

02 November 2016 | Sector Update

## Semiconductor Sector

**Maintain NEUTRAL**

### China-led growth

- September 2016 sales increased by +3.6%yoy and +4.2%mom to USD29.4b
- China leads the global growth in semiconductor sales, follow by Japan and Asia Pacific
- Semiconductor product category-wise, there is healthy demand for NAND flash and microprocessors
- September 2016 BTB ratio remains above parity, signalling strong order book for the remainder of 2016
- Maintain NEUTRAL on the sector amid lack of near term catalysts

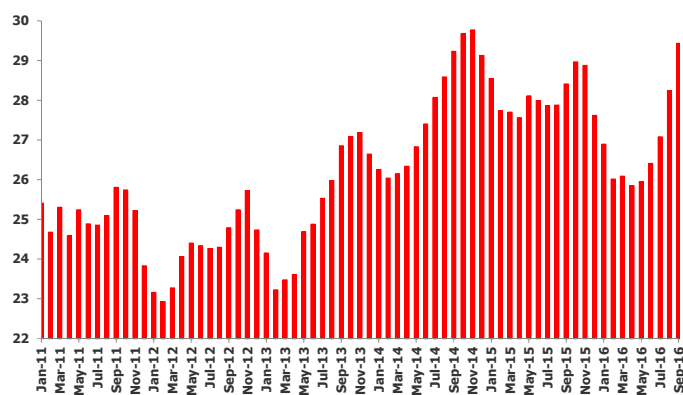
### A. STATE OF GLOBAL SEMICONDUCTOR INDUSTRY

#### i. Global Semiconductor Sales (September 2016)

**Improvement in monthly sales.** Global semiconductor sales (GSS) for the month of September 2016 grew by +3.6%yoy to USD29.4b from USD28.4b in September 2015. This marked the second consecutive year-over-year sales growth since August 2016. The increase in sales was mainly attributable to higher sales from the China, Japan and Asia Pacific region. Sales growth from China was particularly impressive, registering a double-digit growth. Meanwhile, sales from Americas and Europe continue to decline, albeit narrowing. NAND flash and microprocessors standouts among the semiconductor product categories.

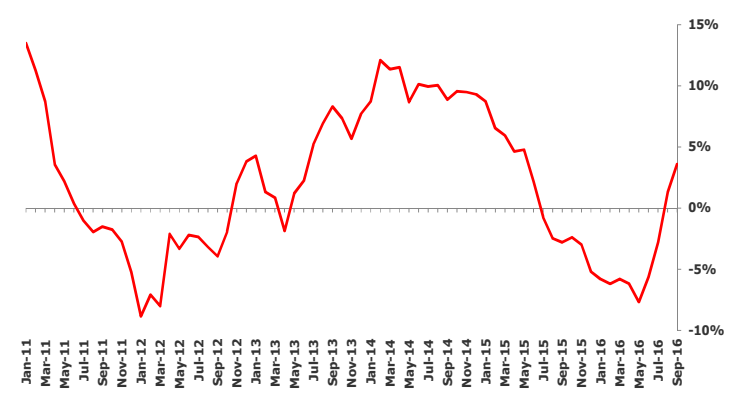
GSS grew by +4.2%mom, the largest sequential monthly growth since May 2013. Since May 2016, GSS has been growing on a month-over-month basis representing five months of sales expansion. The Semiconductor Industry association (SIA) commented that *"indications are positive for increased sales in the coming months."* On a cumulative basis, GSS from January to September 2016 amounted to USD241.2b, lagging by -3.9%yoy as compared to the previous year corresponding period. This is in-line with the World Semiconductor Trade Statistics (WSTS) 2016 sales estimates, accounting for 74.3% of full year sales forecasts of USD324.5b.

**Chart 1: Monthly global semiconductor sales (USD billion)**



Sources: SIA, MIDFR

**Chart 2: Monthly Global semiconductor sales (%yoy)**



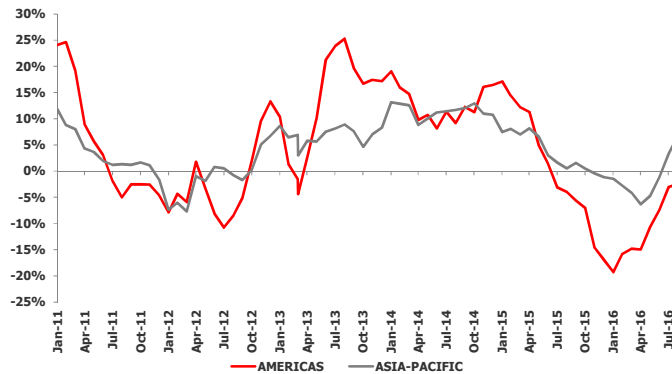
Sources: SIA, MIDFR

**China leads global growth.** For the month-in-review, sales from China accelerated by +12.0%yoy to USD9.5b. This is followed by Japan (+4.2%yoy) and Asia Pacific (+1.7%yoy). However, sales from the Americas and Europe dropped by -2.4%yoy and -4.0%yoy to USD5.7b and USD2.8b respectively. Inclusive of September 2016, sales from Americas has declined for fourteen consecutive months since August 2015. On this note, Europe's sales also have been on the downtrend since January 2015.

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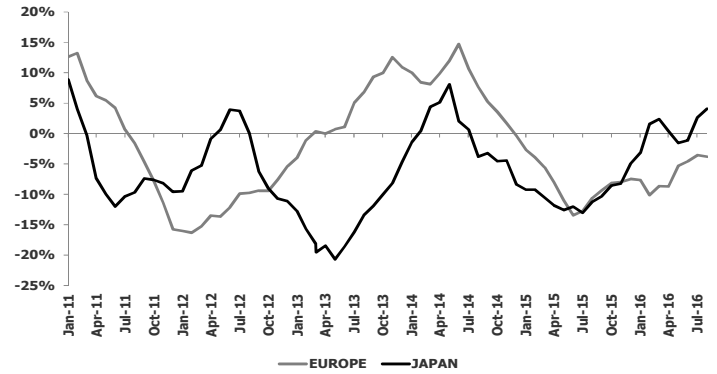
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**Chart 3: Americas and Asia Pacific\* sales (%yoy)**



Sources: SIA, MIDFR  
\*Include China

**Chart 4: Europe and Japan sales (%yoy)**



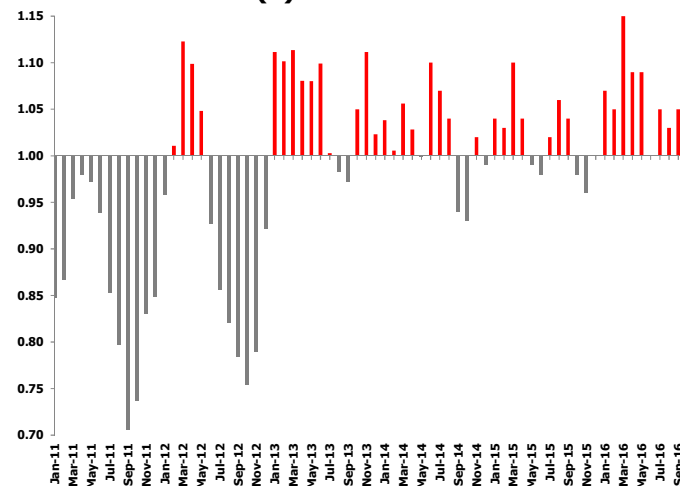
Sources: SIA, MIDFR

## ii. Capital spending: Book-To-Bill (BTB) ratio (SEPTEMBER 2016)

**Positive BTB ratio.** The North America-based manufacturers of semiconductor equipment posted a BTB ratio of 1.05x for the month of September 2016. A BTB ratio of 1.05x indicates that USD105 worth of orders were received for every USD100 of products billed for the month. Inclusive of September 2016, the BTB ratio has remained at or above parity for the tenth consecutive month. Should this trend continues throughout 4Q16, total bookings and billing for 2016 should be higher than 2015.

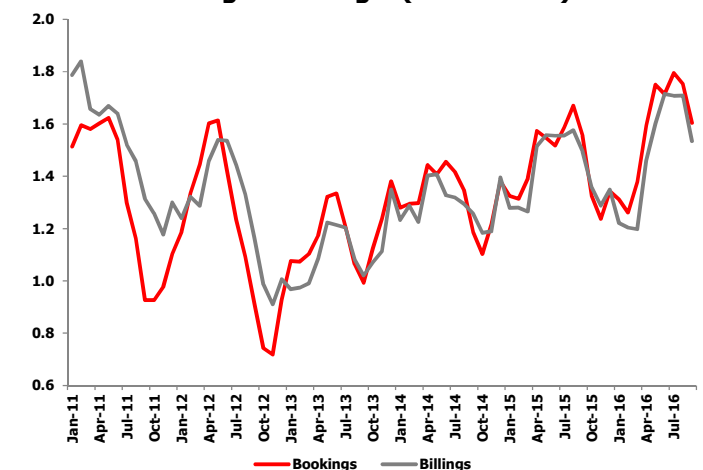
**Higher bookings and billings.** September 2016 bookings increased by +3.2%yoy to USD1,604.1m. Bookings have been growing for six consecutive months since April 2016. We attributed this to strong purchasing activity in China. Due to higher bookings, billings for the month of September 2016 also improved by +2.6%yoy to USD1,534.4m. This represents the fifth consecutive monthly growth since May 2016.

**Chart 5: BTB ratio (x)**



Sources: SEMI, MIDFR

**Chart 6: Bookings & billings (USD billion)**



Sources: SEMI, MIDFR

## B. INDUSTRY UPDATE

**New launches catering the PC market.** Towards the end of October 2016, Microsoft unveiled an upgraded version of its Surface Book which came with better performance and longer battery life. In response to this, Apple also revealed the MacBook Pro. The latter has a new touch bar with virtual keys and came with an in-built fingerprint scanner. As compared to Microsoft, Apple displayed more innovations via the MacBook Pro. However, the optimism surrounding the MacBook Pro was partially subdued by the hefty price tag as well as the removal of the standard USB port. We are positive in Microsoft and Apple's commitments to continuously introduce new products as this provides some support to the ailing personal computer market.

**Intel expanding internet of things (IOT) roadmap.** Intel unveiled its latest IOT roadmap. It will introduce a series of processors which are suited for IOT applications. This includes industrial machine, video conferencing, manufacturing and channel retail. We opine that the move provides a clearer indication that the industry is moving toward the IOT ecosystem.

**Maintain NEUTRAL.** Despite the positive momentum seen in 3Q16, 9M16 sales is still lagging behind WSTS' sales estimate. In addition, sales growth of smartphone is expected to remain lackluster in the immediate term owing to global economic slowdown and lack of innovation in new smartphone launches. On another note, we take comfort in knowing that semiconductor players remain committed in its capital spending as seen in the positive BTB ratio. This would ensure that the industry will continue to grow, albeit at a slower pace. All in, we are anticipating 2016 to be a muted year and we maintain our **NEUTRAL** stance on the sector. 

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### MIDF AMANAH INVESTMENT BANK : GUIDE TO RECOMMENDATIONS

#### STOCK RECOMMENDATIONS

BUY	Total return is expected to be >15% over the next 12 months.
TRADING BUY	Stock price is expected to <i>rise</i> by >15% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -15% and +15% over the next 12 months.
SELL	Total return is expected to be <-15% over the next 12 months.
TRADING SELL	Stock price is expected to <i>fall</i> by >15% within 3-months after a Trading Sell rating has been assigned due to negative newsflow.

#### SECTOR RECOMMENDATIONS

POSITIVE	The sector is expected to outperform the overall market over the next 12 months.
NEUTRAL	The sector is to perform in line with the overall market over the next 12 months.
NEGATIVE	The sector is expected to underperform the overall market over the next 12 months.