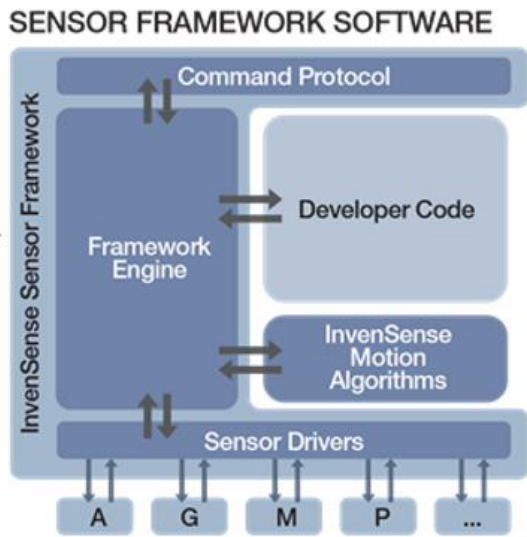


GENERAL DESCRIPTION

InvenSense Sensor Framework enables the fastest path to prototype and full product development for IoT applications.

Our Sensor Framework simplifies managing sensors and creating innovative, reliable and power optimized sensor fusion with our FireFly chipset family.

Our Sensor Framework comes pre-integrated with the ICM-30630 DK and our SensorStudio.



APPLICATIONS

- Internet Of Things

FEATURES

- **Power & code size optimized Sensor fusion:** Sensor Calibration, 3D Orientation, Gestures, Linear acceleration
- **Auxiliary sensors:** magnetometer AKM-09911, pressure sensor BMP-280, and a proximity sensor VCNL4040
- **Simplified RTOS** (running FreeRTOS)
- **Extension API** to create sensor drivers and data fusion (I2C, GPIO, Task & Timer)
- **Cross-build environment** with GCC linaro
- **Eclipse IDE** for C/C++ Developers
- **J-LINK Debug probe** from Segger
- **Arduino IDE** sketches

DETAILED DESCRIPTION

- **Sensor Framework supports sensor partners**

Our Sensor Framework supports the low power accelerometer & gyroscope from ICM-30630.

Auxiliary sensors, connected to FireFly thru I2C, are also pre-integrated, and community is building up.

Complete API, to integrate and extend the sensor framework with custom sensor driver, is provided.

- **Sensor Framework simplifies data fusion**

Our Sensor Framework supports the ICM-30630 pre-integrated Sensor fusion running on its DigitalMotionProcessor.

Complete API, to integrate and extend the sensor framework with custom data fusion, is provided.

RTOS is pre-configured, synchronization is built-in. Straightforward Task configuration reduces complexity & facilitates focus on data fusion processing.

- **Sensor Framework works with industry standards**

Custom code added to our Sensor Framework is easily build with pre-integrated GCC linaro toolchain and debugged with J-Link Debug probe & Eclipse IDE for C/C++ Developers.

Our Sensor Framework is pre-integrated with our SensorStudio, allowing even faster debug thru standard data visualizations.

Our Sensor Framework is pre-integrated with Arduino IDE giving access to sensor outputs, standards & customs, thru documented sketches.

BLOCK DIAGRAM

