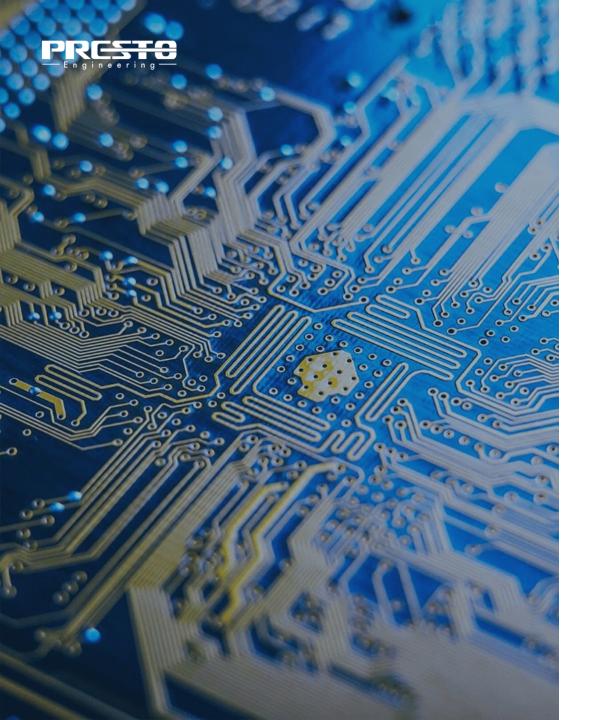


Your trusted microelectronics partner

Presto
Engineering-
IoT Platforms





About us

Presto Engineering is a leading independent ASIC design and semiconductor device production provider, offering services from feasibility to tape-out and the delivery of finished goods.



Presto at a Glance

More than 35-year experience helping innovative companies: minimizing overhead, reducing risk and accelerating time-to-market.

150 semiconductor

experts

10 worldwide operations

state-of-the-art test floors

40 test systems

€30M equipment value

100ASIC projects completed

1,000 served customers

50
new
projects/year

60M
finished goods
shipped/year

Your one-roof solution from ASIC design to Production

ASIC



FEASIBILITY STUDY

Defining your needs & options

Architecture & cost assessment



ASIC DESIGN

From idea to chip

Analog & mixed-signal

ASICs



SIP DESIGN

full custom package development

Wide portfolio of packaging solutions



TEST

Prototype and high-volume



QUALIFICATION

ie, package, and boardlevel qualification

ISO 17025*
Industrial JEDEC



PRODUCTION SUPPLY CHAIN

Trusted supply chain for time to market

trong relationships with foundries & OSATs



THOR

Multiprotocol NFC sensor and data logger platform

Accelerate your time to market with our NFC sensor platform developed for specific market segments or applications. It can be reused as customizable building blocks in a wide range of applications according to your needs.

KEY BENEFITS

- Suitable for a wide range of monitoring and continuous data logging applications an requirements
- Communicates with most of today's mobile devices using the ISO 14443A or ISO 15693 NFC/RFID protocols
- Accurate on-chip temperature sensor
- Enables the use of external analog and digital sensors such as humidity, shock, tilt, pressure and luminance

Evaluation kit including PCB with THOR chip and demonstration app to explore platform capabilities



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Logistics and transport

- Cold chain monitoring & logistics
- Asset tracking & localization
- Inventory management



Building automation

- Smart appliances
- Climate monitoring
- Access control



Industrial monitoring

- Factory automation
- Predictive maintenance
- Construction



Point-of-care diagnostics

APPLICATIONS

- In vitro diagnostics
- Testing of body fluids
- Electrochemical & optical



Pharmaceuticals

- Transport & storage
- Smart packaging
- Dosage compliance



Healthcare & medical Wearables

- Wearable sensors
- Smart bandages & wound monitoring
- Exercise trackers



HUGIN

Electrochemical NFC sensor and data logging

Accelerate your time to market with our NFC electrochemical sensor platform developed for specific market segments or applications.

It can be reused as customizable building blocks in a wide range of applications according to your needs.

KEY BENEFITS

- Suitable for a wide range of electrochemistry measurements and continuous monitoring applications
- Communicates with most of today's mobile devices using the ISO 14443A or ISO 15693 NFC/RFID protocols
- On-chip electrochemistry measurements blocks and accurate temperature sensor
- Easy to use with rapid results and suitable for in-situ tests.
- A potentiostat can be integrated into the ASIC platform to interface to biosensor for electrochemical analysis.
- Enables the use of external analog and digital sensors such as humidity, shock, tilt, pressure and luminance.

APPLICATIONS



Industrial monitoring

- Factory automation
- Predictive maintenance
- Construction



Pharmaceuticals

- Transport & storage
- Smart packaging
- Dosage compliance



Point-of-care diagnostics

- In vitro diagnostics
- Testing of body fluids
- Electrochemical & optical



Healthcare & medical Wearables

- Wearable sensors
- Smart bandages & wound monitoring
- Exercise trackers



HEIMDALL

Smart low-resolution vision sensor for movement detection

Accelerate your time to market with reference platforms developed for a specific market segments or applications. They can be reused as technological building blocks in a wide range of applications and customized according to your needs.

KEY BENEFITS

- Low power and low-resolution applications
- Combines a monochrome CMOS image, an ambient light,
 and a temperature sensor
- Complete sensor system available in 6x6 mm2 package,
 suitable for space constrained design
- Can be combined with our energy-harvesting platform

Heimdall demo kit RGB sensor + Ambient Light Sensor



Building and infrastructure automation

- Occupancy and people counting
- Smart lighting
- Factory access control and automatic doors
- Highway & traffic surveillance/vehicle counting



Production infrastructure

- Smart agriculture including pesticide detection (NIR) levels
- Food and material quality inspection and sorting automation

APPLICATIONS



Security, Surveillance and Safety

- Factory line smart safety (safety alarms)
- Complement to video surveillance and intrusion detection
- Eyewear protection



Test & Measurement

- Chemical analytical composition
- Material inspection
- High dynamic Intrusion
- High dynamic global shutter optics



CHARON

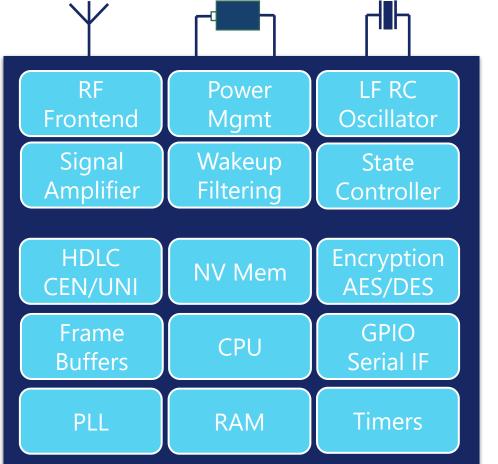
DSRC Custom IC Platform for Intelligent Transport Systems

CHARON is an ASIC platform for a road tolling DSRC on-board unit that supports communication and payment processing.

KEY BENEFITS:

- Fully functional DSRC transceiver.
- Build in RF front end.
- 32-bit RISC processor & flash memory to allow for customer-specific firmware to control the payment transactions.
- Ultra-low power listening mode with intelligent false wakeup discriminator to allow for 7+ years of battery operation.
- Built-in hardware supports tamper protection and low battery warning.
- Built-in cryptographic cores to support hardware-assisted AES encryption.
- **Support for CEN and UNI DSRC standards.**

Applications: Tolling / Enforcement / Tracking / Light or Heavy Vehicles





FREYJA

Energy harvesting platform for batteryless IoT applications

Accelerate your time to market with our energy harvesting platform developed for low-power sensor and monitoring applications. It can be reused as customizable building blocks in a wide range of applications according to your needs.

KEY BENEFITS

- Suitable for Photovoltaics and Thermoelectric generators.
- Efficient operation of both single cell and multiple solar cells.
- Source voltage monitoring and maximum power point tracking.
- Ultra-low operating current (<1uA).
- Low power RC oscillator for timing. Higher precision clock possible using a crystal.
- Temperature range -30°C to +100°C.
- Serial communication interface (SPI).



Logistics and transport

- Cold chain monitoring & logistics [Light or Thermal]
- Asset tracking & localization [Light]



Smart Building and Homes

- Window and door sensors [Light]
- HVAC monitoring [Thermal]

APPLICATIONS



Industrial monitoring

- Predictive maintenance [Light]
- Railroad and pipeline monitoring [Thermal]



Environmental Sensing

- Air quality monitoring [Light or Thermal]
- Soil moisture sensors [Light]

