

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F/A
(Amendment No. 1)

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report _____

For the transition period from _____ to _____

Commission file number: 001-41426

Nano Labs Ltd
(Exact name of registrant as specified in its charter)

N/A
(Translation of Registrant's name into English)

Cayman Islands
(Jurisdiction of incorporation)

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People's Republic of China
(Address of principal executive offices)

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Securities registered or to be registered, pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A ordinary shares	NA	Nasdaq Global Market

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

Class A ordinary shares, par value US\$0.0002 each (giving effect to the 2-for-1 share consolidation effective from January 31, 2024)	37,242,359
Class B ordinary shares, par value US\$0.0002 each (giving effect to the 2-for-1 share consolidation effective from January 31, 2024)	28,589,078

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Of 1934. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards † provided pursuant to Section 13(a) of the Exchange Act.

† The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International accounting Standards Board Other

If “Other” has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

Explanatory Note

Nano Labs Ltd (the “Company”) is filing this Amendment No. 1 on Form 20-F/A (this “Amendment No. 1”) in entirety to amend its annual report on Form 20-F for the fiscal year ended December 31, 2023 as filed with the Securities and Exchange Commission (the “SEC”) on April 8, 2024 (the “Original Filing”), to address certain comments from the Staff of the SEC in relation to the Original Filing.

This Amendment No. 1 speaks as of the filing date of the Original Filing, or April 8, 2024. No attempt has been made in this Amendment No. 1 to modify or update in any way the financial statements in the Original Filing. This Amendment No. 1 does not reflect any event that has occurred after the date of the Original Filing. As required by Rule 12b-15 of the Securities and Exchange Act of 1934, as amended, the Company is also filing or furnishing the certifications required under Section 302 and Section 906 of the Sarbanes-Oxley Act of 2002 as exhibits to this Amendment No. 1.

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INTRODUCTION

Except where the context otherwise requires and for purposes of this annual report on Form 20-F only:

- “CAGR” refers to compound annual growth rate;
- “China” and “PRC” refers to the People’s Republic of China, excluding, for the purposes of this annual report only, Taiwan, the Hong Kong Special Administrative Region and the Macau Special Administrative Region;
- “Class A ordinary shares” refers to our Class A ordinary shares, par value US\$0.0002 per share;
- “Class B ordinary shares” refers to our Class B ordinary shares, par value US\$0.0002 per share;
- “hash rate” refers to the processing power of the cryptocurrency network and represents the number of computations that is processed by the network in a given time period;
- “ICs” or “chips” refers to integrated circuits;
- “nm” refers to nanometer (1 meter = 1,000,000,000 nanometers);
- “RMB” and “Renminbi” refers to the legal currency of China;
- “shares” and “ordinary shares” refers to our Class A ordinary shares and our Class B ordinary shares;
- “TH/s” and “GH/s” refers to the measuring unit of hash rate, which represent the processing power of the cryptocurrency mining machine. 1 TH/s =1,000 GH/s;
- “US\$” and “U.S. dollars” refers to the legal currency of the United States of America; and
- “we,” “us,” “our company,” “our,” and “our group” refers to Nano Labs Ltd, our Cayman Islands holding company, its predecessor entity and its subsidiaries, as the context requires.

On December 29, 2023, Citibank N.A. distributed a notification regarding the amendment to the deposit agreement, dated December 19, 2023, as amended, and the termination of American depository receipts facility for our American depository shares, effective from February 1, 2024.

Effective from January 31, 2024, we conducted a 2-to-1 share consolidation, which consolidated two shares with a par value of US\$0.0001 each in our issued and unissued share capital into one share with a par value of US\$0.0002. Upon the effectiveness of such share consolidation, our authorized share capital became US\$50,000 divided into 250,000,000 ordinary shares of par value of US\$0.0002 each, comprising (1) 121,410,923 Class A ordinary shares of par value of US\$0.0002 each, (2) 28,589,078 Class B ordinary shares of par value of US\$0.0002 each and (3) 99,999,999 shares of a par value of US\$0.0002 each of such class or classes (however designated) as our board of directors may determine in accordance with our memorandum and articles of association, as amended. Unless otherwise indicated, shares and per share amount in this annual report represent the actual ones at the relevant time.

Names of certain companies provided in this annual report are translated or transliterated from their original Chinese legal names.

Discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

This annual report on Form 20-F includes our audited consolidated financial statements for the 2021, 2022 and 2023 fiscal years.

This annual report on Form 20-F contains information from an industry report commissioned by us and prepared by Frost & Sullivan, an independent research firm, to provide information regarding our industry and our market position in China. We refer to this report as the F&S report.

This annual report contains translations of certain Renminbi amounts into U.S. dollars at specified rates. Unless otherwise stated, the translation of Renminbi into U.S. dollars has been made at RMB7.0827 to US\$1.00, the central parity rate on December 29, 2023 published by the People's Bank of China. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. The PRC government imposes controls over its foreign currency reserves in part through direct regulation of the conversion of Renminbi into foreign exchange and through restrictions on foreign trade.

Nano Labs Ltd is not a Chinese operating company but a Cayman Islands holding company with operations primarily conducted by our subsidiaries in China and Hong Kong. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure and Governance—Investors in our Class A ordinary shares are not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead are purchasing equity securities of a Cayman Islands holding company." Nano Labs Ltd does not have any contractual arrangements with variable interest entities based in China or any consolidated indirect majority ownership interests in China-based subsidiaries.

Nano Labs Ltd is a holding company with no material operations of its own. We conduct our operations primarily through our subsidiaries in China and Hong Kong. As a result, Nano Labs Ltd's ability to pay dividends depends upon dividends paid by our subsidiaries in China and Hong Kong. If our existing PRC and Hong Kong subsidiaries or any newly formed ones incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us.

We face various legal and operational risks and uncertainties related to being based in and having significant operations in China. The PRC government has significant authority to exert influence on the ability of a China-based company, such as us, to conduct its business, accept foreign investments or list on U.S. or other foreign exchanges. For example, we face risks associated with regulatory approvals of offshore offerings and oversight on cybersecurity and data privacy. The PRC government may intervene in or influence our operations at any time, or may exert control over operations of our business, which could result in a material change in our operations and/or the value of our Class A ordinary shares. See also "Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China—The PRC government has significant authority to exert influence on the China operations of an offshore holding company, and offerings conducted overseas and foreign investment in China-based issuers, such as us. Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business, results of operations, financial condition, and the value of our securities." We may need to make material changes in our operations to comply with those requirements and/or the value of our Class A ordinary shares might be affected. PRC government's certain administrative requirements in regulating our operations, the overseas offering and listing of China-based issuers, and foreign investments could significantly limit or completely hinder our ability to offer or continue to offer our Class A ordinary shares and/or other securities to investors and cause the value of such securities to significantly decline or be worthless. The PRC government also has significant discretion over the conduct of our business and may intervene with or influence our operations or the development of the relevant industry as it deems appropriate to further regulatory, political and societal goals, subject to necessary procedures. Uncertainties regarding the enforcement of laws and that the rules and regulations in China can change quickly with little advance notice. See also "Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China—Uncertainties with respect to the enforcement of and changes in laws and regulations in China could have a material adverse effect on our business, results of operations, financial condition and future prospects, and cause our Class A ordinary shares to significantly decline in value or become worthless." Furthermore, the PRC government has recently exerted more oversight and control over overseas securities offerings and foreign investment in China-based companies, and these rules could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or in extreme cases, become worthless. For further details, see "Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China."

In addition, our PRC subsidiaries are permitted to pay dividends to us only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Pursuant to the Company Law of the People's Republic of China, or the PRC Company Law, our PRC subsidiaries are required to make contribution of at least 10% of their after-tax profits calculated in accordance with the PRC GAAP to the statutory common reserve. Contribution is not required if the reserve fund has reached 50% of the registered capital of our subsidiaries. As of December 31, 2023, our PRC subsidiaries had reserve fund of RMB6.6 million (US\$0.9 million).

None of our PRC subsidiaries has issued any dividends or distributions to respective holding companies or any investors as of the date of this annual report. Our PRC subsidiaries generate and retain cash generated from operating activities and re-invest it in our business. Historically, our PRC subsidiaries have also received equity financing from its shareholders to fund business operations of our PRC subsidiaries. In 2021, 2022 and 2023, we transferred cash proceeds of US\$21.1 million, US\$24.3 million and US\$17.5 million to our PRC subsidiaries for the settlement of intercompany transactions and as paid-in capital for our PRC subsidiaries. In the future, cash proceeds raised from overseas financing activities may be, and are intended to be, transferred by us through subsidiaries in Hong Kong to our PRC subsidiaries via capital contribution and shareholder loans, as the case may be. Subsidiaries in China that receives such cash proceeds then will transfer funds to its subsidiaries to meet the capital needs of our business operations. For details about the applicable PRC rules that limit transfer of funds from overseas to our PRC subsidiaries, see "Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds—Use of Proceeds" and "Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China—PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of the securities offering to make loans or additional capital contributions to our PRC subsidiaries."

On December 15, 2022, the PCAOB announced that it was able to secure complete access to inspect and investigate PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong completely in 2022. The PCAOB Board vacated its previous 2021 determinations that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong. The PCAOB inspections team has also completed fieldwork for 2023, with the complete access required under the Holding Foreign Companies Accountable Act (the “HFCAA”). However, whether the PCAOB will continue to be able to satisfactorily conduct inspections of PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong is subject to uncertainties and depends on a number of factors out of our and our auditor’s control. The PCAOB continues to demand complete access in mainland China and Hong Kong moving forward, as well as to continue pursuing ongoing investigations and initiate new investigations as needed. The PCAOB has also indicated that it will act immediately to consider the need to issue new determinations with the HFCAA if needed. Our financial statements contained in this annual report of Form 20-F have been audited by MaloneBailey, LLP, an independent registered public accounting firm that is headquartered in the United States with offices in Beijing and Shenzhen, China. MaloneBailey, LLP is a firm registered with the PCAOB, and is required by the United States laws to undergo regular inspections by the PCAOB to assess its compliance with the laws of the U.S. and professional standards. As of the date of this annual report, we have not been and do not expect to be identified by the SEC under the HFCAA. However, if the PCAOB is unable to inspect and investigate completely registered public accounting firms located in China and we fail to meet the PCAOB’s requirements, our Class A ordinary shares will be delisted from the Nasdaq Stock Market, and our shares will not be permitted for trading over the counter in the United States under the HFCAA and related regulations. If our Class A ordinary shares are prohibited from trading in the United States, we cannot assure you that we will be able to list on a non-U.S. exchange or that a market for our Class A ordinary shares will develop outside of the United States. Such a prohibition would substantially impair your ability to sell or purchase our Class A ordinary shares when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our Class A ordinary shares. Moreover, the HFCAA or other efforts to increase U.S. regulatory access to audit information could cause investor uncertainty for affected issuers, including us, and the market price of our Class A ordinary shares could be adversely affected. Furthermore, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, results of operations and financial condition. For details, see “Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China—Our Class A ordinary shares will be delisted and prohibited from trading in the over-the-counter market under the Holding Foreign Companies Accountable Act, if the PCAOB is unable to inspect or investigate completely auditors located in China for two consecutive years. The delisting of our Class A ordinary shares, or the threat of their being delisted, may materially and adversely affect the value of your investment.”

Our Class A ordinary shares are listed on the Nasdaq Global Market under the symbol “NA.”

MARKET AND INDUSTRY DATA

Market data and certain industry forecasts used in this annual report were obtained from internal surveys, market research, publicly available information and industry publications. Industry publications generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. Similarly, internal surveys, industry forecasts and market research, while believed to be reliable, have not been independently verified, and we make no representation as to the accuracy of such information.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Investors in our Class A ordinary shares are not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead are purchasing equity securities of a Cayman Islands holding company. Nano Labs Ltd is a holding company with no material operations of its own. We conduct our operations primarily through our subsidiaries in China and a subsidiary in Hong Kong. This structure involves unique risks to investors in our Class A ordinary shares. For details, see “—D. Risk Factors—Risks Relating to Our Corporate Structure and Governance—Investors in our Class A ordinary shares are not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead are purchasing equity securities of a Cayman Islands holding company.”

We face various legal and operational risks and uncertainties related to being based in and having significant operations in China. The PRC government has significant authority to exert influence on the ability of a China-based company, such as us, to conduct its business, accept foreign investments or list on U.S. or other foreign exchanges. For example, we face risks associated with regulatory approvals of offshore offerings and oversight on cybersecurity and data privacy. The PRC government may intervene in or influence our operations at any time, or may exert control over operations of our business, which could result in a material change in our operations and/or the value of our Class A ordinary shares. See also “—D. Risk Factors—Risks Related to Conducting Business in China—The PRC government has significant authority to exert influence on the China operations of an offshore holding company, and offerings conducted overseas and foreign investment in China-based issuers, such as us. Changes in China’s economic, political or social conditions or government policies could have a material adverse effect on our business, results of operations, financial condition, and the value of our securities.” We may need to make material changes in our operations to comply with those requirements and/or the value of our Class A ordinary shares might be affected. PRC government’s certain administrative requirements in regulating our operations, the overseas offering and listing of China-based issuers, and foreign investments could significantly limit or completely hinder our ability to offer or continue to offer our Class A ordinary shares and/or other securities to investors and cause the value of such securities to significantly decline or be worthless. The PRC government also has significant discretion over the conduct of our business and may intervene with or influence our operations or the development of the relevant industry as it deems appropriate to further regulatory, political and societal goals, subject to necessary procedures. Uncertainties regarding the enforcement of laws and that the rules and regulations in China can change quickly with little advance notice. See also “Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China—Uncertainties with respect to the enforcement of and changes in laws and regulations in China could have a material adverse effect on our business, results of operations, financial condition and future prospects, and cause our Class A ordinary shares to significantly decline in value or become worthless.” Furthermore, the PRC government has recently exerted more oversight and control over overseas securities offerings and foreign investment in China-based companies, and these rules could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or in extreme cases, become worthless. For further details, see “Item 3. Key Information—D. Risk Factors—Risks Related to Conducting Business in China.”

Our auditor was not subject to the determination announced by the PCAOB on December 16, 2021. However, trading in your Class A ordinary shares may be prohibited under the HFCAA if the PCAOB determines that it cannot inspect or investigate completely our auditor, and as a result, our Class A ordinary shares will be delisted from the Nasdaq Stock Market, and our shares will not be permitted for trading over the counter in the United States under the HFCAA and related regulations. For details, see “—D. Risk Factors—Risks Related to Conducting Business in China—Our Class A ordinary shares will be delisted and prohibited from trading in the over-the-counter market under the Holding Foreign Companies Accountable Act, if the PCAOB is unable to inspect or investigate completely auditors located in China for two consecutive years. The delisting of our Class A ordinary shares, or the threat of their being delisted, may materially and adversely affect the value of your investment.”

Permissions and Licenses Required from the PRC Authorities for Our Operations and Overseas Securities Offerings

To the extent that the discussions in this section on permissions and licenses required from the PRC authorities for our operations in China, it is the opinion of Zhong Lun Law Firm, our PRC counsel. We are a leading fabless IC design company and product solution provider in China. The operations of the businesses that we own and operate are subject to PRC laws and regulations. The laws and regulations governing relevant industries in China are relatively new and quickly evolving, thus bringing uncertainties to their interpretation and enforcement. For details, see “Item 4. Information on the Company—B. Business Overview—Regulation” in this annual report.

We conduct our operations primarily through our subsidiaries in China and one subsidiary in Hong Kong. Our operations in China are governed by PRC laws and regulations. We and the affiliated entities are required to obtain certain licenses, permits or filing from relevant governmental authorities in China in order to operate our business and conduct overseas securities offerings and listings. As of the date of this annual report, as advised by our PRC counsel, our subsidiaries in China have obtained business licenses from the PRC government authorities necessary for our business operations in China. Given the uncertainties of interpretation and implementation of relevant laws and regulations and the enforcement practice by relevant government authorities, and the promulgation of new laws and regulations and amendment to the existing ones, we may be required to obtain additional licenses, permits, registrations, filings or approvals for our business operations in the future. We cannot assure you that we or our subsidiaries will be able to obtain, in a timely manner or at all, or maintain such licenses, permits or approvals, and we or our subsidiaries may also inadvertently conclude that such permissions or approvals are not required. Any lack of or failure to maintain requisite approvals, licenses or permits applicable to us or our subsidiaries may have a material adverse impact on our business, results of operations, financial condition and prospects and cause the value of any securities we offer to significantly decline or become worthless. For details, see “—D. Risk Factors—Risks Related to Our Operations—We require various approvals, licenses, permits and certifications to operate our business. If we fail to obtain or renew any of these approvals, licenses, permits or certifications, it could materially and adversely affect our business and results of operations.”

On December 28, 2021, the CAC and other twelve PRC regulatory authorities jointly revised and promulgated the Measures for Cybersecurity Review (the “Cybersecurity Review Measures”), which became effective on February 15, 2022. Under the current Cybersecurity Review Measures, subject to any further interpretation of the CAC and other relevant authorities, we believe we are not subject to the cybersecurity review by the CAC, as we are primarily engaged in the design and manufacturing of ICs or do not process any data in our business. However, there remains uncertainty as to how the Cybersecurity Review Measures will be interpreted or implemented and whether the PRC regulatory agencies, including the CAC, may adopt new laws, regulations, rules, or detailed implementation and interpretation related to the Draft Measures. We cannot assure you that PRC regulatory agencies, including the CAC, would take the same view as we do, and we cannot assure you that we can fully or timely comply with such legal or regulatory requirements. If we become subject to cybersecurity inspection and/or review by the CAC or other PRC authorities or are required by them to take any specific actions, it could cause suspension or termination of the future offering of our securities, including offerings under this registration statement, disruptions to our operations, result in negative publicity regarding our company, and divert our managerial and financial resources. We may also be subject to significant fines or other penalties, which could materially and adversely affect our business, financial condition and results of operations. Any actions by the PRC government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in companies having operations in China, including us, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors, and cause the value of our securities to significantly decline or become worthless. For details, see “—D. Risk Factors—Risks Related to Conducting Business in China—Recent regulatory developments in China may subject us to additional regulatory review or otherwise restrict or completely hinder our ability to offer securities and raise capitals overseas, all of which could materially and adversely affect our business and cause the value of our Class A ordinary shares to significantly decline or become worthless.”

On February 17, 2023, with the approval of the State Council, the CSRC released the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies, or the Trial Measures and five supporting guidelines, which came into effect on March 31, 2023. According to the Trial Measures, among other requirements, (1) domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedures with the CSRC; if a domestic company fails to complete the filing procedures, such domestic company may be subject to administrative penalties; and (2) where a domestic company seeks to indirectly offer and list securities in an overseas market, the issuer shall designate a major domestic operating entity responsible for all filing procedures with the CSRC, and such filings shall be submitted to the CSRC within three business days after the submission of the overseas offering and listing application. On the same day, the CSRC also held a press conference for the release of the Trial Measures and issued the Notice on Administration for the Filing of Overseas Offering and Listing by Domestic Companies, which clarifies that (1) on or prior to the effective date of the Trial Measures, domestic companies that have already submitted valid applications for overseas offering and listing but have not obtained approval from overseas regulatory authorities or stock exchanges may reasonably arrange the timing for submitting their filing applications with the CSRC, and must complete the filing before the completion of their overseas offering and listing; (2) a six-month transition period will be granted to domestic companies which, prior to the effective date of the Trial Measures, have already obtained the approval from overseas regulatory authorities or stock exchanges, but have not completed the indirect overseas listing; if domestic companies fail to complete the overseas listing within such six-month transition period, they shall file with the CSRC according to the requirements; and (3) the CSRC will solicit opinions from relevant regulatory authorities and complete the filing of the overseas listing of companies with contractual arrangements which duly meet the compliance requirements, and support the development and growth of these companies. Any such action, once taken by the PRC government, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or, in extreme cases, become worthless. We did not have to make such filings with or obtain the relevant approvals from the CSRC for our initial public offering completed on July 11, 2022 and the supplemental offering completed on September 27, 2022 because the offerings had been completed before the enactment of the Trial Measures. For our follow-on offering on September 13, 2023, we completed the filing with the CSRC on January 9, 2024, and we will be obligated to submit filings with the CSRC in a timely manner for our future offerings. If we cannot obtain such approvals or the CSRC rescind our approvals, we may not continue to offer securities to investors and cause the value of our securities to significantly decline or, in extreme cases, become worthless.

On February 24, 2023, the CSRC, together with Ministry of Finance of the PRC, National Administration of State Secrets Protection and National Archives Administration of China, revised the Provisions on Strengthening Confidentiality and Archives Administration for Overseas Securities Offering and Listing which was issued by the CSRC, National Administration of State Secrets Protection and National Archives Administration of China in 2009. The revised version was issued under the title of the Provisions on Strengthening Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies (the “Revised Provisions”), and has come into effect on March 31, 2023. One of the major revisions to the Revised Provisions has expanded their application to cover indirect overseas offering and listing, which is consistent with the Trial Measures. The Revised Provisions require that, among other things, (1) a domestic company that plans to, either directly or indirectly through its overseas listed entity, publicly disclose or provide to relevant individuals or entities including securities companies, securities service providers and overseas regulators, any documents and materials that contain state secrets or working secrets of government agencies, shall first obtain approval from competent authorities, and file with the secrecy administrative department at the same level; and (2) domestic company that plans to, either directly or indirectly through its overseas listed entity, publicly disclose or provide to relevant individuals and entities including securities companies, securities service providers and overseas regulators, any other documents and materials that, if leaked, will be detrimental to national security or public interest, shall strictly fulfill relevant procedures stipulated by applicable national regulations. On or after March 31, 2023, any failure or perceived failure by any PRC subsidiaries including us to comply with the above confidentiality and archives administration requirements under the Revised Provisions and other PRC laws and regulations may result in that the relevant entities would be held liable by competent authorities, and referred to the judicial organ to be investigated for criminal liability if suspected of committing a crime.

Cash and Asset Flows through Our Organization

None of our PRC subsidiaries has issued any dividends or distributions to respective holding companies or any investors as of the date of this annual report. Our PRC subsidiaries generate and retain cash generated from operating activities and re-invest it in our business. Historically, our PRC subsidiaries have also received equity financing from its shareholders to fund business operations of our PRC subsidiaries. In 2021, 2022 and 2023, we transferred cash proceeds of US\$21.1 million, US\$24.3 million and US\$17.5 million to our PRC subsidiaries for the settlement of intercompany transactions and as paid-in capital for our PRC subsidiaries. In the future, cash proceeds raised from overseas financing activities may be, and are intended to be, transferred by us through subsidiaries in Hong Kong to our PRC subsidiaries via capital contribution and shareholder loans, as the case may be. Subsidiaries in China that receives such cash proceeds then will transfer funds to its subsidiaries to meet the capital needs of our business operations.

We are an offshore holding company. We may make loans to our PRC subsidiaries subject to the approval, registration, and filing with governmental authorities and limitation of amount, or we may make additional capital contributions to our wholly foreign-owned subsidiaries in China. Any loans to our wholly foreign-owned subsidiaries in China, which are treated as foreign-invested enterprises under PRC law, are subject to foreign exchange loan registrations with the National Development and Reform Commission, or the NDRC, and SAFE or its local branches. In addition, a foreign invested enterprise shall use its capital pursuant to the principle of authenticity and self-use within its business scope. The capital of a foreign invested enterprise shall not be used for the following purposes: (1) directly or indirectly used for payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations; (2) directly or indirectly used for investment in securities or investments other than banks' principal-secured products unless otherwise provided by relevant laws and regulations; (3) the granting of loans to non-affiliated enterprises, except where it is expressly permitted in the business license; and (4) paying the expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises). In light of the various requirements imposed by PRC regulations on loans to and direct investment in PRC entities by offshore holding companies, we cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals or filings on a timely basis, if at all, with respect to future loans by us to our PRC subsidiaries or with respect to future capital contributions by us to our PRC subsidiaries. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds from the securities offering and to capitalize or otherwise fund our PRC operations may be negatively affected, which could adversely affect our liquidity and our ability to fund and expand our business.

Enforceability of Civil Liabilities

We are incorporated under the laws of the Cayman Islands as an exempted company with limited liability to take advantage of certain benefits associated with being a Cayman Islands exempted company:

- political and economic stability;
- an effective judicial system;
- a favorable tax system;
- the absence of foreign exchange control or currency restrictions; and
- the availability of professional and support services.

However, certain disadvantages accompany incorporation in the Cayman Islands. These disadvantages include, but are not limited to, the following:

- the Cayman Islands has a less developed body of securities laws than the United States and these securities laws provide significantly less protection to investors; and
- Cayman Islands companies may not have standing to sue before the federal courts of the United States.

Our currently effective memorandum and articles of association do not contain provisions requiring that disputes, including those arising under the securities laws of the United States, between us, our officers, directors and shareholders, be arbitrated.

We conduct all of our operations outside the United States, and substantially all of our assets are located outside the United States. Substantially all of our officers are nationals or residents of jurisdictions other than the United States and a substantial portion of their assets are located outside the United States. As a result, it may be difficult or impossible for a shareholder to effect service of process within the United States upon us or these persons, or to enforce against us or them judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state in the United States.

Cayman Islands

We have been advised by Maples and Calder (Hong Kong) LLP, our counsel as to Cayman Islands law, that the courts of the Cayman Islands are unlikely (1) to recognize and enforce judgments of U.S. courts obtained against us or our directors or officers that are predicated upon the civil liability provisions of the federal securities laws of the United States or the securities laws of any state in the United States, and (2) in original actions brought in the Cayman Islands to impose liabilities against us or our directors or officers that are predicated upon the civil liability provisions of federal securities laws of the United States or the securities laws of any state in the United States so far as the liabilities imposed by those provisions are penal in nature.

We have also been advised by Maples and Calder (Hong Kong) LLP that, although there is no statutory recognition in the Cayman Islands of judgments obtained in the federal or state courts of the U.S. (and the Cayman Islands are not a party to any treaties for the reciprocal enforcement or recognition of such judgments), the courts of the Cayman Islands will at common law, recognize and enforce a foreign money judgment of a foreign court of competent jurisdiction without any re-examination of the merits of the underlying dispute based on the principle that a judgment of a competent foreign court imposes upon the judgment debtor an obligation to pay the liquidated sum for which such judgment has been given, provided such judgment (1) is given by a foreign court of competent jurisdiction, (2) imposes on the judgment debtor a liability to pay a liquidated sum for which the judgment has been given, (3) is final and conclusive, (4) is not in respect of taxes, a fine or a penalty, (5) is not inconsistent with a Cayman Islands judgment in respect of the same matter, and (6) is not impeachable on the grounds of fraud and was not obtained in a manner and is not of a kind the enforcement of which is contrary to natural justice or the public policy of the Cayman Islands.

However, the Cayman Islands courts are unlikely to enforce a judgment obtained from the United States courts under the civil liability provisions of the securities laws if such judgment is determined by the courts of the Cayman Islands to give rise to obligations to make payments that are penal or punitive in nature. A Cayman Islands court may stay enforcement proceedings if concurrent proceedings are being brought elsewhere.

PRC

Zhong Lun Law Firm, our counsel as to PRC law, has advised us that there is uncertainty as to whether the PRC courts would:

- recognize or enforce judgments of United States courts or Cayman courts obtained against us or our directors or officers predicated upon the civil liability provisions of the securities laws of the United States or any state in the United States; or
- entertain original actions brought in each respective jurisdiction against us or our directors or officers predicated upon the securities laws of the United States or any state in the United States.

Zhong Lun Law Firm has further advised us that the recognition and enforcement of foreign judgments are provided for under the PRC Civil Procedures Law. PRC courts may recognize and enforce foreign judgments in accordance with the requirements of the PRC Civil Procedures Law. Zhong Lun Law Firm has advised us further that under PRC law, a foreign judgment that does not otherwise violate the basic legal principles, national sovereignty, security or public interest may be recognized and enforced by a PRC court, based either on bilateral treaties or international conventions contracted by China and the jurisdiction where the judgment is made or on principles of reciprocity between jurisdictions. China does not have any treaties or other form of reciprocity with the United States or the Cayman Islands that provide for the reciprocal recognition and enforcement of foreign judgments. In addition, according to the PRC Civil Procedures Law, courts in China will not enforce a foreign judgment against us or our directors and officers if they decide that the judgment violates the basic principles of PRC law or national sovereignty, security or public interest. As a result, it is uncertain whether and on what basis a PRC court would enforce a judgment rendered by a court in the United States or in the Cayman Islands. Under the PRC Civil Procedures Law, foreign shareholders may originate actions based on PRC law against us in China if they can establish sufficient connection to China for a PRC court to have jurisdiction, and meet other procedural requirements, including, among others, the plaintiff must have a direct interest in the case, and there must be a concrete claim, a factual basis and a cause for the suit. However, it will be difficult for foreign shareholders, by virtue only of holding the ordinary shares, to establish a sufficient connection to China for a PRC court to have jurisdiction as required under the PRC Civil Procedures Law.

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business is subject to numerous risks and uncertainties, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations, cash flows, and prospects. These risks are discussed more fully below and include, but are not limited to, risks related to:

Risks Related to Our Business

- Uncertainties in our research and development activities;
- Volatility of the cryptocurrency market;
- Market conditions for HTC and HPC solutions market;
- Constant technological changes in the industries we operate in;
- Significant revenue contribution from our cryptocurrency mining machines; and
- Our reliance on limited suppliers.

Risks Related to Our Operations

- Our ability to achieve or sustain profitability;
- Our ability to forecast our business and assess the seasonality and volatility in our business;
- Ongoing global coronavirus COVID-19 outbreak;
- Our ability to obtain significant financial resources;
- Our ability to price our products at our desired margins;
- Credit risks and concentration of credit risks in relation to defaults from counterparties;
- Our ability to manage our growth or execute our strategies effectively; and
- High customer concentration.

Risks Related to Our Industry

- Adverse changes in the regulatory environment in China;
- Adverse changes of regulatory environment in foreign markets;
- Increasing mining difficulty, which could result in downward pressure on the expected economic returns;
- Concert actions, which could prevent new transactions from gaining confirmations, halt payments between users, and reverse previously completed transactions;
- Challenges against decentralized nature of cryptocurrencies; and
- Change of algorithm and mining mechanism.

Risks Related to Conducting Business in China

- Chinese government's significant authority to intervene or influence our operations at any time and to exert more control over offerings conducted overseas and/or foreign investment in China-based issuers;
- Uncertainties with respect to the PRC legal system, including such relating to the enforcement of rules and regulations in China and the risk that rules and regulations can change quickly with little advance notice;
- Recent regulatory developments in China, which may subject us to additional regulatory review;
- Significant influence of PRC government over companies with China-based operations;
- Possibility of delisting if the PCAOB is unable to inspect auditors with presence in China;
- Changes in the political and economic policies of the PRC government;
- Uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations;
- A severe or prolonged downturn in China's economy; and
- Increased labor costs and enforcement of stricter labor laws and regulations in China.

Risks Relating to Our Corporate Structure and Governance

- Investors in our Class A ordinary shares not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead equity securities of a Cayman Islands holding company;
- Custodians or authorized users of our controlling non-tangible assets, including chops and seals, failing to fulfill their responsibilities;
- Anti-takeover provisions in our currently effective memorandum and articles of association;
- Dual-class structure of our ordinary shares which could affect the trading market for our Class A ordinary shares;
- Less protection to shareholders due to our home country practices for corporate governance matters;
- Certain judgments obtained against us by our shareholders may not be enforceable;
- Reduced reporting requirements due to our emerging growth company status; and
- Our exemption from certain provisions applicable to U.S. domestic public companies due to our foreign private issuer status.

Risks Related to Our Class A Ordinary Shares

- Failure to maintain the listing of our Class A ordinary shares with a U.S. national securities exchange;
- Volatile trading price of our Class A ordinary shares;
- Lack of research or report on the business or change in recommendations regarding our Class A ordinary shares; and
- Sale or availability for sale of substantial amounts of our Class A ordinary shares.

Risks Related to Our Business

We may fail to anticipate or adapt to technology innovations in a timely manner, so our IC design may fail to gain recognition from the customers and the IC design industry.

The IC design industry is experiencing rapid technological changes. Failure to anticipate technology innovations or adapt to such innovations in a timely manner, or at all, may result in our products becoming obsolete at sudden and unpredictable intervals. As a result, our IC design may fail to gain recognition from the customers and the industry, which could materially and adversely affect our business, results of operations or financial condition. To maintain the relevancy of our products, we have actively invested in product planning and research and development. The process of developing and marketing new products is inherently complex and involves significant uncertainties. We cannot assure you that our efforts will bring customers and industry recognition. There are various risks, including the following:

- our product planning efforts may fail to result in the development or commercialization of new technologies or ideas;
- our research and development efforts may fail to translate new product plans into commercially feasible products;
- our new technologies or new products may not be well received by consumers;
- we may not have adequate funding and resources necessary for continual investments in product planning and research and development;
- our products may become obsolete due to rapid advancements in technology and changes in consumer preferences; and
- our newly developed technologies may not be protected as proprietary intellectual property rights.

Any failure to anticipate the next-generation technology roadmap or changes in customer preferences or to timely develop new or enhanced products in response could result in decreased revenue and market share. In particular, we may experience difficulties with product design, product development, marketing or certification, which could result in excessive research and development expenses and capital expenditure, delays or prevent our introduction of new or enhanced products. Furthermore, our research and development efforts may not yield the expected results or may prove to be futile due to the lack of market demand.

Our results of operations have been and are expected to continue to be significantly impacted by the volatility of the cryptocurrency market, and in particular, the sharp price decrease of cryptocurrencies.

Our products, including HTC and HPC solutions and distributed computing and data storage solutions, are currently designed primarily for the mining of various cryptocurrencies, such as Bitcoin, EthereumPoW (“ETHW”), EthereumFair (“ETHF”), Ethereum Classic (“ETC”), Grin and Filecoin. The demand for, and pricing of, our products are therefore affected by the expected economic returns of mining activities for these cryptocurrencies, which in turn are primarily driven by, among other factors, the prices. The cryptocurrency market is highly volatile, and the prices of cryptocurrencies, such as Bitcoin, ETHW, ETHF, ETC, Grin and Filecoin, have experienced significant fluctuations over their short existence and may continue to fluctuate significantly in the future.

Historically, our revenues were primarily derived from the sales of our HTC solutions in relation to ETHW, ETHF, ETC and Grin mining, and HPC solutions for Bitcoin mining and distributed computing and data storage solutions for Filecoin mining. We expect our results of operations to be affected by the prices of cryptocurrencies, in particular, significantly and negatively impacted by the sharp price decrease of the prices of cryptocurrencies including Bitcoin, ETHW, ETHF, ETC, Grin and Filecoin. Although we have begun the delivery of these new products in 2022, a diversified offering of mining solution types is unlikely to spread the risk of volatility as the prices of mainstream cryptocurrencies are highly correlated. We cannot assure you that the cryptocurrency market will remain active enough to sustain the demand for our current and future mining machines or that the prices for any of these cryptocurrencies will not decline significantly in the future. Furthermore, fluctuations in the prices of cryptocurrencies, in particular, Bitcoin, ETHW, ETHF, ETC, Grin and Filecoin, can have an immediate impact on the trading price of the companies operating in the cryptocurrency industry, including our Class A ordinary shares, even before our financial performance is affected, if at all.

In addition to the market volatility, various other factors, mostly beyond our control, could impact the prices of cryptocurrencies. For example, the usage of Bitcoins in the retail and commercial marketplace is relatively low in comparison with the usage for speculation, which contributes to Bitcoin price volatility.

If the price of cryptocurrencies such as Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin drops and fails to recover, the expected economic return of such mining activities will diminish, which could result in a decrease in demand for our current and future products. As a result, we may need to reduce the price of our products. At the same time, if transaction fees for these cryptocurrencies increase to such an extent as to discourage users from using them as a medium of exchange, it may decrease the transaction volume of the relevant network and may affect the demand for our products. In addition, any shortage of power supply due to government control measures or other reasons, and any increase in energy costs, would raise the costs of mining activities. This in turn could affect the expected economic return to our customers for their mining activities and the demand for and pricing of our current and future HTC and HPC solutions and distributed computing and data storage solutions. Furthermore, fluctuations in the prices of Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin may affect the value of our inventory as well as the provision we make to the inventory as we manage our inventory based on, among others, the sales forecast of current and future HTC and HPC solutions and distributed computing and data storage solutions. If we increase our procurement volume and stock up finished goods for the launch of new products or we expect a surge of demand of certain HTC and HPC solutions, a significant drop in the prices of Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin can lead to a lower expected sales price and excessive inventory, which in turn will lead to impairment losses with respect to such inventory. If the prices of Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin drop significantly in the future, we may need to record write-down for potentially obsolete, slow-moving inventory. For example, we recorded an inventory write-down of RMB184.1 million and RMB60.8 million (US\$8.6 million) in the cost of revenues in 2022 and 2023, respectively, due to the downward adjustment on the book value of a portion of our inventory in response to the decrease in the market price of cryptocurrency and expected economic return on cryptocurrency mining. To the extent that we are able to sell such inventory above its carrying value, our gross profit may also be inflated by such write down.

The price drop of cryptocurrencies may also adversely impact the ability of our customers who made down payments for our current or future products. We usually require full payment to be paid before the delivery of our products. If the prices of Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin drop significantly in the future, we may need to offer to certain of our customers price concession in the case where they encounter the difficulties for making the final payments, even if we generally do not offer a price concession to customers. If we provide any price concession to our customers in the future, our revenues and results of operations may be adversely affected.

We have derived and may continue to derive revenues primarily from our HTC and HPC solutions. If the market for HTC and HPC solutions ceases to exist or diminishes significantly, our business, results of operations and financial condition would be materially and adversely affected.

Historically, our revenues were primarily derived from the sales of our HTC solutions in relation to ETHW, ETHF, ETC and Grin mining, and HPC solutions for Bitcoin mining. In 2021, 2022 and 2023, sales of our HTC and HPC solutions accounted for 100.0%, 93.6% and 91.0% of our total revenues, respectively, and our advance from customers was RMB107.8 million (US\$15.2 million) as of December 31, 2023. We expect to generate, in the foreseeable future, a significant portion of our revenues from sales of our HTC and HPC solutions.

If the market for any of the above-mentioned mining solutions ceases to exist or diminishes significantly, we would experience a significant loss of sales, cancelation of orders, or loss of customers for our current and future mining machines.

Adverse factors that may affect the market for our current and future mining machines include:

- Another cryptocurrency, especially one that is not created using the same mining processes as Bitcoin, ETHW, ETHF, ETC or Grin, emerges as a new mainstream cryptocurrency and squeezes Bitcoin, ETHW, ETHF, ETC or Grin out of the market, thereby causing these cryptocurrencies to lose value or become worthless, which could adversely affect the sustainability of our business.
- Bitcoin, ETHW, ETHF, ETC or Grin fails to gain wide market acceptance and fails to become a generally accepted medium of exchange in the global economy due to certain inherent limitations to cryptocurrencies.
- Over time, the reward for blockchain mining will decline in terms of the amount of cryptocurrency awarded, which may reduce the incentive to mine these cryptocurrencies. Therefore, our HTC and HPC solutions and distributed computing and data storage solutions may become less productive as the available rewards for cryptocurrency mining decrease.

If we cannot maintain the scale and profitability of our HTC and HPC solutions and, at the same time, successfully expand our business in other application markets, our business, results of operations, financial condition and prospects will suffer. Furthermore, excess inventory, inventory markdowns, brand image deterioration and margin squeeze caused by declining economic returns for miners or pricing competition for our HTC and HPC solutions could all have a material and adverse effect on our business, results of operations and financial condition. Moreover, as we only had limited experience in the commercialization of HTC and HPC solutions, we cannot assure you that our HTC and HPC solutions to be launched will be well received among the miners of these cryptocurrencies, nor can we assure you that the demand for these products will be strong enough for us to recover the research and development expenses incurred in relation to the development of these products. If our efforts to market these new products fail, or the demand for these products turns out to be weaker than we expected, our business, results of operations and financial condition may be materially and adversely affected.

We face risks associated with the expansion of our business operations overseas and if we are unable to effectively manage such risks, our business growth and profitability may be negatively affected.

We intend to grow our business in part by expanding our sales network and operations internationally beyond China. Our expansion plans include establishing offices for sales, research and development and other operations in Singapore and the United States. However, there are risks associated with such global expansion plans, including:

- high costs of investment to establish a presence in a new market and manage international operations;
- competition in unfamiliar markets;
- foreign currency exchange rate fluctuations;
- regulatory differences and difficulties in ensuring compliance with multi-national legal requirements and multi-national operations;
- changes in economic, legal, political or other local conditions in new markets;
- our limited customer base and limited sales and relationships with international customers;
- competitors in the overseas markets may be more dominant and have stronger ties with customers and greater financial and other resources;
- challenges in managing our international sales channels effectively;
- difficulties in and costs of exporting products overseas while complying with the different commercial, legal and regulatory requirements of the overseas markets in which we offer our products;

- difficulty in ensuring that our customers comply with the sanctions imposed by the Office of Foreign Assets Control in the United States and regulators in other countries and regions, on various foreign states, organizations and individuals;
- inability to obtain, maintain or enforce intellectual property rights;
- inability to effectively enforce contractual or legal rights or intellectual property rights in certain jurisdictions where we operate; and
- governmental policies favoring domestic companies in certain foreign markets or trade barriers including export requirements, tariffs, taxes and other restrictions and charges. In particular, a worldwide trend in favor of nationalism and protectionist trade policy and the ongoing trade dispute between the United States and China as well as other potential international trade disputes could cause turbulence in international markets. These government policies or trade barriers could increase the prices of our products and make us less competitive in such countries.

If we are unable to effectively manage such risks, we may encounter difficulties in our overseas expansion plans and our business, reputation, results of operations and financial condition may be impaired.

Our business growth is dependent on the development of blockchain technology and applications, particularly in the field of Bitcoin, ETHW, ETHF, ETC, Grin and Filecoin.

Historically, our revenues were primarily derived from the sales of our HTC solutions in relation to ETHW, ETHF, ETC and Grin mining, and HPC solutions for Bitcoin mining and distributed computing and data storage solutions for Filecoin mining. The development of blockchain technology is still in a relatively early stage, and we cannot assure you that blockchain applications, including those in the fields of cryptocurrencies and other areas such as artificial intelligence, will gain wide market acceptance. Any blockchain application may become redundant or obsolete with the introduction of new competing technologies or products. If market acceptance or confidence in blockchain technology is lost or reduced for any reason, such as due to cybersecurity issues, the demand for our existing or future blockchain products may decline.

Our blockchain mining solution business depends significantly on the development of cryptocurrency applications, in particular, Bitcoin, ETHW, ETHF, ETC, Grin and Filecoin applications. The cryptocurrency market is rapidly and continuously evolving. Any actual or perceived adverse development in Bitcoin or other cryptocurrencies can significantly affect market demand for mining activities and our HTC and HPC solutions and distributed computing and data storage solutions. In addition, any event or rumor that generates negative publicity for the cryptocurrency market could hinder the development and reduce market acceptance of cryptocurrency applications. Under such circumstances, our business, results of operations and financial condition could be materially and adversely affected.

The average selling prices of our products may decrease from time to time due to technological advancement, and we may not be able to pass onto our suppliers such decreases, which may in turn adversely affect our profitability.

The IC design industry is characterized by rapid launches of new products, continuous technological advancements, and changing market trends and customer preferences, all of which translate to a shorter life cycle and a gradual decrease in the average selling prices of products over time. Because we compete in the environment of rapidly-evolving technology advancement and market trends and developments of the IC design industry, we may need to lower the price of our products to gain stronger market competitiveness and we cannot assure you that we will be able to pass on any decrease in average selling prices of our products to our suppliers. If the average selling prices of our products unusually or significantly decrease and such decreases cannot be offset by a corresponding decrease in the prices of the principal components of our products, our gross profit margins may be materially and adversely affected, which in turn, may adversely affect our profitability.

If cryptocurrencies relating to our products lose their popularity or are replaced by other cryptocurrencies as the mainstream cryptocurrencies, we may not be able to win the market for our future mining machines and our results of operations will be materially and adversely affected.

Historically, our revenues were primarily derived from the sales of our HTC solutions in relation to ETHW, ETHF, ETC and Grin mining, and HPC solutions for Bitcoin mining and distributed computing and data storage solutions for Filecoin mining. We face the risk that other cryptocurrencies could replace these cryptocurrencies as the mainstream cryptocurrencies, which may in turn negatively impact the value of these cryptocurrencies and diminish interest in these cryptocurrencies. Acceptance of these cryptocurrencies may decline due to various reasons such as the following:

- potential changes in algorithms or source code may negatively impact user acceptance;
- patches, upgrades, attacks or hacking of relevant infrastructure may undermine user interest or confidence;
- usage of these cryptocurrencies for illicit or illegal activities by bad actors may erode public perception of Bitcoin or Ethereum; or
- hacking, fraud or other problems with cryptocurrency exchanges, wallets or other related infrastructure may negatively impact user confidence.

If fewer people accept these cryptocurrencies or fewer merchants accept these cryptocurrencies as a payment method and alternative assets or mining of these cryptocurrencies being restricted or prohibited due to the changes of the relevant laws and regulations, these cryptocurrencies may decline in value. For example, although Bitcoin is currently the largest cryptocurrency by market capitalization, a substantial amount of Bitcoin-related transactions may be speculation-related and a technological breakthrough in the form of a better cryptocurrency is a continuous threat. Other cryptocurrencies may be designed with algorithms that are not compatible with the kind of computing done by ASIC chip mining machines. If such a cryptocurrency were to become dominant, our existing technological know-how may not be applicable in creating hardware for participants in that cryptocurrency network, and we may face greater competition from new players. In addition, since the value of and support for cryptocurrencies relating to our products depend entirely on the community using it, any disagreement between the users may result in the splitting of the network to support other cryptocurrencies and the users may sell all their stock of cryptocurrencies and switch to other cryptocurrencies. As a result, our future blockchain mining solutions and our results of operations would be materially and adversely affected.

Our IC products mainly depend on supplies from third-party foundries, and any failure to obtain sufficient foundry capacity from such foundries would significantly delay the shipment of our products.

As a fabless IC design company, we do not own any IC fabrication facilities. As of the date of this annual report, we work with two leading foundries as our main IC fabrication partners and place purchase orders according to our business needs. It is important for us to have a reliable relationship with third-party foundries as well as other future foundry service providers to ensure adequate product supply to respond to customer demand.

We cannot guarantee that our foundry service providers will be able to meet our manufacturing requirements. The ability of our foundry service providers to provide us with foundry services is limited by their technology migration, available capacity and existing obligations. If any of our foundry service providers fails to succeed in its technology migration, it will not be able to deliver to us qualified ICs, which will significantly affect our technological advancement and shipment of our products and solutions. This could in turn result in lost sales and have a material adverse effect on our relationships with our customers and on our business and financial condition. In addition, we do not have a guaranteed level of production capacity from our foundry service providers. We do not have long-term contracts with them, and we source our supplies on a purchase order basis and prepay the purchase amount. As a result, we depend on our foundry service providers to allocate to us a portion of its manufacturing capacity sufficient to meet our needs, produce products of acceptable quality and at acceptable final test yields and deliver those products to us on a timely basis and at acceptable prices. If any of our foundry service providers raises its prices or is unable to meet our required capacity for any reason, such as shortages or delays in the shipment of semiconductor equipment or raw materials required to manufacture our ICs, or if our business relationships with any of our foundry service providers deteriorate, we may not be able to obtain the required capacity and would have to seek alternative foundries, which may not be available on commercially reasonable terms, or at all. Moreover, it is possible that other customers of any of our foundry service providers that are larger and/or better financed than we are, or that have long-term contracts with it, may receive preferential treatment in terms of capacity allocation or pricing. In addition, if we do not accurately forecast our capacity needs, any of our foundry service providers may not have available capacity to meet our immediate needs or we may be required to pay higher costs to fulfill those needs, either of which could materially and adversely affect our business, results of operations or financial condition.

In particular, the production of our IC products may require advanced IC fabrication technologies, and some third-party foundries we partner with might not have sufficient production capacity for such technologies, if at all, to meet our requirements. This may expose us to risks associated with engaging new foundries. For example, using foundries with which we have not established relationships could expose us to potentially unfavorable pricing, unsatisfactory quality or insufficient capacity allocation.

Other risks associated with our dependence on third-party foundries include limited control over delivery schedules and quality assurance, lack of capacity in periods of excess demand, unauthorized use of our intellectual property and limited ability to manage inventory and parts. In particular, although we have entered into confidentiality agreements with our third-party foundries for the protection of our intellectual property, they may not protect our intellectual property with the same degree of care as we use to protect our intellectual property. If we fail to properly manage any of these risks, our business and results of operations may be materially and adversely affected.

Moreover, if any of our foundry service providers suffers any damage to its facilities, suspends manufacturing operations, loses benefits under material agreements, experiences power outages or computer virus attacks, lacks sufficient capacity to manufacture our products, encounters financial difficulties, is unable to secure necessary raw materials from its suppliers or suffers any other disruption or reduction in efficiency, we may encounter supply delays or disruptions.

We rely on a limited number of third parties for IC packaging and testing services.

Fabrication of ICs requires specialized services to process the silicon wafers into ICs by packaging them and to test their proper functioning. We primarily collaborate with a leading packaging and testing service provider for such services, which may expose us to a number of risks, including difficulties in finding alternate suppliers, capacity shortages or delays, lack of control or oversight in timing, quality or costs, and misuse of our intellectual property. If any such problems arise with our packaging and testing partners, we may experience delays in our production and delivery timeline, inadequate quality control of our products or excessive costs and expenses. As a result, our financial condition, results of operations, reputation and business may be adversely affected.

Shortages in, or rises in the prices of, the components of our products may adversely affect our business.

Given the long production period to manufacture, assemble, and deliver certain components and products, problems could arise in planning production and managing inventory levels that could seriously interrupt our operations, including the possibility of defective parts, an increase in component costs, delays in delivery schedules, and shortages of components. In addition to ICs, the components we use for our mining machines include printed circuit boards, other electronic components, fans, and aluminum casings. The production of our mining machines also requires certain ancillary equipment and components such as controllers, power adaptors, and connectors. The production of our current products depends on obtaining adequate supplies of these components on a timely basis and at competitive prices. We do not typically maintain large inventory of the components, and rather purchase them on an “as-needed” basis from various third-party component manufacturers that satisfy our quality standards and meet our production requirements. We may have to turn to less reputable suppliers if we cannot source adequate components from our regular suppliers. Under such circumstances, the quality of the components may suffer and could cause performance issues in our products.

Shortages of components could result in reduced production or delays in production, as well as an increase in production costs, which may negatively affect our ability to fulfill orders or make timely shipments to our customers, as well as our customer relationships and profitability. Component shortages may also increase our costs of products sold because we may be required to pay higher prices for components in short supply, or redesign or reconfigure products to accommodate for the substitute components, without being able to pass such cost to our customers. As a result, our business, results of operations and reputation could be materially and adversely affected by any product defects.

Failure at tape-out or failure to achieve the expected final test yields for our ICs could negatively impact our results of operations.

The tape-out process is a critical milestone in our business. A tape-out means all the stages in the design and verification process of our ICs have been completed, and the chip design is sent for manufacturing. The tape-out process requires considerable investment in time and resources and close cooperation with the wafer foundry, and repeated failures can significantly increase our costs, lengthen our product development period, and delay our product launch. If the tape-out or testing of a new chip design fails, either as a result of design flaws by our research and development team or problems with production or the testing process by the wafer foundry, we may incur considerable costs and expenses to fix or restart the design process. Such obstacles may decrease our profitability or delay the launch of new products.

Once tape-out is achieved, the IC design is sent for manufacturing, and the final test yield is a measurement of the production success rate. The final test yield is a function of both product design, which is developed by us, and process technology, which typically belongs to a third-party foundry. Low final test yields can result from a product design deficiency or a process technology failure or a combination of both. As such, we may not be able to identify problems causing low final test yields until our product designs go to the manufacturing stage, which may substantially increase our per unit costs and delay the launch of new products.

For example, if any of our foundry service providers experiences manufacturing inefficiencies or encounters disruptions, errors or difficulties during production, we may fail to achieve acceptable final test yields or experience product delivery delays. We cannot guarantee that our foundry service providers will be able to develop, obtain or successfully implement process technologies needed to manufacture future generations of our IC products on a timely basis. Moreover, during the periods in which foundries are implementing new process technologies, their manufacturing facilities may not be fully productive. A substantial delay in the technology transitions to smaller geometry process technologies could have a material and adverse effect on us, particularly if our competitors transition to such technologies before us. In addition, resolution of yield problems requires cooperation among us, foundry partners, and packaging and testing partners. We cannot assure you that the cooperation will be successful and that any yield problem can be fixed.

Our HTC and HPC solutions and distributed computing and storage solutions use open source software as their basic controller system, which may subject us to certain risks.

We use open source software in our HTC and HPC solutions and distributed computing and storage solutions. For example, our mining machine controller open source software needs to be installed on open source, which serves as the basic controller system for our HTC and HPC solutions, and we expect to continue to use open source software in the future. We may face claims from others claiming ownership of, or seeking to enforce the terms of, an open source license, including by demanding the release of the open source software, derivative works or our proprietary source code that was developed using such software. These claims could also result in litigation, requiring us to purchase a costly license or to devote additional research and development resources to change our technologies, either of which would have a negative effect on our business and results of operations. In addition, if the license terms for the open source software we utilize change, we may be forced to re-engineer or discontinue our solutions or incur additional costs.

If we fail to maintain an effective quality control system, our business could be materially and adversely affected.

We place great emphasis on product quality and adhere to stringent quality control measures and have obtained product compliance certifications, such as ICES certificate, CE EMC certificate and FCC SDOC certificate, after independent third party inspection for our products. To meet our customers' requirements and expectations for the quality and safety of our products, we have selected leading third party assembling partners with quality control certifications such as ISO9001 and adopted a stringent quality control system to ensure that every step of the production process is strictly monitored and managed. Failure to maintain an effective quality control system or to obtain or renew our quality standards certifications may result in a decrease in demand for our products or cancelation or loss of purchase orders from our customers. Moreover, our reputation could be impaired. As a result, our business, results of operations and financial condition could be materially and adversely affected.

The quality of our products and services relies on third-party suppliers and service providers we engage. If we fail to provide satisfactory services or maintain their service levels, it could materially and adversely affect our business, reputation, financial condition and results of operations.

We rely on third-party suppliers and service providers to provide quality products and services to customers, and our brand and reputation may be harmed by actions taken by them that are beyond our control. Despite the measures we have taken to ensure the quality of products and services provided by third-party suppliers and service providers, to the extent that there are manufacturing defects beyond our control, or our third-party suppliers and service providers are unable to maintain the efficiency of their production facilities, supply sufficient components or raw materials in a timely manner, or provide satisfactory services to our customers, we may suffer reputational damage, and our brand image, business, results of operations and financial condition may be materially and adversely affected.

We rely on third-party logistics service providers to deliver our products. Disruption in logistics may prevent us from meeting customer demand and our business, results of operations and financial condition may suffer as a result.

We engage third-party logistics service providers to deliver the ICs from our production partners to our assembly partners and our products from our assembly partners to our customers. Disputes with or termination of our contractual relationships with one or more of our logistics service providers could result in delayed delivery of products or increased costs. We cannot assure you that we can continue or extend relationships with our current logistics service providers on terms acceptable to us, or that we will be able to establish relationships with new logistics service providers to ensure accurate, timely and cost-efficient delivery services. If we are unable to maintain or develop good relationships with our preferred logistics service providers, it may inhibit our ability to offer products in sufficient quantities, on a timely basis, or at prices acceptable to our consumers. If there is any breakdown in our relationships with our preferred logistics service providers, we cannot assure you that no interruptions in our product delivery would occur or that they would not materially and adversely affect our business, results of operations and financial condition.

As we do not have any direct control over these logistics service providers, we cannot guarantee their quality of service. In addition, services provided by these logistics service providers could be interrupted by unforeseen events beyond our control, such as poor handling provided by these logistics service providers, natural disasters, pandemics, adverse weather conditions, riots and labor strikes. If there is any delay in delivery, damage to products or any other issue, we may lose customers and sales and our brand image may be tarnished.

Product defects resulting in a large-scale product recall or product liability claims against us could materially and adversely affect our business, results of operations and reputation.

Our products are manufactured in accordance with internationally accepted quality standards and specifications provided by our customers. However, we cannot assure you that all our products are free of defects. Consequently, any product defects identified by our customers or end users might erode our reputation and negatively affect our customer relationships and future business. Product defects may also result in product returns and large-scale product recalls or product liability claims against us for substantial damages. Such claims, irrespective of the outcomes or the merits, would likely be time-consuming and costly to defend and could divert significant resources and management attention. Furthermore, even if we are able to defend any such claim successfully, we cannot assure you that our customers will not lose confidence in our products or that our future relationships with our customers will not be damaged. As a result, our business, results of operations, reputation and brand image could be materially and adversely affected by any product defects.

If we are unable to maintain or enhance our brand recognition, our business, results of operations and financial condition may be materially and adversely affected.

Maintaining and enhancing the recognition, image and acceptance of our brand are important to our ability to differentiate our products from and to compete effectively with our peers. Our brand image, however, could be jeopardized if we fail to maintain high product quality, pioneer and keep pace with evolving technology trends, or timely fulfill the orders for our products. If we fail to promote our brand or to maintain or enhance our brand recognition and awareness among our customers, or if we are subject to events or negative allegations affecting our brand image or the publicly perceived position of our brand, our business, results of operations and financial condition could be adversely affected.

Risks Related to Our Operations

We have incurred net losses and negative cash flows from operating activities in the past, and we may not achieve or sustain profitability.

We recorded net loss of RMB174.9 million in 2021, net income of RMB31.1 million in 2022 and net loss of RMB254.4 million (US\$35.9 million) in 2023. We also recorded negative cash flows from operating activities of RMB274.9 million and RMB133.5 million (US\$18.8 million) in 2022 and 2023, respectively, and generated positive cash flows from operating activities of RMB71.7 million in 2021. We cannot assure you that we will be able to generate net income or positive cash flow from operating activities in the future. Our ability to achieve profitability will depend in large part on our ability to control expenses and manage our growth effectively, achieve a more stable performance given the significant fluctuation and volatility of the prices of cryptocurrencies and blockchain mining business, and maintain our competitive advantage in the relevant markets. We expect to continue to make investments in the development and expansion of our business, which will place significant demands on our management and our operational and financial resources. Continuous expansion may increase the complexity of our business, and we may encounter various difficulties. We may fail to develop and improve our operational, financial and management controls, enhance our financial reporting systems and procedures, recruit, train and retain highly skilled personnel, or maintain customer satisfaction to effectively support and manage our growth. If we invest substantial time and resources to expand our operations but fail to manage the growth of our business and capitalize on our growth opportunities effectively, we may not be able to achieve profitability, and our business, results of operations and financial condition would be materially and adversely affected.

Our limited operating history and our volatile historical results of operations could make it difficult for us to forecast our business and assess the seasonality and volatility in our business.

We have a relatively short operating history since 2019 and did not generate any revenue until 2020. Our total revenue was RMB39.4 million, RMB983.2 million and RMB78.3 million (US\$11.1 million) in 2021, 2022 and 2023, respectively. The significant decrease in our revenue in 2023 was primarily a result of (1) the switch from proof-of-work to proof-of-stake by the Ethereum Mainnet on September 15, 2022 and (2) fluctuations in the prices of cryptocurrencies. We cannot guarantee that we will improve our financial results or that we will reverse the revenue trajectory in the future due to the various risks and uncertainties disclosed elsewhere in this annual report. As the fabless IC design market is relatively nascent and still rapidly evolving, and due to our limited operating history and historical data, as well as the limited visibility into future demand trends for our products, we may not be able to accurately forecast our future total revenue and budget our operating expenses accordingly. As most of our expenses are fixed in the short-term or incurred in advance of anticipated total revenue, we may not be able to adjust our expenses in a timely manner in order to offset any shortfall in revenue.

Our business may be subject to the varying order patterns of the fabless IC design market. We may experience fluctuations in orders in the future. Our volatile historical results of operations could make it difficult to assess the impact of seasonal factors on our business. If we or any of our third-party manufacturing service providers are unable to increase production of new or existing products to meet any increases in demand due to seasonality or other factors, our total revenue would be adversely affected and our reputation with our customers may be damaged.

Our business requires significant financial resources, but we may not be able to obtain it in a timely manner and on favorable terms or at all.

We recorded net cash outflow from operating activities of RMB274.9 million and RMB133.5 million (US\$18.8 million) in 2022 and 2023, respectively, while we recorded net cash inflow from operating activities of RMB71.7 million in 2021. We also incurred net loss of RMB174.9 million and RMB254.4 million (US\$35.9 million) for 2021 and 2023, respectively, although we generated net income of RMB31.1 million in 2022. We have in the past financed our working capital needs primarily with our capital contributions by and loans from shareholders. In August 2022, we were granted a credit line of up to RMB100 million from a commercial bank with a mortgage of our 50-year right to use a parcel of land with an area of 49,452 square meters located in Shaoxing, China. In 2023, such credit line was increased to RMB148 million. As of December 31, 2023, we had a balance of borrowing of approximately RMB123.7 million (US\$17.5 million) under the credit line.

We may require additional cash resources due to the future growth, development and expansion of our business. Our future capital requirements may be substantial as we seek to expand our operations, diversify our product offering, and pursue acquisitions and equity investments. In addition, we incurred accounts payable of RMB15.3 million and RMB16.9 million (US\$2.4 million) as of December 31, 2022 and 2023, respectively. If our cash resources are insufficient to satisfy our cash requirements, we may seek to issue additional equity or debt securities or obtain new or expanded credit facilities or enter into additional factoring arrangements.

Our ability to obtain external financing in the future is subject to a variety of uncertainties, including our future financial condition, results of operations and cash flows and the liquidity of international capital and lending markets. In addition, our loan agreements may contain financial covenants that restrict our ability to incur additional indebtedness or to distribute dividends. Any indebtedness that we may incur in the future may also contain operating and financial covenants that could further restrict our operations. We cannot assure you that financing will be available in a timely manner or in amounts or on terms acceptable to us, or at all. A large amount of bank borrowings and other debt may result in a significant increase in interest expense while at the same time exposing us to increased interest rate risks. Equity financings could result in dilution to our shareholders, and the securities issued in future financings may have rights, preferences and privileges that are senior to those of our ordinary shares. Any failure to raise needed funds on terms favorable to us, or at all, could severely restrict our liquidity as well as have a material adverse effect on our business, results of operations and financial condition.

We may not be able to price our products at our desired margins as a result of any decrease in our bargaining power or changes in market conditions.

We set prices for our products based on various internal and external factors, such as the cost of production, the technological contents of our products, market conditions, and competition we face. Our ability to set favorable prices at our desired margins and accurately estimate costs, among other factors, has a significant impact on our profitability. We cannot assure you that we will be able to maintain our pricing or bargaining power or that our gross profit margin will not be driven down by market conditions or other factors. If we see higher pricing pressure due to intensified competition from other manufacturers, decreases in prices to our customers in the end market or any other reasons, or if we otherwise lose bargaining power due to weaker demand for our products, we may need to reduce the prices and lower the margins of our products. Moreover, we may not be able to accurately estimate our costs or pass on all or part of any increase in our costs of production, and in particular, the costs of raw materials, components and parts, to our customers. As a result, our results of operations and financial condition could be materially and adversely affected.

We may be exposed to credit risks and concentration of credit risks in relation to defaults from counterparties.

Although we require our customers to make full payment for our products before delivery, and we generally do not offer credit sales to customers, we cannot assure you that we will not offer credit sales to our customers in the future due to various internal or external factors, such as the decrease in our bargaining power and changes in industry conditions. If this happens, a drop in the prices of relevant cryptocurrencies may result in lower economic returns for mining activities of our customers and adversely affect their businesses and financial condition, which may further affect their credit profiles and their ability to settle accounts receivables. In addition, if we start to offer credit sales, we may also face concentration of credit risks associated with our business. Our exposure to credit risk may be influenced mainly by the individual characteristics of each customer as well as the industry or country in which the customers operate, and may be concentrated on few number of customers. Although we will monitor our exposure to credit risk on an ongoing basis and make periodic judgment on impairment of overdue receivables based on the likelihood of collectability in the case where we start offer credit sales to our customers, we cannot assure you that all of our counterparties are creditworthy and reputable and will not default on payments in the future. If we encounter significant delays or defaults in payment by our customers or are otherwise unable to recover our accounts receivables, our cash flow, liquidity and financial condition may be materially and adversely affected.

If we are unable to manage our growth or execute our strategies effectively, our business, results of operations and financial condition may be materially and adversely affected.

We plan to expand the application scenarios, including but not limited to data centers and vision computing, by enhancing the quality and variety of our chip products and solution offerings to better serve existing customers and attract new customers. We may fail to successfully execute our expansion plan due to our limited resources and other reasons beyond our control. For example, the gain we obtain from the sales of our existing HTC and HPC solutions may not cover our expenses of development due to a prolonged depression of cryptocurrency prices. In addition, we may face relevant restrictions from existing and future regulations in connection with our expansion into these new business areas. See “—Risks Relating to Our Industry—It may be or become illegal to acquire, own, hold, sell or use cryptocurrencies, participate in the blockchain, transfer or utilize similar bitcoin assets in China or overseas markets where we operate due to adverse changes in the regulatory and policy environment in these jurisdictions.” While we have been closely monitoring the development of the relevant regulations and have been in communication with regulatory authorities, these new business initiatives may not be viable due to regulatory concerns. Should we fail to successfully manage our growth or implement our strategies, the resources we allocate to the new business lines will be wasted, and our business, results of operations and financial condition could be materially and adversely affected.

Our business, results of operations and financial position could be adversely affected by the ongoing COVID-19 pandemic.

The outbreak of COVID-19 has spread throughout the world. On March 11, 2020, the World Health Organization declared the outbreak a global pandemic. Many businesses and social activities in China and other countries and regions have been severely disrupted in the first quarter of 2020, including those of our suppliers, customers and employees. This global outbreak has also caused market panics, which materially and negatively affected the global financial markets, such as the plunge of global stocks on major stock exchanges in March 2020. Such disruption and the potential slowdown of the world’s economy in 2020 and beyond could have a material adverse effect on our results of operations and financial condition. We and our customers experienced and may continue to experience significant business disruptions and suspension of operations due to quarantine measures to contain the spread of the pandemic, which may cause shortage in the supply of raw materials, reduce our production capacity, increase the likelihood of default from our customers and delay our product delivery. For example, in April 2022, we experienced temporary delay in product delivery due to shutdown caused by the pandemic that affected our logistics service providers.

Many of the restrictive measures previously adopted by the PRC governments at various levels to control the spread of the COVID-19 virus have been revoked or replaced with more flexible measures since December 2022. The extent to which the COVID-19 pandemic impacts our business, results of operations and financial position will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the pandemic, its severity, the actions to contain the virus or treat its impact, and when and to what extent normal economic and operating activities can resume. Even after the COVID-19 pandemic has subsided, difficult macroeconomic conditions, such as decreases in per capita income and level of disposable income, increased and prolonged unemployment or a decline in consumer confidence as a result of the COVID-19 pandemic, as well as reduced spending by businesses, could each have a material adverse effect on the demand for our products. We cannot accurately forecast the potential impact of additional outbreaks, further shelter-in-place or other government restrictions implemented in response to such outbreaks, or the impact on the ability of our customers to remain in business as a result of the ongoing pandemic or such additional outbreaks. With the uncertainties surrounding the COVID-19 outbreak, the threat to our business disruption and the related financial impact remains.

High customer concentration exposes us to all of the risks faced by our major customers and may subject us to significant fluctuations or declines in revenues.

Our customers include both enterprises and individuals. A limited number of our major customers, however, have contributed a significant portion of our revenues in the past. In 2021, 2022 and 2023, we generated approximately 59.0%, 9.6% and 15.0% of our total revenues from our largest customer of each year and approximately 85.0%, 38.0% and 55.0% from the top five largest customers, respectively. Although we continually seek to diversify our customer base, we cannot assure you that the proportion of the revenue contribution from these customers to our total revenues will decrease in the near future. Dependence on a limited number of major customers will expose us to the risks of substantial losses and extend the turnover days if any of them reduces or even ceases business collaborations with us. Specifically, any one of the following events, among others, may cause material fluctuations or declines in our revenues and have a material and adverse effect on our business, results of operations, financial condition and prospects:

- an overall decline in the business of one or more of our significant customers;
- the decision by one or more of our significant customers to switch to our competitors;
- the reduction in the prices of our products agreed by one or more of our significant customers;
- the failure or inability of any of our significant customers to make timely payment for our products; or
- regulatory developments that may negatively affect the business of one or more of our significant customers or cryptocurrency mining activities in general.

If we fail to maintain relationships with these major customers, and if we are unable to find replacement customers on commercially desirable terms or in a timely manner or at all, our business, financial condition, results of operations and prospects may be materially and adversely affected.

Our prepayments to suppliers may subject us to counterparty risk associated with such suppliers and negatively affect our liquidity.

We are required to prepay some of our suppliers before the service is provided to secure the supplier's production capacity. The amount of our prepayments may significantly increase as we continue to pursue technological advancement. We are subject to counterparty risk exposure to our suppliers. Any failure by our suppliers to perform their contract obligations on a timely manner and/or with our requested quality may cause us fail to fulfill customers' orders accordingly. In such event, we may not be able to regain the prepayment in a timely manner or in full, even though our suppliers are obligated to return such prepayments under specified circumstances as previously agreed upon. Furthermore, if the cash outflows for the prepayments significantly exceed the cash inflows during any period, our future liquidity position will be adversely affected.

If we fail to maintain appropriate inventory levels in line with the approximate level of demand for our products, we could lose sales or face excessive inventory risks and holding costs.

On the one hand, to operate our business successfully and meet our customers' demands and expectations, although we usually only offer advance sale in most of circumstances, we must still maintain a certain level of finished goods inventory to ensure immediate delivery when required. We are also required to maintain an appropriate level of raw materials for our production. However, forecasts are inherently uncertain. If our forecasted demand is lower than what eventually transpires, we may not be able to maintain an adequate inventory level of our finished goods or produce our products in a timely manner, and we may lose sales and market share to our competitors. On the other hand, we may also be exposed to increased inventory risks due to accumulated excess inventory of our products or raw materials, parts and components for our products. Excess inventory levels may lead to increases in inventory holding costs, risks of inventory obsolescence and provisions for write-downs, which will materially and adversely affect our business, results of operations and financial condition.

In order to maintain an appropriate inventory level of finished goods and raw materials to meet market demand, we adjust our procurement amount and production schedule from time to time based on customers' orders and anticipated demand. We also carry out an inventory review and an aging analysis on a regular basis. We may make provision for the obsolete and slow-moving inventory of raw materials and finished goods that are no longer suitable for use in production or sale depending on future changes of our inventory strategy. However, we cannot guarantee that these measures will always be effective and that we will be able to maintain an appropriate inventory level. We may also be exposed to the risk of holding excessive inventory, including older generation IC products that are less marketable which may increase our inventory holding costs and subject us to the risk of inventory obsolescence or write-offs, which could have a material adverse effect on our business, results of operations and financial condition. If we cannot maintain an appropriate inventory level, we may lose sales and market share to our competitors.

Our export of products to foreign countries such as the United States, may be subject to high tariff rates resulting from protectionism trade policies, and as a result, our future sales volumes, profitability and results of operations will be materially and adversely affected.

Historically, only a small portion of our products were exported to the United States. However, as our sales continue to ramp up, export of our products to the United States may increase. The United States and China had previously been involved in controversy over trade barriers in China that have threatened a trade war between these two countries, and had implemented or proposed to implement tariffs on certain imported products. Though we are not aware of any trade policies announced by the United States that may directly impact the export of our IC products as of the date of this annual report, we cannot accurately predict whether any anti-dumping duties, tariffs or quota fees will be imposed on our HTC and HPC solutions by the United States in the future. Any export requirements, tariffs, taxes and other restrictions and charges imposed by the United States on our IC products could significantly increase our customers' purchase costs of our products and make our products less competitive in the U.S. market. As a result, our future sales volumes, profitability and results of operations could be adversely affected.

In addition, we also intend to increase our export of HTC and HPC solutions and distributed computing and data storage solutions to other overseas markets such as the European Union. However, the worldwide populism trend that calls for protectionism trade policy and potential international trade disputes could cause turbulence in the international markets. These government policies or trade barriers could increase the prices of our products and cause us to lose our sales and market share to our competitors in these countries.

We may be unable to make the substantial research and development investments that are required to remain competitive in our business.

Advances in technologies, such as blockchain, artificial intelligence and cloud computing, have led to increased demand for ICs of higher performance and power efficiency for solving computational problems of increasing complexity. We intend to broaden our product offerings to design and develop solutions covering more application scenarios, including vision computing and privacy computing. We are committed to investing in new product development in order to stay competitive in our markets. Nevertheless, if we are unable to generate enough revenue or raise enough capital to make adequate research and development investments going forward, our product development and relevant research and development initiatives may be restricted or delayed, or we may not be able to keep pace with the latest market trends and satisfy our customers' needs, which could materially and adversely affect our results of operations. Furthermore, our substantial research and development expenditures may not yield the expected results that enable us to roll out new products, which in turn will harm our prospects and results of operations.

We require various approvals, licenses, permits and certifications to operate our business. If we fail to obtain or renew any of these approvals, licenses, permits or certifications, it could materially and adversely affect our business and results of operations.

In accordance with the laws and regulations in the jurisdictions in which we operate, we are required to maintain various approvals, licenses, permits and certifications in order to operate our business or engage in the business we plan to enter into. Complying with such laws and regulations may require substantial expenses, any non-compliance may expose us to liability. In the event of that government authorities consider us to be in non-compliance, we may have to incur significant expenses and divert substantial management time to rectify the incidents. If we fail to obtain all the necessary approvals, licenses, permits and certifications, we may be subject to fines or the suspension of operations of the facilities that do not have the requisite approvals, licenses, permits or certifications, which would adversely affect our reputation, business and results of operations. See "Item 4. Information on the Company—B. Business Overview—Regulation" for further details on the requisite approvals license permits and certifications.

We may encounter difficulties in recruiting and retaining key personnel.

Our future growth and success depend to a significant extent on the continuing service and contribution of our engineers and senior management personnel. Many of these key personnel are highly skilled and experienced and are difficult to recruit and retain, particularly as we seek to expand our business with respect to the HTC and HPC solutions and distributed computing and data storage solutions. Competition for recruiting qualified personnel is intense, and recruiting personnel with the combination of skills and attributes required to execute our business strategy may be difficult, time-consuming and expensive. As a result, the loss of any key personnel or failure to recruit, train or retain qualified personnel could have a significant negative impact on our operations.

We may become a target for public scrutiny, including complaints to regulatory agencies, negative media coverage, and malicious allegations, all of which could severely damage our reputation and materially and adversely affect our business and prospects.

We may become a target for public scrutiny, including complaints to regulatory agencies, negative media coverage, and malicious allegations. Certain features of cryptocurrency networks, such as decentralization, independence from sovereignty and anonymity of transactions, create the possibility of heightened attention from the public, regulators and the media. Heightened regulatory and public concerns over us and cryptocurrency-related issues may subject us to additional legal and social responsibilities and increased scrutiny and negative publicity over these issues, due to our leading position in the industry. From time to time, these allegations, regardless of their veracity, may result in consumer dissatisfaction, public protests or negative publicity, which could result in government inquiry or substantial harm to our brand, reputation and operations.

Moreover, as our business expands and grows, both organically and through acquisitions of and investments in other businesses, domestically and internationally, we may be exposed to heightened public scrutiny in jurisdictions where we already operate as well as in new jurisdictions where we may operate. We cannot assure you that we would not become a target for regulatory or public scrutiny in the future or that scrutiny and public exposure would not severely damage our reputation as well as our business and prospects.

We may face difficulties in protecting our intellectual property rights.

We rely on our intellectual property rights, and in particular, our patents, software copyrights and our registered IC layout designs of our ICs. Even though we have successfully registered certain of our intellectual property rights in China, it may be possible for a third party to imitate or use our intellectual property rights without authorization. Additionally, we have developed and utilized some intellectual property that has not been registered. If a third party misuses or misappropriates our intellectual property, we may not be able to easily differentiate our products from the others in the market. As a result, we may be forced into an adverse price competition that reduces our profit margin. As we develop new technologies, we will need to continue to apply for intellectual property rights protections. There is no guarantee that we will be able to obtain valid and enforceable intellectual property rights in China or in other relevant jurisdictions as needed. Even when we are able to obtain such protections, there is no guarantee that we will be able to effectively enforce our rights.

In addition, we have entered and may, from time to time, enter into cooperation agreements with cooperation partners to develop new IC products. Depending on the specific terms of each cooperation agreement, we may solely own or share with such partners the intellectual property developed under such agreement. Although we typically entered into confidentiality agreements with our cooperation partners for the protection of our intellectual property, they may not protect our intellectual property with the same degree of care as we use, even in the case where they own part of the intellectual property. Such cooperation may expose us to risks of misuse or misappropriation of our intellectual property by third parties. We may also find it difficult to assert or claim that third parties infringed our intellectual property rights due to the faults of our cooperation partners, which may lead to unraveling relationships between our cooperation partners and us.

In this respect, we may incur expenses and efforts to monitor and enforce our intellectual property rights. Infringement of our intellectual property rights and the resulting diversion of resources to protect such rights through litigation or other means could also adversely affect our profitability.

Third parties have claimed and may, from time to time, assert or claim that we infringed their intellectual property rights, and any failure to protect our intellectual property rights could have a material adverse impact on our business.

We operate in an industry where players own a large number of patents and other intellectual property rights that are material to operations and will vigorously pursue, protect and defend these rights. Our competitors or other third parties may allege to own intellectual property rights and interests that could potentially conflict with our own. It is difficult to monitor all of the patent applications and other intellectual property rights protection registrations or applications that may be filed in China or in other relevant jurisdictions. If we offer products that may potentially infringe on such pending applications and the applications are granted, third parties may initiate intellectual infringement claims against us.

As we expand our operations with new products and into new markets, the chances of encountering infringement claims by third parties will increase. We may incur substantial costs in defending or settling such disputes and such actions could divert significant resources and management attention. If any such claim against us is successful, we may not have a legal right to continue to manufacture and sell the relevant products that are found to have incorporated the disputed intellectual property. The success of such claims may also result in an increase in our costs, including additional royalties, licensing fees or further research and development costs to develop non-infringing alternatives, and negatively affect our profitability. Moreover, such claims, whether successful or not, may cause significant damage to our reputation and a loss of customers, as a result of which our business, results of operations and financial condition could be materially and adversely affected.

We have been, and may continue to be, subject to litigation for various claims, which could adversely affect our results of operations, harm our reputation or otherwise negatively impact our business.

We have been, and may continue to be, subject to litigation for claims arising from our normal business activities. These may include claims, suits, and proceedings involving, contract disputes, product liability, labor and employment and other matters. For example, a customer filed a civil action against us and sought to rescind a sales contract for our products executed in 2022, amounting to approximately RMB39.0 million. The customer also demanded a return of payment consisting of the contract amount and additional payments made in connection with the contract, totaling approximately RMB44.9 million, as well as damages of approximately RMB1.7 million. Based on the final judgment, we were ordered to return approximately RMB0.1 million as well as interests accrued to this customer. Any claims and lawsuits, and the disposition of such claims and lawsuits, could be time-consuming and expensive to resolve, divert management attention and resources, and lead to attempts on the part of other parties to pursue similar claims. Any adverse determination related to litigation could adversely affect our results of operations, harm our reputation or otherwise negatively impact our business. In addition, depending on the nature and timing of any such dispute, a resolution of a legal matter could materially affect our future operating results, our cash flows or both.

Cybersecurity incidents, including data security breaches or computer viruses, could harm our business by disrupting our delivery of services, damaging our reputation or exposing us to liability.

We receive, process, store and transmit, often electronically, the data of our customers and others, much of which is confidential. Unauthorized access to our computer systems or stored data could result in the theft, including cyber-theft, or improper disclosure of confidential information, and the deletion or modification of records could cause interruptions in our operations. These cyber-security risks increase when we transmit information from one location to another, including over the Internet or other electronic networks. Despite the security measures we have implemented, our facilities, systems and procedures, and those of our third-party service providers, may be vulnerable to security breaches, acts of vandalism, software viruses, misplaced or lost data, programming or human errors or other similar events which may disrupt our delivery of services or expose the confidential information of our customers and others. Any security breach involving the misappropriation, loss or other unauthorized disclosure or use of confidential information of our customers or others, whether by us or a third party, could subject us to civil and criminal penalties, have a negative impact on our reputation, or expose us to liability to our customers, third parties or government authorities. We are not aware of such breaches or any other material cybersecurity risks in our supply chain to date. Any of these developments could have a material adverse effect on our business, results of operations and financial condition.

If we suffer failure or disruption in our information systems, our ability to effectively manage our business operations could be adversely affected.

We use information systems to obtain, process, analyze and manage data crucial to our business such as our enterprise resource planning system. We use these systems to, among other things, monitor the daily operations of our business, maintain operating and financial data, manage our distribution network as well as manage our research and development activities, production operations and quality control systems. Any system damage or failure that interrupts data input, retrieval or transmission or increases service time could disrupt our normal operations. In particular, our operations could be disrupted if such damage or failure includes any security breach caused by hacking or cybersecurity incidents, involves efforts to gain unauthorized access to our information or systems, or causes intentional malfunctions, loss or corruption of data, software or hardware, the intentional or inadvertent transmission of computer viruses and similar events or third-party actions. We cannot assure you that we will be able to effectively handle a failure of our information systems, or that we will be able to restore our operational capacity in a timely manner to avoid disruption to our business. The occurrence of any of these events could adversely affect our ability to effectively manage our business operations and negatively impact our reputation.

We currently do not have insurance coverage covering all risks related to our business and operations.

As of the date of this annual report, we do not maintain insurance policies covering all of our business risks, such as risks relating to properties, receivables, goods in transit and public liability. We cannot assume you that the insurance coverage we currently have would be sufficient to cover our potential losses. See “Item 4. Information on the Company—B. Business Overview—Insurance” for more information on the insurance policies maintained by us. In the event there is any damage to any assets or incidents for which we do not have sufficient insurance coverage, if at all, we would have to pay for the difference ourselves where our cash flow and liquidity could be negatively affected.

If we fail to comply with labor, work safety or environmental regulations, we could be exposed to penalties, fines, suspensions or action in other forms.

Our operations are subject to the labor, work safety and environmental protection laws and regulations promulgated by the PRC government and the laws and regulations of other jurisdictions which may be applicable to us. These laws and regulations require us to pay social insurance, maintain safe working conditions and adopt effective measures to control and properly dispose of solid waste and other environmental pollutants. We could be exposed to penalties, fines, suspensions or actions in other forms if we fail to comply with these laws and regulations. The laws and regulations in China may be amended from time to time and changes in those laws and regulations may cause us to incur additional costs in order to comply with the more stringent rules. In the event that changes to existing laws and regulations require us to incur additional compliance costs or require costly changes to our production process, our costs could increase and we may suffer a decline in sales for certain products, as a result of which our business, results of operations and financial condition could be materially and adversely affected.

Failure to qualify for or obtain any preferential tax treatments that are available in China could adversely affect our results of operations and financial condition.

The modified Enterprise Income Tax Law, effective on December 29, 2018, or the EIT Law, and its implementation rules generally impose a uniform income tax rate of 25% on all enterprises but grant preferential treatment to the High and New Technology Enterprises, or the HNTEs, to enjoy a preferential enterprise tax rate of 15%. Zhejiang Nanomicro was accredited as an HNTE on December 16, 2021 and are eligible for a preferential enterprise tax rate of 15% if it satisfies the criteria of HNTEs in each year of the accredited period. According to the relevant administrative measures, to qualify as an HNTE, Zhejiang Nanomicro must satisfy certain financial and non-financial criteria and complete verification procedures with the administrative authorities. We cannot assure you that such policy will continue in the future, nor that Zhejiang Nanomicro will continue to be qualified as an HNTE. Moreover, continued qualification as an HNTE is subject to a three-year review by the relevant government authorities in China, and in practice, certain local tax authorities also require annual evaluation of such qualification. In the event that Zhejiang Nanomicro fails to obtain accreditation as an HNTE or are not verified by the local tax authorities, and fails to obtain preferential income tax treatment based on other qualifications, it will continue to be subject to the standard PRC enterprise income tax rate of 25%. We cannot assure you that the tax authorities will approve the preferential tax rate of 15% as a matter of course even if Zhejiang Nanomicro has been accredited as an HNTE.

Our business operations and international expansion are subject to geopolitical risks.

Our business operation and international expansion is subject to geopolitical risks. Any significant deterioration in the international relationship may have a negative impact on the ability of our production partners to fulfill their contractual obligations and ship the IC products to us, which could have a material and adverse effect on our business, financial condition and results of operations.

We exported our products to various countries outside of China and derive sales from exporting to those countries, and we intend to continue to sell our current and future products to countries outside of China. Additionally, we rely on the supply of certain tools, such as our electronic design automation, a development tool, from certain overseas providers. Changes to trade policies, treaties and tariffs in or affecting the jurisdictions in which we operate and to which we sell our products, or the perception that these changes could occur, could adversely affect the financial and economic conditions in those jurisdictions, as well as our international sales, results of operations and financial condition.

In February 2022, a full-scale military invasion of Ukraine by Russian troops was reported. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine could lead to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions. We are continuing to monitor the situation in Ukraine and globally and assessing its potential impact on our business. Additionally, Russia's prior annexation of Crimea, recent recognition of two separatist republics in the Donetsk and Luhansk regions of Ukraine and subsequent military interventions in Ukraine have led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia, Belarus, the Crimea Region of Ukraine, the so-called Donetsk People's Republic, and the so-called Luhansk People's Republic, including agreement to remove certain Russian financial institutions from the Society for Worldwide Interbank Financial Telecommunication, or SWIFT, payment system, expansive ban on imports and exports of products to and from Russia and ban on exportation of U.S. denominated bank notes to Russia or persons located there. Additional potential sanctions and penalties have also been proposed and/or threatened. Russian military actions and the resulting sanctions could adversely affect the global economy and financial markets and lead to instability and lack of liquidity in capital markets. Although our operations have not experienced material and adverse impact on supply chain, cybersecurity or other aspects of our business from the ongoing conflict between Russia and Ukraine, there is no assurance that such conflict would not develop or escalate in a way that could materially and adversely affect our business, financial condition, and results of operations in the future.

In August 2022, Nancy Pelosi, the U.S. House Speaker visited Taiwan despite repeated protests from Beijing. The PRC government condemned Pelosi's visit in strong terms and responded with live-fire military exercises around the region and a ban on certain exports/imports with Taiwan, ratcheting up tensions between the U.S. and China as well as Taiwan and mainland China. If the relationship between mainland China and Taiwan continues to deteriorate, we cannot assure you that the supply chain of the global IC industry will not be affected, which may in turn adversely affect our business, financial condition and results of operations.

Any global systemic economic and financial crisis could negatively affect our business, results of operations and financial condition.

Any prolonged slowdown in the Chinese or global economy may have a negative impact on our business, results of operations and financial condition. For example, the global financial markets have experienced significant disruptions since 2008 and the United States, Europe and other economies have experienced periods of recession. The recovery from the lows of 2008 and 2009 has been uneven and there are new challenges, including the escalation of the European sovereign debt crisis from 2011 and the slowdown of the PRC's economic growth since 2012, which may continue. The market panics over the global outbreak of coronavirus COVID-19 and the drop in oil price have materially and negatively affected the global financial markets in March 2020, which may cause a potential slowdown of the world's economy. See “—Risks Relating to Our Operations—The ongoing global coronavirus COVID-19 outbreak has caused significant disruptions in our business, which we expect will materially and adversely affect our results of operations and financial condition.” Additionally, there is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. There have also been (1) concerns over unrest in Ukraine, the Middle East and Africa, which have resulted in volatility in financial and other markets; (2) concerns over the United Kingdom leaving the European Union as well as the significant potential changes to United States trade policies, treaties and tariffs, including trade policies and tariffs regarding China; (3) concerns about the economic effect of the tensions in the relationship between China and surrounding Asian countries; and (4) concerns over the rising level of inflation in major industrial countries including the United States and worries that efforts to curb inflation may result in recession. There were and could be in the future a number of domino effects from such turmoil on our business, including significant decreases in orders from our customers, insolvency of key suppliers resulting in product delays, rises in raw material prices leading up to increased level of cost of sales that we may not be able to pass onto customers, inability of customers to obtain credit to finance purchases of our products and/or customer insolvencies, and counterparty failures negatively impacting our operations. Any systemic economic or financial crisis could cause revenues for the semiconductor industry as a whole to decline dramatically and could materially and adversely affect our results of operations.

We face risks of natural disasters, acts of God and occurrence of epidemics, which could severely disrupt our business operations.

Natural disasters, epidemics and other acts of God which are beyond our control may adversely affect the economy, infrastructure and livelihood of the people in China and may materially and adversely affect our operations as our facilities and offices are located in China. Material damage to, or the loss of, such facilities due to fire, severe weather, flood, earthquake, or other acts of God or cause may not be adequately covered by proceeds of our insurance coverage and could materially and adversely affect our business and results of operations. Any outbreaks of contagious disease, acts of war or terrorist attacks may cause damage or disruption to our business, our employees and our markets, any of which could adversely impact our business, results of operations and financial condition.

If we grant employees share options or other equity incentives in the future, our net income could be adversely affected.

We have adopted a share incentive plan and may grant options in the future. We are required to account for share-based compensation expenses in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation, which generally requires a company to recognize, as an expense, the fair value of share options and other equity incentives to employees based on the fair value of equity awards on the date of the grant, with the compensation expense recognized over the period in which the recipient is required to provide service in exchange for the equity award. If we grant options or other equity incentives in the future, we could incur significant compensation charges and our financial condition could be adversely affected.

If we fail to implement and maintain an effective system of internal controls to remediate our material weakness over financial reporting, we may be unable to accurately or timely report our results of operations, meet our reporting obligations or prevent fraud, and investor confidence and the market price of our Class A ordinary shares may be materially and adversely affected.

In connection with the audits of our consolidated financial statements as of and for the year ended December 31, 2023, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting. As defined in the standards established by the Public Company Accounting Oversight Board of the United States, a “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company’s annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness identified is related to lack of sufficient accounting personnel who possess adequate knowledge in financial reporting in accordance with U.S. GAAP. We intend to implement a number of measures to address this material weakness in our internal control over financial reporting. We cannot assure you, however, that these measures may fully address these deficiencies in our internal control over financial reporting or that we may conclude that they have been fully remedied.

Since our initial public offering, we have become a public company in the United States subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, requires that we include a report of management on our internal control over financial reporting in our annual report on Form 20-F beginning with our second annual report on Form 20-F. In addition, once we cease to be an “emerging growth company” as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Our management may conclude that our internal control over financial reporting is not effective. Moreover, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, as a public company, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation. During the course of documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404, we may identify other weaknesses and deficiencies in our internal control over financial reporting.

In addition, if we fail to maintain the adequacy of our internal control over financial reporting, as these standards are modified, supplemented or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404. Generally, if we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our Class A ordinary shares. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

Risks Relating to Our Industry

It may be or become illegal to acquire, own, hold, sell or use cryptocurrencies, participate in the blockchain, transfer or utilize similar bitcoin assets in China or overseas markets where we operate due to adverse changes in the regulatory and policy environment in these jurisdictions.

We primarily generated our revenue from sales in China in 2023. Our blockchain mining solution business could be significantly affected by, among other things, the regulatory and policy developments in China and overseas jurisdictions. Governmental authorities are likely to continue to issue new laws, rules and regulations governing the blockchain and cryptocurrency industry we operate in and enhance enforcement of existing laws, rules and regulations. For example, the People's Bank of China, or the PBOC, the Cyberspace Administration of China, or the CAC, Ministry of Industry and Information Technology, State Administration for Industry and Commerce, China Banking Regulatory Commission, China Securities Regulatory Commission and China Insurance Regulatory Commission issued "Announcement on Preventing Token Fundraising Risks" on September 4, 2017, prohibiting all organizations and individuals from engaging in initial coin offering transactions and token trading platforms from providing pricing, information agency or other services for tokens or virtual currencies. On May 21, 2021, the Financial Stability and Development Committee of the PRC State Council mentioned the need to resolutely crack down on bitcoin mining and trading activities. On June 18, 2021, the "Notice of the Sichuan Provincial Development and Reform Commission and the Sichuan Provincial Energy Administration on the Cleanup and Shutdown of Virtual Currency Mining Projects" required electricity companies within Sichuan Province in China to close down power supply to businesses involved in cryptocurrency mining. On June 21, 2021, the PBOC was reported to have held interviews with certain financial institutions in China, and stressed that banks and other financial institutions in China shall strictly implement the "Guarding Against Bitcoin Risks" and the "Announcement on Preventing Token Fundraising Risks" and other regulatory requirements, diligently fulfill their customer identification obligations, and shall not provide account opening, registration, trading, clearing, settlement and other services related to blockchain and cryptocurrency business. On September 15, 2021, ten ministries and commissions, including PBOC, CAC and the Supreme People's Court of PRC, published the Notice on Further Prevention and Disposal of the Risk of Speculation in Cryptocurrency Trading, which clarifies that certain cryptocurrency-related businesses are illegal financial activities and emphasizes the establishment of a mechanism to deal with risks related to cryptocurrency trading and speculation, strengthening the monitoring and warning of cryptocurrency trading and speculation risk, and the establishment of a multi-dimensional and multi-level risk prevention and disposal system. Furthermore, according to the Industrial Structure Adjustment Guidance Catalogue (2024 Edition) published by the National Development and Reform Commission on December 27, 2023, cryptocurrency mining activities are listed as the backward production processes and equipment under the eliminated category, and as such, investments in activities in the elimination category, including cryptocurrency mining activities, are prohibited in China. These regulations may severely restrict our ability to expand our business or serve our customers in China. We cannot assure you that government authorities in China will not introduce further enhanced regulation over the cryptocurrency industry that may lead to our inability to operate in China at all.

In light of these developments in China, we are in the process of expanding our business in the overseas IC markets. We may be subject to restrictions relating to the transfer of blockchain mining solutions out of China, as China has recently strengthened regulations on exports of goods, technology and services. Specifically, for computers and related components used in blockchain mining solutions, exporting enterprises should carefully evaluate whether the mining solutions, their components, and any data or information contained are subject to export restrictions, and therefore are required to go through relevant export licensing procedures before such mining solutions can be transported out of China. The relevant restrictions that apply to the transfer of blockchain mining solutions by us include, but are not limited to, the Catalogue of Goods Prohibited from Export, the Catalogue of Goods Subject to Export License Management, the Catalogue of Technologies Prohibited from Export and Restricted from Export in China, the Catalogue for the Administration of Import and Export Licenses of Dual-use Items and Technologies, and other applicable export control catalogues and lists. If we are deemed to have violated export restrictions or data security regulations in China or otherwise become subject to government interferences, we may be subject to administrative penalties or criminal investigation by relevant government authorities and our business expansion in overseas markets may be delayed, interrupted or compromised.

Some jurisdictions, including China, restrict various uses of cryptocurrencies, including the use of cryptocurrencies as a medium of exchange, the conversion between cryptocurrencies and fiat currencies or between cryptocurrencies, the provision of trading and other services related to cryptocurrencies by financial institutions and payment institutions, and initial coin offerings and other means of capital raising based on cryptocurrencies. We cannot assure you that these jurisdictions will not enact new laws or regulations that further restrict activities related to cryptocurrencies.

In addition, cryptocurrencies may be used by market participants for black market transactions to conduct fraud, money laundering and terrorism-funding, tax evasion, economic sanction evasion or other illegal activities. As a result, governments may seek to regulate, restrict, control or ban the mining, use, holding and transferring of cryptocurrencies. We may not be able to eliminate all instances where other parties use our products to engage in money laundering or other illegal or improper activities. We cannot assure you that we will successfully detect and prevent all money laundering or other illegal or improper activities which may adversely affect our reputation, business, financial condition and results of operations. With advances in technology, cryptocurrencies are likely to undergo significant changes in the future. It remains uncertain whether Bitcoin, ETHW, ETHF, ETC, Grin or Filecoin will be able to comply with, or benefit from, those changes. In addition, as mining activities employ sophisticated and high computing power devices that need to consume large amounts of electricity to operate, future developments in the regulation of energy consumption, including possible restrictions on energy usage in the jurisdictions where we sell our products, may also affect our business operations and the demand for our blockchain mining solutions. There has been negative public reaction to the environmental impact of mining activities, particularly the large consumption of electricity, and governments of various jurisdictions have responded. For example, in the United States, certain local governments of the state of Washington have discussed measures to address the environmental impacts of Bitcoin-related operations, such as the high electricity consumption of Bitcoin mining activities.

The current regulatory environment in foreign markets, including the United States, and any adverse changes in that environment, could have a material adverse impact on our blockchain products business.

We currently export our products to various overseas markets and intend to develop our business and operations in jurisdictions outside China in the future. Our blockchain mining solution business could therefore be significantly affected by regulatory developments in jurisdictions outside China, including the United States. Governmental authorities, including those in the United States, oversee certain aspects of the cryptocurrency markets, have taken actions based on current laws and regulations, and are likely to continue to issue new laws, rules and regulations governing the cryptocurrency industry we operate in. As a result, and as discussed further below, existing and future regulations affecting the mining, holding, using or transferring of cryptocurrencies may adversely affect our future business operations and results of operations, and could even result in our or our customers' liability for activities conducted by our customers. As described under United States federal and state securities laws may specifically limit our ability and the ability of our customers to use our blockchain mining solutions where these operations are conducted in connection with cryptocurrencies that are considered "securities" for purposes of U.S. law. The likely status of cryptocurrencies as securities could limit distributions, transfers or other actions involving such cryptocurrencies, including mining, in the United States. For example, the distribution of cryptocurrencies to miners through the mining process could be deemed to involve an illegal offering or distribution of securities subject to federal or state law. In addition, miners on cryptocurrency networks could, under certain circumstances, be viewed as statutory underwriters or as "brokers" subject to regulation under the Securities Exchange Act of 1934. This could require us or our customers to change, limit, or cease their mining operations, register as broker-dealers and comply with applicable law, or be subject to penalties, including fines. In addition, we could have liability for facilitating their illegal activities.

Furthermore, cryptocurrencies are subject to additional U.S. laws and regulations related to transactions in commodities as enforced by the Commodity Futures Trading Commission, or CFTC, and to money transmission, money service business, anti-money laundering, and know-your-customer activities as enforced by the Department of the Treasury's Financial Crimes Enforcement Network, or FinCEN, and by state governments. We or our customers could be subject to regulatory restrictions or regulatory actions based on these laws and regulations.

Any restrictions imposed by a foreign government could force us to restructure operations, perhaps significantly, which could result in significant costs and inefficiencies that harm our profitability, or even cause us to cease operations in the applicable jurisdiction. In addition, existing and proposed laws and regulations can delay or impede the development of new products, result in negative publicity, decrease demand for our products, require significant management time and attention, and subject us to claims or other remedies, including fines or demands that we modify or cease existing business practices.

In addition, any action brought against us or our customers by a foreign regulator, or by an individual in a private action, based on foreign law could cause us or our customers to incur significant legal expenses and divert our management's attention from the operation of the business. If our or our customers' operations are found to be in violation of any laws and regulations, we or they may be subject to penalties associated with the violation, including civil and criminal penalties, damages and fines. This could in turn require us to curtail or cease all or some operations. Regulatory action or regulatory change could also decrease demand for our products, which would be harmful to the success of our business.

The industries in which we operate are characterized by constant changes. If we fail to continuously innovate and provide products that meet the expectations of our customers, we may be unable to attract new customers or retain existing customers, and hence our business and results of operations may be adversely affected.

The industries in which we operate are characterized by constant changes, including rapid technological evolution, continual shifts in customer demands, frequent introductions of new products and solutions, and constant emergence of new industry standards and practices. Thus, our success will depend, in part, on our ability to respond to these changes in a cost-effective and timely manner. We need to anticipate the emergence of new technologies and assess their market acceptance. We also need to invest significant resources in research and development in order to keep our products competitive in the market.

However, research and development activities are inherently uncertain, and we might encounter practical difficulties in commercializing our research and development results, which could result in excessive research and development expenses or delays. Given the fast pace with which blockchain has been and will continue to be developed, we may not be able to timely upgrade our technologies in an efficient and cost-effective manner, or at all. In addition, new developments in artificial intelligence, deep learning, Internet-of-things, computer vision, blockchain and cryptocurrency could render our products obsolete or unattractive. If we are unable to keep up with the technological developments and anticipate market trends, or if new technologies render our technologies or solutions obsolete, customers may no longer be attracted to our products. As a result, our business, results of operations and financial condition would be materially and adversely affected.

Increasing mining difficulty could result in downward pressure on the expected economic returns on cryptocurrency mining.

The mining difficulty for Bitcoin, Ethereum and Grin, or the amount of computational resources required for a set amount of reward for recording a new block, directly affects the expected economic returns for Bitcoin, Ethereum and Grin miners, which in turn affects the demand for our HTC and HPC solutions. Mining difficulty is a measure of how much computing power is required to record a new block, and it is affected by the total amount of computing power in the Bitcoin, Ethereum or Grin network. Taking Bitcoin as an example, the Bitcoin algorithm is designed so that one block is generated, on average, every ten minutes, no matter how much computing power is in the network. Thus, as more computing power joins the network, and assuming the rate of block creation does not change (remaining at one block generated every ten minutes), the amount of computing power required to generate each block and hence the mining difficulty increases. In other words, based on the current design of the Bitcoin network, Bitcoin mining difficulty would increase together with the total computing power available in the Bitcoin network, which is in turn affected by the number of Bitcoin mining machines in operation. For example, Bitcoin mining difficulty would increase based on increases in the total computing power available in the Bitcoin network, which is in turn affected by the number of Bitcoin mining machines in operation. From January 2017 to December 2019, Bitcoin mining difficulty increased by approximately 35 times, according to Blockchain.info. The same applies to Ethereum. As a result, a strong growth in sales of our HTC and HPC solutions can contribute to further growth in the total computing power in each cryptocurrency's respective network, thereby driving up the difficulty of mining and resulting in downward pressure on the expected economic return of blockchain mining and the demand for, and pricing of, our products. Although, in May 2021, more than 54% of Bitcoin's hash rate, which is the collective computing power of miners worldwide, has dropped off the network since its market peak as China cracked down on mining, the Bitcoin network may recovery from such decrease in the hash rate very soon and drive up the mining difficult again.

In addition, the number of Bitcoins awarded for solving a block in the blockchain halves approximately every four years until the estimated complete depletion of Bitcoin by around the year 2140. In each of 2013, 2014 and 2015, approximately 25 Bitcoins were awarded for each block solved. The number of Bitcoins awarded for solving a block halved in 2016 to 12.5 Bitcoins per block and halved in 2020 to 6.25 Bitcoins per block. It is expected to halve again in 2024 to 3.125 Bitcoins per block. It is unclear how the market will react to future reward halving events and how the Bitcoin price and the expected economic returns on Bitcoin mining will be affected. Similar mechanism applies to Ethereum and Grin as well.

Aside from mining rewards, transaction fees are another form of incentive for participation in Bitcoin, Ethereum and Grin verification processes. Bitcoin, Ethereum and Grin users may offer to pay a discretionary transaction fee to the network member who solves the block and adds that user's transaction to the blockchain to incentivize prioritizing that user's transaction. Transaction fees are discretionary, so if the transaction fees were to become the only or primary income for Bitcoin, Ethereum or Grin mining activities in the future, the expected economic returns from Bitcoin, Ethereum or Grin mining and therefore the demand for our HTC and HPC solutions will decrease significantly, which will result in a significant negative impact on our business and results of operations.

If any person, institution or a pool of them acting in concert obtains control of more than 50% of the processing power active on the Bitcoin, Ethereum or Grin, such person, institution or a pool of them could prevent new transactions from gaining confirmations, halt payments between users, and reverse previously completed transactions, which would erode user confidence in Bitcoin, Ethereum or Grin.

If the award of Bitcoin, Ethereum or Grin for solving blocks and transaction fees for recording transactions are not sufficiently high to incentivize miners, miners may cease expending processing power to solve blocks. Miners ceasing operations would reduce the collective processing power on the Bitcoin, Ethereum or Grin network, which would adversely affect the confirmation process for transactions and make the Bitcoin, Ethereum or Grin network more vulnerable to any person, institution or a pool of them which has obtained over 50% control over the computing power on the Bitcoin, Ethereum or Grin network. In such event, such person, institution or a pool of them could prevent new transactions from gaining confirmation, halt payments between users, and reverse previously completed transactions. Such changes or any reduction in confidence in the confirmation process or processing power of the Bitcoin, Ethereum or Grin network may erode user confidence in Bitcoin, Ethereum or Grin, which would decrease the demand for our products.

The decentralized nature of cryptocurrency may be subject to challenges, which could negatively affect our results of operations.

A key reason for Bitcoin, Ethereum, Grin and other cryptocurrencies to have attracted many new and committed users in a short period of time is its decentralized nature, or the lack of control by a central authority. However, there are divergent views on the decentralized nature of cryptocurrencies. For example, there are claims that most of the actual services and businesses built within the Bitcoin ecosystem are in fact centralized since they are run by specific people, in specific locations, with specific computer systems, and that they are susceptible to specific regulations. Individuals, companies or groups, as well as cryptocurrency exchanges that control vast amounts of Bitcoin can affect the market price of Bitcoin. Furthermore, mining equipment production and mining pool locations may become centralized. The concerns or skepticism about the decentralized nature of Bitcoin may cause customers to lose confidence in the Bitcoin industry's prospects. This in turn could adversely affect the market demand for our blockchain mining solutions and our business. Furthermore, the possibility that a person or a coordinated group of people may gain more than 50% control of the process power active on Bitcoin and be able to manipulate transactions, despite the intended decentralized structure, may also erode confidence in Bitcoin. Similar mechanism also applies to Ethereum and Grin. As such, our business, prospects and results of operations therefore may adversely be affected by the divergent views on the decentralized nature of Bitcoin and other cryptocurrencies.

Change of algorithm and mining mechanism for cryptocurrencies may materially and adversely affect our business and results of operations.

Our HPC and HTC chips are designed for proof-of-work, or PoW, mechanism, which the Bitcoin, Ethereum and Grin networks use to validate their transactions. Many people within the Bitcoin community believe that PoW is a foundation within Bitcoin's code that would not be changed. However, there have been debates on mechanism change to avoid the "de facto control" by a great majority of the network computing power. With the possibility of a change in rule or protocol of the Bitcoin network, if our Bitcoin mining machines cannot be modified to accommodate any such changes, such mining machines will not be able to meet customer demand, and the results of our operations will be significantly affected. For more details, see "—The administrators of certain cryptocurrency networks' source code could propose amendments to the relevant network's protocols and software that, if accepted and authorized by the relevant network's community, could adversely affect our business, results of operations and financial condition." and "—The acceptance of Bitcoin or Ethereum network software patches or upgrades by a significant, but not overwhelming, percentage of the users and miners in the Bitcoin or Ethereum network could result in a 'fork' in the blockchain, resulting in the operation of two separate networks that cannot be merged. The existence of forked blockchains could erode user confidence in Bitcoin or Ethereum and could adversely impact our business, results of operations and financial condition."

On September 15, 2022, the Ethereum Mainnet completed its merger with a separate proof-of-stake, or PoS, blockchain called the Beacon Chain (the "Merger"). PoS is a type of consensus mechanism used by blockchain networks to achieve distributed consensus. This switch fundamentally changes how the Ethereum blockchain comes to consensus every 12 seconds. It requires users to stake their Ethereum to become a validator in the network. Validators are responsible for the same thing as miners in PoW: ordering transactions and creating new blocks so that all nodes can agree on the state of the network. Unlike PoW, validators do not need to use significant amounts of computational power because they are selected at random and are not competing. They do not need to mine blocks; they just need to create blocks when chosen and validate proposed blocks when they are not. This validation is known as attesting. Validators get rewards for proposing new blocks and for attesting to ones they have seen. After the Merger, the EthereumPoW blockchain (ETHW blockchain), a hard fork of Ethereum Mainnet before the Merger, emerged; however, the daily active user for ETHW blockchain is significantly lower than that of the Ethereum Mainnet using PoS. Our current products cannot accommodate the Merger. If our Ethereum mining machines cannot be modified to accommodate the Merger or the ETHW blockchain remains a low activity level, our Ethereum mining solutions will not be able to meet customer demand, and the results of our operations will be significantly affected.

Customers of our HTC and HPC solutions may rely on a steady and inexpensive power supply for operating blockchain mining farms and running blockchain mining hardware. Failure to access a large quantity of power at reasonable costs could significantly increase their operating expenses and adversely affect their demand for our HTC and HPC solutions.

Many of the customers of our HTC and HPC solutions engage in the blockchain mining business. Blockchain mining consumes a significant amount of energy power to process the computations and cool down the mining hardware. Therefore, a steady and inexpensive power supply is critical to blockchain mining. We cannot assure you that the operations of our customers will not be affected by power shortages or an increase in energy prices in the future. In particular, the power supply could be disrupted by natural disasters, such as floods, mudslides and earthquakes, or other similar events beyond the control of our customers. Further, certain of our customers may experience power shortages due to seasonal variations in the supply of certain types of power such as hydroelectricity. Power shortages, power outages or increased power prices could adversely affect mining farm businesses of our blockchain customers and reduce the expected market demand for our HTC and HPC solutions significantly. Under such circumstances, our business, results of operations and financial condition could be materially and adversely affected.

Cryptocurrencies face significant scaling obstacles that can lead to high fees or slowed transaction settlement times, and attempts to increase the transaction processing capacity may not be effective.

Many cryptocurrency networks face significant scaling challenges. For example, as of December 31, 2019, Bitcoin network could handle, on average, five to seven transactions per second. Various solutions have been promoted recently to resolve this problem, including segregated witness, Lightning Network and the introduction of Bitcoin Cash. However, we cannot assure you that the cryptocurrencies community will accept these solutions, or these solutions will effectively resolve these problems.

As the use of cryptocurrency networks increases without a corresponding increase in throughput of the networks, average fees and settlement times can increase significantly. Bitcoin's network, for example, has been, at times, at capacity, which has led to very high transaction fees. Increased fees and decreased settlement speeds could preclude certain use cases for Bitcoins (e.g., micropayments), and can reduce demand for and the market price of Bitcoins, which could adversely affect the market demand for our HTC and HPC solutions. We cannot guarantee that any of the mechanisms in place or being explored for increasing the scale of settlement of transactions of Bitcoin, Ethereum or Grin will be effective, or how long they will take to become effective, which could adversely affect the market demand for our HTC and HPC solutions.

Cryptocurrency exchanges and wallets, and to a lesser extent, a cryptocurrency blockchain itself, may suffer from hacking and fraud risks, which may adversely erode user confidence in cryptocurrencies and reduce demand for our HTC and HPC solutions.

Cryptocurrency transactions are entirely digital and, as with any virtual system, face risk from hackers, malware and operational glitches. For example, hackers can target cryptocurrency exchanges, wallets, and custodians to gain unauthorized access to the private keys associated with the wallet addresses where cryptocurrencies are stored. Cryptocurrency transactions and accounts are not insured by any type of government program and cryptocurrency transactions generally are permanent by design of the networks. Certain features of cryptocurrency networks, such as decentralization, the open source protocols, and the reliance on peer-to-peer connectivity, may increase the risk of fraud or cyber-attack by potentially reducing the likelihood of a coordinated response. Cryptocurrencies have suffered from hacking risks and several cryptocurrency exchanges and miners have reported cryptocurrency losses, which highlight concerns over the security of cryptocurrencies and in turn affect the demand and the market price of cryptocurrencies. In addition, while cryptocurrencies use private key encryption to verify owners and register transactions, fraudsters and scammers may attempt to sell false cryptocurrencies. These risks may adversely affect the operation of the cryptocurrency network which would erode user confidence in cryptocurrencies, which would negatively affect demand for our HTC and HPC solutions.

The administrators of certain cryptocurrency networks' source code could propose amendments to the relevant network's protocols and software that, if accepted and authorized by the relevant network's community, could adversely affect our business, results of operations and financial condition.

The cryptocurrency networks are based on a cryptographic, algorithmic protocol that governs the end-user-to-end-user interactions between computers connected to the relevant network. A loosely organized group can propose amendments to such a network's source code through one or more software upgrades that alter the protocols and software that govern the network and the properties of such cryptocurrencies, including the irreversibility of transactions and limitations on the mining of new cryptocurrencies. For example, to the extent that a significant majority of the users and miners on the Bitcoin or Ethereum network install such software upgrade(s), the Bitcoin network would be subject to new protocols and software that may render our HTC and HPC solutions less desirable, which in turn may adversely affect our business, results of operations and financial condition. If less than a significant majority of the users and miners on the Bitcoin network install such software upgrade(s), the Bitcoin network could "fork."

The acceptance of Bitcoin, Ethereum or Grin network software patches or upgrades by a significant, but not overwhelming, percentage of the users and miners in the Bitcoin, Ethereum or Grin network could result in a "fork" in the blockchain, resulting in the operation of two separate networks that cannot be merged. The existence of forked blockchains could erode user confidence in Bitcoin, Ethereum or Grin and could adversely impact our business, results of operations and financial condition.

Bitcoin, Ethereum and Grin are based on open source software and have no official developer or group of developers that formally controls their network. Any individual can download the Bitcoin, Ethereum or Grin network software and make any desired modifications, which are proposed to users and miners on Bitcoin, Ethereum or Grin network through software downloads and upgrades. However, miners and users must consent to those software modifications by downloading the altered software or upgrade implementing the changes; otherwise, the changes do not become part of the Bitcoin, Ethereum or Grin network. Since the inception of Bitcoin, Ethereum and Grin networks, changes to the network have been accepted by the vast majority of blockchain users and miners, ensuring that the Bitcoin, Ethereum and Grin networks each remain a coherent economic system. However, a developer or group of developers could potentially propose a modification to the Bitcoin, Ethereum or Grin network that is not accepted by a vast majority of miners and users, but that is nonetheless accepted by a substantial population of participants in the network. In such case, a fork in the blockchain could develop and two separate networks could result, one running the pre-modification software program and the other running the modified version. An example is the introduction of Bitcoin Cash in mid-2017. This kind of split in the Bitcoin, Ethereum or Grin network could erode user confidence in the stability of the Bitcoin or Ethereum network, which could negatively affect the demand for our HTC and HPC solutions.

Cryptocurrency assets and transactions may be subject to further taxation in the future.

In recent years, the rise of cryptocurrency prices and transaction volume has attracted the attention of tax authorities. As the laws governing cryptocurrencies are still evolving, the tax treatment of cryptocurrencies in various jurisdictions are subject to change. While some countries intend to or have imposed taxation on cryptocurrency assets and transactions, other tax authorities are silent. As there is considerable uncertainty over the taxation of cryptocurrencies, we cannot guarantee that the cryptocurrency assets and transactions denominated in cryptocurrencies will not be subject to further taxation in the future, including but not limited to additional taxes and increased tax rate. These events could reduce the economic return of cryptocurrency and increase the holding costs of cryptocurrency assets, which could materially and adversely affect the businesses and financial performances of our blockchain customers engaging in blockchain mining businesses, and in turn could have material adverse effect on our business and results of operations.

We face intense industry competition.

As a fabless IC design company, we operate in a highly competitive environment. Our competitors include companies that may have a larger market share, greater brand recognition, broader international customer base, greater financial resources or other competitive advantages. We expect that competition in the HPC industry will continue to be intense as we compete not only with existing players that have been focused on blockchain mining, but also new entrants that include well-established players in the semiconductor industry, and players who were not predisposed to this industry in the past. In terms of smart-NICs, we expect to face competition from industry giants such as Broadcom and Intel as well as other existing and new players that are more established than us. Some of these competitors may also have stronger brand names, greater access to capital, longer histories, longer relationships with their suppliers or customers and more resources than we do.

On August 9, 2022, the U.S. President Biden signed into law the CHIPS and Science Act of 2022, or the CHIPS Act, a significant investment in industrial policy that is expected to bring a US\$280 billion package that includes US\$52 billion in funding to boost U.S. domestic semiconductor manufacturing. The CHIPS Act was a bipartisan deal whose goal is perceived to be to revive American innovation in opposition to growing Chinese technological dominance. While we believe the CHIPS Act does not have an immediate impact on our business, such act may further intensify the competition within the IC industry by strengthening our competitors from the United States and potentially put us in a less advantageous position.

Strong competition in the market may require us to lower our prices, increase our sales and marketing expenses or otherwise invest greater resources to maintain or gain market share as needed to adequately compete. Such efforts may negatively impact our profitability. If we are unable to effectively adapt to changes or developments in the competitive landscape, our business, financial conditions and results of operations may be adversely affected.

Blockchain mining activities are energy-intensive, which may restrict the geographic locations of miners and have a negative environmental impact.

Blockchain mining activities are inherently energy-intensive and electricity costs account for a significant portion of the overall mining costs. The availability and cost of electricity will restrict the geographic locations of mining activities. Any shortage of electricity supply or increase in electricity cost in a jurisdiction may negatively impact the viability and the expected economic return for blockchain mining activities in that jurisdiction, which may in turn decrease the sales of our HTC and HPC solutions in that jurisdiction.

In addition, the significant consumption of electricity may have a negative environmental impact, including contribution to climate change, which may give rise to public opinion against allowing the use of electricity for blockchain mining activities or government measures restricting or prohibiting the use of electricity for such mining activities. Any such development in the jurisdictions where we sell our HTC and HPC solutions could have a material and adverse effect on our business, financial condition and results of operations.

Risks Related to Conducting Business in China

The PRC government has significant authority to exert influence on the China operations of an offshore holding company, and offerings conducted overseas and foreign investment in China-based issuers, such as us. Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business, results of operations, financial condition, and the value of our securities.

We conduct our business in China and substantially all of our assets are located in China. Accordingly, our business, results of operations and financial condition may be influenced to a significant degree by the PRC political, economic, and social conditions. The PRC government may intervene or influence our operations at any time, which could result in a material change in our operations and/or the value of our securities. The PRC government has released regulations and policies that have significantly impacted various industries in general and specific operators within such industries, and may in the future release new regulations or policies that could intervene in or influence our operations or the industry sectors in which we operate. The PRC government may also require us to obtain new permits or approvals to continue our operations. If we fail to comply with these regulations, policies or requirements, it could result in a material change in our operations or significantly limit or completely hinder our ability to offer or continue to offer our Class A ordinary shares to investors and cause the value of our Class A ordinary shares to significantly decline or become worthless. Therefore, investors of our company and our business face uncertainties from potential actions taken by regulators that may affect our business and the value of our Class A ordinary shares.

Our ability to successfully maintain or grow business operations in China also depends on various factors, which are beyond our control. These factors include, among others, macro-economic and other market conditions, political stability, social conditions, measures to control inflation or deflation, changes in the rate or method of taxation, changes in laws, regulations and administrative directives or their interpretation, and changes in industry policies. If we fail to take timely and appropriate measures to adapt to any of the changes or challenges, our business, results of operations and financial condition could be materially and adversely affected.

Uncertainties with respect to the enforcement of and changes in laws and regulations in China could have a material adverse effect on our business, results of operations, financial condition and future prospects, and cause our Class A ordinary shares to significantly decline in value or become worthless.

The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions in a civil law system may be cited as reference but have limited precedential value. The interpretations of such laws and regulations may evolve rapidly, and enforcement of these laws and regulations involves significant uncertainties.

Moreover, developments in our industry and other industries and that we are and will be involved in may lead to changes in PRC laws, regulations and policies or in the interpretation and application thereof. As a result, we may be required by the regulators to upgrade or obtain the licenses, permits, approvals, to complete additional filings or registrations for the products and services we offer, or to modify business practices that may subject us to various penalties, including criminal penalties for individual and entity. We cannot assure you that our business operations would not be deemed to violate any existing or future PRC laws or regulations, which in turn could materially and adversely affect our business operations.

Furthermore, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis, or at all, and may have a retroactive effect. As a result, we may not be aware of our violation of any of these policies and rules until sometime after the violation. Such unpredictability and uncertainties could limit the legal protections available to you and us, significantly limit or completely hinder our ability to offer or continue to offer our Class A ordinary shares, cause significant disruption to our business operations, and severely damage our reputation, which would materially and adversely affect our results of operations and financial condition and cause our Class A ordinary shares to significantly decline in value or become worthless.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management's attention. Since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory provisions and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. These uncertainties may impede our ability to enforce the contracts we have entered into and could materially and adversely affect our business and results of operations.

These uncertainties may also affect our decisions on the policies and actions to be taken to comply with PRC laws and regulations, and may affect our ability to enforce contractual rights, property (including intellectual property) or tort rights. In addition, the regulatory uncertainties may be exploited through unmerited legal actions or threats in an attempt to extract payments or benefits from us. Such uncertainties may therefore increase the operating expenses and costs, and materially and adversely affect our business and results of operations.

Recent regulatory developments in China may subject us to additional regulatory review or otherwise restrict or completely hinder our ability to offer securities and raise capitals overseas, all of which could materially and adversely affect our business and cause the value of our Class A ordinary shares to significantly decline or become worthless.

The recent regulatory developments in China, in particular with respect to restrictions on China-based companies raising capital offshore, may lead to additional regulatory review in China over our financing and capital raising activities in the United States. Pursuant to the PRC Cybersecurity Law, which was promulgated by the Standing Committee of the National People's Congress on November 7, 2016 and took effect on June 1, 2017, personal information and important data collected and generated by a critical information infrastructure operator in the course of its operations in China must be stored in China, and if a critical information infrastructure operator purchases internet products and services that affects or may affect national security, it should be subject to cybersecurity review by the Cybersecurity Administration of China, or the CAC. The PRC Cybersecurity Law also establishes more stringent requirements applicable to operators of computer networks, especially to operators of networks which involve critical information infrastructure. The PRC Cybersecurity Law contains an overarching framework for regulating Internet security, protection of private and sensitive information, and safeguards for national cyberspace security and provisions for the continued government regulation of the Internet and content available in China. The PRC Cybersecurity Law emphasizes requirements for network products, services, operations and information security, as well as monitoring, early detection, emergency response and reporting. Due to the lack of further interpretations, the exact scope of "critical information infrastructure operator" remains unclear. According to the Cybersecurity Review Measures announced jointly by the CAC, the National Development and Reform Commission and other government agencies on December 28, 2021, which became effective on February 15, 2022, the scope of cybersecurity reviews is extended to data processing operators engaging in data processing activities that affect or may affect national security. The Cybersecurity Review Measures further requires that any operator applying for listing of its securities on a foreign stock exchange must go through cybersecurity review if it possesses personal information of more than one million users. According to the Cybersecurity Review Measures, a cybersecurity review assesses potential national security risk that may be brought about by any procurement, data processing, or overseas listing. The review focuses on several factors, including, among others, (1) the risk of theft, leakage, corruption, illegal use or export of any core or important data, or a large amount of personal information, and (2) the risk of any critical information infrastructure, core or important data, or a large amount of personal information being affected, controlled or maliciously exploited by a foreign government after a company is listed overseas. While the Cybersecurity Review Measures has become final, there is still uncertainty regarding, among many aspects, the implementation and interpretation of the Cybersecurity Review Measures.

Under the current Cybersecurity Review Measures, subject to any further interpretation of the CAC and other relevant authorities, we believe we are not subject to the cybersecurity review by the CAC, as we are primarily engaged in the design and manufacturing of ICs or do not process any data in our business. However, there remains uncertainty as to how the Cybersecurity Review Measures will be interpreted or implemented and whether the PRC regulatory agencies, including the CAC, may adopt new laws, regulations, rules, or detailed implementation and interpretation related to the Draft Measures. We cannot assure you that PRC regulatory agencies, including the CAC, would take the same view as we do, and we cannot assure you that we can fully or timely comply with such legal or regulatory requirements. If we become subject to cybersecurity inspection and/or review by the CAC or other PRC authorities or are required by them to take any specific actions, it could cause suspension or termination of the future offering of our securities, including offerings under this registration statement, disruptions to our operations, result in negative publicity regarding our company, and divert our managerial and financial resources. We may also be subject to significant fines or other penalties, which could materially and adversely affect our business, financial condition and results of operations. Any actions by the PRC government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in companies having operations in China, including us, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors, and cause the value of our securities to significantly decline or become worthless.

The PRC government has significant influence over companies with China-based operations by enforcing existing rules and regulation, adopting new ones, or changing relevant industrial policies in a manner that may materially increase our compliance cost, change relevant industry landscape or otherwise cause significant changes to our operations in China, which could result in material and adverse changes in our operations and cause the value of our securities to significantly decline or be worthless.

A significant portion of our business is conducted in China. The PRC government has significant influence over China-based operations of any company by allocating resources, providing preferential treatment to particular industries or companies, or imposing industry-wide policies on certain industries. The PRC government may also amend or enforce existing rules and regulation or adopt new ones, which could materially increase our compliance cost, change the relevant industry landscape, or cause significant changes to our business operations. In addition, the PRC regulatory system is based in part on government policies and internal guidance, some of which are not published on a timely basis or at all, and some of which may even have a retroactive effect. We may not be aware of all non-compliance incidents at all time, and may face regulatory investigation, fines and other penalties as a result. As a result of any changes in the government-mandated industrial policies, including the amendment to and/or enforcement of the related laws and regulations, companies with China-based operations, including us, and the industries in which we operate could face significant compliance and operational risks and uncertainties. For example, in July 2021, the PRC government released a broad set of reforms targeting private education companies providing after-school tutoring services and prohibiting foreign investments in institutions providing such after-school tutoring services. As a result, the market value of certain U.S. listed companies with China-based operations in the affected sectors declined substantially. The PRC government has also imposed severe restrictions over the operations of cryptocurrency business, which has drastically changed industry landscape in China, and as a result, due to the possible change of regulation, it may be illegal to acquire, own, hold, sell or use cryptocurrencies, participate in the blockchain business, or transfer or utilize cryptocurrency assets in China. In addition, the National Development and Reform Commission of China has classified cryptocurrency mining operations as an industry to be eliminated. We have adopted a development strategy to expand our business and promote our products and solution offerings globally. If industry-wide regulations or policies are adopted in China in a way that significantly curtails or prohibits the research and development of our solution offerings and other aspects of our business, our operations in China will be materially and adversely affected, and we may have to cease our operations in China and relocate our offices and assets overseas, which may significantly disrupt our operations and adversely affect our business, results of operations and financial condition.

Our Class A ordinary shares will be delisted and prohibited from trading in the over-the-counter market under the Holding Foreign Companies Accountable Act, if the PCAOB is unable to inspect or investigate completely auditors located in China for two consecutive years. The delisting of our Class A ordinary shares, or the threat of their being delisted, may materially and adversely affect the value of your investment.

As part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular China's, the HFCAA has been signed into law on December 18, 2020. The HFCAA, as subsequently amended, states if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspection for the PCAOB for two consecutive years, the SEC shall prohibit our ADSs from being traded on a national securities exchange or in the over-the-counter market in the United States.

On December 2, 2021, the SEC adopted final amendments to its rules implementing the HFCAA, which include requirements to disclose information, including the auditor name and location, the percentage of shares of the issuer owned by governmental entities, whether governmental entities in the applicable foreign jurisdiction with respect to the auditor has a controlling financial interest with respect to the issuer, the name of each official of the Chinese Communist Party who is a member of the board of the issuer, and whether the articles of incorporation of the issuer contains any charter of the Chinese Communist Party. These amendments also establish procedures the SEC will follow in identifying issuers and prohibiting trading by certain issuers under the HFCAA, including that the SEC will identify an issuer as a “Commission-identified Issuer” if the issuer has filed an annual report containing an audit report issued by a registered public accounting firm that the PCAOB has determined it is unable to inspect or investigate completely, and will then impose a trading prohibition on an issuer after it is identified as a Commission-Identified Issuer for three consecutive years.

In August 2022, the PCAOB, the CSRC and the Ministry of Finance of the PRC signed the Statement of Protocol, which establishes a specific and accountable framework for the PCAOB to conduct inspections and investigations of PCAOB-governed accounting firms in mainland China and Hong Kong. On December 15, 2022, the PCAOB announced that it was able to secure complete access to inspect and investigate PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong completely in 2022. The PCAOB Board vacated its previous 2021 determinations that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong. The PCAOB inspections team has also completed fieldwork for 2023, with the complete access required under the HFCAA. However, whether the PCAOB will continue to be able to satisfactorily conduct inspections of PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong is subject to uncertainties and depends on a number of factors out of our and our auditor’s control. The PCAOB continues to demand complete access in mainland China and Hong Kong moving forward, as well as to continue pursuing ongoing investigations and initiate new investigations as needed. The PCAOB has also indicated that it will act immediately to consider the need to issue new determinations with the HFCAA if needed. Our financial statements contained in this annual report of Form 20-F have been audited by MaloneBailey, LLP, an independent registered public accounting firm that is headquartered in the United States with offices in Beijing and Shenzhen, China. MaloneBailey, LLP is a firm registered with the PCAOB, and is required by the United States laws to undergo regular inspections by the PCAOB to assess its compliance with the laws of the U.S. and professional standards. As of the date of this annual report, we have not been and do not expect to be identified by the SEC under the HFCAA. However, if the PCAOB is unable to inspect and investigate completely registered public accounting firms located in China and we fail to retain a registered public accounting firm that the PCAOB is able to inspect and investigate completely for two consecutive years, or if we otherwise fail to meet the PCAOB’s requirements, our Class A ordinary shares will be delisted from the Nasdaq Stock Market, and our shares will not be permitted for trading over the counter in the United States under the HFCAA and related regulations. If our Class A ordinary shares are prohibited from trading in the United States, we cannot assure you that we will be able to list on a non-U.S. exchange or that a market for our Class A ordinary shares will develop outside of the United States. Such a prohibition would substantially impair your ability to sell or purchase our Class A ordinary shares when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our Class A ordinary shares. Moreover, the HFCAA or other efforts to increase U.S. regulatory access to audit information could cause investor uncertainty for affected issuers, including us, and the market price of our Class A ordinary shares could be adversely affected. Furthermore, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, results of operations and financial condition.

Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business, results of operations and financial condition.

Substantially all of our revenues were derived in China, and most of our operations are conducted in China. Accordingly, our business, prospects, financial condition and results of operations may be influenced to a significant degree by political, economic and social conditions in China generally and by continued economic growth in China as a whole. In addition, the Chinese government continues to play a significant role in regulating industry development by imposing industrial policies. The Chinese government also exercises significant control over China's economic growth through strategically allocating resources, controlling the payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. While the Chinese economy has experienced significant growth over the past decades, growth has been uneven, both geographically and among various sectors of the economy, and the rate of growth has been slowing since 2012. Any adverse changes in economic conditions in China, in the policies of the Chinese government or in the laws and regulations in China could have a material adverse effect on the overall economic growth of China. As a result, changes in economic conditions and government policies could adversely affect our business and results of operations, lead to reduction in demand for our services and adversely affect our competitive position.

Uncertainties in the interpretation and enforcement of PRC laws and regulations could limit the legal protections available to you and us.

The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but have limited precedential value. Our PRC legal system is evolving rapidly, but its current slate of laws may not be sufficient to cover all aspects of the economic activities in China, including such activities that relate to or have an impact on our business. Implementation and interpretations of laws, regulations and rules are not always undertaken in a uniform matter and enforcement of these laws, regulations and rules involves uncertainties.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of protection we enjoy than in more developed legal systems. Furthermore, the PRC legal system is based in part on government policies and internal rules (some of which are not published in a timely manner or at all) that may have a retroactive effect. As a result, we may not always be aware of any potential violation of these policies and rules until sometime after the violation. Such uncertainties, including unpredictability towards the scope and effect of our contractual, property (including intellectual property) and procedural rights, and any failure to respond to changes in the regulatory environment in China could materially and adversely affect our business and impede our ability to continue our operations.

The PRC government has significant oversight and discretion over the conduct of our business and may intervene with or influence our operations as the government deems appropriate to further regulatory, political and societal goals.

The PRC government has significant oversight and discretion over the conduct of our business and may intervene with or influence our operations as the government deems appropriate to further regulatory, political and societal goals. The PRC government has recently published new policies that significantly affected certain industries including the cryptocurrency industry, which may severely restrict our ability to expand our business or serve our customers in China. We cannot assure you that government authorities in China will not introduce further enhanced regulation over the cryptocurrency industry that may lead to our inability to operate in China at all. Furthermore, the PRC government has recently indicated an intent to exert more oversight and control over overseas securities offerings and other capital markets activities and foreign investment in China-based companies like us. For example, on July 6, 2021, the relevant PRC government authorities promulgated the Opinions on Strictly Scrutinizing Illegal Securities Activities in Accordance with the Law, or the Opinions. The Opinions emphasized the need to strengthen the administration over illegal securities activities and the supervision on overseas listings by China-based companies and proposed to take effective measures, such as promoting the construction of relevant regulatory systems to deal with the risks and incidents faced by China-based overseas-listed companies. On February 17, 2023, with the approval of the State Council, the CSRC released the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies, or the Trial Measures and five supporting guidelines, which came into effect on March 31, 2023. According to the Trial Measures, among other requirements, (1) domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedures with the CSRC; if a domestic company fails to complete the filing procedures, such domestic company may be subject to administrative penalties; and (2) where a domestic company seeks to indirectly offer and list securities in an overseas market, the issuer shall designate a major domestic operating entity responsible for all filing procedures with the CSRC, and such filings shall be submitted to the CSRC within three business days after the submission of the overseas offering and listing application. On the same day, the CSRC also held a press conference for the release of the Trial Measures and issued the Notice on Administration for the Filing of Overseas Offering and Listing by Domestic Companies, which clarifies that (1) on or prior to the effective date of the Trial Measures, domestic companies that have already submitted valid applications for overseas offering and listing but have not obtained approval from overseas regulatory authorities or stock exchanges may reasonably arrange the timing for submitting their filing applications with the CSRC, and must complete the filing before the completion of their overseas offering and listing; (2) a six-month transition period will be granted to domestic companies which, prior to the effective date of the Trial Measures, have already obtained the approval from overseas regulatory authorities or stock exchanges, but have not completed the indirect overseas listing; if domestic companies fail to complete the overseas listing within such six-month transition period, they shall file with the CSRC according to the requirements; and (3) the CSRC will solicit opinions from relevant regulatory authorities and complete the filing of the overseas listing of companies with contractual arrangements which duly meet the compliance requirements, and support the development and growth of these companies. Any such action, once taken by the PRC government, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or, in extreme cases, become worthless. We did not have to make such filings with or obtain the relevant approvals from the CSRC for our initial public offering completed on July 11, 2022 and the supplemental offering completed on September 27, 2022 because the offerings had been completed before the enactment of the Trial Measures. For our follow-on offering on September 13, 2023, we completed the filing with the CSRC on January 9, 2024, and we will be obligated to submit filings with the CSRC in a timely manner for our future offerings. If we cannot obtain such approvals or the CSRC rescind our approvals, we may not continue to offer securities to investors and cause the value of our securities to significantly decline or, in extreme cases, become worthless.

On February 24, 2023, the CSRC, together with Ministry of Finance of the PRC, National Administration of State Secrets Protection and National Archives Administration of China, revised the Provisions on Strengthening Confidentiality and Archives Administration for Overseas Securities Offering and Listing which was issued by the CSRC, National Administration of State Secrets Protection and National Archives Administration of China in 2009. The revised version was issued under the title of the Provisions on Strengthening Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies (the “Revised Provisions”), and has come into effect on March 31, 2023. One of the major revisions to the Revised Provisions has expanded their application to cover indirect overseas offering and listing, which is consistent with the Trial Measures. The Revised Provisions require that, among other things, (1) a domestic company that plans to, either directly or indirectly through its overseas listed entity, publicly disclose or provide to relevant individuals or entities including securities companies, securities service providers and overseas regulators, any documents and materials that contain state secrets or working secrets of government agencies, shall first obtain approval from competent authorities, and file with the secrecy administrative department at the same level; and (2) domestic company that plans to, either directly or indirectly through its overseas listed entity, publicly disclose or provide to relevant individuals and entities including securities companies, securities service providers and overseas regulators, any other documents and materials that, if leaked, will be detrimental to national security or public interest, shall strictly fulfill relevant procedures stipulated by applicable national regulations. On or after March 31, 2023, any failure or perceived failure by any PRC subsidiaries including us to comply with the above confidentiality and archives administration requirements under the Revised Provisions and other PRC laws and regulations may result in that the relevant entities would be held liable by competent authorities, and referred to the judicial organ to be investigated for criminal liability if suspected of committing a crime.

A severe or prolonged downturn in China's economy could materially and adversely affect our business, financial condition and results of operations.

The global macroeconomic environment is facing challenges, including the end of quantitative easing by the U.S. Federal Reserve, the economic slowdown in the Eurozone since 2014 and the uncertain impact of "Brexit." The growth of China's economy has slowed down since 2012 and such slowdown may continue. The outbreak of coronavirus COVID-19 in China has resulted in a severe disruption of social and economic activities in China. See "**Risks Relating to Our Operations**—The ongoing global coronavirus COVID-19 outbreak has caused significant disruptions in our business, which we expect will materially and adversely affect our results of operations and financial condition." In addition, there is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. There have also been concerns on the relationship between China and other countries, including the surrounding Asian countries, which may potentially result in foreign investors exiting the China market and other economic effects. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. For example, sustained tension between the United States and China over trade policies could significantly undermine the stability of the global and China's economy. See "**Risks Relating to Our Operations**—Our export of products to foreign countries such as the United States, may be subject to high tariff rates resulting from protectionism trade policies, and as a result, our future sales volumes, profitability and results of operations will be materially and adversely affected." Any severe or prolonged slowdown or instability in the global or China's economy may materially and adversely affect our business, financial condition and results of operations.

We may be adversely affected by inflation or labor shortage in China.

In recent years, the PRC economy has experienced periods of rapid expansion and highly fluctuating rates of inflation. During the past ten years, the rate of inflation in China has been as high as 5.4% and as low as -0.8%. While inflation has slowed in recent years with a moderate rate of 1.6% recorded in 2017, it is uncertain when the general price level may increase or decrease sharply in the future. Moreover, the significant economic growth in China has resulted in a general increase in labor costs and shortage of low-cost labor. Inflation may cause our production cost to continue to increase. If we are unable to pass on the increase in production cost to our customers, we may suffer a decrease in profitability and a loss of customers, and our results of operations could be materially and adversely affected.

Increases in labor costs and enforcement of stricter labor laws and regulations in China and our additional payments of statutory employee benefits may adversely affect our business and profitability.

The average wage in China has increased in recent years and is expected to continue to grow. The average wage level for our employees has also increased in recent years. We expect that our labor costs, including wages and employee benefits, will continue to increase. Unless we are able to pass on these increased labor costs to our customers, our profitability and results of operations may be materially and adversely affected. In addition, we have been subject to stricter regulatory requirements in terms of entering into labor contracts with our employees and paying various statutory employee benefits, including pensions, housing funds, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance to designated government agencies for the benefit of our employees. Pursuant to the PRC Labor Contract Law and its implementation rules, employers are subject to stricter requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employee's probation and unilaterally terminating labor contracts. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the PRC Labor Contract Law and its implementation rules may limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations.

Pursuant to PRC laws and regulations, companies registered and operating in China are required to apply for social insurance registration and housing fund deposit registration within 30 days of their establishment and to pay for their employees different social insurance including pension insurance, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance to the extent required by law. We have not fully paid social insurance and housing provident funds for our employees due to inconsistency in implementation or interpretation of the relevant PRC laws and regulations among government authorities in China. Recently, as the PRC government enhanced its enforcement measures relating to social insurance collection, we may be required to make up the contributions for our employees, and may be further subjected to late fees payment and administrative fines, which may adversely affect our financial condition and results of operations. As the interpretation and implementation of labor-related laws and regulations are still evolving, we cannot assure you that our current employment practices do not and will not violate labor-related laws and regulations in China, which may subject us to labor disputes or government investigations. In addition, we may incur additional expenses in order to comply with such laws and regulations, which may adversely affect our business and profitability.

Fluctuations in exchange rates could affect our results of operations and reduce the value of your investment.

The value of the Renminbi against the U.S. dollar and other currencies is affected by changes in China's political and economic conditions and China's foreign exchange policies, among other things. In 2005, the PRC government changed its decades-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. On November 30, 2015, the Executive Board of IMF completed the regular five-year review of the basket of currencies that make up the Special Drawing Right, or the SDR, and decided that with effect from October 1, 2016, Renminbi is determined to be a freely usable currency and will be included in the SDR basket as a fifth currency, along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2016, the Renminbi has depreciated significantly against the backdrop of a surging U.S. dollar and persistent capital outflows from China. This depreciation halted in 2017, and the RMB appreciated approximately 7% against the U.S. dollar during this one-year period. In 2018, a new round of RMB depreciation emerged under the influence of a strong U.S. dollar and the trade friction between China and the United States. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system and we cannot assure you that Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and the U.S. dollar in the future.

Significant revaluation of the Renminbi may have a material adverse effect on your investment. For example, to the extent that we need to convert U.S. dollars we receive from the securities offering into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or the ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. As of the date of this annual report, we have not entered into any material hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert Renminbi into foreign currency.

We may be subject to enterprise income tax on our worldwide income if our company or any of our subsidiaries were considered a PRC “resident enterprise” under the PRC Enterprise Income Tax Law.

Under the EIT Law, and its implementation rules, enterprises established outside of China with “de facto management bodies” within China are considered a “resident enterprise” and will be subject to enterprise income tax, or EIT, at a rate of 25% on their worldwide income. The implementation rules under EIT define the term “de facto management bodies” as “establishments that carry out substantial and overall management and control over the production, operation, personnel, accounting and properties of an enterprise.” The State Administration of Taxation of the PRC, or SAT promulgated the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or Circular 82, on April 22, 2009, which provides certain specific criteria for determining whether the “de facto management body” of a Chinese-controlled offshore incorporated enterprise is located in China. On July 27, 2011, SAT issued the Measures for Administration of Income Tax of Chinese Controlled Resident Enterprises Incorporated Overseas (Trial), or Circular 45, to supplement Circular 82 and other tax laws and regulations. Circular 45 clarifies certain issues relating to resident status determination. Although Circular 82 and Circular 45 apply only to offshore enterprises controlled by PRC enterprises or PRC group companies and not those controlled by PRC individuals or foreigners, the determining criteria set forth in Circular 82 and Circular 45 may reflect the SAT’s general position on how the “de facto management body” test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises or individuals or foreign enterprises. A substantial majority of our senior management team is located in China. If our company or any of our subsidiaries were considered to be a PRC “resident enterprise,” we would be subject to a EIT at a rate of 25% on our worldwide income.

Dividends payable to our foreign investors and gains on the sale of our Class A ordinary shares by our foreign investors may become subject to PRC tax.

Under the EIT Law and its implementation regulations issued by the State Council, a 10% PRC withholding tax is applicable to dividends payable to investors that are non-resident enterprises, which do not have an establishment or place of business in China or which have such establishment or place of business but the dividends are not effectively connected with such establishment or place of business, to the extent such dividends are derived from sources within China. Similarly, any gain realized on the transfer of our Class A ordinary shares by such investors is also subject to PRC tax at a current rate of 10%, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions, if such gain is regarded as income derived from sources within China. If we are deemed a PRC resident enterprise, dividends paid on our Class A ordinary shares, and any gain realized from the transfer of our Class A ordinary shares, would be treated as income derived from sources within China and would as a result be subject to PRC taxation. Furthermore, if we are deemed a PRC resident enterprise, dividends payable to individual investors who are non-PRC residents and any gain realized on the transfer of our Class A ordinary shares by such investors may be subject to PRC tax at a current rate of 20%, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions. If we or any of our subsidiaries established outside China are considered a PRC resident enterprise, it is unclear whether holders of our Class A ordinary shares would be able to claim the benefit of income tax treaties or agreements entered into between China and other countries or areas. If dividends payable to our non-PRC investors, or gains from the transfer of our Class A ordinary shares by such investors, are deemed as income derived from sources within China and thus are subject to PRC tax, the value of your investment in our Class A ordinary shares may decline significantly.

PRC regulations relating to investments in offshore companies by PRC residents may subject our PRC-resident beneficial owners or our PRC subsidiaries to liability or penalties, limit our ability to inject capital into our PRC subsidiaries or limit our PRC subsidiaries' ability to increase their registered capital or distribute profits.

In July 2014, the State Administration of Foreign Exchange of the PRC, or SAFE, promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular 37, which replaces the previous SAFE Circular 75. SAFE Circular 37 requires PRC residents, including PRC individuals and PRC corporate entities, to register with SAFE or its local branches in connection with their direct or indirect offshore investment activities. SAFE Circular 37 is applicable to our shareholders who are PRC residents and may be applicable to any offshore acquisitions that we may make in the future.

Under SAFE Circular 37, PRC residents who make, or have prior to the implementation of SAFE Circular 37 made, direct or indirect investments in offshore special purpose vehicles, or SPVs, are required to register such investments with SAFE or its local branches. In addition, any PRC resident who is a direct or indirect shareholder of an SPV, is required to update its registration with the local branch of SAFE with respect to that SPV, to reflect any material change. Moreover, any subsidiary of such SPV in China is required to urge the PRC resident shareholders to update their registration with the local branch of SAFE to reflect any material change. If any PRC resident shareholder of such SPV fails to make the required registration or to update the registration, the subsidiary of such SPV in China may be prohibited from distributing its profits or the proceeds from any capital reduction, share transfer or liquidation to the SPV, and the SPV may also be prohibited from making additional capital contributions into its subsidiaries in China. In February 2015, SAFE promulgated a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, which took effect on June 1, 2015. Under SAFE Notice 13, applications for foreign exchange registration of inbound foreign direct investments and outbound direct investments, including those required under SAFE Circular 37, must be filed with qualified banks instead of SAFE or its local branch. Qualified banks should examine the applications and accept registrations under the supervision of SAFE. We have used our best efforts to notify PRC residents or entities who directly or indirectly hold shares in our Cayman Islands holding company and who are known to us as being PRC residents to complete the foreign exchange registrations. However, we may not be informed of the identities of all the PRC residents or entities holding direct or indirect interest in our company, nor can we compel our beneficial owners to comply with SAFE registration requirements. We cannot assure you that all other shareholders or beneficial owners of ours who are PRC residents or entities have complied with, and will in the future make, obtain or update any applicable registrations or approvals required by, SAFE regulations. Failure by such shareholders or beneficial owners to comply with SAFE regulations, or failure by us to amend the foreign exchange registrations of our PRC subsidiaries, could subject us to fines or legal sanctions, restrict our overseas or cross-border investment activities, limit our PRC subsidiaries' ability to make distributions or pay dividends to us or affect our ownership structure, which could adversely affect our business and prospects.

Furthermore, as these foreign exchange and outbound investment related regulations' interpretation and implementation has been constantly evolving, it is unclear how these regulations, and any future regulation concerning offshore or cross-border investments and transactions, will be interpreted, amended and implemented by the relevant government authorities. For example, we may be subject to a more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our financial condition and results of operations. We cannot assure you that we have complied or will be able to comply with all applicable foreign exchange and outbound investment related regulations. In addition, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company, as the case may be, will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the foreign exchange regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of the securities offering to make loans or additional capital contributions to our PRC subsidiaries.

We are an offshore holding company. We may make loans to our PRC subsidiaries subject to the approval, registration, and filing with governmental authorities and limitation of amount, or we may make additional capital contributions to our wholly foreign-owned subsidiaries in China. Any loans to our wholly foreign-owned subsidiaries in China, which are treated as foreign-invested enterprises under PRC law, are subject to foreign exchange loan registrations with the National Development and Reform Commission, or the NDRC, and SAFE or its local branches. In addition, a foreign invested enterprise shall use its capital pursuant to the principle of authenticity and self-use within its business scope. The capital of a foreign invested enterprise shall not be used for the following purposes: (1) directly or indirectly used for payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations; (2) directly or indirectly used for investment in securities or investments other than banks' principal-secured products unless otherwise provided by relevant laws and regulations; (3) the granting of loans to non-affiliated enterprises, except where it is expressly permitted in the business license; and (4) paying the expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises).

In light of the various requirements imposed by PRC regulations on loans to and direct investment in PRC entities by offshore holding companies, we cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals or filings on a timely basis, if at all, with respect to future loans by us to our PRC subsidiaries or with respect to future capital contributions by us to our PRC subsidiaries. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds from the securities offering and to capitalize or otherwise fund our PRC operations may be negatively affected, which could adversely affect our liquidity and our ability to fund and expand our business.

We and our shareholders face uncertainties with respect to indirect transfers of equity interests in PRC resident enterprises or other assets attributed to a Chinese establishment of a non-Chinese company, or immovable properties located in China owned by non-Chinese companies.

In February 2015, SAT issued a Public Notice Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises, or SAT Public Notice 7. SAT Public Notice 7 extends its tax jurisdiction to transactions involving transfer of other taxable assets through offshore transfer of a foreign intermediate holding company. In addition, SAT Public Notice 7 provides clear criteria for assessment of reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Public Notice 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of taxable assets. In October 2017, SAT issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Bulletin 37, which came into effect on December 1, 2017. The SAT Bulletin 37 further clarifies the practice and procedure of the withholding of non-resident EIT. Where a non-resident enterprise transfers taxable assets indirectly by disposing of the equity interests of an overseas holding company, which is an indirect transfer, the non-resident enterprise as either transferor or transferee, or the PRC entity that directly owns the taxable assets, may report such indirect transfer to the relevant tax authority. Using a "substance over form" principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such indirect transfer other than transfer of shares acquired and sold on public markets may be subject to EIT, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10%. Both the transferor and the transferee may be subject to penalties under PRC tax laws if the transferee fails to withhold the taxes and the transferor fails to pay the taxes. We face uncertainties as to the reporting and other implications of certain past and future transactions that involve PRC taxable assets, such as offshore restructuring, sale of the shares in our offshore subsidiaries and investments. Our company may be subject to filing obligations or taxed if our company is transferor in such transactions, and may be subject to withholding obligations if our company is transferee in such transactions, under SAT Public Notice 7 or SAT Bulletin 37, or both.

We are subject to PRC restrictions on currency exchange.

Some of our revenues and expenses are denominated in Renminbi. Renminbi is currently convertible under the “current account,” which includes dividends, trade and service-related foreign exchange transactions, but not under the “capital account,” which includes foreign direct investment and loans, including loans we may secure from our onshore subsidiaries. Currently, certain of our PRC subsidiaries may purchase foreign currency for settlement of “current account transactions,” including payment of dividends to us, without the approval of the SAFE by complying with certain procedural requirements. However, the relevant PRC governmental authorities may limit or eliminate our ability to purchase foreign currencies in the future for current account transactions. Foreign exchange transactions under the capital account remain subject to limitations and require approvals from, or registration with, SAFE and other relevant PRC governmental authorities. Since a part of our future net income and cash flow will be denominated in Renminbi, any existing and future restrictions on currency exchange may limit our ability to utilize cash generated in Renminbi to fund our business activities outside of China or pay dividends in foreign currencies to our shareholders, and may limit our ability to obtain foreign currency through debt or equity financing for our subsidiaries.

The M&A Rules and certain other PRC regulations establish complex procedures for some acquisitions of Chinese companies by foreign investors, which could make it more difficult for us to pursue growth through acquisitions in China.

The Regulations on Mergers and Acquisitions of Domestic Companies by Foreign Investors, or the M&A Rules, adopted by six PRC regulatory agencies in August 2006 and amended in September 2009, and some other regulations and rules concerning mergers and acquisitions established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex, including requirements in some instances that the Ministry of Commerce, or MOFCOM, be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise, or that the approval from MOFCOM be obtained in circumstances where offshore companies established or controlled by PRC enterprises or residents acquire affiliated domestic companies. Moreover, the Anti-Monopoly Law requires that MOFCOM shall be notified in advance of any concentration of undertaking if certain thresholds are triggered. In addition, the security review rules issued by MOFCOM that became effective in September 2011 specify that mergers and acquisitions by foreign investors that raise “national defense and security” concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise “national security” concerns are subject to strict review by MOFCOM, and the rules prohibit any activities attempting to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the above-mentioned regulations and other relevant rules to complete such transactions could be time consuming, and any required approval processes, including obtaining approval from MOFCOM or its local counterparts may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

We face regulatory uncertainties in China that could restrict our ability to grant share incentive awards to our employees or consultants who are PRC citizens.

Pursuant to the Notices on Issues concerning the Foreign Exchange Administration for Domestic Individuals Participating in a Stock Incentive Plan of an Overseas Publicly-Listed Company issued by SAFE on February 15, 2012, or Circular 7, a qualified PRC agent (which could be the PRC subsidiary of the overseas-listed company) is required to file, on behalf of “domestic individuals” (both PRC residents and non-PRC residents who reside in China for a continuous period of not less than one year, excluding the foreign diplomatic personnel and representatives of international organizations) who are granted shares or share options by the overseas-listed company according to its share incentive plan, an application with SAFE to conduct SAFE registration with respect to such share incentive plan, and obtain approval for an annual allowance with respect to the purchase of foreign exchange in connection with the share purchase or share option exercise. Such PRC individuals’ foreign exchange income received from the sale of shares and dividends distributed by the overseas listed company and any other income shall be fully remitted into a collective foreign currency account in China, which is opened and managed by the PRC domestic agent before distribution to such individuals. In addition, such domestic individuals must also retain an overseas entrusted institution to handle matters in connection with their exercise of share options and their purchase and sale of shares. The PRC domestic agent also needs to update registration with SAFE within three months after the overseas-listed company materially changes its share incentive plan or make any new share incentive plans.

We have adopted a share incentive plan and may grant options in the future. When we do, from time to time, we need to apply for or update our registration with SAFE or its local branches on behalf of our employees or consultants who receive options or other equity-based incentive grants under our share incentive plan or material changes in our share incentive plan. However, we may not always be able to make applications or update our registration on behalf of our employees or consultants who hold any type of share incentive awards in compliance with Circular 7, nor can we ensure you that such applications or update of registration will be successful. If we or the participants of our share incentive plan who are PRC citizens fail to comply with Circular 7, we and/or such participants of our share incentive plan may be subject to fines and legal sanctions, there may be additional restrictions on the ability of such participants to exercise their share options or remit proceeds gained from sale of their shares into China, and we may be prevented from further granting share incentive awards under our share incentive plan to our employees or consultants who are PRC citizens.

It may be difficult for overseas regulators to conduct investigation or collect evidence within China.

Shareholder claims or regulatory investigation that are common in the United States generally are difficult to pursue as a matter of law or practicality in China. For example, in China, there are significant legal and other obstacles to providing information needed for regulatory investigations or litigations initiated outside China. Although the authorities in China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, such cooperation with the securities regulatory authorities in the United States may not be efficient in the absence of mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the PRC territory, and without the consent by the Chinese securities regulatory authorities and the other competent governmental agencies, no entity or individual may provide documents or materials related to securities business to any foreign party. While detailed interpretation of or implementation rules under Article 177 have yet to be promulgated, the inability for an overseas securities regulator to directly conduct investigation or evidence collection activities within China may further increase the difficulties you face in protecting your interests. See also “—Risks Relating to Our Corporate Structure and Governance—You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law and conduct our operations primarily in emerging markets.”

Risks Relating to Our Corporate Structure and Governance

Investors in our Class A ordinary shares are not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead are purchasing equity securities of a Cayman Islands holding company.

Investors in our Class A ordinary shares are not purchasing equity securities of our subsidiaries that have substantive business operations in China but instead are purchasing equity securities of a Cayman Islands holding company. Nano Labs Ltd is a holding company with no material operations of its own. We conduct our operations primarily through our subsidiaries in China and a subsidiary in Hong Kong. This structure involves unique risks to investors in our Class A ordinary shares. Investors may never directly hold equity interests in our PRC subsidiaries with substantive operations. We also cannot assure you that the Chinese regulatory authorities will not disallow such a structure. If the Chinese regulatory authorities disallow the structure, it would likely result in a material change in our operations and cause the value of our Class A ordinary shares to significantly decline or become worthless.

If the custodians or authorized users of our controlling non-tangible assets, including chops and seals, fail to fulfill their responsibilities, or misappropriate or misuse these assets, our business and operations may be materially and adversely affected.

Under PRC law, legal documents for corporate transactions, including agreements and contracts such as the leases and sales contracts that our business relies on, are executed using the chop or seal of the signing entity or with the signature of a legal representative whose designation is registered and filed with the relevant local branch of the market supervision administration.

In order to maintain the physical security of our chops and the chops of our PRC entities, we generally store these items in secured locations accessible only by the authorized personnel of each of our PRC subsidiary and consolidated entities. Although we monitor such authorized personnel, there is no assurance such procedures will prevent all instances of abuse or negligence. Accordingly, if any of our authorized personnel misuse or misappropriate our corporate chops or seals, we could encounter difficulties in maintaining control over the relevant entities and experience significant disruption to our operations. If a designated legal representative obtains control of the chops in an effort to obtain control over any of our PRC subsidiary or consolidated entities, we, our PRC subsidiaries or consolidated entities would need to pass a new shareholder or board resolution to designate a new legal representative and we would need to take legal action to seek the return of the chops, apply for new chops with the relevant authorities, or otherwise seek legal redress for the violation of the representative's fiduciary duties to us, which could involve significant time and resources and divert management attention away from our regular business. In addition, the affected entity may not be able to recover corporate assets that are sold or transferred out of our control in the event of such a misappropriation if a transferee relies on the apparent authority of the representative and acts in good faith.

The dual-class structure of our ordinary shares may adversely affect the trading market for our Class A ordinary shares.

Certain shareholder advisory firms have announced changes to their eligibility criteria for inclusion of shares of public companies on certain indices, including the S&P 500, to exclude companies with multiple classes of shares and companies whose public shareholders hold no more than 5% of total voting power from being added to such indices. In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual-class structure of our ordinary shares may prevent the inclusion of our Class A ordinary shares in such indices and may cause some shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any such exclusion from indices could result in a less active trading market for our Class A ordinary shares. Any negative actions or publications by shareholder advisory firms could also adversely affect the value of our Class A ordinary shares.

We are a "controlled company" within the meaning of the Nasdaq Stock Market Rules and, as a result, may rely on exemptions from certain corporate governance requirements that provide protection to shareholders of other companies.

We are, and will continue to be, a "controlled company" as defined under corporate governance rules of Nasdaq Stock Market, because Mr. Jianping Kong beneficially owns approximately 33.6% of our then-issued and outstanding ordinary shares and is able to exercise approximately 55.6% of the total voting power of our issued and outstanding ordinary shares. For further information, see "Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders." For so long as we remain a controlled company under that definition, we are permitted to elect to rely, and may rely, on certain exemptions from corporate governance rules, including (1) the requirement that our director nominees must be selected or recommended solely by independent directors and (2) the requirement that we have a corporate governance and nominating committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities. As a result, you may not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

Our currently effective memorandum and articles of association contain anti-takeover provisions that could have a material adverse effect on the rights of holders of our Class A ordinary shares.

Our currently effective memorandum and articles of association contain provisions to limit the ability of others to acquire control of our company or cause us to engage in change-of-control transactions, including a provision that entitles each Class B ordinary share to 15 votes in respect of all matters subject to a shareholders' vote. These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our board of directors has the authority without further action by our shareholders to issue additional Class B ordinary shares, which will be dilutive to our Class A ordinary shareholders. In addition, our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix their designations, powers, preferences, privileges, and relative participating, optional or special rights and the qualifications, limitations or restrictions, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights associated with our Class A ordinary shares. We could issue preferred shares quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue preferred shares, the price of our Class A ordinary shares may fall and the voting and other rights of the holders of our Class A ordinary shares may be materially and adversely affected.

You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law and conduct our operations primarily in emerging markets.

We are an exempted company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our memorandum and articles of association, the Companies Act of the Cayman Islands, as amended and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by our minority shareholders and the fiduciary duties of our directors to us under the Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands have a less developed body of securities laws than the United States. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action in a federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records (other than the memorandum and articles of association, our register of mortgages and charges and special resolutions of our shareholders) or to obtain copies of lists of shareholders of these companies. Our directors have discretion under our articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obligated to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Certain corporate governance practices in the Cayman Islands, which is our home country, differ significantly from requirements for companies incorporated in other jurisdictions such as the United States. We may follow the home country practice for certain corporate governance practices which may differ from the requirements of the Nasdaq Global Market. If we choose to follow the home country practice, our shareholders may be afforded fewer protection than they otherwise would under rules and regulations applicable to U.S. domestic issuers.

In addition, we conduct a significant portion of our business operations in emerging markets, including China, and substantially all of our directors and senior management are based in China. The SEC, U.S. Department of Justice, or the DOJ, and other authorities often have substantial difficulties in bringing and enforcing actions against non-U.S. companies and non-U.S. persons, including company directors and officers, in certain emerging markets, including China. Additionally, our public shareholders may have limited rights and few practical remedies in emerging markets where we operate, as shareholder claims that are common in the United States, including class action based on securities law and fraud claims, generally are difficult or impossible to pursue as a matter of law or practicality in many emerging markets, including China. For example, in China, there are significant legal and other obstacles for the SEC, the DOJ and other U.S. authorities to obtaining information needed for shareholder investigations or litigation. Although the competent authorities in China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, the regulatory cooperation with the securities regulatory authorities in the United States has not been efficient in the absence of a mutual and practical cooperation mechanism. According to Article 177 of the PRC Securities Law which became effective in March 2020, no foreign securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of China. Accordingly, without the consent of the competent PRC securities regulators and relevant authorities, no organization or individual may provide the documents and materials relating to securities business activities to foreign securities regulators.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as public shareholders of a company incorporated in the United States. For a discussion of significant differences between the provisions of the Companies Act of the Cayman Islands and the laws applicable to companies incorporated in the United States and their shareholders, see “Item 10. Additional Information — Share Capital — Differences in Corporate Law.”

Certain judgments obtained against us by our shareholders may not be enforceable.

We are a Cayman Islands exempted company and substantially all of our assets are located outside the United States. A significant portion of our operations is conducted in China. In addition, substantially all of our current directors and officers are nationals and residents of countries other than the United States. A substantial portion of the assets of these persons are located outside the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the United States in the event that you believe that your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 for so long as we are an emerging growth company until the fifth anniversary from the date of our initial listing.

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. We intend to avail ourselves of the extended transition period.

We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to United States domestic public companies.

Because we are a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the securities laws and regulations in the United States that apply to U.S. domestic issuers, including:

- the rules under the Exchange Act requiring the filing of quarterly reports on Form 10-Q or current reports on Form 8-K with the SEC;
- the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to publish our results on a quarterly basis through press releases, distributed pursuant to the rules and regulations of the Nasdaq Global Market. Press releases relating to financial results and material events will also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC will be less extensive and less timely than that required to be filed with the SEC by U.S. domestic issuers. As a result, you may not be afforded the same protections or information that would be made available to you were you investing in a U.S. domestic issuer.

As an exempted company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the requirements of Nasdaq Stock Market Rules. These practices may afford fewer protection to shareholders than they would enjoy if we complied fully with the Nasdaq Stock Market Rules.

As a Cayman Islands exempted company listed on the Nasdaq Global Market, we are subject to the Nasdaq Stock Market Rules. However, the Nasdaq Stock Market Rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the Nasdaq Stock Market Rules. For instance, we are not required to: (1) have a majority of the board be independent; (2) have a compensation committee or a nominating and corporate governance committee consisting entirely of independent directors; or (3) have regularly scheduled executive sessions with only independent directors each year. We intend to rely on all of these exemptions. As a result, you may not be provided with the benefits of certain corporate governance requirements of the Nasdaq Global Market. We may also follow the home country practice for certain other corporate governance practices which may differ from the requirements of the Nasdaq Global Market. If we choose to follow the home country practice, our shareholders may be afforded fewer protection than they would otherwise enjoy under the Nasdaq Stock Market Rules applicable to U.S. domestic issuers.

Risks Relating to Our Class A Ordinary Shares

If we fail to maintain the listing of our Class A ordinary shares with a U.S. national securities exchange, the liquidity and price of our Class A ordinary shares could be adversely affected.

Our Class A ordinary shares are currently listed for trading on the Nasdaq Global Market. In order to maintain our listing on The Nasdaq Global Market, we must comply with certain Nasdaq listing rules. If our Class A ordinary shares are delisted, our Class A ordinary shares may be eligible to trade on the OTC Bulletin Board or another over-the-counter market; however, such delisting could have an adverse impact on the liquidity and price of our Class A ordinary shares. Any such alternative would likely result in it being more difficult for us to raise additional capital through the public or private sale of equity securities and for investors to dispose of, or obtain accurate quotations as to the market value of, our Class A ordinary shares. In addition, there can be no assurance that our Class A ordinary shares would be eligible for trading on any such alternative exchange or markets.

The trading price of our Class A ordinary shares is likely to be volatile, which could result in substantial losses to investors.

The trading price of our Class A ordinary shares has been volatile since our Class A ordinary shares began to trade on the Nasdaq Global Market following our recently completed initial public offering in July 2022. The trading price of our Class A ordinary shares could fluctuate widely due to factors beyond our control. This may happen because of broad market and industry factors, including the performance and fluctuation of the market prices of other companies with business operations located mainly in China that have listed their securities in the United States. In addition to market and industry factors, the price and trading volume for our Class A ordinary shares may be highly volatile for factors specific to our operations including the following:

- actual or anticipated variations in our revenues, earnings, cash flow and changes or revisions of our expected results;
- fluctuations in operating metrics;
- announcements of new investments, acquisitions, strategic partnerships or joint ventures by us or our competitors;
- announcements of new products and services by us or our competitors;
- changes in financial estimates by securities analysts;
- announcements of studies and reports relating to the quality of our product and services or those of our competitors;
- changes in the performance or market valuations of our competitors;
- detrimental negative publicity about us, our competitors or our industry;
- additions or departures of key personnel;
- release of lockup or other transfer restrictions on our outstanding equity securities or sales of additional equity securities;
- regulatory developments affecting us or our industry;
- general economic or political conditions affecting China or elsewhere in the world;
- fluctuations of exchange rates between the RMB and the U.S. dollar; and
- potential litigation or regulatory investigations.

Any of these factors may result in large and sudden changes in the volume and price at which our Class A ordinary shares will trade. The securities of some China-based companies that have listed their securities in the United States have experienced significant volatility since their initial public offerings in recent years, including, in some cases, substantial declines in the trading prices of their securities. The trading performances of these companies' securities after their offerings may affect the attitudes of investors towards Chinese companies listed in the United States in general, which consequently may impact the trading performance of our Class A ordinary shares, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or other matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in any inappropriate activities. In particular, the global financial crisis, the ensuing economic recessions and deterioration in the credit market in many countries have contributed and may continue to contribute to extreme volatility in the global stock markets.

Moreover, there have been recent instances of extreme stock price run-ups followed by rapid price declines and strong stock price volatility with a number of recent initial public offerings, particularly among companies with relatively smaller public floats. As we have a relatively small public float, we may experience greater stock price volatility, including aggressive price run-ups and declines, lower trading volume and less liquidity, compared with companies with larger public floats. In particular, our Class A ordinary shares may be subject to rapid and substantial price volatility, low volumes of trades and large spreads in bid and ask prices. Such volatility, including any stock run-up, may be unrelated to our actual or expected operating performance, financial condition or prospects, and industry, market or economic factors, which makes it difficult for prospective investors to assess such rapidly changing value of our Class A ordinary shares. In addition, if the trading volumes of our Class A ordinary shares are low, persons buying or selling in relatively small quantities may easily influence prices of our Class A ordinary shares. This low volume of trades could also cause the price of our Class A ordinary shares to fluctuate significantly, with large percentage changes in price occurring in any trading day session. Holders of the ADSs may also not be able to readily liquidate their investment or may be forced to sell at depressed prices due to such low-volume trading. As a result of such volatility, investors may experience losses on their investment in our Class A ordinary shares. Such volatility also could adversely affect our ability to issue additional Class A ordinary shares or other securities and our ability to obtain additional financing in the future, as well as our ability to retain key employees, many of whom have been granted equity incentives. Furthermore, the potential extreme volatility may confuse the public investors of the value of our Class A ordinary shares, distort the market perception of the price of our Class A ordinary shares, and our financial performance and public image, and negatively affect the long-term liquidity of our Class A ordinary shares, regardless of our actual or expected operating performance.

In the past, shareholders of public companies have often brought securities class action suits against companies following periods of instability in the market price of their securities. If we were involved in a class action suit, it could divert a significant amount of our management's attention and other resources from our business and require us to incur significant expenses to defend the suit, which could harm our results of operations. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our results of operations and financial condition.

If securities or industry analysts do not publish research or reports about our business, or if they adversely change their recommendations regarding our Class A ordinary shares, the market price for our Class A ordinary shares and trading volume could decline.

The trading market for our Class A ordinary shares will be influenced by research or reports that industry or securities analysts publish about our business. If one or more analysts who cover us downgrade our Class A ordinary shares, the market price for our Class A ordinary shares would likely decline. If one or more of these analysts cease to cover us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could, in turn, cause the market price or trading volume for our Class A ordinary shares to decline.

The sale or availability for sale of substantial amounts of our Class A ordinary shares could adversely affect their market price.

Sales of substantial amounts of our Class A ordinary shares in the public market or the perception that these sales could occur, could adversely affect the market price of our Class A ordinary shares and could materially impair our ability to raise capital through equity offerings in the future. Our Class A ordinary shares sold are freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, and shares held by our existing shareholders may also be sold in the public market in the future subject to the restrictions in Rule 144 and Rule 701 under the Securities Act and the applicable lock-up agreements. We and our officers, directors and certain option holders have agreed not to sell any ordinary shares for 180 days after July 11, 2022 pursuant to the underwriting agreement dated July 11, 2022 in connection with our initial public offering without the prior written consent of the underwriters for our initial public offering, subject to certain exceptions. However, such underwriters may release these securities from these restrictions at any time, subject to applicable regulations of the Financial Industry Regulatory Authority, Inc. We cannot predict what effect, if any, market sales of securities held by our significant shareholders or any other shareholder or the availability of these securities for future sale will have on the market price of our Class A ordinary shares.

Because we do not expect to pay dividends in the foreseeable future, you must rely on price appreciation of our Class A ordinary shares for a return on your investment.

We currently intend to retain most, if not all, of our available funds and any future earnings after the securities offering to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in our Class A ordinary shares as a source for any future dividend income.

Our board of directors has discretion as to whether to distribute dividends, subject to certain requirements of Cayman Islands law. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on our future results of operations and cash flow, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiaries, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in our Class A ordinary shares will likely depend entirely upon any future price appreciation of our Class A ordinary shares. There is no guarantee that our Class A ordinary shares will appreciate in value after the securities offering or even maintain the price at which you purchased our Class A ordinary shares. You may not realize a return on your investment in our Class A ordinary shares, and you may even lose your entire investment in our Class A ordinary shares.

We have not determined a specific use for a portion of the net proceeds from the securities offering, and we may use these proceeds in ways with which you may not agree.

We have not determined a specific use for a portion of the net proceeds of the securities offering, and our management will have considerable discretion in deciding how to apply these proceeds. You will not have the opportunity to assess whether the proceeds are being used appropriately before you make your investment decision. You must rely on the judgment of our management regarding the application of the net proceeds of the securities offering. We cannot assure you that the net proceeds will be used in a manner that will improve our results of operations or increase the price of our Class A ordinary shares, or that these net proceeds will be placed only in investments that generate income or appreciate in value.

We will incur increased costs as a result of being a public company, particularly after we cease to qualify as an “emerging growth company.”

Upon the completion of the initial public offering, we have become a public company and expect to incur significant legal, accounting and other expenses that we did not incur as a subsidiary of a listed company. The Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the SEC and the Nasdaq Global Market, impose various requirements on the corporate governance practices of public companies.

We expect these rules and regulations to increase our legal and financial compliance costs and to make some corporate activities more time-consuming and costly. After we are no longer an “emerging growth company,” we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and the other rules and regulations of the SEC. For example, as a result of becoming a public company, we will need to increase the number of independent directors and adopt policies regarding internal controls and disclosure controls and procedures. We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or to incur substantially higher costs to obtain the same or similar coverage. In addition, we will incur additional costs associated with our public company reporting requirements. It may also be more difficult for us to find qualified persons to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate with any degree of certainty the amount of additional costs we may incur or the timing of such costs.

We may become a passive foreign investment company, which could result in adverse United States tax consequences to United States investors.

In general, we will be a PFIC for any taxable year in which:

- at least 75% of our gross income is passive income, or
- at least 50% of the value (determined based on a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income.

For purposes of the income test, “gross income” generally consists of sales revenues less the cost of goods sold, together with income from investments and from other sources, and “passive income” generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. However, under the applicable guidance, it is unclear how companies, like us, with negative gross revenue, are treated. Assuming that we are permitted to use gross loss to offset our passive income, based on the past and projected composition of our income and assets, and the valuation of our assets, including goodwill, we do not expect to be classified as a passive foreign investment company, or a PFIC, for the taxable year ended December 31, 2023 or for the current taxable year, although, in each case, there can be no assurance in this regard.

The determination of whether we are a PFIC is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in our asset or income composition and the characterization of such income or assets as passive or active. The Internal Revenue Service (the “IRS”) may challenge our determination in this regard. The composition of our assets and income may be affected by how, and how quickly we use our liquid assets. Because we have valued our goodwill based on the market value of our Class A ordinary shares, a decrease in the market price of our Class A ordinary shares may also result in our becoming a PFIC. The market price of our Class A ordinary shares has been and may continue to be volatile. If our market capitalization does not increase or continues to decline, we may be or become classified as a PFIC for the current taxable year or future taxable years.

If we are a PFIC for any taxable year during which you hold our ADSs (prior to February 1, 2024) or our Class A ordinary shares, our PFIC status could result in adverse United States federal income tax consequences to you if you are a U.S. Holder, as defined under “Item 10. Additional Information—E. Taxation—United States Federal Income Taxation.” For example, if we are or become a PFIC, you may become subject to increased tax liabilities under United States federal income tax laws and regulations, and will become subject to burdensome reporting requirements. See “Item 10. Additional Information—E. Taxation—United States Federal Income Taxation—Passive foreign investment company considerations.” We cannot assure you that we will not be a PFIC for the current or any future taxable year.

If a U.S. Holder is treated as owning at least 10% of our ordinary shares, such U.S. Holder may be subject to adverse United States tax consequences.

If a U.S. Holder is treated as owning, directly, indirectly or constructively, at least 10% of the value or voting power of our ordinary shares, such U.S. Holder may be treated as a “United States shareholder” with respect to each “controlled foreign corporation” in our group, if any. Generally, a non-United States corporation is deemed as a controlled foreign corporation if more than 50% of its stock (by voting power or value) of is owned (directly, indirectly or constructively) by United States shareholders. We will generally be classified as a controlled foreign corporation if more than 50% of our outstanding shares, measured by reference to voting power or value, are owned (directly, indirectly or by attribution) by United States shareholders. Although we are not likely to be a controlled foreign corporation, because our group could include one or more United States subsidiaries, it is likely that certain of our non-United States subsidiaries could be treated as controlled foreign corporations. We cannot provide any assurances that we will assist our investors in determining whether any of our non-United States subsidiaries are treated as a controlled foreign corporation or whether such investor is treated as a United States shareholder with respect to any of such controlled foreign corporations. Further, we cannot provide any assurances that we will furnish to any United States shareholder information that may be necessary to comply with its reporting and tax paying obligations as a result. U.S. Holders should consult their tax advisors regarding the potential application of these rules to their investment in our Class A ordinary shares.

ITEM 4. INFORMATION ON THE COMPANY

A. History and development of the company

We are a Cayman Islands holding company and primarily conduct our operations in China through our PRC subsidiaries. We first started our business designing and developing high throughput computing solutions through Zhejiang Haowei Technology Co., Ltd., or Zhejiang Haowei, incorporated in July 2019. Since our inception, we have been devoted to the design and development of computing power solutions.

On January 8, 2021, we incorporated Nano Labs Ltd, our holding company, as an exempted company with limited liability under the laws of the Cayman Islands. In 2021, we underwent a series of corporate reorganization in anticipation of our initial public offering, including incorporation of our company as the listing vehicle, incorporation of our oversea holding companies and issuance of shares to shareholders of Zhejiang Haowei. In May 2021, we completed a one-for-10,000 shares subdivision, following which our authorized share capital of US\$50,000 is divided into 500,000,000 ordinary shares of US\$0.0001 each.

On July 12, 2022, our American depositary shares representing Class A ordinary shares commenced trading on the Nasdaq Global Market under the symbol of “NA.” On December 29, 2023, Citibank N.A. distributed a notification regarding the amendment to the deposit agreement, dated December 19, 2023, as amended, and the termination of American depositary receipts facility for our American depositary shares, effective from February 1, 2024.

Effective from January 31, 2024, we conducted a 2-to-1 share consolidation, which consolidated two shares with a par value of US\$0.0001 each in our issued and unissued share capital into one share with a par value of US\$0.0002. Upon the effectiveness of such share consolidation, our authorized share capital became US\$50,000 divided into 250,000,000 ordinary shares of par value of US\$0.0002 each, comprising (1) 121,410,923 Class A ordinary shares of par value of US\$0.0002 each, (2) 28,589,078 Class B ordinary shares of par value of US\$0.0002 each and (3) 99,999,999 shares of a par value of US\$0.0002 each of such class or classes (however designated) as our board of directors may determine in accordance with our memorandum and articles of association, as amended. Unless otherwise indicated, shares and per share amount in this annual report have been retroactively adjusted to reflect such share consolidation for all periods presented.

Our principal executive office is located at China Yuangu Hanggang Technology Building, 509 Qianjiang Road, Shangcheng District, Hangzhou, Zhejiang, People's Republic of China. Our telephone number at this address is (86) 0571-8665 6957. Our registered office in the Cayman Islands is located at PO Box 309, Uglan House, Grand Cayman, KY1-1104, Cayman Islands.

For information regarding our principal capital expenditures, see "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Liquidity and Capital Resources."

SEC maintains an Internet site, <http://www.sec.gov>, which contains reports, proxy and information statements, and other information regarding us.

B. Business Overview

We are a leading fabless IC design company and product solution provider in China. We are committed to the development of HTC chips, HPC chips, distributed computing and storage solutions, smart-NICs, vision computing chips and distributed rendering. We have built a comprehensive FPU architecture which offers solution that integrates the features of both HTC and HPC. Moreover, our *Cuckoo* series are one of the first near-memory HTC chips available in the market with a maximum bandwidth of approximately 2.27 Tbps, as well as one of the first movers of ASIC-based Grin mining market. In June 2021, we established IPOLLO PTE. LTD., our indirect wholly-owned subsidiary in Singapore, to facilitate our business expansion in the overseas IC markets.

We have established an integrated solution platform covering three main business verticals, including HTC solutions, HPC solutions and distributed computing and storage solutions. Our HTC solutions feature our proprietary *Cuckoo* series chips, which have become alternative ASICs solutions for traditional GPUs. Our HPC solutions offer both HPC chips, *Darkbird*, and Bitcoin mining machine, *iPollo*. In addition to HTC and HPC chips, we launched our *Darksteel* series, which can be applied to both industrial and commercial sectors by offering distributed computing and data storage solutions, in the fourth quarter of 2021.

We have strong capabilities for IC design and related research and development for the Metaverse computing network. We have successfully designed our 55nm, 40nm, 22nm and n+1 ASIC chips and our 38nm memory chip. Our unique Nano FPU design architecture allows us to develop HTC chips with superior computing power and high-power efficiency as compared to most traditional GPUs available in the market. As of December 31, 2023, we had registered 30 software copyrights, four IC layout-design rights and 25 patents, and applied for registration of 16 patents. We enjoy a skilled talent pool and are committed to enhancing our technology leadership and upgrade our product solutions through our high-caliber research and development team. As of December 31, 2023, our research and development team consisted of 83 engineers, researchers, programmers and data analysts and is led by Dr. Bingbo Li, our vice president and chief technology officer, who has extensive experience of over 10 years in the semiconductor industry.

Our Products

HTC Solutions

Our HTC solutions feature our proprietary *Cuckoo* series chips, which integrate high-bandwidth memory dies and high computing performance logic chips and have become alternative ASICs solutions for traditional GPUs. Our *Cuckoo 1.0* and *Cuckoo 2.0* strategically target the ASIC-resistant mining algorithms of cryptocurrencies such as Ethereum and Grin, which requires high speed, high bandwidth memory in exchange for mining efficiency.

In the second quarter of 2020, we launched *Cuckoo 1.0*, one of the first commercialized Grin mining ASIC chips in the world, according to the F&S report. Built on our proprietary Nano-FPU 1.0 architecture and 22nm process, *Cuckoo 1.0*, equipped with our proprietary high bandwidth memory chip, provides a memory bandwidth of as much as 2.27 Tbps. The overall Grin mining efficiency and energy consumption efficiency of a *Cuckoo 1.0*'s is approximately 100 W/Graph. Based on *Cuckoo 1.0*, we launched *iPollo G1* Grin mining machine with 30 *Cuckoo 1.0* chips in a single machine, whose computing power amounts to approximately 36 Graph/s, and *iPollo G1 mini*, whose compact size and superior energy consumption efficiency makes it a great choice for Grin home miners.

In the second quarter of 2021, we completed the tape-out of *Cuckoo 2.0*, which is the largest HTC chip in the world, according to the F&S report. *Cuckoo 2.0* marks a significant step forward from *Cuckoo 1.0* as it comes with a memory bandwidth of 24 Tbps, approximately 12 times as much as that of *Cuckoo 1.0*. The overall mining efficiency and energy consumption efficiency of a *Cuckoo 2.0* is estimated to be 0.8 W/MHash. Based on *Cuckoo 2.0*, we developed *iPollo V1 Series* ETC/ETH mining machines, which encompass multiple models catering to different customer demands, including *iPollo V1*, *V1 mini*, *V1 Classic*, *V1 mini Classic* and *V1 mini Classic Plus*. Taking *iPollo V1* as an example, it comes with 12 *Cuckoo 2.0* chips in a single machine whose computing power amounts to approximately 3.6 GH/s. Benefiting from the Nano FPU architecture, *iPollo V1* has an energy consumption of 0.86 W/MHash, significantly lower than other Ethereum mining machines on the market, according to the F&S report. We launched the first two products in the *iPollo V1 Series*, *iPollo V1 mini Classic* and *iPollo V1 mini Classic WiFi*, in the first quarter of 2022. We further launched other six products in our *iPollo V1 Series* in the second quarter of 2022.

We are in the design process of *Cuckoo 3.0*, which is expected to be completed in 2024. We expect *Cuckoo 3.0* to be an enhancement of *Cuckoo 2* and programmable, which provides more flexibility to a wide range of application scenarios.

HPC Solutions

To accommodate the strong and growing demand for mining solutions, we have also completed the design and tape-out of *Darkbird 1.0* HPC chips. Benefitting from our proprietary technologies, *Darkbird series* HPC chips feature high performance and high energy consumption efficiency.

The following table sets forth certain information of the HTC and HPC chips we have designed or taped out as of the date of this annual report:

HTC Chip	Cryptocurrency	Feature	Status
Cuckoo 1.0	Grin and MWC	Nano FPU 1.0 architecture; high performance and high throughput; superior mining efficiency compared to traditional GPUs	Launched in the second quarter of 2020
Cuckoo 2.0	ETHW, ETHF, ETC, QKC, CLO and POM	Nano FPU 2.0 architecture; high performance and high throughput; superior mining efficiency compared to traditional GPUs	Launched in the fourth quarter of 2021
HPC Chip	Cryptocurrency	Feature	Status
Darkbird 1.0	BTC and BCH	High energy consumption efficiency; optimized process and fundamental cells; customized circuit and physical design	Launched in the first quarter of 2022

The following table sets forth certain specifications of the *iPollo* blockchain mining machines we have launched or are ready to launch as of the date of this annual report:

Blockchain Mining Machine	ASIC	Computing Power (±10%)	Energy Consumption (±10%)	Status
Grin				
G1	Cuckoo 1.0	36 Graph/s	78W/Graph	Launched in the second quarter of 2020
G1 mini	Cuckoo 1.0	1.2 Graph/s	100W/Graph	Launched in August 2020
Ethereum				
V1	Cuckoo 2.0	3.6 GH/s*	0.86W/MHash*	Launched in the second quarter of 2022
V1 mini	Cuckoo 2.0	0.3 GH/s (300MH/s)*	0.8W/MHash*	Launched in the second quarter of 2022
V1 mini WiFi	Cuckoo 2.0	0.3 GH/s (300MH/s)*	0.8W/MHash*	Launched in the second quarter of 2022
V1 Classic**	Cuckoo 2.0	1.55 GH/s*	0.8W/MHash*	Launched in the second quarter of 2022
V1 mini Classic**	Cuckoo 2.0	0.13 GH/s (130MH/s)*	0.8W/MHash*	Launched in the first quarter of 2022
V1 mini Classic WiFi**	Cuckoo 2.0	0.13 GH/s (130MH/s)*	0.8W/MHash*	Launched in the first quarter of 2022
V1 mini Classic Plus**	Cuckoo 2.0	0.28 GH/s (280MH/s)*	0.96W/MHash*	Launched in the second quarter of 2022
V1 mini Classic Plus WiFi**	Cuckoo 2.0	0.28 GH/s (280MH/s)*	0.96W/MHash*	Launched in the second quarter of 2022
V1 Mini SE	Cuckoo 2.0	0.20 GH/s (200MH/s)*	0.58W/MHash*	Launched in the third quarter of 2022
V1 Mini SE Plus	Cuckoo 2.0	0.40 GH/s (400MH/s)*	0.58W/MHash	Launched in the third quarter of 2022
X1	Cuckoo 2.0	0.33 GH/s (330MH/s)*	0.73W/MHash	Launched in the second quarter of 2023
V1H	Cuckoo 2.0	0.95 GH/s (950MH/s)*	0.79W/MHash	Launched in the third quarter of 2023
Bitcoin				
B1L	Darkbird 1.0	58 TH/s*	52W/THash*	Launched in the first quarter of 2022

* Based on the theoretical value of the design, which may not be the actual performance of the actual products to be delivered to our customers.

** For ETC mining only.

Distributed Computing and Data Storage Solutions

Distributed computing and data storage has emerged as a disruptor to the current centralized cloud computing and storage market in recent years, as the decentralized model utilizes idle storage capacity in potentially any device in the world and spares users the risk of data loss as a result of central server failure. We have designed our own *Darksteel* series to store data over various distributed network to capture the potential growth in the distributed computing and data storage market. Our products in this series can be applied to both industrial and commercial sectors by offering distributed computing and data storage solutions. *Darksteel* series solutions support popular distributed computing and data storage networks such as Filecoin.

Besides, in order to support the computing of AI generated content (“AIGC”) and zero knowledge proof (“ZKP”), we have launched our newly self-developed A-series iPollo computing devices in February 2023, featuring high-performance graphics cards with large memory and high-core CPUs. ZKP is a method by which one party can prove to another party that a given statement is true while the prover avoids conveying any additional information apart from the fact that the statement is indeed true. ZKP attaches more importance to the encryption field and Web3.0, and expects to contribute to Ethereum scaling and to boost the further development of the blockchain industry. In addition, the development of Metaverse requires the support of digital content and AIGC is the perfect solution for generating brand-new digital content in Web 3.0. The hardware of our A-series products features low power consumption, user-friendly management, high computing power and stable operating performance, which lead to a higher computing efficiency for ZKP and AIGC.

The following table sets forth certain specifications of the *Darksteel* distributed computing and storage solutions we have designed as of the date of this annual report:

Distributed Computing and Data Storage Solution	Storage	Processor/Memory	Feature	Status
Darksteel S	8 TB enterprise SSD	12 cores 24 threads dual CPU/128G DDR4	Dual hot-swappable power supplies; traffic enhancement and sharing; node drift; intranet enhancement; clustered deployment	Launched in the fourth quarter of 2021
Darksteel F	36*16 TB HARD	2.2G CPU/64G DDR4/480G SSD	576T ultra-high computing power; fusion of unique algorithm optimization; customized special chip	Launched in the fourth quarter of 2021
Darksteel C	60*16 TB HARD	XEON E5-2450 CPU/ 16G DDR4	Standard server with 6 NetApp storages; hot-swappable dual power supplies; 60 16t enterprise-class SAS disks; 960 TB storage; 5.76 PB cluster capacity	Launched in the fourth quarter of 2021

Roadmap for Our Future Products and Services

The table below sets forth certain information about the IC products under development.

Product under Development	Feature	Status
<i>HTC Solution</i> Cuckoo 3.0	High bandwidth	Expected to be launched in 2024

We believe our strong in-house designing capability will enable us to realize fast iteration of our Nano-FPU architecture and chip designs built on it. Moreover, we are well-positioned to design and develop solutions covering more application scenarios, including vision computing and privacy computing, and expect to launch our smart NIC and vision computing products in 2023.

To diversify our service offerings, we are at the preparatory stage of launching our Internet data center, or IDC, server hosting services. Our IDC server hosting services will enable customers to operate their IDC server remotely in a cost-effective manner. We will help customers set up and configure their IDC servers and monitor the daily operation of these servers on our hosting site and provide routine maintenance services to customers. We are currently seeking hosting sites in various countries and regions, such as the United States, Singapore and Hong Kong.

In addition, we have launched *iPollo Metaverse*, offering photography studio services which include 3D scanning and printing services as well as augmented reality technologies. Leveraging *iPollo Metaverse*, we create digital application scenarios for various IPs, effectively enhancing our user engagement. Through *iPollo* 3D full-color printing technology, we have been able to transform concepts such as digital IPs into reality. Furthermore, our *iPollo Metaverse Store* provides users with customized services, allowing enthusiasts to experience the novelty from the Metaverse.

Our Customers

The customer base for our products comprises both enterprises and individual buyers. Generally, we either require prepayment in full or offer alternative payment plans for customers to prepay a certain percentage with the remainder to be settled after the completion of manufacturing but before the delivery of the products. In 2022, substantially all of our mining machine customers were in China. In 2023, approximately 70% of our revenue were generated from our mining machine customers in China. We intend to explore additional market opportunities in overseas markets and have set up our first indirect wholly-owned subsidiary, IPOLLO PTE. LTD., in Singapore, which is to serve as the headquarter for the *iPollo* brand. In 2022, we expanded our customer base to overseas markets such as North America, Europe and the Southeast Asia. Going forward, we expect our sales revenues from overseas markets as a percentage of the total revenues to increase substantially. See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Industry—It may be or become illegal to acquire, own, hold, sell or use cryptocurrencies, participate in the blockchain, transfer or utilize similar bitcoin assets in China or overseas markets where we operate due to adverse changes in the regulatory and policy environment in these jurisdictions.”

In 2022 and 2023, substantially all of our HTC and HPC solutions are distributed through direct sales. We do not restrict resales of our mining machine products by our customers, so some of our customers in China may resell purchased products to end-users or other buyers located in overseas markets. In 2022, we began to engage distributors to facilitate distribution of our products in certain countries.

Research and Development

Our success depends largely on our ability to continue to develop and launch cutting-edge IC products catering to the evolving market demand. We have assembled a dedicated in-house research and development team led by Mr. Bingbo Li, who is the vice president and chief technology officer of our company and worked as algorithm engineer at several leading IC companies. As of December 31, 2023, our research and development team comprised 83 members, representing approximately 53% of our total employees. Among these team members, approximately 33% hold a master's degree or above, and many of them once worked for leading companies in the semiconductor industry, including leading IC design houses. Core members of our research and development team all have more than ten years of relevant industry experience. In 2021, 2022 and 2023, our research and development expenses were RMB145.5 million, RMB131.9 million and RMB88.6 million (US\$12.5 million), respectively. As of December 31, 2023, we had registered 30 software copyrights, four IC layout-design rights and 25 patents, and applied for registration of 16 patents.

Production

Our Fabless Model

We do not directly manufacture ICs used for our products. We utilize what is known as a fabless model, whereby we collaborate with world-class production partners for all phases of the manufacturing process of our ICs, including wafer fabrication and packaging and testing. Under the fabless model, we can leverage the expertise of industry leaders that are certified by the ISO in such areas as fabrication, assembly, quality control and assurance, reliability and testing. In addition, the fabless model allows us to avoid many of the significant costs and risks associated with owning and operating various fabrication and packaging and testing facilities. We closely work with leading global production partners for IC fabrication and IC packaging and testing and our fabrication partners are responsible for the procurement of most of the raw materials used in the production of our ICs. In this way, we can focus our resources on research and development, product design and additional quality assurances.

IC Fabrication

We currently work with two leading foundries as our main IC fabrication partners, and we place actual orders according to our business needs. This strategy allows us to guarantee low inventory. After we place our orders, and once the foundries accept our orders, we are required to prepay in full in order to secure production capacity from foundries. It takes an average of approximately three to six months from the time when we place our order to the delivery of wafers. Since our inception, we have cooperated with several leading foundries, and we do not maintain any long-term contract or framework agreement.

Packaging and Testing

We collaborate with leading packaging and testing service providers. We provide rolling forecasts and firm orders for our partners to purchase necessary materials. We typically settle with our partners upon delivery. However, we may need to pay our partners in advance to secure their production capacity when their products and services are in high demand. We have built our in-house testing capabilities to perform testing on final products.

Assembling

We currently lease an assembly plant to meet our assembling demand inhouse. We may from time to time outsource some of our assembling to trusted assembly partners.

Quality Control

We emphasize quality control in all aspects of our operations. We implement ample design verification to ensure the reliability of product design. From product development, component sourcing to product assembly and delivery, we strictly control the quality of our products and components, to ensure our products meet our stringent internal standards as well as international and industry standards. We have also employed a traceability system that enables us to trace the product flow throughout the manufacturing and supply chain, allowing us to identify and resolve quality defect at their root. As a result, we are not involved in any material dispute with our customers regarding product malfunctions. We also require our fabrication, packaging and testing and assembling service providers to apply their stringent quality control standards.

We have implemented various quality-control checks into our production process and the IC fabrication process by our production partners. In addition, we provide timely and effective after-sales services and support to our users. We devote significant resources to quality control of our products with a dedicated team.

Warranty and After Sales Services

We usually offer warranties ranging from six months to 12 months, which we believe is in line with prevailing industry practice. Our warranties cover regular maintenance services and parts and labor for repairs.

We have devised a standard operating procedure for customer service. We collect and record customer feedback and complaints from different channels and make timely responses in order to achieve customer satisfaction.

We accept exchanges of our blockchain mining machines only for major defects. We believe our exchange policy is consistent with relevant PRC laws and regulations governing product quality and consumer rights and interests. We have not received any requests for exchange which individually or in aggregate has had a material adverse effect on our business and financial condition. In addition, as of the date of this annual report, we have not experienced any product recall that adversely impacted our reputation, business operations or financial condition.

Competition

The global fabless IC design market is relatively concentrated with a few large players. We are an IC design company in China that provide a rich product matrix consisting of HTC chips, HPC chips and distributed computing and storage solution.

Our competitors include well-known players within and outside China. We expect that competition in the HPC industry will continue to intensify as we compete not only with existing players that have been focused on blockchain mining, but also new entrants that include well-established players in the semiconductor industry, and players who were not predisposed to this industry in the past. Some of these competitors may also have stronger brand names, greater access to capital, longer histories, longer relationships with their suppliers or customers and more resources than we do.

Intellectual Property

Our patents, IC layout and design rights, copyrights, trademarks, domain names, know-how, proprietary technologies and similar intellectual property are critical to our success, and we rely on a combination of protections provided by patents, IC layout design rights, copyrights, trademark and trade secret law and confidentiality agreements, non-compete agreements and nondisclosure agreement with our employees and others to protect such proprietary rights.

As of December 31, 2023, we have registered 82 trademarks and 215 domain names. As of the same date, we had registered 30 software copyrights, four IC layout-design rights and 25 patents, and applied for registration of 16 patents. Proprietary know-how that is not patentable and proprietary technologies and processes for which patents, IC layout design rights and copyrights are difficult to enforce are also of significant importance to our operations. We rely on trade secret protection and confidentiality agreements to safeguard our interests in this respect. Certain elements in our operations are not covered by patents, IC layout design rights or copyrights. We have taken security measures to protect these elements.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our technology. Monitoring unauthorized use of our technology is difficult and costly, and we cannot be certain that the steps we have taken will prevent misappropriation of our technology. From time to time, we may have to resort to litigation to enforce our intellectual property rights, which could result in substantial costs and diversion of our resources.

We have in the past entered and may continue in the future to enter into IP licensing agreements with third parties for the use of their proprietary technologies, primarily software development tools, in the development of our products. Third parties may initiate litigation against us alleging infringement of their proprietary rights or breach of a licensing agreement or declaring their non-infringement of our intellectual property rights. In the event of a successful claim of infringement or breach of a licensing agreement and our failure or inability to develop non-infringing technology or license the infringed or similar technology or cure the breach on a timely basis, our business could be harmed. Moreover, even if we are able to license the infringed or similar technology, license fees could be substantial and may adversely affect our results of operations.

See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Operations—We may face difficulties in protecting our intellectual property rights” and “—Third parties have claimed and may, from time to time, assert or claim that we infringed their intellectual property rights, and any failure to protect our intellectual property rights could have a material adverse impact on our business.”

Employees

As of December 31, 2023, we had 157 employees, substantially all of whom were in China. The following table sets forth the number of our employees by function as of December 31, 2023:

Function	Number of Employees	Percentage %
Management	5	3.1
Research and development	83	52.9
Sale and marketing	21	13.4
Finance, operations and others	48	30.6
Total	157	100.0

The remuneration payable to our employees includes salaries, allowances, performance-based bonus and comprehensive subsidy. We determine employee remuneration based on factors primarily including industry standard, operation of our company and the department, role requirement and work performance. In order to maintain the quality, knowledge and skills of our employees, we appreciate the importance of training to employees. We provide regular trainings to our employees, which include orientation training for new employees and continuing on-the-job training for existing employees. We believe we offer our employees competitive compensation packages and a dynamic work environment that encourages initiative and is based on merit. As a result, we have been able to attract and retain talented personnel and maintain a stable core management team.

As required by PRC regulations, we participate in various government statutory employee benefit plans, including social insurance, namely pension insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance, and housing funds. We are required under PRC law to make contributions to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government regulations from time to time.

In addition to full-time employees, we also use workers from outsourced labor outsourcing service providers, primarily for the development of non-core technologies under temporary arrangements. This arrangement gives us greater flexibility in staffing and work allocation in response to fluctuating work demands. We do not directly enter into contracts with these workers, and instead, we typically enter into contracts with the labor outsourcing service providers for the engagement of such workers. We pay to the labor outsourcing service providers an overall service fee calculated based on the inspection outcome after the completion of a project.

We enter into standard labor and confidentiality agreements with all employees and non-compete agreements with our core employees. The non-compete restricted period typically expires two years after the termination of employment.

Properties

We are headquartered in Hangzhou, Zhejiang province, China. As of December 31, 2023, we occupied 10 properties with an aggregate gross floor area of approximately 5,866.12 square meters located in Hangzhou, Shanghai, Shenzhen and Shaoxing, China and Singapore. In May 2022, we entered into a land use agreement and made full payment for the right to use a parcel of land with an area of 49,452 square meters located in Shaoxing, China for 50 years. We mortgaged such land use right to obtain a credit line of up to RMB148 million from a commercial bank.

Insurance

Besides the government-mandated social insurance and housing provident fund schemes and motor vehicle insurance, we do not maintain any insurance covering our properties, equipment, inventory or employees, and we do not carry any business interruption or product liability insurance or any third-party liability insurance to cover claims in respect of personal injuries or any damages arising from accidents on our properties or in relation to our operations. We believe that our insurance coverage is adequate and is in line with industry practice.

Legal Proceedings

We may from time to time be subject to various legal, arbitration or administrative proceedings arising in the ordinary course of business, such as proceedings in respect of disputes with suppliers or customers and labor disputes. As of the date of this annual report, we are party to the following legal, arbitration or administrative proceedings, regulatory inquiries or investigations made or pending that we believe are material to our business and results:

On September 8, 2023, a customer named iPollo Pte Ltd, our Singapore subsidiary, as the defendant of a claim in the General Division of the High Court of the Republic of Singapore. This customer alleged that we failed to make timely delivery for products purchased and such products did not function as expected, demanding a return of payments of US\$0.3 million with relevant damages, interests and costs. As of the date of this annual report, the high court has decided to adjudicate certain issue of the claim by a court hearing. While the outcome remains uncertain at this stage, we intend to defend ourselves vigorously.

On December 25, 2023, three of our subsidiaries, Zhejiang Ipollo Technology Co., Ltd., Zhejiang Haowei Technology Co., Ltd. and Zhejiang Metaverse Technology Co., Ltd., were named as defendants along with others unaffiliated to us in a civil action filed at the People's Court of Yuhuatai District, Nanjing City. The plaintiff of such civil action alleged that it entered into a sales contract for our products with one of the defendants who purportedly purchased our products for resale and failed to make timely delivery. The plaintiff seeks to rescind the sales contract with this defendant and demands a return of payments of RMB47.0 million with interests accrued by all defendants including our three subsidiaries. As of the date of this annual report, the first trial of this civil action is pending for further notice. While the outcome remains uncertain at this stage, we intend to defend ourselves vigorously.

Regulation

We are a leading fabless IC design company and product solution provider in China. This section sets forth a summary of the applicable PRC laws, rules, regulations, government and industry policies and requirements that have a significant impact on our operations and business in China. This summary does not purport to be a complete description of all the laws and regulations, which apply to our business and operations. Investors should note that the following summary is based on relevant laws and regulations in force as of the date of this annual report, which may be subject to change.

PRC Laws and Regulations relating to Foreign Direct Investment

The PRC Company Law was promulgated on December 29, 1993, and was subsequently amended on December 25, 1999, August 28, 2004, October 27, 2005, December 28, 2013, and October 26, 2018. Limited liability companies and stock limited companies established in China shall be subject to the PRC Company Law. Foreign-invested companies are also subject to the PRC Company Law, except as otherwise provided in the Foreign Investment Law of the PRC.

The Foreign Investment Law of the PRC was adopted by the National People's Congress on March 15, 2019, and became effective on January 1, 2020, replacing the Law of the PRC on Sino-Foreign Equity Joint Ventures, the Law of the PRC on Sino-Foreign Contractual Joint Ventures and the Law of the PRC on Wholly Foreign-owned Enterprises, together with their implementation rules and ancillary regulations. Under the Foreign Investment Law of the PRC, the PRC government shall implement management systems of pre-entry national treatment and a negative list for foreign investment, according to which the treatment provided to foreign investors and for their investments during the investment access stage shall not be less favorable than that provided to their domestic competitors in China, and the PRC government shall grant national treatment to foreign investment beyond the negative list where special administrative measures for the access of foreign investment in specific fields is specified. Besides, the PRC government shall protect foreign investors' investment, earnings and other legitimate rights and interests within the territory of China according to relevant laws and regulations, and all national policies on supporting the development of enterprises shall equally apply to foreign-invested enterprises. Among others, the PRC government shall take action to prompt foreign investment, such as ensuring fair competition for foreign-invested enterprises to participate in government procurement activities and protecting the intellectual property rights of foreign investors and foreign-invested enterprises. In respect of the administration of foreign investment, foreign investment projects shall go through relevant verification and record-filing procedures as required by relevant laws and regulations, if any. The organization structure, institutional framework and standard of conduct for a foreign-invested enterprise shall be subject to the provisions of the PRC Company Law or the Partnership Enterprise Law of the PRC, if applicable.

Our subsidiaries in China are subject to and have complied with the above regulations relating to the Foreign Investment Law of the PRC as of the date of this annual report.

PRC Policies and Regulations relating to the IC Industries

Pursuant to Provisions for Guiding the Foreign Investment Direction, projects with foreign investment fall into four categories, namely encouraged, permitted, restricted and prohibited. Projects with foreign investment that are encouraged, restricted or prohibited shall be listed in the Foreign Investment Catalog. Projects with foreign investment not listed as encouraged, restricted or prohibited projects are permitted projects.

According to the Catalogue of Encouraged Industries for Foreign Investment (2022 Version), which was jointly promulgated by MOFCOM and the NDRC on October 26, 2022, and became effective on January 1, 2023, integrated circuit design and software product development/production are listed in catalog 330 and 340, respectively.

As demonstrated by The Circular of the State Council on Printing and Distributing Policies for Encouraging the Development of the Software Industry and the Integrated Circuit Industry issued on June 24, 2000, China continues to enact policies encouraging new and advanced technology and supporting the software and IC industries.

Pursuant to the Circular on Printing and Distributing Policies for Further Encouraging the Development of the Software Industry and the Integrated Circuit Industry, which became effective on January 28, 2011, and the Several Policies to Promote the High-quality Development of the Integrated Circuit Industry and Software Industry in the New Era, which became effective on July 27, 2020, the PRC State Council granted preferential policies to the integrated circuit industry and the software industry in terms of taxation, investment, financing, research and development, import and export, talents, intellectual property rights, market application, and international cooperation, in order to further optimize the development environment of such industries and to improve the industrial innovation capability and development quality.

PRC Policies and Regulations relating to the Cryptocurrency Industry

The policies and regulations relating to the cryptocurrency industry do not have a direct impact on the Company. However, they could have an impact on the Company's customers in China, which could indirectly impact the demand for the Company's cryptocurrency mining machines.

According to the Circular on Prevention of Risks Associated with Bitcoin jointly promulgated by People's Bank of China, Ministry of Industry and Information Technology, China Banking Regulatory Commission, China Securities Regulatory Commission, or CSRC, and China Insurance Regulatory Commission on December 3, 2013, or the Circular, Bitcoin shall be a kind of virtual commodity in nature, which shall not be in the same legal status with currencies and shall not be circulated as currencies and used in markets as currencies. The Circular also provides that financial institutions and payment institutions shall not engage in business in connection with cryptocurrency.

According to the Announcement on Prevention of Risks from Offering and Financing of Cryptocurrencies promulgated by seven PRC governmental authorities including the People's Bank of China on September 4, 2017, or the Announcement, and Guarding against the Speculative Risks of Cryptocurrency Trading promulgated by the National Internet Finance Association of China, the China Banking Association and the Payment & Clearing Association of China on May 18, 2021, activities of offering and financing of cryptocurrencies, including initial coin offerings, have been forbidden in China since they may be suspected to be considered as illegal offering of securities or illegal fundraising. According to the Announcement, all so-called token trading platform should not (1) engage in the exchange between any statutory currency with tokens and "virtual currencies," (2) trade or trade the tokens or "virtual currencies" as central counterparties, or (3) provide pricing, information agency or other services for tokens or "virtual currencies." The Announcement further provides that financial institutions and payment institutions shall not engage in business in connection with transactions of offering and financing of tokens.

Pursuant to the Circular of the Regulating Cryptocurrency Mining Activities promulgated by several PRC governmental authorities including the PBOC on September 3, 2021, which aims to dispose of the hidden risks in cryptocurrency mining as it pursues China's carbon-neutrality goals, and cryptocurrency mining is to be classified as a phased-out industry. This circular does not outlaw cryptocurrency mining completely, rather it orders local authorities to clamp down on illegal mining activities with plans to gradually phase out the industry. Investing in and constructing new mining projects will not be allowed and the existing mining projects will be given time to exit, and the entire industrial chain of the upstream and downstream of cryptocurrency mining activities will be tighten regulated.

On September 15, 2021, the PBOC and other nine government departments in China promulgated the Notice on Further Prevention and Disposal of the Risk of Speculation in Cryptocurrency Trading. This notice reiterates that cryptocurrencies do not have the same legal status as Renminbi and financial institutions and non-bank payment institutions are prohibited to provide services for virtual currency-related business activities.

PRC Laws and Regulations relating to Intellectual Property Rights

Trademark

The Trademark Law of the PRC was promulgated on August 23, 1982 with the last amendment effective from November 1, 2019. The implementing regulations of Trademark Law of the PRC was promulgated on August 3, 2002 by the State Council and amended on April 29, 2014 and became effective on May 1, 2014. These current effective laws and regulations provide the basic legal framework for the regulations of trademarks in China, covering registered trademarks including commodity trademarks, service trademarks, collective marks and certificate marks. The Trademark Office under the SAMR is responsible for the registration and administration of trademarks in China. Trademarks are granted on a term of 10 years commencing on its registration date. Six months prior to the expiration of the 10-year term, an application may renew the trademark for another 10 years.

Under the Trademark Law, any of the following acts may be regarded as an infringement of the exclusive right to use a registered trademark:

- (1) Use of a trademark that is identical with or similar to a registered trademark on the same or similar kind of commodities without the authorization of the trademark registrant;
- (2) Sale of commodities infringing upon the exclusive right to use a registered trademark;
- (3) Counterfeiting or making, without authorization, representations of a registered trademark, or sale of such representation of a registered trademark; and
- (4) Infringing upon other person's exclusive right to use a registered trademark in other ways and causing damages.

Violation of the Trademark Law may result in imposition of fines, confiscation and destruction of infringing commodities.

Patent

Pursuant to the Patent Law of the PRC, or the Patent Law of the PRC, promulgated on March 12, 1984 with the last amendment effective from June 1, 2021, and the Implementing Regulations of the Patent Law of the PRC last amended on December 11, 2023 and effective from January 20, 2024, respectively, an inventor or a designer may apply to the State Intellectual Property Office, or the SIPO for the grant of an invention patent, an utility model patent or a design patent. According to the Patent Law of the PRC, the right to apply for a patent (a patent application) and of registered patent can be transferred upon completion of registration with SIPO. The patent right duration is 20 years for invention and 10 years for utility model and design, starting from the date of application. A patentee is obligated to pay annual fee beginning with the year in which the patent right is granted. Failure to pay the annual fee may result in a termination of the patent right duration.

Copyright

The Copyright Law of PRC, promulgated on September 7, 1990 with the last amendment effective from June 1, 2021, protects copyright and explicitly covers computer software copyright. The Regulations on the Protection of Computer Software, promulgated on December 20, 2001 and amended on January 30, 2013 and came into force on March 1, 2013, protects the rights and interests of the computer software copyright holders and encourages the development of the software industry and information economy. In China, software developed by PRC citizens, legal persons or other organizations are automatically protected immediately after its development, whether published or not. Foreigners or stateless persons having software first published within the territory of China enjoy copyright in accordance with these regulations. Software owned by foreigners or stateless persons are protected in China under these regulations according to an agreement signed between the country to which the foreigner belongs or the habitual residence of its developer and China or according to the international conventions China participated in. A software copyright owner may register with the software registration institution recognized by the copyright administration department of the State Council. A registration certificate issued by the software registration institution is a preliminary proof of the registered items. On February 20, 2002, the National Copyright Administration of the PRC promulgated the Measures for the Registration of Computer Software Copyright, which came into force on the date of promulgation and outlines the operational procedures for registration of software copyright, as well as registration of software copyright licenses and transfer contracts. The copyright Protection Center of PRC is mandated as the software registration agency under the regulations.

The regulations on the Protection of Layout Designs of Integrated Circuits was promulgated by the State Council on April 2, 2001 and became effective on October 1, 2001, and the Detailed Implementing Rules of the Regulations on the Protection of Layout Designs of Integrated Circuits were promulgated by SIPO, the authority to receive and examine applications for registrations of layout IC designs, on September 18, 2001 and came into effect on October 1, 2001, or collectively the Layout-design Regulations.

Pursuant to the Layout-design Regulations, layout-design created by a PRC citizen, legal person or other organization shall be eligible for the exclusive right of layout-design in accordance with the Layout-design Regulations. The holder of the right of a layout design shall enjoy the following exclusive right:

- (1) Reproducing a protected layout-design in its entirety or any part thereof that complies with the requirement of originality; and
- (2) Commercially exploiting a protected layout-design, an IC incorporating a protected layout-design, or an article incorporating such an IC.

The exclusive right of a layout-design is acquired after it is registered with the intellectual property administration department of the State Council. Any unregistered layout-design shall not be protected under the Layout-design Regulations. The term of protection of the exclusive right of a layout-design shall be 10 years starting from the date of filing for registration or from the date on which it was first commercially exploited anywhere in the world, whichever expires earlier. However, no matter whether it has been registered or commercially exploited, a layout-design shall no longer be protected under the Layout-design Regulations 15 years after the date of the completion of its creation.

Any layout-design, if no application for its registration has been filled with the intellectual property administration department of the State Council within two years from the date on which it was first commercially exploited anywhere in the world, shall no longer be registered by the intellectual property administration department of the State Council.

The following acts, without the authorization of the holder of the right of a layout-design, would constitute an infringement of the layout-design:

- (1) reproducing a protected layout-design in its entirety or any part thereof that complies with the requirement of originality; and
- (2) importing, selling, or otherwise distributing for commercial purposes a protected layout design, an IC incorporating such a layout-design, or an article incorporating such an IC.

The amount of compensation for the damage caused by an infringement of the exclusive right of a layout-design shall be the profits which the infringer has earned through the infringement or the losses suffered by the person whose right was infringed, including the reasonable expenses paid by the infringed person for the purposes of stopping the infringement.

Domain Name

Internet domain name registration and related matters are primarily regulated by the Administrative Measures on Internet Domain Names issued by the Ministry of Industry and Information Technology, or the MIIT, on August 24, 2017 which became effective on November 1, 2017, the Implementing Rules of ccTLD Registration issued by China Internet Network Information Center, or the CINIC, which became effective on June 18, 2019, and the ccTLD Dispute Resolution Policy issued by CINIC which became effective on June 18, 2019.

Domain name registrations are handled through domain name service agencies established under the relevant regulations, and the applicants become domain name holders upon successful registration. Domain name disputes shall be submitted to institutions authorized by the CINIC for resolution.

PRC Laws relating to Product Quality

The Product Quality Law of the PRC was promulgated on February 22, 1993 and amended on July 8, 2000, August 27, 2009 and December 29, 2018, respectively. The product quality supervision department under the State Council is responsible for nationwide product quality supervision. All the relevant departments under the State Council are in charge of product quality supervision according to their respective responsibilities. Local product quality supervision departments at or above the county level are responsible for product quality supervision within their own administrative areas.

Manufacturers and sellers shall establish and improve their internal product quality management systems and rigorously implement quality norms, quality responsibilities and corresponding measures for their assessment.

The PRC government encourages the use of scientific quality management methods and adoption of advanced science and technology, and encourages enterprises to ensure that their product quality reach or surpass trade standards, national standards and international standards. The entities and individuals that have made outstanding achievements in exercising advanced management of product quality and in bringing product quality up to the advanced international levels shall be awarded.

Pursuant to the Civil Code of the PRC, or the Civil Code, which was promulgated on May 28, 2020 and became effective on January 1, 2021, the infringed party may claim for compensation from the manufacturer or the seller of the relevant product in which the defects have caused damage. Where the product defects are caused by the producers, the sellers shall have the right to recover the same from the producers after paying compensation. If the products are defective due to the fault of the seller, the producer may, after paying compensation, claim the same from the seller.

PRC Laws relating to Production Safety

The Work Safety Law of the PRC promulgated on June 29, 2002, with the latest amended version effective from September 1, 2021, is the principal law governing the supervision and administration of production safety in China. Entities engaged in production and business activities within the territory of China shall abide by the relevant legal requirements such as providing its staff with training on production safety and providing safe working environment in compliance with relevant laws and regulations. Any entities unable to provide the required safe working environment may not engage in production activities. Any failure to comply with the aforesaid provisions or to rectify noncompliance within a time limit may subject the relevant entities to fines and penalties, suspension of operations, ceasing of operations, or even criminal liability in severe situations.

PRC Laws and Regulations relating to Taxation

Enterprise Income Tax

According to the Enterprise Income Tax Law of the PRC, or the EIT Law which was promulgated by the National People's Congress on March 16, 2007 with the latest amended version effective from December 29, 2018, and its implementing rules, a unified EIT rate of 25% is applied equally to both resident and non-resident enterprises. EIT shall be payable by a resident enterprise for income sourced within or outside the PRC. EIT shall be payable by a non-resident enterprise, for income sourced within the PRC by its institutions or premises established in the PRC, and for income sourced outside the PRC for which the institutions or premises established in the PRC have a de facto relationship. Where the non-resident enterprise has no institutions or premises established in the PRC or has income bearing no de facto relationship with the institution or premises established, EIT shall be payable by the non-resident enterprise only for income sourced within the PRC. The EIT rate could be reduced to 15% for High and New Technology Enterprises, or the HNTEs, in need of special support from the PRC government.

Pursuant to the newly revised Administrative Measures for the Accreditation of the High and New Technology Enterprises, or the Administrative Measures, which became effective on January 1, 2016, which are recognized in accordance with the Administrative Measures, may apply for the tax preferential policy in accordance with the EIT Law and the Implementing Measures thereof, the Law of PRC Concerning the Administration of Tax Collection and Implementing Rules of the Law of the PRC Concerning the Administration of Tax Collection. The qualified HNTEs would be taxed at a rate of 15% on EIT. The validity period of HNTEs shall be three years from the date of issuance of the certificate for an HNTE. After obtaining the HNTE qualification, such enterprise shall retain its financial statements together with details of its research and development activities and other technological innovation activities for future reference in accordance with the requirements of the tax authority and other relevant authorities. Where a significant change occurred such as change of name or other conditions related to the High-tech enterprises identified (e.g., spin-off, merger, restructuring and change of business), such enterprise shall report it to the relevant competent tax authority, which would accredit such enterprise within three months.

Upon such accreditation, an HNTE would either remain its qualification or be disqualified. For enterprises undergoing a change of name, the authority would re-issue the certificate with the certificate number and duration of validity remains unchanged.

According to the Notice of the Ministry of Finance and the State Administration of Taxation on Enterprise Income Tax Policies for Further Encouraging the Development of Software and Integrated Circuit Industries, the newly established IC design enterprises and qualified software enterprises within the territory of China shall, upon confirmation, be exempted from the enterprise income tax for the first two years starting from the first profit-making year and shall pay enterprise income tax at the reduced rate of half of the statutory tax rate of 25% from subsequent third to fifth year. In addition, according to the Notice of the Ministry of Finance, the State Administration of Taxation, the National Development and Reform Commission and the Ministry of Industry and Information Technology on Issues concerning Preferential Enterprise Income Tax Policies for the Software and Integrated Circuit Industries, a software or IC enterprise shall calculate the preferential period for tax exemption or reduction on a regular basis from the year when the enterprise starts to make profits. If such enterprise does not meet the conditions on enjoying preferential tax treatment in the profit-making year, the enterprise shall enjoy the corresponding tax exemption or reduction in the remaining years calculated from the year when the enterprise meets the conditions for the first time.

According to the Notice of the Ministry of Finance and the State Administration of Taxation on Implementing the Inclusive Tax Deduction and Exemption Policies for Micro and Small Enterprises, only 25% of a small enterprise's first RMB1.0 million annual taxable income will be taxed at a reduced tax rate of 20%, and for the portion above RMB1.0 million but less than RMB3.0 million, only 50% of that portion will be taxed at the same reduced tax rate.

Pursuant to the Announcement of the State Administration of Taxation on Several Issues Concerning the Enterprise Income Taxes on the Indirect Transfer of Properties by Non-resident Enterprises promulgated and with effect from February 3, 2015, or SAT Circular 7, and the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Bulletin 37 promulgated on October 17, 2017 with last amendment on June 15, 2018, where a non-resident enterprise indirectly transfers equities and other properties of a PRC resident enterprise, or PRC Taxable Properties, to evade its obligation of paying EIT by implementing arrangements that are not for bona fide commercial purpose, such indirect transfer shall be re-identified and recognized as a direct transfer of equities and other properties of the PRC resident enterprise, in accordance with the provisions of Article 47 of the EIT Law. PRC Taxable Properties in this announcement include properties of a PRC entity or establishment located in China, real estate in China and an equity investment in a PRC resident enterprise, that are directly held by a non-resident enterprise and proceeds from such transfer shall be subject to EIT in China in accordance with the PRC tax laws. An indirect transfer of PRC Taxable Properties refers to a transfer by a non-resident company of an equity interest or other similar right or interest in an overseas enterprise (excluding the PRC resident enterprise registered overseas), or the Overseas Enterprises, that in turn directly or indirectly holds the PRC Taxable Properties, which effectively has the same or a similar effect as a direct transfer of such PRC Taxable Properties. SAT Bulletin 7 also provides that an indirect transfer of PRC Taxable Properties, which satisfies one of the following conditions, will not be subject to the aforesaid provisions:

- (1) A non-resident enterprise buys and sells the shares of one same overseas listed company in a public stock exchange; and
- (2) If the non-resident enterprise directly held and transferred PRC Taxable Properties, the proceeds derived thereof would be exempt from EIT under the applicable tax treaty or arrangement.

Value-added Tax

Pursuant to the Provisional Regulations on Value-Added Tax of the PRC promulgated by the Stated Council on December 13, 1993 with the latest amended version effective from November 19, 2017, and its implementing rules promulgated by MOF on December 25, 1993 and revised on December 18, 2008 and October 28, 2011, respectively, tax payers engaging in sale of goods, provision of processing services, repairs and replacement services or importation of goods within the territory of China shall pay value-added tax, or the VAT. Unless stated otherwise, the rate of value-added tax is 17%.

Pursuant to the Notice on Value-added Tax Policies of Software Products, a general taxpayer who sells its self-developed software products and borne a VAT more than 3%, could enjoy a levy-refund policy on VAT after being taxed at the fixed rate of 17%. However, in practice, such general taxpayer should present the license of software products or registration certificates of software copyrights to prove the software products were developed and produced by its own.

In April 2018, MOF and SAT jointly promulgated the Circular of the Ministry of Finance and the State Administration of Taxation on Adjustment of Value-Added Tax Rates, or Circular 32, according to which (1) for VAT taxable sales or imports of goods originally subject to value-added tax rates of 17% and 11% respectively, such tax rates were adjusted to 16% and 10%, respectively; and (2) for exported goods originally subject to a tax rate of 17% and an export tax refund rate of 17%, the export tax refund rate was adjusted to 16%. Circular 32 became effective on May 1, 2018 and superseded existing provisions which were inconsistent with Circular 32.

Pursuant to the Announcement on Relevant Policies for Deepening Value-Added Tax Reform, which was promulgated by MOF, State Administration of Taxation and the General Administration of Customs on March 20, 2019, where (1) for VAT taxable sales or imports of goods originally subject to value-added tax rates of 16% and 10%, such tax rates shall be adjusted to 13% and 9%, respectively; and (2) for the exported goods originally subject to a tax rate of 16% and an export tax refund rate of 16% and 10%, the export tax refund rate shall be adjusted to 13% and 9%, respectively.

PRC Laws and Regulations relating to Dividend Distribution

Under the Foreign Investment Law of the PRC, which was promulgated by the National People's Congress of the PRC in 2019, foreign-invested enterprises in China may pay dividends only out of their accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, wholly foreign-owned enterprises in China are also required to allocate at least 10% of their respective accumulated profits after tax each year, if any, to certain common statutory reserves unless these accumulated reserves have reached 50% of the registered capital of such enterprises. These reserves are not distributable as cash dividends.

According to the EIT Law and its implementing rules, dividends paid to investors of an eligible PRC resident enterprise can be exempted from EIT and dividends paid to foreign investors which are non-resident enterprises and which have not established or operated premises in the PRC, or which have established or operated premises but where their income has no de facto relationship with such establishment or operation of premises are subject to a withholding tax rate of 10%, unless relevant tax agreements entered into by the PRC government provide otherwise.

The PRC and the government of Hong Kong entered into the Arrangement between the Mainland of the PRC and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Incomes, or the Arrangement, on August 21, 2006. According to the Arrangement, 5% withholding tax rate shall apply to the dividends paid by a PRC company to a Hong Kong resident, provided that such Hong Kong resident directly holds at least 25% of the equity interests in the PRC company, and 10% of withholding tax rate shall apply if the Hong Kong resident holds less than 25% of the equity interests in the PRC company. The 5% withholding tax rate, however, does not automatically apply and certain requirements must be satisfied, including without limitation that (1) the Hong Kong resident must be the beneficial owner of the relevant dividends; and (2) the Hong Kong resident must directly hold more than 25% equity interest in the PRC company during the 12 consecutive months preceding its receipt of the dividends. In current practice, a Hong Kong resident must obtain a tax resident certificate from the Hong Kong tax authority to apply for the 5% lower PRC withholding tax rate.

PRC Laws and Regulations relating to Labor

Pursuant to the PRC Labor Law promulgated on July 5, 1994 and effective from January 1, 1995, and subsequently revised on August 27, 2009 and December 29, 2018, respectively, as well as the PRC Labor Contract Law promulgated on June 29, 2007, revised on December 28, 2012 and effective from July 1, 2013, if an employment relationship is established between an entity and its employees, written labor contracts shall be executed between them. The relevant laws stipulate the maximum number of working hours per day and per week, respectively. Furthermore, the relevant laws also set forth the minimum wages. The entities shall establish and develop systems for occupational safety and sanitation, implement the rules and standards of the PRC government on occupational safety and sanitation, educate employees on occupational safety and sanitation, prevent accidents at work and reduce occupational hazards.

Pursuant to the Interim Regulations on Levying Social Insurance Premiums promulgated on January 22, 1999 and revised on March 24, 2019, Decisions of the State Council on Modifying the Basic Endowment Insurance System for Enterprise Employees promulgated on December 3, 2005, Decision on Establishment of Basic Medical System for Urban Employee issued by State Council with effect from December 14, 1998, the Regulations on Unemployment Insurance effective from January 22, 1999, Regulations on Work-Related Injury Insurance promulgated on April 27, 2003 with effect from January 1, 2004, and as amended on December 20, 2010, and the Interim Measures concerning the Maternity Insurance for Enterprise Employees promulgated on December 14, 1994 with effect from January 1, 1995, employers are required to register with the competent social insurance authorities and provide their employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance and medical insurance.

Pursuant to the Social Insurance Law of the PRC, which became effective on July 1, 2011 with last amendment on December 29, 2018, all employees are required to participate in basic pension insurance, basic medical insurance schemes and unemployment insurance, which must be contributed by both the employers and the employees. All employees are required to participate in work-related injury insurance and maternity insurance schemes, which must be contributed by the employers. Employers are required to complete registrations with local social insurance authorities. Moreover, the employers must timely make all social insurance contributions. Except for mandatory exceptions such as force majeure, social insurance premiums may not be paid late, reduced or be exempted. Where an employer fails to make social insurance contributions in full and on time, the social insurance contribution collection agencies shall order it to make all or outstanding contributions within a specified period and impose a late payment fee at the rate of 0.05% per day from the date on which the contribution becomes due. If such employer fails to make the overdue contributions within such time limit, the relevant administrative department may impose a fine equivalent to one to three times the overdue amount.

Pursuant to the Administrative Regulations on the Housing Provident Fund effective from April 3, 1999, amended on March 24, 2002 and March 24, 2019, enterprises are required to register with the competent administrative centers of housing provident fund and open bank accounts for housing provident funds for their employees. Employers are also required to timely pay all housing fund contributions for their employees.

Where an employer fails to submit and deposit registration of housing provident fund or fails to go through the formalities of opening housing provident fund accounts for its employees, the housing provident fund management center shall order it to go through the formalities within a prescribed time limit. Failing to do so at the expiration of the time limit will subject the employer to a fine of not less than RMB10,000 and up to RMB50,000. When an employer fails to pay housing provident fund due in full and in time, housing provident fund center is entitled to order it to rectify, failing to do so would result in enforcement exerted by the court.

PRC Laws and Regulations relating to Foreign Exchange

Foreign Exchange

Pursuant to the Administrative Regulations of the PRC on Foreign Exchange promulgated by the State Council on January 29, 1996 and amended on August 1, 2008 with effect from August 5, 2008, and various regulations issued by the State Administration of Foreign Exchange, or the SAFE, and other PRC regulatory agencies, foreign currency could be exchanged or paid through two different accounts, namely current account and capital account. Payment of current account items, including commodity, trade and service-related foreign exchange transactions and other current payment, may be made by conversion between Renminbi and foreign currencies without approval of the SAFE, but are subject to procedural requirements including presenting relevant documentary evidence of such transactions. Capital account items, such as direct equity investment, loans and repatriation of investment, require the prior approval from or registration with the SAFE or its local branch for conversion between Renminbi and the foreign currency, and remittance of the foreign currency outside China.

SAFE Circular 59

On November 19, 2012, SAFE promulgated the Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment, or SAFE Circular 59, which became effective on December 17, 2012, with last amendment on December 30, 2019. SAFE Circular 59 substantially amends and simplifies the current foreign exchange procedure. According to SAFE Circular 59, the opening of various special purpose foreign exchange accounts (e.g., pre-investment expenses account, foreign exchange capital account, asset realization account, guarantee account) no longer requires SAFE's approval. Furthermore, multiple capital accounts for the same entity may be opened in different provinces, which was not possible before the issuance of SAFE Circular 59. Reinvestment of lawful incomes derived by foreign investors in China (e.g., profit, proceeds of equity transfer, capital reduction, liquidation and early repatriation of investment) no longer requires SAFE's approval or verification, and purchase and remittance of foreign exchange as a result of capital reduction, liquidation, early repatriation or share transfer in a foreign-invested enterprise no longer requires SAFE's approval.

SAFE Circular 19

On March 30, 2015, SAFE promulgated the Circular on Reforming the Management Approach regarding the Settlement of Foreign Exchange Capital of Foreign-invested Enterprises, or SAFE Circular 19, which came into effect on June 1, 2015, with last amendment on March 23, 2023. According to SAFE Circular 19, the foreign exchange capital of foreign-invested enterprises, or the FIE, shall be subject to a discretionary foreign exchange settlement, or the Discretionary Foreign Exchange Settlement. The Discretionary Foreign Exchange Settlement refers to the foreign exchange capital in the capital account of an FIE for which the rights and interests of monetary contribution has been confirmed by the local foreign exchange bureau (or the book-entry registration of monetary contribution by the banks) and can be settled at the banks based on the actual operational needs of the FIE. The proportion of Discretionary Foreign Exchange Settlement of the foreign exchange capital of an FIE is temporarily determined as 100%. Renminbi converted from a foreign exchange capital will be kept in a designated account and if an FIE needs to make further payment from such account, it still needs to provide supporting documents and go through the review process with the banks.

Furthermore, SAFE Circular 19 stipulates that the use of capital by foreign-invested enterprises shall follow the principles of authenticity and self-use within the business scope of enterprises. The capital of an FIE and capital in Renminbi obtained by the FIE from foreign exchange settlement shall not be used for the following purposes:

- (1) directly or indirectly used for the payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations;
- (2) directly or indirectly used for investment in securities or investments other than capital-protected banking products unless otherwise provided by relevant laws and regulations;
- (3) directly or indirectly used for granting the entrust loans in Renminbi (unless permitted by the scope of business), repaying the inter-enterprise borrowings (including advances by the third party) or repaying the bank loans in Renminbi that have been sub-lent to the third party; and
- (4) paying the expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises).

SAFE Circular 16

The Circular on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular 16, was issued by SAFE on June 9, 2016. Pursuant to Circular 16, enterprises registered in the PRC may also convert their foreign debts from foreign currency to Renminbi on a self-discretionary basis. SAFE Circular 16 provides an integrated standard for conversion of foreign exchange capital items (including but not limited to foreign currency capital and foreign debts) on a self-discretionary basis applicable to all enterprises registered in the PRC. SAFE Circular 16 reiterates the principle that an enterprise's Renminbi capital converted from foreign currency-denominated capital may not be directly or indirectly used for purposes beyond its business scope or purposes prohibited by PRC laws or regulations, and such converted Renminbi capital shall not be provided as loans to non-affiliated entities.

SAFE Circular 37

On July 4, 2014, Circular of the State Administration of Foreign Exchange on Issues Concerning Foreign Exchange Administration over the Overseas Investment and Financing and Round-trip Investment by Domestic Residents via Special Purpose Vehicles, or SAFE Circular 37, became effective on July 4, 2014. Pursuant to SAFE Circular 37, SAFE and its branches shall enforce registration management for establishment of a special purpose vehicle, or SPV, by domestic residents (including domestic institutions and domestic resident individuals, and domestic resident individuals shall refer to PRC citizens holding the identity cards for PRC domestic residents, military identity certificates or identity certificates for armed police force, and overseas individuals that do not hold any domestic legitimate identity certificates but have habitual residences within the territory of China due to relationships of economic interests). Prior to contributing domestic and overseas legitimate assets or interests to an SPV, a domestic resident shall apply to SAFE for foreign exchange registration of overseas investment. Where a registered overseas SPV undergoes changes of its domestic resident individual shareholders, name, operating period or other basic information, or experiences substantial changes including without limitation the increase or reduction of registered capital by domestic resident individuals, transfer or replacement of equity and merger or split, the SPV shall go through modification registration of foreign exchange for overseas investment with SAFE. Where a non-listed SPV uses its own equity interests or options to grant equity incentives to the directors, supervisors and senior management of a domestic enterprise under its direct or indirect control, as well as other employees in employment or labor relationships with the aforesaid company, relevant domestic resident individuals may, before exercising their rights, apply to SAFE for foreign exchange registration of the SPV.

Pursuant to Circular on Further Simplifying and Improving the Direct Investment-related Foreign Exchange Administration Policies, or SAFE Circular 13, which was promulgated by SAFE on February 13, 2015 and became effective on June 1, 2015, the foreign exchange registration under domestic direct investment and the foreign exchange registration under overseas direct investment will be directly reviewed and handled by banks in accordance with SAFE Circular 13, and SAFE and its branches shall perform indirect regulation over the foreign exchange registration via banks.

PRC Laws and Regulations relating to Cybersecurity

Pursuant to the PRC Cybersecurity Law, which was promulgated by the Standing Committee of the National People's Congress on November 7, 2016 and took effect on June 1, 2017, personal information and important data collected and generated by a critical information infrastructure operator in the course of its operations in China must be stored in China, and if a critical information infrastructure operator purchases internet products and services that affects or may affect national security, it should be subject to cybersecurity review by the Cybersecurity Administration of China, or the CAC. The PRC Cybersecurity Law also establishes more stringent requirements applicable to operators of computer networks, especially to operators of networks which involve critical information infrastructure. The PRC Cybersecurity Law contains an overarching framework for regulating Internet security, protection of private and sensitive information, and safeguards for national cyberspace security and provisions for the continued government regulation of the Internet and content available in China. The PRC Cybersecurity Law emphasizes requirements for network products, services, operations and information security, as well as monitoring, early detection, emergency response and reporting. Due to the lack of further interpretations, the exact scope of "critical information infrastructure operator" remains unclear. According to the Cybersecurity Review Measures announced by the CAC on December 28, 2021, which became effective on February 15, 2022, the scope of cybersecurity reviews is extended to data processing operators engaging in data processing activities that affect or may affect national security. The Cybersecurity Review Measures further requires that any operator applying for listing of its securities on a foreign stock exchange must go through cybersecurity review if it possesses personal information of more than one million users. According to the Cybersecurity Review Measures, a cybersecurity review assesses potential national security risk that may be brought about by any procurement, data processing, or overseas listing. The review focuses on several factors, including, among others, (1) the risk of theft, leakage, corruption, illegal use or export of any core or important data, or a large amount of personal information, and (2) the risk of any critical information infrastructure, core or important data, or a large amount of personal information being affected, controlled or maliciously exploited by a foreign government after a company is listed overseas. While the Cybersecurity Review Measures has become final, there is still uncertainty regarding, among many aspects, the implementation and interpretation of the Cybersecurity Review Measures.

PRC Laws and Regulations relating to Overseas Securities Offerings

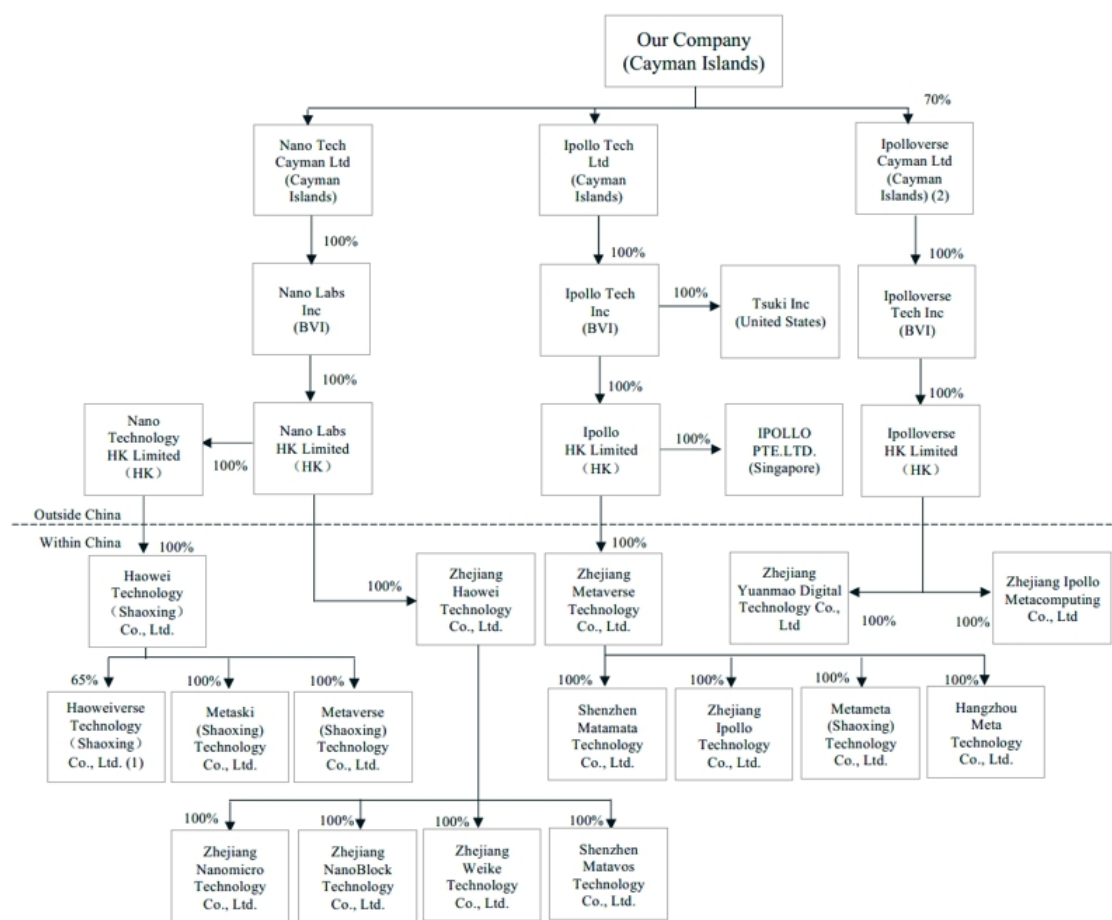
On February 17, 2023, with the approval of the State Council, the CSRC released the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies, or the Trial Measures and five supporting guidelines, which came into effect on March 31, 2023. According to the Trial Measures, among other requirements, (1) domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedures with the CSRC; if a domestic company fails to complete the filing procedures, such domestic company may be subject to administrative penalties; and (2) where a domestic company seeks to indirectly offer and list securities in an overseas market, the issuer shall designate a major domestic operating entity responsible for all filing procedures with the CSRC, and such filings shall be submitted to the CSRC within three business days after the submission of the overseas offering and listing application. On the same day, the CSRC also held a press conference for the release of the Trial Measures and issued the Notice on Administration for the Filing of Overseas Offering and Listing by Domestic Companies, which clarifies that (1) on or prior to the effective date of the Trial Measures, domestic companies that have already submitted valid applications for overseas offering and listing but have not obtained approval from overseas regulatory authorities or stock exchanges may reasonably arrange the timing for submitting their filing applications with the CSRC, and must complete the filing before the completion of their overseas offering and listing; (2) a six-month transition period will be granted to domestic companies which, prior to the effective date of the Trial Measures, have already obtained the approval from overseas regulatory authorities or stock exchanges, but have not completed the indirect overseas listing; if domestic companies fail to complete the overseas listing within such six-month transition period, they shall file with the CSRC according to the requirements; and (3) the CSRC will solicit opinions from relevant regulatory authorities and complete the filing of the overseas listing of companies with contractual arrangements which duly meet the compliance requirements, and support the development and growth of these companies.

C. Organizational Structure

We are an exempted company incorporated pursuant to the laws of Cayman Islands. We operate and own our assets directly and indirectly through a number of subsidiaries. The following is a list of our principal subsidiaries as of the date of this annual report on Form 20-F, their jurisdictions of incorporation and the ownership interest we hold:

Subsidiaries	Place of Incorporation	Ownership Interest
Nano Tech Cayman Ltd	Cayman Islands	100%
Ipollo Tech Ltd	Cayman Islands	100%
Ipolloverse Cayman Ltd	Cayman Islands	70%
Nano Labs Inc	BVI	100%
Ipollo Tech Inc	BVI	100%
Tsuki Inc	United States	100%
Ipolloverse Tech Inc	BVI	70%
Nano Technology HK Limited	Hong Kong	100%
Nano Labs HK Limited	Hong Kong	100%
Ipollo HK Limited	Hong Kong	100%
IPOLLO LTD.	Singapore	100%
Ipolloverse HK Limited	Hong Kong	70%
Haowei Technology (Shaoxing) Co., Ltd.	Shaoxing, China	100%
Zhejiang Haowei Technology Co., Ltd.	Hangzhou, China	100%
Zhejiang Metaverse Technology Co., Ltd.	Hangzhou, China	100%
Haoweiverse (Shaoxing) Technology Co., Ltd.	Shaoxing, China	65%
Metaski (Shaoxing) Technology Co., Ltd.	Shaoxing, China	100%
Metaverse (Shaoxing) Technology Co., Ltd.	Shaoxing, China	100%
Shenzhen Matamata Technology Co., Ltd.	Shenzhen, China	100%
Zhejiang Ipollo Technology Co., Ltd.	Hangzhou, China	100%
Metameta (Shaoxing) Technology Co., Ltd.	Shaoxing, China	100%
Hangzhou Meta Technology Co., Ltd.	Hangzhou, China	100%
Zhejiang Nanomicro Technology Co., Ltd.	Hangzhou, China	100%
Zhejiang NanoBlock Technology Co., Ltd.	Hangzhou, China	100%
Zhejiang Weike Technology Co., Ltd.	Hangzhou, China	100%
Shenzhen Matavos Technology Co., Ltd.	Shenzhen, China	100%
Zhejiang Yuanmao Digital Technology Co., Ltd	Hangzhou, China	70%
Zhejiang Ipollo Metacomputing Co., Ltd.	Hangzhou, China	70%

The following diagram illustrates our corporate structure, including our principal subsidiaries described above, as of the date of this annual report on Form 20-F:



(1) The remaining 35% equity interest is owned by Hangzhou Lin'an Mantefu Technology Co., Ltd., an unaffiliated third party.

(2) The remaining 30% equity interest is owned by Metadata Labs Inc., an unaffiliated third party.

D. Property, plants and equipment

See “Item 4. Information on the Company—Business Overview—Properties.”

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion of our financial condition and results of operations is based upon and should be read in conjunction with our consolidated financial statements and their related notes included in this annual report. This report contains forward-looking statements. In evaluating our business, you should carefully consider the information provided under the caption “Item 3. Key Information—D. Risk Factors” in this annual report. We caution you that our businesses and financial performance are subject to substantial risks and uncertainties.

A. Operating results

Overview

We are a leading fabless IC design company and product solution provider in China. We are committed to the development of HTC chips, HPC chips, distributed computing and storage solutions, smart-NICs, vision computing chips and distributed rendering. We have built a comprehensive FPU architecture which offers solution that integrates the features of both HTC and HPC. Moreover, our *Cuckoo* series are one of the first near-memory HTC chips available in the market with a maximum bandwidth of approximately 2.27 Tbps, as well as one of the first movers of ASIC-based Grin mining market. In June 2021, we established IPOLLO PTE. LTD., our indirect wholly-owned subsidiary in Singapore, to facilitate our business expansion in the overseas IC markets.

In 2020, we began to generate revenues, which were primarily from the sales of our HTC solutions in relation to Grin mining.

Key Factors Affecting Our Results of Operations

Our results of operations have been, and are expected to continue to be, affected by various factors, which primarily include the following:

Pricing of our products and changes in our sales mix

Our product pricing strategy and sales mix directly impacted our financial results and financial condition historically and are expected to continue affecting our revenue and financial performance in the future. We normally set the price of our products on a cost-plus basis after taking into account a variety of factors, including the costs of the products, market conditions, the purchase volume of our customers, technical requirements of the application solutions and resources involved. We may not be able to set the prices at desired level for some of our products and our sales mix may fluctuate significantly in response to the technological advancement, and the changes in market demand and market competition. If there are any significant changes in our sales mix and product prices, our overall gross profit margin and profit margin will be both affected by the changes in revenue and gross profit margin attributable to each of our products.

Performance and cost of our products

The pricing of and demand for our products and solutions are closely related to their performance. In general, more advanced process technologies can accommodate designs that produce ASIC chips with higher power efficiency. The introduction of new process and design technologies also enables us to gradually lower the production costs of chips with comparable computing power. However, the application of such process technologies, as well as other cutting-edge technologies in the design and production of ASIC chips, also commands high initial setup costs, particularly when the new production techniques first become available, which translates to higher per unit costs. As a result, our new generation ASICs using the most advanced technologies will need to achieve strong sales in order to justify the initial setup costs of the new production techniques and maintain our profitability. At the same time, as the most advanced production capabilities of IC foundries ramp up, the initial high unit cost for IC fabrication may also decrease, which will likely translate to lower fabrication costs and a positive effect on our business, results of operations and financial condition.

Competitiveness in research and development

Research and development is key to the success of our products and solutions. Our research and development expenses were RMB145.5 million, RMB131.9 million and RMB88.6 million (US\$12.5 million) in 2021, 2022 and 2023, respectively. We continue to focus on enhancing our product planning and research and development capabilities to introduce or improve products that can address the evolving customer needs in a timely manner. As existing competitors may introduce new technologies or provide more competitive offerings and more companies may enter the market to compete with us, competition may intensify in the future, and consequently, our competitiveness and market share may be affected. As a result, our ability to continue offering new and enhanced ICs as well as competitive products and technologies will have a significant impact on our results of operations.

Expected economic returns on blockchain mining activities and fluctuation of cryptocurrency price especially

In 2020, we began to generate revenues, which were primarily from the sales of our HTC solutions as applied to blockchain mining. We expect that a significant part of our revenue will depend on the sales of our HTC and HPC solutions in the near future. An increase in the economic return of blockchain mining activities would generally stimulate the demand and average selling price for our HTC and HPC solutions, and vice versa. Increases in cryptocurrency prices, especially the prices of Bitcoin and Ethereum, are the most significant factor that could increase the expected economic returns generated by blockchain mining activities. Other factors that may increase the economic return of blockchain mining activities include, among others, increase in transaction fees, decrease in electricity costs or other operating costs, increase in computing power and efficiency of our HTC and HPC solutions, reduction of difficulties of mining activities and increase in the number of cryptocurrencies awarded for mining activities. Fluctuation of cryptocurrency prices, such as a significant drop, may significantly affect our results of operations and financial condition.

Production capacity

As a fabless IC design company, we outsource the fabrication process of our chips to third-party foundry partners, the testing and packaging process to third-party testing and packaging partners, and assembling of final products to third-party assembling partners, in addition to our in-house testing and assembling capabilities. We work closely with a limited number of such partners. For example, we currently mainly rely on third-party leading foundries in the globe for the manufacturing process of our IC products, and we cannot guarantee that they will be able to meet our manufacturing requirements or capacity or that they will not raise their prices. See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Business—Our IC products mainly depend on supplies from third-party foundries, and any failure to obtain sufficient foundry capacity from such foundries would significantly delay the shipment of our products.” It will also be difficult for us to establish new or alternative supplier relationship to ensure a steady supply in a timely and cost-effective manner. As a result, our ability to quickly respond to market demand and meet production timelines, as well as to price our products competitively, is highly dependent on our third-party production partners. If our production partners are unable to meet our production capacity requirements or deliver products that meet our quality standards on a timely basis, our results of operations will be adversely affected.

We may also incur significant cash outflow at the early stages of our production process because we are required to make prepayments to some of our third-party production partners to secure their production capacity beforehand, which may affect our liquidity position. In addition, any failure by our third-party production partners to perform their obligations in a timely manner may subject us to counterparty risk and make it difficult or impossible for us to fulfill our customers’ orders, which would harm our reputation and negatively affect our business, results of operations and financial condition.

Regulatory environment

Historically, our customers were primarily based in China, and we expect a growing portion of our revenues to be derived from sales outside China. As such, we need to make efforts and incur costs to ensure that we are compliant with the evolving laws and regulations in the various jurisdictions that are material to our business and operations. Our ability to anticipate and respond to potential changes in government policies and regulations will have a significant impact on our business operations in such countries and our overall results of operations.

Liquidity

In 2023, we incurred net loss of RMB254.4 million (US\$35.9 million) and recorded net cash used in operating activities of RMB133.5 million (US\$18.8 million). Historically, we relied primarily on both operational sources of cash and non-operational sources of financing from investors to fund our operations and business development. Our ability to continue as a going concern is dependent on our management's ability to successfully execute our business plan, which includes increasing revenues while controlling costs and operating expenses as well as generating operational cash flows and continuing to gain support from outside sources of financing. However, there can be no assurance that we will be successful in acquiring additional financing or that any additional financing would be sufficient to continue operations in future years.

Key Components of Results of Operations

Net Revenues

Our net revenues are primarily derived from sales of our HTC and HPC solutions and provision of design and technical services to our customers.

The following table sets forth the breakdown of our net revenues by category, both in absolute amount and as a percentage of total net revenues for each category for the periods indicated:

	Years Ended December 31,						
	2021		2022		2023		
	RMB	%	RMB	%	RMB	US\$	%
Product sales revenue	39,440,897	100.0	920,653,911	93.6	71,321,462	10,069,813	91.0
Service revenue	—	—	62,514,987	6.4	7,013,914	990,288	9.0
Total net revenues	39,440,897	100.0	983,168,898	100.0	78,335,376	11,060,101	100.0

Product sales revenue

Our product sales revenue primarily comprises sales of our HTC solutions in relation to ETHW, ETHF, ETC and Grin mining, and HPC solutions for Bitcoin mining and distributed computing and data storage solutions for Filecoin mining. The following table sets forth the breakdown of sales volume and average selling price (per unit) of our products, related accessories and parts and other products for the periods indicated:

	2021			2022			2023				
	Revenue (RMB)	Sales Volume (Unit)	Average selling price per unit (RMB)	Revenue (RMB)	Sales Volume (Unit)	Average selling price per unit (RMB)	Revenue		Sales volume (Unit)	Average selling price per unit	
							(RMB)	(US\$)		(RMB)	(US\$)
Products	38,078,762	5,475	6,955	872,851,495	49,065	17,790	64,231,522	9,068,790	14,399	4,461	630
Others ⁽¹⁾	1,362,135	19	71,691	47,802,416	2,069	23,104	7,089,940	1,001,023	6,899	1,028	145

(1) Primarily include accessories and parts of our products which generated revenue of RMB1.3 million, RMB47.8 million and RMB6.3 million (US\$0.9 million) in 2021, 2022 and 2023, respectively, as well as 3D printing products which generated revenue of nil, nil and RMB0.8 million (US\$0.1 million) in the same years, respectively.

The average selling price of our products is primarily affected by the cryptocurrency prices and expected economic returns on cryptocurrency mining activities, and the performance of the products. The cryptocurrency prices and expected economic returns on cryptocurrency mining activities could significantly affect the demand of mining machines and in turn the average selling price of mining machines. See “—Key Factors Affecting Our Results of Operations” for details of factors affecting economic return on cryptocurrency mining activities and the market demands. A significant fluctuation in cryptocurrency prices, and particularly in Grin, ETHW, ETHF, ETC and Bitcoin, in a short period of time could significantly reverse the trend of average selling price of our HTC and HPC solutions in certain periods of time. Our HTC solutions were primarily designed for ETHW, ETHF, ETC and Grin mining, and HPC solutions are designed for Bitcoin mining.

Service revenue

Service revenue primarily includes revenues from the provision of design and technical services to our customers. Leveraging our strong in-house design and technical capabilities, we from time to time provide design and technical services catering to the specific needs of our customers.

Cost of Revenues

Cost of revenues represent costs and expenses incurred in order to generate revenue. Cost of revenues mainly consist of products costs, including costs of raw material, contract manufacturers for production, testing costs and staff costs for our employees involved in the provision of services. In 2021, a one-off inventory write-down of RMB26.8 million was the largest component, accounting for 61.5% of the total cost of revenues for 2021. In 2022 and 2023, we recorded an inventory write-down of RMB184.1 million and RMB60.8 million (US\$8.6 million), respectively, accounting for 24.5% and 33.4% of our total cost of revenues for the same years, respectively, due to the downward adjustment on the book value of a portion of our inventory in response to the decrease in the market price of cryptocurrency and expected economic return on cryptocurrency mining.

The following table sets forth the breakdown of our cost of revenues by category, both in absolute amount and as a percentage of the cost of revenues, for the periods indicated:

	Years Ended December 31,						
	2021		2022		2023		
	RMB	%	RMB	%	RMB	US\$	%
Product sales	43,530,708	100.0	752,443,614	99.9	179,636,489	25,362,714	98.8
Service	—	—	560,565	0.1	2,148,087	303,286	1.2
Total	43,530,708	100.0	753,004,179	100.0	181,784,576	25,666,000	100.0

Gross Profit (Loss)

The gross profit (loss) of sales of our products, primarily including HTC and HPC solutions, is primarily affected by cryptocurrency prices, which have a significant effect on the economic returns of mining activities. A decrease in the relevant cryptocurrency price could result in a much lower demand of our HTC and HPC solutions, leading to lower revenues as we may have to adjust the average selling price of our products. A decrease in the relevant cryptocurrency price and expected economic returns of blockchain mining activities could also lead to increase in write-down for the potentially obsolete, slow-moving inventories and lower of cost or market adjustment and write-down for advances to suppliers as a result of stagnant demand and decrease in average selling price for our HTC and HPC solutions. For example, we recorded an inventory write-down of RMB184.1 million and RMB60.8 million (US\$8.6 million) in the cost of revenues in 2022 and 2023, respectively, due to the downward adjustment on the book value of a portion of our inventory in response to the decrease in the market price of cryptocurrency and expected economic return on cryptocurrency mining.

The gross profit and gross profit margin of our design and technical services are primarily affected by the service fees we charge our customers and the labor cost in relation to the provision of such services.

The following table sets forth our gross profit (loss) and gross profit (loss) margin by category for the periods indicated:

	Years Ended December 31,						
	2021		2022		2023		
	RMB	%	RMB	%	RMB	US\$	%
Product sales revenue	(4,089,811)	(10.4)	168,210,297	18.3	(108,315,027)	(15,292,901)	(151.9)
Service revenue	—	—	61,954,422	99.1	4,865,827	687,002	69.4
Total	(4,089,811)	(10.4)	230,164,719	23.4	(103,449,200)	(14,605,899)	(132.1)

Operating Expenses

The following table sets forth our operating expenses, both in absolute amount and as a percentage of the total operating expenses, for the periods indicated:

	For the years ended December 31,						
	2021		2022		2023		
	RMB	%	RMB	%	RMB	US\$	%
Selling and marketing expenses	5,119,072	2.9	24,431,649	11.7	15,332,523	2,164,785	9.8
General and administrative expenses	24,121,823	13.8	53,197,248	25.4	53,402,101	7,539,794	33.9
Research and development expenses	145,455,181	83.3	131,851,602	62.9	88,601,470	12,509,561	56.3
Total operating expenses	174,696,076	100.0	209,480,499	100.0	157,336,094	22,214,140	100.0

Selling and marketing expenses

Selling and marketing expenses primarily include salary expenses, logistics expenses and advertising expenses.

General and administrative expenses

General and administrative expenses primarily include (1) salaries and benefits of our management, finance, operations and other administrative staff, (2) professional fees, mainly consist of service fees paid to professional parties, (3) rental expenses, (4) travelling expenses, and (5) insurance fee.

Research and development expenses

Research and development expenses primarily include (1) salaries and benefits of our research and development staff, (2) production and procurement expenses for producing prototypes and procuring tools for IC design, including raw materials used, (3) equipment rental fee, (4) design expenses and (5) service expenses.

Taxation

Cayman Islands

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or after execution, brought within the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of the shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of the shares, nor will gains derived from the disposal of the shares be subject to Cayman Islands income or corporation tax.

British Virgin Islands

Nano Labs Inc, Ipollo Tech Inc and Ipolloverse Tech Inc are incorporated in the British Virgin Islands and all dividends, interest, rents, royalties, compensation and other amounts paid by these entities to persons who are not resident in the BVI and any capital gains realized with respect to any shares, debt obligations, or other securities of our company by persons who are not resident in the BVI are exempt from all provisions of the Income Tax Ordinance in the BVI.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not resident in the BVI with respect to any shares, debt obligation or other securities of these entities.

All instruments relating to transfers of property to or by these entities and all instruments relating to transactions in respect of the shares, debt obligations or other securities of these entities and all instruments relating to other transactions relating to the business of our company are exempt from payment of stamp duty in the BVI. This assumes that these entities do not hold an interest in real estate in the BVI.

There are currently no withholding taxes or exchange control regulations in the BVI applicable to these entities or its members.

Hong Kong

Our subsidiaries incorporated in Hong Kong are subject to Hong Kong Profits Tax on the taxable income as reported in our statutory financial statements adjusted in accordance with relevant Hong Kong tax laws. The applicable tax rate is 8.25% on assessable profits arising in or derived from Hong Kong up to HKD2,000,000 and 16.5% on any part of assessable profits over HKD2,000,000. These subsidiaries did not make any provisions for Hong Kong profit tax as there were no assessable profits derived from or earned in Hong Kong since inception.

United States

Our subsidiary in the United States is subject to profits tax at 21% statutory tax rate with respect to the profit generated from the United States. We did not make any provisions for US profit tax as there were no assessable profits derived from or earned in the United States since our inception.

Singapore

Our subsidiary, IPOLLO PTE. LTD., is incorporated in Singapore and is subject to Singapore Profits Tax on the taxable income as reported in its statutory financial statements adjusted in accordance with relevant Singapore tax laws. The applicable tax rate is 17% in Singapore, with 75% of the first SGD0.1 million (approximately RMB0.5 million) and 50% of the next SGD0.1 million (approximately RMB0.5 million) taxable income exempted from income tax. IPOLLO PTE. LTD. did not make any provisions for Singapore income tax as there were no assessable profits derived from or earned in Singapore since inception.

PRC

Our PRC subsidiaries are subject to EIT on the taxable income in accordance with the relevant PRC income tax laws at a rate of 25%. In addition, preferential tax treatments are granted to enterprises qualified as the HNTEs. Our PRC subsidiary Zhejiang Nanomicro Technology Co., Ltd. has been accredited as an HNTE on December 16, 2021 and are eligible for a preferential enterprise tax rate of 15% from 2021 to 2024 if it satisfies the criteria of HNTEs in each year of the accredited period.

Results of Operations

The following table sets forth our selected consolidated profit or loss data and as percentages of total net revenues for the periods indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this annual report. The results of operations in any period are not necessarily indicative of the results that may be expected for any future period.

	Years Ended December 31,							
	2021		2022		2023			
	RMB	%	RMB	%	RMB	US\$	%	
Net revenues:								
Product sales revenue	39,440,897	100.0	920,653,911	93.6	71,321,462	10,069,813	91.0	
Service revenue	—	—	62,514,987	6.4	7,013,914	990,288	9.0	
Total net revenues	39,440,897	100.0	983,168,898	100.0	78,335,376	11,060,101	100	
Cost of revenues	43,530,708	110.4	753,004,179	76.6	181,784,576	25,666,000	232.1	
Gross profit (loss)	(4,089,811)	(10.4)	230,164,719	23.4	(103,449,200)	(14,605,899)	(132.1)	
Operating expenses:								
Selling and marketing expenses	5,119,072	13.0	24,431,649	2.5	15,332,523	2,164,785	19.5	
General and administrative expenses	24,121,823	61.2	53,197,248	5.4	53,402,101	7,539,794	68.2	
Research and development expenses	145,455,181	368.7	131,851,602	13.4	88,601,470	12,509,561	113.1	
Total operating expenses	174,696,076	442.9	209,480,499	21.3	157,336,094	22,214,140	200.8	
Profit (loss) from operations	(178,785,887)	(453.3)	20,684,220	2.1	(260,785,294)	(36,820,039)	(332.9)	
Other expenses (income):								
Finance expenses (income)	509,764	1.3	(4,407,504)	(0.5)	920,055	129,902	1.1	
Interest income	(3,495,208)	(8.8)	(2,005,580)	(0.2)	(489,098)	(69,055)	(0.6)	
Other expenses (income)	(855,959)	(2.2)	(4,021,582)	(0.4)	(6,846,803)	(966,694)	(8.7)	
Total other expenses (income)	(3,841,403)	(9.7)	(10,434,666)	(1.1)	(6,415,846)	(905,847)	(8.2)	
Income (loss) before income tax provision	(174,944,484)	(443.6)	31,118,886	3.2	(254,369,448)	(35,914,192)	(324.7)	
Income tax provision	—	—	—	—	(17,394)	(2,456)	(0.0)	
Net income (loss)	(174,944,484)	(443.6)	31,118,886	3.2	(254,352,054)	(35,911,736)	(324.7)	

Year Ended December 31, 2023 Compared to Year Ended December 31, 2022

Net revenues. Our net revenues decreased significantly from RMB983.2 million in 2022 to RMB78.3 million (US\$11.1 million) in 2023, primarily due to the decrease in the sales of iPollo V1 Series and B1 Series products as well as provision of design services.

Cost of revenues. Our cost of revenues decreased significantly from RMB753.0 million in 2022 to RMB181.8 million (US\$25.7 million) in 2023. This decrease in cost of revenues was due to the decrease in sales volume.

Gross profit (loss). As a result of the foregoing, we recorded gross loss of RMB103.4 million (US\$14.6 million) in 2023. In 2022, we recorded gross profit of RMB230.2 million.

Operating expenses. Our total operating expenses decreased by 24.9% from RMB209.5 million in 2022 to RMB157.3 million (US\$22.2 million) in 2023, primarily due to the decrease in our selling and marketing expenses and research and development expenses.

- *Selling and marketing expenses.* Our selling expenses decreased from RMB24.4 million in 2022 to RMB15.3 million (US\$2.2 million) in 2023. Such decrease was primarily due to the decrease in advertising fee and marketing promotion expenses.
- *General and administrative expenses.* Our general and administrative expenses remained stable at RMB53.2 million and RMB53.4 million (US\$7.5 million) in 2022 and 2023, respectively.
- *Research and development expenses.* Our research and development expenses decreased from RMB131.9 million in 2022 to RMB88.6 million (US\$12.5 million) in 2023, primarily due to the decrease in equipment cost, salary expenses and share-based compensation expenses. We expect to continue our investment in research and development to support our future development, product iteration and competitive strengths.

Profit (loss) from operations. As a result of the foregoing, our loss from operations was RMB260.8 million (US\$36.8 million) for 2023, as compared to our profit from operations of RMB20.7 million for 2022.

Finance expenses (income). Our finance expense was RMB0.9 million (US\$0.1 million) for 2023, as compared to finance income RMB4.4 million for 2022, primarily due to the increase in foreign currency exchange loss and interest expense.

Interest income. Our interest income, which primarily consists of interest income from bank, decreased from RMB2.0 million for 2022 to RMB0.5 million (US\$0.07 million) for 2023, primarily due to decreased amount of deposits in banks.

Other income. We recorded other income of RMB4.0 million and RMB6.8 million (US\$1.0 million) for 2022 and 2023, respectively. The increase in other income was primarily due to the increases in tax refund amount and government subsidies.

Net income (loss). As a result of the foregoing, our net loss was RMB254.4 million (US\$35.9 million) for 2023, while we recorded net income RMB31.1 million for 2022.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Net revenues. Our net revenues increased significantly to RMB983.2 million in 2022 from RMB39.4 million in 2021, primarily due to increase in the sales of iPollo V1 Series and B1 Series products as well as provision of design services.

Cost of revenues. Our cost of revenues increased significantly to RMB753.0 million in 2022 from RMB43.5 million in 2021. This increase in cost of revenues was due to (1) our general business growth and (2) a one-off inventory write-down of RMB184.1 million in 2022, which accounted for 24.5% of our total cost of revenues. This write-down was due to our downward adjustment of the book value for a portion of our inventories in response to the decrease in cryptocurrency market prices and the expected economic return on cryptocurrency mining activities.

Gross profit (loss). As a result of the foregoing, we recorded gross profit of RMB230.2 million in 2022. In 2021, we recorded gross loss of RMB4.1 million.

Operating expenses. Our total operating expenses increased by 19.9% to RMB209.5 million in 2022 from RMB174.7 million in 2021, primarily due to increase in our selling and marketing expenses and general and administrative expenses.

- *Selling and marketing expenses.* Our selling expenses increased to RMB24.4 million in 2022 from RMB5.1 million in 2021. The selling and marketing expenses in 2022 was primarily related to the increase in advertising and promotion expenses and the increase in employee salary expenses.
- *General and administrative expenses.* Our general and administrative expenses increased significantly to RMB53.2 million in 2022 from RMB24.1 million in 2021, primarily due to the significant increase in employee salary expenses and expenses for professional services.
- *Research and development expenses.* Our research and development expenses decreased to RMB131.9 million in 2022 from RMB145.5 million in 2021, primarily due to the decrease in expenses relating to materials used in research and development.

Profit (loss) from operations. As a result of the foregoing, our profit from operations increased to RMB20.7 million for 2022 from loss from operations of RMB178.8 million for 2021.

Finance expenses (income). Our finance income increased to RMB4.4 million for 2022 from a finance expense of RMB0.5 million for 2021, primarily due to the increase of foreign currency exchange gains.

Interest income. Our interest income, which primarily consists of interest income from bank, decreased to RMB2.0 million for 2022 from RMB3.5 million for 2021, primarily due to decreased amount of deposits in banks.

Other income. We recorded other income of RMB4.0 million for 2022 from RMB0.9 million for 2021. The increase in other income was primarily due to the increase in tax refund amount.

Net income (loss). As a result of the foregoing, our net income increased to RMB31.1 million for 2022 from a net loss of RMB174.9 million for 2021.

B. Liquidity and Capital Resources

Liquidity and Capital Resources

Our primary source of liquidity historically has been cash generated from our business operations, equity contributions from our shareholders and borrowings, which have historically been sufficient to meet our working capital and capital expenditure requirements.

As of December 31, 2022 and 2023, our cash and cash equivalents were RMB87.8 million and RMB48.2 million (US\$6.8 million), respectively. Our cash and cash equivalents primarily consist of cash in bank and highly liquid investments placed with banks, which are unrestricted to withdrawal and use and have original maturities of less than three months.

In August 2022, we were granted a credit line of up to RMB100 million from a commercial bank with a mortgage of our 50-year right to use a parcel of land with an area of 49,452 square meters located in Shaoxing, China. In 2023, such credit line was increased to RMB148 million. As of December 31, 2023, we have a balance of borrowing of approximately RMB123.7 million (US\$17.5 million) under the credit line.

Our ability to continue as a going concern is dependent on our management’s ability to successfully execute our business plan, which includes increasing revenues while controlling costs and operating expenses as well as generating operational cash flows and continuing to gain support from outside sources of financing. We expect to launch Cuckoo 3.0 Series products in 2024 and have received certain advance payments from customers as of the date of this annual report. These plans have alleviated the previously identified substantial doubt about our ability to continue as a going concern. We believe that our existing cash and cash equivalents together with our anticipated cash flows from operations will be sufficient to meet our anticipated cash needs for general corporate purposes for the next 12 months from the date of this annual report. See “Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds—Use of Proceeds.” However, the exact amount of proceeds we use for our operations and expansion plans will depend on the amount of cash generated from our operations and any strategic decisions we may make that could alter our expansion plans and the amount of cash necessary to fund these plans. We may, however, decide to enhance our liquidity position or increase our cash reserve for future investments through additional capital and finance funding. We may need additional cash resources in the future if we experience changes in business conditions or other developments, or if we find and wish to pursue opportunities for investments, acquisitions, capital expenditures or similar actions. If we determine that our cash requirements exceed the amount of cash and cash equivalents we have on hand at the time, we may seek to issue equity or debt securities or obtain credit facilities. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that would restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

Our ability to manage our working capital, including receivables and other assets and liabilities and accrued liabilities, may materially affect our financial condition and results of operations.

The following table sets forth our selected consolidated cash flow data for the periods indicated:

	For the years ended			
	December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
Net cash provided by (used in) operating activities	71,732,868	(274,940,789)	(133,473,937)	((18,845,065)
Net cash used in investing activities	(36,046,123)	(33,182,870)	(105,482,822)	(14,893,024)
Net cash provided by financing activities	164,896,124	160,996,502	199,520,201	28,170,077
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(2,062,387)	1,132,887	159,828	22,566
Net increase (decrease) in cash, cash equivalents and restricted cash	198,520,482	(145,994,270)	(39,276,730)	(5,545,446)
Cash, cash equivalents and restricted cash at the beginning of the year	35,333,172	233,853,654	87,859,384	12,404,787
Cash, cash equivalents and restricted cash at the end of the year	233,853,654	87,859,384	48,582,654	6,859,341

Operating Activities

Net cash used in operating activities for 2023 was RMB133.5 million (US\$18.8 million), which primarily reflected our net loss of RMB254.3 million (US\$35.9 million) as mainly adjusted for (1) inventory write-down of RMB60.8 million (US\$8.6million), which was primarily due to the downward adjustment on the book value of a portion of our inventories, (2) depreciation and amortization expenses of RMB4.4 million (US\$0.6 million), (3) amortization of right-of-use assets of RMB5.8 million (US\$0.8 million) and (4) changes in working capitals. Adjustment for changes in working capital primarily consisted of (1) inventories of RMB28.8 million (US\$4.1 million) and (2) prepayments of RMB47.2 million (US\$6.7 million), partially offset by (1) advance from customers of RMB16.7 million (US\$2.4 million), (2) other current liabilities of RMB5.5 million (US\$0.8 million), and (3) operating lease liabilities, current of RMB4.3 million (US\$0.6 million).

Net cash used in operating activities for 2022 was RMB274.9 million, which primarily reflected our net profit of RMB31.1 million as mainly adjusted for (1) inventory write-down of RMB184.1 million, which was primarily due to the downward adjustment on the book value of a portion of our inventories, (2) share-based compensation of RMB9.3 million, (3) amortization of right-of-use assets of RMB5.5 million and (4) changes in working capitals. Adjustment for changes in working capital primarily consisted of (1) a decrease of RMB794.3 million in advances from customers which primarily related to the prepayments from customers to our HTC and HPC solutions and (2) an increase of RMB71.4 million in inventories, partially offset by (1) a decrease of RMB304.3 million in prepayments to our suppliers, which primarily related to the production of ICs and (2) a decrease of RMB51.7 million in other current assets, which primarily included value-added tax recoverable and deposits for our office space leases.

Net cash provided by operating activities for 2021 was RMB71.7 million, which primarily reflected our net loss of RMB174.9 million as mainly adjusted for (1) amortization of right-of-use assets of RMB2.9 million, (2) depreciation and amortization expenses of RMB2.6 million, (3) inventory write-down of RMB26.8 million, which was primarily due to the downward adjustment on the book value of a portion of our inventories, and (4) changes in working capital. Adjustment for changes in working capital primarily consisted of an increase of RMB852.0 million in advances from customers, which primarily related to the prepayments from customers to our HTC and HPC solutions, partially offset by (1) an increase of RMB233.4 million in inventories, (2) an increase of RMB364.4 million in prepayments to our suppliers, which primarily related to the production of ICs, and (3) an increase of RMB38.6 million in other current assets, which primarily included value-added tax recoverable, deferred offering related expenses and deposits for our office space leases.

Investing Activities

Net cash used in investing activities for 2023 was RMB105.5 million (US\$14.9 million), mainly due to the purchases of property, plant and equipment of RMB105.5 million (US\$14.9 million), which was primarily for the construction in process for the expansion and optimization of our supply chain.

Net cash used in investing activities for 2022 was RMB33.2 million, mainly attributable to (1) purchase of intangible assets of RMB49.3 million, which was primarily for a land use right and (2) purchase of property, plant and equipment of RMB17.5 million, which was primarily for the construction in progress, partially offset by proceeds from sales of short-term investments of RMB33.6 million.

Net cash used in investing activities for 2021 was RMB36.0 million, mainly attributable to (1) purchase of short-term investment of RMB32.3 million, which was primarily for short-term wealth management products issued by reputable commercial banks and (2) purchase of property and equipment of RMB8.7 million, which was primarily for computers and electronic equipment, partially offset by collection of loan provided to a related party of RMB4.5 million.

Financing Activities

Net cash generated from financing activities for 2023 was RMB199.5 million (US\$28.2 million), mainly attributable to proceeds from bank loans of RMB128.2 million (US\$18.1 million) and the proceeds from issuance of ordinary shares of RMB72.8 million (US\$10.3 million), partially offset by repayments of bank loans of RMB1.5 million (US\$0.2 million).

Net cash generated from financing activities for 2022 was RMB161.0 million, mainly attributable to (1) proceeds from issuance of ordinary shares of RMB144.0 million and (2) proceeds from long-term debts of RMB17.1 million, partially offset by repayments of long-term debts of RMB0.1 million.

Net cash generated from financing activities for 2021 was RMB164.9 million, mainly attributable to proceeds from issuance of ordinary shares of RMB201.2 million, partially offset by (1) repayment to related parties of RMB31.4 million and (2) repayment of loan payable of RMB5.0 million.

Capital Expenditures

We made capital expenditures of RMB8.7 million, RMB66.8 million and RMB105.5 million (US\$14.9 million) in 2021, 2022 and 2023, respectively. In these periods, our capital expenditures were mainly used for procurement of computers and electronic equipment for research and development, construction in process and purchase of land use right for the expansion and optimization of our supply chain.

We plan to fund our future capital expenditures with our existing cash balance and proceeds from the securities offering. We will continue to make capital expenditures to meet the expected growth of our business, including for procurement of photomask, mold and various intellectual properties.

Internal Control Over Financial Reporting

In connection with the audits of our consolidated financial statements as of and for the year ended December 31, 2023, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting. As defined in the standards established by the Public Company Accounting Oversight Board of the United States, a “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness identified is related to lack of sufficient accounting personnel who possess adequate knowledge in financial reporting in accordance with U.S. GAAP.

We intend to undertake measures to improve our internal control over financial reporting to address the material weakness identified, including implementing regular and continuous U.S. GAAP accounting and financial reporting training programs for our accounting and financial reporting personnel. In addition, we plan to take the following initiatives to improve our internal control over financial reporting to address the material weakness that have been identified:

- hiring additional qualified accounting and reporting personnel who are equipped with the relevant U.S. GAAP and SEC reporting experience and qualifications to strengthen our financial reporting function and to set up a financial and system control framework; and
- enhancing our internal audit function as well as engaging an external consulting firm to assist us with assessing our Sarbanes-Oxley compliance readiness and improving overall internal controls.

However, we cannot assure you that we will remediate our material weakness in a timely manner. The process of designing and implementing an effective financial reporting system is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a financial reporting system that is adequate to satisfy our reporting obligation. See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Operations—If we fail to implement and maintain an effective system of internal controls to remediate our material weakness over financial reporting, we may be unable to accurately or timely report our results of operations, meet our reporting obligations or prevent fraud, and investor confidence and the market price of our Class A ordinary shares may be materially and adversely affected.”

As a company with less than US\$1.07 billion in revenue for our last fiscal year, we qualify as an “emerging growth company” pursuant to the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include exemption from the auditor attestation requirement under Section 404 of the Sarbanes-Oxley Act of 2002, in the assessment of the emerging growth company’s internal control over financial reporting.

Contractual Obligations and Commitments

The following table sets forth our contractual obligations as of December 31, 2023:

	Payments due by period				
	Total	Less than one year	One to three years	Three to five years	More than five years
	(RMB)				
Long-term debts obligations	123,670,783	3,410,000	10,480,000	15,360,000	94,420,783
Operating lease obligations	7,794,221	3,605,781	2,388,720	1,799,720	—
Total	131,465,004	7,015,781	12,868,720	17,159,720	94,420,783

Our commitments related to the construction in progress not yet reflected in the consolidated financial statements were RMB39.1 million (US\$5.5 million) as of December 31, 2023 and were expected to be incurred within one year.

Off Balance Sheet Commitments and Arrangements

We have not entered into any off-balance sheet financial guarantees or other off-balance sheet commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholder’s equity or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or product development services with us.

C. Research and Development, Patents and Licenses, etc.

See “Item 4. Information on the Company—B. Business Overview—Intellectual Property.”

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for 2023 that are reasonably likely to have a material adverse effect on our net revenue, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial condition.

E. Critical Accounting Estimates

An accounting policy is considered critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time such estimate is made, and if different accounting estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the consolidated financial statements.

We prepare our financial statements in conformity with the U.S. GAAP, which requires us to make judgments, estimates and assumptions. We continually evaluate these estimates and assumptions based on the most recently available information, our own historical experiences and various other assumptions that we believe to be reasonable under the circumstances. Since the use of estimates is an integral component of the financial reporting process, actual results could differ from our expectations as a result of changes in our estimates. For a description of all our significant accounting policies, see Note 2 to our annual audited consolidated financial statements in this annual report.

When reviewing our financial statements, you should consider our selection of critical accounting policies, the judgments and other uncertainties affecting the application of such policies, and the sensitivity of reported results to changes in conditions and assumptions. We believe that the following accounting policy involves a higher degree of judgment and complexity in their application and require us to make critical accounting estimates.

Inventory Write-Down

Inventories are stated at the lower of cost and net realizable value. The cost of inventory is determined using the weighted average cost method. Adjustments are recorded to write down the cost of inventory to the estimated net realizable value due to slow-moving and obsolete inventory, which depends on factors such as historical and forecasted consumer demand, estimated selling price of products, estimated completion cost and estimated selling expenses, etc. As of December 31, 2022 and 2023, our inventory write-downs were RMB208.2 million and RMB265.1 million (US\$37.4 million), respectively. Write-downs are recorded in the cost of revenues in the Consolidated Statements of Operations and Comprehensive Income (Loss).

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth information regarding our directors and senior management as of the date of this annual report:

Name	Age	Position/Title
Jianping Kong	39	Chairman of the Board and Chief Executive Officer
Qifeng Sun	43	Vice Chairman of the Board
Nan Hu	42	Director and Chief Executive Officer of Zhejiang Haowei
Jiaming Zhu	73	Independent Director
Li Zhang	38	Independent Director
Lizhen Xie	44	Independent Director
Bing Chen	56	Chief Financial Officer and Senior Vice President
Bingbo Li	41	Vice President and Chief Technology Officer of Zhejiang Haowei

Jianping Kong has served as our chairman of the board of directors and chief executive officer since January 2021. Mr. Kong has approximately 13 years of experience in business and corporate management. Mr. Kong currently also serves as chairman of the board of Hangzhou Haowei Yunlian Technology Co., Ltd., a company listed on PRC National Equities Exchange and Quotations under the stock code 838316. He has also been appointed and currently served as a director of Hong Kong Cyberport Management Company Limited. Mr. Kong served as a co-chairman of the board of Canaan Inc. (Nasdaq: CAN), a leading provider of supercomputing solutions, from May 2018 to July 2020. Mr. Kong received a bachelor's degree in law from Wenzhou University in June 2008 and a master's degree from Tsinghua University in July 2019.

Qifeng Sun has served as our vice chairman of the board of directors since January 2021. Mr. Sun currently also serves as a director of Hangzhou Haowei Yunlian Technology Co., Ltd. He used to serve as a director of Canaan Inc. from May 2018 to July 2020, overseeing and managing the sales and marketing activities.

Nan Hu has served as our director since November 2021 and chief executive officer of Zhejiang Haowei since February 2021. Mr. Hu has over ten years of experience in the semiconductor industry. Prior to that, Mr. Hu had served as a validation manager at Trident Multi-Media Technology Co. from August 2010 to April 2012 and then at Entropic Shangmin Communication Technology Co. until November 2014. Mr. Hu received a bachelor's degree in electrical engineering and automation from East China University of Science and Technology in July 2003 and a master's degree in electronic and communication engineering from Shanghai Jiao Tong University in March 2013.

Jiaming Zhu has served as our independent director since July 2022. Mr. Zhu has been serving as chairman of the Committee of Academic and Technological Affairs at the Digital Alliance Institute of Digital Finance Research and chairman of the Committee of Academic and Technological Affairs at Beijing Chuangyan Digital Technology Limited since 2021 and 2018, respectively. Mr. Zhu obtained an MBA degree from Sloan School of Management, Massachusetts Institute of Technology in 1995 and a Ph.D. degree in Economics from the Chinese Academy of Social Sciences in 1988.

Li Zhang has served as our independent director since July 2022. Ms. Zhang has approximately 13 years of experience in accounting, investment and business management. She joined Huobi Technology Co., Ltd., a company listed on the Stock Exchange of Hong Kong (HKEX: 1611), in August 2020, and has been serving as executive director at the said company since December 2021. Prior to that, Ms. Zhang had served as vice president at Canaan Inc. (Nasdaq: CAN) from March 2018 to August 2020, vice president and secretary of the board at Hangzhou Shunwang Technology Co., Ltd., a company listed on the Shenzhen Stock Exchange (SZ: 300113), from May 2014 to August 2017, a senior manager at the acquisition and financing department of Guotai Junan Securities from November 2012 to May 2014, and a senior auditor at PricewaterhouseCoopers Zhong Tian LLP from October 2009 to September 2012. Ms. Zhang received a bachelor's degree and a master's degree in automobile engineering from Tsinghua University in 2006 and 2008, respectively. She also received an EMBA from Peking University in July 2019.

Lizhen Xie has served as our independent director since July 2022. She has spent 18 years in lecturing and teaching since she joined the Law School of Wenzhou University in July 2004 and is currently an associate professor at the school. She served as a deputy director of the research office of the Intermediate People's Court of Wenzhou City from December 2016 to December 2017. Ms. Xie received a bachelor's degree and a master's degree in law from Zhongnan University of Economics and Law in China in 2001 and 2004, respectively. She also received a doctor's degree in law from China University of Political Science and Law in June 2015.

Bing Chen has served as our chief financial officer and senior vice president since January 2021. Mr. Chen has approximately 20 years of experience in business and corporate management. Prior to joining us, Mr. Chen had worked at Hangzhou Jinjiang Group, one of China's Fortune 500 companies, for approximately 27 years, holding various positions, including special consultant since 2020, assistant to the chairman of its board since March 2002 to the end of 2019, secretary of the chairman of the board and then office director from June 1994 to March 2002. Prior to that, Mr. Chen had worked as an assistant statistician and economist at Lin'an Bureau of Statistics from November 1992 to November 1995. Mr. Chen received a bachelor's degree in mechanical engineering from Zhejiang Radio & Television University in July 1990 and a master's degree in quality management from the Hong Kong Polytechnic University in December 2005. Mr. Chen is currently a doctor candidate in technology economics and management at Graduate School of Chinese Academy of Social Sciences.

Bingbo Li has served as our vice president and chief technology officer of Zhejiang Haowei since January 2021 and August 2020, respectively. Prior to joining us, Mr. Li had served as algorithm engineer at several companies including Nokia Siemens Networks (Shanghai) Co., Ltd. from April 2010 to December 2010, Trident Multi-Media Technology Co. from December 2010 to April 2012, Entropic Shangmin Communication Technology Co. from May 2012 to November 2014, and Hunan Guoke Microelectronics Co., Ltd., Shanghai Branch from May 2015 to April 2018. Mr. Li received a bachelor's degree in information and electronic engineering from Zhejiang University in June 2003 and a doctor's degree in information and communication engineering from Zhejiang University in December 2008.

B. Compensation

Compensation of Directors and Executive Officers

In 2023, the aggregate cash compensation to directors and executive officers was approximately RMB5.3 million (US\$0.7 million). This amount consisted only of cash and did not include any share-based compensation or benefits in kind. Each of our directors and officers is entitled to reimbursement for all necessary and reasonable expenses properly incurred in the course of employment or service. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our executive officers and directors, except that our subsidiaries are required by law to make contributions equal to certain percentages of each employee's salary for his or her pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund. Our board of directors may determine compensation to be paid to the directors and the executive officers. The compensation committee will assist the directors in reviewing and approving the compensation structure for the directors and the executive officers.

Share Incentive Plan

Historically, Zhejiang Haowei has issued 1,456,411 restricted shares to certain employees of ours, which were replaced with 11,253,356 restricted shares of our company held by Nanometa Ltd., the nominee of our equity incentive trust designated to such employees. As of the date of this annual report, 5,795,547 restricted shares and options have been granted and 383,016 restricted shares have been forfeited due to the termination of employees.

The following table sets forth information on restricted shares that we have awarded and are outstanding as of the date of this annual report.

Directors and Executive Officers	Number of Restricted Shares Awarded	Grant Date
Nan Hu	884,715	2020/1/31
Nan Hu	89,549	2020/12/10
Bingbo Li	*	2020/1/31
Bingbo Li	*	2020/12/10
Total	1,723,862	

* Less than 1% of our total outstanding shares on an as-converted basis.

On January 1, 2022, we granted an employee an option to purchase 500,000 ordinary shares with exercise price of US\$0.0002 per share. 33.3% of the award was to vest on December 31, 2022 or one year after we complete the initial public offering, whichever is earlier; 33.3% will vest on December 31, 2023 or two years after we complete the initial public offering, whichever is earlier; and the remaining 33.3% will vest on December 31, 2024 or three years after we complete the initial public offering, whichever is earlier.

2022 Share Incentive Plan

In June 2022, our shareholders and board of directors adopted our 2022 share incentive plan, or the 2022 Plan, which has become effective upon the completion of our initial public offering, to motivate, attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and promote the success of our business. Under the 2022 Plan, the maximum aggregate number of Class A ordinary shares which may be issued pursuant to all awards under such plan is 10,379,000, which constitutes 10% of the total issued and outstanding shares of our company on a fully-diluted basis as of the date of adoption. As of the date of this annual report, we have granted 861,860 shares under the 2022 Plan (after the 2-to-1 share consolidation effective from January 31, 2024).

The following paragraphs summarize the principal terms of the 2022 Plan.

Types of awards. The 2022 Plan permits the awards of options, restricted shares, restricted share units or any other type of awards approved by our board of directors or compensation committee of the board, or the committee.

Plan administration. Our board of directors or the compensation committee administers the 2022 Plan. The board or the committee determines, among other things, the participants to receive awards, the type and number of awards to be granted to each participant, and the terms and conditions of each award grant.

Award agreement. Awards granted under the 2022 Plan are evidenced by an award agreement that sets forth terms, conditions and limitations for each award, which may include the term of the award, the provisions applicable in the event of the grantee's employment or service terminates, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind the award.

Eligibility. We may grant awards to our employees, directors and consultants.

Vesting schedule. In general, the plan administrator determines the vesting schedule, which is specified in the relevant award agreement.

Exercise of awards. The exercise price per share subject to an option is determined by the plan administrator and set forth in the award agreement, which may be a fixed price or a variable price related to the fair market value of the shares. The vested portion of option will expire if not exercised prior to the time as the plan administrator determines at the time of its grant.

Transfer restrictions. Awards may not be transferred in any manner by the eligible participant other than in accordance with the limited exceptions, such as transfers to our company or a subsidiary of ours, transfers to the immediate family members of the participant by gift, the designation of a beneficiary to receive benefits if the participant dies, permitted transfers or exercises on behalf of the participant by the participant's duly authorized legal representative if the participant has suffered a disability, or, subject to the prior approval of the plan administrator or our executive officer or director authorized by the plan administrator, transfers to one or more natural persons who are the participant's family members or entities owned and controlled by the participant and/ or the participant's family members, including but not limited to trusts or other entities whose beneficiaries or beneficial owners are the participant and/or the participant's family members, or to such other persons or entities as may be expressly approved by the plan administrator, pursuant to such conditions and procedures as the plan administrator may establish.

Termination and amendment. Unless terminated earlier, the 2022 Plan has a term of ten years. Our board of directors may terminate, amend or modify the plan, subject to the limitations of applicable laws. However, no such action may adversely affect in any material way any award previously granted without prior written consent of the participant.

C. Board Practices

Board of Directors

As of the date of this annual report, our board of directors consists of six directors. A director is not required to hold any shares in our company to qualify to serve as a director. A director may vote with respect to any contract, proposed contract or arrangement notwithstanding that he may be interested therein, and if he does so his vote shall be counted and he may be counted in the quorum at any meeting of our directors at which any such contract or proposed contract or arrangement is considered, provided (a) such director has declared the nature of his interest at the earliest meeting of the board at which it is practicable for him to do so, either specifically or by way of a general notice and (b) if such contract or arrangement is a transaction with a related party, such transaction has been approved by the audit committee. Our directors may from time to time at their discretion exercise all the powers of the company to borrow money, mortgage or charge its undertaking, property and assets (present or future) and uncalled capital or any part thereof, and issue debentures, debenture share, bonds or other securities whether outright or as collateral security for any obligation of the company or of any third party. None of our directors has a service contract with us that provides for benefits upon termination of service.

Committees of the Board of Directors

We have established three committees under the board of directors, including an audit committee, a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee

Our audit committee consists of Ms. Li Zhang, Ms. Lizhen Xie and Mr. Jiaming Zhu. Ms. Li Zhang is the chairperson of our audit committee. We have determined that Li Zhang, Lizhen Xie and Jiaming Zhu satisfy the "independence" requirements of the Rule 5605(c)(2) of the Nasdaq Stock Market Listing Rules and meets the independence standards under Rule 10A-3 under the Exchange Act. Our audit committee consists solely of independent directors that satisfy the Nasdaq Stock Market and SEC requirements within one year of the completion of the securities offering. Our board of directors has also determined that Ms. Li Zhang qualifies as an "audit committee financial expert" within the meaning of the SEC rules and possesses financial sophistication within the meaning of the Nasdaq Stock Market Listing Rules.

The audit committee oversees our accounting and financial reporting processes and the audits of our financial statements. The audit committee is responsible for, among other things:

- selecting our independent registered public accounting firm and pre-approving all auditing and non-auditing services performed by our independent registered public accounting firm;
- reviewing with the independent registered public accounting firm any audit problems or difficulties and management's response;
- reviewing and approving all proposed related-party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;

- discussing the annual audited financial statements with management and our independent registered public accounting firm;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of material control deficiencies;
- annually reviewing and reassessing the adequacy of our audit committee charter;
- meeting separately and periodically with management and our independent registered public accounting firms;
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance; and
- reporting regularly to the board of directors.

Compensation Committee

Our compensation committee consists of Mr. Qifeng Sun, Ms. Li Zhang and Ms. Lizhen Xie. Mr. Qifeng Sun is the chairman of our compensation committee. We have determined that Ms. Li Zhang and Ms. Lizhen Xie satisfy the “independence” requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Listing Rules.

The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated.

The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors;
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements, annual bonuses, employee pension and welfare benefit plans; and
- selecting compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person’s independence from management.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Mr. Jianping Kong, Ms. Lizhen Xie and Mr. Jiaming Zhu. Mr. Jianping Kong is the chairman of our nominating and corporate governance committee. We have determined that Ms. Lizhen Xie and Mr. Jiaming Zhu satisfy the “independence” requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Listing Rules.

The nominating and corporate governance committee assists the board of directors in selecting directors and in determining the composition of our board and board committees. The nominating and corporate governance committee is responsible for, among other things:

- identifying and recommending nominees for election or re-election to our board of directors, or for appointment to fill any vacancy;
- reviewing annually with our board of directors its composition in light of the characteristics of independence, age, skills, experience and availability of service to us;
- selecting and recommending to the board the names of directors to serve as members of the audit committee and the compensation committee, as well as of the nominating and corporate governance committee itself;
- developing and reviewing the corporate governance principles adopted by the board and advising the board with respect to significant developments in the law and practice of corporate governance and our compliance with such laws and practices; and
- evaluating the performance and effectiveness of the board as a whole.

Duties of Directors

Under Cayman Islands law, our directors owe to us fiduciary duties, including a duty of loyalty, a duty to act honestly and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also have a duty to exercise the skill they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than what may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care, and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association, as amended and restated from time to time. Our company has the right to seek damages if a duty owed by our directors is breached. A shareholder may in certain limited exceptional circumstances have the right to seek damages in our name if a duty owed by our directors is breached. See “Item 10. Additional Information —Share Capital— Differences in Corporate Law” for additional information on our standard of corporate governance under Cayman Islands law.

Our board of directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our board of directors include, among others:

- convening shareholders' annual general meetings and reporting its work to shareholders at such meetings;
- declaring dividends and distributions;
- appointing officers and determining the term of office of officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and
- approving the transfer of shares of our company, including the registering of such shares in our share register.

Terms of Directors and Officers

Our directors may be appointed by a resolution of our board of directors, or by an ordinary resolution of our shareholders, pursuant to our currently effective memorandum and articles of association. Our directors are not subject to a term of office and hold office until such time as they are removed from office by ordinary resolution of the shareholders (unless he has sooner vacated office) or upon any specified event or after any specified period in a written agreement between our company and the director, if any, and an appointment of a director may be on terms that the director shall automatically retire from office (unless he has sooner vacated office) at the next or a subsequent annual general meeting; but no such term shall be implied in the absence of an express provision. A director will cease to be a director if, among other things, the director (1) becomes bankrupt or makes any arrangement or composition with his creditors; (2) dies or is found by our company to be or becomes of unsound mind; (3) resigns his office by notice in writing to the company; (4) without special leave of absence from our board, is absent from three consecutive board meetings and our board of directors resolve that his office be vacated; (5) is prohibited by law from being a director; or (6) is removed from office pursuant to any other provision of our currently effective memorandum and articles of association. Our officers are appointed by and serve at the discretion of the board of directors.

Employment Agreements

We have entered into employment agreements with our executive officers. Each of our executive officers is employed for a specified time period, which will be automatically extended for successive one-year terms unless either party gives the other party a prior written notice to terminate employment. We may terminate the employment for cause, at any time, without advance notice or remuneration, for certain acts of the executive officer, including conviction or pleading of guilty to a felony, fraud, misappropriation or embezzlement, negligent or dishonest act to our detriment, misconduct or failure to perform his or her duty, disability, or death. An executive officer may terminate his or her employment at any time with a one-month prior written notice if there is a material and substantial reduction in such executive officer's existing authority and responsibilities or at any time if the termination is approved by our board of directors.

Each executive officer agrees to hold, both during and after the employment agreement expires or is earlier terminated, in strict confidence and not to use, except for our benefit, any confidential information. Each executive officer also agrees to assign to us all his or her all inventions, improvements, designs, original works of authorship, formulas, processes, compositions of matter, computer software programs, databases, mask works and trade secrets.

Each executive officer agrees that, during his or her term of employment and for a period of two-year after terminating employment with us, such executive officer will not, without our prior written consent, (1) approach our suppliers, clients, customers or contacts or other persons or entities introduced to the executive officer in his or her capacity as a representative of us for the purpose of doing business with such persons or entities that will harm our business relationships with these persons or entities; (2) assume employment with or provide services to any of our competitors, or engage, whether as principal, partner, licensor or otherwise, any of our competitors, without our express consent; or (3) seek directly or indirectly, to solicit the services of, or hire or engage any of our employees who is employed by us on or after the date of the executive officer's termination, or in the year preceding such termination, without our express consent.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we agree to indemnify our directors and executive officers against all liabilities and expenses incurred by such persons in connection with claims made by reason of their being a director or officer of our company to the fullest extent permitted by law with certain limited exceptions.

D. Employees

As of December 31, 2023, we had 157 employees, substantially all of whom were in China. The following table sets forth the number of our employees by function as of December 31, 2023:

Function	Number of Employees	Percentage %
Management	5	3.1
Research and development	83	52.9
Sale and marketing	21	13.4
Finance, operations and others	48	30.6
Total	157	100.0

The remuneration payable to our employees includes salaries, allowances, performance-based bonus and comprehensive subsidy. We determine employee remuneration based on factors primarily including industry standard, operation of our company and the department, role requirement and work performance. In order to maintain the quality, knowledge and skills of our employees, we appreciate the importance of training to employees. We provide regular trainings to our employees, which include orientation training for new employees and continuing on-the-job training for existing employees. We believe we offer our employees competitive compensation packages and a dynamic work environment that encourages initiative and is based on merit. As a result, we have been able to attract and retain talented personnel and maintain a stable core management team.

As required by PRC regulations, we participate in various government statutory employee benefit plans, including social insurance, namely pension insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance, and housing funds. We are required under PRC law to make contributions to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government regulations from time to time.

In addition to full-time employees, we also use workers from outsourced labor outsourcing service providers, primarily for the development of non-core technologies under temporary arrangements. This arrangement gives us greater flexibility in staffing and work allocation in response to fluctuating work demands. We do not directly enter into contracts with these workers, and instead, we typically enter into contracts with the labor outsourcing service providers for the engagement of such workers. We pay to the labor outsourcing service providers an overall service fee calculated based on inspection outcome after the completion of a project.

E. Share Ownership

The following table sets forth information concerning the beneficial ownership of our ordinary shares, as of the date of this annual report, for:

- each of our directors and executive officers; and
- each person known to us to beneficially own 5% or more of our ordinary shares.

The percentage of beneficial ownership in the table below is calculated based on 41,927,302 Class A ordinary shares and 28,589,078 Class B ordinary shares issued and outstanding as of the date of this annual report. To our knowledge, except as indicated in the footnotes to the following table, the persons named in the table have sole voting and investment power with respect to all ordinary shares beneficially owned by them.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days of the date of this annual report, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Ordinary shares beneficially owned***			
	Class A ordinary shares	Class B ordinary shares	Percentage of beneficial ownership (of total Class A and Class B ordinary shares)	Percentage of total voting power†
Directors and Executive Officers**				
Jianping Kong (1)	6,704,981	16,998,911	33.6	55.6
Qifeng Sun (2)	2,873,563	11,590,167	20.5	37.5
Nan Hu (3)	4,542,748	—	6.4	0.8
Jiaming Zhu	—	—	—	—
Li Zhang (4)	2,085,500	—	3.0	0.4
Lizhen Xie	—	—	—	—
Bing Chen (5)	1,000,000	—	1.4	0.2
Bingbo Li	*	—	*	*
Directors and executive officers as a group	17,707,846	28,589,078	65.6	94.5
Principal Shareholders:				
Jianping Kong (1)	6,704,981	16,998,911	33.6	55.6
Qifeng Sun (2)	2,873,563	11,590,167	20.5	37.5
Nanometa Ltd (6)	5,325,786	—	7.6	1.1
Nanoeco Ltd (7)	5,189,500	—	7.4	1.1
Nan Hu (3)	4,542,748	—	6.4	0.8

* Represents less than 1% of our total outstanding shares on an as converted basis.

** Except as indicated otherwise below, the business address of our directors and executive officers is China Yuangu Hanggang Technology Building, 509 Qianjiang Road, Shangcheng District, Hangzhou, Zhejiang, People's Republic of China.

*** Beneficial ownership information disclosed herein represents direct and indirect holdings of entities owned, controlled or otherwise affiliated with the applicable holder as determined in accordance with the rules and regulations of the SEC.

† For each person or group included in this column, percentage of total voting power represents voting power based on both Class A and Class B ordinary shares held by such person or group with respect to all outstanding shares of our Class A and Class B ordinary shares as a single class. Each holder of our Class A ordinary shares is entitled to one vote per share. Each holder of our Class B ordinary shares is entitled to 15 votes per share. Our Class B ordinary shares are convertible at any time by the holder into Class A ordinary shares on a one-for-one basis, while Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances.

(1) Represents 16,998,911 Class B and 6,704,981 Class A ordinary shares held of record by JIANPING KONG LTD, a British Virgin Islands company owned by Jianping Kong. The registered address of JIANPING KONG LTD is Intershore Consult Ltd. of Intershore Chambers, Road Town, Tortola, British Virgin Island.

(2) Represents 11,590,167 Class B and 2,873,563 Class A ordinary shares held of record by Star Spectrum Capital Ltd, a British Virgin Islands company owned by Qifeng Sun. The registered address of Star Spectrum Capital Ltd is Intershore Consult Ltd. of Intershore Chambers, Road Town, Tortola, British Virgin Island.

- (3) Represents 3,863,389 Class A ordinary shares held of record by Tong Qi Holding Ltd, a British Virgin Islands company owned by a trust designated to Nan Hu, and 679,359 Class A restricted shares held by Nanometa Ltd., the nominee of our equity incentive trust designated to certain employees of ours, which were granted to Nan Hu and have become vested as of the date of this annual report. The registered address of Tong Qi Holding Ltd is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, British Virgin Islands.
- (4) Represents 2,085,500 Class A ordinary shares held of record by Lucky Lily Ltd, a British Virgin Islands company owned by Li Zhang. The registered address of Lucky Lily Ltd is Intershore Chambers, Road Town, Tortola, British Virgin Island.
- (5) Represents 1,000,000 Class A ordinary shares held of record by Dualities Link C Ltd., a British Virgin Islands company owned by Bing Chen. The registered address of Dualities Link C Ltd. is Sertus Incorporations (BVI) Limited of Sertus Chambers, P.O. Box 905, Quastisky Building, Road Town, Tortola, British Virgin Islands.
- (6) Represents 5,325,786 Class A ordinary shares held of record by Nanometa Ltd, a British Virgin Islands company and the nominee of our equity incentive trust designated to certain employees of ours. The registered address of Nanometa Ltd. is Intershore Chambers, Road Town, Tortola, British Virgin Islands.
- (7) Represents 5,189,500 Class A ordinary shares held of record by Nanoeco Ltd, a British Virgin Islands company and the nominee of our equity incentive trust designated to certain employees of ours. The registered address of Nanoeco Ltd. is Intershore Chambers, Road Town, Tortola, British Virgin Islands.

To our knowledge, as of the date of this annual report, none of our ordinary shares are held by any record holder in the United States. None of our shareholders has informed us that it is affiliated with a registered broker-dealer or is in the business of underwriting securities. As of the date of this annual report, we are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

F. Disclosure of a registrant’s action to recover erroneously awarded compensation.

Not Applicable.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

See “Item 6. Directors, Senior Management and Employees—E. Share Ownership.”

B. Related Party Transactions

In 2021, 2022 and 2023, we entered into certain transactions with the following related parties:

Name of Entity or Individual	Relationship with Us
Jianping Kong	Principal shareholder, chairman of the board and chief executive officer
Qifeng Sun	Principal shareholder and vice chairman
Hangzhou Weiditu Technology Co., Ltd., or Weiditu	Company controlled by Jianping Kong

During the year ended December 31, 2021, we repaid RMB19.3 million to Jianping Kong. As of December 31, 2022 and 2023, the amounts due to Jianping Kong were nil.

During the year ended December 31, 2021, we repaid RMB12.1 million to Qifeng Sun. As of December 31, 2022 and 2023, the amounts due to Qifeng Sun were nil.

During the year ended December 31, 2021, we lent RMB0.1 million to and collected RMB4.5 million from Hangzhou Weiditu Technology Co., Ltd. As of December 31, 2022 and 2023, the amounts due from Hangzhou Weiditu Technology Co., Ltd. were nil.

During the year ended December 31, 2021, we purchased raw materials and services in amount of RMB0.3 million from Hangzhou Weiditu Technology Co., Ltd., and made payment in amount of RMB5.0 million to it. As of December 31, 2022 and 2023, the accounts payable to Hangzhou Weiditu Technology Co., Ltd. were nil.

The amounts due from related party and due to related parties are unsecured, non-interest bearing and due on demand.

During the year ended December 31, 2023, Jianping Kong and Qifeng Sun provided guarantee for our debts and provided interest-free loans to us which were subsequently converted into Class A ordinary shares. See Notes 10 and 11 to our annual audited consolidated financial statements in this annual report for details.

Private Placements

Upon our incorporation, we issued one ordinary share at nominal value to the initial subscriber and this one ordinary share was transferred to JIANPING KONG LTD, a company controlled by Mr. Jianping Kong, our controlling shareholder, on the same day. Additionally, we issued 25,499 and 24,500 ordinary shares to JIANPING KONG LTD and Star Spectrum Capital Ltd, respectively, on the same date.

On March 30, 2021, Star Spectrum Capital Ltd transferred 2,500, 5,000, 750, 1,000 and 250 ordinary shares to JIANPING KONG LTD, Topqick Ltd, VICTORBTC Ltd., Koala TC Ltd. and Hami Melon Technology Ltd, respectively.

On May 12, 2021, we completed a one-for-10,000 shares subdivision, following which our authorized share capital of US\$50,000 with par value of US\$1.00 each was divided into 500,000,000 ordinary shares with par value of US\$0.0001 each.

On the same date, we repurchased 150,000,000, 50,000,000, 7,500,000, 10,000,000 and 2,500,000 ordinary shares from Star Spectrum Capital Ltd, Topqick Ltd, VICTORBTC Ltd., Koala TC Ltd. and Hami Melon Technology Ltd, respectively, and issued 15,000, 5,000, 750, 1,000 and 250 ordinary shares to Star Spectrum Capital Ltd, Topqick Ltd, VICTORBTC Ltd., Koala TC Ltd. and Hami Melon Technology Ltd, respectively, on the same date.

On May 13, 2021, we repurchased 280,000,000 ordinary shares from JIANPING KONG LTD and issued 28,000 ordinary shares to JIANPING KONG LTD on the same date.

On July 8, 2021, we issued 44,351,440, 23,759,700, 3,995,000, 1,187,985, 1,583,980, 395,995, 3,924,900, 4,171,000, 2,580,000, 1,000,000, 3,400,000, 1,000,000, 1,000,000, 1,000,000, 1,000,000, 504,000, 706,000, 2,000,000, 290,000, 100,000 and 2,000,000 ordinary shares to JIANPING KONG LTD, Star Spectrum Capital Ltd, Topqick Ltd, VICTORBTC Ltd., Koala TC Ltd., Hami Melon Technology Ltd, Toqiteck Ltd, Luckylily Ltd, Zebra J Ltd., GREAT SCENERY VENTURES LIMITED, Root Grace Ltd., Wayne&Elizabeth Yao Ltd., Tujia Ltd., NANHE Ltd., Appleple W Ltd., M-Dreamer Ltd., Nicefollow Ltd., Dream Candy Ltd., Weast Possum Ltd., Bitrise Capital Ltd. and Dualities Link C Ltd, respectively.

On November 1, 2021, we issued 1,540,000, 800,000, 600,000, 600,000, 200,000 and 50,000 ordinary shares to Yongwan Ltd., Liu JiaSheng, Jade Investments Holding Limited, HashKey FinTech Investment Fund LP, HUANG YONG and LI JINPENG, respectively.

On January 13, 2022, JIANPING KONG LTD, Star Spectrum Capital Ltd, Toqiteck Ltd, VICTORBTC Ltd., Koala TC Ltd and Hami Melon Technology Ltd. transferred 10,381,619, 594,367, 198,122, 29,718, 39,624 and 9,906 ordinary shares to Nanometa Ltd, the nominee of our equity incentive trust designated to certain employees of ours.

On May 11, 2022, Toqiteck Ltd transferred 3,726,778 ordinary shares to Topqick Ltd.

On July 14, 2022, we completed our initial public offering of 3,540,000 Class A ordinary shares on Nasdaq.

On September 30, 2022, we completed our follow-on offering of 4,166,668 Class A ordinary shares on Nasdaq.

On July 28, 2023, we entered into agreements with Mr. Jianping Kong, our chairman and chief executive officer, and Mr. Qifeng Sun, our vice chairman, along with their respective affiliates (the “Lenders”) for interest-free loans to fund our research and development initiatives directed towards the advancement of ASIC chips, smart-NICs, and vision computing chips. On September 5, 2023, we entered into agreements with the Lenders to convert such loans into certain amount of Class A ordinary shares in lieu of repayment. On the same date, we issued 19,157,087 Class A ordinary shares to the Lenders at a per share price of US\$0.522, being the average closing price over the previous 10 trading days as of September 5, 2023.

Except for JIANPING KONG LTD, Star Spectrum Capital Ltd, Topqick Ltd, Toqiteck Ltd and Dualities Link C Ltd., which are companies controlled by our directors and executive officers and/or principal shareholders, none of the other entities to which we have issued ordinary shares is affiliated with us.

Employment Agreements and Indemnification Agreements

See “Item 6. Directors, Senior Management and Employees — C. Board of Directors — Employment Agreements” and “—Indemnification Agreements.”

Share Incentive Plan

See “Item 6. Directors, Senior Management and Employees—B. Compensation—Share Incentive Plan.”

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

See “Item 4. Information on the Company—B. Business Overview—Legal Proceedings.”

Dividend Policy

We have not declared or paid any dividends. We do not have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

Our board of directors has complete discretion in deciding the payment of any future dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. The declaration and payment of dividends will depend upon, among other things, our future operations and earnings, capital requirements and surplus, our financial condition, contractual restrictions, general business conditions and other factors as our board of directors may deem relevant. See “Item 10. Additional Information—Memorandum and Articles of Association—Dividends.”

We are a holding company incorporated in the Cayman Islands. We may rely on dividends from our subsidiaries in China for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC subsidiaries to pay dividends to us.

If we pay any dividends, cash dividends on our Class A ordinary shares, if any, will be paid in U.S. dollars.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offer and Listing Details

Our Class A ordinary shares are listed on the Nasdaq Global Market under the symbol “NA.”

B. Plan of Distribution

Not applicable.

C. Markets

On September 27, 2022, our Class A ordinary shares, previously represented by American depositary shares, were listed on the Nasdaq Global Market under the symbol “NA.”

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

We were incorporated as an exempted company with limited liability under the Companies Act (As Revised) of the Cayman Islands, as amended, or the Companies Act, on January 8, 2021. Our corporate affairs are governed by our memorandum and articles of association, as amended from time to time and the Companies Act, and the common law of the Cayman Islands.

As of the date of this annual report, our authorized share capital is US\$50,000 divided into 250,000,000 ordinary shares, with a par value of US\$0.0002 each, comprising of 121,410,923 Class A ordinary shares, 28,589,078 Class B ordinary shares and 99,999,999 shares of a par value of US\$0.0002 each of such class or classes (however designated) as the board of directors may determine in accordance with our currently effective memorandum and articles of association.

Differences in Corporate Law

The Companies Act is modeled after that of England and Wales but does not follow recent statutory enactments in England. In addition, the Companies Act differs from laws applicable to United States corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Act applicable to us and the laws applicable to companies incorporated in the United States. For details, please see “Description of Share Capital— Differences in Corporate Law” in the registration statement on Form F-1 (File Number 333-265539).

B. Memorandum and Articles of Association

We adopted the third amended and restated memorandum and articles of association, which had become effective on January 31, 2024.

The following are summaries of material provisions of our currently effective memorandum and articles of association and the Companies Act insofar as they relate to the material terms of our ordinary shares.

The following description of our share capital and provisions of our currently effective memorandum and articles of association are summaries and are qualified by reference to our currently effective memorandum and articles of association. Copies of these documents have been filed with the SEC as exhibits to our registration statement on Form F-1 (File Number 333-265539).

Objects of our company

Under our currently effective memorandum and articles of association, the objects of our company are unrestricted and we have the full power and authority to carry out any object not prohibited by the law of the Cayman Islands.

Ordinary shares

All of our issued and outstanding ordinary shares are fully paid and non-assessable. Our ordinary shares are issued in registered form and are issued when registered in our register of members. We may not issue shares to bearer. Our shareholders who are non-residents of the Cayman Islands may freely hold and transfer their ordinary shares.

Holders of our Class A ordinary shares and Class B ordinary shares have the same rights except for voting and conversion rights. The Class A ordinary shares and Class B ordinary shares carry equal rights and rank *pari passu* with one another, including the rights to dividends and other capital distributions. On a show of hands, every shareholder present at the general meeting shall each have one vote, and on a poll, each Class A ordinary share shall entitle the holder thereof to one (1) vote on all matters subject to vote at our general meetings, and each Class B ordinary share shall entitle the holder thereof to fifteen (15) votes on all matters subject to vote at our general meetings. Our ordinary shares are issued in registered form and are issued when registered in our register of members.

Conversion

Each Class B ordinary share is convertible into one Class A ordinary share at any time at the option of the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment or disposition of Class B ordinary shares by a holder thereof to any person or entity that is not Mr. Jianping Kong, Mr. Qifeng Sun or their affiliate (as defined in our currently effective memorandum and articles of association), or upon a change of ultimate beneficial ownership of any Class B ordinary share to any person who is not Mr. Jianping Kong, Mr. Qifeng Sun or their affiliate, such Class B ordinary shares will be automatically and immediately converted into an equal number of Class A ordinary shares.

Voting rights

Holders of our Class A ordinary shares and our Class B ordinary shares shall, at all times, vote together as one class on all matters submitted to a vote by our shareholders at any general meeting of our company. On a show of hands, every shareholder present at the general meeting shall each have one vote, and on a poll, each Class A ordinary share shall be entitled to one vote, and each Class B ordinary share shall be entitled to 15 votes, on all matters subject to a vote at general meetings of our company. Voting at any meeting of shareholders is by show of hands unless a poll is demanded (before or on the declaration of the result of the show of hands).

A poll may be demanded by the chairperson of such meeting or any shareholder present in person or by proxy. No person shall be entitled to vote or be counted in a quorum, unless such person is duly registered on our register of members as our shareholder.

An ordinary resolution to be passed at a general meeting requires the affirmative vote of a simple majority of the votes attaching to all issued and outstanding ordinary shares cast at a general meeting, while a special resolution requires the affirmative vote of at least two-thirds of votes attached to all issued and outstanding ordinary shares cast at a general meeting. Both ordinary resolutions and special resolutions may also be passed by a unanimous written resolution signed by all the shareholders of our company, as permitted by the Companies Act and our currently effective memorandum and articles of association. A special resolution will be required for important matters such as a change of name or making changes to our currently effective memorandum and articles of association. We may, among other things, subdivide or consolidate our shares by ordinary resolution.

General meetings of shareholders

As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our currently effective memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by a majority of our board of directors or the chairperson of our board of directors. Advance notice of at least ten calendar days is required for the convening of our annual general meeting and any other general meeting of our shareholders. A quorum required for a meeting of shareholders consists of at least one or more shareholder(s) holding shares which carry in aggregate not less than one-third (1/3) of all votes attaching to all shares which carry the right to attend and vote at such general meeting, present in person or by proxy, or, if a corporation or other non-natural person, by its duly authorized representative.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our currently effective memorandum and articles of association provide that upon the requisition of shareholders representing in aggregate not less than one-third (1/3) of all votes attaching to the issued and outstanding shares of our company entitled to vote at general meetings as at the date of the deposit of the requisition, our board is obliged to convene an extraordinary general meeting and put the resolutions so requisitioned to a vote at such meeting. However, our currently effective memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Dividends

Subject to the Companies Act, our directors may declare dividends in any currency to be paid to our shareholders. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under the laws of the Cayman Islands, dividends may be declared and paid out of our profits or out of the share premium account. Our currently effective memorandum and articles of association provide that dividends may be declared and paid out of the funds of our company lawfully available therefor. In no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business. Holders of our ordinary shares will be entitled to such dividends as may be declared by our board of directors.

Transfer of ordinary shares

Subject to any applicable restrictions set forth in our currently effective memorandum and articles of association, any of our shareholders may transfer all or any of his or her shares by an instrument of transfer in the usual or common form or in a form that our directors may approve.

Our directors may decline to register any transfer of any share which is not fully paid up or on which we have a lien. Our directors may also decline to register any transfer of any share unless:

- the instrument of transfer is lodged with us and is accompanied by the certificate for the shares to which it relates and such other evidence as our directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of share;
- the instrument of transfer is properly stamped (in circumstances where stamping is required);
- in the case of a transfer to joint holders, the number of joint holders to whom the share is to be transferred does not exceed four; and
- a fee of such maximum sum as the Nasdaq Global Market may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three calendar months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, after compliance with any notice requirement of the Nasdaq Global Market, be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine, provided, however, that the registration of transfers shall not be suspended nor the register closed for more than 30 calendar days in any calendar year as our board may determine.

Liquidation

Subject to any future shares which are issued with specific rights, on the winding up of our company (1) if the assets available for distribution among our shareholders are more than sufficient to repay the whole of the capital paid up at the commencement of the winding up, the excess shall be distributed among those shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise, and (2) if the assets available for distribution among the shareholders as such are insufficient to repay the whole of the paid-up capital, those assets shall be distributed so that, as nearly as may be, the losses shall be borne by the shareholders in proportion to the par value of the shares held by them.

Calls on ordinary shares and forfeiture of ordinary shares

Subject to our currently effective memorandum and articles of association and to the terms of allotment, our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their ordinary shares in a notice served to such shareholders at least 14 calendar days prior to the specified time of payment. The ordinary shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption of shares, repurchase and surrender of ordinary shares We are empowered by the Companies Act and our currently effective memorandum and articles of association to purchase our own shares, subject to certain restrictions. We may issue shares on terms that are subject to redemption, at our option or at the option of the holders, on such terms and in such manner as may be determined by our board of directors.

We may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders.

Under the Companies Act, the redemption or repurchase of any share may be paid out of the company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if the company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act, no such share may be redeemed or repurchased (i) unless it is fully paid up, (ii) if such redemption or repurchase would result in there being no shares issued and outstanding, or (iii) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of rights of shares

If at any time, our share capital is divided into different classes of shares, the rights attached to any such class may, subject to any rights or restrictions for the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of two-thirds of the issued shares of that class or with the sanction of a special resolution passed at a separate general meeting of the holders of the shares of that class.

The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by the creation, allotment or issue of further shares ranking pari passu with or subsequent to them or the redemption or purchase of any shares of any class by our company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

Issuance of additional shares

Our currently effective memorandum and articles of association authorizes our board of directors to issue additional shares (including, without limitation, preferred shares) from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our currently effective memorandum and articles of association also authorizes our board of directors to establish from time to time one or more series of preference shares and to determine, with respect to any series of preference shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue preference shares without action by our shareholders to the extent authorized but unissued. Issuance of these shares may dilute the voting power of holders of ordinary shares.

Inspection of books and records

Holders of our ordinary shares have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records (except for our memorandum and articles of association, our register of mortgages and charges and special resolutions of our shareholders). However, we will provide our shareholders with annual audited financial statements.

Anti-takeover provisions.

Some provisions of our currently effective memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that (1) authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders, and (2) limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our currently effective memorandum and articles of association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Appointment and removal of directors

Unless otherwise determined by our company in general meeting, our currently effective memorandum and articles of association provide that our board of directors will consist of not less than three directors. There are no provisions relating to retirement of directors upon reaching any age limit. The directors have the power to appoint any person as a director either to fill a casual vacancy on the board or as an addition to the existing board. Our shareholders may also appoint any person to be a director by way of ordinary resolution.

Subject to restrictions contained in our currently effective memorandum and articles of association, a director may be removed with or without cause by ordinary resolution of our company. In addition, the office of any director shall be vacated if the director (1) becomes bankrupt or makes any arrangement or composition with his creditors, (2) dies or is found to be or becomes of unsound mind, (3) resigns his office by notice in writing to our company, (4) without special leave of absence from our board, is absent from three consecutive board meetings and our board resolves that his office be vacated, or (5) is removed from office pursuant to our currently effective memorandum and articles of association.

Proceedings of board of directors

Our currently effective memorandum and articles of association provide that our business is to be managed and conducted by our board of directors. The quorum necessary for board meetings may be fixed by the board and, unless so fixed at another number, will be a majority of the directors. Our currently effective memorandum and articles of association provide that the board may from time to time at their discretion exercise all the powers of our company to raise or borrow money, to mortgage or charge all or any part of the undertaking, property, assets (present and future) and uncalled capital of our company and to issue debentures, debenture stock, bonds and other securities, whether outright or as collateral security for any debt, liability or obligation of our company or of any third party.

Alteration of capital

We may from time to time by ordinary resolution in accordance with the Companies Act alter the conditions of our currently effective memorandum and articles of association to:

- increase our capital by such sum, to be divided into shares of such amounts, as the resolution shall prescribe;
- consolidate and divide all or any of our share capital into shares of larger amounts than our existing shares;
- cancel any shares which at the date of the passing of the resolution have not been taken or agreed to be taken by any person, and diminish the amount of its share capital by the amount of the shares so cancelled subject to the provisions of the Companies Act;
- sub-divide our shares or any of them into shares of smaller amount than is fixed by our currently effective memorandum and articles of association, subject nevertheless to the Companies Act; and
- divide shares into several classes and without prejudice to any special rights previously conferred on the holders of existing shares, attach to the shares respectively any preferential, deferred, qualified or special rights, privileges, conditions or such restrictions that in the absence of any such determination in a general meeting may be determined by our directors.

We may, by special resolution, subject to any confirmation or consent required by the Companies Act, reduce our share capital or any capital redemption reserve in any manner authorized by law.

Register of members

Under the Companies Act, we must keep a register of members and there should be entered therein:

- the names and addresses of our members, together with a statement of the shares held by each member, and such statement shall confirm (i) the amount paid on the shares of each member, (ii) the number and category of shares held by each member, and (iii) whether each relevant category of shares held by a member carries voting rights under the memorandum and articles of association of the company and if so, whether such voting rights are conditional;
- the date on which the name of any person was entered on the register as a member; and
- the date on which any person ceased to be a member.

Under the Companies Act, the register of members is prima facie evidence of the registered holder or member of shares of a company. Therefore, a person becomes a registered holder or member of shares of the company only upon entry being made in the register of members. A member registered in the register of members is deemed as a matter of Cayman Islands law to have legal title to the shares as set against its name in the register of members.

After the completion of the securities offering, the depositary was included in our register of members as the only holder of the shares represented by the ADSs in the securities offering.

If the name of any person is incorrectly entered in or omitted from our register of members or if there is any default or unnecessary delay in entering on the register the fact of any person having ceased to be a member of our company, the person or member aggrieved (or any member of our company or our company itself) may apply to the Grand Court of the Cayman Islands for an order that the register be rectified. The Court may either refuse such application or it may, if satisfied of the justice of the case, make an order for the rectification of the register.

Exempted company

We are an exempted company with limited liability under the Companies Act. The Companies Act distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;

- does not have to hold an annual general meeting;
- may issue shares with no par value;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are given for a period of up to 30 years);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

“Limited liability” means that the liability of each shareholder is limited to the amount unpaid by the shareholder on the shares of the company (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

C. Material Contracts

Material contracts other than in the ordinary course of business are described in Item 4 and Item 7 or elsewhere in this annual report.

D. Exchange Controls

See “Item 4. Information on the Company—B. Business Overview—Regulation—PRC Laws and Regulations relating to Foreign Exchange.”

E. Taxation

The following summary of the material Cayman Islands, PRC and United States federal income tax consequences of an investment in the ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. The following summary does not constitute legal or tax advice. The discussion does not deal with all possible tax consequences relating to an investment in the ordinary shares. In particular, the discussion does not address U.S. state or local tax laws, or tax laws of jurisdictions other than the Cayman Islands, the PRC and the federal income tax law of the United States. Accordingly, you should consult your own tax advisor regarding the tax consequences of an investment in the ordinary shares. To the extent that the discussion relates to matters of Cayman Islands tax law, it represents the opinion of Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel. To the extent that the discussion relates to matters of PRC tax law, it represents the opinion of Zhong Lun Law Firm, our PRC legal counsel.

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or after execution brought within the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties applicable to payments to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of the shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of the shares, nor will gains derived from the disposal of the shares be subject to Cayman Islands income or corporation tax.

PRC Taxation

Under the EIT Law and its implementation rules, an enterprise established outside of China with a “de facto management body” within China is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its global income. The implementation rules define the term “de facto management body” as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In April 2009, SAT issued Circular Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprise on the Basis of De Facto Management Bodies, or SAT Circular 82, which provides certain specific criteria for determining whether the “de facto management body” of a PRC-controlled enterprise that is incorporated offshore is located in China. Although SAT Circular 82 only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners, the criteria set forth in SAT Circular 82 may reflect the general position of SAT on how the “de facto management body” test should be applied in determining the tax resident status of all offshore enterprises. According to SAT Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its “de facto management body” in China only if all of the following conditions are met: (1) the primary location of the day-to-day operational management is in China; (2) decisions relating to the enterprise’s financial and human resource matters are made or are subject to approval by organizations or personnel in China; (3) the enterprise’s primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in China; and (4) at least 50% of voting board members or senior executives habitually reside in China.

We do not believe that our Cayman Islands holding company meets all of the conditions above. Our Cayman Islands holding company is not a PRC resident enterprise for PRC tax purposes. As a holding company, its key assets are its ownership interests in its subsidiaries, and its key assets are located, and its records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside China. For the same reasons, we believe our other entities outside of China are not PRC resident enterprises either. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” There can be no assurance that the PRC government will ultimately take a view that is consistent with ours.

Zhong Lun Law Firm, our legal counsel as to PRC law, has advised us that if the PRC tax authorities determine that our Cayman Islands holding company is a PRC resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises with no institutions or premises established in the PRC or income bearing no de facto relationship with the institution or premises established. In addition, non-resident enterprise shareholders may be subject to a 10% PRC tax on gains realized on the sale or other disposition of ordinary shares, if such income is treated as sourced from within China. It is unclear whether our non-PRC individual shareholders would be subject to any PRC tax on dividends or gains obtained by such non-PRC individual shareholders in the event we are determined to be a PRC resident enterprise. If any PRC tax were to apply to such dividends or gains, it would generally apply at a rate of 20% unless a reduced rate is available under an applicable tax treaty. However, it is also unclear whether non-PRC shareholders of our Cayman Islands holding company would be able to claim the benefits of any tax treaties between their country of tax residence and China in the event that our Cayman Islands holding company is treated as a PRC resident enterprise.

Provided that our Cayman Islands holding company is not deemed to be a PRC resident enterprise, holders of the ordinary shares who are not PRC residents will not be subject to PRC income tax on dividends distributed by us or gains realized from the sale or other disposition of our shares. However, under SAT Bulletin 37, where a non-resident enterprise conducts an “indirect transfer” by transferring taxable assets, including, in particular, equity interests in a PRC resident enterprise, indirectly by disposing of the equity interests of an overseas holding company, the non-resident enterprise, being the transferor, or the transferee or the PRC entity which directly owned such taxable assets may report to the relevant tax authority such indirect transfer. Using a “substance over form” principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax, and the transferee obligated to withhold the applicable taxes, currently at a rate of 10% for the transfer of equity interests in a PRC resident enterprise. We and our non-PRC resident investors may be at risk of being required to file a return and being taxed under SAT Circular 7, and we may be required to expend valuable resources to comply with SAT Circular 7, or to establish that we should not be taxed thereunder. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Conducting Business in China—We may be subject to enterprise income tax on our worldwide income if our company or any of our subsidiaries were considered a PRC ‘resident enterprise’ under the PRC Enterprise Income Tax Law.”

United States Federal Income Taxation

The following discussion is a summary of United States federal income tax considerations relating to the ownership and disposition of our Class A ordinary shares by a U.S. Holder, as defined below, that acquired our Class A ordinary shares and held our Class A ordinary shares as “capital assets” (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (the “Code”).

This discussion is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. No ruling has been sought from the Internal Revenue Service (the “IRS”) with respect to any United States federal income tax consequences described below, and there can be no assurance that the IRS or a court will not take a contrary position.

This discussion does not address all aspects of United States federal income taxation that may be important to particular investors in light of their individual circumstances, including investors subject to special tax rules, including:

- financial institutions;
- insurance companies; regulated investment companies;
- real estate investment trusts;
- broker-dealers;
- traders in securities or other persons that elect mark-to-market treatment;
- partnerships or other pass-through entities and their partners or investors;
- tax-exempt organizations (including private foundations);
- investors that own (directly, indirectly, or constructively) 10% or more of our stock by vote or value;
- investors that hold their Class A ordinary shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction);
- investors that have a functional currency other than the U.S. dollar; or
- investors required to accelerate the recognition of any item of gross income with respect to our Class A ordinary shares as a result of such income being recognized on an applicable financial statement.

In addition, this discussion does not address any state, local, alternative minimum tax, or non-United States tax considerations, or the Medicare contribution tax on net investment income. Each potential investor is urged to consult its tax advisor regarding the United States federal, state, local and non-United States income and other tax considerations of an investment in our Class A ordinary shares.

General

For purposes of this discussion, a “U.S. Holder” is a beneficial owner of our Class A ordinary shares that is, for United States federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or other entity treated as a corporation for United States federal income tax purposes) created in, or organized under the laws of, the United States or any state thereof or the District of Columbia, (3) an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source, or (4) a trust (a) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (b) that has otherwise elected to be treated as a United States person under the Code.

If a partnership (or other entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of our Class A ordinary shares, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. Partnerships and partners of a partnership holding our Class A ordinary shares are urged to consult their tax advisors regarding an investment in such ordinary shares.

As described above under “Item 4. Information on the Company—A. History and development of the company,” our American deposit receipt facility was terminated on February 1, 2024, and the holders of our ADSs received our Class A ordinary shares in exchange for such ADSs. For United States federal income tax purposes, a U.S. Holder of ADSs will generally be treated as the beneficial owner of the underlying shares represented by the ADSs. Accordingly, the termination of our American deposit receipt facility is generally not expected to be a taxable transaction for United States federal income tax purposes. Except where specifically discussed below, the United States federal income tax consequences discussed below would apply to each U.S. Holder of ADSs prior to February 1, 2024.

Passive foreign investment company considerations

A non-United States corporation, such as our company, will be classified as a “passive foreign investment company,” or a PFIC, for United States federal income tax purposes, if, in the case of any particular taxable year, either (1) 75% or more of its gross income for such year consists of certain types of “passive” income or (2) 50% or more of its average quarterly assets during such year is attributable to assets that produce or are held for the production of passive income. For this purpose, cash is categorized as a passive asset and the company’s unbooked intangibles associated with active business activities may generally be classified as active assets. For purposes of the income test, “gross income” generally consists of sales revenues less the cost of goods sold, together with income from investments and from other sources, and “passive income” generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other non-United States corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

Under the applicable guidance, it is unclear how companies, like us, with negative gross revenue, are treated. Assuming that we are permitted to use gross loss to offset our passive income, based upon our current income and assets and the actual and projected value of our Class A ordinary shares, we do not believe we were a PFIC for the taxable year ended December 31, 2023, and we do not presently expect to be classified as a PFIC for the current taxable year ending December 31, 2024.

While we reasonably do not expect to become a PFIC in the current or future taxable years, the determination of whether we will be or become a PFIC will depend upon (i) the composition and characterization of our income (which may differ from our historical results and current projections) and (ii) the composition and characterization of our assets and the value of our assets from time to time, including, in particular the value of our goodwill and other unbooked intangibles (which may depend upon the market value of our Class A ordinary shares from time-to-time and which has been and may continue to be volatile). In estimating the value of our goodwill and other unbooked intangibles, we have taken into account our market capitalization. Among other matters, if our market capitalization does not increase or continues to decline, we may be or become classified as a PFIC for the current or future taxable years. It is also possible that the IRS, may challenge our classification of assets or income or the valuation of our goodwill and other unbooked intangibles, which may result in our company being, or becoming classified as, a PFIC for the current or one or more future taxable years.

The determination of whether we would be or become a PFIC may also depend, in part, on how, and how quickly, we used our liquid assets. Under circumstances where we retain significant amounts of liquid assets, including cash, our risk of being classified as a PFIC may substantially increase. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the current taxable year ending December 31, 2024 or any future taxable year. If we were classified as a PFIC for any year during which a U.S. Holder held our Class A ordinary shares or ADSs, we generally would continue to be treated as a PFIC for all succeeding years during which such U.S. Holder held our Class A ordinary shares or ADSs.

The discussion below under “Dividends” and “Sale or other disposition of our Class A ordinary shares” is written on the basis that we will not be classified as a PFIC for United States federal income tax purposes. The United States federal income tax rules that apply if we are classified as a PFIC for the current taxable year or any subsequent taxable year are discussed below under “Passive foreign investment company rules.”

Dividends

Subject to the PFIC rules described below, any cash distributions (including the amount of any PRC tax withheld) paid on our Class A ordinary shares out of our current or accumulated earnings and profits, as determined under United States federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder of our Class A ordinary shares. Because we do not intend to determine our earnings and profits on the basis of United States federal income tax principles, any distribution will generally be treated as a “dividend” for United States federal income tax purposes. Under current law, a non-corporate recipient of dividend income will generally be subject to tax on dividend income from a “qualified foreign corporation” at the lower applicable net capital gains rate rather than the marginal tax rates generally applicable to ordinary income, provided that certain holding period and other requirements are met.

A non-United States corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) will generally be considered to be a qualified foreign corporation (1) if it is eligible for the benefits of a comprehensive tax treaty with the United States, which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program, or (2) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. Prior to February 1, 2024, our ADSs, but not our Class A ordinary shares, were listed on Nasdaq. Accordingly, assuming our ADSs were considered to be readily tradeable on an established securities market, we were a qualified foreign corporation with respect to dividends paid on our ADSs but not our Class A ordinary shares. Beginning on January 1, 2024, our Class A ordinary shares are listed on Nasdaq. We believe, but cannot assure you, that our Class A ordinary shares will be readily tradable on an established securities market in the United States and that we will be a qualified foreign corporation with respect to dividends paid on our Class A ordinary shares. There can be no assurance that our Class A ordinary shares will continue to be considered readily tradable on an established securities market in later years. In the event we are deemed to be a PRC resident enterprise under the Enterprise Income Tax Law (see “—PRC Taxation”), we may be eligible for the benefits of the Agreement Between the Government of the United States of America and the Government of the People’s Republic of China for the Avoidance of Double Taxation and the Prevention of Tax Evasion with Respect to Taxes on Income, or the United States-PRC income tax treaty (which the Secretary of the Treasury of the United States has determined is satisfactory for this purpose), in which case we would be treated as a qualified foreign corporation with respect to dividends paid on our Class A ordinary shares. U.S. Holders are urged to consult their tax advisors regarding the availability of the reduced tax rate on dividends in their particular circumstances. Dividends received on the Class A ordinary shares will not be eligible for the dividends received deduction allowed to qualifying corporations under the Code.

For United States foreign tax credit purposes, dividends paid on our Class A ordinary shares will generally be treated as income from foreign sources and will generally constitute passive category income. In the event that we are deemed to be a PRC resident enterprise under the Enterprise Income Tax Law, a U.S. Holder may be subject to PRC withholding taxes on dividends paid, if any, on our Class A ordinary shares. A U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any foreign withholding taxes imposed on dividends received on our Class A ordinary shares. A U.S. Holder who does not elect to claim a foreign tax credit for foreign tax withheld may instead claim a deduction for United States federal income tax purposes in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex. U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or other disposition of our Class A ordinary shares

Subject to the PFIC rules discussed below, a U.S. Holder will generally recognize capital gain or loss, if any, upon the sale or other disposition of our Class A ordinary shares in an amount equal to the difference between the amount realized upon the disposition and the holder’s adjusted tax basis in such ordinary shares. Any capital gain or loss will be long-term capital gain or loss if our Class A ordinary shares have been held for more than one year and will generally be United States source gain or loss for United States foreign tax credit purposes. Long-term capital gains of non-corporate U.S. Holders are currently eligible for reduced rates of taxation. In the event that we are treated as a PRC resident enterprise under the EIT Law, and gain from the disposition of our Class A ordinary shares is subject to tax in the PRC (see “—PRC Taxation”), such gain may be treated as PRC source gain for foreign tax credit purposes under the United States-PRC income tax treaty. The deductibility of a capital loss may be subject to limitations. U.S. Holders are urged to consult their tax advisors regarding the tax consequences if a foreign tax is imposed on a disposition of our Class A ordinary shares, including the availability of the foreign tax credit under their particular circumstances.

Passive foreign investment company rules

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds our Class A ordinary shares, unless the U.S. Holder makes one of certain elections (as described below), the U.S. Holder will, except as discussed below, be subject to special tax rules that have a penalizing effect, regardless of whether we remain a PFIC, on (1) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125% of the average annual distributions paid in the three preceding fiscal years or, if shorter, the U.S. Holder's holding period for our Class A ordinary shares), and (2) any gain realized on the sale or other disposition, including, under certain circumstances, a pledge, of such ordinary shares. Under the PFIC rules:

- the excess distribution and/or gain will be allocated ratably over the U.S. Holder's holding period for our Class A ordinary shares;
- the amount of the excess distribution or gain allocated to the taxable year of distribution or gain and to any taxable years in the U.S. Holder's holding period prior to the first fiscal year in which we are classified as a PFIC (each such taxable year, a pre-PFIC year) will be taxable as ordinary income; and
- the amount of the excess distribution or gain allocated to each prior taxable year, other than the current taxable year of distribution or gain or a pre-PFIC year, will be subject to tax at the highest tax rate in effect applicable to the individuals or corporations, as appropriate, for that other taxable year, and will be increased by an additional tax equal to interest on the resulting tax deemed deferred with respect to each such other taxable year.

If we are a PFIC for any taxable year during which a U.S. Holder holds our Class A ordinary shares and any of our non-United States subsidiaries is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

As an alternative to the foregoing rules, a U.S. Holder of "marketable stock" in a PFIC may make a mark-to-market election with respect to the Class A ordinary shares, provided that such ordinary shares are "regularly traded" (as specially defined) on Nasdaq. Prior to February 1, 2024, our ADSs, but not our Class A ordinary shares, were listed on Nasdaq. Accordingly, assuming our ADSs were considered to be readily tradeable on an established securities market, we were eligible to make a mark-to-market election with respect to our ADSs but not our Class A ordinary shares. Beginning on January 1, 2024, our Class A ordinary shares are listed on Nasdaq. No assurances may be given regarding whether our Class A ordinary shares will qualify, or will continue to be qualified, as being regularly traded in this regard. If a mark-to-market election is made, the U.S. Holder will generally (1) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of our Class A ordinary shares, held at the end of the taxable year over the U.S. Holder's adjusted tax basis in such ordinary shares and (2) deduct as an ordinary loss the excess, if any, of the U.S. Holder's adjusted tax basis in such ordinary shares over the fair market value of such ordinary shares held at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. Holder's adjusted tax basis in our Class A ordinary shares would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes an effective mark-to-market election, in each year that we are a PFIC any gain recognized upon the sale or other disposition of our Class A ordinary shares will be treated as ordinary income and any loss will be treated as ordinary loss, but only to the extent of the net amount previously included in income as a result of the mark-to-market election.

If a U.S. Holder makes a mark-to-market election in respect of a corporation classified as a PFIC and such corporation ceases to be classified as a PFIC, the U.S. Holder will not be required to take into account the mark-to-market gain or loss described above during any period that such corporation is not classified as a PFIC.

Because a mark-to-market election cannot be made for any lower-tier PFICs that a PFIC may own, a U.S. Holder who makes a mark-to-market election with respect to our Class A ordinary shares may continue to be subject to the general PFIC rules with respect to such U.S. Holder's indirect interest in any of our non-United States subsidiaries that is classified as a PFIC.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections, which, if available, would result in tax treatment different from the general tax treatment for PFICs described above.

As discussed above under "Dividends," dividends that we pay on our Class A ordinary shares will not be eligible for the reduced tax rate that applies to qualified dividend income if we are classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year. In addition, if a U.S. Holder owns our Class A ordinary shares during any taxable year that we are a PFIC, the U.S. Holder must file an annual information return with the IRS. Each U.S. Holder is urged to consult its tax advisor concerning the United States federal income tax consequences of purchasing, holding, and disposing the ordinary shares if we are or become a PFIC, including the possibility of making a mark-to-market election and the unavailability of the qualified electing fund election.

Information reporting

Certain U.S. Holders are required to report information to the IRS relating to an interest in "specified foreign financial assets" (as defined in the Code), including shares issued by a non-United States corporation, for any year in which the aggregate value of all specified foreign financial assets exceeds \$50,000 (or a higher dollar amount prescribed by the IRS), subject to certain exceptions (including an exception for shares held in custodial accounts maintained with a United States financial institution). These rules also impose penalties if a U.S. Holder is required to submit such information to the IRS and fails to do so.

In addition, U.S. Holders may be subject to information reporting to the IRS and backup withholding with respect to dividends on and proceeds from the sale or other disposition of our Class A ordinary shares. Information reporting will apply to payments of dividends on, and to proceeds from the sale or other disposition of, our Class A ordinary shares by a paying agent within the United States to a U.S. Holder, other than U.S. Holders that are exempt from information reporting and properly certify their exemption. A paying agent within the United States will be required to withhold at the applicable statutory rate, currently 24%, in respect of any payments of dividends on, and the proceeds from the disposition of, our Class A ordinary shares within the United States to a U.S. Holder (other than U.S. Holders that are exempt from backup withholding and properly certify their exemption) if the U.S. Holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with applicable backup withholding requirements. U.S. Holders who are required to establish their exempt status generally must provide a properly completed IRS Form W-9.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a U.S. Holder's United States federal income tax liability. A U.S. Holder generally may obtain a refund of any amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS in a timely manner and furnishing any required information. Each U.S. Holder is advised to consult with its tax advisor regarding the application of the United States information reporting rules to their particular circumstances.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on display

We have previously filed with the SEC our registration statement on Form F-1 (File Number 333-265539), as amended, and our registration statement on Form F-3 (File Number 333-273968).

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system.

As a foreign private issuer, we are exempt from the rules of the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

I. Subsidiary Information

For a listing of our subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

J. Annual Report to Security Holders

Not Applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Concentration of Credit Risk

Financial instruments that potentially expose us to concentrations of credit risk consist primarily of cash and cash equivalents. As of December 31, 2022 and 2023, our cash and cash equivalents amounted to RMB87.8 million and RMB48.2 million (US\$6.8 million), respectively. We place our cash and cash equivalents primarily with financial institutions with high credit ratings and quality in China. Historically, deposit in Chinese banks are secure due to the state policy on protecting depositors' interests. In the event of bankruptcy of one of these financial institutions, we may not be able to claim its cash and demand deposits back in full. We continue to monitor the financial strength of the financial institutions. There has been no recent history of default in relation to these financial institutions.

Concentration of Suppliers

In 2021, purchases from top two suppliers represented 50.0% and 34.0% of the total purchase amount made by us. In 2022, purchases from top two suppliers represented 32.0% and 23.0% of the total purchase amount made by us. In 2023, purchases from top two suppliers represented 38.0% and 14.0% of the total purchase amount made by us.

Liquidity Risk

Our policy is to regularly monitor our liquidity requirements and our compliance with lending covenants, to ensure that we maintain sufficient reserves of cash and readily realizable marketable securities and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term. See "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources" for details.

Currency Risk

Our operations are primarily in China. Our reporting currency is denominated in RMB. We are exposed to currency risk primarily through sales and purchases which give rise to receivables, payables and cash balances that are denominated in a currency other than the functional currency of the operations to which the transactions relate. Thus, our revenues and results of operations may be impacted by exchange rate fluctuations between RMB and U.S. dollars. We incurred and recognized foreign currency translation loss of RMB0.5 million, foreign currency translation gain of RMB4.9 million and foreign currency translation gain of RMB0.8 million (US\$0.1 million) in 2021, 2022 and 2023, respectively, as a result of changes in the exchange rate.

Inflation

To date, inflation in China has not materially affected our results of operations. According to the National Bureau of Statistics of China, the year-over-year percent changes in the consumer price index for December 2022 and 2023 were increase of 1.8% and decrease of 0.3%, respectively. Although we have not been materially affected by inflation in the past, we may be affected if China or Hong Kong experiences higher rates of inflation in the future.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Material Modifications to the Rights of Security Holders

See “Item 10. Additional Information” for a description of the rights of securities holders, which remain unchanged.

Use of Proceeds

The following “Use of Proceeds” information relates to the registration statement on Form F-1, as amended (File Number 333-265539) in relation to our initial public offering of 1,770,000 American depositary shares (the “ADSs”) representing 3,540,000 Class A ordinary shares at an initial offering price of US\$11.50 per ADS, and the registration statement on Form F-1, as amended (File Number 333-266825) in relation to our follow-on public offering of 2,083,334 ADSs representing 4,166,668 Class A ordinary shares at an offering price of US\$2.40 per ADS. Our initial public offering closed in July 2022, and our follow-on public offering closed in September 2022. Maxim Group LLC, AMTD and Tiger were the representatives of the underwriters for our initial public offering and follow-on public offering.

The F-1 registration statement for our initial public offering was declared effective by the SEC on July 11, 2022. We received net proceeds of approximately US\$16.6 million from our initial public offering. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities or our affiliates. None of the net proceeds from the initial public offering were paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities or our affiliates.

The F-1 registration statement for our follow-on offering was declared effective by the SEC on September 27, 2022. We received net proceeds of approximately US\$4.5 million from our follow-on public offering. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities or our affiliates. None of the net proceeds from the follow-on public offering were paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities or our affiliates.

For the period from July 11, 2022, the date that the F-1 registration statement for our initial public offering was declared effective by the SEC, to the date of this annual report, we have spent a total of approximately US\$34.3 million with the following allocation: about US\$15.9 million for research and development of new products; roughly US\$9.1 million for optimizing our supply chain; approximately US\$5.6 million for establishing our brand and global sales network; and around US\$3.6 million for supporting our working capital and daily operations.

The total expenses incurred for our company's account in connection with our initial public offering for the period from the effective date of the initial public offering F-1 Registration Statement to December 31, 2022 and in connection with our follow-on offering for the period from the effective date of the follow-on public offering F-1 Registration Statement to December 31, 2022 was approximately US\$3.0 million, which included approximately US\$1.8 million of underwriting discounts and commissions and approximately US\$1.2 million of other offering expenses.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report.

Based upon that evaluation, our management, with the participation of our chief executive officer and chief financial officer, has concluded that, due to the outstanding material weakness described below under "Internal Control over Financial Reporting," as of December 31, 2023, our disclosure controls and procedures were not effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f), of the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or because the degree of compliance with policies or procedures may deteriorate.

Under the supervision and with the participation of our management, which includes our chief executive officer and chief financial officer, we conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2023. The assessment was based on criteria established in the framework Internal Control-Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that our internal control over financial reporting was not effective as of December 31, 2023.

Internal Control over Financial Reporting

In the course of auditing our consolidated financial statements as of December 31, 2023, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting as of December 31, 2023. As defined in the standards established by the PCAOB, a “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our company’s annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

The material weakness identified is related to lack of sufficient accounting personnel who possess adequate knowledge in financial reporting in accordance with U.S. GAAP.

We intend to undertake measures to improve our internal control over financial reporting to address the material weakness identified, including implementing regular and continuous U.S. GAAP accounting and financial reporting training programs for our accounting and financial reporting personnel. In addition, we plan to take the following initiatives to improve our internal control over financial reporting to address the material weakness that have been identified:

- hiring additional qualified accounting and reporting personnel who are equipped with the relevant U.S. GAAP and SEC reporting experience and qualifications to strengthen our financial reporting function and to set up a financial and system control framework; and
- enhancing our internal audit function as well as engaging an external consulting firm to assist us with assessing our Sarbanes-Oxley compliance readiness and improving overall internal controls.

However, we cannot assure you that we will remediate our material weakness in a timely manner. The process of designing and implementing an effective financial reporting system is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a financial reporting system that is adequate to satisfy our reporting obligation. See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Operations—If we fail to implement and maintain an effective system of internal controls to remediate our material weakness over financial reporting, we may be unable to accurately or timely report our results of operations, meet our reporting obligations or prevent fraud, and investor confidence and the market price of our Class A ordinary shares may be materially and adversely affected.”

Attestation Report of the Registered Public Accounting Firm

This annual report on Form 20-F does not include an attestation report of our registered public accounting firm due to rules of the SEC where domestic and foreign registrants that are “emerging growth companies” which we are, are not required to provide the auditor attestation report.

Changes in Internal Control over Financial Reporting

Other than those discussed above relating to the material weakness, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [RESERVED]

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our audit committee consists solely of independent directors that satisfy the Nasdaq Stock Market and SEC requirements within one year of the completion of the securities offering. Our board of directors has also determined that Ms. Li Zhang qualifies as an “audit committee financial expert” within the meaning of the SEC rules and possesses financial sophistication within the meaning of the Nasdaq Stock Market Listing Rules.

ITEM 16B. CODE OF ETHICS

Our board of directors has adopted our code of conduct and ethics, a code that applies to members of the board of directors including its chairman and other senior officers, including the chief executive officer, the chief financial officer and the chief operations officer. This code is publicly available on our website at <https://ir.nano.cn/>.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by our independent registered public accounting firm, namely MaloneBailey, LLP, for the years indicated. We did not pay any other fees to our independent registered public accounting firms during the periods indicated below.

	2021	2022	2023
	(RMB in thousands)		
Audit fees (1)	2,128.5	3,231.9	2,576.6
Audit-related fees (2)	—	807.1	308.5
Total	2,128.5	4,039.0	2,885.1

- (1) Audit fees consist of fees billed for professional services rendered for the audit of our year-end financial statements and services that are normally provided by our independent registered public accounting firm in connection with regulatory filings. The above amounts include interim procedures and audit fees.
- (2) Audit-related fees consist of fees billed for assurance and related services that are reasonably related to performance of the audit or review of our financial statements and are not reported under “audit fees.”

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

None.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

None.

ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

We are a “foreign private issuer” under the federal securities laws of the United States and the Nasdaq Global Market listing standards. Under the federal securities laws of the United States, foreign private issuers are subject to different disclosure requirements than U.S.-domiciled registrants. We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act, the rules adopted by the SEC and the Nasdaq Global Market listing standards. Under SEC rules and the Nasdaq Global Market listing standards, a foreign private issuer is subject to less stringent corporate governance requirements. Subject to certain exceptions, the SEC and the Nasdaq Global Market permit a foreign private issuer to follow its home country practice in lieu of their respective rules and listing standards. We currently intend to rely on the home country practices that will exempt us from (1) having a majority of the board be independent; (2) having a compensation committee or a nominating and corporate governance committee consisting entirely of independent directors; or (3) having regularly scheduled executive sessions with only independent directors each year. See “Item 3. Key Information—D. Risk Factors —Risks Relating to Our Corporate Structure and Governance—As an exempted company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the requirements of Nasdaq Stock Market Rules. These practices may afford fewer protection to shareholders than they would enjoy if we complied fully with the Nasdaq Stock Market Rules.”

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

ITEM 16J. INSIDER TRADING POLICIES

We have adopted an insider trading policy to promote compliance with applicable securities laws and regulations, including those that prohibit insider trading. This policy applies to all officers, directors, employees and consultants of our Group (each, an “Affiliate”) and extends to all activities within and outside an individual’s duties at our group.

The insider trading policy establishes guidelines and procedures for the following:

1. No Trading: No Affiliate can trade any securities or enter into a trading plan while possessing material non-public information about us. Affiliates in possession of such information must wait for a 48-hour period after public disclosure and the lapse of one full trading day on Nasdaq before trading. Additionally, affiliates cannot trade during limited trading periods, regardless of the possession of material information. All transactions of securities by officers, directors, and key employees must be pre-approved by our compliance officer.

2. Trading Window: The insider trading policy establishes a trading window for officers, directors, employees, or consultants, during which they can trade our securities or enter into a trading plan. The trading window begins at the close of business on the second trading day following the public disclosure of our financial results for the previous fiscal year or quarter and ends on the last day of each fiscal quarter. Trading during the trading window does not provide a safe harbor, and affiliates must comply with all policies. If in doubt, consult the compliance officer before trading.

3. No Tipping: No Affiliate may directly or indirectly disclose any material information to anyone who trades in our securities.

4. Confidentiality: No Affiliate may communicate any material information to anyone outside our Group under any circumstances unless approved by the compliance officer in advance, or to anyone within the our group other than on a need-to-know basis.

5. No Comment: No Affiliate may discuss any internal matters or developments of our Group with anyone outside our group, except as required in the performance of regular corporate duties. Unless expressly authorized to do otherwise, if an affiliate receives any inquiries about our group or its securities from any press, investment analyst, investor or other outsiders, or any requests for comments or interviews, they should decline to comment and direct the inquiry or request to the compliance officer or any other office designated by the chief executive officer.

6. Corrective Action: If any information that may be considered material information is unintentionally disclosed, any affiliate with knowledge of the disclosure should notify the compliance officer immediately. This allows our group to determine if any corrective action, such as public disclosure, is necessary.

We are committed to maintaining the highest standards of ethical conduct and have implemented these insider trading policies and procedures to ensure compliance with applicable securities laws and to protect the interests of our shareholders.

ITEM 16K. CYBERSECURITY

Cybersecurity Risk Management and Strategy

To preserve the confidentiality, integrity and availability of our information systems, safeguard our assets, data, intellectual property and network infrastructure, while meeting regulatory requirements, it is crucial to effectively manage cybersecurity risks. To achieve this, we have implemented a comprehensive cybersecurity risk management framework, which is integrated in our overall enterprise risk management system and processes and is internally managed.

Our dedicated IT staff is tasked with assessing, identifying and managing risks related to cybersecurity threats and is responsible for:

- risk assessments designed to help identify material cybersecurity risks to our critical systems, information, products, services and our broader enterprise IT environment;
- development of risk-based action plans to manage identified vulnerabilities and implementation of new protocols and infrastructure improvements;
- cybersecurity incident investigations;
- monitoring threats to sensitive data and unauthorized access to our systems;
- secure access control measures applied to critical IT systems, equipment and devices, designed to prevent unauthorized users, processes and devices from accessing IT systems and data;
- developing and executing protocols to ensure that information regarding cybersecurity incidents is promptly shared with the board of directors, as appropriate, to allow for risk and materiality assessments and to consider disclosure and notice requirements; and
- developing and implementing training on cybersecurity, information security and threat awareness.

There were no cybersecurity incidents during the year ended December 31, 2023, that resulted in an interruption to our operations, known losses of any critical data or otherwise had a material impact on our strategy, financial condition or results of operations. However, the scope and impact of any future incident cannot be predicted. See “Item 3. Key Information—D. Risk Factors” for more information on how material cybersecurity attacks may impact our business.

Governance

Our board of directors acknowledges the significance of robust cybersecurity management programs and actively participates in overseeing and reviewing our cybersecurity risk profile and exposures. Our board of directors receives prompt and timely information regarding any significant cybersecurity incidents, as well as ongoing updates regarding any such incidents. Furthermore, in the event of any significant updates or adjustments to our cybersecurity related policies, our IT staff will present them to the board of directors for their review and approval.

Our IT staff are responsible for the daily management of our cybersecurity efforts. This includes updates and refinement of cybersecurity policies, execution and management of cybersecurity measures, and the preparation of regular reports on cybersecurity execution. Their primary focus is to consistently update our cybersecurity programs and mitigation strategies, ensuring they align with industry best practices and procedures.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

Our consolidated financial statements are included at the end of this annual report.

ITEM 19. EXHIBITS

EXHIBIT INDEX

Exhibit No.	Description of Exhibit
1.1*	Third Amended and Restated Articles of Association of the Registrant, as currently in effect
2.1	Registrant's Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.2 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
2.2*	Description of Securities
4.1	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers (incorporated by reference to Exhibit 10.1 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
4.2	Form of Employment Agreement between the Registrant and each of its executive officers (incorporated by reference to Exhibit 10.2 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
4.3	2022 Share Incentive Plan (incorporated by reference to Exhibit 10.3 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
8.1*	Significant Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 99.1 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
11.2	Insider Trading Policy (incorporated by reference to Exhibit 11.2 to the annual report on Form 20-F (File No. 001-41426) filed with the Securities and Exchange Commission on April 18, 2023)
12.1**	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2**	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1***	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2***	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1**	Consent of Zhong Lun Law Firm
15.2**	Consent of MaloneBailey, LLP
15.3	Consent of Frost & Sullivan (incorporated by reference to Exhibit 99.3 to the registration statement on Form F-1 (File No. 333-265539), as amended, initially filed with the Securities and Exchange Commission on June 10, 2022)
97.1*	Policy Relating to Recovery of Erroneously Awarded Compensation
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Previously filed with the Original Filing.

** Filed herewith.

*** Furnished herewith.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this report on its behalf.

NANO LABS LTD

Date: May 28, 2024

By: /s/ Jianping Kong

Name: Jianping Kong

Title: Chairman and Chief Executive Officer

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Nano Labs Ltd

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Nano Labs Ltd and its subsidiaries (collectively, the “Company”) as of December 31, 2022 and 2023, and the related consolidated statements of operations and comprehensive income (loss), changes in shareholders’ equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2023, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ MaloneBailey, LLP

www.malonebailey.com

We have served as the Company’s auditor since 2021.

Houston, Texas

April 8, 2024

NANO LABS LTD
CONSOLIDATED BALANCE SHEETS
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	As of December 31,		
	2022	2023	
	RMB	RMB	US\$
ASSETS			
Current assets:			
Cash and cash equivalents	87,811,272	48,164,664	6,800,325
Restricted cash	48,112	417,990	59,016
Accounts receivable, net	—	1,739,065	245,537
Inventories, net	102,201,746	12,874,986	1,817,808
Prepayments	71,314,254	24,386,010	3,443,039
Other current assets	27,275,215	37,908,092	5,352,209
Total current assets	288,650,599	125,490,807	17,717,934
Non-current assets:			
Property, plant and equipment, net	21,426,955	169,653,582	23,953,236
Intangible asset, net	48,717,132	47,731,288	6,739,137
Operating lease right-of-use assets	8,447,978	7,424,554	1,048,266
Total non-current assets	78,592,065	224,809,424	31,740,639
TOTAL ASSETS	367,242,664	350,300,231	49,458,573
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)			
Current liabilities:			
Short-term debts	—	20,000,000	2,823,782
Current portion of long-term debts	280,000	3,410,000	481,455
Accounts payable	15,292,843	16,875,586	2,382,649
Advance from customers	124,469,097	107,826,617	15,223,942
Operating lease liabilities, current	4,199,361	3,479,752	491,303
Other current liabilities	39,399,532	90,978,171	12,845,126
Total current liabilities	183,640,833	242,570,126	34,248,257
Non-current liabilities:			
Long-term debts	16,673,316	120,260,783	16,979,511
Operating lease liabilities, non-current	2,514,115	3,730,672	526,730
Total liabilities	202,828,264	366,561,581	51,754,498
Shareholders' equity (deficit):			
Class A ordinary shares (\$0.0002 par value; 121,410,923 shares authorized; 27,159,258 and 41,927,302 shares issued as of December 31, 2022 and 2023, respectively; 27,159,258 and 37,242,359 shares outstanding as of December 31, 2022 and 2023, respectively)*	35,425	50,106	7,074
Class B ordinary shares (\$0.0002 par value; 28,589,078 shares authorized; 28,589,078 shares issued and outstanding as of December 31, 2022 and 2023)*	36,894	36,894	5,209
Additional paid-in capital	354,803,564	428,310,028	60,472,706
Accumulated deficit	(199,207,921)	(452,031,693)	(63,821,945)
Statutory reserves	6,647,109	6,647,109	938,499
Accumulated other comprehensive income	2,099,329	2,254,558	318,319
Total Nano Labs Ltd shareholders' equity (deficit)	164,414,400	(14,732,998)	(2,080,138)
Noncontrolling interests	—	(1,528,352)	(215,787)
Total shareholders' equity (deficit)	164,414,400	(16,261,350)	(2,295,925)
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)	367,242,664	350,300,231	49,458,573

* After giving effect of the reverse stock split, see Note 1.

The accompanying notes are an integral part of these consolidated financial statements

NANO LABS LTD
CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE INCOME (LOSS)
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	For the years ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
Net revenues	39,440,897	983,168,898	78,335,376	11,060,101
Cost of revenues	43,530,708	753,004,179	181,784,576	25,666,000
Gross profit (loss)	(4,089,811)	230,164,719	(103,449,200)	(14,605,899)
Operating expenses:				
Selling and marketing expenses	5,119,072	24,431,649	15,332,523	2,164,785
General and administrative expenses	24,121,823	53,197,248	53,402,101	7,539,794
Research and development expenses	145,455,181	131,851,602	88,601,470	12,509,561
Total operating expenses	174,696,076	209,480,499	157,336,094	22,214,140
Profit (loss) from operations	(178,785,887)	20,684,220	(260,785,294)	(36,820,039)
Other expenses (income):				
Finance expenses (income)	509,764	(4,407,504)	920,055	129,902
Interest income	(3,495,208)	(2,005,580)	(489,098)	(69,055)
Other income	(855,959)	(4,021,582)	(6,846,803)	(966,694)
Total other expenses (income)	(3,841,403)	(10,434,666)	(6,415,846)	(905,847)
Income (loss) before income tax provision	(174,944,484)	31,118,886	(254,369,448)	(35,914,192)
Income tax provision	—	—	(17,394)	(2,456)
Net income (loss)	(174,944,484)	31,118,886	(254,352,054)	(35,911,736)
Less: net loss attributable to noncontrolling interests	—	—	(1,528,282)	(215,777)
Net income (loss) attributable to Nano Labs Ltd	(174,944,484)	31,118,886	(252,823,772)	(35,695,959)
Comprehensive income (loss):				
Net income (loss)	(174,944,484)	31,118,886	(254,352,054)	(35,911,736)
Other comprehensive income (loss)				
Foreign currency translation adjustment	(2,467,327)	4,566,656	155,159	21,907
Total comprehensive income (loss)	(177,411,811)	35,685,542	(254,196,895)	(35,889,829)
Comprehensive loss attributable to noncontrolling interests	—	—	(1,528,352)	(215,787)
Comprehensive income (loss) attributable to Nano Labs Ltd	(177,411,811)	35,685,542	(252,668,543)	(35,674,042)
Net income (loss) per ordinary share attributable to Nano Labs Ltd				
–Basic*	(3.89)	0.58	(4.29)	(0.61)
–Diluted*	(3.89)	0.58	(4.29)	(0.61)
Weighted average number of shares used in per share calculation:				
– Basic*	44,938,990	53,244,500	58,885,071	58,885,071
– Diluted*	44,938,990	53,307,605	58,885,071	58,885,071

* After giving effect of the reverse stock split, see Note 1.

The accompanying notes are an integral part of these consolidated financial statements

NANO LABS LTD
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIT)
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	Ordinary Shares*		Class A Ordinary Shares*		Class B Ordinary Shares*		Additional Paid-in Capital	Statutory Reserves	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interest	Total Shareholders' Equity (Deficit)
	Number of Shares	Amount RMB	Number of Shares	Amount RMB	Number of Shares	Amount RMB						
Balance, January 1, 2021	39,624,502	51,135	—	—	—	—	163,747	—	(48,735,214)	—	—	(48,520,332)
Issuance of ordinary shares for cash	12,270,500	15,835	—	—	—	—	201,184,154	—	—	—	—	201,199,989
Cash contribution from shareholders	—	—	—	—	—	—	51,135	—	—	—	—	51,135
Share-based compensation	—	—	—	—	—	—	19,344	—	—	—	—	19,344
Net loss	—	—	—	—	—	—	—	—	(174,944,484)	—	—	(174,944,484)
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	(2,467,327)	—	(2,467,327)
Balance, December 31, 2021	<u>51,895,002</u>	<u>66,970</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>201,418,380</u>	<u>—</u>	<u>(223,679,698)</u>	<u>(2,467,327)</u>	<u>—</u>	<u>(24,661,675)</u>
Re-designation of ordinary shares to Class A and Class B ordinary shares immediately prior the completion of initial public offering	(51,895,002)	(66,970)	23,305,924	30,076	28,589,078	36,894	—	—	—	—	—	—
Share issuance initial public offering, net of issuance cost	—	—	1,770,000	2,388	—	—	111,937,012	—	—	—	—	111,939,400
Share issuance following initial public offering, net of issuance cost	—	—	2,083,334	2,961	—	—	32,100,825	—	—	—	—	32,103,786
Net income	—	—	—	—	—	—	—	—	31,118,886	—	—	31,118,886
Share-based compensation	—	—	—	—	—	—	9,347,347	—	—	—	—	9,347,347
Transfer to reserve	—	—	—	—	—	—	—	6,647,109	(6,647,109)	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	4,566,656	—	4,566,656
Balance, December 31, 2022	<u>—</u>	<u>—</u>	<u>27,159,258</u>	<u>35,425</u>	<u>28,589,078</u>	<u>36,894</u>	<u>354,803,564</u>	<u>6,647,109</u>	<u>(199,207,921)</u>	<u>2,099,329</u>	<u>—</u>	<u>164,414,400</u>
Issuance of ordinary shares	—	—	9,578,544	13,947	—	—	72,788,053	—	—	—	—	72,802,000
Issuance of ordinary shares upon the exercise of stock options	—	—	504,557	734	—	—	—	—	—	—	—	734
Share-based compensation	—	—	—	—	—	—	718,411	—	—	—	—	718,411
Net loss	—	—	—	—	—	—	—	—	(252,823,772)	—	(1,528,282)	(254,352,054)
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	155,229	(70)	155,159
Balance, December 31, 2023	<u>—</u>	<u>—</u>	<u>37,242,359</u>	<u>50,106</u>	<u>28,589,078</u>	<u>36,894</u>	<u>428,310,028</u>	<u>6,647,109</u>	<u>(452,031,693)</u>	<u>2,254,558</u>	<u>(1,528,352)</u>	<u>(16,261,350)</u>
Balance, December 31, 2023, in US\$	<u>—</u>	<u>—</u>	<u>37,242,359</u>	<u>7,074</u>	<u>28,589,078</u>	<u>5,209</u>	<u>60,472,706</u>	<u>938,499</u>	<u>(63,821,945)</u>	<u>318,319</u>	<u>(215,787)</u>	<u>(2,295,925)</u>

* After giving effect of the reverse stock split, see Note 1.

The accompanying notes are an integral part of these consolidated financial statements

NANO LABS LTD
CONSOLIDATED STATEMENTS OF CASH FLOWS
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	For the Years Ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
Cash flows from operating activities:				
Net income (loss)	(174,944,484)	31,118,886	(254,352,054)	(35,911,736)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Amortization of right-of-use assets	2,920,433	5,505,422	5,752,591	812,203
Depreciation and amortization expenses	2,609,699	3,928,131	4,422,560	624,417
Gain (loss) on lease termination	(12,088)	—	113,588	16,037
Share-based compensation	19,344	9,347,347	718,411	101,432
Inventory write-down	26,753,768	184,073,191	60,767,978	8,579,776
Changes in assets and liabilities:				
Accounts receivable, net	1,165,716	—	(1,732,378)	(244,593)
Inventories, net	(233,385,726)	(71,446,484)	28,782,243	4,063,739
Prepayments	(364,369,453)	304,300,103	47,159,593	6,658,420
Other current assets	(38,564,595)	51,740,635	511,358	72,198
Accounts payable	1,937,951	10,591,202	898,564	126,867
Accounts payable - related party	(4,716,981)	—	—	—
Advance from customers	851,987,235	(794,302,470)	(16,662,392)	(2,352,548)
Operating lease liabilities, current	(4,687,184)	(5,330,448)	(4,349,974)	(614,169)
Other current liabilities	5,019,233	(4,466,304)	(5,504,025)	(777,108)
Net cash provided by (used in) operating activities	71,732,868	(274,940,789)	(133,473,937)	(18,845,065)
Cash flows from investing activities:				
Purchases of property, plant and equipment	(8,692,683)	(17,531,162)	(105,482,822)	(14,893,024)
Refund of prepayment for property, plant and equipment	550,000	—	—	—
Purchases of short-term investment	(32,293,440)	—	—	—
Proceeds from sales of short-term investments	—	33,640,500	—	—
Purchases of intangible assets	—	(49,292,208)	—	—
Loan provided to a related party	(100,000)	—	—	—
Collection of loan provided to a related party	4,490,000	—	—	—
Net cash used in investing activities	(36,046,123)	(33,182,870)	(105,482,822)	(14,893,024)
Cash flows from financing activities:				
Repayment to related parties	(31,355,000)	—	—	—
Proceeds from issuance of ordinary shares	201,199,989	144,043,186	72,802,734	10,278,952
Cash contribution from shareholders	51,135	—	—	—
Proceeds from bank loans	—	17,093,316	128,247,467	18,107,144
Repayments of bank loans	—	(140,000)	(1,530,000)	(216,019)
Repayment of loan payable	(5,000,000)	—	—	—
Net cash provided by financing activities	164,896,124	160,996,502	199,520,201	28,170,077
Effects of exchange rate changes on cash, cash equivalents and restricted cash	(2,062,387)	1,132,887	159,828	22,566
Net increase (decrease) in cash, cash equivalents and restricted cash	198,520,482	(145,994,270)	(39,276,730)	(5,545,446)
Cash, cash equivalents and restricted cash at beginning of the year	35,333,172	233,853,654	87,859,384	12,404,787
Cash, cash equivalents and restricted cash at end of the year	233,853,654	87,859,384	48,582,654	6,859,341
Supplemental cash flow disclosures:				
Interest paid	—	180,619	3,773,028	532,710
Income taxes paid	276,186	89,169	—	—
Non-cash investing and financing activities:				
Operating lease right-of-use asset obtained in exchange for operating lease liability	—	4,557,092	5,015,808	708,177
Liabilities assumed in connection with purchase of property, plant and equipment	—	—	46,180,063	6,520,121

The accompanying notes are an integral part of these consolidated financial statements

NANO LABS LTD
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(all amounts in RMB, except share or as otherwise noted)

1. Organization and nature of operations

Nano Labs Ltd (“Nano Labs”), incorporated on January 8, 2021, is a holding company, as an exempted company with limited liability in the Cayman Islands. Nano Labs principally engages in fabless integrated circuit (“IC”) design and sale of product solutions by integrating its self-designed IC products in the People’s Republic of China (“PRC”) and other countries and regions. The Company utilizes third-party suppliers to fabricate, pack and test the IC products.

Prior to the incorporation of the Company, the Company’s business was carried out by Zhejiang Haowei Technology Co., Ltd. (“Zhejiang Haowei”) and its subsidiaries. Zhejiang Haowei was established by Mr. Jianping Kong, the principal shareholder, chairman and chief executive officer, in July 2019. Nano Labs underwent a series of onshore and offshore reorganizations, which were completed in September 2021 (the “Reorganization”).

Immediately before and after the Reorganization, the controlling shareholders of Zhejiang Haowei controlled Zhejiang Haowei and Nano Labs; therefore, for accounting purposes, the Reorganization is accounted for as a transaction of entities under common control. Accordingly, the accompanying consolidated financial statements have been prepared as if the current corporate structure had been in existence throughout the periods presented.

The Company does not conduct any substantive operations on its own but instead conducts its business operations through its subsidiaries. As of the date of this report, the Company’s major subsidiaries are as follows:

Name of subsidiaries	Date of incorporation	Place of incorporation	Ownership percentage	Principal activities
Zhejiang Haowei Technology Co., Ltd. (“Zhejiang Haowei”)	July 16, 2019	Hangzhou, China	100%	Research and development of ICs
Zhejiang Nanomicro Technology Co., Ltd. (“Zhejiang Nanomicro”)	July 16, 2019	Hangzhou, China	100%	Research and development of ICs
Zhejiang NanoBlock Technology Co., Ltd.	July 16, 2019	Hangzhou, China	100%	Research and development of ICs
Zhejiang Ipollo Technology Co., Ltd.	August 18, 2020	Hangzhou, China	100%	Distribution of products
Nano Labs HK Limited	September 8, 2020	Hong Kong	100%	Investment
Nano Labs Inc	December 22, 2020	BVI	100%	Investment

Name of subsidiaries	Date of incorporation	Place of incorporation	Ownership percentage	Principal activities
Zhejiang Weike Technology Co., Ltd.	June 2, 2021	Hangzhou, China	100%	Research and development of software
IPOLLO PTE. LTD. (formerly IPOLLO MINER PTE.LTD.)	June 9, 2021	Singapore	100%	Distribution of products
Ipollo Tech Inc	June 29, 2021	BVI	100%	Investment
Nano Tech Cayman Ltd	July 6, 2021	Cayman	100%	Investment
Nano Technology HK Limited	July 7, 2021	Hong Kong	100%	Investment
Ipollo HK Limited	July 7, 2021	Hong Kong	100%	Distribution of products
Zhejiang Metaverse Technology Co., Ltd.	August 12, 2021	Hangzhou, China	100%	Investment
Ipollo Tech Ltd	October 27, 2021	Cayman	100%	Investment
Haawei Technology (Shaoxing) Co., Ltd.	November 3, 2021	Shaoxing, China	100%	Investment
Shenzhen Matamata Technology Co., Ltd.	November 17, 2021	Shenzhen, China	100%	Distribution of products
Shenzhen Matavos Technology Co., Ltd.	December 21, 2021	Shenzhen, China	100%	Distribution of products
Tsuki Inc	January 7, 2022	United States	100%	Distribution of products
Metaski (Shaoxing) Technology Co., Ltd.	January 13, 2022	Shaoxing, China	100%	Distribution of products
Haoweiverse (Shaoxing) Technology Co., Ltd.	January 13, 2022	Shaoxing, China	65%	Plant and distribution of products
Metameta (Shaoxing) Technology Co., Ltd.	January 25, 2022	Shaoxing, China	100%	Distribution of products
Ipolloverse HK Limited	May 18, 2022	Hong Kong	70%	Research and development
Metaverse (Shaoxing) Technology Co., Ltd.	May 20, 2022	Shaoxing, China	100%	Distribution of products
Ipolloverse Cayman Ltd	May 27, 2022	Cayman	70%	Investment
Ipolloverse Tech Inc	May 30, 2022	BVI	70%	Investment
Hangzhou Meta Technology Co., Ltd.	October 21, 2022	Hangzhou, China	100%	Distribution of products

Nano Labs and its consolidated subsidiaries are collectively referred to herein as the “Company”, “we” and “us”, unless specific reference is made to an entity.

Reverse stock split

On January 31, 2024, a two-for-one reverse stock split (the “reverse stock split”) of the Company’s issued and outstanding ordinary shares, restricted stock units and stock options was effected. The par value of Class A and Class B ordinary shares were changed from \$0.0001 to \$0.0002. All information related to the Company’s ordinary shares, restricted stock units and stock options, as well as all per share data included in these financial statements and footnotes have been retrospectively adjusted to reflect the reverse stock split for all periods presented. Also see Note 19.

Liquidity

During the year ended December 31, 2023, the Company incurred net loss of RMB254 million, and the net cash used in operating activities was RMB133 million. As of December 31, 2023, the Company had a working capital deficit of RMB117 million and accumulated deficit of RMB452 million. Historically, the Company has relied principally on both operational sources of cash and non-operational sources of financing from investors to fund its operations and business development. The Company’s ability to continue as a going concern is dependent on management’s ability to successfully execute its business plan, which includes increasing revenues while controlling costs and operating expenses, as well as, generating operational cash flows and continuing to gain support from outside sources of financing. The Company expects to launch Cuckoo 3.0 Series products in 2024 and has received certain advance payments from customers as of the date of this report. In addition, the Company has been continuously receiving financing support from investors and related parties through the issuances of ordinary shares and credit facilities. Refer to Note 11 and Note 10 for details of the Company’s ordinary shares financing activities and credit facilities. Moreover, the Company has the ability to adjust the pace of its operation expansion and control the operating expenses.

As a result, the Company’s cash flow projections for the period after one year from the date that the consolidated financial statements are issued indicate that the Company’s existing cash and cash equivalents, together with the operating cash flows will be sufficient to cover the liquidity needs that become due within one year after the date that the consolidated financial statements are issued. Management’s plans described above have alleviated the previously identified substantial doubt about the Company’s ability to continue as a going concern. The accompanying consolidated financial statements are prepared in accordance with generally accepted accounting principles applicable to a going concern. However, the Company may need additional capital in the future to fund the continued operations of the Company. There can be no assurance that the Company will be successful in acquiring additional financing, that the Company’s projections of its future working capital needs will prove accurate, or that any additional financing would be sufficient to continue operations in future years.

2. Summary of Significant Accounting Policies

Basis of preparation

The accompanying consolidated financial statements and related notes have been prepared in accordance with accounting principles generally accepted in the United States of America (“US GAAP”) for information pursuant to the rules and regulations of the SEC.

Significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements are summarized below.

Use of estimates

The preparation of the Company’s consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Significant accounting estimates reflected in the Company’s consolidated financial statements including, but not limited to, inventory write-down, impairment of long-lived assets, valuation allowance for deferred tax assets and share-based compensation.

Principles of consolidation

The Company’s consolidated financial statements include the financial statements of the Company and its subsidiaries. All transactions and balances among the Company and its subsidiaries have been eliminated upon consolidation.

Functional currency and foreign currency translation

The Company uses Renminbi (“RMB”) as its reporting currency. The functional currency of the Company and its subsidiaries incorporated outside of PRC is the United States dollar (“US\$”), while the functional currency of the PRC entities in the Company is RMB as determined based on the criteria of ASC 830, “*Foreign Currency Matters*”.

Transactions denominated in other than the functional currencies are re-measured into the functional currency of the entity at the exchange rates prevailing on the transaction dates. Financial assets and liabilities denominated in other than the functional currency are re-measured at the balance sheet date exchange rate. The resulting exchange differences are included in the consolidated statements of operations and comprehensive income (loss).

The financial statements of the Company are translated from the functional currency to the reporting currency, RMB. Assets and liabilities of the Company and its subsidiaries incorporated outside of PRC are translated into RMB at fiscal year-end exchange rates. Income and expense items are translated at average exchange rates prevailing during the fiscal year, representing the index rates stipulated by the People’s Bank of China. Translation adjustments arising from these are reported as foreign currency translation adjustments and are shown as a separate component of shareholders’ equity (deficit) on the consolidated financial statement.

Convenience translation

The United States dollar (“US\$”) amounts disclosed in the accompanying financial statements are presented solely for the convenience of the readers. Translations of amounts from RMB into US\$ were calculated at the rate of US\$1.00=RMB7.0827 on December 31, 2023, representing the central parity rate on December 31, 2023 published by the People’s Bank of China. No representation is made that the RMB amounts could have been, or could be, converted into US\$ at that rate on December 31, 2023, or at any other rate.

Concentration of credit risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company places its cash and cash equivalents with financial institutions with high credit ratings and quality.

Fair value measurement

The Company adopted the guidance of Accounting Standards Codification (“ASC”) 820 for fair value measurements which clarifies the definition of fair value, prescribes methods for measuring fair value, and establishes a fair value hierarchy to classify the inputs used in measuring fair value as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Observable, market-based inputs, other than quoted prices, in active markets for similar assets or liabilities.

Level 3: Unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

ASC 820 also describes three main approaches to measuring the fair value of assets and liabilities:

(1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

Financial instruments included in current assets and current liabilities are reported in the consolidated balance sheets at face value or cost, which approximate to fair value because of their short-term maturities.

Related party transactions

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operational decisions. Parties are also considered to be related if they are subject to common control or common significant influence. A transaction is considered to be a related party transaction when there is a transfer of resources or obligations between related parties. Related parties may be individuals or corporate entities.

Transactions involving related parties cannot be presumed to be carried out on an arm's-length basis, as the requisite conditions of competitive, free market dealings may not exist. Representations about transactions with related parties, if made, shall not imply that the related party transactions were consummated on terms equivalent to those that prevail in arm's-length transactions unless such representations can be substantiated. It is not, however, practical to determine the fair value of amounts due from/to related parties due to their related party nature.

Cash and cash equivalents

Cash and cash equivalents include cash in bank and time deposits placed with banks or other financial institutions, which have original maturities of three months or less and are readily convertible to known amounts of cash. As of December 31, 2022 and 2023, cash and cash equivalents in banks was RMB87,811,272 and RMB48,164,664, respectively.

Restricted cash

Restricted cash mainly represents the bank deposit frozen by the court as a result of legal proceedings. As of December 31, 2022 and 2023, the Company had restricted cash RMB48,112 and RMB417,990, respectively.

Inventories, net

Inventories, consist of raw materials, work in process and finished goods. Inventories are stated at the lower of cost and net realizable value. Cost of inventory is determined using the weighted average cost method. Adjustments are recorded to write down the cost of inventory to the estimated net realizable value due to slow-moving and obsolete inventory, which is dependent upon factors such as historical and forecasted consumer demand, and promotional environment.

Prepayments

Prepayments primarily consist of advances to suppliers for future inventory purchases, prepaid processing fees and prepaid expenses for research and development activities.

Property, plant and equipment, net

Property, plant and equipment are stated at historical cost less accumulated depreciation and impairment loss, if any. Depreciation is calculated using the straight-line method over their estimated useful lives. The estimated useful lives are as follows:

Computers and electronic equipment	2 to 3 years
Office furniture	5 years
Transportation equipment	4 years

Leasehold improvements are depreciated using the straight-line method over the shorter of the estimated useful life of the asset or the remaining lease term.

Construction in progress represents assets under construction. All direct costs relating to the construction are capitalized as construction in progress. Construction in progress is not depreciated until the asset is placed in service.

Intangible asset, net

The Company's intangible asset with definite useful lives primarily consists of a franchise right and land use right. According to the law of PRC, the government owns all the land in the PRC. Companies or individuals are authorized to possess and use the land only through land use rights granted by the Chinese government for a specified period of time. The Company amortizes its franchise right and land use right on a straight-line basis over the contractual term. The estimated useful lives are as follows:

Franchise right	2 years
Land use right	50 years

Impairment of long-lived assets

For long-lived assets including property, plant and equipment, right-of-use assets, and intangible assets with finite lives, the Company evaluates for impairment whenever events or changes (triggering events) indicate that the carrying amount of an asset may no longer be recoverable. The Company recognizes an impairment loss when the sum of expected undiscounted future cash flows is less than the carrying amount of the asset. The amount of impairment is measured as the difference between the asset's estimated fair value and its book value. For the years ended December 31, 2021, 2022 and 2023, no impairment of long-lived assets was recognized.

Revenue from contracts with customers

Consistent with the criteria of ASC 606 "Revenue from Contracts with Customers", the Company recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to receive in exchange for those goods or services. Revenue consists of the invoiced value for the sales net of value-added tax ("VAT"), business tax and applicable local government levies.

Product sales revenue

The Company generates revenue primarily from the sale of product solutions by integrating its self-designed IC products (e.g., high throughput computing, or HTC, solutions) directly to a customer, such as a business or individual engaged in mining activities.

The Company recognizes revenue at a point in time when the control of the products has been transferred to customers. The transfer of control is considered complete when products have been picked up by or shipped to customers. The Company's sales arrangements usually require prepayment before the delivery of products. The advance payment is not considered a significant financing component. The Company elected to account for shipping and handling fees as a fulfillment cost. The product sales contracts generally include product warranty provisions. The Company did not accrue warranty liabilities for the product sales as the financial impacts of the warranty have historically been and are expected to continue to be immaterial. The Company estimates sales return based on historical experiences and there was no allowance for sales return recorded during the years ended December 31, 2021, 2022 and 2023.

Service revenue

The Company also generates revenue from its design and technical services under separate contracts. Revenues from the design and technical service to the customers are recognized at a point in time when services are provided.

Revenue disaggregation

In accordance with ASC 606, the Company disaggregates revenue from contracts with customers by revenue stream. The Company determined that disaggregating revenue into these categories meets the disclosure objective in ASC 606 which is to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by regional economic factors. The following table summarizes the net revenues generated from different revenue streams:

	For the Years Ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Product sales revenue	39,440,897	920,653,911	71,321,462
Service revenue	—	62,514,987	7,013,914
Net revenues	39,440,897	983,168,898	78,335,376

Contract liabilities

Contract liabilities are recorded when consideration is received from a customer prior to transferring the control of goods or services to the customer. As of December 31, 2022 and 2023, the Company recorded contract liabilities of RMB124,469,097 and RMB107,826,617, respectively, which were presented as advance from customers on the accompanying consolidated balance sheets. During the years ended December 31, 2021, 2022 and 2023, the Company recognized RMB4,241,270, RMB804,875,532 and RMB23,740,945 of contract liabilities as revenue, respectively.

Cost of revenues

Amounts recorded as cost of revenue relate to direct expenses incurred in order to generate revenue. Such costs are recorded as incurred. Cost of revenues consists of product costs and service costs. Product costs include costs of raw material, contract manufacturers for production, shipping and handling costs, and warehousing costs. Service costs include labor costs and material costs. During the years ended December 31, 2021, 2022 and 2023, the Company recorded inventory write-down of RMB26,753,768, RMB184,073,191 and RMB60,767,978 as cost of revenues, respectively.

Selling and marketing expenses

Selling and marketing expenses consist primarily of advertising and promotion, salaries, and shipping and handling costs incurred during the selling activities. Advertising and transportation expenses are charged to expense as incurred.

Advertising and promotion costs in the amounts of RMB992,996, RMB10,901,200 and RMB1,278,586 for the years ended December 31, 2021, 2022 and 2023, respectively, are included in selling and marketing expenses.

Shipping and handling costs amounting to RMB371,769, RMB4,233,084 and RMB2,122,358 for the years ended December 31, 2021, 2022 and 2023, respectively, are included in selling and marketing expenses.

Research and development expenses

Research and development expenses consist primarily of salary and welfare for research and development personnel, raw materials used, consulting and contractor expenses, testing and processing expenses and other expenses associated with research and development activities. The Company recognizes research and development expenses as expense when incurred.

Leases

Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Right-of-use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. When determining the lease term, the Company includes options to extend or terminate the lease when it is reasonably certain that it will exercise that option, if any. As the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate, which it calculates based on the credit quality of the Company and by comparing interest rates available in the market for similar borrowings, and adjusting this amount based on the impact of collateral over the term of each lease.

The Company elected not to record assets and liabilities on its consolidated balance sheet for lease arrangements with terms of 12 months or less. The Company recognizes lease expenses for such leases on a straight-line basis over the lease term.

Employee social security and welfare benefits

Employees of the Company in the PRC are entitled to staff welfare benefits including pension, work-related injury benefits, maternity insurance, medical insurance, unemployment benefit and housing fund plans through a PRC government-mandated multi-employer defined contribution plan. The Company is required to contribute to the plan based on certain percentages of the employees' salaries, up to a maximum amount specified by the local government.

The PRC government is responsible for the medical benefits and the pension liability to be paid to these employees and the Company's obligations are limited to the amounts contributed and no legal obligation beyond the contributions made.

Share-based compensation

Restricted shares and options granted to employees and directors are accounted for under ASC Topic 718, "Compensation - Stock compensation" ("ASC 718"). In accordance with ASC 718, the Company determines whether restricted shares or options should be classified and accounted for as an equity award. All grants of restricted shares and options to employees and directors classified as equity awards are recognized in the financial statements based on their grant date fair values. The value of the portion of the award that is ultimately expected to vest is recognized as compensation expense over the requisite service periods in the statements of operations. In addition, compensation expense must be recognized for the change in fair value of any awards modified, repurchased or cancelled after the grant date.

The fair value of stock option granted is estimated on the grant date using the Binomial or Black-Scholes model.

Income taxes

The Company accounts for income taxes under the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based on the differences between the financial reporting and income tax bases of assets and liabilities and are measured using the tax income rates that will be in effect when the differences are expected to reverse. A valuation allowance is recorded if it is more likely than not that some portion or all of the deferred income tax assets will not be realized in the foreseeable future.

In accordance with the provisions of ASC 740, "Income taxes", the Company recognizes in its financial statements the impact of a tax position if a tax return position or future tax position is "more likely than not" to be sustained upon examination based solely on the technical merits of the position. Tax positions that meet the recognition threshold are measured using a cumulative probability approach, at the largest amount of tax benefit that has a greater than fifty percent likelihood of being realized upon settlement. Interest and penalties arising from underpayment of income taxes are computed in accordance with the applicable tax law and is classified in the consolidated statements of operations as income tax expense.

Noncontrolling interests

For the Company's consolidated subsidiaries, noncontrolling interests are recognized to reflect the portion of their equity that is not attributable, directly or indirectly, to the Company as the controlling shareholder. Noncontrolling interests are classified as a separate line item in the equity section of the Company's consolidated balance sheets and have been separately disclosed in the Company's consolidated statements of operations and comprehensive income (loss).

Comprehensive income (loss)

Comprehensive income/(loss) is defined as the changes in equity of the Company during a period from transactions and other events and circumstances excluding transactions resulting from investments from shareholders and distributions to shareholders. Comprehensive income (loss) for the periods presented includes net income (loss) and foreign currency translation adjustments.

Earnings (loss) per share

The Company computes earnings (loss) per share in accordance with ASC 260, "Earnings per Share". ASC 260 requires companies to present basic and diluted earnings (loss) per share. Basic earnings (loss) per share is computed by dividing net income (loss) attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings (loss) per share is calculated by dividing net income (loss) attributable to ordinary shareholders as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary equivalents shares outstanding during the year. Dilutive equivalent shares are excluded from the computation of diluted earnings (loss) per share if their effects would be anti-dilutive. Ordinary share equivalents consist of the ordinary shares issuable in connection with the Company's ordinary shares issuable upon the conversion of the share-based awards, using the treasury stock method.

Segment Reporting

The Company uses the "management approach" in determining reportable segments. The management approach considers the internal organization and reporting used by the Company's chief operating decision maker for making operating decisions and assessing performance as the source for determining the Company's reportable segments. The Company's chief operating decision maker has been identified as the chief executive officer of the Company who reviews financial information of operating segments based on U.S. GAAP. The chief operating decision maker now reviews results analyzed by marketing channel. This analysis is only presented at the revenue level with no allocation of direct or indirect costs. Consequently, the Company has determined that it has only one operating segment. For the years ended December 31, 2021, 2022 and 2023, substantially all of the Company's long-lived assets are located in the PRC. The Company's net revenues by geographical location of customers are as follows:

	For the Years Ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
PRC	37,430,935	906,347,962	57,485,526
The United States	368,532	16,278,352	7,115,353
Others	1,641,430	60,542,584	13,734,497
Net revenues	39,440,897	983,168,898	78,335,376

Recently adopted or issued accounting pronouncements

In June 2016, the FASB issued ASU 2016-13, “Measurement of Credit Losses on Financial Instruments (Topic 326)”, and issued subsequent amendments to the initial guidance, transitional guidance and other interpretive guidance between November 2018 and March 2020 within ASU 2018-19, ASU 2019-04, ASU 2019-05, ASU 2019-11, ASU 2020-02 and ASU 2020-03. ASU 2016-13 introduces new guidance for credit losses on instruments within its scope, which significantly changes the way entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses expected to occur over their remaining life, instead of when incurred. The Company adopted ASU 2016-13 on January 1, 2023 and the adoption did not have a material impact on its consolidated financial statements.

In October 2023, the FASB issued ASU 2023-06, “Disclosure Improvements – Codification Amendment in Response to the SEC’s Disclosure Update and Simplification Initiative.” This ASU modified the disclosure and presentation requirements of a variety of codification topics by aligning them with the SEC’s regulations. The amendments to the various topics should be applied prospectively, and the effective date will be determined for each individual disclosure based on the effective date of the SEC’s removal of the related disclosure. If the SEC has not removed the applicable requirements from Regulation S-X or Regulation S-K by June 30, 2027, then this ASU will not become effective. Early adoption is prohibited. The Company does not expect the amendments of this accounting standard update to have a material impact on its consolidated financial statements and related disclosures.

In November 2023, the FASB issued ASU 2023-07 “Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures” which expands annual and interim disclosure requirements for reportable segments, primarily through enhanced disclosures about significant segment expenses. ASU 2023-07 is effective for annual periods beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the potential effect that the updated standard will have on its consolidated financial statement disclosures.

In December 2023, the FASB issued ASU No. 2023-09, “Income Taxes (Topic 740): Improvement to Income Tax Disclosures” to enhance the transparency and decision usefulness of income tax disclosures, primarily related to the rate reconciliation and income taxes paid information. ASU 2023-09 is effective for annual periods beginning after December 15, 2024, on a prospective basis. Early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements and related disclosures.

3. Inventories, net

Inventories, net consist of the following:

	As of December 31,	
	2022	2023
	RMB	RMB
Raw materials	69,914,306	56,952,428
Work in process	158,693,203	130,609,171
Finished goods	81,807,783	90,377,688
Less: write-down of inventories	(208,213,546)	(265,064,301)
Inventories, net	102,201,746	12,874,986

4. Prepayments

Prepayments consist of the following:

	As of December 31,	
	2022	2023
	RMB	RMB
Prepayments – inventories and processing fee	64,813,532	14,645,763
Prepayments – design fees	3,850,329	7,162,700
Prepayments – others	2,650,393	2,577,547
Total	71,314,254	24,386,010

5. Other current assets

Other current assets consist of the following:

	As of December 31,	
	2022	2023
	RMB	RMB
Value-added tax recoverable	23,731,587	34,041,675
Deposits	3,434,080	2,361,968
Others	109,548	1,504,449
Total	27,275,215	37,908,092

6. Property, plant and equipment, net

Property, plant and equipment, net consist of the following:

	As of December 31,	
	2022	2023
	RMB	RMB
Cost:		
Computers and electronic equipment	9,537,316	12,098,631
Office furniture	266,252	266,252
Leasehold improvement	1,550,648	1,550,648
Transportation equipment	41,014	41,014
Construction in progress	16,119,419	165,221,605
Less: Accumulated depreciation	(6,087,694)	(9,524,568)
Property, plant and equipment, net	21,426,955	169,653,582

Depreciation expenses recognized for the years ended December 31, 2021, 2022 and 2023 were RMB2,510,398, RMB3,353,055 and RMB3,436,716, respectively.

7. Intangible asset, net

Intangible asset, net consists of the following:

	As of December 31,	
	2022	2023
	RMB	RMB
Cost:		
Land use right	49,292,208	49,292,208
Franchise right	334,865	334,865
Less: Accumulated amortization	(909,941)	(1,895,785)
Intangible asset, net	48,717,132	47,731,288

Amortization expense for the years ended December 31, 2021, 2022 and 2023 amounted to RMB99,301, RMB575,076 and RMB985,844, respectively.

As of December 31, 2022 and 2023, land use right with net book value of RMB48,717,132 and RMB47,731,288 was pledged as collateral under a loan arrangement (also see Note 10).

As of December 31, 2023, the future estimated amortization expenses are as below.

Years ended December 31,	Estimated amortization expense RMB
2024	985,844
2025	985,844
2026	985,844
2027	985,844
2028	985,844
Thereafter	42,802,068
Total	47,731,288

8. Operating leases

The Company entered into various operating lease agreements for offices space. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The following component of lease cost are included in the Company's consolidated statements of operations and comprehensive income (loss):

	For the year ended December 31, 2021	For the year ended December 31, 2022	For the year ended December 31, 2023
	RMB	RMB	RMB
Operating lease cost	3,277,780	11,385,312	6,051,298
Short-term lease cost	1,867,850	295,564	198,306
Total lease cost	<u>5,145,630</u>	<u>11,680,876</u>	<u>6,249,604</u>

Supplemental disclosure related to operating leases were as follows:

	For the year ended December 31, 2021	For the year ended December 31, 2022	For the year ended December 31, 2023
	RMB	RMB	RMB
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows for operating leases	5,068,864	5,822,406	4,648,690
		As of December 31, 2022	As of December 31, 2023
Weighted average remaining lease term of operating leases (years)		1.65	3.53
Weighted average discount rate of operating leases		6.24%	6.24%

The following table summarizes the maturity of operating lease liabilities as of December 31, 2023:

As of December 31,	<u>2023</u> RMB
2024	3,605,781
2025	1,194,360
2026	1,194,360
2027	1,197,632
2028	602,088
Total lease payments	7,794,221
Less: imputed interest	(583,797)
Total lease liabilities	<u>7,210,424</u>

9. Other current liabilities

Other current liabilities consist of the following:

	As of December 31, 2022	As of December 31, 2023
	RMB	RMB
Salary accrual	8,536,985	7,013,473
Deposit	10,000,000	10,000,000
Accrued construction in progress	—	46,180,063
Tax accrual	13,609,170	13,604,797
Others	7,253,377	14,179,838
Total	<u>39,399,532</u>	<u>90,978,171</u>

10. Short-term and long-term debts

Short-term debts

On September 21, 2023, the Company entered into a credit facility (the “Credit Facility”) up to RMB20,000,000 to be used for working capital and general corporate purposes. The Credit Facility has a one-year term expiring on September 20, 2024 and was guaranteed by Mr. Jianping Kong, the principal shareholder, chairman and chief executive officer, Mr. Qifeng Sun, the principal shareholder and vice chairman, and two subsidiaries within the Company’s organizational structure. As of December 31, 2023, borrowings under the Credit Facility bear interest rates ranging from 3.7% to 4% per annum. Amounts borrowed under the Credit Facility, once repaid, can be borrowed again from time to time. During the year ended December 31, 2023, the Company borrowed RMB20,000,000 under the Credit Facility and repaid nil.

Long-term debts

On August 11, 2022, the Company entered into a line of credit agreement with Zhejiang Shaoxing Ruifeng Rural Commercial Bank for a credit line up to RMB100,000,000 with a due date on July 25, 2030. In June 2023, the credit line was increased to a maximum amount of RMB148,000,000, with guarantee provided by Mr. Jianping Kong, the principal shareholder, chairman and chief executive officer starting from July 2023. During the year ended December 31, 2022 and 2023, the Company borrowed RMB17,093,316 and RMB108,247,467 under the credit line and repaid RMB140,000 and RMB1,530,000, respectively. The loans bear an annual interest rate of 5.4% with repayment dates for parts of the loan ranging from September 20, 2022 to July 25, 2030. The loans are pledged by the land use right of the Company (mentioned in Note 7).

As of December 31, 2023, the future maturities of long-term debts are as below:

As of December 31,	RMB
2024	3,410,000
2025	4,630,000
2026	5,850,000
2027	7,070,000
2028	8,290,000
Thereafter	94,420,783
Total	<u>123,670,783</u>

11. Shareholders' equity (deficit)

On January 8, 2021, Nano Labs Ltd was incorporated in the Cayman Islands. The authorized share capital of the Company is 250,000,000 ordinary shares with par value of US\$0.0002 each after giving effects of the reverse stock split as described in Note 1.

In April and May 2021, the Company entered into agreements with fourteen new shareholders to issue a total of 10,375,500 ordinary shares for total cash proceeds of RMB 81,000,000 (approximately US\$12,600,000). In August 2021, the Company entered into agreements with six new shareholders to issue a total of 1,895,000 ordinary shares for total consideration of US\$18,950,000 (approximately RMB122,300,000).

Immediately prior to the completion of the initial public offering ("IPO") on July 12, 2022, the Company adopted a dual-class share structure, consisting of Class A ordinary shares and Class B ordinary shares, with par value of US\$0.0002 per share. 28,589,078 ordinary shares, beneficially owned by Mr. Jianping Kong and Mr. Qifeng Sun, the founders of the Company, were re-designated into Class B ordinary shares on a one-for-one basis, and the remaining 23,305,924 ordinary shares were re-designated into Class A ordinary shares on a one-for-one basis.

Each Class A ordinary share is entitled to one vote per share and each Class B ordinary share is entitled to 15 votes per share. Each Class B ordinary share is convertible at any time into one Class A ordinary share, while Class A ordinary shares are not convertible into Class B ordinary shares.

On July 14, 2022, the Company completed the IPO with new issuance of ADSs representing 1,770,000 Class A ordinary shares at a price of US\$11.50 per ADS and per ordinary share for gross proceeds of approximately US\$20.4 million. The Company received all the net proceeds of approximately US\$16.6 million (approximately RMB111,939,400) after deducting underwriting discounts and commissions and other offering expenses by July 14, 2022.

On September 30, 2022, the Company completed the supplemental offering with new issuance of ADSs representing 2,083,334 Class A ordinary shares at price of US\$2.40 per ADS and per ordinary share for gross proceeds of approximately US\$5.0 million. The Company received all the net proceeds of approximately US\$4.5 million (approximately RMB32,103,786) after deducting underwriting discounts and commissions and other offering expenses by October 5, 2022.

On July 28, 2023, the Company entered into agreements with Mr. Jianping Kong, the chairman and chief executive officer, and Mr. Qifeng Sun, the vice chairman, along with their respective affiliates (the "Lenders"), who together provided interest-free loans in the total amount of US\$10 million (approximately RMB72,802,000) ("the Loans"), to fund the Company's research and development initiatives directed towards the advancement of ASIC chips, smart-NICs, and vision computing chips. On September 5, 2023, the Company and the lenders entered into agreements to convert the Loans into an aggregate of 9,578,544 Class A ordinary shares of the Company for no additional consideration. The share issuance was completed on September 13, 2023.

On November 13, 2023, the Company issued a total of 5,189,500 Class A ordinary shares, being the maximum aggregate number of shares which may be issued under the 2022 Share Incentive Plan (see Note 12) of the Company, to Nanoeco Ltd ("Nanoeco"), a British Virgin Islands limited liability company wholly owned by Kastle Limited, who has been designated as the nominee holder for the 5,189,500 Class A ordinary shares, which serves as the ESOP platform. During the year ended December 31, 2023, a total of 504,557 options were exercised by employees at exercise price of US\$0.0002 per share and the shares were transferred to the employees from the ESOP platform.

On December 29, 2023, Citibank N.A. distributed a notification regarding the amendment to the deposit agreement, dated December 19, 2023, as amended, and the termination of American depository receipts facility for the Company's American depository shares, effective from February 1, 2024.

As of December 31, 2022 and 2023, nil and 4,684,943 Class A ordinary shares held by the ESOP platform are considered issued but not outstanding. As of December 31, 2022 and 2023, there were a total of 55,748,336 and 70,516,380 Class A and Class B ordinary shares issued, 55,748,336 and 65,831,437 Class A and Class B ordinary shares outstanding, respectively.

12. Share-based compensation

2022 Share Incentive Plan

In June 2022, our shareholders and board of directors adopted our 2022 share incentive plan, or the 2022 Plan, which has become effective upon the completion of our initial public offering, to motivate, attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and promote the success of our business. Under the 2022 Plan, the maximum aggregate number of Class A ordinary shares which may be issued pursuant to all awards under such plan is 5,189,500, which constitutes 10% of the total issued and outstanding shares of our company on a fully-diluted basis as of the date of adoption.

Restricted Stock Units ("RSUs")

On November 1, 2021, the Board of the Company approved the establishment of an employee benefit trust for the purpose of holding the Company's ordinary shares to be transferred to the recipient employees and directors of the share awards granted prior to the establishment of the 2022 Plan. In January 2022, Mr. Jianping Kong and other original shareholders of Zhejiang Haowei transferred a total of 5,626,678 ordinary shares held by them on behalf of the respective equity reward holders to Nanometa Ltd. ("Nanometa"), the nominee of the employee benefit trust. 273,155 shares held by Nanometa were sold on behalf of the recipient employees and directors. As of December 31, 2023, a total of 5,353,523 shares were still held by Nanometa, which comprises of: 1) 4,161,023 shares held on behalf of and transferable to the recipient employees and directors upon request; 2) 895,018 shares transferable to the recipient employees and directors upon vesting; and 3) 214,149 shares unassigned due to forfeiture of share awards.

During the years ended December 31, 2021, 2022 and 2023, share-based compensation recognized by the Company related to the RSUs were RMB19,344, RMB17,863 and RMB6,227, respectively. As of December 31, 2022 and 2023, unrecognized compensation cost is RMB15,559 and RMB4,264, respectively, which is expected to be recognized through December 2024.

The following table summarized the RSUs activity and related information for the year ended December 31, 2022 and 2023:

	Number of RSUs	Weighted Average Grant Date Fair Value (RMB)
Unvested, January 1, 2022	3,090,710	0.02
Granted	—	—
Forfeited	81,131	0.02
Vested	1,003,192	0.02
Unvested, December 31, 2022	2,006,387	0.02
Granted	—	—
Forfeited	216,350	0.02
Vested	895,019	0.02
Unvested, December 31, 2023	895,018	0.02

Options

On January 1, 2022, the Company granted an employee an option to purchase 250,000 Class A ordinary shares of the Company with an exercise price of US\$0.0004 per share. The option granted has a contractual term of 10 years. For the reward, 33.3% will be vested on December 31, 2022 or one year after the Company completed the initial public offering, whichever is earlier; 33.3% will be vested on December 31, 2023 or two years after the Company completed the initial public offering, whichever is earlier; and 33.3% will be vested on December 31, 2024 or three years after the Company completed the initial public offering, whichever is earlier. During the year ended December 31, 2023, the employee exercised the option to purchase a total of 83,333 shares. The shares were held on behalf of and transferable to the employee by Nanometa, the nominee of the employee benefit trust.

The option granted on January 1, 2022 was valued using the binomial model with the assistance of an independent valuation firm using the management's estimates and assumptions. Significant assumptions used in the valuation are set as below:

	January 1, 2022
Spot price on valuation date	US\$ 4.80
Expected volatility	137.01%
Risk-free interest rate	1.51%
Dividend yield	0.00%
Forfeiture rate	0.00%

On April 27, 2023, the Company granted a series of options under the 2022 share incentive plan: 1) the Company granted employees options to purchase a total of 225,215 Class A ordinary shares of the Company with an exercise price of US\$0.0002 per share. The options granted have a contractual term of 10 years. For the reward, 33.3% will be vested on April 27, 2024; 33.3% will be vested on April 27, 2025; and 33.3% will be vested on April 27, 2026; 2) the Company granted employees options to purchase a total of 77,869 Class A ordinary shares of the Company with an exercise price of US\$0.0002 per share. The options granted have a contractual term of 10 years. For the reward, 33.3% will be vested on July 12, 2023; 33.3% will be vested on July 12, 2024; and 33.3% will be vested on July 12, 2025; 3) the Company also granted employees options to purchase a total of 545,789 Class A ordinary shares of the Company with an exercise price of US\$0.0002 per share. The options granted have a contractual term of 10 years. The options were fully vested and exercisable at the grant date. The options in 2) and 3) described above were subject to performance conditions based on the result of an annual performance review of the grantee in accordance with the predetermined performance targets. The Company estimated the annual performance review result for each grantee and recognized the related compensation expenses.

On August 16, 2023, under the 2022 plan, the Company granted an employee an option to purchase 12,987 ordinary shares of the Company with an exercise price of US\$0.0002 per share. The options granted have a contractual term of 10 years. For the reward, 33.3% will be vested on August 16, 2023; 33.3% will be vested on August 16, 2024; and 33.3% will be vested on August 16, 2025.

The options granted under the 2022 plan were valued using the Black-Scholes model using the management's estimates and assumptions. Significant assumptions used in the valuations are set as below:

	For the year ended December 31, 2023	
Spot price on valuation date	US\$	1.06
Expected volatility		120.95%-123.34%
Risk-free interest rate		3.53%-4.28%
Dividend yield		0.00%

The following table summarizes the share options activity and related information for the years ended December 31, 2022 and 2023:

	Number of Options	Weighted Average Exercise Price (RMB)	Weighted Average Remaining Term (Years)	Weighted Average Grant Date Fair Value (RMB)	Aggregated Intrinsic Value (RMB)
Outstanding as of January 1, 2022	—	—	—	—	—
Granted	250,000	0.003	10.0	60.94	
Forfeited	—	—	—	—	
Exercised	—	—	—	—	
Outstanding as of December 31, 2022	<u>250,000</u>	<u>0.003</u>	<u>9.0</u>	<u>60.94</u>	<u>2,001,626</u>
Vested and exercisable as of December 31, 2022	<u>83,333</u>	<u>0.003</u>	<u>9.0</u>	<u>60.94</u>	<u>667,209</u>
Granted	861,860	0.001	9.3	7.34	
Forfeited	211,584	0.003	—	49.57	
Exercised	587,890	0.002	—	14.94	
Outstanding as of December 31, 2023	<u>312,386</u>	<u>0.001</u>	<u>9.3</u>	<u>7.34</u>	<u>4,004,469</u>
Vested and exercisable as of December 31, 2023	<u>71,517</u>	<u>0.001</u>	<u>9.3</u>	<u>7.34</u>	<u>916,775</u>

During the years ended December 31, 2021, 2022 and 2023, share-based compensation recognized by the Company related to the option were nil, RMB9,329,484 and RMB712,184, respectively. The outstanding unamortized share-based compensation related to option was RMB1,032,277 (which will be recognized through April 2026) as of December 31, 2023.

13. Statutory Reserves

The Company's subsidiaries incorporated in the PRC are required on an annual basis to make appropriations of retained earnings set at certain percentage of after-tax profit determined in accordance with PRC accounting standards and regulations ("PRC GAAP").

Appropriation to the statutory general reserve should be at least 10% of the after tax net income determined in accordance with the legal requirements in the PRC until the reserve is equal to 50% of the entities' registered capital. The Company is not required to make appropriation to other reserve funds and the Company does not have any intentions to make appropriations to any other reserve funds.

The general reserve fund can only be used for specific purposes, such as offsetting the accumulated losses, enterprise expansion or increasing the registered capital. Appropriations to the general reserve funds are classified in the consolidated balance sheets as statutory reserves.

There are no legal requirements in the PRC to fund these reserves by transfer of cash to restricted accounts, and the Company has not done so.

Relevant laws and regulations permit payments of dividends by the PRC subsidiaries and affiliated companies only out of their retained earnings, if any, as determined in accordance with respective accounting standards and regulations. Accordingly, the above balances are not allowed to be transferred to the Company in terms of cash dividends, loans or advances.

The Company has made nil, RMB6,647,109 and nil appropriations to statutory reserve for the years ended December 31, 2021, 2022 and 2023.

14. Earnings (loss) per share

The calculation of basic earnings (loss) per share is based on the income (loss) attributable to ordinary shareholders of the Company and weighted-average number of ordinary shares outstanding for the years ended December 31, 2021, 2022 and 2023.

Diluted earnings (loss) per share is computed using the weighted average number of ordinary shares and dilutive potential ordinary shares outstanding during the respective periods. For the year ended December 31, 2023, the options granted under the 2022 share incentive plan for a weighted average number of 312,386 shares could potentially dilute earnings (loss) per share but were not included in the computation of diluted net loss per share due to their antidilutive effects resulted from net loss.

The following reflects the income and share data used in the basic and diluted earnings (loss) per ordinary share computations:

	For the years ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Earnings (loss) attributable to ordinary shareholders of the Company	(174,944,484)	31,118,886	(252,823,772)
Weighted average number of ordinary shares outstanding for basic earnings (loss) per share calculation	44,938,990	53,244,500	58,885,071
Basic earnings (loss) per share	<u>(3.89)</u>	<u>0.58</u>	<u>(4.29)</u>
Earnings (loss) attributable to ordinary shareholders of the Company for diluted earnings (loss) per share calculation	(174,944,484)	31,118,886	(252,823,772)
Weighted average number of ordinary shares outstanding diluted earnings (loss) per share calculation	44,938,990	53,244,500	58,885,071
Adjusted for:			
- incremental shares issuable related to options issued	—	63,105	—
Weighted average number of shares outstanding for diluted earnings (loss) per share calculation	<u>44,938,990</u>	<u>53,307,605</u>	<u>58,885,071</u>
Diluted earnings (loss) per share	<u>(3.89)</u>	<u>0.58</u>	<u>(4.29)</u>

15. Income Taxes

Cayman Islands

Under the current tax laws of Cayman Islands, the holding companies incorporated in the Cayman Islands are not subject to income, corporation or capital gains tax, and no withholding tax is imposed upon the payment of dividends.

British Virgin Islands

The holding companies incorporated in the British Virgin Islands are not subject to tax on income or capital gains under current British Virgin Islands law. In addition, upon payments of dividends by these entity to the shareholders, no British Virgin Islands withholding tax will be imposed.

Hong Kong

The Company's subsidiaries incorporated in Hong Kong are subject to Hong Kong Profits Tax on the taxable income as reported in its statutory financial statements adjusted in accordance with relevant Hong Kong tax laws. The applicable tax rate is 8.25% on assessable profits arising in or derived from Hong Kong up to HKD2,000,000 and 16.5% on any part of assessable profits over HKD2,000,000. These companies did not make any provisions for Hong Kong profit tax as there were no assessable profits derived from or earned in Hong Kong since inception.

United States ("US")

The Company's subsidiary in the US is subject to profits tax at 21% statutory tax rate with respect to the profit generated from the US. The company did not make any provisions for the US profit tax as there were no assessable profits derived from or earned in the US since inception.

Singapore

The company incorporated in Singapore is subject to Singapore Profits Tax on the taxable income as reported in its statutory financial statements adjusted in accordance with relevant Singapore tax laws. The applicable tax rate is 17% in Singapore, with 75% of the first SGD100,000 (approximately RMB470,000) and 50% of the next SGD100,000 (approximately RMB470,000) taxable income exempted from income tax. The company did not make any provisions for Singapore income tax as there were no assessable profits derived from or earned in Singapore since inception.

The Company’s subsidiaries incorporated in the PRC are subject to PRC Enterprise Income Tax (“EIT”) on the taxable income in accordance with the relevant PRC income tax laws. A new enterprise income tax law (the “EIT Law”) in the PRC was enacted and became effective on January 1, 2008. The EIT Law applies a uniform 25% enterprise income tax (“EIT”) rate to both foreign invested enterprises and domestic enterprises. Accordingly, the Company’s PRC subsidiaries are subject to the EIT rate of 25%. EIT grants preferential tax treatment to certain High and New Technology Enterprises (“HNTEs”). Under this preferential tax treatment, HNTEs are entitled to an income tax rate of 15%, subject to a requirement that they re-apply for HNTE status every three years. Zhejiang Nanomicro obtained the “high-tech enterprise” tax status in December 2021, which reduced its statutory income tax rate to 15% from December 2021 to December 2024.

A reconciliation between the effective income tax rate and the PRC statutory income tax rate is as follows:

	For the Years Ended December 31,		
	2021	2022	2023
PRC statutory income tax rates	25.00%	25.00%	25.00%
Effect of expenses not deductible for tax purposes	(0.22)%	0.91%	(0.42)%
Effect of additional deduction of research and development expense	15.18%	(64.43)%	5.98%
Effect of income tax exemptions and reliefs	(13.14)%	(56.77)%	(5.71)%
Recovery from deferred income tax assets	0.00%	(97.39)%	0.05%
Effect of valuation allowance on deferred income tax assets	(26.35)%	171.26%	(23.52)%
Income tax difference under different tax jurisdictions	(0.47)%	21.42%	(1.37)%
Total	0.00%	0.00%	0.01%

The provision for income taxes consists of the following:

	For the Years Ended December 31,		
	2021	2022	2023
	RMB	RMB	RMB
Current income tax expense (benefit)	—	—	(17,394)
Deferred tax expense	—	—	—
Income tax expense	—	—	(17,394)

Significant component of deferred tax assets are as follows:

	As of December 31,	
	2022	2023
Net operating loss carryforward	63,038,127	77,373,944
Accrued expense and others	(29,335,373)	(282,843)
Inventory impairment	47,198,866	51,027,391
Deferred tax assets	80,901,620	128,118,492
Less: valuation allowance	(80,901,620)	(128,118,492)
Deferred tax assets	—	—

The provision of valuation allowance for the years ended December 31, 2021, 2022 and 2023 were RMB42,631,572, RMB24,519,326 and RMB47,333,923, respectively. The reversal of valuation allowance for the years ended December 31, 2021, 2022 and 2023 were nil, RMB6,100,147, and RMB117,051, respectively.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the cumulative earnings and projected future taxable income in making this assessment. Recovery of the Company's deferred tax assets is dependent upon the generation of future income, exclusive of reversing taxable temporary differences.

Uncertain tax positions

The tax authority of the PRC Government conducts periodic and ad hoc tax filing reviews on business enterprises operating in the PRC after those enterprises complete their relevant tax filings. In general, the PRC tax authority has up to five years to conduct examinations of the tax filings of the Company's PRC entities. Accordingly, the PRC subsidiaries' tax years of 2019 through 2022 remain open to examination by the respective tax authorities. It is therefore uncertain as to whether the PRC tax authority may take different views about the Company's PRC entities' tax filings, which may lead to additional tax liabilities.

The Company evaluates each uncertain tax position (including the potential application of interest and penalties) based on the technical merits, and measure the unrecognized benefits associated with the tax positions. As of December 31, 2022 and 2023, the Company did not have any significant unrecognized uncertain tax positions.

16. Related party transactions

Related parties with whom the Company conducted business consist of the following:

Name of related party	Nature of Relationship
Jianping Kong	Principal shareholder, chairman and chief executive officer
Qifeng Sun	Principal shareholder and vice chairman
Hangzhou Weiditu Technology Co., Ltd.	Company controlled by Jianping Kong

During the year ended December 31, 2021, the Company repaid RMB19,270,000 to Jianping Kong. As of December 31, 2022 and 2023, the amounts due to Jianping Kong were nil.

During the year ended December 31, 2021, the Company repaid RMB12,085,000 to Qifeng Sun. As of December 31, 2022 and 2023, the amounts due to Qifeng Sun were nil.

During the year ended December 31, 2021, the Company lent RMB100,000 to and collected RMB4,490,000 from Hangzhou Weiditu Technology Co., Ltd. As of December 31, 2022 and 2023, the amounts due from Hangzhou Weiditu Technology Co., Ltd. were nil.

During the year ended December 31, 2021, the Company purchased raw materials and services in amount of RMB328,411 from Hangzhou Weiditu Technology Co., Ltd., and made payment in amount of RMB5,045,392 to it. As of December 31, 2022 and 2023, the accounts payable to Hangzhou Weiditu Technology Co., Ltd. were nil.

The amounts due from related party and due to related parties are unsecured, non-interest bearing and due on demand.

During the year ended December 31, 2023, Jianping Kong and Qifeng Sun provided guarantee for the Company's debts and provided interest-free loans to the Company which were subsequently converted into Class A ordinary shares. See Note 10 and 11 for more details.

17. Concentrations

The following table sets forth information as to each customer that accounted for 10% or more of the Company's revenues for the years ended December 31, 2021, 2022 and 2023:

	For the Years Ended December 31,		
	2021	2022	2023
Customer A	59%	—	—
Customer B	15%	—	—
Customer C	—	—	15%
Customer D	—	—	12%

The following table sets forth information as to each supplier that accounted for 10% or more of the Company's purchase for the years ended December 31, 2021, 2022 and 2023:

	For the Years Ended December 31,		
	2021	2022	2023
Supplier A	—	—	38%
Supplier B	50%	32%	—
Supplier C	34%	—	—
Supplier D	—	—	14%
Supplier E	13%	23%	—

18. Commitments and contingencies

Operating lease commitments

The information of lease commitments is provided in Note 8.

Purchase commitments

The Company's commitments related to the construction in progress but not yet reflected in the consolidated financial statements were RMB39,119,300 as of December 31, 2023 and were expected to be incurred within one year.

Contingencies

The Company is subject to litigation matters from time to time in the normal cause of business. The Company's legal counsel and the management routinely assess the likelihood of adverse judgments and outcomes to these matters, as well as ranges of probable losses. Accruals are recorded for these matters to the extent that management concludes a loss is probable and the financial impact, should an adverse outcome occur, is reasonable estimable. The Company has not recorded any material liabilities in this regard as of December 31, 2022 and 2023.

On September 8, 2023, a customer named one of the Company's subsidiaries as the defendant of a claim in the General Division of the High Court of the Republic of Singapore. This customer alleged that the Company failed to make timely delivery for products purchased and such products did not function as expected, demanding a return of payments of US\$300,000 with relevant damages, interests and costs. Given the nature of the case, as of the filing date, the amount liable by the Company in the event of an unfavorable outcome cannot be reasonably estimated.

On December 25, 2023, three of the Company's subsidiaries were named as defendants along with others unaffiliated to the Company in a civil action filed at the People's Court of Yuhuatai District, Nanjing City. The plaintiff of such civil action alleged that it entered into a sales contract for the Company's products with one of the defendants who purportedly purchased the Company's products for resale and failed to make timely delivery. The plaintiff seeks to rescind the sales contract with this defendant and demands a return of payments of RMB47,000,000 with interests accrued by all defendants including the Company's three subsidiaries. Given the nature of the case, as of the filing date, the amount liable by the Company in the event of an unfavorable outcome cannot be reasonably estimated.

The Company believes they have strong arguments against these claims and will defend vigorously.

Two bank accounts of the Company were judicially frozen by the court as a result of the legal proceedings. The frozen amount as of December 31, 2023 and the date of this annual report was RMB417,990 and RMB418,201, respectively.

19. Subsequent events

The following subsequent events were evaluated on April 8, 2024, the date the financial statements were issued. Except as set forth below, there were no events that occurred subsequent to December 31, 2023 that require adjustment to or disclosure in the consolidated financial statements.

On January 25, 2024, the shareholders of the Company approved a 2-for-1 reverse stock split (the “reverse stock split”). After such reverse stock split, the authorized share capital of the Company would be divided into 250,000,000 ordinary shares with par value of US\$0.0002 each, comprising of :1) 121,410,923 Class A ordinary shares with par value of \$0.0002 each, 2) 28,589,078 Class B ordinary shares with par value of \$0.0002 each, and 3) 99,999,999 shares of a par value of US\$0.0002 each of such class or classes (however designated) as the board of directors of the Company (the “Directors”) may determine. The reverse stock split was effective on January 31, 2024. All information related to the Company’s ordinary shares, restricted stock units and stock options, as well as all per share data included in these financial statements and footnotes have been retrospectively adjusted to reflect the reverse stock split for all periods presented.

On February 5, 2024, an employee who holds options under the 2022 share incentive plan, elected to exercise the vested options to purchase a total of 36,067 Class A ordinary shares of the Company with an exercise price of US\$0.0002 per share. The shares were issued to the employee from the ESOP platform.

From January to April 2024, the Company borrowed a total of approximately RMB20.2 million from Zhejiang Shaoxing Ruifeng Rural Commercial Bank Co., Ltd under the credit line pledged by the land use right of the Company as described in Note 10. The additional borrowings bear an annual interest rate of 5.4% with repayment dates for parts of the loan ranging from June 20, 2024 to July 25, 2030.

20. Parent-only financial statements

The Company performed a test on the restricted net assets of the consolidated subsidiaries in accordance with Securities and Exchange Commission Regulation S-X Rule 4-08 (e) (3), “General Notes to Financial Statements” and concluded that it was applicable for the Company to disclose the financial information for the parent company only.

The subsidiaries did not pay any dividend to the Company for the periods presented. Certain information and footnote disclosures generally included in the financial statements prepared in accordance with U.S. GAAP have been condensed and omitted. These statements should be read in conjunction with the notes to the consolidated financial statements of the Company.

Basis of presentation

The financial information of the parent company has been prepared using the same accounting policies as set out in the Company’s consolidated financial statements except that the parent company used the equity method to account for investments in its subsidiaries.

The following represents condensed financial information of the parent company:

NANO LABS LTD
CONDENSED BALANCE SHEETS
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	As of December 31,		
	2022	2023	
	RMB	RMB	US\$
ASSETS/(LIABILITIES)			
Cash and cash equivalents	25,769	1,205,993	170,273
Prepayments	—	13,776	1,945
Due from intercompany	380,321,338	456,041,568	64,388,096
Investment in subsidiaries	(215,932,707)	(471,994,335)	(66,640,453)
TOTAL ASSETS (LIABILITIES)	164,414,400	(14,732,998)	(2,080,139)
SHAREHOLDERS' EQUITY (DEFICIT)			
Shareholders' equity (deficit):			
Class A ordinary shares (\$0.0002 par value; 121,410,923 shares authorized; 27,159,258 and 41,927,302 shares issued as of December 31, 2022 and 2023, respectively; 27,159,258 and 37,242,359 shares outstanding as of December 31, 2022 and 2023, respectively)*	35,425	50,106	7,074
Class B ordinary shares (\$0.0002 par value; 28,589,078 shares authorized; 28,589,078 shares issued and outstanding as of December 31, 2022 and 2023)*	36,894	36,894	5,209
Additional paid-in capital	354,803,564	428,310,028	60,472,705
Accumulated deficit	(199,207,921)	(452,031,693)	(63,821,945)
Statutory reserves	6,647,109	6,647,109	938,499
Accumulated other comprehensive income	2,099,329	2,254,558	318,319
TOTAL NANO LABS LTD SHAREHOLDERS' EQUITY (DEFICIT)	164,414,400	(14,732,998)	(2,080,139)

* After giving effect of the reverse stock split, see Note 1.

NANO LABS LTD
CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	For the years ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
Net revenues	—	—	—	—
Operating expenses:				
Selling and marketing expenses	980	—	—	—
General and administrative expenses	306,775	5,822,906	471,664	66,594
Total operating expenses	<u>307,755</u>	<u>5,822,906</u>	<u>471,664</u>	<u>66,594</u>
Loss from operations	(307,755)	(5,822,906)	(471,664)	(66,594)
Finance income	—	66,144	110,971	15,668
Investment income	—	53,809	—	—
Income (loss) from investment in subsidiaries	<u>(174,636,729)</u>	<u>36,821,839</u>	<u>(252,463,079)</u>	<u>(35,645,033)</u>
Net income (loss) attributable to Nano Labs Ltd	<u>(174,944,484)</u>	<u>31,118,886</u>	<u>(252,823,772)</u>	<u>(35,695,959)</u>
Comprehensive income (loss):				
Net income (loss)	(174,944,484)	31,118,886	(252,823,772)	(35,695,959)
Other comprehensive income (loss)				
Foreign currency translation adjustment	<u>(2,467,327)</u>	<u>4,566,656</u>	<u>155,229</u>	<u>21,917</u>
Total comprehensive income (loss) attributable to Nano Labs Ltd	<u>(177,411,811)</u>	<u>35,685,542</u>	<u>(252,668,543)</u>	<u>(35,674,042)</u>

NANO LABS LTD
CONDENSED STATEMENTS OF CASH FLOWS
(all amounts in RMB and US\$, except number of shares or as otherwise noted)

	For the years ended December 31,			
	2021	2022	2023	
	RMB	RMB	RMB	US\$
Net cash provided by (used in) operating activities	(535,017)	3,911,561	344,012	48,571
Net cash used in investing activities	(201,554,446)	(155,900,936)	(68,918,960)	(9,730,605)
Net cash provided by financing activities	201,251,124	144,043,186	72,802,734	10,278,952
Effect of exchange rate changes on cash and cash equivalents	926,910	7,883,387	(3,047,562)	(430,284)
Net increase (decrease) in cash and cash equivalents	88,571	(62,802)	1,180,224	166,634
Cash and cash equivalents at beginning of the year	—	88,571	25,769	3,639
Cash and cash equivalents at end of the year	88,571	25,769	1,205,993	170,273

Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jianping Kong, certify that:

1. I have reviewed this annual report on Form 20-F of Nano Labs Ltd, as amended by Amendment No. 1 thereto;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

May 28, 2024

By: /s/ Jianping Kong

Name: Jianping Kong

Title: Chairman and Chief Executive Officer

Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Bing Chen, certify that:

1. I have reviewed this annual report on Form 20-F of Nano Labs Ltd, as amended by Amendment No. 1 thereto;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

May 28, 2024

By: /s/ Bing Chen

Name: Bing Chen

Title: Chief Financial Officer and Senior Vice President

**Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Nano Lab Ltd (the “Company”) on Form 20-F for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof, as amended by Amendment No. 1 thereto (the “Report”), I, Jianping Kong, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 28, 2024

By: /s/ Jianping Kong
Name: Jianping Kong
Title: Chairman and Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Nano Lab Ltd (the “Company”) on Form 20-F/A for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof, as amended by Amendment No. 1 thereto (the “Report”), I, Bing Chen, Chief Financial Officer and Senior Vice President of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 28, 2024

By: /s/ Bing Chen
Name: Bing Chen
Title: Chief Financial Officer and Senior Vice President



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May 28, 2024

To: Nano Labs Ltd (the “**Company**”)
Genesis Building, 5th Floor, Genesis Close
PO Box 446
Grand Cayman, KY1-1106
Cayman Islands

Ladies and Gentlemen,

We hereby consent to the reference of our name in Nano Labs Ltd’s annual report on Form 20-F/A for the year ended December 31, 2023 (the “**Annual Report**”), which will be filed with the Securities and Exchange Commission (the “**SEC**”) in the month of May 2024. We also consent to the filing of this consent letter with the SEC as an exhibit to the Annual Report.

In giving such consent, we do not thereby admit that we fall within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

[The following is the signature page]

Yours faithfully,

/s/ Zhong Lun Law Firm

Zhong Lun Law Firm

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-273043) and Form F-3 (No. 333-273968) of our report dated April 8, 2024 with respect to the audited consolidated financial statements of Nano Labs Ltd (the “Company”), which appears in this Annual Report on Amendment No.1 to Form 20-F of the Company for the year ended December 31, 2023.

/s/ MaloneBailey, LLP
www.malonebailey.com
Houston, Texas
May 28, 2024