freescale
semiconductor

Freescale - LFSTBEB8450 - LFSTBEB8450 Evaluation Board

Product Overview:

The LFSTBEB8450 provides is an evaluation board for the Freescale MMA8450Q 3-axis high performance, high functionality low-g accelerometer. The LFSTBEB8450 includes an 8-bit MC9S08QE8CWL MCU for data acquisition, and an EEPROM for data storage. For customers already familiar with the Sensor Toolbox Platform, the LFSTBEB8450 is designed to work with the LFSTBBAT9 for power or LFSTBUSB for communication to a PC.

The development kit RD3924MMA8450Q comes with both the LFSTBEB8450 and the LFSTBUSB boards together for evaluating all of the embedded MMA8450 functionality. The GUI Software is available for download to use with the RD3924MMA8450Q (or separately purchased LFSTBEB8450 and LFSTBUSB). The GUI software providing real time data and demonstration of the latest embedded accelerometer features such as the High Pass Filter, 32 data point FIFO buffer, enhanced Orientation (Portrait/Landscape) detection, Shock Detection, Tap Detection and Transient detection.

Kit Contents:

- MMA8450 Development Board
- USB Cable
- Quick Start Guide

Key Features:

- Multiple toolsets that work on a unified platform
- Complimentary software installer
- Demo, evaluation and tutorial modes included in the GUI demo
- Newer tools will continue to be introduced and added to the Sensor Toolbox

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
LFSTBEB8450	Freescale Semiconductor	1796118	64R6755

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
MMA8450Q	Freescale Semiconductor	8-bit/12-bit Digital Accelerometer IC	1796117	65R1278
MC9S08QE8CWL	Freescale Semiconductor	IC, SM, MCU, 8-BIT, S08, 8KB FLASH	1561389	69M3834
2480 02	Lumberg	USB 2.0 Cable Assembly	1308879	31M6502

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
LFSTBEB7660	Freescale Semiconductor	Accelerometer Development Kit	MMA7660FC	1788041	26R2807
LFSTBBAT3	Freescale Semiconductor	Sensor Toolbox Accelerometer 3V Battery Board	LFSTBEB736,LFSTBEB745,LFSTBEB7660	NA	15R1830
LFSTBBAT9	Freescale Semiconductor	Sensor Toolbox Accelerometer 9V Battery Board	LFSTBEB736,LFSTBEB745,LFSTBEB7660	NA	26R2804
LFSTBEB7455	Freescale Semiconductor	Sensor Toolbox Accelerometer Development Kit	LFSTBBAT3, LFSTBBAT9, LFSTBUSB	NA	14R8812
LFSTBEB7361	Freescale Semiconductor	Sensor Toolbox Accelerometer Development Kit	LFSTBBAT3, LFSTBBAT9, LFSTBUSB	NA	26R2805

Document List:

Datasheets:

Part Number	Description	Size
LFSTBEB8450	Sensor Toolbox for MMA8450 Accelerometer	543KB
MMA8450Q	8-bit/12-bit Digital Accelerometer IC	655KB
MC9S08QE8CWL	IC, SM, MCU, 8-BIT, S08, 8KB FLASH	1.25MB
2480 02	CABLE, USB, A TO MINI B, 2M	83KB

Application Notes:

File Name	Size
AN3923, MMA8450Q Design Checklist and Board Mounting Guidelines	318KB
AN3920, Using the 32 Sample First In First Out (FIFO) in the MMA8450Q	286KB
AN3921, Low Power Modes and Auto-Wake/Sleep Using the MMA8450Q	273KB
AN3917, Motion and Freefall Detection Using the MMA8450Q	300KB
AN3918, High Pass Filtered Data and Transient Detection Using the MMA8450Q	350KB
AN3919, MMA8450Q Single/Double and Directional Tap Detection	435KB
AN3916, Offset Calibration of the MMA8450Q	139KB
AN3915 Embedded Orientation Detection Using the MMA8450Q	256KB

Hardware & Software:

File Name	Size
Software for Sensor Toolbox board	15MB
Sensor Toolbox Fact Sheet	632KB
RD3965MMA7660FC GUI	36MB
AN3922, Data Manipulation and Basic Settings of the MMA8450Q with Driver Code	449KB