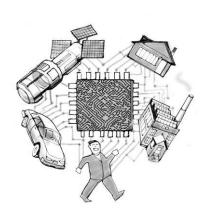
## Sector View

# Semiconductors

September sales update: solid fundamentals and M&A remain tailwinds for valuation

	1 M	3 M	6 M	31/12/15
Semiconductors	-3.1%	2.0%	31.4%	20.3%
DJ Stoxx 600	-3.4%	-1.2%	-1.2%	-9.4%
*Stoxx Sector Indices				

Companies covered						
ams		NEUTRAL	U.R.			
Last Price	CHF26.5	Market Cap.	CHF1,945m			
ASML		SELL	EUR83			
Last Price	EUR92.38	Market Cap.	EUR40,031m			
DIALOG		BUY	EUR40			
Last Price	EUR35.363	Market Cap.	EUR2,706m			
INFINEON		BUY	EUR17.5			
Last Price	EUR15.505	Market Cap.	EUR17,562m			
MELEXIS		SELL	EUR48			
Last Price	EUR56.8	Market Cap.	EUR2,295m			
SOITEC		NEUTRAL	EUR0.5			
Last Price	EUR0.89	Market Cap.	EUR540m			
STMICROELE	CTRONICS	NEUTRAL	EUR7.3			
Last Price	EUR8.11	Market Cap.	EUR7,388m			
u-blox		BUY	CHF255			
Last Price	CHF183	Market Cap.	CHF1,248m			

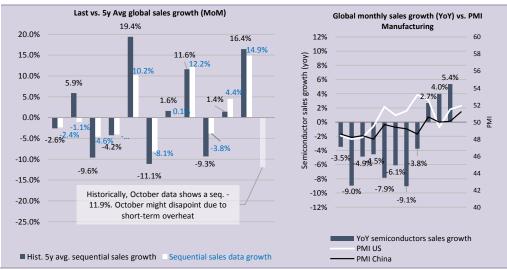


Worldwide semiconductor sales growth for September came out below the usual seasonal average growth. According to SIA, unadjusted global semiconductor sales stood at USD32.7bn, up 14.9% on a sequential basis and up 5.4% on a yearly basis. This was 160ppts below our 5-y historical benchmark pointing to a sequential uptick of 16.4% in September. Nevertheless, almost all market segments provided tailwinds in September. Overall, 9-month aggregated sales are down 2.6% yoy so far in 2017 highlighting a continuous improvement in H2 2016 (H1 sales were down 6.0% yoy). This is mainly due to an easier comparable base and weak but improving momentum in both the PC and Smartphones markets.

## **ANALYSIS**

- Despite being below seasonal, September showed a continuous improvement in semiconductor market momentum. Unadjusted global semiconductor sales increased by 5.4% on a yearly basis to USD32.7bn in September. On a sequential basis, September sales were up 14.9% compared to August. This was slightly below our 5-y historical benchmark showing an historical seasonal uptick of 16.4% in September compared to August. As a result, 2017 9-month sales declined by 2.6% compared to 2016. Due to the particularly weak H1 and despite a rebound in H2, we continue to expect worldwide semiconductor sales to fall slightly in 2016 (in the range of -2% to 0%). Fundamentals remain strong in Automotive and Industrial sectors while we see sign of slightly improving momentum in PC and Smartphone markets. Nevertheless, we would adopt a more defensive track for Q4, especially in Smartphone segment.
- October and beyond: October might disappoint due to the short-term overheat. September sales growth came out below the usual seasonal average growth, but was in line with our expectations (yoy growth). In view of current visibility, we expect October sales momentum to be in line or lower than historical seasonality (i.e. a sequential decline of 11.9%, +/-300bp). Most end-markets remain strong but we are cautious about a possible temporary overheat causing a short term slowdown (Q3 2016 was particularly strong with a >4% yoy increase). In the automotive segment, nine-month vehicle production continues to provide a tailwind, with production of light vehicles up 10.3% yoy (of which down 4.1% in China, up 9.4% in Europe and up 37.7% in the U.S.). Smartphone supply chain benefited strongly from the better than expected start of the iPhone 7. However, we are cautious regarding the tailing potential of this success while Note7 also impacts some players (such as ams (Neutral, FV EUR27)). Regarding PMI Manufacturing, note that the US ISM data set was supportive in October and headed in the right direction with the US PMI Manufacturing index at 51.9 compared with 51.5 in September. Finally, Chinese and Eurozone PMI Manufacturing data were up 0.1ppt and up 0.9ppt respectively in October (to 51.2 and 53.5) while the German Industrial production (IFO) index increased by 1.0ppt to 110.5.

# October semiconductor sales might disappoint due to short-term overheat



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

# **VALUATION**

• Semiconductor average valuation metrics decreased in October. Our semiconductor valuation table shows that the overall valuation of the six main sub-sectors decreased in October. As of today, Intellectual Property & EDA and Fabless groups have the highest valuation metrics with average 2017e P/E ratios of 19.5x (down from 19.9x a month ago) and 17.7x (down from 18.2x a month ago) respectively. Conversely, Memory IDM and Foundry groups have the lowest valuation metrics with average 2017e P/E ratio of 10.5x (down from 11.0x a month ago) and 12.3x (down from 12.8x a month ago) respectively. Currently, Logic & Analog IDM and Semi Equipmt & Materials shows P/E ratios of 15.2x (down from 15.7x a month ago) and 14.5x (down from 15.0x a month ago) respectively.

## **BG** semiconductor sub-sector valuation table

	YTD price return		2016e			
Subsector average (# of comp.)	Avg. / Median	High / Low	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Fabless (14)	22.5% / 11.7%	115.9% / -25.2%	2.5x	9.4x	11.5x	17.7x
Logic & Analog IDM (16)	17.1% / 18.0%	73.0% / -17.3%	3.2x	8.9x	11.3x	15.2x
Memory IDM (4)	34.3% / 31.7%	52.5% / 21.2%	0.9x	3.5x	6.9x	10.5x
Foundry (5)	16.8% / 19.0%	36.7% / -2.9%	1.5x	3.9x	11.2x	12.3x
Semi Equipmt & Materials (11)	17.8% / 13.5%	55.8% / -2.3%	2.1x	8.3x	10.4x	14.5x
Intellectual Property & EDA (9)	44.3% / 41.4%	82.2% / 22.9%	3.5x	12.1x	15.8x	19.5x

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 06/11/16

## **NEXT CATALYSTS**

• October 2016 WSTS global billing reports, expected for early December.

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# Stock rating

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Positive opinion for a stock where we expect a favourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential upside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

NEUTRAL

Opinion recommending not to trade in a stock short-term, neither as a BUYER or a SELLER, due to a specific set of factors. This view is intended to be temporary. It may reflect different situations, but in particular those where a fair value shows no significant potential or where an upcoming binary event constitutes a high-risk that is difficult to quantify. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

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Negative opinion for a stock where we expect an unfavourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential downside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

# Distribution of stock ratings

BUY ratings 72%

NEUTRAL ratings 0%

SELL ratings 28%

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