Organic Electronics

Next Generation Displays Flexible Electronics Wearables

## **AIXTRON** Investor Presentation

Opto & Power Electronics

Next Generation Displays SSL Adoption · UV-C Renewable Energy Power Management E-Mobility · Connectivity Our technology.
Your future.

Memory & Logic

High Performance Computing Memory / Big Data Sensors · Smart Devices

Graphene & Nanomaterials

Flexible Electronics Sensors · Energy Storage High Performance Computing Composites

IR Presentation – Q1/2017

(FSE: AIXA, ISIN DE000A0WMPJ6)

**RIXTRON** 

Disclaimer 2

## **Forward-Looking Statements**

This document may contain forward-looking statements regarding the business, results of operations, financial condition and earnings outlook of AIXTRON. These statements may be identified by words such as "may", "will", "expect", "anticipate", "contemplate", "intend", "plan", "believe", "continue" and "estimate" and variations of such words or similar expressions. These forward-looking statements are based on our current assessments, expectations and assumptions, of which many are beyond control of AIXTRON, and are subject to risks and uncertainties. You should not place undue reliance on these forward-looking statements. Should these risks or uncertainties materialize, or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of AIXTRON may materially vary from those described explicitly or implicitly in the relevant forward-looking statement. This could result from a variety of factors, such as actual customer orders received by AIXTRON, the level of demand for deposition technology in the market, the timing of final acceptance of products by customers, the condition of financial markets and access to financing for AIXTRON, general conditions in the market for deposition plants and macroeconomic conditions, cancellations, rescheduling or delays in product shipments, production capacity constraints, extended sales and qualification cycles, difficulties in the production process, the general development in the semi-conductor industry, increased competition, fluctuations in exchange rates, availability of public funding, fluctuations and/or changes in interest rates, delays in developing and marketing new products, a deterioration of the general economic situation and any other factors discussed in any reports or other announcements, in particular in the chapter Risks in the Annual Report, filed by AIXTRON. Any forwardlooking statements contained in this document are based on current expectations and projections of the executive board based on information available the date hereof. AIXTRON undertakes no obligation to revise or update any forward-looking statements as a result of new information, future events or otherwise, unless expressly required to do so by law.

This document is an English language translation of a document in German language. In case of discrepancies, the German language document shall prevail and shall be the valid version.

Due to rounding, numbers presented throughout this presentation may not add up precisely to the totals indicated and percentages may not precisely reflect the absolute figures for the same reason.

Our registered trademarks: AIXACT®, AIXTRON®, Atomic Level SolutionS®, Close Coupled Showerhead®, CRIUS®, Gas Foil Rotation®, OVPD®, Planetary Reactor®, PVPD®, TriJet®, Optacap™



## **Our Vision**

## **Technology. Materials. Performance.**

## Technology.

We are the **recognized technology leader** in complex material deposition.

#### Materials.

We **enable our customers** to
successfully shape the
markets of the future,
exploiting the potential
offered by **new materials**.

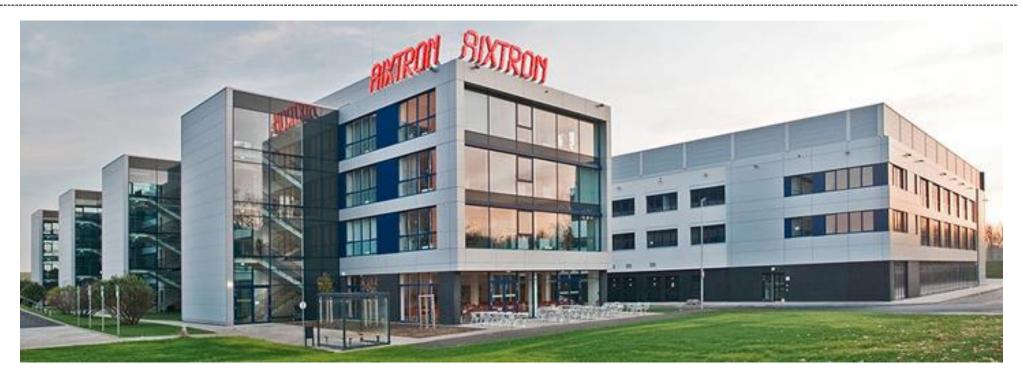
#### Performance.

We deliver the performance driving economic success through our expertise, our employees and the quality of our products.



#### 4

## Who we are



- Headquarters based in Herzogenrath, Germany
- Worldwide presence with 13 sales/representatives offices and production facilities
- Company founded in 1983 over 30 years of experience
- ~ 700 employees

- Technology leader in deposition systems
- More than 3,000 deposition systems delivered all over the world
- State of the art R&D center and demo facilities



## **Global Presence**





## **AIXTRON** - Enabling an Innovative Future

## **New Complex Materials**



#### **Compound Semiconductors**

- GaAs/ GaN (Sensors)
- GaN/SiC (RF/Power Mobile)
- GaAs/InP (Laser Datacom)
- GaN (LED LiFi, Micro-LED, UV LED)



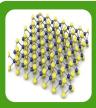
#### Silicon Semiconductors

- III-V (Next-generation Logic Real-time Processing)
- Innovative materials (Memory - Big Data)



#### Organic

- Display, Lighting
- Flexible Electronics
- Organic Photovoltaics

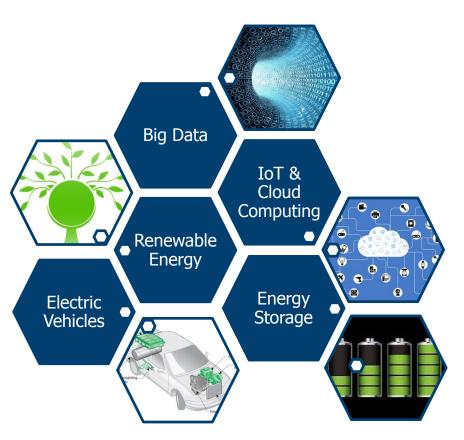


#### **Carbon Nano Structures**

- Graphene (Energy Storage)
- 2D materials (Smart Sensors, Energy Storage)

## **Tech Trends**







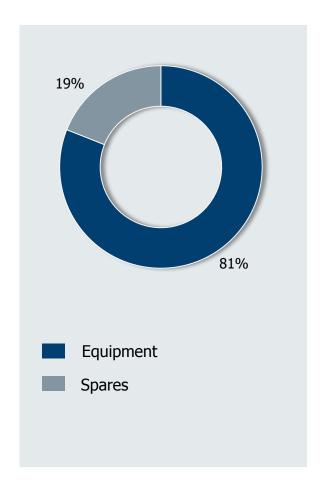
## **Our Technology Portfolio**

#### Silicon Carbon **Compound Semiconductors Organic Semiconductors Nanomaterials** OVPD®/PVPD®/TFE **MOCVD** ALD/CVD/MOCVD **PECVD** LEDs, Lasers and **Graphene, 2D Nano Silicon Power Management Organic Electronics** GaN / SiC **Semiconductors Optoelectronics CNTs and CNWs** • LEDs for display: RF transistors DRAM Dielectric and Metal • OLEDs for display: Transistors TVs, mobile phones, TVs, mobile phones, Interconnects AC-DC converters Electrode tablets, etc. Flash Inter Poly Dielectric tablets, etc. DC-DC converters Flexible Electronics · LEDs for lighting • Thin Film Encapsulation and Metals Energy Storage Solar inverters ReRAM and PCRAM Active · OLEDs for lighting LEDs for automotive · Motor drives in · Sensors, etc. element and Electrode · Organic, flexible LEDs for datacom industrial applications Logic Gate stack electronics Lasers for telecom, automotive and Logic High Mobility Organic Photovoltaics consumer electronics consumer electronics Channel Photovoltaics Increasing equipment Growth in NAND Flash Increasing demand for New Applications driving **Production Oualification with** demand expected by driving Demand Relevant Customers Demand **Advanced Optoelectronics** TFOS in Early Development

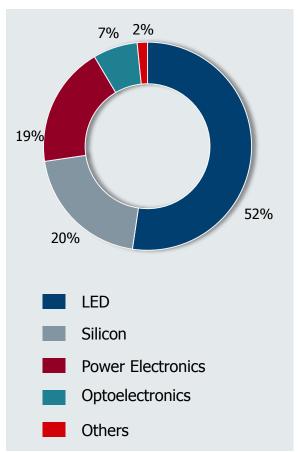
2018 and beyond

## **Revenue Analysis**

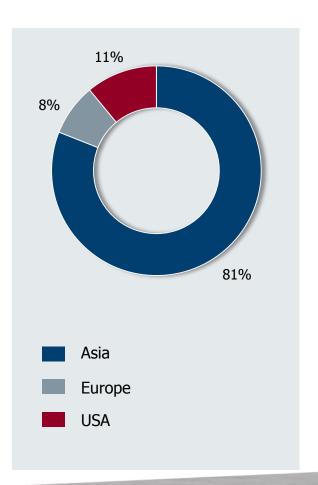
Q1/2017: by equipment & spares



Q1/2017: by end application (equipment only)



Q1/2017: by region





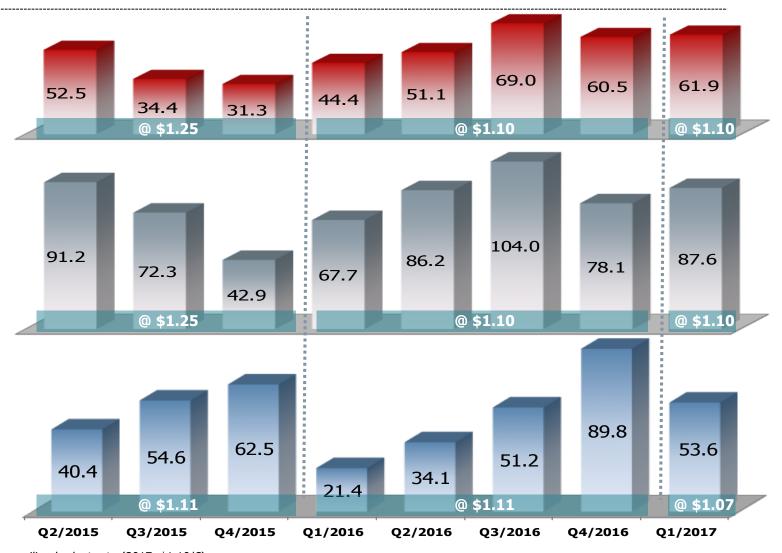
## **24 - Month Business Development**

(€ million)

Order Intake (incl. equipment, service, spare parts)

Order Backlog (equipment only)

Total Revenues (incl. equipment, service, spare parts)



USD order intake and backlog were recorded at the prevailing budget rate (2017: \$1.10/€) USD revenues were converted at the actual period average FX rate (Q1/2017: \$1.07/€)



## **Consolidated Income Statement\***

(€ million)	Q1/16	Q1/17	+/- %	Q4/16	Q1/17	+/- %
Revenues	21.4	53.6	_	89.8	53.6	-40
Cost of sales ( <i>incl.</i> € 1m TFOS effect)	18.3	40.0	_	60.5	40.0	-34
Gross profit	3.1	13.6	_	29.4	13.6	-54
%	15	25	10 pp	33	25	-8 pp
Selling expenses	2.9	2.6	-10	4.8	2.6	-46
General & admin expenses	3.8	4.3	13	5.0	4.3	-14
R&D ( <i>incl.</i> € 5.6m TFOS effect)	13.3	19.7	48	14.4	19.7	37
Net other operating income & expenses	-2.2	-0.2	91	-2.7	-0.2	93
EBITDA	-11.7	-6.0	49	12.5	-6.0	_
EBIT	-14.7	-12.7	14	7.9	-12.7	_
%	-69	-24	45 pp	9	-24	-33 pp
Adjusted EBIT**	-14.7	-6.1**	59	7.9	-6.1**	_
Net result	-15.5	-13.5	13	6.4	-13.5	_
%	-72	-25	47 pp	7	-25	-32 pp



<sup>\*)</sup> rounded figures; may not add up
\*\*) Q1/17 EBIT adjusted by EUR 6.6m one-time TFOS write downs

Financials 11

## **Balance Sheet\***

(€ million)	31/03/16	31/12/16	31/03/17
Property, plant & equipment	79.0	74.2	68.9
Goodwill	74.6	74.6	74.5
Other intangible assets	6.0	5.4	5.2
Others	3.3	2.4	2.1
Non-current assets	162.9	156.5	150.6
Inventories	73.6	54.2	49.9
Trade receivables	18.2	60.2	29.6
Others	9.1	5.3	5.6
Cash & Cash Deposits	181.9	160.1	193.6
Current Assets	282.8	279.7	278.6
Shareholders' equity	375.6	369.7	356.7
Non-current liabilities	3.0	4.2	4.2
Trade payables	8.8	14.6	15.2
Advance payments from customers	32.1	26.1	30.5
Others	26.2	21.6	22.6
Current liabilities	67.1	62.3	68.3
Balance Sheet total	445.7	436.2	429.2

<sup>\*)</sup> rounded figures; may not add up



Financials 12

## **Consolidated Statement of Cash Flows\***

(€ million)	Q1/16	Q1/17	Q4/16	Q1/17
Net Result	-15.5	-13.5	6.4	-13.5
Adjust for				
Non Cash Items	3.7	7.3	5.9	7.3
Changes in Working Capital	-7.6	40.8	-15.0	40.8
Cash Flow from Operating Activities	-19.4	34.6	-2.7	34.6
Capital Expenditures	-5.1	-1.3	-2.2	-1.3
Financing / FX effects	-2.7	0.3	1.3	0.3
Total Cash Flow (excl. Changes in Deposits)	-27.2	33.6	-3.6	33.6
Cash & Deposits	181.9	193.6	160.1	193.6

<sup>\*)</sup> rounded figures; may not add up



**FUTURE MARKETS** 

## **Market Prospects**

#### **Short-Term**

- Further increasing adoption of LEDs and specialty LEDs (in particular Red-Orange-Yellow, UV or IR) for Display and other applications
- Increased emergence of wide-band-gap GaN or SiC based devices for energy efficient power management and communications in automotive, consumer electronics and mobile applications
- Development of next generation NAND and DRAM memory devices
- Increasing emergence of compound semiconductor based laser devices for ultrafast data transfer and sensors in infrastructure and mobile applications
- Increasing emergence of compound semiconductor based sensor devices for autonomous driving

## Mid- to Long-Term

- Further progress in the development of GaN-on-Silicon LEDs and Wafer Level Packaging
- Development of new wide-band-gap applications such as RF and System-on-Chip with integrated power management
- Progress in the development of large area OLED devices requiring efficient deposition technologies
- Progress in the development of flexible and rigid OLED devices requiring thin-film encapsulation
- Increased development activity for specialized compound solar cell applications
- Increasing requirements for High-k and interconnect components, implying a new approach to production technologies
- Progress in the development of future logic chips applying wide band gap and high electron mobility materials (III-V-on-Silicon)
- Development of applications using Carbon Nanostructures (Carbon Nanotubes, Carbon Nanowires, Graphene)
- Development of alternative LED applications such as Visual Light Communication technology or Micro-LED Displays

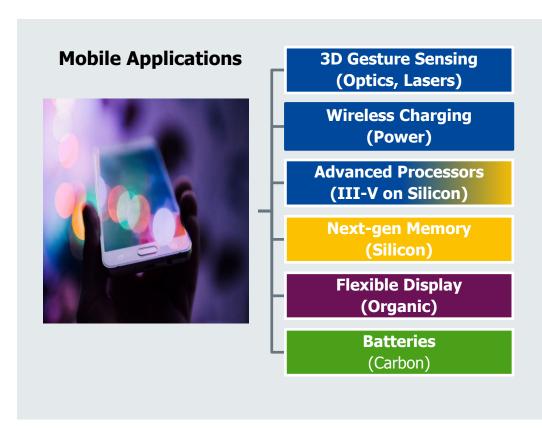


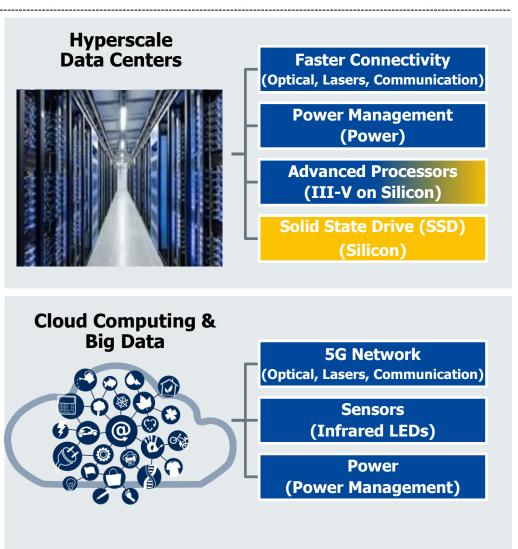
AIXTRON INVESTOR PRESENTATION 14

# Our technology. YOUR FUTURE.



## **Compound Semiconductors – Enabling Breakthrough Technologies**

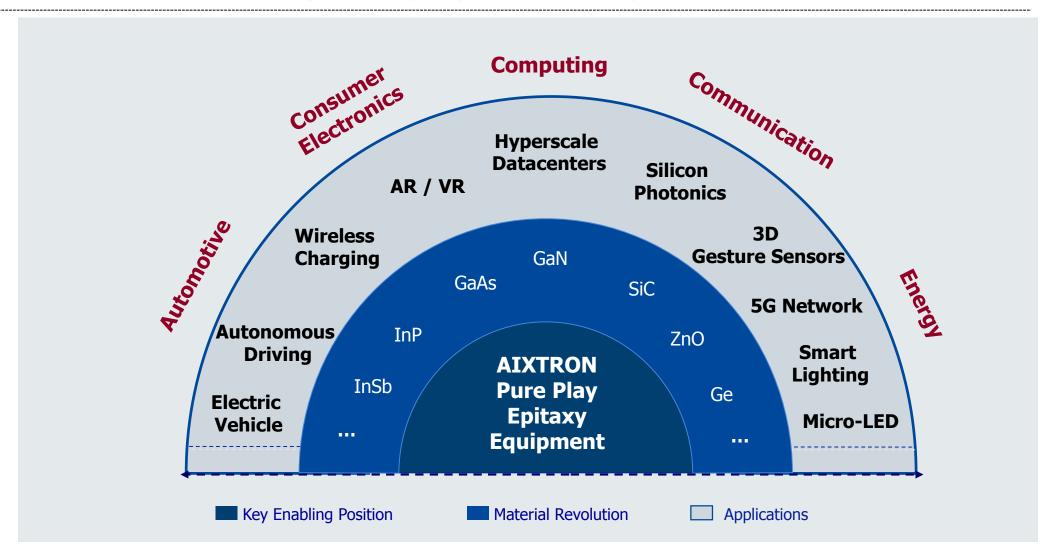






AIXTRON TECHNOLOGIES AND PRODUCTS

## **AIXTRON** – Enabling Emerging Global Mega Trends





## **AIXTRON** – Enabling Emerging Global Mega Trends

## AIXTRON

#### **Key Enabling Position**

- Growing Demand of MOCVD Equipment Driven by Increasing Adoption of High Performance III-V Materials
- Number 1 Position in Throughput per Yield Epitaxy Equipment: Enabling Emergence of New Applications
- Only Pure Play Epitaxy Equipment Company

#### **Material Revolution**

- Advanced III-V Compound Materials Enabled by MOCVD
- Established Material Library based on MOCVD Technology
- More than Moore:
  - Decade of Materials
  - Moore's law Extension Enabled by III-V Materials

## Applications for Global Mega Trends

- Global Megatrends in Mobility, Connectivity and Performance fueling Demand for Leading Edge Deposition Technology
- Industry Convergence:
   Automotive Consumer
   Electronics Communications
- New Application Features driving Advanced Optoelectronics Device Growth



## **Short Term: Compound Semiconductors in Next-Gen CE Applications**

Source: Gartner; Credit Suisse, Deutsche Bank, Stifel

#### **AIXTRON Enables GaAs Applications**

MMIC

**RF Switches** 

**RF** Power transistors

HMIC Pin diode

Iris scan

**Camera autofocus** 

**HDMI** interconnects

**Night vision camera** 

**Displays** 

**Pulsed power transistor** 

**3D gesture sensors** 

**Proximity sensor** 

**Body functions** 

**Environmental scan** 

Wireless charger

**Base Station** for 3G / 4G

**Logic processor** 

**AIXTRON** also in...

**OLED** Flexible Display **3D NAND** 

**1X DRAM** 

**CNT based LiB** 

RF energy solution **MMIC** 

Fast charger

**Base station for 5G Wireless PAs**  **Noise cancelation GaN ICs** 

Camera Flash

**AIXTRON Enables GaN Applications** 

#### **Potential CE markets (2017e)** ~3bn units

Smartphones: 1.55 bn units 0.18 bn units Laptops:

Tablets:

0.3 bn units

Smartwatches: 0.1 bn units Wearables: 0.3 bn units TV: 0.25 bn units Others (DSC, Game consoles): 0.1bn

#### **Customer profiles:**

Fragmented and global

IDMs, PDM, foundries and start ups

GaN MOCVD: 100+ players with epi capability

GaAs MOCVD: 60+ players with epi capability

CNT PFCVD: shift toward commercial customers



## Mid Term: Compound Semiconductors in Connected Vehicles

**AIXTRON Enables GaAs Applications** 

Vehicle speed sensing (IR)

Night vision IR Emergency break assist (IR)

Adaptive cruise control (IR)

Pedestrian detection (IR)

**Driver condition monitoring (VCSEL) AIXTRON** also in... **OLED CNT based LiB** Interior Lighting LED **Exterior Lighting LED** Charging Head up infrastructure **Displays** 48V system On board battery charger Wireless charger Lidar **DC/DC** conversion Headlights Infotainment

**AIXTRON Enables SiC Applications** 

Main inverter

AIXTRON Enables GaN
Applications

Source: Gartner; Baader, Bernstein, Deutsche Bank, Stifel

## Potential EV, BEV and PHEV 4m units in 2020e

- Power Semiconductor content per car internal combustion engine: \$50
- Power Semiconductor content per car electrical vehicle: \$350

#### Potential ADAS

#### ~ 25m units in 2019e

- Semiconductor content partially automated: sub \$100 per car
- Semiconductor content fully automated: \$580 per car

#### Customer profiles:

- Fragmented and global
- IDMs, PDM, foundries and start ups
- GaN MOCVD: 100+ players with epi capability
- GaAs MOCVD: 60+ players with epi capability
- CNT PECVD: shift toward commercial customers



## **Long Term: Compound Semiconductors in Smart Homes**

**AIXTRON also in... AIXTRON Enables GaAs Applications** 

**OLED** 

**CNT** based LiB

**Night vision IR** 

**Terrestrial CPV** 

**FTTH** 

3D gesture sensors

Motion sensors

**Environmental** sensors

**Fast charger** 

**5G Home Internet** 

**Smart Lighting** I FD

**Med-Tech** wearables

Wireless charger

**Wireless PAs** 

**AIXTRON Enables GaN Applications** 

**LiDAR** 

AR Gaming

**Infotainment** 

**Smart homes: Self-sufficient,** environmentally friendly and connected

Source: Gartner; Credit Suisse, Deutsche Bank, Stifel

- Smart sensing: motion, environmental sensors, microphones
- Processing: low power, high performance, microcontroller
- Connectivity: Sub-GHz, Bluetooth, WiFi
- Energy management: digital power, energy harvesting

#### **Applications:**

appliances, home control, household robots, smart lighting, home multimedia, smart door locks, EV chargers, smart meters, improved security



**Charging** infrastructure

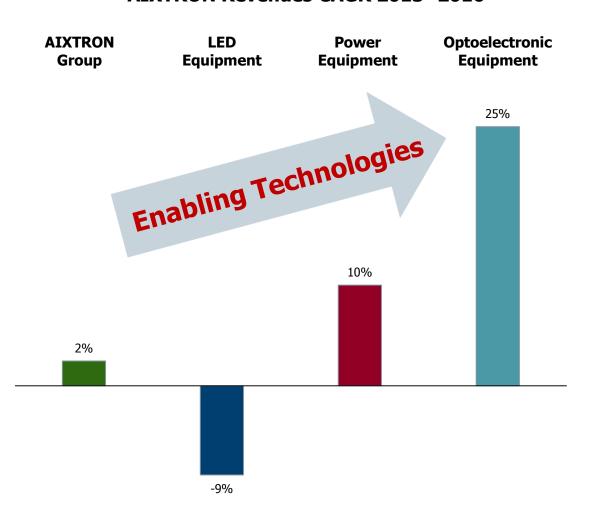
**Main inverter** 

**DC/DC** conversion

**AIXTRON Enables SiC Applications** 

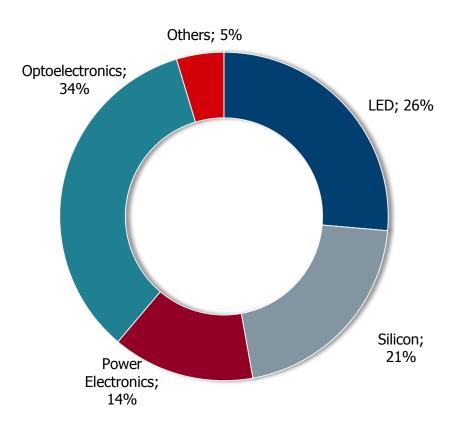
## **Compound Semiconductors – Evolving Applications**

#### **AIXTRON Revenues CAGR 2013 -2016**



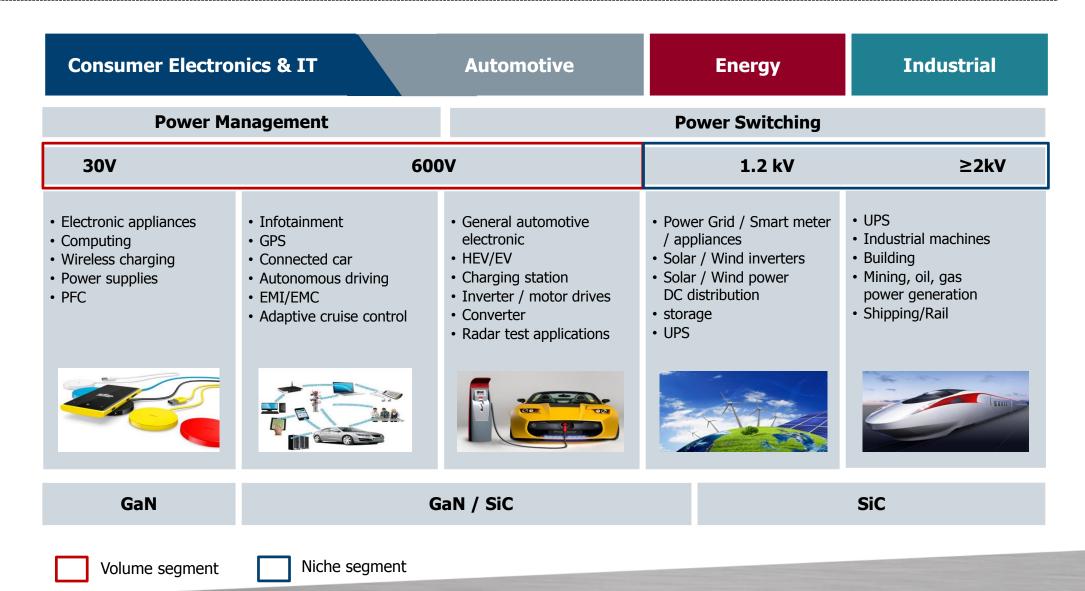
## AIXTRON 2016 Revenues by end application

(equipment only)





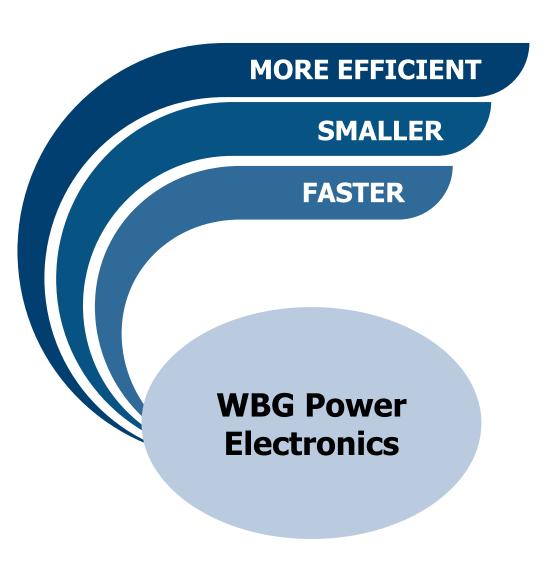
## **Compound Semiconductors – Wide-Band-Gap (WBG) Power Electronics**

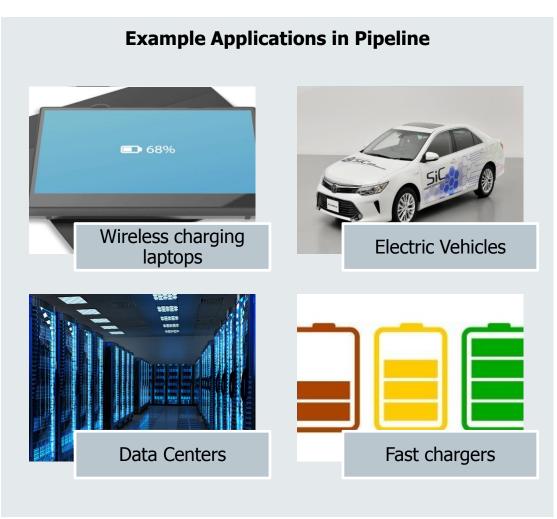




## **Compound Semiconductors – Wide Band Gap (WBG) Power Electronics**

Source: Dell, DOE, Toyota







2016

## **Silicon Semiconductors – Leading Edge Technologies**

Source: Gartner 2016 At the forefront to extend Moore's Law **Logic transistor Interconnects Memory** (MOCVD-III-V) (ALD) (Graphene/CNT) >5x ≤14nm Fab Capacities **Total Fab Capacities** "More than Moore" ~1.1x (2016: Indexed=1x)



Year

2020

## **Silicon Semiconductors – ALD**

#### **Product Description – ALD**

- 300mm ALD Technology
- QXP-8300 Mini-batch system
- High throughput: 2 Process Chambers 8 stations
- Up to 3 vaporizers and one bubbler
- Applications: DRAM, Logic and Flash High k Dielectric Metal electrode: ReRAM and PCRAM Active elements
- Proven in HVM with >40% lower CoO and >90% Uptime in DRAM and Flash Fabs

"Best-in class technology, state of the art deposition system, lowest CoO"

#### **Product Features**

- Up to 3 patented TriJet vaporizers
- Small volume confined process space ensure short ALD cycle time
- > 40 % less precursor consumption
- Efficient purge
- Isolated multi wafer processing with
   > 40% higher throughput
- Close Coupled Showerhead for uniform distribution
- · Flexibility and ease of maintenance





## **Carbon Nanomaterials – PECVD**

#### **Graphene and Carbon Nanotube Deposition Systems**

- Proprietary thermal and plasma enhanced chemical vapor deposition technology
- Excellent uniformity and reproducibility with fast turnaround cycle times
- BM platform: BM R&D (2-inch), BM Pro (4-inch and 6-inch), BM GB (4-inch glovebox), BM HT (high temperature, 1,700C), BM300T (300mm)
- Graphene and carbon nanotube films for electronics, energy storage, thermal management, sensors and flexible/transparent applications

#### **Product features**

- Fast response heater and turnaround
- Thermal CVD
- Substrate and top heating
- Closed loop infrared wafer temperature control
- Plasma enhanced CVD with frequency control
- Flexible processing for different applications
- Low cost of ownership
- Easy maintenance and cleaning
- User management features and growth library

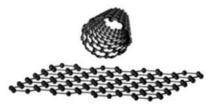
Material Properties



AIXTRON Technology



Enabling Applications



Graphene (2D) and Carbon nanotube (1D)

Unique combination of high electrical/ thermal conductivity, mobility, flexibility and transparency



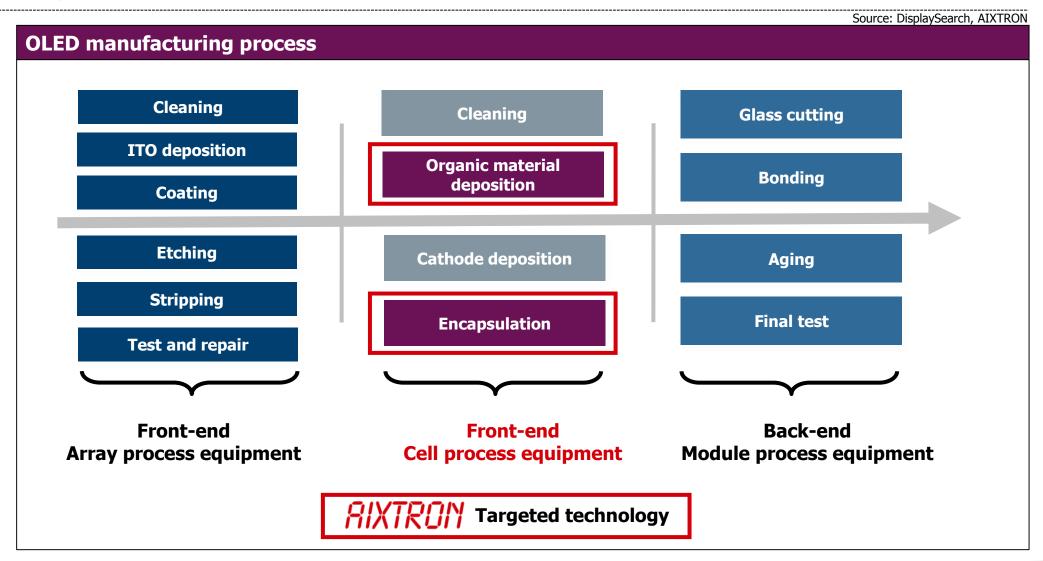
Serving R&D market today
AIXTRON BM Pro



Production ready for tomorrow AIXTRON BM Pro 300



## **Organic Electronics – OVPD® + Encapsulation**



## **Organic Electronics – OVPD®**

#### **Product Description – OVPD**

- Proprietary carrier-gas enhanced gas phase deposition approach for organic thin films
- Based on AIXTRON's core competence of carrier gas enhanced vapor phase deposition
- Free scalability: suitable for all relevant substrate generations
- Manufacturing technology applicable for OLED displays, OLED lighting, organic semiconductors, and organic photovoltaic
- Proprietary STExS<sup>™</sup> evaporation source technology: low thermal stress, high rates, continuous operation

"Disruptive deposition technology for cost efficient OLED manufacturing"

#### **Product Features**

- High deposition rates for high throughput
- Reduced thermal stress for organic materials
- High material utilization efficiency
- Flexible process control
- Simplified scaling due to
  - Close Coupled Showerhead and
  - Decoupled source technology
- Flexible integration solutions batch and inline
- Reduced number of deposition chamber and footprint
- Scalable: Available for substrate sizes up to Gen8.5 (=2.3 x 2.5 m²)



OVPD demonstrator OLAD (Organic Large Area Demonstrator) (optimized for Generation 8.5 substrate sizes)



## Organic Electronics – OPTACAP™ PECVD

#### **Product Description – OptaCap™ PECVD**

- Proprietary PECVD technology based on linear plasma sources
- Based on AIXTRON's core competence of carrier gas enhanced vapor phase deposition
- Free scalability: suitable for all relevant substrate generations
- Manufacturing technology applicable for barrier applications, i.e. thin film encapsulation: highly flexible, low film stress, high transparent, high water and oxygen permeation barrier,

"Disruptive deposition technology for cost efficient deposition of flexible barrier films"

#### **Product Features**

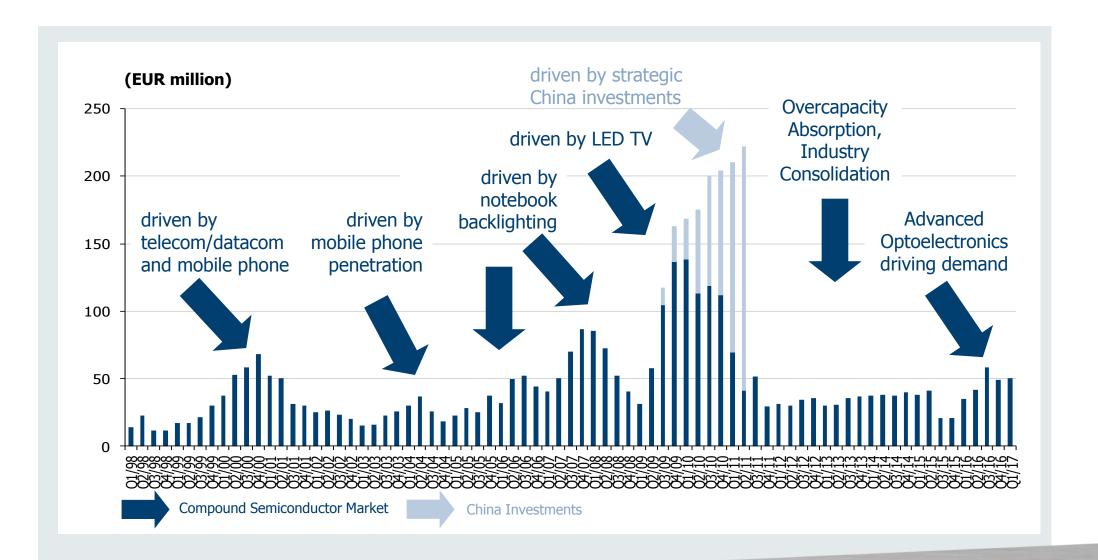
- High deposition rates for high throughput
- Flexible process control
- Simplified scaling due to
  - Linear PECVD source technology
  - Multiple source configurations
- Scalable: Available for substrate sizes up to Gen3.5, future: up to Gen8.5
- Highly flexible SiNx-based barrier films at high rates
- Low temperature process (<80°) with low film stress





OPERATIONS

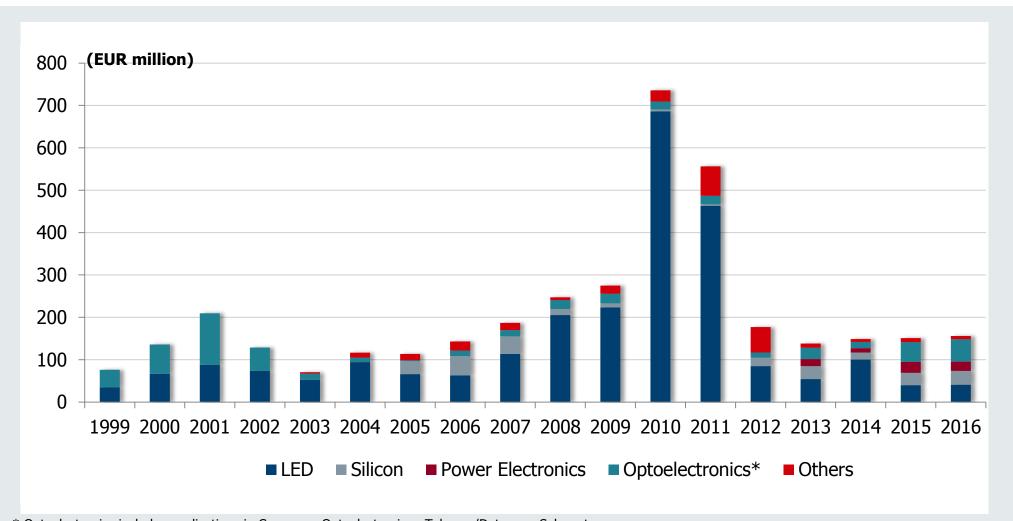
## **Equipment Order Intake per Quarter**





30

## **Annual Equipment Revenues by Application (excl. spares)**



<sup>\*</sup> Optoelectronics includes applications in Consumer Optoelectronics, Telecom/Datacom, Solar, etc.



**INDUSTRY** 32

## **Competitive Landscape**

GaAs/InP: Advanced Optoelectronics, ROY LEDs









GaN LED









**GaN Power** 













**Silicon** 













**Organic** 



















**FINANCIALS** 33

## **Consolidated Income Statement\***

(€ million)	2014	2015	2016
Revenues	193.8	197.8	196.5
Cost of sales	154.1**	147.9	140.2
Gross profit	39.7**	49.8	56.3
Gross Margin	20%	25%	29%
Selling expenses	14.1**	11.5	13.8
General & admin expenses	19.3	16.3	17.1
R&D	66.7	55.4	53.9
Net other operating income & expenses	-2.2	-6.7	-7.2
EBITDA	-41.3	-16.4	-7.9
EBIT	-58.3	-26.7	-21.4
EBIT Margin	-30%	-14%	-11%
Result before tax	-57.1	-26.0	-21.0
Pre-Tax Margin	-29%	-13%	-11%
Net result	-62.5	-29.2	-24.0
Net Return on Sales	-32%	-15%	-12%



<sup>\*)</sup> rounded figures; may not add up \*\*) 2014 figures adjusted to be comparable

FINANCIALS 34

## **Balance Sheet\***

(€ million)	31/12/14	31/12/15	31/12/16
Property, plant & equipment	77.3	81.3	74.2
Goodwill	64.8	75.9	74.6
Other intangible assets	2.5	6.4	5.4
Others	4.6	3.9	2.4
Non-current assets	149.2	167.6	156.5
Inventories, WIP & Finished Goods	81.7	70.8	54.2
Trade receivables	26.3	26.0	60.2
Others	8.3	8.2	5.3
Cash & Cash Equivalents incl. CD	268.1	209.4	160.1
Current Assets	384.4	314.4	279.7
Shareholders' equity	415.7	396.5	369.7
Non-current liabilities	1.3	3.6	4.2
Trade payables	16.4	9.8	14.6
Advance payments from customers	66.9	24.0	26.1
Others	33.2	48.0	21.6
Current liabilities	116.5	81.8	62.3
Balance Sheet total	533.5	482.0	436.2

<sup>\*)</sup> rounded figures; may not add up



## **Consolidated Statement of Cash Flows\***

(€ million)	2014	2015	2016
Cash Flow from operating activities	-33.8	-45.7	-37.7
Cash Flow from investing activities	-23.2	41.2	43.4
Cash Flow from financing activities	0.2	-0.1	0.3
Exchange rate changes	5.9	4.3	-2.3
Net change in Cash & Cash Equivalents	-50.9	-0.3	3.7
Cash & Cash Equivalents (beginning of period)	167.5	116.6	116.3
Cash & Cash Equivalents (end of period)	116.6	116.3	120.0
Change in Cash deposits	9.9	-60.5	-52.8
Free Cash Flow**	-47.0	-57.3	-42.9
Capex	13.4	13.3	5.3



<sup>\*)</sup> rounded figures; may not add up \*\*) Operating CF + Investing CF + Changes in Cash Deposits, adjusted for acquisition effects

## **Global Presence**



## **AIXTRON SE Headquarters**

Herzogenrath, Germany

Core of AIXTRON's activities is the Technology and R&D Center near Aachen.

Focus on engineering and process development in MOCVD and organic semiconductors.



#### **AIXTRON Ltd.**

Cambridge, United Kingdom

Focus on key MOCVD reactor component technology, carbonbased nanotechnology systems, state of the art innovation and production of R&D tools.



#### **AIXTRON Inc.**

Sunnyvale, California, USA

Focus on silicon applications for leading suppliers of DRAM and CMOS.



### **Financial Calendar & Contact Data**

May 9, 2017 Annual General Meeting, Aachen

July 25, 2017 H1/2017 Results, Conference Call

October 26, 2017
 9M/2017 Results, Conference Call

February 2018 FY/2017 Results, Conference Call

#### For further information please contact:

Investor Relations & Corporate Communications

AIXTRON SE • Dornkaulstr. 2 • 52134 Herzogenrath, Germany

IR Team Europe

Phone: +49 (2407) 9030-444 • E-Mail: invest@aixtron.com

IR Team USA – Andrea Su

Phone: +1 (408) 747-7140 ext. 1292 • E-Mail: invest@aixtron.com



## Thank you very much for your attention.

