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华大科技

HUADA TECHNOLOGY

China Electronics

Huada Technology Company Limited

中國電子華大科技有限公司

(Incorporated in the Cayman Islands and continued in Bermuda with limited liability)

(於開曼群島註冊成立及於百慕達繼續經營之有限公司)

(Stock Code 股份代號: 00085)

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

環境、社會及管治報告

2023

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1. ABOUT THIS REPORT

This report is the Environmental, Social and Governance Report issued by China Electronics Huada Technology Company Limited (the "Company"). It addresses the actions taken by and the achievements of the Company and its subsidiaries (the "Group") in respect of sustainable development regarding environmental, social and governance ("ESG") issues. This report has been prepared with reference to the Environmental, Social and Governance Reporting Guide issued by The Stock Exchange of Hong Kong Limited.

1.1 Scope of the report

Organisational scope: the companies covered under this report included the Company, and its subsidiaries, CEC Huada Electronic Design Co., Ltd ("Huada Electronics"), Shanghai Huahong Integrated Circuit Co., Ltd and China Electronics Huada Technology (Shenzhen) Company Limited.

Reporting period: from 1 January 2023 to 31 December 2023.

1.2 Data

Data disclosed in this report were extracted from the Group's original records in day-to-day operation or financial reports.

1.3 Reliability assurance

The board of director of the Company (the "Board") guarantees the contents of this report do not contain any false information, misleading statement or material omission.

1.4 Reporting principles

- Principle of materiality. This report identifies and responds to material ESG issues affecting the Group's sustainable development through an online survey of key stakeholders and data analysis. The process and results of the materiality analysis are detailed on pages 7 to 9 of this report.
- Principle of quantitative. The Group's ESG quantitative key performance indicators have been disclosed in this report and are detailed on page 19, 22, 25, 26, 30, 36 and 39 of this report.
- Principle of consistency. The indicators used in this report are as consistent as possible from one reporting period to the next, and changes in the indicators are explained to reflect the changing trends in key performance.

1. 關於本報告

本報告是中國電子華大科技有限公司（「本公司」）發佈的環境、社會及管治報告，披露本公司及其附屬公司（「本集團」）在環境、社會及管治（「ESG」）議題的可持續發展方面採取的行動及達到的成效。本報告參考香港聯合交易所有限公司發佈的《環境、社會及管治報告指引》編製。

1.1 報告範圍

組織範圍：本報告涵蓋的公司包括本公司，以及其附屬公司北京中電華大電子設計有限責任公司（「華大電子」）、上海華虹集成電路有限責任公司和中電華大科技（深圳）有限公司。

報告期間：2023年1月1日至2023年12月31日。

1.2 數據

本報告披露的數據來自本集團日常營運的原始記錄或財務報告。

1.3 可靠性保證

本公司董事會（「董事會」）對本報告的內容進行保證，不存在任何虛假資料、誤導性陳述或重大遺漏。

1.4 匯報原則

- 重要性原則。本報告通過重要持份者線上調查及數據分析，識別出影響本集團可持續發展的重要ESG議題並回應。重要性分析過程及結果詳見本報告第7頁至第9頁。
- 量化原則。本報告已經披露本集團的ESG量化關鍵績效指標，詳見本報告第19頁、第22頁、第25頁、第26頁、第30頁、第36頁及第39頁。
- 一致性原則。本報告對不同報告期間所使用的指標盡量保持一致，對發生變化的指標進行解釋說明，以反映關鍵績效的變化趨勢。

- Principle of balance. This report reflects objective facts and discloses both positive and negative indicators.

2. ESG MANAGEMENT STATEMENT FROM THE BOARD

2.1 Governance structure for ESG

The Group has established a top-down governance structure for ESG issues with the Board assuming overall responsibility for ESG strategy and reporting of the Group, and established an ESG working group as the manager and coordinator of ESG work.

- *The Board*

The duties of the Board include:

- assessing and determining the risks and opportunities associated with the ESG issues of the Group;
- ensuring that appropriate and effective ESG risk management and internal control systems are in place;
- formulating the Group's ESG management approach, strategies, priorities and targets;
- reviewing the Group's performance against ESG targets on a regular basis; and
- approving the Environmental, Social and Governance Report of the Group.

- *ESG working group*

The ESG working group is responsible for the implementation of ESG tasks to all relevant departments. The duties of the ESG working group include:

- directing and reviewing the formulation of ESG management approach and strategies;
- monitoring the formulation and implementation of ESG targets and reviewing the progress of their achievement;
- directing and reviewing the identification and priorities of key ESG issues;

- 平衡性原則。本報告反映客觀事實，同時披露正面和負面指標。

2. 董事會的ESG管理聲明

2.1 ESG的管治架構

本集團建立了自上而下的ESG議題管治架構，由董事會對本集團的ESG策略及匯報承擔全部責任，並成立ESG工作小組作為ESG工作的管理者與協調者。

- *董事會*

董事會的責任包括：

- 評估及釐定與本集團的ESG議題相關的風險及機遇；
- 確保設有適當和有效的ESG風險管理及內部控制系統；
- 制定本集團的ESG管理方針、策略、優次排序及目標；
- 就ESG目標定期檢討本集團的表現；及
- 審批本集團的環境、社會及管治報告。

- *ESG工作小組*

ESG工作小組負責將ESG任務落實到各有關部門。ESG工作小組責任包括：

- 指導和檢討ESG管理方針及策略的制定；
- 監察ESG目標的制定和實施及檢討該等目標實現的進展；
- 指導和檢討重要ESG議題的識別和優次排序；

- d) preparing the annual Environmental, Social and Governance Report for the Board's review and approval;
- e) identifying ESG risks relevant to the Group annually and assessing the impact of such risks on the Group and making recommendations to the Board on the risk-counteracting strategies; and
- f) other duties as delegated by the Board.

2.2 Progress of ESG work

In 2023, the Group upheld the ESG vision of "Innovation empowers green practices, for a bright future" and continued to promote ESG management practices at all levels with due consideration of the Group's businesses and the demands of various key stakeholders, with specific progress as follows:

- *Products and services*

We insisted on research and development and innovation, continuously enhanced the Group's competitive advantage in the sector of smart cards and secure element chips and expanded the market share. We continued to participate in the formulation of national standards, industry standards and association standards, helped promote the standardisation of industry technology and passed the ISO 27001 Information Security Management System Certification.

- *Employees*

Through survey and research studies on the competitiveness of the Group's remuneration, comprehensively considering factors such as annual staff cost budget, annual staffing requirements, etc., we reasonably adjusted the remuneration levels of employees. We established a production safety standardisation system and passed the audit of Beijing's production safety standardisation (Level 3), conducted training on production safety for employees to ensure their safety, advocated the combination of work and leisure, and organised a number of employee activities to enrich the working life of employees.

- d) 編製年度環境、社會及管治報告，並提交董事會審批；
- e) 每年識別與本集團有關的ESG風險及評估此類風險對本集團的影響，並就風險應對策略向董事會提供建議；及
- f) 董事會授予的其他責任。

2.2 ESG工作進展

2023年，本集團秉持「創新賦能綠色、美好未來」的ESG願景，在充份考慮本集團業務及各重要持份者訴求的基礎上，持續推進各層面的ESG管理實踐，具體進展如下：

- *產品及服務*

堅持研發創新，不斷提升本集團在智能卡及安全芯片領域的競爭優勢及擴大市場佔有率；繼續參與國家標準、行業標準及團體標準的制定，協助推動行業技術的標準化；通過ISO 27001信息安全管理体系認證。

- *員工*

通過本集團的薪酬競爭力調研，綜合考慮年度人工成本預算、年度人員編制需求等因素，合理調整員工薪酬水平；建立安全生產標準化體系並通過北京市安全生產標準化(三級)審核，組織員工開展安全生產培訓，保障員工安全；倡導勞逸結合，舉辦多項員工活動，豐富員工工作生活。

- *Compliance operation*

We conducted publicity activities on corruption-free practice and business ethics for directors, senior and middle management and employees, and through various channels continuously promoted the building of business ethics culture, continuously promoted the environmental and social risks management of the supply chain to ensure the supplier's compliance operation, and guarantee the quality of the Group's products and services.

- *Environment*

Through means such as improving the management system, raising awareness publicity and implementing daily management, we are actively responding to China's "Peak carbon dioxide emissions and carbon neutrality targets" and make every effort to minimise the energy consumption during operations, complying with the principle of "Reduce, recycle, harmless" enshrined in the Prevention and Control of Environmental Pollution by Solid Waste Law of the People's Republic of China to optimise the disposal method of waste and reduce environmental pollution through recycling.

- *Community investment*

We continued to participate in community welfare activities, support disadvantaged groups and assist village revitalisation.

3. ESG MANAGEMENT

3.1 ESG philosophy

The Group is principally engaged in the business of design and sale of integrated circuit chips. The integrated circuit chips design operation comprises the design of smart cards and secure element chips and the development of application system.

The Group has all along been insisting on developing the information industry and maintaining information security as its own responsibility. By adhering to the "Be innovative in electronics of China, lead the information in the future" responsibility philosophy, and incorporating it into the Group's strategic and operational practice. The Group seeks to maximise the comprehensive benefits of ESG, and strives to realise the ESG vision of "Innovation empowers green practices, for a bright future".

- *Compliance operation*

向董事、中高層管理人員及員工開展廉潔執業及商業道德宣傳工作，通過多種渠道不斷推動商業道德文化建設，持續推進對供應鏈的環境及社會風險管理，確保供應商的合規營運，並保障本集團產品及服務的質量。

- *Environment*

通過完善管理制度、強化意識宣傳及落實日常管理等手段，積極響應中國「碳達峰、碳中和目標」，竭力減少營運過程中的能源消耗；遵守《中華人民共和國固體廢物污染環境防治法》的「減量化、資源化、無害化」原則，優化廢棄物的處置方式，通過循環使用減少環境污染。

- *Community investment*

持續參與社會公益活動，資助弱勢群體及助力鄉村振興。

3. ESG管理

3.1 ESG理念

本集團的主要業務為從事集成電路芯片的設計及銷售。集成電路芯片設計業務涵蓋智能卡及安全芯片的設計及應用系統開發。

本集團始終堅持以發展信息產業及維護信息安全為己任，秉承「創新中國電子，引領信息未來」的責任理念，並將其融入本集團戰略及營運實踐。本集團追求ESG綜合效益最大化，致力實現「創新賦能綠色、美好未來」的ESG願景。

The Company has complied with the “Comply or explain” provisions set out in the Environmental, Social and Governance Reporting Guide as set out in Appendix C2 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited for the year ended 31 December 2023. Details of the corporate governance practices of the Company are set out in the Company’s 2023 Annual Report.

3.2 Participation of stakeholders and analysis of key ESG issues

The communication with and the participation of stakeholders are important components of the sustainable development of a corporation. The Group operates principally in Mainland China. The key stakeholders of the Group includes its shareholders, customers, employees, government and regulatory authorities, business partners, communities and the public as well as the ecological environment. Through communication with its stakeholders, the Group understands their expectations and advices, so as to provide guidelines for the Group’s operational decision-making and make more positive contributions to sustain the industrial and social development.

In 2023, the Board analysed the materiality of various ESG issues with reference to peer practice and expert opinions, in light of the Group’s actual operating circumstances and issues that key stakeholders are highly concerned about and have a material impact on the Group’s business, identified and determined the Group’s key ESG issues, and gave a salient response to these key issues in this report.

於截至2023年12月31日止年度本公司已遵守香港聯合交易所有限公司證券上市規則附錄C2所載環境、社會及管治報告指引所載的「不遵守就解釋」條文。有關本公司的企業管治常規詳見本公司的2023年年報。

3.2 持份者參與及重要ESG議題的分析

與持份者的溝通及其參與是企業可持續發展的重要組成部份。本集團主要經營地點在中國內地。本集團的重要持份者包括其股東、顧客、員工、政府及監管機構、業務夥伴、社區及公眾和生態環境。通過與其持份者的溝通，本集團了解各方期望及建議，為本集團營運決策提供指引，為行業及社會可持續發展做出更積極的貢獻。

2023年，董事會採取同業對標及專家意見相結合的方式，結合本集團實際營運的情況及重要持份者高度關注且對本集團業務有重要影響的議題，分析各項ESG議題的重要性，識別及釐定本集團的重要ESG議題，並在本報告中對該等重要議題進行重點回應。

ESG issues ESG議題		Materiality analysis 重要性分析	Corresponding section 對應章節
Emissions 排放物	Exhaust and greenhouse gas emissions 廢氣及溫室氣體排放	The Group is principally engaged in the business of design of smart cards and secure element chips and its operation does not involve manufacturing. Apart from greenhouse gases, non-hazardous wastes produced in offices (such as waste paper), and consumption of a small number of waste toner cartridges, the Group does not produce significant exhaust emission, cause water and land pollutions and generate hazardous wastes during operations. 本集團的主營業務為智能卡及安全芯片之設計，其業務不涉及製造環節。除溫室氣體、辦公環節產生的無害廢棄物（如廢紙）以及消耗少量廢棄碳粉匣外，本集團於營運過程中並無產生顯著廢氣排放、向水及土地排污以及產生有害廢棄物。	7.1 Green operations 7.1 綠色營運
	Cause water and land pollutions 向水及土地排污		7.1 Green operations 7.1 綠色營運
	Hazardous and non-hazardous waste generation 有害及無害廢棄物產生		7.1 Green operations 7.1 綠色營運
Use of resources 資源使用	Use of energy 能源使用	The Group consumes gasoline, electricity, water resource and packaging materials used in finished products during operations. Managing the use of resources can help to lower the environmental impacts arising from the Group's operation. 本集團營運過程中消耗汽油、電力、水資源以及製成品所用包裝材料。管理資源的使用有助於降低本集團的營運對環境做成的影響。	7.1 Green operations 7.1 綠色營運
	Use of water resource 水資源使用		7.1 Green operations 7.1 綠色營運
	Packaging materials used in finished products and paper used in office 製成品所用包裝材料及辦公用紙		7.1 Green operations 7.1 綠色營運
Environment and natural resources 環境及天然資源		In the process of smart card chips manufacturing, suppliers who work with the Group will exert impacts on the environment and natural resources. 在智能卡芯片製造過程中與本集團合作的供應商會對環境及天然資源產生影響。	7.2 Green products 7.2 綠色產品

ESG issues ESG議題		Materiality analysis 重要性分析	Corresponding section 對應章節
Climate change 氣候變化		<p>The Group's integrated circuits design operation does not involve manufacturing, and its four business operational locations are located in industrial parks or business centers of first-tier cities with well-developed infrastructure and facilities, so climate change has minimum impact on the Group's operations. However, in response to China's "Peak carbon dioxide emissions and carbon neutrality targets", the Group is also doing its best to promote the efficient use of resources and makes every effort to minimise the energy consumption during operations, so as to lower carbon emissions generated during operations.</p> <p>本集團的集成電路設計業務不涉及製造環節，而其四個業務營運點均分佈在一線城市基建及配套完善的工業園區或商業中心，因此氣候變化對本集團的營運影響甚微。但是，為了響應中國「碳達峰、碳中和目標」，本集團亦盡己所能倡導資源的高效使用及竭力減少營運過程中的能源消耗，降低營運過程中產生的碳排放。</p>	7.1 Green operations 7.1 綠色營運
Employment and labour practices 僱傭及勞工常規	Employment 僱傭	<p>Employees are an asset to the Group and a driving force for the Group to innovate continuously. Therefore, the rights and interests and benefits, health and safety, training and development of employees are all key areas of work of the Group regarding ESG management.</p> <p>員工被視為本集團的資產，同時為本集團提供不斷創新的原動力。因此，員工的權益及福利、健康及安全、培訓及發展均為本集團於ESG管理方面的重要工作。</p>	5.1 Employment and employee benefits 5.1 僱傭及員工福利
	Health and safety 健康及安全		5.3 Occupational health and safety 5.3 職業健康及安全
	Training and development 培訓及發展		5.2 Training and development 5.2 培訓及發展
	Labour standards 勞工準則		5.1 Employment and employee benefits 5.1 僱傭及員工福利
Supply chain management 供應鏈管理	<p>Management of environmental and social risks of the supply chain 供應鏈的環境及社會風險管理</p>	<p>Effective supply chain management not only helps the Group to avoid environmental and social risks, but is also crucial to the Group's product quality.</p> <p>有效的供應鏈管理不僅能幫助本集團規避在環境及社會方面的風險，也對本集團的產品質量至關重要。</p>	6.1 Supply chain management 6.1 供應鏈管理

ESG issues ESG議題		Materiality analysis 重要性分析	Corresponding section 對應章節
Product responsibility 產品責任	Development of security chips 安全芯片開發	The rapid development of 5G and the Internet of Things continues to raise the market demand for information security, and thus the importance of development of security chips to the Group's business continues to grow. 5G和物聯網的高速發展不斷提升市場對信息安全的需求，因此安全芯片開發對於本集團業務的重要性也在不斷增加。	4.1 Information security 4.1 信息安全
	Quality of products and services 產品及服務的質量	Effective product and service quality management are the foundation for achieving sustainable development of the Group. 有效的產品及服務質量管理為本集團實現可持續發展的基礎。	4.2 Quality management 4.2 質量管理 4.4 Customer service 4.4 顧客服務
	Intellectual property management 知識產權管理	The operation of the Group involves the use of intellectual properties owned by customers, suppliers or the Group. Therefore, protecting the intellectual properties of the Group and business partners, and avoiding infringement of others' intellectual properties are all key areas of work of the Group regarding ESG management. 本集團的營運會涉及到使用顧客、供應商或本集團自身擁有的知識產權。因此，保護自身及業務夥伴的知識產權，同時防止侵犯他人的知識產權為本集團於ESG管理方面的重要工作。	4.3 Research and development innovation, and intellectual property protection 4.3 研發創新與知識產權保護
	Customers' information security and privacy protection 顧客信息安全及私隱保護	The operation of the Group involves confidential information of some of its customers and business partners. 本集團的營運會涉及到部分顧客及業務夥伴的機密信息。	4.4 Customer service 4.4 顧客服務
Anti-corruption 反貪污	Anti-corruption practices 反貪污常規	Anti-corruption is a key safeguard for the healthy and sustainable development of the Group's business. 反貪污是本集團的業務健康及可持續發展的重要保障。	6.2 Anti-corruption 6.2 反貪污
Community investment 社區投資		The Group mainly operates in Mainland China. The local government and society expect corporation to fulfill their social responsibilities through support disadvantaged groups and public welfare projects. 本集團主要營運地點在中國內地，當地政府及社會期待企業通過資助弱勢群體和公益項目履行其社會責任。	8. Community investment 8. 社區投資

3.3 ESG working group

The Group has established an ESG working group as the manager and coordinator of ESG work, which is headed by the deputy managing director of the Company. The ESG working group is responsible for implementing ESG tasks to all relevant departments and reporting the progress of the ESG work to the Board on a regular basis.

The duties of the ESG working group are set out in the section headed “ESG Management Statement from the Board” of this report.

4. PRODUCTS AND SERVICES

The Group regularly reviews and improves the management systems regarding aspects such as safety, advertisement, labelling and privacy of its products and services by adhering to the “Innovate through reform and cherish integrity towards the world” operational philosophy, and complying with the Standardisation Law of the People’s Republic of China, the Intellectual Property Law of the People’s Republic of China, the Product Quality Law of the People’s Republic of China and the Advertising Law of the People’s Republic of China. In 2023, there was no litigation against the Group and no violation of laws and regulations by the Group in relation to the safety, advertisement, labelling and privacy of its products and services.

4.1 Information security

As the practitioner and promoter of the smart card chips design industry in China, the Group regards maintenance of information security as its own responsibility, complies with the laws and regulations and the relevant requirements regarding information security management such as the Electronic Information Industry Production Safety Management Requirements, the Computer Information System Safety Protection Regulation of the People’s Republic of China, the Network Security Law of the People’s Republic of China, the Commercial Cryptographic Management Regulations, etc. The Group focuses on autonomous research and development of smart cards and secure element chips while building a safe operating environment, and provides the foundation for China’s information technology modernisation and information security.

3.3 ESG工作小組

本集團成立了ESG工作小組作為ESG工作的管理者與協調者，由本公司副董事總經理擔任組長。ESG工作小組負責將ESG任務落實到各相關部門，並定期向董事會匯報ESG工作進展。

ESG工作小組責任載於本報告標題為「董事會的ESG管理聲明」一節內。

4. 產品及服務

本集團秉承「知變圖新、誠達天下」的經營理念，遵守《中華人民共和國標準化法》、《中華人民共和國知識產權法》、《中華人民共和國產品質量法》及《中華人民共和國廣告法》，對其產品及服務的安全、廣告、標籤及私隱等方面的管理制度定期進行檢討及完善。本集團於2023年在其產品及服務的安全、廣告、標籤及私隱方面並沒有訴訟和違法及違規事件。

4.1 信息安全

本集團作為中國智能卡芯片設計行業的實踐者及推動者，以維護信息安全為己任，遵守《電子信息產業安全生產管理規定》、《中華人民共和國計算機信息系統安全保護條例》、《中華人民共和國網絡安全法》、《商用密碼管理條例》等信息安全管理相關的法律及法規及有關規定，研發自主可控的智能卡及安全芯片，同時打造安全的營運環境，為中國信息技術現代化以及信息安全提供基石。

The Group established an information security management system by adhering to the Group's information security approach of "Catering for demand for safety through system protection; seeking for continuous development through the involvement of all employees". The Group has also set up an information security management team to be responsible for coordinating information security management work, ensuring stable operation of the information security management system, continuously improving the information security facilities and managing of the information assets. In 2023, the Group obtained the certification of ISO 27001 Information Security Management System and revised a number of management documents such as the Record Control Procedures and the Internal Audit Control Procedures in accordance with the ISO 9001 Quality Management System, the IATF 16949 Automotive Quality Management System and the ISO 27001 Information Security Management System to strengthen the control over service suppliers.

Through internal and external information audits, the Group has refined and improved the information security management system and initiated measures against potential sources of risk based on the results of the internal and external information audits, so as to continuously enhance the Group's information security management capabilities. In addition, the Group conducted business continuity exercises on its infrastructure, network and application systems, the results of which indicated that the information systems were operating normally.

In order to further consolidate and raise information security performance and maintain the effective operation of the information security management system, the Group established the information security targets and the ancillary management requirements to assist external suppliers to improve information security management. The Group has promoted information security awareness to all employees and organised them to complete information security tests after training to consolidate their information security awareness. In 2023, the Group formulated the Information Security Strategy and through methods such as setting information access rights, encryption, obfuscation or desensitization so as to protect customer privacy, data and information. At the same time, the Group has implemented identity identification for specific visitors to protect the information security of the Group and customers.

本集團秉承「系統防範，滿足安全需求；全員參與，追求持續發展」的信息安全方針，建立信息安全管理體系，並設立了信息安全管理小組，負責協調信息安全管理工作，確保信息安全管理體系的穩定運行，持續完善信息安全設施及管理信息資產。2023年，本集團獲得ISO 27001 信息安全管理體系認證，並依據 ISO 9001 質量管理體系、IATF 16949 汽車質量管理體系以及 ISO 27001 信息安全管理體系修訂《記錄控制程序》、《內部審核控制程序》等多項管理文件，加強了對服務類供方的控制。

本集團通過內外部信息審核，細化及完善信息安全管理體系，並依據內外部信息審核結果對潛在風險源開展措施，持續提升本集團信息安全管理的能力。此外，本集團針對其基礎設施、網絡和應用系統開展業務連續性演練，演練結果顯示信息系統運行正常。

為進一步鞏固、提高信息安全績效，保持信息安全管理體系運行的有效性，本集團建立信息安全目標及配套管理要求，協助外部供應商完善信息安全管理工作。本集團對全體員工進行了信息安全意識宣貫，組織全體員工在培訓後完成信息安全測試題，鞏固員工信息安全意識。2023年，本集團制定《信息安全策略》，通過設置信息訪問權限、加密、模糊或脫敏等方式，保護客戶隱私、數據與資料。同時，本集團對個別訪客施行身份識別，保護自身及客戶的信息安全。

- *Development of security chips*

The Group strives to promote the continuous development of China's security chips technology, products and applications. With globally advanced and China's leading security attack and defense technology, covering the protection technology at levels such as the system level, algorithm level, circuit level and layout level along with technologies such as side channel attack, malfunction-injection attack and physical attack technologies, a well-established product safety management system is formed. A number of high-end security chips were accredited with security qualification certification such as the China EAL4+ Certification and EAL5+ Certification, CCEAL6+ Certification, EMVCo Certification, etc. Security chip series products are widely used in sectors such as financial payment, social security, resident health, public transportation, telecommunications, network authentication, identity authentication, Internet of Things, intelligent connected vehicles, etc.

The Group continued to lead China's security chips technology, keep pace with international standards, and demonstrate China's "Smart card chips" capability. The Group has launched and achieved large-scale application in a number of automotive grade security chip products for intelligent connected vehicles applications. Related products had also been gradually applied on a large scale in the information security sector such as Internet of Things, intelligent connected vehicles, 5G communication, and payment. The Group's product (CIU9872B_01_C14.0) was awarded the IT Product Information Security Certification (China EAL5+ Certification) by the China Cybersecurity Review Technology and Certification Center and the UnionPay Card Chip Product Security Certification. At 31 December 2023, one of the Group's smart card chip products was awarded the EMVCo Security Certification.

In addition, the Group actively participated in the preparation of a number of national and industry standards such as Technical Requirements and Experimental Methods for Automobile Security Chips and Technical Requirements for Automobile Password Application, which continued to enhance the comprehensive competitiveness and attractiveness of the industry in the international arena.

- *安全芯片開發*

本集團致力於推進中國安全芯片的技術、產品及應用的持續發展。憑藉世界先進、中國領先的安全攻防技術，覆蓋系統級、算法級、電路級、版圖級等防護技術，具備側信道攻擊、故障注入攻擊、物理攻擊等技術，形成了完整的產品安全管理體系；多款高端安全芯片獲得中國EAL4+認證及EAL5+認證、CCEAL6+認證、EMVCo認證等安全資質認證；安全芯片系列產品已廣泛應用於金融支付、社會保障、居民健康、公共交通、電信、網絡認證、身份識別、物聯網、智能網聯車等領域。

本集團繼續引領中國安全芯片技術、緊隨國際水平，展現中國「芯」實力。本集團推出多款智能網聯車應用的車規級安全芯片產品並實現規模應用；同時相關產品也在物聯網、智能網聯車、5G通信、及支付等信息安全領域逐步形成規模應用。本集團產品(CIU9872B_01_C14.0)獲得中國網絡安全審查技術與認證中心的IT產品信息安全認證(中國EAL5+認證)及銀聯卡芯片產品安全認證。截至2023年12月31日，本集團的一款智能卡芯片產品獲EMVCo安全認證。

此外，本集團積極參與《汽車安全芯片技術要求及試驗方法》、《汽車密碼應用技術要求》等多項國家及行業標準編制，持續提升行業在國際上的綜合競爭能力及吸引力。

- *Safe operating environment*

While focusing on the development of smart card chips with high security and high reliability, the Group also pays attention to the safety of physical environment, that is, protecting computer network equipment and facilities from being destroyed by accidents such as earthquakes, floods, etc., as well as human acts. The Group formulated a series of physical safety management systems such as the Physical Safety Control Procedures, the Security Facilities Management Measures, the Central Control Room Control Specifications, the Security Officer Management Measures, the Office Facilities, Security Facilities and Working Environment Control Procedures, etc., which covers areas such as laboratory temperature and humidity management requirements, office environment management, etc., for protecting the design and development of smart cards and secure element chips.

4.2 Quality management

- *Quality management system*

The integrated circuits design operation of the Group comprises the design of smart cards and secure element chips and the development of application system. The Group is not involved in aspects such as manufacturing, assembling, transportation, albeit adhering to the tenet of “Zero defect” in provision of products and services to customers as well as the quality approach of “Catering for customers’ demand through continuous innovation, seeking for customers’ satisfaction through the involvement of all employees”. The Group promotes comprehensive quality management with the involvement of all employees, striving to control and continuously improve the entire process of production of products.

The Group established corresponding management measures for aspects such as product design and development, risk control, outsourcing of production control, and performance evaluation, in accordance with the requirements of ISO 9001 Quality Management System, so as to meet customers’ demand for diversification, personalisation and refinement through systematic management. In 2023, the Group formulated the Product Review Guidelines in accordance with the IATF 16949 Automotive Quality Management System to clearly stipulate the requirements for reviewing the quality characteristics of products; and regularly monitoring the wafer level, packaging level and product level of automotive products. In addition, the Group revised the Production Supplier Management Control Procedures and the Production Procurement and Outsourcing Processes Control Procedures in accordance with the IATF 16949 Automotive Quality Management System and the ISO 27001 Information Security Management System, and conducted monthly quality meetings with major product suppliers in order to review and raise the quality of production and processing.

- *安全營運環境*

在專注於高安全性、高可靠性智能卡芯片開發的同時，本集團亦注重物理環境安全，即保護計算機網絡設備及設施免遭地震、水災等事故以及人為行為導致的破壞。本集團制定有《物理安全控制程序》、《安防設施管理辦法》、《中控室控制規範》、《保安員管理辦法》、《辦公設施、安防設施及工作環境控制程序》等一系列物理安全管理制度，涵蓋實驗室溫濕度的管理要求及辦公環境管理等內容，為智能卡及安全芯片設計及開發提供保障。

4.2 質量管理

- *質量管理體系*

本集團的集成電路設計業務涵蓋智能卡及安全芯片之設計及應用系統開發，業務不涉及製造、封裝及運輸等環節，但秉承著向顧客提供「零缺陷」產品及服務的宗旨，「持續創新，滿足顧客需求，全員參與，追求顧客滿意」的質量方針。本集團倡導全員參與的全面質量管理，致力於對產品的生產實現全過程控制及持續改進。

本集團按照ISO 9001質量管理體系要求，在產品設計及開發、風險控制、生產外包控制、績效評價各環節建立了相應的管理辦法，通過體系化管理滿足顧客多樣化、個性化、精細化等訴求。2023年，本集團依據IATF 16949汽車質量管理體系制定《產品審核指導書》，明確規定產品質量特性審核要求；定期對車規產品的晶圓級、封裝級和產品級進行監控。另外，本集團依據IATF 16949汽車質量管理體系以及ISO 27001信息安全管理體系修訂《生產類供方管理控制程序》以及《生產類採購與外包過程控制程序》，與主要產品供方開展月度質量會，檢視及提高生產加工的質量。

Based on the foundation of conducting continuous ISO 9001 Quality Management System audits and follow-up works, the Group will deal with the substandard products found during operations in accordance with the requirements of the Substandard Products Control Procedures, while arrangements will be made for the responsible departments to analyse the reason for the generation of substandard products, formulate rectification and precautionary measures, and be responsible to follow up on the implementation and the effectiveness of these measures. In 2023, there was no recall of the Group's products sold or delivered due to safety and health concerns.

在持續開展ISO 9001質量管理體系審核及跟進工作的基礎上，針對在營運過程中發現的不合格品，本集團按照《不合格品控制程序》的要求進行處置，同時安排責任部門分析不合格品產生原因、糾正及預防措施制定，以及負責跟進該等措施的實施情況及成效。本集團於2023年並沒有因安全及健康理由而須對已售或已運送產品進行回收的事件。

Quality management system 質量管理體系



For the management of labelling of product, the Group formulated the packaging specifications for products such as IC card, smart card, etc., which clearly stipulates the labelling requirements for information such as product model number, product lot number, product quantity, time of processing, origin, etc.

在產品標籤的管理方面，本集團制定了針對IC卡、智能卡等產品包裝規範，明確規定對產品型號、產品批號、產品數量、加工時間、產地等信息的標籤要求。

- *Quality inspection procedures*

The Group conducted quality inspection on products such as wafers, modules, cards, circuits, etc., that are researched and developed autonomously with procurement and processing outsourced in accordance with the operational requirements of the quality inspection procedures imposed by its quality management system. Quality inspections are performed by inspectors with professional skills, in accordance with the inspection specifications and practice guidelines, and inspections are performed by using professional inspection equipment, so as to prevent the acceptance of substandard products. In addition, the professional high-precision instruments used for quality inspection are calibrated regularly to ensure the accuracy of the inspection result.

- *Quality culture*

The Group held quarterly quality meetings in 2023 to provide attendees with a comprehensive understanding of the quality problems and the causes through regularly compiling and reporting on product and service quality problems and treatments, so as to guide and enhance the employees' awareness of product and service quality, and create a quality culture of full participation. At the same time, the Group organised training for new employees on the knowledge of the quality management system to accelerate their understanding of the Group's quality management system and enhance their knowledge of quality management.

In addition, the Group required employees to complete online quality knowledge quizzes on "Quality management and information security management awareness promotion" during the "Quality month" activities in 2023 and invited external professional lecturer to provide training on "Advanced product quality planning", "Design failure mode and effects analysis" and "VDA6.3 process audit" for research and development personnels, so as to promote the integration of IATF 16949 Automotive Quality Management System with the existing quality management system.

- *質量檢測程序*

本集團按照其質量管理體系對質量檢測程序的操作要求，針對其自主研發並委外採購及加工的圓片、模組、卡片、電路等產品進行質量檢測。質量檢測由具備專業技能的檢測人員，依據檢測規範及作業指導書，使用專業的檢測設備進行檢測，防止接收不合格品。此外，檢測人員通過定期對用於質量檢測的專業高精度儀器進行校準，以保證檢測結果的準確性。

- *質量文化*

本集團於2023年召開季度質量會，通過定期編匯並報告產品及服務質量問題及處理情況，使參與者全面地認識質量問題及產生原因，從而引導與提升員工的產品及服務質量意識，營造全員參與的質量文化。同時，本集團組織新員工參與質量管理體系相關知識培訓，加速新員工了解本集團質量管理體系，提升其對質量管理的認識。

此外，本集團於2023年「質量月」活動中要求員工完成「質量管理和信息安全管理意識宣貫」線上質量知識答題，並聘請外部專業講師向研發人員進行「先期產品質量策劃」、「設計階段的潛在失效模式分析」、「VDA6.3過程審核」培訓，推進IATF 16949汽車質量管理體系與現有質量管理體系的整合。

4.3 Research and development innovation, and intellectual property protection

The Group attaches importance to original innovation, collective innovative capabilities, scientific discovery and technology invention, through incentive measures encourages employees to actively apply for intellectual properties and publish thesis, etc. The Group has established awards such as the Technical Contribution Award and the Technical Innovation Award, etc. to commend employees for their significant research and development innovation achievements. In 2023, 15 and 8 employees received the Technical Contribution Award and Technical Innovation Award, respectively. In addition, the Group has conducted training on "Smart card chip products development process", aiming to cultivate research and development personnel's innovation awareness. In 2023, the Group held an annual technology conference to share the latest scientific research and technology innovation achievements in aspects such as research and development processes, platform innovation and applications, etc. with employees, and to recognise and reward employees who have made outstanding technical contributions and successfully applied for intellectual property.

In 2023, research and development costs of the Group amounted to HK\$421.4 million. The percentage of research and development costs to revenue was 14.0%. Research and development during the year primarily focused on the research and development of secure element chip and secure microcontroller unit chip series of products, the continuous improvements in smart card products' performance, research in the secure element chips for the Internet of Things sector and the intelligent connected vehicles sector applications, and the development of application systems and solutions. In addition, the Group participated in the preparation of a number of national and industry standards such as Technical Requirements and Experimental Methods for Automobile Security Chips and Technical Requirements for Automobile Password Application in 2023 to promote the high-quality development of the industry.

In 2023, the Group obtained 30 new patents, registered 3 new software copyrights and 2 new integrated circuits layout designs.

4.3 研發創新與知識產權保護

本集團重視原始創新、集成創新能力，科學發現及技術發明，通過獎勵措施鼓勵員工積極進行知識產權申請及論文發表等。本集團設立了《技術貢獻獎》及《技術創新獎》等獎勵，表揚有重大研發創新成果的員工，2023年分別有15名及8名員工獲得《技術貢獻獎》及《技術創新獎》。此外，本集團開展「智能卡芯片產品開發流程」培訓，旨在培養研發人員創新意識。2023年，本集團舉辦科技年會，向員工分享研發流程、平台創新、應用程序等方面的最新科研及科技創新成果，表彰及獎勵有突出技術貢獻及成功申請知識產權的員工。

2023年，本集團研究及開發成本為421.4百萬港元，研究及開發成本佔收入的百分比為14.0%，年內研究及開發主要側重於安全芯片和安全主控芯片系列產品的研究及開發，智能卡產品性能的持續提升，應用於物聯網領域及智能網聯車領域的安全芯片研究以及應用系統和解決方案的開發。此外，本集團在2023年參與《汽車安全芯片技術要求及試驗方法》以及《汽車密碼應用技術要求》等多項國家及行業標準編制工作，助力提升行業高質量發展。

2023年，本集團新增30項專利、新登記3項軟件著作及新註冊2項集成電路佈圖設計。

The Group conducts patent retrieval and infringement analysis at all stages of research and development, and maintains awareness of the patent information of other parties to reduce the risk of infringing others' intellectual properties. Moreover, the Group conducts training activities on intellectual property for employees every year to constantly raising employees' awareness on intellectual property protection.

The Group respects intellectual properties, regulates the usage of intellectual properties from customers and third parties. It also keeps all business partners' product's technical information strictly confidential. Moreover, the Group formulated the Intellectual Property Management Measures to protect its own intellectual properties and continues to improve and amend it.

The Intellectual Property Management Measures clearly stipulates the responsibilities and working procedures for each of the departments and personnel, and states the detailed requirements regarding the assessment, searching, retrieval and analysis of relevant intellectual properties during the research and development process, contract filing management, intellectual properties ownership, protection and application of intellectual properties, trainings, awards, etc. The Intellectual Property Management Measures facilitates the formation of innovation mechanism, and creates a sound environment with rules and precedents to follow for obtaining and protecting intellectual properties.

4.4 Customer service

- *Customer service system*

The Group adheres to the "Users first and customers foremost" philosophy and builds a sound customer service system to provide more convenient and better quality service to customers. In addition, the Group has professional support team to provide immediate professional technical services to customers to solve their technical problems before, during and after a purchase.

本集團於研發各環節開展專利檢索與侵權分析，並保持對他人的專利信息的關注，減少侵犯他人知識產權的風險。此外，本集團每年向員工開展知識產權培訓活動，持續提升員工知識產權保護意識。

本集團尊重知識產權，規範使用顧客及第三方的知識產權，亦對所有業務夥伴的產品技術信息進行嚴格保密。此外，就自身知識產權的保護，本集團制定了《知識產權管理辦法》，並持續完善修訂。

《知識產權管理辦法》明確了各部門及人員的職責及工作程序，對包括研發過程中對相關的知識產權的評估、查新、檢索、分析、合同檔案管理、知識產權歸屬、知識產權的保護及申請、培訓及獎勵等都做了詳細的規定，《知識產權管理辦法》促進了創新機制的形成，營造了獲取和保護知識產權工作有法可依、有章可循的良好環境。

4.4 顧客服務

- *顧客服務體系*

本集團秉承「用戶第一、顧客至上」的理念，營造完善的顧客服務體系，為顧客提供更便捷、優質的服務。此外，本集團擁有專業支援團隊，為顧客即時提供售前、售中、售後的專業技術服務，解決技術難題。

Customer Complaint Handling Procedures are formulated by the Group to assist customers to solve any issues encountered after products are sold and during usage, and feedback from customers will be used for continuous raising of products and services quality. In addition, depending on the issue raised by the customer, the Group will organise respective professionals from the failure analysis team, product research and development and design team, production and processing professional technical team, sales service team, technical support team and project management team to work together to analyse, identify the fundamental causes of the issue, formulate rectifying and precautionary measures, and follow up with the customer's subsequent usage to ensure the effectiveness of such measures.

For customers' information security and privacy protection, the Group formulated the Technology Confidentiality Agreement Management Measures and the Confidentiality Management Requirements, and employees are required to keep trade secrets of the Group and customers in strict confidence, so as to ensure information confidentiality for both sides during business interaction between the Group and customers.

- *Customer satisfaction survey*

The Group attaches importance to customer satisfaction survey and through the survey identifies key factors affecting the satisfaction of customers so as to raise the quality of its products and services. The Group sends out customer satisfaction questionnaires to customers each year to understand customer's satisfaction, opinions and suggestions on aspects such as products' or projects' design quality, service quality, and pace and capability in handling issues arose, and the Customer Satisfaction Surveillances and Measurements Evaluation Report will be prepared summarising feedbacks from customers and passed to the respective departments for continuous improvement of products and services quality. In 2023, the Group has revised the Customer Satisfaction Control Procedure to clearly stipulates the scope and customer types in conducting customer satisfaction survey, and conducted the customer satisfaction survey in accordance with the newly revised requirements.

本集團制定《顧客抱怨處理程序》，幫助解決在產品銷售後、顧客使用中遇到的任何問題，並同時通過顧客的反饋持續提升產品及服務的質量。此外，本集團根據顧客提出的問題，組織失效分析團隊、產品研發設計團隊、生產加工專業技術團隊、銷售服務團隊、技術支援團隊及項目管理團隊中相關的專業人員，共同完成整個問題的分析工作，挖掘問題的根本原因，制定糾正及預防措施，並跟進顧客的後續使用情況，以確保該等措施的成效。

在顧客信息安全及私隱保護方面，為確保本集團與顧客業務交往中雙方的信息保密，本集團制定了《技術保密協議管理辦法》以及《保密管理規定》，並要求員工需嚴格保守本集團及顧客的商業秘密。

- *顧客滿意度調查*

本集團重視顧客滿意度調查，通過調查挖掘影響顧客滿意度的關鍵因素，從而提升其產品及服務的質量。本集團每年向顧客發送顧客滿意度調查表，以了解顧客對產品或項目的設計質量、服務質量、處理問題的速度及能力等方面的滿意度，意見及建議，並編製《顧客滿意度監視及測量評價報告》，將結果反饋給相關部門，持續提升產品及服務的質量。2023年，本集團修訂《顧客滿意度控制程序》，明確開展顧客滿意度調查的範圍及客戶類型，並根據新修訂要求開展顧客滿意度調查。

Statistics on products and services key performance indicators
產品及服務關鍵績效指標統計

Indicators	指標	2023 2023年度	2022 2022年度
Number of customer complaints received	顧客投訴事件次數	180	119
Percentage of customer complaints dealt with (%)	顧客投訴處理率(%)	100.00	100.00
Customer satisfaction (%)	顧客滿意度(%)	96.00	95.47

5. EMPLOYEES

The Group regularly reviews and improves the management systems regarding aspects such as employees' rights and interests, remuneration and benefits, recruitment and promotion, training and development, working environment and occupational health, child labour, forced labour, etc. by adhering to the "Responsibility orientated, attaches importance to competent and rewards linked with performance" talent philosophy, and complying with the laws and regulations and the relevant requirements of the Labour Law of the People's Republic of China, the Production Safety Law of the People's Republic of China, the Women's Rights and Interests Protection Law of the People's Republic of China and the Paid Annual Leave for Employees Regulations, etc. In 2023, there was no litigation against the Group and no violation of laws and regulations by the Group in relation to employment, occupational health and safety, child labour and forced labour.

5.1 Employment and employee benefits

- Employment and employees' rights and interests*

The Group attaches importance to attracting and fostering of talents, protecting employees' equal rights in aspects such as terms of employment, training, promotion, remuneration, etc. and ensuring no discrimination against any person on grounds such as gender, marital status, disability, age, race, family conditions, nationality, religion, etc. takes place. In addition, the Group resolutely prohibits child labour and all forced labour.

5. 員工

本集團秉承「盡責是才、重能酬績」的人才理念，遵守《中華人民共和國勞動法》、《中華人民共和國安全生產法》、《中華人民共和國婦女權益保障法》及《職工帶薪年休假條例》等法律及法規及有關規定，對員工權益、薪酬及福利、招聘及晉陞、培訓及發展、工作環境及職業健康、童工、強制勞工等方面的管理體系定期進行檢討及完善。本集團於2023年在僱傭、職業健康及安全、童工及強制勞工方面並沒有訴訟及違法及違規事件。

5.1 僱傭及員工福利

- 僱傭及員工權益*

本集團注重人才的引進及培養，保障員工在僱傭條件、培訓、晉升、薪酬等方面的平等權利，確保沒有因性別、婚姻狀況、殘疾、年齡、種族、家庭狀況、國籍、宗教等因素而遭受歧視。另外，本集團堅決杜絕僱用童工及一切強制勞工的行為。

The Group formulated the Administrative Management System, which clearly stipulates the management of the recruitment and dismissal of employees. In 2023, the Group conducted background checks on job applicants for sales, purchasing, finance and IT positions in accordance with the requirements of the ISO 27001 Information Security Management System and the Personal Information Protection Law of the People's Republic of China; at the same time, headhunters were required to conduct background checks on personnel to be hired through legal channels to protect personal information and privacy from being infringed.

The Group also formulated the Employee Code, which covers area such as standards of daily behaviour, attendance management, sick leave and other leave management, performance management, remuneration and benefits, trainings of employees.

The Group encourages employees to introduce talents with competitiveness. Through regularly issuing demand for talents and employees introducing talents based on such demand, the Group identifies talents who will benefit its development, enhances the capability of the Group and enlarges its talent pool.

In addition, the Group has established an e-HR human resources information system for all employees with online management functions such as employee's promotion, training, remuneration, etc.

The Group, through internal and external remuneration comparisons and comprehensively considered factors such as annual staff cost budget, annual staffing requirements, etc., adjusts the remuneration of employees to retain talent attraction and market competitiveness.

本集團制定了《行政管理制度》，其中明確規定了在員工招聘及解僱的管理工作。2023年，本集團依據ISO 27001 信息安全管理体系及《中華人民共和國個人信息保護法》要求對銷售、採購、財務及IT崗位的應聘人員做背景調查；同時，要求獵頭公司通過合法途徑對將聘用人員進行背景調查，保護個人信息及私隱不受侵犯。

本集團亦制定了《員工守則》，涵蓋員工的日常行為準則，考勤管理，病、事假管理，績效管理、薪酬及福利、培訓等內容。

本集團鼓勵員工推薦有競爭力的人才，通過定期發佈人才需求，而員工根據需求推薦人才，從而為本集團尋找契合發展的人才，增強本集團實力、擴大人才隊伍。

此外，本集團建立了具備員工晉升、培訓、薪酬等的在線管理功能覆蓋全體員工的e-HR人力資源信息系統。

本集團通過內外部薪酬對比，綜合考慮年度人工成本預算、年度人員編制需求等因素，調整員工薪酬以保持人才吸引力及市場競爭力。

Overview of employment and employee's rights and interests system

僱傭及員工權益制度概覽

Recruitment and dismissal 招聘及解僱	Work hours and leave 工時及休假	Remuneration and benefits 薪酬及福利
<ul style="list-style-type: none"> • Recruitment: New employees are recruited in accordance with the principle of "Openness, equality, competition and on the basis of merit". • 招聘：按照「公開、平等、競爭、擇優」的原則招聘新員工。 	<ul style="list-style-type: none"> • Work hours: Work hours meets the requirements of operational location's laws and regulations. • 工時：工時符合營運地法律及法規的要求。 	<ul style="list-style-type: none"> • Remuneration: The remuneration of each position is determined with reference to market practices and with reasonable adjustments after considering job position values and contributions. • 薪酬：參考市場慣例定義崗位薪酬，同時考慮崗位價值及貢獻對薪酬進行合理的調整。
<ul style="list-style-type: none"> • Dismissal: Employees are dismissed in accordance with the related requirements of the Employee Code and in compliance with the requirements of operational location's laws and regulations. • 解僱：按照《員工守則》相關規定解僱員工，並符合營運地法律及法規的要求。 	<ul style="list-style-type: none"> • Working overtime: Employees are entitled to pay or time-off in lieu for working overtime. Overtime compensation meets the requirements of operational location's laws and regulations. • 加班：員工加班享有加班費或加班調休權利，加班補償符合營運地法律及法規的要求。 	<ul style="list-style-type: none"> • Social insurance: Various kinds of social insurances are purchased for all employees in accordance with the requirements of operational location's laws and regulations. • 社會保險：按照營運地法律及法規的要求為全體員工繳納各項社會保險。
	<ul style="list-style-type: none"> • Leave: Paid annual leave, marriage leave, bereavement leave, maternity leave, sick leave, etc., are provided in accordance with operational location's laws and regulations. • 休假：帶薪年休假、婚假、喪假、生育假、病假等按營運地法律及法規提供。 	<ul style="list-style-type: none"> • Benefits: Employees are provided with various benefits such as annual body checks, supplementary medical insurance, etc. in accordance with the actual circumstances of the Group. • 福利：結合本集團實際情況為員工提供多項福利，如年度體檢及補充醫療保險等。

Statistics on employment key performance indicators
僱傭關鍵績效指標統計

Indicators	指標	2023 2023年度	2022 2022年度
Number of employees	員工人數	430	422
By gender:	Male	285	272
	Female	145	150
By type of employment:	Permanent	418	411
	Secondment	12	11
By age group:	Over 50	17	18
	30 to 50	339	339
	Under 30	74	65
By geographical region:	Mainland China	428	420
	Hong Kong	2	2
Employee turnover rate (%)	員工流失率(%)	12	8
By gender:	Male	13	9
	Female	10	7
By age group:	Over 50	6	11
	30 to 50	12	8
	Under 30	3	9
By geographical region:	Mainland China	12	8

• *Employees communication and caring*

Effective communication with employees is crucial to the formulation of decision-making and corporation development. The Group strives to build an open working culture, and strengthen the communication between employees and management. It has also sets up various communication channels to understand employees' opinions, so as to create a frank and an open communication atmosphere.

The Group cares and supports every employee who is in need. Through proactively conducting employee caring activities, the Group visits employees suffering from injuries and sickness, attends employees' wedding ceremonies and funeral ceremonies and helps employees who are in difficulties. The Group also conducts consolatory activities on public holidays strictly in accordance with the relevant requirements of the China Federation of Trade Unions. The Group formulated the Trade Union Expenditure Management Measures, stating the detailed requirements on expenditure for condolences to employees, support for employees who are in difficulties, etc. As for caring for female employees, nursing rooms have been set up within the office area.

• *員工溝通及關懷*

有效的員工溝通對決策制定、企業發展至關重要。本集團致力建設開放的工作文化，並加強員工與管理層的溝通，亦設立了多樣溝通渠道以了解員工的意見，營造坦誠及開放的溝通氛圍。

本集團關心及支持每一位需要幫助的員工。通過積極開展員工關愛活動，本集團做到傷病必訪、婚喪必訪、幫助困難員工，同時嚴格按照中國總工會的有關規定，開展法定節假日慰問活動。本集團制定了《工會經費管理辦法》，對員工慰問、困難員工幫扶等的經費支出做了詳細規定。在女員工關愛方面，辦公區內設置了母嬰室。

Overview of caring activities for employees in 2023

- ✧ “Sending coolness” consolatory activity in summer, providing employees with cooling consolatory products to prevent summer heat.
- ✧ “Sending warmth” consolatory activity in winter, providing employees with consolatory products for keeping warm.

Overview of employee activities in 2023

- ✧ “Good luck in the Year of Rabbit and gather to celebrate the happy new year” cloud gala activity.
- ✧ ““Kids” at Huada with “Chips” future” family activity day.
- ✧ “Lyrics based on youth and compose the song of the era” staff singing performance.
- ✧ “Beautiful women's day and meet in March” on the March 8th Women’s Day activity.
- ✧ “Run! Youth!” fun sports meeting.
- ✧ “Concentrating on “Chips” and striving for development with “Chinese” style of promoting operation” CE Huada Tech and SMIC’s football event.
- ✧ “Concentrating on “Chips” and striving for development with “Chinese” style of promoting operation” CE Huada Tech and China Mobile’s basketball event.

5.2 Training and development

• *Employees training*

Facilitating employees’ growth provides impetus for corporate development. The Group’s employee training is divided into three levels: corporate level, departmental level and individual level. Corporate level training focuses mainly on cross-departmental and internal all-purpose trainings, such as new employee trainings, and quality and safety requirements trainings. Departmental level training focuses mainly on enhancing knowledge and skills in departmental professional areas. Trainings for individuals act as a useful supplement to the two types of training above.

2023年度員工關愛活動概覽

- ✧ 夏日「送清涼」慰問活動，向員工發放防暑降溫慰問品。
- ✧ 冬日「送溫暖」慰問活動，向員工發放御寒慰問品。

2023年度員工活動概覽

- ✧ 「兔年行大運•歡樂迎新春」雲聯歡活動。
- ✧ 「「童」在華大•「芯」向未來」家庭活動日。
- ✧ 「以青春作詞•譜時代之歌」職工歌唱匯演。
- ✧ 「美麗女人節•相約三月天」三八女神節活動。
- ✧ 「奔跑吧！青春！」趣味運動會。
- ✧ 「凝「芯」舉力謀發展•「中華」風采促經營」中電華大科技與中芯國際足球活動。
- ✧ 「凝「芯」舉力謀發展•「中華」風采促經營」中電華大科技與中國移動籃球活動。

5.2 培訓及發展

• *員工培訓*

促進員工的成長是企業發展的動力源泉。本集團的員工培訓分為公司級、部門級及個人三級。公司級培訓側重於跨部門及內部通用性培訓，如新員工培訓和質量及安全要求培訓，部門級培訓側重於知識及技能提升培訓，在部門專業方向上實施，個人培訓作為前兩者的有益補充。

Employees of the Group are entitled to an individual training allowance of up to RMB5,000 per person per year starting from the 13th month onwards after joining. Such allowance can be used for trainings as designated by the Group, or can be used in relation to employee's job-related trainings at his/her own choice subject to prior approval by the Group.

本集團員工自入職後第13個月起享有個人培訓津貼，每年每人最高限額人民幣5,000元，可以由本集團指定的培訓時使用，或由員工自主選擇與本職位相關的培訓，在經過申請同意後參加使用。

The Group upholds the principle of "Reaching out, drawing in" and formulated the Training System, which covers area such as types of training and effectiveness assessment, training implementation, internal training instructors, etc., as well as formulated the four major categories, namely system, rules and regulations, experience exchanges, knowledge and skills, and cultural awareness, to be covered in the annual training programme. In 2023, the Group increased its investment in internal training and external learning for employees, and conducted 7 internal training courses in management, covering project management ability, golf management - horizontal management and the three-pronged approach to strategy implementation, for a total of 167 participants with a total of 1,995 class hours. At the same time, the Group supported 39 participants to study external learning courses.

本集團秉持「走出去、引進來」的原則，制定了《培訓制度》，包含培訓類型以及效果評估、培訓實施、內部培訓講師等內容，並制定了涵蓋體系、規章及制度、經驗交流、知識及技能和文化意識四大類的年度培訓計劃。2023年，本集團增加對員工內訓及外出學習的投入，開展7場管理類內訓，涵蓋項目管理能力、高爾夫管理－橫向管理以及戰略落地三板斧巡戰等內容，合計167人次參與，累積1,995學時；同時，支持39人次外出學習。

Overview of employee training activities in 2023 2023年度員工培訓活動概覽	
Training project 培訓項目	Objectives 目的
<ul style="list-style-type: none"> New employees training 新員工培訓 	<p>Help new employees to understand the company's profile, rules and regulations, etc., so that they can adapt to the working environment and integrate into the team more quickly.</p> <p>幫助新員工了解公司概況、規章和制度等，使其更快適應工作環境以及融入團隊。</p>
<ul style="list-style-type: none"> Fresh graduates training 應屆畢業生培訓 	<p>Broaden fresh graduates' knowledge of integrated circuits.</p> <p>擴展應屆畢業生的集成電路知識。</p>
<ul style="list-style-type: none"> Strategic planning training for senior management 高層管理人員戰略規劃培訓 	<p>Assist senior management in anchoring the company's development focus.</p> <p>協助高層管理人員錨定公司發展重點。</p>
<ul style="list-style-type: none"> Management training 管理力培訓 	<p>Enhance project management ability and leadership.</p> <p>提升項目管理能力、領導力。</p>

Statistics on employee training key performance indicators
員工培訓關鍵績效指標統計

Indicators	指標	2023 2023年度	2022 2022年度
Percentage (%) of employees who received training	員工接受培訓百分比(%)	97	94
By gender: Male	按性別： 男性	66	63
Female	女性	34	37
By grade: Senior management	按級別： 高級管理層	1	2
Middle management	中級管理層	11	9
Grass-roots employees	基層員工	88	89
Average number of hours of training received per employee per year	員工每年人均接受培訓的小時數	38	17
By gender: Male	按性別： 男性	38	18
Female	女性	37	14
By grade: Senior management	按級別： 高級管理層	70	43
Middle management	中級管理層	38	17
Grass-roots employees	基層員工	23	16

• *Occupational development*

The Group implements a qualification management system and establishes an occupational development channel to provide an important basis for employee's promotion and salary increment. The Group implements dual channel development path for the technicians that accounts over 60% of the Group's total employee headcount. The technicians are divided into five grades, those who have reached grade four can select either the management line or the technical line. In the technical line, they can become technical expert, system engineer, etc., and in the management line, they can enter into the administrative management or project management area.

Technicians applying for promotions below the expert level will undergo an appraisal by the defense appraisal committee organised by the respective department; technicians applying for promotions above the expert level will be centrally organised by the human resources department and appraised by the appointment qualification appraisal panel. The Office of the General Manager will conduct a re-appraisal on those selected for promotion.

• *職業發展*

本集團實施任職資格管理制度，建立職業發展通道，為員工晉陞、提薪提供重要依據。對於佔本集團總員工人數60%以上的技術類員工實行雙通道發展路徑，技術類分為五級，到四級後可選擇管理線或技術線，技術線發展到技術專家、系統工程師等，管理線則可進入行政管理或項目管理範疇。

技術類人員申請專家級以下級別的晉升，由相關部門組織答辯評審會評審；技術類人員申請專家級以上職級的晉升由人力資源部統一組織，由任職資格評定小組負責評審。總經理辦公會複審所有獲選拔晉升的申請。

5.3 Occupational health and safety

- *Production safety management*

The Group complied with the Production Safety Law of the People's Republic of China and formulated the Production Safety Management Requirements which clearly stipulates the specific requirements for safety production work reporting system and penalties for non-compliance with safety guidelines. The Group established a production safety structure, with the deputy chairman and deputy managing director of the Company serving as the director of the production safety committee and the first-level department manager of the Group serving as member. The Group has signed the "Letter of Commitment on Production Safety" with the relevant employees each year to ensure production safety. In 2023, the Group established a production safety standardisation system and passed the audit of Beijing's production safety standardisation (Level 3).

In order to ensure safe operation throughout the year, the Group carried out trainings and promotional activities such as "Safety production month", "Fire safety publicity month" and "Safety production management" in 2023, and through activities such as safety production quizzes, online safety education training, emergency evacuation drills, to raise employees' awareness of safety production.

Statistics on employees' occupational health and safety key performance indicators 員工職業健康及安全關鍵績效指標統計

Indicators	指標	2023 2023年度	2022 2022年度	2021 2021年度
Number of work-related fatalities	因工死亡人數	0	0	0
Number of work-related injuries	因工受傷次數	0	0	1
Number of lost work days due to work-related injuries	因工傷損失工作日數	0	0	2

5.3 職業健康及安全

- *安全生產管理*

本集團遵守《中華人民共和國安全生產法》，制定《安全生產管理規定》，明確了安全生產工作報告制度以及違反安全指引的懲罰措施等具體要求。本集團建立安全生產架構，由本公司副主席及副董事總經理擔任安全生產委員會主任，本集團一級部門經理擔任委員。本集團每年與相關員工簽署《安全生產承諾書》，保障生產安全。2023年，本集團建立安全生產標準化體系並通過北京市安全生產標準化(三級)審核。

為確保全年安全營運，本集團2023年開展「安全生產月」、「消防宣傳月」、「安全生產管理」等培訓及宣貫活動，通過安全生產答題、安全教育線上培訓、應急疏散演練等內容，提高員工安全生產意識。

- *Quality working environment*

Quality working environment has a direct impact on the physical and mental health and work efficiency of employees. Based on the “People-oriented” philosophy, the Group strives to provide and maintain a warm, comfortable, healthy and safe working environment for employees. Huada Electronics has set up a library and a recreation area within its office area, so as to create a quality office arena. The Group has equipped its offices with safety packs, clearly stipulates the requirements for safe use of electrical appliances, installed ventilation system, etc. for new office in response to the air quality conditions in Beijing. In addition, the Group purchased travel traffic safety insurance for employees (such as insurance for employee travelling on planes, vehicles, etc.) to provide coverage for safe travel.

6. COMPLIANCE OPERATION

The Group considers the compliance with laws and regulations as the cornerstone of corporation. The Group regularly reviews and improves the management systems regarding aspects such as supply chain management and anti-corruption by complying with operational location’s laws and regulations relevant to the compliance operation such as the Company Law of the People’s Republic of China, the Civil Code of the People’s Republic of China, the Anti-Unfair Competition Law of the People’s Republic of China, etc. There was no confirmed corruption incident and lawsuit relating to the Group or its employees in 2023. The Group has complied with all laws and regulations in relation to bribery, extortion, fraud and money laundering.

In 2023, the Group sent the Integrity Reminder Letter to directors, middle and senior level employee, explained the disciplinary requirements for expense reimbursement in the light of the business nature and job characteristics of different departments, organised employees to watch business ethics education publicity videos and conducted typical case learning activities for employees, and continuously promoted the building of business ethics culture through various channels.

- *優質工作環境*

優質的工作環境對員工的身心健康及工作效率具有直接影響。本集團基於「以人為本」的理念，致力為員工提供及維持溫馨、舒適、健康而安全的工作環境。華大電子在其辦公區內設置了圖書室及休閒區，營造優質辦公空間。本集團在其辦公室配備安全包，明確規定安全使用電器的要求；並針對北京地區的空氣質量狀況，在新辦公室安裝通風系統等。此外，本集團為員工購買差旅交通安全保險（例如員工乘坐飛機、汽車等的保險），為安全差旅提供保障。

6. 合規營運

本集團認為遵守法律及法規乃企業之基石，遵守《中華人民共和國公司法》、《中華人民共和國民法典》、《中華人民共和國反不正當競爭法》等與合規營運相關的營運地法律及法規，對本集團供應鏈管理及反貪污等方面的管理制度定期進行檢討及完善。本集團於2023年並沒有與其或其員工有關的已確認的貪污事件及訴訟。本集團已遵守所有與賄賂、勒索、欺詐及洗黑錢相關的法律及法規。

2023年，本集團向董事、中高層人員發送《廉潔提示函》，結合不同部門的業務性質和崗位特點講解費用報銷的紀律要求，組織員工觀看商業道德教育宣傳片及開展典型案例學習活動，通過多種渠道不斷推動商業道德文化建設。

6.1 Supply chain management

- Suppliers management procedures

The Group is principally engaged in the business of design of integrated circuit chips, and its major suppliers are integrated circuit chips manufacturers. The effective management of suppliers during the course of the Group's development can help to reduce costs and cooperation risk, raise the quality of products and services, and build up a quality brand. To this end, the Group has formulated a sound supplier management system, involving aspects such as supplier introduction and risk assessment, regular appraisal, and win-win cooperation.

6.1 供應鏈管理

- 供應商管理程序

本集團以集成電路芯片設計為主營業務，而其主要供應商為集成電路芯片製造商。對供應商的有效管理可以幫助本集團在發展過程中降低成本、降低合作風險，提高產品及服務質量，建立良好品牌。為此，本集團制定了完善的供應商管理體系，涉及供應商引入及風險評估、定期評審、合作共贏等方面。

Supplier management system 供應商管理體系



The Group formulated the Production Supplier Management Control Procedures setting out the requirements for the selection, appraisal and management for production suppliers. In particular, it sets out in detail the guiding principles for aspects such as selection, appraisal, daily management, and subsequent appraisal of suppliers, so as to ensure a long-term and stable provision of high quality and reliable products and services by the suppliers.

本集團制定了《生產類供方管理控制程序》，規定了對生產類供應商的選擇、評審及管理的要求，其中詳細規定了供應商的選擇、評審、日常管理以及再評審等方面工作的指導原則，以確保供應商能夠長期、穩定的提供高質素可靠的產品及服務。

In addition, the Group formulated the Production Procurement and Outsourcing Processes Control Procedures, setting out the requirements for the procedures and rules for managing the production procurement and the outsourcing. These procedures provide the definitions and corresponding operational requirements for aspects such as requirement planning, order formation and approval, procurement implementation, quality control, acceptance settlement, etc., so as to ensure the materials and products procured and outsourced comply with the requirements.

In 2023, the Group revised the Production Supplier Management Control Procedures in accordance with the IATF 16949 Automotive Quality Management System and the ISO 27001 Information Security Management System, and added new audit requirements for information security management and product quality management.

- *Regular appraisal of suppliers*

The Group chooses to cooperate with suppliers which comply with the requirements of the laws and regulations in the People's Republic of China in aspects such as environmental and social risks appraisal. These suppliers also comply with the requirements of the Group's Key Factors of Inspection for the Assessment of Supplier Form regarding information security management system and quality management system.

The Group carries out annual appraisal of its critical qualified suppliers. The appraisal of the qualified suppliers is based on criteria such as the supply situation in last year, the requirement planning for the coming year, etc. Based on the results of the appraisal, the Group will adjust the eligibility and grading of suppliers accordingly and compile a list of qualified suppliers for the coming year, while ad hoc two-party audits will also be conducted on suppliers as part of daily management. In the event that a qualified supplier has no business dealing with the Group for the past 3 consecutive years, the qualification of such supplier will be canceled. The Group conducted appraisal on 7 suppliers in 2023, mainly focusing on the assessment of suppliers' quality control system, information security management system, procedure control and corporate management system, covering identity authentication smart card chips testing, module assembling testing, circuit initialisation, etc.

此外，本集團制定了《生產類採購與外包過程控制程序》，規定了生產類採購及外包管理程序及規則。該程序對需求計劃，訂單形成及審批，採購實施，質量控制，以及入庫結算等方面做了定義及相應操作規定，以確保採購及外包的材料及產品符合要求。

2023年，本集團依據IATF 16949汽車質量管理體系以及ISO 27001信息安全管理體系修訂《生產類供方管理控制程序》，新增信息安全管理、產品質量管理的審核要求。

- *供應商定期評審*

本集團選擇合作的供應商在環境及社會風險評審方面均符合中華人民共和國法律及法規的要求，並且符合本集團《供方評估檢查要素表》中的信息安全管理體系及質量管理體系的規定。

本集團每年對其重點合格供應商進行評審。本集團根據上一年度供貨情況、以及未來一年度需求計劃等準則，對合格供應商進行評審。根據評審結果，對供應商資格及等級進行調整，形成新一年的合格供應商名單，日常管理中還會對供應商進行不定期的二方審核。如果合格供應商連續3年與本集團沒有業務往來，其合格供應商資格將會被取消。本集團於2023年對7家供應商進行評審，主要針對供應商的質量控制體系、信息安全管理體系、程序控制及公司管理體系等進行評估，涵蓋身份識別智能卡芯片測試、模塊封裝測試以及電路初始化等內容。

Statistics on supply chain management key performance indicators
供應鏈管理關鍵績效指標統計

Indicators	指標	2023 2023年度	2022 2022年度
Total number of suppliers	供應商總數(間)	45	65
By geographical region	按地區		
• Mainland China	• 中國內地	41	60
• Hong Kong, Macau, Taiwan and overseas	• 香港、澳門、台灣及海外	4	5

6.2 Anti-corruption

- Anti-corruption management system*

The Group implements the building of corruption-free practice by adhering to the “Law abiding and establishing creditability, advocating integrity and nurturing people” integrity philosophy, insisting on the approach of “Treating both symptoms and root causes, applying punishment and prevention for impeachments and focusing on precaution”.

In order to regulate the gift accepting arrangement during business interactions on behalf of the Group, eradicate the possibility of violating laws and disciplines, strengthen employees’ self-restraint and awareness of preventing corruption, the Group formulated the Handing Over of Gifts Collected Requirements (Provisional), and the “Significant issue, key official appointment and removal, significant project investment and large value fund utilisation” Decision-making System Implementation Measures. The Group conducted a special anti-corruption training on disciplinary education, organising learning activities on warning cases, anti-corruption for the management, etc. At the same time, the Group organised quarterly disciplinary education for a total of 383 participants to enhance employees' awareness of integrity.

- Complaint and whistleblowing management*

In order to regulate the management of complaints and whistleblowing reporting, the Group formulated the Complaints and Whistleblowing Management Measures. Employees of the Group and outsiders can report, in anonymity, corporation’s or individual’s suspected misconduct relating to corruption, including bribery, extortion, fraud and money laundering, malpractice or irregularity during operations to either the internal audit department or the audit committee of the Company through channels such as letter, telephone, internet, facsimile, etc.

6.2 反貪污

- 反貪污管理制度*

本集團秉承「奉法立信、興廉樹人」的廉潔理念，堅持「標本兼治、懲防並舉、預防為主」的方針，落實廉政建設。

為了規範本集團業務交往中的饋贈行為，杜絕可能發生的違法及違紀事件，增強員工的自我約束及防止腐敗的意識，本集團制定《禮品上繳規定(試行)》及《「三重一大」決策制度實施辦法》。本集團開展紀律教育專題的反貪污培訓，組織管理層學習警示案例、反貪污等內容。同時，本集團組織季度紀律教育，合計383人次參與，提升員工廉潔意識。

- 投訴及舉報管理*

為了規範投訴及舉報管理工作，本集團制定《投訴及舉報管理辦法》。本集團員工、外部人員均可匿名通過信件、電話、互聯網、傳真等渠道向內部審核部門或本公司的審核委員會反映企業或個人營運過程中有關貪污，包括賄賂、勒索、欺詐及洗黑錢的懷疑不當事宜、舞弊或違規情況。

In addition, the Group keeps personal information of informers and whistleblowing cases strictly confidential in accordance with the confidentiality principle of the Complaints and Whistleblowing Management Measures.

此外，本集團按照《投訴及舉報管理辦法》的保密原則，對舉報人個人信息及舉報個案進行嚴格保密。



7. ENVIRONMENT

The Group strives to reducing the possible adverse impact of operations on the environment. The Group regularly reviews the environmental protection management measures in complying with operational location's laws and regulations relevant to environment such as the Environmental Protection Law of the People's Republic of China, encourages employees to take responsible actions on the environment and regularly provides employees with relevant training. In 2023, there was no environmental pollution incident, and no litigation against the Group and no violation of laws and regulations by the Group in relation to environmental protection.

7.1 Green operations

The environmental impacts of the Group's operations mainly include the use of energy and water resources, and packaging materials used in finished products, as well as greenhouse gas emission. In response to the identified environmental impacts, the Group has formulated corresponding management measures.

7. 環境

本集團致力減低營運可能對環境造成的不利影響，遵守《中華人民共和國環境保護法》等與環境相關的營運地法律及法規，對環保管理措施定期進行檢討，鼓勵員工對環境採取負責任的行為，定期向員工提供相關培訓。本集團於2023年並沒有環境污染事件，及在環保方面並沒有訴訟及違法及違規事件。

7.1 綠色營運

本集團營運過程中造成的環境影響主要包括能源及水資源的使用和製成品所用包裝材料，以及溫室氣體排放。針對已識別的環境影響，本集團制定了相應的管理措施。

Aspects 層面	Green operation measures 綠色營運措施
---------------	------------------------------------

- | | |
|---|--|
| <p>1. Emissions
1. 排放物</p> | <p>Measures to reduce greenhouse gas emission and office waste generated during operations.
對營運過程中產生的溫室氣體排放及辦公廢棄物的減量化措施。</p> |
| <p>2. Use of resources and climate change
2. 資源使用及氣候變化</p> | <p>Water conservation and energy conservation measures, and recycling of packaging materials used in finished products during operations. Strengthening low-carbon publicity and education to promote energy conservation philosophy.
營運過程中的節水及節能措施、對製成品所用包裝材料進行循環使用。加強低碳宣傳和教育，倡導節能理念。</p> |
| <p>3. Incorporating environmental protection awareness
3. 環保意識融入</p> | <p>Conducting environmental protection educational activities to help employees gain awareness of environmental protection and natural resources conservation.
開展環保教育活動，幫助員工樹立環保與節約天然資源意識。</p> |

- *Emissions*

Apart from greenhouse gases and non-hazardous wastes produced in offices (such as waste paper), the Group does not produce significant exhaust emission, cause water and land pollutions, generate hazardous wastes and other environmental impacts during operations. The Group reduces greenhouse gas emission through electricity conservation. Non-hazardous wastes are dealt with by property management companies.

The Group also reduces the use of paper and waste paper produced through implementation of paperless processes. For old computers generated from office use, the Group shall pass them to a third party organisation for disposal in accordance with the Equipment Management and Control Procedures. The Group complies with the Prevention and Control of Environmental Pollution by Solid Waste Law of the People's Republic of China, improved the disposal method of waste toner cartridges by entrusting the printer suppliers to conduct unified recycling to reduce environmental pollution.

- *排放物*

除溫室氣體及辦公環節產生的無害廢棄物(如廢紙等)外，本集團於營運過程中並無產生顯著廢氣排放、向水及土地排污、產生有害廢棄物以及其他環境影響。本集團通過節電減少溫室氣體排放。無害廢棄物均交由物業管理公司處理。

本集團亦通過實施無紙化工作流程減少用紙以及廢紙產生。針對辦公環節產生的廢棄電腦，本集團按照《設備管理控制程序》，交由第三方機構進行處置。本集團遵守《中華人民共和國固體廢物污染環境防治法》，改善廢棄碳粉匣的處置方式，委託打印機供應商統一進行回收，以減少環境污染。

- *Use of energy*

With regards to use of energy, the Group incorporated the resources conservation behaviors such as water conservation and energy conservation by employees into the Employee Daily Conduct Specifications, requiring them to turn off the lights when leaving work, turn off the water tap after use, have the computer under standby mode temporarily when not in use, turn off the monitor after use, turn off the electric power supply when leaving the office, etc. and arranged for the cleaning and insulation pipe inspection of the VRV (variable refrigerant volume) air conditioners in its office building, so as to strengthen their work efficiencies and reduce energy consumption. In addition, the Group formulated the Use of Office Vehicles Management Requirements, requiring the timely recording of the mileage and fuel consumption of office vehicles after use to reduce gasoline consumption through standardised management.

With regards to awareness publicity, the Group extensively conducted low-carbon publicity and education to its employees through activities such as low-carbon and energy conservation knowledge publicity, view collection on low-carbon and energy conservation and seminars on carbon neutralisation knowledge, promoting the energy conservation philosophy of "Low-carbon life, green building the future".

- *Use of water resource*

As the Group's consumption of water resource mainly arises from operation of offices, and currently the Group's water source is municipal water supply, it is not facing problem and risk in accessing sufficient water source. The Group promotes the basic philosophy of water conservation to all employees by posting gentle reminders. The water taps will be repaired in a timely manner if it is found damaged, so as to reduce water resource wastage.

- *Packaging materials used in finished products and paper used in office*

Packaging materials used in finished products of the Group consists of cartons, black boxes, iron rings, stainless steel racks, etc. The Group recycles these black boxes, iron rings and stainless steel racks to the extent that the hygiene of such item is ensured, so as to reduce resources wastage.

- *能源使用*

在能源使用方面，本集團將員工節水及節能等資源節約行為列入《員工日常行為規範》，要求員工做到人走燈滅，隨手關水龍頭，電腦暫時不用即進入待機狀態，隨手關閉顯示器、下班離開辦公室關閉電源等，亦對辦公大樓內的VRV(變製冷劑流量多聯式)空調進行清洗及保溫管排查等，加強其工作效率及降低能耗。此外，本集團制訂《公車使用管理規定》，要求使用車輛後及時記錄公車行使里程及油耗情況，通過規範化管理減少汽油消耗。

在意識宣傳方面，本集團通過低碳及節能知識宣傳、低碳及節能意見徵集及碳中和知識講座等活動，廣泛向其員工開展了低碳宣傳和教育，倡導「低碳生活，綠建未來」的節能理念。

- *水資源使用*

本集團對水資源的消耗主要來自於辦公營運，目前本集團取水來源為市政供水，不面臨求取適用水源的問題及風險。本集團通過張貼溫馨提示向全體員工倡導節約用水的基本理念，如發現水龍頭損壞及時修理，減少水資源浪費。

- *製成品所用包裝材料及辦公用紙*

本集團的製成品所用包裝材料主要包括紙箱、黑盒、鐵環及不銹鋼繃架等。其中，對於黑盒、鐵環及不銹鋼繃架，本集團在確保其清潔的情況下，進行循環使用，減少資源浪費。

The Group also established an office automation (“OA”) system to implement paperless office. Aspects such as the receiving and sending of official documents, circulation of documents, sharing of departmental documents, etc. within members of the Group are all carried out through the OA system, so as to achieve paperless operation of office process. On the premise of protecting printing privacy, the Group implements double-sided printing, so as to reuse waste paper. In addition, the Group advocates bring-your-own-cup at internal meetings, so as to reduce the use of disposable paper cups.

- *Climate change*

In order to respond to the “Peak carbon dioxide emissions and carbon neutrality targets” in the PRC, the Group proactively identified the risks posed by climate change to its operations in accordance with the requirements of operational location’s laws and regulations such as the Beijing Peak Carbon Dioxide Emissions Implementation Plan, promoted the efficient use of resources, and made every effort to minimise the energy consumption during operations (including the consumption of electricity and gasoline by office vehicles), so as to lower carbon emissions generated during operations.

The Group’s integrated circuits design operation does not involve manufacturing, and its four business operational locations are located in industrial parks or business centers of first-tier cities with well-developed infrastructure and facilities, so climate change has minimum impact on the Group’s operations.

In 2023, the Group established a management system to address the climate change with reference to the International Financial Reporting Standards S2 “Climate-related disclosures” issued by the International Sustainability Standards Board, in order to enhance its ability and resilience to respond to climate change.

本集團亦建立辦公自動化(「OA」)系統推行無紙化辦公，本集團成員公司間對於公文收發、文件流轉、部門文件共享等方面均通過OA系統實現辦公流程無紙化操作。本集團推行雙面打印紙張，在保障打印私隱的前提下重複利用廢棄紙張。此外，本集團內部會議提倡自帶水杯，減少一次性紙杯的使用。

- *氣候變化*

為了響應中國「碳達峰、碳中和目標」，本集團按照《北京市碳達峰實施方案》等所在營運地法律及法規的要求，積極識別氣候變化對營運的風險，倡導資源的高效使用及竭力減少營運過程中的能源消耗(包括耗電及公車的汽油消耗)，降低營運過程中產生的碳排放。

本集團的集成電路設計業務不涉及製造環節，而其四個業務營運點均分佈在一線城市基建及配套完善的工業園區或商業中心，因此氣候變化對本集團的營運影響甚微。

2023年，本集團參考國際可持續發展準則理事會發佈的國際財務報告準則第2S號「氣候相關披露」建立應對氣候變化的管理體系，提升自身應對氣候變化的能力及韌性。

Climate change response management system
應對氣候變化管理體系

<ul style="list-style-type: none"> • Governance • 管治 	<p>The Group has established a top-down climate change response governance structure. The Board is responsible for formulating climate change response strategies, regularly reviewing the progress of work on climate change management issues to ensure the effectiveness of the strategies and management measures as well as the progress of the targets. The ESG working group is responsible for implementing the climate change response strategies, assessing, managing and monitoring climate change related issues, and regularly reporting to the Board on the progress of the work of the ESG working group and relevant performance.</p> <p>本集團建立由上至下的應對氣候變化管理架構。董事會負責制定應對氣候變化策略，定期審閱氣候變化管理事宜工作進度確保策略及管理措施的有效性，檢視目標進度。ESG工作小組負責執行應對氣候變化策略，評估、管理及監察相關氣候變化相關議題，定期向董事會匯報ESG工作小組的工作進展及相關績效。</p>
<ul style="list-style-type: none"> • Strategies • 策略 	<p>The Board and the ESG working group regularly identify and analyse climate-related risks and opportunities related to the Group's business, assess the impact of climate-related risks on the business, and make timely adjustments to the Group's strategies and management measures to cope with climate change and business development.</p> <p>董事會及ESG工作小組定期識別、分析與本集團業務相關的氣候相關風險及機遇，評估氣候相關風險對業務的影響，適時調整本集團應對氣候變化及業務發展的策略及管理措施。</p>
<ul style="list-style-type: none"> • Risk management • 風險管理 	<p>To formulate corresponding risk assessment and management procedures based on the probability of occurrence of climate-related risks and the degree of impact on the Group's business, with regular emergency response drills to enhance the ability to respond to these climate-related risks.</p> <p>基於氣候相關風險發生機率及對本集團業務影響程度，制定相應風險評估及管理程序，定期開展應急演練，提升對該等氣候相關風險的應對能力。</p>
<ul style="list-style-type: none"> • Performance and targets • 指標及目標 	<p>To set appropriate climate management targets based on estimated future business development and to disclose relevant performance and progress of achieving the targets in the annual environmental, social and governance report.</p> <p>基於預期未來業務發展，制定合適的氣候管理目標，並在年度環境、社會及管治報告披露相關績效及目標進度。</p>

Statistics on environment key performance indicators

環境關鍵績效指標統計

Indicators	指標	Units 單位	2023 2023年度	2022 2022年度	2030 target 2030年度目標
Gasoline consumption ¹	汽油消耗量 ¹	litre 升	8,002	4,654	
Electricity consumption	耗電量	MWh 兆瓦時	2,655	2,627	
Consolidated energy consumption ²	綜合能源消耗量 ²	MWh 兆瓦時	2,726	2,700	
Consolidated energy consumption per square meter of floor area ³	每平方米樓面面積的綜合能源消耗量 ³	MWh/m ² 兆瓦時/平方米	0.17	0.17	The increase is not more than 10% of the performance level in the base year 2023 增幅不多於基準年2023年的績效水平的10%
Total greenhouse gas emission ⁴	總溫室氣體排放量 ⁴	ton of CO ₂ equivalent 噸 CO ₂ 當量	1,532	1,512	
• Scope 1 greenhouse gas emission ⁵	• 範圍1溫室氣體排放量 ⁵	ton of CO ₂ equivalent 噸 CO ₂ 當量	17	13	
• Scope 2 greenhouse gas emission ⁶	• 範圍2溫室氣體排放量 ⁶	ton of CO ₂ equivalent 噸 CO ₂ 當量	1,514	1,499	
Total greenhouse gas emission per square meter of floor area ³	每平方米樓面面積的總溫室氣體排放量 ³	ton of CO ₂ equivalent/m ² 噸 CO ₂ 當量/平方米	0.09	0.09	The increase is not more than 10% of the performance level in the base year 2023 增幅不多於基準年2023年的績效水平的10%
Waste toner cartridges consumption	廢棄碳粉匣消耗量	number 個	56	69	
		ton 噸	0.05	0.07	
Waste toner cartridges consumption per square meter of floor area ³	每平方米樓面面積的廢棄碳粉匣消耗量 ³	gramme/m ² 克/平方米	3	5	The increase is not more than 10% of the performance level in the base year 2023 增幅不多於基準年2023年的績效水平的10%
Water consumption	耗水量	m ³ 立方米	7,716	8,929	
Water consumption per square meter of floor area	每平方米樓面面積的耗水量	m ³ /m ² 立方米/平方米	0.48	0.56	
Volume of paper used in offices	辦公用紙量	ton 噸	1	1	
Volume of packaging materials used in finished products	製成品所用包裝材料量	ton 噸	4	1	

Notes:

1. In 2023, the Group was not affected by the external environment and the usage of office vehicles increased, which resulted in an increase in gasoline consumption in 2023.
2. Consolidated energy consumption includes purchased electricity consumption and gasoline consumption.
3. Due to the favourable development of the operations in recent years, the Group has revised the environmental targets, namely consolidated energy consumption per square meter of floor area target, total greenhouse gas emission per square meter of floor area target and waste toner cartridges consumption per square meter of floor area target, in 2023 to: with 2030 as the target year, consolidated energy consumption per square meter of floor area target, total greenhouse gas emission per square meter of floor area target and waste toner cartridges consumption per square meter of floor area target are set at an increase of not more than 10% of the performance level in the base year 2023.
4. The total greenhouse gas emission is the sum of Scope 1 and Scope 2 greenhouse gas emission.
5. Scope 1 greenhouse gas emission is calculated based on vehicle fuel consumption data and related emission factors, and the calculation formula and emission factors are determined with reference to the Reporting Guidance on Environmental KPIs issued by The Stock Exchange of Hong Kong Limited. The Group is not involved in the use of diesel fuel, so Scope 1 greenhouse gas emission is generated from gasoline consumption.
6. Scope 2 greenhouse gas emission is calculated based on electricity consumption data and grid-based emission factors. The grid-based emission factors of 0.5703 kg CO₂/kWh stated in the Notice on Doing a Good Job in 2023-2025 Reporting and Management of Greenhouse Gas Emission of Power Generation Corporation issued by the Ministry of Ecology and Environment of the People's Republic of China has been used for the calculation in 2023 and 2022.
7. The waste toner cartridges consumption is calculated by multiplying the weight of a single waste toner cartridge by the number of waste toner cartridges consumed during the reporting period.

附註：

1. 2023年，本集團不受外部環境影響，公車使用量增加，導致2023年度汽油消耗量增加。
2. 綜合能源消耗包括外購電力消耗及汽油消耗。
3. 由於近年業務良好發展，本集團在2023年修訂環境目標，分別為每平方米樓面面積的綜合能源消耗量目標、每平方米樓面面積的總溫室氣體排放量目標及每平方米樓面面積的廢棄碳粉匣消耗量目標。環境目標以2030年為目標年，每平方米樓面面積的綜合能源消耗量目標、每平方米樓面面積的總溫室氣體排放量目標及每平方米樓面面積的廢棄碳粉匣消耗量目標設定為增幅不多於基準年2023年的績效水平的10%。
4. 總溫室氣體排放量為範圍1及範圍2溫室氣體排放量總和。
5. 範圍1溫室氣體排放量根據汽車耗油數據及相關排放系數進行計算，計算公式及排放系數經參考香港聯合交易所有限公司發佈的《環境關鍵績效指標匯報指引》而釐定。本集團不涉及柴油使用，故範圍1溫室氣體排放量為汽油消耗產生。
6. 範圍2溫室氣體排放量根據耗電量數據及電網排放系數進行計算，2023年度及2022年度採用中華人民共和國生態環境局《關於做好2023-2025年發電行業企業溫室氣體排放報告管理有關工作的通知》發佈的電網排放系數0.5703 kg CO₂/kWh進行計算。
7. 計算廢棄碳粉匣消耗量是將單個廢棄碳粉匣重量乘以報告期內廢棄碳粉匣消耗數量。

7.2 Green products

The Group is principally engaged in the business of design of smart cards and secure element chips. Despite smart card chips only accounting for a relatively small portion of the technological product, smart card chips are the core to driving the operation of the products, and good design can effectively reduce the impacts on the environment throughout the entire life cycle of the product.

- *Design phase*

During the design phase of smart card chips, the Group's impacts on the environment include greenhouse gas emission, and use of energy and water resources. The Group implements a green office, which reduces greenhouse gas emission and resources consumption.

- *Production phase*

The impacts on the environment are mainly produced by suppliers who work with the Group. The Group requires suppliers to provide relevant qualification certifications according to customers' requirements to manage their impacts on the environment.

The Group's products include smart card chips, modules, circuits and cards. All products meet the requirements of RoHS. In particular, the smart card chips, modules and circuits also meet the requirements of REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals).

The Group actively uses more environmentally-friendly raw material to reduce the impact of operation, research and development, and production on the environment.

7.2 綠色產品

本集團的主營業務為智能卡及安全芯片之設計。儘管智能卡芯片在科技產品整體來說佔比較小，但智能卡芯片是驅動產品運作的核心，良好的設計有利於減少產品整個生命週期對環境的影響。

- *設計階段*

本集團在智能卡芯片設計階段的環境影響包括溫室氣體排放，以及能源及水資源的使用。本集團推行綠色辦公，減少溫室氣體排放及資源消耗。

- *生產階段*

主要為與本集團合作的供應商所產生的環境影響。本集團根據顧客要求，要求供應商提供相關資質證明，以此對供應商所產生的環境影響進行管理。

本集團產品包括智能卡芯片、模塊、電路及卡片。所有產品均滿足RoHS要求，其中智能卡芯片、模塊及電路同時滿足REACH（《化學品的註冊、評估、授權和限制》）要求。

本集團積極採用更環保的原材料，降低營運、研發及生產對環境的影響。

8. COMMUNITY INVESTMENT

The Group strives to be an outstanding corporate citizen by focusing on public welfare issues such as environmental protection, village revitalisation and community building, actively practicing corporate social responsibility, and continuously influencing employees and key stakeholders in this way.

In 2023, the Group launched the public welfare activities of "Earth hour", "Consoling frontline forest guards and green ride to help protect the green hills and clear waters", "Central state-owned corporation providing agri-support week" and "Helping the disabled with public welfare actions". In addition, the Group invested RMB310,000 to a Village Revitalisation Special Fund organised by China Electronics Corporation Limited.

8. 社區投資

本集團關注環境保護、鄉村振興及社區建設等公益議題，積極踐行企業社會責任，並以此不斷影響員工和重要持份者，致力於成為卓越的企業公民。

本集團於2023年開展「地球一小時」「慰問一線護林員•綠色騎行助力守護綠水青山」「央企消費幫扶興農周」及「助殘公益行動」公益活動。同時，本集團投入人民幣310,000元至中國電子信息產業集團有限公司籌辦的鄉村振興專項基金。

Statistics on community investment key performance indicator 社區投資關鍵績效指標統計

Indicator	指標	Unit 單位	2023 2023年度	2022 2022年度
Investment in community welfare ¹	社區公益投資 ¹	RMB'000 人民幣千元	310	350

Note:

1. Investment in community welfare in 2023 excluded the donation from the Group's "Consoling frontline forest guards and green ride to help protect the green hills and clear waters", "Central state-owned corporation providing agri-support week" and "Helping the disabled with public welfare actions" activities. Investment in community welfare in 2022 excluded materials donated by the Group to various places in Inner Mongolia to help improve the living and education standards of the local people, and electronic equipment such as computers donated by the Group to the Disabled Persons Federation of Chicheng County, Zhangjiakou City, Hebei Province to support the disabled in online learning and working from home.

附註：

1. 2023年度社區公益投資不含本集團的「慰問一線護林員•綠色騎行助力守護綠水青山」「央企消費幫扶興農周」及「助殘公益行動」活動的捐贈金額。2022年度社區公益投資不含本集團向內蒙古多地捐贈物資，協助改善當地人民的生活水平及教育水平；及向河北省張家口市赤城縣殘疾人聯合會捐贈電腦等電子設備，支持殘疾人士進行在線學習和居家辦公。



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