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October 22, 2021

Dale Welcome
Martin James

Division of Corporation Finance
Office of Manufacturing
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

Re: Canaan Inc.

Response to the Staff's Comments on the Form 20-F for the Fiscal Year Ended December 31, 2020 (File No. 001-39127)

Dear Mr. Welcome and Mr. James:

On behalf of our client, Canaan Inc., a foreign private issuer organized under the laws of the Cayman Islands (the “**Company**”), set forth below are responses of the Company to the comments of the staff of the Division of Corporation Finance (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) contained in your letter dated September 21, 2021 regarding the above-referenced Form 20-F for the fiscal year ended December 31, 2020, File No. 001-39127 (the “**Form 20-F**”). Capitalized terms used herein and otherwise not defined herein shall have the meanings assigned to such terms in the Form 20-F.

For your convenience, each response is prefaced by the exact text of the Staff's corresponding comment in bold text. All references to page numbers and captions correspond to the Form 20-F unless otherwise specified.

PARTNERS: Pierre-Luc Arseneault³ | Manas Chandrashekar⁵ | Lai Yi Chau | Maurice Conway⁵ | Justin M. Dolling⁵ | David Patrick Eich^{1,4,5} | Chui Hao Farn³ | Liu Gan² | David G. Harrington⁷ | Karen K.Y. Ho | Ka Chun Hui | Damian C. Jacobs⁵ | Guang Li³ | Mengyu Lu³ | Neil E.M. McDonald | Kelly Naphtali | Ram Narayan³ | Amy Y.M. Ngan⁷ | Nicholas A. Norris⁵ | Paul S. Quinn | Louis A. Rabinowitz³ | Fergus A. Saurin⁵ | Richard C.C. Sharpe | Jesse D. Sheley[#] | Li Chien Wong | Jacqueline B.N. Zheng^{3,5}

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ADMITTED IN: ¹ State of Illinois (U.S.A.); ² Commonwealth of Massachusetts (U.S.A.); ³ State of New York (U.S.A.); ⁴ State of Wisconsin (U.S.A.); ⁵ England and Wales; ⁶ Victoria (Australia); ⁷ New South Wales (Australia); ⁸ State of Georgia (U.S.A.); ⁹ State of California (U.S.A.); # non-resident

Austin Bay Area Beijing Boston Brussels Chicago Dallas Houston London Los Angeles Munich New York Paris Shanghai Washington, D.C.

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The Company respectfully advises the Staff that the Company does not use a structure that involves variable interest entities based in China, nor does it operate any online platform that has more than one million registered users. As such, the Company considers it more appropriate to make additional disclosure in response to the development in 2021 as proposed herein in its annual report for the fiscal year ending December 31, 2021.

Form 20-F for the Fiscal Year Ended December 31, 2020

ITEM 3. Key Information, page 1

- 1. Please revise to provide prominent disclosure about the legal and operational risks associated with being based in or having the majority of the company's operations in China and Hong Kong. Your disclosure should make clear whether these risks could result in a material change in your operations and/or the value of your ADSs or could significantly limit or completely hinder your ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless. Your disclosure should address how recent statements and regulatory actions by China's government, such as those related to the use of variable interest entities and data security or anti-monopoly concerns, has or may impact the company's ability to conduct its business, accept foreign investments, or list on an U.S. or other foreign exchange.**

In response to the Staff's comment, the Company proposes to include the paragraph below under "Item 3. Key Information".

Proposed addition:

We are a Cayman Islands holding company and we conduct substantially all of our operations and operate our business in China through our PRC subsidiaries. Investors in the ADSs are not purchasing equity securities of our operating subsidiaries but instead are purchasing equity securities of a Cayman Islands holding company. We face various legal and operational risks and uncertainties associated with being based in or having our operations primarily in China and the complex and evolving PRC laws and regulations. For example, we face risks associated with regulatory approvals on offerings conducted overseas and foreign investment in China-based issuers, anti-monopoly regulatory actions, and oversight on cybersecurity and data privacy, as well as the lack of PCAOB inspection on our auditors, which may impact our ability to conduct certain businesses, accept foreign investments, or list on a United States or other foreign exchange. These risks could result in a material adverse change in our operations and the value of our ADSs, significantly limit or completely hinder our ability to offer or continue to offer securities to investors, or cause the value of such securities to significantly decline. For a detailed description of risks related to doing business in China, see "—D. Risk Factors—Risks Relating to Doing Business in the PRC."

2. **Please revise to clearly disclose how you will refer to the holding company and subsidiaries when providing the disclosure throughout the document so that it is clear to investors which entity the disclosure is referencing and which subsidiaries or entities are conducting the business operations. Disclose clearly the entity (including the domicile) in which investors are purchasing their interest.**

In response to the Staff's comment, the Company proposes to revise the disclosure throughout "Item 4. Information on the Company — B. Business Overview" as shown in Annex A hereof. In particular, the Company proposes to include a list of its principal operating subsidiaries and their respective principal activities to facilitate the investors' understanding of the roles played by each of the Company's operating subsidiaries.

3. **Please revise to provide a clear description of how cash is transferred through your organization. Disclose your intentions to distribute earnings or settle any amounts owed. Quantify any cash flows and transfers of other assets by type that have occurred between the holding company and its subsidiaries, and direction of transfer. Quantify any dividends or distributions that a subsidiary have made to the holding company and which entity made such transfer, and their tax consequences. Similarly quantify dividends or distributions made to U.S. investors, the source, and their tax consequences. Describe any restrictions on foreign exchange and your ability to transfer cash between entities, across borders, and to U.S. investors. Describe any restrictions and limitations on your ability to distribute earnings from your businesses, including subsidiaries, to the parent company and U.S. investors.**

In response to the Staff's comment, the Company proposes to include the paragraphs below under "Item 3. Key Information".

Proposed addition:

We rely on dividends and other distributions from our operating subsidiaries in the PRC to satisfy part of our liquidity requirement. Under the PRC law, each of our PRC operating subsidiaries may only pay dividends after 10% of its net profit has been set aside as reserve funds, unless such reserves have reached at least 50% of its registered capital. In addition, our subsidiaries in China may allocate a portion of their after-tax profits based on PRC accounting standards to enterprise expansion funds and staff bonus and welfare funds at their discretion. The statutory reserve funds and the discretionary funds are not distributable as cash dividends. Remittance of dividends by a subsidiary out of China is subject to examination by the banks designated by SAFE. For risks relating to the cash flows within our organization, see

“—D. Risk Factors — Risks Relating to Doing Business in the PRC — Our corporate structure may restrict our ability to receive dividends from, and transfer funds to, our PRC operating subsidiaries, which could restrict our ability to act in response to changing market conditions in a timely manner.” and “—D. Risk Factors — Risks Relating to Doing Business in the PRC — Dividends payable by us to our foreign investors and gains on the sale of the ADSs may become subject to withholding taxes under the PRC tax laws.”

As of the date of this annual report, our PRC subsidiaries have not paid dividends and will not be able to pay dividends until they generate accumulated profits and meet the above-mentioned requirements for statutory reserve funds. In addition, we have not declared or paid any dividends on our ordinary shares since our inception, nor have any present plan to pay any dividends on our ordinary shares or ADSs 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. See “Item 8. Financial Information — A. Consolidated Statements and Other Financial Information — Dividend Policy and Distributions.”

The Company also proposes to include the following disclosure under “Item 5. Operating and Financial Review and Prospectus — B. Liquidity and Capital Resources — Holding Company Structure” to quantify the historical cash flow from the holding company to the operating subsidiaries.

Proposed addition:

For us to remit cash to our PRC subsidiaries, including the net proceeds from any offering of securities outside of China, we may do so through equity investments into our PRC subsidiaries or provision of shareholders’ loan to our PRC subsidiaries. We may also establish new operating subsidiaries in the PRC. The maximum amount of equity investment the Company can make into its PRC subsidiaries is not subject to any limitations, while the maximum amount of shareholder loans the Company’s PRC subsidiaries can incur is determined by the difference between its registered capital and total investment amount. The table below sets forth the amount of cash remitted to our PRC subsidiaries through our Hong Kong subsidiary in 2018, 2019 and 2020:

<u>Year</u>	<u>Method</u>	<u>Amount</u>
2018	Equity investment	RMB692.1 million (US\$110.2 million)
	Shareholder loan	RMB21.3 million (US\$3.1 million)
2019	N/A	Nil
2020	Shareholder loan	RMB111.6 million (US\$16.0 million)

ITEM 3.D. Risk Factors, page 6

4. **Please revise your Risk Factor Summary to disclose the risks that your corporate structure and being based in or having the majority of the company's operations in China poses to investors. In particular, describe the significant regulatory, liquidity, and enforcement risks with cross-references to the more detailed discussion of these risks in the filing. For example, specifically discuss risks arising from the legal system in China, including risks and uncertainties regarding the enforcement of laws and that rules and regulations in China can change quickly with little advance notice; and the risk that the Chinese government may intervene or influence your operations at any time, or may exert more control over offerings conducted overseas and/or foreign investment in China-based issuers, which could result in a material change in your operations and/or the value of your ADSs. Acknowledge any risks that any actions by the Chinese government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers could significantly limit or completely hinder your ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.**

In response to the Staff's comment, the Company proposes to include the following disclosure on page 8 of the Form 20-F.

Proposed addition:

- Our business is subject to various evolving PRC laws and regulations regarding data privacy and cyber-security. Failure of cyber-security and data privacy concerns could subject us to penalties, damage our reputation and brand, and harm our business and results of operations.

Risks and uncertainties related to doing business in the PRC in general, include, but are not limited to, the following:

- Changes in PRC's economic, political and social conditions as well as governmental policies in the PRC could adversely affect our business, prospects, financial condition and financial results.
- Changes to and uncertainties in the legal system of the PRC may have a material adverse impact on our business, financial condition and results of operations. Legal protections available to you under the legal system of the PRC may be limited.

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- PRC governmental authorities' significant authority in regulating our operations and their oversight and control over offerings conducted overseas by, and foreign investment in, China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and result in a material adverse change in our operations and the value of our ADSs.
- Our ADSs may be delisted under the Holding Foreign Companies Accountable Act if the PCAOB is unable to inspect auditors who are located in China. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment. Additionally, the inability of the PCAOB to conduct inspections deprives our investors with the benefits of such inspections.

5. Please revise your risk factors to acknowledge that if the PRC government determines that your offshore corporate structure does not comply with PRC regulations, or if these regulations change or are interpreted differently in the future, your shares may decline in value or become worthless if you are unable to assert your contractual control rights over the assets of your PRC subsidiaries that conduct all or substantially all of your operations.

The Company respectfully advises the Staff that the Company does not use a structure that involves variable interest entities based in China and there have been no contractual arrangements between the Company and its subsidiaries in the PRC to exert control. Instead, the Company, as a Cayman Islands holding company, conduct its operations in China through its PRC subsidiaries, in which the Company holds 100% direct ownership interest. See "Item 4. Information on the Company—C. Organizational Structure." The Company's PRC subsidiaries hold the licenses, approvals, and key assets that are essential for the operations of certain of the Company's businesses. And the Company has been able to exercise its rights as a shareholder to effect changes in the board of directors/ executive director of its subsidiaries, which, subject to any applicable fiduciary obligations, could implement changes in the subsidiaries for the best interests of the Company.

6. Given the Chinese government's significant oversight and discretion over the conduct of your business, please revise to separately highlight the risk that the Chinese government may intervene or influence your operations at any time, which could result in a material change in your operations and/or the value of your ADSs. Also, given recent statements by the Chinese government indicating an intent to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers, acknowledge the risk that any such action could significantly limit or completely hinder your ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.

In response to the Staff's comment, the Company proposes to make revision to an existing risk factor and include an additional risk factor as shown below.

Proposed revision of existing risk factor (additional language underlined):

We are subject to risks associated with legal, political or other conditions or developments regarding holding, using or mining of Bitcoins, which could negatively affect our business, results of operations and financial position.

Our customers are based globally. As such, changes in government policies, taxes, general economic and fiscal conditions, as well as political, diplomatic or social events, expose us to financial and business risks. In particular, changes in domestic or overseas policies and laws regarding holding, using and/or mining of Bitcoins could result in an adverse effect on our business operations and results of operations. Moreover, if any domestic or international jurisdiction where we operate or sell our Bitcoin mining machines prohibits or restricts Bitcoin mining activities, we may face legal and other liabilities and will experience a material loss of revenue.

There are significant uncertainties regarding future regulations pertaining to the holding, using or mining of Bitcoins, which may adversely affect our results of operations. While Bitcoin has gradually gained more market acceptance and attention, it is anonymous and may be used for black market transactions, money laundering, illegal activities or tax evasion. As a result, governments may seek to regulate, restrict, control or ban the holding, use and mining of Bitcoins. For example, On May 21, 2021, the Financial Stability and Development Commission of the State Council held its 51st meeting. The meeting called for firm prevention and control of financial risks and crackdown on Bitcoin mining and trading activities. The provincial governmental authorities of Inner Mongolia Autonomous Region, Sichuan Province and Qinghai Province promulgated circulars in succession, requiring the closure of all kinds of virtual currency mining projects and prohibiting the approval of any new virtual currency mining projects. According to the Circular on Regulating Virtual Currency "Mining" Activities (《关于整治虚拟货币“挖矿”活动的通知》), promulgated by the National Development and Reform Commission of the PRC and other authorities on September 3, 2021, the PRC government strictly prohibits the issuance of new virtual currency, and classifies the virtual currency mining activities as the eliminated industry. According to the Circular on Further Preventing and Disposing of Virtual Currency Trading Speculation Risks(《关于进一步防范和处置虚拟货币交易炒作风险的通知》), promulgated by the People's Bank of China and other authorities on September 15, 2021, virtual currency- related business activities,

such as exchange between legal tender currencies and virtual currencies, exchange between virtual currencies, trading virtual currencies as central counterparty, providing information intermediary and pricing services for virtual currency trading, token issuance and financing, and virtual currency derivatives trading are illegal financial activities and are strictly prohibited and resolutely banned. Virtual currency-related business activities of an overseas virtual currency exchange which provides services to PRC residents via the Internet are illegal financial activities. Moreover, on October 8, 2021, the National Development and Reform Commission of the PRC published the Market Access Negative List (2021 Edition) (Draft for Comments) (《市场准入负面清单(2021年版)(征求意见稿)》), which lists the virtual currency mining activities as the “backward production processes and equipment” under the eliminated item in the Catalogue for Guiding Industrial Restructuring (《产业结构调整指导目录》). According to the List, market entities are prohibited from investing in eliminated items. The above regulations and policies may result in no customers in the PRC buying our products. Although we can continue to sell our products to and generate revenue from the customers who undertake mining activities outside of the PRC, the long-term impact of such restrictions can be detrimental to our business and profitability, and our business and results of operation may suffer and investors in our securities may lose part or all of their investment if further extreme restrictions follow.

In addition, due to compliance risk, cost, government regulation or public pressure, banks and financial institutions may not provide banking services, or may cut off services, to businesses that provide cryptocurrency-related services or that accept cryptocurrencies, including Bitcoins, as payment. Our existing policies and procedures for the detection and prevention of money laundering and terrorism-funding activities through our business activities have only been adopted in recent years and may not completely eliminate instances in which we or our products may be used by other parties to engage in money laundering and other illegal or improper activities. We cannot assure you that there will not be a failure in detecting 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 will be able to cope with, or benefit from, those changes. In addition, as Bitcoin mining employs sophisticated and high computing power devices that need to consume a lot 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 Bitcoin mining machines. There have been public backlashes surrounding the environmental impacts of Bitcoin mining, particularly the large consumption of electricity, and governments of various jurisdictions have responded.

Proposed additional risk factor:

PRC governmental authorities' significant authority in regulating our operations and their oversight and control over offerings conducted overseas by, and foreign investment in, China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and result in a material adverse change in our operations and the value of our ADSs.

We conduct our business primarily through our PRC subsidiaries. Our operations in China are governed by PRC laws and regulations. The PRC governmental authorities have significant oversight and discretion over the conduct of our business, and it may influence our operations, which could result in a material adverse change in our operation and/or the value of our ADSs. Also, the PRC governmental authorities have recently indicated an intent to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers. Any such action could significantly limit or completely hinder our ability to offer or continue to offer securities to investors. In addition, implementation of industry-wide regulations directly targeting our operations could cause the value of our securities to significantly decline. Therefore, investors of our company and our business face potential uncertainty from actions taken by the PRC governmental authorities affecting our business.

In particular, 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. China has not developed a fully integrated legal system, and recently enacted laws, rules and regulations may not sufficiently cover all aspects of economic activities in China or may be subject to a significant degree of interpretation by PRC regulatory agencies and courts. In particular, because these laws, rules and regulations are relatively new, and because of the limited number of published decisions and the non-precedential nature of these decisions, and because the laws, rules and regulations often give the relevant regulator significant discretion in how to enforce them, the interpretation and enforcement of these laws, rules and regulations involve uncertainties and can be inconsistent and unpredictable. Therefore, it is possible that our existing operations may be found not to be in full compliance with relevant laws and regulations in the future. In addition, 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 which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until after the occurrence of the violation.

Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. 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 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, financial condition and results of operations.

In addition, the PRC government has recently announced its plans to enhance its regulatory oversight of Chinese companies listing overseas. The Opinions on Intensifying Crack Down on Illegal Securities Activities (《关于依法从严打击证券违法活动的意见》) issued on July 6, 2021 called for:

- tightening oversight of data security, cross-border data flow and administration of classified information, as well as amendments to relevant regulation to specify responsibilities of overseas listed Chinese companies with respect to data security and information security;
- enhanced oversight of overseas listed companies as well as overseas equity fundraising and listing by Chinese companies; and
- extraterritorial application of China's securities laws.

As the Opinions on Intensifying Crack Down on Illegal Securities Activities were recently issued, there are great uncertainties with respect to the interpretation and implementation thereof. The Chinese government may promulgate relevant laws, rules and regulations that may impose additional and significant obligations and liabilities on overseas listed Chinese companies regarding data security, cross-border data flow, and compliance with China's securities laws. See also “- Risks Relating to Our Business and Industry—Our business is subject to various evolving PRC laws and regulations regarding data privacy and cyber-security. While our principal business activities do not involve large amount of registered users and deal with vast amount of user data, we operate a small-scale online discussion forum for developers and therefore transmit and store limited amount of confidential and private information of our customers and others. Failure of cyber-security and data privacy concerns could subject us to penalties, damage our reputation and brand, and harm our business and results of operations.” It is uncertain whether or how these new laws, rules and regulations and the interpretation and implementation thereof may affect us, but among other things, our ability and the ability of our subsidiaries to obtain external financing through the issuance of equity securities overseas could be negatively affected.

7. **In light of recent events indicating greater oversight by the Cyberspace Administration of China over data security, particularly for companies seeking to list on a foreign exchange, please revise your disclosure to explain how this oversight impacts your business and to what extent you believe that you are compliant with the regulations or policies that have been issued by the CAC to date.**

In response to the Staff's comment, the Company proposes to include an additional risk factor as shown below.

Proposed additional risk factor:

Our business is subject to various evolving PRC laws and regulations regarding data privacy and cyber-security. Failure of cyber-security and data privacy concerns could subject us to penalties, damage our reputation and brand, and harm our business and results of operations.

We face significant challenges with respect to cyber-security and data privacy, including the receipt, processing, storage, and transmission of the data of our customers and others, much of which is confidential. While our principal business activities do not involve large amount of registered users and deal with vast amount of user data, we operate a small-scale online discussion forum for developers and therefore transmit and store limited amount of confidential and private information of our customers and others, such as personal information, including user accounts, phone numbers, and E-mail accounts. As of September 30, 2021, our online discussion forum did not have more than one million of registered users.

As such, we are subject to various regulatory requirements relating to cyber-security and data privacy, including, without limitation the PRC Cybersecurity Law. We are required by these laws and regulations to ensure the confidentiality, integrity, availability, and authenticity of the information of our customers and others, which is also essential to maintaining their confidence in our products. We have adopted strict information security policies and deployed advanced measures to implement the policies, including, among others, advanced encryption technologies. However, advances in technology, an increased level of sophistication and diversity of our products and services, an increased level of expertise of hackers, new discoveries in the field of cryptography or others can still result in a compromise or breach of our websites. If we are unable to protect our systems, and hence the information stored in our systems, from unauthorized access, use, disclosure, disruption, modification, or destruction, such problems or security breaches could cause a loss, give rise to our liabilities to the owners of confidential information, or subject us to fines and other penalties. In addition, complying with various laws and regulations could cause us to incur substantial costs or require us to change our business practices, including our data practices, in a manner adverse to our business.

In addition, regulatory requirements on cyber-security and data privacy are constantly evolving and can be subject to varying interpretations or significant changes, resulting in uncertainties about the scope of our responsibilities in that regard. For example, on June 10, 2021, the Standing Committee of the National People's Congress promulgated the PRC Data Security Law (《中华人民共和国数据安全法》), which took effect in September 2021. The PRC Data Security Law provides for a security review procedure for the data activities that may affect national security. Additionally, Measures for Cybersecurity Review (《网络安全审查办法》), which became effective on June 1, 2020, set forth the cybersecurity review mechanism for critical information infrastructure operators, and provided that critical information infrastructure operators who intend to purchase internet products and services that affect or may affect national security shall be subject to a cybersecurity review. Moreover, on July 10, 2021, the Cyberspace Administration of China published the Measures for Cybersecurity Review (Revised Draft for Comments) (《网络安全审查办法 (修订草案征求意见稿)》), which further restates and expands the applicable scope of the cybersecurity review. Pursuant to the draft measures, critical information infrastructure operators that intend to purchase internet products and services and data processing operators engaging in data processing activities that affect or may affect national security must be subject to the cybersecurity review. The draft measures further stipulate that if an operator has personal information of over one million users and intends to be listed in a foreign country, it must be subject to the cybersecurity review. As advised by our PRC legal advisor, the draft measures were released for public comment only, and its operative provisions and the anticipated adoption or effective date may be subject to change with substantial uncertainty. The draft measures remain unclear on whether the relevant requirements will be applicable to companies that have been listed in the United States, such as us. Furthermore, the exact scope of "critical information infrastructure operators" under the draft measures and the current regulatory regime remains unclear, and the PRC government authorities may have wide discretion in the interpretation and enforcement of these laws. Therefore, it is uncertain whether we would be deemed as a critical information infrastructure operator under PRC law. It also remains uncertain whether the future regulatory changes would impose additional restrictions on companies like us. We cannot predict the impact of the draft measures, if any, at this stage, and we will closely monitor and assess any development in the rule-making process. If the enacted version of the draft measures mandates clearance of cybersecurity review and other specific actions to be completed by companies like us, we face uncertainties as to whether such clearance can be timely obtained, or at all. If we are not able to comply with the cybersecurity and data privacy requirements in a timely manner, or at all, we may be subject to government enforcement actions and investigations, fines, penalties, suspension of our non-compliant operations, among other sanctions, which could materially and adversely affect our business and results of operations.

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Exhibits 12.1 and 12.2, page 108

8. **The lead-in of the fourth paragraph omits the reference to internal control over financial reporting. Since this is your second annual report on Form 20-F, you are required to provide this language in your certification. Please amend your Form 20-F to provide currently dated certifications that include the required language. Refer to Instruction 12 to the Form 20-F Exhibits.**

In response to the Staff's comment, the Company will revise the certifications on Exhibits 12.1 and 12.2.

Consolidated Financial Statements

Statement of Cash Flows, page F-7

9. **We note the significant write-downs of obsolete inventory and of prepayments to third party suppliers disclosed in Notes 6 and 7 for 2018 and 2019. As we note no adjustments to your net income (loss) for these items on page F-7, please explain to us how you considered and reflected these items in your reconciliation of net income (loss) to net cash (used in) provided by operating activities in each reported period. Refer to the guidance in ASC 230-10-45-28 through 45-32.**

The Company respectfully acknowledges the Staff's comment. According to the Company's accounting policies, the inventories and the prepayments to third-party suppliers are stated at the lower of cost and net realizable value, and the adjustment of write-downs is recorded as the deduction to the balances of inventories and prepayments and recognized as the cost of revenues in the meantime.

The Company recorded the write-downs of obsolete inventory and of prepayments for 2018 and 2019 as disclosed in Form 20-F for 2020. The write-downs of obsolete inventory and of prepayments to suppliers have been reflected in the result of net income (loss) and the reconciling items of changes in inventories and in prepayments and other current assets on page F-7, which removed the effect of the write-downs that was included in net income (loss) but did not affect net cash used in operating activities. Such disclosure of the reconciliation is consistent with the guidance in ASC 230-10-45-28 through 45-32.

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2. Principal Accounting Policies

(p) Contract liabilities, page F-14

- 10. Please tell us the reason for the significant change in this account during the period. Additionally, pursuant to ASC 606-10-50-10, revise this note in future filings to explain the reasons for the significant change in contract liabilities during the reported periods.**

The Company respectfully acknowledges the Staff's comment. According to ASC 606-10-45 and the Company's accounting policies, cash proceeds received from customers before product delivery is recognized as contract liabilities. The prepayments received from customers as of December 31, 2019 and 2020 was RMB8.29 million and RMB430.39 million, respectively and the significant increase was mainly due to an increase in down payments for the sales orders of Bitcoin mining machines to be delivered in 2021 and beyond. The Company will revise this note in the filing of Form 20-F for 2021 and afterwards.

If you have any questions regarding this letter, please contact me by phone at +852 3761 3426 or via e-mail at howie.farn@kirkland.com.

Very truly yours,

/s/ Howie Farn

Howie Farn

Enclosure

cc: Nangeng Zhang, Chairman and Chief Executive Officer, Canaan Inc.
James Jin Cheng, Chief Financial Officer, Canaan Inc.
David Zhang, Esq., Partner, Kirkland & Ellis International LLP
Howie Farn, Esq., Partner, Kirkland & Ellis International LLP
Steven Zhao, Partner, PricewaterhouseCoopers Zhong Tian LLP

The follow excerpt shows the Company's proposed revisions with underline:

B. Business Overview

We, through our PRC operating subsidiaries, provide supercomputing solutions through our proprietary high performance computing ASICs. Our visionary management team has a clear strategy to commercialize supercomputing technology. In January 2013, Mr. Nangeng Zhang, our chairman and chief executive officer, and his team, invented and delivered one of the first Bitcoin mining machines incorporating ASIC technology. Our founders and management team have a clear strategy to commercialize supercomputing technology. We initially dedicated our research and development efforts to ASIC applications for Bitcoin mining, which rapidly built up our know-how of ASIC design. Such experience provided us with a solid foundation in terms of both technology and capital resources, which better prepared us for further research and development involving AI chips. In September 2018, we became the first in the industry to deliver commercial edge computing AI chips based on Risc-V architecture and self-developed neural-network accelerator with outstanding performance. As we are a fabless IC designer, the ICs that we design are manufactured, packaged and tested by industry-leading suppliers, including SMIC, TSMC and Samsung.

We have developed significant advantages in our business and technological capabilities, including the following:

- Our mastery of the whole IC design process;
- Our years of accumulated engineering experience in applying theoretical research to the mass production of new products, producing in aggregate over 217 million chips in 2018, 2019, and 2020;
- Our ability to achieve a fast time-to-market with our products and our successful early monetization of the ASIC design in blockchain applications have provided us with an early advantage with respect to both technology and capital reserve to pursue our strategic initiatives;
- Our breakthroughs in various technological fields to improve ASIC performance, such as low voltage and high power efficiency operations and high computing density, all of which are crucial features for ASICs for blockchain and AI solutions;
- Our ownership of most of the intellectual property we employ, and our accumulation of valuable know-how and multiple generations of proprietary silicon data through our years of ASIC design experience;
- Our ability to provide a holistic AI solution to our customers, including AI chips, algorithm development and optimization, hardware module, end-product and software services; and
- Our close and trusted partnerships with leading global suppliers, which have enabled us to achieve high-quality, high yield rate and stable production.

We are a holding company and we conduct substantially all of our operations and operates our business in China through our subsidiaries. Our operating subsidiaries carry out main business functions including research and development, sales and distribution, supply chain management and assembly of system products. The table below sets forth our principal subsidiaries and their respective jurisdictions of incorporation and principal activities:

<u>Subsidiaries</u>	<u>Jurisdiction of Incorporation</u>	<u>Principal Business Activities</u>
<u>Canaan Creative (HK) Holdings Limited*</u>	<u>Hong Kong</u>	<u>Research and development</u>
<u>Hangzhou Canaan Creative Information Technology Limited</u>	<u>PRC</u>	<u>Research and development</u>
<u>Canaan Creative Co., Ltd.</u>	<u>PRC</u>	<u>Research and development</u>
<u>Langfang Creative Technology Co., Ltd.</u>	<u>PRC</u>	<u>Assembly of system products</u>
<u>Hangzhou Ruihong Technology Co., Ltd.</u>	<u>PRC</u>	<u>Supply chain and domestic distribution of system products</u>
<u>Hangzhou Canaan Blockchain Technology Co., Ltd.</u>	<u>PRC</u>	<u>Research and development</u>
<u>Canaan Convey Co., Ltd.</u>	<u>PRC</u>	<u>International distribution of system products</u>
<u>Zhejiang Avalon Technology Co., Ltd.</u>	<u>PRC</u>	<u>Domestic distribution of system products</u>
<u>Canaan Mingxin(Beijing) Technology Co., Ltd.</u>	<u>PRC</u>	<u>International distribution of system products</u>
<u>Hangzhou Canaan Chuangxin Technology Co., Ltd.</u>	<u>PRC</u>	<u>Research and development</u>

Our Business Model

We are a fabless IC designer that provides advanced semiconductor solutions for supercomputing hardware. We are engaged in the front-end and back-end of IC design, which are the major components of the IC product development chain. Our PRC operating subsidiaries currently sell Bitcoin mining machines under our AvalonMiner brand that feature our proprietary ASICs which we design in-house, as well as ASICs designed for AI applications. Our PRC operating subsidiaries also sell Bitcoin mining machine parts and offer after-sales technical services for our products. In addition, our PRC operating subsidiaries started to lease our Bitcoin mining machine in July 2019 to achieve better liquidity management when the Bitcoin price is low. Our PRC operating subsidiaries typically lease our Bitcoin mining machines for a period of six months, but with the option, at the mutual agreement of the parties, of ending the lease in three months. Our customer is responsible for the maintenance of the Bitcoin mining machines during the lease period.

We closely partner with industry-leading third-party suppliers to fabricate, test and package the IC products we design. For our Bitcoin mining machine, our PRC operating subsidiaries assemble the final Bitcoin mining machines by integrating the ICs produced by us and related components we procure. Our front-end design capability ensures the robustness of our ICs, which can recover from any logic fault. Further, we carry out a complete verification process notwithstanding the significant time pressure to roll out new designs. We use FPGA based prototyping and simulation to ensure that the functionality and performance of our products are consistent with their design intent. Moreover, our rich experiences from previous tape-outs provide us with a vast amount of data that enable us to more accurately estimate the product's power efficiency, performance and yield rate at the back-end design stage.

We have endeavored to leverage the trend of early and large-scale adoption of advanced process technologies to build a world-class semiconductor company. We aim to continuously introduce ICs of higher performance and power efficiency for application in both the blockchain and AI fields.

Our Products

Bitcoin Mining Solutions

In 2009, CPUs were the initial Bitcoin mining solution. As the requirements for computing power grew, Bitcoin miners gradually migrated to chips with stronger computing power, including GPU and FGPA. In 2013, Mr. Nangeng Zhang, our chairman and chief executive officer, began to offer ASIC-based hardware as a more effective Bitcoin mining solution.

Set forth below is a summary of the milestones and status of the development of our ASICs developed for Bitcoin mining solutions.

ASICs	Status and expected timeline*
28nm	<ul style="list-style-type: none"> • Production end of life
16nm, First Generation	<ul style="list-style-type: none"> • Production end of life
16nm, Second Generation	<ul style="list-style-type: none"> • Mass production of final products in 4th quarter 2017
16nm, Third Generation	<ul style="list-style-type: none"> • Mass production of final products in 2nd quarter 2018
7nm, First Generation	<ul style="list-style-type: none"> • Mass production of final products in 3rd quarter 2018
16nm, Fourth Generation	<ul style="list-style-type: none"> • Mass production of final products in 2nd quarter 2019
8nm, First Generation	<ul style="list-style-type: none"> • Mass production of final products in 1st quarter 2020
14nm, First Generation	<ul style="list-style-type: none"> • Mass production in 2nd quarter 2020
N+1nm, First Generation	<ul style="list-style-type: none"> • Mass production in 3rd quarter 2020

* The expected timeline of the mass production of 14nm ASICs is based on our best estimates, which can be affected by factors beyond our control, including but not limited to, delays cause by our suppliers.

We, through our PRC operating subsidiaries, offer a single line of Bitcoin mining machines, under the AvalonMiner brand. The AvalonMiner Bitcoin mining machines feature our proprietary ASICs, and the ASICs are integrated with components procured by us including a circuit board, PMU boards, a cooling fan, heat sensors, and enclosed with an aluminum casing. We typically introduce new series of Bitcoin mining machines every year incorporating the latest technological development in terms of ASIC design and process technology. Our PRC operating subsidiaries also sell Bitcoin mining machine parts, mainly battery packs, that our customers, especially our overseas customers, purchase along with Bitcoin mining machines.

Set forth below are certain specifications of our selected AvalonMiner products.

Bitcoin Mining Machine	Release Date	ASICs	Number of ASICs in Each Product	Computing Power (GH/s)	Power Consumption (W/GHs)
A841	March 2018	16nm, Second Generation	104	13,000	0.10
A851	July 2018	16nm, Third Generation	104	14,500	0.10
A852	April 2019	16nm, Third Generation	104	15,000	0.10
A921	August 2018	7nm, First Generation	104	20,000	0.09
A911	January 2019	16nm, Third Generation	204	19,500	0.09
A1047	April 2019	16nm, Fourth Generation	240	37,000	0.07
A1066	July 2019	16nm, Fourth Generation	342	50,000	0.07
A1066 pro	September 2019	8nm, First Generation	324	55,000	0.06
A1246	September 2020	N+1nm, First Generation	360	90,000	0.04

ASICs for AI Applications

We, through our PRC operating subsidiaries, began to develop ASICs for AI applications in 2016 and completed the tape-out of our AI chips in June 2018. Our AI chips are miniaturized chips characterized by high-performance and low energy consumption. Each AI chip is designed with an artificial neural-network and high-performance processors, which mainly provides heterogeneous, real-time and off-line AI applications. In September 2018, we released the first generation of our AI chip, Kendryte K210, and we, through our PRC operating subsidiaries, began mass production in the fourth quarter of 2018. K210 is a SoC that integrates machine vision and machine hearing functions. We were the first in the industry to deliver commercial edge computing AI chips based on Risc-V architecture and self-developed neural-network accelerator with outstanding performance.

Through the development of various generations of ASICs for Bitcoin mining, we have accumulated rich experience in reducing the size and increasing the power efficiency of the ASICs while achieving high computing power, which is fundamental to designing commercially successful ASICs for AI applications. Specifically, using TSMC's ultra-low-power 28nm advanced process with dual-core 64-bit processors for better power efficiency, stability and reliability, K210 is able to achieve low voltage and high power efficiency compared to other systems with the same processing power. Further, K210 is a SoC and provides a "single" chip solution, as compared with competing products that require separate chips to perform. As such, our AI chips will involve less set up costs for our customers and are able to avoid potential function loss when any of the chips malfunctions.

Set forth below is a summary of the milestones and status of the development of our AI products.

<u>Product</u>	<u>Status</u>
Kendryte K210—28nm	<ul style="list-style-type: none">Released in September 2018Mass production and shipment of final products in 4th quarter 2018

K210 empowers our clients to provide AI solutions in the field of IoT through its machine vision and machine hearing capabilities. Details of these capabilities are set out below:

- Machine Vision.* K210 is a highly adaptive embedded machine vision solution. It can perform convolutional neural-network calculations with high power efficiency. It is capable of object detection, image classification, face detection and recognition, obtaining size and coordinates of targets in real time and analyzing the type of detected targets in real time.
- Machine Hearing.* K210 comes with a high-performance microphone array audio processor capable of real-time source orientation detection, sound field imaging, beamforming, voice wake-up and speech recognition.

Our AI chips' capabilities have the potential to be applied in a number of AI solutions in the field of IoT that involve automation, image and voice recognition, motion control and authentication. We currently focus on the following applications:

- Smart Homes.* Our chips can be applied in smart home appliances and security systems, including air conditioners, microwave ovens, gas meters, speakers, robot vacuum, electronic door locks featuring facial recognition functions, and household monitoring systems.
- Agriculture.* Our chips can increase crop yields when used for AI-powered agricultural monitoring, pest and disease monitoring and automated control.
- Smart Retail.* Our chips can power AIoT devices in smart retail to elevate customer experience, including supporting facial recognition for payment, automatically classifying items in vending machines, and tracking and analyzing customer flows.
- Surveillance and Security.* AI applications in image and voice recognition can be used by companies, schools or hotels for security purposes.
- Advanced driver-assistance systems.* Our chips can empower image or video capturing devices installed in cars to detect human movements and facial expression for driver fatigue warning.

Our AI chips can also be used for the following applications:

- *Smart Industrial Applications.* Our chips can be applied in logistics solutions, including intelligent sorting and transportation in complex warehousing environments, smart industrial machinery and robots, monitoring of electrical equipment, equipment fault detection and analysis of industrial equipment data. End users of such applications will mainly be logistics companies and manufacturers who wish to become more cost-efficient.
- *Medical Industry.* Our chips can be utilized in medical solutions, including intelligent auxiliary diagnosis and treatment, medical image recognition, medicine identification search, medicine excavation, health management and medical care.
- *Education.* Our chips can enhance the process of providing education to students and help teachers improve their teaching methods by allowing for the use of educational robots, virtual tutors, self-adaptive/personalized teaching, intelligent interactive platforms, educational efficiency inspection, teaching interaction and educational review. In addition, our AI chips can be utilized in body gesture detection or emotion detection technologies to identify child abuse, bullying or school violence incidents.
- *Authentication.* Image and voice recognition can also be used as an authentication method for devices, such as AI-powered face unlock for smartphones, and commercial transactions, such as ATM and bank transactions.

To enhance the robustness of our AI development ecosystem and ultimately to provide better user experiences, we offer comprehensive developer support to facilitate the development of AI applications. In particular, we provide schematic diagrams, reference printed circuit board and comprehensive design guidelines for hardware engineers, and we provide software development kits, debugging tools, an integrated development environment and their source codes for software engineers. We have also actively explored collaboration with business partners, including iSoftStone, and have integrated our AI chips in different IoT vertical markets, such as smart lock, smart toy and smart meter.

Sales and Marketing

We have assembled a dedicated team of marketing personnel and software engineers to focus on the development and marketing of our AI products. Our AI marketing team is organized around application scenarios, with dedicated team members. To generate interest from our customers, we also actively promote our latest research and development achievements and display our sample products. We are also in the process of working with a number of industry participants in the industries of smart city management systems, smart home devices, lighting solutions, smart apparel, telecommunications, intelligent entertainment devices and intelligent security devices, to further explore their interest in our AI products. In addition, we participate in industry associations, including the Zhejiang Software Industry Association, the Zhejiang Blockchain Technology Application Association, the Chinese Private Technology Entrepreneur Association, the Hangzhou Association of Enterprises with Foreign Investment and the China Communications Industry Association (IoT Application Branch), which help us acquire customers and discover potential partners.

Our Customer Base

Bitcoin Mining Machines

We, through our PRC operating subsidiaries, generally provide our Bitcoin mining products to individual or corporate customers on a first-pay-first-serve basis, while we prioritize potential customers whom we believe have stronger potential for a longer-term relationship. However, we do not restrict or control the end-use of our Bitcoin mining products.

Except for situations where our Bitcoin mining products have major defects upon delivery, our customers cannot return or exchange their purchases for upgrades, despite the possibility that their old Bitcoin mining products may no longer be economical for Bitcoin mining for them.

AI Applications

Our target customers are companies that are in the IoT industry, including, among others, those engaged in intelligent security solutions, smart appliances and instruments, intelligent medical solutions, logistic solutions, AI-powered educational solutions, robotics and authentication. We plan to increase our sales and marketing efforts to cover major customer groups in the IoT field. We currently focus on customers operating in large to mid-sized cities. While our current distribution method is to sell our AI ASICs directly to AI product developers, we plan to also sell our products through distributors in the future.

K210 has received strong interest from the Risc-V developer community. As of December 31, 2020, we, through our PRC operating subsidiaries, have shipped over 239,000 AI chips and development kits to AI product developers, the majority of which are from overseas, and we have initiated cooperation with more than 110 AI algorithm companies to develop holistic AI solutions for end consumers.

Research and Development

We became a global pioneer in offering ASIC solutions for blockchain computation purposes as a result of the work done by our research and development team led by our chairman and chief executive officer, Mr. Zhang. Mr. Zhang and his team are credited with inventing one of the first cryptocurrency mining machines incorporating ASIC technology.

To implement our research and development roadmap and our plan to diversify our product offering, members of our research and development team are primarily organized under two focus groups, including (i) a high power-efficiency computing group consisting of 32 team members, which is responsible for chip design and optimization and (ii) an AI products group consisting of 53 team members, which are responsible for the design of our Kendryte series including algorithm optimization and end application, both as of December 31, 2020.

As of December 31, 2020, our research and development team is comprised of 85 members, representing approximately 34.3% of our total employees. Our research and development team includes 40 members with a master's degree or above. In addition to Mr. Zhang heads our research and development efforts and has extensive experience in the industry. The members of our research and development team have relevant educational backgrounds, including undergraduate and advanced degrees in computational science and design and other relevant fields, and many are fluent in multiple coding languages. Many of our research and development personnel have gained relevant design and engineering experiences at other leading IC design houses.

We believe we are one of the few companies in the world to possess advanced technological know-how for ASIC design, including algorithm development and optimization, standard cell design and optimization, low voltage and high power efficiency operations, design of high performance system and heat dissipation technology. We were also the first in the industry to deliver commercial edge computing AI chips based on Risc-V architecture and self-developed neural-network accelerator with outstanding performance for commercial adoption. We are devoted to in-house research and development of core advanced technologies, such as energy-efficient computing. As it requires a substantial amount of time and production engineering experience to integrate the results of research and development and master the core technologies in the ASICs field, we have created high barriers to entry against our competitors.

Hangzhou Canaan was recognized by the Zhejiang Ministry of Science and Technology, Ministry of Finance and State Administration of Taxation as a High-tech Enterprise in 2016 for an initial three year period, and such recognition was renewed for another three year period in 2019.

Research and Development Achievements

Our research and development efforts have yielded significant results which enable us to establish our brand recognition and our competitive position. Some of our research and development results are protected by copyrights and patents while the rest are part of our proprietary trade secrets. As of December 31, 2020, we and our operating subsidiaries have registered a total of 135 patents in the PRC, including 15 inventions, 92 utility model patents and 28 exterior design patents. As of the same date, we have registered 105 software copyrights and 70 IC layout-design rights in the PRC. In particular, we and our operating subsidiaries have been focusing on designing ASICs utilizing the most advanced process technologies available and achieved the following technological breakthroughs:

- mass production of 28 nm ASICs in 2015, which positioned us among the leading global players using the then most advanced process technology in the world;
- mass production of the first generation of 16nm ASICs in 2016, which made us among the first-movers in the world to use this advanced process technology on blockchain-related ASICs;
- mass production of the second generation of 16nm ASICs in 2017;
- mass production of the third generation of 16nm ASICs in 2018;
- mass production of the fourth generation of 16nm ASICs in 2019;
- release and mass production of the first generation of ASICs for AI application in 2018;
- 7nm ASICs design tape-out in April 2018 and mass production by TSMC in August 2018;
- 8nm ASIC design tape-out in June 2019 and mass production of 8nm ASIC in first quarter of 2020; and
- 14nm ASIC design tape-out in November 2019 and expected mass production of 14nm ASIC in second quarter 2020.

Research and Development Roadmap

The core strength of our capabilities consists of designing products with high computing power and high energy efficiency. We aspire to develop advanced IC designs for supercomputing hardware and innovative applications, including blockchain and AI. We follow a market-oriented research and development approach, and we focus on research and development projects that have a relatively clear path toward market acceptance and commercialization opportunities. We are also able to diversify the application of our technology from pure blockchain application to the AI field, and we plan to increase our investment in the development of our AI chips and the establishment of an AI development ecosystem by providing AI chips with better performance and fostering an interactive developer community using our products.

Our Fabless Model

We and our PRC operating subsidiaries do not directly manufacture ICs used for our products. Instead, we utilize what is known as a fabless model, whereby we, through our PRC operating subsidiaries, cooperate 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 are able to 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. Our fabrication partners are responsible for procurement of the majority of the raw materials used in the production of our ICs. As a result, we can focus our resources on research and development, product design and additional quality assurances.

We closely work with leading global production partners, including SMIC, TSMC and Samsung for IC fabrication.

IC Fabrication

We work with SMIC, currently our main IC fabrication partner, to formulate semi-annual purchase plans in order for them to allocate their production resource, and we place actual orders according to our business needs. After we, through our PRC operating subsidiaries, place our orders, and once SMIC accepts our orders, we are required to prepay 50% of the purchase price in order to secure production capacity from SMIC. It takes an average of approximately three months from the time when we place our order to the delivery of wafers. We started our cooperation with SMIC in 2019, and we do not maintain any long-term contract or framework agreement.

Packaging and Testing

We work with leading packaging and testing partners. According to our agreements, we provide rolling forecasts and firm orders for our packaging and testing partners to purchase necessary materials. We, through our PRC operating subsidiaries, typically settle with our packaging and testing partners on a monthly basis and we are required to pay them within 30 days upon receipt of invoices.

Assembly Plant

We, through our PRC operating subsidiary Langfang Creative Technology Co., Ltd., currently operate an assembly plant located in Hebei Province that has a gross floor area of 7,538.5 square meters. Subject to the amount of ICs we can obtain from our production partners, we have the flexibility to adjust the production capacity of our Bitcoin mining machines. For example, we can adjust the assembly worker's shifts in response to the purchase orders we receive.

Quality Control

We emphasize quality control in all aspects of our operations. From product development, component sourcing to product assembly and delivery, we strictly control the quality of our products and components, to ensure our Bitcoin mining machines meet our stringent internal standards as well as international and industry standards. We also require our fabrication, packaging and testing service providers to apply their stringent quality control standards. In particular, we have attained the CE certification and U.S. Federal Communication Commission certification for some of our AvalonMiner products.

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 provide warranties of not longer than six months, which we believe is in line with prevailing industry practice. Our warranties cover regular maintenance services and parts and labor for repairs. The components used in our products are typically covered by warranties provided by the respective suppliers.

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 Bitcoin 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

Cryptocurrency mining machines comprise the overwhelming majority of blockchain hardware. The global Bitcoin mining machine market is relatively concentrated with a few large players. Most of the leading players are based in the PRC.

Our competitors include many well-known domestic and international players. We expect that competition in the Bitcoin mining industry will continue to be intense as we compete not only with existing players that have been focused on Bitcoin 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 the IC industry for AI products, we expect to face competition from 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.

Intellectual Property

We regard our patents, IC layout and design rights, copyrights, trademarks, domain names, know-how, proprietary technologies and similar intellectual property as 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 our proprietary rights. As of December 31, 2020, we and our operating subsidiaries had registered 200 trademarks, including 59 in the PRC, 56 in Hong Kong, 16 in Taiwan, 20 in Japan, 17 in Republic of Korea, 12 in the United States, 20 in Russia.

As of December 31, 2020, we and our operating subsidiaries have registered a total of 135 patents in the PRC, including 15 inventions, 92 utility model patents and 28 exterior design patents. As of the same date, we have registered 105 software copyrights and 70 IC layout-design rights in the PRC.

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 and our operating subsidiaries 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.

Insurance

We and our PRC operating subsidiaries do not maintain business liability or interruption insurance, which, based on publicly available information available to us relating to IC design companies based in the PRC, is in line with customary industry practice in the PRC. Any uninsured occurrence of business disruption, litigation or natural disaster, or significant damages to our uninsured equipment or facilities could have a material adverse effect on our results of operations.

Employees

As of December 31, 2020, we and our operating subsidiaries employed a total of 248 employees that are classified as follows:

<u>Function</u>	<u>Number of Employees</u>	<u>Percentage of Total Number of Employees</u>
Management	47	19.0%
Sales and marketing	19	7.7%
Research and development	85	34.3%
Others	97	39.0%
Total	248	100.0%

We operate in a highly competitive and fast-growing industry in which recruiting and retaining talent is crucial to our continued growth and profitability. We compensate our employees based on historical contributions, potential for further contributions, as well as the market rate for qualified talent. We are committed to attracting and retaining top talent in the industry, and our emolument policy reflects that commitment. We offer various incentives to our employees including performance-based bonuses and share-based compensation. We also provide accidental insurance for the benefit of our employees. Pursuant to local regulations in each of the regions where we operate, we make contributions to various employee benefit plans. Employee benefits covered by these arrangements include employee benefits required by PRC laws and regulations as well as incentives for increasing production quantity, accommodations, meals and travel allowances. We believe that maintaining a stable and motivated workforce is critical to the success of our business. As a fast-growing company, we believe we are able to provide our employees with ample career development choices and advancement opportunities. We organize and launch various training programs on a regular basis for our employees. We believe that the current emolument policy has contributed to our ability to attract, incentivize and retain talents in such a competitive and fast-growing industry.

Properties

Our PRC operating subsidiaries lease all our properties in China in connection with our business operations. They mainly include premises for our assembly plants, warehouses and offices. As of December 31, 2020, we and our operating subsidiaries occupied a total of 17 properties with an aggregate gross floor area of approximately 14,500 square meters.

Environmental Matters

Our PRC operating subsidiaries are subject to PRC environmental laws and regulations including the Environmental Protection Law of the PRC. These laws and regulations govern a broad range of environmental matters, including air pollution, noise emissions and water and waste discharge. We consider the protection of the environment to be important and have implemented measures in the operation of our business to ensure our compliance with all applicable requirements under PRC environmental laws and regulations. Due to the nature of our operations, the waste we produce is not hazardous and has minimal impact on the environment.

The operations of our operating subsidiaries are subject to regulation and periodic monitoring by local environmental authorities. If we fail to comply with present or future laws and regulations, we could be subject to fines, suspension of production or cessation of operations.

Legal Proceedings

On March 4, 2020, a putative class action was filed in the United States District Court of Oregon against us, certain of our officers and directors and the underwriters in our IPO. The complaint alleges that the Form F-1 registration statement for our IPO contained material misstatements and omissions in violation of federal securities laws. On March 6, 2020, another putative class action, making substantially similar allegations, was filed in New York County Supreme Court (the “State Action”) against us and certain of our officers and directors. On June 1, 2020, we filed a motion to stay all proceedings in the State Action pending adjudication of the Federal Action, which was granted on July 21, 2020. Subsequently, the Federal Action was transferred to the U.S. District Court for the Southern District of New York on September 2, 2020. On December 7, 2020, we filed a motion to dismiss in the Federal Action and our motion to dismiss was fully briefed on March 8, 2021. As of the date of this annual report, we are in the process of preparing our response to the letter motion that the complaint filed to exclude three exhibits cited in our motion to dismiss briefing or, in the alternative, convert the motion to dismiss into a motion for summary judgment.

Other than the above, we are currently not a party to, and we are not aware of any threat of, any legal, arbitral or administrative proceedings, which, in our opinion, is likely to have a material and adverse effect on our business, financial conditions or results of operations. We may from time to time become a party to various legal, arbitral or administrative proceedings arising in the ordinary course of our business.

Regulatory

This section summarizes the principal current PRC laws and regulations relevant to the business and operations of our PRC operating subsidiaries.

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 the PRC through our PRC operating subsidiaries. This summary does not purport to be a complete description of all the laws and regulations, which apply to the business and operations of our PRC operating subsidiaries. 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.