

Octavian Seminar 2021

January 14, 2021

Kevin Crofton
CEO

Lisa Pataki
CFO

Comet AG
Herrengasse 10
CH-3175 Flamatt

T +41 31 744 90 00
www.comet.tech

Agenda

- 01** Comet at a glance
- 02** Strategic focus on core competencies and markets
- 03** Comet positioned to capitalize on macro environment
- 04** Delivery to promise in 2020
- 05** Future growth opportunities: 2021 and beyond
- 06** 2020 - a year of progress



01

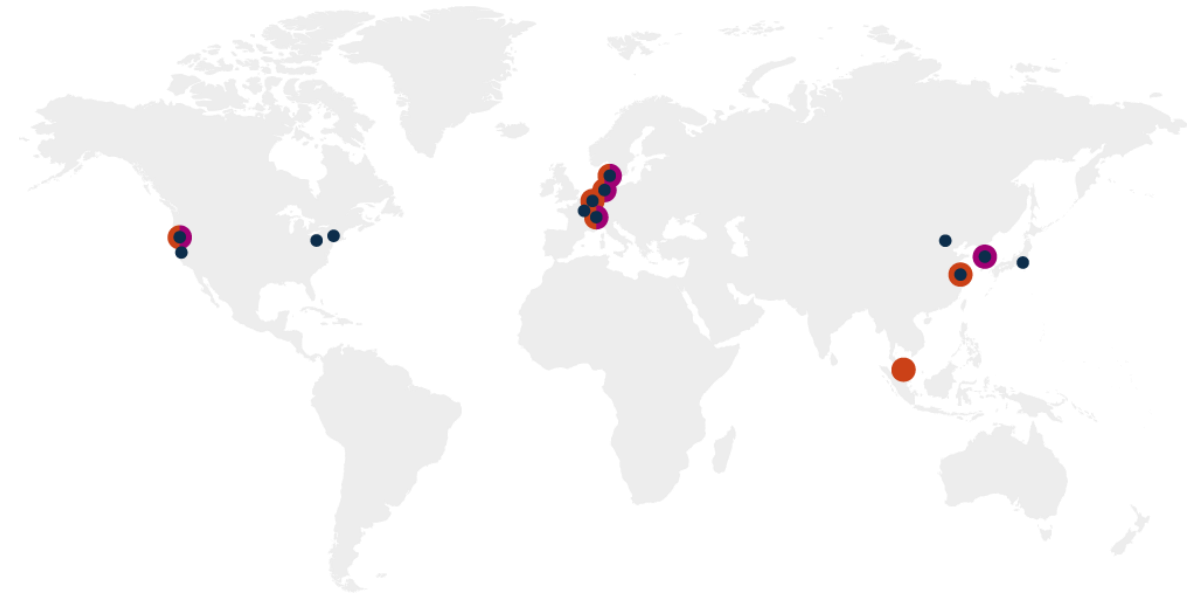
Comet at a glance

Comet Group: a Swiss-based global technology leader

- Headquartered in Flamatt, Switzerland
- ~ 1'400 employees
- 14 locations worldwide

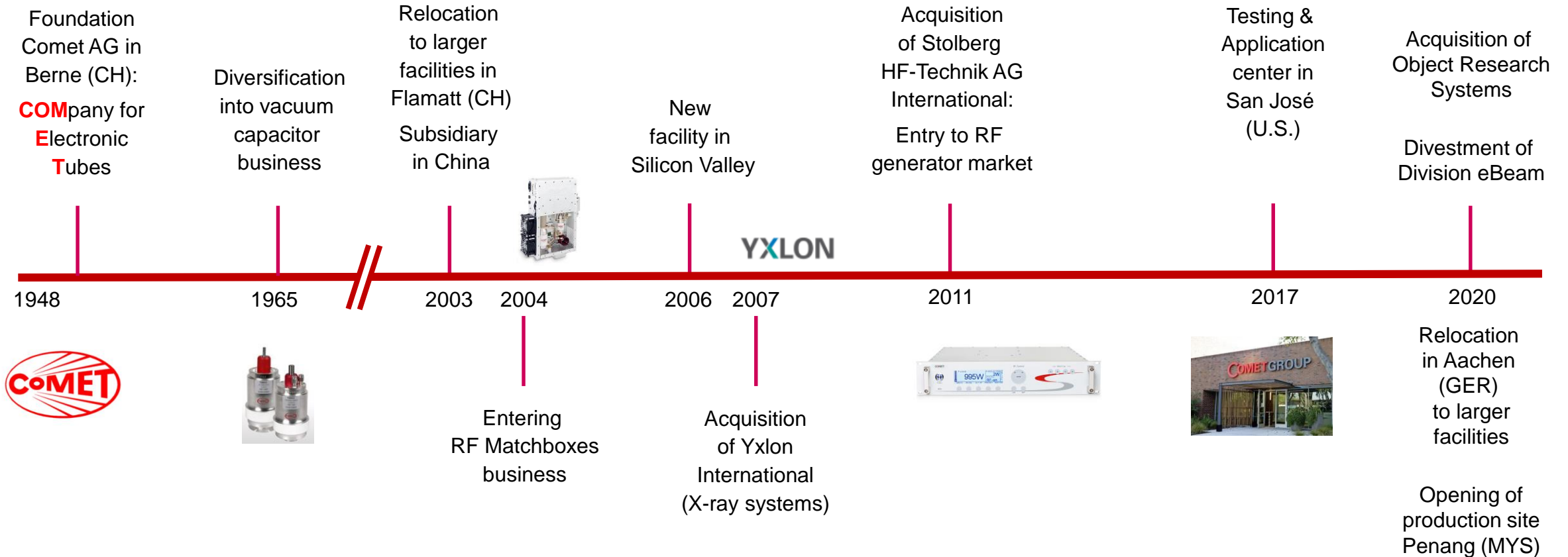
Guidance FY 2020

- Net sales 385 to 395 million CHF
- EBITDA margin: 13% to 14%



- Manufacturing
- R&D
- Sales & Services

A global leader in high-tech applications

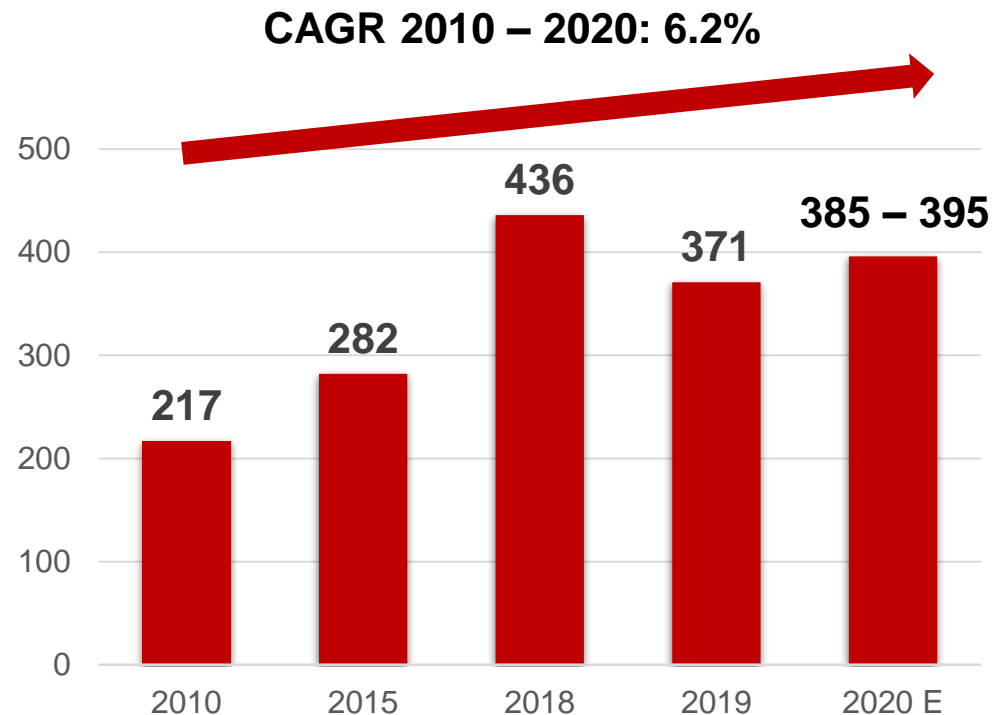


Comet history: <https://youtu.be/5J9qrCNS7F8>

Demonstrated growth over the last 10 years

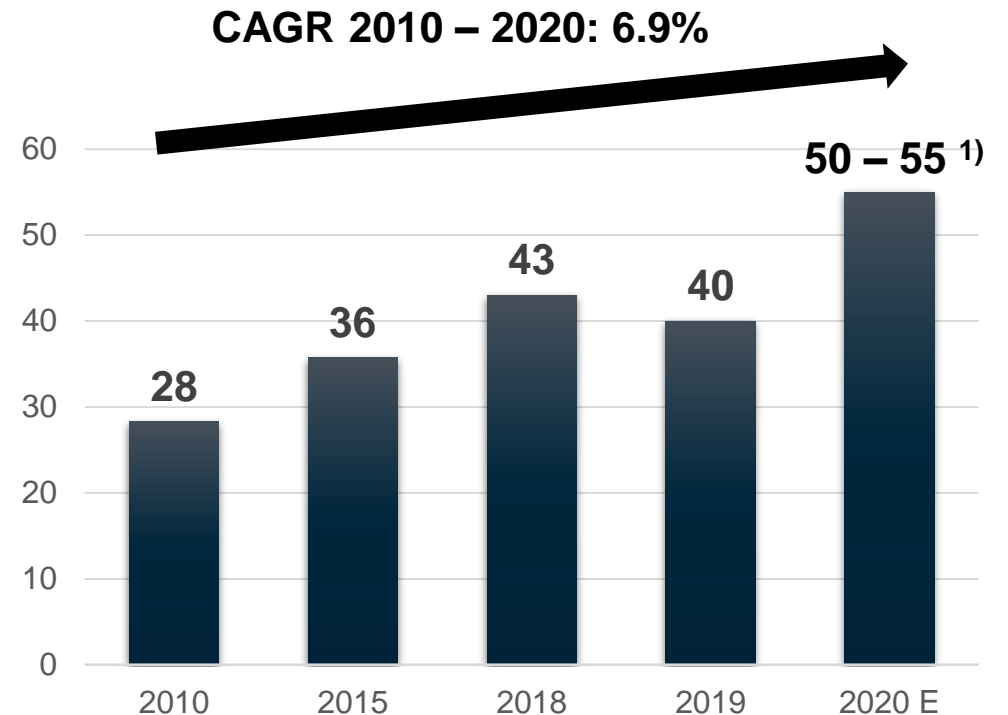
Revenue

(million CHF)



EBITDA

(million CHF)



¹⁾ Based on guidance FY 2020: EBITDA margin 13% to 14%

02

Comet Group – strategic focus on core competencies and markets

Our core competencies are in radio frequency and X-ray technologies ...

RF Power



Radio frequency (RF) technology: powers the production of the micro chips and touchscreens found everywhere today in sensors, PCs, smartphones and tablets, as well as in large server farms.

X-Ray Modules



X-ray technology and computed tomography (CT): important foundations of non-destructive testing in industries such as semi/electronics, automotive, aerospace and security inspection.

X-Ray Systems



... bundled in 3 Divisions with leading market positions

Division	Plasma Control Technologies (PCT)	X-ray Systems (IXS)	X-ray Modules (IXM)
Products	Vacuum capacitors, Matchboxes, RF generator (as of 2021)	X-ray inspection systems	X-ray tubes
Market Position	#1 (capacitors, matchboxes)	Top 3 (inline inspection, 3D)	#1 in ceramic x-ray tubes
Applications	RF Power subsystems for plasma processing	Non-destructive testing, 2D/3D inspection	Non-destructive testing, security inspections
Focus markets	Manufacturers of microdevices and related production equipment (semiconductors, electronics)	Semis, electronics (SMT) , Volume markets: automotive, aerospace	Electronics , broad range of industrial products and components
% of Group sales (H1/2020)¹⁾	53%	29%	17%
Strategic focus	Expansion of served accessible market (SAM) with unique RF generator (launch in 2021)	Leverage innovation for in-line CT and data-driven process optimization	Enlarge served available market with new products for semiconductor and electronics applications

¹⁾ Balance to Group total sales: ebeam technologies, divested in 2020

PCT Division: three types of products for plasma control



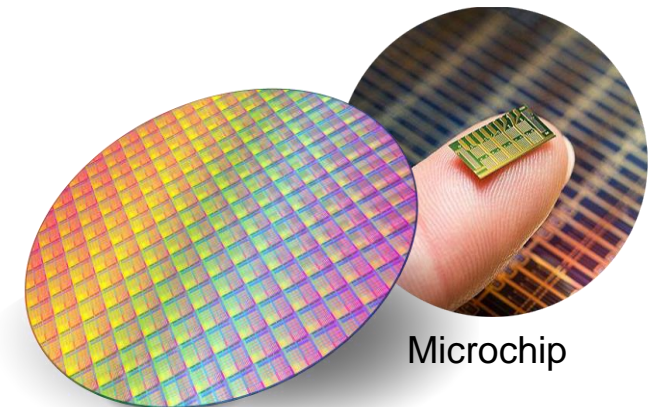
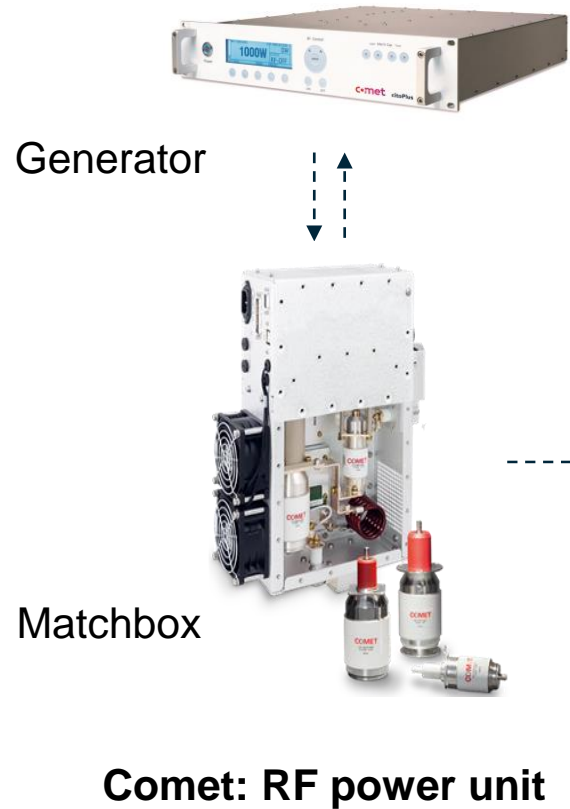
Vacuum Capacitors
("vaccaps")

Impedance Matching Network
with vacuum capacitors
("Matchbox")



Radio-frequency Power Generator
("RF Generator")

Comet RF power solutions for precise control of plasma processes in the semiconductor industry



IXS Division: radioscopic and CT inspection systems

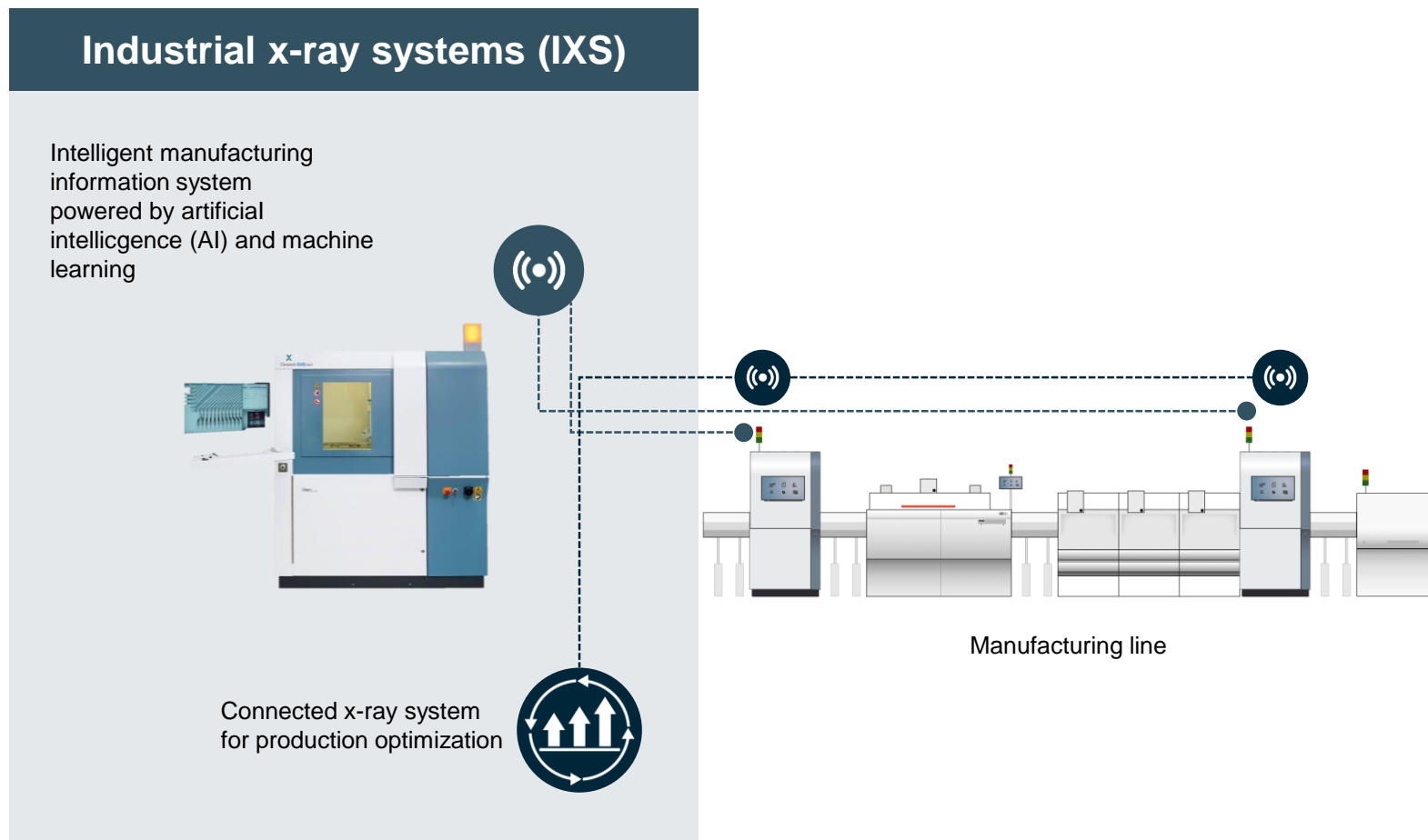


FF85 CT – High Resolution Industrial CT System



UX20 – x-ray/CT inspections of medium to large cast parts

X-ray systems: Enabling more efficient production processes driven by AI and machine learning



IXM Division: x-ray sources and portable x-ray modules



X-Ray Portable Modules



X-Ray Stationary Modules



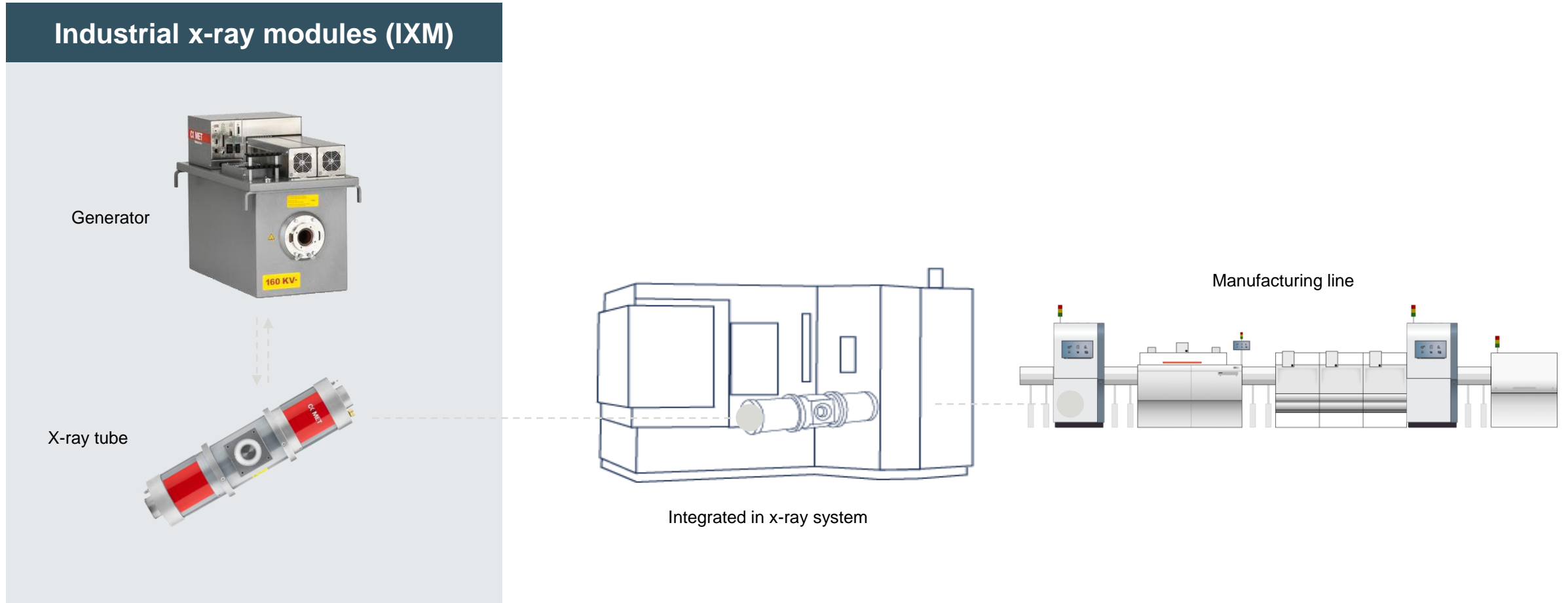
High-voltage X-ray Generators



Metal/ceramic x-ray tubes

X-ray modules: Smart products enabling OEMs' digital solutions

Industrial x-ray modules (IXM)



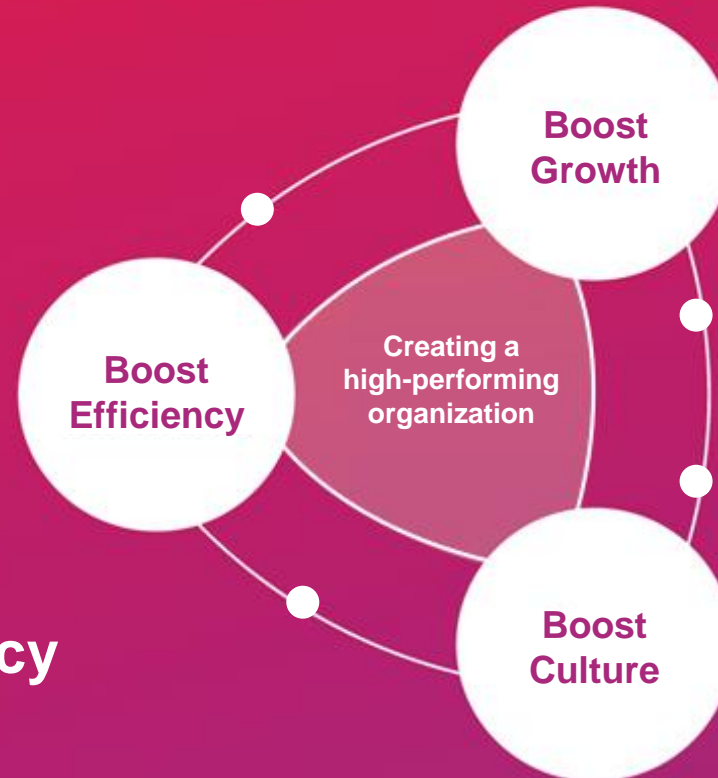
Developing Comet into a high-performing organization

Commercial excellence

Strengthen technology-driven market leadership by boosting commercial skills

Speed & sense of urgency

Accelerate Product development & go-to-market



Outside-In

Key to success:
customer value creation

Empowerment

At mid- and working level,
encourage risk taking

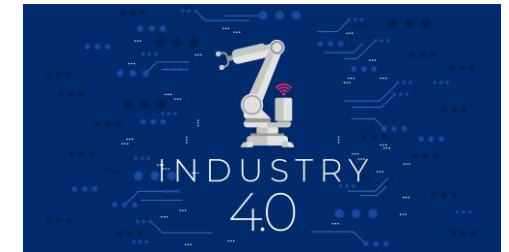
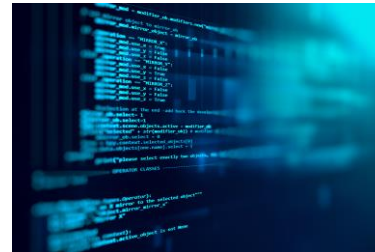
03

Comet positioned to capitalize on macro environment

COVID-19 has accelerated the digital transformation of society

More die and packaged die drives more demanding plasma & inspection processes

- Cloud Storage
- Data Centers
- Gaming



- Smart Home
- Ultra Fast Broadband
- Video Conference

- Artificial Intelligence (AI)
- Machine Learning (ML)
- Deep Learning (DL)

- Broadband
- Wireless
- 5G Connectivity

- Remote Healthcare/Wearables
- IoT (Sensors)
- Robotics / Industry 4.0

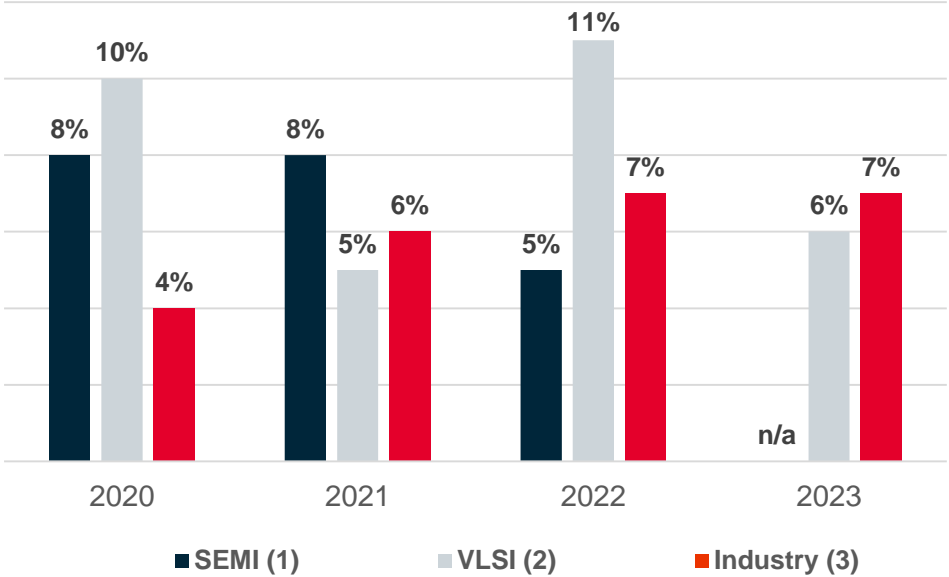
Near- to mid-term

Digitalization

Long-term

Wafer Fab Equipment (WFE) spending forecasts suggest a strong business environment for Comet

Semis WFE industry y-o-y % growth in capital spending ...



Sources: (1) SEMI global industry association, October 2020
 (2) VLSI Consultancy, October 2020 (3) mean of three estimates, large semi producers, Aug to Oct 2020

... and Comet's view for three scenarios for FY 2021

Most Likely: 2021 +5% YoY WFE Spending

- High Performance Computing, 5G rollout continues
- World's largest foundry further differentiates, Apple 5G successful
- China continues investment in sovereign capability

Alternate 1: 2021 flat to -5% WFE Spending

- China investment stalls
- World-wide economy deteriorates

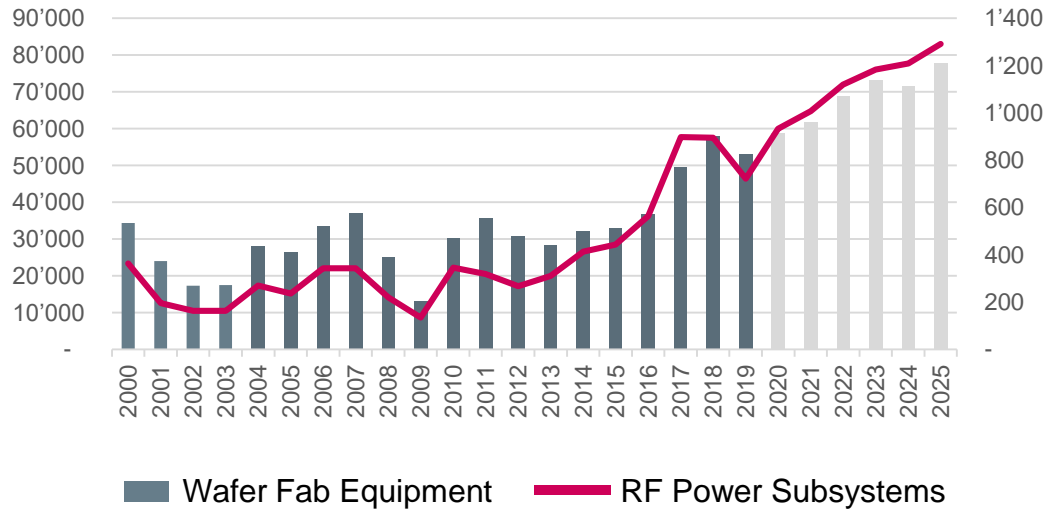
Alternate 2: 2021: +10% YoY WFE Spending

- New Administration in the United States
- 5G adoption accelerates, putting capacity pressure on 5 nm design rule
- DRAM investment accelerates (NAND already strong)
- China rolls out alternate to 5 nm chipsets

Radio-frequency subsystems spend growing

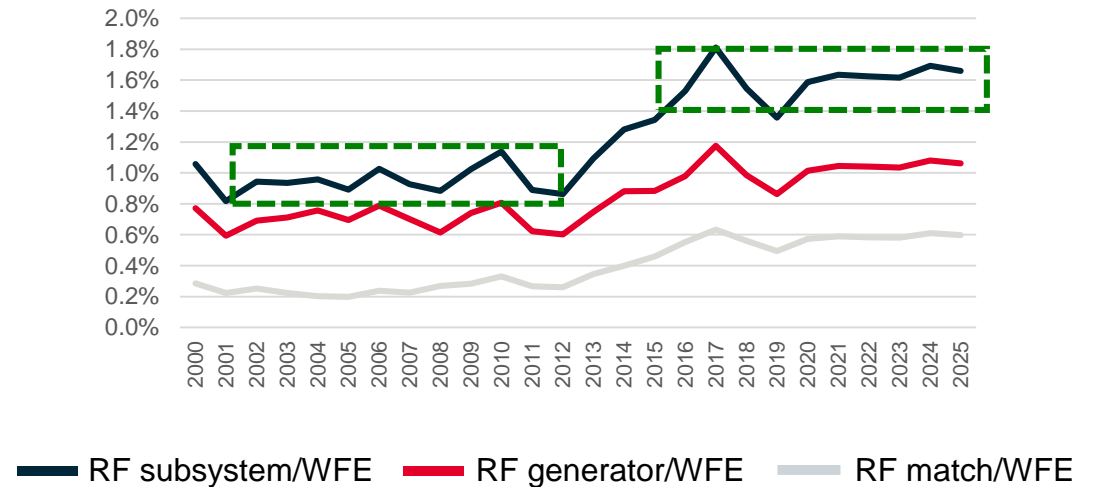
RF subsystems: increasingly critical in semiconductor production equipment

RF Subsystems to WFE (in million USD)



Source: VLSI

RF Power Ratio to WFE



Sources: VLSI, company data

Traditional IXS and IXM markets were challenged in 2020 ... some bright spots

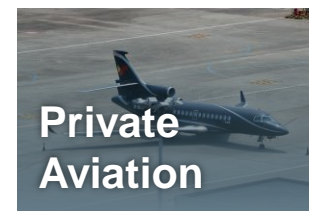
Growth drivers in

... Automotive ...



- **Strong investment in electrification and autonomous driving**
- Current environment: market crawling back up from April lows, China snaps back

... Aerospace ...



- **Structural growth in Asia**
- Historic reduction in traffic and aircraft demand
- Defense spending largely unaffected

04

Delivery to promise in 2020

Key milestones achieved in 2020

Comet Group

- Divestment of eBeam as anticipated
- Ongoing IMD program to foster cultural change
- Proactive measures limited the COVID impact on financials and on health of our staff
- New CEO and CFO hired to drive change

Plasma-control Technology (PCT)

- Production site in Penang operational in less than ten months
- State-of-the-art factory for new RF Generator in Aachen (GER)
- Expansion of capacitor production in Flamatt
- Several wins of strategic projects in matchboxes in the U.S., growing market share in China

X-ray systems (IXS)

- Acquisition of Montreal-based ORS to shift up a gear in Artificial Intelligence (AI) and Machine/Deep Learning
- Transformation underway to adapt to current environment
- Proven first commercial successes of new products/variants
- Narrowed product range from 7 to 3 platforms, completion 2021
- Investing in NDT for semiconductors, electronics

X-ray modules (IXM)

- Renewed x-ray sources product portfolio to keep/expand leading market position in traditional industries
- Quick implementation of efficiency measures
- Initial setup of supply chain for generators in Penang

Comet Group: accomplishments to date

eBeam divested to years-long development partner



Virtual program with IMD to accelerate cultural change



Resilient to impact from COVID-19

Strong first half-year 2020 results:

- Net sales +3% vs. H1 2019
- EBITDA margin 10.3% (H1 2019: 4.8%)
- Free cash flow and Equity ratio stable

Filled CEO and CFO positions



CEO Kevin Crofton (Sept 1)



CFO Lisa Pataki (Oct 1)

PCT: expanded production facilities in Europe and Asia

Several design wins in matchboxes in the USA, growing market share in China

State-of-the-art factory ready for production of new RF Generator in Aachen, Germany

Expansion of capacitor production in Flamatt, Switzerland

Penang, Malaysia:

First production ten months after decision

Comet location (3'700 m²) within walking distance to future location of a tier 1 WFE customer

Penang, new production site



Aachen,
RF Generator production

IXS: realignment to focus on product portfolio, new markets and cost

Realignment / transformation underway to adapt to current business environment

Invested in Artificial Intelligence, Machine Learning, Deep Learning: acquisition of Montreal-based Object Research Systems (ORS)

Proven first commercial successes of new products and variants: UX20 for x-ray, and FF85 for CT inspections of medium to large cast parts

Narrowed product range from 7 to 3 platforms, completed by 2021

Targeted R&D investment for NDT for semiconductors, electronics



**Inspect
Award 2020**
UX20 –
category
automation

IXM: new product adoption ahead of expectations

Rapid adoption of **ION** modules for diverse Security applications by 10 customers



Cargo inspection

Sales of novel **Mesofocus** experiencing strong pull from NDT customers (automotive, aerospace)



Car/Portal Inspection

Multiple **Pluto** units already sold to 3rd parties (Electronics), ahead of plan



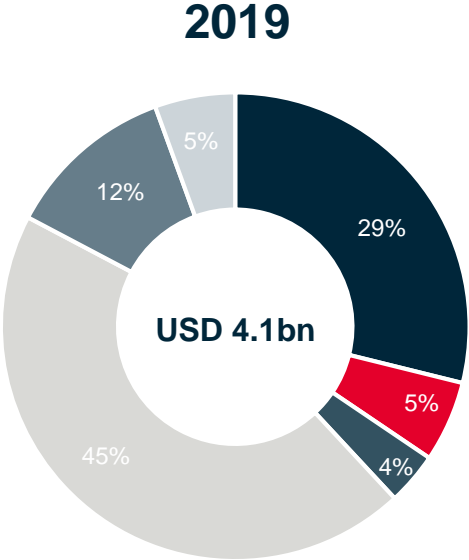
05

Future growth opportunities: 2021 and beyond

Attractive growth in Comet's served markets

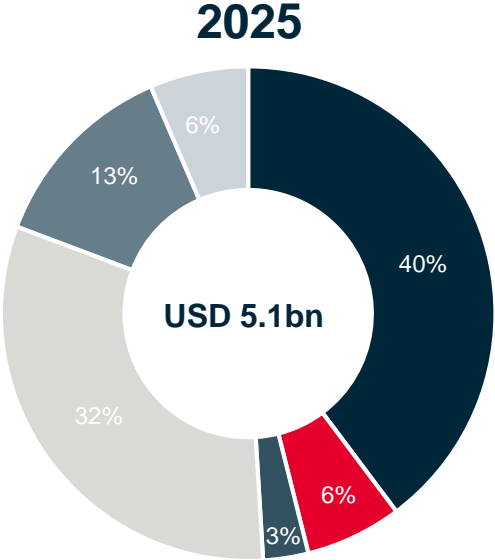
TAM
Total available market

- Semi/Electronic
- Automotive
- Aerospace
- Security
- SnM (inc. Medical)
- Other

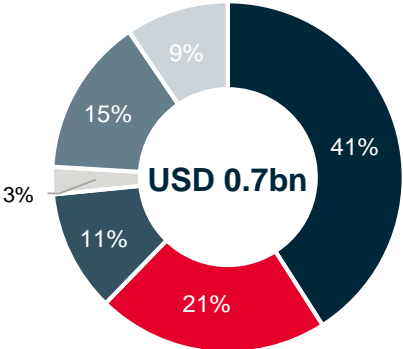


CAGR 2019 – 2025

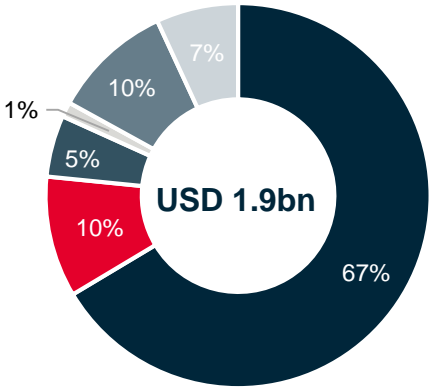
~ 3%



SAM
Served available market



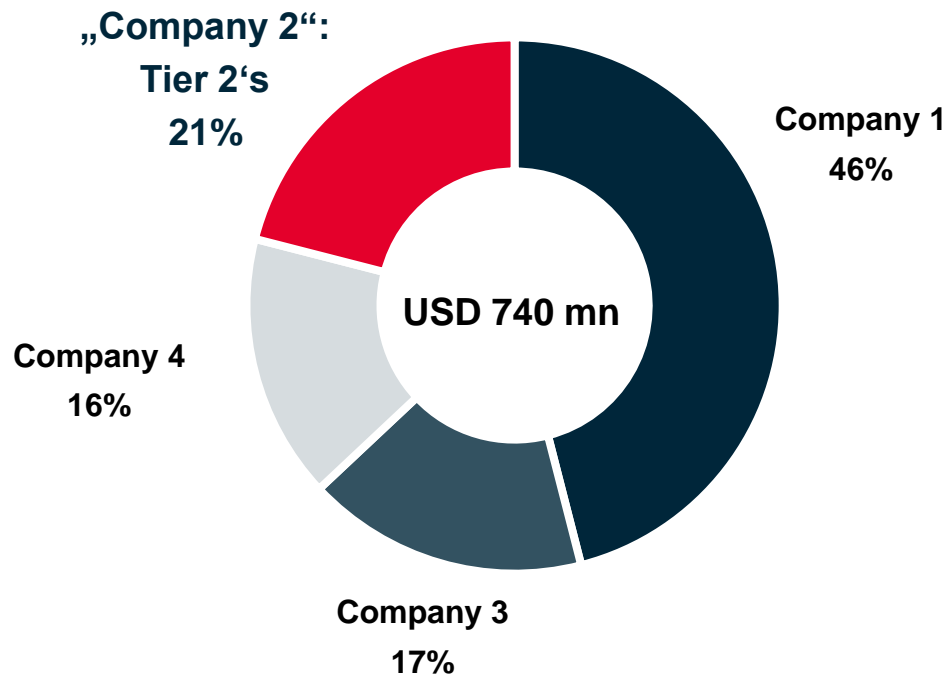
~ 18%



Sources: VLSI, company data

PCT: opportunity to increase share of wallet

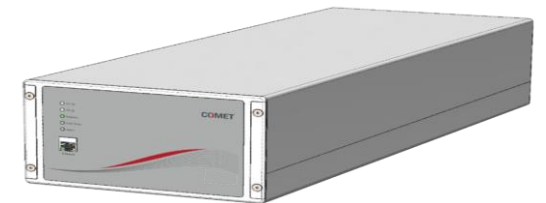
RF Power Spend by OEM [%, 2019]



Source: VLSI 2020

Target all plasma processes in memory, foundry, logic

- Note: Qualification takes time:
 - 9 to 15 months tier 1's
 - 6 to 9 months tier 2's
- First revenue in 2021, ramp-up in 2022
- Adoption accelerated via underserved tier 2 customers



IXM: expanding market share and served available market with innovative products

New Markets

- Enter Semi / Electronics with new microfocus **Xplorer**
- Transfer of open **Microfocus** sources production and R&D to Flamatt

Extend existing markets

Security and NDT (stationary and portable) to be extended with innovative products:

- **Mesofocus** product family: Metrology and high-end CT
- **ION** family: entry into integrated x-ray sources/modules

Future opportunities: Transfer **iVario** generator manufacturing to Penang



IXS: three pillars on the road to sustainable profitability

Successful transformation to current environment

- Achieve profitability in 2021

Product portfolio focused on strategic markets

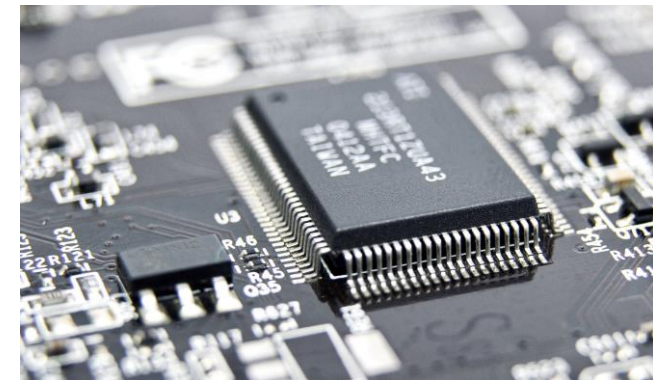
- Reduce legacy systems

Position for growth

- Strengthen position in high-growth semi advanced packaging inspection market
- ORS acquisition – enhancing yields:
from defect detection to understanding production processes; ability to predict and steer processes



X-ray image of a detached bond die



06

2020 – a year of progress

Business Update: confident for 2020

- **Strategy execution on track**
- Trends observed in HY continued through the second half-year:
 - Buoyant demand from the semiconductor sector
 - Softer market in automotive and aerospace to continue with some pockets of growth (China, Defense)
- For FY 2025, Comet confirms its ambitions:
CAGR ~15% / EBITDA margin ~25% / ROCE ~30%

Guidance FY 2020

Revenue (in million CHF)

385 to 395

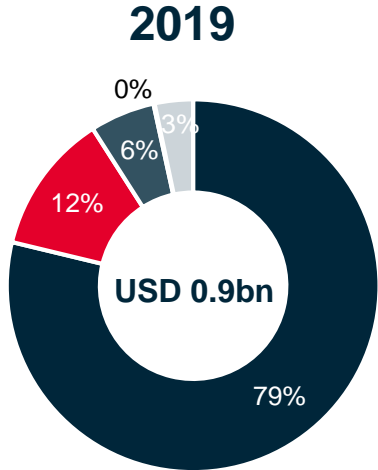
EBITDA margin (in %)

13.0 to 14.0

Backup slides

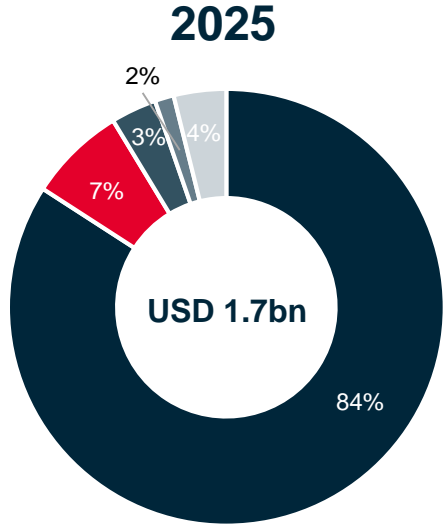
PCT: RF Generator a potential game changer in the semi equipment industry

TAM
Total available market



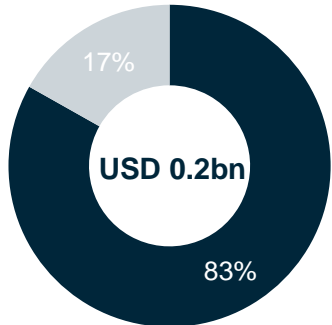
CAGR 2019 – 2025

~ 10%



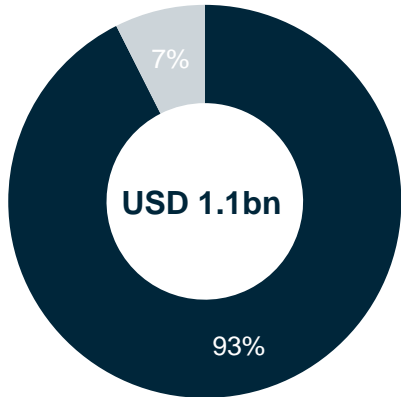
- Semi/Electronic
- FDP
- Solar
- Security
- Battery
- Other

SAM
Served available market



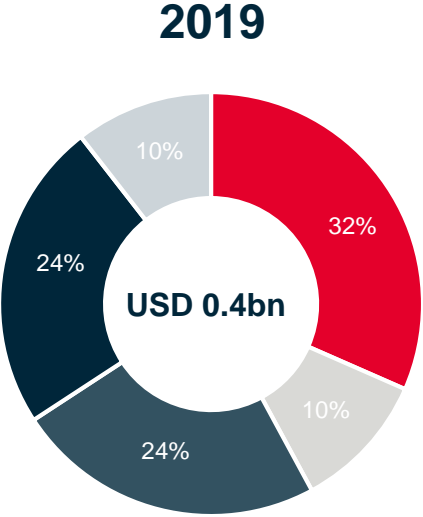
~ 33%

Market entry RF Generator



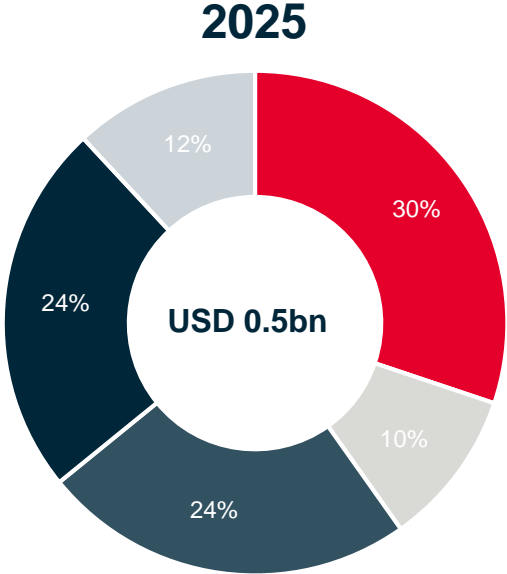
IXM: entering the semi/electronics market leads to significant SAM expansion

TAM
Total available market



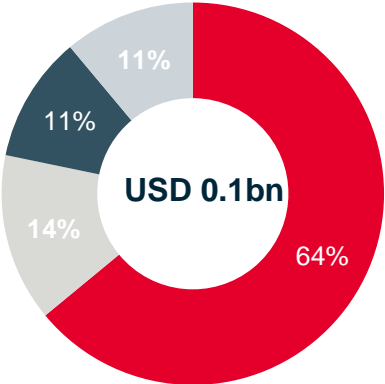
CAGR 2019 – 2025

~ 5%



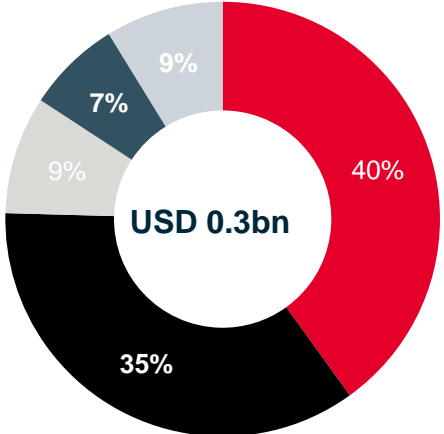
- Semi/Electronics
- NDT Stationary
- Security
- NDT Portable
- Battery
- Other

SAM
Served available market



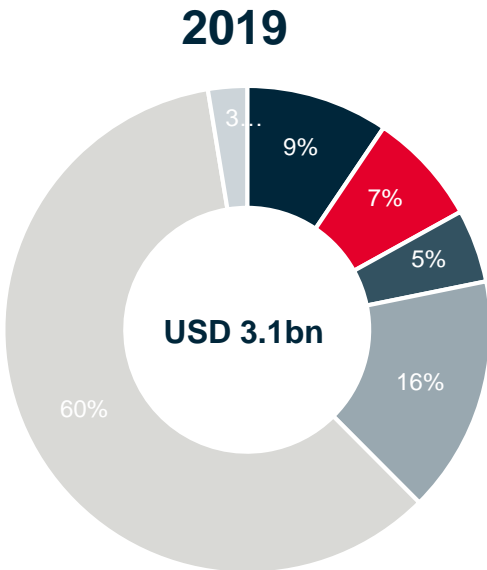
~ 12%

Increase market penetration with new products: ION, Explorer, Mesofocus, Microfocus



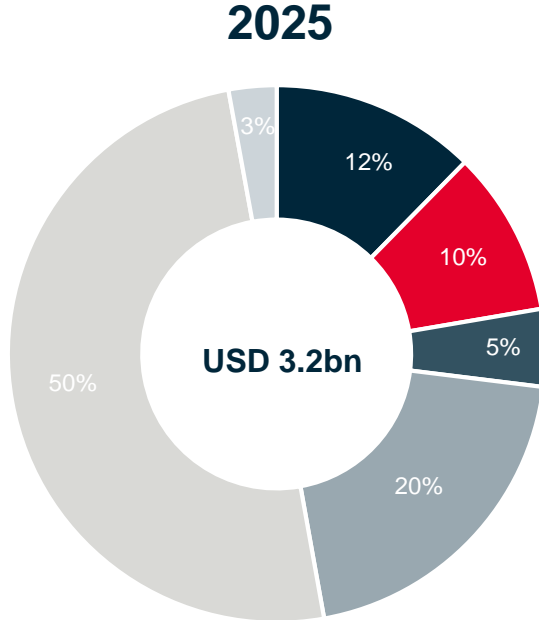
IXS: x-ray systems business to address untapped markets

TAM
Total available market



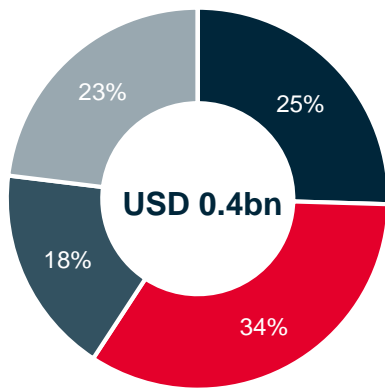
CAGR 2019 – 2025

~ 1%



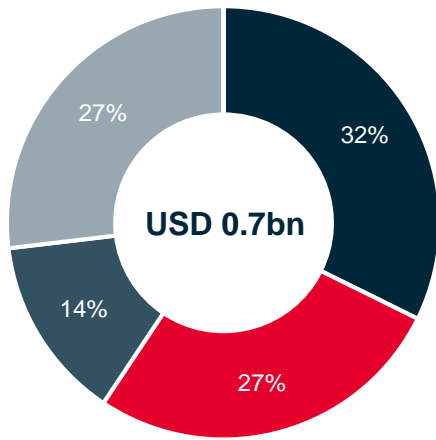
- Semi/Electronics
- Automotive
- Aerospace
- Security
- SnM (inc. Medical)
- Food

SAM
Served available market



~ 8%

Increasing share in Semi & Electronics
Untapped potential in Security



c•met
group