

RENESAS TOOL NEWS on October 1, 2007: 071001/tn6

A Note on Using the E10A-USB and E200F Emulator Software

Please take note of the problem described below in using the E10A-USB and E200F emulator software, which are used for members of the SuperH RISC engine MCU family.

1. Products Concerned

1.1 The E10A-USB Emulators

Product type:	E10A-USB		
Type names:	HS0005KCU01H and HS0005KCU02H		
Versions of the emulator software:	V.2.09 Release 00 and earlier		
Target MCUs:	SH7260 series, SH7201 and SH7203 groups, SH7200 series, and SH7670 group, SH- Ether		

1.2 An E200F Emulator

Product type:	E200F	
Type names:	R0E0200F1EMU00	
Versions of the emulator software:	V.2.04 Release 00 and earlier	

Target MCUs: The same as in E10A-USB

2. Problem

If the user program is halted at a break point during the period from the issuance of an instruction causing an FPU exception to the cycle where an FPU exception handling request is generated, the emulator software provides the incorrect contents for the floating-point registers listed below.

Note, however, that if the user program is restarted after this problem has occurred, these floating-point registers properly operate in the user program.

The floating-point registers whose contents are displayed incorrectly:

(1) The FPRi registers (16 floating-point registers):
FPRO, FPRI, FPR2, FPR3, FPR4, FPR5, FPR6, FPR7,
FPR8, FPR9, FPR10, FPR11, FPR12, FPR13, FPR14, and FPR15

(2) The Fri registers (16 single precision floating-point registers):

FR0 through FR15 (FPR0 through FPR15 are assigned to these.)

(3) The DRi registers (8 pairs of double precision floating-point or single precision floating-point registers):

DR0 (FR0 and FR1), DR2 (FR2 and FR3), DR4 (FR4 and FR5), DR6 (FR6 and FR7), DR8 (FR8 and FR9), DR10 (FR10 and FR11), DR12 (FR12 and FR13), and DR14 (FR14 and FR15)

3. Workaround

If this problem has arisen, perform step execution. The contents of the above floating-point registers will be provided properly in the emulator software.

4. Schedule of Fixing the Problem

We plan to fix this problem in the emulator software V.2.11 Release 00 and later for the E10A-USB emulators; and in the emulator software V.2.06 Release 00 and later for the E200F emulators.

[Disclaimer]

The past news contents have been based on information at the time of publication. Now changed or invalid information may be included. The URLs in the Tool News also may be subject to change or become invalid without prior notice.