COOPERATIVE RESEARCH PROJECTS

IPCEI ME/CT - IMPORTANT PROJECT OF COMMON EUROPEAN INTEREST

NXP Austria focuses on development and first industrial deployment of a highly secure post quantum processing and communication system, including localization features. A second focus area addresses reliable, safe and secure battery management systems for green mobility.

"SEAMAL IPCEI" SECURELY APPLIED MACHINE LEARNING

In IPCEI ME, the predecessor project to IPCEI ME/CT, NXP-AT is focusing on hardware-based solutions for secure and reliable implementations of energy-efficient chip platforms in smart access applications. The project supports the further expansion of the R&D competence center in Gratkorn and enables a stronger focus on the topic of security in the European IPCEI consortium. LINK

IPCEI Microelectronics and Communication Technologies · IPCEI on Microelectronics · austria wirtschafts service aws · FFG Forschung wirkt.

AWARE – HARDWARE ENSURED SOFTWARE SECURITY

FFG Forschung wirkt.

AWARE aims to improve the security of embedded devices by researching novel hardware-rooted countermeasures and corresponding verification techniques that ensure secure software execution in the presence of software attacks and physical attacks.

EMW – EMC & WIRELESS SYSTEM MODELLING

SAL SILICON AUSTRIA LABS

The EMW project is dedicated to establishing procedures in modelling for Electromagnetic compatibility as well as high-level modelling for Wireless Communication and EMC.

ENHANCE-UWB - BENCHMARKING AND ADVANCING LOCALIZATION AND COMMUNICATION PERFORMANCE OF UWB SYSTEMS IN HARSH ENVIRONMENTS

FFG Forschung wirkt.

The project aims to develop a testbed allowing for the reproducible study of UWB in complex application environments and benchmarking of a BLE link's communication performance in the presence of co-located wireless devices sharing the same spectrum.

REINDEER - RESILIENT INTERACTIVE APPLICATIONS THROUGH HYPER DIVERSITY IN ENERGY EFFICIENT RADIOWEAVES TECHNOLOGY

REINDEER aims to develop smart connectivity technologies for resilient interactive experiences, with perceived zero latency and uninterrupted availability. LINK

TEXHYPE - TEXTILE INTEGRATED HYBRID PRINTED ELECTRONICS

TEX-hype aims at the development of novel technologies for smart textiles enabling seamless integration of electronics and vital sensors into garment (waistband of underwear) and develop remote patient monitoring system and predictive clinical decision support system which will be applied in nursing homes. LINK

TRISTAN - TOGETHER FOR RISC-V TECHNOLOGY AND APPLICATIONS

TRISTAN aims to further expand and develop RISC-V architecture in Europe so that is able to compete with existing commercial alternatives. TRISTAN approach will be holistic, covering both electronic design automation tools and the full software stack. LINK

OPEVA - OPTIMIZATION OF ELECTRIC VEHICLE AUTONOMY

OPEVA's focus is on analyzing and designing optimization architecture, reducing battery charging time, and developing infrastructure, as well as reporting on the driver-oriented human factors. Overall, OPEVA's goal is to enhance EAV market penetration and adoption, making them more accessible and convenient. LINK

NEXTBMS - NEXT-GENERATION PHYSICS AND DATA-BASED BATTERY MANAGEMENT SYSTEMS FOR OPTIMIZED BATTERY UTILIZATION

NEXTBMS will develop an advanced battery management systems (BMS) and will ensure that the next generation of BMSs will enable higher performance, safety, and longer lifetime of the battery cells for an overall optimal utilization of the battery system. LINK

ISOLDE

ISOLDE aims to expedite the digitalization of European economic and societal sectors, enabling a quicker and more efficient adoption of green solutions. The project focuses on developing high-performance RISC-V processing systems and platforms with open-source, industrial-grade support to enhance quality and accessibility. LINK

CD LABOR DIGIDOW - PRIVATE DIGITAL AUTHENTICATION IN THE PHYSICAL WORLD

Digidow aims to enable individuals to authenticate their identity in the physical world without physical identity documents or devices, using a fully decentralized digital system. It addresses challenges of scalability and trust, planning to develop and test prototypes for critical applications such as border control.

CHRISTIAN DOPPLER LABORATORY FOR LOCATION - AWARE ELECTRONIC SYSTEMS

The CD Labor aims at investigating technical limitations of radio-based localization systems, which are to be employed for the purpose of ensuring the authenticity of such wireless access transactions by means of determining the physical location of the embedded radio transponder.