



Visions to Products

## Applied research, development and foundry services for industry

- Budget 2017: 27,0 Mio. € (6,9 Mio. € industry)
- Employees 2017: 206 FTE (221 persons)
- Part of the Innovation Alliance Baden-Württemberg (innBW)



DIN EN ISO 9001



Hahn-Schickard Stuttgart  
DIN EN ISO 9001:2015



Hahn-Schickard Villingen-Schwenningen  
DIN EN ISO 9001:2008



Hahn-Schickard Freiburg  
DIN EN ISO 9001:2008

# Our Portfolio: From the Idea to Products

## R&D services

Sensors

Actuator technology + dosing technology

Microelectronics

Integrated microsystems

Lab-on-a-Chip + analytics

Energy Harvesting + energy management

Information technology

Measurement + testing technology, damage analysis

Modeling + reliability

## Technologies

Silicon technologies

Precision machining

Polymer and molding technologies

Structuring of surfaces + MID

Micro assembly + packaging

Additive manufacturing + rapid prototyping

Printing technologies

## Production

Lab-on-a-Chip  
Design + Foundry Service

TransferFab

MEMS Foundry

# Hahn-Schickard Stuttgart and IFM



**Hahn-Schickard Stuttgart**

[www.hahn-schickard.de](http://www.hahn-schickard.de)



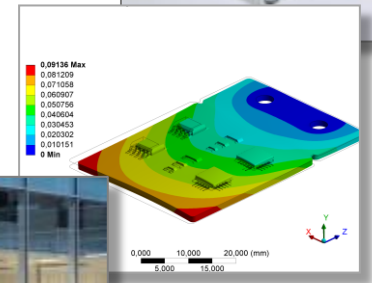
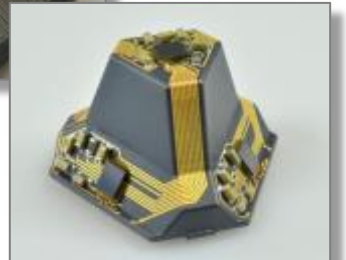
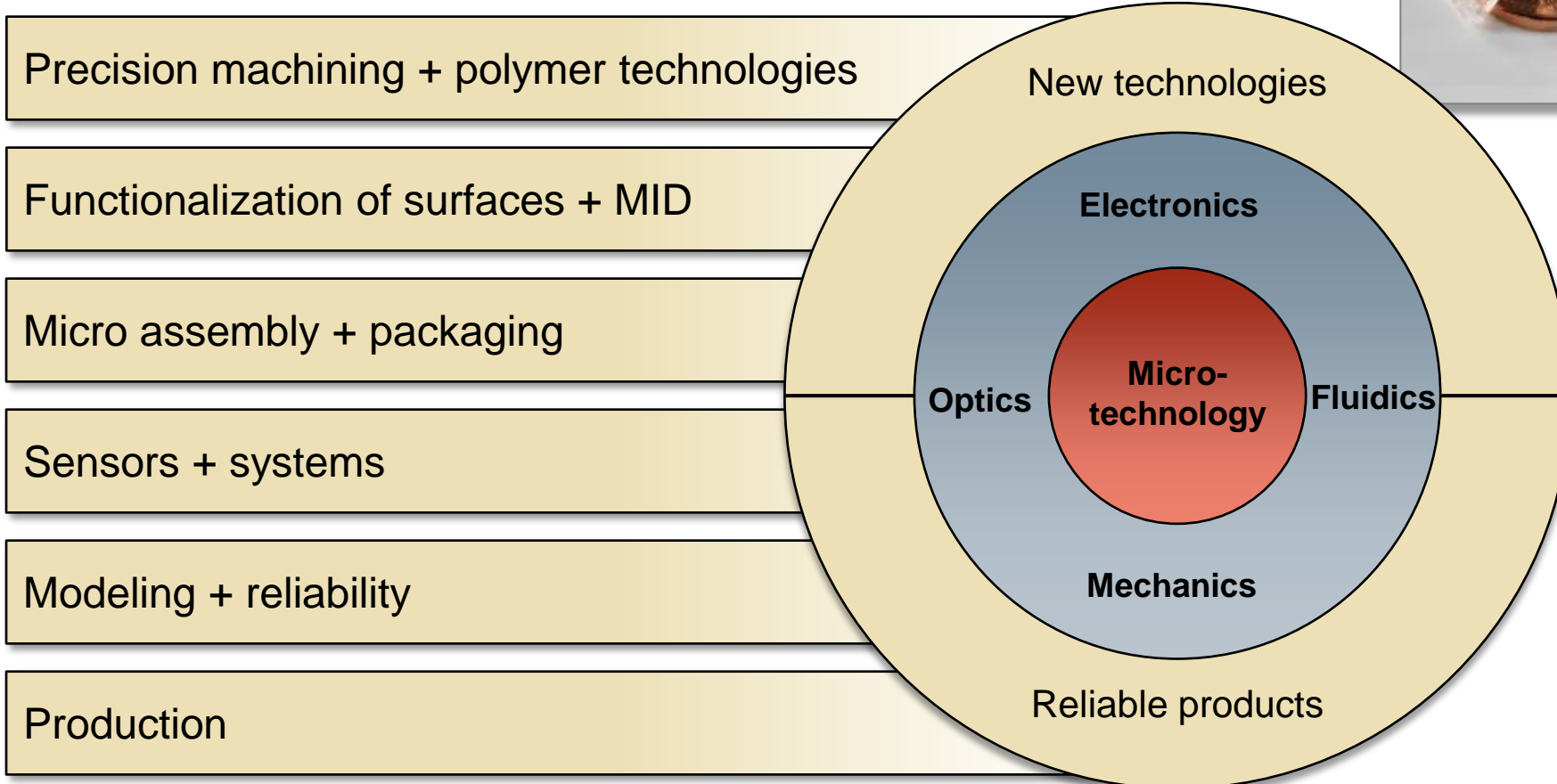
**Institute for Micro Integration  
University of Stuttgart**

[www.ifm.uni-stuttgart.de](http://www.ifm.uni-stuttgart.de)

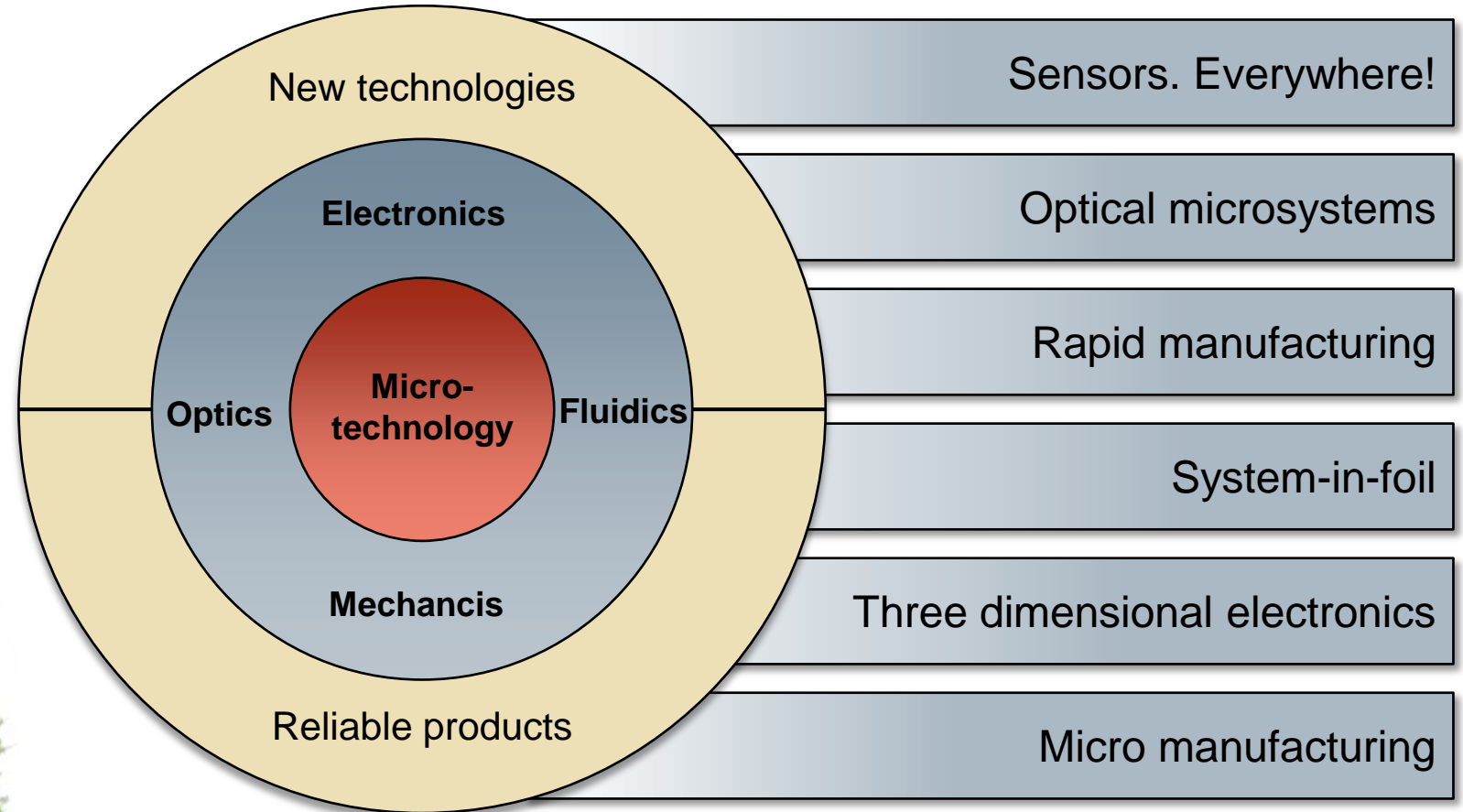


**We create innovations from research to transfer into industrial applications**

# Core competences



# Application areas



## Measuring on site

- Seamless integration of sensors
- Enabler for the megatrends **internet of things**, **smart factory**, **smart home** and **ambient assisted living**

## Hahn-Schickard ...

- develops sensors and sensor systems based on various physical principles and technologies.
- integrates sensors as closely as possible at the optimal site utilizing competency on micro integration.
  - Miniaturization, adaption of the form factor, reliability in harsh environment

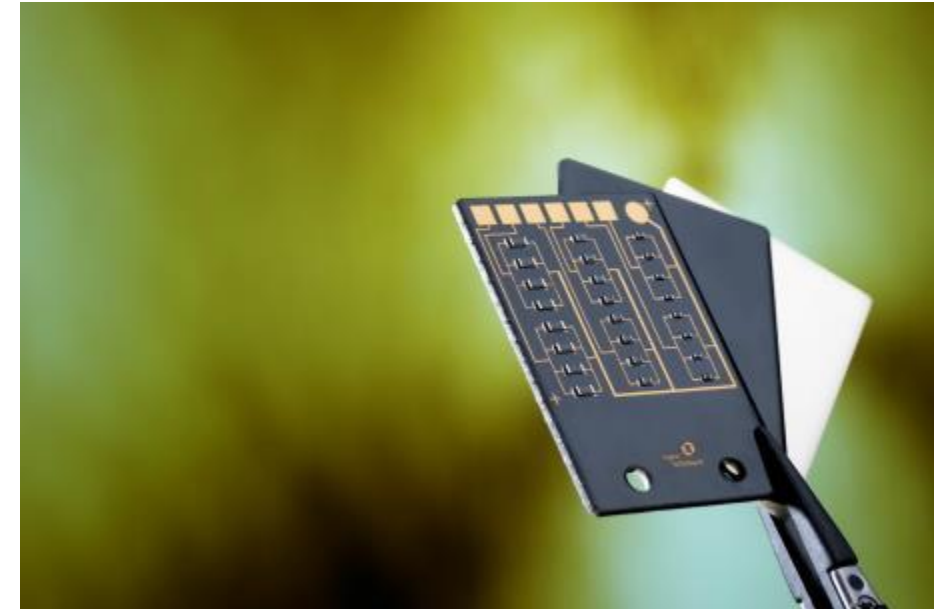


## Digital process chains for individualized products

- Cost-competitive manufacturing of products right from lot size 1
- Individualized products, small lot sizes, large variant diversity

## Hahn-Schickard ...

- develops digital process chains based on additive and subtractive 2D and 3D processes.
  - Direct imaging, printing technologies, laser technologies
- ensures their reliability.
- optimizes the technology readiness level from rapid prototyping to rapid manufacturing.





## Functional integration in three dimensions

- Design freedom and miniaturization potential via 3D-capability
- Integration of mechanical, electrical, fluidic and optical functions

## Hahn-Schickard ...

- optimizes the maturity of MID-technologies.
  - Standardization (i.e. for laser direct structuring), knowledge on reliability, improvement of fine-pitch-capability
- enlarges the materials portfolio from thermoplastics to ceramics and thermosets.
  - Application in harsh environment





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