RENESAS Tool News

Notes on Using In-Circuit Emulator QB-RL78G14 (IECUBE for RL78/G14 Group of MCUs)

When you use in-circuit emulator QB-RL78G14 (the IECUBE for the RL78/G14 group of MCUs), the following restrictions are imposed:

- On supplying negative reference voltage to the A/D converter (No. 1)
- On reading the RJ timer's count value from the Timer RJ Counter register 0 (TRJ0) (No. 2)

Here, No. X at the end of each item is a consecutive number for indexing the restrictions in QB-RL78G14.

1. Product Concerned

QB-RL78G14 with control code A

To check to see your product's control code, follow these steps:
(1) Start the self-diagnostic tool of the IECUBE to display the IEQBUTL dialog box.
(2) Click START in the SELF-TEST tab of the dialog box.
(3) In IECUBE Information of the SELF-TEST tab, look for the letter before "F/W" in such a representation as is shown below.

    Example: IECUBE RL78.78K0R: **** A F/W: **.**
             In this example, the control code is A.

2. Restrictions

2.1 On Supplying Negative Reference Voltage to the A/D Converter (No. 1)
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.

2.2 On reading the RJ timer's count value from the Timer RJ Counter register 0 (TRJ0) (No. 2)

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.

3. Schedule of Raising Restrictions

To raising Restriction No. 1, we are upgrading your emulator as follows:

Reception of application for upgrade starts from: January 23, 2012

For details, we inform you on RENESAS TOOL NEWS.

NOTICE: The above date is subject to change without notice. For faster action, contact your local Renesas Electronics marketing office or distributor.

We are going to raise Restriction No. 2 when the emulator is upgraded in future.