

SME MEMBERS DIRECTORY



FOREWORD



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!

SME MEMBERS DIRECTORY

Acktar Ltd.	5
advlCo microelectronics GmbH	6
Afore Oy	7
Agileo Automation	8
ALTERIA AUTOMATION	9
CAIRDAC	10
CELESTIA TECHNOLOGIES GROUP BV	11
CEMWorks	12
CISC Semiconductor GmbH	13
D4T Systems BV	14
EAAT GmbH Chemnitz	15
eesy-innovation GmbH	16
EPIC Semiconductors, Inc. (EPIC)	17
EVALAN	18
EXCILLUM AB	19
FABMATICS	20
Flexbright Oy	21
Hyperstone	22
IBS	23
IDEAS	24

INOVASYON MUHENDISLIK	25
Institute of Microelectronic Applications	26
IMAGIMOB AB	27
intoPIX	28
LPE spa	29
M3 SYSTEMS	30
mi2-factory GmbH	31
Pavo Design Production Electronic Trade Inc.	32
PITON	33
Pregenerate GmbH	34
Qmicro BV	35
RECIF Technologies	36
Reden BV	37
RULEX INNOVATION LABS	38
Semiconductor Ideas to the Market (ItoM)	39
SiPearl	40
SPINVERSE	41
Ubiqu	42
XENON Automation GmbH	43

Acktar Ltd.



Created in 1994







Acktar is a world technology leader in the development, industrialisation and production of light absorbing Black coatings based on vacuum deposition technologies. Our coatings are integrated in the most sophisticated systems in space as well as in daily used technology.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Acktar is an equipment manufacturer and a service provider.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Acktar's most recent involvements are "UPHO" in EUREKA collaborative programme with two Germany based partners & "IqClock" from the Horizon 2020 program. Also previously involved in FP7 with projects NEXT-GTL, CARENA and CoMETHy.

TECHNOLOGICAL EXPERTISES

Parts of optical systems, light absorbing tapes, high specific surface area coatings, cold shields & IR detectors parts, emitters, blackbodies, thermal radiators for thermal control system, parts for thermographic cameras, night vision systems, radiation absorbing layers for temperature sensors, heat dissipation coatings, high capacitance anode & cathode foils.

MARKETS

Optical components, Nanotechnology, Sensors, detectors, lasers, Semiconductors, optoelectronics, **Automotive**

LOOKING FOR PARTNERS AND EXPERTISES

Looking to team-up with companies from a variety of fields for innovative collaboration.

MORE INFORMATION



www.acktar.com



dina@acktar.com info@acktar.com







advICo 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

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

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

advICo'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







Afore Oy



Created in 1995



Employees 35





Afore Oy designs and delivers intelligent test solutions for MEMS sensor testing and devices requiring application specific test solutions. We offer systems for device characterisation during development, wafer sort and final test. Sensor test solutions provide physical stimulus like motion, pressure, humidity and gas concentration. Afore operates globally and production is in Finland.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Afore Oy is an equipment supplier and service provider

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Involved in:

- PENTA project ESAIRQ
- ENIAC projects APPLAUSE and EUROPAT-MASIP

TECHNOLOGICAL EXPERTISES

Providing wafer probe and device handling equipment with physical stimulus like motion, pressure and humidity for sensor test and calibration along the device development and production value chain.

MARKETS

MEMS sensor research and development. Wafer sort for MFMS sensors and other devices

Final test for MFMS sensors and other devices.

LOOKING FOR PARTNERS AND EXPERTISES

MEMS development MFMS wafer level and final test Thermal imaging and photonics devices

MORE INFORMATION



www.afore.fi



Michael Siebert michael.siebert@afore.fi

Agileo Automation



Created in 2010
Employees • •

Company Location
Poitiers
France



Agileo Automation provides software and robotics solutions for production equipment. Agileo has developed A²ECF 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. A²ECF 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 & DEKI
- Productive 4.0 (ECSEL): 109 partners-19 countries- Agileo works on the assessment on 0PC-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

COTTITIONICACION SCANDARUS

Industry 4.0

Robotics

MARKETS

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

- Semi-conductor, Photovoltaic, MEMS, LED
- Electronics, SMT
- Optoeletronics, 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





ALTERIA AUTOMATION



Created in 2017





Company Location Madrid Spain



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)

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Alteria has been & is active in:

- Collaboration with Fraunhofer Institute for Production Technology in Aachen (Predictive Maintenance on Industrial Cutting Machines) No Program Yet.
- PENTA 3 / Euripides2 consortium with Infineon & Fraunhofer (biodegradable smart sensors): PLANtAR
- Spanish supported R&D (CDTI NEOTEC): Handheld Predictive Maintenance Device

TECHNOLOGICAL EXPERTISES

Smart Sensors: Vibration, Ultrasound, Temperature, Environmental, Inertial. Voltage, Current...

Data preprocessing at source (sensor) Embedded Egde

Sensor Fusion / Data Homogenisation Real Time / Time Synch

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



Mario Alfonso malfonso@alteriaautomation.com



Company Location
Antony
France



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 EnS0 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 an 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





CELESTIA TECHNOLOGIES GROUP BV



Created in 2016





Company Location Noordwijk The Netherlands



CTG BV is a Dutch SME working in the technological innovations of the Aerospace, Telecommunications and Scientific sectors and offering state of the art equipment and systems.

It is also the company holding for Celestia Technologies Group integrating 15 high technology SME companies located in several European countries, and based on innovation, and development of high technology products, as key factors to a steady

POSITIONING IN THE ELECTRONICS VALUE CHAIN

CTG BV is an equipment provider and a system engineering company

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

CTG BV is involved in the following projects:

ECSEL Project ADACORSA. CTG BV develops an aerial unmanned vehicle transponder based on common aviation technologies providing accurate positioning and identification of the platform.

TECHNOLOGICAL EXPERTISES

The main background and expertise of the company includes on-board UAV electronics and datalinks, antenna measurement systems, electromechanical positioners, microelectronics, beamforming technologies, signal processing, ground stations and systems.

LOOKING FOR PARTNERS AND EXPERTISES

- Satellite and/or Teleport Operators
- Cooling and Thermal Analysis
- Structural Analysis
- Additive Manufacturing and 3D printing
- Industry 4.0 and Artificial Intelligence
- Navigation Applications
- Testing & Certification

MARKETS

- Unmanned Aerial Vehicles (UAVs) and Unmanned Ground Vehicles (UGVs)
- Radiofrequency and Antennas
- Signal Processing
- Antenna Measurement Systems
- Satellite Ground Systems and Stations

MORE INFORMATION



www.celestia-tech.com



José Alonso jalonso@celestia-tech.com



10

Company Location Winnipeg, MB Canada



CEMWorks offers cutting-edge electromagnetic simulation tools for the design optimisation of new complex and large-scale applications in 5G/mmWave/RF electronics, metamaterials and Smart Mobility. Our innovative approach to simulation allows engineers to create designs in a virtual environment to certify compliance with regulatory standards, reduce costs, and accelerate time-to-market.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

CEMWorks provides electromagnetic simulation tools for chips, materials and applications

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

CEMWorks is involved in RD&I confidential collaborations with global industry leaders.

TECHNOLOGICAL EXPERTISES

- Design Automation
- Electromagnetic Simulation
- Modeling of 3D packaging, IC passives, antennas, PCBs, interposers.

MARKETS

Companies designing and manufacturing for:

- Semiconductor Industry
- Automotive
- Aerospace and Defense
- o 5G/mmWave/RF
- Metamaterials
- Antennas

LOOKING FOR PARTNERS AND EXPERTISES

- O Designers with challenging simulation tasks
- Semiconductor manufacturers
- System integrators
- Component Developers & Manufacturers

MORE INFORMATION

www.cemworks.com





CISC Semiconductor GmbH



Created in 1999



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





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 personyears R&D investment) in European programs such as H2020 (FP7), ECSEL, EUREKA ...

TECHNOLOGICAL EXPERTISES

- Wireless communication (BLE/UWB)
- loT/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 0EMs
- 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



Dr. Markus Pistauer m.pistauer@cisc.at



Created in 2009

Company Location Schijndel Netherlands



D4T Systems offers highly specialized software products for IC test verification and test automation focused on analog mixed signal. Customer key benefits include first time right test programs, evaluating "what-if" test scenarios and our modelling approach leads to fast simulation and test integration. We provide services on our tools and help customers in new test technology projects with fast software prototyping and data analysis.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

D4T systems is a software product and service provider for architectural and chip design

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

 ${\sf D4T}$ systems has active involvement in the following: PENTA: HADES for systems manufacturing chip test.

ENIAC JTI: ELESIS for embedded chip test instrument verification

CATRENE: TOETS for one integrated chip test solution

TECHNOLOGICAL EXPERTISES

EDA test simulation, IEEE test standard integration and simulation, chip test data analysis with fast prototyping software engineering

MARKETS

Semiconductor processing, test equipment and chip design (ODM) suppliers for high quality, high demanding applications:

- Industrial
- Automotive.
- Healthcare

LOOKING FOR PARTNERS AND EXPERTISES

We welcome partnerships with semiconductor process and test equipment, chip design and design service providers.

MORE INFORMATION

www.d4t-systems.com







Created in 1993 **Employees** 35



Company Location Lichtenau Germany



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&LCOLLABORATIVE 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





eesy-innovation GmbH



Created in 2015 **Employees**



Company Location Unterhaching Germany



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" founded by CATRENE: developing system for health care
- "TreuFunk" founded by BMBF: developing a microchip for industry
- "Concordia" founded 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
- loT Market

LOOKING FOR PARTNERS AND EXPERTISES

Universities for further colaboration

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

MORE INFORMATION



www.eesy-innovation.com



 □ Guenter Maximilian Hefner hefner@eesy-innovation.com

EPIC Semiconductors, Inc. (EPIC)



Created in 2008

12

888

Company Location
Vancouver
Canada



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

EPIC has developed a microscopic Al 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 Al on chip

MARKETS

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

LOOKING FOR PARTNERS AND EXPERTISES

OFMs tiers enablers

MORE INFORMATION

www.epic-semiconductors.com





EVALAN



Created in 2005





Company Location Amsterdam The Netherlands



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 loT platform. We can manage your loT 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



www.evalan.com



Menk Schwietert info@evalan.com



Created in 2007
Employees

50

Sto

Company Location Headquarters in Stockholm, Sweden / Subsidiary USA



Excillum AB, is a leading SME in the field of high end micro- and nano-focus X-ray sources. We design, develop and manufacture world's brightness microfocus X-ray sources based on MetalJet technology, and smallest nanofocus X-ray sources based on advanced e-beam technology. Our products are available for applications such as diffraction/scattering (XRD, SAXS), spectroscopy (XRF, XPS), imaging (NDT, CT, XRM, phase contrast), etc.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Equipment (sub-system provider to OEMs)

Excillum AB designs, develop and manufactures X-ray sources.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Excillum AB is and has been active in projects within different collaborative schemes such as:

ECSEL JU – MADEin4 EMPIR – NanoXSpot

HORIZON 2020 - (CITCOM, SME Instrument)

FP7 - (NanoXCT_FUROSTARS-FI7892)

TECHNOLOGICAL EXPERTISES

Metal Jet anode for X-ray generation Advanced Electron Beam Micro - and Nano - focus X-ray sources X-ray systems (source + optics)

MARKETS

Equipment (sub-system) manufacturer for different fields:

- Semiconductor industry
- Electronics industry
- Industrial imaging
- Medical, Pharma
- Additive manufacturing
- Industrial production (aerospace, automotive)
- Quality control
- O NDT

Research: materials, bio&medical, X-ray method development.

LOOKING FOR PARTNERS AND EXPERTISES

X-ray system integrators, X-ray component suppliers (other than X-ray source), X-ray application users.

MORE INFORMATION

www.excillum.com







FABMATICS



Created in 1991



Employees 220



Company Location Headquarters Dresden Germany



Fabrnatics is an experienced specialist for the automation of material flows and handling processes in semiconductor factories, semiconductor process plants and other hightech 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

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

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

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

- Cool Fab and Cool Flow
- EPT300
- SFMI4.0 / 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
- MFMS
- 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



Dr. Karli Hantzschmann karli.hantzschmann@fabmatics.com



Created in 2013
Employees •

Company Location Haukipudas Oulu Finland



Flexbright Oy is a Finnish high-tech startup company designing and manufacturing flexible, thin, light-weight & customizable LEDFOILs for large-area displays, media-walls & smart illumination. Roll-to-roll manufacturing process enables production of continuous LEDFOILs up to hundreds of meters long. Flexbright offers complete integrated solution, comprising of the LEDFOILs installation & control & power systems.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Flexbright is a LEDFOIL component supplier, Integrated system suppliers and Roll-to-Roll electronics manufacturing service provider

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Flexbright has been active in different RD&I schemes:

Delphi4LED, ECSEL-RIA-2016

Finnish National funded R&D:

- Flex-in-Glass,
- ELASTRONICS, "Enabling the future of wearable electronics, Design and assembly of electronics on stretchable circuit boards.

TECHNOLOGICAL EXPERTISES

- Printed and flexible electronics materials, manufacturing processes and design
- Roll-to-roll manufacturing
- Design and roll-to-roll manufacturing of customized thin & flexible LEDFOILs with RGB(W) dynamic lighting
- Structural integration of LEDFOILs using various techniques (canvas, plastic-encapsulation, injection-moulding, glass lamination etc.)
- Complete integrated system solutions

LOOKING FOR PARTNERS AND EXPERTISES

- New materials and components for flexible electronics (substrates, adhesives, LEDs, sensors, encapsulation)
- Roll-to-roll manufacturing processes and equipment
- New structural integration opportunities
- Novel large-area application innovations

MARKETS

- Automotive glass
- Architectural lighting
- Electronics manufacturing

MORE INFORMATION

www.flexbright.fi







21



Created in 1990 **Employees**

65

Company Location Konstanz Germany



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.

RD&I 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

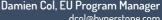
LOOKING FOR PARTNERS AND EXPERTISES

- 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

www.hyperstone.com





IBS (ion beam services)



Created in 1987 **Employees**

RA



Company Location Peynier Rousset **Erance**



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.

lon 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
- o 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



Laurent Roux laurent.roux@ion-beam-services.fr



IDEAS -**Integrated Detector Electronics AS**

Created in 1992 **Employees**

26



Company Location Oslo Norway



IDEAS - Integrated Detector Electronics AS - is a fabless supplier of integrated circuits (ICs) and systems based in Oslo, Norway. The company designs integrated circuits (ICs) and systems for radiation detection and imaging subsystems with proprietary readout technology. IDEAS works with research organisations and business partners creating new products based on IDEAS' custom made ICs.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

IDEAS develops Integrated Circuits (Chips) and sensor systems.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Recent innovations are Infrared FPA readout controllers for European customers, including European Space Agency, and ROIC, MEMS and WLP for uncooled infrared thermal image sensors. Public funding received under H2020 (SONDE, 3DMUSE), EUROSTARS (MINC), ECSEL (APPLAUSE).

TECHNOLOGICAL EXPERTISES

- ASIC, IC, ROIC design, mixed signal, fullcustom: amplifiers, ADC/DAC, SPI, FSM, SRAM
- SiPM, PMT, CZT, semiconductor sensors.
- MEMS sensors (bolometers)
- CMOS supply chain management

MARKETS

- High-energy and nuclear physics
- Space radiation science and astronomy
- Security scanning using x-rays
- Industrial scanning using x-rays
- Thermography, surveillance

LOOKING FOR PARTNERS AND EXPERTISES

- 0EM camera manufacturers
- Users of thermal infrared imaging
- MEMS foundry
- CMOS foundry
- MEMS packaging incl. wafer-level packaging

MORE INFORMATION

www.ideas.no







INOVASYON MUHENDISLIK



Created in 2009

Employees

tutorials.



Company Location Eskisehir Turkey



Inovasyon Muhendislik was established in 2010. The company conducts R&D projects on indoor and outdoor positioning systems, robotic systems and intelligent vehicles. This project is based on embedded system design of electronic equipment and systems, which implements the development and production. Our U-plat (Virtual Robotic

Laboratory) product is an easier and better learning platform with open source ROS

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Inovasyon Muhendislik is software and equipment producer and service & technology provider.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

3rd Party Projects: ROSIN PS, ROSIN UPLAT, RPSIN PHM

ECSEL Project: VALU3S

TUBITAK Projects: Autonomous Carrier Robot for Smart Factories, IOTOPRO

KOSGEB Project: Automated Guided Vehicle (AGV) ITEA Projects: INVALUE, WATERM, POLDER

TECHNOLOGICAL EXPERTISES

- Embedded Sytems
- Robotics Systems
- Data Collecting
- System Health Management
- Machine Learning
- Data Science
- 3D modelling
- Prototyping
- RF Communication
- Data Acquisition

MARKETS

- Automated Guided Vehicles (AGV)
- Indoor Positioning Systems (PLAB)
- Education and Research Robots (FVAROBOT)
- UPLAT (Virtual Robotic Laboratory-www. theuplat.com)

LOOKING FOR PARTNERS AND EXPERTISES

- Producer at similar platforms
- Production sectors
- Robotic Systems users
- Data collectors

MORE INFORMATION



www.inovasyonmuhendislik.com



Erol Ciraci erol.ciraci@inovasyonmuhendislik.com



Institute of Microelectronic Applications

Created in 1992
Employees

200

Company Location Prague Czech Republic



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 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: CATRENE (CORTIF, H20), ITEA (ESTABLISH), EUROSTARS (LSU, F2P, SACON), PENTA (ESAIRQ) and ECSEL JU (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

www.ima.cz





IMAGIMOB AB



Created in 2013







Company Location Stockholm Sweden



At Imagimob, we've invented a way to create Al 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 Al Design tools and Applications

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Imagimob is active in ECSEL project: AFarCloud

TECHNOLOGICAL EXPERTISES

- Edge Al application development
- Edge Al 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



Anders Hardebring anders@imagimob.com



Created in 2006 Employees

30+



Company Location Belgium



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 programne, 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
- Mohile
- Cameras

LOOKING FOR PARTNERS AND EXPERTISES

Positioned as technology provider, we are looking for partner 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







Created in 1972





Company Location Baranzate, Italy Catania, Italy



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_FDG_FFM_Thermal
- Semiconductor characterisation.
- Software development: Realtime and SECS-GEM
- Project management

LOOKING FOR PARTNERS AND EXPERTISES

- Equipment part manufacturer
- Automation manufacturer
- Process simulation

MARKETS

- Silicon Power devices
- Cool MOS
- IGRT
- SFNSORS
- MFMS
- Silicon Carbide devices
- Schotty diodes
- MOSFFT

MORE INFORMATION



www.lpe-epi.com



Franco Preti francopreti@lpe-epi.com



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). 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 FDS0i technology ECSEL projects: OCEAN12 for development of IPs on FDS0i 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





mi2-factory GmbH



Created in 2016





Company Location Jena Germany



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 costperformance 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





PAVOTEK

Pavo Design Production Electronic Trade Inc.

Created in 2003 **Employees**

231



Company Location Istanbul Turkey



Pavotek was established in Istanbul in 2003 to provide qualified solutions with its expert engineers on electronic card and systems of product and design. We continue to work as a strategic partner of Turkey's defense companies. Automotive, Energy, Telecom and Power Control is designing products in different sectors. R&D office is located in Teknopark Istanbul, production and testing facilities also in Istanbul.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Pavotek is an electro-mechanic designer and manufacturer and therefore working in the equipment and materials areas.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

TÜBİTAK: These projects are related to power electronics, communication systems and autonomous Systems.

H2020-ECSEL & PENTA: Intelligent Reliability 4.0 (iRel40), Intelligent Secure Trustable Things (InSecTT) & Highly Automated Analog IP Reuse & Creation by Holistic Engineering (ARCHF)

TECHNOLOGICAL EXPERTISES

- Electronic Hardware Design (FPGA & embedded)
- Electronic SMD Typesetting and Manufacturing
- Electronic Testing and Integration
- Power electronics solutions
- Communication and control systems / products

MARKETS

- IP Communication Devices Surveillance System
- Smart City and Energy Solutions
- Defense Technology- Communication &Control & Avionics System
- Industry 4.0 Tracking and Electronic Shelf Label(ESL) solutions
- Single Board Computer (to be continued)

LOOKING FOR PARTNERS AND EXPERTISES

Software application firms

MORE INFORMATION

www.pavotek.com.tr/en







Created in 2006







PITON provides cutting-edge electronics and information technology solutions, working on different areas for software and embedded solutions. PITON is not only a software expert but also full system designer and implementer with addition of Electronics and Innovation expertise. With a special focus on critical infrastructures and digital transformation, PITON designs and implements Smart City Solutions, Transportation Management Systems, IoT-enabled Systems and GIS-based Business Intelligence Solutions.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Software development, full system designer and implementer, mobile applications development.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

PITON works on innovative software and electronics solutions in any business especially for public bodies and industry. PITON is an expert on IoT based M2M systems and has already developed many embedded and fully integrated solutions on transportation and governmental organisations.

TECHNOLOGICAL EXPERTISES

Transportation Information, Passenger Information, Enterprise Management, Fleet Management and Asset Monitoring software systems.

LOOKING FOR PARTNERS AND EXPERTISES

- Advance Semiconductor Manufacturing
- 5G Communication
- IoT Sensor Fusion
- AI/ML/DL
- Autonomous Vehicles
- Green Vehicles

MARKETS

- Smart City
- Transportation
- Mobility
- GIS 0
- Logistics
- Public Services

MORE INFORMATION



www.piton.com.tr



Ersan GÜRDOĞAN ersangurdogan@piton.com.tr

Pregenerate GmbH



Created in 2019

Employees oc

2

Company Location
Vienna
Austria



Pregenerate GmbH is a Vienna based microfluidic start-up established in November 2019 which is improving quality of life by In Vitro diagnostic (IVD) and Point-of-care diagnostics (POC). The core technology of Pregenerate GmbH is microfluidics, with offers in two platform technologies: organ-on-chip (arthritis IVD) and lab-on-chip (rapid viral POC).

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Pregenerate is microfluidic chip developer and service provider for IVD and POC.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Pregenerate is involved in ECSEL Research and Innovation Actions (RIA)Calls 2020 for Data treatment & Wearable Integration Technologies for Medical Applications.

TECHNOLOGICAL EXPERTISES

Microfluidics chip development
Drug testing for Arthritis Invitro diagnostics
Lab-on-a-chip system for detection of Viral infections.

MARKETS

- Organ-on-a-chip
- Personalized medicine
- Drug development
- Equine arthritis market Lab-on-a-chip
- Point-of-care

LOOKING FOR PARTNERS AND EXPERTISES

Arthritis patient cells and tissue banks
Drugs for Arthritis that needs to be tested
A1 system for morphological analysis of images
Virology Biosensing experts
Automation of the liquid handling with lab robotics

MORE INFORMATION

www.pregenerate.net







Omicro BV



Created in 2013



Employees





Omicro offers high-tech solutions for gas analysis and diagnostics, enabled by micro chip technology (MEMS). Application areas for these solutions are industrial process control and automation, laboratory analysis and portable devices or sensors. Omicro is engaged in customised manufacturing and OEM product supply.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Omicro is a gas mixture analysis equipment manufacturer.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Involved in PENTA project ESAIRQ and several innovative micro technology application projects funded by EU or Dutch authorities.

TECHNOLOGICAL EXPERTISES

Expert in micro chip Gas Chromatography and its application in (non) explosion safe monitoring equipment for fast gas mixture analysis.

MARKETS

Industrial process, (petro)chemical, automation, (bio)gas, natural gas, hydrogen.

LOOKING FOR PARTNERS AND EXPERTISES

Looking for applications specialists for on-line monitoring of gas mixtures, hydrogen, emissions, gas purity.

MORE INFORMATION



www.qmicro.com



Vincent Spiering vincent.spiering@qmicro.nl

RECIF Technologies



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
- o IDM

LOOKING FOR PARTNERS AND EXPERTISES

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

MORE INFORMATION

www.reciftech.com







Reden BV



Created in 2001



Employees 21





REDEN BV is a Research & Development company that excels in simulation-driven product development and the development of Digital Twins. We support our clients in achieving a breakthrough in their product development. Based on our simulation models, we offer product developers better understanding of the relationship between production design and performance; the Digital Twin. We make performance predictable (design for 6 Sigma).

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Reden is involved in new product and process development and optimising existing products and processes.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

Involved in PENTA project Hyb-Man.

TECHNOLOGICAL EXPERTISES

- Multi physics modelling & simulation
- Digital Twinning
- Design for 6 Sigma
- Artificial Intelligence

MARKETS

OEM's in machine Industry, consumer products, automotive and aerospace.

LOOKING FOR PARTNERS AND EXPERTISES

OEM's in different sectors, Big Data specialists.

MORE INFORMATION



www.reden.nl



Marco Ezendam m.ezendam@reden.nl

RULEX INNOVATION LABS



Created in 2007 **Employees**

27

Company Location Genova Italy



Rulex Innovation Labs (RIL) represents the headquarters for the research and development of the American company Rulex Inc. which specializes in Artificial Intelligence and in particular in B2B applications on decision and process automation through the machine learning technology called LLM (Logic Learning Machine), contained inside the software Rulex Analytics®.

POSITIONING IN THE FLECTRONICS VALUE CHAIN

Rulex is a software and service provider

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

RIL manages all the R&D activities for Rulex Inc. RIL is involved in several research projects, both at European and National level. H2020: NEXT PERCEPTION, VALU3S, FRACTAL, SAFECOP POR: PICK-UP (energy), LIGURIA 4P HEALTH

TECHNOLOGICAL EXPERTISES

RIL develops innovative methods for Explainable AI (namely Logic Learning Machine) and helps business users to implement Rulex-based automated decision process powered by XAI.

MARKETS

Thanks to its domain-independent approach, Rulex can apply its technologies in many fields, such as: cyber-physical systems, industry automation, IoT, supply chain, fintech, energy, transports and health.

LOOKING FOR PARTNERS AND EXPERTISES

Rulex looks for partner with strong expertise in specific vertical fields to apply its algorithm in real-world context.

MORE INFORMATION

www.rulex.it







Semiconductor Ideas to the Market

Created in 1998
Employees

35

نث

Company Location Eindhoven Enschede The Netherlands



ItoM is a Dutch system IP and semiconductor design centre with core expertise on mixed-signal IC design. As an independent design company, ItoM focuses on wireless connectivity, sensor data acquisition, and timing systems. ItoM is internationally recognised for its ground-breaking IP blocks, having a unique track record of innovations implemented for many leading semiconductor customers.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

ItoM is an IC design company, active in architecture, chips and applications

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

ItoM has been and is active in projects within different collaboration schemes: H2020 & Eurostars: SmartEEs, FICCaR

- PENTA: HEFPA
- FIWARE: FICHe, SmartAgriFood
- Dutch R&D: MIT. MRE. OP ZUID/OOST. IPC. TALCOM

TECHNOLOGICAL EXPERTISES

Expertise:

- RF Analog Mixed-Signal IC design (CMOS & BiCMOS) with extensive system knowledge on RF transceivers (e.g. 56, BLE, Bluetooth, Wi-Fi)
- Signal processing
- Embedded design

Service IP- complete designs as well as extensive list of IP blocks in:

- O RF RX & TX
- PLL & FLL
- IF & ADC / DAC e.g. ADPLL, TDC, Power Amplifier, Sigma Delta ADC, SAR ADC, RF DAC

LOOKING FOR PARTNERS AND EXPERTISES

- Digital IC design partners
- Semiconductor product companies
- Supply chain management partners
- Electronic Design Automated companies
- Sensor product companies

MARKETS

Focus on application markets:

- Wireless Communications
- Connectivity
- Sensing
- Timing systems

MORE INFORMATION

www.itom.nl









Created in 2019



Employees 10+





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 Al, Cryptographic and Quantum startupWe 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 note submicron process (beyond 7nml
- Interconnect and HPC software

MARKETS

- High Performance Computing, Al 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



Philippe Notton philippe.notton@sipearl.com



Created in 2004
Employees

50



Company Location Helsinki, Finland Stockholm, Sweden Berlin, Germany



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.

RD&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 Standust 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







Created in 2010





Company Location Delft. The Netherlands



Ubiqu has revolutionised digital identification by adding the same level of assurance to every digital transaction, as if displaying an ID in person.

The innovation Ubiqu brings is a way to remotely add a hardware- based token to existing mobile phones maintaining the high level of security that hardware provides.

- Easy to use
- Level of assurance 4
- Hardware based and easy to use and easy to scale

POSITIONING IN THE ELECTRONICS VALUE CHAIN

Ubiqu is a secure element provider to larger applications. Examples are; use of a mobile phone as an epassport, edriver license, ebank card, elicense, ecard key or ephysical key

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

H2020: FIDES FCSFI · Secredas

TECHNOLOGICAL EXPERTISES

- Cryptography
- Crypto protocols
- Secure elements
- Physical Access
- Logical Access
- Authentication, Signing, Decryption

MARKETS

- Banking
- Telecom
- Automotive
- Access
- Identity and Access
- Security
- Defense

LOOKING FOR PARTNERS AND EXPERTISES

- Banking
- Telecom
- Automotive
- Access
- Identity and Access
- Security
- Defense

MORE INFORMATION



www.ubiqu.com



Boris Goranov boris@ubiqu.com

XENON Automation GmbH



Created in 1990 Employees

340

888

Company Location
Dresden
Germany



XENON has more than 30 years of experience in the development of automated plant solutions for automotive, electronics and medical technology, with over 1500 machines delivered. Highest precision with micrometer accuracy, short cycle times, product and process data acquisition and -processing are key competencies of the company.

POSITIONING IN THE ELECTRONICS VALUE CHAIN

XENON is a provider of automated solutions for production equipment.

RD&I COLLABORATIVE INNOVATION INVOLVEMENT

ECSEL projects: IoSense, productive 4.0

PENTA projects: Hyb-Man

German supported R&D: AllMeSa (Mechatronics Alliance Saxony), ProMoA (automated machine planning and -development), safe-UR-chain (use of block chains in value chains)

TECHNOLOGICAL EXPERTISES

Assembly and testing of mechatronics products. Broad technology platform, starting with classic, partly robot-assisted pick-and-place and joining technologies, up to technologies of assembly and connection technology: Fitting, bending, dosing, heating, joining, handling, marking, cooling, lasering, testing, cleaning, welding, cutting, packing, feeding...

MARKETS

Actors, Sensors, Electric and Mechatronic Systems, Plug Connectors, Contact Systems for the markets of Automotive, Electronics and Medical Technology

LOOKING FOR PARTNERS AND EXPERTISES

Medical Technology
Digitization of processes for development of custom-made automation solutions
Human-Robot-Collaboration
Industry4.0

MORE INFORMATION

www.xenon-automation.com/en





Innovation Create Shape

Community Network Influence

AENEAS 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 cluster PENTA dedicated to micro and nanoelectronics enabled systems and applications.

44 rue Cambronne 75015 Paris France

Tel: +33 1 40 64 45 60 contact@aeneas-office.org www.aeneas-office.org



@AENEAS_EU

