

Who we are & what we offer

The Fraunhofer Center for Advanced CMOS & Heterointegration Saxony – CEASAX gives you access to the most advanced technologies - from developing new IP up to pilot fabrication.

With us you will find a strong research partner for the complete process chain for microelectronics, from design over frontend and backend to systems on 300 mm wafers.

As the appointed location for 300 mm wafer technologies in Saxony, the center is part of the »Advanced Heterogeneous System Integration and Advanced Packaging Pilot Line« and a core of R&D value creation within the framework of the European Chips Act.

Our Focus: High Performance & Low Power Electronics

Technology development for

- Chiplet integration
- 3D integration
- High density connections for nodes ≥ 10 nm

Application scenarios

- Neuromorphic computing
- Quantum computing
- Trusted electronics
- Communication
- Si-Photonics

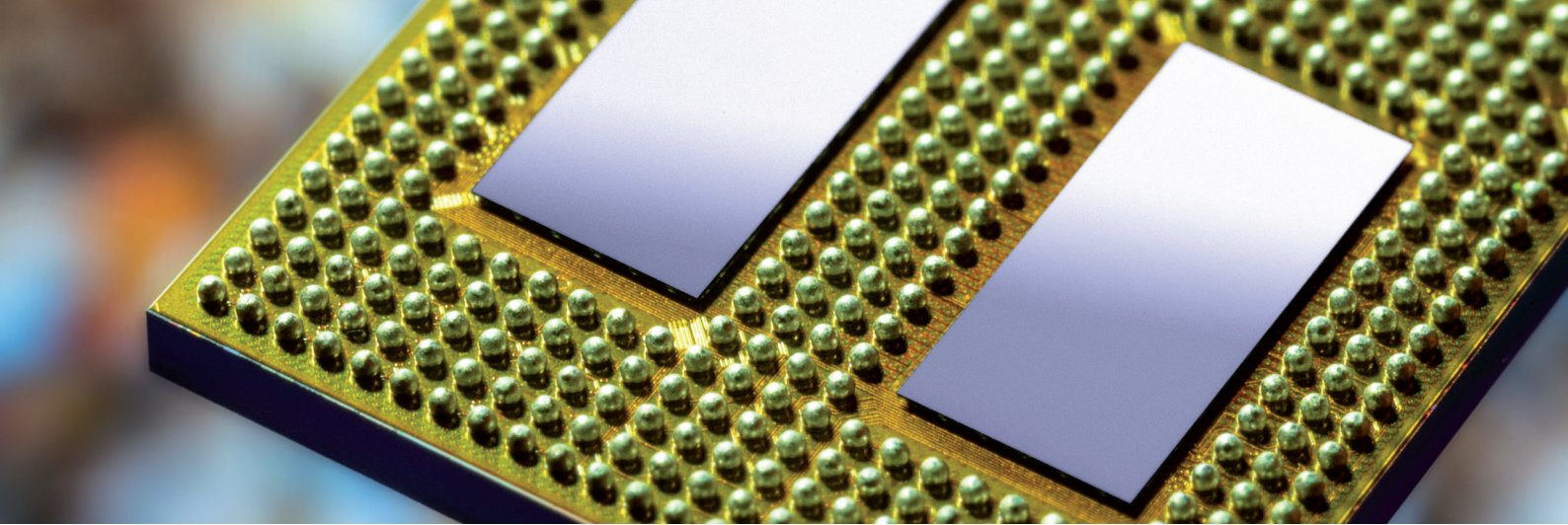


Fraunhofer



Center for Advanced CMOS and
Heterointegration Saxony – CEASAX

Research Platform for
300 mm Frontend and
Backend Wafer Level
Integration



Fan-in wafer level package with flip chips assembled face-down

Portfolio for Industrial Applications

- Intelligent sensor systems
- Future technologies for the development of chiplets
- Technology modules for HPC and AI
- Process solutions for wafer level integration, 3D SiP and 3D wafer stacking
- Assembly and wafer level packaging
- Advanced interposer technology for highly integrated SiPs

Our Offer: From Design to Frontend to Systems on 300 mm

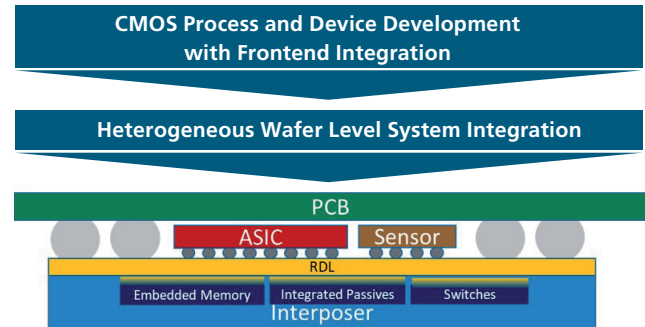
- Integrated passive/active components
- Emerging memories
- BEoL & FEoL CMOS technology modules for ≥ 10 nm
- Post-FAB wafer processes
- High density 2.5D/3D wiring through active and passive interposers for high bandwidth and high frequency

Infrastructure

- Industry standard frontend and backend clean rooms with > 150 tools
- More than 5.000 m² space
- ISO 6 and ISO 3 areas

Platform for Active & Hetero-Integrated Systems

The merging of the scientific and technical competencies in a joint center enables an extended technology platform and value chain and forms the basis for the innovative integration of high-performance chips in major application scenarios.





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Strengthening Saxony as Europe's
largest semiconductor location!«