

# XHY56-DEMO-V1 QUICK START GUIDE

## Introduction and Default Settings

The XHY56-DEMO-V1 simulates an automotive instrument cluster designed to showcase the Freescale MC9S12Xhy256 MCU. The MC9S12XHY family is an automotive, 16-bit microcontroller product line specifically designed for entry level instrument clusters.

The Dashboard Cluster Demo applies CAN, LIN/J2602, Stepper Motors, and a loud-speaker to simulate a automotive cluster panel. The board ships with a demo application loaded to showcase various peripherals.

This quick start guide will show how to connect the target board to a host PC, install the correct version of CodeWarrior Development Studio, and execute a simple demonstration program loaded in FLASH memory.

## Install CodeWarrior Development Studio for or Microcontrollers, Special Edition

The XHY56-DEMO-V1 ships with CodeWarrior Development Studio for HCS12(X), 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.

## To Launch the Demo Program:

The Dashboard Cluster Demo ships with a demonstration program pre-loaded into FLASH memory. The demo program exercises the motors, LCD, and push-buttons. Follow the steps below to execute the demo application.

1. Apply power to the barrel connector at J4 using the included power supply. Move the toggle switch at SW5 to the ON position.
2. The motor pointers will illuminate and rotate to the fully counter clock-wise direction. Also, the LCD backlight will turn ON.
3. After a short pause, the motor pointers will begin to rotate, alternating in the clock-wise and counter clock-wise directions. Also, all LEDs on the board will flash ON and OFF.
4. The LCD will also show various activity.



**Web Site:** [www.axman.com](http://www.axman.com)

**Support:** [support@axman.com](mailto:support@axman.com)

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 Technical Information Card (TIC) card included in the Dashboard Cluster Demo kit for contact information.

- Ensure the correct version of CodeWarrior is installed and that the XHY256 Service Pack is installed
- Ensure the included power supply is connected properly and is providing +12V output.
- Ensure SW5 is in the ON position.
- Ensure SW2 (RESET) push-button is not stuck in the closed position.

If the above Troubleshooting tips fail to correct the problem, please contact Freescale Semiconductors for further assistance. Refer to the included in the kit for contact information.

