Touch-Sensing Software Electrode Evaluation Module

Quick Start Guide

The touch-sensing software (TSS) electrode evaluation board is designed to connect to any MCU demo board that includes the MCU port connector. This port can be found in the stand-alone demo boards for 9S08 and ColdFire V1 families. The purpose of this board is to easily evaluate the TSS library in S08 and ColdFire V1 devices. The board includes eight electrodes configured in three common controllers: keypad, linear slider and rotary.

1 Installing CodeWarrior

Install CodeWarrior per the instructions included with the MCU demo kit.

2 Installing the TSS Library

1. **Insert the included CD, wait for the menu to open.**
2. **Select the "Install TSS."**
3. **Follow install instructions.**
4. **The installation directory includes the documentation and demo code.**
5. **Alternatively you can download and install the latest version of the TSS library from freescale.com/touchsensing.**

3 Connecting the Demo Board to the TSSELECTRODEEVM

1. **Locate pins 1 and 3 of the MCU port on the DEMO board.**
2. **Locate pins 1 and 3 on the TSSELECTRODEEVM header.**

3. **Connect pins 1 and 3 from the DEMO board to pins 1 and 3 respectively and insert the whole connector.**

   Some demo boards have a jumper that connects power to the MCU_Port header. Make sure this connection is enabled.

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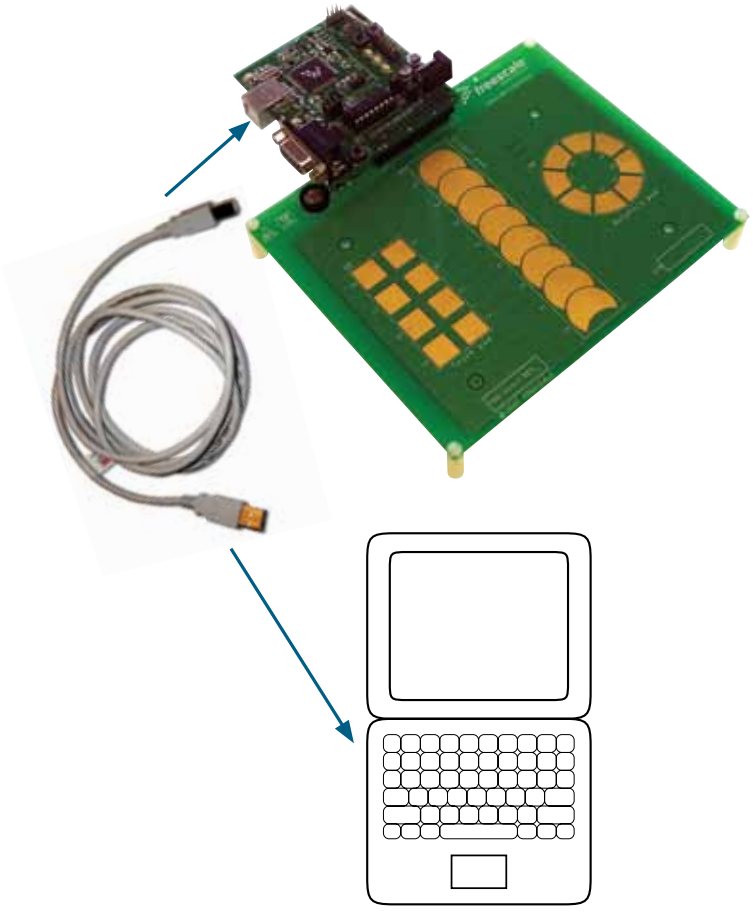
4 Connecting the DEMO Board to the Computer

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



5 Creating an Application for the TSSELECTRODEEVM

1. **Depending on the MCU you are using, you will need to create a code project to demo your application. Please refer to the TSSUG document (Chapters 3 and 4) for in-depth instructions on creating a basic application.**

   Alternatively, you can use the Processor Expert component available starting in TSS version 2.0 for easier and faster development. More info on the TSS Processor Expert Component is in TSSUG chapter 5.

2. **The electrodes in the TSSELECTRODEEVM are mapped as follows**

Table 1: TSSELECTRODEEVM 30 Pin			
Signal	Pin	Pin	Signal
Vcc	1	2	NC
GND	3	4	NC
NC	5	6	NC
NC	7	8	Buzzer
Electrode 1	9	10	NC
Electrode 2	11	12	NC
Electrode 3	13	14	NC
Electrode 4	15	16	NC
Electrode 5	17	18	NC
Electrode 6	19	20	NC
Electrode 7	21	22	NC
Electrode 8	23	24	Buzzer
NC	25	26	NC
NC	27	28	NC
NC	29	30	NC

   As the MCU_Port has the same pinout for all S08 and ColdFire V1 MCUs, the electrode assignments to port pins are the same (from electrode 1 to electrode 8): PTA2, PTA3, PTA0, PTB6, PTB3, PTB4, PTB2, PTB5.

3. **Example code running on the DEMOQE128 board is included on the TSSELECTRODEEVM CD.**

4. **The TSSUG includes further information for configuration of the TSS. For in-depth information on the library software, consult the TSSAPIRM (TSS API reference manual).**

Learn More: For current information about Freescale products and documentation, please visit **freescale.com/touchsensing.**

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