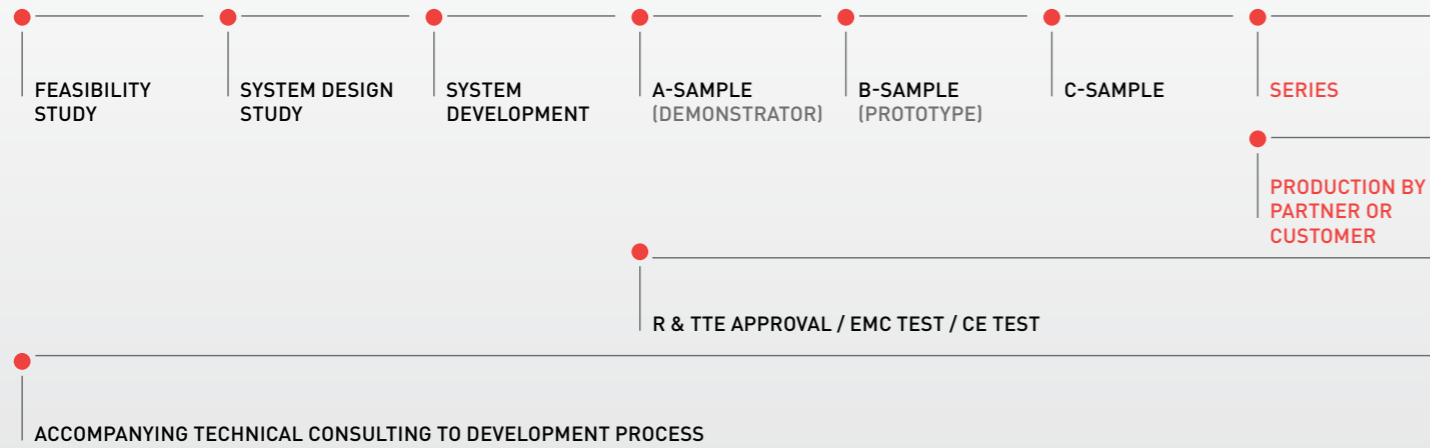


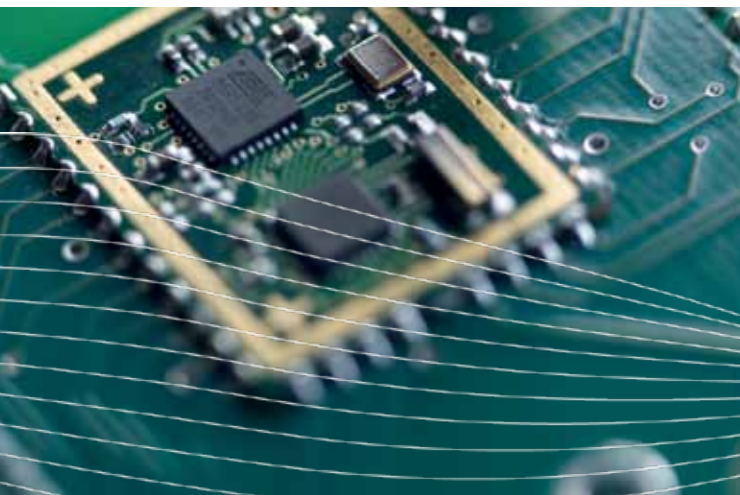
→ ALL SERVICES AT A GLANCE



Circuit design is our business. We are fully committed to providing the best possible solution for our customers. Our extensive portfolio includes the whole range of services such as:

- Design of integrated components and systems
- Design of PCBs
- Development of RF modules
- Measurement and characterization service
- Type approval and certification
- Studies and consulting
- Partnership in R&D projects

→ **YOUR CHALLENGES, OUR SOLUTIONS!**



The skillful symbiosis of industrial development and innovative research projects allows us to provide high performance solutions for our customer's problems. Through strategic cooperation with our industrial partners, we can efficiently bridge the gap from prototype to final product.

IMST GmbH
 Carl-Friedrich-Gauss-Str. 2-4
 47475 Kamp-Lintfort
 Germany



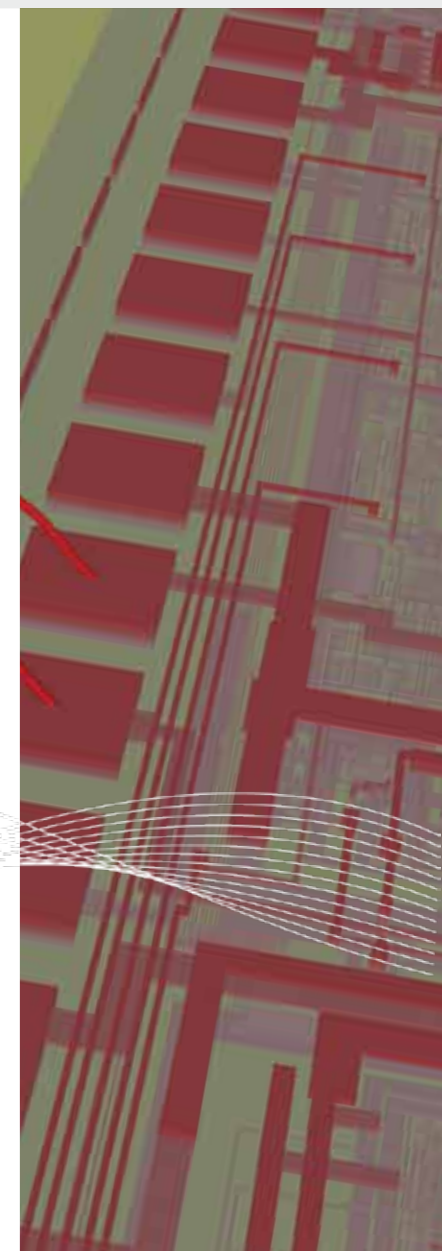
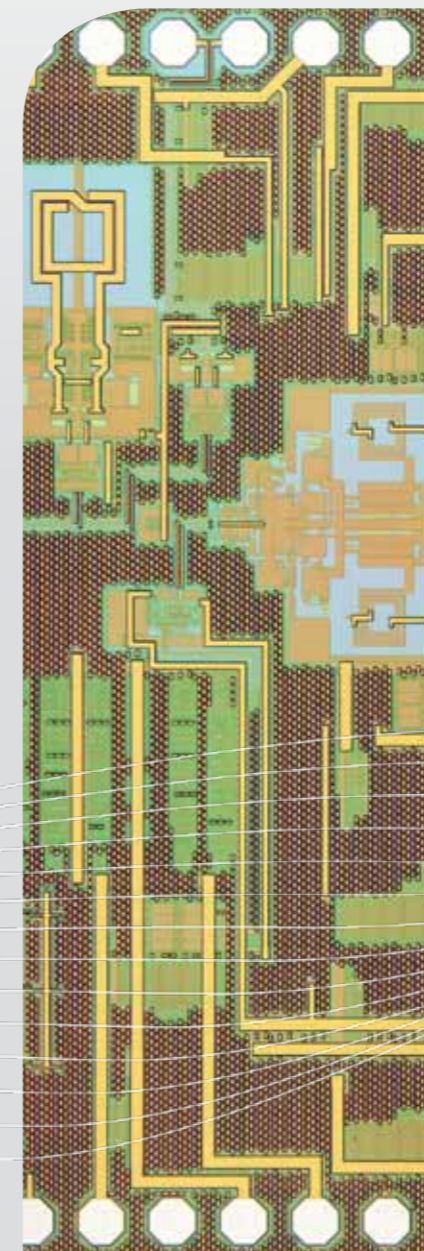
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10/2015

CUSTOMIZED CUTTING-EDGE DESIGNS

→ CIRCUIT DESIGN CENTRE



YOUR PARTNER FOR CIRCUIT DESIGN

→ ABOUT US

IMST offers the complete range of circuit design. Our extensive know-how covers integrated circuits based on different material systems (GaAs, SiGe, GaN), hybrid circuits on different substrate materials, or in-house LTCC (Low Temperature Co-fired Ceramics) production. Our application support starts at single device characterization/modelling and includes design of complex systems such as T/R-modules. In parallel, IMST can perform all required measurements in order to make a design successful. Our service includes prototyping as well as product transfer.

Are you looking for something new? IMST experts will define your system, break down the specification to component level, and quickly assemble a prototype. Do you need an MMIC for space? IMST experts will design it considering all temperature and radiation aspects. Please contact us for a quotation.

We take circuit design seriously!

IMST is a leading design house and development centre for wireless modules, communication systems, chip design, antennas, EDA software, and regulatory certification using an in-house accredited/certified regulatory test centre. IMST offers both standard products such as radio modules with hardware/software as well as complete system and product design. Individualized support during every phase of product development including wireless technologies, from initial consulting to series production is one of the unique selling propositions of IMST.

→ IMST GmbH



→ OUR SERVICES AT A GLANCE

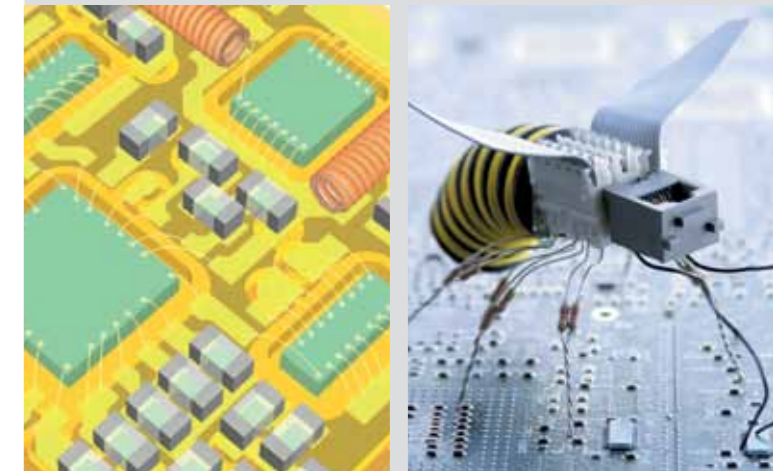
→ INTEGRATED CIRCUIT DESIGN

Integrated circuit design is a core element of IMST's business. Depending on system requirement or chip specification, we propose adequate processes. Depending on quantity, we select the right semiconductor foundry together with the customer.

The design is carried out with state-of-the-art simulation tools. Electromagnetic coupling effects are considered for maximum circuit density resulting in minimum chip size. All circuit designs are centered related to technology spread and yield. Circuits can be characterized on-wafer or connectorized on test-boards. For space related design, we even offer TID or SEU tests. We assemble our own prototype boards. Among our successful customer designs we would like to emphasize our 60 GHz modules (IBM awarded), fractional-N synthesizers for space applications (e.g. 1.5...12 GHz) or broadband IQ-modulators with an ACPR of -74 dBc.

→ HYBRID CIRCUIT DESIGN

More than 20 years of experience enables IMST engineers to design compact hybrid circuits built on different substrate materials. Among our hybrid systems, there are PCBs and antennas for electronic toll collect systems, power amplifiers (PA) for mobile phones or sophisticated automotive boards.



Prototyping is an essential step in development process. At IMST, we rely on our own facilities, and the cooperation with technology partners in areas such as mechanical design, PCB, and RF components. This will ensure short development cycles including all required performance measurements and tests.

IMST supports customized solutions in wireless communication and radar technology in various frequency bands. After successful development of prototypes, IMST will support the transition to production.

LTCC multilayer ceramic prototyping extends IMST's manufacturing and assembly services. Sophisticated circuits and antennas have been developed during the past 20 years.

