

China

ADD (no change)

Consensus ratings*: Buy 8 Hold 2 Sell 0

Current price:	Rmb51.47
Target price:	Rmb71.50
Previous target:	Rmb84.00
Up/downside:	38.9%
CGS-CIMB / Consensus:	0.3%
Reuters:	688981.SS
Bloomberg:	688981 CH
Market cap:	US\$31,314m
	Rmb199,071m
Average daily turnover:	US\$147.3m
	Rmb936.1m
Current shares o/s:	7,904m
Free float:	61.7%

*Source: Bloomberg

Key changes in this note

- FY22F/23F revenue increased by 16.4/38.8%.
- FY22F/23F GPM increased by 6.3%/3.5% pts.
- FY22F/23F EPS increased by 50.9%/70.9%.



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	0.7	-8.6	-4.7
Relative (%)	2.8	-6.1	1

Major shareholders	% held
CNIC Corporation	15.5
Datang Telecom Technology & China Integrated Circuit Industry	11.6
	11.2

Analyst



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SMIC-A

Cycle likely to peak in 2Q22F

- SMIC posted a record quarterly net profit of US\$534m in 4Q21, some 26% above our forecast, primarily due to better-than-expected ASP growth.
- We expect robust wafer shipments (+22% yoy) but moderate ASP growth (+9% yoy) in FY22F, driven by the rapid growth in mature nodes capacity.
- Maintain Add. TP is lower at Rmb71.50 to reflect the prolonged US entity list restriction and potential decline in wafer prices.

Record 4Q revenue and net profit, driven by robust ASP growth

SMIC's 4Q21 net profit surged 108% yoy (+66% qoq) to US\$534m, driven by robust wafer shipments (+22% yoy, +0.2% qoq), and ASP growth (+33% yoy, +6.2% qoq) amid strong domestic demand for high voltage drivers, microcontroller units (MCU) and ultra-low power logic. 4Q21 GPM further expanded to 35% (+1.9% pts qoq) thanks to product mix change and increase in ASP. Capex in 4Q21 reached US\$2.13bn (47% of FY21's), mainly for mature nodes capacity expansion. FY21 core net profit grew 106% yoy to US\$1.47bn, driven by 20% wafer shipments growth, 38% ASP growth and 7.2% pts GPM gain.

1Q22F ASP set to grow by another 10%, GPM to reach 36-38%

Management said that across-the-board foundry capacity shortages are switching to the phase of a structural shortage but expects overall foundry supply to improve in 2H22F. SMIC guides for 1Q22F revenue growth of 15-17% qoq, with a c.10% ASP growth and GPM of 36-38%. We expect 1Q22F wafer ASP/shipments to grow 10%/6% yoy. SMIC has increased the number of long-term agreements (LTA) with key customers which will help to limit downside risk from wafer prices but would also cap ASP growth in FY22F.

Capacity continues to grow rapidly but ASP set to peak in 2Q22F

SMIC's capacity rose by 16% yoy to 604k (8" equivalent) in FY21. With a US\$5bn capex, we estimate wafer capacity will rise c.22% yoy (adding 130k-150k 8" equiv. wfp/m) in FY22F. We expect SMIC's wafer shipments to grow 22% yoy in FY22F (+18% yoy in FY21) amid strong demand from electric vehicles, IoT, mid-to-high end analogue, MCU and power management applications. However, smartphone (CIS, TDDI and fingerprint ICs) and consumer electronics demand should slow down. Given that we believe overall foundry supply will improve in 2H22F, we expect wafer ASP to peak in 2Q22F before softening in 2H22F. We estimate wafer ASP will grow by 9% in FY22F but fall 5% FY23F amid an over-supply. Although we expect higher depreciation costs of US\$2.2bn in FY22F (US\$1.87bn in FY21), we estimate that GPM will expand further to 33.8% in FY22F (33.1%/35.0% in 3Q/4Q21) due to wafer price hikes and high utilisation rates. On the back of stronger wafer ASP growth and GPM improvements, we raise FY22F/23F EPS by 51%/71%.

Maintain Add but on lower target price of Rmb71.50

We maintain Add as we think SMIC will continue to benefit from strong domestic demand for mature process nodes. We lower our TP to Rmb71.50 as we now use 5x FY22F P/BV (previously 7x FY21F), to reflect the prolonged US entity list restriction that limits its advanced process technology development, as well as the potential risk of wafer price declines. Share price catalysts are removal of export restriction by the US government and accelerated FinFET technology development. Risks: faster-than-expected wafer price erosion and delays in equipment delivery from suppliers.

Financial Summary

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue (US\$m)	3,907	5,443	7,325	9,089	9,492
Net Profit (US\$m)	848	1,701	1,734	1,759	1,681
Normalised EPS (US\$)	0.11	0.19	0.22	0.22	0.21
Normalised EPS Growth	142%	65%	18%	1%	(4%)
FD Normalised P/E (x)	87.14	43.52	36.91	36.38	38.07
Price To Sales (x)	13.17	11.76	8.74	7.04	6.74
DPS (US\$)	-	-	-	-	-
Dividend Yield	0%	0%	0%	0%	0%
EV/EBITDA (x)	47.36	27.78	20.70	19.22	19.67
P/FCFE (x)	NA	NA	NA	59.72	47.27
Net Gearing	11.4%	7.4%	9.5%	9.0%	8.4%
P/BV (x)	4.19	3.73	3.68	3.51	3.38
ROE	7.0%	9.2%	10.0%	9.9%	9.0%
% Change In Normalised EPS Estimates			50.9%	70.9%	
Normalised EPS/consensus EPS (x)			0.17	0.16	0.15

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Cycle likely to peak in 2Q22F

Figure 1: Results comparison

FYE Dec 31 (US\$ m)	4QFY21	4QFY20	yoy % chg	qoq % chg	4QFY21 Cum	4QFY20 Cum	yoy % chg	Prev. FY21F	Comments
Revenue	1,580	981	61.1	11.6	5,443	3,907	39.3	5,112	4Q21 wafer revenue jumped 66% yoy, driven by robust
Operating costs	(472)	(402)	17.5	(18.3)	(2,078)	(2,053)	1.2	(1,997)	c.22% wafer shipment increase and c.33% ASP growth.
EBITDA	1,108	579	91.3	32.3	3,365	1,854	81.5	3,114	
EBITDA margin (%)	70.1	59.0			61.8	47.4		60.9	4Q21 GPM further expanded to 35.0% (+1.9% pts qoq, +10.8%
Depn & amort.	(508)	(366)	38.9	5.9	(1,869)	(1,214)	54.0	(2,014)	pts yoy), driven by product mix change and ASP growth.
EBIT	599	213	181.5	67.7	1,496	640	133.8	1,100	
Interest expense	(27)	(19)	41.2	0.4	(110)	(73)	50.4	(115)	
Interest income	59	52	13.9	4.6	223	171	30.6	218	
Associates' contrib	-	-	N/M	N/M	-	-	N/M	285	
Exceptionals	-	-	N/M	N/M	231	132	N/M	231	
Pretax profit	631	246	157.1	63.1	1,840	870	111.6	1,720	
Tax	(53)	(17)	212.3	272.7	(65)	(68)	(4.6)	(138)	
Tax rate (%)	8.4	6.9	-	-	3.5	7.9		0.1	
Minority interests	(45)	28	(256.9)	(13.3)	(73)	46	(257.9)	8	
Net profit	534	257	107.7	66.1	1,701	848	100.7	1,590	4Q21 net profit surged 108% yoy to US\$534m.
Core net profit	534	257	107.7	66.1	1,470	716	105.5	1,359	FY21 core net profit formed 108% of our FY21F forecast, primary
EPS (US cts)	6.77	4.05	67.3	66.1	21.58	13.34	61.7	20.17	due to better-than-expected ASP growth.
Core EPS (US cts)	6.77	4.05	67.3	66.1	18.65	11.26	65.6	17.24	

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 2: Quarterly operational metrics (1Q18 to 4Q21)

Operational metrics	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
Revenue breakdown (weighting %)																
- Application (%)																
- Smartphone	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	42.3%	43.1%	48.3%	46.7%	46.1%	36.7%	35.2%	31.6%	31.5%	31.2%
- Smart home	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.0%	16.7%	15.5%	16.4%	20.5%	15.8%	13.9%	12.4%	12.5%	12.7%
- Consumer Electronics	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	22.2%	20.8%	18.4%	17.2%	17.0%	20.2%	20.4%	25.1%	24.1%	23.7%
- Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	18.5%	19.4%	17.8%	19.7%	16.4%	27.3%	30.5%	30.9%	31.9%	32.4%
- Geography (%)																
- North America	28.6%	33.0%	33.0%	31.7%	32.3%	27.5%	24.7%	22.2%	25.5%	21.6%	18.6%	27.7%	27.7%	23.3%	20.3%	19.6%
- China	62.4%	58.6%	57.9%	57.5%	53.9%	56.9%	60.5%	65.1%	61.6%	66.1%	69.7%	56.1%	55.6%	62.9%	66.7%	68.3%
- Eurasia	9.0%	8.4%	9.1%	10.8%	13.8%	15.6%	14.8%	12.7%	12.9%	12.3%	11.7%	16.2%	16.7%	13.8%	13.0%	12.1%
- Wafer technology (%)																
- 0.25/0.35nm	3.9%	3.8%	3.6%	3.6%	4.3%	4.0%	4.2%	4.1%	4.3%	4.3%	3.4%	4.0%	3.6%	3.2%	3.0%	2.9%
- 0.15/0.18nm	38.9%	37.1%	39.5%	38.7%	46.0%	38.6%	35.8%	35.4%	33.4%	33.0%	31.2%	32.5%	30.3%	28.4%	27.9%	28.6%
- 0.11/0.13nm	7.6%	7.6%	8.7%	7.3%	7.4%	6.5%	6.6%	6.3%	5.4%	5.4%	4.4%	6.2%	6.0%	5.9%	5.4%	2.5%
- 90nm	3.8%	1.2%	1.4%	1.7%	2.2%	1.7%	1.3%	1.5%	1.6%	2.8%	3.4%	3.5%	4.1%	3.2%	3.1%	2.5%
- 55/65nm	20.9%	24.2%	21.0%	23.0%	21.8%	26.2%	29.3%	31.3%	32.6%	30.0%	25.8%	34.0%	32.8%	29.9%	28.5%	26.8%
- 40/45nm	21.7%	17.5%	18.7%	20.3%	15.3%	19.2%	18.5%	16.4%	14.9%	15.4%	17.2%	14.8%	16.3%	14.9%	13.9%	15.3%
- 14/28nm	3.2%	8.6%	7.1%	5.4%	3.0%	3.8%	4.3%	4.1%	6.5%	6.6%	14.6%	5.0%	6.9%	14.5%	18.2%	18.6%
Total wafer capacity ('000/month)	448	449	451	451	467	483	444	449	476	480	510	521	541	562	594	604
Wafer Shipments ('000)	1,084	1,258	1,315	1,218	1,090	1,284	1,315	1,339	1,407	1,436	1,441	1,416	1,559	1,745	1,720	1,723
Utilisation rate (%)	88.3%	94.1%	94.7%	89.9%	89.2%	91.1%	97.0%	98.8%	98.5%	98.6%	97.8%	95.5%	98.7%	100.4%	100.3%	99.4%
Capex (US\$m)	322	559	528	405	440	908	190	492	777	1,342	2,280	1,333	534	771	1,081	2,130

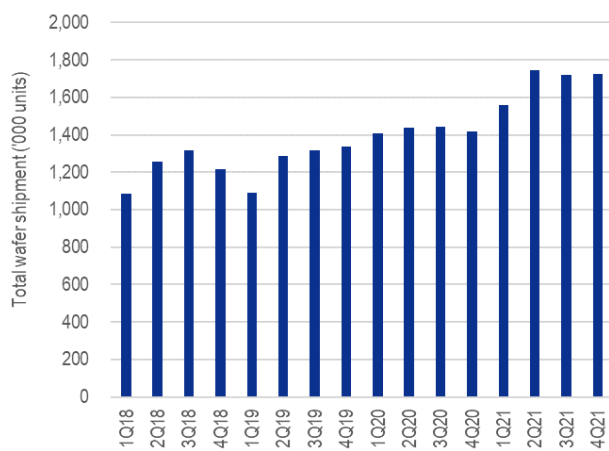
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 3: Quarterly financial analysis (1Q18 to 4Q21)

Financial analysis	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
US\$m																
Revenue	831.0	890.7	850.7	787.6	668.9	790.9	816.5	839.4	904.9	938.5	1082.5	981.1	1103.6	1344.1	1415.3	1580.1
Gross profit	220.2	217.8	174.5	134.1	122.1	151.2	169.8	199.4	233.6	248.6	262.0	176.8	250.1	405.0	467.9	552.8
Operating profit	42.3	19.1	-5.8	-40.9	24.4	-42.8	47.2	20.1	47.3	64.7	225.6	212.9	109.7	429.4	357.5	599.4
Net profit	29.4	51.6	26.6	26.5	12.3	18.5	115.1	88.7	64.2	138.0	256.2	257.0	158.7	687.8	321.4	533.8
Margin (%)																
Gross profit	26.5%	24.5%	20.5%	17.0%	18.2%	19.1%	20.8%	23.8%	25.8%	26.5%	24.2%	18.0%	22.7%	30.1%	33.1%	35.0%
Operating profit	5.1%	2.1%	-0.7%	-5.2%	3.7%	-5.4%	5.8%	2.4%	5.2%	6.9%	20.8%	21.7%	9.9%	31.9%	25.3%	37.9%
Net profit	3.5%	5.8%	3.1%	3.4%	1.8%	2.3%	14.1%	10.6%	7.1%	14.7%	23.7%	26.2%	14.4%	51.2%	22.7%	33.8%
YoY change (%)																
Revenue	4.8%	18.6%	10.5%	0.0%	-19.5%	-11.2%	-4.0%	6.6%	35.3%	18.7%	32.6%	16.9%	22.0%	43.2%	30.7%	61.1%
Gross profit	-0.3%	12.2%	-1.6%	-9.7%	-44.6%	-30.6%	-2.7%	48.7%	91.4%	64.5%	54.3%	-11.4%	7.1%	62.9%	78.6%	212.7%
Operating profit	-45.4%	-11.5%	-125.7%	-1389.9%	-42.2%	-323.8%	909.0%	149.2%	93.7%	251.0%	378.5%	956.9%	131.8%	564.1%	58.5%	181.5%
Net profit	-57.9%	42.3%	2.5%	-44.4%	-58.2%	-64.1%	333.5%	234.6%	422.8%	644.2%	122.5%	189.7%	147.3%	398.5%	25.4%	107.7%
QoQ change (%)																
Revenue	5.6%	7.2%	-4.5%	-7.4%	-15.1%	18.2%	3.2%	2.8%	7.8%	3.7%	15.3%	-9.4%	12.5%	21.8%	5.3%	-35.4%
Gross profit	48.3%	-1.1%	-19.9%	-23.2%	-9.0%	23.8%	12.3%	17.4%	17.1%	6.4%	5.4%	-32.5%	41.5%	61.9%	15.5%	-15.6%
Operating profit	1231.9%	-54.7%	-130.5%	602.3%	159.7%	-275.2%	210.1%	-57.3%	135.0%	36.6%	248.9%	-5.6%	-48.5%	291.4%	-16.8%	11.2%
Net profit	-38.4%	75.6%	-48.5%	-0.1%	-53.7%	51.1%	521.0%	-22.9%	-27.7%	115.0%	85.7%	0.3%	-38.3%	333.5%	-53.3%	-36.9%
Margin (yoy % pts)																
Gross profit	-1.3%	-1.4%	-2.5%	-1.8%	-8.2%	-5.3%	0.3%	6.7%	7.6%	7.4%	3.4%	-5.7%	-3.2%	3.6%	8.9%	17.0%
Operating profit	-4.7%	-0.7%	-3.6%	-5.6%	-1.4%	-7.6%	6.5%	7.6%	1.6%	12.3%	15.1%	19.3%	4.7%	25.1%	4.4%	16.2%
Net profit	-5.3%	1.0%	-0.2%	-2.7%	-1.7%	-3.4%	11.0%	7.2%	5.3%	12.4%	9.6%	15.6%	7.3%	36.5%	-1.0%	7.6%
Margin (qoq % pts)																
Gross profit	7.6%	-2.0%	-3.9%	-3.5%	1.2%	0.9%	1.7%	3.0%	2.1%	0.7%	-2.3%	-6.2%	4.6%	7.5%	2.9%	8.2%
Operating profit	4.7%	-2.9%	-2.8%	-4.5%	8.9%	-9.1%	11.2%	-3.4%	2.8%	1.7%	14.0%	0.9%	-11.8%	22.0%	-6.7%	15.9%
Net profit	-2.5%	2.3%	-2.7%	0.2%	-1.5%	0.5%	11.8%	-3.5%	-3.5%	7.6%	9.0%	2.5%	-11.8%	36.8%	-28.5%	-0.8%

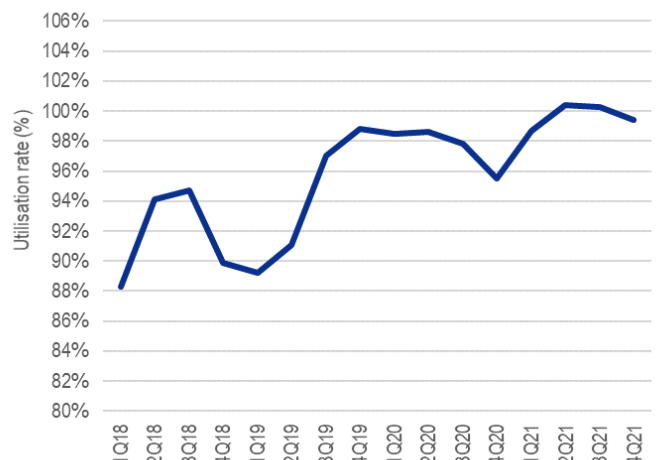
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 4: Total wafer shipments (1Q18 to 4Q21)



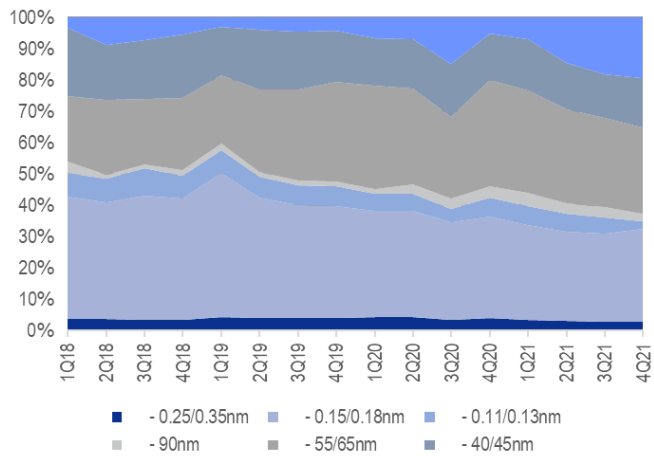
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 5: Utilisation rate (1Q18 to 4Q21)



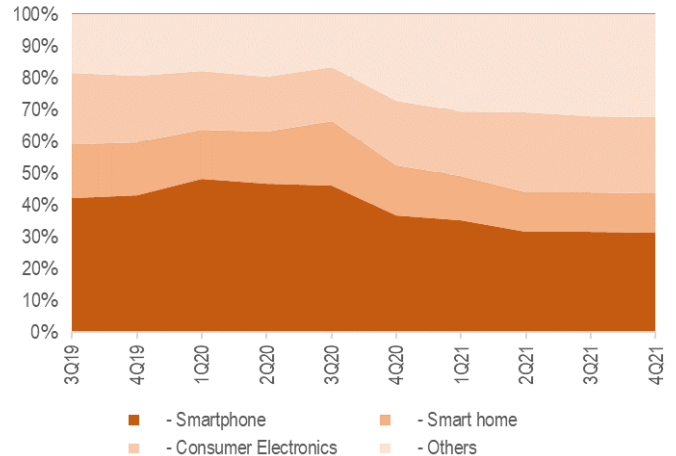
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 6: Revenue breakdown by node (1Q18 to 4Q21)



SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 7: Revenue breakdown by application (3Q19 to 4Q21)


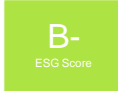
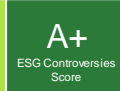
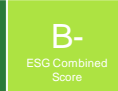





SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 8: Earnings revisions

FYE Dec 31 (US\$ m)	Dec-21A	Dec-22F			Dec-23F			Dec-24F		
		Old	New	% chg	Old	New	% chg	Old	New	% chg
Revenue	5,443	6,294	7,325	16.4%	6,548	9,089	38.8%	-	9,492	-
Gross profit	1,676	1,731	2,476	43.0%	1,702	2,681	57.5%	-	2,658	-
Gross profit margin	30.8%	27.5%	33.8%	6.3% pts	26.0%	29.5%	3.5% pts	-	28.0%	-
EBITDA	3,365	3,419	4,082	19.4%	3,370	4,366	29.5%	-	4,329	-
Net profit	1,701	1,146	1,734	51.3%	1,027	1,759	71.3%	-	1,681	-
Core net profit	1,470	1,146	1,734	51.3%	1,027	1,759	71.3%	-	1,681	-
EPS (US\$)	0.215	0.145	0.219	50.9%	0.130	0.223	70.9%	-	0.213	-
Core EPS (US\$)	0.186	0.145	0.219	50.9%	0.130	0.223	70.9%	-	0.213	-

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

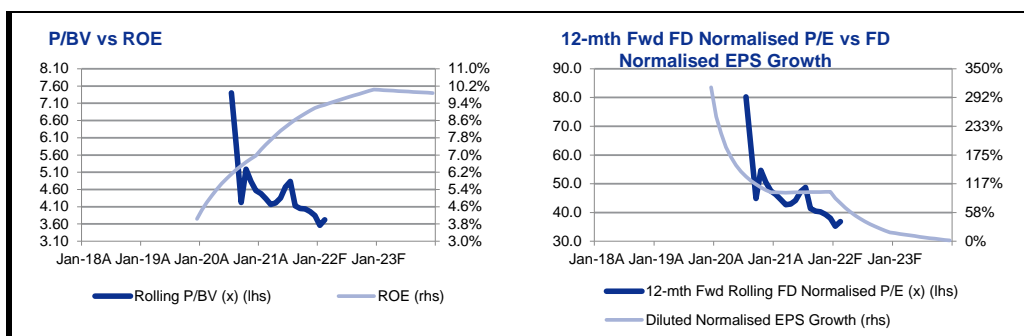
Refinitiv ESG Scores	
	
     	
<h2>ESG in a nutshell</h2> <p>SMIC has released its Corporate Social Responsibility report for 12 years in a row. SMIC complies with strict legal requirements for corporate governance, financial accounting, and transparent reporting.</p> <p>In 2020, the company incorporated several of the requirements of the UNSDGs and China's National Plan for Implementing the 2030 Agenda for Sustainable Development into CSR management. SMIC has selected 14 of the 17 UNSDGs and implemented relevant measures.</p> <p>In our view, SMIC is not involved in any environmentally-detrimental industry practices and takes the effort to minimise the environmental impact of its operations.</p>	
<h3>Keep your eye on</h3> <p>We believe SMIC's processes are ethical, safe, environmentally sound and fair to its employees, in accordance with the laws, rules, and regulations of the countries it operates in.</p>	<h3>Implications</h3> <p>SMIC has established a CSR Committee to promote CSR management projects and to achieve its goals. The chairman of the committee is appointed by the management. All functional departments have representatives in the committee to jointly carry out CSR work. The CSR Committee holds monthly work meetings to review social responsibility-related topics and regularly reports to the management on the progress of CSR work.</p>
<h3>ESG highlights</h3> <p>SMIC recognises the importance of business development and value creation and cares for environmental protection and the efficient use of resources and energy. In our view, the company continually improves its processes to fulfil its responsibilities in environmental protection and sustainable development.</p>	<h3>Implications</h3> <p>SMIC has set up Environment, Safety and Hygiene Departments and established an environmental protection management system and an ISO 14001 Environmental Management System. The company has formulated environmental protection, safety and health policies with reference to the ISO 14001 Environmental Management System.</p> <p>SMIC has systematically integrated environmental management practices into its overall production and operations in aspects such as organisational structure, document control, operation control and supervision management and aims for continuous improvement in its planning, implementing, and operating of environmental management projects.</p>
<h3>Trends</h3> <p>In FY20, the company's energy and water consumption increased. The company's total domestic waste produced also increased in FY20.</p>	<h3>Implications</h3> <p>SMIC's total energy consumption intensity was 74.8 (kWh/8-inch equivalent wafer mask layer) in FY20, higher by 4% yoy.</p> <p>Water consumption increased 12% yoy to 71.6 (liter/8-inch equivalent wafer mask layer) in FY20. Wastewater discharge rose 34% yoy to 1,317 (ten thousand tonnes).</p> <p>SMIC's total exhaust gas emissions were 6,2266,287 (ten thousand square meter) in FY20.</p> <p>Total hazardous waste produced was 2,102 tonnes in FY20, up by 53% yoy. Hazardous waste generated per unit product (8-inch equivalent wafer mask layer) climbed 12% yoy in FY20.</p> <p>Total domestic waste produced was 28,706 tonnes in FY20, increased by 31% yoy. Non-hazardous waste generated per unit product (8-inch equivalent wafer mask layer) decreased by 23% yoy in FY20.</p>

SOURCES: CGS-CIMB RESEARCH, REFINITIV

Figure 9: Peers comparison

Company	Bloomberg		Price (local curr)	Target Price (local curr)	Market Cap (US\$ m)	P/E(x)		3-year EPS CAGR (%)		P/BV (x)		Recurring ROE (%)		EV/EBITDA (x)		Dividend Yield (%)	
	Ticker	Recom.				CY21F	CY22F	CY23F	CY22F	CY21F	CY22F	CY21F	CY22F	CY21F	CY22F	CY21F	CY22F
Foundry - China peers																	
Hua Hong Semiconductor	1347 HK	Not Rated	38.80	NA	6,470	32.5	23.3	20.7	52.1%	2.0	1.8	9.1%	9.3%	9.8	8.8	0.5%	0.7%
SMC	981 HK	Add	20.55	27.30	31,433	14.1	12.0	11.8	24.9%	1.2	1.2	9.2%	10.0%	7.8	6.5	0.0%	0.0%
Average						23.3	17.7	16.3	38.5%	1.6	1.5	9.2%	9.7%	8.8	7.7	0.3%	0.4%
Foundry - International peers																	
TSMC	2330 TT	Not Rated	633.00	NA	588,714	27.7	20.8	17.9	21.4%	6.1	5.0	32.1%	30.8%	11.8	9.7	2.0%	2.0%
UMC	2303 TT	Not Rated	53.50	NA	23,954	12.0	9.2	9.7	42.2%	2.1	2.0	24.0%	20.4%	5.0	5.2	6.6%	6.5%
Vanguard	5347 TT	Not Rated	127.00	NA	7,466	17.8	12.9	13.3	34.8%	4.8	4.2	40.0%	31.0%	8.3	7.8	4.5%	5.1%
Win Semiconductors	3105 TT	Not Rated	22.12	NA	3,371	23.8	17.3	14.5	14.3%	2.8	2.3	13.2%	11.4%	14.6	11.7	0.6%	0.9%
DB HiTek	000990 KS	Add	66.700	73,000	2,477	11.4	9.1	8.0	n.a.	2.9	2.3	28.7%	27.9%	5.2	4.0	0.9%	1.4%
Samsung	005930 KS	Add	73,700	106,000	367,987	13.8	10.7	n.a.	n.a.	1.6	1.5	12.5%	14.4%	5.1	3.9	2.6%	2.9%
Intel	INTC US	Not Rated	47.58	NA	193,746	9.0	13.8	13.0	-10.5%	1.8	1.8	14.7%	15.4%	6.4	6.6	3.0%	3.1%
Tower Semiconductor	TSEM US	Not Rated	33.13	NA	3,607	21.7	15.4	11.7	n.a.	2.0	1.7	N/A	N/A	N/A	N/A	0.0%	0.0%
Average						17.2	13.6	12.6	20.4%	3.0	2.6	23.6%	21.6%	8.1	7.0	2.5%	2.7%
Global IC design companies (fabless)																	
MediaTek	2454 TT	Not Rated	1,100.00	NA	63,080	16.3	13.6	12.4	51.7%	3.8	3.6	29.5%	29.9%	10.3	9.5	6.8%	7.5%
Infineon	IFX GR	Not Rated	32.84	NA	48,650	29.3	19.4	17.7	45.3%	3.3	2.9	16.7%	16.4%	10.9	9.7	1.0%	1.2%
NVIDIA	NVDA US	Not Rated	242.67	NA	606,675	99.9	55.8	46.2	56.6%	22.9	16.4	47.7%	39.9%	47.8	38.3	0.1%	0.2%
Qualcomm	QCOM US	Not Rated	165.13	NA	186,102	20.0	14.3	13.3	45.8%	11.4	7.7	93.0%	63.3%	11.1	9.9	1.7%	1.8%
Average						41.4	25.8	22.4	49.9%	10.4	7.6	46.7%	37.4%	20.0	16.9	2.4%	2.6%
China IC design companies (fabless)																	
China Res Micro	688396 CH	Not Rated	57.10	NA	11,872	33.7	30.0	26.1	44.6%	4.3	3.7	15.4%	14.7%	19.8	17.0	0.4%	0.4%
GigaDevice	603986 CH	Not Rated	145.31	NA	15,276	42.9	34.4	27.4	55.4%	6.3	5.3	19.6%	20.1%	28.6	22.6	0.8%	1.0%
Maxscend	300782 CH	Not Rated	254.09	NA	13,349	40.3	30.9	23.9	n.a.	10.7	7.6	36.9%	32.8%	25.7	19.9	0.6%	0.7%
Montage	688008 CH	Not Rated	76.30	NA	13,614	105.1	67.2	45.8	n.a.	8.8	7.6	14.0%	16.9%	75.3	43.1	0.4%	0.7%
NavInfo	002405 CH	Not Rated	242.67	NA	606,675	99.9	55.8	46.2	56.6%	22.9	16.4	47.7%	39.9%	47.8	38.3	0.1%	0.2%
Shenzhen Goodix Technology	603160 CH	Reduce	92.11	92.00	6,644	42.4	34.1	29.3	n.a.	4.6	4.0	11.4%	12.5%	57.6	36.9	0.3%	0.4%
SMIC-A	688981 CH	Add	51.47	71.50	31,314	43.3	36.9	36.4	24.9%	3.7	3.7	9.2%	10.0%	27.8	20.7	0.0%	0.0%
Will Semiconductor	603501 CH	Add	241.38	387.00	33,250	49.1	40.5	32.2	37.2%	13.1	10.4	30.9%	28.6%	35.8	29.2	0.2%	0.2%
Average						57.1	41.2	33.4	43.7%	9.3	7.3	23.1%	21.9%	39.8	28.5	0.3%	0.5%

SOURCES: CGS-CIMB RESEARCH, BLOOMBERG (PRICE AS AT 15 FEB 2022)

BY THE NUMBERS

Profit & Loss

(US\$m)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Net Revenues	3,907	5,443	7,325	9,089	9,492
Gross Profit	921	1,676	2,476	2,681	2,658
Operating EBITDA	1,251	2,603	3,562	3,886	3,849
Depreciation And Amortisation	(1,214)	(1,869)	(2,179)	(2,416)	(2,492)
Operating EBIT	37	734	1,384	1,471	1,357
Financial Income/(Expense)	98	113	67	40	63
Pretax Income/(Loss) from Assoc.	187	0	45	54	54
Non-Operating Income/(Expense)	415	762	520	480	480
Profit Before Tax (pre-EI)	738	1,609	2,016	2,045	1,954
Exceptional Items	132	231	0	0	0
Pre-tax Profit	870	1,840	2,016	2,045	1,954
Taxation	(68)	(65)	(202)	(204)	(195)
Exceptional Income - post-tax	0	0	0	0	0
Profit After Tax	801	1,775	1,814	1,840	1,759
Minority Interests	46	(73)	(80)	(82)	(78)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Preference Dividends (Australia)					
Net Profit	848	1,701	1,734	1,759	1,681
Normalised Net Profit	669	1,544	1,814	1,840	1,759
Fully Diluted Normalised Profit	716	1,470	1,734	1,759	1,681

Cash Flow

(US\$m)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
EBITDA	1,251	2,603	3,562	3,886	3,849
Cash Flow from Inv. & Assoc.					
Change In Working Capital	(18)	(453)	(237)	(130)	(18)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	381	881	453	440	417
Other Operating Cashflow					
Net Interest (Paid)/Received	98	113	67	40	63
Tax Paid	(51)	(65)	(202)	(204)	(195)
Cashflow From Operations	1,660	3,078	3,643	4,031	4,115
Capex	(5,275)	(4,500)	(5,000)	(3,000)	(3,000)
Disposals Of FAs/subsidiaries	55	0	0	0	0
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(1,852)	223	185	156	180
Cash Flow From Investing	(7,071)	(4,277)	(4,815)	(2,844)	(2,820)
Debt Raised/(repaid)	2,914	(465)	232	(116)	58
Proceeds From Issue Of Shares	7,514	25	23	23	23
Shares Repurchased	0	0	0	0	0
Dividends Paid	(8)	0	0	0	0
Preferred Dividends					
Other Financing Cashflow	2,285	(110)	(118)	(116)	(117)
Cash Flow From Financing	12,704	(550)	138	(209)	(36)
Total Cash Generated	7,293	(1,749)	(1,034)	978	1,260
Free Cashflow To Equity	(2,497)	(1,664)	(939)	1,071	1,354
Free Cashflow To Firm	(5,338)	(1,089)	(1,054)	1,304	1,412

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd

Balance Sheet

(US\$m)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Cash And Equivalents	2,923	3,948	3,948	3,948	3,948
Total Debtors	976	1,215	1,636	2,030	2,120
Inventories	799	1,194	1,537	2,030	2,166
Total Other Current Assets	10,474	8,861	7,514	8,649	9,830
Total Current Assets	15,171	15,218	14,634	16,656	18,063
Fixed Assets	12,629	14,815	17,636	18,220	18,728
Total Investments	1,441	1,859	1,859	1,859	1,859
Intangible Assets	82	68	68	68	68
Total Other Non-Current Assets	1,997	4,152	4,152	4,152	4,152
Total Non-current Assets	16,149	20,893	23,714	24,299	24,807
Short-term Debt	1,355	890	1,123	1,006	1,064
Current Portion of Long-Term Debt					
Total Creditors	1,649	1,830	2,356	3,113	3,320
Other Current Liabilities	889	1,733	1,732	1,785	1,786
Total Current Liabilities	3,893	4,454	5,211	5,905	6,171
Total Long-term Debt	4,031	4,938	5,332	5,488	5,410
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	1,715	1,249	1,250	1,251	1,252
Total Non-current Liabilities	5,746	6,187	6,582	6,740	6,662
Total Provisions	0	32	43	54	56
Total Liabilities	9,639	10,673	11,836	12,698	12,889
Shareholders' Equity	14,875	17,150	17,395	18,228	18,949
Minority Interests	6,807	8,288	9,117	10,029	11,032
Total Equity	21,682	25,438	26,512	28,257	29,981

Key Ratios

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue Growth	25.4%	39.3%	34.6%	24.1%	4.4%
Operating EBITDA Growth	76%	108%	37%	9%	(1%)
Operating EBITDA Margin	32.0%	47.8%	48.6%	42.8%	40.5%
Net Cash Per Share (US\$)	(0.32)	(0.24)	(0.32)	(0.32)	(0.32)
BVPS (US\$)	1.93	2.17	2.20	2.31	2.40
Gross Interest Cover	0.51	6.66	11.76	12.66	11.61
Effective Tax Rate	7.9%	3.5%	10.0%	10.0%	10.0%
Net Dividend Payout Ratio	NA	NA	NA	NA	NA
Accounts Receivables Days	84.88	73.47	71.04	73.60	79.99
Inventory Days	87.5	96.5	102.8	101.6	112.4
Accounts Payables Days	164.4	168.5	157.6	155.8	172.3
ROIC (%)	0.30%	2.90%	4.66%	4.65%	4.04%
ROCE (%)	1.02%	3.28%	4.88%	4.80%	4.31%
Return On Average Assets	2.43%	4.26%	4.71%	4.55%	4.06%

Key Drivers

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Wafer shipments ('000)	5,698.6	6,747.2	8,366.5	10,960.1	12,275.4
Utilisation rate (%)	97.6%	98.1%	96.3%	95.1%	95.1%
Revenue growth (yoy change %)	25.4%	39.3%	34.6%	24.1%	4.4%
Gross profit margin (%)	23.6%	30.8%	33.8%	29.5%	28.0%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

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Score Range:	90 - 100	80 – 89	70 - 79	Below 70	No Survey Result
Description:	Excellent	Very Good	Good	N/A	N/A

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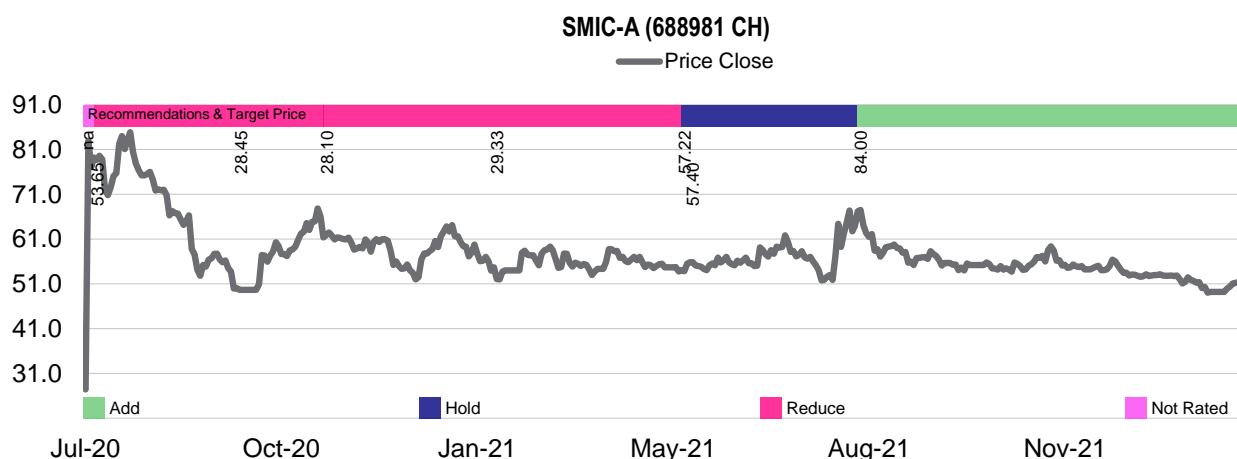
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Distribution of stock ratings and investment banking clients for quarter ended on 31 December 2021		
619 companies under coverage for quarter ended on 31 December 2021		
	Rating Distribution (%)	Investment Banking clients (%)
Add	71.1%	1.5%
Hold	21.8%	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, **GGC** – 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, **TIDLOR** – 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)

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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.
<i>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.</i>	
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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.
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