

To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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(Note 2) “Renesas Electronics product(s)” means any product developed or manufactured by or for Renesas Electronics.

PFESiP® EP Series Roadmap

NEC Electronics' PFESiP EP Series^{Note} microcontrollers, which have both a 32-bit microcontroller with NEC Electronics V850 CPU core and Gate array on a single package, can be customized easily. They support a lot of applications with high connectivity feature, such as USB2.0 and Ethernet, and they have a customizable area for function expansion.

The **EP-1** Series, which was the first released product series of the EP Series, supports 200 MHz high-speed operation and USB2.0FS (full speed) in host and function modes, and has large-capacity RAM and a customizable area of up to 240 K gates.

The **EP-3** Series, which is still being developed and will be released next, has a faster CPU core than the EP-1 series to achieve 266 MHz high-speed operation. The EP-3 Series has many communication interfaces such as Ethernet and CAN and supports also USB HS(high speed). An optimal configuration of buses, memory, and and the DMAC is used to resolve bus bottlenecks of the data traffic.

Note PFESiP : Platform for Embedded System in a Package
EP-1 : Embedded Processor -1

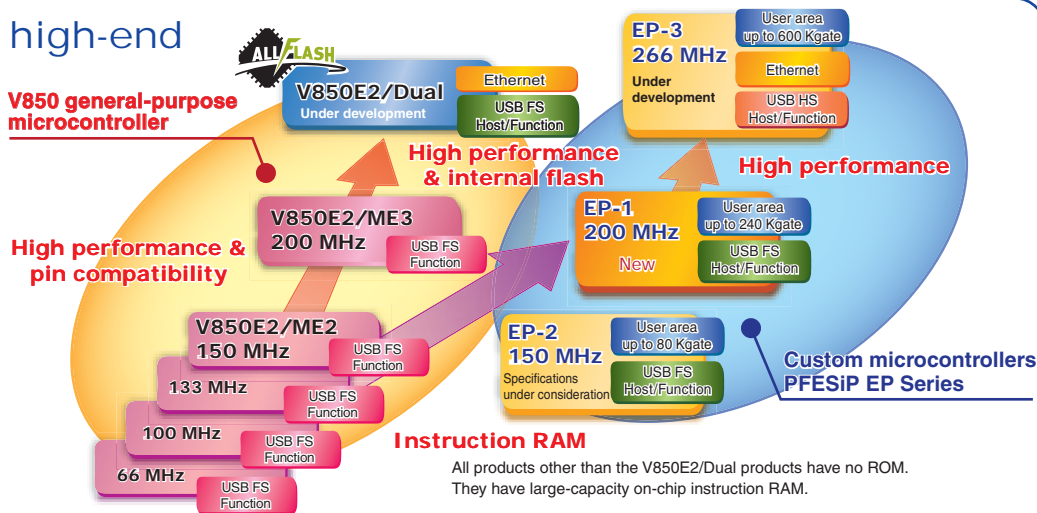
Main specifications of the EP Series

Item	EP-1	EP-3 (under development)
CPU	100 to 200 MHz	Up to 266 MHz
USB 2.0	FS Host/Function	HS Host/Function
Ethernet	-	10/100 Ether MAC
System bus	Single layer	Multiple layers
On-chip instruction RAM	192 KB	512 KB
Other interfaces	-	CAN
Customizable area	Up to 240 K gates Can support a 5 V interface 10/100 Ethernet MAC can be used	Up to 600 K gates Can support a 5 V interface

Roadmap of V850 high-end products

We are expanding the high-end products among the V850 32-bit microcontrollers as follows:

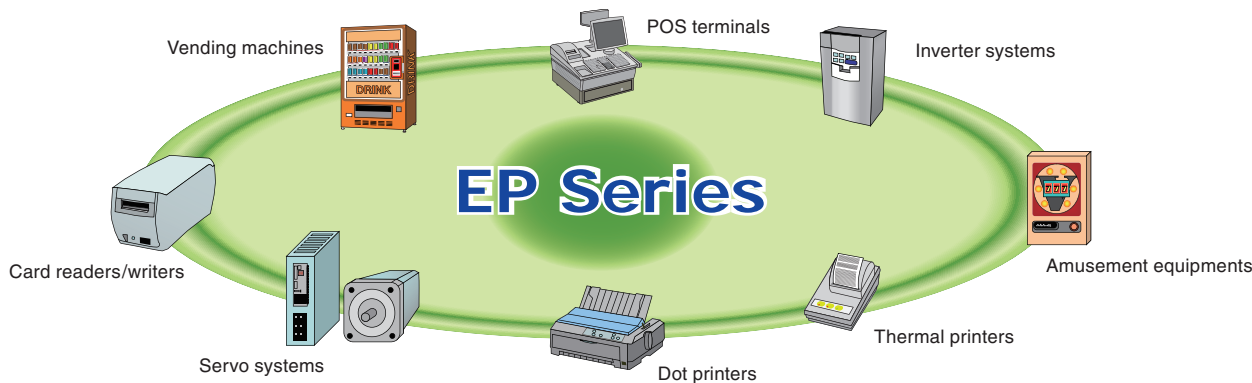
- V850 general-purpose microcontroller products
- Customizable PFESiP EP Series products



Solutions suitable for industrial equipment, office automation equipment, and amusement equipment

EP Series products can be used for the following purposes.

- Industrial equipment (motor control, communication control, and vending machines)
- Office automation equipment (thermal, dot, and photo printers, and card readers/writers)
- Other equipment (amusement equipments)



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