RENESAS Tool News

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A Note on Using the Debuggers for the M32R, M16C, H8 (H8/300H Tiny Series Only), and 740 MCU Families

Please take note of the following problem in using the debuggers for the M32R, M16C, H8 (H8/300H Tiny series only), and 740 MCU families:

- On referencing member variables of a structure, union, or class

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1. **Products Concerned**

(1) Debuggers for the M32R family
M3T-PD32RM, all the versions of
M3T-PD32R V.4.00 Release 1 and later
M3T-PD32RSIM V.2.00 Release 1 and later

(2) Debuggers for the M16C family
M32C PC7501 emulator debugger V.1.00 Release 00 *
M32C PC4701 emulator debugger V.1.00 Release 00 *
M32C compact emulator debugger V.1.00 Release 00 *
M32C simulator debugger V.1.00 Release 00 *
M32C FoUSB/UART debugger V.1.00 Release 00 *
M3T-PD308F, all the versions of
M3T-PD308MF V.1.00 Release 1
M3T-PD308 V.4.00 Release 1 and later
M3T-KD3083 V.3.00 Release 1 and later
M16C R8C PC7501 emulator debugger V.1.00 Release 00--
-V.1.01
Release 00 *
M16C PC4701 emulator debugger V.1.00 Release 00--
V.1.01 Release 00 *
M16C R8C compact emulator debugger V.1.00 Release

00--V.1.01
Release 00 *
M16C R8C simulator debugger V.1.00 Release 00--V.1.01
Release 00 *
M16C R8C FoUSB/UART debugger V.1.00 Release 00--
V.1.01 Release 00 *
M3T-PD30F, all the versions of
M3T-PD30MF V.1.00 Release 1
M3T-PD30 V.7.00 Release 1 and later
M3T-KD30 V.4.00 Release 1 and later

(3) Debuggers for the H8 family (H8/300H Tiny series only)
H8/Tiny compact emulator debugger V.1.00 Release 00 *

(4) Debuggers for the 740 family
740 PC4701 emulator debugger V.1.00 Release 00 *
740 compact emulator debugger V.1.00 Release 00 *
740 simulator debugger V.1.00 Release 00 *

* These debuggers are managed by the High-performance Embedded Workshop. For the emulators supported by the above debuggers, see the datasheets of each debugger.

2. Description

When structure member variables, union member variables, or class member variables are displayed in such a window as the C Watch window, which is capable of referencing variables, a message may appear saying "not active", resulting in no variables being referenced.

2.1 Condition

This problem occurs if member names of a structure, union, or class begin with a letter of 'e' or 'E' immediately followed by a numeral.

Example

```
-------------------------------------------------
  typedef struct {
        int e2;    /* Not referenced */
        int e2p;   /* Not referenced */
        int ee2;   /* Referenced */
  } STRUCT;
```

```
   STRUCT st;
-------------------------------------------------
```

In the above example, if structure object name st is registered* with the C Watch window and then expanded, structure member variables st.e2 and st.e2p cannot be referenced.

* For how to register structure objects, see the help file of each debugger.

3. Workaround

Before referencing any member variable concerned, enclose the member name with parentheses. For example, if you need to reference st.e2 and st.e2p described in 2.1, register them with the C Watch window under the names of st.(e2) and st.(e2p).

4. Schedule of Fixing the Problem

We plan to fix this problem in the next release of the products concerned.

NOTICE:
Because we have no plans of revising the M3T-PDxxx and M3T-KDxxx, which are used for the M16C family, please use their successors.
For detailed information on them, see the following Web pages:

- RENESAS TOOL NEWS "The Emulator Debuggers for the M32C/80, and M16C/80 Series Published" issued on October 1, 2005
- 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" issued on January 26, 2005.
