RENESAS Tool News

Note on Using Application Leading Tool RL78, Applilet3 for RL78

When using application leading tool RL78, Applilet3 for RL78, take note of the problems on the following points that are described in this note:

1. Code Generated for Comparator Settings
   (Applicable Products: RL78/I1A Group)

2. DTC Settings
   (Applicable Products: RL78/F13, RL78/F14 Groups)

3. Saving Projects with Settings for the A/D Convertor
   (Applicable Products: RL78/L1C Group)

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1. Code Generated for Comparator Settings

1.1 Product and Version Concerned
   Applilet3 for RL78 V1.06.00

1.2 MCUs Concerned
   RL78 Family: RL78/I1A group MCUs in 30-pin packages

1.3 Description
   When a comparator is set, code for clock supply is not output.

1.4 Workaround
   Add the statement for clock supply given below at the beginning of the comparator initialization function (R_COMP_Create() in r_cg_comp.c) after the code has been generated.

   PGACMPEN = 1U; /* Supply the comparator clock. */
   This should be added every time code is generated.

1.5 Schedule for Fixing the Problem

This problem will be fixed in the next version.

2. DTC Settings

2.1 Product and Version Concerned
   Applilet3 for RL78 V1.06.00

2.2 MCUs Concerned
   RL78 Family: RL78/F13, RL78/F14 groups

2.3 Description
   (1) A project is not saved after code generation, when high-speed
       transfer by the DTC is set.
   (2) DTC activating source numbers are not set correctly for the DTC
       vector addresses.

2.4 Workaround
   (1) For 2.3 (1)
       After generating code, release the setting for high-speed transfer
       by the DTC before saving the project.
   (2) For 2.3 (2)
       After generating code, make correct DTC vector address settings (*)
       in the DTC initialization function (void R_DTC_Create() in r_cg_dtc.
       c) with reference to the manual indicated below.
       Note that the above modification will be needed every time code is
       generated.
        *: x in dtc_vectortable[x] is the number of the activating source.

       RL78/F13, F14 User's Manual: Hardware
        Table 19-5 DTC Activation Sources and DTC Vector Addresses

https://www.renesas.com/search/keyword-
search.html#genre=document&q=r01uh0368

       Example of the modification: Setting the completion of reception by
       UART0 as the source for DTC activation

       Set the correct activating source number "10" (reception by
       UART0 completed, transfer by CSI01 completed or CSI01 buffer
       is empty, or transfer by IIC01 completed), otherwise the wrong
       activating source number "9" (A/D conversion completed) will
       be set.

         Before modification: dtc_vectortable[9] = xx;
         After modification: dtc_vectortable[10] = xx;

xx: Output value of code generation

2.5 Schedule for Fixing the Problem
   This problem will be fixed in the next version.

3. Saving Projects with Settings for the A/D Convertor

3.1 Product and Version Concerned
   Application Leading Tool for RL78 V1.05.00

3.2 MCUs Concerned
   RL78 Family: RL78/L1C group

3.3 Description
   When a project configured with the below settings for the A/D convertor
   is read, the "A fatal error occurred" dialog box is displayed, after
   which CS+ operation is terminated.
     - Selection of analog input pin from among ANI0-ANI2, ANI5, and ANI6:
       ANI0-ANI1
     - VREF(+)setting:
       AVREFP
     - VREF(-)setting:
       AVREFM

3.4 Workaround
   After the code generation, change the setting for "analog input pin
   setting for ANI0-ANI2, ANI5, and ANI6" to "ANI0-ANI2" and save the
   project.

3.5 Schedule for Fixing the Problem
   This problem will be fixed in the next version.