

Sector View

Semiconductors

	1 M	3 M	6 M	31/12/15
Semiconductors	4.6%	33.2%	28.7%	25.3%
DJ Stoxx 600	-1.9%	7.5%	3.7%	-6.3%

*Stoxx Sector Indices

Companies covered

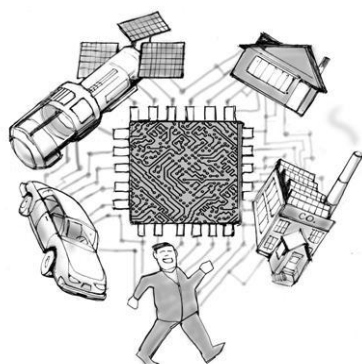
Company	Rating	Target Price
ams	NEUTRAL	CHF29
Last Price	CHF33.75	Market Cap. CHF2,478m
ASML	SELL	EUR81
Last Price	EUR96.76	Market Cap. EUR41,929m
DIALOG	BUY	EUR37
Last Price	EUR36.694	Market Cap. EUR2,808m
INFINEON	BUY	EUR17.5
Last Price	EUR16.19	Market Cap. EUR18,338m
MELEXIS	SELL	EUR48
Last Price	EUR64.7	Market Cap. EUR2,614m
SOITEC	NEUTRAL	EUR0.5
Last Price	EUR0.86	Market Cap. EUR521m
STMICROELECTRONICS	NEUTRAL	EUR6.5
Last Price	EUR7.335	Market Cap. EUR6,682m
u-blox	BUY	CHF255
Last Price	CHF216.4	Market Cap. CHF1,474m

Semiconductor sales momentum continues to improve through the year, as expected

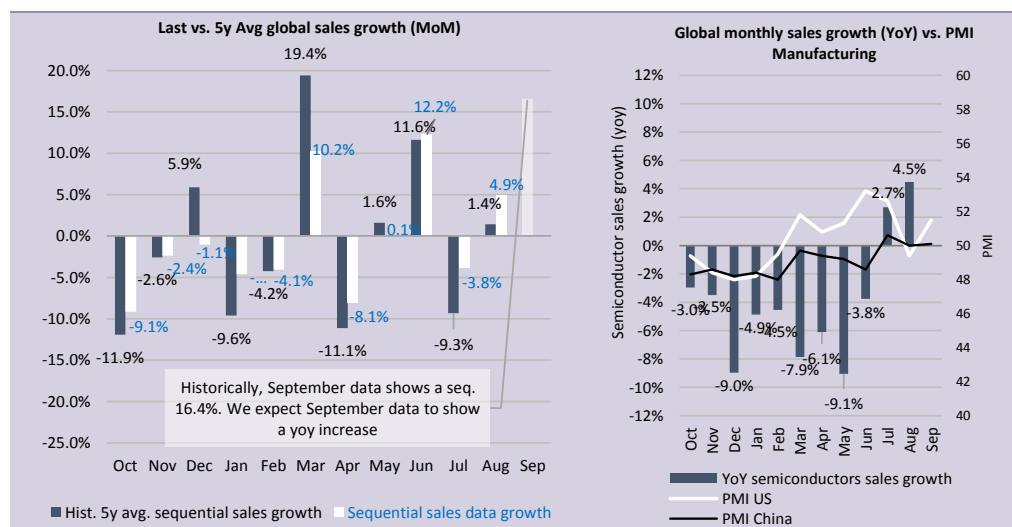
Worldwide semiconductor sales growth for August came out above the usual seasonal average growth. According to WSTS data, unadjusted global semiconductor sales stood at USD28.6bn, up 4.9% on a sequential basis and up 4.5% on a yearly basis. This was about 350bps above our 5-y historical benchmark pointing to a sequential uptick of 1.4% in August. Computer processors, DRAM and flash memory were strong in August while analogue was helped by a low comparison basis. Overall, eight-month aggregated sales have dropped 3.7% yoy so far in 2016 but continued to improve as expected (YTD sales were down 6.5% in May). We continue to see an improvement in momentum through H2 thanks to an easier comparison basis.

ANALYSIS

- Strong August data showed a continuous uptick in worldwide sales.** Unadjusted global semiconductor sales increased by 4.5% on a yearly basis to USD28.6bn in August. On a sequential basis, August sales were up 4.9% compared to July. This was above our 5-y historical benchmark showing an historical seasonal uptick of 1.4% in August compared to July. As a result, 2016 8-month sales declined by 3.7% compared to 2015. Indeed, note that based on the visibility we now have, we expect 2016 worldwide semiconductor sales to fall slightly (in the range of -2% to 0%). The environment in the Automotive and Industrial sectors remains healthy despite volumes sustainability being a potential threat. Regarding smartphones, momentum bounced back thanks to the good start of the iPhone 7.
- September and beyond: We expect September data to show a yoy increase.** August sales growth came out above the usual seasonal average growth, but in line with our expectations. In view of current visibility, we expect September sales momentum to also be slightly better than historical seasonality (i.e. a sequential uptick of 16.4%, +/-300bp). Thanks to the good start to the iPhone 7, the Smartphone segment's momentum bounced back but we are cautious regarding the sustainability of this trend over coming quarters. Eight-month vehicle production remains healthy overall, with production of light vehicles up 8.6% yoy (of which down 0.8% in China, up 9.6% in Europe and up 28.4% in the US). Over the mid-term, we continue to expect better momentum in H2 2016 (vs. H1) thanks to easier comparison in Automotive and Smartphones. Regarding PMI Manufacturing, we note that US ISM data for September was encouraging with the US PMI Manufacturing index at 51.5 compared with 49.4 in August. Note that we started the year with US PMI at 48.2 in January. Finally, Chinese and Eurozone PMI Manufacturing data were down 0.6ppt and down 0.3ppt respectively in September (to 50.1 and 52.6) while the German Industrial production (IFO) index increased by 0.1ppt to 106.3.



We expect September data to show a yoy increase



Sources: WSTS; ISM; Markit; Bryan, Garnier & Co ests.

VALUATION

- **Semiconductor average valuation metrics decreased in September.** Our semiconductor valuation table shows that the overall valuation of the six main sub-sectors decreased in September. As of today, Intellectual Property & EDA and Fabless groups have the highest valuation metrics with average 2016e P/E ratios of 23.6x (down from 24.7x a month ago) and 23.5x (up from 23.0x a month ago) respectively. Conversely, Memory IDM and Foundry groups have the lowest valuation metrics with average 2016e P/E ratios of 11.8x (down from 16.2x a month ago) and 13.1x (stable) respectively. Currently, Logic & Analog IDM and Semi Equipment & Materials shows P/E ratios of 18.0x (up from 17.3x a month ago) and 16.2x (up from 15.9x a month ago) respectively.

BG semiconductor sub-sector valuation table

Subsector average (# of comp.)	YTD price return		2016e			
	Avg. / Median	High / Low	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Fabless (14)	24.4% / 11.6%	107.2% / -28.2%	2.8x	11.4x	15.6x	23.5x
Logic & Analog IDM (16)	18.6% / 17.8%	73.1% / -16.9%	3.4x	10.0x	13.0x	18.0x
Memory IDM (4)	31.7% / 32.0%	37.1% / 25.7%	1.0x	3.8x	6.2x	11.8x
Foundry (5)	15.8% / 12.7%	33.6% / -4.1%	1.6x	4.3x	13.2x	13.1x
Semi Equipmt & Materials (11)	15.8% / 12.3%	58.6% / -6.3%	2.3x	9.0x	11.3x	16.2x
Intellectual Property & EDA (9)	50.1% / 51.4%	89.7% / 21.8%	4.5x	16.2x	22.3x	23.6x

Numbers between brackets represent the number of companies in each category; green/red numbers are higher/lower per group.
Sources: valuation metrics based on consensus ests from Thomson Reuters; updated on 06/10/16

NEXT CATALYSTS

- September 2016 WSTS global billing reports, expected for early November.

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NEUTRAL ratings 31.8%

SELL ratings 11.7%

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