

Shennan Circuits (002916 CH)

Strong 3Q results; Cost pressure remains

Shennan reported 3Q21 results with revenue of RMB3.9bn (26% YoY) and net profit of RMB4.7mn (25% YoY). GPM was stable at 24.6% in 3Q (vs 24.5% in 2Q), while NPM improved QoQ to 12.0% (vs 10.1% in 2Q). We believe both domestic and overseas communications service providers (CSP) capex contributed to the strong revenue growth. We think 3Q may be the best quarter of the year as 4Q demand could be difficult to keep up. With material price still at their highs, we remain conservative for Shennan. **Maintain HOLD and TP adjusted to RMB110.75.**

- Strong 3Q21 results driven by domestic/overseas 5G investments.** Shennan's 3Q revenue grew 26.3%/22.8% YoY/QoQ, largely driven by its PCB business (majority is from telecom market). China telcos resumed their 3rd batch 5G tender in 3Q. We estimate 5G BTS net-add will reach 692k in 2021 (200k 700MHz 5G BTS to be completed within 2021), compared to 588k in 2020. Overseas CSP investment was another contributor. Gartner estimated global 5G capex will increase 39% YoY this year. Looking forward, we expect China 5G capex plan to maintain a similar level but overseas 5G investment will increase 22% YoY in 2022E. We believe Shennan will be the key beneficiary with revenue growth of 16.6%/15.3% YoY in 2022E/23E.
- Material cost pressure to continue.** Although Shennan managed to sustain its overall GPM at 24.5%, we think the cost pressure will continue. Copper price has slipped slightly from recent new high but remains at US\$9.5k/ton (as of 1/11/2021). With low domestic copper inventory, we believe material cost will remain an overhang. However, Shennan has improved its profitability with better operating efficiency, and NPM increased to 12.0% in 3Q from 8.9%/10.1% in 1Q/2Q.
- Maintain HOLD with new TP of RMB110.75.** We slightly raised our TP to RMB110.75 based on same 30.0x FY22E P/E. We think 3Q could be the best quarter and demand will slightly ease in 4Q. We maintain HOLD given uncertainty in economy growth, elevated material cost and constraints in supply chain. Potential upside risks include faster-than-expected decline of material costs, higher-than-expected 5G infrastructure spending and consumer demand.

Earnings Summary

(YE 31 Dec)	FY19A	FY20A	FY21E	FY22E	FY23E
Turnover (RMB mn)	10,524	11,600	13,141	15,629	17,668
YoY growth (%)	38.4%	10.2%	13.3%	18.9%	13.0%
Gross margin (%)	26.5%	26.5%	24.2%	25.0%	25.7%
Net profit (RMB mn)	1,234	1,430	1,423	1,818	2,218
EPS (RMB)	3.66	3.00	2.90	3.69	4.50
YoY growth (%)	47.0%	-18.0%	-3.4%	27.4%	22.0%
Consensus EPS (RMB)	NA	NA	2.92	3.70	4.41
PE (x)	26.7	32.6	33.7	26.5	21.7
PB (x)	6.6	6.3	5.7	5.1	4.5
Yield (%)	1.2%	1.0%	1.8%	2.3%	2.8%
ROE (%)	24.7%	19.2%	16.8%	19.3%	20.9%

Source: Company data, Bloomberg, CMBIS estimates

HOLD (Maintain)

Target Price	RMB 110.75
(Previous TP)	RMB 101.92)
Up/Downside	+13.3%
Current Price	RMB 97.71

China Technology Sector

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Stock Data

Mkt. Cap. (RMB mn)	47,811
Avg. 3mths t/o (RMB mn)	294
52W High/Low (RMB)	139.9/74.9
Total Issued Shares (mn)	489.3

Source: Bloomberg

Shareholding Structure

AVIC International Holdings	67.05%
Hong Kong Securities Clearing	2.60%
China Asset Management Co	0.90%

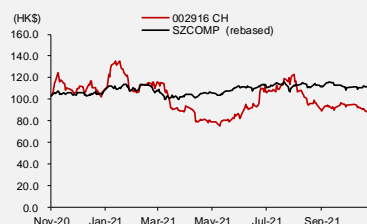
Source: Bloomberg

Share Performance

	Absolute	Relative
1-mth	-6.3%	-6.5%
3-mth	-26.9%	-27.4%
6-mth	11.9%	7.2%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: BDO

Recent Reports:

- Positive on capacity expansion plan; Maintain HOLD on fair valuation – 25 Jun 2021 ([Link](#))
- Positive outlook for PCB/CCL sector amid cost pressure – 31 May 2021 ([Link](#))

3Q21 Results Review

Figure 1: 3Q21 results review

RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	QoQ	YoY
Revenue	2,498	3,418	3,067	2,618	2,725	3,156	3,875	22.8%	26.3%
Gross Profit	639	911	848	673	639	772	951	23.2%	12.2%
Operating Profit	336	514	442	332	277	337	509	51.1%	15.1%
Net profit	277	448	374	332	244	317	467	47.0%	24.8%
EPS (RMB)	0.82	0.70	0.78	0.70	0.50	0.64	0.95	48.4%	21.8%
Gross Margin	25.6%	26.7%	27.6%	25.7%	23.4%	24.5%	24.6%	0.1 ppt	-3.1 ppt
Operating Margin	13.5%	15.0%	14.4%	12.7%	10.2%	10.7%	13.1%	2.5 ppt	-1.3 ppt
Net Margin	11.1%	13.1%	12.2%	12.7%	8.9%	10.1%	12.0%	2 ppt	-0.1 ppt

Source: Company data, CMBIS estimates

Figure 2: CMBIS earnings revisions

RMB mn	New			Old			Change (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	13,141	15,629	17,668	13,320	15,141	17,338	-1%	3%	2%
Gross Profit	3,186	3,906	4,549	3,280	3,867	4,512	-3%	1%	1%
Operating Profit	1,559	2,028	2,451	1,549	1,908	2,260	1%	6%	8%
Net profit	1,423	1,818	2,218	1,348	1,662	1,970	6%	9%	13%
EPS (RMB)	2.90	3.69	4.50	2.76	3.40	4.03	5%	9%	12%
Gross Margin	24.2%	25.0%	25.7%	24.6%	25.5%	26.0%	-0.4 ppt	-0.5 ppt	-0.3 ppt
Operating Margin	11.9%	13.0%	13.9%	11.6%	12.6%	13.0%	0.2 ppt	0.4 ppt	0.8 ppt
Net Margin	10.8%	11.6%	12.6%	10.1%	11.0%	11.4%	0.7 ppt	0.7 ppt	1.2 ppt

Source: Company data, CMBIS estimates

Figure 3: CMBIS estimates vs consensus

RMB mn	CMBIS			Consensus			Diff (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	13,141	15,629	17,668	13,098	15,519	17,984	0%	1%	-2%
Gross Profit	3,186	3,906	4,549	3,260	3,984	4,683	-2%	-2%	-3%
Operating Profit	1,559	2,028	2,451	1,685	2,087	2,487	-7%	-3%	-1%
Net profit	1,423	1,818	2,218	1,413	1,821	2,185	1%	0%	2%
EPS (RMB)	2.90	3.69	4.50	2.92	3.70	4.41	-1%	0%	2%
Gross Margin	24.2%	25.0%	25.7%	24.9%	25.7%	26.0%	-0.6 ppt	-0.7 ppt	-0.3 ppt
Operating Margin	11.9%	13.0%	13.9%	12.9%	13.4%	13.8%	-1 ppt	-0.5 ppt	0 ppt
Net Margin	10.8%	11.6%	12.6%	10.8%	11.7%	12.1%	0 ppt	-0.1 ppt	0.4 ppt

Source: Company data, CMBIS estimates

Figure 4: PCB players revenue growth

RMB mn	Ticker	2020	1H21	2H21E	2021E	2022E	2021E YoY	2022E YoY
Dongshan	002384 CH	28,093	14,005	17,770	31,775	35,461	13.1%	11.6%
Shengnan	002916 CH	11,600	5,881	7,260	13,141	15,629	13.3%	18.9%
WUS	002463 CH	7,460	3,542	4,247	7,790	9,392	4.4%	20.6%
Fastp	002436 CH	4,035	2,371	2,625	4,995	6,077	23.8%	21.7%
Shengyi Electronics	688183 CH	3,634	1,624	2,021	3,646	6,087	0.3%	67.0%
Bomin	603936 CH	2,786	1,646	1,963	3,609	5,263	29.6%	45.8%
Average							13.7%	18.2%

Source: Company data, CMBIS estimates

Company update

In 1H21, Shennan's PCB business has declined 14% YoY, due to the delay of 5G BTS deployment in China. As soon as 3rd batch 5G tender resumed, Shennan's 3Q revenue grew 26.3%/22.8% YoY/QoQ. Meanwhile, demand from overseas was also strong. Gartner estimated global 5G capex will increase 39% YoY this year. However, we think demand in 4Q is difficult to keep up with strong number delivered in 3Q considering the uncertainty in economy growth, elevated material cost, constraints in supply chain.

Looking forward, we expect 5G Capex plan to maintain at a similar level in 2022E, given the de-spec trend in 5G BTS. For example, lower frequency spectrum equipment accounted for the majority of 5G BTS tender this year (2021: 700MHz/2.1GHz, vs. 2020: 2.6GHz/3.5GHz). PCB growth will be largely driven by oversea 5G investment, which is expected to grow at 22% in 2022 according to Gartner. Substrate business will continue to deliver strong results as its Wuxi factory has entered the mid-to-late stage of ramp-up process.

Shennan's PCB capacity was about 200w sq m per year. The capacity of the Company's PCB production was ~80-85% in 1H21. The recent power shortage has not affected the Company's operation, but its PCB production line will not reach full capacity in 2H21. New PCB capacity includes 1) Phase II plant in Nantong, Jiangsu (58w sq m, currently ramping up in the mid-to-late stage) and 2) Phase III plant in Nantong, Jiangsu (expected to begin production in 4Q22). Substrate capacity was 30w per year. New substrate capacity includes 1) Wuxi, Jiangsu (60w, high-end substrate, currently ramping up in the mid-to-late stage) and 2) Guangzhou, Guangdong (expected to begin production in 2023).

Figure 5: Capacity Schedule

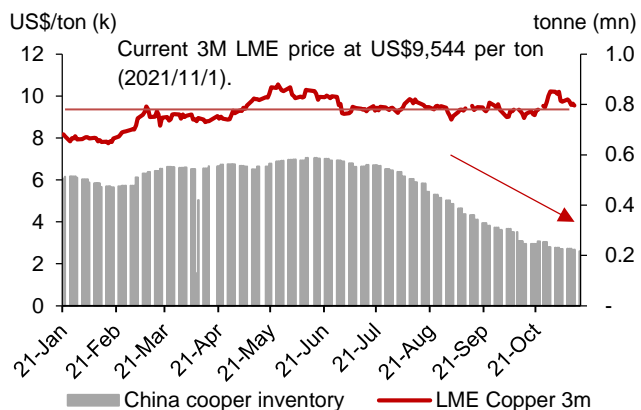
Capacity Schedule	FY20	FY21E	FY22E	FY23E
PCB				
Shenzhen, Guangdong (100w sqm)	[Green shaded area]			
Wuxi, Jiangsu (50w)				
Nantong, Jiangsu (50w, increased from 34w)				
New Nantong, Jiangsu (58w sqm)				
Substrate				
Shenzhen, Guangdong (30w, increased from 23w)	[Green shaded area]			
New Nantong, Jiangsu (60w sqm)				
New Guangzhou, Guangdong				

Source: Company data, CMBIS estimates

Shennan announced to expand substrate capacity in Guangzhou production base, which will add 200mn FC-BGA and 3mn panel RF/FC-CSP substrate capacity. We expect the new project to contribute revenue in 2023/24E. Shennan's existing substrate capacity has been in full production since last year, driven by strong semiconductor demand. We believe strong substrate revenue will continue into 2H21E, driving 22.5% YoY growth in FY21E.

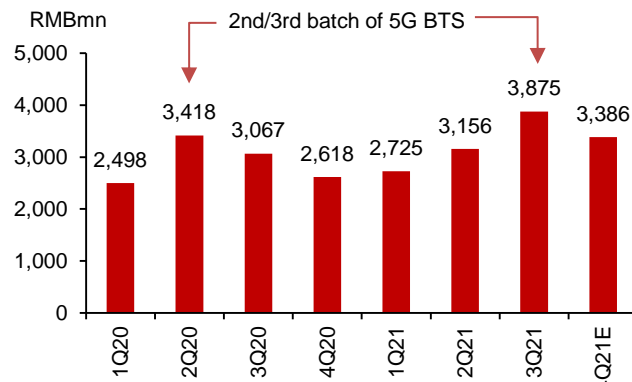
The structural change of product mix will help to improve profitability but will be partially offset by the high material costs. Copper price has slipped slightly from the recent new high but remains at US\$9.5k/ton (as of 1/11/2021). With low domestic copper inventory, we maintain a conservative view.

Figure 6: Copper: price is high while inventory is low (China)



Source: Wind, CMBIS estimates

Figure 7: 2Q20/3Q21 revenue growth largely driven by new tender of 5G BTS



Source: Shengyi Electronics, CMBIS estimates

Figure 8: Segment breakdown

RMB mn	FY19	FY20	1H21	2H21E	FY21E	FY22E	FY23E
Revenue							
PCB	7,726	8,311	3,707	4,712	8,419	10,260	11,752
...YoY	44%	8%	-14%	18%	1%	22%	15%
PCBA	1,211	1,160	674	660	1,334	1,321	1,307
...YoY	31%	-4%	14%	16%	15%	-1%	-1%
Substrate	1,164	1,544	1,095	1,479	2,574	3,153	3,623
...YoY	23%	33%	46%	86%	67%	23%	15%
Other	423	585	405	410	814	896	985
...YoY	21%	38%	49.6%	30%	39%	121%	141%
Total	10,524	11,600	5,881	7,260	13,141	15,629	17,668
...YoY	38%	10%	-1%	28%	13%	19%	13%
Volume (k sq m)							
PCB	2,016	1,957	916	1,170	2,086	2,595	3,002
Substrate	394	540	315	405	720	900	1,050
ASP (RMB)							
PCB	3,833.0	4,247.5	4,047.3	4,025.5	4,035.1	3,954.4	3,914.8
Substrate	972.0	931.0	1,081.5	1,059.8	1,070.7	1,060.0	1,049.4
Gross margin							
PCB	28.0%	28.4%	25.9%	24.7%	25.3%	25.6%	26.4%
PCBA	19.5%	14.6%	12.1%	14.8%	13.4%	13.9%	13.9%
Substrate	26.2%	28.1%	27.9%	30.0%	29.1%	29.8%	30.2%
Other	20.9%	18.2%	15.6%	16.5%	16.1%	17.0%	17.5%
Total	26.5%	26.5%	24.0%	24.4%	24.2%	25.0%	25.7%

Source: Company data, CMBIS estimates

Figure 9: P&L forecasts

RMB mn	FY19	FY20	1Q21	2Q21	3Q21	4Q21E	FY21E	FY22E	FY23E
Revenue	10,524	11,600	2,725	3,156	3,875	3,386	13,141	15,629	17,668
...YoY	38.4%	10.2%	9%	-8%	26%	29%	13.3%	18.9%	13.0%
Cost of sales	7,732	8,530	2,086	2,384	2,923	2,562	9,955	11,723	13,119
Gross profit	2,792	3,071	639	772	951	824	3,186	3,906	4,549
GPM (%)	58.8%	10.0%	0%	-15%	12%	22%	3.7%	22.6%	16.5%
...YoY	26.5%	26.5%	23%	24%	25%	24%	24.2%	25.0%	25.7%
SG&A	719	647	151	198	197	194	740	844	936
...% of rev	6.8%	5.6%	6%	6%	5%	6%	5.6%	5.4%	5.3%
R&D	537	645	169	180	188	197	733	872	986
...% of rev	5.1%	5.6%	6%	6%	5%	6%	5.6%	5.6%	5.6%
Operating profit	1,418	1,625	277	337	509	436	1,559	2,028	2,451
OPM (%)	80.9%	14.6%	-17.6%	-34.5%	15.1%	31.1%	-4.1%	30.2%	20.8%
...YoY	13.5%	14.0%	10%	11%	13%	13%	11.9%	13.0%	13.9%
Net profit	1,234	1,430	244	317	467	395	1,423	1,818	2,218
NPM (%)	76.9%	15.9%	-12.0%	-29.1%	24.8%	18.9%	-0.5%	27.8%	22.0%
...YoY	11.7%	12.3%	8.9%	10.1%	12.0%	11.7%	10.8%	11.6%	12.6%

Source: Company data, CMBIS estimates

Valuation

Maintain Hold with new TP at RMB110.75 (13% upside)

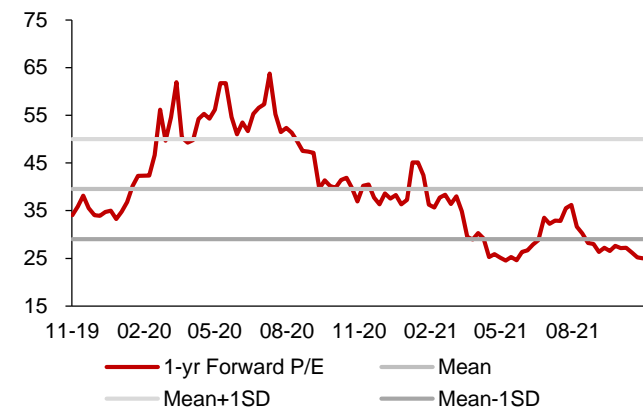
We slightly raised our TP to RMB110.75 based on the same 30.0x FY22E P/E. We think 3Q could be the best quarter and demand will slight ease in 4Q. We maintain HOLD rating given uncertainty in economy growth, elevated material cost and constraints in supply chain. Potential upside risks include faster-than-expected decline of material costs, higher-than-expected 5G infrastructure spending and consumer demand. Potential downside risks include continued price increase in upstream materials and slower-than-expected 5G deployment.

Figure 10: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	Up/Down -side	P/E (x)		P/B (x)		ROE (%)		
							FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	
Shengyi Tech	600183 CH	Buy	8473	23.47	30.5	30%	17.1	16.6	3.9	3.4	22.6	20.2	
Shennan Circuits	002916 CH	Hold	7472	97.71	110.7	13%	33.7	26.5	5.7	5.1	16.8	19.3	
WUS	002463 CH	NR	3338	11.26	NA	NA	15.8	12.8	3.0	2.6	17.3	18.9	
Kinwon	603228 CH	NR	3788	28.44	NA	NA	22.9	18.8	3.4	3.0	14.7	15.8	
DSBJ	002384 CH	NR	5644	21.12	NA	NA	18.8	15.0	2.4	2.1	13.6	14.9	
Zhen Ding	4958 TT	NR	3180	98.20	NA	NA	10.6	8.9	1.1	1.1	10.1	11.4	
TTM	TTMI US	NR	1427	13.24	NA	NA	10.7	9.3	1.0	0.9	-	-	
UMTC	3037 TT	NR	10209	189.00	NA	NA	25.8	19.4	5.1	4.2	20.2	22.6	
Tripod	3044 TT	NR	2207	117.00	NA	NA	9.8	8.9	1.6	1.5	16.3	16.8	
Comped	2313 TT	NR	1814	42.40	NA	NA	11.1	9.8	1.6	1.5	15.2	15.8	
SEMCO	009150 KS	NR	10049	158500.00	NA	NA	11.2	10.1	1.8	1.5	17.0	16.3	
Average								17.1	14.2	2.8	2.4	12.5	13.3

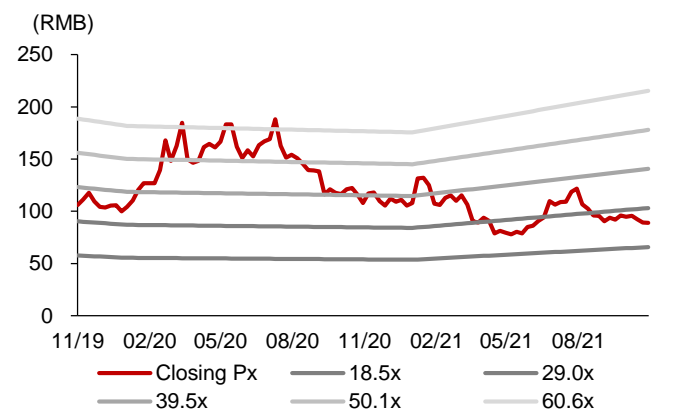
Source: Bloomberg, CMBIS estimates

Figure 11: 12M forward P/E chart



Source: Company data, CMBIS estimates

Figure 12: 12M forward P/E band



Source: Company data, CMBIS estimates

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue	10,524	11,600	13,141	15,629	17,668
Cost of sales	(7,732)	(8,530)	(9,955)	(11,723)	(13,119)
Gross profit	2,792	3,071	3,186	3,906	4,549
Selling exp	(218)	(167)	(231)	(250)	(282)
Admin exp (excl. R&D)	(501)	(480)	(508)	(594)	(654)
R&D exp	(537)	(645)	(733)	(872)	(986)
Finance costs	(72)	(152)	(64)	(70)	(61)
Other operating exp.	2,702	2,889	3,164	3,663	4,081
Operating profit	1,418	1,625	1,559	2,028	2,451
Other non-oper exp.	(14)	(19)	(6)	(16)	(13)
Pre-tax profit	1,404	1,606	1,553	2,012	2,438
Income tax expense	(170)	(175)	(129)	(193)	(218)
Minority interests	1	1	1	2	2
Net profit	1,234	1,430	1,423	1,818	2,218

Cash flow summary

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Net profit	1,234	1,431	1,424	1,819	2,220
Depreciation/amortization	448	606	778	1,039	1,324
Change in working capital	(650)	(557)	(185)	(778)	242
Others	232	320	177	51	199
Net cash from operating	1,263	1,800	2,194	2,131	3,986
Capex	(2,183)	(2,486)	(893)	(1,114)	(1,316)
Other	186	(149)	27	173	(3)
Net cash from investing	(1,997)	(2,635)	(866)	(941)	(1,319)
Share issuance	130	0	38	40	40
Dividend paid	(278)	(453)	(465)	(854)	(1,091)
Other	1,664	383	1,145	56	216
Net cash from financing	1,516	(71)	719	(758)	(835)
Net change in cash	791	(937)	2,046	432	1,832
Cash at beginning of the year	650	1,441	504	2,550	2,983
Cash at beginning of the year	467	1,227	2,254	3,941	Exchan
Cash at the end of the year	1,441	504	2,550	2,983	4,815

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Current assets	5,977	5,941	8,724	11,247	11,856
Cash & equivalents	1,444	507	2,550	2,983	4,815
Account receivables	2,092	2,053	3,203	3,743	3,324
Inventory	1,504	2,206	1,942	3,268	2,562
Prepayment	3	6	12	11	13
Other current assets	934	1,169	1,016	1,242	1,141
Non-current assets	6,242	8,067	8,416	8,497	8,553
PPE	4,310	6,485	8,400	10,141	11,871
Deferred tax assets	68	72	85	100	102
Other non-current	1,865	1,509	-69	-1,744	-3,420
Total assets	12,219	14,008	17,140	19,743	20,409
Current liabilities	4,670	4,932	6,071	7,683	6,985
ST borrowings	158	232	370	374	393
Account payables	1,555	1,515	2,333	3,119	2,463
Tax payable	46	22	55	47	57
Other current liabilities	2,911	3,163	3,313	4,142	4,072
Non-current liabilities	2,547	1,631	2,596	2,629	2,811
LT borrowings	945	1,059	1,677	1,697	1,783
Deferred tax liability	3	6	7	9	9
Other non-current	1,599	566	912	924	1,020
Total liabilities	7,216	6,563	8,667	10,313	9,797
Share capital	339	489	491	492	494
Reserve	2,231	3,660	3,696	3,734	3,773
Minority interest	2	3	4	6	8
Total equity	5,003	7,444	8,472	9,431	10,612
Total liabilities and	12,219	14,008	17,140	19,743	20,409

Key ratios

YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue mix					
PCB	7,726	8,311	8,419	10,260	11,752
PCBA	1,211	1,160	1,334	1,321	1,307
Substrate	1,164	1,544	2,574	3,153	3,623
Growth (%)					
Revenue	38.4%	10.2%	13.3%	18.9%	13.0%
Operating profit	58.8%	10.0%	3.7%	22.6%	16.5%
Net profit	80.9%	14.6%	-4.1%	30.2%	20.8%
	76.9%	15.9%	-0.5%	27.8%	22.0%
Profit & loss ratio (%)					
Gross margin					
Operating margin	26.5%	26.5%	24.2%	25.0%	25.7%
Net profit margin	13.5%	14.0%	11.9%	13.0%	13.9%
	11.7%	12.3%	10.8%	11.6%	12.6%
Balance sheet ratio					
Net debt/total equity (%)	Net cash	10.5%	Net cash	Net cash	Net cash
Current ratio (x)	1.3	1.2	1.4	1.5	1.7
Receivable turnover days	64	65	73	81	73
Inventory turnover days	(67)	(79)	76	81	81
Payable turnover days	(67)	(66)	(71)	(85)	(78)
Profitability (%)					
ROE	24.7%	19.2%	16.8%	19.3%	20.9%
ROA	10.1%	10.2%	8.3%	9.2%	10.9%
Per share data (RMB)					
EPS	3.66	3.00	2.90	3.69	4.50
DPS	1.15	0.95	1.74	2.21	2.70
BPS	14.84	15.61	17.25	19.14	21.54

Source: Company data, CMBIS estimates

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