RENESAS

QB-RL78G14 (Control Code: A,B)

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
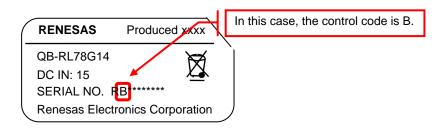
Contents

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-RL78G14)

In this case, the control code is B.

RENESAS   Produced xxxx

QB-RL78G14
DC IN: 15
SERIAL NO. RB*******
Renesas Electronics Corporation

Chapter 2. Changed Specifications

2.1   List of changed specifications

No.	Changed or Added Specifications	Control Code	
		A	B
1	Emulating the 3-wired serial I/O (CSI)	×	〇
2	Emulating the MCUs of the RL78/G14 group whose ROM sizes are 96 KB or greater.	×	〇

×: Change not implemented, 〇: Change implemented

2.2   Details of specifications

No.1   Emulating the 3-wired serial I/O (CSI)

【contents】 Supported emulating the 3-wired serial I/O (CSI**) whose baud rate is 16 Mbps or 12
            Mbps.

No.2   Emulating the MCUs of the RL78/G14 group whose ROM sizes are 96 KB or greater.

【contents】 Supported emulating the MCUs of the RL78/G14 group whose ROM sizes are 96 KB or
            greater

Chapter 3. Restrictions

3.1 List of restrictions

Restrictions applicable, depending on the combination of control code of IECUBE and CubeSuite+ version.

Please refer to 3.2 List of restrictions.

No.	Restrictions
1	On Supplying Negative Reference Voltage to the A/D Converter
2	On reading the RJ timer's count value from the Timer RJ Counter register 0 (TRJ0)

3.2 List of restrictions

IECUBE Control Code	CubeSuite+ version	Restriction number	
		1	2
A	V1.01.00	×	×
A	V1.01.01	×	×
B	E1.01.01a02 or later	○	×

×: Applicable, ○: Corrected

Remark 1. QB-RL78G14 (control code A) is supported with CubeSuite+ V1.01.00 and CubeSuite+ V1.01.01.

2. QB-RL78G14 (control code B) is supported with CubeSuite + E1.01.01a02 or later.

3.3 Details of restrictions

No.1	On Supplying Negative Reference Voltage to the A/D Converter
【Description】	Supplying the negative reference voltage to the A/D converter from the AVREFM pin cannot be emulated. So supply this voltage to the converter from VSS.
	When the IECUBE is operating, set bit 5 (ADREFM) of the A/D Converter Mode register 2 (ADM2) to 1, and supply the negative reference voltage to the A/D converter from the AVREFM pin, and the AVREFM pin will be pulled up by the voltage at the AVREFP pin through a 600-ohm resistor.
【Workaround】	There is no workaround
【Implementation】	This issue has been corrected in products with control code B or later.

No.2	On reading the RJ timer's count value from the Timer RJ Counter register 0 (TRJ0)
【Description】	The RJ timer's count value cannot correctly be read from the Timer RJ Counter register 0 (TRJ0): the immediately preceding value is read out.
	Note, however, that the functions of RJ timer, including timer interrupts, are emulated properly by the IECUBE, though its count value is not read out correctly.
【Workaround】	There is no workaround
【Implementation】	Correction is under discussion.

Chapter 4. Revision History

Document Number	Issued on	Description
R20UT0961EJ0100	February 23, 2012	Newly created.