



Welcome to Comet's Capital Markets Day

November 16, 2022

Zurich, Switzerland



Cautionary statement regarding Forward Looking Statements

This document contains forward-looking statements about the Comet Group that may be subject to uncertainty and risk. Readers should therefore be aware that such statements may deviate from actual future outcomes or events. Forward-looking statements in this document are projections of possible future developments. All forward-looking statements are made on the basis of data available to Comet at the time of preparation of this document. The Comet Group assumes no obligation whatsoever to update or revise forward-looking statements in this document, whether as a result of new information, future events or otherwise.

Capital Markets Day 2022: managing volatility over the cycles

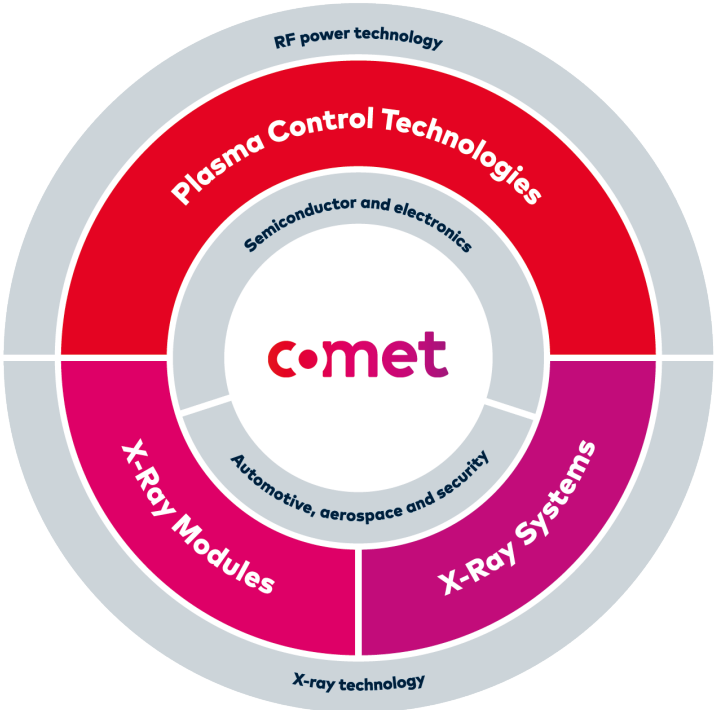
November 16, 2022

Stephan Haferl, CEO



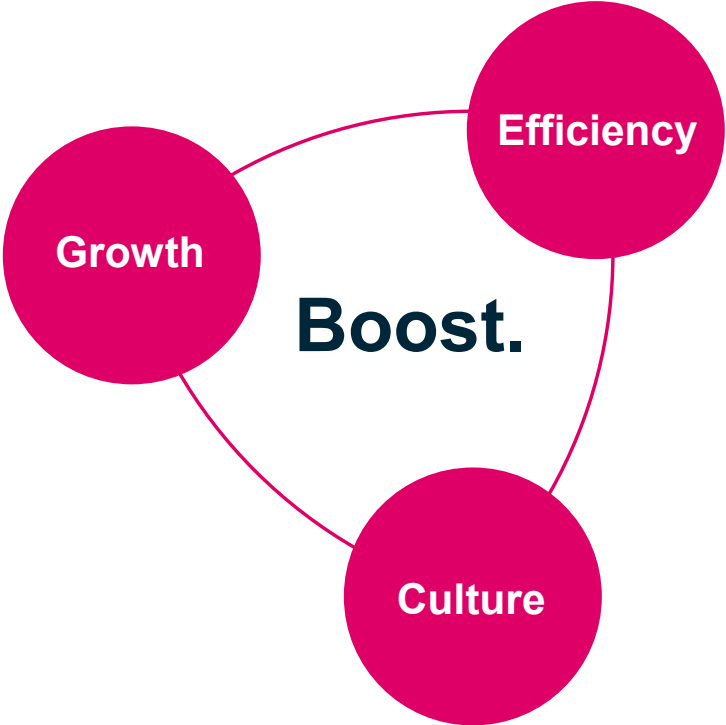
Focus strategy is showing results

Strategic focus



- 1 company
- 2 core technologies
- 3 divisions
- 4 primary end markets with a focus on semi/electronics

Boost program



Leading market positions in radio-frequency (RF) power delivery and x-ray technology

Plasma-Control Technologies

#1

in vacuum capacitors and matchboxes



59%

of Group sales FY21

Industrial X-Ray Systems

Top 3

in served markets



28%

of Group sales FY21

Industrial X-Ray Modules

#1

in metal ceramic x-ray tubes



13%

of Group sales FY21

Global presence close to our customers

42%
of 2021
group sales

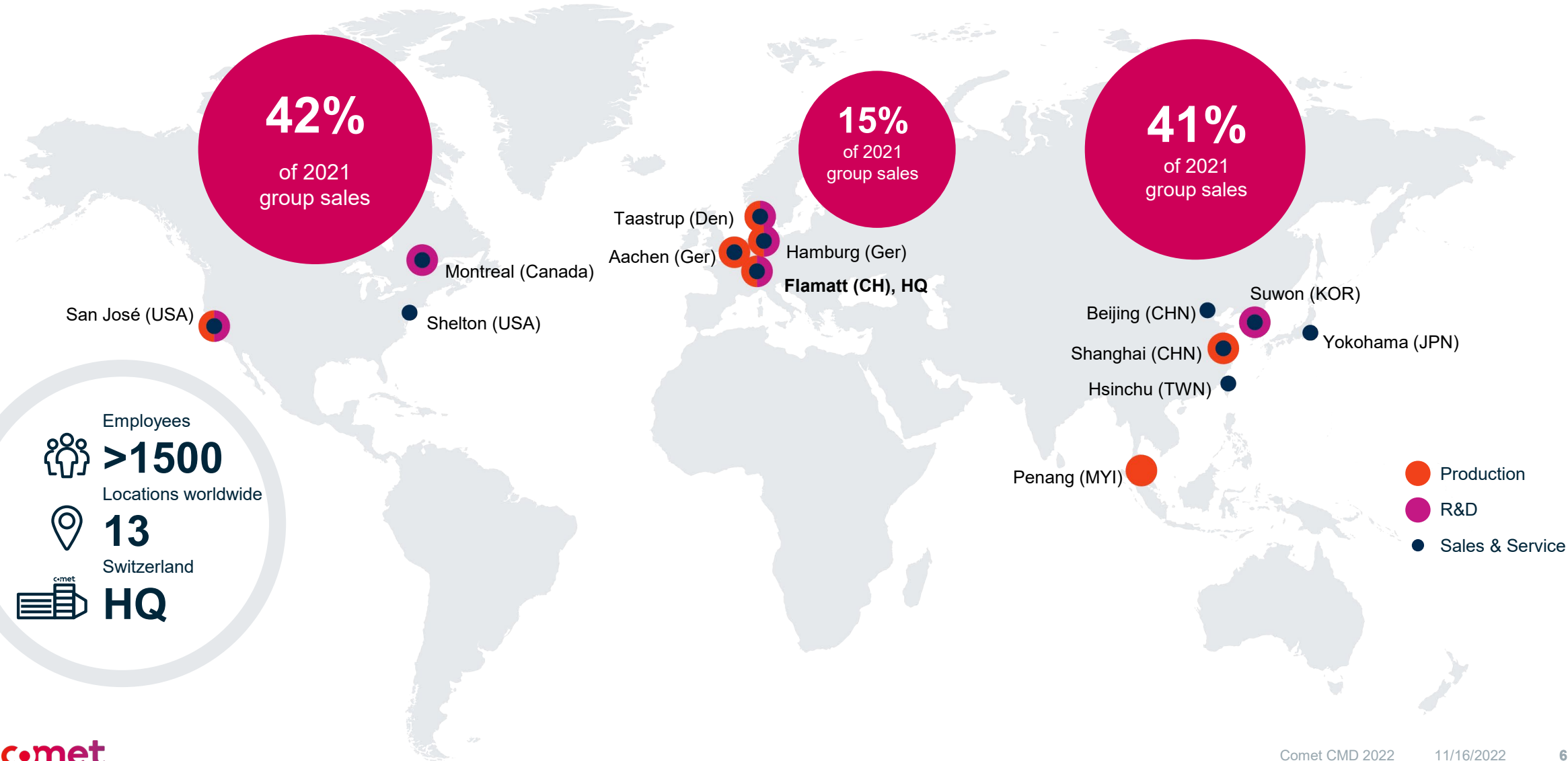
15%
of 2021
group sales

41%
of 2021
group sales

Employees **>1500**

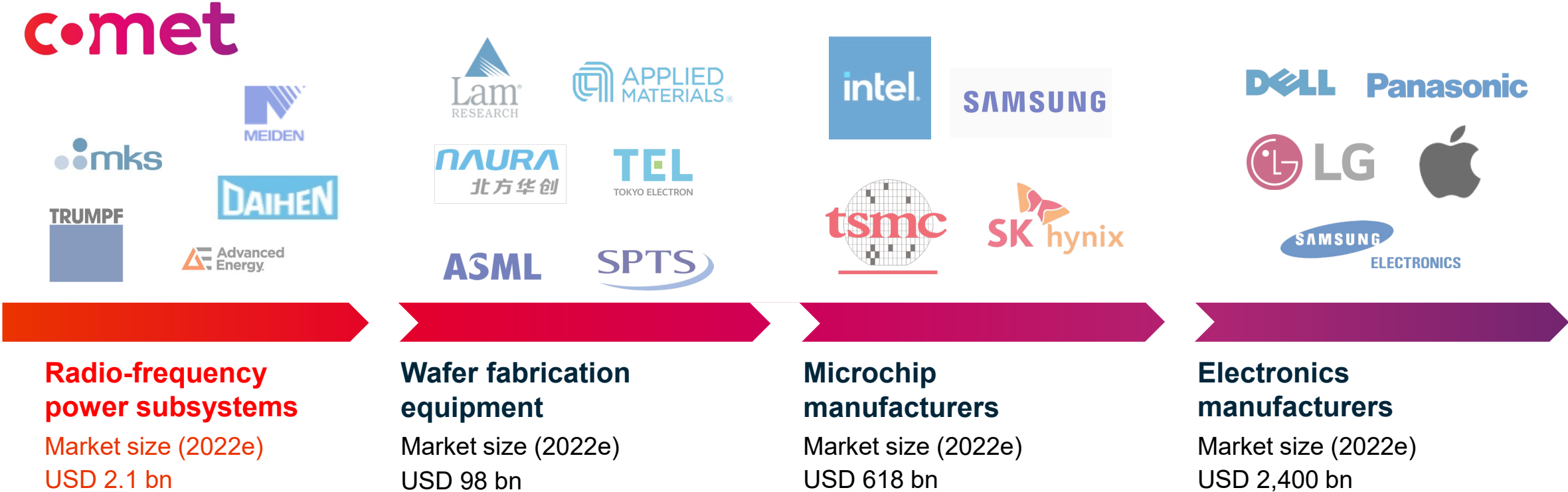
Locations worldwide **13**

Switzerland **HQ**

**Well positioned to benefit from
growth in our target markets**

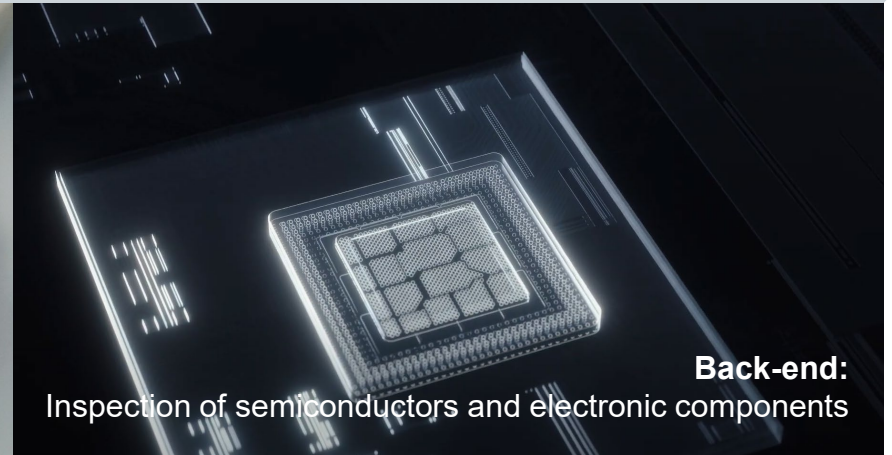
A vital role in the global semiconductor value chain: total available market (TAM) of USD 2.0 bn



Sources: Gartner, TechInsights

Comet: a group that covers the semi / electronics value chain from the front-end to the back-end

Semiconductor value chain



comet
pct

RF power subsystems for
wafer fabrication equipment

Comet at the heart of
microchip production

[Watch the video](#)

comet
x-ray

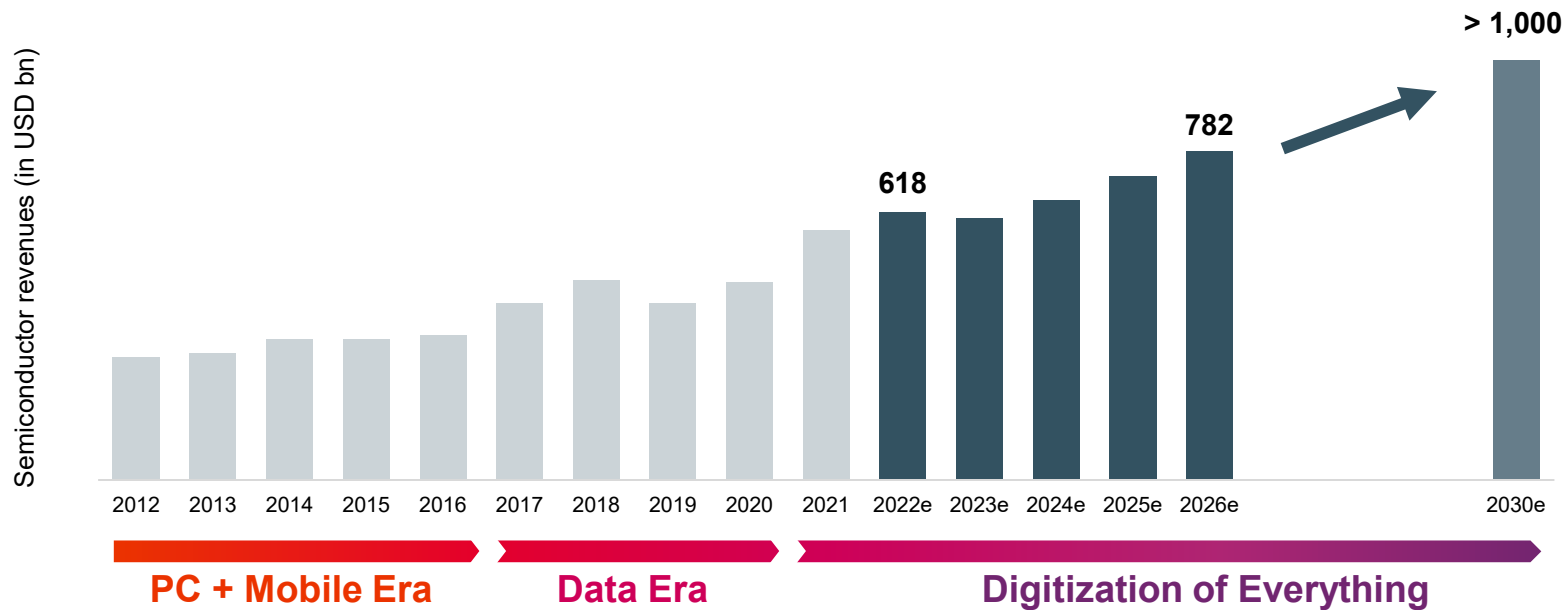
X-ray systems and modules for quality control
of semiconductors and electronic components

comet
yxlon

comet
group

Structural long-term demand growth for microchips remains unbroken with diversification of end markets

Worldwide semiconductor revenues estimated to exceed USD 1 trillion by 2030

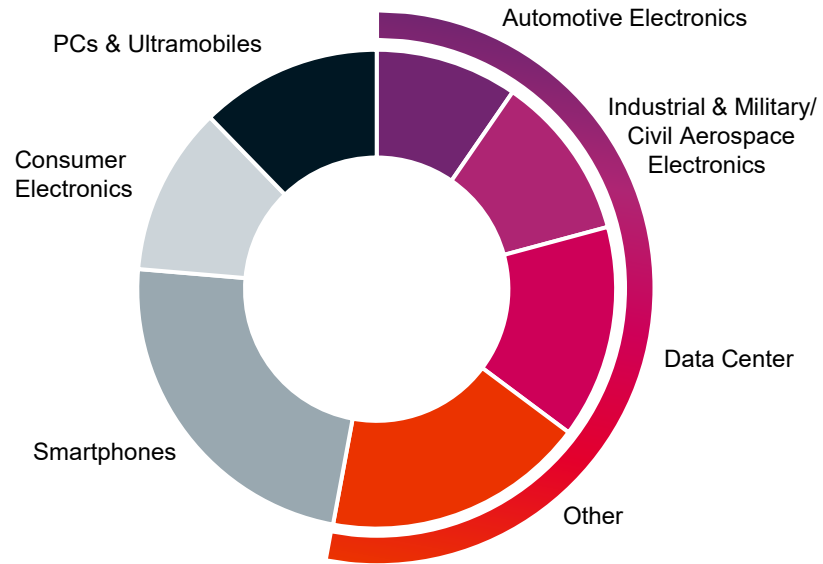


- Semi demand fueled by data-driven economy and AI
- Cyclical semi downturn pulled forward from 2024 to 2023
- Driver of downcycle: memory
- Logic/Foundry still expected to grow
- Projected revenue growth 2023: -3.6%, excl. memory at +1.1%

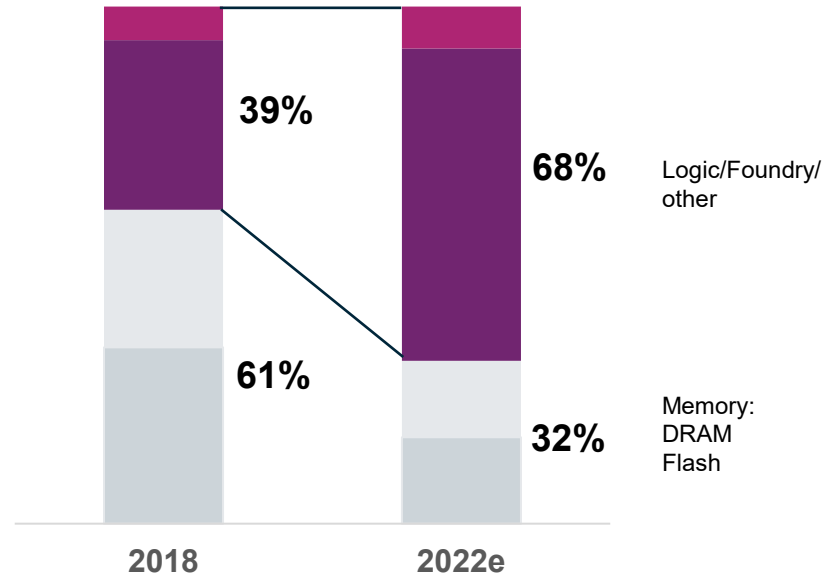
Sources: Gartner Semiconductor and Electronics Forecast Database, Worldwide, Q3/22 update; Comet, Semi, TechInsights, McKinsey.

Diminished influence of memory and consumer-driven end markets compared with previous years

Semiconductor revenues 2022e by end market



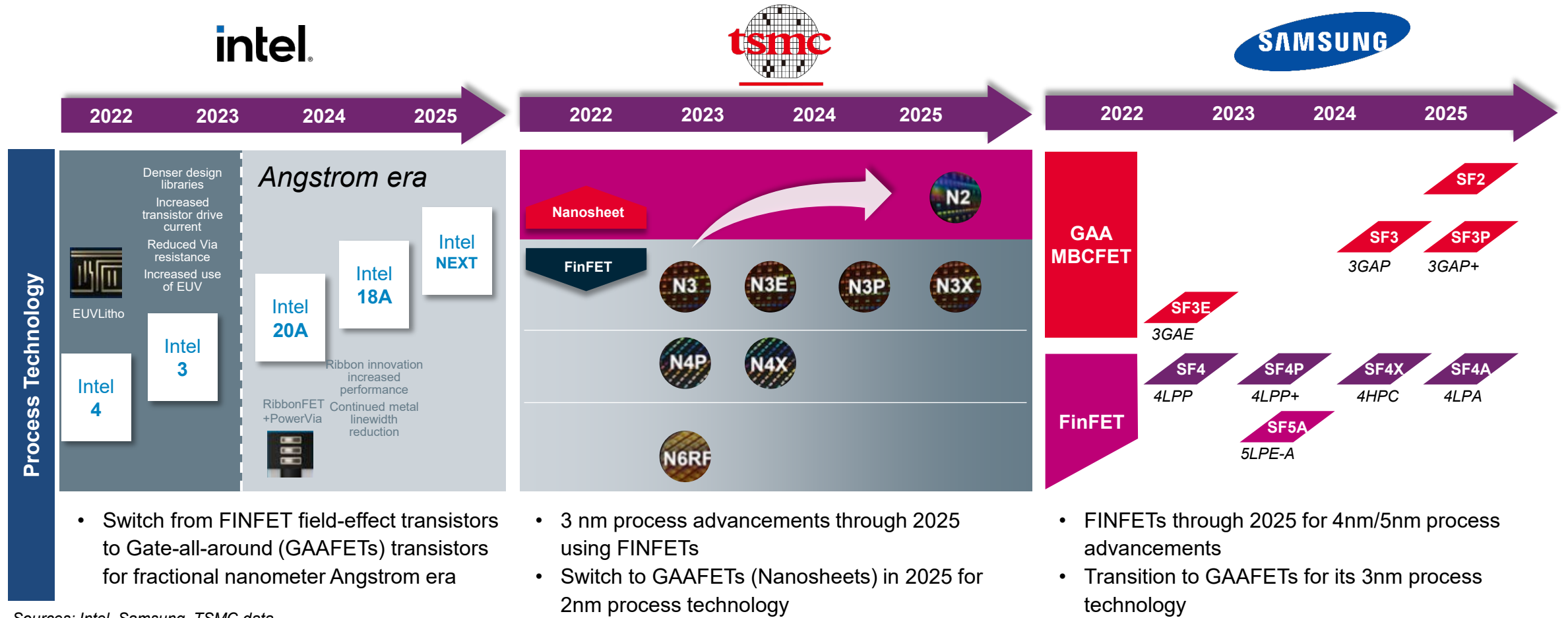
WFE spend by device type



- Macro uncertainty weighs on consumer electronics, smart phones, PCs
- Non-consumer segments: >50% of market
- Memory: lower share of total market
- Logic/Foundry customers continue to invest
- Comet: <50% memory exposure (2018: approx. 70%)

Sources: Gartner, Semi

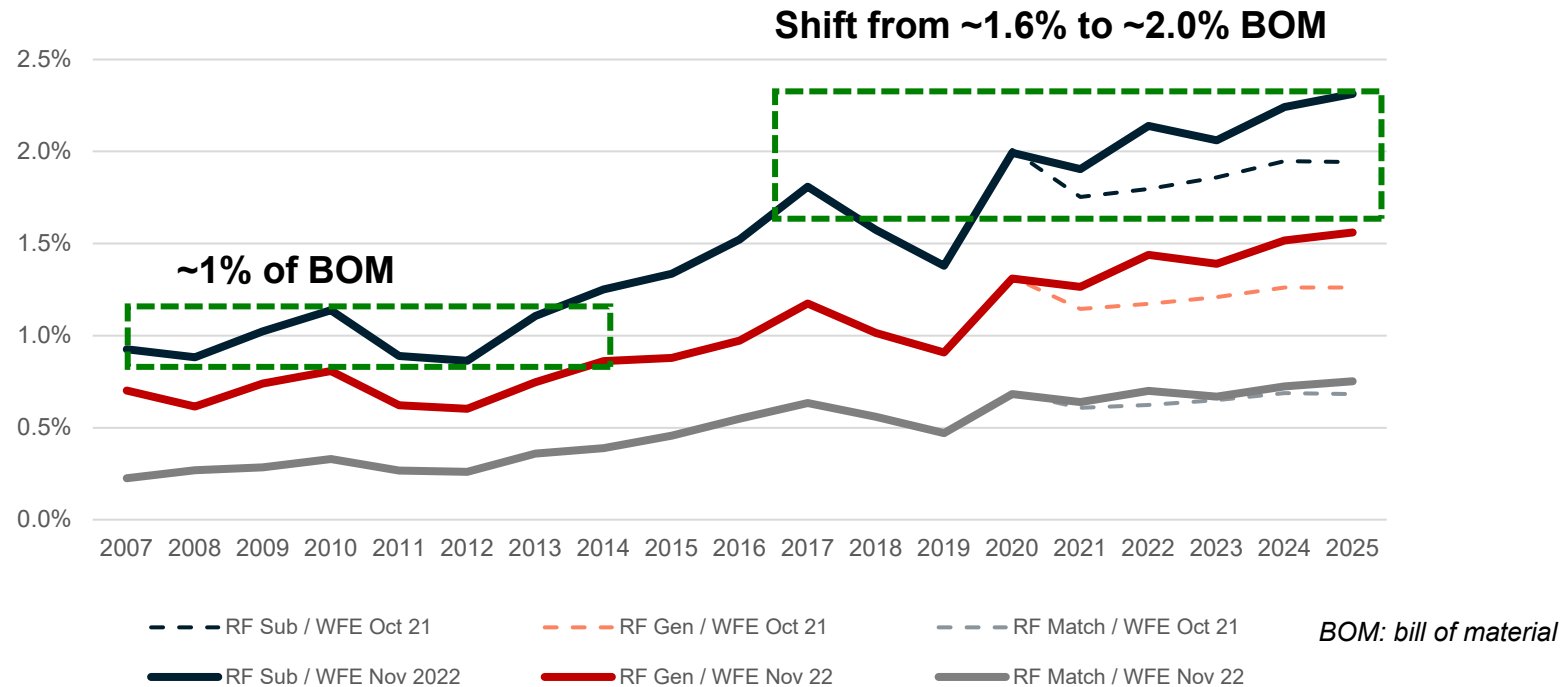
Leading semiconductor manufacturers' aggressive process roadmaps fueling growth forward



Sources: Intel, Samsung, TSMC data

Chip (device) complexity requires more plasma-based equipment and RF power subsystems

RF Power Ratio to WFE



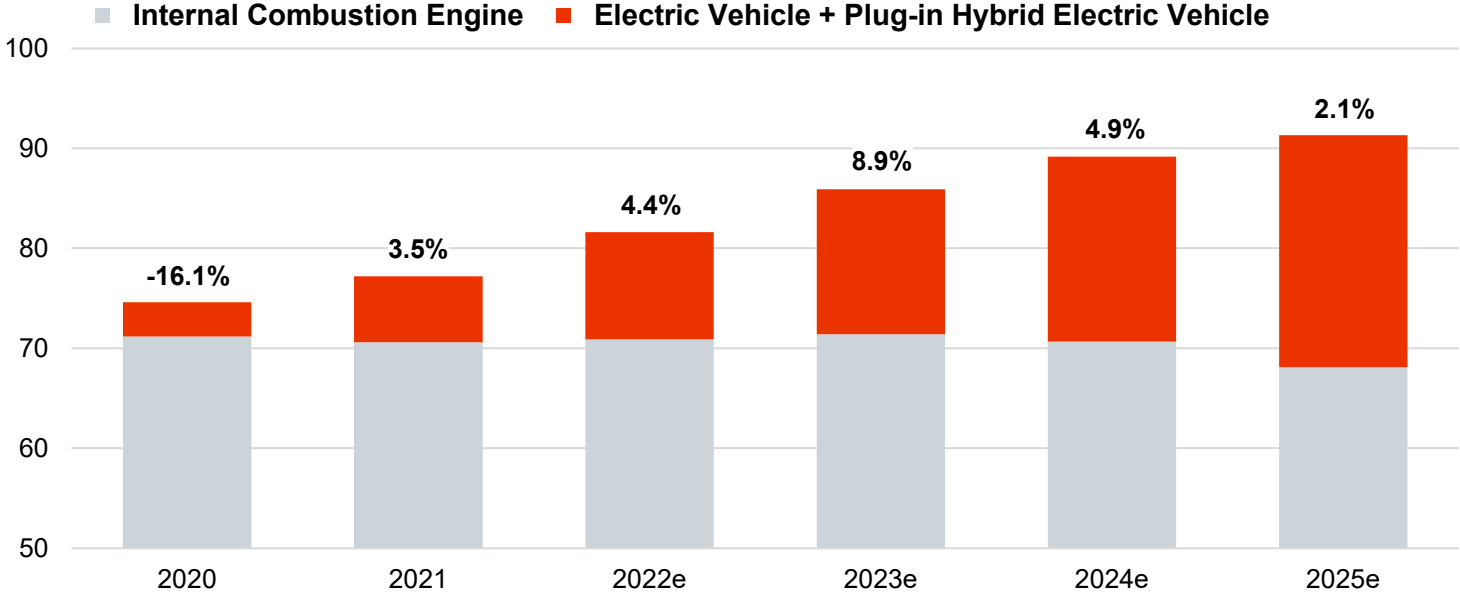
- WFE spend forecasts yoy*:
2022: 9.1% / 2023: -13.5%
- Bill of materials for RF subsystems per production unit increasing:
 - complexity chip architectures
 - smaller technology nodes
- RF Subsystem expected CAGR 2021 to 2025: 10.3%

* Average of 6 estimates for 2022 and 5 estimates for 2023 (Gartner, Semi, TechInsights, Lam Research, KLA, Applied Materials (2022 only))

Sources: TechInsights, company data

Transition to electric vehicles opens attractive entry point

Global light vehicles production forecast (million units and yoy growth)

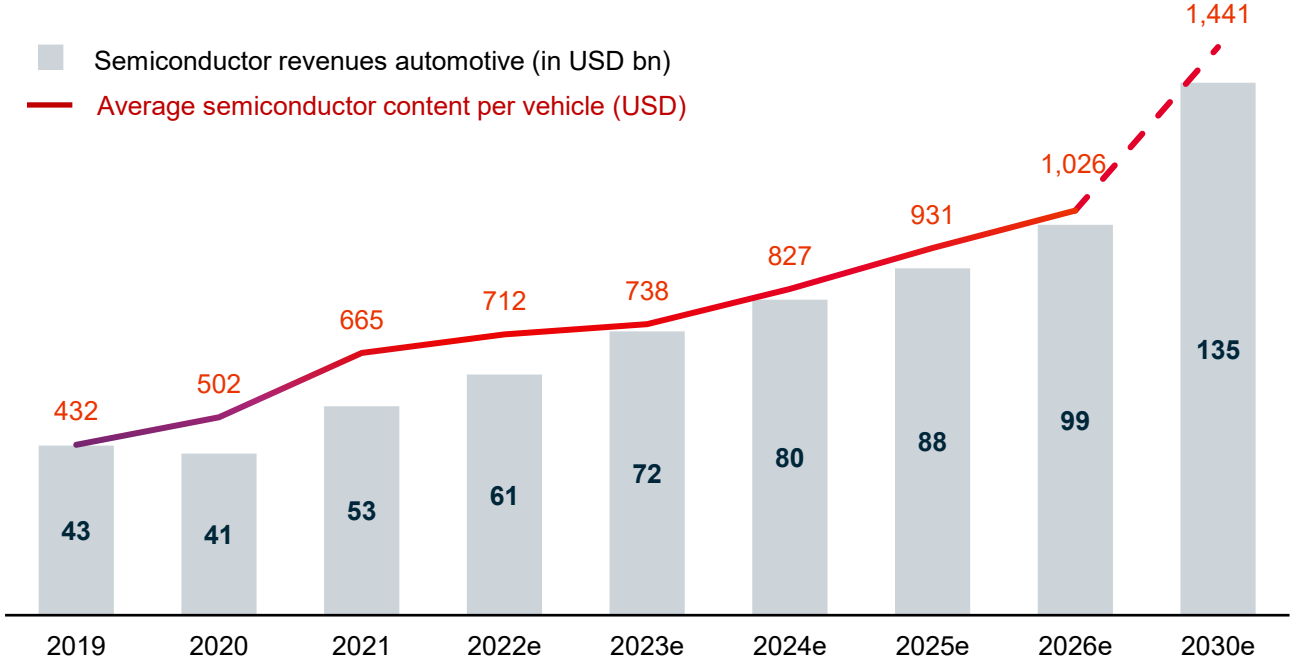


- CAGR 2021 to 2025e: approx. 5%
- Accelerated transition towards EVs
- EV production share: 8.5% in 2021 to ~25% in 2025e

Sources: IHS Markit Sept 2022, Comet

Average semiconductor content per vehicle expected to exceed USD 1,000 by 2026

Automotive industry: microchips revenues >USD 100bn by 2030



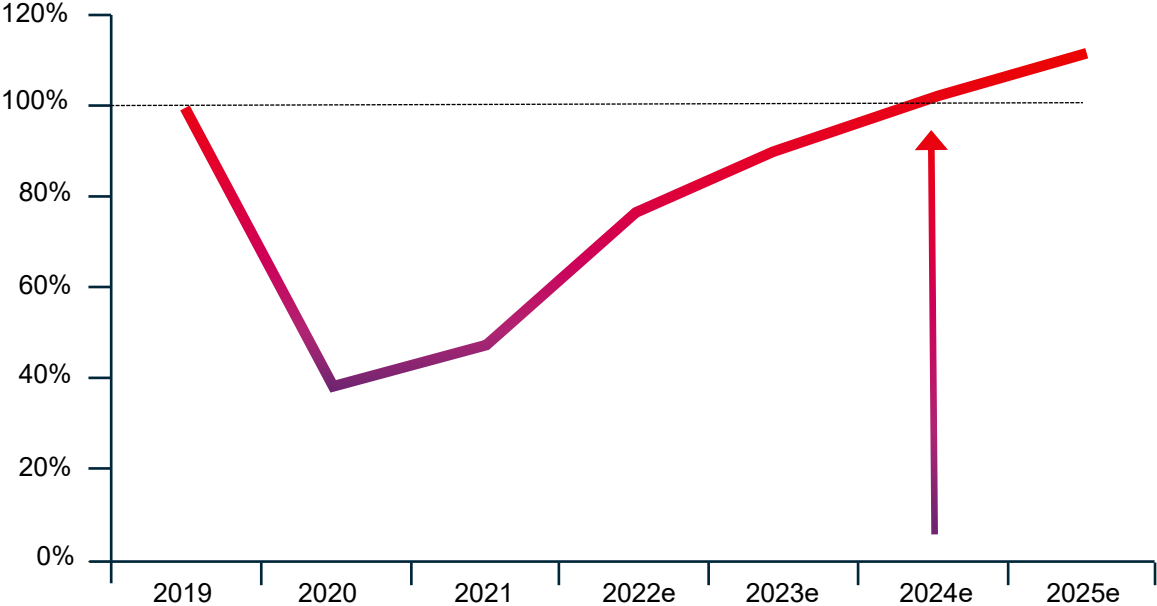
Opportunities:

- Significantly higher microchips value in EVs
- Battery inspection with x-ray

Source: Gartner Semiconductor Forecast Database, Worldwide, 2022 Update

Aerospace and security markets have embarked on a solid recovery path

Global monthly air traffic revenue passenger kilometers



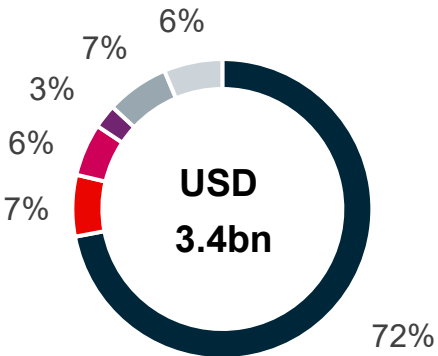
- Air Traffic Volumes (ATV): forecast to return to 2019 levels by 2024
- Forecast CAGR 2024 to 2030: 5.3%
- Strong correlation between ATVs and IXS/IXM sales into aerospace and security markets

Source: IATA, September 2022

TAM and SAM have further increased, semi and electronics driving growth

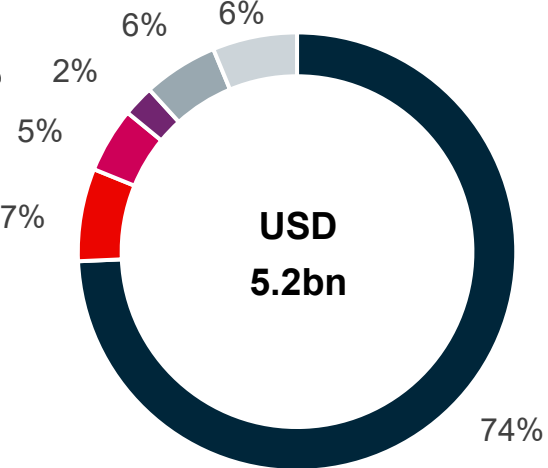
2021

TAM



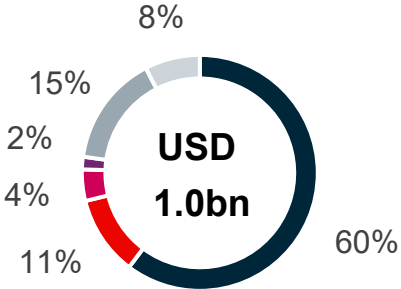
1.5 x

2025

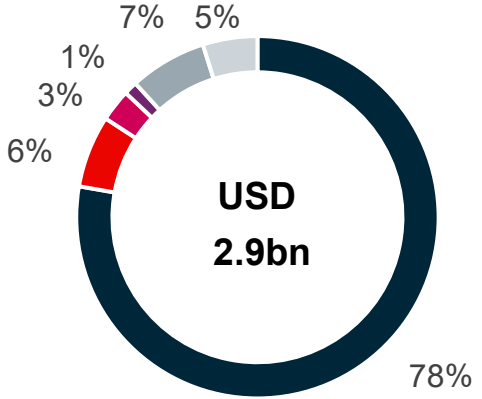


TAM CMD 2021:
2020: USD 2.9 bn
2025: USD 4.5 bn

SAM



2.8 x



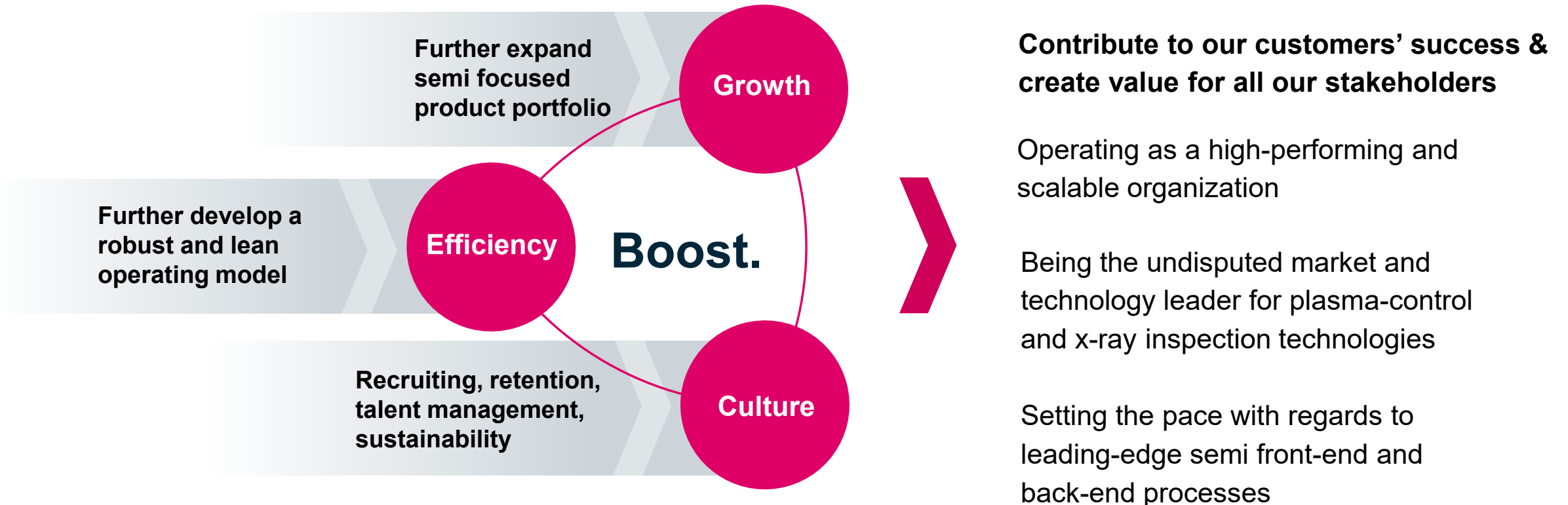
SAM CMD 2021:
2020: USD 0.9 bn
2025: USD 2.5 bn

- Semi/Electronics
- Automotive
- Aerospace
- Security
- SnM (incl. Medical)
- Other (e.g. Food, O&G)

**Consistently pursuing our
medium-term goals**

Focus strategy confirmed

Growth ambitions based on a sound strategic framework



Proximity to customer, production, R&D: expansion laying the foundation for future growth

Expansion focus on fast growing Asian markets



**Aachen
Germany**

Production of Synertia®



**Montreal,
Canada**

AI expertise through acquisition of ORS



**Suwon,
South Korea**

Design center for Asian customers



**Hsinchu,
Taiwan**

Demonstration/training center for local customers



**Yokohama,
Japan**

Offering for customers expanded



**Penang,
Malaysia**

Assembly of RF matches



**Flamatt,
Switzerland**

Expansion of vacuum capacitor production



**Shanghai,
China**

Activities consolidated in one site

Preparing for further growth



San Jose: consolidation of 4 sites into 1 (2023), focus on new product introduction and pilot line

Location(s) to be evaluated:

Looking beyond 2025 to capture additional growth in matchboxes and vacuum capacitors

Penang: a crucial step towards our 2025 targets

Move of global high-volume matchbox assembly from San Jose to Penang progressing, completed by mid-2023

San Jose



This stays in SJ:

R&D: Innovation Center Lab One

Close to major customers

Consolidation of operations into one building (early 2023)

high-volume
production



Penang



Major driver for 2025 targets achievement

Close to Asian growth markets

Local supply chain installed

Serving customers globally

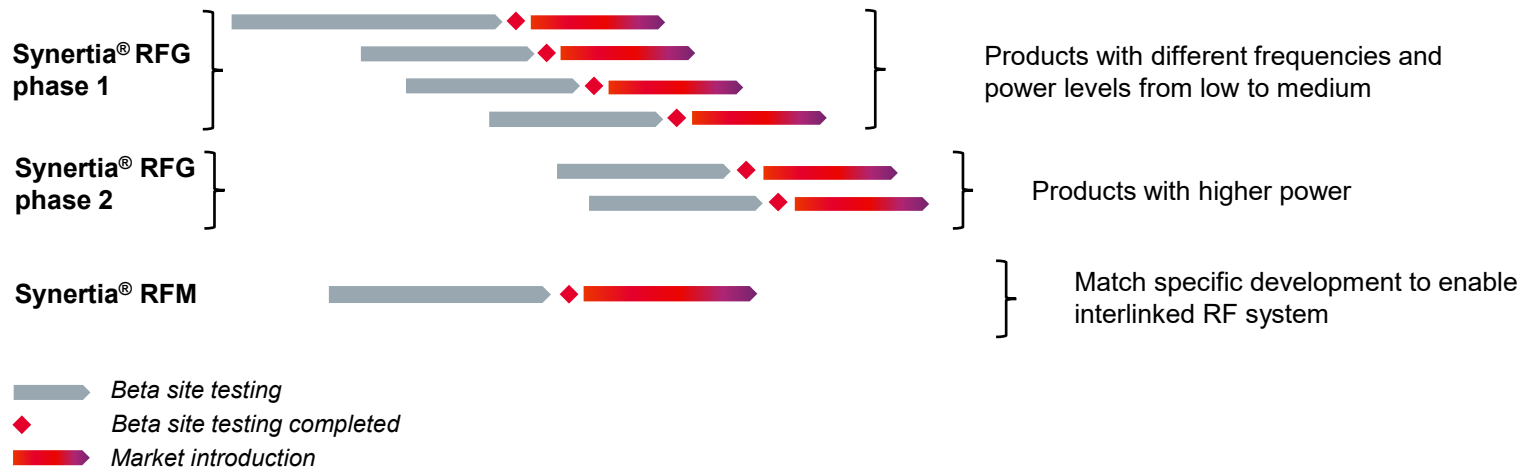
Favourable labor costs

Expansion opportunities



PCT: successful Synertia® launch

Simplified schematic view of Synertia® development



- Market for RF generators in 2025e: ~USD 1.7 bn, targeted market share by 2025: ~10%
- Product launch at Semicon West in July 2022
- Beta site tests with 8 potential customers underway
- First purchase orders received
- Marginal sales in FY22, ramp-up in FY23, significant revenues expected in FY24



IXS: portfolio transformation on track

- Progressed in strategy execution: number of hardware and software platforms reduced to targeted level
- Enhance productivity at customers through integration of AI-based visualization software well on track with first launches in 2022
- Focus on high-growth semiconductor and electronics markets on track
- Improvement in financial performance back-end loaded towards 2025 targets



IXM: grown market position in semi/ electronics, battery

- New products: 13% of Division sales in 2022e
- Market share grown in semi/electronics
- Sales/marketing activities in focus market Asia ramped up
- Strong entry into battery market based on MesoFocus platform



Summary and outlook

Challenges have intensified, multiple opportunities remain



Recruiting
Retention



Trade
conflicts



Supply
chain



Energy
costs / shortages



Armed
conflicts



New products
and markets



Financial
flexibility



Long-term
favorable markets



Mindset
change



Regional semiconductor
manufacturing

Comet's focus strategy has proven to be the right path to achieve our 2025 targets.



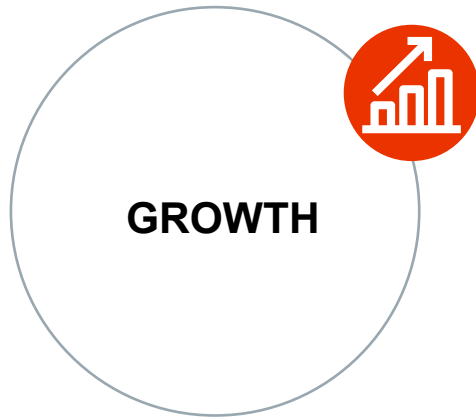
Financials

November 16, 2022

Lisa Pataki, CFO



Continued focus on growth drivers, operating leverage and capital deployment



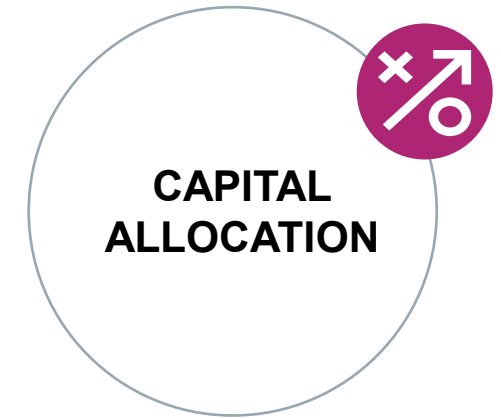
- Industry growth drives demand for Comet's technologies
- New products and applications will open new addressable markets



- Committed to operational excellence
- Focused investments in R&D to drive our semi / electronics product portfolio



- Strengthened balance sheet absorbs business cycle uncertainties
- Asset light manufacturing in Penang, Malaysia allows for speed and flexibility

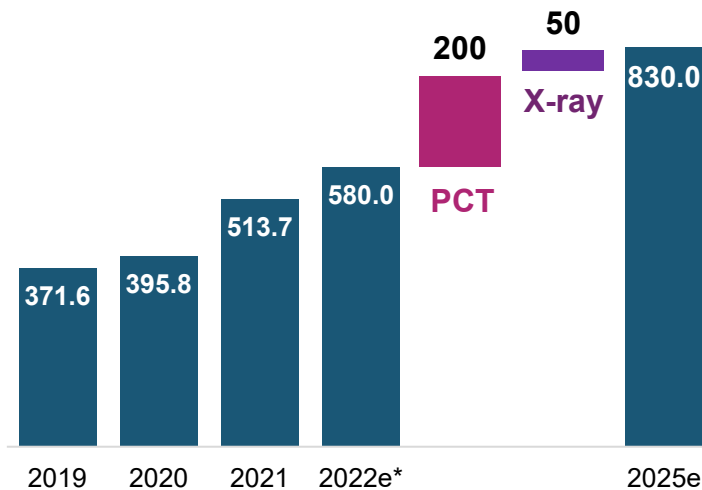


- Strategic capital allocation to support growth initiatives
- Committed annual dividend strategy
- Organic growth as a priority, smaller M&A (technology, processes)

Progress towards 2025 target model



Net sales in CHF millions

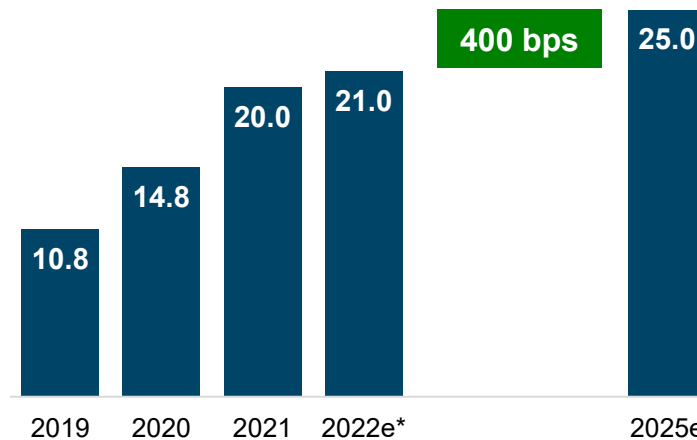


CAGR 2019/2022e:
16.0%

CAGR 2022e/2025e:
~13%



EBITDA margin in %



Incremental YoY margin expansion...well on track

Main drivers

- Outperform market growth
- Higher process control intensity
- New product introductions
 - Synertia® RFG + RFM
 - MesoFocus
- Market realignment of X-Ray systems & applications

CAGR(e) 2022 to 2025

- PCT division ~15%
- X-Ray divisions ~8%

* assumption: lower end of guidance 2022 achieved

Focused investments support organic growth



	FY19 – FY21	Target 2025
Capex	CHF 44 million ~3.4% of sales	~5% of sales on average
R&D investments	CHF 157 million ~12% of sales	~10 - 12% of sales on average

Priorities

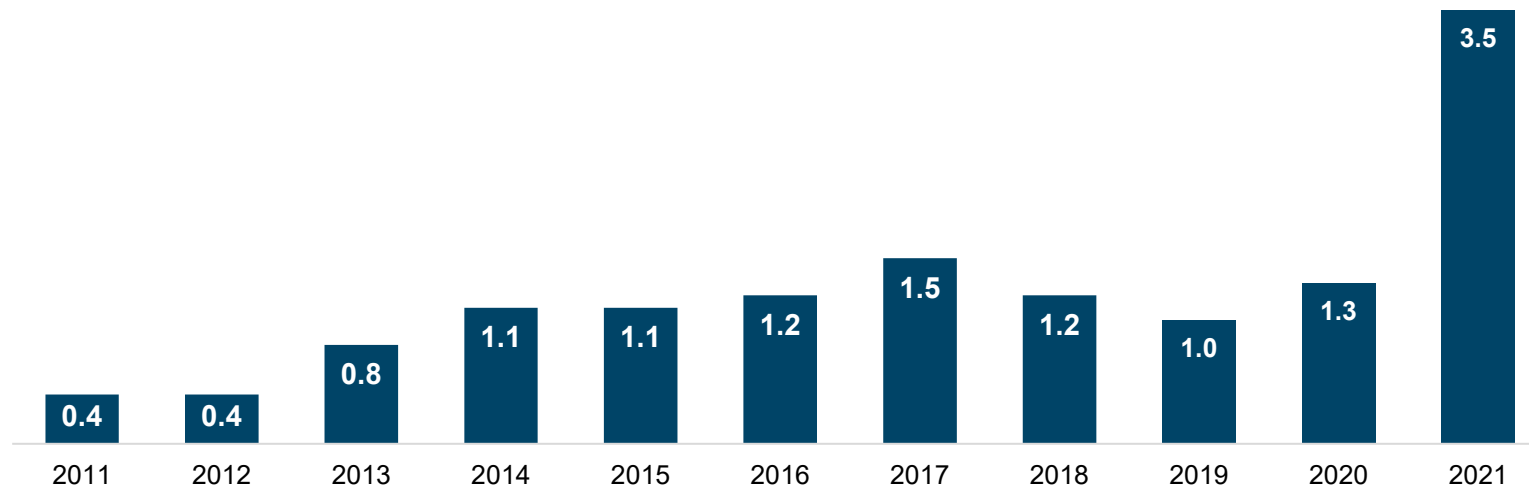
- Organic business growth
- Building lean / efficient operations
- Driving scalable infrastructure (digital business processes, IT)

Returning cash to shareholders a key element of Comet's capital allocation



Dividend history

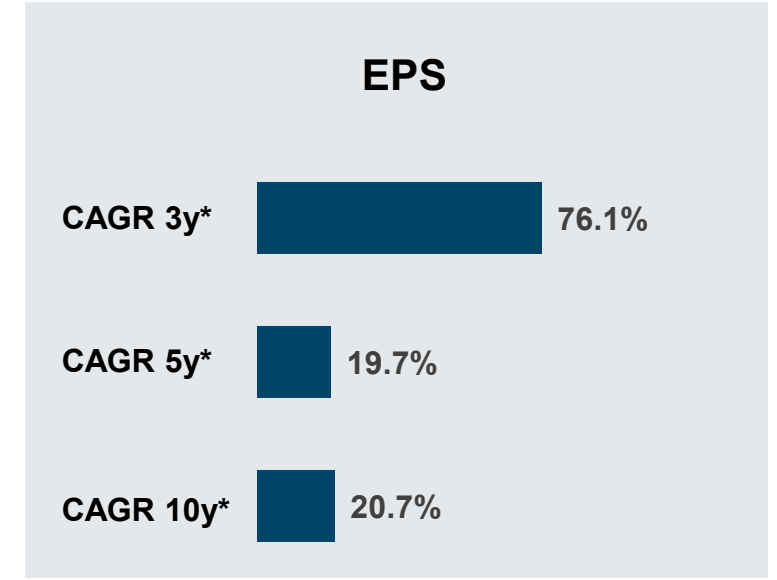
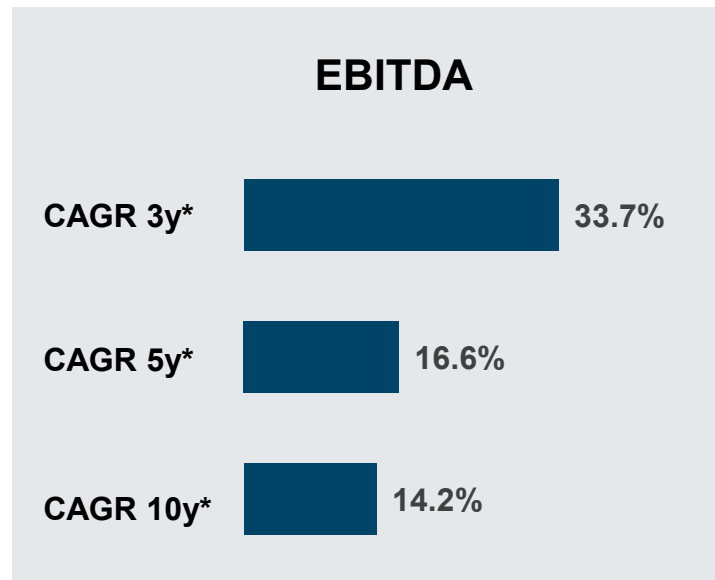
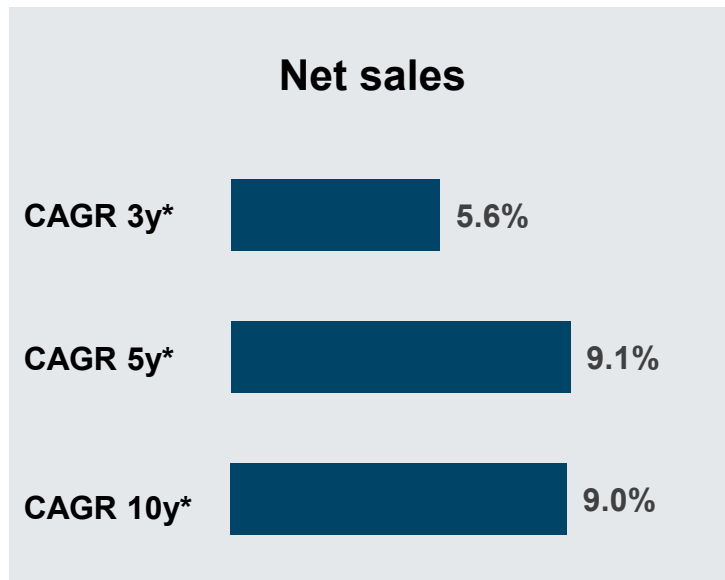
in CHF/share



Dividend policy

- Shareholders to participate in the success of Comet
- 25% to 40% of net income
- Yearly evaluation by Board of Directors
- Other ways of returns to shareholders constantly evaluated, e.g., share buyback, stock dividend
- Priority to keep financial flexibility

Long-term value creation over the last 10 years: the next chapter in the Comet story is being written



+905%
Share price performance since Jan 1, 2011
(as of November 11, 2022)

All-time high: CHF 383.00 (November 9, 2021)
Current share price, 2022: CHF 197.00
(as of November 11, 2022)

* 3y, 5y, 10y: FY18 to FY21, FY16 to FY21, FY11 to FY21

Comet's strong performance has built a robust financial footing.

Comet is well positioned to capitalize on the market opportunities by 2025 and beyond.

Comet is on track to 2025 target model



> 830

Net sales (million CHF)

~ 25%

EBITDA margin (%)

~ 30%

Return on capital
employed (%)

15 minutes break



Synertia[®] Generator and Match the future of plasma control

November 16, 2022

André Grede, Vice President Global R&D PCT

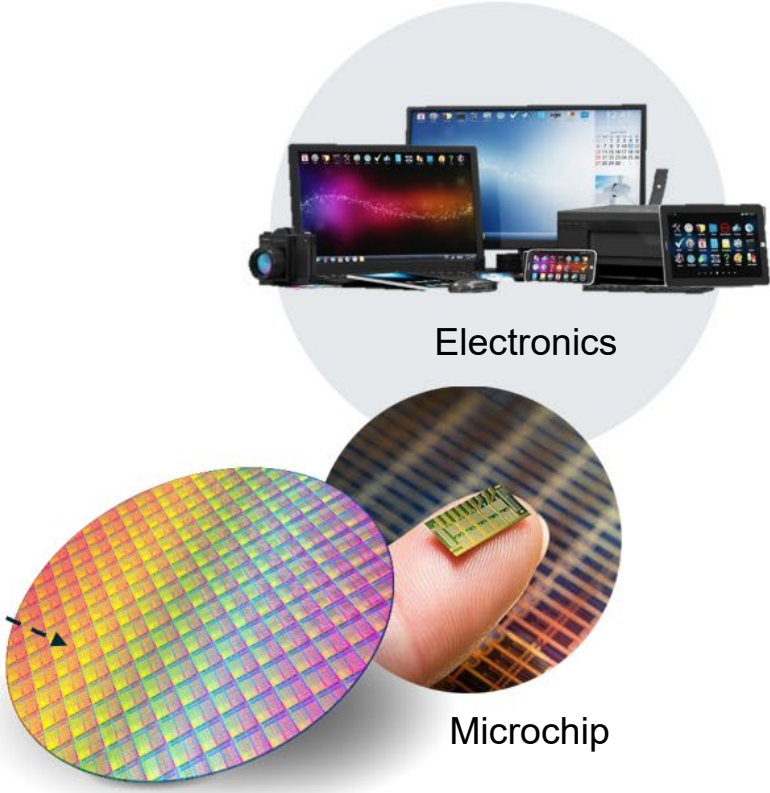
Comet's products in semiconductor manufacturing



Semiconductor manufacturing tool in a FAB



Plasma based processing tool

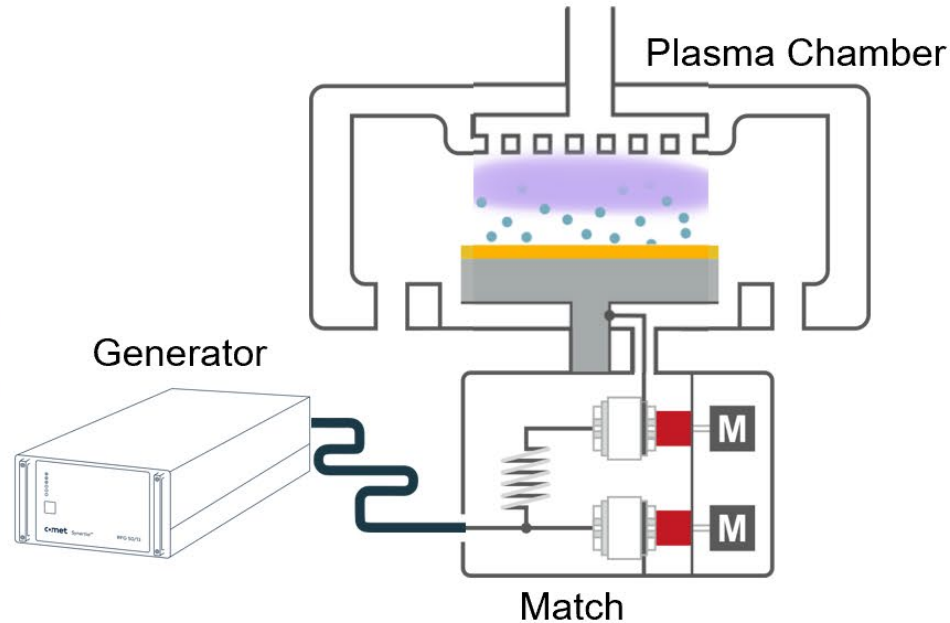


Electronics

Microchip

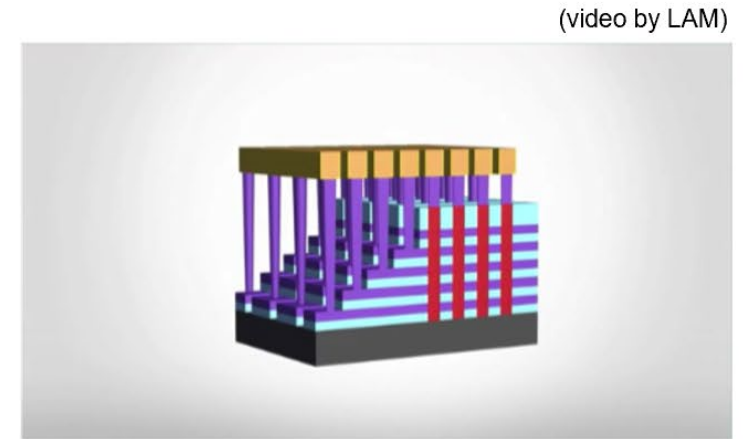
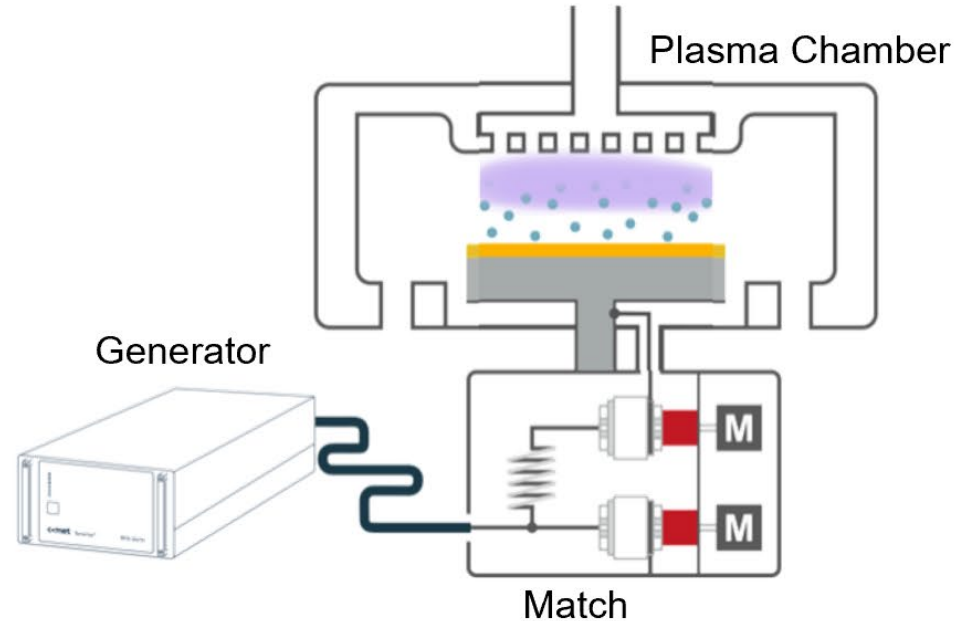
Silicon wafer

Delivering the energy for plasma processes



- Important steps during semiconductor manufacturing like adding, removing or modifying material are done using plasma.
- Comet PCT's products are generating and controlling high frequency process energy.
- The amount of energy, the envelope and the way it is controlled has a very strong influence on the plasma process.

What modern semi processes need



(video by LAM)

Making of 3D Nand Memory

- Higher absolute precision and repeatability as well as efficiency for reduced cooling demands
- Smaller footprint and higher power density
- Faster control and tuning of generators, matches and capacitors
- Stability during highly nonlinear, time dependent load conditions
- Pulsing with several levels and inter-level transition control

Product performance alone is not enough

- No matter what, where and why, immediate customer **support** for:
 - innovation
 - optimization
 - problem solving on a higher level of complexity**is the key to win new business.**

Future products, teams and development environments must offer:

- More flexibility in freely shaping the RF envelope or any RF related parameter
- Ability to adapt i.e., develop, qualify and release new functions faster and more often
- Lower latencies in communication and internal functions
- Accelerated problem solving based on life data and on-site support by RF experts
- Delivery of more RF data insight for on-tool root cause analysis and optimization
- Improved performance of the overall RF subsystem by real-time communication between our RF products

Our answer to future customer requirements:

The new RF Power Platform Synertia®

Successful launch of first products at SEMICON West

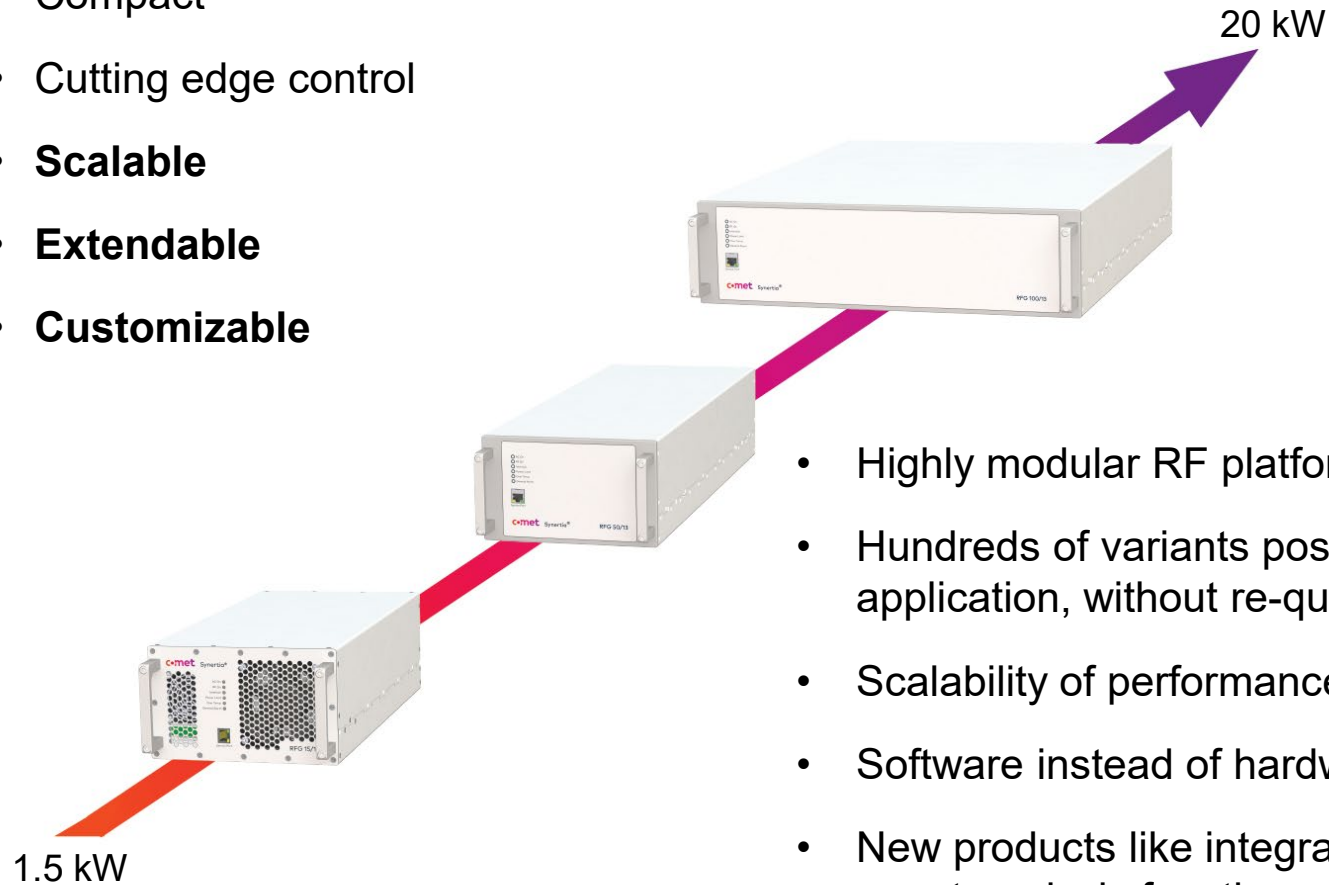
- First **Synertia®** products introduced
- An interconnected RF eco-system offering performance beyond single products
- **Synertia® Generators** and latest prototype of a **Synertia® Match** at the show booth
- Intensive discussions with customers and live demonstration by Comet's experts



With Synertia®, Comet has introduced the most innovative RF Power System to the market.

The product portfolio will grow...

- Compact
- Cutting edge control
- **Scalable**
- **Extendable**
- **Customizable**

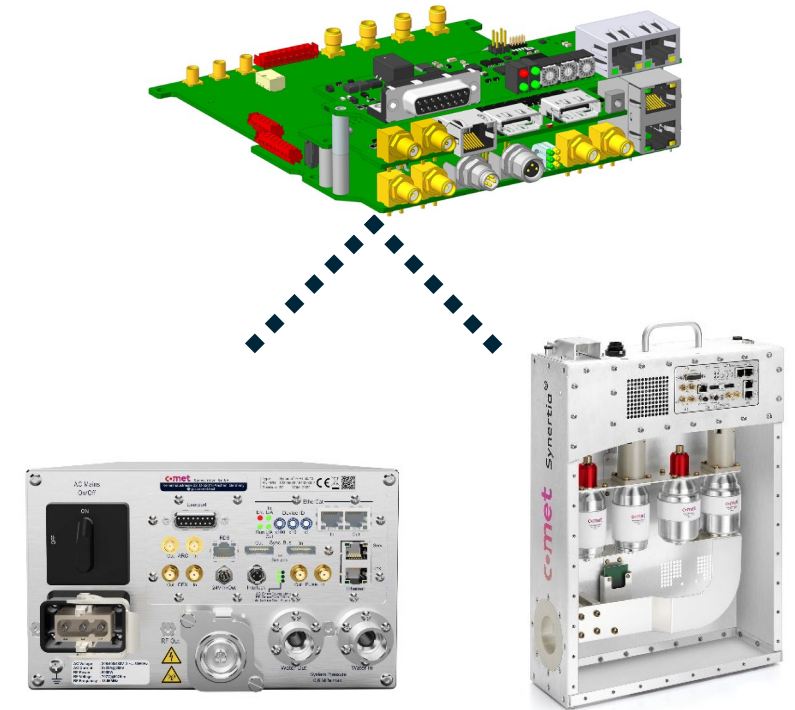


- Highly modular RF platform
- Hundreds of variants possible, the right product for every customer and application, without re-qualification or certification
- Scalability of performance and functions for all power levels and frequencies
- Software instead of hardware gives customers flexibility to upgrade in the field
- New products like integrated, interlinked RF systems, advanced sensors and smart analysis functions as well as new digital services

The Technology Platform behind Synertia®

Enabler – the new Gen 3 Technology Platform

- 2017, PCT started developing its future RF technology platform called Gen 3.
- Combining the advantages of high-level- and real-time operating systems as well as hardware accelerated digital signal processing on FPGAs.
- It will be the shared brain of all future Synertia® RF products.
- Comet's Gen 3 technology adds unknown capabilities to enable data driven and fully interlinked RF subsystems.



This industry leading solution enables a new level of real-time insights into plasma processes what will allow customers to solve critical problems faster.

What is behind Gen 3

Building a



A worldwide team of specialists

PCT has build a team of specialists for:

- High frequency technology
- Embedded software and electronics
- Mechanical engineering & material science
- Digitalization & IT
- DVT, compliance and reliability

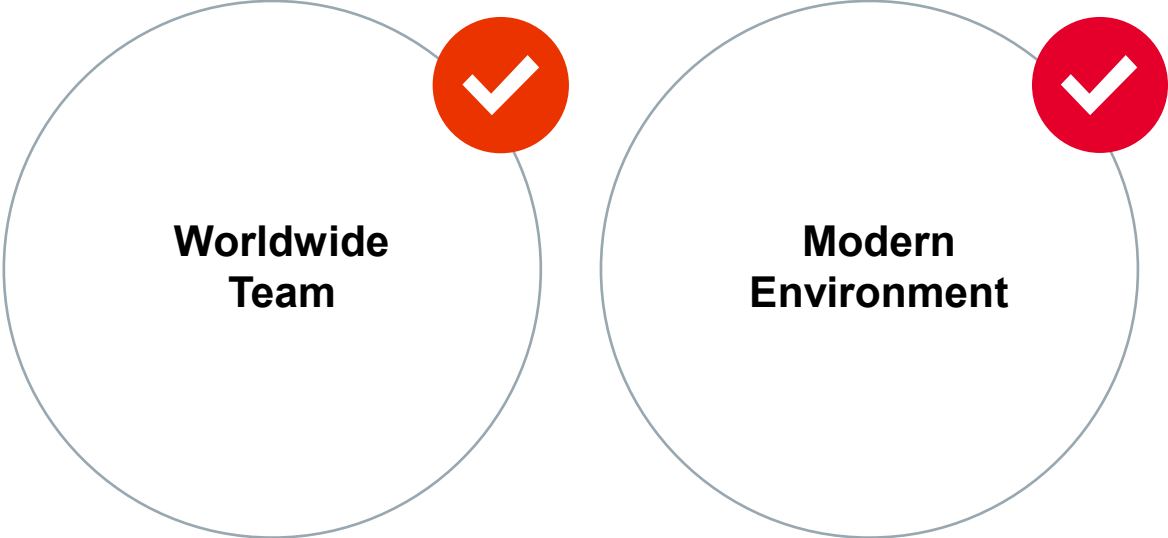
Our footprint allows us to hire the best talents in four countries on three different continents.



We offer customers the best products and immediate support on R&D level, anywhere in the world and around the clock.

What is behind Gen 3

Building a



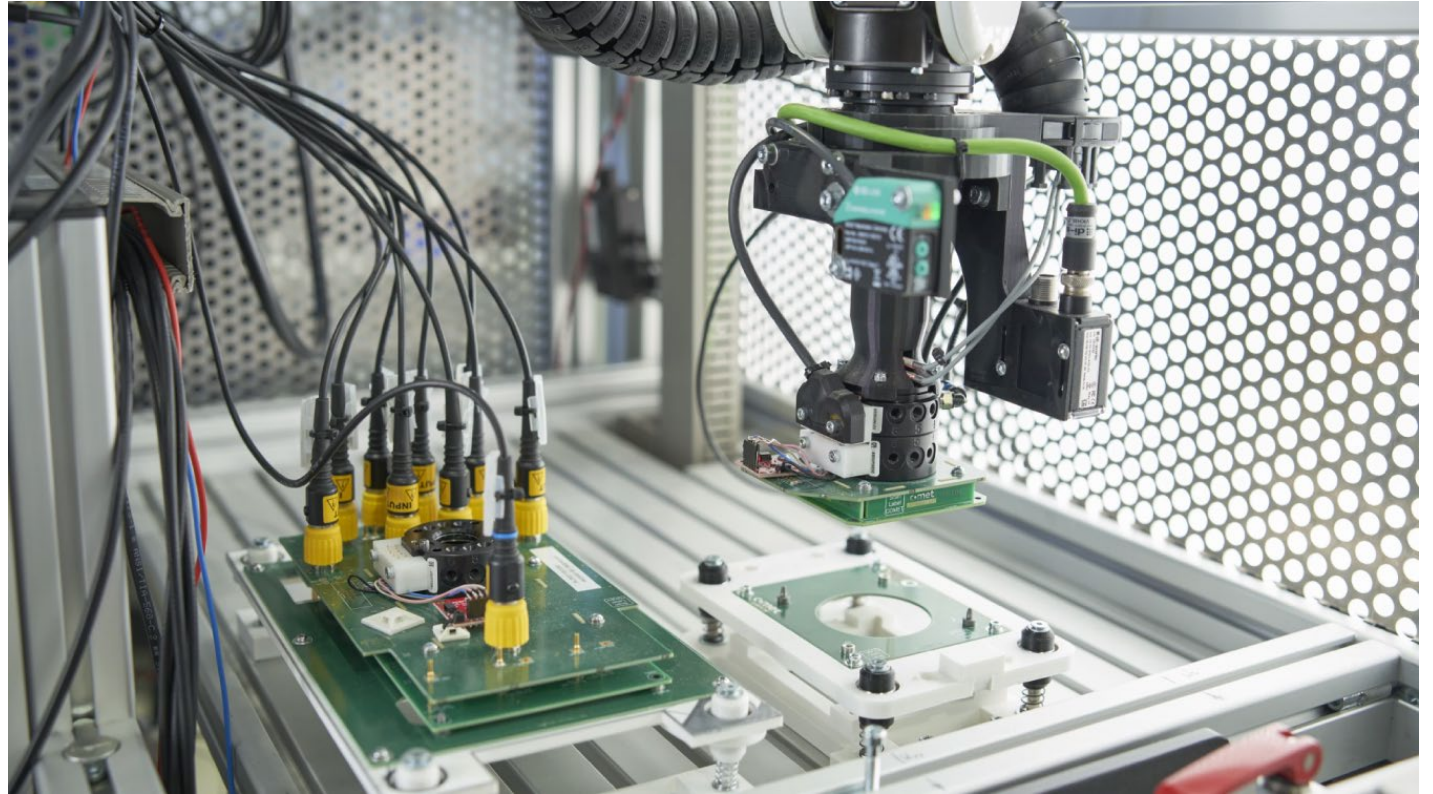
A smart environment for smart products

High-tech production site in Aachen / Germany

- Fully automated manufacturing
- Industry 4.0 production environment

High power RF smartLABs

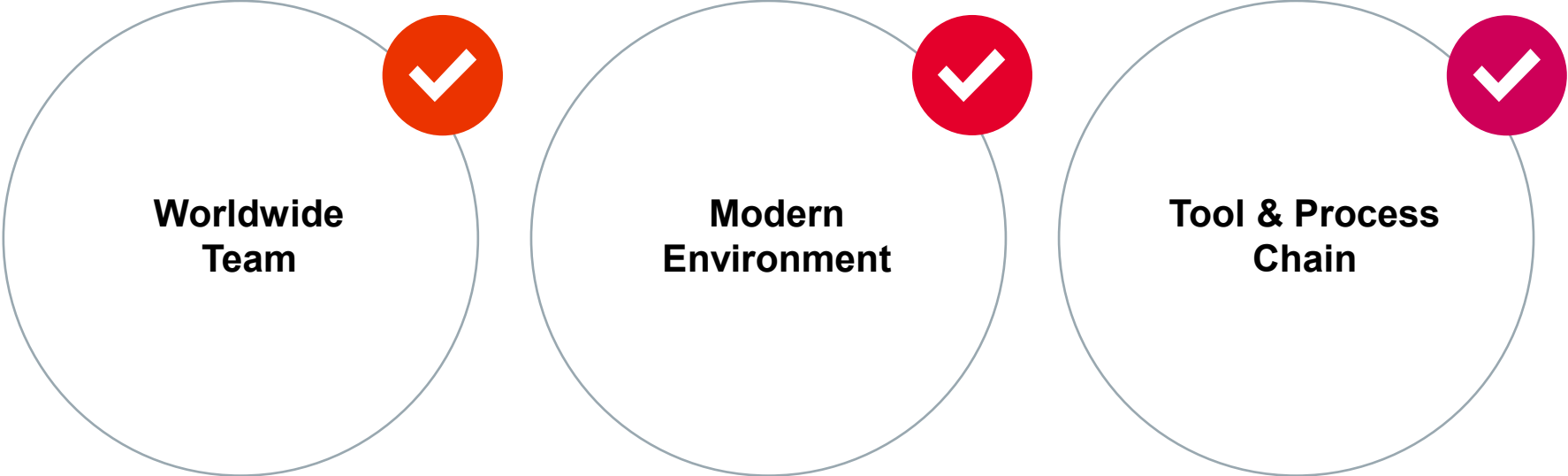
- Worldwide interlinked lab environment
- Inhouse prototyping
- Hardware in the loop testing
- Automated and data driven design verification during and after development



Adaption to new customer requests in no time, faster qualification of new functions, possibility of duplicating and analyzing field problems in our data driven lab environment.

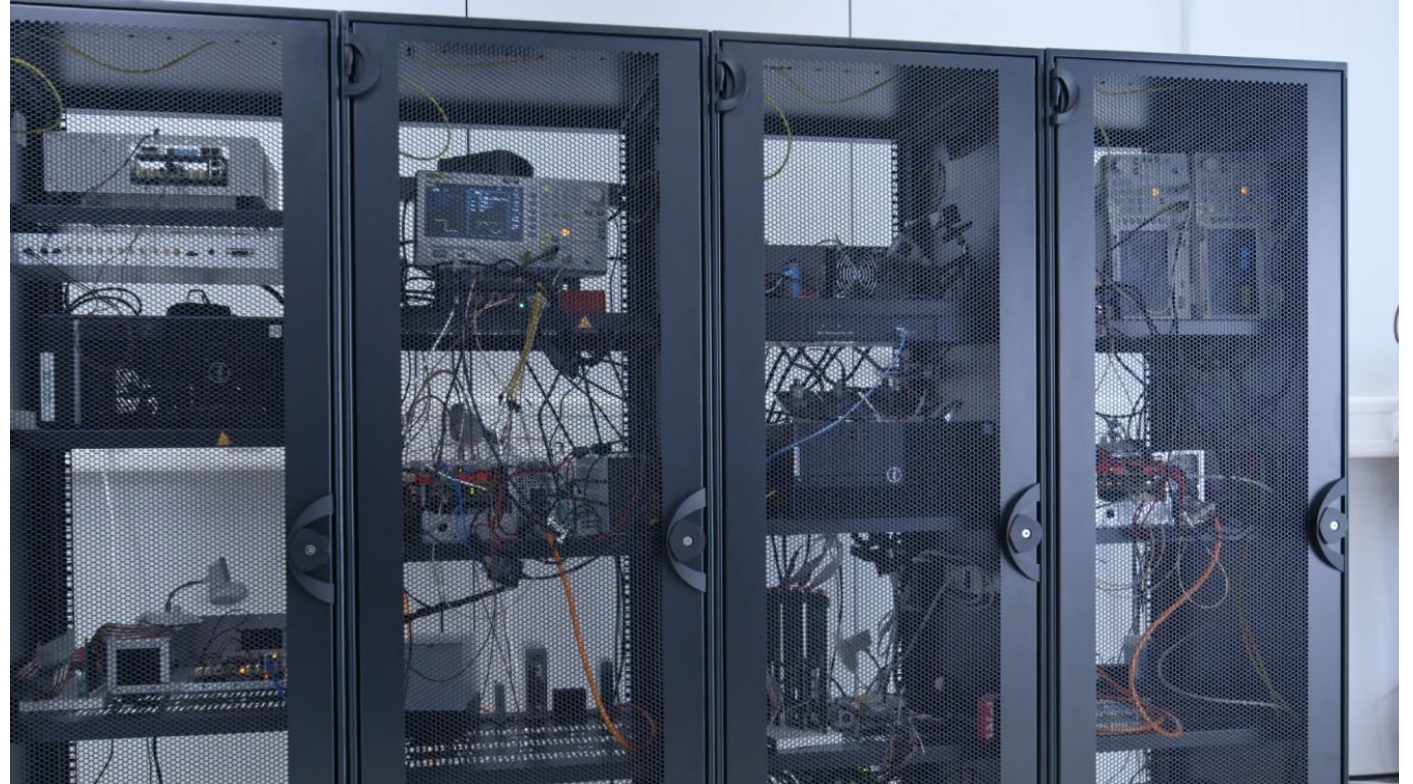
What is behind Gen 3

Building a



Tool and process chains go digital

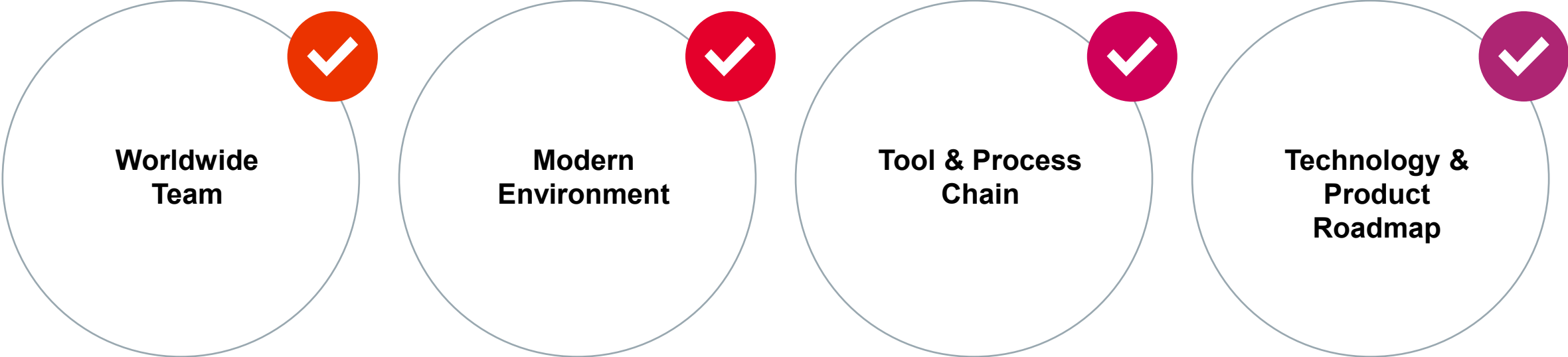
- Continuous invests into digitalization of R&D enable complex solutions
- Application lifecycle management and CI chain for continuous integration
- Product lifecycle management to organize and grow a huge product portfolio
- Digitized processes to increase efficiency and enhance collaboration between a global team and customers worldwide



Sustainable solutions with full traceability and transparency during all phases of a collaboration. More efficient support over the whole lifecycle of a product.

What is behind Gen 3

Building a



Synertia® live presentation & customer feedback

Important customers were invited to a private room, showing our Gen 3 technology platform.

Some customer feedback:

- ... first innovative generator after years.
- Your capabilities to analyze data will help optimizing processes, a big differentiator.
- I like your smartLAB idea.
- Many have tried modularized platforms and failed. You really did it, very impressive.
- We would love to visit your automated production...
- You have a fantastic team.



Signal processing & data streaming on a new level

- IoT capabilities to monitor and analysis over 1000 parameters, locally or remotely
- Integrated, onboard datalogging, no chance to miss an important event
- Build-in high frequency measurement studio replaces RF instruments worth ten thousands of USD.
- Nanoseconds resolution, real time data streaming (RDS) to external controls or servers enables ML and AI.



Data Streaming for real time decision making and analysis of recipes pulse by pulse, wafer by wafer and tool by tool over thousands of runs will enable a new level of process and yield optimization.

Summary

- First **Synertia**[®] products have been officially launched during SEMICON West 2022.
- Customer feedback is very positive. **Synertia**[®] is described as a new and innovative approach.
- New functionalities of **Synertia**[®] and its data driven abilities will help to identify and solve problems faster and therefore save time, improve yield, reduce downtime and allow to launch processes faster.
- Customer evaluation of our new products is very successful. After launch, demand has strongly increased.
- Comet PCT will focus on supporting our customers in qualifying the new products. We are working on the introduction of several additional **Synertia**[®] products in 2023.
- The scalability of our new technology platform will allow us to continuously grow our product portfolio for a long time. It also opens the door for new, digital products, services and business opportunities.

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group