## SmartMotion® Platform by InvenSense®



## DK-20680A, DK-20680HP, and DK-20680HT

Development Kit for IAM-20680, IAM-20680HP, and IAM-20680HT 6-Axis Motion Sensor for Automotive Applications

## **Overview**

DK-20680A is a comprehensive development platform for IAM-20680, a high performance 6-axis motion sensor that combines a 3-axis gyroscope, and a 3-axis accelerometer.

The platform designed around a Microchip G55 microcontroller unit (MCU) can be used by developers for rapid evaluation and development of IAM-20680-based solutions. Each development kit includes an on-board embedded debugger so that external tools are not required to program or debug the G55 MCU.

The development kit comes with all the necessary software including InvenSense MotionLink, a GUI based development tool and embedded Motion Drivers for IAM-20680/HP/HT.



Embedded Motion Drivers (eMD) consist of a set of application programming interfaces (APIs) to configure various aspects of the platform including IAM-20680 sensor parameters such as full-scale range (FSR), output data rate (ODR), low-power or low-noise mode, Accelerometer, Gyroscope Calibration, and sensor interface to host (I<sup>2</sup>C, SPI).

Motion Link is a graphic user interface (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**

- IAM-20680/HP/HT 6-axis automotive grade 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

