RENESAS Tool News

A Note on Using the Real-Time OSes M3T-MR308 and M3T-MR30

Please take note of the following problem in using the real-time OSes M3T-MR30 and M3T-MR308 (which are used for the M16C family of MCUs):

- On using task pause function

1. **Products Concerned**

   (1)   M3T-MR308 V.1.20 Release 1, Release 1A, and Release 1B
   In this product, Problem 1 described in Section 2 arises.

   (2)   M3T-MR308 V.1.00 Release 1 through V.1.20 Release 1B
   M3T-MR30 V.3.00 Release 1 through V.3.30 Release 2
   In these products, Problem 2 described in Section 2 arises.

   NOTES:
   M3T-MR308: used for the M32C/90, M32C/80, and M16C/80
   M3T-MR30: used for M16C/60, M16C/30, M16C/20, M16C/10, and M16C/Tiny series

2. **Description**
   Either of the following problems may arise if programs containing the task pause function of the products concerned are loaded into the emulator debugger to debug:

   Problem 1:   The value of the program counter in a task that is
   in the PAUSE state is incorrectly displayed in the
   MR Task Pause window of the emulator debugger.

   Problem 2:   The task cannot be exited from the PAUSE state.
   (If this problem occurs, application programs may
   not thereafter run properly.)

3. Conditions

(1) Problem 1 inevitably occurs if a task is entered into the PAUSE state by pressing the PAUSE or COME button in the MR Task Pause window.

(2) Problem 2 may occur if a task is entered into the PAUSE state by pressing the PAUSE button in the MR Task Pause window.

NOTE:
If task_pause is set to YES in the configuration file, neither Problem 1 nor Problem 2 above occurs unless the corresponding condition mentioned above is met.

4. Workaround

(1) For Problem 1, stop executing the program once; then restart it. The value of the program counter will be correctly displayed.

(2) For Problem 2, there is no solution. So reset the emulator debugger; then re-execute the program.

5. Schedule of Fixing the Problem
We plan to fix this problem in the next release of the products.