

Hong Kong

ADD (no change)

Consensus ratings*: Buy 25 Hold 3 Sell 0

Current price:	HK\$7.12
Target price:	HK\$14.25
Previous target:	HK\$20.61
Up/downside:	100.1%
CGS-CIMB / Consensus:	-16.3%
Reuters:	1478.HK
Bloomberg:	1478 HK
Market cap:	US\$1,078m
	HK\$8,416m
Average daily turnover:	US\$2.89m
	HK\$23.48m
Current shares o/s:	1,172m
Free float:	35.7%
*Source: Bloomberg	

Key changes in this note

- FY21-23F revenue decreased by 0.3-3.2%
- FY21-23F GPM cut 0.3-1.0% pts
- FY21-23F EPS decreased by 8-20%



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	-25.6	-36.7	-54.2
Relative (%)	-18.5	-29.5	-31.3

Major shareholders	% held
Mr HE Ningning	64.3

Analyst



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Q Technology

Increasing competition in HCM supply chain

- Q Tech expects 1Q22F HCM net profit to drop 48-58% yoy due to customers' weak high-end smartphone sales and increased competition.
- We see HCM shipments growing 15% yoy in FY22F due to order wins for Samsung and Honor, but GPM declining c.0.7% pt on increased competition.
- Maintain Add. TP lowered to HK\$14.25 as we cut FY21-23F EPS by 8-20%.

Disappointing HCM performance in 1Q22F on intense competition

Q Technology's (Q Tech) share price plunged 15% today on the announcement (published on 23 Feb after market close) of an update on the proposed spin-off in the Shenzhen Stock Exchange). It forecasts 1Q22F handset camera module (HCM) business (c.90% of total revenue) net profit to drop 48%-58% yoy (Rmb85m to Rmb105m). The company attributed the poor operational performance to weak customer demand and increased competition in the HCM market, and losses in its IoT and automotive camera module business unit.

HCM shipment growth of 15% in FY22F but GPM to fall 0.7% pt

Q Tech guides for 1Q22F HCM revenue of approximately Rmb3.5bn-4.0bn, down 5.5-7.7% yoy which implies net profit margin could fall to 2.4%-2.6% (vs. 5.3% in 1Q21). We estimate HCM gross profit margin (GPM) to decline c.2.5% pts yoy to 8-9% in 1Q22F (1Q21 GPM estimate: 10.5-11.5%) due to a sharp fall (c.-10% hoh) in HCM ASP, due to fierce competition given the lack of new model launches and weak domestic demand in the high-end segment. Q Tech's HCM shipments grew by 31% yoy (+5% mom) in Jan 2022 due to rising orders from Samsung and Honor. We believe 1Q22F HCM shipments can maintain the strong growth momentum (c.20-25% yoy growth), driven by customers' new model launches and further project wins for Oppo, Vivo and Samsung. We maintain our HCM shipment forecast of 15% yoy growth in FY22F amid stable order flows from Oppo and Vivo and continued market share gain in the Samsung supply chain. We expect sequential GPM improvement on a better product mix, but we believe GPM could fall 0.7% pt to c.9.7% in FY22F (FY21F estimate: 10.4%) due to increased competition and weak ASP growth.

Vehicle camera module business could drag down FY22F net profit

Q Tech started vehicle camera module shipments to domestic automakers including Geely Auto, Foton Daimler, XPeng, etc. in FY21F. The company has obtained certifications for qualified suppliers from more than 10 automakers. Given the company's capacity expansion (c.2m units/mth at end-FY21) and higher R&D expenses, we believe this business unit could drag down the company's overall profitability in FY22F while it will take a few years to execute orders on hand. We expect it to turn profitable in FY23F on better capacity utilisation and higher shipments.

Maintain Add; lower TP to HK\$14.25 on 8-20% cut in FY21-23F EPS

We cut EPS by 8-20% in FY21-23F as we lower our GPM assumptions. We retain Add on Q Tech due to its cheap valuation of c.6x FY22F P/E (c.10%/20% EPS growth in FY22F/23F). TP lowered to HK\$14.25, based on 10x FY23F (previously 14x FY22F), a 50% discount to its closest peer to reflect its weaker earnings growth and smaller handset lens business. Re-rating catalysts include stable GPM outlook. Downside risk: sustained GPM pressure from competition.

Financial Summary	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Revenue (Rmbm)	13,170	17,400	19,630	24,563	27,936
Net Profit (Rmbm)	542	840	988	1,165	1,400
Normalised EPS (Rmb)	0.49	0.73	0.90	0.99	1.19
Normalised EPS Growth	1741%	48%	24%	10%	20%
FD Normalised P/E (x)	11.84	7.96	6.44	5.84	4.86
Price To Sales (x)	0.50	0.39	0.34	0.28	0.24
DPS (Rmb)	0.09	0.04	0.08	0.10	0.12
Dividend Yield	1.56%	0.73%	1.46%	1.72%	2.07%
EV/EBITDA (x)	7.47	3.84	2.98	2.10	1.25
P/FCFE (x)	6,066	3	10	5	5
Net Gearing	28.8%	(26.1%)	(29.5%)	(42.8%)	(53.5%)
P/BV (x)	2.33	1.78	1.44	1.18	0.97
ROE	22.5%	25.6%	24.9%	22.3%	22.1%
% Change In Normalised EPS Estimates			(7.5%)	(19.5%)	(18.6%)
Normalised EPS/consensus EPS (x)			0.92	0.83	0.85

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Increasing competition in HCM supply chain

Figure 1: 2H21F results preview

FYE Dec (Rmb m)	2HFY21F	2HFY20	yoy %	hoh %	2HFY21F	2HFY20	yoy %	Prev.	
			chg	chg	Cum	Cum	chg	FY21F	Comments
Revenue	10,294	8,598	19.7	10.3	19,630	17,400	12.8	19,689	2H21F revenue likely grew 20% yoy, driven by 20% shipment
Operating costs	(9,511)	(7,754)	22.7	12.5	(17,965)	(16,014)	12.2	(22,942)	growth in HCM.
EBITDA	783	844	(7.2)	(11.1)	1,665	1,387	20.1	1,729	2H21F GPM could decline by 2.8% pts yoy (-2.3% hoh) to 9.3%
EBITDA margin (%)	7.6	9.8			8.5	8.0		7.0	due to drop in ASP and increase in R&D and operating expenses.
Depn & amort.	(270)	(202)	33.3	30.9	(476)	(384)	23.7	(476)	
EBIT	514	642	(20.0)	(24.0)	1,189	1,002	18.7	1,253	
Interest expense	(17)	(24)	(31.2)	13.9	(32)	(54)	(41.0)	(51)	
Interest & invt inc	28	(12)	339.4	(50.9)	86	56	53.4	65	
Associates' contrib	(20)	(8)	163.7	8.6	(38)	(23)	66.0	5	Share of net loss from Newmax Technology (36% owned).
Exceptionals	(25)	(3)	N/M	N/M	(68)	(11)	496.2	(68)	
Pretax profit	481	595	N/M	(26.8)	1,137	970	17.2	1,244	
Tax	(63)	(91)	(29.9)	(26.0)	(149)	(130)	14.8	(170)	
Tax rate (%)	13.2	15.2	-	-	13.1	13.4	-	13.1	
Minority interests	-	-	N/M	N/M	-	-	N/M	-	
Net profit	417	505	(17.3)	(26.9)	988	840	17.6	1,074	2H21F core net profit likely fell 13% yoy to Rmb442m.
Core net profit	442	508	(13.0)	(28.1)	1,056	852	24.0	1,142	FY21F core net profit likely formed 92% of our FY21F forecasts due to
EPS (Rmb cts)	35.7	43.2	(17.3)	(26.4)	84.6	71.9	17.6	91.9	weaker-than-expected GPM and higher in operating expenses.
Core EPS (Rmb cts)	37.8	43.5	(13.0)	(27.5)	90.4	72.9	24.0	97.8	

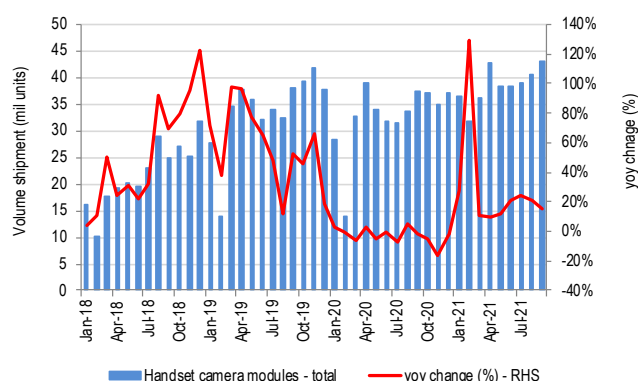
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 2: Key product monthly shipments (Jan 21 to Dec 21)

Monthly shipments	12M20	12M21	Company guidance	01/21	02/21	03/21	04/21	05/21	06/21	07/21	08/21	09/21	09/21	11/21	12/21
Volume shipments (mil units)															
Handset camera modules	393	479	25%+	36.4	31.9	36.1	42.8	38.3	38.4	39.2	40.8	43.0	39.8	47.0	45.6
- 8MP and below	113	166	n.a.	9.9	10.7	10.7	11.4	10.2	12.5	13.2	14.3	16.7	17.1	19.3	19.8
- 10MP to 30MP	179	161	n.a.	16.8	11.7	14.0	16.8	14.1	12.5	13.5	14.2	14.5	9.6	11.3	12.4
- 32MP and above	101	152	over 30%	9.7	9.4	11.3	14.6	14.0	13.4	12.5	12.3	11.9	13.0	16.3	13.4
Fingerprint recognition modules	92	115	n.a.	9.7	8.8	9.2	9.9	7.6	10.3	8.9	9.3	9.5	9.9	11.0	10.6
- Under-glass fingerprint	47	59	n.a.	5.4	5.1	5.1	5.5	4.1	5.7	3.7	4.3	3.8	4.9	6.9	4.5
- non under-glass fingerprint	45	55	n.a.	4.2	3.6	4.1	4.4	3.4	4.5	5.2	5.0	5.7	4.9	4.2	6.1
Volume shipments (yoy %)															
Handset camera modules		22%		28%	129%	10%	9%	12%	20%	24%	20%	15%	7%	34%	23%
- 8MP and below		47%		9%	235%	1%	20%	5%	120%	46%	27%	48%	51%	62%	97%
- 10MP to 30MP		-10%		52%	44%	-1%	0%	-5%	-25%	-14%	-6%	-23%	-47%	-17%	-19%
- 32MP and above		50%		17%	267%	43%	13%	46%	40%	80%	64%	63%	70%	75%	13%
Fingerprint recognition modules		25%		63%	139%	21%	26%	-6%	51%	82%	-2%	12%	17%	6%	3%
- Under-glass fingerprint		25%		85%	121%	9%	8%	6%	72%	78%	3%	5%	0%	22%	-1%
- Non under-glass fingerprint		24%		41%	169%	39%	61%	-18%	30%	85%	-6%	17%	36%	-14%	6%

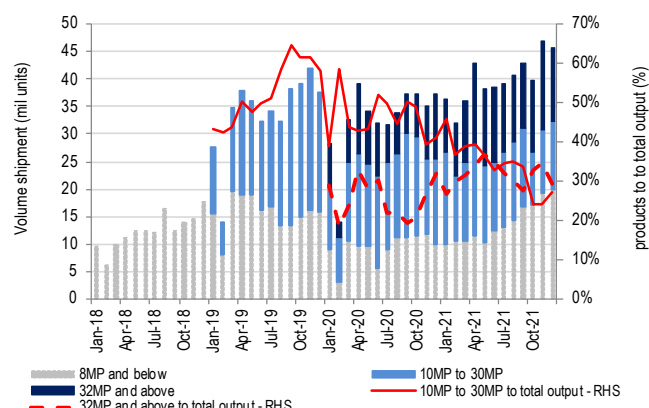
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 3: Handset camera modules monthly shipments (Jan 18 to Dec 21)

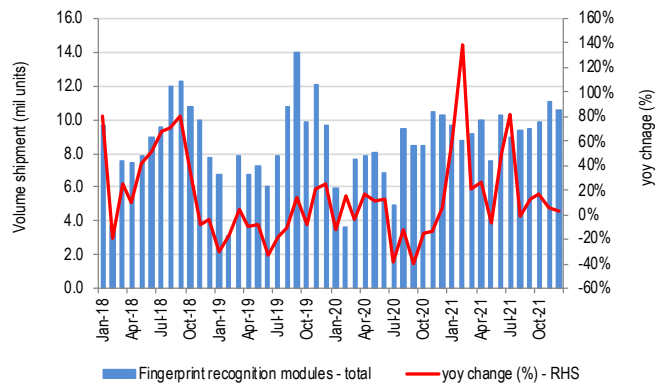


SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

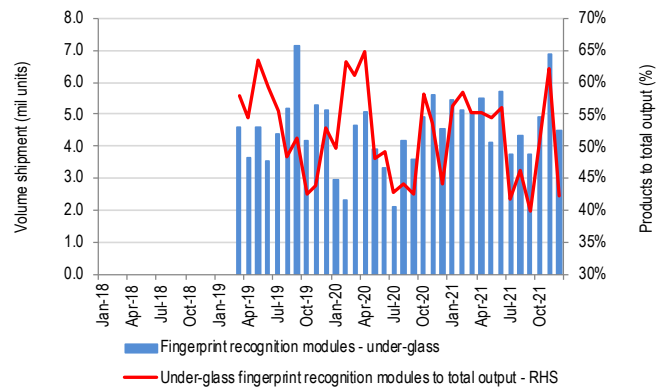
Figure 4: Handset camera modules monthly shipments - 10MP and above (Jan 18 to Dec 21)



SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 5: Fingerprint recognition modules monthly shipments (Jan 18 to Dec 21)


SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 6: Fingerprint recognition modules monthly shipments - under-glass (Jan 18 to Dec 21)


SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 7: Earnings revisions

FYE Dec (Rmb m)	Dec-20A	Dec-21F			Dec-22F			Dec-23F		
		Old	New	% chg	Old	New	% chg	Old	New	% chg
Revenue	17,400	19,689	19,630	-0.3%	25,370	24,563	-3.2%	28,855	27,936	-3.2%
Gross profit	1,771	2,105	2,038	-3.2%	2,699	2,376	-12.0%	3,121	2,753	-11.8%
Gross profit margin	10.2%	10.7%	10.4%	-0.3% pts	10.6%	9.7%	-1.0% pts	10.8%	9.9%	-1.0% pts
EBITDA	1,414	1,729	1,660	-4.0%	2,139	1,871	-12.5%	2,430	2,122	-12.7%
Net profit	840	1,068	988	-7.5%	1,447	1,165	-19.5%	1,720	1,400	-18.6%
EPS (Rmb)	0.719	0.91	0.84	-7.5%	1.23	0.99	-19.5%	1.47	1.19	-18.6%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 8: Peers comparison

	Bloomberg		Closing price	Target Price	Market Cap		P/E (x)	3-year EPS		P/BV (x)		Recurring ROE (%)		EV/EBITDA (x)		Dividend Yield (%)	
Company	Ticker	Recom.	(local curr)	(local curr)	(US\$ m)	CY21F	CY22F	CY23FCAGR (%)		CY21F	CY22F	CY21F	CY22F	CY21F	CY22F	CY21F	CY22F
Handset vendors																	
Lenovo Group	992 HK	Add	8.64	13.78	13,331	8.5	6.5	5.9	38.5%	3.4	2.5	42.7%	44.5%	3.5	2.4	4.8%	5.5%
Xiaomi	1810 HK	Add	14.96	27.38	47,933	13.8	12.4	10.8	29.2%	2.3	2.0	17.0%	17.3%	10.7	8.7	0.0%	0.0%
Average						11.1	9.5	8.4	33.9%	2.9	2.3	29.8%	30.9%	7.1	5.6	2.4%	2.7%
Handset component manufacturers (HKEX - listed)																	
AAC Technologies	2018 HK	Reduce	22.60	26.41	3,500	17.0	14.2	12.0	10.1%	1.1	1.1	6.3%	7.7%	6.1	5.4	1.1%	1.4%
Cowell e Holdings	1415 HK	Add	8.35	14.17	893	16.5	10.6	7.7	23.0%	2.7	2.2	18.7%	23.1%	8.6	6.4	0.9%	1.4%
Q Technology	1478 HK	Add	7.12	14.25	1,078	6.5	5.8	4.8	21.5%	1.4	1.2	24.3%	22.3%	3.0	2.1	1.6%	2.1%
Sunny Optical	2382 HK	Add	184.2	261.4	25,889	29.3	22.4	17.8	27.0%	7.9	6.1	30.1%	31.8%	18.8	14.3	0.7%	0.9%
Tongda Group	698 HK	Hold	0.16	0.28	199	3.0	3.1	2.5	6.3%	0.1	0.1	5.6%	6.5%	2.4	1.9	5.0%	4.9%
Average						14.4	11.2	9.0	17.6%	2.7	2.1	17.0%	18.3%	7.8	6.0	1.9%	2.1%
Handset component manufacturers (A share - listed)																	
BOE Technology	000725 CH	Add	4.77	8.50	28,735	8.3	10.5	10.4	50.0%	1.5	1.4	18.1%	13.5%	5.0	5.3	6.0%	3.8%
Lens Technology	300433 CH	Add	14.52	33.55	11,430	13.5	10.7	8.9	15.2%	1.4	1.3	11.1%	12.6%	7.3	6.0	1.8%	2.3%
Shenzhen Goodix	603160 CH	Reduce	90.69	92.00	6,582	41.7	33.6	28.9	-2.5%	4.5	3.9	11.4%	12.5%	57.0	36.5	0.3%	0.4%
Tianma Microelectronics	000050 CH	Add	11.82	20.26	4,598	14.0	11.1	9.6	16.8%	0.8	0.8	5.9%	7.1%	8.2	7.1	0.6%	0.9%
Universal Scientific Industrial	601231 CH	Add	14.18	24.23	4,961	16.9	14.3	12.2	14.8%	2.4	2.3	14.5%	16.5%	9.8	8.5	3.5%	4.2%
Will Semiconductor	603501 CH	Add	245.95	387.00	34,091	50.1	41.3	32.8	37.2%	13.4	10.6	30.9%	28.6%	36.7	29.9	0.2%	0.2%
Average						24.1	20.2	17.2	21.9%	4.0	3.4	15.3%	15.1%	20.6	15.6	2.1%	2.0%
Semiconductor																	
ASM Pacific	522 HK	Add	85.65	134.00	4,529	11.0	9.8	8.9	53.2%	2.3	2.2	22.6%	23.2%	6.7	5.8	4.6%	5.1%
SMIC	981 HK	Add	19.70	27.30	30,617	13.5	11.5	11.3	24.9%	1.2	1.1	9.2%	10.0%	7.5	6.3	0.0%	0.0%
SMIC - A	688981 CH	Add	50.73	71.50	30,571	42.9	36.6	36.1	24.9%	3.7	3.6	9.2%	10.0%	27.6	20.6	0.0%	0.0%
SOURCES: CGS-CIMB RESEARCH, BLOOMBERG (PRICE AS AT 24 FEB 2022)																	

SOURCES: CGS-CIMB RESEARCH, BLOOMBERG (PRICE AS AT 24 FEB 2022)



ESG in a nutshell

In 2020, Q tech integrated several environmental protections into its daily operations, including improving the energy-saving technology of the ice water machines, applying energy-saving LED lightings, reduced the fuel used for staff shuttle buses and carrying out the Six Sigma training project to advocate for health and safety concepts for employees to all members in the task force.

The company has developed its vision “to illuminate machines” and is pushing for the research and development of new materials, new processes, and new products to achieve stable and sustainable development.

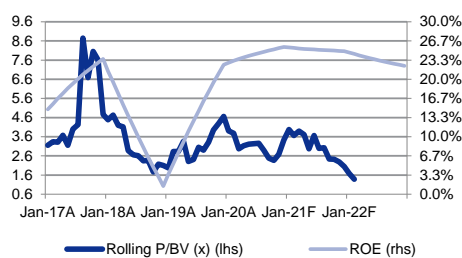
In our view, Q Tech is not involved in any environmentally-detrimental industry practices and has launched efforts to minimise the environmental impact of its operations.

Keep your eye on Q Tech supports sustainable development by following three main goals in ESG strategy.	Implications Q Tech identified three vital goals to connect its operations and ESG commitments. These act as the foundation of the company's ESG strategy, namely Decent Work and Economic Growth, Responsible Consumption and Production, and Peace, Justice, and Strong Institutions.
ESG highlights Q Tech has a well-established ESG governance structure to review and tailor ESG goals and monitor the corresponding risk.	Implications Q tech established a cross-department ESG task force for reporting relevant ESG performance to the Board. The report combines opinions from stakeholders, including employees, customers, investors and suppliers in a 4-step procedure, namely identification, prioritisation, validation and review.
Trends In FY20, the company's energy and water consumption, greenhouse gas emission and hazardous waste produced increased; its non-hazardous waste produced decreased.	Implications Q Tech's total energy consumption rose 21% yoy to 688,744 GJ in FY20. Energy consumption density (GJ per thousand of products sold) increased from 1.12 in FY19 to 1.42 in FY20. Total water consumption rose 10% yoy to 1,774,478 m ³ in FY20. Water consumption density (m ³ per thousand of products sold) increased from 3.17 in FY19 to 3.66 in FY20. Total greenhouse gas (GHG) emission increased 20% yoy to 150,932 tonnes of CO ₂ in FY20. Total emission density (tonnes/'000 pcs sales volume) increased from 0.25 in FY19 to 0.31 in FY20. Total hazardous waste produced increased 112% yoy to 563.1 tonnes in FY20. Total non-hazardous waste produced decreased 4.5% yoy to 573 tonnes in FY20.

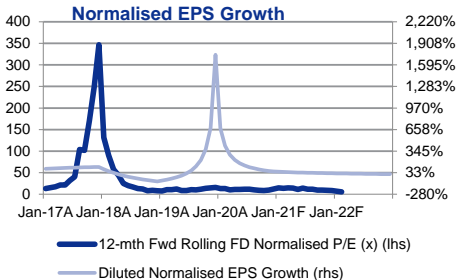
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORT

BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Normalised P/E vs FD Normalised EPS Growth



Profit & Loss

(Rmbm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Total Net Revenues	13,170	17,400	19,630	24,563	27,936
Gross Profit	1,180	1,771	2,038	2,376	2,753
Operating EBITDA	932	1,387	1,665	1,851	2,102
Depreciation And Amortisation	(291)	(384)	(476)	(533)	(549)
Operating EBIT	641	1,002	1,189	1,318	1,553
Financial Income/(Expense)	(56)	2	54	16	25
Pretax Income/(Loss) from Assoc.	40	(23)	(38)	4	28
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	624	981	1,205	1,338	1,605
Exceptional Items	(18)	(11)	(68)	0	0
Pre-tax Profit	607	970	1,137	1,338	1,605
Taxation	(65)	(130)	(149)	(173)	(205)
Exceptional Income - post-tax					
Profit After Tax	542	840	988	1,165	1,400
Minority Interests	0	0	0	0	0
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Preference Dividends (Australia)					
Net Profit	542	840	988	1,165	1,400
Normalised Net Profit	560	852	1,056	1,165	1,400
Fully Diluted Normalised Profit	560	852	1,056	1,165	1,400

Cash Flow

(Rmbm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
EBITDA	932	1,387	1,665	1,851	2,102
Cash Flow from Inv. & Assoc.	(40)	23	38	(4)	(28)
Change In Working Capital	1,183	1,379	51	179	84
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	397	973	(34)	28	43
Net Interest (Paid)/Received	(39)	(37)	(9)	(4)	5
Tax Paid	(33)	(121)	(149)	(173)	(205)
Cashflow From Operations	2,400	3,604	1,562	1,877	2,001
Capex	(1,156)	(541)	(1,100)	(700)	(600)
Disposals Of FAs/subsidiaries	0	0	0	0	0
Acq. Of Subsidiaries/investments	(156)	0	0	0	0
Other Investing Cashflow					
Cash Flow From Investing	(1,312)	(541)	(1,100)	(700)	(600)
Debt Raised/(repaid)	(1,086)	(1,015)	230	148	91
Proceeds From Issue Of Shares	40	242	0	0	0
Shares Repurchased	0	0	0	0	0
Dividends Paid	0	(107)	(49)	(99)	(116)
Preferred Dividends					
Other Financing Cashflow	230	(435)	(32)	(29)	(33)
Cash Flow From Financing	(817)	(1,315)	149	19	(59)
Total Cash Generated	271	1,748	611	1,196	1,343
Free Cashflow To Equity	1	2,048	692	1,325	1,492
Free Cashflow To Firm	1,140	3,117	493	1,206	1,434

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd

Balance Sheet

(Rmbm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Total Cash And Equivalents	504	2,250	2,560	3,775	5,135
Total Debtors	4,919	3,589	4,049	5,066	5,762
Inventories	1,913	1,943	2,187	2,758	3,131
Total Other Current Assets	26	100	113	141	161
Total Current Assets	7,363	7,882	8,909	11,741	14,189
Fixed Assets	2,704	2,960	3,584	3,751	3,801
Total Investments	433	416	416	416	416
Intangible Assets	5	4	4	4	4
Total Other Non-Current Assets	130	141	89	89	89
Total Non-current Assets	3,272	3,521	4,093	4,259	4,310
Short-term Debt	1,270	1,104	1,175	1,322	1,413
Current Portion of Long-Term Debt					
Total Creditors	6,192	6,021	6,777	8,548	9,702
Other Current Liabilities	82	151	151	151	151
Total Current Liabilities	7,543	7,276	8,103	10,021	11,266
Total Long-term Debt	59	159	0	0	0
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	160	157	177	221	251
Total Non-current Liabilities	220	316	177	221	251
Total Provisions	5	25	25	25	25
Total Liabilities	7,768	7,617	8,304	10,267	11,543
Shareholders' Equity	2,867	3,786	4,697	5,733	6,956
Minority Interests	0	0	0	0	0
Total Equity	2,867	3,786	4,697	5,733	6,956

Key Ratios

	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Revenue Growth	61.9%	32.1%	12.8%	25.1%	13.7%
Operating EBITDA Growth	318%	49%	20%	11%	14%
Operating EBITDA Margin	7.08%	7.97%	8.48%	7.54%	7.52%
Net Cash Per Share (Rmb)	(0.71)	0.84	1.18	2.09	3.18
BVPS (Rmb)	2.48	3.23	4.01	4.89	5.93
Gross Interest Cover	12.13	18.72	37.66	44.87	46.97
Effective Tax Rate	10.6%	13.4%	13.1%	13.0%	12.8%
Net Dividend Payout Ratio	18.6%	5.8%	9.4%	10.0%	10.0%
Accounts Receivables Days	110.2	89.5	71.0	67.7	70.7
Inventory Days	39.84	45.15	42.85	40.68	42.68
Accounts Payables Days	136.9	139.9	132.6	125.9	132.1
ROIC (%)	17.6%	21.9%	34.8%	31.9%	37.4%
ROCE (%)	17.5%	22.0%	22.1%	20.7%	20.6%
Return On Average Assets	7.05%	7.71%	8.32%	7.95%	8.01%

Key Drivers

	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Handset camera module shipments (yoy change %)	48.7%	0.0%	22.1%	15.0%	10.0%
Fingerprint recognition module shipments (yoy chan	(0.1)	(0.1)	0.2	0.1	0.1
Handset camera module GPM (%)	8.0%	10.0%	10.6%	9.8%	10.0%
Fingerprint recognition module GPM (%)	12.2%	10.7%	8.0%	8.0%	8.0%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

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Description:	Excellent	Very Good	Good	N/A	N/A

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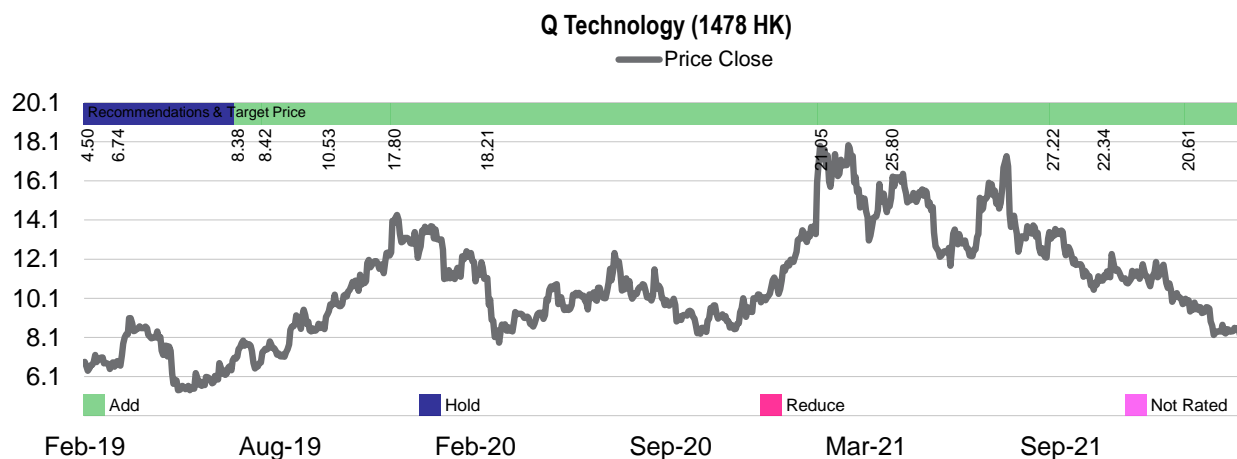
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Distribution of stock ratings and investment banking clients for quarter ended on 31 December 2021		
619 companies under coverage for quarter ended on 31 December 2021		
	Rating Distribution (%)	Investment Banking clients (%)
Add	71.1%	1.5%
Hold	21.8%	0.0%
Reduce	7.1%	0.0%

Spitzer Chart for stock being researched (2 year data)



Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2021, Anti-Corruption 2021

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AWC** – Excellent, Declared, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Excellent, Certified, **BCH** – Very Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BEM** – Excellent, n/a, **BH** – Good, n/a, **BJC** – Very Good, n/a, **BLA** – Very Good, Certified, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – n/a, n/a, **CENDEL** – Excellent, Certified, **CHAYO** – Very Good, n/a, **CHG** – Very Good, n/a, **CK** – Excellent, n/a, **COM7** – Excellent, Certified, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **CPNREIT** – n/a, n/a, **CRC** – Excellent, Declared, **DELTA** – Excellent, Certified, **DDD** – Excellent, n/a, **DIF** – n/a, n/a, **DOHOME** – Very Good, Declared, **DREIT** – n/a, n/a, **DTAC** – Excellent, Certified, **ECL** – Excellent, Certified, **EGCO** – Excellent, Certified, **EPG** – Excellent, Certified, **ERW** – Very Good, Certified, **GFPT** – Excellent, Certified, **GCG** – Excellent, Certified, **GLOBAL** – Excellent, n/a, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Certified, **III** – Excellent, Declared, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – n/a, n/a, **JKN** – n/a, Certified, **JMT** – Very Good, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KEX** – Very Good, Declared, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MAKRO** – Excellent, Certified, **MC** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Certified, **NETBAY** – Very Good, n/a, **NRF** – Very Good, Declared, **OR** – Excellent, n/a, **ORI** – Excellent, Certified, **OSP** – Excellent, n/a, **PLANB** – Excellent, Certified, **PRINC** – Very Good, Certified, **PR9** – Excellent, Declared, **PSH** – Excellent, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, n/a, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RAM** – n/a, n/a, **RBF** – Very Good, n/a, **RS** – Excellent, Declared, **RSP** – Good, n/a, **S** – Excellent, n/a, **SAK** – Very Good, Declared, **SAPPE** – Very Good, Certified, **SAWAD** – Very Good, n/a, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCGP** – Excellent, Declared, **SECURE** – n/a, n/a, **SHR** – Excellent, n/a, **SIRI** – Excellent, Certified, **SPA** – Very Good, n/a, **SPALI** – Excellent, Certified, **SPRC** – Excellent, Certified, **SSP** – Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIDLO** – n/a, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, n/a, **TOP** – Excellent, Certified, **TRUE** – Excellent, Certified, **TTB** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Certified, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – n/a, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

- CG Score 2021 from Thai Institute of Directors Association (IOD)

- Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 5, 2021) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.

Recommendation Framework

Stock Ratings

Definition:

Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

