

## Dialog Semiconductor

Price EUR34.85

Feedback from Technology Day – It is time to take a break

Fair Value EUR40 (+15%)

NEUTRAL vs. BUY

Bloomberg	DLG GR
Reuters	DLGS.DE
12-month High / Low (EUR)	38.8 / 24.4
Market Cap (EURm)	2,713
Ev (BG Estimates) (EURm)	1,943
Avg. 6m daily volume (000)	4.50
3y EPS CAGR	9.2%

	1 M	3 M	6 M	31/12/15
Absolute perf.	-8.0%	11.7%	30.1%	11.6%
Semiconductors	-2.5%	-1.1%	31.7%	19.5%
DJ Stoxx 600	-0.8%	-2.6%	0.8%	-7.7%

YEnd Dec. (USDm)	2015	2016e	2017e	2018e
Sales	1,355	1,197	1,374	1,631
% change		-11.7%	14.7%	18.7%
EBITDA	360	285	366	455
EBIT	317.7	216.3	293.8	382.7
% change		-31.9%	35.8%	30.3%
Net income	238.4	163.0	228.2	305.6
% change		-31.6%	40.0%	33.9%

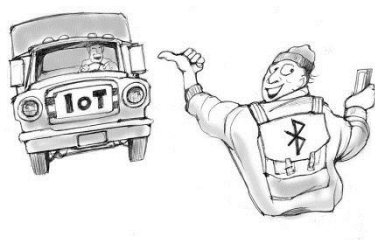
	2015	2016e	2017e	2018e
Operating margin	23.4	18.1	21.4	23.5
Net margin	17.6	13.6	16.6	18.7
ROE	17.3	20.3	12.9	14.6
ROCE	46.9	40.4	48.6	63.4
Gearing	-54.0	-62.6	-66.7	-70.8

(USD)	2015	2016e	2017e	2018e
EPS	3.02	2.09	2.94	3.94
% change		-30.7%	40.5%	33.9%
P/E	11.5x	16.7x	11.9x	8.9x
FCF yield (%)	8.9%	9.4%	6.4%	8.4%
Dividends (USD)	0.00	0.00	0.00	0.00
Div yield (%)	NM	NM	NM	NM
EV/Sales	1.6x	1.6x	1.3x	1.0x
EV/EBITDA	6.0x	6.8x	4.8x	3.4x
EV/EBIT	6.8x	9.0x	6.0x	4.1x

Last Friday, Dialog held a Technology Day dedicated to “charging”. While we often only speak about Apple and PMIC when it comes to Dialog, the group has strong expertise in overall power management and proved that it will leverage on this expertise to expand its serviceable available market over the coming year. Fast charging offers a unique opportunity for Dialog to diversify through new customers, especially in China. As such, the overall message of the day was convincing regarding the LT. Nevertheless, Dialog stock remains largely tied to Apple’s evolution and reacts rapidly to ST newsflow. We have already highlighted our concern regarding possible overheating in the smartphone space due to a strong start by the iPhone 7, which, by the way, helped DLG stock to jump by 30% over the last 6m. As such, we prefer to adopt a more cautious approach on the stock and downgrade from Buy to Neutral.

## ANALYSIS

- A positive message for the LT, but the stock mostly reacts to ST.** Last Friday, Dialog held a Technology conference for analysts and investors. Overall, we think that the message and details given by the company about its markets and opportunities were positive: an expansion of its serviceable available market thanks to its expertise in fast charging and a possible reduction of exposure to its first customer thanks to higher demand for DLG chips from Chinese OEMs. Here are the main takeaways:
- Working hard to expand its SAM in Mobile Systems (80% of sales): from USD3.4bn to USD6.0bn by 2019e.** So far, Dialog benefited from strong momentum, driven by increasing complexity of PMIC (and the introduction of sub-PMIC), but new supportive trends are coming. First, the market for power management in mobile devices is moving fast to rapid charge solutions. It is now clear that most of the smartphones should have such a solution in the coming years, while only 250m smartphones should be shipped with such a technology this year, or only about 17% of smartphones sold, data from IHS and IDC points to an accelerating adoption rate and a 2015/2019e CAGR of 68% for fast charging solutions. Let’s not forget that this has been mostly driven by Chinese OEMs so far. This is particularly important for Dialog since the group holds a 70% market share in the rapid charging market, with a unique offering including the support of most of the market standards including the two most important from Qualcomm and MediaTek. This evolution appears natural to us, since new smartphones have higher energy needs. As such, increased battery capacity which take longer to charge using standard charging technologies. This triggers the need for more efficient power management ICs and charging solutions. Here, Dialog introduces battery and charging management chips solution in addition to its current PMIC portfolio and stands out of the crowd with the introduction of a new “one-chip” solution able to support up to 15W energy supply (vs. current standard at 7.5W) with no heat issue and an efficiency increased to 96% (vs. 89% for standard PMIC today). Thanks to this new IC design, the group is able to reduce by 50% the Build of Materials (BOM) and PCB area (particularly important for OEMs constantly changing PCB area). If PCB area is less a problem (we think about tablets for examples), Dialog proposes a second chip which supports a 30W input (available from H1-2017). In addition to that, the group will also bring its product to new segments such as premium wearable, DSLR and Mobile computing, also contributing to SAM expansion.
- Power conversion: rapid charging also provides another boost here.** To enable more efficient fast charging capabilities, Dialog is also expanding its product portfolio to new AC/DC controllers to be embedded directly in Chargers (vs. in the Smartphone for PMICs). Dialog’s new ICs propose a new way of controlling and transforming energy from the power source to the smartphone. Working with ICs, Dialog is able to reduce significantly 1/ the number of discrete component used in a Charger, 2/ the size of the charger (1 small chips vs. multiples discrete components), 3/ reduce costs of manufacturing thanks to a smaller amount of chip, and 4/ a more efficient and reliable circuit. In addition to that, Dialog’s ICs allows a direct compatibility with Fast Charging chips embedded in Smartphones. Fast Charging capabilities, on the charger side, is particularly tough to support using discrete components since power density tends to be too high for these components (causing over-heating problems and then limitations). As such, while a standard travel adapter contains one Dialog IC today (a primary side control IC), it should gradually increase to 3 due to the more intelligent features embedded in Travel Adapters (a primary side control IC, a rapid charge IC, and a sync rec control IC). To sum up, Dialog should also benefit from rapid



charging feature adoption in chargers as for smartphones. We believe that the unique expertise of Dialog in this field (we see no other company in the semi landscape with a similar expertise in fast charging) and its current market portfolio should help the group to expand its SAM. As for chips embedded in smartphones, Dialog anticipates that, from <100m units chipsets for chargers that have been shipped in 2015 (c. 250m in 2016e), the market should expand to >600m units in 2019 or a CAGR of 68% over the period and target a LT market share of 50% which appears to be achievable. In addition to these new products, Dialog also reminds us that it has a strong R&D pipe when it comes to Gallium Nitride (enabling higher-efficiency). The group will use this technology to retain leadership in the Power management market and accelerate the transition from discrete components to ICs.

#### VALUATION

- **Overall, we believe that most of the positive news is already included in the consensus and adopt a Neutral recommendation.** We recall that management's guidance is for market share gain in the next iPhone since several months and consensus (BG included) expectations already embrace such an impact (FY17e sales growth: cs. +14.0% / BG +14.7%). In addition, we stress that Dialog stock mostly reacts to short-term momentum and especially Apple's. We have already highlighted our concern regarding possible overheating in the smartphone space due to the good start of the iPhone 7, which, by the way, helped DLG stock to jump by 35% over the last 6m. As such, we prefer to adopt a more cautious approach on the stock and **downgrade from Buy to Neutral**.
- Based on our estimates, Dialog' shares are trading on 2017e P/E and PEG ratios of 11.9x and 1.4x respectively.

#### NEXT CATALYSTS

- Late February/Early March 2017: Q4 and FY16 results (not confirmed yet)

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