SmartMotion® Platform
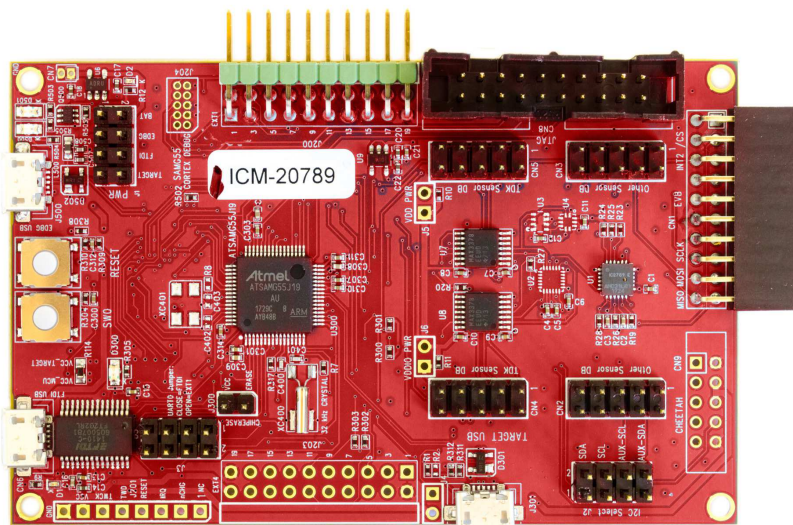*by InvenSense®*

◆TDK

DK-20789

Development Kit for ICM-20789 7-Axis Motion Sensor

Overview

The DK-20789 is a comprehensive development platform for ICM-20789, a high performance 7-axis motion sensor that combines a 3-axis gyroscope, a 3-axis accelerometer, a pressure sensor, 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-20789 based solutions. The DK-20789 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-20789.

Embedded Motion Drivers (eMD) consists of a set of APIs to configure various aspects of the platform including ICM-20789 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-20789 7-axis motion sensor*
- *Atmel 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*

Functions

- *Sensor Fusion*
- *Accelerometer, Gyroscope, and Pressure Sensor Calibration*
- *Android Functions: Game Rotation Vector, Gravity, Linear Acceleration*

Available Q4'17