China / Hong Kong Company Update

Q Technology

Bloomberg: 1478 HK Equity | Reuters: 1478.HK

Refer to important disclosures at the end of this report

DBS Group Research . Equity

17 Feb 2022

BUY

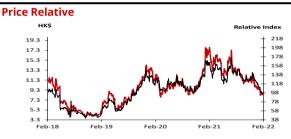
Last Traded Price (16 Feb 2022): HK\$8.59 (HSI : 24,719) Price Target 12-mth: HK\$16.60 (93% upside) (Prev HK\$16.80)

Analyst

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What's New

- Oppo's and Vivo's higher-than-market expected share gains fuel CCM shipment CAGR to 22%
- Module premiumisation pulls margin from 10.2% in FY20 to 14.2% in FY23
- Expect FY22 CCM shipment, revenue, and EPS at 14%, 19%, and 36% higher than market
- Reiterate BUY based on its cheap valuation and promising FY20-23F EPS CAGR of 37.7%



—Q Technology (LHS) — Relative HSI (RHS)

Forecasts and Valuation	on			
Forecasts and Valuation FY Dec (RMBm) Turnover EBITDA Pre-tax Profit Net Profit Net Profit Gth (Pre-ex) (%) EPS (RMB) EPS (HK\$) EPS (HK\$) DPS (HK\$) BV Per Share (HK\$) DPS (HK\$) BV Per Share (HK\$) PE (X) P/Cash Flow (X) P/Free CF (X) EV/EBITDA (X) Net Div Yield (%) P/Book Value (X) Net Debt/Equity (X) ROAE (%)	2020A 17.400 1.391 970 840 840 54.9 0.72 0.89 51.1 0.88 0.72 0.89 51.1 0.88 0.11 4.03 9.7 3.6 5.0 5.3 1.3 2.1 CASH 25.3	2021F 19.919 2.155 1.609 1.361 62.0 1.13 1.39 57.4 1.39 0.15 5.29 6.2 nm nm 4.7 1.8 1.6 0.3 30.7	2022F 26,853 2,888 2,305 1,950 43,3 1,59 1,95 40,2 1,95 0,21 7,09 4,4 2,0 2,6 2,5 2,5 1,2 CASH 32,4	2023F 31.363 3.378 2.763 2.337 19.9 1.86 2.29 17.4 2.29 0.25 9.21 3.7 3.4 6.4 1.8 2.9 0.9 CASH 28.9
Earnings Rev (%): Consensus EPS (RMB) Other Broker Recs:		43 0.98 B:24	50 1.20 S:0	New 1.41 H:3

Source of all data on this page: Company, DBS Bank (Hong Kong) Limited ("DBS HK"), Thomson Reuters



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Major beneficiary in the smartphone market repositioning

Investment Thesis

Market share surpasses that of O-Film for the first time. Oppo's and Vivo's share gains that were higher than the market's expectation accelerated Q Tech's CCM shipment growth to a 22% FY20-23 CAGR. Higher market share strengthens its bargaining power.

Premiumisation of CCM exerts a strong pull on margin.

Advanced CCM revenue is expected to increase from 57.0% in FY20 to 75.7% in FY23, pulling the overall gross margin from 10.2% in FY20 to 14.2% in FY23.

Potential A-share listing narrows R&D spread with peers.

Over 50% of capital raised will be allocated to R&D investment, with support for research expenditure to double in three years.

Valuation:

Q Tech is trading at 4.3x FY22F PE, well below its seven-year forward PE average of 13.2x. Our TP of HK\$16.60 is based on an 8.5x FY22F PE, reversion to 1SD below the seven-year historical average, on promising share gain and margin expansion.

Where we differ:

Our FY22F CCM shipment estimation is 14% higher than the market's, resulting in 19%/36% higher revenue/ EPS.

Key Risks to Our View:

Slowing smartphone shipment growth due to prolonged chip shortage.

At A Glance

Activities	
Issued Capital (m shrs)	1,172
Mkt Cap (HK\$m/US\$m)	10,067 / 1,291
Major Shareholders (%)	
He (Ningning)	63.7
Free Float (%)	36.3
3m Avg. Daily Val. (US\$m)	3.17
GICS Industry: Information Technology / Technology	ogy Hardware &
Equipmen	



WHAT'S NEW

CCM growth accelerated with Vivo and Oppo, margin pull led by premiumisation

Market overview

Smartphone component suppliers like that of compact camera modules ("CCMs") have been facing headwind due to the sluggish growth of global smartphone shipment since 2H21. The headwind was caused by the chip shortage and prolonged supply chain woes due to the numerous COVID-19 outbreaks.

A few suppliers benefited from the market share gains of leading smartphone vendors like Oppo and Vivo. These suppliers maintained their industry-beating shipment growth in 2021 – Q Technology ("Q Tech") is one of them.

Established in 2007, Q Tech is China's third-largest camera module (CCM) supplier in terms of revenue, after Sunny Optical (2382 HK) and O-Film (002456 CH) in 2020. It grew rapidly with China's top smartphone vendors like Vivo and Oppo over the past few years.

We expect that the above-mentioned trend and factors mentioned below will lead Q Tech to certain breakthroughs in the CCM market:

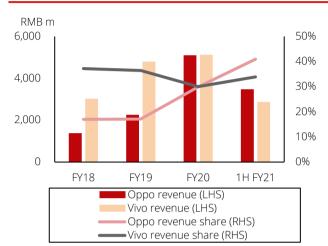
1. FY22 market share expected to replace O-Film's 2nd position

Q Tech has long-term clients and has partnered with Oppo and Vivo since 2012, when it started supplying CCM to Vivo. These relationships involved deep interactions and communications on optical technology, which can be seen in Q Tech's application of its latest technology and engineering knowhow in Oppo's and Vivo's products. For instance, Q Tech exclusively supplied its module for Vivo's X50 Pro, which has utilised the world's first gimbal-like stabilisation technique. It also solely supplied its newly developed products – a 3D structural light module and under-glass fingerprint recognition modules – for Oppo's Find X and Vivo's X21 for over 1m and 7m units for the first batch of the brands' bulk orders, respectively.

Revenue from Vivo and Oppo increased significantly during

Q Tech's growth with them; revenue was recorded at Rmb3.0/4.8/5.1bn and Rmb1.4/2.3/5.1bn in FY18/19/20, respectively. The revenue share from Oppo has surged from 17.0% in FY18 to 40.9% in 1H21, while that of Vivo maintains a high ratio ranging from 30% to 37%.

Fig.1 Revenue and revenue share from Oppo and Vivo from FY18 to 1H21



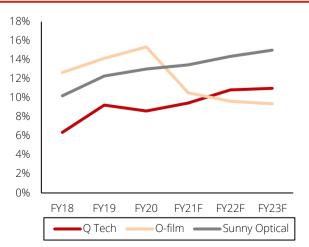
Source: Company data, DBS HK

Oppo and Vivo shipment growth accelerates.

After Apple and Xiaomi, Oppo and Vivo are two of the major beneficiaries gaining the market share of Huawei in 2021, which has faced chip and software embargoes from the US and some western countries since May 2019.

Their shipment share increased by over 1% in total in 2021. As the average replacement cycle of smartphones is 28 months, we expect Oppo's and Vivo's trend in taking up the Huawei market to continue in 2022 and 2023 on the back of 1) its strong physical retail distribution channel, 2) innovative premium features supported by strong R&D, and 3) good value for money.

Fig.2 Market share trend of Q Tech and peers



Source: Trendforce, DBS HK

Huawei's replacement fuels 22% growth in Oppo, Vivo in 2022.

Huawei's app gallery has 0.73bn active users. Taking a conservative estimation approach, if we assume only Huawei's 2018/2019 shipments are subject to replacement and all the incremental shipments of the top five vendors in 2021 and 2022 came from Huawei's user replacement, there will be 0.42bn units of shipment for replacement from Huawei. It contributes 26.7%/17.2% of Oppo's/Vivo's 2021 shipments and is expected to fuel a growth of 22.1% in their total shipment in 2022, accelerating from 17.4% in 2021.

FY22F CCM shipment 14% higher than market.

Being a key supplier of Oppo and Vivo, we expect Q Tech's CCM shipment share, driven by Oppo's and Vivo's share gain, to accelerate to a FY20-23 CAGR of 21.7%. This translates to our forecast on FY22 CCM shipment/revenue/EPS being 14.1%/18.7%/35.7% higher than the market consensus.

Q Tech's CCM revenue has surpassed O-Film's in 1H21 for

the first time, driven by the demand from Oppo and Vivo. We expected Q Tech's CCM shipment growth to remain strong throughout 2021 and 2022 and expect it to replace O-Film's 2nd position in the global CCM market in FY22, reaching a market share of 10.8%.

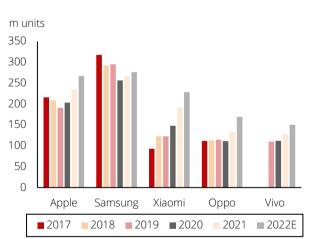


Fig.3 2022 top five vendors in terms of expected shipment

Source: IDC, DBS HK

We expect Q Tech to have greater bargaining power

toward upstream suppliers with a rising position in the CCM market, which may be shown in a better ASP and terms of payment. The capacity expansion coming along with the shipment growth will also equip Q Tech with higher stability in shipment supply and higher operating efficiencies due to economies of scale. These together strengthen its competitive edge in competing orders from other leading smartphone vendors.

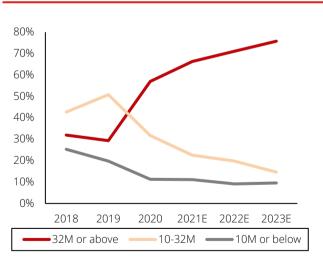
2. CCM margin reaching industrial average

Premiumiation of CCM exerts a strong pull on margin,

besides greater bargaining power, to upstream suppliers on the back of replacing O-Film's 2nd position in terms of CCM market share. Gaining market share in high-end CCMs increases the ASP and margin of Q Tech's CCM business. High-end CCMs with a higher megapixel or more advanced applications have a much higher ASP than lowend modules. The 32M-or-above CCM's ASP was Rmb74.7 while that of 10M-to-32M/10M or below were only Rmb23.5/14.7 in 1H21. Meanwhile, the 32M-or-above CCM's margin was 15.9% while that of 10M-to-32M/10M was only 5.6%/10.9%.

With an increasing penetration in advanced modules (32Mor-above, dual/multi-camera modules, 3D modules, etc.), from 32.0% in FY18 to 65.0% in 1H21, Q Tech's ASP spread with market leader Sunny Optical has been narrowing significantly from about Rmb28.3 in 1H19 to Rmb1.7 in 1H21. We expected advanced CCM's revenue share to further increase from 57.0% in FY20 to 75.7% in FY23.

Fig.4 Revenue share of Q Tech's modules business



Source: Source: Company data, DBS HK



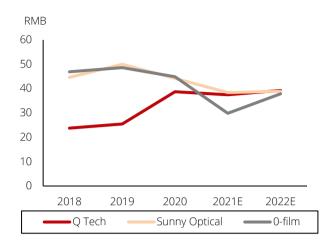


Fig.5 Q Tech's CCM ASP comparison with peers



Potential A-share listing further fuels CCM premiumisation.

Q Tech's A-share listing applications have been accepted by the Shenzhen Stock Exchange on June 2021 and it finished its 1st round of comments. We believe the capital raised from the potential A-share listing in 2022 will enhance Q Tech's competitive edge in CCM technology.

50% capital to be raised allocated for research investment.

According to Q Tech's A-share listing prospectus, the expected total proceeds to be raised amounted to Rmb 3bn and c.50% of it is allocated towards research investment for the innovation and production of advanced smartphone CCM – this is c.300% of FY20's research expenses. Capital from the IPO is to be used to fund research projects that include the most advanced technology that is used in CCMs of premium smartphones or flagship models like the OIS module, folded camera for zoom, aperture adjustable modules, and even ADAS in auto CCM.

Q Tech's R&D spending is expected to increase 113% in three years, with the incremental research investment to be sourced from IPOs. The research expenses-to-sales ratio has been rising over the past three years. With a capital replenishment for R&D, we expect the research expense spread with Q Tech's peers to be narrowed.



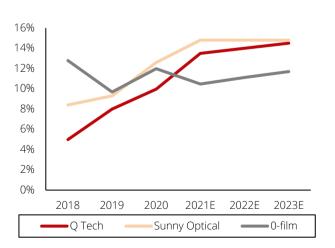
Fig.6 Q Tech's R&D expenditure and growth

Source: Company data, DBS HK

ASP and margin reaching Rmb41.2 and 14.2% in FY23.

Q Tech's management expects the revenue share of advanced CCM to further increase in the coming years. With an expectation of raising its market penetration for advanced CCM, we expect Q Tech's CCM ASP to increase from Rmb38.7 in FY20 to Rmb41.2 in FY23. Its overall gross margin is expected to further increase from 10.2% in FY20 to 14.2% in FY23, which will reach the current industrial average level and approach the current level of Sunny Optical, which is 14.8%.





Source: Visible Alpha, DBS HK

Conclusion

Revenue and EPS that are higher than the market's expectation are going to boost Q Tech's share price performance with the same valuation. Meanwhile, certain breakthroughs in 2022 may support a higher valuation.

Q Tech's market peers like O-Film, Sunny Optical, etc. have been enjoying a higher valuation because of its long-term superiority in market share, research level, and gross margin. We expect that 1) the surpassing of O-Film's 2nd place in the CCM market share in 2022, 2) Q Tech approaching the average industrial level in its research expense ratio, and 3) it reaching the industrial level in gross margin in the coming one to two years will reverse the long-term perception and trigger a revaluation of its stock.

Forecast and valuation

Q Tech's momentum in CCM shipment remains strong in the beginning of 2022. Jan 22 CCM shipment growth was recorded at a robust 30.8% y-o-y in overall CCM and a 39.4% y-o-y growth in advanced CCM. Meanwhile, the market leader, Sunny Optical is still experiencing a y-o-y decline of 23.3% due to weak demand from some android smartphone vendors.

We expect the strong revenue and net profit growth to accelerate in the coming three years, driven by market

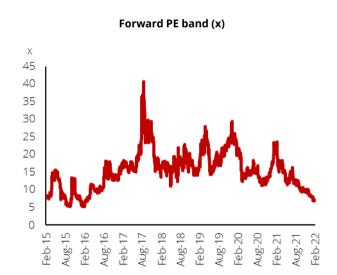
share gain and gross margin pull from the expansion of Q Tech's advanced CCM business. This results in FY20-23F revenue and EPS CAGRs of 21.7% and 37.9%, respectively.

Q Tech is currently trading at 4.3x FY22F PE, well below its seven-year forward PE average of 13.2x for more than 1.5SD. It is also lower than the mean of peers' seven-year PE averages which is c.17.3x.

Our target price of HK\$16.60 is based on an expected progressive mean reversion to 1SD below its seven-year average forward PE, which is c.8.5x in 2022. We reiterate BUY based on its cheap valuation, promising share gain, and margin expansion. Any positive news about its progressing A-share listing can be a short-term catalyst.

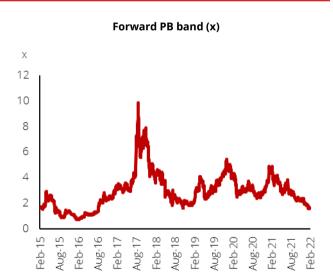
Company Background

Established in 2007, Q Tech is China's third-largest camera module (CCM) supplier, in terms of revenue, after Sunny Optical (2382 HK) and O-Film (002456 CH). Its major customers are among the top five smartphone vendors in China, namely Vivo, Oppo, Lenovo, Xiaomi, and Huaqin (Huawei's ODM supplier). The company entered the fingerprint module (FPM) business in 2H15. CCM and FPM accounted for 87% and 11% of its FY20 revenue, respectively.



12-mth forward PE and PB band









FY Dec	2019A	2020A	2021F	2022F	2023F
Camera Modules Shipment	406.0	392.6	479.1	628.8	706.9
Gross Margin (%)	8.0	10.0	13.5	14.0	14.5
Fingerprint recognition modules Shipment	121.9	81.5	114.6	121.9	121.9
Gross Margin (%) Source: Company, DBS HK	12.2	10.7	8.0	8.5	9.0

Segmental Breakdown (RMB m)

	,				
FY Dec	2019A	2020A	2021F	2022F	2023F
Revenues (RMB m)					
Camera Modules	10,360	15,202	17,967	24,707	29,095
Fingerprint recognition modules	2,759	2,101	1,898	2,072	2,194
Others Source: Company, DBS HK	51	97	54	74	74

Income Statement (RMB m)

FY Dec	2019A	2020A	2021F	2022F	2023
Revenue	13,170	17,400	19,919	26,853	31,363
Cost of Goods Sold	(11,990)	(15,630)	(17,322)	(23,191)	(26,920
Gross Profit	1,180	1,771	2,597	3,662	4,443
Other Opng (Exp)/Inc	(539)	(768)	(879)	(1,222)	(1,584
Operating Profit	641	1,002	1,718	2,440	2,859
Other Non Opg (Exp)/Inc	(35)	27	(11)	(14)	(17
Associates & JV Inc	40	(23)	(7)	(4)	(4
Net Interest (Exp)/Inc	(39)	(37)	(91)	(116)	(74
Dividend Income	0	0	0	0	(
Exceptional Gain/(Loss)	0	0	0	0	(
Pre-tax Profit	607	970	1,609	2,305	2,763
Тах	(65)	(130)	(248)	(355)	(426
Minority Interest	0	0	0	0	
Preference Dividend	0	0	0	0	
Net Profit	542	840	1,361	1,950	2,33
Net Profit before Except.	542	840	1,361	1,950	2,33
EBITDA	937	1,391	2,155	2,888	3,37
Growth					
Revenue Gth (%)	61.9	32.1	14.5	34.8	16.
EBITDA Gth (%)	273.2	48.5	54.9	34.0	16.
Opg Profit Gth (%)	(5,083.6)	56.5	71.4	42.0	17.
Net Profit Gth (%)	3,666.7	54.9	62.0	43.3	19.
Margins & Ratio					
Gross Margins (%)	9.0	10.2	13.0	13.6	14.
Opg Profit Margin (%)	4.9	5.8	8.6	9.1	9.
Net Profit Margin (%)	4.1	4.8	6.8	7.3	7.
ROAE (%)	21.8	25.3	30.7	32.4	28.
ROA (%)	6.4	7.6	10.1	11.0	10.
ROCE (%)	14.9	18.1	22.2	23.5	22.
Div Payout Ratio (%)	0.0	12.8	10.6	10.6	10.
Net Interest Cover (x)	16.5	27.4	18.8	21.1	38.
Source: Company, DBS HK					

Balance Sheet (RMB m)

FY Dec	2019A	2020A	2021F	2022F	2023F
Net Fixed Assets	2,704	2,960	3,221	3,757	4,387
Invts in Associates & IVs	433	2,960 416	410	405	4,567 401
Other LT Assets	455	145	181	219	261
Cash & ST Invts	438	2,084	805	3,879	5,082
Inventory	1,913	2,084 1,943	2,559	3,450	4,029
Debtors	4,919	3,589	2,339 5,774	7,785	9,092
Other Current Assets	4,919	267	,	521	
		-	2,564		683
Total Assets _	10,635	11,403	15,515	20,016	23,936
ST Debt	1,270	1,104	2,211	2,211	2,211
Creditors	6,192	6,021	7,468	9,999	11,608
Other Current Liab	82	151	213	274	313
LT Debt	59	159	319	319	319
Other LT Liabilities	166	182	224	260	288
Shareholder's Equity	2,867	3,786	5,080	6,953	9,197
Minority Interests	0	0	0	0	0
Total Cap. & Liab.	10,635	11,403	15,515	20,016	23,936
Non-Cash Wkg. Capital	652	(374)	3,216	1,483	1,883
Net Cash/(Debt)	(891)	820	(1,724)	1,350	2,552
Debtors Turn (avg days)	110.2	89.2	85.8	92.2	98.2
Creditors Turn (avg days)	144.8	146.2	145.9	140.3	149.5
Inventory Turn (avg days)	40.8	46.2	48.7	48.3	51.7
Asset Turnover (x)	1.5	1.6	1.5	1.5	1.4
Current Ratio (x)	1.0	1.1	1.2	1.3	1.3
Quick Ratio (x)	0.7	0.8	0.7	0.9	1.0
Net Debt/Equity (X)	0.3	CASH	0.3	CASH	CASH
Net Debt/Equity ex MI (X)	0.3	CASH	0.3	CASH	CASH
Capex to Debt (%)	83.5	50.6	28.4	39.7	46.3
Z-Score (X) Source: Company, DBS HK	NA	NA	NA	NA	NA

Cash Flow Statement (RMB m)

FY Dec	2019A	2020A	2021F	2022F	2023F
	2010/1	LOLON	LOLII	LULL	LOLOI
Pre-Tax Profit	607	970	1,609	2,305	2,763
Dep. & Amort.	291	385	454	468	540
Tax Paid	(65)	(130)	(248)	(355)	(426)
Assoc. & JV Inc/(loss)	(40)	23	7	4	4
(Pft)/ Loss on disposal of FAs	0	0	0	0	0
Chg in Wkg. Cap.	280	1,025	(3,590)	1,733	(400)
Other Operating CF	57	(9)	72	100	58
Net Operating CF	1,131	2,264	(1,695)	4,254	2,540
Capital Exp. (net)	(1,110)	(640)	(717)	(1,003)	(1,172)
Other Invts. (net)	25	(62)	0	100	0
Invts in Assoc. & JV	(164)	(6)	0	0	0
Div from Assoc & JV	0	0	0	0	0
Other Investing CF	2	42	(11)	(14)	(17)
Net Investing CF	(1,247)	(665)	(728)	(918)	(1,189)
Div Paid	0	(107)	(145)	(207)	(249)
Chg in Gross Debt	151	(66)	1,266	0	0
Capital Issues	221	186	78	131	155
Other Financing CF	56	(40)	(55)	(86)	(55)
Net Financing CF	428	(27)	1,145	(163)	(149)
Currency Adjustments	0	0	0	0	0
Chg in Cash	312	1,572	(1,278)	3,174	1,202
Opg CFPS (RMB)	0.75	1.06	1.58	2.05	2.34
Free CFPS (RMB)	0.02	1.39	(2.01)	2.65	1.09

Source: Company, DBS HK



DBS HK recommendations are based on an Absolute Total Return* Rating system, defined as follows:

STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

BUY (>15% total return over the next 12 months for small caps, >10% for large caps)

HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)

SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

*Share price appreciation + dividends

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Sources for all charts and tables are DBS HK unless otherwise specified.

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