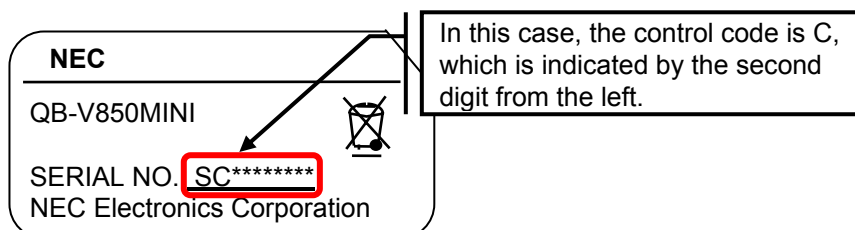# Microcontroller Technical Information

QB-V850MINI On-Chip Debug Emulator for V850 Microcontrollers Upgrade	Document No.	ZBG-CD-10-0010		1/2
	Date issued	March 11, 2010		
	Issued by	Development Tool Solution Group		
		Multipurpose Microcomputer Systems Division		
		Microcomputer Operations Unit		
Related documents		NEC Electronics Corporation		
QB-V850MINI User's Manual: U17638EJ3V0UM00	Document classification		Usage restriction	
QB-V850MINIL, QB-V850MINI (Control Code: A, B, C, E) Operating Precautions: ZUD-CD-10-0041		√	Upgrade	
			Document modification	
How to Upgrade QB-V850MINI: ZUD-CD-10-0042			Other notification	

1. Target product and version

Product	Description	Control Code[Note]	Upgrade Method

QB-V850MINI	On-chip debug emulator for V850 microcontrollers	A, B, C	For control code A or C:
			    Upgrade by the user
			For control code B:
			    Upgrade by sending the product to NEC
			    Electronics

Note The control code is the second digit from the left in the 10-digit serial number.

2. Upgrade details

The major revision is as follows:

- V850E2M microcontrollers are now supported.

For details, see *QB-V850MINIL, QB-V850MINI (Control Code: A, B, C, E) Operating Precautions* (ZUD-CD-10-0041). This document is posted on the MINICUBE2 information site shown below. After upgrading, the control code will be E.

URL: http://www.necel.com/micro/en/development/asia/v850/minicube.html

3. Upgrade method

Two types of upgrade are available: upgrade by the user and upgrade by sending the product to NEC Electronics.

3.1　Upgrade by a user (who uses a QB-V850MINI with control code A or C)

Download the latest version of the upgrade file (for firmware, FPGA data, etc.) available on the **Development Tools Download** page on the NEC Electronics website and upgrade the product by referring to *How to Upgrade QB-V850MINI* (ZUD-CD-10-0042), which is included with the upgrade file.

URL: http://www.necel.com/micro/en/ods/ → Click **Version-up Service**.
　　　Category:　　　Each Development Tool → MINICUBE_Software
　　　Product Name: QB-V850MINI
　　　Version:　　　Rev. E

3.2　Upgrade by sending the product to NEC Electronics (for customers who use a QB-V850MINI with control code B)

Upgrading by sending the product to NEC Electronics is available from March 11, 2010.

For details, contact an NEC Electronics sales representative or distributor.

The free upgrade period for products with control code B has expired, so you will be required to pay a fee for this upgrade.