### Microcontroller Technical Information

<table>
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<tr>
<th>QB-78F1026 In-Circuit Emulator for 78K0R/KC3-L (USB), 78K0R/KE3-L (USB)</th>
<th>Document No.</th>
<th>ZBG-CD-10-0026</th>
<th>1/1</th>
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<tbody>
<tr>
<td>Date issued</td>
<td>July 29, 2010</td>
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<td>Issued by</td>
<td>MCU Tool Product Marketing Department</td>
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<td>MCU Software Division</td>
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<td>MCU Business Unit</td>
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<td>Renesas Electronics Corporation</td>
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#### Usage Restrictions

**Related documents**
- QB-78F1026 In-Circuit Emulator for 78K0R/KC3-L (USB), 78K0R/KE3-L (USB) - Upgrade: ZBG-CD-10-0027
- Notification classification
  - √ Usage restriction
  - Upgrade
  - Document modification
  - Other notification

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1. **Affected product and version**

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<th>Product</th>
<th>Outline</th>
<th>Control Code Note</th>
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<tr>
<td>QB-78F1026</td>
<td>In-circuit emulator for 78K0R/KC3-L (USB), 78K0R/KE3-L (USB)</td>
<td>A</td>
</tr>
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</table>

**Note** The control code is the second digit from the left in the 10-digit serial number. To see if the product has been upgraded, click the ID78K0R-QB Help menu, select **About**, and then check the control code. X in **IECUBE **** X F/W: V**.** is the control code.

2. **New restriction**

Restriction No. 1 has been added. See the attachment for details.

3. **Workarounds**

See the attachment for details.

4. **Modification schedule**

Products in which No. 1 is corrected are scheduled for release as follows:

- **Newly shipped products (control code B):** Shipments as of July 30, 2010
- **Upgrade for already shipped products:** Available from July 30, 2010

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

5. **List of restrictions**

See the attachment.

6. **Document revision history**

| QB-78F1026 In-Circuit Emulator for 78K0R/KC3-L (USB), 78K0R/KE3-L (USB) - Usage Restrictions |
|-------------------------------------------------|-----------------------------------------------|
| Document Number                                | Issued on                                     | Description                                    |
| ZBG-CD-10-0026                                  | July 29, 2010                                 | 1st edition                                   |
Operating Precautions for QB-78F1026

This document describes the restrictions applicable to this emulator. Note that some restrictions have been corrected in later control codes.

See the following documents for the restrictions related to the target device:

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

Also see the user’s manual for cautions on using the emulator.

1. Product Version

The product versions of Renesas Electronics in-circuit emulators are indicated by a control code. The control code is the second digit from the left in the 10-digit serial number. To see if the product has been upgraded, click the ID78K0R-QB Help menu, select About, and then check the control code.

In Figure 2, X in IECUBE **** X F/W: V*.** is the control code.

![Figure 1. Checking the Control Code (Label on QB-78F1026)](image1)

In this case, the control code is A.

![Figure 2. Checking the Control Code (ID78K0R-QB)](image2)

In this case, the control code is A.
2. Restrictions

2.1 List of restrictions

<table>
<thead>
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<th>No.</th>
<th>Restrictions</th>
<th>Control Code</th>
<th>A</th>
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<td>1</td>
<td>Execution branching from RAM code to ROM code</td>
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<td>×</td>
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 jung: Not relevant, ×: Applicable, O: Corrected

2.2 Restriction details

No. 1  Execution branching from RAM code to ROM code

Description:
When execution branches from RAM code to ROM code, the now-invalid instruction at the address following the branch instruction is traced. This is only a problem with displaying the trace result; the program runs correctly.

Note that, if an event is specified for the invalid instruction, the event will actually occur.

Workaround:
There is no workaround.

Correction:
This issue will be corrected in QB-78F1026 with control code B.