

eMD ICM-42605 2.0.0

Software Release Note

November 15, 2019

Version 1.0

InvenSense

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# Overview

This release note document explains all the relevant information regarding the eMD ICM-42605 **2.0.0** software release.

# Software Modules included

* **AGMFusion algorithm 1.0.2-p1**

*@ prebuilt\lib\*

* **Embedded Driver for ICM-42605**

*@ sources\Invn\Drivers\Icm426xx\*

* **Sample code** for Nucleo board to demonstrate usage of the driver and algorithm in an embedded context

@ *sources\examples\example-algo\*

@ *sources\examples\example-eis\*

@ *sources\examples\example-pedometer\*

@ *sources\examples\example-raise-to-wake\*

@ *sources\examples\example-raw-ag\*

@ *sources\examples\example-raw-data-registers\*

@ *sources\examples\example-sanity\*

@ *sources\examples\example-selftest\*

@ *sources\examples\example-smd\*

@ *sources\examples\example-tap\*

@ *sources\examples\example-tilt\*

@ *sources\examples\example-wom\*

* **Atmel Studio project** to build and debug each sample code
* **Prebuilt firmware binaries**: for each sample code.

@ *release\bin\*

* **Documentation** covering Software guide as well as API definition

*@ doc\*

# Supported Features

* Hardware features:
  + Accel raw data
  + Gyro raw data
  + Temperature raw data
  + Self-Test
  + Pedometer
  + Raise-to-Wake
  + SMD
  + Tap
  + Mag raw data
* Software features:
  + Calibrated Accelerometer
  + Calibrated Gyroscope
  + Calibrated Magnetometer
  + 6-axis fusion
  + 9-axis fusion
  + Gravity
  + Linear Acceleration

# Changelog

* Migrate to SmartMotion platform (DK-42605) instead of Nucleo.
* Implement gyroscope power off to power on transition as described in AN-000166.
* Example-algo will continue to run if magnetometer is not connected (only 6-axis algorithms will be available)
* Add ‘inv\_icm426xx\_get\_version’ API to retrieve driver version

# Known Issues

This section describes the known issues for all versions, including but not limited to design limitations, postponed items etc.

* None

# Compliance Declaration Disclaimer

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