

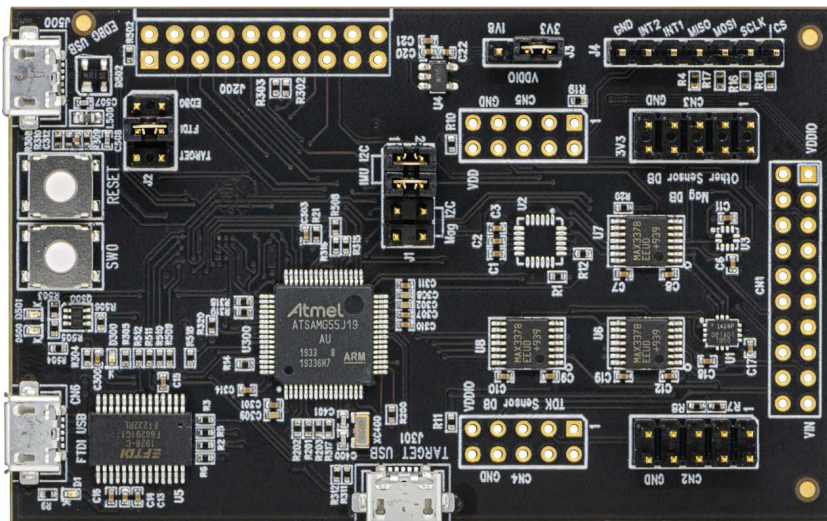
DK-42652

Development Kit for IIM-42652 6-Axis Motion Sensor

Overview

The DK-42652 is a comprehensive development platform for IIM-42652 a high performance 6-axis motion sensor that combines a 3-axis gyroscope, and a 3-axis accelerometer.

The platform, designed around Microchip SAM G55 MCU can be used by developers for rapid evaluation and development of IIM-42652 based solutions. The DK-42652 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-42652.

Embedded Motion Drivers (eMD) consists of a set of APIs to configure various aspects of the platform including IIM-42652 sensor parameters such as full-scale range (FSR), output data rate (ODR), low-power or low-noise mode, and sensor interface to host (I²C, 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-42652 6-axis motion sensor
- 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
- Sensor Fusion
- Accelerometer & Gyroscope calibration
- Functions: Rotation Vector, Gravity,
- Linear Acceleration
- Motion measurements: Tap, Tilt, Freefall, Wake on Motion (WOM) and Significant Motion Detection (SMD)

