

# DEMO9S12HY64 QUICK START GUIDE

## Introduction and Default Settings

The DEMO9S12HY64 features the MC9S12HY64 which is an automotive, 16-bit MCU specifically designed for entry level instrument clusters. The MC9S12HY64 provides multiple, integrated stepper motor controllers, an LCD controller, and supports CAN and LIN/J2602 protocols. This guide will show how to quickly connect the board to a host PC, and execute a demonstration application preloaded into FLASH memory. Default jumper positions for the DEMO9S12HY64 are shown in the figure below.

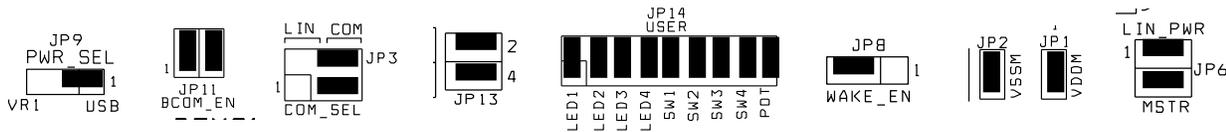


Figure 1: DEMO9S12HY64 Default Option Settings

## Install CodeWarrior Development Studio

The DEMO9S12HY64 board ships with the latest version of CodeWarrior Development Studio for Freescale HCS12(X) Microcontrollers. CodeWarrior Development Studio is a complete Integrated Development Environment (IDE) that provides a highly visual and automated framework to accelerate the development of the most complex embedded applications.

**NOTE:**

CodeWarrior Development Studios 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 board.

## To Install CodeWarrior for Microcontrollers:

Insert the CodeWarrior Development Studio for Freescale HCS12(X) Microcontrollers CD into a CD / DVD drive. The installation will start automatically. If the installation fails to start, start the installation program manually. Open Windows Explorer and navigate to the CD / DVD drive where the CodeWarrior disk is inserted. Double click on Launch.exe to launch the installer. Follow the on-screen instructions to install the CodeWarrior IDE and integrated programmer.



## To Launch the Demo Program:

The DEMO9S12HY64 ships with a demonstration program preloaded into on-chip FLASH memory. The demonstration program turns on all segments of the LCD and exercises various peripherals of the board.

1. Verify the option jumpers are set in default positions. Refer to Figure 1 above.
2. Connect the included A/B USB cable between an open USB port on the host PC and the USB connector on the target board. Follow the on-screen instructions to install the necessary USB drivers.
3. Move the ON/OFF switch to the ON position
4. All segments of the LCD panel should illuminate
5. Rotate the POT and notice the Temp and System Voltage Bars vary with POT position
6. Press SW1 and notice LED1 flashes and several segments of the LCD animate. Press SW1 again to turn off the LED and animated LCD segments.
7. Repeat for SW2 – SW4.
8. Connect a serial cable to the COM connector at J8. Open a terminal program and configure for 19200,8,N,1. AxIDE is a simple terminal program included on the Support CD.
9. Type in the terminal window and notice the keystrokes are echoed.

The Quick Start CodeWarrior Project may be downloaded from the Axiom Manufacturing web site at [www.axman.com/support](http://www.axman.com/support).

## Troubleshooting

If the demonstration application fails to function as indicated above, please follow the steps below before contacting Freescale Semiconductors. Please refer to the TIC card included in the DEMO9S12HY64 kit for contact information.

- Ensure the option jumpers are set to default positions. Refer to Figure 1 above. Specifically, ensure the PWR\_SEL option jumper is set correctly.
- Ensure the correct version of CodeWarrior is installed and that the HY64 Service Pack is installed
- If keystrokes are not echoed in the terminal window, ensure the terminal program is correctly configured. Also, ensure the COM\_SEL jumpers are set properly, refer to Figure 1 above.

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