

## Sector View

## Semiconductors

A strong start to Q3 with July well above historical seasonality and a positive view on August

	1 M	3 M	6 M	31/12/15
Semiconductors	0.6%	20.6%	24.7%	20.4%
DJ Stoxx 600	2.7%	1.2%	2.8%	-4.2%

\*Stoxx Sector Indices

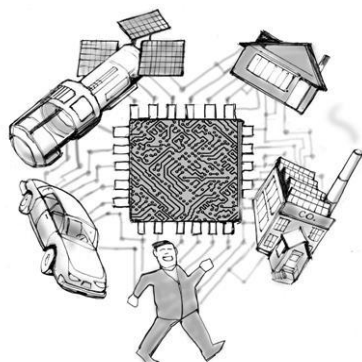
## Companies covered

<b>ams</b>	<b>NEUTRAL</b>	<b>CHF29</b>
Last Price	CHF33	Market Cap. CHF2,422m
<b>ASML</b>	<b>SELL</b>	<b>EUR81</b>
Last Price	EUR96.23	Market Cap. EUR41,700m
<b>DIALOG</b>	<b>BUY</b>	<b>EUR37</b>
Last Price	EUR32.499	Market Cap. EUR2,531m
<b>INFINEON</b>	<b>BUY</b>	<b>EUR16</b>
Last Price	EUR14.82	Market Cap. EUR16,783m
<b>MELEXIS</b>	<b>SELL</b>	<b>EUR48</b>
Last Price	EUR60.26	Market Cap. EUR2,435m
<b>SOITEC</b>	<b>NEUTRAL</b>	<b>EUR0.5</b>
Last Price	EUR0.8	Market Cap. EUR485m
<b>STMICROELECTRONICS</b>	<b>NEUTRAL</b>	<b>EUR6.5</b>
Last Price	EUR6.81	Market Cap. EUR6,204m
<b>u-blox</b>	<b>BUY</b>	<b>CHF255</b>
Last Price	CHF219.1	Market Cap. CHF1,491m

July sales came out better than the seasonal average. According to WSTS data, unadjusted global semiconductor sales stood at USD27.7bn, down 2.1% on a sequential basis and up 4.6% on a yearly basis. This was 720bps above our 5-y historical benchmark pointing to a sequential decrease of 9.3% in July. Computer processors, DRAM and flash memory were particularly strong in July while analogue was broadly in line with seasonal figures. Overall, seven-month aggregated sales fell 4.5% yoy but continued to improve as expected (YTD sales were down 6.5% in May). We expect sales to continue to improve thanks to an easier comparison basis in H2.

## ANALYSIS

- Strong July data showed an uptick in worldwide sales but this was not really a surprise.** Unadjusted global semiconductor sales bounced back and increased on a yoy basis to USD27.7bn (up 4.6%). On a sequential basis, unadjusted global sales were down 2.1% in July compared to June. This was well above our benchmark based on five-year historical data showing an historical seasonal decrease in sales of 9.3% in July compared to June. As a result, 2016 seven-month sales came out 4.5% lower than in 2015, i.e. making up 2015 data as expected. Indeed, note that based on the visibility we now have, we expect 2016 worldwide semiconductor sales to fall slightly. We continue to see a healthy environment in the Automotive and Industrial sectors so far, while the Smartphone market remains bumpy. First data on the success of the iPhone 7 will give more colour about late-2016 momentum.
- Asia-Pacific was particularly strong in July.** Sales in Asia (about 60% of semiconductor billings, o/w ~50% in China), were up 9% yoy in July. Conversely, European and US sales fell 2 and 3% respectively while Japan was almost flat yoy.
- August and beyond: August data could harbour positive surprises.** July sales came out better than historical seasonality but in line with our expectations. In view of current visibility, we expect August sales to be slightly above historical seasonality (i.e. a sequential increase of 1.4%, +/- 300bp). We continue to expect Smartphone sales to be bumpy although the first data from Taiwan points to a continuous improvement in momentum in this market. Six-month vehicle production remains healthy, with production of light vehicles up 6.5%, of which +7% yoy in China and +10% in Europe (however, the US, which accounts for a quarter of Chinese production and a third of European production, decreased by 6%). Our mid-term view has not changed and we continue to expect better momentum in H2 2016 thanks to better comparison in Automotive and Smartphones. Nevertheless, we note that ISM data for August was not particularly encouraging with the US PMI Manufacturing index at 49.4 compared with 52.6 in July. Note that we started the year with January PMI at 48.2. Chinese data also dipped slightly in August after a rebound in July with Markit PMI Manufacturing at 50.0 compared with 50.6 in July (48.4 in January) while the German Industrial production (IFO) data are also unsupportive in August (down 2.0% yoy). Overall, the semiconductor environment appears to be temporarily better than the overall industrial backdrop for August.



## VALUATION

- The 2016e P/E valuation improved significantly in August.** Our semiconductor valuation table shows that the overall valuation between the six sub-sectors of the industry continued to improve slightly in August. On average, IP & EDA vendors, and Fabless maintained the highest valuation metrics (driven by ARM acquisition) with average 2016e P/E ratios of 24.7x and 23.0x respectively (from 20.3x and 19.8x a month ago). Conversely, Foundry makers have the lowest valuation with an average 2016e P/E ratios of 13.1x (up from 11.9x a month ago). IDMs average P/E ratios also increased to 17.3x respectively (vs. 15.5x a month ago).

### BG semiconductor sub-sector valuation table

Subsector (# of comp.)	YTD stocks perf.		2016e			
	Avg. / Median	High / Low	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Fabless (14)	21.9% / 14.6%	89.7% / -26.1%	2.7x	10.9x	14.8x	23.0x
Logic & Analog IDM (17)	14.8% / 11.1%	58.3% / -14.3%	3.3x	9.6x	12.7x	17.3x
Memory IDM (4)	25.3% / 24.7%	33.8% / 17.9%	0.9x	3.8x	6.4x	16.2x
Foundry (5)	13.3% / 10.1%	28.1% / -3.7%	1.6x	4.3x	13.3x	13.1x
Semi Equipmt & Materials (11)	14.1% / 6.9%	60.8% / -5.5%	2.2x	8.9x	10.0x	15.9x
Intellectual Property & EDA (10)	42.4% / 41.5%	77.5% / 12.6%	5.7x	17.0x	22.1x	24.7x

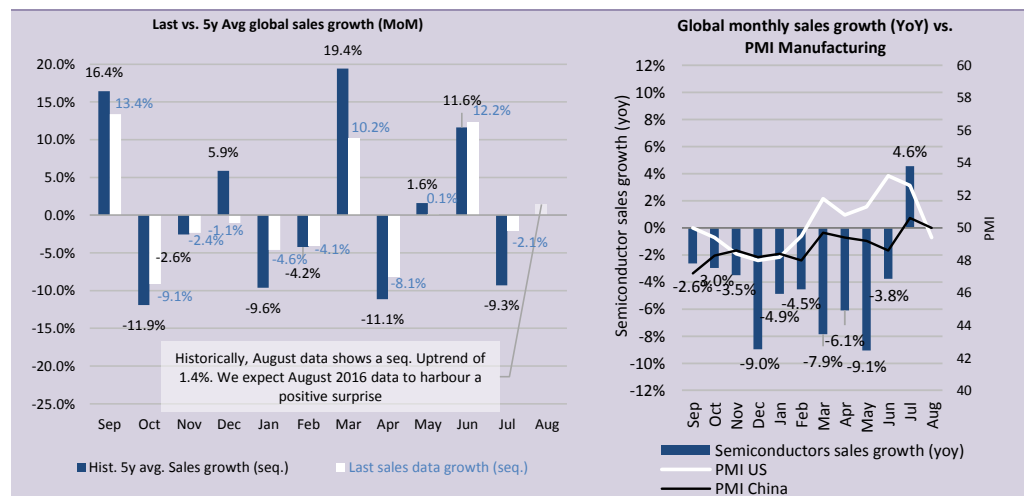
Numbers between brackets represent the number of companies in each category; green/red numbers are higher/lower data per ratio.

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

### NEXT CATALYSTS

- August 2016 WSTS global billing reports, expected for early October.

### August data could surprise positively



Sources: WSTS; Bryan Garnier & Co.

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