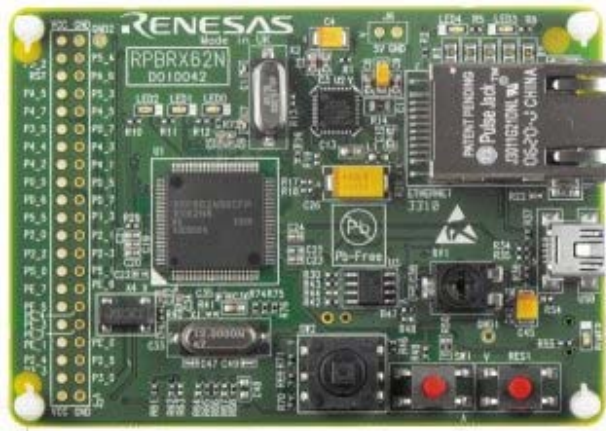


QuickStart Renesas Promotional Board for RX62N



RENEASAS



1. Installation

This Quick Start Guide is for use in conjunction with v3 of the RPBRX62N installer; optical disc reference number D010048_25_V03.

You can run the installation first, or come back and run it later if you wish to use the pre-programmed on-board demo. However, if the USB driver is not automatically installed after connecting to the RPB you will need to perform the installation before proceeding.

The installer will install all of the tools for your Renesas Promotional Board.

1. Insert the mini disk into your computer's DVD-ROM drive. The PC should automatically run the installation program. If the installer does not start, browse to the disc's root folder and double click on 'setup.exe'.
2. Windows™ Vista users may see "User Account Control" dialog box. If applicable, enter the administrator password. Click <OK>
3. Follow the on-screen instructions until the installation is completed.

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

2. Connection

4. Connect the RPBRX62N Ethernet connector either to your computer directly or to a network hub, using the supplied Ethernet cable. (The supplied cable is a 1:1 connection.)
5. Connect the RPBRX62N USB connector (on top of the board, next to the Ethernet connector) to a spare USB connector on your computer using the supplied USB cable.
6. The USB driver should be automatically installed, however if not, follow onscreen instructions.
7. The demo program will start executing when the RPBRX62N board is powered up; power being supplied via the USB.
8. Upon power up, the RPBRX62N demo program will first initialise the Ethernet controller and will try to obtain an IP address via DHCP. If obtaining a DHCP address fails, the RPBRX62N will use a default IP address (192.168.1.10).
9. After obtaining an IP address, the RPBRX62N demo program initialises USB, and is then ready for use. The RPBRX62N demo program runs a small web server, and is used by connecting to the RPBRX62N using a web browser and USB. USB is used to communicate the IP address of the RPBRX62N board to the host PC (via the Device Manager).
10. The 'power' LED as well as FDUPLEX and SPEED LEDs next to the Ethernet connector on the RPBRX62N will light up.

3. Setup Demonstration

Notes: The demonstration uses the RX62N's built-in web server to serve a small website to your computer, or via your LAN to any machine. This website contains a number of demonstrations of the RX62N's capabilities. To use all of the demonstration features you will need to install a VNC client, for example the one available from <http://www.realvnc.com/>.

11. Run the USBViewer.exe application in the Start menu RPB program group (or from the disc). It will display the IP address of the RPB and other information as necessary.
12. The application will show either an assigned IP address or a fixed IP address (192.168.1.10) with additional network settings instructions for the machine. In the first case, click the <Launch Browser> button and skip to step 19 to use the demo.
In the latter case, follow steps 13-18.
13. If the RPBRX62N is connected to your PC directly with an Ethernet cable, and your PC does NOT provide a DHCP server, the default IP address (192.168.1.10) is used as the IP address of the RPB. To access the board, it is necessary to configure the PC with an appropriate IP address, default gateway and subnet mask.
14. Open Control Panel > Network Connections > [your Ethernet device name] > General tab, select <Properties>.
15. Scroll down to "Internet protocol (TCP/IP) and click <Properties>.
16. Select "Use the following IP address" and enter suitable values, for example IP address 192.168.1.1, Default gateway 192.168.1.1 and Subnet mask 255.255.255.0.
Note: If your PC or laptop has firewall protection you may need to contact your IT department or (if you have the necessary rights) disable it for the duration of the demo. You may also need to remove proxy settings from the browser connection.
17. Click the <Launch Browser> button and your default browser will start showing the Welcome page of the demo.
18. Start your web browser, and go to <http://192.168.1.10>. Your browser will show the Welcome page of the demo.

Using the demo:

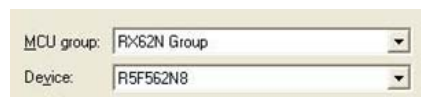
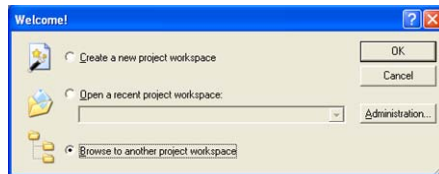
19. You will be looking at a webpage saying "Congratulations! You have successfully connected to the Renesas Promotional Board for RX62N."
20. Follow on-screen instructions to use the demonstrations, note that some of the demos require use of the VNC client already mentioned. Additional information is provided at the web page referenced at the end of this Guide.

4. HEW Workspace

Once you have tested the pre-programmed demonstration, it is time to connect to the board and write some code. High-performance Embedded Workshop (HEW) integrates various tools such as compiler, assembler, debugger and editor into a common graphical user interface.

The workspace supplied is set to automatically connect to the on-board Segger debugger circuit (located on the underside of the RPB).

21. Connect the RPB's underside USB connector to a spare USB socket.
22. J-Link will install its driver automatically.
Note: Windows Vista users may need to enter an administrator password during this process.
23. Launch HEW from the Start Menu. (Start Menu > All Programs > Renesas > High-performance Embedded Workshop).
24. In the "Welcome" dialog box select "Browse to another project workspace". Click <OK>
25. The "Open Workspace" dialog box will be shown looking at the C:\Workspace folder
26. Open the RPB folder (this is the workspace folder) , browse through to the first RX62N folder (this is the project folder) and select the RX62N.hws file (.hws denotes a HEW Workspace file). Click <Select>
27. The RX62N workspace will now open and the Device dialog box will open.
28. Ensure "RX62N Group" is selected on the "MCU group" dropdown.
29. Ensure "R5F562N8" is selected on the "Device" selection. Click <OK>
30. On the second view, click <OK>.
31. The debugger will now connect.
32. Using the power features of HEW you will be able to view, edit, build and debug the workspace.



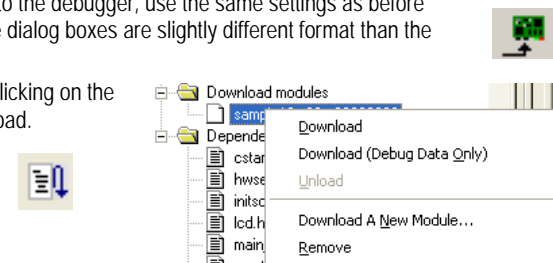
5. The Main HEW Controls

- There are two pull-downs to select the Build



Configuration and Session.

- The 'Build' icon is the command to compile, assemble and link the project.
- The "Connect" icon is used to reconnect to the debugger, use the same settings as before (although on subsequent connections the dialog boxes are slightly different format than the first time).
- You can download to the target by right clicking on the "Download module" and selecting Download.
- The "Reset-Go" command is used to reset the Program Counter and run the program.



To learn more about using HEW, open the HEW User Manual installed on your computer (Start Menu > All Programs > Renesas > High-performance Embedded Workshop > Manual Navigator).

6. 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 add projects to the current workspace by selecting (Project > Insert Project) from the main menu. 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 website.

7. Renesas RX Compiler

The version of the compiler provided with this RSK is fully functional but time limited. You have 60 days to evaluate the full product before the compiler will limit the code linker to 128k bytes. Full licensed RX compiler versions are available from your Renesas supplier.

8. Support

For technical support and further information about this product, about RX62N and the rest of the new Renesas RX range of microcontrollers please visit us at: www.renesas.com/rpbrx62n

Note on AutoUpdate: This is configured to automatically add itself to the Startup folder in the Windows Start Menu and use the registry defaults for access to the web. After restarting the machine an icon will appear in the System Tray next to the clock. To change the settings or access AutoUpdate, simply right click on the icon and use the menu that appears.

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