



# Semiconductor Manufacturing Int'l Corp.

## Focus on core business throughout transition period

### Investment Focus

#### Action

**We believe SMIC will enter a transition period in 2018 due to the faster than expected shift of the semiconductor industry's growth driver from smartphones to AI, auto and crypto currency.** We think SMIC's new strategy of focusing on leading edge progress migration is the right one to shorten the painful transition period due to technological disadvantages.

#### Reasoning

**Growth driver transition hurts SMIC's short-term profitability:** as we saw from TSMC's recent results announcement, we think the global semiconductor industry's growth driver is transitioning from smartphones to AI, crypto currency and auto. Regardless of structural growth opportunities in China, SMIC is not immune from this global trend, as most high computing chips use 14nm or above processes.

**Focus on core businesses through transition period:** SMIC revealed progress in technological developments, including: 1) 14nm process to start risk production in 1H19, six months ahead of schedule; 2) it licensed mature technologies to a third party company in China to monetize R&D assets; and, 3) CIS/NOR flash revenue increasing 30% YoY in 2017 (SMIC will continue to invest in these two platforms to support customers' product upgrades).

#### Earnings forecast and valuation

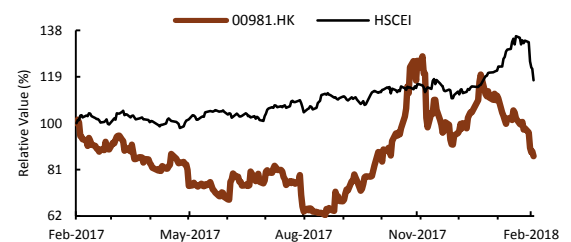
**We lower our 2018/19 revenue forecasts by 6%/9% and net profit by 29%/40% to reflect its weaker than expected revenue growth and rising R&D expenses for leading edge process developments. We thus cut our target price by 21.9% to HK\$12.50 (1.60x 2018e P/B) and maintain our BUY rating on its strong earnings recovery from 2019.**

#### Risks

Weaker than expected smartphone demand.

### Maintain BUY

Ticker	00981.HK
CICC investment rating	BUY
Last close	HK\$9.75
CICC target	HK\$12.50
52wk price range	HK\$14.76~6.91
Market cap (bn)	HK\$48
Daily value (mn)	HK\$497.39
Shares outstanding (mn)	4,918
Free float (%)	100
Daily volume (mn sh)	44.92
Business sector	Electronic Components



(US\$ mn)	2016A	2017A	2018E	2019E
Revenue	2,914	3,101	3,349	4,200
(+/-)	30.3%	6.4%	8.0%	25.4%
Net profit	377	180	136	254
(+/-)	48.6%	-52.3%	-24.5%	87.1%
EPS	0.07	0.03	0.03	0.05
BPS	0.82	1.01	1.00	1.05
DPS	0.00	0.00	0.00	0.00
CPS	0.19	0.22	0.21	0.22
P/E	16.9	35.8	49.2	26.3
P/B	1.5	1.2	1.2	1.2
EV/EBITDA	5.9	6.7	4.9	2.9
Dividend yield	0.0%	0.0%	0.0%	0.0%
ROAA	4.4%	1.6%	1.0%	1.5%
ROAE	9.6%	3.8%	2.6%	4.6%

Source: Wind, Bloomberg, company data, CICC Research

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## Financial summary

Financial statement (USD mn)	2016A	2017A	2018E	2019E	Financial ratios	2016A	2017A	2018E	2019E					
<b>Income statement</b>					<b>Growth ability</b>									
Revenue	2,914	3,101	3,349	4,200	Revenue	30.3%	6.4%	8.0%	25.4%					
COGS	-2,064	-2,360	-2,578	-3,150	Operating profit	52.8%	-63.2%	-33.9%	128.2%					
Selling expenses	-192	-234	-251	-312	EBITDA	19.0%	-2.7%	10.2%	17.0%					
Administrative expenses	0	0	0	0	Net profit	48.6%	-52.3%	-24.5%	87.1%					
Other ops income (expense)	0	45	48	48	<b>Profitability</b>									
Operating profit	339	125	83	188	Gross margin	29.2%	23.9%	23.0%	25.0%					
Finance costs	-12	9	4	28	Operating margin	11.6%	4.0%	2.5%	4.5%					
Other income (expense)	-18	-6	-10	-10	EBITDA margin	49.4%	45.1%	46.0%	43.0%					
Profit before income tax	310	128	77	207	Net margin	12.9%	5.8%	4.1%	6.0%					
Income tax	7	-2	-1	-3	<b>Liquidity</b>									
Minority interest	-60	-53	-60	-50	Current ratio	1.86	2.19	1.13	1.00					
Net profit	377	180	136	254	Quick ratio	1.63	1.86	1.03	0.90					
EBITDA	1,439	1,399	1,542	1,805	Cash ratio	1.07	0.96	0.68	0.67					
Recurrent net income	377	180	136	254	Liabilities / assets	46.6%	43.6%	55.6%	63.1%					
<b>Balance sheet</b>					Net debt / equity	16.6%	21.9%	net cash	net cash					
Cash and bank balances	2,126	1,838	3,587	5,946	<b>Return</b>									
Trade and bill receivables	673	651	779	1,014	RoA	4.4%	1.6%	1.0%	1.5%					
Inventories	464	623	564	886	RoE	9.6%	3.8%	2.6%	4.6%					
Other current assets	420	1,057	1,057	1,057	<b>Per-share data</b>									
Total current assets	3,684	4,169	5,988	8,903	EPS (USD)	0.07	0.03	0.03	0.05					
Fixed assets and CIP	5,685	6,523	8,003	8,923	BPS (USD)	0.82	1.01	1.00	1.05					
Intangible assets and others	747	1,226	1,446	1,446	DPS (USD)	0.00	0.00	0.00	0.00					
Total non-current assets	6,432	7,749	9,449	10,369	Cash flow per share (USD)	0.19	0.22	0.21	0.22					
Total assets	10,115	11,918	15,437	19,272	<b>Valuation</b>									
Short-term borrowings	687	441	124	155	P/E	16.9	35.8	49.2	26.3					
Trade and bill payables	781	1,050	1,068	1,348	P/B	1.5	1.2	1.2	1.2					
Other current liabilities	513	416	4,098	7,368	EV/EBITDA	5.9	6.7	4.9	2.9					
Total current liabilities	1,981	1,907	5,290	8,871	Dividend yield	0.0%	0.0%	0.0%	0.0%					
Long-term borrowings	2,338	2,872	2,872	2,872										
Total non-current liabilities	2,731	3,290	3,290	3,290										
Total liabilities	4,712	5,197	8,580	12,161										
Share capital	4,151	5,233	5,369	5,623										
Retained profit	0	0	0	0										
Equity	4,151	5,233	5,369	5,623										
Total liabilities & equity	10,115	11,918	15,437	19,272										
<b>Cash flow statement</b>														
Pretax profit	77	207	380	421										
Depreciation & amortization	1,117	1,280	1,469	1,626										
Change in working capital	-315	134	-52	-277										
Others	98	-485	-659	-588										
Cash flow from operations	977	1,135	1,138	1,182										
Capital expenditure	-2,843	-2,386	-1,948	-2,200										
Others	400	-331	0	0										
Cash flow from investing	-2,443	-2,717	-1,948	-2,200										
Equity financing	18	343	0	0										
Bank borrowings	1,766	634	2,559	3,376										
Others	831	294	0	0										
Cash flow from financing	2,615	1,272	2,559	3,376										
Foreign exchange gain (loss)	-28	22	0	0										
Net changes in cash	1,121	-288	1,749	2,359										

Source: Company data, CICC Research

## Company description

Semiconductor Manufacturing International Corporation (SMIC) is one of the leading semiconductor foundries in the world and the largest and most advanced foundry in mainland China. SMIC provides integrated circuit (IC) foundry and technology services at 0.35-micron to 28-nanometer. Headquartered in Shanghai, China, SMIC has a 300mm wafer fabrication facility (fab) and a 200mm mega-fab in Shanghai; a 300mm mega-fab in Beijing and a majority owned 300mm fab for advance nodes under development; and a 200mm fab in Tianjin and Shenzhen.



#### 4Q17 results review

For 4Q17, SMIC reported a 2.3% QoQ revenue increase but a 4.2ppt drop in GM, in line with its guidance and our forecasts.

Figure 1: Quarterly results

(US\$ mn)	1Q17	2Q17	3Q17	4Q17	1Q18E
	A	A	A	A	(Guidance)
<b>Capacity &amp; utilization</b>					
8-inch	226	229	233	229	
12-inch mature	68	70	68	66	
12-inch leading	19	23	28	29	
Total (8-inch k wafer/month)	422	438	448	443	
% chg QoQ	3.8%	3.9%	2.2%	-1.2%	
Utilisation	91.8%	85.7%	83.9%	85.8%	
<b>Turnover</b>					
	793	751	770	787	down 10.1-12.1%
% chg QoQ	-2.7%	-5.3%	2.5%	2.3%	
Wafer ASP	702	717	692	677	
% chg YoY	-2.4%	2.1%	-3.4%	-2.2%	
COGS	(572)	(557)	(592)	(639)	
Gross Profit	221	194	177	148	
Non-GAAP Operating Expenses	(165)	(187)	(184)	(195)	
Gov. Grants and others	21	14	30	49	
<b>EBITDA</b>					
	312	287	260	258	
% chg QoQ	13.9%	-8.2%	-9.3%	-0.7%	
<b>Operating Income</b>					
	77	22	23	3	
% chg QoQ	58%	-72%	5%	-86%	
Non-Operating Incomes	(12)	15	7	(6)	
<b>Pretax income</b>					
	65	36	30	(3)	
% chg QoQ	31.4%	-44.4%	-17.1%	-109.7%	
Taxes	(1)	(3)	1	1	
<b>Net income</b>					
	64	33	31	(2)	
% chg QoQ	10.6%	-48.1%	-8.2%	n.a.	
Non-controlling interests	6	3	(5)	49	
<b>Net income to shareholders</b>					
	70	36	26	48	
% chg QoQ	-32.9%	-48.0%	-28.6%	84.2%	
Capex	727	782	451	499	
Depreciation	(235)	(241)	(243)	(252)	
% chg QoQ	9.2%	2.4%	0.8%	3.6%	
<b>Ratios (%)</b>					
Gross margin	27.8%	25.8%	23.0%	18.9%	10-12%
EBITDA margin	39.4%	38.2%	33.8%	32.8%	
OPM	9.8%	2.9%	2.9%	0.4%	
Pretax income	8.2%	4.8%	3.9%	-0.4%	
Net Income margin	8.8%	4.8%	3.4%	6.1%	
ROE	6.3%	6.9%	5.0%	3.6%	
BVPS (US\$)	1.00	1.00	1.01	1.02	

Source: Company data, CICC Research

#### Major positives

- **Faster than expected process migration.** During its conference call, SMIC management highlighted that it will focus more on process migration, and expects 28nm HKC+ to enter mass production in 1H18 (in line with its original guidance), and 14nm process to enter risk production in 1H19 (originally guided for 2H19).



### Major negative factors

- ▶ **ASP declined 2.2% QoQ in 4Q17 regardless of product mix improvement.** Revenue mix of 28nm process increased from 8.8% in 3Q17 to 11.3% in 4Q17. We think this reflects the rising competition in both 12-inch mature nodes from domestic players (e.g. Huali) and 12-inch advanced nodes from TSMC.
- ▶ For 1Q18 guidance, SMIC guides 7–9% QoQ revenue growth including recognizing US\$150mn of one-time technology licensing revenue. This implies **1Q18 wafer revenue will decline by 10.1%–12.1% QoQ, weaker than its major peers, TSMC and UMC.** We think this reflects SMIC has higher revenue mix from Chinese smartphone customers.
- ▶ SMIC guides GPM including license revenue to increase to 25–27%. This implies **1Q18 GPM (excluding licensing revenue) will decline to 10–12% in 1Q18.**
- ▶ **2018 revenue growth guidance is weaker than expected:** the company guides high single digit revenue growth, including a US\$150mn one-time technology license fee. This implies low single digit revenue growth in 2018, lower than our original expectation of 15% YoY revenue growth.

Figure 2: Quarterly performance vs. TSMC and UMC

	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18
	A	A	A	A	A	A	A	A	(Guidance)
<b>Revenue QoQ growth</b>									
TSMC	0.0%	9.0%	17.4%	0.7%	-10.8%	-8.6%	17.9%	10.1%	down 8.7%
UMC	1.6%	7.5%	3.2%	0.4%	-2.3%	0.3%	0.4%	-2.8%	flat
SMIC	4.0%	8.8%	12.3%	5.2%	-2.7%	-5.3%	2.5%	2.3%	down 10.1-12.1%
<b>GPM</b>									
TSMC	44.9%	51.5%	51.5%	51.5%	51.9%	50.8%	49.9%	50.0%	49.5-51.5%
UMC	14.6%	22.4%	21.8%	22.9%	19.9%	18.0%	17.5%	17.2%	low teens range
SMIC	24.2%	31.6%	30.0%	30.2%	27.8%	25.8%	23.0%	18.9%	10.0-12.0%
<b>Utilization rate</b>									
TSMC	87.0%	93.0%	NA	NA	NA	NA	NA	NA	NA
UMC	82.0%	89.0%	88.0%	~90%	96.0%	96.0%	96.0%	90.0%	~90.0% range
SMIC	98.4%	97.9%	97.2%	96.5%	91.8%	85.7%	83.9%	85.8%	NA

Note: SMIC guidance excludes one-time license fee of US\$150mn. Source: company data, CICC Research

### 14/28nm process: better outlook on product map while limited profitability within near-term

The 28nm segment reported 31.3% sequential revenue growth and represented 11.3% of total sales in 4Q17. In 2017, the 28nm segment contributed 7.9% of total sales. We expect the overall 28nm segment revenue to increase 46.0% to US\$359mn in 2018, representing 10.7% of total sales. Management plans to launch HKC+ in 1H18.

We believe SMIC's Co-CEO, Dr. Liang Mong Song will focus on 14nm FinFET development and SMIC would roll out risk production for 14nm in 1H19, six months ahead of its original schedule. Recently, SMIC announced it would receive cash contribution injection (total amount up to US\$1.7bn) from China IC Fund and Shanghai IC Fund, to accelerate 14nm development. This newly built up JV called SMIC South (SMSC) will mainly concentrate on developing 14/10/7nm process and roll out mass production in 2019. During the analyst meeting, management states they have already set R&D facilities for roughly 3.5kwpm at the initial stage. R&D capacity will rise further to 6kwpm/9kwpm at phase two/three.



Figure 3: Revenue and capacity of leading nodes

Leading nodes (14/28nm)	1Q17	2Q17	3Q17	4Q17	1Q18E	2017A	2018E	2019E	2020E
Capacity	19	23	28	29	29	29	45	69	99
% chg QoQ	5.6%	21.1%	19.6%	5.5%	0.0%	61.1%	55.2%	53.3%	43.5%
Revenue	40	50	68	89	40	246	359	901	1,228
% chg QoQ	39.0%	25.0%	36.6%	31.3%	-55.3%	434.1%	46.0%	150.9%	36.3%
% of total revenue	5.0%	6.6%	8.8%	11.3%	4.7%	7.9%	10.7%	21.5%	23.9%

Source: company data, CICC Research

Figure 4: SMIC 12" fab overview

Company Name	Location	Application	Wafer size (inch)	Fab Name	Process node	Capacity (k wafer/mon)					CAPEX USDbn
						2016	2017	2018E	2019E	2020E	
SMIC	Beijing	Logic	12	B1	AI/130-90/65/55nm	43	46	46	46	46	0.0%
SMIC (Majority-Owned)	Beijing	Logic	12	B2	65/40/28/24nm	18	29	39	39	39	34.5%
SMIC	Shanghai	Logic	12	S2	40/28nm	20	17	17	17	17	0.0%
SMIC (50.1%, China IC Fund 27.04%, Shanghai IC Fund 22.86%)	Shanghai	Logic	12	SMSC	14/10/7nm				10	25	n.a.
SMIC	Beijing	Qualcomm chips	12	B3				6	20	35	n.a.
SMIC	Shenzhen	Logic, CIS, PMIC...	12	SZ			3	5	15	35	66.7%
<b>Total</b>						<b>81</b>	<b>95</b>	<b>113</b>	<b>147</b>	<b>197</b>	<b>18.9%</b>

Source: company data, CICC Research; Note: Items shaded in grey are under construction.

Figure 5: Product roadmap

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TSMC	28nm PolySiON	3Q11								
	28nm HKMG	1Q12								
	20nm Planar			2Q14						
	16nm FinFET				4Q15					
	10nm FinFET						1Q17			
	7nm FinFET								1Q19	
Samsung	28nm PolySiON		4Q12							
	28nm HKMG		2Q13							
	22nm FD-SOI				2Q15					
	20nm Planar			2Q14						
	14nm FinFET				1Q15					
	10nm FinFET						1Q17			
7nm FinFET								1Q19		
GF	28nm PolySiON		2Q13							
	22nm FD-SOI			1Q14						
	20nm Planar				4Q14					
	14nm FinFET				1Q15					
	10nm FinFET						3Q17			
	7nm FinFET								3Q19	
Intel	22nm Planar	4Q11								
	14nm FinFET			2Q14						
	10nm FinFET						1Q17			
	7nm FinFET								1Q19	
SMIC	28nm PolySiON				2Q15					
	28nm HKMG							3Q18		
	20nm Planar							3Q18		
	14nm FinFET								1H19	
	7nm FinFET									2020

Source: company data, CICC Research



Figure 6: SMIC's current major focus on new technology platforms

	CIS-BSI	BCD	High-Voltage	Mixed-signal/RF	Logic	Embd Flash	Embd EEPROM	NOR/NAND-Flash	MEMS	TSV
0.35um		✓	✓	✓	✓		✓			
0.25um				✓	✓					
0.18um	✓	✓	✓	✓	✓	✓	✓		●	✓
0.15/0.153um	✓	●			✓					
0.13um	✓	●	●	✓	✓	✓	✓		✓	●
0.11um	●			✓	✓					
95nm					●					
90nm				✓	✓			✓		
65nm	●			✓	✓			✓		
55nm				✓	✓	✓				
40/45nm				✓	✓			✓		
38nm								✓		
28nm				●	●			●		
22nm										
14nm					●					

Source: company data, CICC Research; Note: 1) tick indicates in production; dot indicates major focus or in early production

### 12" mature node process: to provide with differentiated product platforms

**Mature nodes (40-90nm) had flat QoQ growth in 4Q17, mainly due to: 1) inventory correction; and, 2) product migration to leading nodes.** SMIC has carried out a solid plan to fill up its idle capacity with specialty memory (Nor Flash and Nand Flash for specialty usage), CIS and PMU. During the analyst meeting, management stated that Nor Flash and CIS generated revenue growth of +30% in 2017. After the 28nm HKC+ platform enters mass production in 1H18, SMIC will migrate some products from the 40/45nm process to the leading nodes platform.

However, since there is fierce competition among mature node foundry players, we believe the company will also confront violent cannibalization in ASP and margins. We predict revenue will drop by 8.9% YoY to US\$1.2bn in 2018, representing 36.1% of total revenue.

Figure 7: Revenue and capacity in mature nodes (40-90nm)

Mature nodes (40-90nm)	1Q17	2Q17	3Q17	4Q17	1Q18E	2017A	2018E	2019E	2020E
Capacity	68	70	68	66	63	66	68	78	98
% chg QoQ	7.9%	2.9%	-2.9%	-2.9%	-4.5%	4.8%	3.0%	14.7%	25.6%
Revenue	343	331	325	326	268	1,325	1,208	1,475	1,946
% chg QoQ	-6.3%	-3.5%	-1.9%	0.3%	-17.8%	0.5%	-8.9%	22.1%	31.9%
% of total revenue	43.3%	44.1%	42.2%	41.4%	31.4%	42.7%	36.1%	35.1%	37.8%

Source: company data, CICC Research

### 8" process: continuous stable growth from 2018

Revenue generated from 8" fabs slightly declined by 1.3% in 4Q17 but remained the largest sales contributor, as it has been for the past two years. We believe this segment will continue to enjoy stable annual growth in 2018.

Figure 8: Revenue and capacity in 8-inch fab (0.11um+)

8-inch (0.11um+)	1Q17	2Q17	3Q17	4Q17	1Q18E	2017A	2018E	2019E	2020E
Capacity	226	229	233	229	273	229	273	296	320
% chg QoQ	0.9%	1.3%	1.8%	-1.7%	19.0%	2.2%	19.0%	8.6%	7.9%
Revenue	410	370	377	372	396	1,530	1,632	1,824	1,969
% chg QoQ	-2.3%	-9.7%	1.8%	-1.3%	6.5%	-1.2%	6.7%	11.7%	7.9%
% of total revenue	51.7%	49.3%	49.0%	47.3%	46.4%	49.3%	48.7%	43.4%	38.3%

Source: company data, CICC Research



**Earnings forecast and target price revision**

**We lower our 2018/19 revenue forecasts by 6.3%/9.4% to reflect the weaker than expected demand of both 12-inch leading and mature processes.** We think this reflects the impacts of weaker than expected smartphone demand globally as well as loss of orders from major customers due to product migration.

**We lower our 2018/19 depreciation forecast by 7%/11% to reflect CAPEX decline in 2018; we also cut our net profit forecasts by 29%/40% respectively to reflect weaker than expected revenue growth and rising R&D expenses.**

Figure 9: Forecast revision

(US\$ mn)	2016A (CICC)	2017A (CICC)	2018E (CICC)	2019E (CICC)	2020E (CICC)	2018E (OLD)	2019E (OLD)	2018E Diff.	2019E Diff.
<b>Capacity &amp; utilisation</b>									
8-inch	224	229	273	296	320	284	309	-4%	-4%
12-inch mature	63	66	68	78	98	73	83	-7%	-6%
12-inch leading	18	29	45	69	99	41	65	10%	6%
Total (8-inch k wafer/mon)	406	443	527	627	763	541	641	-3%	-2%
% chg QoQ	43%	9%	19%	19%	22%	22%	18%		
Utilisation	96%	85%	76%	80%	78%				
Turnover	2,914	3,101	3,349	4,200	5,143	3,573	4,635	-6.3%	-9.4%
% chg QoQ	30%	6%	8%	25%	22%	15%	30%		
Wafer ASP	708.5	704.9	680.2	683.2	703.0	671.6	711.6	1%	-4%
% chg YoY	0.1%	-0.5%	-3.5%	0.4%	2.9%	-4.7%	6.0%		
COGS	(2,064)	(2,360)	(2,578)	(3,150)	(3,806)				
Gross Profit	850	741	771	1,050	1,337	857	1,159	-10.0%	-9.4%
Non-GAAP Operating Expenses	(517)	(730)	(833)	(1,056)	(1,200)				
Gov. Grants and others	7	114	144	194	194				
EBITDA	1,063	1,117	1,190	1,459	1,791	1,307	1,823	-8.9%	-20.0%
% chg QoQ	39%	5%	6%	23%	23%	17%	39%		
Operating Income	339	125	83	188	332	119	404	-30.6%	-53.3%
% chg QoQ	53%	-63%	-34%	128%	76%				
Non-Operating Incomes	(29)	3	(6)	18	48				
Pretax income	310	128	77	207	380				
% chg QoQ	34%	-59%	-40%	169%	84%				
Taxes	7	(2)	(1)	(3)	(5)				
Net income	316	126	76	204	374				
% chg QoQ	42%	-60%	-40%	169%	84%				
Non-controlling interests	60	53	60	50	30				
Net income to shareholder	377	180	136	254	404	192	426	-29.3%	-40.4%
% chg QoQ	49%	-52%	-24%	87%	59%	7%	122%		
Capex	2,695	2,458	1,948	2,200	2,000	2,300	2,200	-15%	0%
Depreciation	(730)	(971)	(1,117)	(1,280)	(1,469)	(1,201)	(1,432)	-7%	-11%
% chg QoQ	39%	33%	15%	15%	15%	24%	19%		
<b>Ratios (%)</b>									
Gross margin	29.2%	23.9%	23.0%	25.0%	26.0%	24.0%	25.0%	-1.0%	0.0%
EBITDA margin	36.5%	36.0%	35.5%	34.7%	34.8%				
OPM	11.6%	4.0%	2.5%	4.5%	6.4%				
Pretax income	10.6%	4.1%	2.3%	4.9%	7.4%				
Net Income margin	12.9%	5.8%	4.1%	6.0%	7.9%	5.4%	9.2%	-1.3%	-3.2%
ROE	9.6%	3.8%	2.6%	4.6%	6.9%				
BVPS (US\$)	0.82	1.01	1.00	1.05	1.13				

Source: company data, CICC Research



Figure 10: Forecast revision – segments

(US\$ mn)	1Q17	2Q17	3Q17	4Q17	1Q18E	2017A (CICC)	2018E (CICC)	2019E (CICC)	2020E (CICC)
	A	A	A	A					
Turnover	793	751	770	787	854	3,101	3,349	4,200	5,143
<b>By Process</b>									
12-inch leading (14/28nm)	40	50	68	89	40	246	359	901	1,228
12-inch mature (40-90nm)	343	331	325	326	268	1,325	1,208	1,475	1,946
8-inch (0.11um+)	410	370	377	372	396	1,530	1,632	1,824	1,969
% chg QoQ									
12-inch leading (14/28nm)	39.0%	25.0%	36.6%	31.3%	-55.3%	434%	46%	151%	36%
12-inch mature (40-90nm)	-6.3%	-3.5%	-1.9%	0.3%	-17.8%	0%	-9%	22%	32%
8-inch (0.11um+)	-2.3%	-9.7%	1.8%	-1.3%	6.5%	-1%	7%	12%	8%
Revenue mix									
12-inch leading (14/28nm)	5.0%	6.6%	8.8%	11.3%	4.7%	7.9%	10.7%	21.5%	23.9%
12-inch mature (40-90nm)	43.3%	44.1%	42.2%	41.4%	31.4%	42.7%	36.1%	35.1%	37.8%
8-inch (0.11um+)	51.7%	49.3%	49.0%	47.3%	46.4%	49.3%	48.7%	43.4%	38.3%

Source: company data, CICC Research

**Our 2018/19 revenue and net profit forecasts deviate from market consensus by -3.2%/+5.0% and +13.0%/+27.4% respectively** due to us being more upbeat on the revenue ramp-up from leading nodes.

Figure 11: CICC vs. Consensus

USD mn	4Q17				1Q18E				2018E			2019E		
	Actual	Consensus	Diff	Guidance	CICC	Consensus	Diff	Guidance	CICC	Consensus	Diff	CICC	Consensus	Diff
Revenue	787	827	-4.9%	777-793	854	821	4.0%	+7-9% QoQ	3,349	3,461	-3.2%	4,200	4,000	5.0%
GM	18.9%	24.4%	-5.6%	18-20%	26.8%	22.7%	4.1%	25-27%	23.0%	20.1%	2.9%	25.0%	21.1%	3.9%
Operating Profit	3	38	-91.5%		17	12	38.1%		83	61	34.9%	188	158	19.3%
Net Profit	48	42	14.5%		34	32	3.9%		136	120	13.0%	254	199	27.4%
EPS (USD)	0.009	0.008	15.6%		0.006	0.008	-21.4%		0.025	0.025	1.5%	0.047	0.093	-48.9%

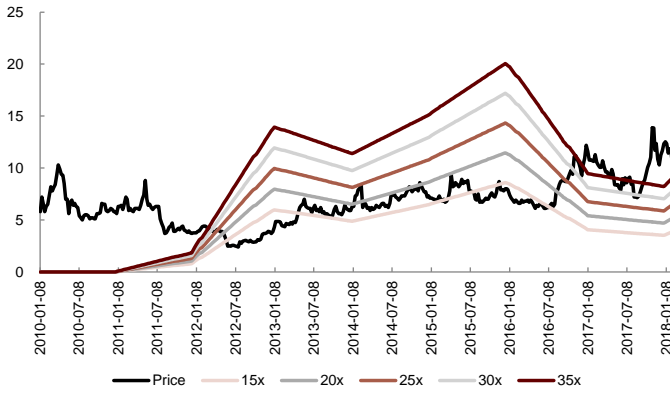
Source: company data, CICC Research

**We slightly lower P/B to 1.60x and cut our target price by 21.9% to HK\$12.50 based on 2018e BPS of US\$1.00.** We think SMIC's near-term revenue growth and business operations will remain weak, but we believe it will regain substantial momentum once its idle capacity in mature nodes are filled up and the profitability of leading nodes improve.



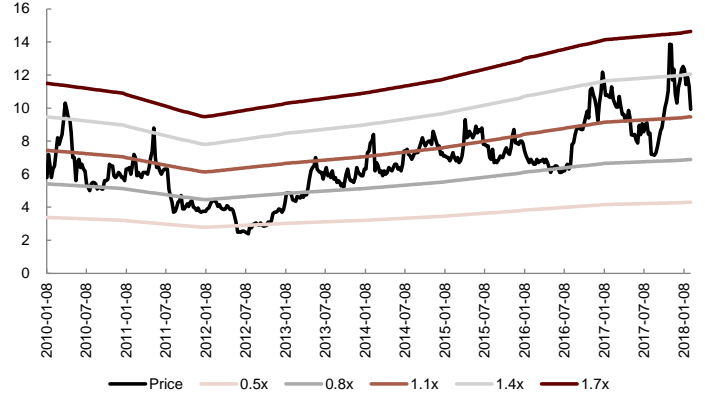


Figure 12: P/E band



Source: Wind, CICC Research

Figure 13: P/B band



Source: Wind, CICC Research

Figure 14: Valuations of comparable companies

WIND TICKER	Company	Price 9-Feb	M/Caps USD mn	P/E		P/B		ROE 2018E	EPS Growth 2018E	Price Change				
				2017A	2018E	2017A	2018E			1D	5D	1M	3M	YTD
2330.TW	TSMC	232.50	215,067	17.7	15.8	3.9	3.5	23.4	11.5%	-	-10	-1	-3	28
2303.TW	UMC	14.05	6,009	18.6	20.3	0.8	0.8	4.2	-4.6%	-	-3	0	-11	23
0981.HK	SMIC	9.75	6,132	35.8	49.2	1.2	1.2	2.6	-27.1%	-	-12	-22	-30	-20
5347.TWO	Vanguard International Semic	64.10	3,579	23.3	19.8	3.7	3.6	15.8	16.4%	-	-1	1	8	14
1347.HK	Hua Hong	13.08	1,739	12.1	13.2	1.0	1.0	8.4	-8.3%	-	-15	-22	-18	55
	Foundry-Average			21.5	23.7	2.1	2.0	10.9						
	Foundry-Median			18.6	19.8	1.2	1.2	8.4						

Source: Wind, Bloomberg, CICC Research; Note: companies shaded in grey are under CICC coverage; all other companies use consensus forecast data.



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V160908

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