

Shennan Circuits (002916 CH)

Substrate demand remains strong in 2022

Shennan Circuits raised RMB2.55bn through a private placement on Thursday, and key participants include National IC industry Investment Fund. The proceeds will be used to expand high-end flip chip IC substrate manufacture. Although we think substrate demand will remain strong, the new capacity will not contribute much before end of 2023. In addition, we believe the positive news have been priced in and the stock is fairly valued. Maintain HOLD with TP of RMB110.75.

- National IC Industry Investment Fund (Phase II) invested in Shennan's recent private placement.** Shennan Circuits raised RMB2.55bn through a private placement. The company issued 23.7mn shares at a price of RMB107.62. There are 19 participants including Huatai Securities, National IC industry Investment Fund, JP Morgan Chase, UBS, etc. The fund will be used to expand Shennan's capacity in high-end flip chip IC substrate manufactures. In 1H21, substrate business accounted for ~19% of total revenue.
- IC substrate supply is expected to remain tight.** We saw substrate demand was strong since last year as we pointed out in our previous reports. Shennan has announced new capacity in Guangzhou factory, with planned capacity of 200mn FC-BGA and 3mn panel RF/FC-CSP. Looking forward, we believe the demand will remain strong. BT substrate is expected to be tight at least in 1H22, while the supply of ABF substrate will fall short throughout 2022.
- Shennan's current substrate capacity is under full production; new capacity will contribute in 2023/34E.** Shennan's existing substrate capacity has been in full production since 2020, driven by strong semiconductor demand. Current substrate capacity is 30w per year. New substrate capacity includes Wuxi, Jiangsu and Guangzhou, Guangdong.
- Maintain HOLD with TP of RMB110.75.** Although we think substrate demand will remain strong, the company's current capacity is under full production and new capacity will not contribute before end of 2023. As the positive news have been priced in, we think the stock is fairly valued at the moment. 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	1,819	2,200
EPS (RMB)	3.66	3.00	2.90	3.69	4.47
YoY growth (%)	47.0%	-18.0%	-3.4%	27.4%	21.0%
Consensus EPS (RMB)	NA	NA	2.92	3.74	4.38
PE (x)	26.7	32.6	33.7	26.5	21.9
PB (x)	6.6	6.3	5.7	4.9	4.2
Yield (%)	1.2%	1.0%	1.0%	1.2%	1.5%
ROE (%)	24.7%	19.2%	16.8%	18.5%	19.2%

Source: Company data, Bloomberg, CMBIS estimates

HOLD (Maintain)

Target Price	RMB110.75
(Previous TP)	RMB110.75)
Up/Downside	-3.7%
Current Price	RMB115.05

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Stock Data

Mkt Cap (HK\$ mn)	56,282
Avg 3 mths t/o (HK\$ mn)	438
52w High/Low (HK\$)	126.66/74.88
Total Issued Shares (mn)	489.2

Source: Bloomberg

Shareholding Structure

AVIC International Holdings	67.06%
HK Securities Clearing	2.60%
China Asset Management Co	0.90%

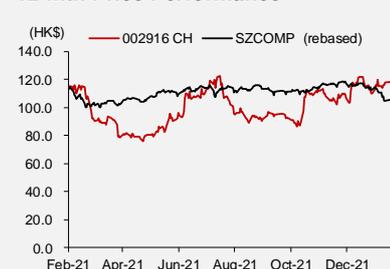
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	0.4%	9.2%
3-mth	6.1%	11.9%
6-mth	8.3%	16.8%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: BDO

Recent Reports:

- Strong 3Q results; Cost pressure remains – 2 Nov 2021 ([Link](#))
- Positive on capacity expansion plan; Maintain HOLD on fair valuation – 25 Jun 2021 ([Link](#))

Company capacity

Shennan's PCB capacity was about 200w sq m per year. The capacity of the Company's PCB production was ~80-85% in 1H21. 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).

Shennan's substrate capacity was 30w per year. New substrate capacity includes 1) Wuxi, Jiangsu (60w, high-end substrate, currently ramping up in the late stage) and 2) Guangzhou, Guangdong (expected to begin production in 2023).

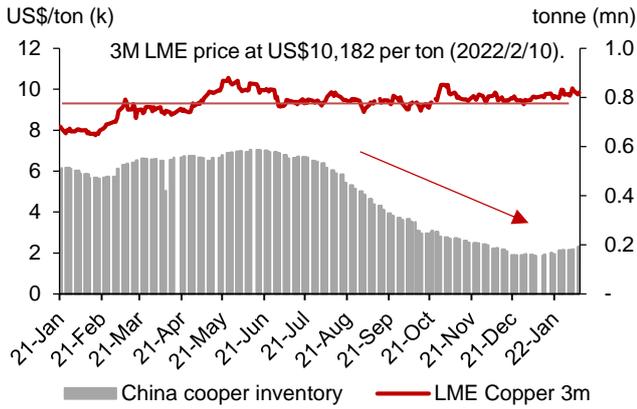
Shennan announced to expand substrate capacity in Guangzhou production base, which will add 200mn FC-BGA and 3mn panel RF/FC-CSP substrate capacity. We expect the new project to contribute revenue in 2023/24E. Shennan's existing substrate capacity has been in full production since last year, driven by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

Figure 1: Capacity Schedule

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

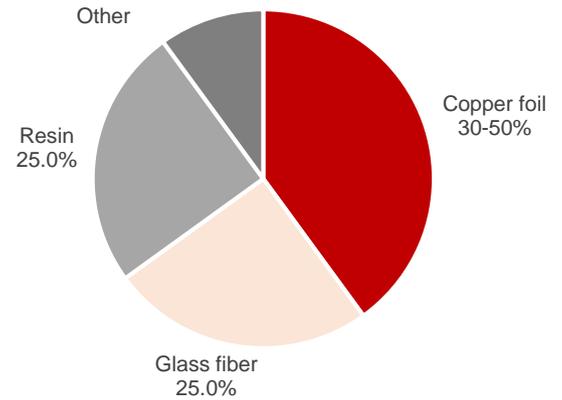
Source: Company data, CMBIS estimates

Figure 2: Copper: price is high while inventory is low (China)



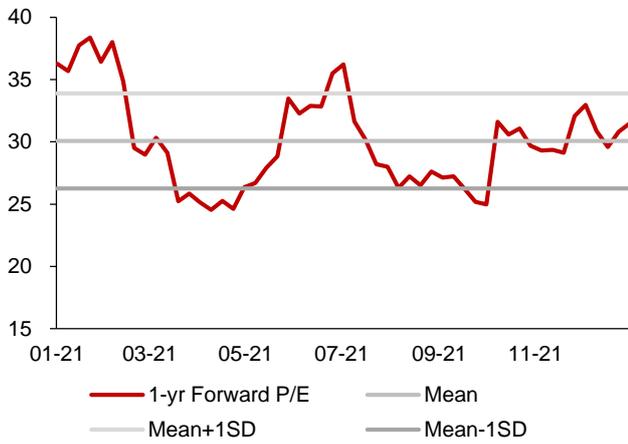
Source: Wind, CMBIS estimates

Figure 3: Copper foil accounts for the largest part of CCL cost (2020)



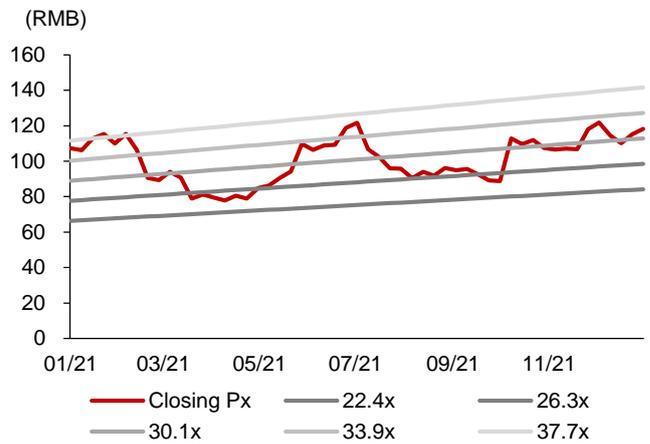
Source: Shengyi Electronics, CMBIS estimates

Figure 4: 12M forward P/E chart



Source: Company data, CMBIS

Figure 5: 12M forward P/E band



Source: Company data, CMBIS

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)	(69)	(64)
Other operating exp.	2,702	2,889	3,164	3,661	4,104
Operating profit	1,418	1,625	1,559	2,030	2,431
Other non-oper exp.	(14)	(19)	(6)	(16)	(13)
Pre-tax profit	1,404	1,606	1,553	2,013	2,418
Income tax expense	(170)	(175)	(129)	(193)	(216)
Minority interests	1	1	1	2	2
Net profit	1,234	1,430	1,423	1,819	2,200

Cash flow

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Net profit	1,234	1,431	1,424	1,820	2,202
D&A	448	606	778	1,039	1,324
Change in working capital	(650)	(557)	(185)	(698)	(986)
Others	232	320	177	45	207
Net cash from operating	1,263	1,800	2,194	2,207	2,748
Capex	(2,183)	(2,486)	(893)	(1,114)	(1,316)
Other	186	(149)	27	201	26
Net cash from investing	(1,997)	(2,635)	(866)	(914)	(1,290)
Share issuance	130	0	38	40	40
Dividend paid	(278)	(453)	(465)	(462)	(591)
Other	1,664	383	1,145	166	341
Net cash from financing	1,516	(71)	719	(256)	(210)
Net change in cash	791	(937)	2,046	1,037	1,248
Cash at beginning of the year	650	1,441	504	2,550	3,588
Exchange difference	9	(31)	0	0	0
Cash at the end of the year	1,441	504	2,550	3,588	4,835

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Current assets	5,977	5,941	8,724	11,873	13,217
Cash & equivalents	1,444	507	2,550	3,588	4,835
Account receivables	2,092	2,053	3,203	3,743	4,110
Inventory	1,504	2,206	1,942	3,268	2,979
Prepayment	3	6	12	11	14
Other current assets	934	1,169	1,016	1,263	1,279
Non-current assets	6,242	8,067	8,416	8,517	8,600
PPE	4,310	6,485	8,400	10,141	11,871
Deferred tax assets	68	72	85	103	109
Other non-current	1,865	1,509	-69	-1,727	-3,380
Total assets	12,219	14,008	17,140	20,390	21,817
Current liabilities	4,670	4,932	6,071	7,842	7,312
ST borrowings	158	232	370	390	425
Account payables	1,555	1,515	2,333	3,119	2,463
Tax payable	46	22	55	49	61
Other current liabilities	2,911	3,163	3,313	4,284	4,363
Non-current liabilities	2,547	1,631	2,596	2,730	3,028
LT borrowings	945	1,059	1,677	1,767	1,928
Deferred tax liability	3	6	7	9	9
Other non-current	1,599	566	912	954	1,091
Total liabilities	7,216	6,563	8,667	10,572	10,340
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	9,818	11,477
Total liabilities and	12,219	14,008	17,140	20,390	21,817

Key ratios

YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue mix					
PCB	7726	8311	8419	10260	11752
PCBA	1211	1160	1334	1321	1307
Substrate	1164	1544	2574	3153	3623
Growth (%)					
Revenue	38.4%	10.2%	13.3%	18.9%	13.0%
Operating profit	80.9%	14.6%	-4.1%	30.2%	19.8%
Net profit	76.9%	15.9%	-0.5%	27.8%	21.0%
Profit & loss ratio (%)					
Gross margin	26.5%	26.5%	24.2%	25.0%	25.7%
Operating margin	13.5%	14.0%	11.9%	13.0%	13.8%
Net profit margin	11.7%	12.3%	10.8%	11.6%	12.5%
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	1.8
Receivable turnover days	64	65	73	81	81
Inventory turnover days	(67)	(79)	76	81	87
Payable turnover days	(67)	(66)	(71)	(85)	(78)
Profitability (%)					
ROE	24.7%	19.2%	16.8%	18.5%	19.2%
ROA	10.1%	10.2%	8.3%	8.9%	10.1%
Per share data (RMB)					
EPS	3.66	3.00	2.90	3.69	4.47
DPS	1.15	0.95	0.94	1.20	1.45
BPS	14.84	15.61	17.25	19.93	23.29

Source: Company data, CMBIS estimates

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