RENESAS Tool News

A Note on Using the M16C R8C Debugger Package and the KD30 Monitor Debugger

Please take note of the following problem in using the M16C R8C debugger package and the KD30 monitor debugger, which are used for the M16C/60, M16C/30, M16C/20, M16C/10, M16C/Tiny, and R8C/Tiny series of MCUs:

- On debugging a target system serially connected to the host PC

1. **Products and Versions Concerned**
   - M16C R8C debugger package V.1.00 Release 00 and Release 01
   - KD30 monitor debugger V.4.10 Release 1

2. **Description**
   Consider the case where a target system is serially connected* to the host PC using the UART function of the R8C/14, R8C/15, R8C/16, and R8C/17 groups of MCUs.
   If three or more breakpoints are set during debugging, the program halts at places where breakpoints had been set and now are cleared, or does not halt at breakpoints newly set.

   * For details of serial connection using the UART function, go to HERE.

3. **Workaround**
   (1) For the M16C R8C debugger package V.1.00 Release 01
       Use any of the following MCU files included with the product according to your target MCU (these MCU files limit the maximum number of breakpoints settable to two):
       R5F21144UART.MCU
       R5F21145UART.MCU
       R5F21146UART.MCU
       R5F21147UART.MCU

(2) For the M16C R8C debugger package V.1.00 Release 00 and
the KD30 V.4.10 monitor debugger
Don't set three or more breakpoints at the same time.
Or, revise your debugger package to V.1.00 Release 01;
then sidestep the problem the way described in (1) above.

4. Schedule of Fixing the Problem

We plan to fix this problem in the next release of the M16C R8C debugger package. After the problem fixed, the maximum number of breakpoints settable will be raised to four in serial connection using the UART function.
* For details, refer to the RENESAS TOOL NEWS issued on Oct. 1, 2005.

When you are using the KD30, upgrade it to the next release of the M16C R8C debugger package. You are able to upgrade your KD30 to any of the debugger packages of V.1.00 Release 01 and later free of charge.
For the relation between the KD30 and the M16C R8C debugger package, see RENESAS TOOL NEWS "The Debugger Package V.1.00 Release 00 for the M16C/60, M16C/30, M16C/20, M16C/10, M16C/Tiny, and R8C/Tiny Series of MCUs Released" Doc. NO. RSO-R0C30600DBW00-050126D, issued on January 26, 2005.