

Your idea

Our
competencies

Your product

Your advantages of working with Fraunhofer as a development partner

■ From the lab to the application

With our competences, we close the gap between laboratory and application environment. We build on your existing sensor frontend and develop an optimized system including electronics, firmware and hardware for a mobile and energy efficient sensor device.

■ Our added value for you

We combine know-how from electrochemistry, medicine and electronics and signal processing. We draw on a broad technology portfolio and expertise along the signal processing chain and translate this into a product that gives you a sustainable competitive advantage.

■ Our promise

With our technical expertise in electronics development, sensor integration and data analysis, we develop innovative solutions that we complete together with you within budget and in time.

■ Strong partners at your side

We offer you a comprehensive infrastructure as well as laboratories with medical reference systems and conduct technical validation studies.

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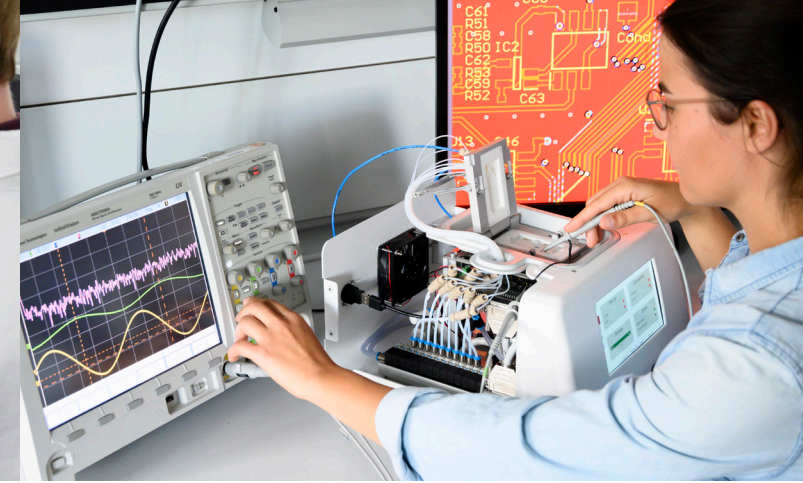
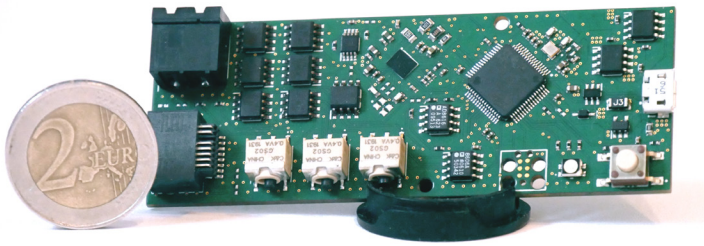
Fraunhofer
IIS



R&D Services for
Electrochemical Instrumentation

Embedded Systems for
on-site Biosensing

www.iis.fraunhofer.de/biosensing



As your partner for embedded system development, we accompany you in the transformation process from your research lab to the real-world application.

We combine our key competencies in electrochemistry, medicine and technology to develop electronics, firmware and software – optimized for your specific sensor frontend.

Our value proposition:

Electrochemical instrumentation of biosensors – miniaturized, energy efficient, application oriented

Our promise:

We accompany you from a laboratory setup to a robust sensor device

Concept development

- Requirements analysis with focus on use case and target application
- Development of control and measurement concepts for Lab-on-a-Chip systems
- System architecture and interface specification

Electronics

- Circuit design, component selection, firmware programming and testing
- Rapid prototyping in discrete electronics
- Small form factor and low energy consumption

Software

- Intuitive GUI for system control, measurements and analysis
- Transmission, visualization, analysis and storage of data
- Communication Interface with high interoperability

Technical Benefits

- High sensitivity and automatic data collection
- Energy efficient data analysis
- On-site and continuous monitoring
- Sensor monitoring during application

