# NOMURA

# **Greater China Semi**

EQUITY: TECHNOLOGY

# Vol One: China Semi's goals and issues

More consolidation likely in region driven by China's ambitious goals and resource allocation

# Prelude: We commence with a series of reports that will examine China's Semi sector and its impact on companies in the Greater China region

In June 2014, China published a policy ("National Semiconductor Industry Development Guidelines") and established a semiconductor (Semi) industry fund of RMB120bn (for 2014-17 investments) to develop the China Semi sector. We introduce the first volume of our *Greater China Semi* series; we will review country- and industry-level numbers first and then follow up with reviews of company-level details, analyse some hot topics (in the Greater China region) and provide some cross-strait industry/company comparisons.

# China Semi: Strong growth over the past few years driven by foreign SATS investments and local IC design growth

China consumes c.60% of the global Semi value (as most electronic products are made in China), but accounted for only c.20% value share of the global Semi market in 2013, as per CSIA. China Semi sales scale was as big as Taiwan's Semi in 2013 (although a big portion of China Semi sales are from foreign investments), after a decent sales CAGR of 21% in 2010-13 (vs. the global Semi value CAGR of 1% in this period), which we attribute to: 1) heavy investments by foreign Semi vendors, particularly in the SATS (semiconductor assembly and testing) space and 2) rapid growth of local IC design companies driven by the surge in China's smartphone and tablet markets.

# China targets more than 20% CAGR for Semi sales by 2020F; this could present a challenge to the RMB120bn fund, in our view

The Semi fund is reported to be RMB120bn (and could be raised further) for investments in 2014-17. RMB120bn (distributed in 2014-17) is a big number (as big as Taiwan Semi industry's investments in capex & R&D in 2013) but is not big enough to drive an above 20% sales CAGR, in our view, using Taiwan as a reference. Thus, we expect either more capital injections, or more Semi investments from foreigners, to make it happen.

# Our view: China has data accuracy risk; separately, consolidation should accelerate in the region

There are many small and unlisted Semi names in China, which has two implications: 1) It is difficult for China data be accurate, eg, we think reported China IC design industry sales are likely 20-30% over-estimated by CSIA, from a wafer consumption perspective and 2) industry consolidation seems necessary. We expect consolidation to further accelerate; also from another perspective that we think China needs to focus its resources on a few market leaders, rather than spread resources across the industry. In our view, smaller companies in the region are at higher risk. Our favourite Buy-rated names in the region are ASE and Novatek. Both are market leaders in their spaces.

# Fig. 1: Stock for action

Company	Ticker	Rating	Market Cap (US\$ bn)	TP	Price	Up/Down side (%)
ASE	2311 TT	Buy	10.0	TWD 40	TWD 38.55	3.8
Novatek	3034 TT	Buy	3.1	TWD 185	TWD 154	20.1

Source: Bloomberg, Nomura estimates. Note: Prices are as of 26 Aug 2014.

# **Global Markets Research**

27 August 2014

## **Anchor themes**

Semi industry consolidation may accelerate in China due to there being too many small/unlisted Semi vendors. China should allocate resources to certain market leaders. Thus consolidation in Greater China may also be stimulated since small Semi companies would have higher risk.China Semi industry statistics are likely overestimated by CSIA, although it should still be on an uptrend.

## **Research analysts**

### Semiconductor

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# Why is China pushing the Semi industry? Domestic chip demand and supply gap is widening

We believe China is keen to establish its own semiconductor industry supply chain, considering that it accounts for c.60% of global Semi demand, considering that China is "the factory of the world" (ie, most electronic products are manufactured in China). That said, China Semi' sales share (including those investments by foreign Semi companies in China) globally is only c.20% (Fig 2). The significant import-export deficit of Semi chips continues to expand (Fig 3). According to China customs statistics, China's IC import value was USD231.3bn in 2013, even bigger than that of oil at USD219.7bn.

# Fig. 2: China Semi demand (for products manufactured in China) vs. China Semi industry sales (including China investments by foreign Semi companies)

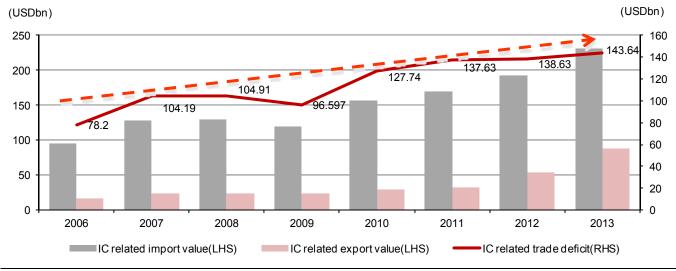
Semi demand from China accounts for nearly 60% of global demand, considering that China is "the factory of the world". However, China Semi industry sales (Including China investments by foreign companies) share is around 20% globally.



Source: WTST, CSIA

### Fig. 3: China's IC related trade deficit

The deficit expanded from USD78.2bn in 2006 to USD143.6bn in 2013.



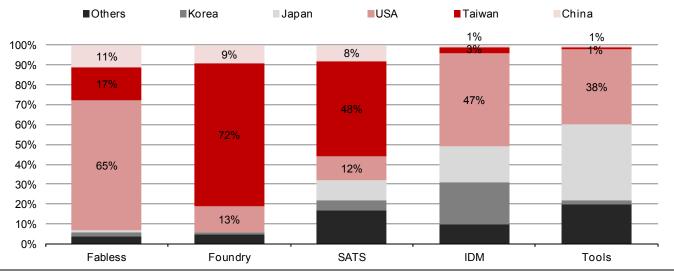
Source: CSIA

CSIA data show that China Semi sales (including investments in China from foreign companies) account for c.20% of the global Semi market; thus China domestic Semi companies' sales could be smaller than the 20% level, in our view.

- IC design (fabless) segment: China's sales share (Head Quarter; HQ basis) was slightly above 10% in 2013, behind Taiwan's 15-20%. Global leaders are the US with a combined share of 65%.
- IC manufacturing (foundry) segment: China's sales (HQ basis) were about 9%, far behind Taiwan at 72%.
- IC SATS segment: China sales (HQ basis) were around 8%, far behind Taiwan's 48%.
- · IDM and equipment segments: China has nearly no presence.

### Fig. 4: Semi value share by sub-segment on HQ basis in 2013

Taiwan dominates IC manufacturing(foundry) and SATS sector while US dominates IC design(fabless) sector



Source: iSuppli, Gartner, CSIA

### Fig. 5: Top 20 global Semi companies by sales market share

SMIC Highliggs and ICET	Cara tha tan China	Comi vandara in the found	ry fablage and SATS apage	roopootivolv
SIVILO, HISILICON and JOE	i are the top China	a Semi vendors in the found	ry, ladiess and SATS space	e, respectively.

	IC Manufacturing (Foundry)	Sales (USDbn)		IC Design (Fabless)	Sales (USDbn)	Market share	IC SATS	Sales (USDbn)	Market share
1	TSMC	19.85	46.3%	Qualcomm	17.21	22.1%	ASE	4.74	18.9%
2	GlobalFoundries	4.26	9.9%	Broadcom	8.22	10.5%	Amkor	2.96	11.8%
3	UMC	3.96	9.2%	AMD	5.30	6.8%	SPIL	2.34	9.3%
4	Samsung	3.95	9.2%	MediaTek	4.59	5.9%	STATS ChipPAC	1.60	6.4%
5	SMIC	2.07	4.8%	nVidia	3.90	5.0%	Powertech	1.27	5.1%
6	Powerchip	1.18	2.7%	Marvel	3.35	4.3%	Jiangsu Changjiang Electronics Technology	0.85	3.4%
7	Vanguard	0.71	1.7%	LSI	2.37	3.0%	J-Devices	0.84	3.4%
8	Huahong Grace	0.71	1.7%	Xilinx	2.30	2.9%	UTAC	0.75	3.0%
9	Dongbu	0.57	1.3%	Altera	1.73	2.2%	ChipMOS	0.65	2.6%
10	TowerJazz	0.51	1.2%	Avago	1.62	2.1%	Chipbond	0.53	2.1%
11	IBM	0.49	1.1%	Novatek	1.40	1.8%	STS Semiconductor	0.50	2.0%
12	MagnaChip	0.41	1.0%	Hisilicon	1.36	1.7%	KYEC	0.43	1.7%
13	Win Semi	0.35	0.8%	MStar	1.14	1.5%	Tianshui Huatian Microelectronics	0.40	1.6%
14				Spreadtrum	1.07	1.4%	Carsem Semiconductor	0.35	1.4%
15				CSR	0.96	1.2%	Unisem	0.31	1.3%
16				Realtek	0.95	1.2%	Formosa Advanced Technologies	0.30	1.2%
17				Dialog	0.90	1.2%	Walton	0.30	1.2%
18				Cirrus Logic	0.77	1.0%	Nantong Fujitsu Microelectronics	0.29	1.1%
19				Himax	0.77	1.0%	AOI Electronics	0.28	1.1%
20				Slilcon Labs	0.58	0.7%	Signetics	0.26	1.0%
Others		3.82	8.9%		17.43	22.4%		5.15	20.5%
Total		42.84	100%		77.91	100%		25.08	100%

Source: IC insight, Gartner; Note: China companies in red

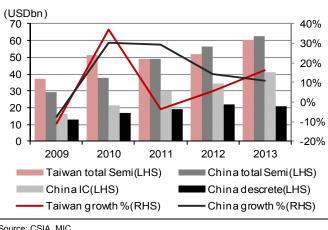
# China Semi vs. Taiwan Semi

The scale: China Semi sales scale (on CSIA data) has caught up with Taiwan Semi, on investments in China by foreign Semi vendors

When comparing China Semi scale with Taiwan Semi, it is worth noting again that a significant portion of China Semi sales are contributed by investments in China by foreign Semi vendors. With this in mind, according to CSIA (for China data) and TEJ (for Taiwan data), China Semi sales were already as big as Taiwan Semi at c.USD60bn per year in 2013, while in 2009 Taiwan Semi sales were still 27% bigger than China Semi (Fig 6). A big jump in China SATS sales in 2011 made up the gap meaningfully - we attribute the jump to Intel's heavy investments in IC SATS facilities in 2010.

### Fig. 6: China and Taiwan semi total sales

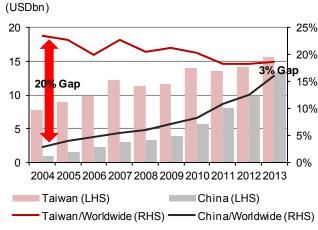
China including IC and discrete devices, Taiwan has little exposure to discrete devices



Source: CSIA, MIC

Fig. 8: China and Taiwan IC design total sales

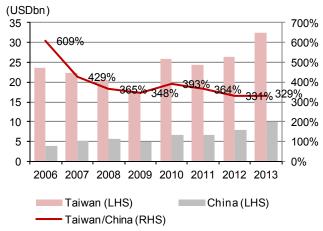
China's IC design sales is catching up with Taiwan



Source: CSIA, MIC

Fig. 7: China and Taiwan IC manufacturing total sales

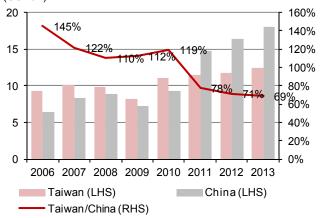
Taiwan's TSMC dominates the global IC manufacturing segment.



Source: CSIA, MIC

#### Fig. 9: China and Taiwan IC SATS total sales

China's IC SATS has multinational enterprise's investment such as Intel (USDbn)



Source: CSIA, MIC

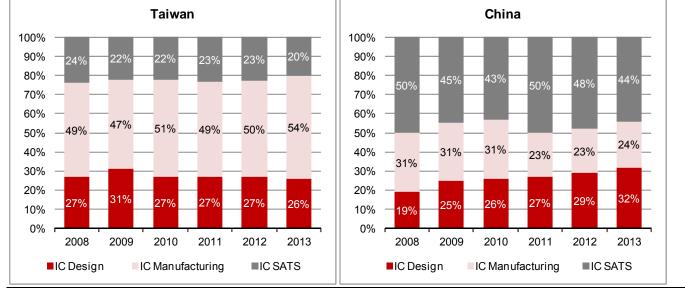
## The mix: SATS is the biggest portion in China, while IC design has been growing fast in the past five years

The value mix of China is meaningfully different from Taiwan. In 2013, IC SATS accounted for the biggest value of 44%, followed by IC design at 32% and IC manufacturing at 24% vs. a mix of 20%/26%/54% in Taiwan mainly due to TSMC's leadership in the global foundry business and heavy investments in China SATS facilities by foreign Semi vendors.

The consistent trend in China Semi is the rise of IC design. IC design portion in China Semi grew to 32% in 2013, from 25% in 2009. The rise of China domestic smartphones and tablet chip vendors during these years is helping a lot.

## Fig. 10: China and Taiwan Semi industry comparison

Taiwan dominates the IC manufacturing segment, while China has more multinational enterprises' contribution in the IC SATS segment

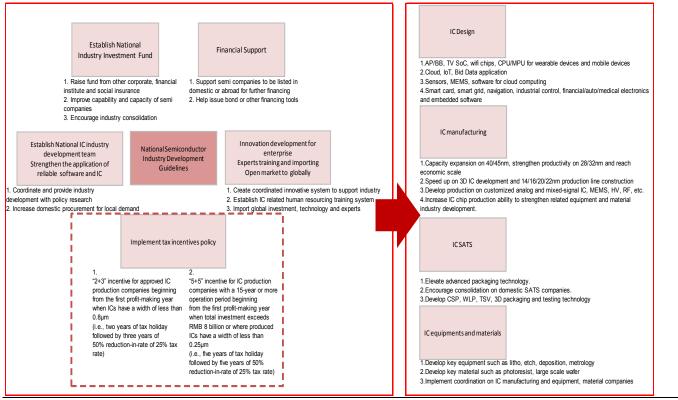


Source: CSIA, MIC

# China Semi industry policy: Targets a 20% CAGR for Semi sales by 2020F

China State Council introduced the "National Semiconductor Industry Development Guidelines" (<u>http://www.csia.et.cn/Article/ShowInfo.asp?InfoID=42972</u>) in June 2014, which sets out central government targets and long-term support for domestic designers, developers and manufacturers of integrated circuits.

### Fig. 11: China's guidelines to promote development of the national IC industry



Source: CSIA

This high-level framework proposes the setting up of a National Industry Investment Fund, managed by professional investors and will inject a RMB120bn fund (unspecified amount of capital injection going forward) into the Mainland's semiconductor industry. The financing will be used to expand manufacturing capacity, boost research and development, and push for market restructuring and consolidation in order to increase the competitiveness of China's semiconductor industry.

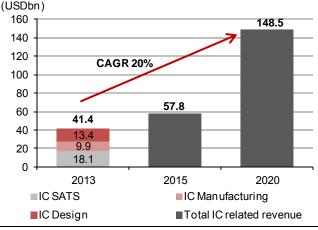
The target for this fund is to increase the IC sales of China companies from RMB 251bn (USD41bn) in 2013 to RMB350bn in 2015F, and reach a CAGR of above 20% by 2020F. (Source: National Semiconductor Industry Development Guidelines, CSIA and local news reported (<u>http://www.csia.net.cn/Article/ShowInfo.asp?InfoID=42253</u>)).

# Fig. 12: A glance at the national industry investment fund RMB120bn could be raised going forward

National Industry Investment Fund						
Total amount	RMB 120bn, could be raised going forward					
Investment period	2014~2017					
Investment method	Equity Investment					
Investment purpose	1. For regular use such as CAPEX					
	2. For specific R&D production project					
	3. For M&A or strategic purpose such as IP acquisition					
Fund composition	Government financing 30bn; social security fund 45bn;					
	others					
Fund distribution	40% for IC manufacturing; 30% for IC desingn, 30%					
	for IC OSATs or equipment and components					

### Fig. 13: China's Semi industry target

Increase IC sales of China companies from RMB251bn (USD41bn) in 2013 to RMB350bn in 2015F, and reach a CAGR of above 20% by 2020F.



Source: China's National Semiconductor Industry Development Guidelines, CSIA

Source: China's National Semiconductor Industry Development Guidelines, CSIA

# What does RMB120bn in 2014~17 mean? Equal to Taiwan Semi industry's investments (CAPEX+R&D) a year in 2013

Compared with the Taiwan semi industry, although currently China companies' sales gap is still quite large compared with leading Taiwan companies, once the China government initiates RMB120bn (roughly USD20bn) of the National Industry Investment Fund, the amount is roughly equal to the total 2013 capex and R&D expense of overall Taiwan Semi companies.

## Fig. 14: CAPEX+R&D of Taiwan major Semi companies in 2013

(USD bn)	TSMC	UMC	Vanguard	ASE	SPIL	PowerTech	Chipmos	Chipbond	мтк	Novatek	Realtek	Richtek	Phison	Taiwan Major Semi Companies	Taiwan Total Semi Companies
CAPEX	9.6	1.1	0.0	1.0	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	12.9	14.9
R&D	1.6	0.4	l 0.0	0.3	0.1	0.0	0.0	0.0	0.9	0.2	0.2	0.1	0.1	3.9	5.5
Sum	11.3	1.8	5 0.1	1.3	0.6	0.3	0.1	0.1	0.9	0.2	0.2	0.1	0.1	16.9	20.4

Source: TEJ

# Our view: Is RMB120bn big enough to drive 20% sales CAGR? More is likely needed

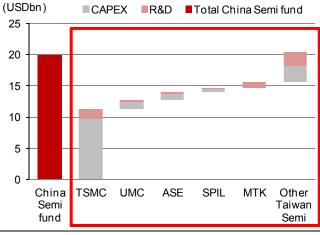
"Is RMB120bn big enough to drive an above 20% sales CAGR?" – We don't have enough information yet to answer this question. That said, on our back-of-envelope calculations, more capital injection is needed, if the targeted industry sales CAGR is 20%. Or, more investments in China from foreign Semi companies would be necessary. In 2010-13, Taiwan major Semi vendors' investments (capex + R&D) were around USD60bn (or USD15bn every year on average) and they only reported combined sales growth of a 17% CAGR in this period – off the low base of 2009 after the financial crisis.

In the case of China, the RMB120bn fund is distributed in 2014-17, or RMB30bn (USD5bn) a year – which we think does not seem enough to drive the industry sales target of a 20% CAGR in the coming years, considering that China Semi sales scale is now as big as that of Taiwan.

Thus, we believe that either: 1) there would be more capital injection into the China Semi industry; or 2) China needs to use the resources wisely – focusing on very select market leaders, rather than spreading resources across the sector.

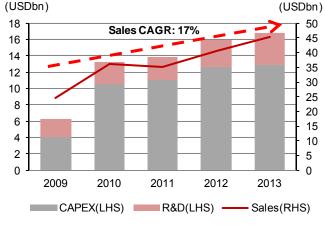
### Fig. 15: China's national industry investment fund scale

The fund (for investments in 2014-17) is equal to Taiwan Semi industry's investments (capex+R&D) in 2013



# Fig. 16: Taiwan major Semi vendors' sales CAGR vs. investments (CAPEX + R&D)

After the 2008 financial crisis, Taiwan major Semi companies' sales CAGR was 17\% in 2009-13 while the average investment a year was USD15bn.



Source: TEJ

# Our view: The long tail phenomenon in the China Semi market implies 1) data accuracy risk and 2) the need for integration

In the China Semi industry, most companies are small and unlisted (ie, a long tail phenomenon); hence, based on our projections there is strong likelihood of China Semi value being over-estimated consistently by CSIA.

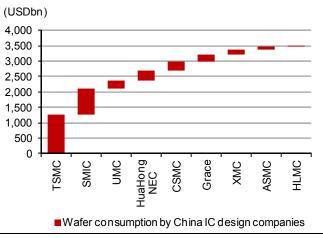
For example, the China IC design industry value was estimated at USD13.4bn in 2013, after combining the sales of 600 companies, according to CSIA. However, it appears that the number could be more reasonable at *USD9-11bn*, if we cross-check the numbers from wafer manufacturers' perspective.

Our approach is as below: TSMC reported its 2013 China sales at USD1.26bn (6% of its 2013 sales). SMIC reported its sales from China at USD840mn (40% of its 2013 sales). UMC didn't report sales from China but we estimate it to be around USD250mn (5~10% of its 2013 sales). Also, the rest of China local foundries reported combined sales of USD1.1bn in 2013, according to iSuppli (USD336mn, 286mn, 231mn, 157mn, 118mn and 14mn by HHNEC, CSMC, Grace, XMC, ASMC and HLMC, respectively). We believe these foundries consume above-95% of the wafers of China IC design companies.

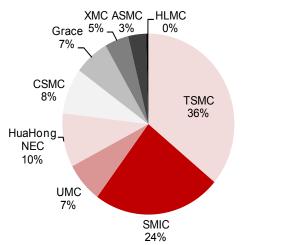
While we don't have concrete ideas about the customer mix (between China and non-China customers) of those unlisted China foundries, the assumption of the mix won't change our conclusion. Assuming those wafers are 100% consumed by China IC design companies, the total wafer value consumed by China IC design companies should be about USD3.5bn. Considering that the China IC design industry might make 30-40% GPM overall and wafer value accounts for 50-60% of COGS, a back-of-envelope calculation shows that the China IC design industry value should be c.USD10bn only, which is 20-30% below the statistics in 2013 (USD13.4bn) as estimated by CSIA.

Source: TEJ. Note: Major Semi vendors as Fig 14

# Fig. 17: Est. of wafer consumption of China IC design industry by foundries in 2013







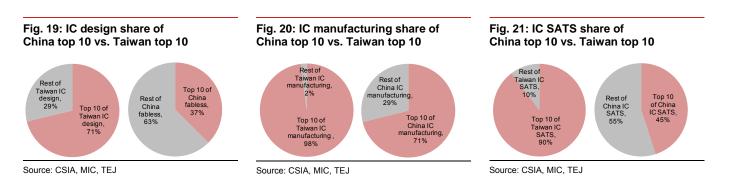
Source: iSuppli, Nomura estimates

Source: iSuppli, Nomura estimates

Using 2013 data, China's top 10 IC design companies accounted for 37% of industry sales vs. Taiwan's top 10 IC design companies at 71%. China's top 10 IC manufacturing companies accounted for 71% of industry sales vs. Taiwan's top 10 at 98%. China's top 10 IC back-end companies accounted for 45% of industry sales vs. Taiwan's top 10 at 90%. We see two implications from here:

1) The long tail phenomenon in China will likely cause data inaccuracy (ie, most likely over-estimation).

2) Consolidation in the China Semi market is only likely to accelerate since its top 10 companies' positions in their respective segments is still small (vs. Taiwan – presumably a more mature market).



2013 Rank	China IC Design Company	2013 sales (USD bn)	2013 Rank	Taiwan IC Design Company	2013 sales (USD bn)
1	HiSilicon Technologies Co., Ltd.	1.36	1	Mediatek	4.54
2	Spreadtrum Communications, Inc.	1.07	2	Novatek	1.38
3	RDA Microelectronics, Inc.	0.46	3	Morning Star	1.12
4	Datang Semiconductor Co., Ltd.	0.40	4	Phison(including NAND module business)	1.07
5	Rockchip Electronics Co., Ltd.	0.36	5	Realtek	0.94
6	Hangzhou Silan Microelectronics Co., Ltd	0.30	6	Himax	0.77
7	China Integrated Circuit Design (Group) Co., Ltd.	0.30	7	Raydium	0.36
8	GalaxyCore Inc.	0.28	8	Richtek	0.36
9	Vimicro International Corporation	0.25	9	ILITEK	0.32
10	ZTE Microelectronics Technology Co.Ltd	0.25	10	Orisetech	0.31
	Top 10 Total	5.02		Top 10 Total	11.18
2013 Cank	China IC Manufacutring Company	2013 sales (USD bn)	2013 Rank	Taiwan IC Manufacutring Company	2013 sale (USD bn
1	Semiconductor Manufacturing International Corporation	2.07	1	TSMC	19.90
2	SK Hynix Semiconductor (China) Ltd.	1.60	2	UMC	4.13
3	Intel Semiconductor (Dalian) Ltd.	0.69	3	Inotera	1.97
4	China Resources Microelectronics Ltd.	0.65	4	Nanya Tech	1.57
5	TSMC China Company Ltd.	0.58	5	PowerChip	1.21
6	Shanghai Huahong Grace Semiconductor Manufacturing Corporation	0.58	6	Winbond	1.10
7	X'an Microelectronics Technology Institute	0.26	7	Macronyx	0.74
8	HeJian Technology (SuZhou) Co., Ltd.	0.23	8	Vanguard	0.70
9	Jilin Sino-Microelectronics Co., Ltd.	0.21	9	Win Semi	0.35
10	Advanced Semiconductor Manufacturing Co., Ltd.	0.17	10	Nuvotum	0.23
	Top 10 Total	7.04		Top 10 Total	31.89
013 ank	China IC SATS Company	2013 sales (USD bn)	2013 Rank	Taiwan IC SATS Company	2013 sale (USD br
1	Jiangsu Xinchao Technology Group Co., Ltd. (JCET's major holder)	1.28	1	ASE	4.74
2	Micron Semiconductor (X'an) Co., Ltd.	1.21	2	SPIL	2.34
3	Freescale Semiconductor (China) Ltd.	1.10	3	PowerTech	1.27
4	Weixun United Semiconductor (Beijing) Co., Ltd.	0.92	4	Chipmos	0.65
5	Intel Products (Chengdu) Ltd.	0.85	5	Chipbond	0.53
6	Nantong Huada Microelectronics Group Co., Ltd. (Nantong's major holder)	0.75	6	KYEC	0.43
7	Tianshui Huatian Electronics Group(Huatian's major holder)	0.58	7	Orient Semi	0.32
8	Hitech Semiconductor (Wuxi) Co., Ltd.	0.54	8	Formosa Advanced Technology	0.30
9	Panasonic Industrial Devices (Shanghai) Co., Ltd.	0.46	9	Walton	0.30
	Infineon Technologies (Wuxi) Co., Ltd	0.45	10	Tong Hsing	0.26
	Top 10 Total	8.14		Top 10 Total	11.13

Source: CSIA, IEK, TEJ, Company data

# Our view: China's development of its Semi industry to lead to more integrations not only in China, but also in the region

Compared with consolidations in China and Taiwan's semi industry for the years shown below in Fig 23, we observe that consolidations in China have been mainly conducted by state-owned corporate such as HuaHong, Grace and China Electronics Corp or investment institutes such as Unigroup, TongFang, PDSTI (Shanhai Pudong Science and Technology Investment Co) and CDB capital. On the other hand, consolidation of Taiwan's semi industry is mainly driven by corporates themselves, led by their strategy of searching for complimentary businesses in the supply chain. But we also note that China IC SATS players such as Huatien and JCET have started to expand their advanced packaging ability through strategy alliances or investments with other companies.

On the one hand, we expect Semi industry consolidation to accelerate in China as there seem to be too many small and unlisted Semi vendors in China. On the other hand, China needs to allocate resources to certain market leaders rather than spreading investments across the industry. As well, consolidations in the Greater China region might be stimulated accordingly, as small Semi companies from other countries will face higher risks of being marginalised and affected.

#### Fig. 23: Semi industry consolidation in China and Taiwan over past two years China Semi industry Consolidation

2011/12	2013/7	2013/9	2013/11	2013/12
HuaHong NEC acquired Grace	Tsinghua Unigroup acquired	Huatien acquired current	Tsinghua Unigroup acquired	Tongfang Guoxin completed
Semiconductor	Spreadtrum	advaced packaging subsidiary	RDA	the acquisition of Shenzhen
		in Kunshan		State Microelectronics
2014/2	2014/6	2014/6	2014/8	2014/8
JCET and SMIC announced JV	Shanghai Pudong Science and	ShangHai Belling reported to	CDB Capital, Tsinghua	Hua Capital Management
for bumping technology	Technology Investment	be included in reorganization	Unigroup invested in TCL	(reported included PDSTI)
	acquired Montage Technology	of IC business of parent		proposed an acquisition on
		company China Electronics		Omnivision

#### Taiwan Semi industry Consolidation

2010/2	2011/10	2012/4	2013/3	2013/10
ASE officially acquired USI	MTK officially acquired Ralink	PowerTech officially acquired Greatek	UMC officially acquired HeJian	Chipbond officially acquired Simpal
2014/3	2014/4	2014/4	2014/5	2014/7
MTK officially acquired Mstar	Focal Tech announced to	Exsar announced to acquire	Microchip announced to	Vishay announced to acquire
	acquire Orise	IML	acquire ISSC	Capella

Source: Company data, Nomura research

# **Appendix A-1**

# **Analyst Certification**

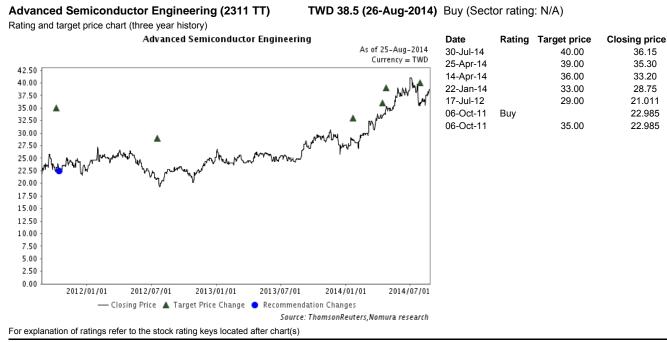
I, Aaron Jeng, hereby certify (1) that the views expressed in this Research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

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The term "Nomura Group" used herein refers to Nomura Holdings, Inc. or any of its affiliates or subsidiaries, and may refer to one or more Nomura Group companies.

### Materially mentioned issuers

Issuer	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Advanced Semiconductor						
Engineering	2311 TT	TWD 38.5	26-Aug-2014	Buy	N/A	
Novatek Microelectronics	3034 TT	TWD 154.0	26-Aug-2014	Buy	N/A	



Valuation Methodology Our TP of TWD40 is based on 2.1x of 2015F BVPS of TWD 18.82. The benchmark index for this stock is MSCI Taiwan.

**Risks that may impede the achievement of the target price** Possible upside risk may come from better-than-expected enddemand and operating efficiency improvement; downside risk may come from weaker-than-expected sales and market share loss from industry consolidation and other peers; SPIL may carry 6-7% dividend yield into June 2015 dividend season, which looks attractive to some investors. That said, we think it might be too early to buy 2015 dividends over the next 6 months.

### **Novatek Microelectronics (3034 TT)** Rating and target price chart (three year history)

Novatek Microelectronics As of 25-Aug-2014 Currency = TWD 175.00 "ha was 150.00 Jon Marine Marine Marine 125.00 100.00 75.00 50.00 25.00 0.00 2012/01/01 2012/07/01 2013/01/01 2013/07/01 2014/01/01 2014/07/01 – Closing Price 🔺 Target Price Change 🔵 Recommendation Changes Source: ThomsonReuters, Nomura research For explanation of ratings refer to the stock rating keys located after chart(s)

Date	Rating	Target price	Closing price
04-Aug-14		185.00	154.00
08-Apr-14		175.00	142.00
25-Jan-14		145.00	122.00
07-Jan-14	Buy		124.50
07-Jan-14		140.00	124.50
07-Nov-13	Neutral		111.00
07-Nov-13		115.00	111.00
08-Jul-13		120.00	140.50
09-May-13	Reduce		146.00
09-May-13		140.00	146.00
31-Jan-13		113.00	117.50
06-Nov-12		111.00	115.00
07-Aug-12		97.00	86.30
08-May-12		90.00	90.30
09-Feb-12		93.00	92.10
07-Feb-12	Neutral		90.30
11-Jan-12	Buy		83.00
11-Jan-12		91.50	83.00
04-Nov-11		80.00	81.90

TWD 154.0 (26-Aug-2014) Buy (Sector rating: N/A)

Valuation Methodology Our TP of TWD185 is based on 16x our 2014-15F average EPS of TWD11.71. The benchmark index for this stock is MSCI Taiwan.

**Risks that may impede the achievement of the target price** Downside risks include worse-than-expected end demand for smartphone and 4K2K TVs.

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### STOCKS

A rating of 'Buy', indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of 'Neutral', indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of 'Reduce', indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of 'Suspended', indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as 'Not rated' or shown as 'No rating' are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: United States/Europe/Asia ex-Japan: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx; Global Emerging Markets (ex-Asia): MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; Japan: Russell/Nomura Large Cap.

#### **SECTORS**

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#### Explanation of Nomura's equity research rating system in Japan and Asia ex-Japan prior to 21 October 2013 STOCKS

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