

## Siltronic – a leading producer of silicon wafers

Investor Presentation August 2017

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## Increasing demand for electronic devices and new applications drive semiconductor growth, which in turn fuels silicon demand.

#### **Electronics value chain 2016**

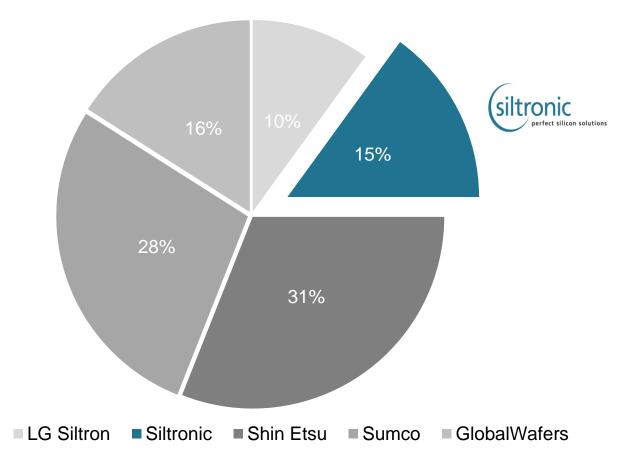


Source: Electronics (IC Insights), Semiconductors (WSTS, only silicon-based), Silicon wafers (SEMI SMG), electronic applications (WACKER estimate)



## Siltronic is a strong wafer supplier with leading-edge technology



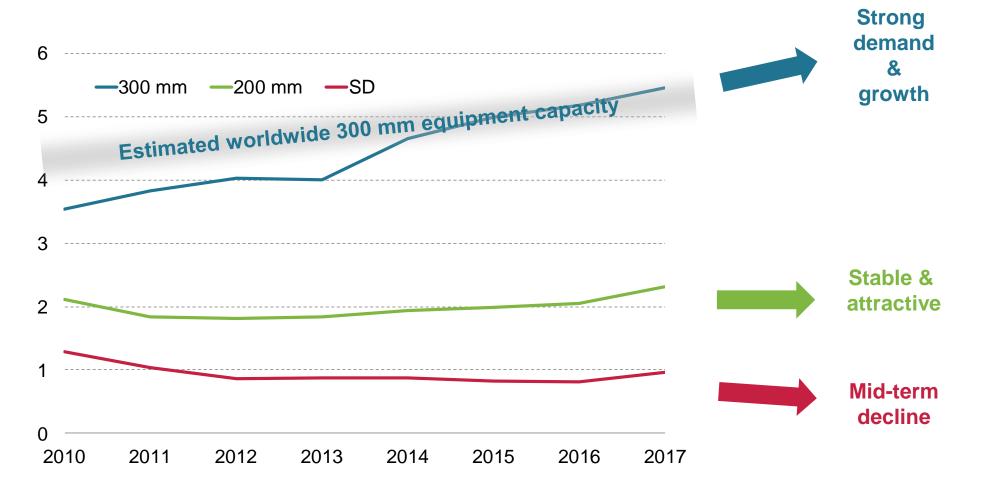


Sources: Companies' revenue reports 2016, converted to USD mn



## Siltronic is focused on growing 300 mm and attractive 200 mm business.

Development of Total Wafer Demand per Diameter, in mn 300 mm equivalents per month

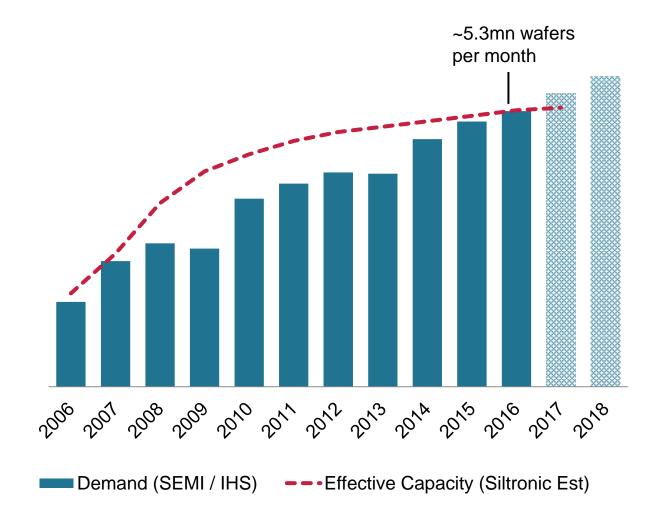


Source: SEMI up to June 2017, Siltronic estimates



## 300mm demand is expected above industry capacity, after almost a decade of over-supply

### 300mm effective capacity vs. demand, kpcs per month



#### Comments

- Extension not considered at current price levels
- ~30% to 35% overall empty shell capacity estimated to be available
  - Would allow for costefficient brownfield extension according to demand growth without need of creating overcapacity
  - Takes around 12-18 months to bring brownfield capacity online

Sources: SEMI, IHS, Siltronic



## **Market highlights**

#### Semiconductors

- Semiconductor market continued its strong growth in May
- Units grew +16.8% y-o-y (3MMA)
- IC Insights predicts a new all-time high for semiconductor CapEx in 2017 (~USD 76bn)

### Silicon wafer demand

SEMI market in Q2 was ~6.4bn cm<sup>2</sup>/month, 4.2% up q-o-q and 10.1% up y-o-y

### **Price increases**

- Substantial increase in wafer prices for 300mm
- Price increase for 200mm wafers
- Siltronic negotiated additional price increases for Q3

### Competition

Wafer suppliers continue to report strong demand for all diameters, with fully utilized 200mm and 300mm lines

Source: WSTS up to May 2017, IC Insights (May 2017 Update), SEMI up to Jun 2017



## Silicon area demand continues to grow



Silicon wafer demand, in bn in<sup>2</sup>

Source: SEMI (Silicon Area until 2016), IHS Markit Technology (Semiconductor Silicon Demand Forecast Tool, Q1'17 Update, Estimate 2017)



## SSDs and industrial applications remain the main drivers for silicon demand. Turnaround in PC and tablet market also helps.

### Computing

- Servers, mobile PCs and PC upgrades drive demand for SSDs.
- Mobile PC units will decline in 2017 but at the slowest rate in 10 years.



#### **Mobile Phones**

- Smartphone shipments are expected to grow.
- Technology migrations and content are key for silicon demand.



### Industrial

Industrial automation, smart homes and medical electronics will increase silicon demand for industrial applications in 2017.

#### Automotive



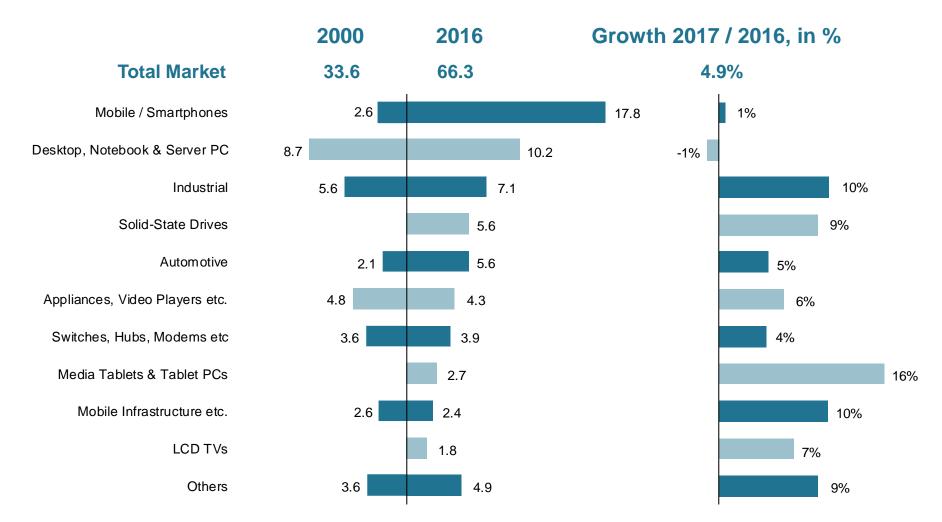
- Semiconductor content in new cars grows, driven by electrification, automated driving and connectivity.
- Vehicle production also rises slowly.

Source: IHS Markit Technology (Semiconductor Silicon Demand Forecast Tool, Q1'17 Update)



## IHS confirms silicon area growth forecast of 4.9% for 2017, with growth spread upon a wide range of applications.

### Wafer Demand 2000 / 2016, in bn. cm<sup>2</sup>



Source: IHS Markit Technology (Semiconductor Silicon Demand Forecast Tool, Q2'17 Update)



## International manufacturing network supports market leadership and business focus





## Customer base well diversified across all major semiconductor Silicon wafer consumers.



Source: Company Information, Siltronic



### Financials improved strongly over the last years

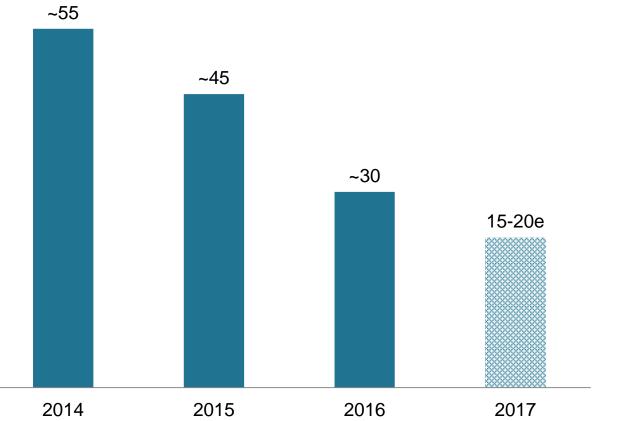
| Adjusted <sup>1</sup> financial figures (EUR mn) | 2012    | 2013   | 2014   | 2015  | 2016  | HY 2017 |
|--|---------|--------|--------|-------|-------|---------|
| Sales  | 1030.0  | 875.5  | 853.4  | 931.3 | 933.4 | 541.1   |
| EBIT   | (75.5)  | (87.3) | (31.6) | 2.7   | 27.0  | 66.8    |
| EBIT margin in %                                 | (7.3)   | (10.0) | (3.7)  | 0.3   | 2.9   | 12.3    |
| EBITDA   | 122.5   | 112.6  | 117.7  | 124.0 | 146.0 | 125.7   |
| EBITDA margin in %                               | 11.9    | 12.9   | 13.8   | 13.3  | 15.6  | 23.2    |
| СарЕх  | 144.3   | 39.7   | 40.7   | 75.0  | 88.8  | 44.9    |
| Free cash flow                                   | (134.4) | 64.7   | 86.3   | 37.4  | 19.0  | 73.2    |

<sup>1</sup> figures 2012-2014 adjusted for consolidation effects resulting from acquisition of SSW and restructuring



### Successful cost reduction programs continue

### Cost savings, in EUR mn<sup>1</sup>



#### Additional savings levers:

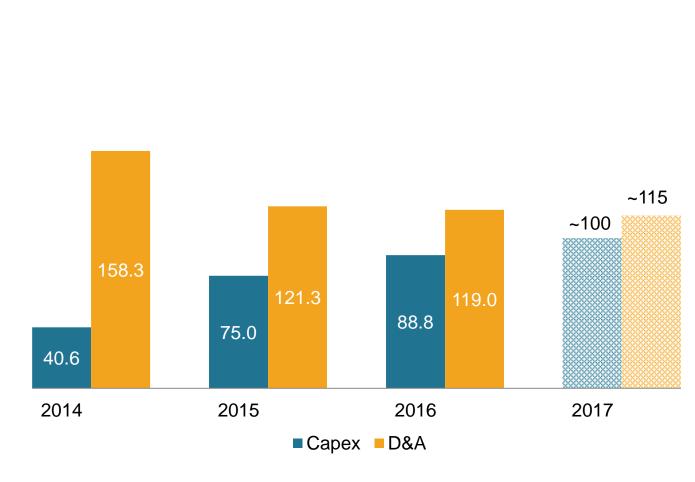
- Investing in automation in Germany
- Investing in new pullers to improve yields and capabilities
- Poly cost optimization ongoing
- Further productivity increases through various initiatives

Based on prior year cost basis to current year volumes and adjustments to certain current year costs to reflect prior year contractual and economic parameters (e.g. prior year unit labor cost).



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## CapEx: spending mostly for capability and cost reductions



Adjusted<sup>1</sup> CapEx and D&A, in EUR mn

### CapEx 2015 and 2016

- New crystal pulling hall in Freiberg
- Exchange of crystal pullers vs. state-of-the-art equipment
- Automation projects in Germany

### 2017 focus on

- Capability improvement
  - New design rules
  - New generation crystal pullers
- Cost reduction (e.g. further automation)
- Debottlenecking

adjustments are based on the assumption that SSW would have been consolidated prior to January 1, 2014. Initial consolidation of SSW was made as of January 24, 2014. The adjustments are not in compliance with IFRS.



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### Siltronic Outlook 2017 (Update as of July 28, 2017)

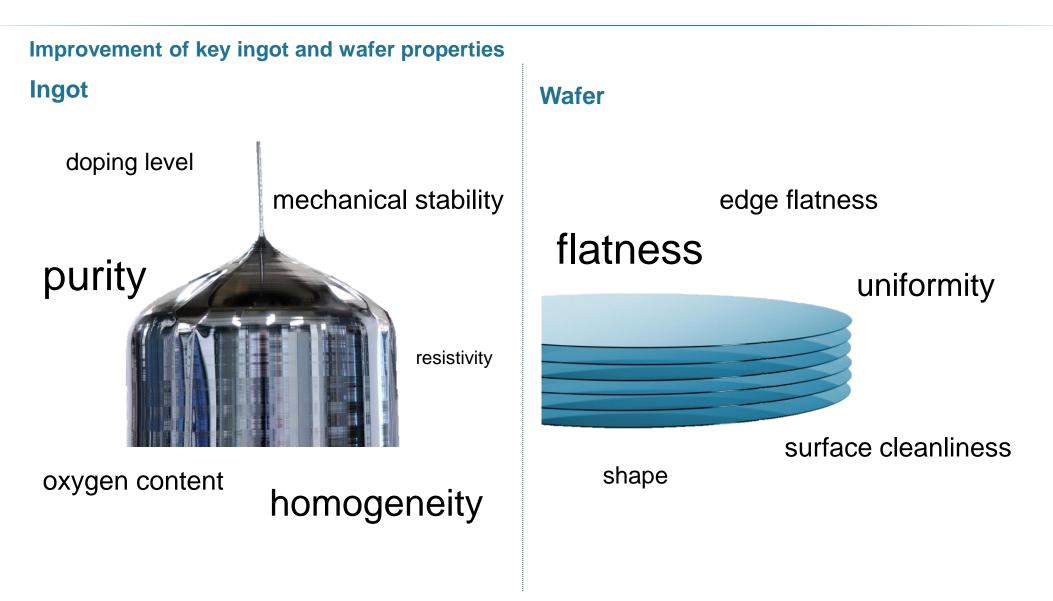
| EBITDA margin      | at least 27%: update  |
|--------------------|---|
| ROCE               | substantially higher than in 2016, considerably higher than WACC: |
| Free Cash Flow     | clearly positive; by far above 2016                               |
| Sales              | at least EUR 1.12bn: update                                       |
| R&D                | unchanged at approx. 7% of sales                                  |
| Cost Position      | potential savings of around EUR 15m to EUR 20m                    |
| Hedging Expenses   | substantially lower around EUR 10m                                |
| Depreciation       | on the level of 2016  |
| Tax rate           | 20% or slightly below   |
| Financial Result   | roughly EUR 10mn interest expense                                 |
| Earnings per Share | significantly higher than in 2016                                 |
| CapEx              | around EUR 100m, partly financed by USD 20m customer prepayments  |



## Appendix



## Continuous improvement of key ingot and wafer properties to meet customers' requirements





## **Financial Year 2016: Highlights**

| Sales          | Sales of EUR 933.4mn (2015: EUR 931.3mn)  |
|----------------|---|
| EBITDA         | EUR 146.0mn (2015: EUR 124.0mn),<br>Without negative FX effects* EBITDA would have been EUR 166.9mn                                 |
| Margin         | EBITDA margin 15.6% (2015: 13.3%)<br>Without negative FX effects* EBITDA margin would have been 17.9%                               |
| EBIT           | positive at EUR 27.0mn (2015: EUR 2.7mn)  |
| Cost Savings   | around EUR 30mn   |
| Investments**  | EUR 88.8mn (2015: EUR 75.0mn), mainly in enhanced capabilities  |
| Free Cash Flow | EUR 19.0mn (2015: EUR 37.4mn), despite EUR 11.1mn one-time payment to pension fund and EUR 20.5mn repayment of customer prepayments |
| Net Cash       | EUR 175.0mn (2015: EUR 155.9mn)   |

\*other operating income and expenses influenced by FX effects, mainly due to hedging. In 2016, FX effects added up to expenses of EUR 20.9mn. \*\* without investment in financial assets

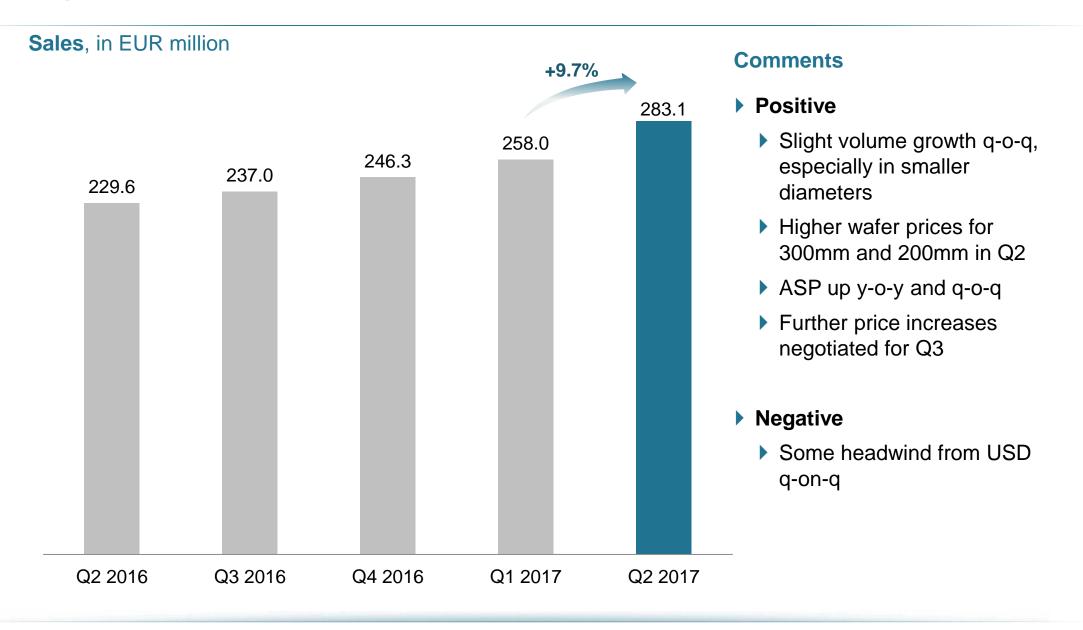


## **Highlights Q2/2017: Financials**

| Sales            | Sales of EUR 283.1m (Q1/2017: EUR 258.0m)<br>+9.7% q-o-q |
|------------------|--|
|                  |  |
| EBITDA           | EUR 72.7m (Q1/2017: EUR 53.0m)<br>+37.2% q-o-q           |
|                  |  |
| Margin           | EBITDA margin of 25.7% (Q1/2017: 20.5%)                  |
|                  |  |
| EBIT             | EUR 43.4m (Q1/2017: EUR 23.4m)<br>+85.5% q-o-q           |
|                  |  |
| CapEx            | EUR 25.5m (Q1/2017: EUR 19.3m)                           |
|                  |  |
| Free Cash Flow   | EUR 41.8m (Q1/2017: EUR 31.3m)                           |
|                  |  |
| Financial Assets | EUR 241.2m (December 31, 2016: EUR 175.0m)               |
|                  |  |

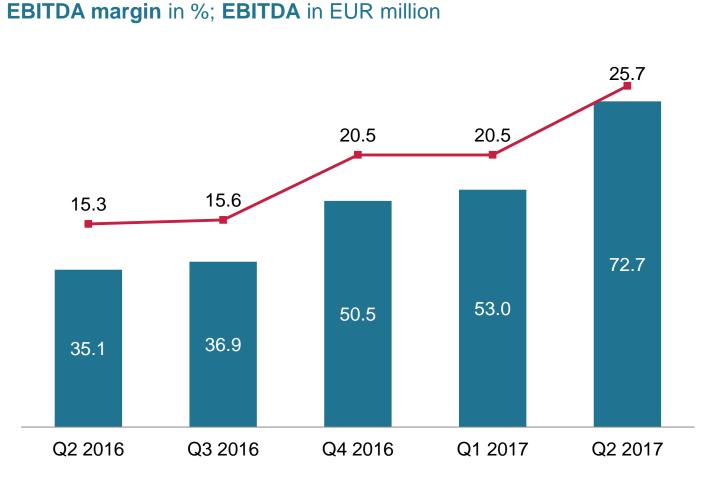


## Q2 sales development driven by increased prices and slightly higher wafer volumes





# Positive development of EBITDA and EBITDA margin mainly due to higher ASP

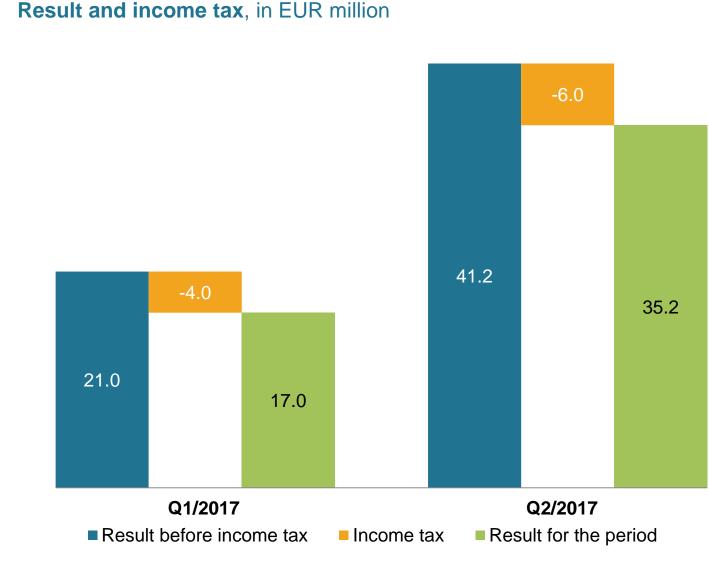


#### Comments

- Positive
  - Higher ASP y-o-y and q-o-q
  - Successful cost reduction program continued – cost of sales per wafer area decreased



## Positive development of net result due to price increases and lower costs per wafer area



#### Comments

- Net profit of EUR 35.2m in Q2/2017
- Price increases and lower cost of sales per wafer area have positive effect
- EUR 6.0m effective taxes
- Potential future tax advantages based on tax losses carried forward not capitalized (accounting policies)



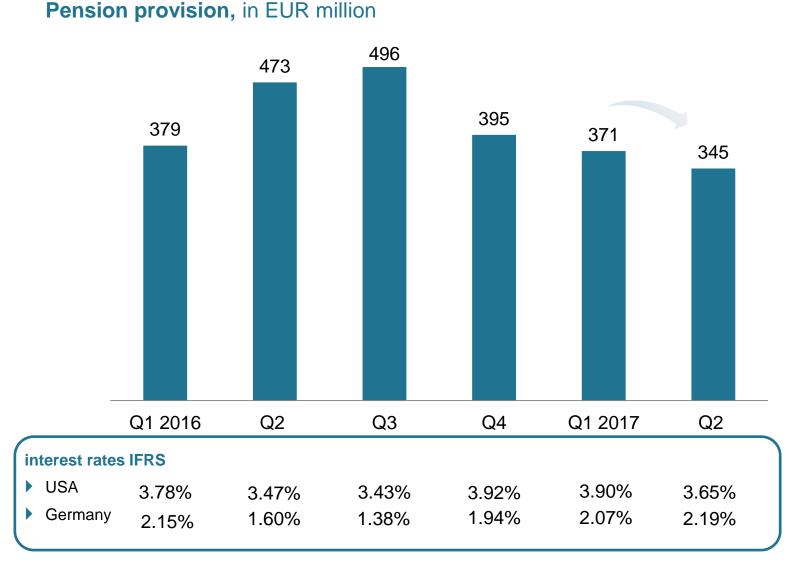
## Equity ratio of 46.9% Net financial assets of EUR 241.2m

### Balance sheet, in EUR million

| Assets                       | Jun 30,<br>2017 | Dec 31,<br>2016 | <i>Comments<br/>Jul 30, 2017</i>                | Equity and liabilities | Jun 30,<br>2017 | Dec 31,<br>2016 | <i>Comments<br/>Jul 30, 2017</i>                 |
|------------------------------|-----------------|-----------------|---|------------------------|-----------------|-----------------|--|
| Non-current                  | 531.4           | 554.1           |   | Equity                 | 522.1           | 425.3           |  |
| PP&E                         | 498.1           | 519.8           |   | Siltronic              | 526.9           | 431.9           |  |
| Other fixed                  | 33.3            | 34.3            | 25 intangibles<br>(related to SSW)<br>3 hedging | Other<br>shareholders  | -4.8            | -6.6            | Samsung's 22% ir<br>SSW                          |
| Current                      | 581.1           | 502.7           |   | Liabilities            | 590.4           | 631.5           |  |
| Inventories                  | 139.9           | 140.9           |   | Pension<br>provision   | 345.1           | 395.1           | Germany and US                                   |
| Trade<br>receivables         | 131.0           | 118.2           |   | Other provisions       | 45.1            | 51.1            | 42 personnel relat<br>(e.g. early<br>retirement) |
| Other current                | 29.2            | 28.2            | 12 hedging                                      | Financial debt         | 39.8            | 40.4            | Samsung  |
|                              |                 |                 |   | Trade liabilities      | 79.2            | 81.6            |  |
| Cash and fixed term deposits | 281.0           | 215.4           |   | Other                  | 81.2            | 63.3            | 30 prepayments<br>35 employee-relat<br>1 hedging |
| Total                        | 1,112.5         | 1,056.8         |   | Total                  | 1,112.5         | 1,056.8         |  |



## Fluctuations in pension provision due to interest rate movements



#### Comments

- Changes in interest rates influence evaluation of pension provision
- Change in interest rates directly reflected in equity (OCI)



## Payments for CapEx partly financed by customer prepayments

### Cash flow, in EUR million

|                                     | Q2/<br>2017 | Q1/<br>2017 |
|-------------------------------------|-------------|-------------|
| Cash flow from operating activities | 65.6        | 48.7        |
| thereof repayment of prepayments    | -5.2        | -5.1        |
| thereof new customer prepayments    | 9.3         | 5.5         |
| Payments for CapEx                  | -23.8       | -17.4       |
| Free cash flow                      | 41.8        | 31.3        |

#### Comments

- CapEx for investments in:
  - state-of-the-art crystal pullers and further automation of production sites
  - product mix
    optimization (leadingedge products)
- CapEx for 2017 will be around EUR 100m; partly financed by USD 20m customer prepayments
- Strong net profit lead to high free cash flow of EUR 41.8m in Q2



### **Contact and Additional Information**

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