RENESAS Tool News

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Launch of RI78V4 V2 Real-Time OS for the RL78 Family

We will be launching the RI78V4 V2 real-time OS for the RL78 family of MCUs.

NOTE: The RI78V4 V2 is different from the RI78V4V1 OS for the RL78 and 78K0R families. The compiler it is intended to work with is CC-RL for the RL78 family. Although RI78V4 V2 is a new product, the first version of the product to be released is V2.00.00.

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1. Overview

The RI78V4 V2 real-time OS for the RL78 family is a real-time OS conforming to the uITRON4.0 specification, the predominant OS for embedded systems in Japan. This is for use in systems designed around MCUs of the RL78 family.

The RI78V4 V2 for the RL78 family is designed to be compact yet has outstanding real-time features and abundant system calls to realize embedded systems with high-quality real-time and multi-tasking environments.
In addition, compatibility with the CS+ integrated development environment, and a configurator which automatically generates definition files, will help you to develop applications more easily and quickly.

This product also operates in combination with the following development tools:

- V3.01.00 and later versions of the CS+ IDE
- CC-RL compiler for the RL78 family

Refer to the following URL for the supported MCUs. This information will be available from June 5.
https://www.renesas.com/ri78v4_rl78

2. Features

- Conformance with uITRON4.0
- High-quality performance
  The service call processing time and the longest time over which interrupts are disabled are shorter than for the RI78V4 V1.
- High portability
  The hardware-dependent processing which is needed in processing by the RI78V4 V2 is gathered into target-dependent parts and parts for the user's own code, and supplied as files of sample source code.
- ROMizing
  This product is designed compactly for convenience in ROMization, since this is a real-time multitask OS intended for use as an execution environment in embedded products.
- Working together with the CS+ IDE from Renesas Electronics
  The necessary options for building are automatically set in cooperation with CS+. A debugger and an analysis tool (task analyzer), which have been specifically prepared for the debugging of program to run under a real-time OS, are included in RI78V4 V2.
  For information about CS+, visit the following page at our web site:
  https://www.renesas.com/cs+

Further information on the product is available in the user's manual on our web site at the following page. This information will be available from June 5.
https://www.renesas.com/ri78v4_rl78

3. Ordering the Product

A mass-production license and evaluation license are available.
For details of the license agreements, see the following page on our web site:
https://www.renesas.com/itron/agreement

To place an order for the product, supply the following information to your local Renesas Electronics marketing office or distributor:

Product type: RI78V4 V2
Type name: RTRRL7800TR01w (see NOTE below)

For the price of the product, contact your local marketing office or distributor.

NOTE:
The letter "w" denotes the type of license and is replaced by letters listed below:

ERR:
Evaluation license; the real-time OS can be installed on only one host computer.
ERRLU:
Evaluation license; the real-time OS can be installed on an unlimited number of host computers.
RRRUL:
Mass-production license; the real-time OS can be embedded in up to 3,000 products and the source code is closed.
RRRUU:
Mass-production license; the real-time OS can be embedded in an unlimited number of products and the source code is closed.
SRRUU:
Mass-production license; the real-time OS can be embedded in an unlimited number of products and we supply the source code.

Example:
In a mass-production license for manufacturing an unlimited number of products where the real-time OS is embedded with the source code closed, the type name will be RTRRL7800TR01RRRUU.

4. Supplementary Note

This product is different from the RI78V4 V1 real-time OS for the RL78 and 78K0R families of MCUs. Thus, this product will not overwrite or be installed in the RI78V4 V1 directories. That is, you will still be able to use V1 after installing this product.
