

# About us

RELOC is an Italian company skilled in designing cutting-edge ICT solutions.

We support our customers by building complete solutions, tailored on specific needs, providing:

- > Analysis and technology scouting for development of new products
- > Design of embedded hardware, based on a wide range of technologies (microcontroller, FPGA, DSP, etc.)
- > Development of embedded firmware based on either simple scheduler or multi-thread RTOS
- > Focus on wireless connectivity, for industrial and consumer IoT fields, based on any radio protocol required (BLE, ZigBee, Wi-Fi, Thread, 6LoWPAN, ISM 433-868 MHz, 3G, LoRa, SigFox, etc.)
- > Integration with several Cloud services, to collect and process gathered data
- > Development of software and mobile applications based on cross-platform technologies
- > Support for test plan definition and certification process.

Please do not hesitate to contact us for further details at [info@reloc.it](mailto:info@reloc.it).



## BUILDING A CONNECTED WORLD. TODAY.



### YOUR PARTNER FOR Embedded Design & Internet-of-Things Solutions

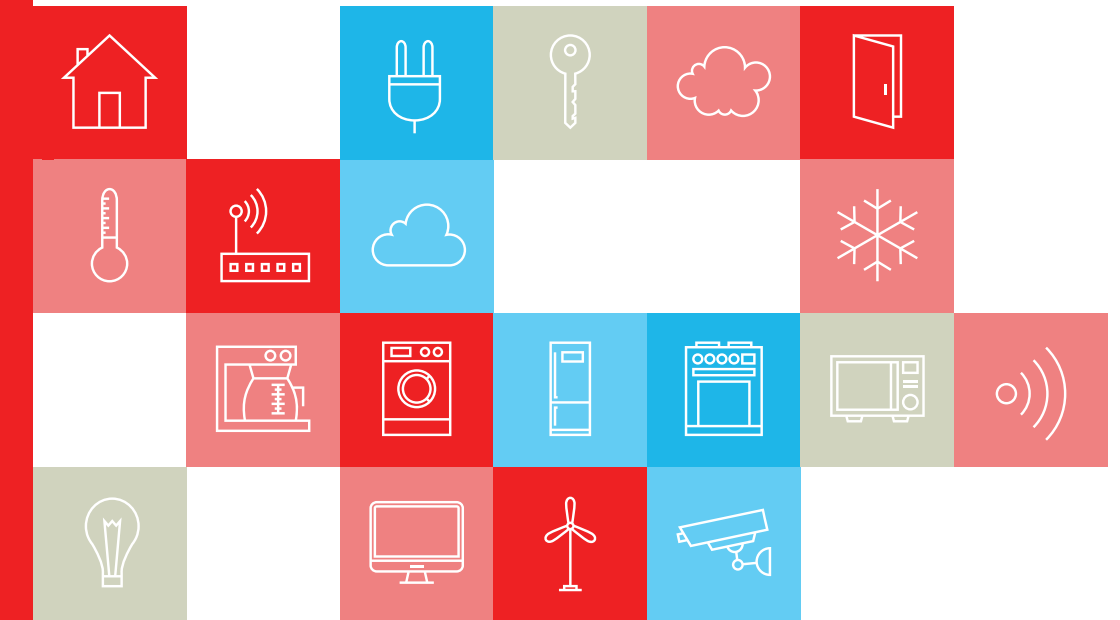


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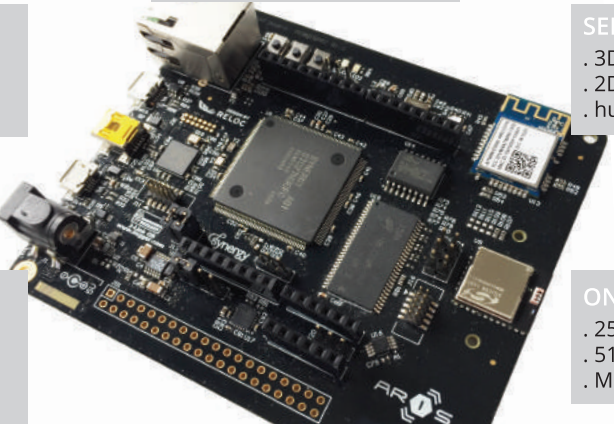


# SYNERGY PLATFORM

## ARIS Internet-of-Things board

RELOC has developed the ARIS board, a ready to use Internet-of-Things (IoT) hardware and software solution that enables users to get their IoT applications up and running quickly.

Leveraging on Renesas Synergy development platform it helps accelerate IoT designs by making it easier and quicker to start development with a fully qualified and optimized combination of hardware and software that encourages innovation and product differentiation.



**RENASAS SYNERGY S7**

- . ARM Cortex-M4 w/ FPU
- . Up to 240 MHz CPU core
- . 4 MB Flash / 640 kB RAM
- . On-board J-Link debugger

**WIRED CONNECTIVITY**

- . Ethernet 10/100 Mbits
- . USB host
- . USB device

**SENSORS**

- . 3DOF accelerometer
- . 2DOF gyroscope
- . humidity and temperature

**ON-BOARD MEMORY**

- . 256 Mbit SRAM
- . 512 Mbit QSPI FLASH
- . Micro-SD slot (bottom side)

**EXPANSIONS**

- . Arduino connector
- . 24bit LCD interface, with resistive touch controller
- . external capacitive touch connector

**WIRELESS NETWORKING**

- . Wi-Fi b/g/n (Atmel WINC1500)
- . BLE 4.1/4.2 (SiLabs BGM111)
- . NFC (NXP NT3H1201)

# Consumer IoT solutions

Why you should connect your products to the internet?

- 1 Engage your customers with new services
- 2 Save resources and stay competitive
- 3 Collect market data to optimize products
- 4 Imagine innovative product lines

RELOC provides customers with tailored end-to-end IoT solutions, starting from connected embedded devices to scalable cloud storage and services, exploiting reliable communications and deploying cross-platform mobile applications.

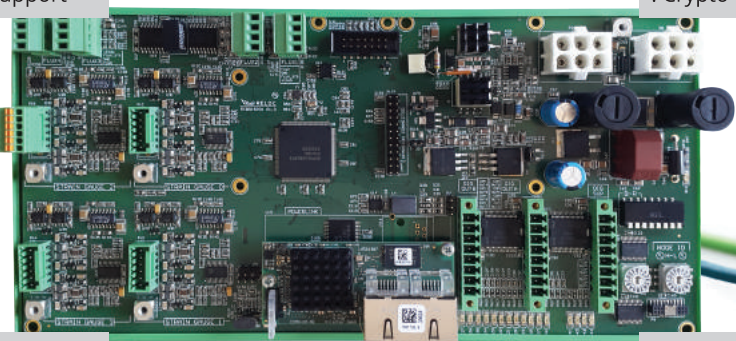


# INDUSTRY 4.0

## Smart factory solutions

Enter the fourth industrial revolution adopting advanced machine-to-machine solutions: high-performance real-time controllers joined with standard industrial communication protocols.

RELOC designs reliable industrial electronics, extending classical local control with secure remote services in order to support machine monitoring and device responsive failure and error analysis.



**RENASAS RX PLATFORM**

- . 100 MHz RX CPU core
- . Up to 2 MB Flash
- . Up to 256 kB SRAM

**FUTURE PROOF**

- . Expandible via castellated board
- . Remote update support

**RELIABLE OPERATIONS**

- . Redundant power-supply
- . Protected 5+24V supply
- . Crypto-bootloader

**FLEXIBLE INPUTS**

- . 4x 24-bit SAR ADC
- . 4x pulse count inputs

**INDUSTRIAL PROTOCOLS**

- . Ethernet real-time M2M
- . Powerlink - EtherCAT
- . CAN-Open support

**FLEXIBLE OUTPUTS**

- . 12x high-current outputs
- . Flexible real-time control loop