RENESAS Tool News

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Middleware for SPI EEPROM Control
Launch of EEPROM Access Clock Synchronous Control Module for the RX Family

We have launched Ver.2.31 Release 00 of the EEPROM access clock synchronous control module for the RX family. The product is within our range of Firmware Integration Technology (subsequently referred to as FIT).

This middleware is supplied free of charge.

For an overview of the software configuration, visit our Web page at the following URL and refer to the block diagram.

https://www.renesas.com/driver/serial_eeprom

Note: While the product is a new release, its version numbers start from 2.31, Release 00.

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1. Outline
   EEPROM Access Clock Synchronous Control Module for the RX Family is middleware that allows control of Renesas Serial EEPROM as a slave device by an RX Family MCU as a master device. This middleware is used with a clock synchronous single master driver of the controlling software in the master device.

   This middleware is an FIT* module, i.e. within our FIT range, so it can easily be combined with other FIT modules. For example, transfer by a DMAC or DTC can easily be handled by combining this module with a DMAC or DTC module, both of which are currently available within our FIT range.

The following are the slave devices for use with this middleware.
Renesas Serial EEPROM: R1EX25xxx and HN58X25xxx series

*: Refer to the web page at the following URL for the details of FIT.
https://www.renesas.com/fit

2. Supported MCUs and Serial Interfaces

The supported MCUs and serial interfaces to be used are as follows.

RX Family
- RX64M Group
  - Serial Peripheral Interface (RSPIa)
  - Quad Serial Peripheral Interface (QSPI)
  - FIFO embedded Serial Communications Interface (SCIFA)
- RX71M Group
  - Serial Peripheral Interface (RSPIa)
  - Quad Serial Peripheral Interface (QSPI)
  - FIFO embedded Serial Communications Interface (SCIFA)
- RX113 Group
  - Serial Peripheral Interface (RSPI)
- RX110 Group
  - Serial Peripheral Interface (RSPI)
- RX111 Group
  - Serial Peripheral Interafce (RSPI)

3. Obtaining the Products

To obtain the application note and sample code, follow the steps below.

(1) Access the page at the following URL.
https://www.renesas.com/a_eeprom_driver_app_notes
You will see a list of titles of application notes and sample code.

(2) Check "RX Family" in the box of "Narrow down by products", and click on "Find by product". You will see a list of products in the MCU family which you designated.

(3) In the list, find the application note for the product you want. The names of the products and the titles of the application notes are as follows.

(a) Serial Peripheral Interface EEPROM control middleware
"EEPROM Access Clock Synchronous control module for the RX Family"
- Application note titles
  RX Family Clock Synchronous Control Module for EEPROM Access Using Firmware Integration Technology

(b) Clock synchronous single master driver
- Application note titles
  - RX Family QSPI Clock Synchronous Single Master Control Module Using Firmware Integration Technology
  - RX Family RSPI Clock Synchronous Single Master Control Module Using Firmware Integration Technology
  - RX Family SCIFA Clock Synchronous Single Master Control Module Using Firmware Integration Technology

Use (a) in combination with any of the above FIT modules, or with a combination of two or more of them.
Note that when using the driver, confirm the module supported by the MCU you are using beforehand.

(4) Click on the hyperlink in the "Project Files" column of the given application note. After that, click on "Download" on the "Download" page.

(5) Log in to MY RENESAS.

(6) Confirm the displayed "Notes" and click on "Agree", then download the sample program.
