

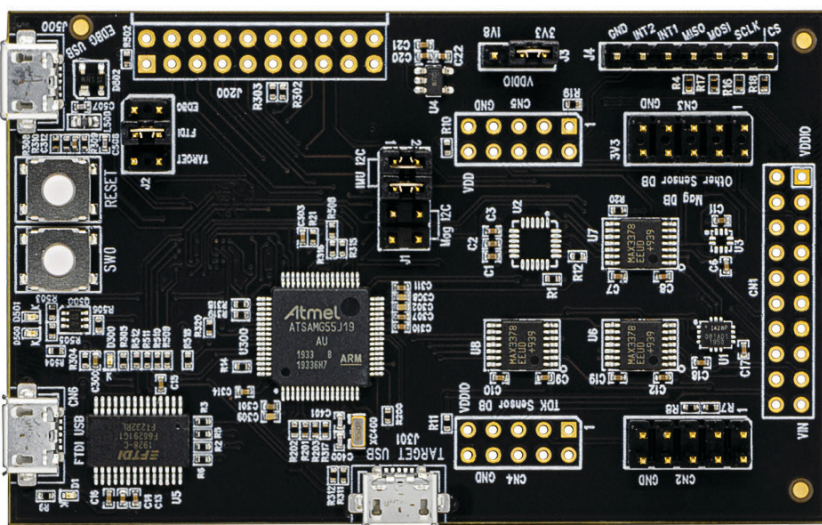
## DK-42670-P

### Development Kit for ICM-42670-P 6-Axis Motion Sensor

#### Overview

The DK-42670-P is a comprehensive development platform for ICM-42670-P, a high performance 6-axis motion sensor that combines a 3-axis gyroscope, and a 3-axis accelerometer.

The platform, designed around Microchip G55 MCU can be used by developers for rapid evaluation and development of ICM-42670-P based solutions. The DK-42670-P includes an on-board Embedded Debugger so external tools are not required to program or debug the G55 MCU.



The development kit comes with necessary software including InvenSense Motion Link, a GUI based development tool and embedded Motion Drivers for ICM-42670-P.

Embedded Motion Drivers (eMD) consists of a set of APIs to configure various aspects of the platform including ICM-42670-P sensor parameters such as full-scale range (FSR), output data rate (ODR), low-power or low-noise mode, and sensor interface to host (I3C<sup>SM</sup>, I2C, SPI).

MotionLink is a GUI based development tool included with the platform. It can be used to capture and visualize the sensor data from the motion sensor.

#### Key Features

- ICM-42670-P 6-axis motion sensor
- Microchip 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
- Android Functions: Game Rotation Vector, Gravity, Linear Acceleration
- Pedometer Functions: Step Detection and Step Count
- Gestures: Tap, Tilt, Raise to Wake/Sleep

