



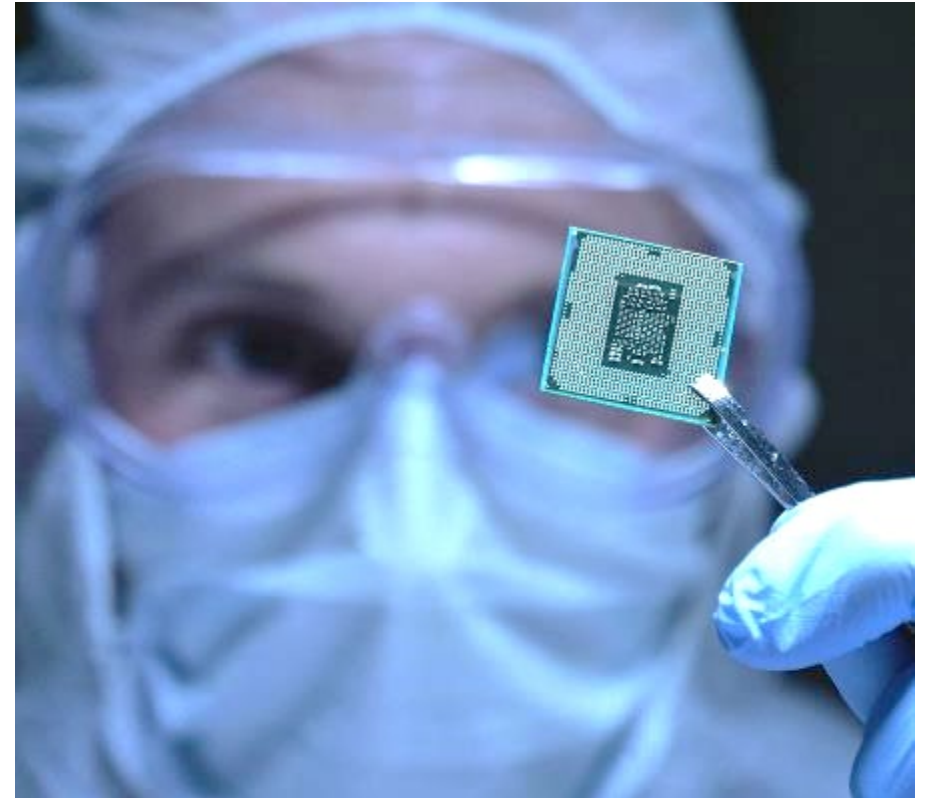
# SILICON AUSTRIA LABS

The Austrian Research Center for Electronic Based Systems (EBS)

# SILICON AUSTRIA LABS

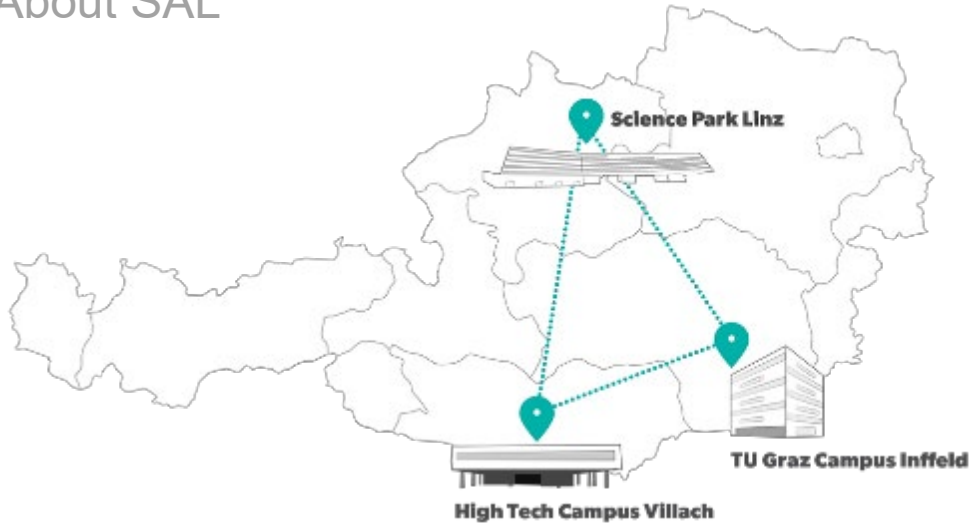
What do we do?

As a European key player in industry-oriented research in the field of electronic based systems (EBS) & software, we support companies' growth with **efficient, sustainable and trustworthy** developments along the entire EBS value chain.



# KEY FACTS

About SAL



3

## LOCATIONS

- Graz (HQ)
- Villach
- Linz



> 300

## EXPERTS

- Experienced & Multidisciplinary team



5

## SHAREHOLDER

- 50,1 % Republic of Austria (BMK)
- 24,95 % FEEI
- 10 % Styria (SFG)
- 10 % State of Carinthia
- 4,95 % Upper Austria (UAR)



> 90

## PARTNER NETWORK

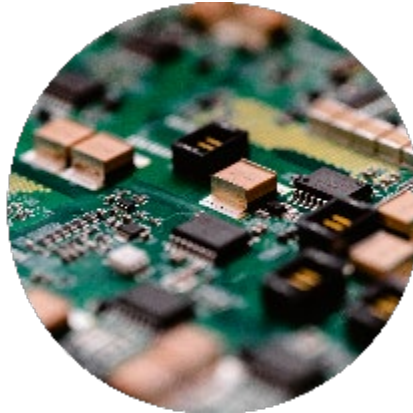
- From Industry & Research

# OUR EXPERTISE

## SAL Divisions



**SENSOR  
SYSTEMS**



**POWER  
ELECTRONICS**



**INTELLIGENT  
WIRELESS  
SYSTEMS**



**MICRO-  
SYSTEMS**



**EMBEDDED  
SYSTEMS**



# SAL AS A RELIABLE PARTNER

Our pillars of success bridging the gap between industry & science



## RESEARCH EXCELLENCE

- Multidisciplinary experts from 40+ nations
- SAL Doctoral College
- Part of high-level Research Networks and conferences

## KEY ENABLING TECHNOLOGIES

- More-than-Moore, Photonics, 6G, High Power Density Converters,
- Dependable EBS
- System Integration Program

## STRATEGIC PARTNERSHIPS

- 90+ partner from industry & science
- Longterm program „Chip2Sys“
- EDIH „Cyber-physical systems“

## INFRASTRUCTURE & EQUIPMENT

- High-end labs & equipment to enable research far beyond state-of-the-art:
  - Cleanroom ISO 4+5
  - Power Electronics Lab
  - Smart EBS Testing
  - 5G Testbed...etc.

# SAL BENEFITS FOR INDUSTRY

What do we offer?

## ≡ Industry oriented research

SAL experts conduct research along the entire EBS value chain: from the semiconductor industry to system integrators and industrial users.

## ≡ R&D services

Our service portfolio includes customized solutions for our partners:

- ≡ Design & Simulation
- ≡ Characterizations
- ≡ Measurement and testing services
- ≡ Manufacturing in the field of micro- and nanotechnologies (TRL: 2-7)

## ≡ Cooperation

We offer our partners various possibilities of cooperation: from our unique **SAL cooperation model** (50% of the project costs are covered by SAL), **contract research** to **funded research**.



# OUR BUSINESS MODELS

How to work together

## SAL Cooperative Research

### Purpose:

- Easy accessible cofinancing for R&D projects with SAL
- Long term R&D cooperations (>1year)

### Organisational Framework:

- Project Evaluation by SAL
- SAL General Contract Terms
- SAL Project Agreement
- IP-rules are in line with the european state aid law

### Advantages:

- 50% co-financing by SAL
- Bi/multilateral cooperation possible
- No application process necessary

## Contract Research

### Purpose:

- Technology Concepts
- Test & Measurement Campaings
- Feasibility Studies
- Proof of Concept Studies
- (Rapid) Prototyping

### Organisational Framework:

- Quote – Order Process

### Advantages:

- Fast project start
- No further contractual framework necessary
- Fixed price
- Clearly defined deliverables

## Funded Research



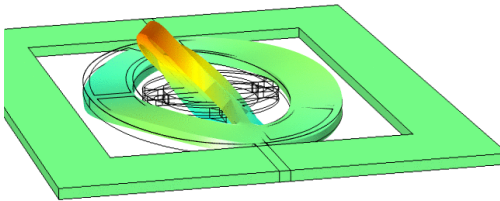
## R&D Services

**Design and simulation, characterizations, measurements and testing up to manufacturing** in the field of micro- and nanotechnology

# SUCCESSFUL PROJECTS

Range of projects

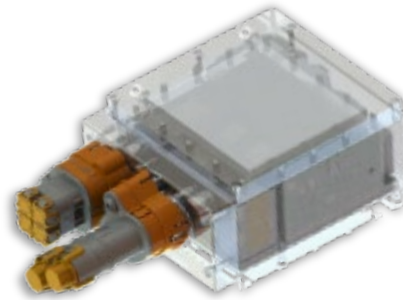
## AUTOMOTIVE



### Micromirror

- Dynamic light projection for road lighting with ability to implement distance measurement
- Power consumption potentially lower (smart light management)
- Cost efficient (less optical components)
- Partner: ZKW, TDK, EVG, Evatec

## AUTOMOTIVE/INDUSTRY



### Tiny Power Box

- Onboard Charger for Automotive / Industrial Forklift
- Bidirectional, Same power density than existing ones, Reduction in size: 80%, reduction in weight: 50%
- Partner: AVL, AT&S, TDK, Infineon, Fronius

## ENERGY & EFFICIENCY



### PREMI

- Development of novel & optimized methods for modeling & simulation of EMI, especially to pre-estimate during the design phase
- Lower design time and costs
- Partner: Magna, Tridonic, TUG



# CONTACT



**Campus TU Graz**  
Sandgasse 34  
8010 Graz



**High Tech Campus Villach**  
Europastraße 12  
9524 Villach



**Science Park 4**  
Altenberger Straße 66c  
4040 Linz