

# Q-Tech (1478 HK)

## Weak 2H22 as expected; IoT/auto CCM poised to drive recovery in 2023

We believe Q-Tech's FY22 profit warning (70-80% YoY decline) is not surprising given 1) 1H22 earnings decline of 72% YoY, 2) 2H22 CCM shipment weakness (-17% YoY, vs -5% in 1H22) and 3) margin pressure on low utilization and loss-making IoT/auto CCM biz. Looking ahead, while handset CCM/FPM shipment will remain muted in 2023, we believe IoT/auto CCM will become major sales growth drivers with 204%/130% YoY in FY23/24E (vs +1%/4% for mobile CCM), accounting for 10%/19% of sales in FY23/24E (vs 3% in FY22). We slightly adjusted FY23/24E EPS for stronger IoT/auto CCM, and reiterate BUY with new TP of HK\$5.76, based on same 10x P/E. Upcoming catalysts include 1Q shipment recovery, auto CCM product launch and A-share spin-off.

- FY22 profit warning not surprising given 2H22 smartphone weakness.** Q-tech announced FY22 profit warning, stating 70-80% YoY earnings decline, largely in-line with our estimates of -68% YoY (prior est. -72%/-63% in 1H/2H22), given continued smartphone CCM/FPM weakness in 2H22. Overall, we believe FY22 results is well expected and reflected in stock price.
- Handset CCM/FPM: muted growth expected in FY23E.** For handset CCM (82% of sales), while we remain positive on Samsung order win and spec upgrade trends including OIS, SMA and periscope lens to drive ASP upside in 2023, we expect shipment will remain flattish in FY23E and estimate 1%/4% growth in FY23/24E. For FPM (8% of sales), we estimate 1%/0% revenue growth given a lack of upgrade and mature market.
- Auto CCM: emerging growth driver with 10%/19% sales mix in FY23/24E.** Q-tech won over 20 certified OEM/Tier-1 auto customers with projects in operation. We expect IoT/auto CCM to deliver 204%/130% YoY sales growth in FY23/24E, accounting for 10%/19% in FY23/24E (vs 3% in FY22E). Despite weak profitability at early stage in FY22, mgmt. expected gross margin will improve with scale and reach corporate level in FY23/24E when orders start to ramp up from new energy vehicle customers.
- The worst is over in 2H22; Maintain BUY.** Looking ahead, mgmt. remains positive on: 1) camera spec upgrade to drive ASP; 2) AR/VR see-through and pancake lens; and 3) new energy vehicle products in 2023. Overall, we believe the worst is over in 2H22 and remain positive on Q-tech's IoT/auto CCM business expansion in 2023E. Trading at 8.7x FY23E P/E, we believe the stock remains attractive and maintain BUY with new TP of HK\$5.76.

### Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (RMB mn)	17,400	18,663	14,094	15,173	17,578
YoY growth (%)	32.1	7.3	(24.5)	7.7	15.8
Net profit (RMB mn)	840.1	862.8	230.8	563.9	938.1
EPS (Reported) (RMB)	0.72	0.73	0.20	0.48	0.80
YoY growth (%)	51.1	1.8	(73.3)	144.4	66.4
Consensus EPS (RMB)	na	0.74	0.31	0.53	0.72
P/E (x)	5.8	5.7	21.3	8.7	5.2
P/B (x)	1.3	1.0	1.0	0.9	0.8
Yield (%)	5.4	0.0	0.9	2.2	3.7
ROE (%)	25.3	20.3	4.8	11.0	16.4
Net gearing (%)	(23.2)	(0.8)	(24.7)	(4.6)	(31.6)

Source: Company data, Bloomberg, CMBIGM estimates

**BUY (Maintain)**

**Target Price** **HK\$5.76**  
 (Previous TP) HK\$5.60  
**Up/Downside** **14.8%**  
**Current Price** **HK\$5.02**

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### Stock Data

Mkt Cap (HK\$ mn)	5,948.7
Avg 3 mths t/o (HK\$ mn)	4.1
52w High/Low (HK\$)	9.63/2.90
Total Issued Shares (mn)	1185.0

Source: FactSet

### Shareholding Structure

HE Ningning	63.6%
Harvest Fund Management Co Ltd	2.7%

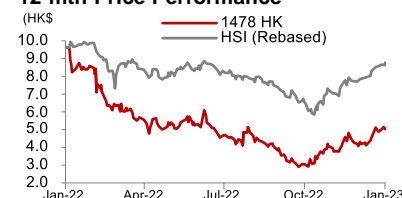
Source: HKEx

### Share Performance

	Absolute	Relative
1-mth	23.3%	6.8%
3-mth	65.1%	22.0%
6-mth	6.4%	0.8%

Source: FactSet

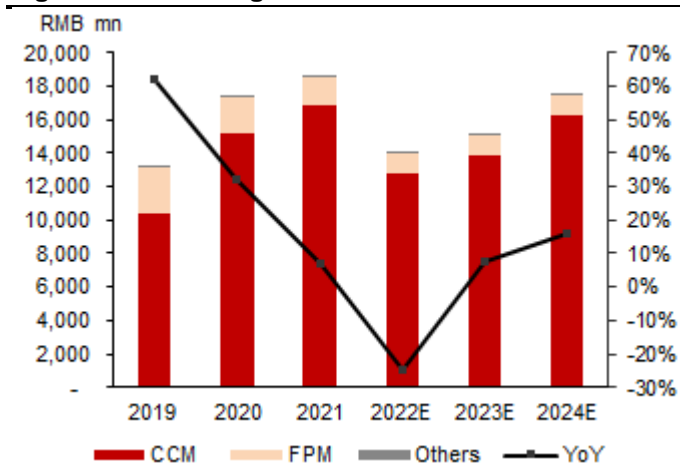
### 12-mth Price Performance



Source: FactSet

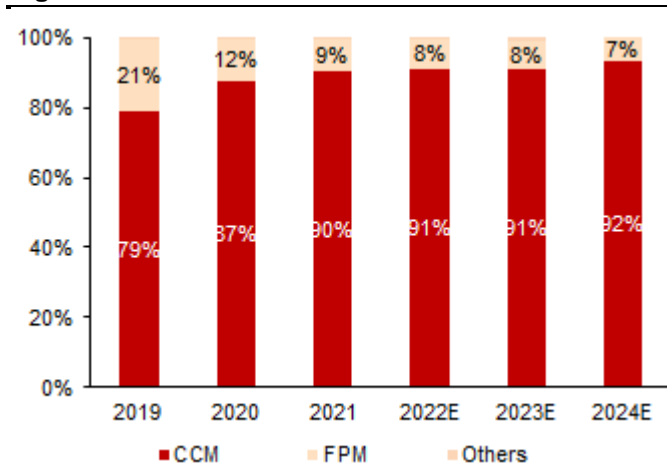
## Focus Charts

**Figure 1: Revenue growth trend**



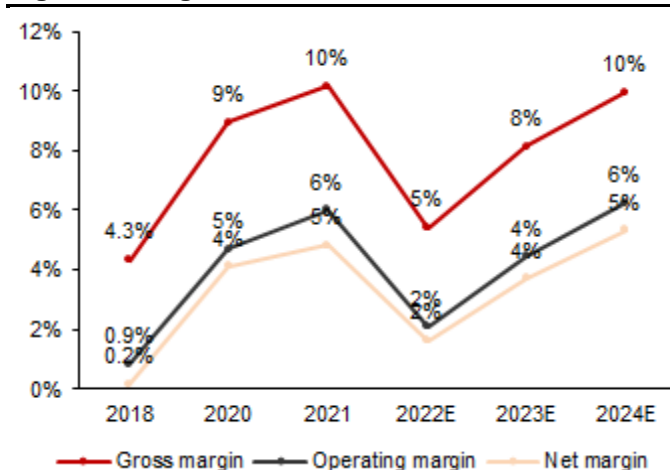
Source: Company data, CMBIGM estimates

**Figure 2: Revenue breakdown**



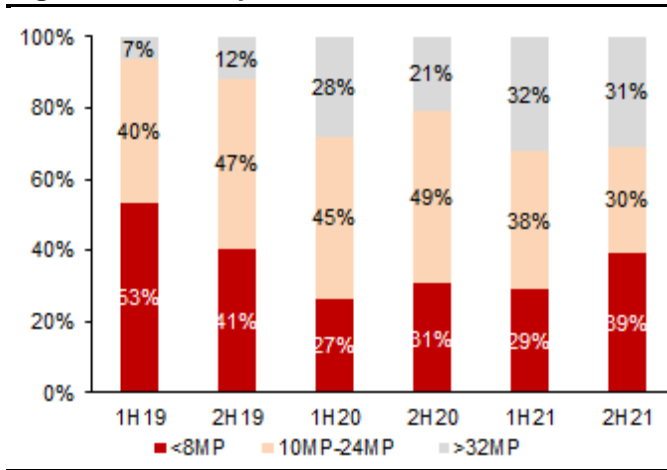
Source: Company data, CMBIGM estimates

**Figure 3: Margins trend**



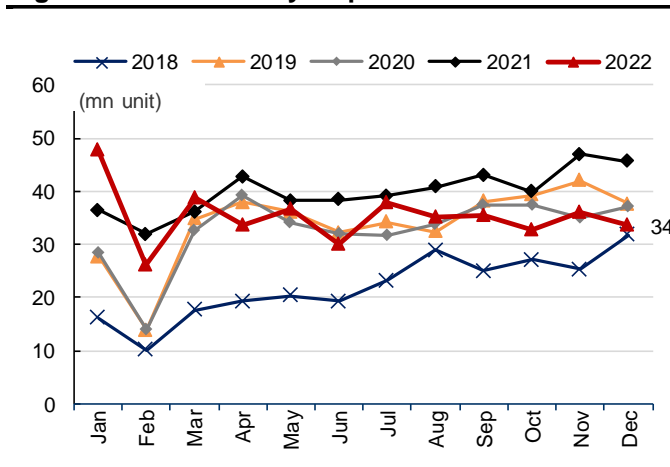
Source: Company data, CMBIGM estimates

**Figure 4: CCM shipment mix**



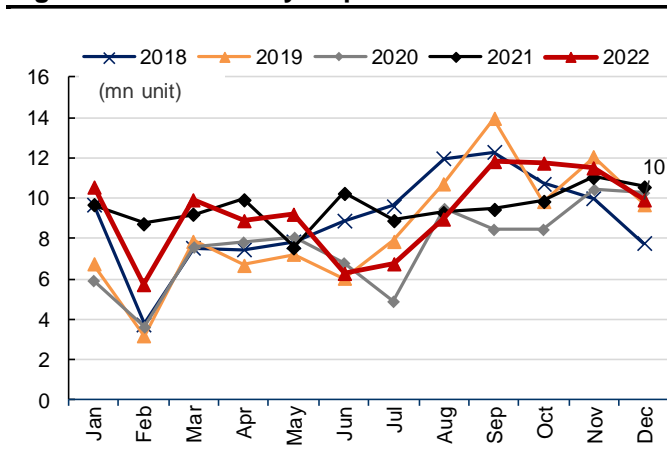
Source: Company data, CMBIGM estimates

**Figure 5: CCM monthly shipment**



Source: Company data, CMBIGM estimates

**Figure 6: FPM monthly shipment**



Source: Company data, CMBIGM estimates

## Earnings Revision

Figure 7: Earnings revision

(RMB mn)	New			Old			Change (%)		
	FY22E	2023E	2024E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
<b>Revenue</b>	14,094	15,173	17,578	15,207	15,623	17,720	-7%	-3%	-1%
Gross profit	760	1,237	1,750	824	1,241	1,762	-8%	0%	-1%
Operating profit	295	675	1,100	337	663	1,106	-12%	2%	-1%
Net profit	231	564	938	273	553	944	-16%	2%	-1%
EPS (RMB)	19.6	47.8	79.5	23.2	46.9	80.0	-16%	2%	-1%
Gross margin	5.4%	8.2%	10.0%	5.4%	7.9%	9.9%	0 ppt	0.2 ppt	0 ppt
Operating margin	2.1%	4.5%	6.3%	2.2%	4.2%	6.2%	-0.1 ppt	0.2 ppt	0 ppt
Net Margin	1.6%	3.7%	5.3%	1.8%	3.5%	5.3%	-0.2 ppt	0.2 ppt	0 ppt

Source: Company data, CMBIGM estimates

Figure 8: CMBI estimates vs consensus

(RMB mn)	CMBI			Consensus			Diff (%)		
	FY22E	2023E	2024E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
<b>Revenue</b>	14,094	15,173	17,578	15,051	16,813	18,941	-6%	-10%	-7%
Gross profit	760	1,237	1,750	938	1,385	1,781	-19%	-11%	-2%
Operating profit	295	675	1,100	325	651	952	-9%	4%	16%
Net profit	231	564	938	371	624	852	-38%	-10%	10%
EPS (RMB)	19.6	47.8	79.5	31.2	53.2	72.4	-37%	-10%	10%
Gross margin	5.4%	8.2%	10.0%	6.2%	8.2%	9.4%	-0.8 ppt	-0.1 ppt	0.6 ppt
Operating margin	2.1%	4.5%	6.3%	2.2%	3.9%	5.0%	-0.1 ppt	0.6 ppt	1.2 ppt
Net Margin	1.6%	3.7%	5.3%	2.5%	3.7%	4.5%	-0.8 ppt	0 ppt	0.8 ppt

Source: Company data, CMBIGM estimates

Figure 9: P&L forecast

RMB mn	FY19	FY20	FY21	1H22	2H22E	FY22E	FY23E	FY24E
<b>Revenue</b>	<b>8,135</b>	<b>17,400</b>	<b>18,663</b>	<b>7,095</b>	<b>6,891</b>	<b>14,094</b>	<b>15,173</b>	<b>17,578</b>
...YoY	2.5%	32.1%	7.3%	-24.0%	-26.1%	-24.5%	7.7%	15.8%
Cost of sales	(7,782)	(15,630)	(16,901)	(6,719)	(6,506)	(13,225)	(13,936)	(15,827)
<b>Gross profit</b>	<b>353</b>	<b>1,771</b>	<b>1,762</b>	<b>376</b>	<b>385</b>	<b>760</b>	<b>1,237</b>	<b>1,750</b>
GPM (%)	4.3%	10.2%	9.4%	5.3%	5.6%	5.4%	8.2%	10.0%
...YoY	-60.0%	50.1%	-0.5%	-65.3%	-43.4%	-56.8%	62.6%	41.5%
SG&A	(100)	(179)	(184)	(78)	(78)	(156)	(152)	(176)
...% of rev	-1.2%	-1.0%	-1.0%	-1.1%	-1.1%	-1.1%	-1.0%	-1.0%
R&D	(266)	(590)	(642)	(261)	(234)	(495)	(501)	(580)
...% of rev	-3.3%	-3.4%	-3.4%	-3.7%	-3.4%	-3.5%	-3.3%	-3.3%
<b>Operating profit</b>	<b>70</b>	<b>1,046</b>	<b>1,039</b>	<b>185</b>	<b>110</b>	<b>295</b>	<b>675</b>	<b>1,100</b>
OPM (%)	0.9%	6.0%	5.6%	2.6%	1.6%	2.1%	4.5%	6.3%
...YoY	-87.1%	68.9%	-0.7%	-73.6%	-67.5%	-71.6%	128.9%	62.9%
Profit of associates.	(25)	(23)	(52)	(18)	(17)	(35)	20	30
<b>Net profit</b>	<b>14</b>	<b>840</b>	<b>863</b>	<b>166</b>	<b>62</b>	<b>231</b>	<b>564</b>	<b>938</b>
NPM (%)	0.2%	4.8%	4.6%	2.3%	0.9%	1.6%	3.7%	5.3%
...YoY	-96.7%	54.9%	2.7%	-71.5%	-77.9%	-73.3%	144.4%	66.4%

Source: Company data, CMBIGM estimates

**Figure 10: Revenue breakdown**

RMB mn	FY19	FY20	FY21	1H22	2H22E	FY22E	FY23E	FY23E
<b>CCM Revenue</b>	<b>10,360</b>	<b>15,202</b>	<b>16,875</b>	<b>6,502</b>	<b>6,176</b>	<b>12,786</b>	<b>13,855</b>	<b>16,257</b>
...YoY	<b>65%</b>	<b>47%</b>	<b>11%</b>	<b>-23%</b>	<b>-27%</b>	<b>-24%</b>	<b>8%</b>	<b>17%</b>
Shipment (mn)	406	392	479	213	211	424	438	492
...YoY	54%	-3%	22%	-5%	-17%	-12%	3%	13%
ASP (RMB)	25.5	38.7	35.2	30.5	29.3	30.2	31.7	33.0
...YoY	7%	52%	-9%	-19%	-12%	-14%	5%	4%
<b>FPM Revenue</b>	<b>2,759</b>	<b>2,101</b>	<b>1,675</b>	<b>551</b>	<b>623</b>	<b>1,173</b>	<b>1,184</b>	<b>1,187</b>
...YoY	<b>51%</b>	<b>-24%</b>	<b>-20%</b>	<b>-40%</b>	<b>-18%</b>	<b>-30%</b>	<b>1%</b>	<b>0%</b>
Shipment (mn)	102	92	115	51	61	112	117	123
...YoY	-5%	-10%	25%	-9%	3%	-3%	5%	5%
ASP (RMB)	27.1	22.8	14.6	10.9	10.2	10.5	10.1	9.7
...YoY	58%	-16%	-36%	-34%	-20%	-28%	-4%	-5%
Others	51	97	112	42	92	134	134	134
...YoY	66%	91%	16%	107%	0%	19%	0%	0%
<b>Total</b>	<b>13,170</b>	<b>17,400</b>	<b>18,663</b>	<b>7,095</b>	<b>6,891</b>	<b>14,094</b>	<b>15,173</b>	<b>17,578</b>
...YoY	<b>62%</b>	<b>32%</b>	<b>7%</b>	<b>-24%</b>	<b>-26%</b>	<b>-24%</b>	<b>8%</b>	<b>16%</b>

Source: Company data, CMBIGM estimates

## Valuation

### Maintain BUY with TP of HK\$5.76 (15% upside)

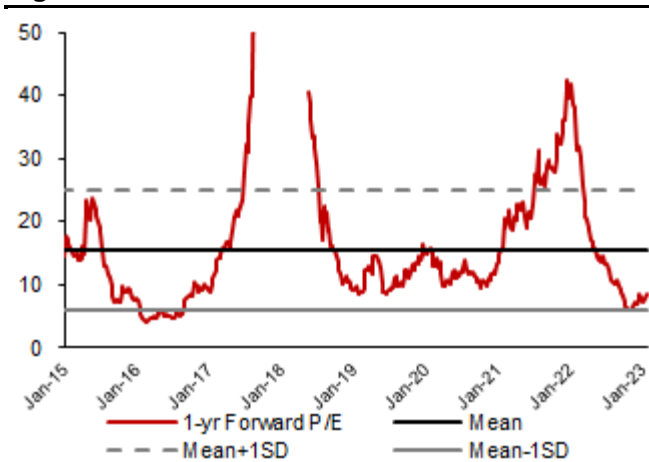
Overall, we believe the worst is over and we remain positive on Q-tech's non-handset business expansion. Maintain BUY with new TP of HK\$5.76. Catalysts include 4Q shipment improvement, auto CCM and A-share spin-off.

**Figure 11: 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	759	5.02	5.76	15%	21.3	8.7	1.0	1.0	4.7	10.6	
FIT Hon Teng	6088 HK	BUY	2,262	2.43	1.84	-24%	11.9	10.6	0.8	0.8	6.9	7.4	
AAC Tech	2018 HK	HOLD	3,298	21.55	15.40	-29%	29.3	18.1	1.0	1.0	3.5	5.6	
Sunny Optical	2382 HK	HOLD	14,973	106.90	96.30	-10%	39.5	27.8	4.5	4.0	11.5	14.4	
Tongda	698 HK	BUY	153	0.12	0.22	79%	4.1	3.1	0.1	0.1	2.3	3.0	
BYDE	285 HK	HOLD	7,754	26.95	20.39	-24%	33.1	19.7	2.1	1.9	6.4	9.9	
TK Group	2283 HK	BUY	173	1.63	3.38	107%	4.0	3.1	0.7	0.6	18.6	20.7	
FIH	2038 HK	NR	850	0.84	NA	NA	-	17.9	-	-	-	2.8	
Truly	732 HK	NR	569	1.41	NA	NA	-	-	-	-	-	-	
SMIC	981 HK	NR	25,809	17.80	NA	NA	10.1	14.7	1.0	0.9	9.9	8.8	
YOFC	6869 HK	NR	2,745	14.34	NA	NA	8.3	6.8	0.9	0.8	10.8	11.4	
Ju Teng	3336 HK	NR	225	1.47	NA	NA	-	-	-	-	-	-	
Cowell	1415 HK	NR	1,552	14.48	NA	NA	19.1	14.4	3.8	3.1	22.2	24.6	
Average								17.9	13.2	1.6	1.4	9.8	10.8

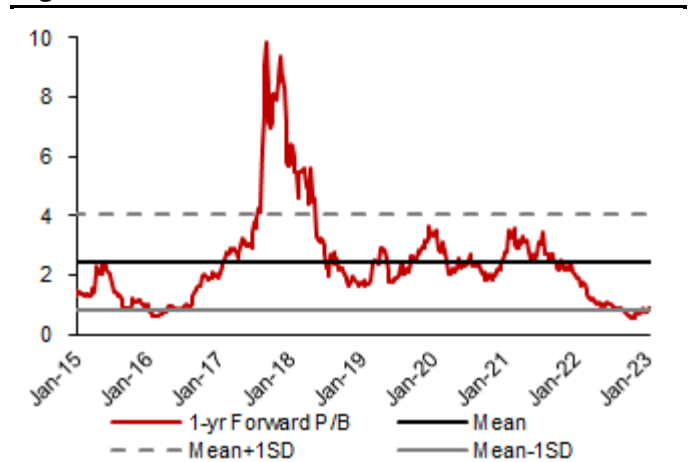
Source: Bloomberg, CMBIGM, \* TP under review

**Figure 12: 12M forward P/E band**



Source: Company data, CMBIGM

**Figure 13: 12M forward P/B band**



Source: Company data, CMBIGM

## Financial Summary

INCOME STATEMENT	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Revenue	13,170	17,400	18,663	14,094	15,173	17,578
Cost of goods sold	(11,990)	(15,630)	(16,901)	(13,225)	(13,936)	(15,827)
<b>Gross profit</b>	<b>1,180</b>	<b>1,771</b>	<b>1,762</b>	<b>760</b>	<b>1,237</b>	<b>1,750</b>
<b>Operating expenses</b>	<b>(560)</b>	<b>(724)</b>	<b>(723)</b>	<b>(465)</b>	<b>(561)</b>	<b>(650)</b>
Selling expense	(15)	(26)	(23)	(19)	(23)	(26)
Admin expense	(128)	(153)	(161)	(137)	(129)	(149)
R&D expense	(396)	(590)	(642)	(495)	(501)	(580)
Others	(21)	44	104	185	91	105
<b>Operating profit</b>	<b>620</b>	<b>1,046</b>	<b>1,039</b>	<b>295</b>	<b>675</b>	<b>1,100</b>
Share of (losses)/profits of associates/JV	40	(23)	(52)	(35)	20	30
Others	(53)	(54)	(30)	(44)	(47)	(52)
<b>Pre-tax profit</b>	<b>607</b>	<b>970</b>	<b>957</b>	<b>216</b>	<b>648</b>	<b>1,078</b>
Income tax	(65)	(130)	(94)	15	(84)	(140)
Minority interest	0	0	0	0	0	0
<b>Net profit</b>	<b>542</b>	<b>840</b>	<b>863</b>	<b>231</b>	<b>564</b>	<b>938</b>

BALANCE SHEET	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
<b>Current assets</b>	<b>7,363</b>	<b>7,882</b>	<b>9,315</b>	<b>6,974</b>	<b>10,915</b>	<b>9,752</b>
Cash & equivalents	412	1,984	1,743	3,455	2,701	4,728
Account receivables	4,919	3,589	4,446	1,622	4,911	2,657
Inventories	1,913	1,943	2,258	1,029	2,435	1,500
ST bank deposits	93	267	811	811	811	811
Other current assets	26	100	57	57	57	57
<b>Non-current assets</b>	<b>3,272</b>	<b>3,521</b>	<b>3,733</b>	<b>3,886</b>	<b>4,034</b>	<b>4,236</b>
PP&E	2,704	2,960	3,144	3,297	3,446	3,647
Intangibles	5	4	20	20	20	20
Other non-current assets	563	557	569	569	569	569
<b>Total assets</b>	<b>10,635</b>	<b>11,403</b>	<b>13,048</b>	<b>10,860</b>	<b>14,949</b>	<b>13,988</b>
<b>Current liabilities</b>	<b>7,543</b>	<b>7,276</b>	<b>8,079</b>	<b>5,707</b>	<b>9,344</b>	<b>7,633</b>
Short-term borrowings	1,270	1,104	1,708	2,249	2,457	2,802
Account payables	5,935	6,013	6,259	3,345	6,775	4,718
Tax payable	49	77	49	49	49	49
Other current liabilities	290	82	64	64	64	64
<b>Non-current liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Deferred income	130	138	200	200	200	200
Other non-current liabilities	5	25	0	0	0	0
<b>Total liabilities</b>	<b>7,768</b>	<b>7,617</b>	<b>8,343</b>	<b>5,970</b>	<b>9,608</b>	<b>7,896</b>
Share capital	9	9	9	9	9	9
Other reserves	2,858	3,776	4,690	4,875	5,326	6,076
<b>Total shareholders equity</b>	<b>2,867</b>	<b>3,786</b>	<b>4,705</b>	<b>4,890</b>	<b>5,341</b>	<b>6,091</b>
Minority interest	0	0	0	0	0	0
<b>Total equity and liabilities</b>	<b>10,635</b>	<b>11,403</b>	<b>13,048</b>	<b>10,860</b>	<b>14,949</b>	<b>13,988</b>

<b>CASH FLOW</b>	<b>2019A</b>	<b>2020A</b>	<b>2021A</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>YE 31 Dec (RMB mn)</b>						
<b>Operating</b>						
Profit before taxation	607	970	957	216	648	1,078
Depreciation & amortization	302	413	498	552	610	678
Change in working capital	1,497	2,177	(1,017)	1,139	(1,264)	1,132
Others	0	0	0	0	0	0
<b>Net cash from operations</b>	<b>2,400</b>	<b>3,604</b>	<b>1,596</b>	<b>1,965</b>	<b>(43)</b>	<b>2,799</b>
<b>Investing</b>						
Capital expenditure	(1,133)	(523)	(1,558)	(705)	(759)	(879)
Others	0	0	0	0	0	0
<b>Net cash from investing</b>	<b>(1,271)</b>	<b>(696)</b>	<b>(880)</b>	<b>(705)</b>	<b>(759)</b>	<b>(879)</b>
<b>Financing</b>						
Dividend paid	0	(107)	0	(46)	(113)	(188)
Net borrowings	(1,086)	(1,015)	604	542	208	345
Others	270	(193)	(1,546)	(44)	(47)	(52)
<b>Net cash from financing</b>	<b>(817)</b>	<b>(1,315)</b>	<b>(942)</b>	<b>452</b>	<b>48</b>	<b>106</b>
<b>Net change in cash</b>						
Cash at the beginning of the year	100	412	1,984	1,743	3,455	2,701
Exchange difference	0	(21)	(14)	0	0	0
<b>Cash at the end of the year</b>	<b>412</b>	<b>1,984</b>	<b>1,743</b>	<b>3,455</b>	<b>2,701</b>	<b>4,728</b>
<b>GROWTH</b>	<b>2019A</b>	<b>2020A</b>	<b>2021A</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>YE 31 Dec</b>						
Revenue	61.9%	32.1%	7.3%	(24.5%)	7.7%	15.8%
Gross profit	234.1%	50.1%	(0.5%)	(56.8%)	62.6%	41.5%
Operating profit	784.8%	68.9%	(0.7%)	(71.6%)	128.9%	62.9%
Net profit	3,666.7%	54.9%	2.7%	(73.3%)	144.4%	66.4%
<b>PROFITABILITY</b>	<b>2019A</b>	<b>2020A</b>	<b>2021A</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>YE 31 Dec</b>						
Gross profit margin	9.0%	10.2%	9.4%	5.4%	8.2%	10.0%
Operating margin	4.7%	6.0%	5.6%	2.1%	4.5%	6.3%
Return on equity (ROE)	21.8%	25.3%	20.3%	4.8%	11.0%	16.4%
<b>GEARING/LIQUIDITY/ACTIVITIES</b>	<b>2019A</b>	<b>2020A</b>	<b>2021A</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>YE 31 Dec</b>						
Net debt to equity (x)	0.3	(0.2)	(0.0)	(0.2)	(0.0)	(0.3)
Current ratio (x)	1.0	1.1	1.2	1.2	1.2	1.3
Receivable turnover days	110.2	89.2	78.6	78.6	78.6	78.6
Inventory turnover days	39.8	45.0	45.4	45.4	45.4	45.4
Payable turnover days	136.9	139.5	132.5	132.5	132.5	132.5
<b>VALUATION</b>	<b>2019A</b>	<b>2020A</b>	<b>2021A</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>YE 31 Dec</b>						
P/E	14.7	12.8	15.3	22.2	9.1	5.5
P/B	2.8	2.8	2.8	1.0	1.0	0.8
Div yield (%)	1.3	5.4	0.0	0.9	2.2	3.7
EV	2,867.0	3,785.8	4,705.2	4,889.8	5,341.0	6,091.5
EV/Sales	0.2	0.2	0.3	0.3	0.4	0.3

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

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