Quick Reference

FRDMSTBC-A8451

Sensor Toolbox Development Platform for the
MMA8451Q 3-Axis Digital Accelerometer

SENSOR TOOLBOX SHIELD DEVELOPMENT BOARD

GET TO KNOW THE FRDMSTBC-A8451

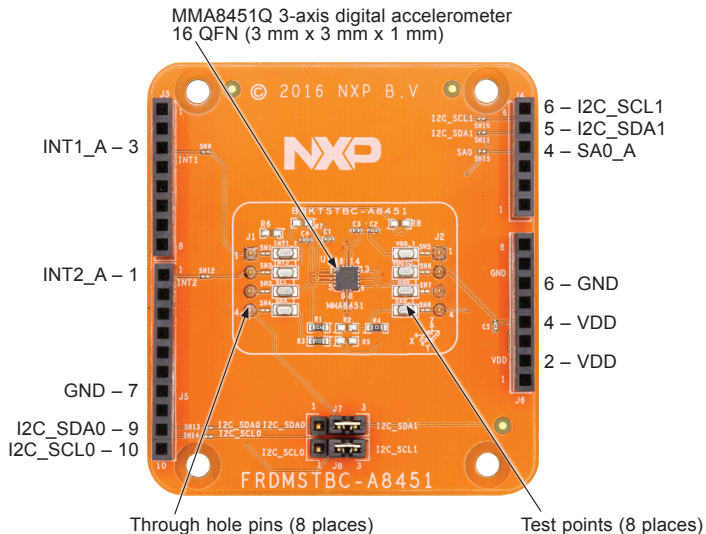MMA8451Q 3-axis digital accelerometer
16 QFN (3 mm x 3 mm x 1 mm)

INT1_A – 3

INT2_A – 1

GND – 7

I2C_SDA0 – 9
I2C_SCL0 – 10

6 – I2C_SCL1
5 – I2C_SDA1
4 – SA0_A

6 – GND

4 – VDD

2 – VDD

Through hole pins (8 places)

Test points (8 places)

Figure 1: FRDMSTBC-A8451

HOW TO GET STARTED

1. Connect the FRDMSTBC-A8451 development board to an NXP Freedom development board or any Arduino R3 compatible board. Refer to the NXP Freedom development board Quick Start Guide for driver information. The latest drivers for the FRDM boards can be found at:
www.nxp.com/openSDA

Note: The FRDM-KL25Z and the FRDM-KL27Z have the MMA8451 on the board and do not require the use of the shield board.

2. Plug one end of a USB cable into the SDA port on the assembly. Plug the other end of the cable into the USB port on the computer.

3. Download and install the latest Sensor Toolbox software at:
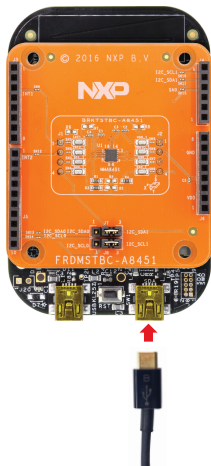**www.nxp.com/sensortoolbox**

Figure 2: Connect board to computer