

Microcontroller Technical Information

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QB-V850MINI On-Chip Debug Emulator for V850 Microcontrollers Usage Restrictions		Document No.	ZBG-CD-06-0097	1/1
		Date issued	December 8, 2006	
		Issued by	Development Tool Group Multipurpose Microcomputer Systems Division 4th Systems Operations Unit NEC Electronics Corporation	
Related documents	QB-V850MINI User's Manual: U17638EJ1V0UM00	Notification classification	√	Usage restriction
				Upgrade
				Document modification
				Other notification

1. Affected product and version

Product	Generic Name	Control Code ^{Note}	Remark
QB-V850MINI	MINICUBE	B	Control code A is not affected by restriction added in this document.

Note For the identification method for the control code, see the attachment.

2. New restriction

Restriction No. 2 has been added. See the attachment for details.

- No. 2 Bug related to heating due to defective parts being mounted

3. Workarounds

See the attachment.

4. Modification schedule

Products in which No. 2 is corrected are scheduled for release as follows.

Newly shipped products: Shipments as of December 2006 (control code: C)

Upgrade for already shipped products: Available from early December, 2006

* Note that this schedule is subject to change without notice. For the detailed release schedule of modified products, contact an NEC Electronics sales representative.

5. List of restrictions

See the attachment.

Notes on Using QB-V850MINI

This document describes the following items. Refer to the user's manual of the emulator for cautions on using the emulator.

- Restrictions not applicable to the target device but applicable to the emulator.
- Restrictions applicable to both the target device and emulator but correction is planned only for the emulator.
- Devices supported by QB-V850MINI

Refer to the following documents for the restrictions in the target device.

- User's manual of target device
- Restrictions notification document for target device

1. Product Version

Control Code ^{Note}	Remark
A	—
B	Change of board (no functional differences)
C	—

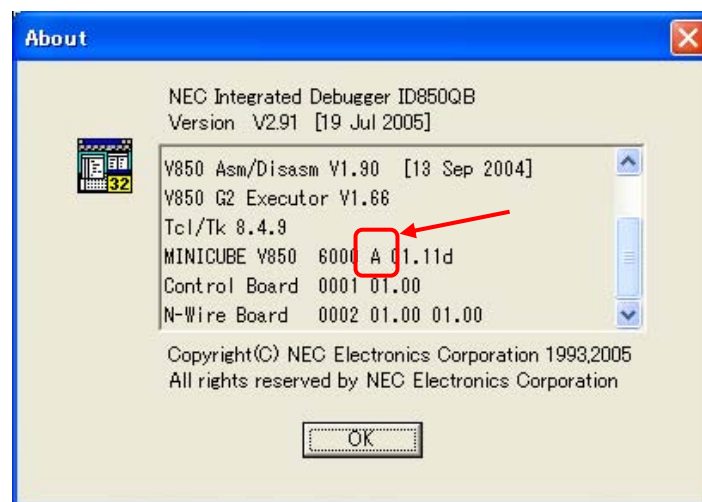
Note The “control code” is the second digit from the left in the 10-digit serial number printed on the sticker attached to the bottom side of MINICUBE (if it has not been upgraded).

If the product has been upgraded, the control code can also be checked with the following methods while the debugger is running.

- When using ID850QB

Click the [Help] menu and then click the About submenu to display the About dialog box.

“X” in “MINICUBE V850 **** X **. **” is the control code.



- When using Green Hills Software (GHS)'s debugger MULTI®

Execute the version command of 850eserv.

“X” in “MINICUBE Control Code=X” is the control code.

```

MULTI> target version
850eserv Version: 3.2346 (for MULTI V4.0.x)
IE type=MINICUBE (RCU1)
Executor Version=V850 G2 Executor V1.63 Copyright 2004
Device File Format Version=V2.18
Device File File Version=V1.00
MINICUBE Control Code=A
MINICUBE Firmware Version=V1.11
Control Board Version=V1.00
MINICUBE Board Version=V1.00 (FPGA Version=1.00)
  
```

2. Product History

No.	Bugs and Changes/Additions to Specifications	Control Code		
		A	B	C
1	Restriction when performing emulation of V850ES/Kx2 with in-circuit method	Permanent restriction		
2	Bug related to heating due to defective parts being mounted	○	×	○

×: Applicable, ○: Not applicable or already corrected

Remark The permanent restriction means a restriction that is not planned for correction.

3. Details of Bugs and Added Specifications

No. 1 Restriction when performing emulation of V850ES/Kx2 with in-circuit method

[Description]

When emulation of the V850ES/KE2, V850ES/KF2, V850ES/KG2, or V850ES/KJ2 is performed with the in-circuit method using the self-check board or QB-V850ESKX1H-DA, the following operations differ from those of the device.

- The P00 pin outputs a low level during reset.
- The subclock cannot be selected as the count clock for timer H1. If the subclock is specified as the count clock for timer H1 using TMHMD1 register, the operation is not guaranteed.

[Workaround]

There is no workaround.

Please regard this item as a permanent restriction.

No. 2 Bug related to heating due to defective parts being mounted

[Description]

Due to defective parts being mounted on the main unit board, the product may break down even if it is used according to the specifications. If breaks down, the power LED (red) will not light and the main unit may generate heat. This heat poses no risk of fire, but may cause a burn injury if direct contact with the product is maintained for a long time.

[Workaround]

There is no workaround. This bug has been corrected in products with control code C and later.

If you have a product with control code B, do not use it, but be sure to upgrade it. Products with control code A do not require upgrading.

The control code is the second digit from the left in the 10-digit serial number printed on the sticker attached to the bottom side of MINICUBE. The control code can also be checked using the debugger, but check it from the serial number, without turning power on.