# RENESAS Tool News

**RENESAS TOOL NEWS on December 16, 2006: 061216/tn7**

## A Note on Using the Debuggers for the M32C MCU Series

Please take note of the following problem in using the simulator and emulator debuggers for the M32C series*:

- With referencing values of IO register in the IO window

* Generic name of the M32C/90, M32C/80, and M16C/80 series

### 1. Products Concerned

(1) M32C simulator debugger V.1.02 Release 00
(2) M32C PC7501 emulator debugger V.1.02 Release 00
(3) M32C PC4701 emulator debugger V.1.02 Release 00
(4) M32C compact emulator debugger V.1.02 Release 00
(5) M32C FoUSB debugger V.1.02 Release 00
(6) M32C E8 emulator debugger V.2.00.00, V.2.01.00 and V.2.01.01

### 2. Descriptions

The following problems arise if any of the above products concerned is used for debugging programs for any member of the M32C MCU series:

(1) If the values of the CANi slot buffer select registers, C0SBS, C1SBS, and C2SBS, are expanded in bit levels and referenced in the IO window, values of the three bits from bit 5 to bit 7 are displayed instead of values of the four bits from bit 4 to bit 7. *

* Values of the four bits from bit 4 to bit 7 in C0SBS, C1SBS, and C2SBS are displayed in the Name column of the IO window as follows:

| Register | Displayed in the IO window |
|---|---|
| C0SBS | buffer1_c0sbs |

| | |
|---|---|
| C1SBS | buffer1_c1sbs |
| C2SBS | buffer1_c2sbs |

(2) The DMA2 request source select register (DM2SL) and the DMA3 request source select register (DM3SL) are not provided in the IO window, so their values cannot be referenced.

## 3. Workaround

Use the problem-fixed IO file of each debugger by going through the following steps:

(1) Download the problem-fixed IO files for the debuggers you want to use from the Web page at
http://tool-support.renesas.com/eng/toolnews/061216/tn7.htm
(to be opened from January 12, 2007 on).
The names of the zip files to be downloaded are as follows:
(a) m32c_sim_io_file.zip (157KB) :for the M32C simulator debugger
(b) m32c_pc7501_io_file.zip (137KB):for the M32C PC7501 emulator debugger
(c) m32c_pc4701_io_file.zip (48KB):for the M32C PC4701 emulator debugger
(d) m32c_cpe_io_file.zip (137KB):for the M32C compact emulator debugger
(e) m32c_fousb_io_file.zip (157KB):for the M32C FoUSB/UAER debugger:
(f) m32c_e8_io_file.zip (111KB):for the M32C E8 emulator debugger:

(2) Decompress the downloaded files to obtain their IO files (xxx.io).

(3) Overwrite the previous IO files with the IO files in (2) above.
The previous IO files are stored in the following folders when the debuggers have been installed in the folder
"C:¥Program Files¥Renesas¥Hew"
(a) M32C simulator debugger:
C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥PDTarget¥PD308SIM¥IO Files
(b) M32C PC7501 emulator debugger:
C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥PDTarget¥PD308F¥IO Files
(c) M32C PC4701 emulator debugger:
C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥PDTarget¥PD308¥IO Files
(d) M32C compact emulator debugger:
C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥PDTarget¥PD308MF¥IO Files
(e) M32C FoUSB debugger:
C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥PDTarget¥KD308¥IO Files
(f) M32C E8 emulator debugger

C:¥Program Files¥Renesas¥Hew¥
Tools¥Renesas¥DebugComp¥Platform¥E8¥E8M32C¥IOFiles

(4) Launch the High-performance Embedded Workshop and click the Browse button in the Set I/O File dialog box.* Among the list of the IO files that appear, select the IO files with which you overwrote the previous ones in Step (3).

* Right-click an unoccupied area of the IO window and open the pop-up menu; then select the Load IO File command. The Set I/O File dialog box will appear.

## 4. Schedule of Fixing the Problem

We plan to fix this problem in the next release of each debugger.

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