DEMO9S08QG8 Quick Start Guide

Introduction and Default Settings

This guide will walk you though how to connect the board to your PC, run the LED test program, and install the correct version of CodeWarrior Development Studio. The source code for DEMO_S08QG8_Test (LED test) is provided on the Axiom CD in the "Examples" folder. Below are diagrams of the default settings for the DEMO9S08QG8 demo board.

Black blocks indicate the "on" or "installed" position of jumpers. Please check these settings before continuing.
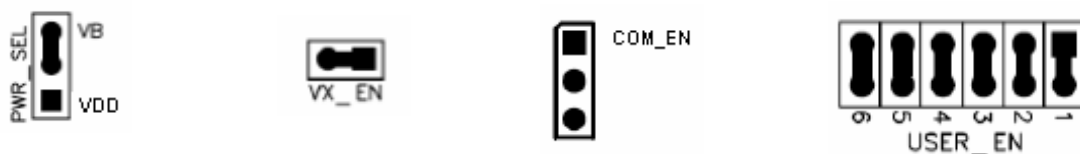

Figure 1. DEMO9S08QG8 Default Settings

Install CodeWarrior Development Studio Version 3.1 for HC(S)08 and service pack for QG support

If you do not have version 3.1 of CodeWarrior for HC(S)08 Special Edition installed on your computer, please refer to the provided "CodeWarrior Development Studio" DVD case and follow the steps in the quick start guide.

After CodeWarrior has been installed properly, please install the HC(S)08 service pack from the CodeWarrior service pack CD. This is required if you want to use the USB-BDM feature on the DEMO9S08QG8 board. The service pack can also be downloaded from www.metrowerks.com

Important: You must register and obtain a special edition license key to use CodeWarrior. This license key allows you to experience all the features of the Special Edition CodeWarrior Development Studio.

Run the DEMO908QB8_Test program

The DEMO9S08QG8 is shipped with the DEMO_S08QG8_Test program stored in on-chip FLASH memory. You may view the source code for this program by accessing the "DEMO_S08QG8_Test.zip" file on the Axiom CD (located in the "Examples" folder).

1. Check the jumper settings and make sure they are in the default position. Use Figure 1 as a guide.
2. Connect the USB cable to the PC and then to the board. If you are using this board for the first time, please follow the instructions on the screen to install the USB device properly. (If you have not installed CW 3.1 and the service pack, you will not have the proper files used to recognize the Demo Board.)
3. After the USB drivers are installed correctly, the USB, USB PWR OUT, and VDD LEDs will be on.
4. Press SW1 and LED1 will toggle.
5. LED2 will blink at a fast rate.

Use the USB BDM to install DEMO9S08QG8_APP Program

The USB-MON08 allows a user to program the MCU FLASH and debug applications via USB connection.

1. From the Axiom CD ("Examples" folder), copy the DEMO9S08QG8_APP.zip file to your PC, and extract the files into a working folder on your desktop. **Note:** Be sure to extract—not just copy—the files.
2. Open CodeWarrior HC(S)08 v3.1 and open the "DEMO9S08QG8_APP.mcp" project file.
3. Open "DEMO9S08QG8_APP.c" in the source folder by double clicking on "DEMO9S08QG8_APP.c". This is the application code.
4. Check the jumper settings and make sure they are in the default position. Use Figure 1 as a guide.
5. If you have not already done so, connect the USB cable. The LED, PWR OUT, and +5V LEDs should be on.
6. Click on "Debug" under Project in the menu bar or press "F5." The True-Time Simulator & Real-Time Debugger interface window will appear. Please follow the instructions on the screen to complete the FLASH programming process.
7. When the ICD Connection Assistant appears, click the "Reset and Stop MCU…" button and follow the instructions on the screen.
8. When the "Erase and Program Flash?" window appears, click the "Yes" button.
9. The "CPROG08SZ Programmer" window should close after the MCU FLASH is programmed. You are now ready to run the DEMO9S08QG8_APP code. Refer to DEMO9S08QG8_APP_UG.pdf for instructions on how to use this code.

Troubleshooting

VDD LED does not turn on

- Make sure the "PWR_SEL" jumper is in the VB position.
- Install the HC(S)08 QG8 CodeWarrior service pack.

Unable to program the part using on board USB-BDM

- Make sure the "PWR_SEL" jumper is in the VB position.
- Install the HC(S)08 QG8 CodeWarrior service pack.