

1. INTRODUCTION

This Addendum explains how to configure CrossView Pro for the Renesas PC4701U emulator.

2. SUPPORTED HARDWARE

CrossView Pro supports Renesas PC4701U.

3. ADDITIONAL SYSTEM REQUIREMENTS

The following are additional system requirements

- One USB port on your PC
- USB cable
- Target board

4. SPECIFICATIONS AND RESTRICTIONS

- This software support only USB to connect your PC and PC4701U. Those two equipments should be directly connected (Do not use USB hub.)
- This software can be used on Windows2000/XP, but not Windows95/98/NT due to missing of USB driver supports on those operating systems..
- This software can supports single PC4701U.
- This software supports following devices.
M16C/60, /61, /1N, /20, /21, /22, /2N, /24, /30, /62, /6H, /6K, /6N, /6V
- This software supports:
 - Up to 64 code break points
 - Up to 6 data break points. This feature supports separate data-read, data-write and data-read/write break points.
 - Trace feature
 - Code coverage feature.
 - Data coverage feature. PC4701U only supports executed position as data coverage. It can't distinguish between data-read and data-write.
 - Memory Mapping for Single Chip mode
 - Unable to assign the emulator internal memory for external space of the MPU

5. INSTALLATION

5.1 HARDWARE INSTALLATION

It is strongly recommended that both your PC and target board should be powered off during the installation. It is also strongly recommended that installation of the connection follows electrostatic conventions to prevent damage to the target CPU and the Emulator pod.

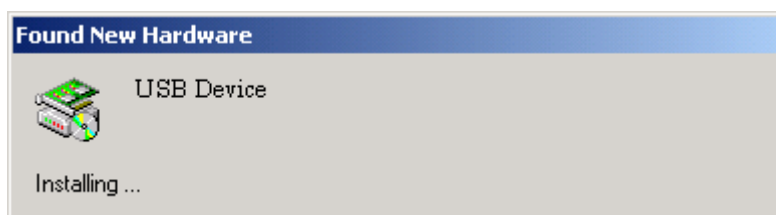


Set up the PC4701U and its POD and connect the POD to your target board following PC4701U User's manual.

5.2 SOFTWARE INSTALLATION

5.2.1 USB DRIVER INSTALLATION

1. USB driver should be installed on your PC when it is first time to be used with PC4701U.
2. You can find the USB driver on the ALTIUM web site. (www.tasking.com/support/m16c). Download the driver files (Musbdrr.inf / Musbdrr.sys) on an appropriate holder in your PC (e.g., c:\Tasking\M16C\drivers).
3. Install the USB device driver.
 - (1) Connect your PC and PC4701U with USB cable.
 - (2) Set the PC4701U's communication interface switch (rear panel PC4701U) to the "USB" position. Then turn on the power to PC4701U.
 - (3) Following dialog box will be shown.



Follow the installation wizard, Then a dialog box for specifying the setup information file (inf file) is displayed. Specify the 'musbdrr.inf' file downloaded from ALTIUM web site.

5.2.2 GET EMULATOR FIRMWARE FILE FROM THE WEB

1. The firmware should be downloaded when;

- (1) You use this product for the first time
- (2) The firmware has been upgraded
- (3) CrossView Pro has been upgraded
- (4) You use this product with a PC4701U which have been used with other emulation pod before.

2. You can find the firmware file on the ALTIUM web site. (www.tasking.com/support/m16c).

Download the firmware files on an appropriate holder in your PC. (e.g., c:\Tasking\M16C\firmware)

Select the firmware file according to devices to be used as follows.

- (1) M16C/60, /61

M30600U.S

- (2) M16C/1N, /20, /21, /22, /2N, /24, /30, /62, /6H, /6K, /6N, /6V

M30620BU.S

5.2.3 Download the firmware into PC4701U

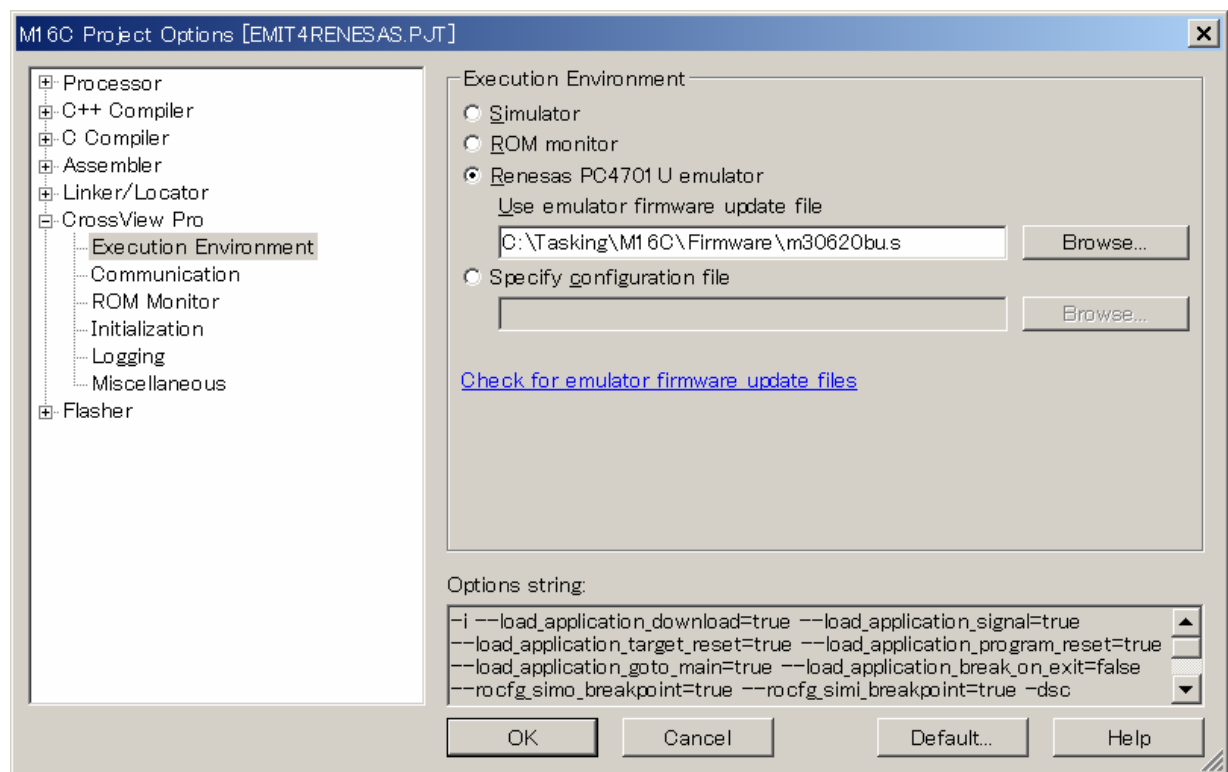
(1) Invoke EDE for M16C. (See 2.6.1 USING EDE / M16C C Cross-Compiler User's Guide)

(2) Open your project.

(3) Select the Project menu and Project options | CrossView Pro | Execution Environment dialog,

- Select 'Renesas PC4701U emulator' Radio button.

- Specify the pathname of the firmware file you have downloaded at 'Use emulator firmware update file' edit box.



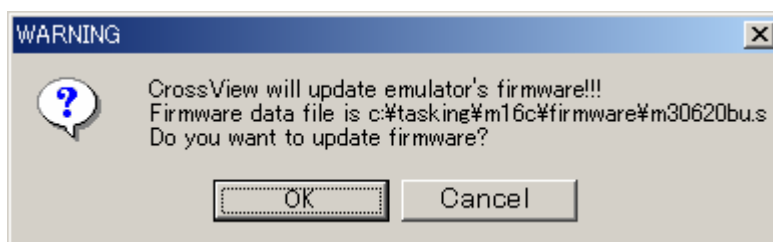
(4) There are two ways to download the firmware into PC4701U.

1) It is necessary to set the PC4701U to its maintenance mode, in case of following conditions.

- You have setup PC4701 for the first time with CrossView Pro debugger.
- You have upgraded CrossView Pro debugger

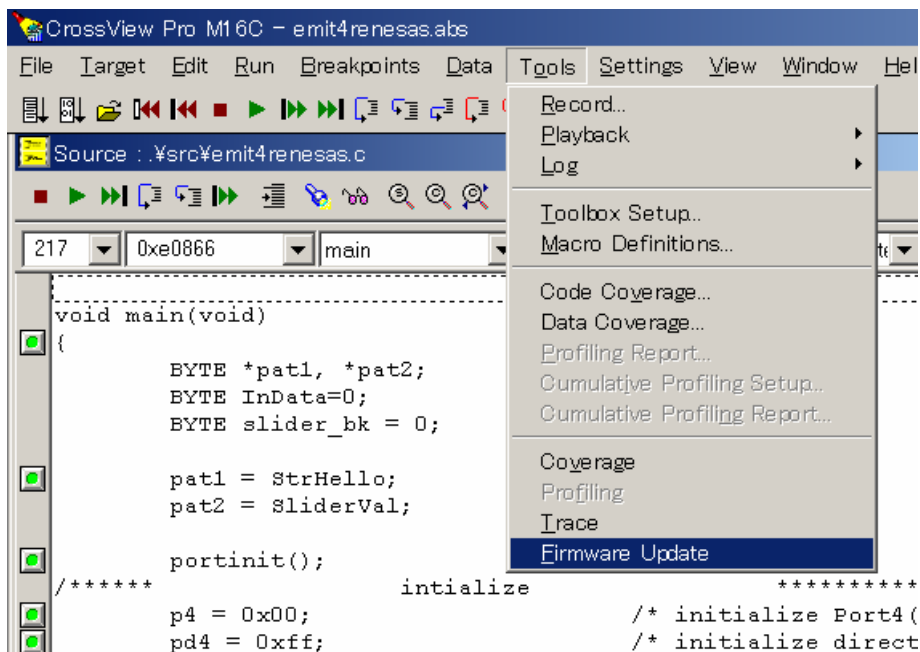
To set the maintenance mode, press the system-reset switch within two seconds after power up the PC4701U to enter the maintenance mode.

When CrossView Pro starts while the emulator is in the maintenance mode, the following dialog is shown.



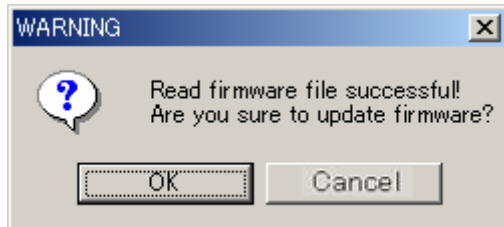
Click [OK] then the firmware will be downloaded.

2) If you wish to upgrade the firmware during CrossView running, just select tools menu and click Firmware Update.

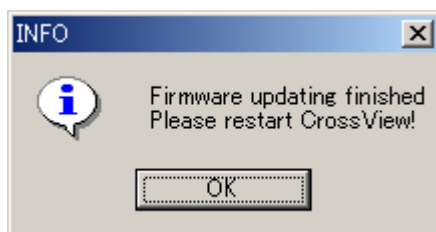


The following dialog box appears, click [OK] to start download.

After click [OK], following dialog box will be displayed. The dialog let you confirm again if you really want to update the firmware.



If you click [OK], the firmware update process will start. It will take a few seconds, and when the processing finished the following dialog box will be displayed.



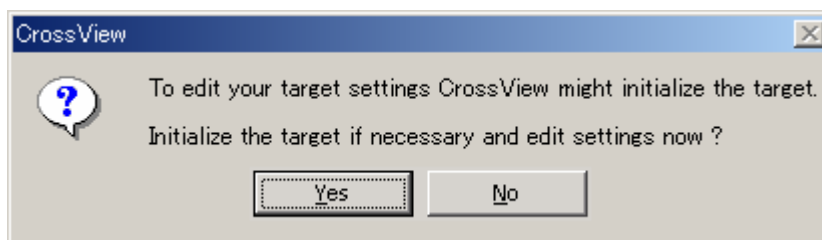
Clicking [OK], the firmware update process completes and CrossView Pro restarts.

6. GETTING STARTED

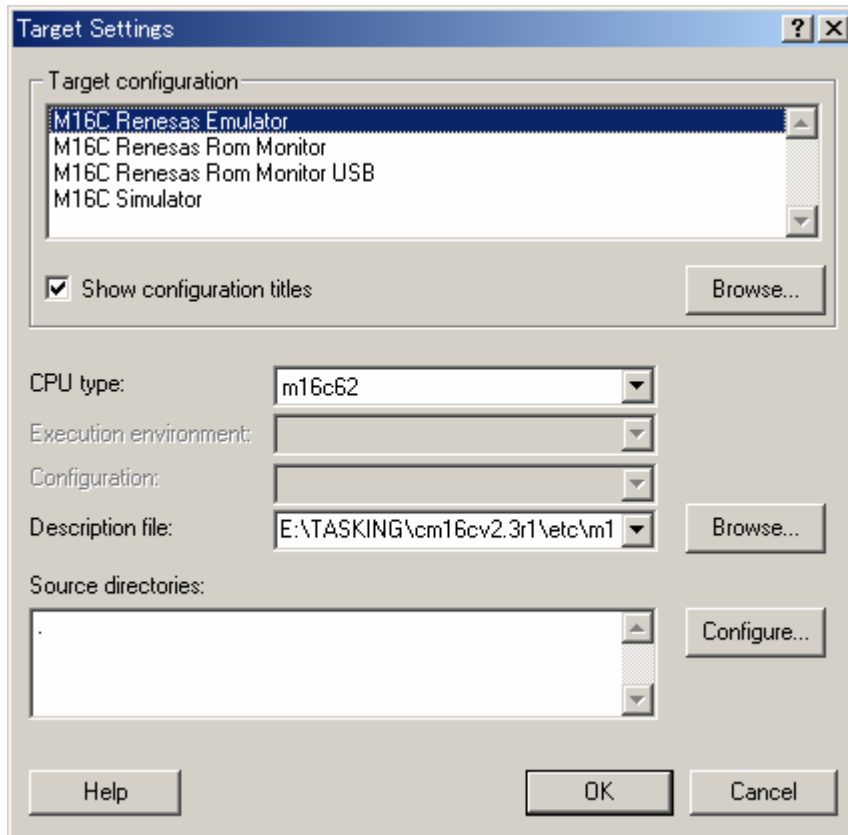
6.1 INVOKE CROSSVIEW PRO FROM START MENU OR IT'S ICON

After CrossView starts, select Target menu | Settings

The following message box appears,



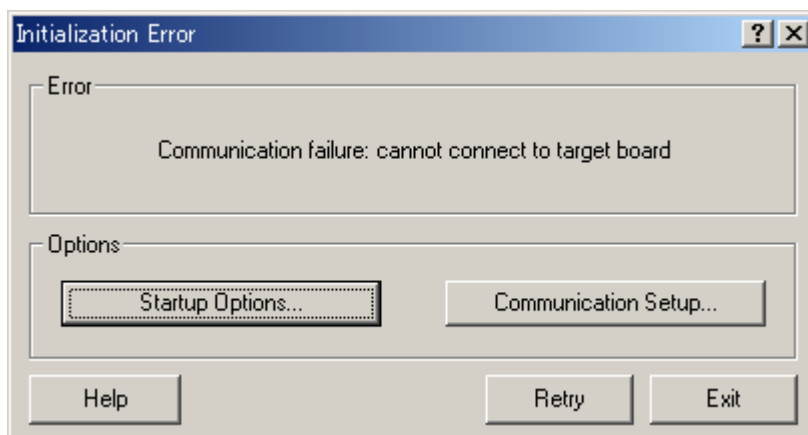
Click [Yes], then following message box appears.



Select 'M16C Renesas Emulator', CPU type and click [OK].

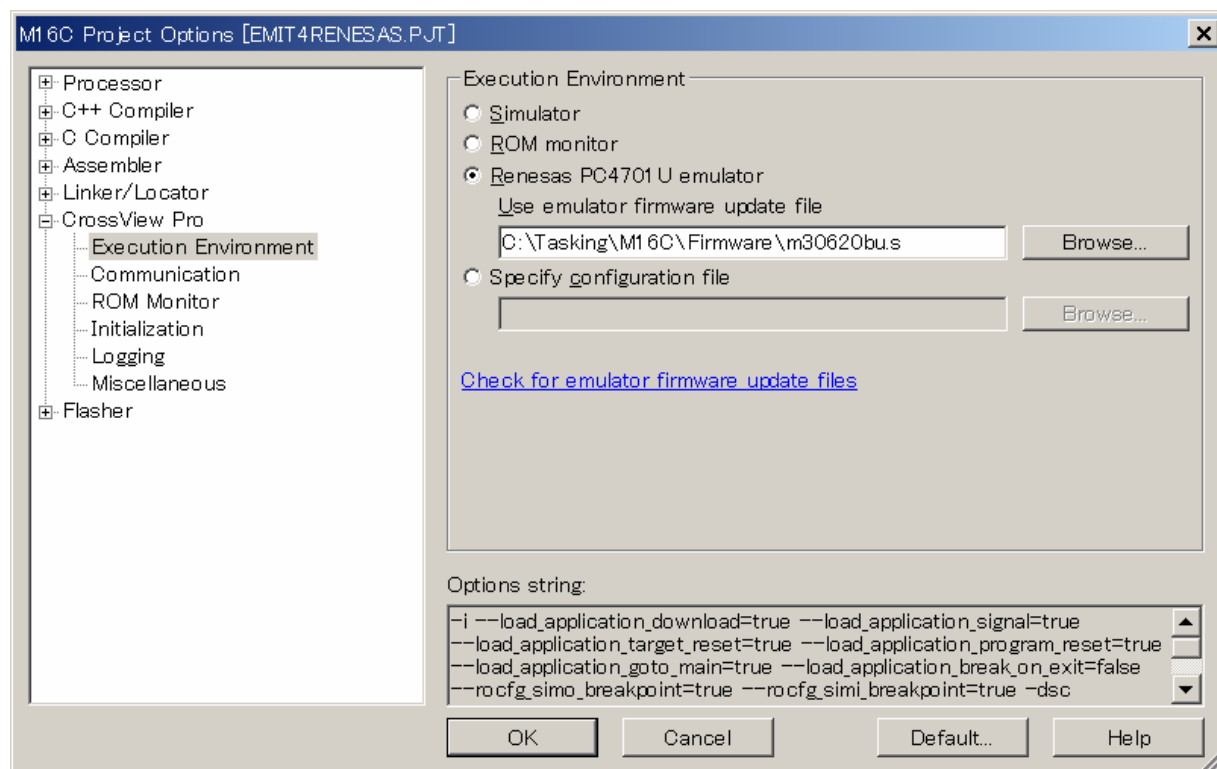


When following dialog box is shown, click 'Start Options...'. Then you will see Target setting dialog again, confirm your setting and try again.



6.2 INVOKE FROM EDE

When you want to start CrossView from M16C EDE, first you should select 'Renesas PC4701U emulator' from Project options | CrossView Pro | Execution Environment dialog on Project menu.



Click [OK] and click debug application button  on EDE to invoke CrossView Pro for PC4701U.

7. START DEBUGGING

For operation of debugging, see M16C CrossView Pro Debugger User's manual.