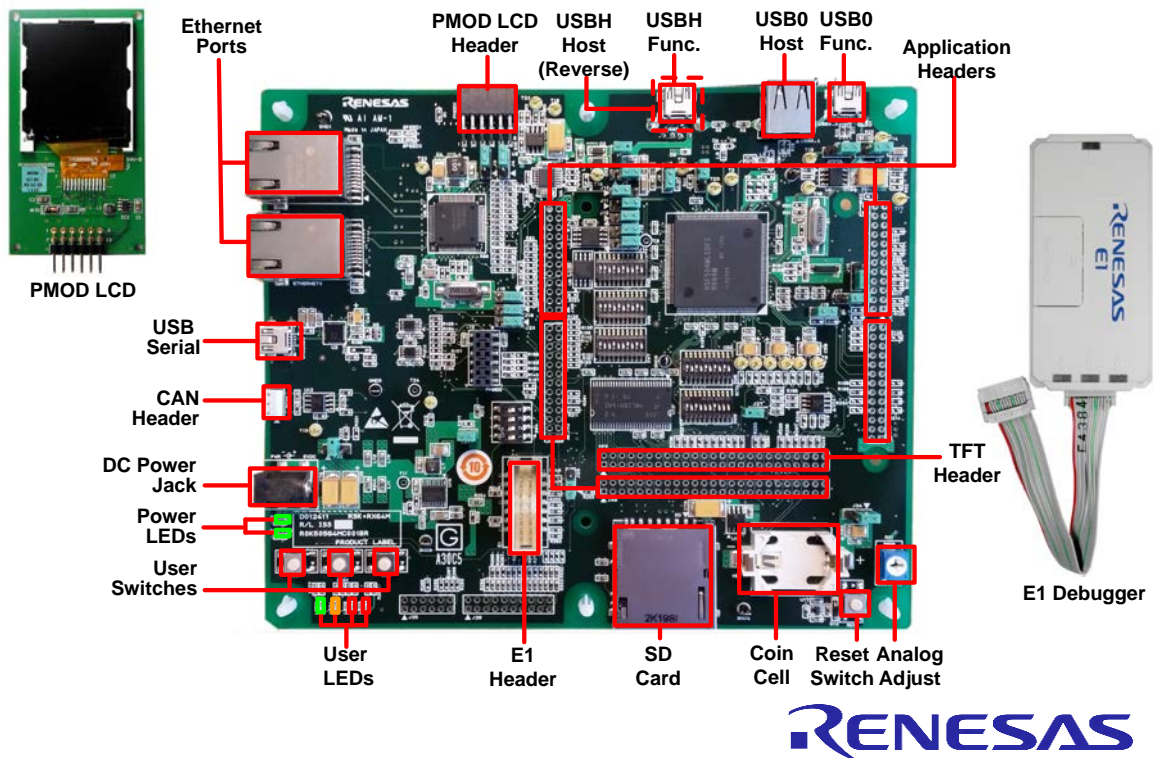


Quick Start Renesas Starter Kit+ for RX64M



NOTE: This Quick Start Guide covers installation of the CubeSuite+ DVD.

1. Installation

Do not connect the E1 debugger module until the software support has been installed.

1. Insert the DVD into your computer's DVD-ROM drive. The DVD should automatically run the installation program. If the installer does not start, browse to the DVD root folder and double click on 'CsPlusLauncher.exe'.
 2. Windows™ 8 / 7 / Vista users may see a "User Account Control" dialog box. If applicable, enter the administrator password and click 'Yes'.
 3. The pre-installer will first check that the CubeSuite+ prerequisites are present, and install any that are missing. Click 'Install' if prompted to. *You will be prompted to obtain a product activation code by logging onto the My Renesas website. Please follow the on screen instructions.*
 4. The CubeSuite+ installer will launch. Click 'Next' to continue.
 5. The End User License Agreement appears. Read the license and select 'Accept' if you wish to continue. Click 'Next'.
 6. The 'Select Components' window appears. Review the components by selecting each component in turn. Click 'Next' to continue.
 7. The License Key Registration window appears. If you have a license key available, click the 'License Manager' button, otherwise click 'Next' and go to Step 9.
 8. Enter the license key in the opened 'License Manager' dialog box and click 'Add' to add the license key. Click 'Close' to return to the installer. Click 'Next'.
 9. The 'Installation Settings Confirmation' window appears. Review the information and click 'Next' to begin installation.
 10. The 'Installation Execution' window will appear showing the installation progress.
- Note: The Windows™ driver signing dialog box may be displayed. Please accept the driver to continue.
11. After the installation has completed, click 'Next'.
 12. Uncheck 'Launch Update Manager', then click 'Finish' to exit the installer.

Note: It is recommended to run the CubeSuite+ Update Manager and install updates after completion of this guide.

2. Connection

13. Ensure the PMOD LCD is fitted to the connector marked 'PMOD1' on the RSK+.
14. Connect the E1 debugger module to the connector marked 'E1' on the RSK using the ribbon cable.
15. Connect the centre positive +5V PSU to the PWR connector on the RSK+ and apply power.
16. Connect the E1 debugger module to a spare USB port of your PC. The green 'ACT' LED on the E1 debugger will flash.
17. Please follow the steps below to install the drivers. Note that administrator privileges are required to install the drivers.

Windows™ 7 / Vista

A "Device driver software installed successfully" pop-up will appear in the Windows™ toolbar and installation will complete.

18. The green 'ACT' LED on the E1 debugger will illuminate.

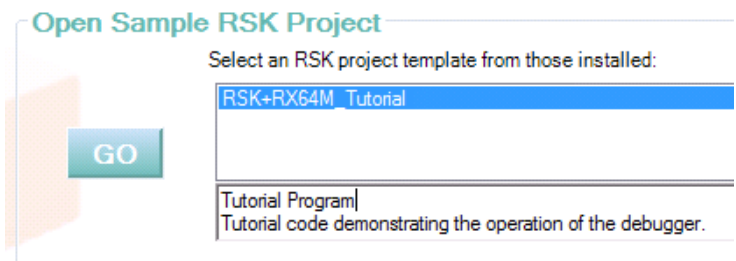
Windows™ 8

An icon will appear in the Windows™ toolbar and installation will complete.

3. CubeSuite+ Project

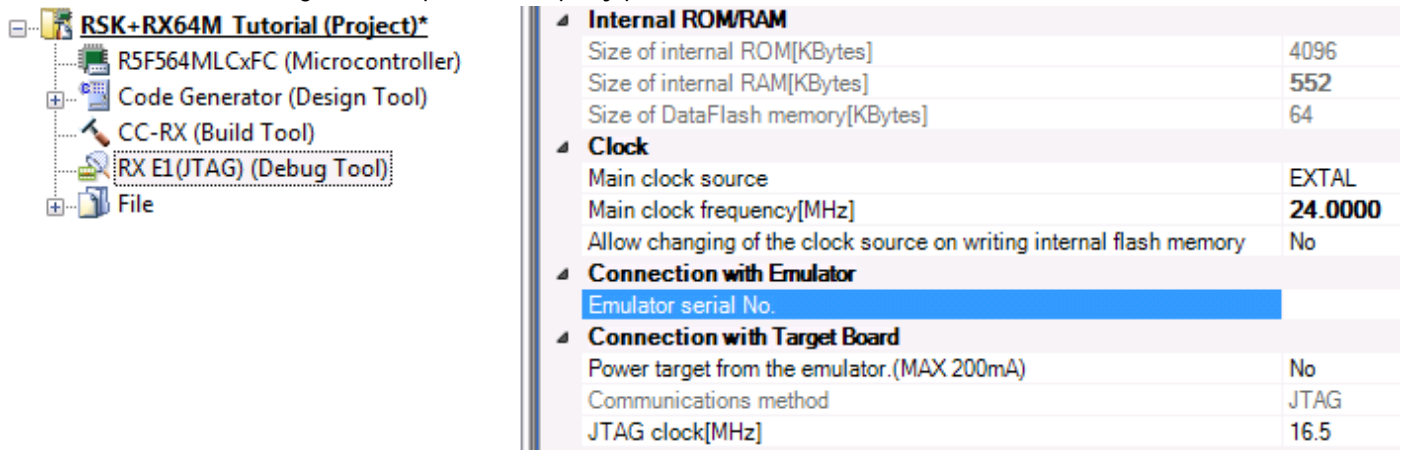
CubeSuite+ integrates various tools such as compiler, assembler, debugger and editor into a common graphical user interface. To learn more on how to use CubeSuite+, refer to the CubeSuite+ Tutorial manual from the menu bar (Help > Tutorial). Other CubeSuite+ manuals are available from the StartMenu (Start Menu > All Programs > Renesas Electronics CubeSuite+> Readme Documents).

19. Launch CubeSuite+, from the Start Menu (Start Menu > All Programs > Renesas Electronics CubeSuite+ > CubeSuite+).
20. The 'One Point Advice' dialog box, which provides useful tips, will open. Click 'OK'.
21. The Start panel will appear. Select the 'RSK+RX64M_Tutorial' project under the 'Open Sample RSK Project' entry and click 'GO'.
22. In the "Create Project" dialog box that follows, specify a name for the project. Leave the list of subprojects unselected.
23. Click "Create" to launch the main Tutorial project.
24. If asked to create the project folder, click 'OK'.



4. Programming and Debug

25. Double-click on the Debug Tool to open the Property pane.



| Internal ROM/RAM | |
|---|---------|
| Size of internal ROM[KBytes] | 4096 |
| Size of internal RAM[KBytes] | 552 |
| Size of DataFlash memory[KBytes] | 64 |
| Clock | |
| Main clock source | EXTAL |
| Main clock frequency[MHz] | 24.0000 |
| Allow changing of the clock source on writing internal flash memory | No |
| Connection with Emulator | |
| Emulator serial No. | |
| Connection with Target Board | |
| Power target from the emulator.(MAX 200mA) | No |
| Communications method | JTAG |
| JTAG clock[MHz] | 16.5 |

26. Verify that the option to 'Power target from the emulator' is set to 'No'.

27. Build the project by clicking on the Build Project button.



28. Download the code to the microcontroller by clicking on the download button.



29. Click the 'Restart' button to reset the CPU and start program execution.



30. The LCD will display "RSK+RX64M", "Tutorial" and "Press Any Key" on the first three lines of the panel.

31. Press any switch SW1, SW2 or SW3). An A/D conversion will be performed and the result will be displayed on the LCD panel.

32. Rotate the Analog Adjust Control and press any switch again. A new A/D conversion will be performed and the count of A/D conversions will be displayed in binary form using LEDs 0-3.

33. Click the 'Stop' button.



The code will stop and the source code will be opened at the current program counter.

5. Next Step

After you have completed this quick start procedure, please review the tutorial code and sample code that came with the kit. You can review the other samples using the sub-projects in CubeSuite+, by setting one of the other projects in the Project Tree as the active project. The Tutorial Manuals will help you understand the device and the development process using Renesas Development Tools.

The Hardware Manual supplied with this RSK is current at the time of publication. Please check for any updates to the device manual from the Renesas internet site at: <http://www.renesas.com/rskrx64m>

6. Renesas RX Compiler

The version of the compiler provided with this RSK is limited to 128kbytes of Code and Data. This restriction can be removed by purchasing a licensed copy of the tools.

7. User Manuals

User manuals can found in the Windows™ Start Menu. (Start Menu > All Programs > Renesas Electronics CubeSuite+ > Readme Documents > RSK > RSK+RX64M).

8. Code Generator

Parts of the sample code provided with the RSK+RX64M can be reproduced using the Code Generator plug in tool. Source files and functions generated by Code Generator are prefixed with 'r_' and 'R_', respectively.

9. Support

Online technical support and information is available at: <http://www.renesas.com/rskrx64m>

Technical Contact Details

Global & Japan: csc@renesas.com

Note on Update Manager: The Update Manager checks via the Internet for any updated resources available for each installed CubeSuite+ tool and downloads and installs them to simplify the update process. It is recommended to run the Update Manager and check for updates regularly.

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