



Quick Start Guide for FRDM-FXS-MULTI-B

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freescale.com/FRDM-MULTI-B

External Use

FRDMFXSMULTIBQSG
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Quick Start Package Overview

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This document is available as part of the Quick Start Package:

Name	Type	Description
Quick Start Guide	PDF	This document

Additional reference documents are available on [freescale.com/FRDM-MULTI-B](https://www.freescale.com/FRDM-MULTI-B):

Name	Description
FRDM-FXS-MULTI-B Schematic	PDF schematics for the FRDM-FXS-MULTI-B hardware
OpenSDA User's Guide	Overview and instructions for use of the OpenSDA embedded debug circuit

Quick Start Package Overview

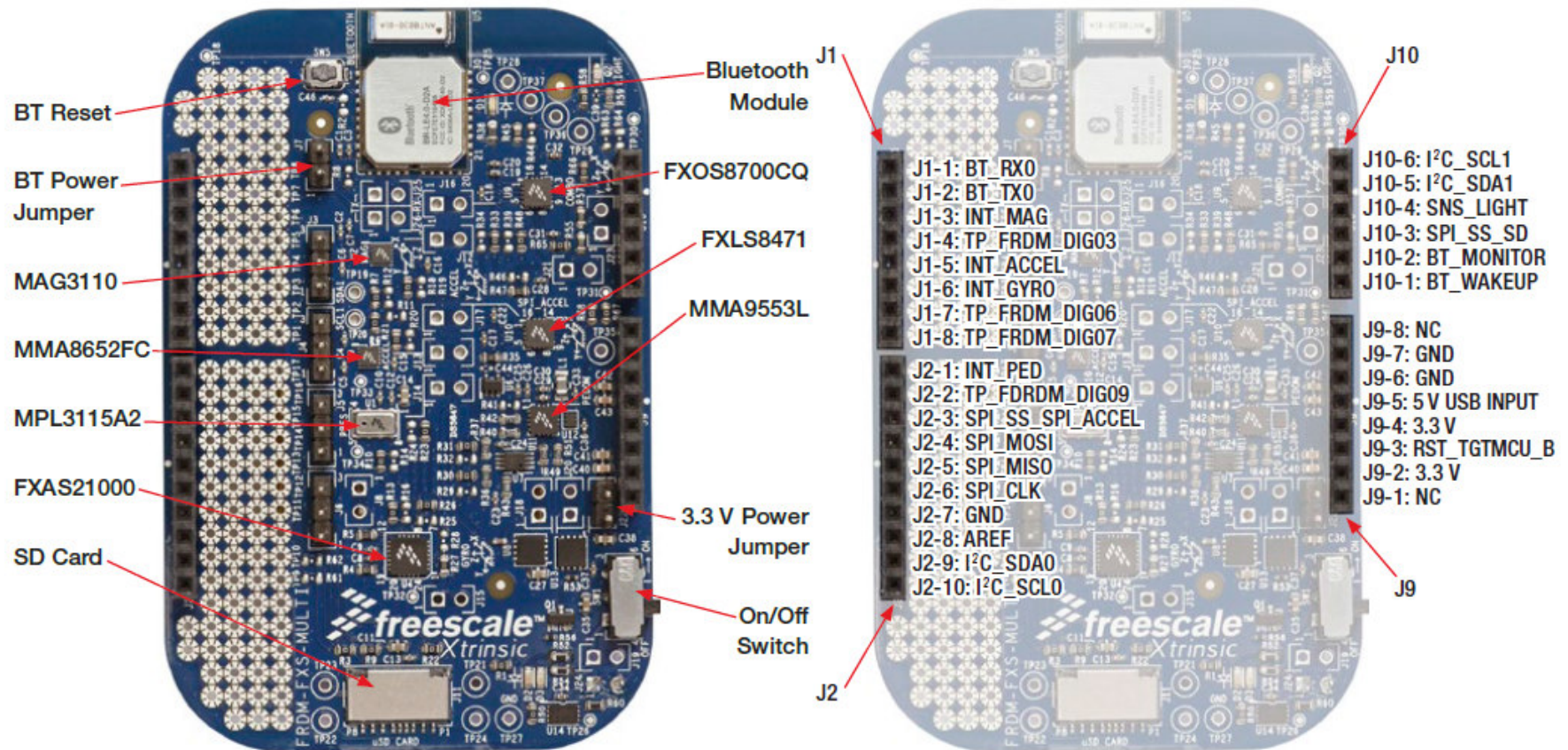
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Documentation for the sensors on the FRDM-FXS-MULTI-B:

Name	Description
MPL3115A2.pdf	Data sheet for MPL3115A2 I2C Precision Altimeter
MMA8652FC.pdf	Data sheet for MMA8652FC 3-Axis, 12-bit Digital Accelerometer
FXAS21000.pdf	Data sheet for FXAS21000 3-Axis Digital Gyroscope
FXOS8700CQ.pdf	Data sheet for FXOS8700CQ 6-Axis Sensor with Integrated Linear Accelerometer and Magnetometer
FXLS8471Q.pdf	Data sheet for FXLS8471Q 3-Axis, Linear Accelerometer
MMA955xL.pdf	Data sheet for MMA9553L Intelligent Motion-Sensing Platform Pedometer
MAG3110.pdf	Data sheet for MAG3110 Three-Axis, Digital Magnetometer

Get to Know the FRDM-FXS-MULTI-B

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Get to Know the FRDM-FXS-MULTI-B

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The Freescale Freedom development platform is a small, low-power, cost-effective evaluation and development system for quick application prototyping and demonstration of Kinetis MCUs and Xtrinsic sensors.

Each platform is scalable, leveraging various Xtrinsic sensors. As a next-generation tool set, there is variation of what can be demonstrated from basic discrete, raw data up through more complex contextual awareness. The FRDM-FXS-MULTI-B is the first of its kind offering 12-axis sensing, wireless with Bluetooth, and the compatible Android app, the Xtrinsic Sensor Fusion Toolbox.

Features:

- Cost Effective
- Small Size (Approximately 81 x 52 x 2 mm)
- Arduino™ R3 footprint-compatible with support for sensor expansion boards
- Easy to access to MCU I/O pins
- Integrated open-standard serial and debug adapter (OpenSDA) when using a Kinetis Freedom Board such as the KL25Z or KL20.



Getting Started Out of the Box

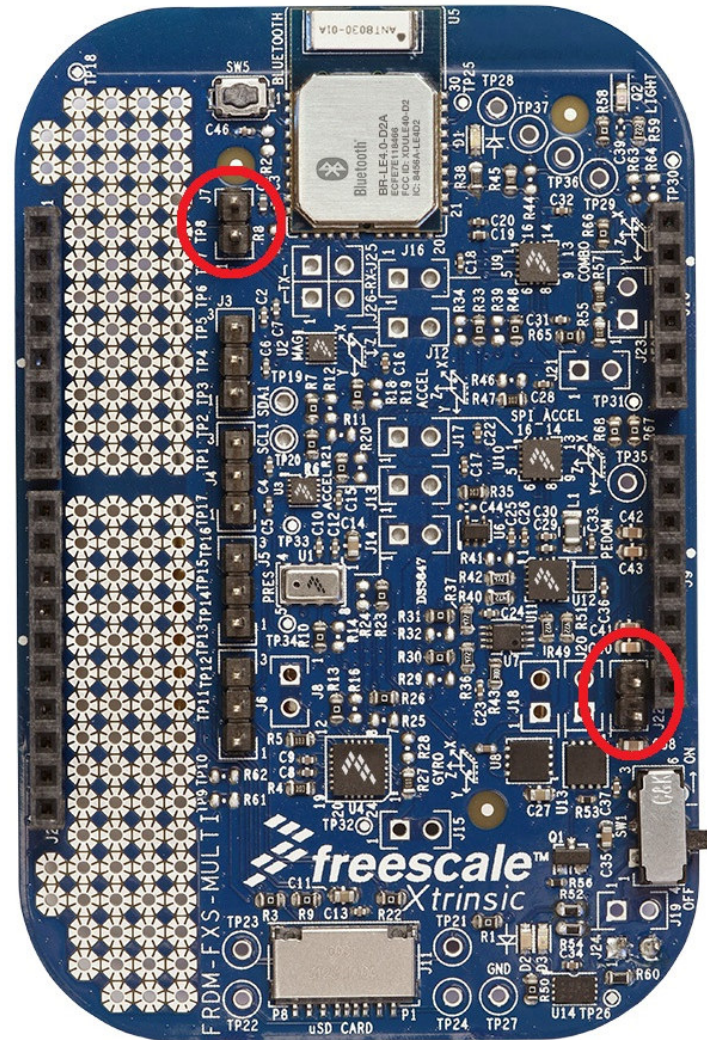
You can utilize the FRDM-FXS-MULTI-B with any Arduino MCU board. We recommend using either the Kinetis KL25Z or KL20 MCU boards.

In order to power up the board and utilize the Bluetooth module you must install the 3.3 V Power Jumper and the BT Power Jumper. Once these jumpers are installed you must slide the power switch to ON to power the board via the battery. The location of these jumpers are indicated with red circles in the image to the right. The jumpers are included in the box inside the accessories bag. The battery is charged when a powered USB cable is connected to either USB slot on the Freescale Freedom MCU board.

The Bluetooth friendly name is BlueRadiosXXXXXX and requires no PIN. The Bluetooth module documentation can be found at:

http://www.blueradios.com/hardware_LE4.0-D2.htm

For more information on OpenSDA, refer to the *OpenSDA User's Guide* or www.pemicro.com/opensda.



Explore Further

Now that you are familiar with the FRDM-FXS-MULTI-B, it's time to explore the additional software and lab guides available on freescale.com/FRDM-MULTI-B.

You can download the android demo at <http://www.freescale.com/webapp/sps/site/overview.jsp?code=XTRSICSNSTLBOX>

Select your next path from the links in the **Jump Start Your Design** section.



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