

## Sector View

## Semiconductors

## February sales in line with seasonal factors, no surprise expected for March

	1 M	3 M	6 M	31/12/15
Semiconductors	0.6%	3.2%	5.4%	-2.6%
DJ Stoxx 600	-3.3%	-6.7%	-8.3%	-9.6%

\*Stoxx Sector Indices

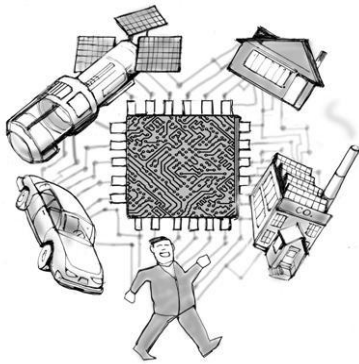
## Companies covered

<b>ARM HOLDINGS</b>	BUY	1340p
Last Price	1029p	Market Cap. GBP14,493m
<b>ASML</b>	SELL	EUR81
Last Price	EUR87.8	Market Cap. EUR38,047m
<b>DIALOG</b>	BUY	EUR39
Last Price	EUR35.236	Market Cap. EUR2,744m
<b>INFINEON</b>	BUY	EUR15
Last Price	EUR12.285	Market Cap. EUR13,899m
<b>SOITEC</b>	NEUTRAL	EUR0.5
Last Price	EUR0.58	Market Cap. EUR134m
<b>STMICROELECTRONICS</b>	NEUTRAL	EUR6.3
Last Price	EUR4.608	Market Cap. EUR4,198m

In February, the environment remained stable compared to January and the deterioration stopped as we expected. According to WSTS data, unadjusted global semiconductor sales stood at USD24.9bn, down 4.0% on a sequential basis and down 4.5% on a yearly basis. This decline was in line with our 5-y historical benchmark pointing to a sequential decline of 4.2%. With an improving environment in the Automotive segment and supportive macroeconomic indices, we also expect March sales to be in line with historical seasonality pointing to a sequential increase of 19.4%. This scenario points to a YoY decrease in global semiconductor sales of 3.0% in Q1 2016 (vs. -4.5% over 2 months).

## ANALYSIS

- Global semiconductor sales continued to decrease on a yoy basis with February sales down 4.5% yoy to USD24.9bn.** On a sequential basis, unadjusted global sales were down 4.0% in February compared to January. As [we expected](#), this was in line with our benchmark based on 5-y historical data showing an historical seasonal decline of 4.2% in February vs. January. Based on the visibility we now have, we anticipate a stabilization in the environment in smartphones while signs of a recovery in automotive continue to strengthen. We also note that macro-economical indices are improving (US ISM is now above 50 and Chinese ISM is also close to 50). Overall, the environment remains soft but seems to benefit from a more positive tone. We continue to expect soft growth for FY16 of 2-3% with H2 stronger than H1 thanks to better comparison.
- Once again, all regions, including Asia, showed a yoy decrease in sales.** February sales in Asia, which represent about 60% of semiconductor billings (~50% of which generated in China), were down by 1.6% yoy. Momentum in the US was once again particularly weak with a yoy decrease of 14.7% in February. European sales were down by 4.1% and Japanese sales were flat.
- March and beyond: March sales expected to be in line.** Recently, we have noted that the weak environment in the smartphone market and particularly in the iPhone value chain is stabilising, in addition, we continue to see an improving environment in the automotive sector. Production of light vehicles in China rose by 5% yoy and by 11% in Europe over the two first months of 2016. The PC segment still looks to be at rock bottom with no signs of improvement. Overall, we continue to expect better momentum in H2 2016 thanks to better comparison in Automotive and Smartphones. March ISM data improved strongly again with the US PMI Manufacturing index up to 51.8 from 49.2 in February and 48.2 in January. This highlights a reacceleration in the industrial sector in the US that could boost demand for chips in this segment. This was also confirmed by March's production index which continued to improve rapidly to 55.3 from 50.2 two months ago. The Inventories Index also continued to close the gap with the "50-level" from the very low level of 43.5 in January to 47 in March. Finally, Chinese data also improved with Markit PMI Manufacturing at 49.7, to be compared to a low point at 48.0 in February.



## VALUATION

- 2016e P/E valuation improved in February.** Our semiconductor valuation table shows that overall valuation between the six sub-sectors of the industry remained broadly stable in March. On average, IP & EDA vendors, and Fabless have the highest valuation metrics with an average 2016e P/E ratio of 19.0x and 16.6x respectively (from 19.1x and 16.1x a month ago). Conversely, Memory makers have the lowest valuation with an average 2016e P/E ratio of 11.4x (up significantly from 9.6x a month ago).

## BG semiconductor sub-sectors valuation table

Subsector (# of comp.)	YTD stocks perf.		2016e			
	Avg. / Median	High / Low	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Fabless (15)	1.7% / 0.4%	24.6% / -18.4%	2.3x	8.8x	11.4x	16.6x
Logic & Analog IDM (19)	-3.0% / -2.2%	7.5% / -24.8%	2.5x	7.9x	11.0x	15.4x
Memory IDM (4)	-11.7% / -13.4%	3.6% / -23.7%	0.8x	2.8x	8.0x	11.4x
Foundry (5)	1.2% / 3.6%	13.6% / -12.7%	1.4x	4.0x	12.4x	12.2x
Semi Equipmt & Materials (11)	4.0% / 4.7%	13.4% / -6.0%	2.0x	8.2x	9.7x	14.9x
Intellectual Property & EDA (10)	13.8% / 12.4%	41.2% / -2.5%	4.2x	13.1x	16.5x	19.0x

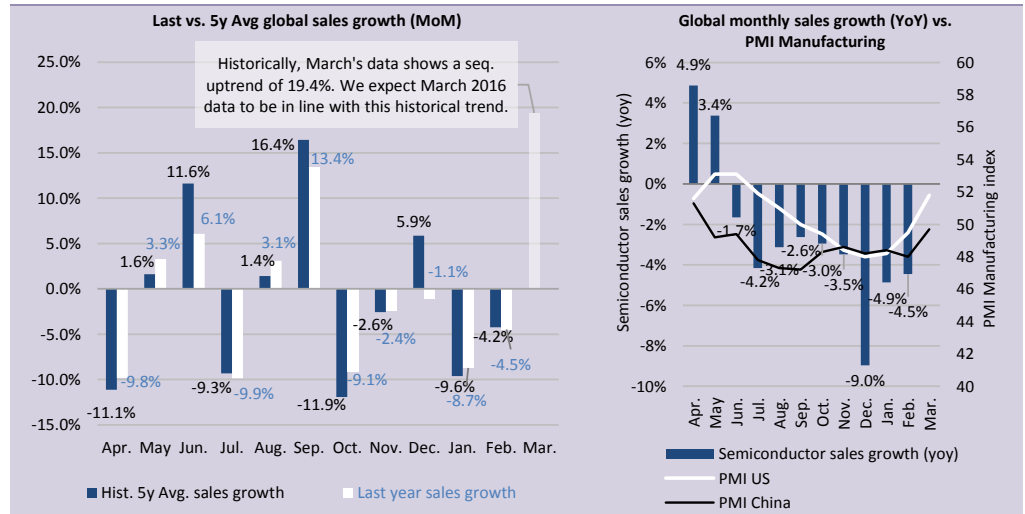
Numbers between brackets represent the number of companies in each category; green/red numbers are higher/lower data per ratio.

Sources: Thomson Reuters I.B.E.S.; Bryan Garnier & Co.

**NEXT CATALYSTS**

- March 2016 WSTS global billing reports, expected for early May.

**February sales in line with seasonal factors, March should harbour no surprises**



Sources: WSTS; Bryan Garnier & Co.

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