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A Note on Using the E8a and E8 Emulator Software Products

When you use the E8a and E8 Emulator Software products, take note of the following problem:

 With downloading programs extending over the data flash area and the program ROM or program ROM2 area; or manipulating data on memory in those areas

1. Products and Versions Concerned

- (1) R8C E8a Emulator Debugger V.1.03.00 and later
- (2) M16C E8a Emulator Debugger V.1.01.00 and later
- (3) M16C E8 Emulator Debugger V.2.03.00 and later

How to check for the version number of your emulator debugger To check for the version number of the emulator debugger you are using, follow these steps:

- (1) In High-performance Embedded Workshop, open the Tools menu and select the Administration command. The Tool Administration dialog box appears, where the Registered Components are provided in the list view with the Component and Version columns.
- (2) In the Component column, search for the component name of *****
 SYSTEM under the Debugger Components folder, where "*****" denotes
 the name of your emulator debugger, and in the Version column, you
 see the version number of your emulator debugger next to the right
 of the file name searched for.

2. Description

When you download programs extending over the following areas or manipulating data on memory in those areas (by using the Set, Fill, and Move instructions), data may not be written into the program ROM or program ROM2 area:

- Data flash and program ROM areas in R8C E8a Emulator Debugger
- Data flash and program ROM2 areas in M16C E8a Emulator Debugger and M16C E8 Emulator Debugger

3. Conditions

3.1 In R8C E8a Emulator Debugger

This problem arises if the conditions described in A's below are both satisfied, or those in B's are all satisfied:

- A-1 In the Emulator Setting dialog box that appears when the debugger is invoked, the Program Flash mode is selected.
- A-2 As the MCU whose memory is to be programmed, either of the following is selected:
 - Any MCU of the R8C/3x series the capacity of whose program ROM is 48 kilobytes or greater and that of data flash is
 4 kilobytes
 - Any MCU of the R8C/Lx series the capacity of whose program ROM is 48 kilobytes or greater and that of data flash is
 4 kilobytes
- B-1 In the Emulator Setting dialog box that appears when the debugger is invoked, any mode except "Program Flash" is selected.
- B-2 The firmware program is placed in the block A or B area of data flash.
- B-3 Debugged is a system designed with any MCU of the R8C/3x series the capacity of whose program ROM is 128 kilobytes and that of data flash is 4 kilobytes.

3.2 In M16C E8a Emulator Debugger

This problem arises if the following conditions are both satisfied:

- (1) In the Emulator Setting dialog box that appears when the debugger is invoked, the Program Flash mode is selected.
- (2) As the MCU whose memory is to be programmed, either of the following is selected:
 - Any MCU of the M16C/5x series
 - Any MCU of the M16C/6x series except those without program ROM2

3.3 In M16C E8 Emulator Debugger

This problem arises if the following conditions are both satisfied:

- (1) In the Emulator Setting dialog box that appears when the debugger is invoked, the Program Flash mode is selected.
- (2) As the MCU whose memory is to be programmed, any MCU of the M16C/64 group is selected.

4. Workarounds

To avoid this problem, use either of the following ways:

- (1) Write programs into the memory by using not the emulator debuggers but Flash Development Toolkit.
- (2) If you debug your system by using R8C E8a Emulator Debugger, place

the firmware program in Block C of the data flash area or the program ROM area.

5. Schedule of Fixing the Problem

We plan to fix this problem in the next release of E8a Emulator Software. But sorry that we have no plan to do it in E8 Emulator Software.

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