

# Proximity Sensor Software Development Kit

## Quick Start Guide

### 1.1 Installing CodeWarrior®

1. Install CodeWarrior per the instructions included with the MCU DEMO Kit.

### 1.2 Installing the Proximity Sensor Software for MCUs

1. Insert the provided DVD into the computer and wait for the menu to appear.
2. Select the KITPROXIMITYEVM development kit.
3. In the installation menu, click on the software tab and select "Install Proximity Sensor Software." This option will install the Proximity Sensor Software for MCUs and the Graphical User Interface (GUI).
4. Follow the Installation instructions.
5. The path where all documents and software are installed is: C:\Program Files\Freescale\Proximity Sensing Software.

### 1.3 Connecting the DEMO Board to the PROXIMITYBOARD0

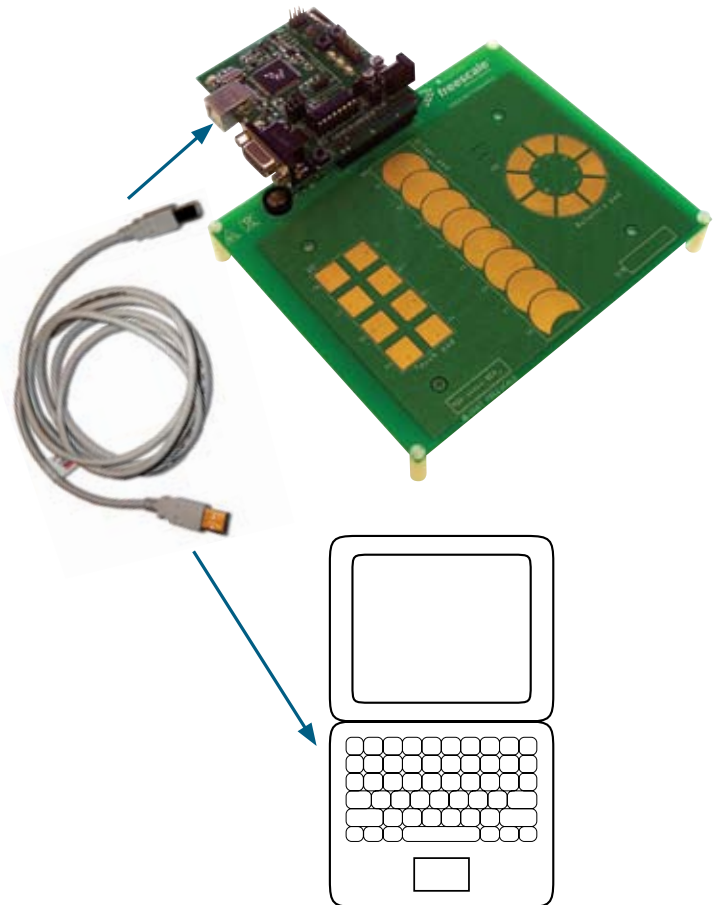
1. Locate pin 1 and 3 of the MCU port on the DEMO board.
2. Locate pin 1 and 3 on the PROXIMITYBOARD0 header.



3. Connect pins 1 and 3 from the DEMO board to the pins 1 and 3 respectively in the PROXIMITYBOARD0 board. For detailed information refer to the PROXQRUG document, which can be found at [www.freescale.com/proximity](http://www.freescale.com/proximity).

### 1.4 Connecting the DEMO Board to the Computer

1. Connect USB cable from USB port on the computer to the USB connector on the board.



## 1.5

### Programming the Microcontroller

1. Open CodeWarrior. Go to Programs > Freescale CodeWarrior > CW for Microcontroller V6.0 > CodeWarrior IDE.
2. Click on the Open Project command and search for the installed Proximity.mcp file.
3. In the project menu, select the "Change MCU/Connection" option.
4. Find the desired MCU family in the dialog box and select it.
5. Select the appropriate connection method depending on the demo board and click Finish. **DO NOT select "Full Chip Simulation".**
6. Click on the Debug button. A new window will pop up.
7. Click on the Connect button.
8. In the debugger window click on the Run button. This executes the code in the microcontroller.
9. Close the debugger.

## 1.6

### Testing the Firmware

1. Open the GUI. Go to Programs > Freescale > Proximity Sensing Software > Proximity Sensing Interface.
2. Press electrode one (E1) until the buzzer is audible. The bar associated to the electrode (E1) should move to the right and the buzzer will become audible when the threshold is reached.
3. Repeat step 2 with another electrode.



For detailed information about the system setup and GUI explanations please refer to AN3579 and PROXRUG documents at [www.freescale.com](http://www.freescale.com).

#### Learn More:

For current information about Freescale products and documentation, please visit [www.freescale.com/proximity](http://www.freescale.com/proximity).