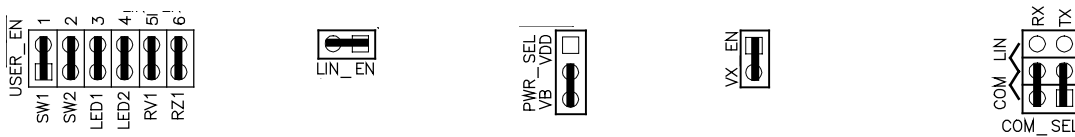


# DEMO9S08EL32 QUICK START GUIDE

## Introduction and Default Settings

This quick start guide will show how to connect the target board to a PC, install the correct version of CodeWarrior Development Studio, and execute a simple demonstration program loaded in FLASH memory. The default jumper settings for the DEMO9S08EL32 are shown below



**Figure 1: DEMO9S08EL32 Default Settings**

## Install CodeWarrior Development Studio for HC(S)08 Special Edition

The DEMO9S08EL32 board ships with CodeWarrior Development Studio for Microcontrollers, a complete Integrated Development Environment (IDE) that provides a highly visual and automated framework to accelerate the development of the most complex embedded applications. To install the IDE, refer to the "CodeWarrior Development Studio" DVD case and follow the steps in the included Quick Start Guide.

CodeWarrior Development Studio must be properly installed before attempting to connect the target board to the host PC. Otherwise, the necessary USB drivers will not be available and the host PC will not recognize the target board when connected.

## Run the LED\_DEMO Program

The DEMO9S08EL32 ships with a simple demonstration program loaded into on-chip FLASH memory. This demonstration program executes when power is applied or when the RESET button is pressed. The source code for this demo program can be found in the LED\_DEMO.zip file on the Axiom Support CD in the /Examples folder. Follow the steps below to run the LED\_DEMO program.

1. Verify the configuration jumpers are set to the default position. Refer to Figure 1 above.
2. Connect the included USB cable between an open USB port on the host PC and the USB connector on the target board.
3. Follow the on-screen instructions to install the necessary USB drivers.
4. After the USB drivers are properly installed, the USB, POWER OUT, and +5V LED's will be ON.
5. The LED\_DEMO program will execute - LED1 toggles at approximately 4Hz. LED2 toggles each time SW2 is pressed.

## Load and run the LED\_DEMO Program

The steps below will show how to program the MCU using the CodeWarrior Development Studio for HC(S)08 Special Edition. The program loaded is a series of steps used to verify peripheral functionality.

1. Ensure the target board is connected and the LED\_DEMO program is running. Refer above if necessary.
2. Copy and unzip the SCI\_DEMO.zip file from the Support CD to the host PC. Make note of where the file is stored during the unzip process.
3. Find and double-click the SCI\_DEMO.mcp project file to open the project in CodeWarrior.
4. Ensure the P&E Multilink/Cyclone Pro build target is selected.
5. Open the MAIN.ASM file to inspect the demonstration code.
6. From the Project menu, select Debug or click the Debug button. The user may also press the F5 key.
7. Click the Connect button when the ICD - Connection Manager pops-up. Click Yes button at the Erase and Program Flash? Pop-up window.
8. The SCI\_DEMO application program loads into FLASH memory on the target.
9. Connect a serial cable (not provided) between the host PC and the COM port on the target board
10. Open AxIDE, or other terminal emulation program, and configure for 9600, 8, N, 1
11. Press the RESET button on the target board and observe a text display in the AxIDE window.

## Troubleshooting

### VDD LED does not light

- Ensure PWR\_SEL jumper is set to VB position (refer to Figure 1 above)
- Ensure CodeWarrior is properly installed
- Ensure USB drivers loaded when target board connected to PC

### Unable to program the target MCU using the USB-BDM

- Follow troubleshooting steps under VDD LED above

### No display in terminal window

- Ensure COM\_SEL jumpers are set to COM position (refer to Figure 1 above)
- Ensure terminal program is configure to 9600, 8, N, 1
- Ensure serial cable is securely attached to host PC and target board

If the above Troubleshooting Tips fail to correct the problem, please contact Freescale Semiconductors for further assistance. Please refer to the Technical Information Card (TIC) included in the kit. Assistance may also be found by contacting Axiom Manufacturing at [support@axman.com](mailto:support@axman.com).

