Freescale Semiconductor
56F8037 EVM Board Kit Installation Guide

Welcome!

Thank you for choosing this Freescale Development Tools product, featuring the CodeWarrior® Integrated Development Environment (IDE). This document provides instructions on setting up the Freescale 56F8037 EVM board with the CodeWarrior IDE. If you have any questions regarding the hardware kit or software development tools, please contact the Technical Information Center:

www.freescale.com/support

Kit Contents

Your 56F8037 EVM board kit includes:

Hardware
- 56F8037 EVM board
- USB TAP including cable
- Additional USB cable

Software
- CodeWarrior IDE with Processor Expert™ Development Tools CD-ROM
- Freescale 56800/E Resource CD-ROM

Documentation
- *56F8037 EVM board Kit Installation Guide* (this document)
- Warranty registration card

System Requirements

- 133 MHz Intel® Pentium® or compatible processor
- Windows® 98/NT/2000/XP
- 64 MB of RAM
- 350 MB hard drive space
- Two free USB ports
- CD-ROM drive for installation

Help

For assistance with the 56F8037 EVM board or the CodeWarrior IDE, please contact the Technical Information Center:
www.freescale.com/support

Processor Expert updates:
www.processorexpert.com/ mc56800updates.html

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1   Install the CodeWarrior IDE with Processor Expert Development Tools

1. Insert the CodeWarrior 8.0 CD into your computer's CD-ROM drive.
   If Auto Install is disabled on your computer, run the **setup.exe** program at root on the CD. Follow the CodeWarrior software installation instructions on your screen.

2. Upon completion of the installation, a FREE[1], Permanent, 8k Words License will be installed and active. The license consists of the file[2] *license.dat*, located in the CodeWarrior directory.

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1. Some Processor Expert Beans are priced separately.
2. Do not move the *license.dat* file after installation. For additional assistance with license issues, contact the Technical Information Center: **www.freescale.com/support.**

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2   Power Up the EVM - Running the PWM Demonstration Application

The 56F8037 EVM board contains a pre-programmed demonstration application, which can be executed directly from flash memory:

1. Configure JG2 for (JG2 center to) USB (which is closest to the LEDs).

2. Connect P2 USB of the EVM to one of your computer's USB ports using one of the supplied USB cables.

3. Observe blinking LEDs.

4. For source code or full documentation, follow these steps:
   a. Launch CodeWarrior IDE
   b. Select **File > New**
   c. Select **Processor Expert Examples Stationery**
   d. Type **Project name** and click **OK**
   e. Select **DemoApplications > 56F8037_DemoBoard > PWM_Example**

3   Connect the 56F8037 EVM Board to Your Computer

1. Connect one end of the remaining USB cable to another USB port on your computer.

2. Connect the other end of the USB cable to the supplied USB TAP.

3. Connect the USB TAP's 14-pin JTAG cable to J1 on the EVM board (align the red key with pin 1, which is closest to the LEDs).

4   Tutorial: Creating a CodeWarrior Project

1. Launch the CodeWarrior IDE.

2. Select **File > New**.

3. Select **Processor Expert Stationery** and give your project a name (a project with the *.mcp* extension will be created).

4. Click **OK** in the **New** window.

5. Select **MC56F803x > MC56F8037** from the **New Project** window and click **OK**.

   The project window opens and displays the file contents of your new CodeWarrior project.

6. Choose **Project > Make**.
   Processor Expert generates appropriate initialization and configuration files.

7. Expand the **User Modules** folder in the project window by clicking on the plus (+) sign.

8. Double-click **projectname.c** to open it.

9. Add any additional code as indicated by comments:

   ```
   /*write your own code here*/
   ```

10. Save your change and close the editor window.

11. Choose **Project > Debug**.

    Your code downloads to the 56F8037 EVM board and the program will stop at *main()* (which appears in the source pane of the debugger window).

12. Choose **Project > Run** (F5). Your program will continue execution until the next breakpoint is encountered.