Integrated circuits and systems

Łukasiewicz
Institute of Microelectronics and Photonics

SPECIALIZED INTEGRATED CIRCUIT ASIC
IC DESIGN MIGRATION
MPW ASIC PROTOTYPING
FULL INTEGRATION WITH D32PRO RISC MICROCONTROLLER

▶▶▶ We offer

- ✔ Dedicated solutions for analog, digital and mixed ASICs
- ✔ Unique solutions of readout modules
- ✔ IC design migration between different fabrication technologies
- ✔ Integrated Circuit design, up to System on Chips (SoC) complexity
- ✔ Thermo-electro-mechalical similation of heterogeneous systems
- ✔ Design of innovative, networked and standalone measurements of devices and systems

Applications ◀◀◀

Low-noise readout amplifiers

Wireless networked solutions of lighting fixtures – smart luminaires

Sensor network for smart building automation – temperature and humidity measurement in buildings

Grow Up Your Business With Us

Our developments

We have many years of experience in development of the application specific integrated circuits (ASIC)

Low-noise ROIC readout development

multichannel ASIC developed for AMSC 0.35µm node. The system implements weak DC voltage signals registration and processing (no phase sensitive detection lock-in

Telemedicine applications

specialized integrated circuit ASIC modules for SPO2, EEG, ECG and neural stimulator implants for variety of IC processes from 0.8um to130nm technology nodes

Smart-power

the specialized integrated circuit (ASIC) with triple and hex half-bridge integrated, mixed mode IC Driver with diagnostics and digital interfaces. The chip has been designed for industrial temperature operation regime for automotive applications

Wireless network of lighting fixtures – smart luminaires

adaptive presence driven integrated, tunable lighting system developed in collaboration with Polish company LARS lighting. Wireless control and device setup (flexible modes: groups, ungrouped, corridor, matrix, autonomous)

Smart buildings

measurement system designed for the heat flow and humidity penetration monitoring in structures. The monitoring network consists of façade elements embedded sensor nodes gathering the temperature and humidity readings from various parts of the building
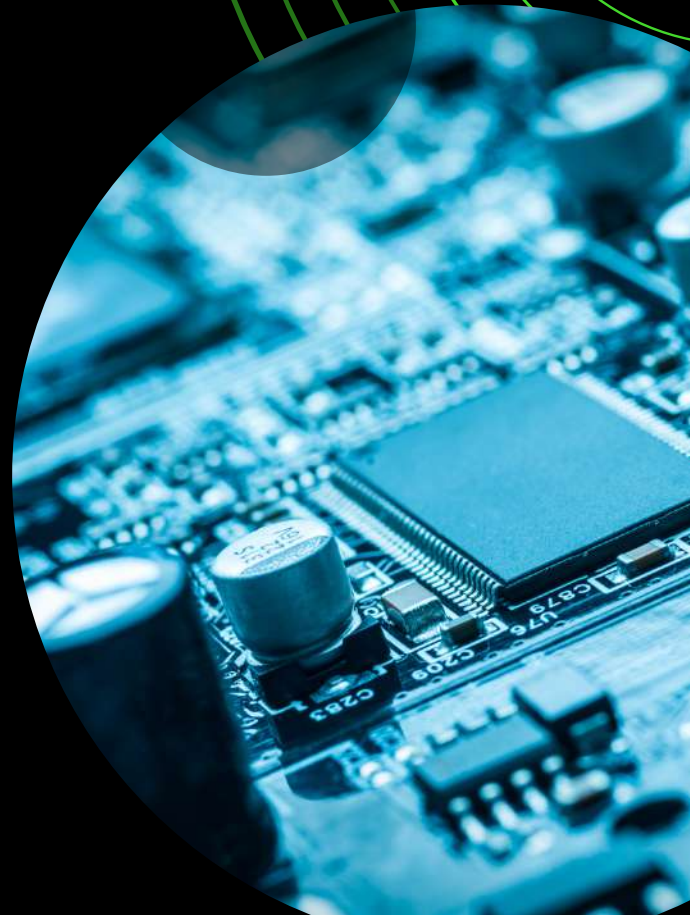
Notes

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