

Q-Tech (1478 HK)

FY22 largely in-line; Auto/VR to accelerate growth

Q-tech's earnings decline of 80% YoY was in-line with profit warning earlier (down 70-80% YoY). We believe the worst is over and earnings growth will resume in FY23E, driven by high-end CCM sales mix (35%+, vs 30% in FY22) and stronger non-smartphone segment (50%+ YoY). To reflect inventory correction in 1H23E and non-mobile expansion, we lowered our FY23-24E EPS by 8-23%. Trading at 8.8x/6.5x FY23/24E P/E, we believe the stock has attractive risk-reward given earnings recovery into FY23-24E. Maintain BUY with new TP of HK\$5.2, based on same 10x FY23E P/E.

- **FY22 weakness in-line.** Q-tech FY22 revenue/net profit was largely in-line, down 26%/80% YoY, mainly due to: 1) CCM shipment/ASP decline of 12%/16% YoY; 2) FPM shipment/ASP decline of 3%/35% YoY. GPM dropped 5.5ppts YoY to 3.9% on intensified competition, low utilization and material cost hike on FX fluctuation.
- **Conservative on smartphone demand in near term.** Mgmt. stated that 2023 capex plan will focus on non-smartphone development and conservative on smartphone capacity expansion, implying bumpy demand recovery in our view. Despite shipment weakness, mgmt. guided 32M+ CCM shipment volume mix of 35%+ (vs. 30% in FY22) given high-end smartphone replacement cycle with OIS and periscope feature upgrade.
- **Non-smartphone growth to accelerate.** For auto CCM, Q-tech won ADAS orders with Continental, VOYAH and Changan, and its ToF and 1M/2M DMS cam entered mass production for Xpeng, ZEEKR. In addition, VR pancake lens modules will enter mass production in 2023. Overall, we expect non-smartphone CCM to deliver 112%/103% YoY sales growth in FY23/24E.
- **1H23E weakness priced in; Maintain BUY with new TP of HK\$5.2.** We lowered our FY23-24E EPS by 8-23% to reflect smartphone bumpy recovery. We believe 1H23 inventory digestion and demand weakness are mostly priced in. Trading at 8.8x FY23E P/E, the stock looks attractive in our view given earnings recovery in FY23/24E. We maintain BUY with new TP of HK\$5.2, based on same 10x FY23E PE. Upcoming catalysts include product launches, auto client wins and shipment recovery.

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	18,663	13,759	15,080	16,658	20,036
YoY growth (%)	7.3	(26.3)	9.6	10.5	20.3
Net profit (RMB mn)	862.8	170.2	510.8	688.3	904.8
EPS (Reported) (RMB)	0.73	0.15	0.43	0.58	0.76
YoY growth (%)	1.8	(80.2)	197.6	34.7	31.5
Consensus EPS (RMB)	0.74	0.27	0.49	0.70	0.87
P/E (x)	15.3	31.4	8.8	6.5	5.0
P/B (x)	2.8	1.1	0.9	0.8	0.7
Yield (%)	0.0	0.0	2.3	3.1	4.0
ROE (%)	20.3	3.6	10.3	12.6	14.9
Net gearing (%)	(0.8)	26.6	33.8	12.3	16.7

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price **HK\$5.20**
 (Previous TP **HK\$5.76**)
Up/Downside **20.3%**
Current Price **HK\$4.32**

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Stock Data

Mkt Cap (HK\$ mn) 5,119.2
 Avg 3 mths t/o (HK\$ mn) 4.9
 52w High/Low (HK\$) 6.56/2.90
 Total Issued Shares (mn) 1185.0

Source: FactSet

Shareholding Structure

HE Ningning 63.6%
 Harvest Fund Management Co Ltd 2.5%

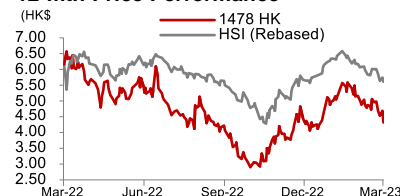
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-15.1%	-6.9%
3-mth	-1.8%	0.4%
6-mth	6.1%	3.9%

Source: FactSet

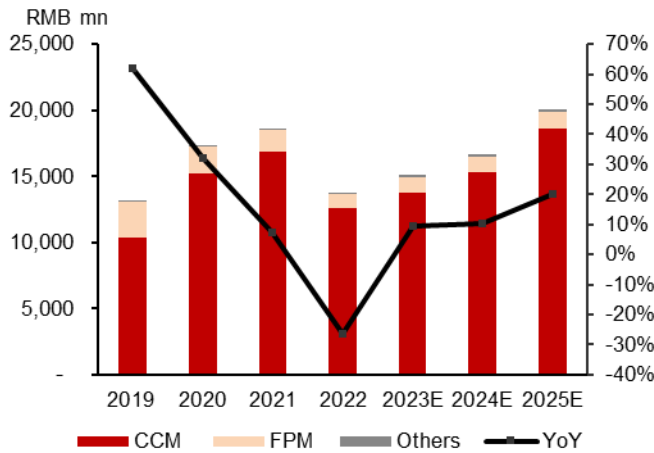
12-mth Price Performance



Source: FactSet

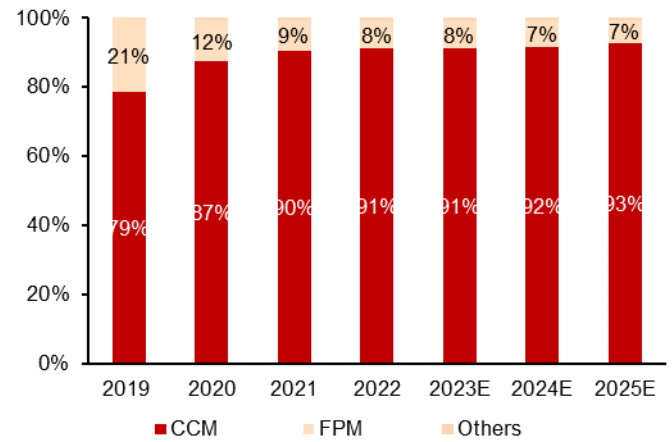
Focus Charts

Figure 1: Revenue growth trend



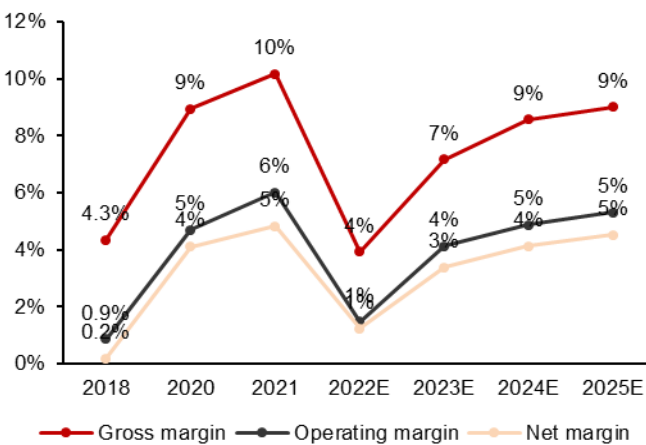
Source: Company data, CMBIGM estimates

Figure 2: Revenue breakdown



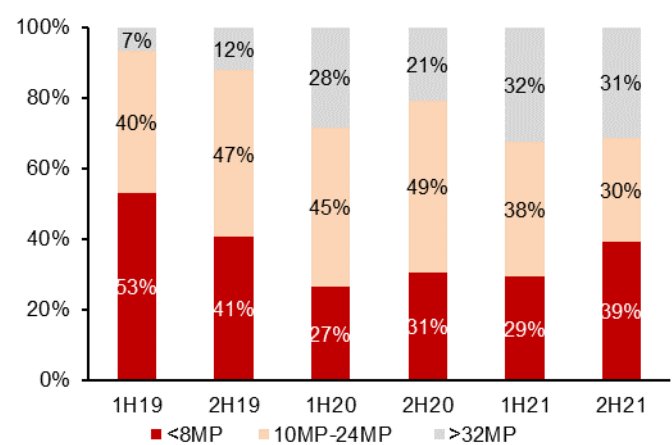
Source: Company data, CMBIGM estimates

Figure 3: Margins trend



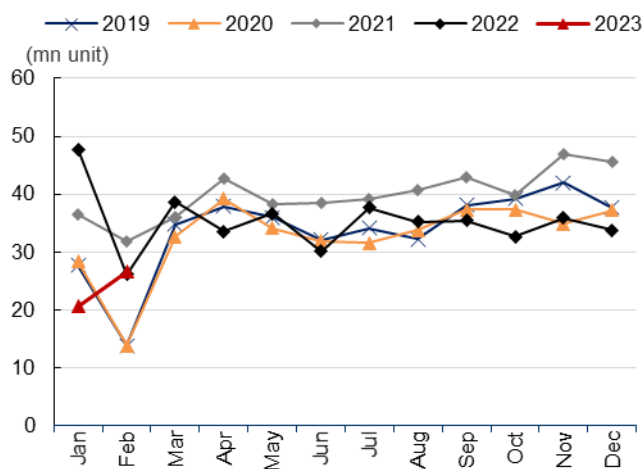
Source: Company data, CMBIGM estimates

Figure 4: CCM shipment mix



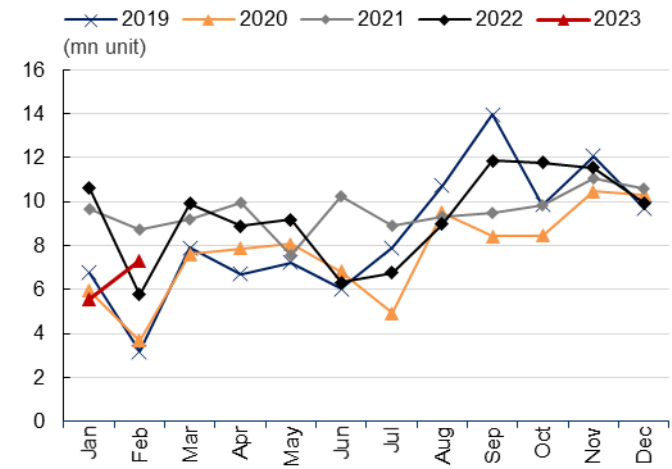
Source: Company data, CMBIGM estimates

Figure 5: CCM monthly shipment



Source: Company data, CMBIGM estimates

Figure 6: FPM monthly shipment



Source: Company data, CMBIGM estimates

Key takeaways from analyst call:

2022 Review:

- Revenue was RMB13.8bn, down 26.3% YoY, due to: 1) CCM and FPM shipment decline on weak smartphone demand; 2) CCM and FPM ASP decline
- GPM was down 5.5pts YoY to 3.9%, due to: 1) sluggish demand given macro headwinds and intensified competition weigh on UTR and ASP; 2) increase in unit manufacturing cost on falling UTR; 3) IoT and auto CCM businesses at market development stage with low UTR; 4) FX fluctuation led to increase in cost of materials imported and settled in USD
- Net profit margin was RMB170mn, down 80.3% YoY, in-line with profit warning
- EPS was RMB14.5 cents, down 80.2% YoY

2023 Guidance:

- 32M and above CCM sales volume mix of 35%+, vs. 30% in FY22
- Non-smartphone CCM sales growth of 50%+ YoY

Compact Camera module (CCM):

- Mobile CCM shipment in FY22 was 422mn units, down 12.4% YoY
- Non-smartphone CCM shipment was 6.6mn units, up 122.7% YoY
- Total shipment of 11.6% YoY decline was above industry decline with continuous market share gain
- ASP was RMB 29.6, down 15.8% YoY, vs. RMB 35.2 in FY21, due to Chinese high-end product sales mix drop
- High-end 32M and above sales mix of 30%, down 1.7ppts YoY on high-end smartphone inventory adjustment but sales growth is under recovery
- OLS and periscope are the two key drivers in high-end smartphones in 2H23E and FY24E

Fingerprint module (FPM)

- Shipment in FY22 was 112mn units, down 2.7% YoY
- ASP was RMB 9.5, down 34.8% YoY, vs. RMB 14.6 in FY21

Other highlights from the call:

- Stabilized FX rate is positive on GPM recovery in FY23E
- 2023 Capex plan: continuous investment in auto capacity; cautious on smartphone capacity expansion; strengthen non-smartphone development and automation upgrade
- VR pancake lens module target mass production in FY23E

FY22 Results review

Figure 7: Earnings revision

RMB mn	FY18	FY19	FY20	FY21	FY22	YoY	Consensus		CMBI	
							FY22E	Diff %	FY22E	Diff %
Revenue	8,135	13,170	17,400	18,663	13,759	-26%	14,872	-7%	15,207	-10%
Gross Profit	353	1,180	1,771	1,762	541	-69%	900	-40%	824	-34%
Operating Profit	70	620	1,046	1,039	204	-80%	302	-33%	337	-40%
Net profit	14	542	840	863	170	-80%	338	-50%	273	-38%
EPS (RMB cents)	1.3	47.6	71.9	73.2	14.5	-80%	27.3	-47%	23.2	-37%
Gross Margin	4.3%	9.0%	10.2%	9.4%	3.9%	-5.5 ppt	6.1%	-2.1 ppt	5.4%	-1.5 ppt
Operating Margin	0.9%	4.7%	6.0%	5.6%	1.5%	-4.1 ppt	2.0%	-0.6 ppt	2.2%	-0.7 ppt
Net Margin	0.2%	4.1%	4.8%	4.6%	1.2%	-3.4 ppt	2.3%	-1 ppt	1.8%	-0.6 ppt

Source: Company data, CMBIGM estimates

Earnings Revision

Lower FY23/24E EPS by 8-27% to reflect slower recovery

We lowered FY23E EPS by 8% after factoring in on-going inventory correction in 1H23E and gradual demand recovery in 2H23E. Our EPS in FY23E is -11% below consensus for more conservative margins.

Figure 8: Earnings revision

(RMB mn)	New			Old			Change (%)		
	FY23E	2024E	2025E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	15,080	16,658	20,036	15,176	17,579	-	-1%	-5%	-
Gross profit	1,180	1,427	1,807	1,237	1,751	-	-5%	-18%	-
Operating profit	622	811	1,065	676	1,100	-	-8%	-26%	-
Net profit	511	688	905	557	939	-	-8%	-27%	-
EPS (RMB)	43.1	58.1	76.4	47.1	79.3	-	-8%	-27%	-
Gross margin	7.2%	8.6%	9.0%	8.2%	10.0%	-	-1 ppt	-1.4 ppt	-
Operating margin	4.1%	4.9%	5.3%	4.5%	6.3%	-	-0.3 ppt	-1.4 ppt	-
Net Margin	3.4%	4.1%	4.5%	3.7%	5.3%	-	-0.3 ppt	-1.2 ppt	-

Source: Company data, CMBIGM estimates

Figure 9: CMBI estimates vs consensus

(RMB mn)	CMBI			Consensus			Diff (%)		
	FY23E	2024E	2025E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	15,080	16,658	20,036	16,373	18,424	21,161	-8%	-10%	-5%
Gross profit	1,180	1,427	1,807	1,328	1,718	1,907	-11%	-17%	-5%
Operating profit	622	811	1,065	628	927	981	-1%	-12%	9%
Net profit	511	688	905	585	820	1,024	-13%	-16%	-12%
EPS (RMB)	43.1	58.1	76.4	48.6	69.9	86.5	-11%	-17%	-12%
Gross margin	7.2%	8.6%	9.0%	8.1%	9.3%	9.0%	-0.9 ppt	-0.8 ppt	0 ppt
Operating margin	4.1%	4.9%	5.3%	3.8%	5.0%	4.6%	0.3 ppt	-0.2 ppt	0.7 ppt
Net Margin	3.4%	4.1%	4.5%	3.6%	4.5%	4.8%	-0.2 ppt	-0.3 ppt	-0.3 ppt

Source: Company data, CMBIGM estimates

Figure 10: P&L forecast

RMB mn	FY19	FY20	FY21	1H22	2H22	FY22	FY23E	FY24E
Revenue	13,170	17,400	18,663	7,095	6,664	13,759	15,080	16,658
...YoY	61.9%	32.1%	7.3%	-24.0%	-28.5%	-26.3%	9.6%	10.5%
Cost of sales	(11,990)	(15,630)	(16,901)	(6,719)	(6,499)	(13,218)	(13,900)	(15,231)
Gross profit	1,180	1,771	1,762	376	166	541	1,180	1,427
GPM (%)	9.0%	10.2%	9.4%	5.3%	2.5%	3.9%	7.2%	8.6%
...YoY	234.1%	50.1%	-0.5%	-65.3%	-75.6%	-69.3%	118.0%	21.0%
SG&A	(143)	(179)	(184)	(78)	(78)	(156)	(151)	(167)
...% of rev	-1.1%	-1.0%	-1.0%	-1.1%	-1.2%	-1.1%	-1.0%	-1.0%
R&D	(396)	(590)	(642)	(261)	(209)	(470)	(498)	(550)
...% of rev	-3.0%	-3.4%	-3.4%	-3.7%	-3.1%	-3.4%	-3.3%	-3.3%
Operating profit	620	1,046	1,039	185	19	204	622	811
OPM (%)	4.7%	6.0%	5.6%	2.6%	0.3%	1.5%	4.1%	4.9%
...YoY	784.8%	68.9%	-0.7%	-73.6%	-94.4%	-80.4%	205.6%	30.4%
Profit of associates.	40	(23)	(52)	-18	-18	(37)	20	30
Net profit	542	840	863	166	5	170	511	688
NPM (%)	4.1%	4.8%	4.6%	2.3%	0.1%	1.2%	3.4%	4.1%
...YoY	3666.7%	54.9%	2.7%	-71.5%	-98.3%	-80.3%	200.1%	34.7%

Source: Company data, CMBIGM estimates

Figure 11: Revenue breakdown

RMB mn	FY19	FY20	FY21	1H22	2H22	FY22	FY23E	FY24E
CCM Revenue	10,360	15,202	16,875	6,502	6,059	12,561	13,782	15,281
...YoY	65%	47%	11%	-23%	-29%	-26%	10%	11%
Shipment (mn)	406	392	479	213	211	424	438	464
...YoY	54%	-3%	22%	-5%	-17%	-12%	3%	6%
ASP (RMB)	25.5	38.7	35.2	30.5	28.7	29.6	31.5	33.0
...YoY	7%	52%	-9%	-19%	-13%	-16%	6%	5%
FPM Revenue	2,759	2,101	1,675	551	513	1,064	1,164	1,243
...YoY	51%	-24%	-20%	-40%	-32%	-37%	9%	7%
Shipment (mn)	102	92	115	51	61	112	123	129
...YoY	-5%	-10%	25%	-9%	3%	-3%	10%	5%
ASP (RMB)	27.1	22.8	14.6	10.9	8.4	9.5	9.5	9.7
...YoY	58%	-16%	-36%	-34%	-34%	-35%	0%	2%
Others	51	97	112	42	92	134	134	134
...YoY	66%	91%	16%	107%	0%	19%	0%	0%
Total	13,170	17,400	18,663	7,095	6,664	13,759	15,080	16,658
...YoY	62%	32%	7%	-24%	-29%	-26%	10%	10%

Source: Company data, CMBIGM estimates

Valuation

Maintain BUY with new TP of HK\$5.2 (20% upside)

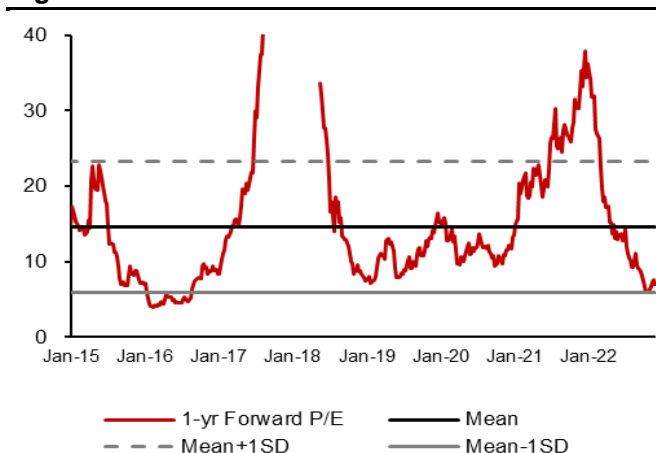
Our new TP of HK\$5.2 is still based on 10x FY23E PE. We remain positive on non-handset CCM (including automotive and AR/VR) to drive earnings growth in the long run. Upcoming catalysts include product launches, auto client wins and shipment recovery.

Figure 12: Peers' valuation

Company	Ticker	Rating	Market Cap US\$(mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE (%)	
							FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
Q tech	1478 HK	Buy	652	4.32	5.20	20%	31.4	8.8	1.0	0.9	3.7	9.8
FIT Hon Teng	6088 HK	Buy	1,960	2.11	2.66	26%	10.2	8.8	0.7	0.7	7.0	7.8
AAC Tech	2018 HK	Hold	2,526	16.54	15.62	-6%	21.5	15.1	0.8	0.8	3.7	5.1
Sunny Optical	2382 HK	Hold	11,817	84.55	96.30	14%	31.2	22.0	3.6	3.2	11.5	14.4
Tongda	698 HK	Buy	139	0.11	0.22	96%	3.7	2.8	0.1	0.1	2.3	3.0
BYDE	285 HK	Hold	5,799	20.20	20.39	1%	24.8	14.7	1.6	1.5	6.4	9.9
TK Group	2283 HK	Buy	168	1.58	3.38	114%	3.9	3.0	0.7	0.6	18.6	20.7
FIH	2038 HK	NR	807	0.80	NA	NA	-	17.0	-	-	-	2.8
Truly	732 HK	NR	399	0.99	NA	NA	-	-	-	-	-	-
SMIC	981 HK	NR	26,739	17.22	NA	NA	9.8	24.4	0.9	0.9	9.9	3.7
YOFC	6869 HK	NR	2,853	14.72	NA	NA	8.6	7.2	0.9	0.8	10.8	11.4
Ju Teng	3336 HK	NR	219	1.43	NA	NA	-	-	-	-	-	-
Cowell	1415 HK	NR	1,774	16.58	NA	NA	23.0	17.3	2.9	2.5	18.3	20.3
Average							16.3	12.8	1.3	1.2	9.2	9.9

Source: Bloomberg, CMBIGM

Figure 13: 12M forward P/E band



Source: Company data, CMBIGM

Figure 14: 12M forward P/B band



Source: Company data, CMBIGM

Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Revenue	17,400	18,663	13,759	15,080	16,658	20,036
Cost of goods sold	(15,630)	(16,901)	(13,218)	(13,900)	(15,231)	(18,229)
Gross profit	1,771	1,762	541	1,180	1,427	1,807
Operating expenses	(724)	(723)	(338)	(558)	(616)	(741)
Selling expense	(26)	(23)	(14)	(23)	(25)	(30)
Admin expense	(153)	(161)	(142)	(128)	(142)	(170)
R&D expense	(590)	(642)	(470)	(498)	(550)	(661)
Others	44	104	288	90	100	120
Operating profit	1,046	1,039	204	622	811	1,065
Share of (losses)/profits of associates/JV	(23)	(52)	(37)	20	30	30
Others	(54)	(30)	(60)	(55)	(50)	(55)
Pre-tax profit	970	957	107	587	791	1,040
Income tax	(130)	(94)	63	(76)	(103)	(135)
Minority interest	0	0	0	0	0	0
Net profit	840	863	170	511	688	905

BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Current assets	7,882	9,315	8,594	10,893	10,428	14,871
Cash & equivalents	1,984	1,743	1,349	629	1,933	1,892
Account receivables	3,589	4,446	3,436	5,203	4,340	7,138
Inventories	1,943	2,258	1,184	2,436	1,531	3,217
ST bank deposits	267	811	919	919	919	919
Other current assets	100	57	1,705	1,705	1,705	1,705
Non-current assets	3,521	3,733	3,691	3,801	3,926	4,143
PP&E	2,960	3,144	3,140	3,250	3,375	3,591
Intangibles	4	20	26	26	26	26
Other non-current assets	557	569	525	525	525	525
Total assets	11,403	13,048	12,285	14,694	14,355	19,014
Current liabilities	7,276	8,079	7,249	9,249	8,359	12,295
Short-term borrowings	1,104	1,708	2,616	2,381	2,634	2,967
Account payables	6,013	6,259	4,584	6,819	5,676	9,278
Tax payable	77	49	12	12	12	12
Other current liabilities	82	64	38	38	38	38
Non-current liabilities	0	0	0	0	0	0
Deferred income	138	200	248	248	248	248
Other non-current liabilities	25	0	7	7	7	7
Total liabilities	7,617	8,343	7,518	9,518	8,628	12,564
Share capital	9	9	9	9	9	9
Other reserves	3,776	4,690	4,753	5,162	5,712	6,436
Total shareholders equity	3,786	4,705	4,767	5,176	5,727	6,451
Minority interest	0	0	0	0	0	0
Total equity and liabilities	11,403	13,048	12,285	14,694	14,355	19,014

CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Operating						
Profit before taxation	970	957	107	587	791	1,040
Depreciation & amortization	413	544	640	644	708	785
Change in working capital	2,177	(1,017)	324	(783)	624	(881)
Others	0	0	0	0	0	0
Net cash from operations	3,604	1,596	1,194	426	2,071	865
Investing						
Capital expenditure	(523)	(1,558)	(1,149)	(754)	(833)	(1,002)
Others	0	0	0	0	0	(1,247)
Net cash from investing	(696)	(880)	(1,149)	(754)	(833)	(1,002)
Financing						
Dividend paid	(107)	0	0	(102)	(138)	(181)
Net borrowings	(1,015)	604	908	(235)	253	333
Others	(193)	(1,546)	(60)	(55)	(50)	(55)
Net cash from financing	(1,315)	(942)	848	(392)	66	97
Net change in cash						
Cash at the beginning of the year	412	1,984	1,743	1,349	629	1,933
Exchange difference	(21)	(14)	(1,288)	0	0	0
Cash at the end of the year	1,984	1,743	1,349	629	1,933	1,892
GROWTH	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Revenue	32.1%	7.3%	(26.3%)	9.6%	10.5%	20.3%
Gross profit	50.1%	(0.5%)	(69.3%)	118.0%	21.0%	26.6%
Operating profit	68.9%	(0.7%)	(80.4%)	205.6%	30.4%	31.3%
Net profit	54.9%	2.7%	(80.3%)	200.1%	34.7%	31.5%
PROFITABILITY	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Gross profit margin	10.2%	9.4%	3.9%	7.8%	8.6%	9.0%
Operating margin	6.0%	5.6%	1.5%	4.1%	4.9%	5.3%
Return on equity (ROE)	25.3%	20.3%	3.6%	10.3%	12.6%	14.9%
GEARING/LIQUIDITY/ACTIVITIES	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Net debt to equity (x)	(0.2)	(0.0)	0.3	0.3	0.1	0.2
Current ratio (x)	1.1	1.2	1.2	1.2	1.2	1.2
Receivable turnover days	89.2	78.6	104.5	104.5	104.5	104.5
Inventory turnover days	45.0	45.4	47.5	47.5	47.5	47.5
Payable turnover days	139.5	132.5	149.7	149.7	149.7	149.7
VALUATION	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
P/E	12.8	15.3	31.4	8.8	6.5	5.0
P/B	2.8	2.8	1.1	0.9	0.8	0.7
Div yield (%)	5.4	0.0	0.0	2.3	3.1	4.0
EV	3,785.8	4,705.2	4,767.4	5,176.1	5,726.7	6,450.5
EV/Sales	0.2	0.3	0.3	0.3	0.3	0.3

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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