Chipsmall

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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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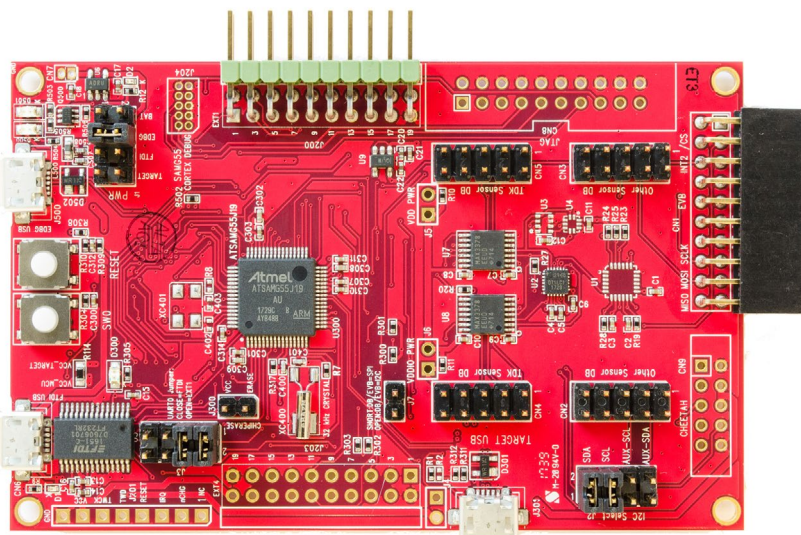# SmartMotion® Platform
by InvenSense®

◆TDK

DK-20948

Development Kit for ICM-20948 9-Axis Motion Sensor

Overview

The DK-20948 is a comprehensive development platform for ICM-20948, a high performance 9-axis motion sensor that combines a 3-axis gyroscope, a 3-axis accelerometer, a 3-axis compass, and a DMP™ (Digital Motion Processor™).

The platform designed around Microchip G55 MCU can be used by developers for rapid evaluation and development of ICM-20948 based solutions. The DK-20948 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 MotionLink, a GUI based development tool and embedded Motion Drivers for ICM-20948.

Embedded Motion Drivers (eMD) consists of a set of APIs to configure various aspects of the platform including ICM-20948 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. It can be used to capture and visualize the sensor data from the motion sensor.

Key Features

- *ICM-20948 9-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, and Compass Calibration*
- *Android Functions: Rotation Vector, Game Rotation Vector, Gravity, Linear Acceleration*
- *Pedometer Functions: Step Detection and Step Count*
- *Gestures: Pickup, Tilt, Bring to See*

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