Embedded Motion Driver 5.1.1
Release Note

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1. Revision History

Revision Date	Revision	Description
12/14/2012	1.0	Initial Release

2. Overview

This release note explains all the relevant information regarding the InvenSense Embedded MotionDriver 5.1.1 software release for embedded systems.

3. Features

3.1 New Features

Following is a list of new features introduced and/or enhancements to existing features in this software release:

- Calibrated gyro data output from hardware
- MPU-6050/MPU-9150 motion interrupt support
- MPU-6500 wake on motion support
- Accel biases can be removed from 6-axis quaternion

3.2 Existing Features

Following is a list of existing features.

- Hardware Gestures
  - Tap
  - Android Screen Orientation
- Hardware Pedometer
- Hardware 3-axis Quaternion
- Hardware 6-axis Quaternion
- I2C interface support
- Function calls for gyro and accel self-test
- Function calls to put individual axes of the gyro to sleep
- Ability to change sensor ODRs of the gyroscope and accelerometer
- Function call to select which data to populate in FIFO

4. Target Microprocessor

TI MSP430 16 bit microcontroller using Code Composer Studio 5.0 IDE environment.

5. Test Hardware

TI MSP430 16 bit microcontroller

6. Test Software Platform

TI Code Composer Studio 5.0

7. InvenSense MotionTracking Device(s) Configurations Supported

The following InvenSense MotionTracking devices were tested in the combinations shown below:

InvenSense Device	3rd party device on primary I2C interface	3rd party device on secondary I2C interface
MPU-6050 Gyro + Accel		AK8975 Compass
MPU-6500 Gyro + Accel		AK8963 Compass
MPU-9150 Gyro + Accel + Compass		

8. Sample Applications Tested

- Motion-driver-client.py (A simple custom 3D UI application)

9. Documentation with this Release

Embedded MotionDriver Functional Specification

10. Bug Fixes since Last Release (N/A)

N/A

11. Known Limitations and Design Constraints

N/A