

Semiconductor Manufacturing International Corp. (0981.HK / 981 HK)

Rating	NEUTRAL
Price (14 Nov 12, HK\$)	0.37
Target price (HK\$)	0.41 ¹
Upside/downside (%)	10.8
Mkt cap (HK\$ mn)	11,839 (US\$ 1,528)
Enterprise value (US\$ mn)	2,267
Number of shares (mn)	31,997.46
Free float (%)	66.0
52-week price range	0.45 - 0.24
ADTO - 6M (US\$ mn)	2.9

¹Stock ratings are relative to the coverage universe in each analyst's or each team's respective sector.

²Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

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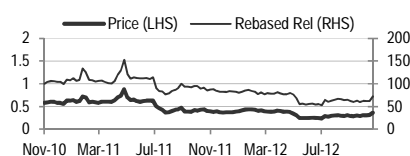
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COMPANY VISIT

A closer look at the turnaround effort

- Analyst day profiles management's strides in building a sustainable business:** We attended SMIC's analyst and investor day in Beijing on Monday, 12 November 2012 and visited its 300mm Beijing fab and met the senior management team. We came away with a more positive view on management's progress turning around operations and more clarity on its strategy to continue its push on the more advanced process nodes (40nm/28nm/20nm) while targeting specialty applications to avoid falling victim to commoditisation on the mature nodes.
- Strategy focused on the emerging Chinese IC design and US fabless multi-source business.** The company is establishing a more stable platform as a cost-effective source for emerging Chinese fabless companies and a more reliable source for US fabless adopting multiple foundries. SMIC is on pace to +25-30% YoY growth driven by Chinese fabless (35% of sales) supplying into low cost smartphones and tablets and a few large US customers, including 0.18 micron power management for mobile and 55/65nm handset and set-top ICs. SMIC is benefitting from Chinese fabless who are now starting 40nm for low-cost computing at disruptive prices.
- Catalysts:** Key events include (1) availability of CMOS MEMS process and customers in the coming months, (2) Ramp of Spreadtrum and RDA 40nm/55nm products, (3) 4Q12 results that top peers and (4) additional evidence of government support, which is driving fabless business to SMIC and now supporting a new 28nm fab in Beijing for risk production in 2014..
- Valuation:** Retain NEUTRAL rating and HK\$0.41 TP (0.7x BV), balancing improving growth and execution with structural challenges taking the current break-even model to one that can drive rising earnings and cash flows.

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 5959.02 on 14/11/12. On 14/11/12 the spot exchange rate was HK\$7.75/US\$1

Performance Over	1M	3M	12M
Absolute (%)	27.6	29.8	-7.5
Relative (%)	25.4	22.1	-11.6

Financial and valuation metrics

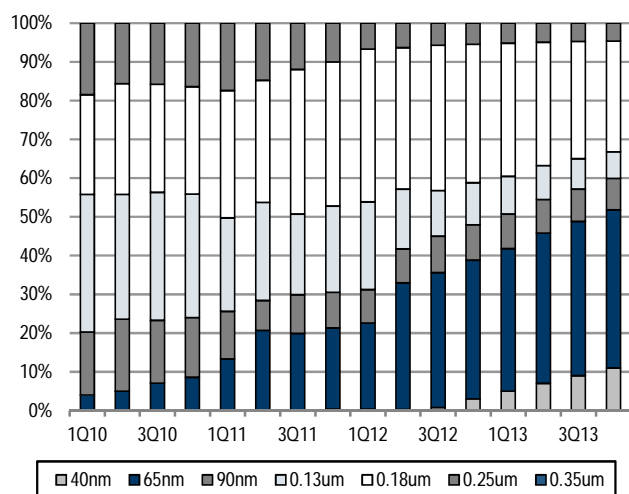
Year	12/11A	12/12E	12/13E	12/14E
Revenue (US\$ mn)	1,319.5	1,681.5	2,043.0	2,243.5
EBITDA (US\$ mn)	359.6	570.6	759.7	877.9
EBIT (US\$ mn)	-190.7	-3.6	151.7	180.6
Net profit (US\$ mn)	-245.9	-18.1	109.8	124.8
EPS (CS adj.) (US\$)	-0.01	-0.00	0.00	0.00
Change from previous EPS (%)	n.a.	n.m	0	0
Consensus EPS (US\$)	n.a.	-0.002	-0.002	0.001
EPS growth (%)	n.m.	n.m.	n.m.	13.7
P/E (x)	-5.3	-79.5	13.9	12.2
Dividend yield (%)	0	0	0	0
EV/EBITDA (x)	5.7	4.0	2.9	2.6
P/B (x)	0.58	0.64	0.65	0.62
ROE (%)	-11.1	-0.8	4.8	5.2
Net debt/equity (%)	23.6	33.1	29.0	29.3

Source: Company data, Thomson Reuters, Credit Suisse estimates.

DISCLOSURE APPENDIX CONTAINS ANALYST CERTIFICATIONS AND THE STATUS OF NON US ANALYSTS. US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

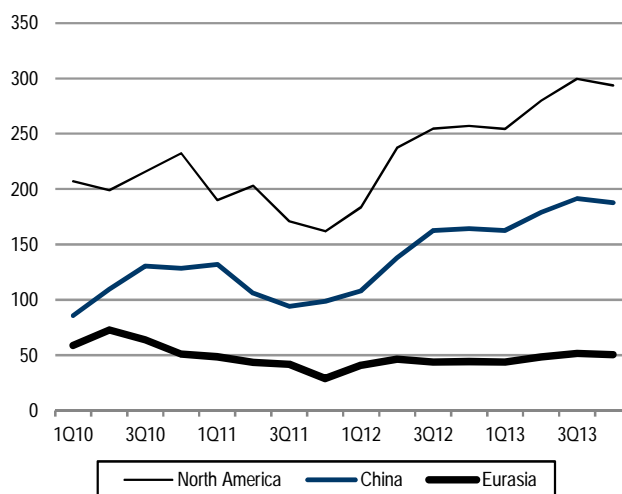
Focus charts and tables

Figure 1: 40/65 nm rising towards 50% of sales in 4Q13E



Source: Company data, Credit Suisse estimates

Figure 2: China fabless companies driving SMIC's growth



Source: Company data, Credit Suisse estimates

Figure 3: SMIC serving most of the major Chinese fabless semiconductor companies (Revenue in US\$ mn)

2010 rank	2011 rank	Companies	2010 revenue	2011 revenue	YoY growth	Major product	SMIC customer
1	1	Shenzhen HiSilicon Technologies	453	704	55%	Comm. ASIC	Yes
2	2	Spreadtrum Communications	346	674	95%	Wireless ASSP	Yes
3	3	RDA Microelectronics	191	289	51%	Wireless ASSP	Yes
4	4	GalaxyCore	124	185	49%	Image Sensor	Yes
5	5	Leadcore Technology	117	135	15%	Wireless ASSP	No
12	6	CEC Huada Electronic Design (HED)	74	128	73%	Smart card	Yes
7	7	Shanghai Huahong	101	114	13%	Smart card	No
9	8	Beijing Tongfang Microelectronics (TMC)	80	106	33%	Smart card	No
14	9	Fuzhou Rockchip Electronics	58	98	69%	Consumer ASSP	Yes
6	10	Nationz Technologies	102	88	-14%	Smart card	No
10	11	Shanghai Fudan Microelectronics Group	75	88	17%	Smart card	Yes
10	12	Datang Microelectronics Technology (DMT)	74	86	16%	Smart card	Yes
8	13	Vimicro	91	74	-19%	Compute ASSP	No
13	14	Shenzhen State Microelectronics	61	73	20%	ASIC	Yes
15	15	Actions Semiconductor	38	47	24%	Consumer ASSP	No
16	16	Ingenic Semiconductor	32	26	-19%	Consumer ASSP	No
Total			2,017	2,915	45%		

Source: Gartner

Figure 4: SMIC avoiding mature process commoditisation with specialty platforms

Specialty process	Process node focus	Key customers
CMOS Image Sensor (CIS)	130nm-180nm	GalaxyCore
NOR Flash	65nm-180nm	GigaDevice
Micro-controller Unit (MCU)	65nm-180nm	Various
Power MOSFET	180nm-300nm	Various
BCD Technology	180nm-350nm	Various
Power Management IC (PMIC)	130nm	Qualcomm
Smart Card IC	110nm-130nm	HED, Datang, Fudan

Source: Company data

SMIC analyst day: A closer look at the turnaround effort

We attended SMIC's analyst and investor day at its Beijing fab on Monday 12 November 2012. During the analyst day, we had the chance to tour SMIC's 300mm Beijing fab facility and meet with senior management team and industry guest speakers, including:

- SMIC CEO, Dr TY Chiu
- MIIT officer, Hong Bin, Peng
- China Semiconductor Industry Association, Xian, Chen
- SMIC Senior VP of Worldwide sales, Mike Rekuc
- SMIC VP of China Sales, John Peng
- Brite Semiconductor CEO, Dr Charlie Zhi
- SMIC Senior VP of Technology Development, Dr Shih-Wuu Lee
- SMIC Senior VP of Operations, Dr Haijun Zhao

New management driving operational improvement

SMIC's new management team led by CEO Dr. T.Y. Chiu has re-engineered the company strategy to better utilise existing production capacity, improve customer/product mix, and build a sustainable/profitable business model. Dr. Chiu highlighted that while SMIC will keep investing in advanced process technology (i.e., 28nm/20nm), providing differentiated specialty technology in mature process is a key part of the new strategy. He also noted that being the biggest foundry may not always be the most desirable strategy given high capex requirements, and emphasized that finding its niche and areas to differentiate is more crucial.

In the near term, SMIC will focus on fully utilising its existing assets to ensure good ROA. For the medium term, the company plans to avoid commoditisation in mature process through differentiated specialty technology. Although SMIC is lagging behind industry technology cadence, it is still committed to pursue advanced technology in 20/28nm and is getting help from its IBM partnership and the China government. The new management team is also focused on making a difference through its service and has received good feedback from its customers. We are encouraged by the improving execution that provides the company a more stable platform to compete in its areas of competency, including a cost-effective source for emerging Chinese fabless companies, value-added specialty process technologies, and a good base for US fabless adopting a multiple foundry strategy.

SMIC's new team has improved execution, bringing break-even utilisation down from 90% to 85% and driving a return to profitability, albeit low. The company is also in the process of engineering profitability and pushing revenue growth through the semiconductor inventory correction through its position of supplying Wifi and RF to high-end smartphones and multiple components (baseband, AP, connectivity, memory controllers, RF, flash and CMOS image sensors) for low-cost tablets and smartphones.

Benefiting from the rising China fabless industry

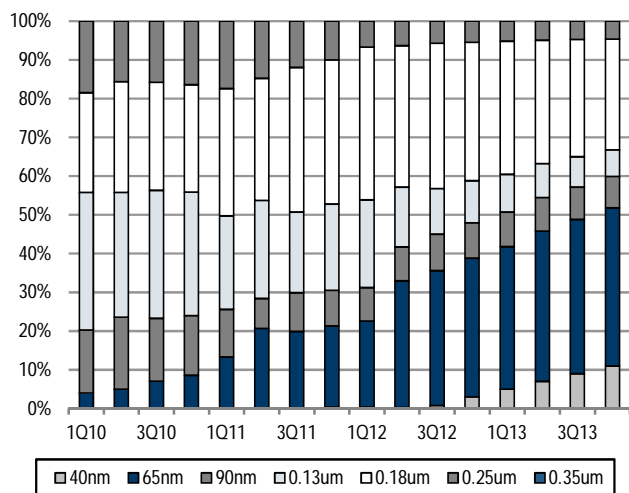
According to Gartner, about 40% of the wafer of Chinese fabless companies is supplied by domestic foundries while the remaining 60% by overseas foundries. Many Chinese fabless companies have selected TSMC, UMC or GlobalFoundries for advanced technologies which domestic foundries do not offer. However, limited by revenue, most Chinese fabless companies are low-tier customers of these leading foreign foundries. SMIC and its domestic competitor Shanghai Hua Hong NEC Electronics (HHNEC) have provided better

SMIC's new strategy – focus on both advanced technology and specialty process

SMIC is a key beneficiary as more China fabless switch over from foreign foundries

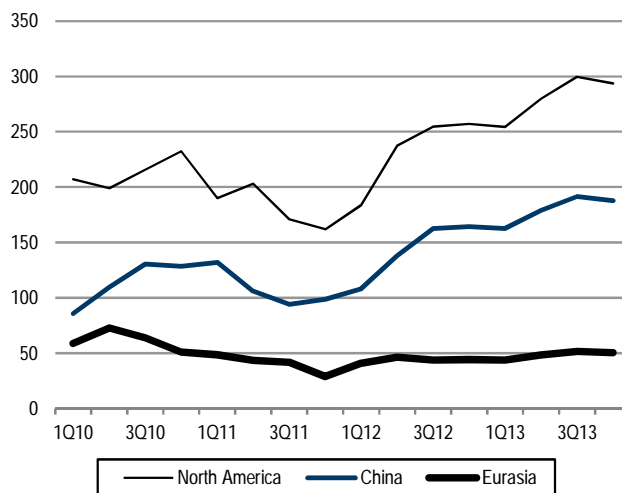
support to the Chinese fabless companies. Our channel checks suggest due to capacity tightness, TSMC has been reducing support to small Chinese fabless since 2Q12. With better local support, availability of advanced technologies (40nm), and for lower cost option, we are likely to see Chinese foundries increasing market share as Chinese fabless switch over from foreign foundries. While the transition may take time given porting takes 2-4 quarters (depending on complexity), we believe SMIC is a beneficiary of the switch.

Figure 5: 40nm/65nm rising towards 50% of sales in 4Q13E



Source: Company data, Credit Suisse estimates

Figure 6: China fabless companies driving SMIC growth



Source: Company data, Credit Suisse estimates

SMIC saw 65nm expand rapidly, growing from only 9% of sales in 4Q10 to 35% of sales in 3Q12, and expects 40nm, which will start ramping in 4Q12, to contribute 10-20% of sales in 40nm by end-2013. The management team highlighted that the Chinese fabless companies are a key driver for the 40nm ramp-up. Management noted that prior to 40nm its advanced technology process was primarily driven by US fabless companies. However, this has changed at 40nm. Some Chinese fabless companies are beginning to adopt more advanced processes to lower costs and improve performance to go after some high growth markets including emerging market smartphones, tablets and set-tops for the China market. SMIC's latest 40nm technology node ramp-up has largely been driven by local Chinese fabless companies, including Spreadtrum, RDA, and Brite Semiconductor.

China fabless are now driving advanced process migrations at SMIC

Figure 7: SMIC serving major Chinese fabless semiconductor companies (Revenue in US\$ mn)

2010 rank	2011 rank	Companies	2010 revenue	2011 revenue	YoY growth	Major product	SMIC customer
1	1	Shenzhen HiSilicon Technologies	453	704	55%	Comm. ASIC	Yes
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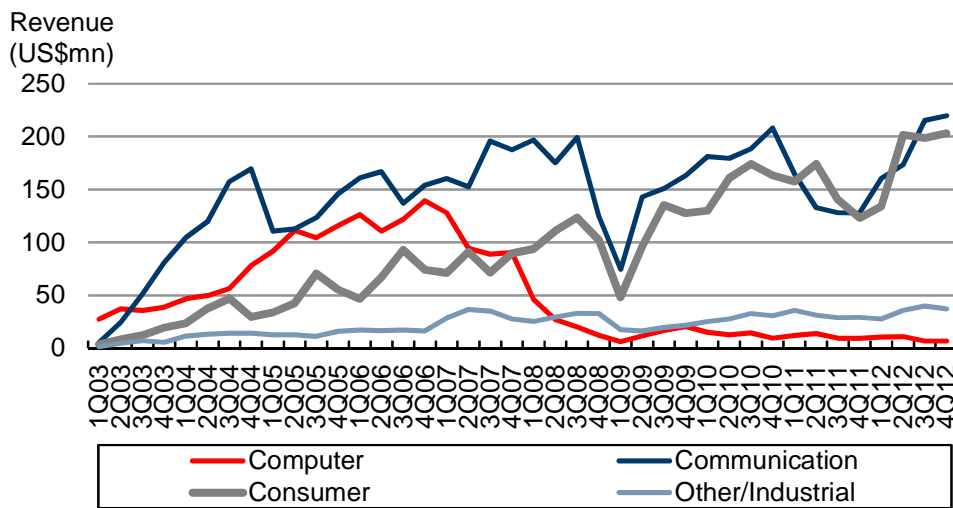
Source: Gartner

According to Gartner, major Chinese fabless companies' revenue grew 45% from US\$2.0 bn in 2010 to US\$2.9 bn in 2011. SMIC is increasingly benefiting from the China fabless IC industry that is now driven by the rapidly growing low-priced smartphones and tablets, a channel with some localisation advantage with most of the manufacturing and design companies based in Shenzhen. The company now serves a broad base of Chinese fabless companies that supply into low-cost smartphones and tablets, including baseband (Spreadtrum, Hisilicon), wireless connectivity (RDA Microelectronics), CMOS image sensors (GalaxyCore), applications processor (Rockchip, Allwinner, AMLogic), NOR flash (Giga Device), smart card ICs (Huada, Fudan). In particular, management highlighted China customers adopting SMIC 55nm for 7" low-cost tablets and 40nm for higher spec 10" low-cost tablets. Key customers of SMIC and designs in this segment that are noteworthy include:

SMIC serving China fabless in a rapidly growing supply chain in low cost mobile computing

- **Spreadtrum** - One of the first 40nm customers (SC8810/6820 at 1.2GHz for EDGE and TD-SCDMA smartphones)
- **RDA Microelectronics** - 55nm Wifi combination chipset manufactured in SMIC's Beijing fab with collaboration with SMIC on integrated passive design (IPD).
- **Hisilicon (private)** –65nm baseband chipset for data dongles; also porting some 65/55/40nm design to SMIC for cost-down chipsets.
- **Rockchip (private)** – 65nm apps processor for low-cost tablets (based on SMIC 65 LL process)
- **AMLogic (private)** – 65nm apps processor for low-cost tablets (65LL, ARM Cortex A9)
- **Brite Semiconductor (private)** – 1.4GHz ARM Cortex A9 on SMIC 40LL process

Figure 8: SMIC driven by communication/consumer (low cost smartphone/tablet market)
In millions, unless otherwise stated



Source: Company data, Credit Suisse estimates

The latest survey from China Software and IC Platform (CSIP) shows that domestic fabless companies now prefer SMIC (scoring 64%) over TSMC (score of 43%), UMC (scoring 25%), and GlobalFoundries (scoring 11%). SMIC is seeing its market share rising as China customers increased from 33% to 35% of sales in 3Q12 though management sees some opportunity for further share gains. While SMIC has over 50% share at RDA Microelectronics (given the early partnership), its share at Spreadtrum is below 20%, and much lower at Hisilicon.

SMIC share in China still low but expanding rapidly

As part of the twelfth five-year plan (2011-15), the Chinese government plans to grow Chinese fabless companies by five to ten times so that each will have over US\$300 mn revenue by 2015. Many Chinese fabless companies receive R&D grants from the government. Additionally, local governments provide beneficial offerings including tax cuts and inexpensive or free rental property. To promote the China semiconductor supply chain, the government encourages Chinese fabless companies receiving government R&D grants to manufacture in a local foundry if the process technology is competitive. The encouragement the government provides including further R&D fundings for next generation projects. Such support benefits SMIC as a leading foundry in China.

China fabless and SMIC benefitting from government support

Avoiding commoditisation with specialty platforms

SMIC has lagged the two-year industry technology cadence with the move to 65nm in 2009 (three years after 90nm) and the move to 40nm (3 years after 65nm). About 50% of SMIC's capacity are in mature process technologies (90nm and above). To avoid commoditisation, the management team opts to target more cost sensitive applications that do not require the most advanced high performance node and also mixed signal and RF on legacy nodes. The majority of Chinese fabless companies are still using mature technology nodes (greater than 110nm) for analog and mixed signal products. This keeps a sizable long-term revenue for SMIC's legacy 6" and 8" wafer fabs as long as the company has high-quality specialty processes for the Chinese market. The mix of n-1 and n-2 projects and specialty platform on mature process allows the company to target customers for their more cost sensitive applications for the emerging market supply chain. Existing specialty process technologies SMIC offers and its key customers for each in the following table.

A sizable revenue for SMIC's mature process lies in specialty platforms for the emerging market supply chain

Figure 9: SMIC avoiding mature process commoditisation with specialty platforms

Specialty process	Process node focus	Key customers
CMOS Image Sensor (CIS)	130nm-180nm	GalaxyCore
NOR Flash	65nm-180nm	GigaDevice
Micro-controller Unit (MCU)	65nm-180nm	Various
Power MOSFET	180nm-300nm	Various
BCD Technology	180nm-350nm	Various
Power Management IC (PMIC)	130nm	Qualcomm
Smart Card IC	110nm-130nm	HED, Datang, Fudan

Source: Company data

Driven by smartphones/tablets, SMIC is shipping 35,000 wafers per month for PMIC based on mature process. Out checks indicate that Qualcomm's PMIC in the Apple iPhone 5 is manufactured at SMIC. In the CMOS image sensor market, SMIC's key customer – GalaxyCore (private) – shipped around 600 mn units in 2011, an increase of 70% from 350 mn units in 2010. The majority of GalaxyCore's CIS has resolution is under 2Mpixels and it mainly serves the China feature phone market and is preparing for higher-pixel products for the booming smartphone market. In the NOR flash segment, SMIC's key customer – GigaDevice (private) - provides a wide range of NOR Flash in embedded consumer and mobile device market. GigaDevice has experienced similar growth in the mobile handset flash market to Spreadtrum in baseband, RDA in RF, and GalaxyCore in CIS. GigaDevice's 2011 revenue is about US\$60 mn, up 150% from 2010. The strong partnership with SMIC has given GigaDevice competitiveness against IDM competitors, Macronix and Winbond. It adopted the 12-inch wafer with upgraded process technology for mass production, which gave it competitive manufacturing costs and flexible capacity.

Mature process still benefiting from rapidly growing mobile market

In smart card ICs, SMIC's key customer is Huada Electronic Design (HED, private). SMIC offers a specialty platform on its mature process (110nm-250nm) by enabling non-volatile memory on smart card ICs. HED is one of the subsidiaries of the state-owned China Electronics Corporation (CEC). The main applications of HED products are citizen ID cards, social security cards, SIM cards, and electronics payment. HED has the largest market share of the Chinese citizen ID card and social security card. It has also developed

Smart card IC is another driver for mature process

Near Field Communication (NFC) solutions and was the first to be certified for China Union Pay mobile payment in 2011.

Improvement in services and IP enablement required

SMIC recently promoted Mike Rukec as VP of Worldwide Sales after being the President of Americas Business Unit (since 2011). Mike Rukec is a semiconductor veteran with 23 years of experience at Motorola Semiconductors and recently held executive positions at Chartered Semiconductor and Grace Semiconductor before joining SMIC in 2011. One of Mike Rukec's main task is to drive sales of the differentiated platform where he will assist CEO Dr T.Y. Chiu who will spend more time on operations. With Mike Rukec experience at Chartered Semiconductor, SMIC will have the help required to boost its services business model and increase customer satisfaction / stickiness.

Mike Rukec driving differentiated platform sales

Compared to a leading foundry like TSMC, SMIC still has a large gap to close in silicon IP block enablement. IP block enablement is as a key metric in selecting a foundry and without a solid IP portfolio, SMIC has clearly been left behind. The gap may require a few years to shorten, but SMIC's new management team has made some progress in the past two years. Investment in Brite Semiconductor in 2010 was the beginning of IP block enablement at SMIC. Brite Semiconductor and SMIC signed a multi-million (US\$) deal with ARM for the Cortex-A9 core and has developed a working chip that achieves 1.5GHz speeds. Brite Semiconductor and SMIC now have access to 18 different ARM cores and can resell the hardened cores to any of SMIC's customers. In addition, Brite Semiconductor has also customised peripheral IPs such as USB and DDR for customer licensing. The IP enablement greatly lowers the entry barrier (technically and financially) and speeds up time-to-market for Chinese fabless companies who often have very short window opportunity. This also enables speedier customer portings (from other foundries to SMIC) and faster production ramp-up. Company management noted that Hisilicon as a successful example in porting designs to SMIC.

Closing the IP block enablement gap

Pursuing the advanced technology cadence

SMIC remains committed to pursue some technology pace to avoid too much commoditisation. The company is a quarter late in ramping up 40nm. We believe this is due to TI's de-emphasizing of OMAP in smartphones but management team noted that SMIC will have several customers from China and US moving to 40nm in 4Q12. Our channel checks indicate that Broadcom has recently successfully taped out a 40nm wireless connectivity chip at SMIC. Management targets 40nm reaching 10-20% of sales by end-2013, enough to approach corporate GMs and break-even profitability.

SMIC making good progress in 40nm despite a quarter delay

28nm is still in the early development stage and the company aims to ramp up in 2014. This should keep the company at least a full node behind foundry leader TSMC. Unlike the 40/45nm node where SMIC licensed directly from IBM, the 28nm technology is a joint development between SMIC and IBM. While 40/45nm was licensed from IBM, 80% of SMIC's 40LL process is developed in-house. The company started the 28nm technology development project in 2Q10 and built on that with a joint development agreement (JDA) with IBM in 2Q12. With this, SMIC actually owns all the 28nm IPs.

From 40nm to 28nm, from import to self reliance

SMIC has just begun the construction of the 40nm/28nm fab in Beijing. The new 28nm Beijing fab is a joint development programme with the Beijing government funding part of the project, to promote the semiconductor supply chain in the region. The details of the funding are still under discussion. Management expects the building construction to be completed by 4Q12 and is targeting for risk production of 28nm in 2013. SMIC will have both HKMG and Poly-SiON for its 28nm.

Partly funded by Beijing government, SMIC's new 28nm fab should be ready for 2014 risk production

SMIC's commitment and aspiration for advanced technologies extends to 20nm and 3D-IC. Management team noted that the company has a strong R&D team with 600 staff, of which 15% are PhDs, 60% are Masters, and 25% have over 15 years of experience. While SMIC lost many R&D engineers in 2009-10 during some of the management transitions

Pushing forward with R&D in 20nm and 3D-IC

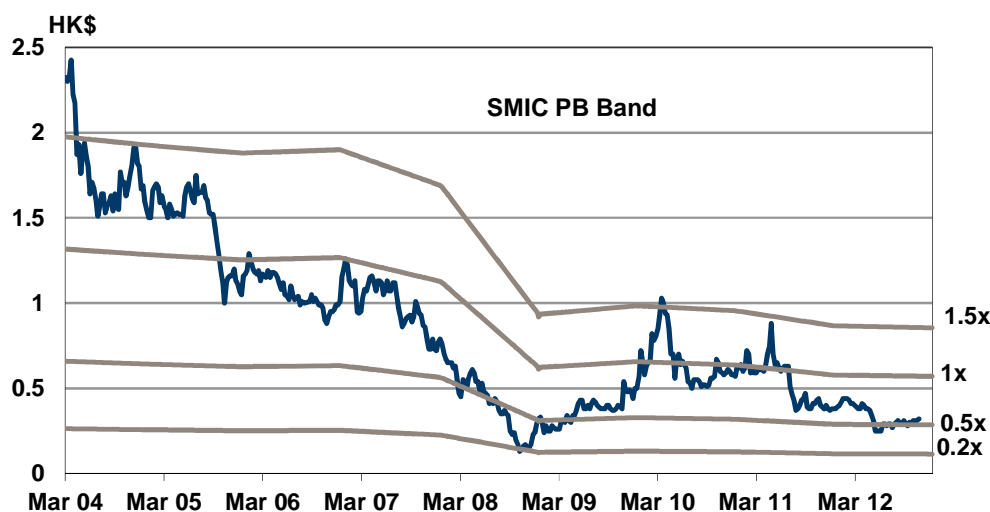
after the TSMC lawsuit loss, many have returned to join SMIC and the company has had very low attrition in 2011-12. SMIC has started pathfinding for the R&D of 20nm in 4Q11. The company aims to leverage government R&D grants and collaboration with leading universities for the development of 20nm. With 20nm R&D work started not long ago, management expects 20nm to be ready only in 3Q15, almost two years after TSMC. To align its advanced nodes with leading foundries, the company has also recently set up a team to start working on 2.5D / 3D IC and Through Silicon Via (TSV).

Maintain our Neutral

We maintain our NEUTRAL rating and our HK\$0.41 target price (0.7x BV), balancing improving execution with a model still near break-even. SMIC management has turned around operations to achieve break-even profitability and should be able to fund moderate growth with operating cash flow. High capital intensity, lagging technology and still relatively high break-even (85% for the company) likely limits potential profit upside but at least creates a more sustainable business to target the growing Chinese base and more multi-source business from its overseas customers.

Maintain our target price at 0.7x P/B

Figure 10: SMIC's historical P/B band



Source: Company data, Credit Suisse estimates

Figure 11: SMIC's operating metrics

	1Q11	2Q11	3Q11	4Q11	1Q12	2Q12	3Q12	4Q12E	2010	2011	2012E	2013E	2014E	2015E
Capacity (8" equivalent)	557	569	580	580	554	594	617	678	2,010	2,286	2,443	2,845	3,197	3,758
Sequential Change (%)	8%	2%	2%	0%	-5%	7%	4%	10%	5%	14%	7%	16%	12%	18%
Shipment (8" equivalent)	471	452	407	374	446	558	606	617	1,981	1,704	2,226	2,714	3,033	3,419
Sequential Change (%)	-9%	-4%	-10%	-8%	19%	25%	9%	2%	44%	-14%	31%	22%	12%	13%
Logic Shipment	471	452	407	374	446	558	606	617	1,905	1,704	2,226	2,714	3,033	3,419
Sequential Change (%)	-9%	-4%	-10%	-8%	19%	25%	9%	2%	54%	-11%	31%	22%	12%	13%
Reported Utilization	72%	73%	61%	66%	74%									
Utilization (Shipments/Capacity)	85%	79%	70%	65%	80%	94%	98%	91%	99%	75%	91%	95%	95%	91%
Logic ASP	\$718	\$723	\$699	\$717	\$705	\$714	\$723	\$716	\$744	\$714	\$715	\$714	\$702	\$683
Sequential Change (%)	-3%	1%	-3%	3%	-2%	1%	1%	-1%	-4%	-4%	0%	0%	-2%	-3%
Simple ASP (Revenue/Shipments)	\$786	\$780	\$755	\$774	\$747	\$756	\$762	\$754	\$725	\$714	\$715	\$714	\$702	\$683
Sequential Change (%)	-1%	-1%	-3%	3%	-4%	1%	1%	-1%	1%	-2%	0%	0%	-2%	-3%
Revenue % of 90nm&below	26%	28%	30%	30%	31%	42%	44%	45%	23%	28%	22%	22%	39%	41%
Capex (US\$m) (Management)	\$333	\$284	\$92	\$56	\$183	\$84	\$130	\$178	\$775	\$765	\$575	\$575	\$800	\$900
Capex (US\$m) (Cash Flows)	\$393	\$285	\$183	\$89	\$116	\$82	\$117	\$259	\$491	\$950	\$575	\$575	\$800	\$900
Capex/revenue (%)	116%	87%	64%	33%	37%	21%	27%	59%	34%	78%	36%	30%	38%	39%
Revenue	\$371	\$352	\$307	\$290	\$333	\$422	\$461	\$466	\$1,555	\$1,319	\$1,681	\$2,043	\$2,244	\$2,460
EPS	\$0.02	-\$0.01	-\$0.16	-\$0.30	-\$0.08	\$0.01	\$0.02	\$0.01	-\$0.02	-\$0.45	-\$0.04	\$0.17	\$0.20	\$0.21
Gross Margin (%)	19%	14%	1%	-7%	12%	24%	27%	18%	20%	8%	21%	22%	23%	22%
Operating Margin (%)	-2%	0%	-25%	-37%	-15%	3%	4%	3%	1%	-14%	0%	7%	8%	8%

Source: Company data, Credit Suisse estimates

Semiconductor Manufacturing International Corp. 0981.HK / 981 HK

Price (14 Nov 12): HK\$0.37, Rating: NEUTRAL [V], Target Price: HK\$0.41, Analyst: Randy Abrams

Target price scenario				
Scenario	TP	%Up/Dwn	Assumptions	
Upside	0.51	38.51	0.9x 2012 BVPS	
Central Case	0.41	10.81	0.7x 2012 BVPS	
Downside	0.33	(11.35)	0.5x 2012 BVPS	

Income statement (US\$ mn)	12/11A	12/12E	12/13E	12/14E
Sales revenue	1,319	1,681	2,043	2,244
Cost of goods sold	1,218	1,328	1,585	1,733
SG&A	90.0	126.7	110.1	117.7
Other operating exp./(inc.)	(347.6)	(343.9)	(411.7)	(485.0)
EBITDA	359.6	570.6	759.7	877.9
Depreciation & amortisation	550.3	574.2	608.0	697.3
EBIT	(190.7)	(3.6)	151.7	180.6
Net interest expense/(inc.)	—	—	—	—
Non-operating inc./(exp.)	8.1	(27.4)	(32.4)	(44.9)
Associates/JV	—	—	—	—
Recurring PBT	(182.7)	(31.0)	119.3	135.7
Exceptionals/extraordinaries	—	—	—	—
Taxes	82.5	(11.3)	9.5	10.9
Profit after tax	(265.2)	(19.7)	109.8	124.8
Other after tax income	19.2	1.6	—	—
Minority interests	—	—	—	—
Preferred dividends	—	—	—	—
Reported net profit	(245.9)	(18.1)	109.8	124.8
Analyst adjustments	—	—	—	—
Net profit (Credit Suisse)	(245.9)	(18.1)	109.8	124.8

Cash flow (US\$ mn)	12/11A	12/12E	12/13E	12/14E
EBIT	(190.7)	(3.6)	151.7	180.6
Net interest	—	—	—	—
Tax paid	—	—	—	—
Working capital	115.2	(127.8)	(28.6)	(11.1)
Other cash & non-cash items	470.0	558.1	566.0	641.5
Operating cash flow	394.5	426.7	689.2	811.0
Capex	(949.9)	(575.0)	(575.0)	(800.0)
Free cash flow to the firm	(555.4)	(148.3)	114.2	11.0
Disposals of fixed assets	—	—	—	—
Acquisitions	—	—	—	—
Divestments	—	—	—	—
Associate investments	—	—	—	—
Other investment/(outflows)	31.1	(144.7)	—	—
Investing cash flow	(918.8)	(719.7)	(575.0)	(800.0)
Equity raised	311.8	(8.9)	—	—
Dividends paid	—	—	—	—
Net borrowings	(43.0)	175.1	250.0	200.0
Other financing cash flow	—	—	—	—
Financing cash flow	268.9	166.3	250.0	200.0
Total cash flow	(255.4)	(126.7)	364.2	211.0
Adjustments	1.2	0.1	—	—
Net change in cash	(254.2)	(126.6)	364.2	211.0

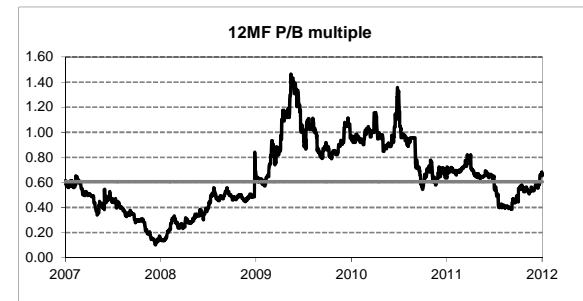
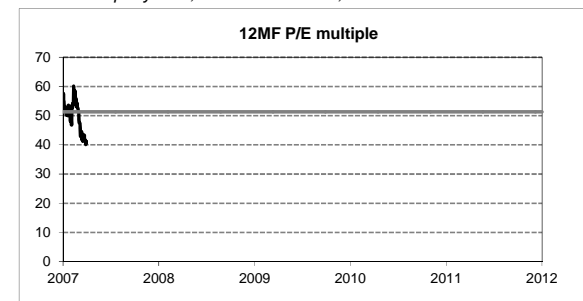
Balance sheet (US\$ mn)	12/11A	12/12E	12/13E	12/14E
Cash & cash equivalents	398.5	365.6	675.5	832.2
Current receivables	165.2	292.0	333.5	364.6
Inventories	207.3	298.6	313.4	358.0
Other current assets	125.5	106.9	122.1	133.5
Current assets	897	1,063	1,444	1,688
Property, plant & equip.	2,594	2,635	2,656	2,813
Investments	—	—	—	—
Intangibles	179.3	335.3	335.3	335.3
Other non-current assets	58.2	—	—	—
Total assets	3,728	4,033	4,436	4,837
Accounts payable	280.7	391.5	410.9	469.4
Short-term debt	825.2	689.9	689.9	689.9
Current provisions	—	—	—	—
Other current liabilities	142.5	165.1	188.6	206.2
Current liabilities	1,248	1,246	1,289	1,365
Long-term debt	103.9	415.5	665.5	865.5
Non-current provisions	—	—	—	—
Other non-current liab.	126.7	134.1	134.1	134.1
Total liabilities	1,479	1,796	2,089	2,365
Shareholders' equity	2,245	2,232	2,342	2,467
Minority interests	4.2	5.0	5.0	5.0
Total liabilities & equity	3,728	4,033	4,436	4,837

Key earnings drivers	12/11A	12/12E	12/13E	12/14E
Computer	0.56	1.67	2.21	2.21
Communication	0.31	1.03	1.41	1.41
Consumer	0.14	0.30	0.38	0.38
Others	1.00	3.00	4.00	4.00

Per share data	12/11A	12/12E	12/13E	12/14E
Shares (wtd avq.) (mn)	27,436	30,080	31,993	31,993
EPS (Credit Suisse)	(0.009)	(0.001)	0.003	0.004
DPS (US\$)	—	—	—	—
BVPS (US\$)	0.08	0.07	0.07	0.08
Operating CFPS (US\$)	0.01	0.01	0.02	0.03

Key ratios and valuation	12/11A	12/12E	12/13E	12/14E
Growth(%)				
Sales revenue	(15.1)	27.4	21.5	9.8
EBIT	(972)	98	4,347	19
Net profit	(1,855)	93	707	14
EPS	(1,674)	93	671	14
Margins (%)				
EBITDA	27.3	33.9	37.2	39.1
EBIT	(14.5)	(0.2)	7.4	8.0
Pre-tax profit	(13.8)	(1.8)	5.8	6.0
Net profit	(18.6)	(1.1)	5.4	5.6
Valuation metrics (x)				
P/E	(5.3)	(79.5)	13.9	12.2
P/B	0.58	0.64	0.65	0.62
Dividend yield (%)	—	—	—	—
P/CF	3.32	3.37	2.22	1.88
EV/sales	1.56	1.35	1.08	1.00
EV/EBITDA	5.72	3.97	2.91	2.56
EV/EBIT	(11)	(635)	15	12
ROE analysis (%)				
ROE	(11.1)	(0.8)	4.8	5.2
ROIC	(10.6)	(0.1)	4.7	5.3
Asset turnover (x)	0.35	0.42	0.46	0.46
Interest burden (x)	0.96	8.68	0.79	0.75
Tax burden (x)	1.45	0.63	0.92	0.92
Financial leverage (x)	1.66	1.80	1.89	1.96
Credit ratios				
Net debt/equity (%)	23.6	33.1	29.0	29.3
Net debt/EBITDA (x)	1.48	1.30	0.89	0.82
Interest cover (x)	—	—	—	—

Source: Company data, Thomson Reuters, Credit Suisse estimates.



Source: IBES

Companies Mentioned (Price as of 14-Nov-2012)

Semiconductor Manufacturing International Corp. (0981.HK, HK\$0.37, NEUTRAL[V], TP HK\$0.41)
United Microelectronics (2303.TW, NT\$10.55)
Taiwan Semiconductor Manufacturing (2330.TW, NT\$90.5)
Macronix (2337.TW, NT\$7.52)
Winbond (2344.TW, NT\$4.11)
Apple Inc (AAPL.OQ, \$536.93)
Actions (ACTS.OQ, \$1.58)
ARM Holdings (ARM.L, 723.0p)
Broadcom Corp. (BRCM.OQ, \$30.64)
International Business Machines Corp. (IBM.N, \$185.51)
QUALCOMM Inc. (QCOM.OQ, \$61.71)
RDA Microelectronics (RDA.OQ, \$10.66)
Spreadtrum Communication (SPRD.OQ, \$19.07)
Texas Instruments Inc. (TXN.OQ, \$28.77)
Vimicro (VIMC.OQ, \$1.38)

Disclosure Appendix

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Price and Rating History for Semiconductor Manufacturing International Corp. (0981.HK)

0981.HK Date	Closing Price (HK\$)	Target Price (HK\$)	Rating
11-Aug-11	0.38	0.35	N
09-Feb-12	0.44	0.41	

* Asterisk signifies initiation or assumption of coverage.



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Restricted	3%	

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Price Target: (12 months) for Semiconductor Manufacturing International Corp. (0981.HK)

Method: Our HK\$0.41 target price for SMIC is based on 0.7x 2012 book value per share, in line with the mid point of the post Lehman crisis average forward P/B multiple of 0.6x.

Risk: The risks that may impede achievement of our HK\$0.41 target price are: (1) the 2012 global semiconductor up-cycle is not as strong as market expected, being an upstream company, SMIC tends to be more cyclical than other tech plays. (2) Price competition from peers are more severe than expected. (3) SMIC, like its peers will be affected by unexpected slow down of global economy. (4) The advanced technology products do not come out as the company scheduled to.

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