

## Technology Sector

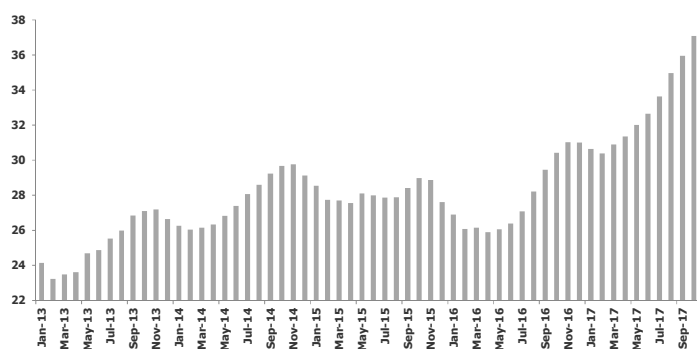
Maintain **POSITIVE**

### Sales on track to breach new heights for 2017

- **October 2017 sales reach new height of USD37.1b, mainly supported by the impressive growth from the Americas region (+40.9%yoy)**
- **Cumulative 9M17 sales kept pace with expectation, on track to breach USD400b**
- **Sales estimates raised higher for 2017 and 2018, indicating brighter outlook ahead**
- **Maintain POSITIVE stance on the sector**

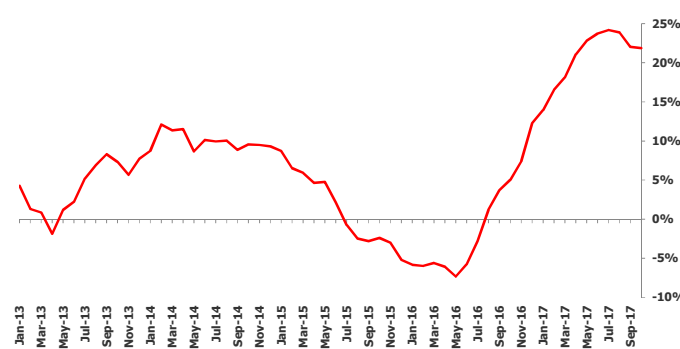
**Double digit sales growth.** Global Semiconductor Sales (GSS) surged by +21.6%yoy to USD37.1b from USD30.4b as at October 2016. Inclusive of this, GSS has been growing by more than +20%yoy each month for the past seven consecutive months since April 2017. October sales also marked the global industry's largest monthly sales total. According to the Semiconductor Industry Association (SIA), "market growth continues to be driven in part by high demand for memory products, but combined sales of all other semiconductor products were up substantially as well, showing the breadth of the market's strength this year". The Americas market outperformed the other markets, recording a growth of +40.9%yoy. Nonetheless, all the other markets also recorded double digit growth, ranging from +10.7%yoy to +19.5%yoy.

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



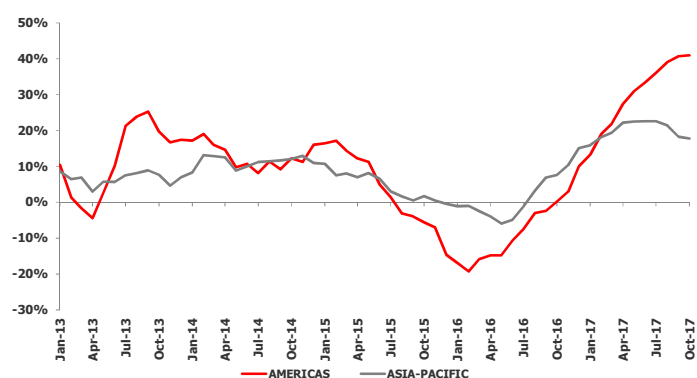
Sources: SIA, MIDFR

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



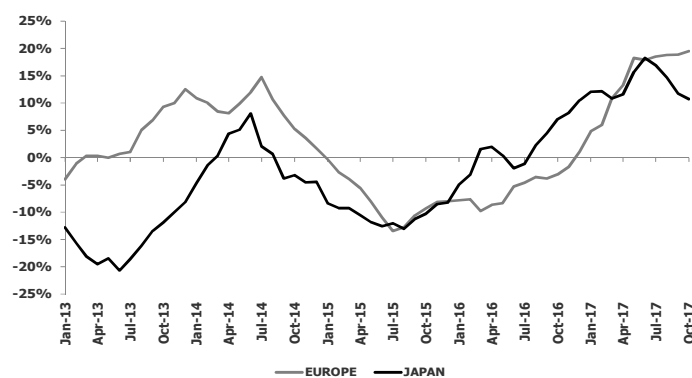
Sources: SIA, MIDFR

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



Sources: SIA, MIDFR  
\*Includes China

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



Sources: SIA, MIDFR

**Another round of sales forecasts upgrades.** The World Semiconductor Trade Statistics' (WSTS) has recently revised 2017 sales figure upwards to USD408.7m from USD377.8m previously, representing an upgrade of +8.2%. Bulk of the revision came from memory (+22.7%), discrete semiconductors (+5.4%) and logic (+4.1%). Following the sales revision, 2017 sales is now expected to surge by +20.6%yoy as compared to 2016 sales of USD338.9m. Higher sales were also seen from across all regions.

**Table 1: WSTS forecast summary – Autumn 2017**

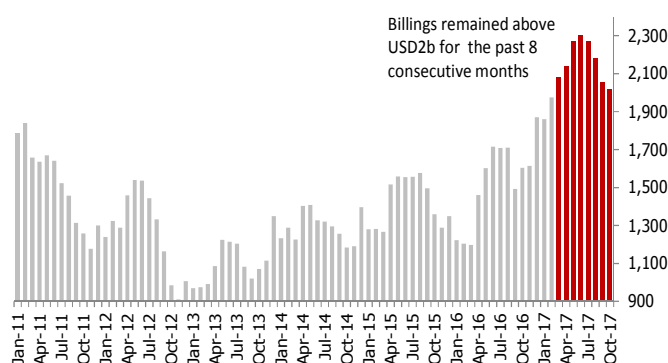
Autum 2017	Amounts (USD'b)			Year on year growth (%)		
	2016	2017F	2018F	2016	2017F	2018F
By Region						
Americas	65.5	86.5	95.4	-4.7	31.9	10.3
Europe	32.7	38.0	37.8	-4.5	16.3	4.6
Japan	32.3	36.4	38.0	3.8	12.6	4.5
Asia Pacific	208.4	247.8	264.1	3.6	18.9	6.6
<b>Total World</b>	<b>338.9</b>	<b>408.7</b>	<b>437.3</b>	<b>1.1</b>	<b>20.6</b>	<b>7.0</b>
By Products						
<b>Discrete Semiconductors</b>	<b>19.4</b>	<b>21.5</b>	<b>22.5</b>	<b>4.3</b>	<b>10.7</b>	<b>4.6</b>
<b>Optoelectronics</b>	<b>32.0</b>	<b>34.5</b>	<b>37.3</b>	<b>-3.8</b>	<b>7.7</b>	<b>8.2</b>
<b>Sensors</b>	<b>10.8</b>	<b>12.5</b>	<b>13.4</b>	<b>22.7</b>	<b>15.9</b>	<b>7.2</b>
<b>Integrated Circuits</b>	<b>276.7</b>	<b>340.2</b>	<b>364.0</b>	<b>0.8</b>	<b>22.9</b>	<b>7.0</b>
<i>Analog</i>	47.8	52.7	55.9	5.8	10.2	6.0
<i>Micro</i>	60.6	63.1	65.3	-1.2	4.2	3.5
<i>Logic</i>	91.5	101.4	108.5	0.8	10.8	7.0
<i>Memory</i>	76.8	122.9	134.3	-0.6	60.1	9.3
<b>Total Products</b>	<b>338.9</b>	<b>408.7</b>	<b>437.3</b>	<b>1.1</b>	<b>20.6</b>	<b>7.0</b>

Source: WSTS, MIDFR

**On-track to meet full year sales estimates.** Cumulatively, 10M2017 GSS amounted to USD329.5m which represents an increase of +20.9%yoy. This is in-line with the World Semiconductor Trade Statistics' (WSTS) expectation, accounting for 80.6% of full year 2017 revised sales forecast. The cumulative sales are also on track to exceed USD400b.

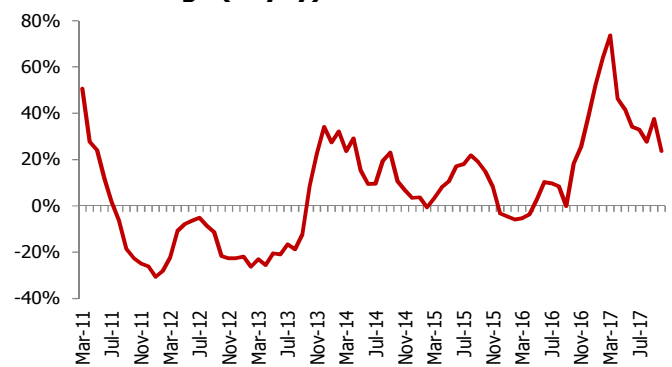
**Capital spending remains elevated.** The North America-based manufacturers of semiconductor equipment recorded October 2017 billings of USD2.0b. This represents an increase of +23.7%yoy as compared to October 2017 billings of USD1.6b. Inclusive of this, the capital spending of semiconductor equipment has been posting double digit growth for more than a year since October 2016. Nonetheless, billings have been tapering off for the past four consecutive months, in-line with seasonal weakness. Moving forward, we expect capital spending to remain robust as long as there are new smart devices launches in the pipeline.

**Chart 5: Billings (USD billion)**



Sources: SEMI, MIDFR

**Chart 6: Billings (%yoy)**



Sources: SEMI, MIDFR

**Maintain POSITIVE.** In recent years, the China government has been supporting the Chinese domestic semiconductor industry with tremendous capital budgets. This has led to China gradually playing a pivotal role in upholding the demand of semiconductor products. At present, sales from China have accounted for one-third of global sales. It is also the main export destination of Malaysia semiconductor products.

Moving forward, we expect the sales growth momentum emanating from China to remain robust in the foreseeable term. This is in-tandem with the anticipated heavy investment in fab equipment in the upcoming years. In the immediate term, we expect the global semiconductor sales to continue to record positive sales growth on a year-over-year basis. Our view corroborates with the recent upgrade in sales forecasts by WSTS.

Apart from the smart devices segment, we also expect healthier demand from the automotive, storage and healthcare markets. The automotive market will be driven by the continuous effort to increase the average semiconductor content per vehicle. Demand from this market is also less susceptible to seasonality factors, thus providing a steadier stream of revenue. Meanwhile, higher demand for the storage market would be supported by the cloud computing and data centre industries.

All factors considered, we maintain our **POSITIVE** stance for the Technology sector. 

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#### STOCK RECOMMENDATIONS

BUY	Total return is expected to be >10% over the next 12 months.
TRADING BUY	Stock price is expected to <i>rise</i> by >10% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -10% and +10% over the next 12 months.
SELL	Total return is expected to be <-10% over the next 12 months.
TRADING SELL	Stock price is expected to <i>fall</i> by >10% 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.