RENESAS Tool News

E8a Emulator Software
Revised to V.1.03 Release 00

We have revised the emulator software for the E8a on-chip debugging emulator from V.1.02 Release 00 to V.1.03 Release 00. The emulator software and the emulator are used for debugging systems designed with MCUs of M16C, R8C, 740, H8 and H8S families.

1. Descriptions of Revision

1.1 Emulator Debuggers Revised

The following emulator debuggers, included in E8a Emulator Software, have been revised:
- R32C E8a Emulator Debugger to V.1.00.01
- M32C E8a Emulator Debugger to V.1.03.00
- M16C E8a Emulator Debugger to V.1.03.00
- R8C E8a Emulator Debugger to V.1.03.00
- 740 E8a Emulator Debugger to V.1.03.00
- H8 Tiny/Super Low Power E8a Emulator Debugger to V.1.04.00
- H8S/Tiny E8a Emulator Debugger to V.1.02.00

1.2 Supported MCUs Increased

The following MCUs have been added to the support line:
(1) In the R32C/100 series, M16C family
- R5F64185 and R5F64186 (R32C/118 group)
- R5F64514, R5F64515, R5F6451M, and R5F6451N (R32C/151 group)
- R5F64524, R5F64525, R5F6452M, and R5F6452N (R32C/152 group)
- R5F64534, R5F64535, R5F6453M, and R5F6453N (R32C/153 group)
- R5F64561, R5F64562, R5F64563, R5F6456F, R5F6456G, and R5F6456H (R32C/156 group)
- R5F64571, R5F64572, R5F64573, R5F6457F, R5F6457G, and 5F6457H (R32C/157 group)
- R5F64600, R5F6460E, R5F64601, and R5F6460F (R32C/160 group)
- R5F64610, R5F6461E, R5F64611, and R5F6461F (R32C/161 group)

(2) In the R8C/3x series, R8C family
   - R5F21357A, R5F21358A, R5F2135AA, and R5F2135CA (R8C/35A group)
   - R5F21364A, R5F21365A, R5F21366A, R5F21367A, R5F21368A, R5F2136AA,
      and R5F2136CA (R8C/36A group)
   - R5F21386A, R5F21387A, R5F21388A, R5F2138AA, and R5F2138CA
      (R8C/38A group)
   - R5F21346E, R5F21347E, R5F21348E, R5F2134AE, and R5F2134CE
      (R8C/34E group)
   - R5F21346F, R5F21347F, R5F21348F, R5F2134AF, and R5F2134CF
      (R8C/34F group)
   - R5F21346G, R5F21347G, R5F21348G, R5F2134AG, and R5F2134CG
      (R8C/34G group)
   - R5F21346H, R5F21347H, R5F21348H, R5F2134AH, and R5F2134CH
      (R8C/34H group)
   - R5F21368E, R5F2136AE, and R5F2136CE (R8C/36E group)
   - R5F21368F, R5F2136AF, and R5F2136CF (R8C/36F group)
   - R5F21368G, R5F2136AG, and R5F2136CG (R8C/36G group)
   - R5F21368H, R5F2136AH, and R5F2136CH (R8C/36H group)
   - R5F21388E, R5F2138AE, and R5F2138CE (R8C/38E group)
   - R5F21388F, R5F2138AF, and R5F2138CF (R8C/38F group)
   - R5F21388G, R5F2138AG, and R5F2138CG (R8C/38G group)
   - R5F21388H, R5F2138AH, and R5F2138CH (R8C/38H group)
   - R5F213G2A, R5F213G4A, R5F213G5A, and R5F213G6A (R8C/3GA group)
   - R5F213J2A, R5F213J4A, R5F213J5A, and R5F213J6A (R8C/3JA group)

(3) In the H8S/Tiny series, H8S family
   - H8S/20115F and H8S/20114F (H8S/20115 device group)
   - H8S/20215F and H8S/20214F (H8S/20215 device group)
   - H8S/20235F and H8S/20234F (H8S/20235 device group)

1.3 Functions Modified and Introduced
   (1) In all the emulator debuggers
      Made compatible with the 32-bit edition of Windows Vista(R).
      On this OS, you can run all the emulator debuggers included
      in E8a Emulator Software with your user rights.

      Note that these debuggers still remain incompatible with the 64-bit
      edition of Windows Vista(R).

   (2) In M16C E8a Emulator Debugger and R8C E8a Emulator Debugger
      The MCU group and the settings of layout of the firmware specified
      at creating the project can be reflected in the Emulator Setting
      dialog box of each debugger.

1.4 Problem Fixed and Function Improved (in H8S/Tiny E8a Emulator Debugger)

First, the following problem has been fixed in E8a Emulator Software V.1.03 Release 00:

When a checksum is calculated with the Writing Flash Memory mode selected in E8a Emulator Software on targeting MCUs of H8S/Tiny series, an unnecessary value of 4 KB multiplied by H'FF, that is H'FF000, is added to the calculated result.

Second, the data flash area has been added to the targets of programming and checksum calculation in E8a Emulator Software V.1.03 Release 00. The related specifications in E8a Emulator Software V.1.02 Release 00 and V.1.03 Release 00 are as follows:

Version of E8a Emulator Software	Target areas	
	Programming	Checksum Calculation
V.1.02 Release 00	Flash	Flash (See NOTE.)
V.1.03 Release 00	Flash and Data Flash	Flash and Data Flash

NOTE: In this case arises a problem that unnecessary 4 KB is added to the Flash area.

2. How to Update Your Product

On-line update is available free of charge. Update yours in either of the following ways:

(1) Use AutoUpdate Utility. This service will be available on and after August 6.
Note that if you update yours in this way, yours is updated by using the debugger-package edition described in NOTICES below.

(2) Download either of the update programs of the V.1.03 Release 00 product, full-package and debugger-package editions described in NOTICES below, from the Web site at:
http://www.renesas.com/en/e8a_download
Then execute it. This Web site will be opened from August 5 on.
The above URL is one of our global sites (in English).

You are able to select either of the following two update programs:
(a) Full-package edition
   This edition contains the full set of the emulator debuggers
   for the E8a emulator, High-performance Embedded Workshop, the
   evaluation version of the related C compiler package, the
   user's manual, and AutoUpdate Utility.
   If you update yours by using this edition in the development
   system where High-performance Embedded Workshop V.4.05.00 or
   earlier resides, it will be updated to V.4.05.01.
(b) Debugger-package edition
   This only contains the full set of the emulator debuggers for
   the E8a emulator and the user's manual. Since High-performance
   Embedded Workshop is not included, install its V.4.05.01 product
   or later one onto your PC in advance if yours is earlier than
   V.4.05.01.