RENESAS Tool News

Notes on Using In-Circuit Emulator QB-RL78F12 (IECUBE for RL78/F12 Group of MCUs)

When you use the QB-RL78F12 in-circuit emulator (the IECUBE for the RL78/F12 group of MCUs), the following restrictions are imposed:

- On supplying the negative reference voltage to the A/D converter (No. 1)
- On using dual power supplies for devices having the EVDD pin (No. 2)
- On emulating the Voltage Detection Function (LVD) (No. 3)

Here, No. X at the end of each item is a consecutive number for indexing the restrictions in QB-RL78F12. They are the same as those used in the release note of the QB-RL78F12.

1. Product Concerned
QB-RL78F12 with revision control code A

To check to see your product's revision 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 revision control code is A.

2. Restrictions
2.1 On Supplying the Negative Reference Voltage to the A/D Converter (No. 1)
Do not supply the negative reference voltage to the A/D converter
through the AVREFM pin. Otherwise, the problem described below arises
if bit 5 (ADREFM) of the A/D Converter Mode register 2 (ADM2) is set to 1.
 Problem:
  The AVREFM pin is pulled up to the potential of the AVREFP pin
  through a 600-ohm resistor.
So, be sure to supply the negative reference voltage through the VSS pin.

2.2 On Using Dual Power Supplies for Devices Having the EVDD Pin (No. 2)

Do not apply different voltages to the VDD and the EVDD pin (for example, VDD = 3.3 V and EVDD = 1.8 V) because these pins are short-circuited in the IECUBE. To use these pins, be sure that the same voltage is applied to both of them.

2.3 On Emulating the Voltage Detection Function (LVD) (No. 3)

Do not emulate the Voltage Detection Function (LVD).
This emulation is not supported.

3. Schedule of Raising Restrictions

To raise the above three restrictions, we are upgrading your emulator.
We will receive your application for upgrade from October 19, 2012.

For details of upgrading, see RENESAS TOOL NEWS Document No. 121016/tn7.
This can be seen on the following Web page, which will be published on October 19, 2012:

https://www.renesas.com/search/keyword-search.html#genre=document&q=121016tn7

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