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Q Tech

Q TECHNOLOGY (GROUP) COMPANY LIMITED

丘鈦科技(集團)有限公司

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 1478)

ANNUAL RESULTS ANNOUNCEMENT FOR THE YEAR ENDED 31 DECEMBER 2022

HIGHLIGHTS

- Revenue of Q Technology (Group) Company Limited (the “**Company**”) and its subsidiaries (collectively the “**Group**”) for the year ended 31 December 2022 amounted to approximately RMB13,759,170,000, representing a decrease of approximately 26.3% as compared with that of 2021. The decrease in revenue was mainly because: (i) under the impact of the recurrence of COVID-19 pandemic and the slowdown in global economic growth, the global smartphone market, especially high-end models, was in poor demand, and the sales volume of the camera modules and fingerprint recognition modules applied to smartphone reported a year-on-year decline of approximately 12.4% and 2.7%, respectively; and (ii) the decline in proportion of high-specification products of the camera modules and fingerprint recognition modules applied to smartphone resulted in a year-on-year decline in average unit sales price of the camera modules and fingerprint recognition modules of approximately 15.8% and 34.8%, respectively.
- Gross profit of the Group for the year ended 31 December 2022 was approximately RMB541,342,000, representing a decrease of approximately 69.3% as compared with that of 2021, while gross profit margin for the year ended 31 December 2022 was approximately 3.9% (2021: approximately 9.4%). The decrease in gross profit margin was mainly because: (i) the poor demand for camera modules and fingerprint recognition modules applied to smartphone affected by macro factors, intensified market competition, and unit price and profit margin were squeezed; (ii) the year-on-year decline in sales volume of camera modules and fingerprint recognition modules applied to smartphone as well as the decline in proportion of high-specification products resulted in a decrease in the production capacity utilization rate of the Group, which led to an increase in the manufacturing cost of unit product; (iii) the IoT and automotive camera module businesses were still at a stage of market development, therefore the production capacity utilization rate still needed to be improved, which affected the comprehensive gross profit margin; and (iv) the exchange rate of RMB against USD fluctuated significantly during the Year, with the central parity rate adjusted from 6.3757 at the beginning of the Year to 6.9646 at the end of the Year, representing a depreciation of approximately 9.2%, resulting in a significant increase in the cost of materials imported and settled in USD, which led to a negative impact on gross profit margin.

- Profit of the Group for the year ended 31 December 2022 was approximately RMB170,230,000, representing a decrease of approximately 80.3% as compared to that of the year 2021. The decrease in profit was mainly attributable to: (i) a decrease in revenue of approximately 26.3% as compared with last year; and (ii) a decrease in gross profit margin of approximately 5.5 percentage points as compared with last year.
- Basic and diluted earnings per share for the year ended 31 December 2022 were approximately RMB0.145 and RMB0.145, respectively.

FINANCIAL RESULTS

The board (the “**Board**”) of directors (the “**Directors**”) of the Company announces the consolidated annual results of the Group for the year ended 31 December 2022 (the “**Year**”) together with the relevant comparative figures for the year ended 31 December 2021 as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

(Expressed in Renminbi)

	<i>Note</i>	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Revenue	2	13,759,170	18,662,626
Cost of sales		<u>(13,217,828)</u>	<u>(16,900,644)</u>
Gross profit		541,342	1,761,982
Other revenue	3	196,839	153,410
Other net income/(loss)	3	90,999	(49,777)
Selling and distribution expenses		(13,790)	(22,867)
Administrative and other operating expenses		(142,166)	(161,452)
Research and development expenses		<u>(469,626)</u>	<u>(642,267)</u>
Profit from operations		203,598	1,039,029
Finance costs	4(a)	(59,874)	(30,050)
Share of loss of an associate		<u>(36,640)</u>	<u>(51,682)</u>
Profit before taxation	4	107,084	957,297
Income tax	5(a)	<u>63,146</u>	<u>(94,451)</u>
Profit for the year		<u>170,230</u>	<u>862,846</u>

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME (CONTINUED)

For the year ended 31 December 2022

(Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Attributable to:			
Equity shareholders of the Company		171,151	862,976
Non-controlling interests		(921)	(130)
Profit for the year		170,230	862,846
Earnings per share (RMB cents)			
Basic	6(a)	14.5	73.2
Diluted	6(b)	14.5	72.8
Profit for the year		170,230	862,846
Other comprehensive income for the year (after tax and reclassification adjustments):			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences on translation of the financial statements of operations outside the Mainland China		(110,477)	29,602
Other comprehensive income for the year		(110,477)	29,602
Total comprehensive income for the year		59,753	892,448
Attributable to:			
Equity shareholders of the Company		60,674	892,578
Non-controlling interests		(921)	(130)
Total comprehensive income for the year		59,753	892,448

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2022

(Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Non-current assets			
Property, plant and equipment		3,139,819	3,144,458
Interest in an associate		325,001	344,488
Intangible assets		26,302	20,127
Equity securities designated at fair value through other comprehensive income (FVOCI)		5,000	–
Deferred tax assets		165,666	109,989
Prepayment for acquisition of non-current assets		20,000	98,479
Other non-current assets		9,550	15,550
		<u>3,691,338</u>	<u>3,733,091</u>
Current assets			
Inventories		1,184,452	2,258,176
Trade and other receivables	7	3,436,206	4,446,063
Other financial assets		1,172,751	51,287
Derivative financial assets	8	11,111	5,471
Pledged bank deposits		919,181	810,950
Fixed deposits with banks with original maturity over three months		521,553	–
Cash and cash equivalents		1,348,884	1,743,070
		<u>8,594,138</u>	<u>9,315,017</u>
Current liabilities			
Short-term bank borrowings		2,615,977	1,707,670
Trade and other payables	7	4,584,043	6,258,928
Contract liabilities		16,305	23,971
Derivative financial liabilities	8	8,386	22,611
Lease liabilities		13,131	17,061
Current tax payable		11,567	48,884
		<u>7,249,409</u>	<u>8,079,125</u>
Net current assets		<u>1,344,729</u>	<u>1,235,892</u>
Total assets less current liabilities		<u>5,036,067</u>	<u>4,968,983</u>

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

As at 31 December 2022

(Expressed in Renminbi)

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Non-current liabilities		
Long-term bank borrowings	–	50,000
Lease liabilities	14,389	13,673
Deferred income	247,649	200,081
Deferred tax liabilities	6,624	–
	<u>268,662</u>	<u>263,754</u>
NET ASSETS	<u>4,767,405</u>	<u>4,705,229</u>
CAPITAL AND RESERVES		
Share capital	9,486	9,466
Reserves	<u>4,752,970</u>	<u>4,689,893</u>
Total equity attributable to equity shareholders of the Company	4,762,456	4,699,359
Non-controlling interests	<u>4,949</u>	<u>5,870</u>
TOTAL EQUITY	<u>4,767,405</u>	<u>4,705,229</u>

NOTES

(Expressed in Renminbi unless otherwise indicated)

1 Base of preparation

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards (“**IFRSs**”), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards (“**IASs**”) and Interpretations issued by the International Accounting Standards Board (the “**IASB**”) and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 1(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current accounting period reflected in these financial statements.

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Company, its subsidiaries (together referred to as the “**Group**”) and the Group’s interest in an associate.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets and liabilities are stated at their fair value as explained in the accounting policies set out below:

- Derivative financial instruments;
- Other financial assets;
- Equity securities designated at fair value through other comprehensive income (FVOCI).

The consolidated financial statements are presented in Renminbi (“**RMB**”), rounded to the nearest thousand. Items included in the financial statements of each entity in the Group are measured using currency that best reflects the economic substance of the underlying events and circumstances relevant to that entity (“**functional currency**”). Most of the companies comprising the Group are operating in the People’s Republic of China (“**PRC**”) and their functional currency is RMB, hence, RMB is used as the presentation currency of the Group.

The preparation of financial statements in conformity with IFRSs requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

(c) **Changes in accounting policies**

The IASB has issued a number of amendments to IFRSs that are first effective for the current accounting period. None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

2 Revenue and segment reporting

The principal activities of the Group are manufacturing and sales of camera modules and fingerprint recognition modules for mobile phones, automobiles, Internet of Things (IoT) and other intelligent mobile terminals.

The Group manages its businesses by business lines. In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has identified reportable segments as follows:

- Design, manufacture and sales of camera modules
- Design, manufacture and sales of fingerprint recognition modules

No operating segments have been aggregated to form the reportable segments of the Group.

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitors segment profit of each reportable segment. Segment profit represents the gross profit earned by each segment without allocation of expenses or other income for the year. The Group does not allocate specific assets or liabilities to the operating segments as the Group's senior executive management does not use such information to assess segment performance.

Information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below.

	Camera modules <i>RMB'000</i>	Fingerprint recognition modules <i>RMB'000</i>	Subtotal of reportable segments <i>RMB'000</i>	Others* <i>RMB'000</i>	Total <i>RMB'000</i>
2022					
Revenue	12,561,468	1,063,578	13,625,046	134,124	13,759,170
Cost of sales	(12,036,670)	(1,106,649)	(13,143,319)	(74,509)	(13,217,828)
Gross profit	<u>524,798</u>	<u>(43,071)</u>	<u>481,727</u>	<u>59,615</u>	<u>541,342</u>
2021					
Revenue	16,874,936	1,675,400	18,550,336	112,290	18,662,626
Cost of sales	(15,235,304)	(1,588,351)	(16,823,655)	(76,989)	(16,900,644)
Gross profit	<u>1,639,632</u>	<u>87,049</u>	<u>1,726,681</u>	<u>35,301</u>	<u>1,761,982</u>

* Others mainly represent revenue from sales of waste materials and equipments.

The following table sets out information about the geographical location of the Group's revenue from external customers. The geographical location of customers is based on the locations of operations of the contracting parties.

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Revenue		
PRC (including Hong Kong)	11,576,174	17,690,116
Overseas	2,182,996	972,510
	13,759,170	18,662,626

The Group's customer base is diversified and includes two customers with whom transactions have exceeded 10% of the Group's revenues. In 2022 revenues to each of these two customers, including sales to entities which are known to the Group to be under common control with these customers, amounted to approximately RMB4,164,560,000 (2021: RMB6,907,059,000) and RMB3,391,395,000 (2021: RMB6,118,753,000), respectively, and arose in all geographical regions as above.

3 Other revenue and other net income/(loss)

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Other revenue		
Government grants (<i>note</i>)	150,118	133,141
Interest income	45,240	18,048
Others	1,481	2,221
	196,839	153,410

Note: Government grants were received from several local government authorities as a recognition of the Group's contribution towards the local economic development, of which the entitlement was under the discretion of the relevant authorities.

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Other net income/(loss)		
Net foreign exchange gain	10,398	21,061
Net gain/(loss) on foreign exchange option contracts	30,730	(25,147)
Net gain on foreign currency forward contracts	20,634	4,706
Net gain on other financial assets	12,081	5,278
Impairment losses on property, plant and equipment	–	(20,678)
Impairment losses on interest in an associate	–	(22,222)
Reversal of impairment losses on interest in an associate (<i>note</i>)	22,222	–
Loss on disposal of property, plant and equipment	(5,066)	(12,775)
	90,999	(49,777)

Note: For the year ended 31 December 2022, the management of the Group assessed the recoverable amounts of the interest in an associate at 31 December 2022 and determined that the recoverable amount is higher than their carrying amount, the impairment of RMB22,222,000 was reversed.

4 Profit before taxation

Profit before taxation is arrived at after charging/(crediting):

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
(a) Finance costs		
Interest on bank borrowings	59,088	28,603
Interest on lease liabilities	786	1,447
	<u>59,874</u>	<u>30,050</u>
	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
(b) Staff costs		
Contributions to defined contribution retirement plans	50,453	54,302
Salaries, wages and other benefits	854,031	1,048,812
Equity settled share-based payment (reversal)/accrual	(7,211)	10,521
	<u>897,273</u>	<u>1,113,635</u>
	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
(c) Other items		
Amortisation of intangible assets	<u>3,579</u>	<u>948</u>
Depreciation charge		
– owned property, plant and equipment	433,283	465,540
– right-of-use assets	30,036	33,448
	<u>463,319</u>	<u>498,988</u>
(Reversals of impairment losses)/impairment losses		
– trade receivables	322	252
– other receivables	(79)	170
	<u>243</u>	<u>422</u>
Auditors' remuneration		
– audit and review services	2,264	2,123
– audit services for subsidiaries	–	445
– other services	300	–
Research and development expenses ((i))	469,626	642,267
Cost of inventories ((ii))	<u>13,407,567</u>	<u>17,210,635</u>

- (i) Research and development expenses include staff costs of employees in the design, research and development department of approximately RMB163,448,000 for the year ended 31 December 2022 (2021: RMB185,985,000), which are included in the staff costs as disclosed in note 4(b).

The criteria for the recognition of such costs as an asset are generally not met until late in the development state of the project when the remaining development costs are immaterial. Hence both research costs and development costs are generally recognised as expenses in the period in which they are incurred.

- (ii) Cost of inventories include carrying amount of inventories sold, carrying amount of inventories recognised as research and development expense, write down of inventories and reversal of write-down of inventories. Cost of inventories includes approximately RMB1,052,549,000 (2021: RMB1,063,908,000) for the year ended 31 December 2022 relating to staff costs and depreciation expenses, which amounts are also included in the respective total amounts disclosed separately above or in note 4(b) for each of these types of expenses.

5 Income tax in the consolidated statement of profit or loss and other comprehensive income

- (a) Taxation in the consolidated statement of profit or loss and other comprehensive income represents:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Current tax		
PRC Corporate Income Tax and Hong Kong Profits Tax	2,367	124,552
Over provision in respect of prior years	(15,230)	–
PRC Dividend Withholding Tax	–	24,971
	<u>(12,863)</u>	149,523
Deferred tax		
Origination and reversal of temporary differences	(52,235)	(55,072)
Effect on deferred tax balances at		
1 January resulting from a change in tax rate	1,952	–
	<u>(50,283)</u>	(55,072)
	<u><u>(63,146)</u></u>	<u><u>94,451</u></u>

- (i) Pursuant to the rules and regulations of the Cayman Islands and the British Virgin Islands (“**BVI**”), the Group is not subject to any income tax in the Cayman Islands and BVI.
- (ii) Kunshan Q Technology (Hong Kong) Limited (“**Kunshan QT Hong Kong**”) and Kunshan Q Technology International Limited (“**QT International**”) are subject to Hong Kong Profits Tax at 16.5%.
- (iii) Kunshan Q Tech Microelectronics (India) Private Limited (“**India Q Tech**”), Q Technology Korea Limited (“**Korea Q Tech**”) and Q Technology (Singapore) Private Limited (“**Singapore Q Tech**”) are subject to the local income tax at 25%, 10% and 17% respectively.
- (iv) The PRC statutory income tax rate is 25%.

Kunshan Q Tech Microelectronics Co., Ltd. (“**Kunshan QT China**”) was qualified as a High and New Technology Enterprise (“**HNTE**”) in 2009, which entitled to a preferential income tax rate of 15% according to relevant regulations in the PRC Corporate Income Tax Law. Kunshan QT China successfully renewed the HNTE qualification in May 2012, July 2015, October 2018 and November 2021 respectively and continued to enjoy a preferential income tax rate of 15% for another three years commenced from 1 January 2021.

Shenzhen Q Technology Limited (“**Shenzhen QT Subsidiary**”) was qualified as a HNTE in 2019 and renewed the HNTE qualification in December 2022 to enjoy a preferential income tax rate of 15% for three years commenced from 1 January 2022.

Kunshan QTech Biological Recognition Limited (“**Kunshan BR Subsidiary**”) was qualified as a HNTE in 2022 to enjoy a preferential income tax rate of 15% for three years commenced from 1 January 2022.

Kunshan QTech Optoelectronic Technology Limited (“**QT Optoelectronic Subsidiary**”) was qualified as a HNTE in 2022 to enjoy a preferential income tax rate of 15% for three years commenced from 1 January 2022.

- (v) According to the PRC Corporate Income Tax Law and its implementation regulations, dividends receivable by non-PRC corporate residents from PRC enterprises are subject to withholding tax at a rate of 10%, unless reduced by tax treaties or arrangements, for profits earned since 1 January 2008. In addition, under the Arrangement between the Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and its relevant regulations, a qualified Hong Kong tax resident will be liable for withholding tax at the rate of 5% for dividend income derived from the PRC if the Hong Kong tax resident is the “beneficial owner” and holds 25% or more of the equity interests of the PRC company.

The provision of the related deferred tax liabilities, if any, are based on the expected dividends to be distributed from these subsidiaries in the foreseeable future in respect of the profits generated since 1 January 2008. Deferred tax liabilities have not been recognised in respect of the tax that would be payable on the distribution of the retained profits as the Company controls the dividend policy of these subsidiaries and it has been determined that it is probable that these profits will not be distributed in the foreseeable future.

(b) Reconciliation between tax expense and accounting profit at applicable tax rates:

	2022	2021
	RMB'000	RMB'000
Profit before taxation	107,084	957,297
Notional tax on profit before taxation, calculated at the rates applicable to the tax jurisdictions concerned	30,294	263,468
Tax effect of PRC preferential tax treatments	(24,766)	(106,597)
Tax effect of additional deduction on research and development expenses	(47,788)	(60,237)
Tax effect of non-deductible expenses	475	2,394
Tax effect of non-taxable income	(1,666)	(3,755)
Tax effect of unused tax losses not recognised	951	903
Tax effect of utilization of tax losses previously not recognised	(1,340)	(1,725)
Tax effect of additional deduction on depreciation of property, plant and equipment	(6,028)	–
Effect on deferred tax balances at 1 January resulting from a change in tax rate	1,952	–
Over-provision in respect of prior years	(15,230)	–
Actual tax expense	(63,146)	94,451

6 Earnings per share

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB171,151,000 (2021: RMB862,976,000) and the weighted average of 1,183,902,000 (2021: 1,179,383,000) ordinary shares in issue during the year, calculated as follows:

Weighted average number of ordinary shares

	2022 '000	2021 '000
Issued ordinary share at 1 January	1,181,986	1,172,251
Effect of share options exercised	<u>1,916</u>	<u>7,132</u>
Weighted average number of ordinary shares at 31 December	<u><u>1,183,902</u></u>	<u><u>1,179,383</u></u>

(b) Diluted earnings per share

The calculation of diluted earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB171,151,000 (2021: RMB862,976,000) and the weighted average of ordinary shares of 1,184,043,000 shares (2021: 1,185,193,000) calculated as follows:

Weighted average number of ordinary shares (diluted)

	2022 '000	2021 '000
Weighted average number of ordinary shares at 31 December	1,183,902	1,179,383
Effect of deemed issue of shares under the Company's share option schemes	<u>141</u>	<u>5,810</u>
Weighted average number of ordinary shares (diluted) at 31 December	<u><u>1,184,043</u></u>	<u><u>1,185,193</u></u>

7 Trade and other receivables

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Trade receivables		
– third parties	3,295,149	4,245,537
– related parties	2,692	231
Bills receivable		
– third parties	<u>11,226</u>	<u>45,066</u>
Trade and bills receivables	3,309,067	4,290,834
Less: loss allowance	<u>(1,837)</u>	<u>(1,842)</u>
	3,307,230	4,288,992
Other deposits, prepayments and receivables	<u>128,976</u>	<u>157,071</u>
	<u>3,436,206</u>	<u>4,446,063</u>

All of the trade and other receivables are expected to be recovered or recognised as expense within one year.

(a) Ageing analysis

As of the end of the year, the ageing analysis of trade and bills receivables (which are included in trade and other receivables), based on the invoice date and net of loss allowance, is as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Within 1 month	2,307,905	3,183,752
More than 1 month but within 3 months	868,151	1,056,520
More than 3 months but within 6 months	129,553	46,278
More than 6 months but within 1 year	1,621	2,261
More than 1 year	<u>–</u>	<u>181</u>
	<u>3,307,230</u>	<u>4,288,992</u>

Trade debtors are generally due within 30 to 90 days from the date of which invoice issued. Bills receivable represented outstanding bank acceptance bills and are due in 3 to 6 months from the date of issue.

(b) Impairment of trade and bills receivables

Impairment losses in respect of trade and bills receivables are recorded using an allowance account unless the Group is satisfied that the recovery of the amount is remote, in which case the impairment loss is written off against trade and bills receivables directly.

The movement of the allowance during the year is as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
As at 1 January	1,842	1,590
Impairment losses recognised	322	252
Amounts written-off during the year	(349)	–
Exchange difference	22	–
	<hr/>	<hr/>
As at 31 December	1,837	1,842

8 Derivative financial assets and liabilities

	At 31 December 2022		
	Notional amount <i>RMB'000</i>	Assets <i>RMB'000</i>	Liabilities <i>RMB'000</i>
Foreign currency derivative instruments			
– Forward contracts	1,169,618	11,111	(7,656)
– Option contracts	1,365,062	–	(730)
	<hr/>	<hr/>	<hr/>
Total	2,534,680	11,111	(8,386)

	At 31 December 2021		
	Notional amount <i>RMB'000</i>	Assets <i>RMB'000</i>	Liabilities <i>RMB'000</i>
Foreign currency derivative instruments			
– Forward contracts	888,310	5,471	–
– Option contracts	710,255	–	(22,611)
	<hr/>	<hr/>	<hr/>
Total	1,598,565	5,471	(22,611)

The Group entered into foreign currency option and foreign currency forward contracts with banks. As at 31 December 2022, the notional amount of outstanding contracts amounted to approximately USD363,938,000 (31 December 2021: USD250,952,000). All these option and forward contracts are matured within one year.

The fair value of the foreign currency option contracts is measured using the Black-Scholes-Merton Model. Main parameters used in the model include the spot price of the foreign exchange rates as of the valuation date, strike rates, forward foreign exchange rates, implied volatilities of foreign exchange rates and the risk-free rates.

The fair value of foreign currency forward contracts takes into account the market interest rate and the estimated future pay-off of the forward contracts.

9 Trade and other payables

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Trade payables and accruals		
– third parties	3,438,861	4,362,199
– related parties	43,573	41,216
Bills payable (unsecured)		
– third parties	<u>704,691</u>	<u>1,097,190</u>
Trade and bills payables	4,187,125	5,500,605
Accrued payroll	77,775	186,682
Other payables and accruals	<u>319,143</u>	<u>571,641</u>
	<u>4,584,043</u>	<u>6,258,928</u>

All of the trade and other payables as at 31 December 2022 are expected to be settled or recognised as income within one year or are repayable on demand.

As of the end of the year, the ageing analysis of the trade and bills payables (which are included in trade and other payables), based on the invoice date, is as follows:

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Within 3 months	3,329,777	4,721,536
More than 3 months but within 6 months	378,834	189,067
More than 6 months but within 1 year	4,259	19,772
More than 1 year	<u>1,499</u>	<u>3,805</u>
	<u>3,714,369</u>	<u>4,934,180</u>

As at 31 December 2022, the accrued trade payables which represented the amounts with no invoice received by the end of the year, amounted to approximately RMB472,756,000 (31 December 2021: RMB566,425,000).

10 Dividends

- (i) Dividends payable to equity shareholders of the Company attributable for the year

The Directors did not recommend the payment of any dividend for the year ended 31 December 2022 (2021: nil).

- (ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Final dividend in respect of the previous financial year, approved and paid during the year of RMB Nil cents per share (2021: RMB4.2 cents) equivalent to HKD Nil cents per share (2021: HKD5.0 cents)	<u> -</u>	<u> 48,603</u>

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

Looking back on the Year, the instability of global social and economic development has further intensified. On one hand, the global energy crisis and food crisis caused by the military conflict between Russia and Ukraine have not yet ended, which kept the inflation level in Europe and the United States at a high level, affected the purchasing power and consumption confidence of ordinary consumers for consumer discretionary products; on the other hand, the continuous and repeated COVID-19 had different degrees of impact on the social and economic activities of major economies around the world, thereby increasing the production and operation costs of enterprises and the cost of living of consumers. The increasingly fierce geopolitical conflicts, the rising international trade protectionism and the continuous tightening monetary policies of major developed countries and economies have made the global macroeconomic situation more complicated and challenging, and many major economies fell into the unfavorable situation of high inflation and low growth. According to the World Economic Outlook report released by the International Monetary Fund on 31 January 2023, it is estimated that the global economic growth for the Year shall be approximately 3.4%, which is far lower than the 4.9% expected in the second half of 2021, which is also lower than 4.4% expected in early 2022 and the average growth rate of 3.8% from 2000 to 2019. However, according to data released by the National Bureau of Statistics of China on 17 January 2023, China's GDP growth rate for the Year was 3%, while the global economy suffered and weakened during the Year.

The unstable macro situation and pessimistic forecasts for the economic outlook had a noticeable impact on demand for consumer discretionary products, including smartphones. According to the report from International Data Corporation (IDC), an independent third-party research institute, in January 2023, the global shipment of smartphones in 2022 was 1.2 billion units, being the lowest volume since 2013, with a decrease of 11%, among which the Chinese market was hit particularly hard. The sales volume of smartphones in China in 2022 was only 286 million units (2021: 329 million units), representing a year-on-year decrease of 13%. It was the biggest drop in ten years and the first time since 2013 that the sales volume fell below 300 million units. The decline in shipment of smartphones had a direct impact on the sales volume of camera modules and fingerprint recognition modules applied to smartphone. At the same time, in order to adapt to the reality of the decline in consumer purchasing power and consumer confidence, smart phone brands proactively slowed down the pace of device specification upgrades, resulting in a decrease in the market penetration growth rate of mid-to-high-end camera modules with 32 mega pixels and above, and the penetration rates of high-end camera modules such as periscope and high-power optical image stabilization and high-end fingerprint recognition modules such as ultra-thin, large-size and ultrasonic were short of expectations, which had a direct impact on the product specifications and average unit sales price of camera modules and fingerprint recognition modules applied to smartphone.

At the same time, affected by the macroeconomic situation and changes in the situation of semiconductor industry, the sales of Internet of Things (IoT) intelligent terminals in 2022 were also lower than expected. According to the China Passenger Car Association ("CPCA"), the retail sales of passenger car market in 2022 were approximately 20.7 million units, representing a year-on-year increase of approximately 550,000 units, representing a growth rate of 1.8%, which was approximately 3.6 percentage points lower than the expectation in early 2022. In addition, according to the report released by IDC on 22 December 2022, the global shipment volume of AR and VR headsets in 2022 was estimated to be 9.7 million units, representing a year-on-year decrease of 12.8% as compared with 2021 and a gap of 12.3% from the estimated shipment of 11.07 million units at the beginning of the Year. Thus, it has affected the sales volume of camera modules applied to smart cars and IoT intelligent terminals.

In summary, the camera module and fingerprint recognition module industry applied in the field of consumer electronics products was affected by external factors during the Year, under greater pressure from sluggish demand and intensified competition.

Despite all kinds of unfavourable factors, based on the trust and support of customers together with the resolution of all its employees to face difficulties in spite of setbacks, the Group confronted a series of challenges arising from the pandemic, intensified geopolitical frictions and insufficient consumer confidence, and its sales volume of camera modules and fingerprint recognition modules, despite the year-on-year decline, outperformed the decline in sales volume of smartphones in China, with market share increased. Meanwhile, the IoT and automotive camera modules in which the Group made strategical layout showed a significant increase in sales volume, representing an increase of approximately 122.7% as compared with last year, and the proportion of revenue increased significantly, gradually showing the results of strategic layout. However, under various unfavourable factors, the Group unfortunately recorded a significant decline in operating results, and the revenue during the Year amounted to approximately RMB13,759,170,000, representing a decrease of approximately 26.3% compared to last year, mainly because: (i) due to the combined effect of the above-mentioned factors which led to the decline in demand for smartphones, especially high-end models and the sluggish demand in the global smartphone market that resulted in poor demand for camera modules and fingerprint recognition modules applied to smartphone and intensified competition, the sales volume of camera modules and fingerprint recognition modules applied to smartphone recorded a year-on-year decrease of approximately 12.4% and 2.7%, respectively; and (ii) the short-term slowdown in smartphone innovation, large downward pressures on the unit sales price of products, and, during the Year, the average unit sales price of camera modules decreased by approximately 15.8% year-on-year to approximately RMB29.63 from approximately RMB35.21 of last year; and the average unit sales price of fingerprint recognition modules decreased by approximately 34.8% year-on-year to approximately RMB9.54 from approximately RMB14.62 of last year.

During the Year, the gross profit margin of the Group was approximately 3.9%, representing a decrease of approximately 5.5 percentage points as compared to approximately 9.4% of last year, which was mainly because: (i) the poor demand for camera modules and fingerprint recognition modules applied to smartphone affected by macro factors, intensified market competition, and unit price and profit margin were squeezed; (ii) the year-on-year decline in sales volume of camera modules and fingerprint recognition modules applied to smartphone as well as the decline in proportion of high-specification products resulted in a decrease in the production capacity utilization rate of the Group, which led to an increase in the manufacturing cost of unit product; (iii) the IoT and automotive camera module businesses were still at a stage of market development, therefore the production capacity utilization rate still needed to be improved, which affected the comprehensive gross profit margin; and (iv) the exchange rate of RMB against USD fluctuated significantly during the Year, with the central parity rate adjusted from 6.3757 at the beginning of the Year to 6.9646 at the end of the Year, representing a depreciation of approximately 9.2%, resulting in a significant increase in the cost of materials imported and settled in USD, which led to a negative impact on gross profit margin.

During the Year, the Group's net profit was approximately RMB170,230,000, representing a year-on-year decrease of approximately 80.3%, which was mainly due to the decline in revenue and the obvious drop in gross profit margin. Although the Group's net profit decreased during the Year, the Group has achieved significant development results in the business of camera module applied to fields other than smartphones, not only the sales volume and sales revenue increased by approximately 122.7% and 69.2% respectively year-on-year, but also the customer structure and the product structure of camera module products used in smart vehicles and IoT terminals have been significantly improved. In the field of automotive camera, during the Year, the automotive camera module products for models of SGMW, Geely Auto, XPeng, Shanghai Automotive Passenger Car, VOYAH, Foton Daimler and other brands have been delivered and put into use, and have passed the qualification certification of qualified suppliers of many automobile enterprises such as BYD, German Continental Automotive, NIO, Beijing Electric Vehicle and Dongfeng Commercial Vehicle. In the field of IoT, during the Year, the Group made a breakthrough in the VR camera module project, successfully obtaining certification from leading companies in the VR industry such as ByteDance, HTC and BlackShark and successively supplying camera modules to them, covering various products such as 3D modules and Pancake modules. At the same time, the Group maintained a solid foothold in segments such as drones, sweeping robots and children's smart watches, and continued to supply bulk to leading companies such as DJI, ECOVACS, Roborock and Little Genius (小天才), which improved its market share and total number of projects.

The Group had published the Strategic Planning for the Five-Year (2021-2025) Operation and Development of Q Technology (Group) Company Limited (《丘鈇科技(集團)有限公司五年(2021-2025年)經營發展戰略規劃》) (the “**Five-year Strategic Planning**”) for the first time in the 2021 interim results announcement of the Company, setting out a development blueprint for the next five years. Entering the second year, although the external environment is full of thorns, all employees of the Group had faith in the future and followed this strategic deployment to make great progress, actively seeking changes, and making progress and reinforcing strengths while seeking changes. During the Year, under the background of recurrent pandemic, the management maintained orderly production and operation and generally smooth logistics and delivery, and also recognised the impact of weak consumption on China's mobile phone market, endeavoured to improve the income structure to reverse the disadvantage. On the one hand, the Group vigorously expanded overseas markets, and the share of camera modules in Korean mobile phone brands continued to rise, on the other hand, the Group grew significantly in the IoT and automotive markets, and made efforts in the field of AR/VR headsets, to successively secure a number of camera modules and opto-mechanical design projects of major domestic brands. In the new energy vehicle market in China, as of the end of the Year, the Group has successively obtained the certification of 6 of the top 15 automobile brands in China in terms of the number of new energy vehicles shipped in 2022. On this solid foundation, the Group will unswervingly achieve its strategic objectives, face the challenges ahead, and achieve another golden five-year period of rapid business growth.

PROSPECTS

Fortunately, the COVID-19 pandemic is approaching a turning point, and China has adjusted its pandemic prevention and control policies accordingly in the fourth quarter of 2022, leading to a gradual normalization of social and economic activities. The “World Economic Outlook Report” released by the International Monetary Fund (IMF) on 31 January 2023 indicates the growth rate of the global economy to be 2.9% in 2023. It is the first time that IMF has raised its economic growth forecast for the year 2023 after consecutive quarters of conservative or downward forecast. Meanwhile, the IMF has raised China’s economic growth forecast for 2023 from the previous 4.4% to 5.2%. The improvement of macro factors has gradually restored everyone’s confidence in economic growth and actively raised consumers’ purchasing power and consumption confidence. Goldman Sachs Research predicted in a report in January 2023 that the growth of China’s resident spending will rebound strongly in the second half of 2023, labor income will improve and consumer confidence will also be boosted. Therefore, smartphones, IoT and new energy vehicles are all expected to embrace good development opportunities in 2023. In terms of smartphones, according to forecasts by a third-party market research institute IDC, with the effective control of pandemic, the market demand will begin to rebound in 2023 and a five-year compound annual growth rate of 1.9% will be achieved by 2026. In terms of the IoT, IDC believes that the sales of AR/VR headsets will resume growth in 2023, and shipments will increase by 31.5% year-on-year. It is expected that AR and VR headsets will continue to grow by over 30% in the next few years with shipments reach 35.1 million units by 2026. In terms of new energy vehicles, the CPCA predicts that the sales volume of new energy passenger vehicles will reach 8.5 million units in 2023. Based on the predicted sales volume of the overall traditional passenger vehicles of 23.5 million units, the penetration rate of new energy vehicles will reach 36% in 2023, representing an increase of 8.4 percentage points from 27.6% in 2022. The recovery and growth of industries such as smartphones, intelligent driving, Metaverse and IoT smart terminals will drive the growth of camera modules and fingerprint recognition modules. At the same time, the recovered consumers’ purchasing power and consumer confidence will be conducive to the sales of high-end mobile phones, thus positively facilitating the specification upgrading of the camera modules and fingerprint recognition modules. The business development of the Group is expected to capture favorable opportunity, particularly the years of accumulation in the non-handset field is exposed to a new development opportunity brought about with the sound macroeconomic growth.

In summary, the Directors believe that development opportunities and challenges coexist in the intelligent vision industry in the future. In the long run, with the continuous specification upgrading of optical products in the fields of handset terminals, automotive and IoT, together with the increasingly complex optical design and structural design of camera modules, the integration requirements for product functions, performance and size will continue to increase. Intelligent vision product manufacturers with capabilities of integrating upstream component design and large-scale automated production are expected to stand out in fierce competition and become the leaders in providing integrated intelligent vision solutions. At the same time, with the continuous improvement of demand on pixel of camera modules for Advanced Driver Assistance Systems (ADAS), the proportion of application of chip on board (COB) process in automotive camera modules will continue to increase, and companies with large-scale and reliable packaging and testing history for handset camera modules will obtain more market opportunities. The Directors believe that with its continuous effort in promoting large-scale intelligent manufacturing and research and development (the “R&D”) of new technology and vertical integration, in firmly propelling the strategies in platform, components and system integration, in adhering to a customer-centric service strategy, and in rapidly and significantly improving the effectiveness of business development in the automotive and IoT sectors, the Group will be able to maintain its long-term competitiveness, and provide high-end and high-quality products and quick-response services to our general customers, and ultimately strive to achieve the vision of the Group “to illuminate machines”.

However, the Directors are also fully aware that the new year is still full of opportunities and challenges, and social and economic development is still facing various uncertainties. On the one hand, the geopolitical situation is complicated and fickle, and the lasting outbreak of wars in some regions has caused a never-easing impact on international politics and economy, resulting high prices of food, fuel and various of sources. On the other hand, as there is a risk that international trade barriers will continue to intensify, major countries and economies are still striving to explore a suitable way of coexistence. The management of the Group must be cautious, keep vigilant, seek changes in stability and follow the trend, so as to properly respond to various unexpected changes, ensure the steady and healthy development of business, and focus on the faster and better development of camera module business in non-handset field, high-end camera module and fingerprint recognition module business. Counterpoint, the world's authoritative electronics industry research institute, pointed out that the smartphone market was affected by macroeconomic weakness and high inflation in 2022 but will improve in 2023. Under the generally upward macroeconomic trend and the expectation of economic recovery, the replacement cycle of mobile phones will gradually shorten. It is expected that the global smartphone shipment market will achieve a year-on-year growth in 2023. With new products such as 5G and folding screens also promoting the growth of high-end smartphones, the high-end market will see more resilience. Another research institute, IDC, predicts that with the effective control of the pandemic and the gradual recovery of the global economy, the market demand for smart phones will begin to rebound in 2023 and will achieve a five-year compound annual growth rate of 1.9% by 2026. Besides, the improvement of mobile phone imaging experience remains the focus of all manufacturers: (i) against the backdrop of the rapid development of the short video and live broadcast industry, consumers are more inclined to have the demand for further improving the video shooting experience; (ii) the main camera pixel enhancement, configuration of 100 to 200 megapixels applications, wide application of one-inch outsole and periscope optical zoom will further promote the upgrade of smartphone imaging experience; (iii) Android phones will firmly follow a high-end development route in 2023, build a dual-flagship strategy of bar phones + folding screen phones, and increase investment in flagship models. The research report of the international investment bank Morgan Stanley dated 8 January 2023 also predicts that the smartphone market will see signs of recovery in the second or third quarter of 2023. Apple's adoption of periscope lenses will drive the investment of Android smartphones in this aspect, which in turn will benefit Android mobile phone camera module manufacturers.

Feedbacks received from the daily communication with customers indicated that the photography function of current mobile phone is still far from expectations of end customers, such as the image delivered in respect of high-definition shooting, night scene shooting, telephoto shooting, etc is inferior to that of traditional SLR cameras. On the sensing level, the adoption of rear 3D modules and multi-spectral modules is still in the initial stage. The Group firmly believes that there is still a broad space for the long-term development of smartphone optics, and the specifications upgrades of smartphone camera modules will definitely further accelerate as long as consumer confidence recovers. Therefore, the Group will continue to build up its R&D efforts, and continue to promote the development of high-end camera module products and strengthen the R&D of new materials, new processes and new products, so as to take full advantage of the various mastered special module processes such as multi-group lens active alignment (MLAA), direct Time-of-Flight (dToF), Variable Aperture and Telescopic Zoom, coupled with the 8-Plastic (8P) lens, glass-plastic hybrid lens, freeform lens and other brand-new lens technology, together with the Sensor Shift, micro-gimble and other new anti-shake designs, to create mobile phone camera modules that can match or even surpass SLR cameras for the new generation in the immediate foreseeable future.

The intelligent vision module market in the non-handset field is proceeding very well. Taking intelligent driving as an example, international chip and algorithm companies are well positioned to accelerate the development of automotive chips and algorithm support. For example, at the Consumer Electronics Show (CES) 2023 held in the United States, Qualcomm announced the launch of the new System-on-a-Chip (SoC) Snapdragon Ride Flex for automotive chip, which will be able to simultaneously correspond to the digital cockpit, advanced automatic driving assistance technology and self-driving system operation in the form of a single chip. So far, test samples are delivered to partners and is expected to put into mass production in 2024. At the same time, Mobileye, which was spun off from Intel and listed in October 2022, also stated at CES that it will cooperate with Zeekr brand under Geely Group to launch the world's first car with Level 4 autonomous driving in China in 2024, and also deepen cooperation with Ford to enable Ford's self-developed BlueCruise self-driving system to use Mobileye's road mapping data, thus realizing self-driving in certain scenarios.

Domestic new energy vehicles embraced explosive growth in 2022, and the new energy penetration rate of passenger vehicles has reached 27.6%, representing an increase of 12.6 percentage points as compared with 2021. According to the forecast of CPCA's expert team, the penetration rate of domestic new energy vehicles will reach 36% in 2023, and will further sink to the second and third tier cities. The upgrading of the entire auto industry will accelerate, and new car-making forces will compete fiercely by virtue of products upgrading and brands building in 2023. Certain key intelligent technologies will become standard. For example, Intelligent Cabin (In-Cabin) System, assisted driving, and autonomous parking will become the basic requirements for consumers and an important basis for their choice, which will be very beneficial to the development of camera module, the "eye of autonomous driving".

According to the latest report published in December 2021 by ICV Tank, a research institute authoritative in the industry, the average number of camera modules equipped per car in 2021 amounted to 2.3 globally, representing a significant growth compared to that in 2020, and such number is expected to reach 3.8 units per car by 2026. The global market of automotive cameras covers pre-factory (completed assembly by original equipment manufacturers (OEMs)) and after-factory (assembling after shipment), in 2021, the global pre-factory market for automotive cameras amounted to US\$12.2 billion, while the after-factory market amounted to US\$5.1 billion. In particular, the pre-factory market is the most important market where the specifications for automotive camera modules are relatively higher, and the shipments of which are estimated to increase from 100 million units in 2020 to 370 million units in 2026, representing a CAGR of 24.32% and a rapidly growth. In terms of automotive camera modules, the Group has deployed ahead of time to seize opportunities. Currently, the Group was certificated by over 20 automobile brands. The Group has obtained certification from six of the top 15 automobile enterprises in terms of sales volume of new energy vehicles announced by the CPCA in 2022, and most of the projects have achieved mass production. On the one hand, the Group will deepen its direct partnership with automobile brands customers to provide quality and quick-response services, upgrade product specifications and assist customers in developing customized and differentiated intelligent driving systems, and on the other hand, it will strengthen hardware partnerships with domestic and overseas Tier 1 system providers to tap into the supply chains of top-tier overseas brands, traditional domestic brands and joint venture brands that tend to use platform-based products, so as to accelerate the acquisition of customers and expand our market share. At the same time, the Group will actively monitor market developments and enter other segments of the automotive intelligent vision industry chain, such as automotive lenses, laser radar (LiDAR) and head-up displays (HUD) by recruiting core teams or mergers and acquisitions.

In recent years, the Group has made good progress in the field of IoT intelligent vision products which it has taken the lead in entering into, and the market share of the Group in the leading enterprise clients who engage in drones, sweeping robots and smart wearable devices, such as DJI, ECOVACS and Little Genius (小天才), has continually increased. In this regard, the immersive experience devices are of utmost importance to the medium-development of IoT, according to the prediction of the China Academy of Information and Communications Technology, the global virtual (augmented) reality industry scale will grow at an average annual rate of approximately 54% in the five years from 2020 to 2024, with VR growing at a rate of approximately 45% and AR at a rate of approximately 66%, with both market scales neck and neck, reaching RMB240 billion in 2024. In recent years, the Group has made remarkable progress in VR headsets. In addition to successfully obtaining the See Through and 6 DOF camera module projects for equipment of multiple brands, the Group has also taken the lead to strengthen its opto-mechanical design capabilities and cooperated with manufacturers on pre-researching the new design of imaging optical path for the switchback VR headsets, providing the Pancake Lens imaging solution which applies the folding of optical path, and conducting the non-camera optical products business.

According to the published financial data of the Year, the Group is currently ranked among the top two in the packaging and testing industry of camera modules for mobile phone in China based on the comprehensive assessment of sales volume, product structure and product average unit sales price, and has successfully covered all major smartphone brands using Android system. In the future, the Group will continue to consolidate and deepen the cooperative relationship with core customers, provide R&D and production services for a full range of products, and at the same time continue to improve the specifications of cooperative products for new customers, increase the number of projects, and strive to become the core suppliers for all Android-based smartphone brands to increase market share, and at the same time strive to seek opportunities for cooperation with smartphone brands other than the Android system.

In terms of vertical integration, the Group, on the one hand, has kept promoting the development of the smartphone camera module lens, IoT camera module lens and 3D module lens of Newmax Technology Co., Ltd. (“**Newmax Technology**”, an associate of the Company listed on the Taipei Exchange in Taiwan, stock code: 3630). The Group, on the other hand, will seek other merger projects regarding critical optical parts and components and promote the development of technology in critical devices like motors, automotive lens and laser radar. The Group will also strive to achieve further breakthrough in the application of camera modules and other optical related modules in non-handset field.

The Group will keep forging ahead in 2023 to enhance its position in the industry of camera modules for smartphones, with a focus on increasing the sales proportion of products with resolutions of 32 megapixels and above. The Group will also expand the business scale of camera modules applied to the non-handset fields such as smart cars and IoT intelligent terminals rapidly. The Group will strive to achieve the following targets: (i) the combined sales volume of camera modules with resolutions of 32 megapixels and above applied to mobile phones and camera modules applied to other fields accounting for more than 35% of the total sales volume of camera modules, which was approximately 30% during the Year; and (ii) a year-on-year increase of not less than 50% in the sales volume of camera modules applied to the non-handset fields.

Taking into account the market conditions and the Group’s actual development and comprehensive capabilities, despite the complicated and changing micro environment, the Directors are confident in leading the Group to embrace the challenges in the year ahead, make further efforts to achieve good development, endeavor to advance the five-year strategic planning, uphold the vision of the Group as “to illuminate machines” and strive to create greater value for the shareholders of the Company (the “**Shareholders**”).

AWARDS AND HONOURS

During the Year, the Group continued to adhere to our customer-oriented service strategies, constantly considered the provision of good personal experience for customers as our operation direction and devoted our best efforts to satisfy customers' needs in product R&D, sales delivery, after-sales service, product quality and technology innovation, and gained high recognition of the Group's comprehensive ability, products and services from the local governments, industry and our customers. The major honors the Group has recently received are as follows:

In April 2022, Kunshan QTech Microelectronics Co., Ltd. (昆山丘鈦微電子科技股份有限公司) ("**Kunshan QT China**"), a subsidiary of the Company, was awarded as the "2022 Jiangsu Province Intelligent Manufacturing Demonstration Factory" by Jiangsu Provincial Department of Industry and Information Technology;

In December 2022, Kunshan QT China was awarded the "2021 Outstanding Contribution Award for R&D Innovation" by Suzhou Municipal People's Government;

In January 2023, Kunshan QT China was awarded the "Excellent Quality Award 2022" by vivo Mobile Communication Co., Ltd. (維沃移動通信有限公司), a world-renowned smartphone brand;

In January 2023, Kunshan QTech Biological Recognition Technology Limited (昆山丘鈦生物識別科技有限公司) ("**QT Biological Recognition**"), a subsidiary of the Company, was awarded the "Best Delivery Award 2022" by vivo Mobile Communication Co., Ltd. (維沃移動通信有限公司), a world-renowned smartphone brand;

In January 2023, Kunshan QT China was awarded the "Excellent Quality Award 2022" by OPPO Guangdong Mobile Communication Co., Ltd. (OPPO廣東移動通信有限公司), a world-renowned smartphone brand;

In January 2023, Kunshan QT China was awarded the "Excellent Delivery Award" by Honor Device Co., Ltd. (榮耀終端有限公司), a world-renowned smartphone brand.

FINANCIAL REVIEW

Revenue

During the Year, the revenue of the Group was approximately RMB13,759,170,000, representing a year-on-year decrease of approximately 26.3% as compared with approximately RMB18,662,626,000 in 2021. The decrease in revenue was mainly because: (i) under the impact of the recurrence of COVID-19 pandemic and the slowdown in global economic growth, the global smartphone market, especially high-end models, was in poor demand, and the sales volume of the camera modules and fingerprint recognition modules applied to smartphone reported a year-on-year decline of approximately 12.4% and 2.7%, respectively; and (ii) the decline in proportion of high-specification products of the camera modules and fingerprint recognition modules applied to smartphone resulted in a year-on-year decline in average unit sales price of the camera modules and fingerprint recognition modules of approximately 15.8% and 34.8%, respectively.

Cost of sales

During the Year, the cost of sales of the Group was approximately RMB13,217,828,000, representing a year-on-year decrease of approximately 21.8% as compared with approximately RMB16,900,644,000 in 2021. The decrease in cost of sales was primarily attributable to the decrease in revenue of approximately 26.3% during the Year as compared with last year, resulting in a decrease in raw materials and direct labor costs compared with last year.

Gross profit and gross profit margin

For the Year, gross profit of the Group was approximately RMB541,342,000 (2021: approximately RMB1,761,982,000), representing a decrease of approximately 69.3% as compared with that in 2021, while gross profit margin was approximately 3.9% (2021: approximately 9.4%). The decrease in gross profit margin was mainly because: (i) the poor demand for camera modules and fingerprint recognition modules applied to smartphone affected by macro factors, intensified market competition, and unit price and profit margin were squeezed; (ii) the year-on-year decline in sales volume of camera modules and fingerprint recognition modules applied to smartphone as well as the decline in proportion of high-specification products resulted in a decrease in the production capacity utilization rate of the Group, which led to an increase in the manufacturing cost of unit product; (iii) the IoT and automotive camera module businesses were still at a stage of market development, therefore the production capacity utilization rate still needed to be improved, which affected the comprehensive gross profit margin; and (iv) the exchange rate of RMB against USD fluctuated significantly during the Year, with the central parity rate adjusted from 6.3757 at the beginning of the Year to 6.9646 at the end of the Year, representing a depreciation of approximately 9.2%, resulting in a significant increase in the cost of materials imported and settled in USD, which led to a negative impact on gross profit margin.

Other revenue

During the Year, other revenue of the Group was approximately RMB196,839,000, representing an increase of approximately 28.3% as compared with approximately RMB153,410,000 in 2021. The increase in other revenue was mainly attributable to: (i) the increase in government grants included in other revenue of approximately RMB16,977,000 from approximately RMB133,141,000 of the previous year to approximately RMB150,118,000 of the Year; and (ii) the year-on-year increase in interest income on bank deposits of approximately RMB27,192,000.

Other net income/(loss)

During the Year, the Group recorded other net income of approximately RMB90,999,000, while other net loss of approximately RMB49,777,000 was recorded in 2021, which was mainly due to: (i) a net gain on foreign exchange option contracts was recorded in the amount of approximately RMB30,730,000 (2021: net loss of approximately RMB25,147,000); (ii) a net gain on foreign currency forward contracts was recorded in the amount of approximately RMB20,634,000 (2021: net gain of approximately RMB4,706,000); (iii) the Group recorded a loss of approximately RMB22,222,000 for the impairment provision for interest in an associate in 2021, while reversed the impairment loss during the Year as there has been a favorable change in the estimate used to determine the recoverable amount; and (iv) the Company made a provision for impairment loss of approximately RMB20,678,000 on property, plant and equipment in 2021, while no such impairment loss was recorded during the Year.

Selling and distribution expenses

For the Year, selling and distribution expenses of the Group amounted to approximately RMB13,790,000, representing a decrease of approximately 39.7% as compared with approximately RMB22,867,000 in 2021. The ratio of selling and distribution expenses to revenue was approximately 0.1%, which was at similar level with that of 2021.

Administrative and other operating expenses

During the Year, the total of administrative and other operating expenses of the Group was approximately RMB142,166,000, representing a decrease of approximately 11.9% as compared with approximately RMB161,452,000 in 2021. The decrease in administrative and other operating expenses was mainly attributable to the enhancement of resource integration and the optimization of the management team by the Group during the Year, which results in a reduction in recruitment expenses and labour costs.

R&D expenses

During the Year, total R&D expenses of the Group were approximately RMB469,626,000, representing a decrease of approximately 26.9% as compared with approximately RMB642,267,000 in 2021. The decrease in R&D expenses was mainly attributable to the Group's improvement of R&D efficiency, optimization of the R&D team and reduction of investment in R&D, such as material requisition.

Finance costs

During the Year, the finance costs of the Group were approximately RMB59,874,000, representing an increase of approximately 99.2% as compared with approximately RMB30,050,000 in 2021. The increase in finance costs was mainly attributable to the increase in bank borrowings drawn by the Group during the Year as compared with that of the previous year as well as the increase in USD borrowing rate.

Share of loss of an associate

During the Year, Newmax Technology, an associate of the Company, recorded a loss. The share of loss of an associate attributable to the Company was approximately RMB36,640,000, representing a decrease of approximately 29.1% as compared with the loss of RMB51,682,000 in 2021.

Income tax expenses

During the Year, the Group recorded income tax income of RMB63,146,000, while the income tax expenses in 2021 were approximately RMB94,451,000. This was mainly attributable to: (i) profit before taxation of approximately RMB107,084,000 recorded by the Group in the Year, which decreased by approximately 88.8% as compared with that of last year; (ii) the deferred tax for origination and reversal of temporary differences amounting to approximately RMB50,283,000 during the Year (2021: approximately RMB55,072,000) attributable to the positive impact of the policy on the accelerated deduction for R&D expenses; and (iii) the reversal of income tax over-provided in the year 2021 of approximately RMB15,230,000 during the Year.

Profit for the Year

Based on the foregoing, the profit of the Group for the Year amounted to approximately RMB170,230,000 (2021: approximately RMB862,846,000), representing a decrease of approximately 80.3% as compared with that of 2021.

LIQUIDITY AND FINANCIAL RESOURCES

Bank Borrowings

As at 31 December 2022, the Group's bank borrowings amounted to approximately RMB2,615,977,000, all of which were short-term borrowings, representing an increase of approximately 48.8% from approximately RMB1,757,670,000 as at 31 December 2021.

As at 31 December 2022, the Group's bank borrowings were mainly denominated in Renminbi and/or USD. The cash flow overview of the Group for the Year and 2021 was set out as follows:

	For the year ended	
	31 December	
	2022	2021
	<i>RMB'000</i>	<i>RMB'000</i>
Net cash generated from operating activities	1,048,352	1,596,214
Net cash used in investing activities	(1,941,098)	(880,473)
Net cash generated from/ (used in) financing activities	468,475	(942,199)

As of 31 December 2022, the cash and cash equivalents of the Group amounted to approximately RMB1,348,884,000, representing a decrease of approximately RMB394,186,000 from approximately RMB1,743,070,000 as at 31 December 2021. The decrease in cash and cash equivalents was mainly attributable to the subscription of wealth management products and time deposits during the Year.

Operating activities

During the Year, the Group recorded a net cash inflow from operating activities of approximately RMB1,048,352,000, representing a decrease of approximately RMB547,862,000 as compared with the net cash inflow of approximately RMB1,596,214,000 in 2021, which was mainly attributable to the decrease in revenue of approximately 26.3% during the Year as compared with that of 2021 and the decrease of gross profit margin as compared with that of 2021.

Investing activities

The net cash outflow used in investing activities of the Group during the Year amounted to approximately RMB1,941,098,000 (2021: net cash outflow amounted to approximately RMB880,473,000), and among such cash used in investment activities: (i) the net cash of approximately RMB1,109,383,000 was used to purchase wealth management products and other financial assets; (ii) the net cash of approximately RMB521,553,000 was used for time deposits with maturity over three months; and (iii) approximately RMB407,520,000 was used for the due payment for the purchase of equipment and other fixed assets.

Financing activities

The net cash inflow generated from the financing activities of the Group during the Year amounted to approximately RMB468,475,000, while the net outflow recorded in the year 2021 was approximately RMB942,199,000, which was mainly attributable to the proceeds from bank borrowings exceeded the repayment amount by approximately RMB630,908,000.

Gearing ratio

The gearing ratio of the Group as at 31 December 2022, as defined by the total balance of bank borrowings and lease liabilities divided by total equity at the end of the Year, was approximately 55.4%, representing an increase of approximately 17.4 percentage points from approximately 38.0% as at 31 December 2021, which was mainly attributable to an increase of approximately 48.8% in the balance of bank borrowings from approximately RMB1,757,670,000 as at 31 December 2021 to approximately RMB2,615,977,000 as at 31 December 2022.

TREASURY POLICIES

The Group's treasury policy was disclosed in the prospectus of the Company dated 20 November 2014 (the "**Prospectus**"), and was amended by the risk management committee of the Company (the "**Risk Management Committee**") on 24 March 2016, the details of which were disclosed under the "Management Discussion and Analysis" section of the 2016 to 2021 annual reports. As at 6 December 2022, the Risk Management Committee and the Board reviewed and approved certain amendments to the Group's treasury policy. Particulars of the amendments to the Group's treasury policy will be disclosed in the 2022 annual report of the Company.

The Board, the Risk Management Committee of the Company and the staff at the relevant positions always remain alert to the performance and risk assessment of the wealth management products. At the same time, the Company also pays close attention to the liquidity and debt asset position of the Group in order to ensure the sufficiency of its working capital and maintain the debt asset ratio at a reasonable level.

MATERIAL ACQUISITION AND DISPOSAL

On 15 December 2020, the Company submitted an application in relation to a possible spin-off and separate listing of Kunshan QT China on the Shenzhen Stock Exchange or Shanghai Stock Exchange in the PRC (the "**Proposed Spin-off**") to the Stock Exchange for approval pursuant to Practice Note 15 of the Rules Governing the Listing of Securities on the Stock Exchange (the "**Listing Rules**"), and received the approval from the Stock Exchange on 23 April 2021. On 23 June 2021, Kunshan QT China submitted an application to the ChiNext Market of Shenzhen Stock Exchange for the proposed listing (the "**Proposed Listing**"), and has received approval from the listing committee of the ChiNext Market of the Shenzhen Stock Exchange on 17 August 2022. Kunshan QT China has also submitted the registration application to the China Securities Regulatory Commission (the "**CSRC**") for the Proposed Listing, and has received the official notice of acceptance from the CSRC on 30 December 2022, and is still undergoing the relevant approval process. As the equity interest of the Company in Kunshan QT China is expected to decrease upon completion of the proposed initial public offering of Kunshan QT China's ordinary shares, the Proposed Spin-off constituted a deemed disposal of the Company under Chapter 14 of the Listing Rules and a major transaction of the Company. The Company convened an extraordinary general meeting (the "**EGM**") on 30 December 2022 to obtain Shareholder's approval for the Proposed Spin-off, and the relevant proposed resolution was duly passed as an ordinary resolution of the Company at the EGM. For details, please refer to the inside information announcements of the Company dated 15 December 2020, 23 April 2021, 23 June 2021, 30 June 2021, 16 December 2021, 23 February 2022, 27 June 2022, 4 August 2022, 17 August 2022, 29 September 2022, 2 December 2022 and 30 December 2022, and the poll result announcement of the EGM dated 30 December 2022.

Save as disclosed above, the Group did not have any material acquisitions or disposals of its subsidiaries, associates and joint ventures for the year ended 31 December 2022.

SIGNIFICANT INVESTMENT

The Group did not hold any significant investment for the year ended 31 December 2022.

FUTURE PLANS FOR MATERIAL INVESTMENTS OR CAPITAL ASSETS

There was no any plan authorized by the Board for other material investments or additions of capital assets as at 31 December 2022.

CONTINGENT LIABILITIES

As at 31 December 2022, the Group did not have any contingent liabilities.

PLEDGE OF ASSETS

As at 31 December 2022, the assets pledged by the Group included bank deposits and shares of an associate of approximately RMB1,049,324,000, representing an increase of approximately RMB100,428,000 as compared with approximately RMB948,896,000 as at 31 December 2021. These pledged assets were used as guarantee for bank borrowings and bank guarantee letters.

EMPLOYEE POLICIES AND REMUNERATION

As at 31 December 2022, the number of staff of the Group was 7,780 (the “**Staff**”, including contractual staff and non-contractual staff such as staff under internship agreements and labour service agreements) (as at 31 December 2021: 12,880). The significant decrease in the number of Staff compared to last year was mainly due to the reduction in the employment demand per unit capacity resulting from the further effective results of the Group’s production automation and digital upgrading. Meanwhile, the decline in the sales volume of camera modules and fingerprint recognition modules in the Year also led to the decrease in demand for Staff. The Group is committed to providing all Staff with fair working environment, providing newly recruited staff with induction training and job technical counseling to help them to adapt to job requirements quickly, providing all Staff with clear job responsibilities guidelines and for employees at different positions with on-the-job training together with other training programmes to help improving their skills and knowledge, and strived to provide all staff with competitive remuneration packages. For the Year, the remuneration of the employees (including staff under labour service agreements and internship agreements) of the Group was approximately RMB897,273,000 (2021: approximately RMB1,113,635,000). Apart from basic salary, the package also includes performance bonus, medical insurance, share options and provident fund (staff under labour service agreements and internship agreements are treated according to the laws and regulations of the PRC).

FOREIGN EXCHANGE EXPOSURE

The Group is exposed to currency risk primarily due to certain receivables, payables, cash balances and loans that are denominated in foreign currencies other than RMB arising from the operating activities such as bank borrowings, product sales and purchase of raw materials. The Group is also exposed to currency risk from the exchange or translation of USD and Hong Kong Dollars into RMB. During the Year, as the sales income of the Group was still mainly settled in RMB but various raw materials for production and some equipment for production were purchased from overseas and settled in USD, while the central parity rate of RMB against USD recorded a downward adjustment of approximately 9.2% from 6.3757 at the beginning of the Year to 6.9646 at the end of the Year, and the highest central parity rate of RMB against USD in the Year reached 7.2555, with a fluctuation range of approximately 13.8%, which made the exchange risk management more difficult. However, the foreign exchange option contracts and foreign currency forward contracts adopted by the Group effectively solidified part of the exchange rate cost of RMB against USD, and recorded a net gain of approximately RMB51,364,000 in aggregate during the Year (2021: recorded a net loss of approximately RMB20,441,000 in aggregate). As affected by multiple factors such as politics, economic, and supply and demand, the trend of RMB against USD in the future is subject to great uncertainties. It is difficult to adjust the business model of the Group in the short run. Therefore, the profit or loss of the Group may still be affected by exchange rate fluctuation in the future. The Group will, on one hand, continuously strive to strengthen the expansion of overseas business and strive to reduce the proportion of USD expense; on the other hand, the Group will continuously enhance daily monitoring of the exchange rate, and fix the future foreign exchange costs by properly using financial instruments, so as to strengthen the management of foreign exchange risks and strive to reduce foreign exchange loss. However, the Group is also clearly aware that there are many factors affecting exchange rates, and the mechanism to determine exchange rate is complicated and fickle, making it is difficult to estimate its trend. Therefore, the profit or loss of the Group may still be affected by exchange rate fluctuation.

DIVIDEND

Taking into consideration of the capital expenditure required by the Group's plan to expand camera module capacity planning and increase investment in camera module business for automotive and IoT fields in 2023, the Board recommended not to declare any final dividend for the year ended 31 December 2022 (final dividend for the year ended 31 December 2021: Nil).

CLOSURE OF REGISTER OF MEMBERS

For the purpose of determining the eligibility to attend the annual general meeting (the "AGM") to be held on 19 May 2023, the register of members of the Company will be closed from 15 May 2023 to 19 May 2023. All transfer documents accompanied by the relevant share certificates must be lodged with the Company's branch share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong not later than 4:30 p.m. on 12 May 2023.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the Year, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities.

ENVIRONMENTAL PROTECTION MANAGEMENT

The Group has strictly complied with the applicable environmental protection laws and policies in the jurisdictions where the respective members of the Group are located. During the Year, the Group had continued to revise, improve and implement a number of internal rules and regulations in relation to environmental protection management such as the implementation of Wastewater Management Regulations, Waste Gas Management Regulations and Greenhouse Gas Management Measures, and to further perfect the wastewater, waste gas and greenhouse gas treatment system in order to strengthen its management and control in production and domestic sewage so as to ensure that the wastewater discharge is in compliance with statutory requirements, and clarified the ranges, procedure and instrument of collecting the data of greenhouse gas for the effective management of greenhouse gas of the Group in the long run and prepared for reducing carbon emissions. At the same time, the Group had also amended and implemented certain regulations and measures including improving the Fire Safety Management Regulations and Emergency Plan, held fire drills with particular focus on strengthening of self-check of the fire control facilities and improving the fire prevention and control capability, and Kunshan QT China and QT Biological Recognition successfully obtained the compliance certificate in terms of work safety granted by Administration of Work Safety and Environmental Protection of Kunshan Hi-tech Park.

Particulars of the environmental protection management of the Company will be disclosed in the Environmental, Social and Governance Report set out in the 2022 annual report of the Company.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the “**Model Code**”) as set out in Appendix 10 to the Listing Rule. The Directors have been aware and have confirmed that they had complied with the required standard for securities transactions by Directors set out in the Model Code during the Year.

CORPORATE GOVERNANCE PRACTICES

The Board is committed to maintaining a high standard of corporate governance, and protecting and enhancing Shareholders’ value through good corporate governance. For the Year, the Company has fully complied with the code provisions set out in Part 2 of Appendix 14 of the Listing Rules. The roles of the Chairman and the Chief Executive Officer are performed by different individuals to enhance the respective roles’ independence, accountability and responsibility.

The Board is primarily responsible for overseeing and supervising the management of the business affairs and the overall performance of the Group, setting the Group’s values and standards, formulating the business plans and strategies, deciding all significant financial and operational issues, developing, monitoring and reviewing the Group’s corporate governance. The Board has established the audit committee (the “**Audit Committee**”), the nomination committee, the remuneration committee and the risk management committee, and all or the majority of members of the committees consist of independent non-executive directors. The respective terms of reference for such committees have been published on the respective websites of the Stock Exchange and the Company.

Particulars of the principal corporate governance practices adopted by the Company will be disclosed in the Corporate Governance Report set out in the 2022 annual report of the Company.

REVIEW OF CONSOLIDATED FINANCIAL STATEMENTS

The Company has established the Audit Committee in compliance with Rule 3.21 of the Listing Rules and paragraph D.3 of the Part 2 of Appendix 14 of the Listing Rules. The Audit Committee comprises three members, namely Mr. Ng Sui Yin (chairman of Audit Committee), Mr. Ko Ping Keung and Mr. Chu Chia-Hsiang, all being independent non-executive directors. The Audit Committee had reviewed the annual results of the Company for the year ended 31 December 2022 with the Company's management.

EVENTS AFTER THE REPORTING YEAR

Save as disclosed in this announcement and/or other announcements of the Company, there were no other important events affecting the Group that had occurred after 31 December 2022 and up to the date of this announcement.

ANNUAL REPORT

The annual results announcement of the Company is published on the respective websites of the Stock Exchange (<http://www.hkexnews.hk>) and the Company (<http://www.qtechsmartvision.com>). The annual report for the year 2022 will be available on the above websites and despatched to Shareholders in due course.

APPRECIATION

The Company would like to take this opportunity to express its sincere thanks and gratitude to the Shareholders, and various parties for their continuous support as well as the Directors and its staff for their dedication and hard work.

By Order of the Board
Q Technology (Group) Company Limited
He Ningning
Chairman and Executive Director

Hong Kong, 13 March 2023

As at the date of this announcement, the executive Directors are Mr. He Ningning (Chairman), Mr. Hu Sanmu (chief executive officer) and Mr. Fan Fuqiang; and the independent non-executive Directors are Mr. Chu Chia-Hsiang, Mr. Ko Ping Keung and Mr. Ng Sui Yin.