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M30850T2-EPB Supplementary Document

Read This Before Using This Product

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The M30850T2-EPB is an emulation probe for the M32C/80, 84, 85, 86 and 8A Group MCUs. This document describes the information necessary to use this product. Read this BEFORE using the product.

1. Downloading the MCU file and firmware for this product

You need to update the MCU file and firmware file to the latest version. Download the firmware "m30870f.s" and MCU file "m30850.mcu" from the web site below. For operations details, refer to the web site.

http://tool-support.renesas.com/eng/toolnews/download/m30850t2-epb.htm

File name	Version	Description
m30870fw_mcu_file_installer20070801.zip	-	Compressed installer file for M32C PC7501 emulator debugger
m30870t-epb20070801.zip	-	Compressed MCU and firmware file for M3T-PD308F

(1) M32C PC7501 emulator debugger

1. Before copying the downloaded files, verify that the M32C PC7501 emulator debugger is installed on your computer. If your emulator debugger is not the latest version, update it using AutoUpdate Utility.
2. Download the compressed installer file "m30870fw_mcu_file_installer20070801.zip" from the web site above to the host machine where the M32C PC7501 emulator debugger is installed, and decompress it.
3. Execute the installer file "m30870fw_mcu_file_installer20070801.exe" to install the emulator debugger. Follow the instruction on the screen to perform the installation.

(2) M3T-PD308F V.3.20 Release1 (discontinued product)

1. Before copying the downloaded files, verify that the emulator debugger M3T-PD308F is installed on your computer. If your M3T-PD308F is not the latest version, update it.
2. Download the compressed MCU and firmware file "m30870t-epb20070801.zip" from the web site above to the host machine where the emulator debugger M3T-PD308F is installed, and decompress it.
3. Copy the MCU file and firmware file following the procedure below.
    1) Copy "**m30850.mcu**", "**m30870.mcu**" and "**m30870_ad.mcu**" to the directory (Mcufiles) that contains MCU files.
    2) Copy "**m30870f.s**" to the directory that contains the emulator debugger execution file "pd308f.exe".

(3) Downloading the new firmware file

1. After copying the MCU file and firmware file by following the procedure (1) or (2), download the firmware file **after starting in maintenance mode**, referring to "2.7 Downloading Firmware" in the M30850T2-EPB User's Manual.
2. To check that the firmware is downloaded properly, execute the self-check following the procedure below after downloading the firmware.
   - If the user system is connected, disconnect it.
   - Reset the switch setting inside the emulation probe to its factory setting.

   For details on the self-check, refer to "2.8 Self-check" in the M30850T2-EPB User's Manual.

2. MCU file

Select M30850.mcu for an MCU file regardless of a group of the MCU to be debugged when using this product.

3. Notes on Using This Product

Refer to the precautions described in M30850T2-EPB User's Manual.

(1) When the JP1 is set to VCC1>VCC2, the following restrictions should be applied.

1. The voltage of VCC2 on the user system should be 3.3 V or more. [*1]
2. If using a CPU clock of more than 30 MHz when the voltage of VCC1 is higher than that of VCC2, set the SFR area of the intelligent I/O function to 2-wait (set the PM13 bit to "1") when reading this area. [*2]
3. If using the expansion emulation memory with a CPU clock of more than 24 MHz, set to 1φ+2φ. [*3]

The following show the specifications of power supply and operating frequency.

Power supply	Operating frequency	SFR	Expansion emulation memory
Vcc1=Vcc2: 3.0--5.5 V	24 MHz or less	1 wait	1φ+1φ
Vcc1=Vcc2: 4.2--5.5 V	32 MHz or less		
Vcc1＞Vcc2:	24 MHz or less		
Vcc1=5.0 V±0.2 V, 3.3 V≤Vcc2＜Vcc1 [*1]	32 MHz or less	2 waits [*2]	1φ+2φ [*3]

(2) When the CPU rewrite program is allocated to the expansion emulation memory, the program may run out of control. For the CPU rewrite program, use an internal RAM area or an external resource on the user system.

(3) When using the page mode control function for a ROM-less version of the M32C/84 and 8A Groups, in a cycle for an area (excluding the emulation memory) written in word, the following emulator function does not operate normally.

- Real-time RAM monitor
- Event detection
- Real-time trace display

These precautions only need to be observed when using an emulator, and do not apply to the actual MCU.

4. Inquiries

For technical information on this product, fill in the text file which is downloaded from the following page, then email to your local distributor.

http://tool-support.renesas.com/eng/toolnews/registration/support.txt