

Getting Started Guide

IAR KickStart Kit[™] for Renesas RX62N

This guide briefly describes how to get started using IAR Embedded Workbench[®] to run an example application on the Renesas YRDKRX62N evaluation board (RDK).

Software installation

- 1 Insert the IAR KickStart Kit CD. The installation program starts automatically.
- 2 Click COPY DOCUMENTS to copy all the kit documentation to your computer, by default under \Program Files\IAR Systems\IAR KickStart Kit\.
- 3 On **SOFTWARE** page, select the IAR Embedded Workbench for Renesas RX installation of your choice. We recommend the Kickstart edition which has no time limit.

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CHOOSE SOFTWAR	RE		RENESAS				
At least one edition of IAR Ember required. If both editions are insta	dded Workbench, our developmen alled use separate installation path	t environment and compiler, is s.					
IAR Embedded Workbench KickStart edition	IAR Embedded Workbench Evaluation edition	IAR visualSTATE Demo edition					
A code size limited edition with no time limit	A time limited edition with no code size limit.	A 20 state limited edition of the IAR state machine tool					

Figure 1 - Choose software

- 4 You will be directed to an online Product Registration page to get your license number and key, which will be delivered to you via e-mail within a few minutes. After this you will be able to install the software and updates. Note that it may take several minutes for the installation files to unpack.
- 5 In the end of IAR Embedded Workbench installation, the Emulator USB Driver Installation Wizard will be prompt, just click **Next** and **Finish** to install them.

Hardware configuration

6 Connect your computer to the J-Link USB connector on the YRDKRX62N evaluation board using the supplied USB cable. The USB drivers for the J-Link debugger should be already installed automatically with the IAR Embedded Workbench.

Note: If you get some message that the driver has not been installed properly, please navigate to \IAR Systems\Embedded Workbench Kickstart x.x\rx\drivers\JLink\ and start the InstDrivers application.

For more details about the evaluation board, please read the YRDKRX62N user manual.

Running example applications

To take the full advantage of the example application, you should have some working knowledge of IAR Embedded Workbench IDE. For a quick introduction, see the **GETTING STARTED** and the **TUTORIALS** in the IAR Information Center (Figure 2).

- 7 From the Start menu, start the IAR Embedded Workbench IDE by choosing All Programs>IAR Systems>IAR Embedded Workbench for Renesas RX x.xx Kickstart>IAR Embedded Workbench.
- 8 Click on **EXAMPLE PROJECTS** in IAR Information Center for Renesas RX.
- 9 Choose **RDKRX62N** and open project RDKRX62N board examples (click ^[1] icon beside).

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		Here you will find all i and reference guides		ed to get started: tutori and release notes		er.
-		GETTING STARTED Guidelines for setting up your project, adding files, compiling, limiting, and debugging it.	USER GUIDES Complete product documentation in PDF format plvis you all the user and reference information you need.	Example PROJECTS Example applications that demonstrate hardware peripherals for specific devices and evaluation boards.	INTEGRATED RTOSes Information, evaluation versions, and example projects for integrated RTOS and middleware solutions.	
		TUTORIALS	SUPPORT	RELEASE NOTES	Tay Pages	
		Tutorials to make you familiar with the IDE and the features of the IAR C-SPY debugger.	For questions about how to use your IAR product, reporting a problem, or finding support resources.	All about the latest features, new device support, and program corrections.	Here you can download product updakes, manage licenses and contact information, and check your SUA status.	
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Figure 2 - IAR Information Center

- **10** Click **Choose** to select a default destination folder to save a copy of this project for testing, so that the original project will not be updated for any changes you made during testing.
- 11 Read the Example description.
- 12 Choose **Project>Make** or click the **Make** button \mathfrak{P} on the toolbar, the project will be compiled and linked.

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Figure 3 - IAR Embedded Workbench IDE- Menu and Toolbar

13 Choose **Project>Download and Debug** or click the **Download and Debug** button *b* on the toolbar.

- a. If asked to update the emulator firmware, follow the prompts to complete.
- b. Use the default settings in the hardware setup dialog box that is displayed. Click **OK** TWICE. This will cause your program to be downloaded to the evaluation board.
- 14 The source file including the main function is now displayed in the editor window. The operation details can be found in the source file header.

- 15 Click **Debug>Go** or click the **Go** button in the toolbar to start the application.
- **16** To stop C-SPY, choose **Debug**>**Break** or click the **Break** button **b** on the toolbar.
- 17 To explore the C-SPY debugging features or change the J-Link settings, choose the View and J-Link menu (see Figure 3).
- **18** To exit C-SPY, choose **Debug>Stop Debugging** or click the **Stop Debugging** button **IX** on the toolbar.

You can now try other example projects included. Right-click on any other Debug project, click on "Set as Active" and then click **Make** button.

Running RTOS examples

- 19 Open a RTOS demo project, for example Express Logic's ThreadX Demo from Example Projects
 - ->RDKRX62N.
- 20 Select the corresponding RTOS plug-ins from Project->Options...->Debugger category, then click OK.

Figure 4 - RTOS plug-ins in C-SPY

- **21** Repeat the step 11-17 as above (let the application run for a while before clicking **X** button).
- **22** Use the RTOS menu and toolbar, integrated in the IAR Embedded Workbech IDE, to explore the RTOS debugging features.



Figure 5 - RTOS menu and toolbar

For more RTOS BSPs, please check **INTEGRATED RTOSes** from IAR Information Center. You probably need to download the BSPs from RTOS partner's website.

To learn more about the IAR Embedded Workbench, RDK evaluation board and get the latest updates, please visit www.iar.com/resources, www.iar.com/kit_updates and www.renesas.com/yrdkrx62n.

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