

# Aeneas

Engage in the digital future

## SME MEMBERS DIRECTORY



# FOREWORD



**CAROLINE BEDRAN**  
AENEAS Director General

AENEAS is an Industry Association, established in 2006, whose purpose is to promote Research, Development and Innovation in order to strengthen the competitiveness of the European industry in the field of Electronic Components and Systems.

AENEAS brings together RD&I partners from Large Enterprises, SMEs, Research Institutes and Universities active all along the Electronic Components and Systems (ECS) value chain.

SMEs are an essential part of our innovation ecosystem. They bring new ideas and an entrepreneurial approach to the industrial community. They are the bedrock of the economy.

By participating in collaborative projects in partnership with Large Enterprises, Research Institutes and Universities, they provide specific knowledge and contribute to deliver very innovative and competitive solutions to the market. Together with their partners, they create economic and societal impact well beyond the boundaries of the project.

AENEAS offers a variety of services helping its members to benefit from a dynamic RD&I ecosystem and plays a pivotal role in stimulating a higher involvement of SMEs in collaborative projects. By organizing events and consortium building sessions, AENEAS provides its members with large networking opportunities. By working closely with the

European Commission and the Members States, AENEAS helps to shape the future funding instruments, based on the ECS Strategic Research Agenda prepared by Industry. In the two programmes in which AENEAS is currently involved, the tripartite ECSEL Joint Undertaking under H2020 and the EUREKA PENTA Cluster, AENEAS supports its members, and particularly SMEs, to participate and increase their footprint, in projects well adapted to their needs.

In order to improve visibility and advertise for SMEs skills, AENEAS is editing this directory. All SMEs which are members of AENEAS can be part of it, it is a living document which will be regularly updated online on the AENEAS website.

I hope you will find it useful to extend your network and wish you all the best in your RD&I endeavours!

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Created in  
2000



Company Location  
Recklinghausen,  
Germany



Employees  
<10

advlCo is an ASIC design house, R&D and EDA service provider for analog, high frequency and broadband designs, sensors, radiation hard circuits etc. using various Silicon BiCMOS and CMOS technologies.

advlCo also offers IP such as for circuit blocks, monolithic optical polarization filters for angle sensors or image sensors (POLDI), or radar polarization sensors (TRAPS).

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

advlCo is a service provider for IC design, circuit and patent IP, and R&D

## R&D COLLABORATIVE INNOVATION INVOLVEMENT

advlCo's R&D has been both commercially and publicly funded (FP7, BMBF, DLR, ESA, ZIM, ...), e.g. fiber-communication, optical and radar sensors, medical devices, wireless, radhard data converters and DC/DC

## TECHNOLOGICAL EXPERTISES

CMOS, SiGe BiCMOS, analog and RF, wideband linear circuits, data converters, digital filters and pseudorandom generators, modeling of passives (PEEC,FEM), modeling of sensors, optical sensors design, photonic filter design, modeling of radiation effects, EDA tool programming, PDK programming, integrated optical polarization sensors, integrated radar polarization sensors

## MARKETS

Optoelectronics, Fibercom (for data center, metro, WAN networks, free-space optics), Industrial and automotive sensors (angle, speed, distance, position, etc.), Sensors for home appliances, surveillance etc., Medical devices and implants, RF and Radar, Satellite and nuclear research (radhard design), EDA

## LOOKING FOR PARTNERS AND EXPERTISES

Services: customers with challenging tasks POLDI, TRAPS: partners for realizing advanced bearingless encoders, integrated motor feedback solutions, advanced image sensors, radhard sensors, automotive sensors

## MORE INFORMATION



[www.advico.de](http://www.advico.de)



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Agileo Automation provides software and robotics solutions for production equipment. Agileo has developed A<sup>2</sup>ECF Framework to realize control software for robotized equipment (cluster tools) ensuring communication with users (GUI) and with factory IT systems (PLM and MES) specifically using SECS/GEM in semi-conductor industry. A<sup>2</sup>ECF can be considered as a digital twin of an equipment, being an Industry 4.0 enabler

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Agileo Automation proposes consulting, software product and software services for production equipment manufacturers

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Agileo Automation has participated in 2 collaborative projects:

- OEDIPUS (EIT Digital): as a subgrantee from CEA to work on a use case for Industry 4.0 with Siemens & DFKI
- Productive 4.0 (ECSEL): 109 partners-19 countries- Agileo works on the assessment on OPC-UA, a standard communication architecture for Industry 4.0 compared to SECS/GEM standards

### TECHNOLOGICAL EXPERTISES

Semi-conductor automation  
Software engineering  
Software framework  
Interoperability  
Communication standards  
Industry 4.0  
Robotics

### MARKETS

Process, test or inspection equipment manufacturers (OEMs) from:

- Semi-conductor, Photovoltaic, MEMS, LED
- Electronics, SMT
- Optoelectronics, Laser
- Aeronautics
- Machining

### LOOKING FOR PARTNERS AND EXPERTISES

Equipment manufacturers / Semi-conductor fabs / Advanced manufacturing / MES vendors / Research laboratory and companies with expertise in Industry 4.0, digital twin, interoperability, OPC-UA

### MORE INFORMATION

[www.agileo-automation.com](http://www.agileo-automation.com)



Marc Engel



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Created in  
2017



Company Location  
Madrid, Spain



Employees  
5

ALTERIA AUTOMATION is an engineering company that designs & manufactures advanced embedded edge proprietary Industry 4.0 products (smart sensors & wireless connectivity nodes and gateways) for industrial condition-based predictive maintenance.

We resolve the issues created by collecting data from raw data sensors. Our technology pre-processes data at the source, saving 97-99% on the data payload before reaching the Database.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

Alteria is an equipment manufacturer and service provider (Systems & Applications)

## R&D & COLLABORATIVE INNOVATION INVOLVEMENT

Alteria has been & is active in:

- Collaboration with Fraunhofer Institute for Production Technology in Aachen (Predictive Maintenance on Industrial Cutting Machines)
- PENTA consortium with Infineon & Fraunhofer (biodegradable smart sensors)
- Spanish supported R&D (CDTI): Handheld Predictive Maintenance Device

## TECHNOLOGICAL EXPERTISES

Smart Sensors: Vibration, Ultrasound, Temperature, Environmental, Inertial, Voltage, Current...  
Data preprocessing at source (sensor)  
Embedded Edge  
Sensor Fusion / Data Homogenisation  
Real Time / Time Synchronisation  
Wireless Communication (Node & Gateway)

## MARKETS

Industry 4.0  
Industrial IoT  
Predictive Maintenance  
Machinery Condition  
Smart Sensors  
Industrial Wireless Communications

## LOOKING FOR PARTNERS AND EXPERTISES

Specific industrial applications for our Smart Sensors:

- Rotary Machinery
- Robotic Applications
- Personnel Safety and Asset tracking
- Smart Composite Fiber optic

## MORE INFORMATION



[www.alteriaautomation.com](http://www.alteriaautomation.com)



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CAIRDAC mission is to do the proof of concept, development, regulatory, clinical evaluation, manufacturing and commercialization of implantable communicating medical devices for the diagnostic and/or therapy of chronic diseases.

Such active implantable medical devices have severe constraints for power consumptions, size, longevity, reliability, robustness and resistant to cyberattack.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

CAIRDAC is application oriented

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

CAIRDAC was involved in smart-MEMPHIS H2020 project and is involved EnSO ECSEL project

### TECHNOLOGICAL EXPERTISES

CAIRDAC has an extended expertise and in-house equipment for the development of biocompatible, autonomous and connected medical devices in harsh environment powered by a vibrational energy harvester coupled to a small rechargeable battery.

### MARKETS

CAIRDAC is addressing the market of cardiac rhythm management

### LOOKING FOR PARTNERS AND EXPERTISES

- ASIC development
- PCB development
- Assembly
- Energy harvesting
- Accelerometer
- Rechargeable battery
- RF communication
- Embedded software
- Cybersecurity
- Reliability robustness

### MORE INFORMATION

[www.cairdac.com](http://www.cairdac.com)



Renzo Dal Molin



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Created in  
1999



Company Location  
Austria (Klu, Grz)  
USA  
(Mountain View, CA)



Employees  
45

## Adding TRUST in a connected world

CISC Semiconductor, established in 1999, is an international operating and highly awarded company that provides competitive and innovative products and engineering solutions to increase performance, conformance, interoperability, security and privacy in communication technologies.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

CISC's value chain includes: Systems, Applications and Equipment (Testing)

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

More than 50 joint national and international R&D projects (several hundreds person-years R&D investment) in European programs such as H2020 (FP7), ECSEL, EUREKA ...

## TECHNOLOGICAL EXPERTISES

Wireless communication (BLE/UWB)  
IoT/CPS  
RFID/NFC Design and Test  
International standardisation  
Human Centric Design  
Security and Privacy

## MARKETS

Automotive  
RFID/NFC  
Semiconductors  
Wireless Communication  
Smart Production

## LOOKING FOR PARTNERS AND EXPERTISES

Semiconductor Manufacturer  
Automotive Tier1 and OEMs  
Smart City Service Provider  
Telecommunication Equipment &  
Consumer Electronics  
RFID/NFC product vendors (tags, chips, systems)  
RFID/NFC users (e.g. automotive, aviation, retails)

## MORE INFORMATION



[www.cisc.at](http://www.cisc.at)



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EAAT GmbH has been a competent and reliable partner in the development and production of electrical automation and drive technology for more than 25 years. We offer our customers tailor-made solutions in the areas of power electronics, electric direct drives and magnetic bearings. EAAT is both a design engineering firm and a manufacturing company.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

EAAT is a systems and applications developer and user

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

EAAT is involved in the innovative use of electronics and electrical components for the development and production of high-tech products in the areas of power electronics, direct drives and magnetic bearings.

### TECHNOLOGICAL EXPERTISES

Hardware development

- Variable Frequency Drives
- Power Supplies
- Current & Voltage Sources
- Software programming
- Micro Controllers
- User Interfaces

### MARKETS

- Industry
- Energy
- Semiconductors
- Nanotechnology
- Aerospace
- Agriculture
- Mining

### LOOKING FOR PARTNERS AND EXPERTISES

- Component Developers & Manufacturers
- System Integrators
- Custom Product Designers
- Semiconductor Manufacturers
- Motor Manufacturers
- Capacitor Manufacturers

### MORE INFORMATION

[www.eaat.de](http://www.eaat.de)



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Created in  
2015



Company Location  
Unterhaching,  
Germany



Employees  
15

Eesy-innovation GmbH works in the field of electronic systems design and develops sensor nodes and communications systems for private and institutional use. Its focus of the business activities goes to the development of products in the field of IoT for Smart Home, Smart Health and Safety and Security applications. In addition to research activities, eesy-innovation offers consulting solutions and has the potential to produce small series of innovation solutions.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

eesy-innovation works in field on system design and applications and as service provider

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Eesy-innovation has been active in the following projects:

- NexGen funded by Catrene: developing system for health care
- TreuFunk funded by BMBF: developing a microchip for industry
- Concordia funded by H2020: cybersecurity solutions

## TECHNOLOGICAL EXPERTISES

- Electronics system design
- Sensor nodes development
- Wireless communication systems
- Development of IoT products for Smart Home, Smart Health and Safety and Security applications

## MARKETS

- Smart Home Market
- Industry 4.0
- Medical sensors
- IoT Market

## LOOKING FOR PARTNERS AND EXPERTISES

Universities for further collaboration

Cooperations partners from high tech industries looking for IoT expertise from demonstrators to high volume production

## MORE INFORMATION



[www.eesy-innovation.com](http://www.eesy-innovation.com)



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## EPIC Semiconductors, Inc. (EPIC)

Created in  
2008



Company Location  
Vancouver, Canada



Employees  
12



EPIC Semiconductors (EPIC) is a fabless technology design firm founded in 2008 in Vancouver, Canada.

EPIC has developed a microscopic AI sensor chip featuring energy harvesting (this eliminates the use of toxic batteries) and bidirectional non-magnetic (RF-free) communication. Its small size allows it to be easily embedded into everyday objects, sensing “human actions, physical forces, chemical reactions and bio-effects”.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

EPIC Semiconductors (EPIC) is a fabless technology systems design firm (IP architecture provider)

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

EPIC is involved in confidential RD&I collaborations with leaders in global markets

### TECHNOLOGICAL EXPERTISES

Proprietary self-powered (batteryless), contactless and wireless communicating technology (magnetic-free) for sensors and AI on chip

### MARKETS

Automotive, home appliance, military, medical, retail, IoT, fitness, sensors and devices

### LOOKING FOR PARTNERS AND EXPERTISES

OEMs, tiers, enablers

### MORE INFORMATION

[www.epic-semiconductors.com](http://www.epic-semiconductors.com)



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Created in  
2005



Company Location  
Amsterdam,  
The Netherlands



Employees  
25

Evalan is an innovative development and application partner in the field of the Internet of Things. We work in close collaboration with our customers to achieve the best results possible.

Evalan focuses on remote monitoring, biometric measurements, and telemetric solutions for the healthcare, industry, and government sectors. We serve around 100 clients, ranging from large multinationals to small technology companies.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

Evalan develops and implements IoT systems to add value to your business

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

ECSEL: EnSO, ESEE

H2020: SINTEC

Catrene: NexGen

Eurostars: SACON, COMFORT

## TECHNOLOGICAL EXPERTISES

We develop mobile devices, sensors, data management systems, data processing algorithms, and user interfaces for different platforms. We fully realize and implement the IoT platform. We can manage your IoT system and optimize the performance to make sure it keeps working safely and provides the data that is needed.

## MARKETS

- Healthcare
- Industry
- Government
- Business
- High tech

## LOOKING FOR PARTNERS AND EXPERTISES

Flexible electronics Printed electronics Structural electronics

## MORE INFORMATION



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Fabmatics is an experienced specialist for the automation of material flows and handling processes in semiconductor factories, semiconductor process plants and other high-tech production environments. The company has been successfully implementing customer-specific automation projects for more than 25 years. The product portfolio includes mobile robots, robot cells, automated transport and storage systems as well as product identification solutions.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Fabmatics is a material handling systems and service provider (Value Chain Category: Equipment).

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Fabmatics and its predecessor companies HAP and Roth & Rau - Ortner have actively participated in H2020 & ECSEL projects:

- Cool Fab and Cool Flow
- EPT300
- SEMI4.0 / Productive4.0:
- ADMONT
- SeNaTe

### TECHNOLOGICAL EXPERTISES

Integrated automation competence for material handling, transport, storage and identification processes up to clean room class ISO3 / FED1

Mask Handling, also for EUV Lithography in < ISO 1 Environments

### MARKETS

- Semiconductor Industry
- MEMS
- Sensors
- PCB-Manufacturing
- Pharmaceutical/Medical Technologies
- Optical Industry

### LOOKING FOR PARTNERS AND EXPERTISES

Advanced semiconductor manufacturing / Material handling automation solutions for transport, storage and handling / Smart intralogistics / Intelligent material identification and tracking / Digitalization of automation engineering companies / Software for efficient control of automation systems

### MORE INFORMATION

[www.fabmatics.com](http://www.fabmatics.com) 

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Hyperstone is a fabless semiconductor company focusing on NAND flash and SSD controllers. Hyperstone's DNA for the past 30 years has been developing and delivering high quality, reliable and innovative solutions and striving to enable its customers to produce world-class storage systems for industrial, embedded, automotive and global communication applications. The firmware is supplied with the controllers and is customised for each flash application.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Supplying chips, reference systems and application firmware.

### R&D COLLABORATIVE INNOVATION INVOLVEMENT

H2020-FP7 / ELITE (leader): Technology development for vertical die stacking/interconnect

BMBF / 03FH025IX5 (participant): ECC and Compression

PENTA / XSR-FMC (leader): platform to develop POC silicon for advanced flash memory controller

### TECHNOLOGICAL EXPERTISES

- NAND Flash memory controllers
- NAND Flash Technology
- Error Correction Coding (ECC)
- Flash Translation Layer (FTL)
- Security (AES, SHA, Elliptic Curve, TCG Opal)

### MARKETS

- Industrial Automation, Industrial IoT
- Automotive (IVI, DashCam, ADAS...)
- Transport solutions
- Telecom Infrastructure (24/7 uptime)
- Smallcells, nanocells
- Energy (distribution, grid management,...)
- PoS, Kiosk, Gaming
- Secure storages (all markets) , Medical

### LOOKING FOR PARTNERS AND EXPERTISES

- Firmware development (security expertise)
- COT flow & Automotive Certifications
- Error Correction Coding
- Automotive Tiers-1 project partner for Disk-on-Board (DoB) solution development
- Channel modelling for flash memory
- Integrators and users of Flash based storage solutions (customisation, know-how transfer)

### MORE INFORMATION





IBS (Ion Beam Services) is an expert in ion implantation offering both state of the art equipment (IMC/ FLEXION Beam Line tools and PULSION Plasma Doping tool) and a range of services (implantation foundry, maintenance, refurbishment). IBS has a plant in France, subsidiaries in Scotland, US and Singapore. IBS has been involved with institutes and industrial customers in process development for advanced CMOS, power, sensors, optics, ...

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

IBS is an equipment manufacturer and a service provider

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

IBS has been and is active in projects within different collaboration schemes :  
French supported R&D projects : SUPERSWITCH oriented to power devices, ISICELL and OXYGEN for efficient solar cell by ion implantation  
FP7 or H2020 projects : SUPERTHEM for process simulation  
ENIAC and ECSEL projects : EPPL, 450 EDL, PLACES2BE, SEMI40, TAKEMI5, OCEAN 12

## TECHNOLOGICAL EXPERTISES

Ion implantation equipment  
Gas boxes, ion sources, high voltage, mass selection, ion beam scanning, e-chuck, vacuum, automation.  
Ion implantation and plasma processes.  
Planar and 3D doping, material modification and process integration for nanoelectronics.  
Silicon and wide gap power components processes  
Sensors manufacturing  
Plasma and ion beam surface treatment  
Solar cells manufacturing

## MARKETS

Physics and nanotechnology research.  
Components manufacturing for different fields:

- Memory and logic
- RF and power
- Optoelectronics, lasers, detectors
- Sensors
- Radiation detectors

## LOOKING FOR PARTNERS AND EXPERTISES

- Advanced semiconductor manufacturing
- Process integration
- 3D structure fabrication (High aspect ration trenches, FINFET, GAA wire or plates ..)
- Nanocaracterisation
- Process simulation
- Equipment part manufacturer

## MORE INFORMATION

[www.ion-beam-services.com](http://www.ion-beam-services.com)



Laurent Roux



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Created in  
1992



Company Location  
Prague,  
Czech Republic



Employees  
73

Institute of Microelectronic Applications s.r.o. (IMA) is a limited private company founded in 1992. IMA deals with electronic identification and utilises smart cards, RFID/NFC, biometrics so as IoT / LPWANS. IMA is providing large ID systems in CZ. IMA systems are compliant with GDPR, ensuring privacy and personal data protection.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

IMA is an equipment manufacturer system integrator and system provider.

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

IMA is member of several international projects and provides practical demonstration of outcomes:

EUREKA (CORTIF, H2O, ESTABLISH), Eurostars (LSU, F2P, SACON), Penta (ESAIRQ) and ECSEL (MOTORBRAIN, 3CCAR, R3-PowerUP, Productive4.0, WAKEMEUP, SECREDAS, ENSO)

## TECHNOLOGICAL EXPERTISES

Smart identifiers: cards Mifare, Desfire, Legic, mobile ID, BLE and applies RFID, NFC, UHF, BLE, Lora, GSM, sensors, LPWANS within own products and systems

## MARKETS

IMA B2B and B2C customers are mainly from Czech Republic, Slovakia, Sweden, Poland, Russia, Baltic countries and Germany  
Principal activity domains: ID systems, access control, automotive and smart cities / buildings

## LOOKING FOR PARTNERS AND EXPERTISES

Looking for partners involved in standards for secure communication in automotive domain so as partners for secure identification and IDM.

## MORE INFORMATION



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At Imagimob, we've invented a way to create AI applications that can run efficiently on small devices while still delivering the performance and accuracy typically only found in bigger systems. Combining inspiration from the machine learning field with our own innovations, each of our applications is designed with small MCUs, low CPU usage, and low memory consumption in mind.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Imagimob provides Edge AI Design tools and Applications

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Imagimob is active in ECSEL project: AFarCloud

### TECHNOLOGICAL EXPERTISES

- Edge AI application development
- Edge AI design tool development
- Sensors

### MARKETS

Product companies aiming to transform to intelligent and autonomous products

### LOOKING FOR PARTNERS AND EXPERTISES

- Sensor manufacturers
- Semiconductor manufacturers
- System integrators

### MORE INFORMATION

[www.imagimob.com](http://www.imagimob.com)



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Created in  
2006



Company Location  
Belgium



Employees  
30+

intoPIX is an innovative technology provider of image processing and compression solutions. We create and deliver market-leading technologies across all audio-visual applications where image quality is a crucial asset. Our FPGA/ASIC IP cores and fast SDKs enable to manage more pixels, preserve quality with no latency, save cost & power and simplify connectivity in many devices and workflows.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

FPGA/ASIC IP-cores & CPU,GPU accelerated SDKs to build chips , systems and applications

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

intoPIX is participating to several collaborative projects (PENTA programme, Eurostars, ...) with European partners in Broadcast, Industrial Vision, as well as various Universities & Research Centers.

## TECHNOLOGICAL EXPERTISES

- Image processing
- Video compression
- Microelectronics (FPGA,ASIC)
- Software Acceleration (CPU,GPU)

## MARKETS

- Media / Broadcast
- Industrial Vision
- Automotive
- Mobile
- Cameras

## LOOKING FOR PARTNERS AND EXPERTISES

Positioned as technology provider, we are looking for partners to build new projects to continue to share our expertise and expand our knowhow markets with more RD&I collaborative project

## MORE INFORMATION



[www.intopix.com](http://www.intopix.com)



Jean-Baptiste Lorent  
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LPE is a manufacturer of equipment for depositing semiconductors thin layers using chemical vapor deposition (CVD). LPE's strategy concentrates on CVD reactors dedicated to severe applications such as Schottky, Power Transistor, PowerMos and very thick epi layers for IGBT devices both using silicon and silicon carbide. LPE has two plants in Italy and one subsidiary in China. During the years LPE has dedicated many resources to R&D to be always at the edge of the products working in partnership with institutes and industrial partners.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Equipment Manufacturer / Worldwide recognized leader supplier for Silicon and Silicon Carbide Epitaxial reactor manufacturer for power application

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

LPE has been active in projects financed from different sources:

Italian R&D PON: EleGaNte (GaN on SiC), SiC4EEI (150mm SiC)

H2020: CHALLENGE

ENIAC/ECSEL: LASTPOWER, EPT300, R2POWER300, Semi40, REACTION

KiC Innoenergy: 3DSiC

### TECHNOLOGICAL EXPERTISES

- Epitaxial reactors: silicon and silicon carbide.
- HTCVD and Sublimation equipment.
- Gas panels and cabinets. Bubblers for liquid precursors.
- Silicon and WBG processes: Epitaxy, LPCVD.
- Process simulation: CFD, EDG, FEM, Thermal
- Semiconductor characterisation.
- Software development: Realtime and SECS-GEM
- Project management

### MARKETS

- Silicon Power devices
- Cool MOS
- IGBT
- SENSORS
- MEMS
- Silicon Carbide devices
- Schottky diodes
- MOSFET

### LOOKING FOR PARTNERS AND EXPERTISES

- Equipment part manufacturer
- Automation manufacturer
- Process simulation

### MORE INFORMATION

[www.lpe-epi.com](http://www.lpe-epi.com)



Franco Preti



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Created in  
1999



Company Location  
France



Employees  
40

M3 Systems is specialized in reliable and accurate geolocation. Since its creation in 1999, it has been developing in the areas of Space / Defense (GNSS), Air Navigation (ATM) and now Land Transportation (ITS). Located near Toulouse, the company is also present in Brussels through M3 Systems Belgium. M3 Systems offers expertise, Test & Measurement software for the needs of innovative applications such as connected and / or autonomous systems.

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

M3 Systems is an Applications Provider, a Systems Provider and an IPs provider

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

M3 Systems has been and is active in several projects among others:

ENIAC projects: THINGS2D0 for development of IPs on FDSOI technology

ECSEL projects: OCEANI2 for development of IPs on FDSOI technology

H2020 Projects: CPS4EU aimed to promote the development of Cyber Physical Systems

## TECHNOLOGICAL EXPERTISES

- SDR IPs
- High Grade GNSS Receivers
- Ultra Precise geolocation systems
- High performance hybridization
- Signal Processing
- Test & Measurements

## MARKETS

- Automotive
- Rail
- Space and Defense
- Maritime
- Drones

## LOOKING FOR PARTNERS AND EXPERTISES

- RF partners
- Silicon vendors
- High Grade INS providers

## MORE INFORMATION



[www.m3systems.eu](http://www.m3systems.eu)



**Pollina Marc**  
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mi2-factory develops, distributes and applies an innovative proprietary tool, called “energy-filter for ion implantation” (EFII). Customers use this novel technology as a process step for optimized cost performance of semiconductor power devices (especially of Silicon Carbide SiC). mi2 factory’s energy filter technology enables power device cost-performance increase (20-80%). EFII results in high levels of doping accuracy across SiC wafers and from wafer to wafer.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

We are a service provider (energy-filtered ion implantation) for precise wafer doping.

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

mi2-factory is involved in the Power2Power EU project. European power device manufacturer will profit from the results by enabling cost-performance improvements mainly for Silicon power devices, but also for SiC.

### TECHNOLOGICAL EXPERTISES

EFII as a production tool, which is specifically tailored for every customer application. The EFII chip consists of a micro-patterned membrane. When used in ion implantation equipment EFII changes the energy distribution of high energy doping ions, such that the desired customer specific doping profile is produced in diodes, MOSFETs and superjunction. mi2-factory owns several patents.

### MARKETS

In order to meet climate goals, conversion losses of electrical energy have to be minimized in the future. Modern SiC devices are elementary components for highly efficient power conversion in wind power, HVDC grids etc. EFII improves cost-performance of SiC diodes, power MOSFETs and SiC superjunction FETs. EFII is also applicable to Silicon or Galliumnitride.

### LOOKING FOR PARTNERS AND EXPERTISES

- Device manufacturers: using our technology in own process steps for the production of microchips (e.g. SiC high-voltage diodes, MOSFETs and superjunction devices) with significantly improved efficiency
- Foundries, ion beam accelerator manufacturers and end-station manufacturers can implement the novel ion implantation technology for their customers.

### MORE INFORMATION

[www.mi2-factory.com](http://www.mi2-factory.com) 

Florian Krippendorf   
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Created in  
1982



Company Location  
Blagnac, France



Employees  
60

RECIF Technologies designs, manufactures, distributes and maintains robotic handling equipment for highly sensitive environments dedicated to the semiconductor industry. Acknowledged as expert in wafer handling and innovative solutions, RECIF Technologies is dedicated to customers satisfaction and established in the main semiconductor industry regions to ensure proximity (USA, Asia, and headquarters in France).

## POSITIONING IN THE ELECTRONICS VALUE CHAIN

RECIF Technologies is an equipment manufacturer – Automation AMHS

## RD&I COLLABORATIVE INNOVATION INVOLVEMENT

RECIF is involved in collaborative programs for several technology nodes

ENIAC & ECSEL: E450LMDAP, Senate, Takemi5, TapeS3, Pln3S

Project leader in CATRENE programme : NGC450 & TSV-HANDY

## TECHNOLOGICAL EXPERTISES

- Automation
- Heterogeneous wafer handling & 3D Packaging
- Atmospheric
- Front end / Back end

## MARKETS

- Memory
- Logic
- Foundry
- OEM
- IDM

## LOOKING FOR PARTNERS AND EXPERTISES

- Advanced semiconductor manufacturing
- Metrology & sensors experts
- Research Institutes

## MORE INFORMATION



[www.reciftech.com](http://www.reciftech.com)



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SiPearl is the industrial hand of European Processor Initiative, and is indeed the fabless company integration, supporting and selling the chip to the market

SiPearl is focused on Advanced Data Processing for High Performance Computing, Artificial Intelligence and Edge Computing. SiPearl Common Platform will enable and speedup European AI, Cryptographic and Quantum startup. We are focused on the P3S. Performance - Sovereignty - Safety - Security

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

SiPearl positioning is in Architecture, and chip design, being fabless

### RD&I COLLABORATIVE INNOVATION INVOLVEMENT

SiPearl is deeply involved in the European Processor Initiative (H2020 consortium initiated in Dec 2018) and supported by DGConnect and will own EPI chip

### TECHNOLOGICAL EXPERTISES

- Digital and High Speed
- 2.5D and large dies
- Deep node submicron process (beyond 7nm)
- Interconnect and HPC software

### MARKETS

- High Performance Computing, AI and Edge Computing
- Cryptography

### LOOKING FOR PARTNERS AND EXPERTISES

Looking for advanced packaging, interposer, 2.5D, 3D expertise in EU. Looking for automotive safety expertise for high performance CPU's

### MORE INFORMATION

[www.sipearl.com](http://www.sipearl.com)



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Created in  
2004



Company Location  
Helsinki, Finland  
Stockholm, Sweden  
Berlin, Germany



Employees  
50

Growth through innovation, technology and corporate renewal – Spinverse is the Nordic leader in innovation consulting, specialised in open innovation, arranging funding and commercialisation of emerging technologies. Our 50-person team has coordinated over 2.3 B€ of large scale innovation programs. Since the beginning of H2020, we have helped our customers get more than 420 M€ of EU funding. Knowledge of successful collaborative R&D&I projects is in the DNA of Spinverse.

### POSITIONING IN THE ELECTRONICS VALUE CHAIN

Private consulting company specialized in open innovation and multi-party project coordination, management, and communication, especially for the whole electronics value chain.

### R&D&I COLLABORATIVE INNOVATION INVOLVEMENT

Day-to-day management and/or dissemination and communication management of the following projects:

ECSEL JU: EuroPAT-MASIP, APPLAUSE

ENIAC JU: Prominent

H2020: Smart-MEMPHIS, CEFOW, Stardust, INNPAPER

BBI JU: PEference, VEHICLE, SWEETWOODS

FP7: IP4Plasma (as a coordinator)

### TECHNOLOGICAL EXPERTISES

We can offer effective tools and processes, insights from evaluators as well as technology and sector expertise; we have altogether 12 PhDs with industry background from Electronics, ICT & Security, Health, Bio and Circular economy, Energy and Manufacturing

### MARKETS

Spinverse has offices in Helsinki, Stockholm and Berlin. Our focus is in:

- Open innovation
- Management consulting
- Public funding

### LOOKING FOR PARTNERS AND EXPERTISES

Need help in building or managing innovation projects? We can improve your odds to get funded and take care of all practicalities in proposal building. We can help in daily administration and support your project delivering communications, commercialization strategies or business plans. We help you build new businesses through partners, funding & new ideas.

### MORE INFORMATION



[www.spinverse.com](http://www.spinverse.com)



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Innovation

Create

Shape

Impact

Community

Network


Influence

AENEAS is an Industry Association is an industry association promoting RD&I in Electronic Components & Systems (ECS) to strengthen European competitiveness along the complete ECS value chain. AENEAS federates all RD&I players, from large industrial companies, Small and Medium Enterprises, research organisations and Universities.

AENEAS represents its members in the ECSEL Joint Undertaking, the Public-Private Partnership for the ECS Value Chain. The Joint Undertaking funds RD&I projects for world –class expertise in key enabling technologies essential for Europe’s digital future. AENEAS is also operating the EUREKA clusters PENTA and CATRENE dedicated to micro and nanoelectronics enabled systems and applications

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