

# Renesas Electronics America Solutions Guide

## Embedded Systems Conference 2010 Edition

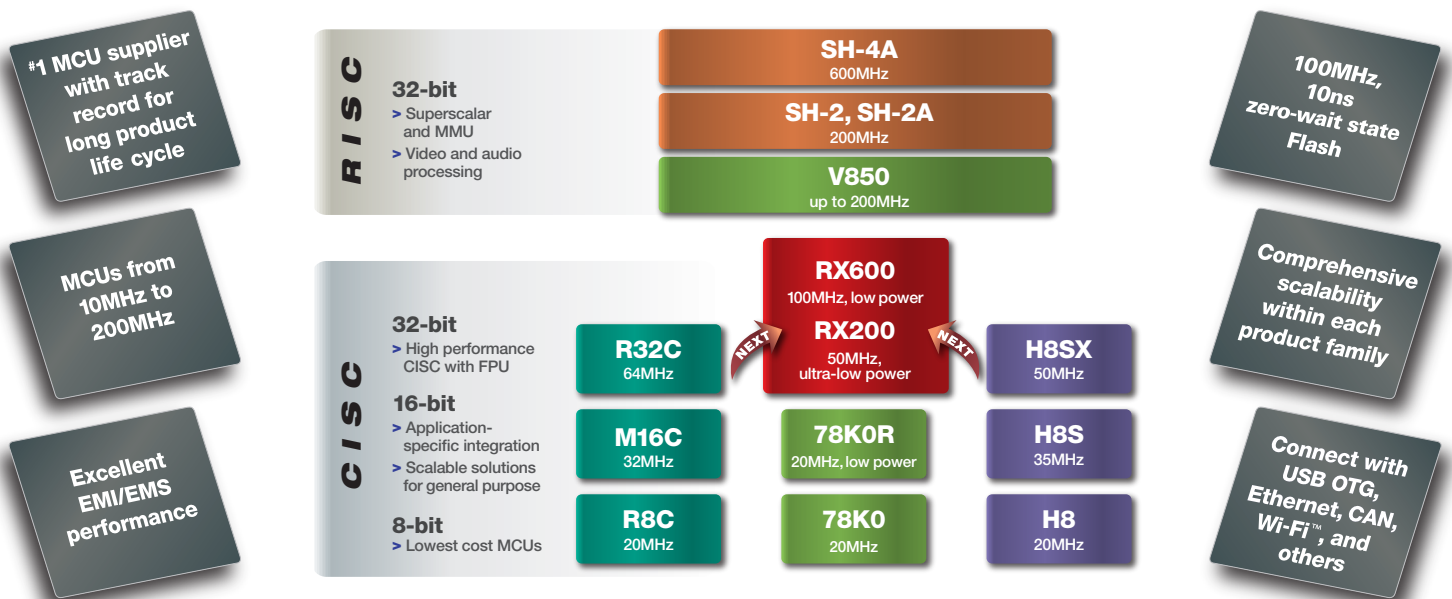
**Renesas Electronics Corporation**—the new company resulting from the April 1, 2010 merger of Renesas Technology Corporation and NEC Electronics Corporation—is a global semiconductor powerhouse offering a wide range of advanced solutions for a huge customer base around the world. Besides being the world's top supplier of microcontrollers with a 30% market share\*, we are also a premiere supplier of SoC products, analog/mixed-signal chips, power devices and much more.

New and existing customers gain significant advantages from the unprecedented strength, extensive technology assets, and clear business focus made possible by our recent merger and invigorated corporate structure.

- ▶ Renesas' microcontroller architectures are #1 across diverse markets, and their extensive use and broad support both facilitate successful system designs and reduce engineering risk.
- ▶ Access to the state-of-the-art design and production technologies of the two biggest Japanese semiconductor companies drives solid product roadmaps and sparks innovation, while top-level commitments to customers protect engineering investments in our existing architectures.
- ▶ Being one of the few chipmakers now supporting an ITDM (Integrated Device and Technology Manufacturer) business model, Renesas Electronics Corporation provides exceptional levels of quality and flexibility by maintaining total control over all aspects of the products we produce: semiconductor R&D, chip design, and device production, including processing, packaging and testing.

### Renesas 8-, 16- and 32-bit MCU and MPU Solutions

Offering solid technology roadmaps featuring performance, integration and power efficiency, with complete development tool support



**Dawn of a New Future –  
Renesas Electronics**

**Combining the strengths of  
NEC Electronics and  
Renesas Technology**

\*MCU Market Share:

- ▶ **Global #1 (30%)**
- ▶ **8-bit #1 (20%)**
- ▶ **16-bit #1 (36%)**
- ▶ **32-bit #1 (38%)**

\* Source: Gartner 2009 Worldwide Semiconductor Market Share Database, March 2010 results



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### Renesas Development Tools — [am.renesas.com/tool](http://am.renesas.com/tool)

Renesas Electronics offers a wide range of development tools that help make everything from coding to flash memory programming and mass production easier, faster and more accurate.

#### Renesas Integrated Development Environments (IDEs)

**HEW4** — Supports R8C, M16C, R32C, RX, H8, SuperH

- ▶ GUI-based integrated development environment for the development and debugging of embedded applications for Renesas microcontrollers.
- ▶ Powerful, yet easy-to-use, tool suite
- ▶ Industry-standard user interface
- ▶ Designed using a modular approach
- ▶ Seamlessly incorporates device family-specific C/C++ compilers and debugger elements
- ▶ Various debugging platforms including emulators and evaluation boards



**CubeSuite** — Supports V850, 78K0R, 78K0

- ▶ Simplified development environment for all former NEC Electronics MCUs
- ▶ Compilers and assemblers
- ▶ Simulator and debugger
- ▶ Code generator and pin configurator
- ▶ Automatic updater with version control

#### Renesas Debuggers and Emulators

Renesas provides wide-ranging emulator lineups with sophisticated debugging functionalities provided via an easy-to-use interface.



#### Software Library

Renesas and our Alliance Partners provide an extensive portfolio of sample code, middleware, device drivers, code generators, and operating systems for our microcontrollers. [am.renesas.com/softwarelibrary](http://am.renesas.com/softwarelibrary)

#### Jump-start your design with Renesas Starter Kits!

A Renesas Starter Kit is a cost-effective tool to get started with Renesas MCUs. It includes board, debugger, power supply and CD-ROM in one box.



#### Renesas Solution Kits for Motor Control, CAN, and Direct-Drive LCD

Solution Kits from Renesas offer many unique features to shorten the development cycle and reduce software complexity.

- [am.renesas.com/motorcontrol](http://am.renesas.com/motorcontrol)
- [am.renesas.com/can](http://am.renesas.com/can)
- [am.renesas.com/lcd](http://am.renesas.com/lcd)



#### RTOS and Middleware support – Special Offer from Renesas and Micrium

Select the Renesas SH7216 or SH7264 Microcontroller + Get Micrium's Real-time Kernel with technical support for FREE

Get FREE Micrium kernel with purchase of Ultra-fast Flash SH7216!\*

and Save 50% on Micrium's Proven Middleware, too!

[am.renesas.com/micriumpromotion](http://am.renesas.com/micriumpromotion)

### The Renesas Ecosystem — Long-term customer support programs



Consultant and Tool Vendor Network  
[am.renesas.com/alliance](http://am.renesas.com/alliance)



University Program  
[renesasuniversity.com](http://renesasuniversity.com)



Online Training  
[renesasinteractive.com](http://renesasinteractive.com)



Customized Updates  
[am.renesas.com/MyRenesas](http://am.renesas.com/MyRenesas)



[am.renesas.com/Samples](http://am.renesas.com/Samples)



[am.renesas.com/tech\\_support](http://am.renesas.com/tech_support)

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