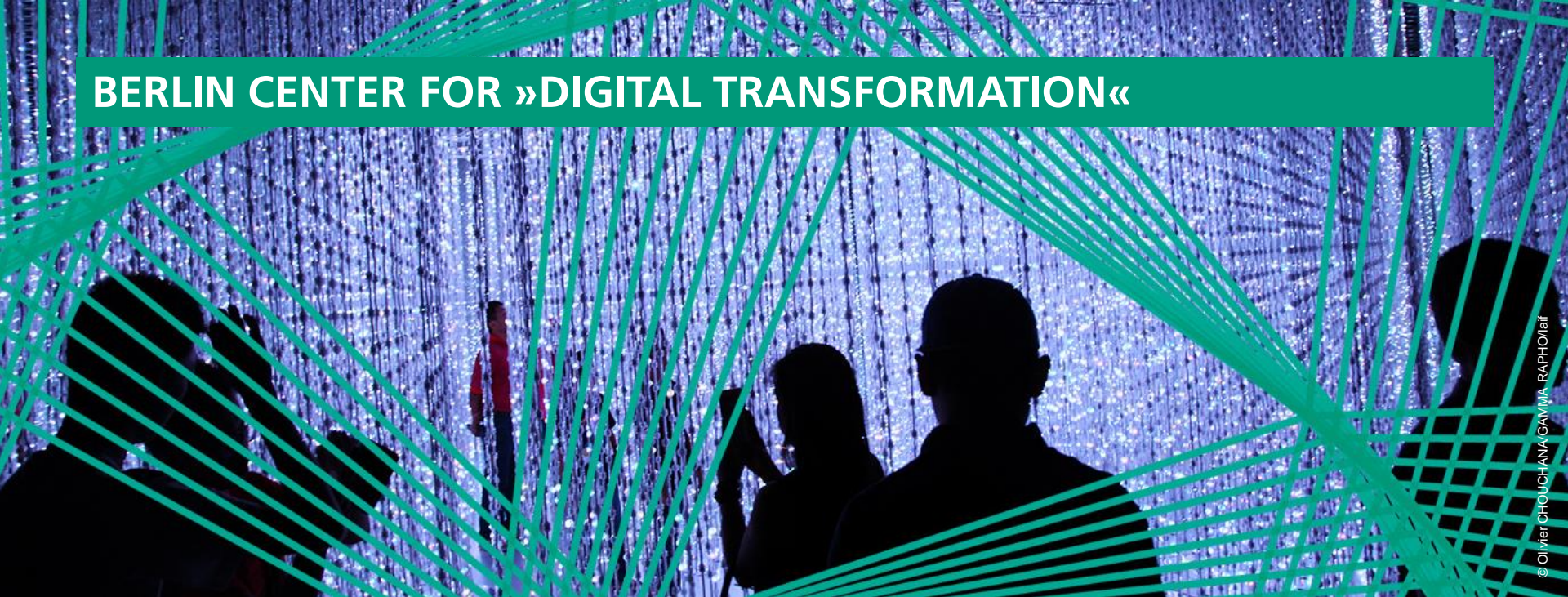


BERLIN CENTER FOR »DIGITAL TRANSFORMATION«

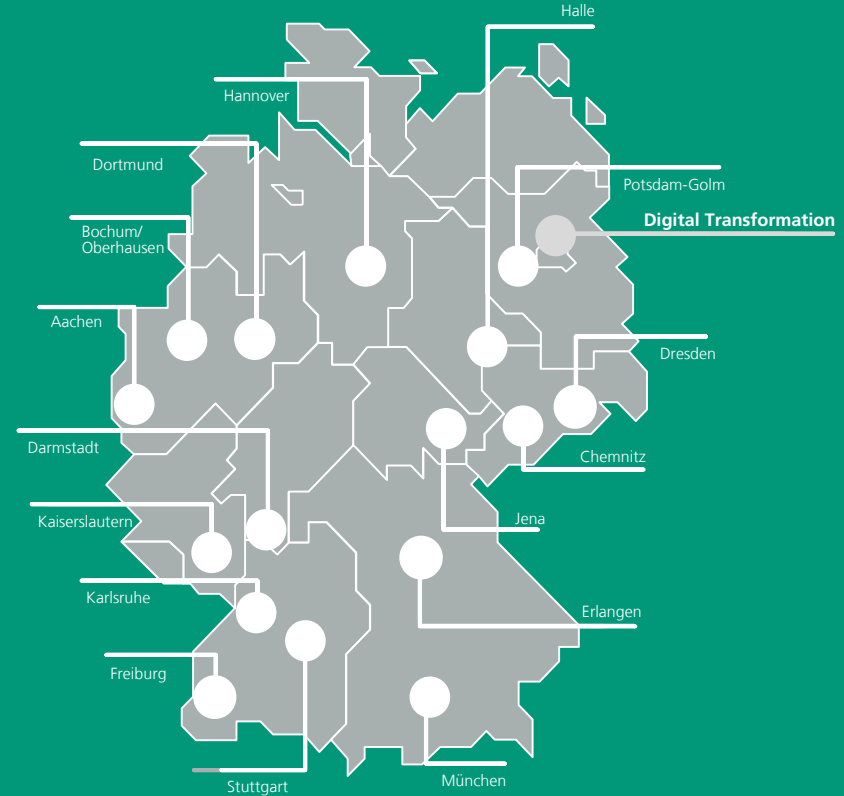


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Photonics Days: The Berlin Brandenburg Photonics R&D ecosystem

FRAUNHOFER HIGH PERFORMANCE CENTERS

- 17 High performance centers in Germany
- connect excellent research and teaching, training and development, transfer and economic activities in order to form a powerful innovation system with regional, national and European impact and international acclaim
- promote interdisciplinary and cross-sectoral cooperation



TRANSFER CENTERS FOR DIGITAL TRANSFORMATION

Internet of Things



Demonstration and
Development Center,
Testbed for IoT Technologies

**Communication
Infrastructure**

Fog Computing
TSN
Edge Computing

5G Technologies



Open Testbed for
Exploration of Innovative
5G Technologies

**Communication
Technology**

Visible Light
Communication
5G

Industrie 4.0



Application Center
for digitally integrated
production

**Digital Integrated
Production**

Robot Programming
Predictive Maintenance
Digital Twin
Augmented Reality

Hardware for CPS



Platform for projects and
product development using
Cyber Physical Systems

**Smart
Systems**

Sensor Networks
Sensor Integration

TRANSFER CENTER: INTERNET OF THINGS LAB

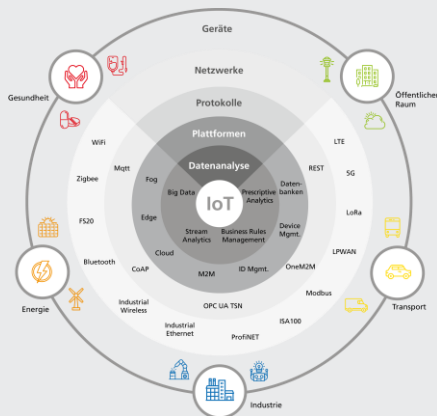
Demonstration and Development Center, Testbed for IoT Technologies

Goals and Focal Points

- Supporting Politics, science and industry about IoT potentials and risks
- Providing a broad-spectrum IoT development and testing infrastructure and modular cross-cutting technologies to realize IoT projects with partners and customers
- Demonstration and training of IoT technologies and applications

Offers

- IoT tools and platforms
- IoT development and test environment
- IoT development, testing, consulting and knowledge transfer



IoT Lab Tour
(Photo: © Fraunhofer FOKUS)



Secure Sensor Nodes for Smart City Services
(Photo: © Fraunhofer FOKUS)

TRANSFER CENTER: 5G TECHNOLOGIES

Open Testbed for Exploration of Innovative 5G Technologies

Goals and Focal Points

- Infrastructure for development and testing with the 5th generation mobile communications standard
- Testing new applications and get solutions and products ready for the wireless and data networks of tomorrow

Offers

- open testbed for partners in the industry and research to develop and test innovative 5G technologies



Production Environment
(Photo: © Fraunhofer HHI)

TRANSFER CENTER: HARDWARE FOR CPS LAB

Platform for interdisciplinary projects and product development using Cyber Physical Systems

Goals and Focal Points

- Providing a modular system enabling an efficient production of hardware for CPS
- Ensuring usability by developing practical use cases realized together with partners

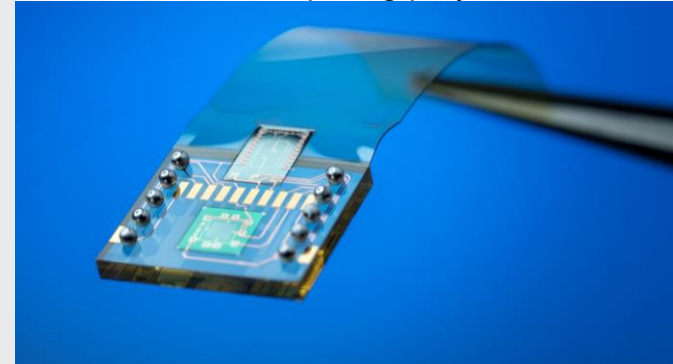
Offers

- Modular development system for CPS
- Cooperative development of hardware based on IZM technologies



Showroom

(Photo: © kai abresch photography)



Embedded ultra-thin micro sensors for condition monitoring (Photo: © Volker Mai)

TRANSFER CENTER: INDUSTRIE 4.0 LAB

Application Center for digitally integrated production

Goals and Focal Points

In reference to the Industry 4.0 Architecture the fields of action extend to the following hierarchy levels:

- Enterprise & Connected World
- Smart Factory
- Cyber Physical Systems

Offers

- Development of visions and scenarios for business cases
- Development and testing of key technologies
- Service offers and tools for digital transformation



Innovative Product Creation
(Foto: © Fraunhofer IPK)



Digitale und Physische Projektassistenz
(Foto: © Fraunhofer IPK)

APPLICATION AREAS

Healthcare



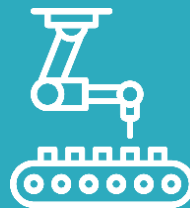
- Tele monitoring
- Tele diagnostics
- Technologies measuring the health status

Mobility & City of the Future



- Highly automated driving
- Early warning systems
- Smart Data Services for Smart Cities

Industry & Production



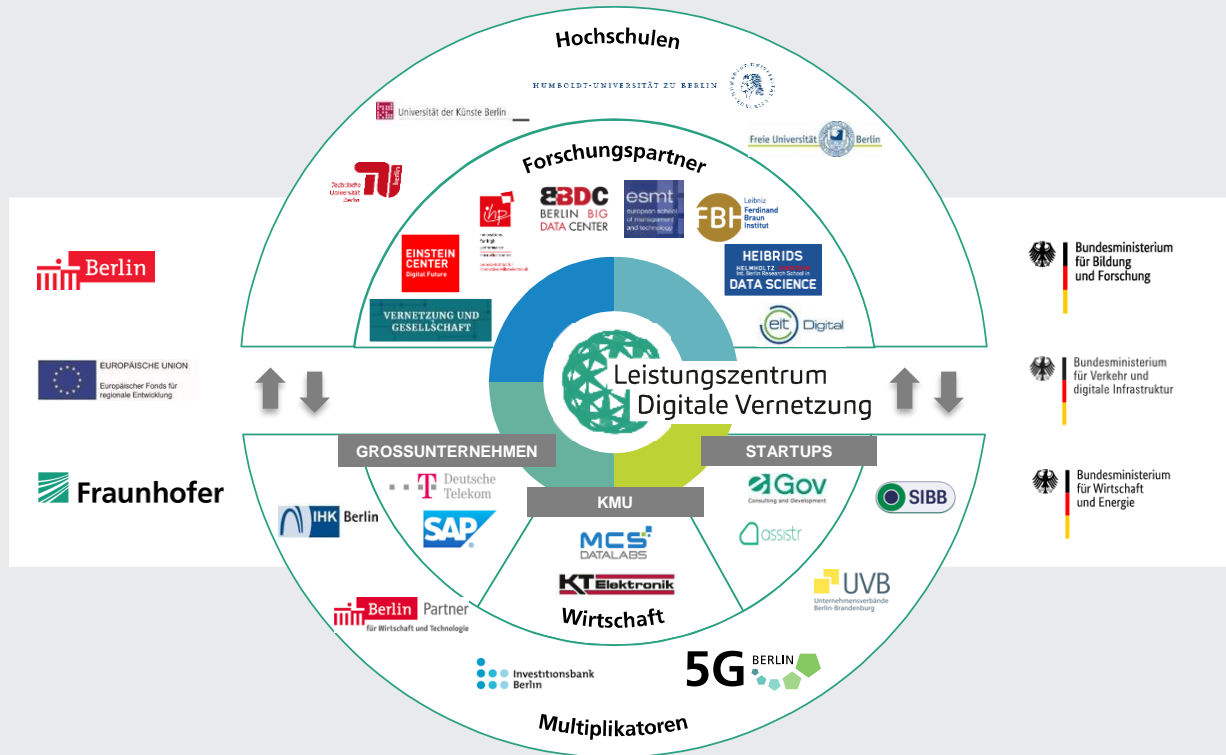
- Seamless value chains
- Internet of Things
- Service-based business models

Infrastructure & Energy



- Smart energy consumption
- Predictive maintenance
- Safe and resilient infrastructures

COOPERATIONS



PARTNERS

ALBA Group

cassini
GUIDING AHEAD

FDX
Fluid Dynamix

**EINSTEIN
CENTER**
Digital Future

FP 

CONET 
SOLUTIONS

 **BOSCH**
Technik fürs Leben

 **Investitionsbank
Berlin**

 **InfAI**
Institut für Angewandte Informatik

Stadtwerke
Rüsselsheim

stone 
The Web Service Factory

 **IHK** Berlin

 **Next Big Thing**

SVA

SAP

 **SIBB**

 **MINT Berlin** Partner
für Wirtschaft und Technologie

Continental
The Future in Motion

 **UVB**
Unternehmensverbände
Berlin-Brandenburg

5G  **BERLIN**

 **Fraunhofer**
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INSTITUTO DE
PESQUISAS
TECNOLOGICAS

Atos

...



LIGHT UP YOUR PRODUCTION

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