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**QB-RL78G1C(Control Code : A)**R20UT2691EJ0200  
Rev.2.00  
Mar 27, 2014

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**Release Note**

This document describes the following items. Refer to the user's manual for cautions on using an in-circuit emulator.

- Restrictions not applicable to the target device but applicable to an in-circuit emulator
- Restrictions applicable to both the target device and an in-circuit emulator but the correction is planned only for the in-circuit emulator

Also refer to the following documents for the restrictions in the target device.

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

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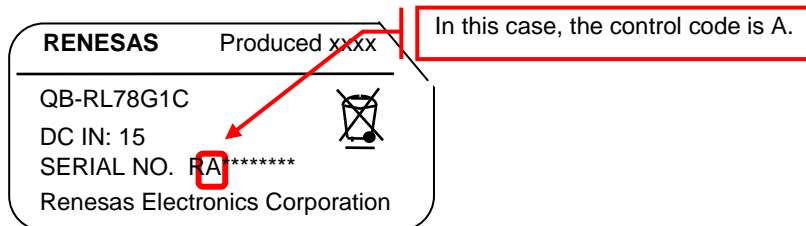
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## Chapter 1. Product version

### 1.1 Control Code

The product versions of Renesas Electronics in-circuit emulators IECUBE are indicated by a control code. The control code is the second digit from the left in the 10-digit serial number.

Figure 1. Checking Control Code (Label on QB-RL78G1C)



## Chapter 2. Restrictions

### 2.1 List of restrictions

Restrictions applicable, depending on the combination of control code of IECUBE and CubeSuite+ version.  
Please refer to 2.2 List of restrictions.

No.	Restrictions
1	Emulation of Low-speed operation with USB function module
2	Supplying negative reference voltage to the A/D Converter
3	The A/D conversion time when using 8 bit conversion mode

### 2.2 List of restrictions

IECUBE Control Code	CubeSuite+ version	Restriction number		
		1	2	3
A	V2.00.00	×	×	×
	V2.01.00 and later	○	○	○

×: Applicable, ○: Corrected

Remark QB-RL78G1C (control code A) is supported with CubeSuite+ V2.00.00 and later.

## 2.3 Details of restrictions

No.1	Emulation of Low-speed operation with USB function module
[Description]	If bit 3 of the system configuration control register is set "1" (DMRPU = "1") when using the low-speed operation, D+ is pulled up instead of D-. For that reason, USB function module cannot notify the USB host of connection as a low-speed device.
[Workaround]	Set the bit 3 of the system configuration control register to "0" (DMRPU = "0") and pull-up D- line on user system.
[Implementation]	This issue has been corrected in CubeSuite+ V2.01.00 and later.

No.2	Supplying negative reference voltage to the A/D Converter
[Description]	The following difference occurs between the target device and IECUBE about the analog reference voltage minus of the A/D converter. [Target device] When the ADREFM bit of ADM2 register is set to "1", the analog reference voltage minus of the A/D converter is the input voltage of an AVREFM terminal. [IECUBE] When the ADREFM bit of ADM2 register is set to "1", the analog reference voltage minus of the A/D converter is not the input voltage of an AVREFM terminal. The analog reference voltage minus of the A/D converter becomes the same voltage as VSS.
[Workaround]	There is no workaround
[Implementation]	This issue has been corrected in CubeSuite+ V2.01.00 and later.

No.3	The A/D conversion time when using 8 bit conversion mode
[Description]	8 bit conversion of QB-RL78G1C ends only the sampling time.
[Workaround]	There is no workaround
[Implementation]	This issue has been corrected in CubeSuite+ V2.01.00 and later.

## Chapter 3. Revision History

Rev.	Date	Description	
		Page	Summary
1.00	July 19, 2013	-	Newly created.
2.00	Mar 27, 2014	P4	Restriction matter No.1,2,3 was corrected CubeSuite+ V2.01.00 and later.

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