

Smart Factory

Semiconductor Solutions for Automation and Drives



Complete Portfolio for Automation and Drives

Core Expertise

For more than two decades, Renesas Electronics focuses on solutions for the industrial automation sector making Renesas a key partner of our customers.

The core differentiators of Renesas Electronics in this significant market are

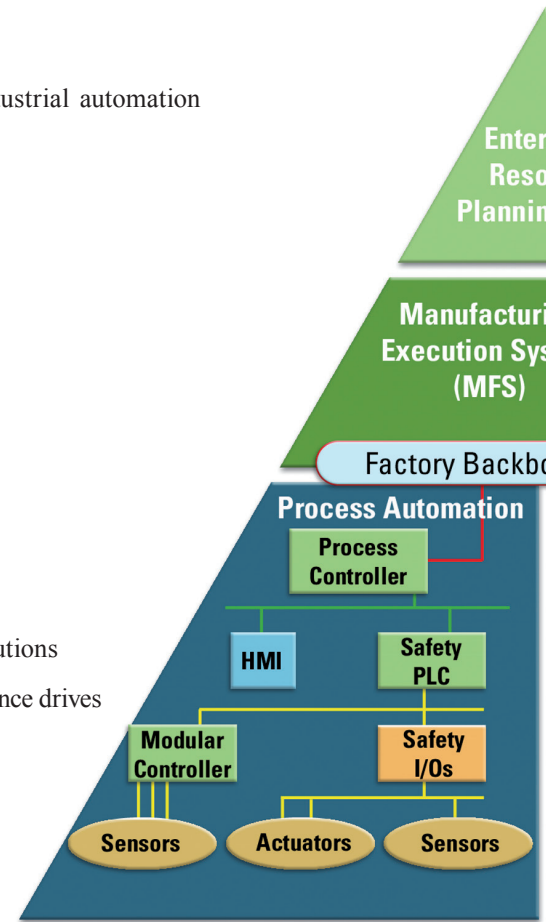
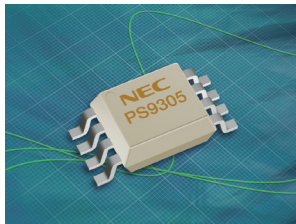
- Excellent product portfolio
- Core knowledge and expertise
- Extensive local support in Europe
- Long term product strategy
- Smart solutions for key applications and standards

Motion and Drives

World's largest offering for Industrial Motor Controls



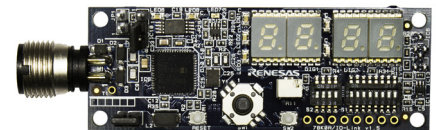
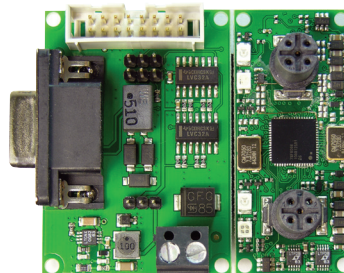
- V850Ix and RX62x families for mid-end inverter solutions
- V850Mx4 single and dual core family for high performance drives
- SH2A family for high-end drives
- Large optocoupler portfolio incl. IGBT drivers
- Huge offering of power devices



Sensors and Actuators

Complete IO-Link Controller portfolio

- Worlds first scalable 2ch-Master
- Small slave controller (QFN)
- Sensor reference design
- IO-Link Master reference design



New low-end MCU family for sensors and actuators

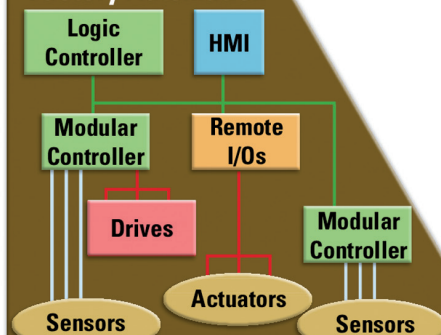
- Small package support (QFN, LGA, SSOP)
- Best in class power-performance ratio
- Data Flash, high-accuracy OSC
- Analog front end components (ADC, Opamp, Comp)

Enterprise
Resource
Planning (ERP)

Manufacturing
System

One Network

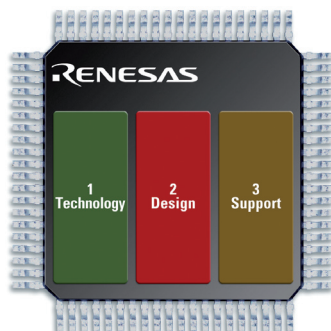
Factory Automation



Control Systems

Solutions for graphics and processing

- High-end graphics based on high-end SH device family
- Mobile panels supported through Zigbee
- Cap-touch and direct drive TFT solutions based on low-end MCU
- Processing power based on high-end and dual-core Mx4 series
- CoDeSys implementations for Logic controller



Custom solutions for PLC and IO Modules

- Services to create your custom chip
- Wide technology and IP portfolio
- ARM processor platforms for PLC and motion with custom logic area
- Solutions for backplanes
- Operating system support for ARM

ARM

MIPS
TECHNOLOGIES

Industrial networks

Best-in-class Ethernet PHY Family

- Low-latency
- Roadmap with single and dual channel
- PTP (IEEE1588) implemented
- Fast link-up and link down detection
- Cable quality monitoring

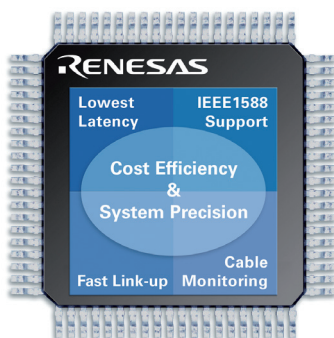
ETHERNET
POWERLINK

Modbus

EtherNet/IP

EtherCAT

SERCOS
interface



Widest range of Industrial Ethernet solutions

- Profinet IRT ASSP families (ERTEC, TPS-1)
- Ethernet/IP stacks for RX and V850
- Profinet RT stacks for RX and V850
- Complete network starter kits

PROFINET
INDUSTRIAL ETHERNET

ERTEC

Getting started

- Easy implementations with our starter Kits
- Our local support experts help you
- Reference designs and application notes
- Communities and Website



For more information please visit us under www.renesas.eu/automation

Before purchasing or using any Renesas Electronics products listed herein, please refer to the latest product manual and/or data sheet in advance.

