

GRW-Cooperation network

**"Electronics-Relevant Subjects and Spheres of activity in the Region Brandenburg - Berlin" (ERT-BB)**

Gesellschaft zur Förderung von Wissenschaft und Wirtschaft - GFWW - e. V.

The "Electronic-Relevant Topics and Spheres of Activities in the Region Brandenburg - Berlin" (ERT-BB) Network managed by GFWW e. V.

([www.gfww.de](http://www.gfww.de)) with currently 17 members was founded in 2018, to develop new concrete application solutions in electronics relevant fields and to expand value chains.

In order to make these potentials visible to other industries, network activities are closely integrated into the Photonics Cluster development of coming years, especially in the fields of action "Photonics and Quantum Technologies for Communication and Sensor Technology" and "Microelectronics and Microsystems Technology". Based on technological developments in semiconductor industry, especially silicon-based nano-, micro-, power electronics and photonics, smart and innovative sensor technology in its application plays a key role for the network with use of cross-clustering.

Aim is to develop completely new technology processes and manufacturing methods/tools that can supplement or even replace previously complicated technologies in chip and sensor production. This will enable applications based on integrated sensor chip solutions with combination of actuators, integrated evaluation electronics and data transmission as well as high reliability under extreme conditions. Application is particularly focused on following key technologies:

Automotive (e.g. engine control, autonomous driving); automation, industry 4.0 (e.g. robotics and production monitoring, remote diagnosis, maintenance); health, life sciences; agriculture, forestry; information and communication technology, including wireless, Internet of Things; safety, security.

New solutions in packaging and interconnection technology are crucial, e.g. for the coupling of electrical and optical signals and integration of new materials.