RENESAS Tool News

Four Products of the Embedded-Type TCP/IP Protocol Stack M3S-T3-Tiny V.1.00 Released

Four products of the TCP/IP protocol stack M3S-T3-Tiny have been released, which are used for the SH4 CPU-cored MCUs, the H8SX and H8S families, and the M32C series of MCUs.
* M3S-T3-Tiny, developed on the base of M3S-T2-Tiny (the TCP/IP protocol stack for the R8C/Tiny, M16C/Tiny, and H8/300H Tiny series), comes with much more enhanced capabilities than M3S-T2-Tiny and provides the above four MCU groups with their respective protocol stacks (their specifications are different group by group). Note that M3S-T3-Tiny cannot be used for the MCUs supported by M3S-T2-Tiny.
http://www.renesas.com/mw/t2
*These are the MCUs supported by M3S-T3-Tiny as of June 2008. We are going to increase the number of MCUs supported one after another.

1. Outline

M3S-T3-Tiny allows you to design all the systems with MCUs of the SH4 CPU, the H8SX and H8S families, and the M32C series to accomplish TCP/IP communications in Ethernet connection. In TCP communications, M3S-T3-Tiny performs transmission/reception processing at high speed with a small amount of memory consumption (18-KB ROM and 0.5-KB RAM).
In addition, M3S-T3-Tiny supports multichannel TCP communications, which M3S-T2-Tiny does not, and also supports non-blocking calls in TCP transmission and reception.

M3S-T3-Tiny can be used in combination with the following compiler packages:
  - C/C++ compiler package for the SuperH family V.9.01 Release 01
    and later
  - C/C++ compiler package for the H8SX, H8S, and H8 families
    V.6.02 Release 00 and later
  - C compiler package for the M32C series V.5.41 Release 01 and later

2. Functions Introduced (in Comparison with M3S-T2-Tiny)

(1) The number of the TCP and UDP communication terminals settable.

(2) The non-blocking call function introduced in all the APIs
 (Application Program Interfaces) of TCP

(3) The canceling API, which discontinues the processing of another API,
 also introduced in the TCP and UDP.

(4) TCP transmission rate improved by modifying the algorithm
 used in the source code for TCP.

For details of M3S-T3-Tiny, visit the Web page at
 http://www.renesas.com/mw/t3
This site will be opened from June 20 on.

3. How to Purchasing the Products

When you place an order for the product you want, supply the following items of information to your local Renesas Technology sales office or distributor. Note that the type names for the target MCU groups are different from each other.

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  Target MCUs       Type Name
  ----------------------------------------

  SH4 CPU core    R0M0400PT0010RRC
  H8S family       R0M8200PT0010RRC
  H8SX family      R0M8100PT0010RRC
  M32C series      R0M3080PT0010RRC
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For the prices of the products, contact the above sales office or distributor.