

## Open edge networking

Investor presentation

FSE: ADV

October 22, 2020

### Disclaimer

#### FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements with words such as "believes", "anticipates" and "expects" to describe expected revenues and earnings, anticipated demand for optical networking solutions, internal estimates and liquidity. These forward-looking statements involve a number of unknown risks, uncertainties and other factors that could cause actual results to differ materially. Unknown risks, uncertainties and other factors are discussed in the 'risk report' section of ADVA Optical Networking's annual report 2019.

#### CONSOLIDATED PRO FORMA FINANCIAL RESULTS

ADVA provides consolidated pro forma financial results in this presentation solely as supplemental financial information to help investors and the financial community make meaningful comparisons of ADVA's operating results from one financial period to another. ADVA believes that these pro forma consolidated financial results are helpful because they exclude non-cash charges related to stock compensation programs and amortization and impairment of goodwill and acquisition-related intangible assets, which are not reflective of the group's operating results for the period presented. This pro forma information is not prepared in accordance with IFRS and should not be considered a substitute for historical information presented in accordance with IFRS.





## **Company**

Overview



## Stability, continuity and growth opportunities

### Statement from the CEO



2019 revenues: EUR 556.8m

Pro forma EBIT: 4.5%

"5G, IoT, edge computing and multi-cloud solutions all require a robust and scalable telecommunications infrastructure with

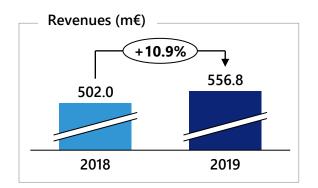
- more fiber-optic data transmission
- new models for the provision of communication services and
- more precise network synchronization.

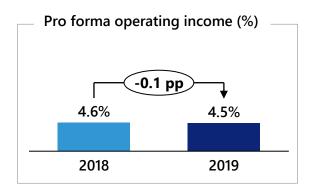
"Our investments in recent years address precisely these aspects. We are technologically well positioned for the new opportunities of this network transformation – a transformation based on openness, virtualization and security."

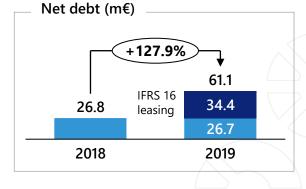
Digitization is transforming networks, bringing the investment focus to us



## Financial year 2019 at a glance







#### Revenues increased +10.9% y-o-y ...

- Positive development due to solid demand from all customer groups across all technology areas
- Except for Q1 2019, quarterly revenues increased sequentially in 2019 and reached EUR 151.1m in Q4 (+14.9% y-o-y)

### 



## ... with stable margin in the mid-single digit range

- Margin was negatively impacted by the US trade policy and strong USD
- High cost discipline within OPEX to offset these impacts
- One-off expense of EUR 5.7m excluded from pro forma operating income

Target
Mid single digit range

#### Net debt before IFRS 16 stable

- Gross cash impacted by decrease in EBT (EUR -3.6m), significant higher R&D investments (EUR 10.6m) and reduction of bank liabilities (EUR -8.5m)
- Financial debt Q4 2019 includes EUR 34.4m lease liabilities due to the first-time adoption of IFRS 16

Target (before IFRS 16)
Stable

- 0.1m\*

\* Without IFRS 16

4.5%



## **ADVA fundamentals**



### **Background**

- Headquartered in Munich, Germany
- More than 1,900 employees
- Over EUR 0.5 billion turnover



### Our vision



Virtualization and software are keys to differentiated solutions, while hardware will remain strategically important



### Our mission



Being your trusted partner for connecting, extending and assuring the cloud

Atlanta Richardson Neuchâtel York Meiningen Munich Gdynia



Haifa Shenzhen Singapore Melbourne

### Innovation – speed for customers – trusted partner



## ADVA: Global provider of open networking solutions

### Cloud interconnect



Cloud access



Network synchronization





OSCILLOQUARTZ

65% of revenues

30% of revenues

5% of revenues

#### **Private Enterprises:**

Business continuity and disaster recovery

**Internet content provider:** (Hyperscale) DCI

Communication service provider: Metro and edge upgrade for IoT, 5G and cloud services **Private Enterprises:** 

Secure cloud access and SD-WAN

**Internet content provider:** Edge cloud

Communication service provider: Zero-touch service delivery and assurance

**Private Enterprises:** 

MiFID II financial time stamping

**Internet content provider:** Global database synchronization

Communication service provider: Next-gen mobile (5G)



## Serving network operators around the world

Global diverse customer base drives growth and mitigates risk

### Communication service providers

- 17 of top 25 global CSPs
- 5 of top 6 global Ethernet service leaders

### 65%\*

- Long sales cycle (RFPs)
- + Volume
- + Longevity (stickiness)















ALABAMA







### Private enterprises

30 of top 50 banks (revenue)



- Limited project volume
- + Premium quality
- + Customer loyalty and trust















#### Internet content provider

4 of top 5 global ICPs

10%\*

- Aggressive pricing
- Limited visibility and stickiness
- + Volume and growth potential













### Top 10 customers drive ~60% of revenues



<sup>\*</sup>approximate revenue contribution FY 2019

## ADVA's 25 years history

Global and loyal customer base

Talented and highly motivated employees

Leadership in several subsegments of our market

Going public and first product

Going global

Product expansion and strategic acquisitions

### Global specialist for

- Open optical networks
- Edge cloud solutions
- Network synchronization

Network innovator – speed for customers – trusted partner





## Industry context

Market growth drivers, technologies and products



## Digitization drives investment focus to the edge

Digitization of all ecosystems

IoT

Smart workspace

Connected home

Smart robots

Autonomous driving

Augmented reality

Artificial intelligence

Network transformation

5G

Cloud & Network 3.0

Disaggregation

Machine learning

White box solutions

Open platform

**Automation** 

Edge computing

Virtualization

ADVA open edge networking

Scalable bandwidth Instant service creation Precise synchronization



The market is coming to our sweet spot – the edge is, where ADVA performs best



## Our technology differentiation



### **Open tera-scale networking**

Bandwidth

- Disaggregated optical architecture
- Highest level of security and automation
- Unparalleled data center expertise

### **Empowering the network edge**

Service creation

- Leader in secure, zero-touch service delivery solutions
- Proven and scalable NFVi architecture
- Seamless transition to virtual service delivery

### **Synchronization at scale**

Precision

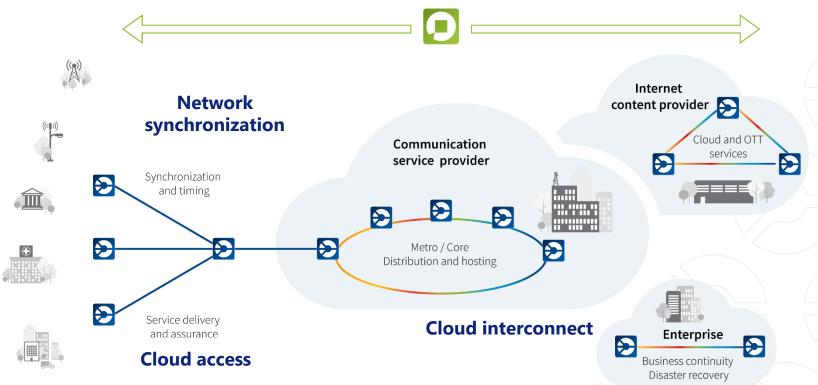
- Most comprehensive network synchronization portfolio
- Best accuracy and assurance
- Key enabler for 5G and many other ecosystems

We innovate from the edge on in – customer focus, profound application know how



### **Solutions**

### **Ensemble network management and control**



Open edge networking – connecting, extending and assuring the cloud

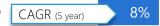


## Product portfolio overview

### Cloud access

Solutions that enable communication service providers to deliver software-defined, differentiated and performance-assured wholesale, mobile backhaul and business services:

Source: Ovum, "service provider switching and routing forecast 2019-2024", published June 2019

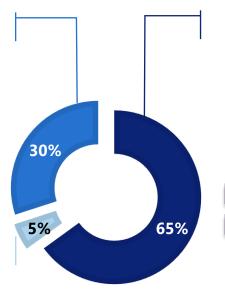


### Network synchronization

Solutions to deliver accurate and scalable time and frequency synchronization for mobile network infrastructure, utilities, media distribution networks, financial services, distributed data bases and meteorology;

Estimated 2020 market size and 5yr CAGR – ADVA internal estimates

TAM (billion USD)		0.3
CAGR (5 year)	$\supset$	5%



### Cloud interconnect

Solutions that deliver scalable bandwidth for access, metro and long-haul networks; high levels of open interworking, programmability and ease-of-use;

	Access	Metro	Long Haul
TAM (billion USD)	1.0	7.7	5.9
CAGR (5 year)	15%	4%	1%

Estimated 2020 market size and CAGR (2019-'24) for access, metro and long haul WDM; Source: Ovum, "optical networks forecast 2019-2024" published September 2019;

Approximate revenue contribution rolling four quarters

Growth rates are highest in segments where ADVA performs best





## **Differentiators**

Competitive landscape



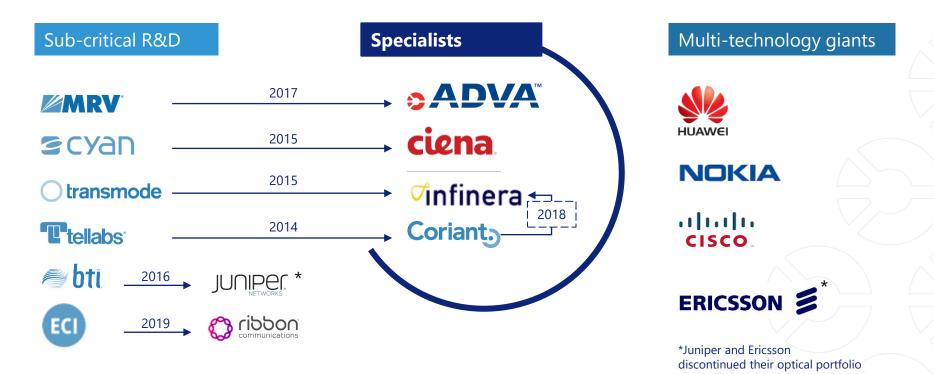
## Networking industry – our ecosystem



Industry leading on time-to-market, time-to-quality and time-to-cost



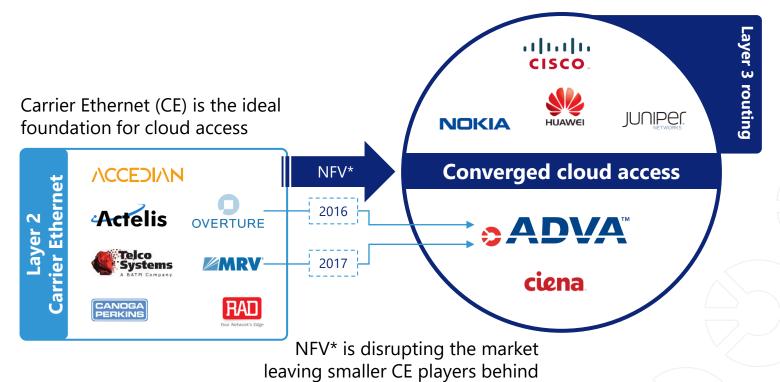
### Cloud interconnect: Vendor consolidation continues



Small players disappear – large corporations lack focus and seek better profitability



## Cloud access: Convergence at the network edge



\*network function virtualization

Layer 2 and Layer 3 access are converging leading to TAM expansion



## Cloud interconnect growth opportunities

### Maximizing network capacity for a digital future



Open and secure terascale networking

- Loyal growing base of largescale customers
  - Top ten drive ~60% of revenues
- Metro and DCI strength\*
  - Global leader in enterprise DCI (>30% global, >50% EMEA)
  - Market share access and metro WDM in EMEA around 12%
  - Top three vendor in purposebuilt DCI

- Industry consolidation continues
- Disaggregation and fear of single vendor lock-in favors open players
- Political security discussions change supplier landscape

 Market share gain with TeraFlex™ terminal and open line systems

 Margin expansion and differentiation through vertical integration

Our foundation

Market disruption



Potential upside



\*Source: Ovum, market share 2Q20 (rolling four quarters) optical networks global and data center interconnect, publ. September 2020

Continue to outperform in select markets and increase vertical content



## Cloud access growth opportunities

## Empowering the network edge

- Caracination (main minutes)
- Packet edge with NFV

- Leading supplier of Ethernet access devices (EAD)
- Most mature NFVi\* solution with world's largest VNF ecosystem
  - 20 new wins since Q1 2019
  - >50 VNFs\*\* from many partners

- Transition from 1G to 10G/100G in access and backhaul
- NFV driving software-based value creation, converging Layer2 and Layer3

 Winning new footprint with differentiated 100G portfolio



FSP 150-XG480

Turning exceptional NFV win rate (2019+) into revenue

### Our foundation





Potential upside



\*network function virtualization infrastructure; \*\*virtual network functions

Expand market share with new-generation 100G EAD and monetize NFV wins



## Synchronization growth opportunities

### Delivering precision timing at scale



- Market leading IEEE 1588 PTP\* timing portfolio
- Very high win rates leading to impressive list of MNO\*\* customers
- >20% annual revenue growth in 2018/2019

- Industry consolidation
- GNSS\*\*\* vulnerability increasingly problematic as timing requirements become more stringent

- Accelerating 5G rollouts
- Increasingly stringent timing requirements in other verticals

### Our foundation





Potential upside



\*precision time protocol; \*\*mobile network operator; \*\*\*global navigation satellite system

Use technology leadership to expand into other verticals



## Our commitment to sustainability and quality

ADVA has a holistic approach adopted from the Telecommunications Industry Association (TIA) sustainability initiative ...

CO2 footprint End-to-end & Ozone depletion Circular Environmental management lifecycle certification Resource efficiency Ecodesign optimization Organisational Stakeholder engagement & engagement capability Supply Corporate chain social management responsibility

... having a strong commitment to the Science Based Targets initiative (SBTi) since 2016, as one of the first 200 companies worldwide with three consecutive **EcoVadis Gold ratings** and a **CDP B rating (2019)** 



### We are two years ahead compared to our telecom peers



## Why we win – the ADVA brand promise

Speed for customers



**Innovation leadership** 

### Open networking solutions

- Differentiated technology
- Network-level applications
- Market-leading scalability and efficiency

### Operational excellence

- High quality
- Short lead times
- Award-winning sustainability focus

### Ease of doing business

**Trusted partner** 

- Technology and VAR ecosystems
- Broad and deep application expertise
- Financial stability, solid balance sheet

Enabling our customers to capitalize on cloud and mobility





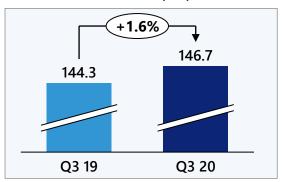
# **Financials**

Overview

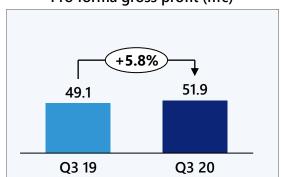


## Q3 2020 key financials

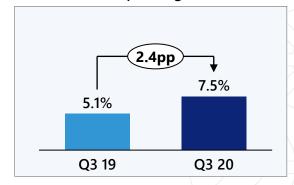
Revenues (m€)



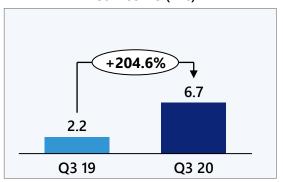
Pro forma gross profit (m€)



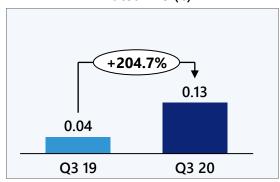
Pro forma operating income (%)



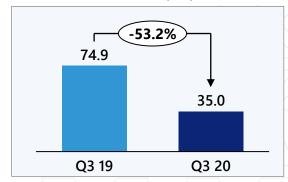
Net income (m€)



Diluted EPS (€)



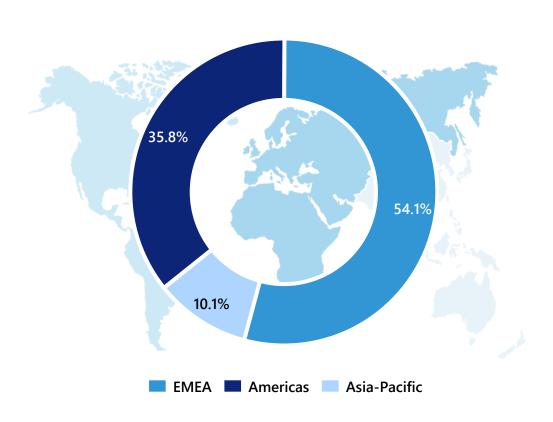
Net debt (m€)\*



\*Note: Net debt Q3 2020 includes EUR 29.6 million lease liabilities due to IFRS 16



## Q3 revenues per region







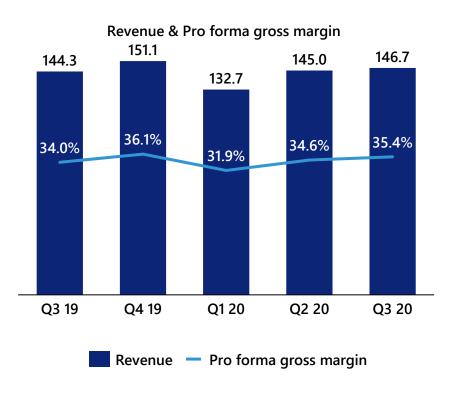


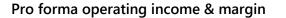


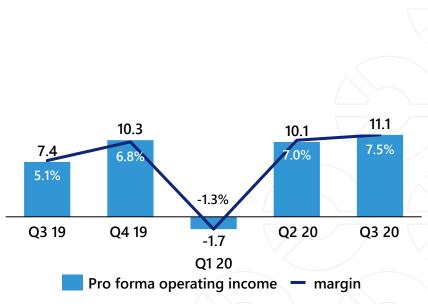


## Quarterly revenue and pro forma profitability

(in millions of EUR, in % of revenues)





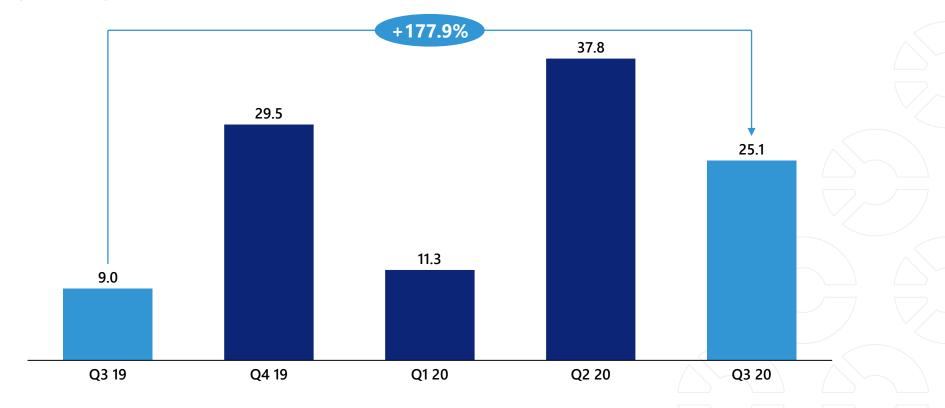


<sup>\*</sup> Pro forma operating income is calculated prior to non-cash charges related to the stock compensation programs and amortization and impairment of goodwill and acquisition-related intangible assets. Additionally, non-recurring expenses related to restructuring measures are not included.



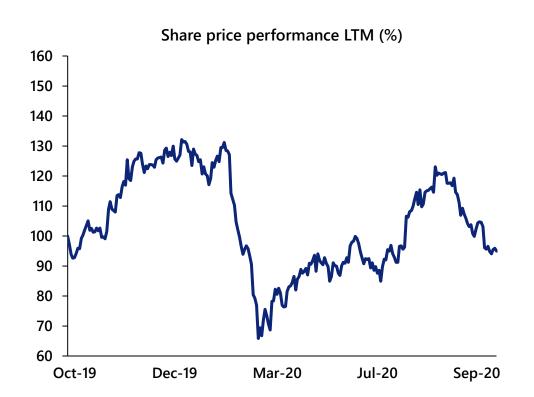
## Seasonality of operating cash flow

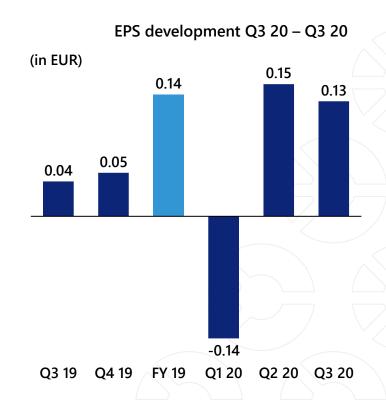
(In millions of EUR)





## Share price and EPS development

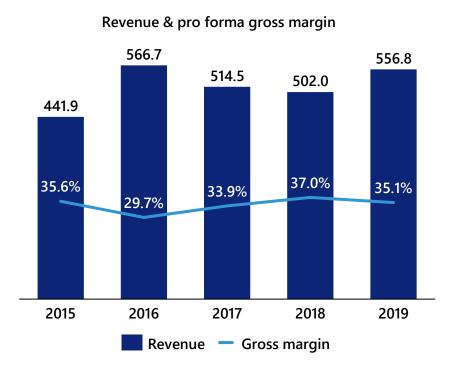




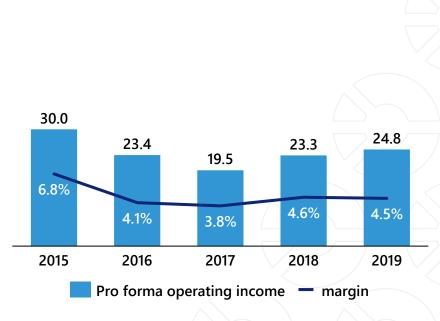


## Annual revenue and pro forma profitability

(in millions of EUR, in % of revenues)



#### Pro forma operating income & margin

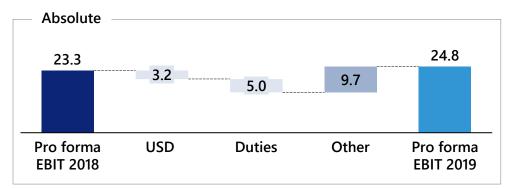


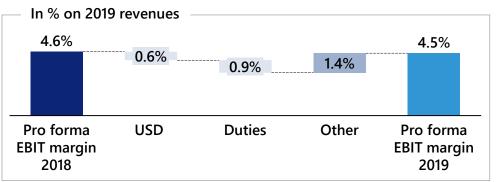
<sup>\*</sup> Pro forma operating income is calculated prior to non-cash charges related to the stock compensation programs and amortization and impairment of goodwill and acquisition-related intangible assets. Additionally, non-recurring expenses related to restructuring measures are not included.



## Pro forma EBIT bridge 2019

(in millions of EUR, in % of revenues)





#### **USD** effect

- Negative impact of 0.6% from strong USD @ average 1.12 vs. 1.18 in 2018
- Majority of components are purchased in USD

#### **Duties**

- Tariffs on China-made goods have been raised in several phases and significantly impacted our margins in the US
- Approx. EUR 5.0m, or negative 0.9% EBIT effect from extra tariffs due to US trade policy

USD and duties with negative impact on EBIT offset by OPEX improvements



### Free cash flow 2019

(In millions of EUR)

flow breakdown	2019	2018
Earnings before taxes	8.9	12.5
Depreciation & Amortization	62.2	49.4
Working capital	-8.0	3.1
Other	3.8	-4.6
Operating cash flow	66.9	60.4
Investing cash flow	-60.3	-48.1
Free cash flow		12.3
Gross cash end of period		62.7
	Earnings before taxes  Depreciation & Amortization  Working capital  Other  Operating cash flow  Investing cash flow  Free cash flow	Earnings before taxes 8.9  Depreciation & Amortization 62.2  Working capital -8.0  Other 3.8  Operating cash flow 66.9  Investing cash flow -60.3  Free cash flow 6.6

#### Operating cash flow

- EBT 2019 impacted by EUR 5.7m extraordinary one-off expenses
- Increase in D&A mainly due to EUR 6.5m IFRS 16 depreciation and higher R&D amortization (+EUR 4.4m)
- Working capital increased (proactive stock purchases due to Brexit and US tariffs)

#### Investing cash flow

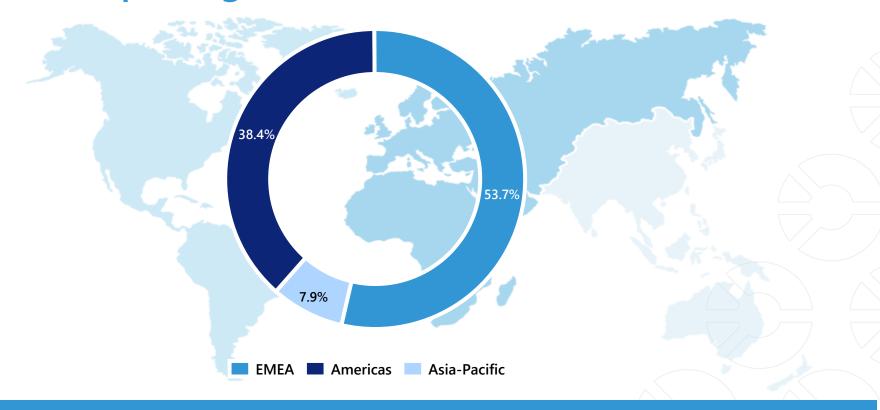
- Mainly driven by EUR 10.6m increase in R&D investments
- Investments in PP&E grew by EUR 2.9m

Note: potential differences due to rounding

### Free cash flow impacted by restructuring expense, inventory and R&D



## Revenue per region FY 2019

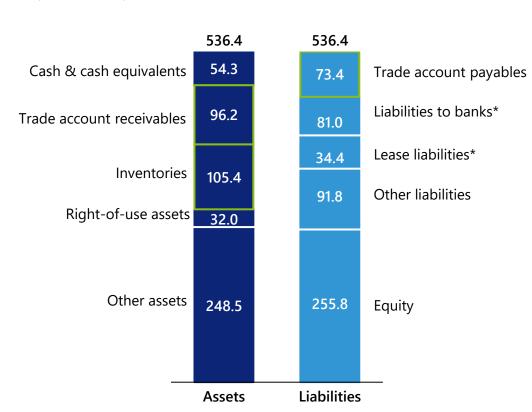


### Strength in Europe and North America

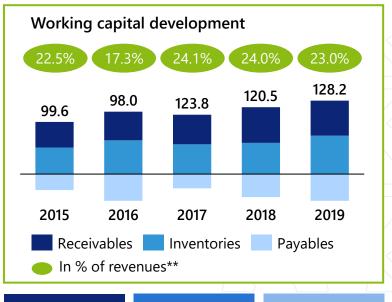


### Balance sheet and credit metrics

(In millions of EUR)



<sup>\*</sup>Financial debt: liabilities to banks + lease liabilities due to IFRS 16

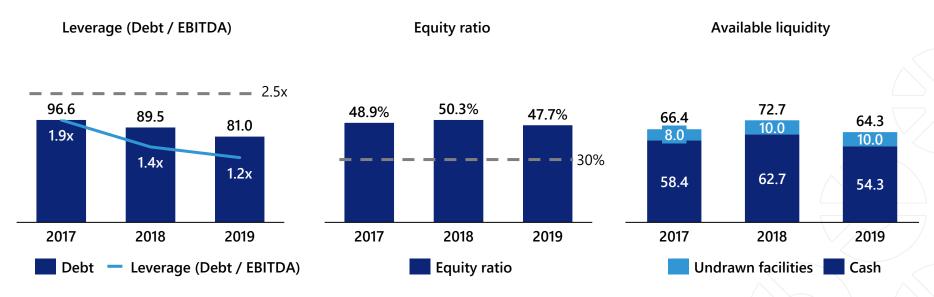




<sup>\*\*</sup> Calculated on a quarterly basis

<sup>\*\*\*</sup> Leverage is calculated as total bank debt divided by EBITDA. EBITDA is calculated as operating income plus depreciation and amortization of non-current assets. Impacts from IFRS 16 are excluded from leverage calculation.

## Financial policy – investment grade rating



#### Comments

- Conservative financial policy targets a Debt / EBITDA leverage ratio of max. 2.5x
- Low current leverage level of 1.2x
- Balanced repayment profile and future profit generation will lead to a strengthened balance sheet
- High equity ratio of circa 48% significant above target of 30%



## **Guidance FY 2020**

#### Revenues

### Pro forma operating income

EUR 565m – 580m

5.0% - 6.0%

#### Comment

- Demand development according to plan, however uncertainties increasing again with evolving second wave of infections.
- Supply chain constraints and the risk of recession driven drop in demand remains.
- The management board now expects
  - revenues between EUR 565m and 580m
  - Proforma operating income margin between 5% and 6%
- The revised guidance assumes that the impact of the pandemic on our business will not significantly worsen beyond the levels we have already experienced.

### Revised guidance issued for FY 2020





# Appendix



## Our partners









## Investor relations overview

### Recent investor activities

Sep 1-2, 20: Jefferies Semiconductor, IT Hardware & Communications Infrastructure Summit, virtual

Sep 3-4, 20: dbAccess European TMT Conference 2020, virtual

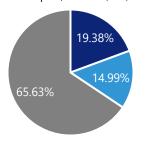
Sep 3, 20: Commerzbank Sector conference, virtual

Sep 21, 20: Berenberg & Goldman Sachs 9th German Corporate Conference, virtual

Oct 7-9, 20: Roadshow Kepler Cheuvreux, virtual

### Shareholder structure

Status: Sep 30, 2020: 50,354,366 shares outstanding



**Teleios Capital Partners** 

#### Top investors\*

Dimensional Fund Advisors 3.2% DNB ASA 3.0% Highclere 3.0%

### Planned investor activities

Nov 12, 20: CIC Market Solutions Forum, virtual

Nov 16-18, 20: Deutsches Eigenkapitalforum, virtual

Nov 16-18, 20: Needham Conference, virtual

Dec 14-15, 20: Cowen Annual Networking Summit, virtual

Jan 11-15, 20: Needham Growth Conference, virtual

Jan 18-20, 20: German Corporate Conference, Frankfurt/M.

### Financial analyst coverage

As of October 21, 2020 Institution	Recommendation/ Price Target	Update	Previous Target
Commerzbank	Hold (€6.50)	Jul 20, 20	€4.30
First Berlin	Buy (€8.00)	Jul 27, 20	€7.10
FMR Research	Hold (€7.60)	Jul 20, 20	€6.70
Kepler Cheuvreux	Hold (€7.00)	Jul 24, 20	€8.00
LBBW	Buy (€8.75)	Jul 17, 20	€6.90
Northland Capital Markets	Outperform (€10.00)	Jul 24, 20	€9.00

Ø €7.98

Egora Group
Free float

<sup>\*</sup>Sources: Commerzbank, ADVA



## Thank you

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