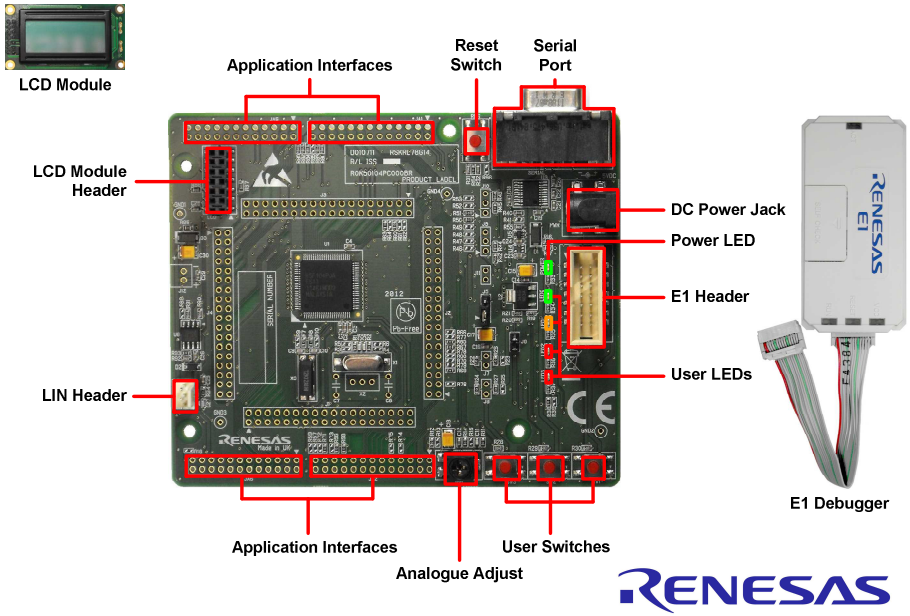
Quick Start Renesas Starter Kit for RL78/G14



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

1. Installation

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

1. Insert the CD into your computer's CD-ROM drive. The CD should automatically run the installation program. If the installer does not start, browse to the CD root folder and double click on 'CsPlusLauncher.exe'.
2. Windows™ Vista/Windows™ 7 users may see "User Account Control" dialog box. If applicable, enter the administrator password and click <OK>.
3. The pre installer will first check to see if the CubeSuite prerequisites are present, and will install if necessary (this may take a few minutes).
4. Once the prerequisites are setup, the CubeSuite+ installer will launch.
5. The CubeSuite+ Welcome window will appear. Click <Next>.
6. The End User License Agreement appears. Read the license agreement and select <Accept> if you wish to continue. Click <Next>.
7. The 'Select Component' window appears. Review the components by selecting each component in turn. Click <Next> to continue.
8. The License Key Registration window appears. If you have a license key available, click the <License Manager> button, otherwise go to Step 9. Enter the license key in the opened 'License Manager' dialog. Add the license key. Click <Add>. If the license key is added successfully, click <Close>.
9. Click <Next>.
10. The 'Installation Settings Confirmation' window appears. Review the information and click <Next> to begin installation.
11. The 'Installation Execution' window will appear showing the install status progress. Before completion, the Renesas E-Series USB Driver installation dialog will appear. Windows™ Vista and Windows™ 7 users may see a 'Windows Security' dialog box. Click 'Always trust software from "Renesas Solutions Corp."' then click <Install>.
12. After a successful installation click <Next>.
13. The 'Setup Completion' window will appear. Click <Finish> to close the installer.

2. Connection

14. Fit the LCD module to the connector marked 'LCD' on the RSK. Ensure all the pins of the connector are correctly inserted in the socket.
15. Connect the E1 debugger module to the connector marked 'E1' on the RSK using the ribbon cable.
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. The 'Found New Hardware' Wizard will appear. Please follow the steps below to install the drivers. Note that, administrator privileges are required for a Windows™ XP/Vista machine.

Windows™ XP

a. Select option 'No, not this time' in "Found New Hardware" Wizard dialog, and click <Next> button.
b. Verify the "Recommended" option is selected and click <Next>.
c. If using Windows™ XP, go to step 'e'; otherwise, click <Next>.
d. Click <Next> to install the driver.
e. Click <Finish> to close the wizard.

Windows™ Vista / Windows™ 7

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

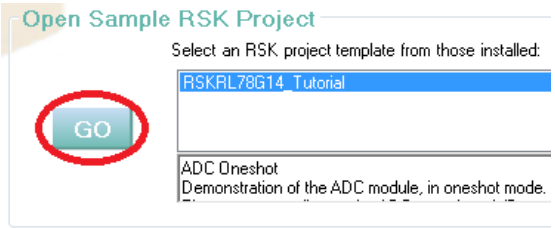
Note: The Windows driver signing dialog may be displayed. Please accept the driver to continue.

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

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).

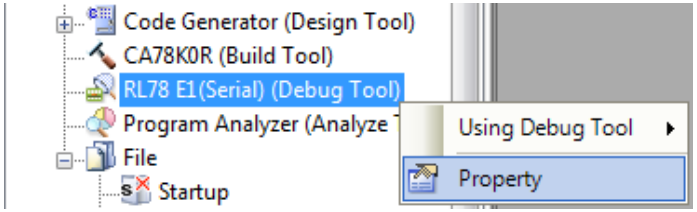
19. Launch CubeSuite+ from the Windows Start Menu. (Start Menu > All Programs > Renesas Electronics CubeSuite+ > CubeSuite+).
20. The 'One Point Advice' dialog which provides useful tips will open. The detail for this is out of scope for this guide. Click <OK>.
21. The Start panel will appear. Select the RSKRL78G14_Tutorial project under the "Open Sample RSK Project" entry and click <GO>.



22. In the “Create Project” dialog that follows, specify a name for the project. Leave the list of subprojects unselected.
23. Click “Create” to launch the main Tutorial project.

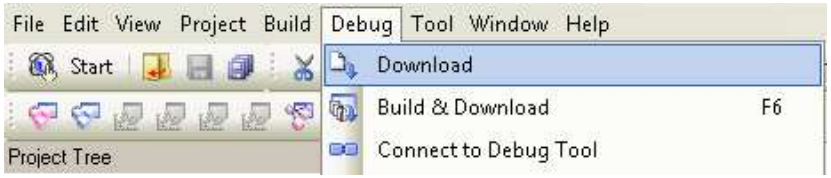
4. Programming and Debug

24. Right-click on the Debug Tool and select ‘Property’.



25. Verify that the option to “Power target from the emulator” is set to “Yes”.
26. Build the project by clicking on the Build Project button.

27. Download the code to the microcontroller by clicking on the download button or click on Debug from the Menu bar and click on Download as shown below:



28. Click the <Restart> button to reset the CPU then start program execution.

The user LEDs on the board will flash at regular intervals. Pressing any of the switches on the RSK, or after 200 flashes have elapsed, will display the string STATIC on the second line of the debug LCD. The second line will then be replaced with the string TESTTEST one character at a time; whilst allowing you to control the user LEDs’ flashing rate using the potentiometer shaft.

29. 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 these codes by changing the active project to another project. The tutorials will help you understand the device and 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: www.renesas.com/rskrl78g14

6. Renesas Compiler

The version of the compiler (Build Tool) provided with this RSK is fully functional with no time restrictions.

7. User Manuals

User manuals can found in the Windows Start Menu. (Start Menu > All Programs > Renesas Electronics CubeSuite+ > Readme Documents > RSK > RSKRL78G14).

8. Support

Online technical support and information is available at: www.renesas.com/rskrl78g14

Technical Contact Details

csc@renesas.com

Notes:

Update Manager: The Update Manager checks via Internet for any updated resources available for each installed CubeSuite+ tool and downloads them accordingly to simplify the update process. Automatic updates will not work if CubeSuite+ is installed without a license key.

© 2012 Renesas Electronics Europe Limited. All rights reserved.
© 2012 Renesas Electronics Corporation. All rights reserved.
© 2012 Renesas Solutions Corp. All rights reserved.

Website: www.renesas.com