

dirior_pod.use dirror_pod.use dirror_pod.use z = Fals dirror_pod.use x = F/ls mirror_mod.use y = Tals mirror_mod.use z = True

ELECTRONICS AND SOFTWARE BASED



Who we are?

ESBS-Austria is an industry-driven national research, development and innovation platform representing the technology areas of micro and nanoelectronics, embedded - systems and systems integration.

- Founded 2013 based on ARTEMIS-Austria (embedded software and software architecture) and ENIAC-Austria (micro- and nanoelectronics)
- Legal Status: Verein
- currently **46 members**





Our mission

Secure supply of key technologies and critical knowhow in the field of electronic components and systems to support innovation in all major sectors of the economy and society in Europe.

Our vision

European leadership in electronics and software based systems



Electronics and Software Based Systems in Austria

Source: ,Electronic Based Systems – Update der Daten zu Unternehmen – Kurzanalyse 2023' Joanneum Research 100 R&D Organisations

> +4400 Researchers

+72.000 People employed in esbs-relevant companies



Our network

The network of ESBS-Austria consists of Austrian Stakeholders, Austrian Clusters and Silicon Alps, the BMK, RDI Framework and "Silicon Austria" Programme and the European RDI Framework.





Our Strategic Goals & Objectives

- strengthen the **international competitiveness** of Austrian companies in the European ESBS funding/innovation system creating added value
- **support cooperation, focus and performance** of Austrian R&D institutions and enterprises along the valuechain of ESBS
- develop inputs for the European and Austrian research programmes based on the strengths of Austrian ESBS eco system
- increase the international visibility of Austrian enterprises and R&D facilities due to leading edge technologies and solutions
- strengthen the Austrian ESBS eco system as valuable partner in large collaborative European projects



Six areas of strength identified by the Austrian ESBS community

- Power electronics and control
- Hybrid integration & process
- Sensing, photonic sensors, quantum sensors
- Open software vehicle platform
- Development and testing of trustably AI based realtime systems
- Secure & energy efficient connectivity, communication
 & processing



ESBS-Austria Technical Position Paper

- Technical Positions Paper
 - Download the full document and abstract at <u>www.esbs-austria.eu/positionpaper1</u>







KDT Calls – successful contributions from Austria

KDT 1. Call

- Partners in 17 submissions
- 9 projects selected by EC
 - 6 funded by BMK/FFG
 - € 6 Mio national contribution

KDT 2. Call

- Partners in 18 submissions
- 11 projects selected by EC
 - 5 funded by BMK/FFG
 - $\mathbf{\in}$ 7 Mio national contribution





KDT 1. Call – successful contributions from Austria

A-IQ Ready	Artificial Intelligence using Quantum measured Information for realtime distributed systems at the edge
AGRARSENSE	Smart, digitalized components and systems for data-based Agriculture and Forestry
PowerizeD	Digitalization of Power Electronic Applications within Key Technology Value Chains
TRISTAN	Together for RISc-V Technology and ApplicatioNs
EdgeAl	Edge AI Technologies for Optimised Performance Embedded Processing
OPEVA	OPEVA - OPtimization of Electric Vehicle Autonomy
Listen2Future	Acoustic sensor solutions integrated with digital technologies as key enablers for emerging applications fostering society 5.0
HICONNECTS	Heterogeneous Integration for Connectivity and Sustainability
<u>SHIFT</u>	Sustainable tecHnologies enabling Future Telecommunication applications

11



KDT 2. Call – successful contributions from Austria

AIMS5.0	Artificial Intelligence in Manufacturing leading to Sustainability and Industry5.0
ALL2GaN	Affordable smart GaN IC solutions as enabler of greener applications
ARCHIMEDES	Trusted lifetime in operation for a circular economy
<u>EcoMobility</u>	Intelligent, Safe and secure connected Electrical Mobility solutions: Towards European Green Deal and Seamless Mobility
NEUROKIT2E	Open source deep learning platform dedicated to Embedded hardware and Europe
R-PODID	Reliable Powerdown for Industrial Drives
SUSTRONICS	Sustainable and green electronics for circular economy
Arrowhead FPVN	Arrowhead Flexible Production Value Networks
EECONE	European ECOsystem for greeN Electronics
<u>14AMI</u>	14 Angstroms Module Integration
ISOLDE	High Performance, Safe, Secure, Open-Source Leveraged RISC-V Domain-Specific Ecosystems



What we offer to our members?

- first level contact for stakeholder's issues in the area of R&D for ESBS
- a lively network offering various options for proactive participation
- a platform to share RD&I project ideas, get inspired by others and gain information
- active contribution to KDT programs and ESBS strategies
- joint preparation/coordination of common positions
- 2 symposia/conferences a year (international & national focus)



ESBS-Austria

Mariahilfer Straße 37-39 1060 Vienna, Austria Tel. +43 1 588 39-41 Mail: office@esbs-austria.eu www.esbs-austria.eu

THANK YOU!

Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology