

Electrode Graphing Tool IIC Driver Errata

by: Microcontroller Division

This errata document describes corrections to the *Electrode Graphing Tool IIC Driver*. For convenience, the addenda items are grouped by revision. Please check our website at <http://www.freescale.com/touchsensing> for the latest updates.

The current version available of the *Touch Sensing Library* is Revision 1.1.

The current version available of the *Electrode Graphing Tool* is Revision 0.9

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1 Errata for Revision 0.9

Table 1. Electrode Graphing Tool Rev 2.0 Errata

Location	Description
TSS library version 1.1	New IIC drivers were included in the examples to correctly write to the sensitivity values for electrodes E16-E63.
Electrode Graphing Tool	New IIC Communications protocol to enable modifications to electrodes E16-E63.
JM Comm Firmware	Modified IIC Communication Protocol between EGT AND target MCU

2 Workaround

To modify the sensitivity of the electrodes 17-64 it is necessary to have installed TSS library version 1.1 or later, Electrode Graphing Tool version 0.9 or later, and the JM60Comm firmware version 1.3 or later programmed on the JM60 Comm MCU. All these files can be found at www.freescale.com. The following points give the specific steps necessary to enable the workaround.

2.1 TSS Library update

The TSS library files are distributed in the form of binary library and source code for compile time configuration and optimization. To install the TSS on your host PC:

1. Download the latest version of the TSS setup file form [Freescale website](http://www.freescale.com).
2. Run the self-extracting setup executable and follow the on-screen instructions.
3. When the system prompts for the destination folder, accept the default value or provide another path.
4. The application project using the TSS library makes only a reference to the TSS files. You can copy the library files into the application project directory or leave them in the installation folder. Leaving the library files in the installation folder enables you in the future to upgrade your project to the newer TSS library versions.

2.2 Replacing I2CDrv.c and I2CDrv.h Files in a Project

If you already have a project that is using the I2CDrv.c and I2CDrv.h files, you will have to replace the files with those in the TSS Library. These files can be found on your computer once the TSS Library 1.1 or later is installed within the TSS Library folder:

C:\Program Files\Freescale\Freescale TSS 1.1\examples\TSSEVB_DEMO\Sources\EGT\

2.3 Electrode Graphing Tool Installation

The Electrode Graphing Tool (EGT) version 0.9 must also be installed. To install the EGT, perform the following steps:

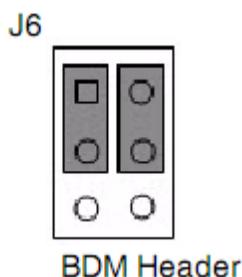
1. Get the latest version of the EGT on the Freescale web site at www.freescale.com.
2. Unzip the EGTInstaller.zip file to a local folder on your computer.

3. Launch the Electrode Graphing Tool installer EGTInstaller.msi. The **Wizard Installer** window appears. Click **Next** to begin the installation process.
4. The **Select Installation Folder** window then appears as shown in Figure3-2. Choose a destination folder or leave the default destination path. Select if the application will be available for all users on the computer or only for the current user (administrator privileges are needed to make an installation for all users). The **Disk Cost** button shows the free space on your local drive and gives information about how much disk space the application will require. Click **Next** to continue.
5. The **Confirm Installation** window appears. Click **Next** to start copying the files onto your computer. A window indicating the installation progress will then appear. After installation, a window indicating that the installation is completed appears. Click the **Close** button.

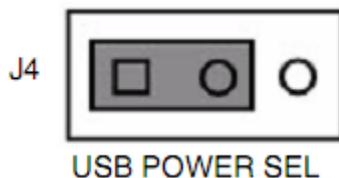
2.4 JM60 Comm Firmware Update

Lastly, it is necessary to update the JM60 Comm MCU that can be found on the TSSEVB. To do this, it is necessary to:

1. Download the latest version of the JM60 Comm Firmware from the [Freescale website](#).
2. Open the .mcp Project using CodeWarrior.
3. Set the MC9S08JM60 Comm MCU as a programming target on the TSSEVB. To do this, place the jumpers of the J6 to the 1–3 and 2–4 position, as pictured here:



4. Power on the TSSEVB through a USB cable through the OSBBDM (J8) connector.
5. Set power selection of the TSSEVB to use OSBDM source



6. After the TSSEVB is powered up, the user can reprogram the JM60 Comm MCU with the new firmware using CodeWarrior and the True Time Simulator and Debugger.

3 Revision History

Table 2. Revision History Table

Rev. Number	Substantive Changes	Date of Release
0.8	Initial release.	09/2009
0.9	Second release. Updated IIC driver to modify electrode sensitivity values for electrodes E16-E63.	02/2010

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