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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

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V850 family

Tool Letter

PCMCIA N-Wire Card IE-V850E1-CD-NW On-Chip Debug Emulator

Description

IE-V850E1-CD-NW is an on-chip debug emulator for NEC's 32-bit RISC microcontrollers based on V850ES or V850E cores incorporating a debug control unit (DCU). Together with optionally available integrated development environment (IDE), IAR's Embedded Workbench™ or Green Hills' Multi® 2000, N-Wire enables highly transparent emulation on user's target board.

On-Chip Debug Emulator IE-V850E1-CD-NW



Transparent emulation

- Single step, procedure step
- Forcible break
- 20 MHz communication speed

Break points

- 2 hardware break points
- 2000 software break points in RAM area
- Up to 8 software break points available in internal ROM/Flash area

Execution time measurement

- Resolution 100 ns
- Max. time 210 s

Memory monitor

- Internal and external memory can be read during program execution

Background Monitor

Direct Memory Modification (DMM)

- Internal and external memory can be modified during program execution
- PCMCIA card

Flash programming function

Easy connection

- Host interface PCMCIA card
- Target I/F: 5-pin JTAG

64 KB size limited IAR workbench included

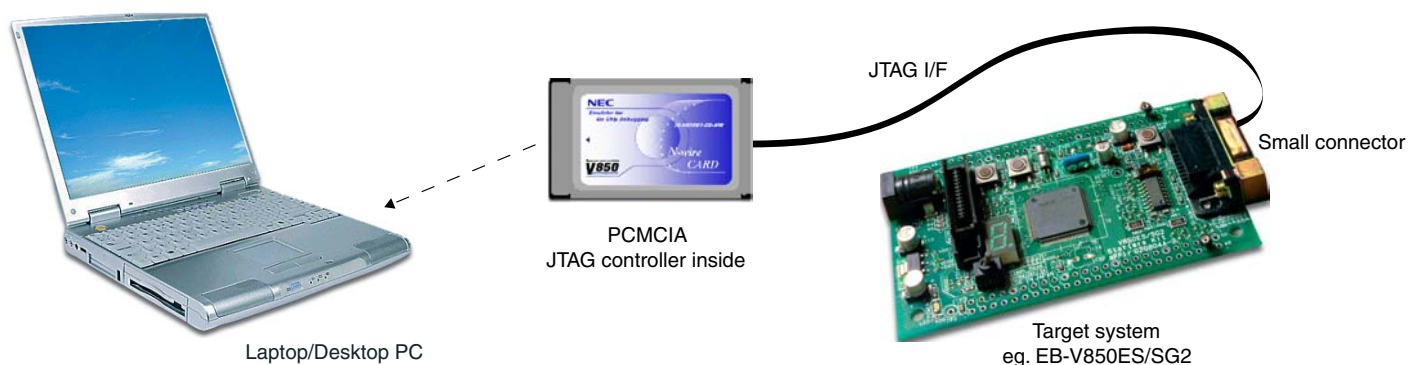
IAR Embedded Workbench™ and GHS MULTI® 2000 (Integrated development tool chains)

On-Chip Debug Emulator Toolset



PCMCIA N-Wire Card IE-V850E1-CD-NW On-Chip Debug Emulator

Tool Configuration Example



Ordering Information

N-Wire Card

Order Number	Description
IE-V850E1-CD-NW	On-chip Debug Emulator

For further information on NEC's V850 family or other NEC products visit our European website at www.ee.nec.de/v850

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