# SmartMotion® Platform by InvenSense®



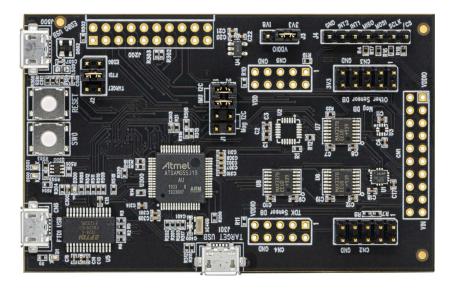
# **DK-42352**

## Development Kit for IIM-42352 3-Axis Accelerometer

#### Overview

The DK-42352 is a comprehensive development platform for IIM-42352, a very low noise 3-axis accelerometer that supports a broad range of applications including vibration and tilt sensing.

The platform, designed around Microchip SAM G55 MCU can be used by developers for rapid evaluation and development of IIM-42352 based solutions. The DK-42352 includes an onboard Embedded Debugger so external tools are not required to program or debug the SAM G55 MCU.



The development kit comes with necessary software including InvenSense Motion Link, a GUI based development tool and embedded Motion Drivers for IIM-42352.

Embedded Motion Drivers (eMD) consists of a set of APIs to configure various aspects of the platform including IIM-42352 sensor parameters such as full-scale range (FSR), output data rate (ODR), low-power or low-noise mode, and sensor interface to host (I<sup>2</sup>C, SPI).

MotionLink is a GUI based development tool included with the platform. SmartMotion Release 4.1.19 or higher can be used to capture and visualize the sensor data from the motion sensor.

### **Key Features**

- IIM-42352 3-axis accelerometer
- Microchip SAM G55 MCU with 512KB Flash
- On-board embedded debugger for programming and debugging
- USB connectors for host interface to support software debug and sensor data logging
- Board power supply through USB
- Accelerometer calibration
- Motion measurements: Tap, Tilt, Freefall, Wake on Motion (WOM) and Signficant Motion Detection (SMD)

