

Renesas Synergy™ Platform

PK-S5D9 v1.0 Out-of-Box Demonstration Programming Guidelines

Introduction

This guide covers how to reload the out-of-box (OOB) demonstration on the PK-S5D9 Kit. To follow the guide, a full JTAG software installation is not needed, as a copy of a supported version is already included.

Minimum PC Requirements

- Microsoft® Windows® 7 or 10 with Intel® Core™ family processor running at 2.0 GHz or higher (or equivalent processor)
- 8 GB memory RAM
- 250 GB free space on hard disk or SSD
- USB 2.0
- Connection to the Internet

Required Resources

- Promotion Kit S5D9 (PK-S5D9)
- e² studio ISDE v6.2.0 or greater or IAR EW for Synergy v8.21.1 or greater
- SSP v1.4.0 or greater and Synergy Standalone Configurator (SSC) v6.2.0 or greater
- SEGGER J-Link® USB driver
- Micro USB cables

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1. About the PK-S5D9 Kit

This programming guide applies to the PK-S5D9 Kit. The OOB demonstration that we load may be a newer and improved version compared to the factory installed demonstration.

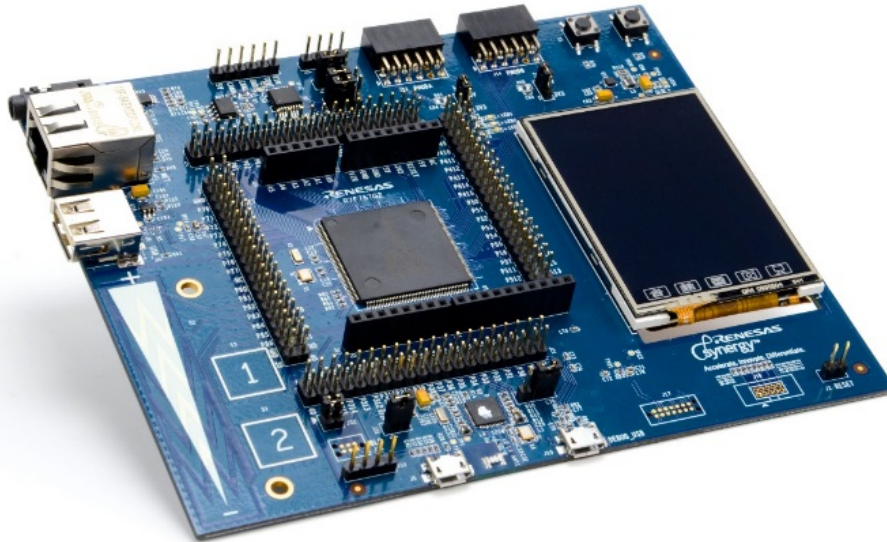


Figure 1. PK-S5D9 Board

2. Reload the Out-of-box Demonstration

Follow these steps to reload the OOB demonstration on the PK-S5D9.

Note: The jumper configuration for the PK-S5D9 kit should be set to the default settings as indicated in *Promotion Kit S5D9 (PK-S5D9) User's Manual (r12um0009)*.

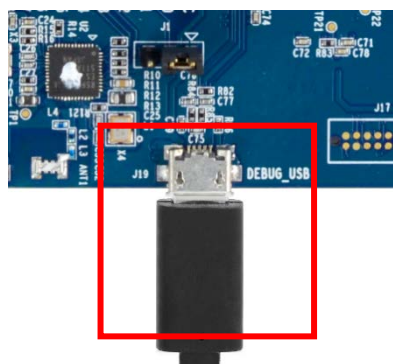


Figure 2. Connecting the Micro USB to the Board

1. Connect the Micro USB end of the supplied USB cable to the PK-S5D9 board J19 connector (DEBUG_USB).
2. Connect the other end of the USB cable to a USB port of the PC. The LED4 on the PK-S5D9 lights green indicating the PK-S5D9 is now properly connected to the PC.
3. In Windows Explorer, double click "Program PK-S5 OOB Demo.bat" to program the PK-S5D9 with the OOB demonstration image.

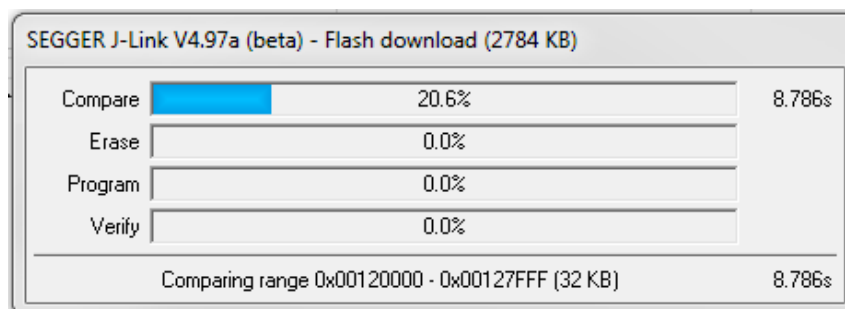


Figure 3. Flash Download Window

Note: If the update J-Link firmware dialog box is displayed, we highly recommend that you click **Yes**. Programming failure may occur if you update the firmware. If this happens just double click on the .bat file again.

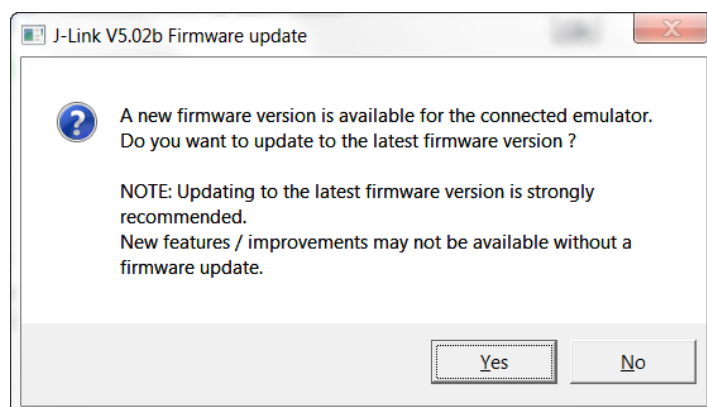


Figure 4. J-Link Firmware Update Window

The OOB demonstration application is now loaded onto the PK-S5D9 and the board is automatically reset.

3. Notes for the Out-of-box Demonstration

1. Once plugged in, the PK-S5D9 will power up, and the LCD will display a splash screen as shown in the below figure.

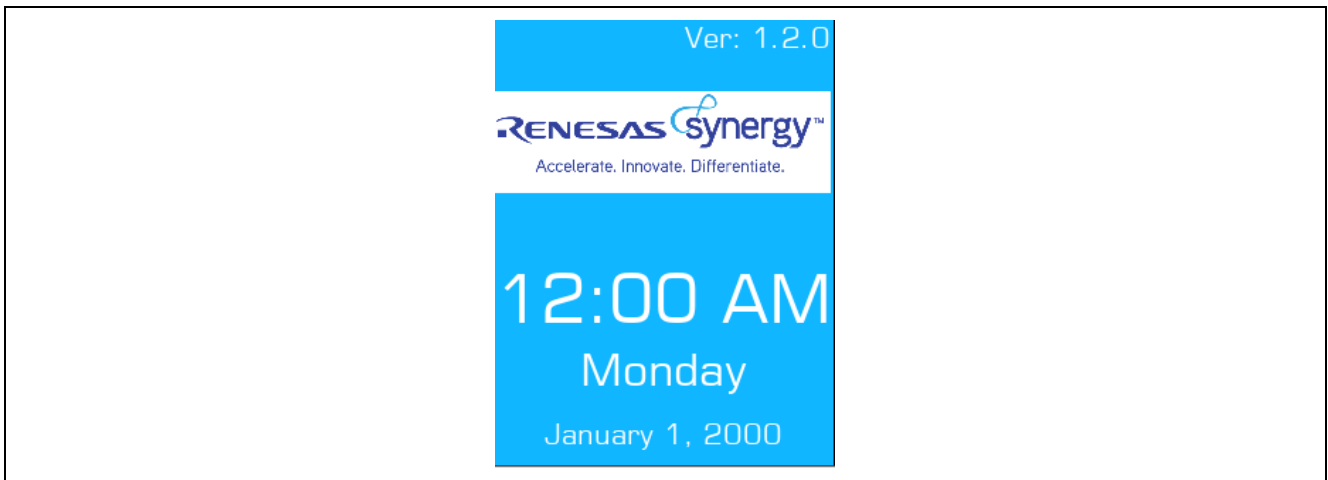


Figure 5. LCD Splash Screen

2. Tap the splash screen to enter the Thermostat demo. In this demonstration, the SSP uses the A/D converter to read the internal temperature sensor of the S5D9 and display this information on the LCD Display.

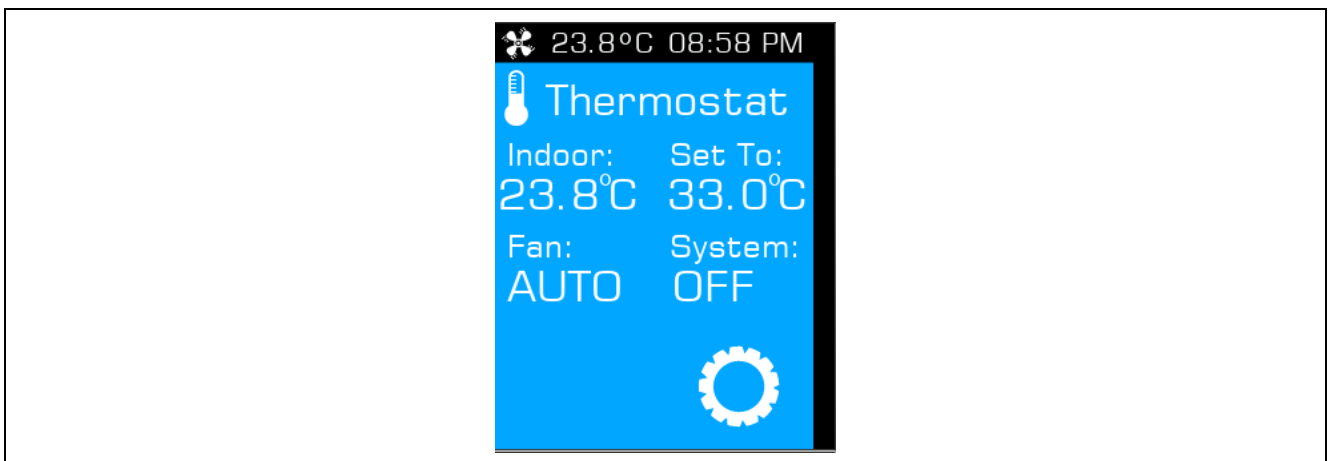


Figure 6. Thermostat Demo Screen

3. Tap the settings icon (looks like a gear) on the bottom right to make adjustments to the system including Units, Time and Date.

Website and Support

Visit the following vanity URLs to learn about key elements of the Synergy Platform, download components and related documentation, and get support.

Synergy Software	www.renesas.com/synergy/software
Synergy Software Package	www.renesas.com/synergy/ssp
Software add-ons	www.renesas.com/synergy/addons
Software glossary	www.renesas.com/synergy/softwareglossary
Development tools	www.renesas.com/synergy/tools
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Partner projects	www.renesas.com/synergy/partnerprojects
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Self-service support resources:	
Documentation	www.renesas.com/synergy/docs
Knowledgebase	www.renesas.com/synergy/knowledgebase
Forums	www.renesas.com/synergy/forum
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Videos	www.renesas.com/synergy/videos
Chat and web ticket	www.renesas.com/synergy/resourcelibrary

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jun.13.20	—	First release document
1.01	Jul.06.20	—	Second release

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

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