

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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V850 series

Tool Letter

In-Circuit Emulator IECUBE

QB-V850ERS1-ZZZ-EE

Description

The QB-V850ERS1-ZZZ-EE is a member of NEC's new in-circuit emulator series: IECUBE. This IECUBE member is used to emulate V850E/RS1 devices.

In-Circuit Emulator

USB Host Interface

- Rev. 2.0 supported

Device Emulation

- Frequency and voltage:
Same as the target device
 - max. up to 40 MHz
 - min. 4.0 V up to max. 5.5 V
- Memory capacity:
Same as the target device
 - up to 1 MB internal ROM
 - up to 60 KB internal RAM

Break Function

- Hardware - Execution: 10 points
Access: 6 points
- Software: 2000 points

Trace Functions

- Trace memory capacity of 256 K frames x 160 bit
- Trace modes are:
Speed priority or trace priority
- Trace events can be: Section, qualify, execution event and access event

Program Execution Function in Real Time

Real Time RAM Monitor Function

- 256 Kbytes x 8 points

Time Measurement

Clock: CPU clock or other dedicated clock
Maximum measurement: 195 hours
Maximum resolution: 20 ns
Timers used for measurement: 8
Minimum, maximum and average

Attachments

Software:

- Full IAR Embedded Workbench™
(size limited to 64 Kbyte hex code)

Hardware:

- Power supply
- USB interface cable
- USB Flash programmer (PG-FPL)

In-Circuit Emulator



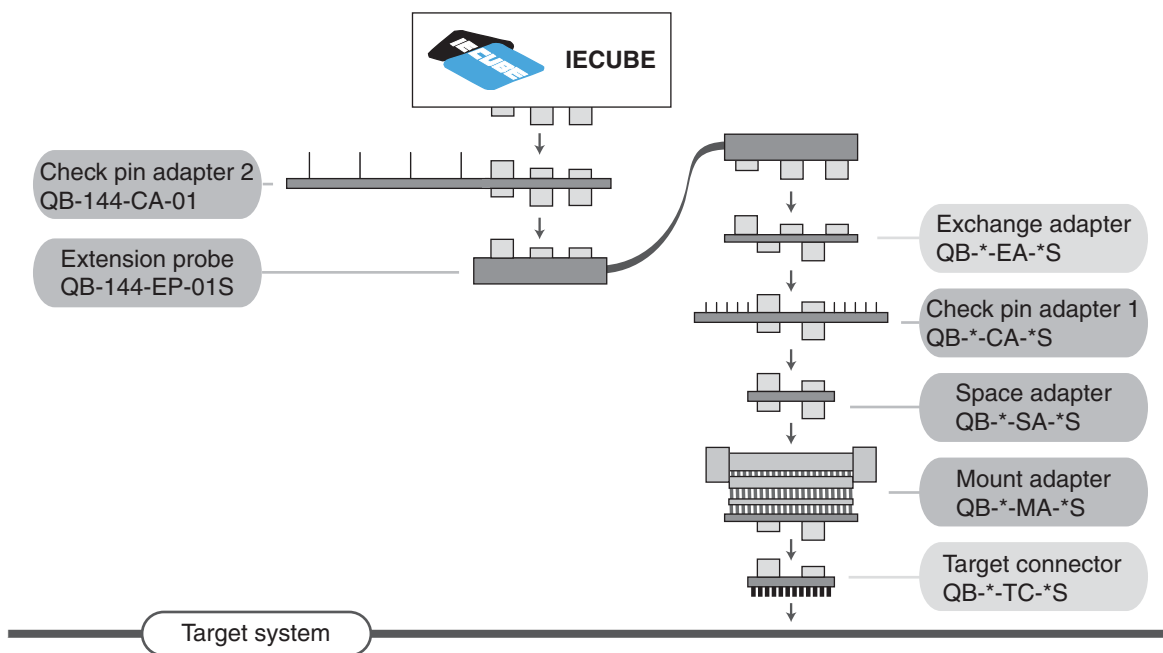
In-Circuit Emulator IECUBE

QB-V850ERS1-ZZZ-EE

Socket Tool Configuration

	100GC	
Exchange Adapter	QB-100GC-EA-01S	Mandatory
Target Connector	QB-100GC-TC-01S	
Mount Adapter	QB-100GC-MA-01S	Optional
Space Adapter	QB-100-SA-01S	
Check Pin Adapter 1	QB-100-CA-01S	
Check Pin Adapter 2	QB-144-CA-01	
Extension Probe	QB-144-EP-01S	

Order Number IECUBE In-Circuit Emulator: QB-V850ERS1-ZZZ-EE



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