

[Notification]

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Rev.1.00

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Renesas RX Family Firmware Integration Technology (FIT)

- Addition of Supported Compilers and End of FIT Module Updates for Some Devices -

Outline

This tool news is a notification of the addition of supported compilers for Renesas RX family Firmware Integration Technology and the end of FIT module updates for some devices.

1. Addition of Supported Compilers

In addition to the RX Family C/C++ Compiler Package (Renesas Compiler), the following compilers from our partners are now supported by the Firmware Integration Technology (FIT module).

- GCC for Renesas RX (GCC Compiler)
- IAR C/C++ Compiler for Renesas RX (IAR Compiler)

■ Supported versions and devices of RX Driver Package (RDP)

- Supported RDP versions

RDP Ver.1.20 (Scheduled to be released in July 2019.)^(Note)

Note: Some FIT modules are supported with restrictions or not supported. Full support for these modules will be provided in later versions. For details, see “3. Supported Versions of RX Driver Package V1.20 for Partner Compilers.”

Also the following FIT module will not be included in RDP V1.20 or later versions.

Serial Communications Interface with FIFO
(SCIFA: Device Driver for Serial Memory Control)

- Supported Devices

RX110, RX111, RX113, RX130,
RX230, RX231, RX23T, RX24T, RX24U,
RX64M, RX65N, RX651, RX71M, RX66T, and RX72T group

2. End of FIT Module Updates for Some Devices

Renesas will no longer provide updates for the FIT modules for the following devices after RDP Ver.1.19. These modules will not be included in Ver.1.20 or later versions.

■ End of Update Devices

RX210, RX21A, RX220,
RX610, RX621, RX62N, RX62T, RX62G, RX630, RX631, RX63N, and RX63T groups

For the FIT modules for the above devices, use the RDP Ver.1.19 ^(Note).

RDP Ver.1.19 will continue to be available for download on Renesas official web site.

<https://www.renesas.com/rdp>

Note: If you are considering purchasing the RX Family Flash Module Using Firmware Integration Technology (R01AN2184), we recommend the product below.

RX600 & RX200 Series Simple Flash API for RX

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r01an0544>

You can use the one included in RDP Ver.1.19, however, there will be no updates provided.

3. Supported Versions of RX Driver Package V1.20 for Partner Compilers

The FIT modules included in the RDP and the versions that supports the partner compilers are listed in Table 1 through 3.

Table 1. Board Support Package (BSP) and supported versions for partner compilers.

FIT module	Rev.
Board Support Package (BSP)	5.20

Table 2. Device Drivers and supported versions for partner compilers (1/2)

FIT module	Rev.
Voltage Detection Circuit (LVD)	3.00
Low Power Consumption (LPC)	1.41 ^{*1}
Battery Backup (VBATT)	1.03
Interrupt Controller (IRQ)	3.00
Data Transfer Controller (DTC)	3.00
DMA Controller (DMAC)	2.00
I/O Ports (GPIO)	3.00
Multi-Function Pin Controller (MPC)	3.00
Compare Match Timer (CMT)	4.00
Compare Match Timer W (CMTW)	2.00
Real-Time Clock (RTC)	2.75
Low Power Timer (LPT)	1.23 ^{*1}
Independent Watchdog Timer (IWDG)	3.00
Watchdog Timer (WDT)	2.00
Serial Communications Interface (SCI: Asynchronous/Clock Synchronous)	3.00
Serial Communications Interface with FIFO (SCIFA: Asynchronous/Clock Synchronous)	1.22 ^{*1}
Serial Communications Interface (SCI: Simple I ² C Bus)	2.41
I ² C Bus Interface (RIIC)	2.41
Serial Peripheral Interface	2.01 ^{*2}
Quad Serial Peripheral Interface (QSPI: Device Driver for Serial Memory Control)	1.12
USB Basic Firmware	1.26
USB Host Mass Storage Class	1.26
USB Host Communication Device Class	1.26
USB Host Human Interface Device Class	1.26
USB Peripheral Mass Storage Class	1.26
USB Peripheral Communications Device Class	1.26
USB Peripheral Human Interface Device Class	1.26
USB Basic Firmware mini	1.11
USB Host Mass Storage Class mini	1.11

^{*1} GCC Compiler and IAR Compiler are not supported by RDP Ver.1.20.
Support will be added in later versions.

^{*2} GCC Compiler and IAR compiler are supported by RDP Ver.1.20 with restrictions.
Support will be added in later versions.

Table 2. Device Drivers and supported versions for partner compilers (2/2)

FIT module	Rev.
USB Host Communication Device Class mini	1.11
USB Host Human Interface Device Class mini	1.11
USB Peripheral Mass Storage Class mini	1.11
USB Peripheral Communication Device Class mini	1.11
USB Peripheral Human Interface Device Class mini	1.11
PTP Module for the Ethernet Controller (EPTPC)	1.15
EPTPC Light Module	1.12
Ethernet Controller (ETHERC)	1.16
CAN Module (CAN)	3.00
CAN Module (RSCAN)	2.00
IrDA Interface (IrDA)	1.01 ^{*1}
Parallel Data Capture Unit (PDC)	2.03
SD Host Interface (SDHI)	2.04
SD Slave Interface (SDSI)	2.02
MMC Mode MMCIF Driver (MMCIF)	1.05
12-Bit A/D Converter (S12AD)	4.00
D/A Converter (DAC)	4.00
Flash Memory (On-Chip Flash Memory Programming)	4.00 ^{*2}
Sampling Rate Converter (SRC)	1.13
Serial Sound Interface (SSI)	1.23
LCD Controller/Driver (LCDC)	1.01
Graphic LCD Controller (GLCDC)	1.10
Unique ID Read	1.11
Byte Queue Buffer (Data Management)	1.80
Long Queue Buffer (Data Management)	1.80
Event Link Controller (ELC)	1.21 ^{*1}
CTSU Module (CTSU)	1.00 ^{*1}

*1 GCC Compiler and IAR Compiler are not supported by RDP Ver.1.20.
Support will be added in later versions.

*2 GCC Compiler and IAR compiler are supported by RDP Ver.1.20 with restrictions.
Support will be added in later versions.

Table 3. Middleware/interface modules

FIT module	Rev.
M3S-T4-Tiny module for embedding	2.08*
Interface Conversion Module for Ethernet Driver and TCP/IP M3S-T4-Tiny for Embedding	1.07*
System Timer Module	1.00*
SD Mode SD Memory Card Driver	2.03*
Flash Memory Data Management Module (DATFRX)	2.01*
Clock Synchronous Control Module for EEPROM Access	3.01
Clock Synchronous Control Module for Serial Flash Memory Access	3.01
I ² C Bus Interface (RIIC) Module for EEPROM Access	1.41*
Simple I ² C Module for EEPROM Access	1.31*
Memory Access Driver Interface Module	1.01
JPEG Decoder Module	2.06*
JPEG Encoder Module	1.01*
M3S-S2-Tiny Module (Sound Recording/Playback System (Original ADPCM Codec))	3.04*
M3S-TFAT-Tiny Module (Open-Source FAT File System)	3.04*
M3S-TFAT-Tiny Memory Driver Interface Module	1.05*
Touch Module	1.00*

* GCC Compiler and IAR Compiler are not supported by RDP Ver.1.20.
Support will be added in later versions.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.01.19	-	First edition issued

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