We have revised the simulator debugger M3T-PD32RSIM from V.2.10 Release 1A to V.3.00 Release 00. This simulator debugger is used for the M32R family of MCUs.

1. Descriptions of Revision

1.1 Program and Functions Introduced

The following program and functions have been introduced:

(1) The real-time OS compliant to uITRON 4.0 specifications (for the M32R family of MCUs): This enables you to debug target programs that run on the M3T-MR32R/4 V.4.00 Release 00 or later.

(2) Supported the object files in the ELF/DWARF2 format created by the C/C++ compiler package M3T-CC32R V.5.00 Release 00 (for the M32R family; to be released on this July 16). This enables you to perform source-level debugging of programs written in C++ language by using the M3T-CC32R.

(3) The Data Trace window: This analyses results of real-time trace measurement and displays data access information (reads from and writes into memory) graphically.

(4) The AddPath script command: This enables you to use search paths (directory path names) for searching for source files.

(5) Supported in-place editing, split views, and highlighting of modified data in the Memory, ASM Watch and C Watch windows.

(6) Reverse scrolling curing the Program or Source window being displayed in DIS (disassemble) mode.
1.2 Improvements Made

The following improvements have been made:

(1) Trace window

(a) Several display modes are selectable simultaneously. If disassemble and source modes are both selected, results of disassembling are displayed immediately after each source line.

(b) Results of trace measurement are displayed using the user-defined color-code, for example, red for reads from memory and blue for writes into memory.

(c) Time information of trace data obtained by trace measurement is displayed in any of the following three types:

   Absolute Time: Elapsed time from beginning of program execution to trace measurement of a selected item of data

   Difference: Differential time between trace measurement of a selected item of data and that of the previous one

   Relative Time: Elapsed time from trace measurement of a selected item of data to that of another

(2) MR window

Prioritized mailboxes and data queue statuses are represented as statuses of OS resources in addition to mailboxes, semaphores, and others. And, the statuses of OS resources are displayed during not only halting the target program but also executing it.

2. How to Update Your Product

2.1 Online Revision (Free of Charge)

Free-of-charge online revision is available. So update yours by downloading the revised products from HERE.
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