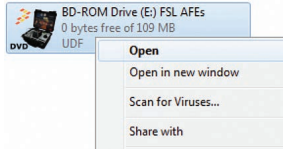
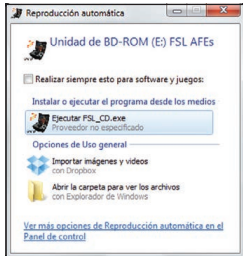


Healthcare Analog Front End (AFE) Reference Platform

1 Insert Disc and Run .exe File

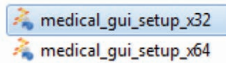
Insert the included disc into your computer. The autorun menu should appear. Click "Execute FSL_CD.exe." The main screen will open. Follow the instructions on the screen to enter the application. The required software and documentation is included in the disk.



Note: If the autorun menu does not appear, go to My Computer. Right click on the disk drive and select open. Search for index.html and double click to open it.

2 Install GUI Software

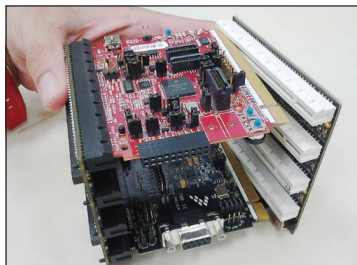
Install the Medical GUI software included on the DVD. Select the installer that corresponds to your Windows® version.



Note: Make sure you have already installed Java® JDK on your computer (look in C:\Program Files\Java for JDK folder).

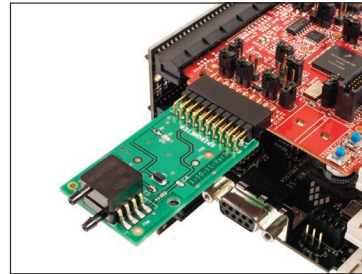
3 Assemble the Tower System

Assemble the Tower System included in the kit by inserting the TWR-K53N512 and TWR-SER modules into the TWR-ELEV cards as shown. Be sure to insert the primary connector into the primary (white connections) TWR-ELEV module.



4 Connect the AFE

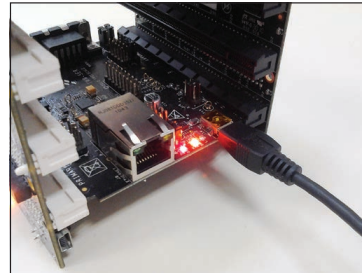
Connect the MED-SPI analog front end to the medical connector for calibration.



Note: MED-SPI is the only plug-in board that requires calibration.

5 Connect via USB

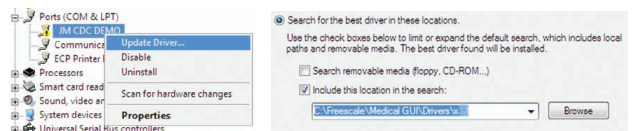
Connect the TWR-SER to the computer using the USB cable that is included.



6 Install Drivers

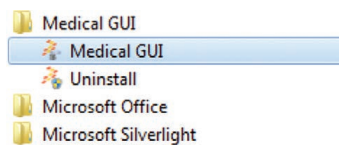
Open Device Manager and install drivers for the JM CDC demo. Drivers can be found here:

- C:\Freescale\Medical GUI\Drivers\x32 for 32-bit version
- C:\Freescale\Medical GUI\Drivers\x64 for 64-bit version



7 Open the GUI Program

Open the Medical GUI program on your computer.

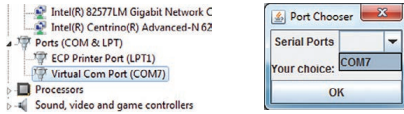


Jumper Configuration

TWR-K53N512	Jumper	J1	J3	J4	J11	J15	J17	J18	J24	J28	J34
	Position	Open	Open	2-3	1-2	Connected	Connected	Connected	1-2	Open	Open
MED-EKG	Jumper	J2	J3	J4	J6	J7	J11				
	Position	1-2	1-2	1-2	2-3	2-3	2-3				
TWR-SER	Jumper	J10	J16	J2							
	Position	1-2	3-4	1-2							

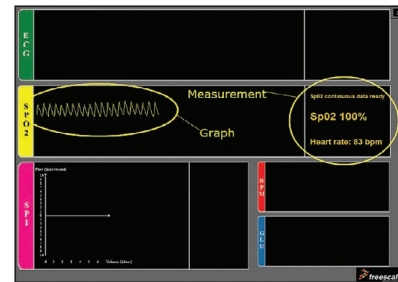
8 Select Port

Select the Virtual Com Port.



10 Start Measurements

In the main window, click on the area for the connected AFE and start measurements.



9 Disconnect the MED-SPI Board and Connect an AFE

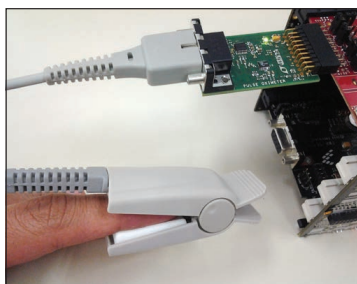
Disconnect the MED-SPI board from the medical connector and connect the desired AFE. Two board options are available for MED-GLU, MED-BPM and MED-SPO2:

1. External opamps using Linear® Technology (the board can be identified by the Linear logo)



2. Kinetis K53 internal opamps

Firmware support for both options without reprogramming



For more information, visit freescale.com/healthcareAFE

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