

Motion

NW-MOT-ICM42670-P

Breakout Board for the InvenSense ICM-42670-P MEMS SmartMotion™



Description:

The TDK InvenSense ICM-42670-P is a 6-axis SmartMotion device that combines a 3-axis gyroscope, and a 3-axis accelerometer in a small 2.5x3x0.76 mm (14-pin LGA) package. The ICM-42670-P features include on-chip 16-bit ADCs, programmable digital filters, an embedded temperature sensor, and programmable interrupts. The device features I3CSM, I²C and SPI serial interfaces, a VDD operating range of 1.71 V to 3.6 V, and a separate VDDIO operating range of 1.71 V to 3.6 V.

The ICM-42670-P also features a 2.25K-byte FIFO that can lower the traffic on the serial bus interface and reduce power consumption by allowing the system processor to burst read sensor data and then go into a low-power mode. ICM-42670-P, with its 6-axis integration, enables manufacturers to eliminate the costly and complex selection, qualification, and system level integration of discrete devices, guaranteeing optimal motion performance for consumers.

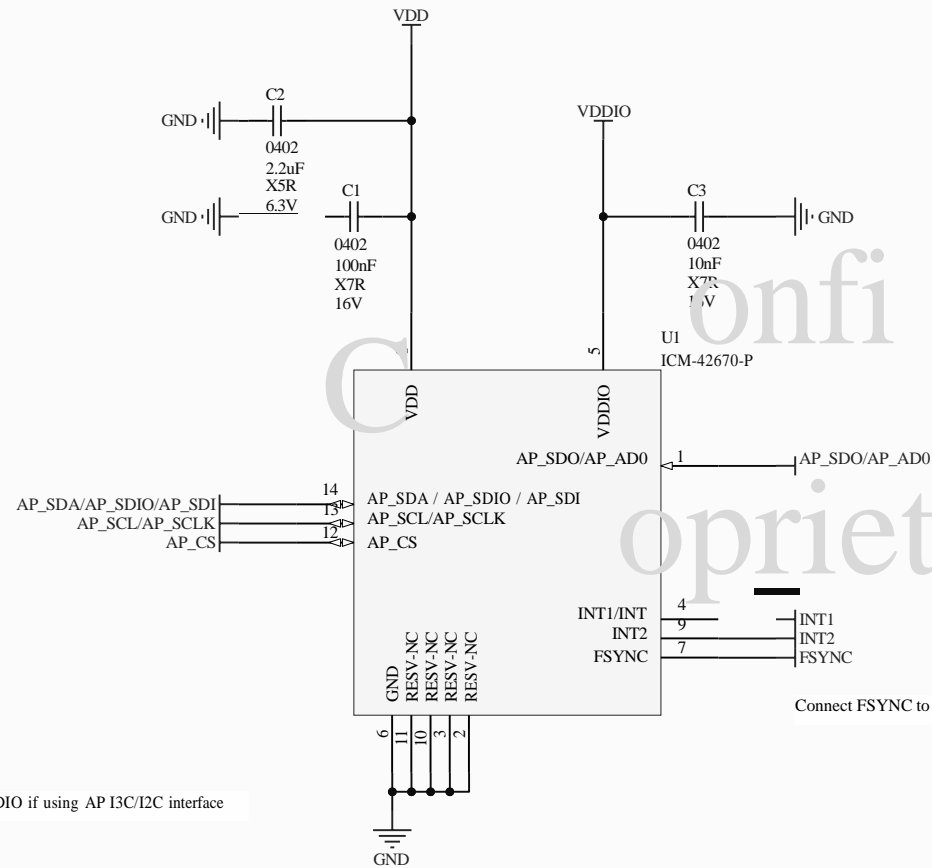
The NM-MOT-ICM42670-P provides an easy to use, low-cost, very small breakout board for the ICM-42670-P. The NOT-MOT-ICM42670-P is configured to applications for I2C output only. All pins are all mapped to standard 2.54mm/0.1" headers. This allows for use in a standard bread board or to be 'wired' into an application. The header-header spacing is 7.62mm (300mil).

Additional Information:

For more information on the NW-MOT-42670-P users can get the complete datasheet from the link below.
<https://www.cdiweb.com/products/detail/icm42670p-tdk-invensense/683094/>

Features:

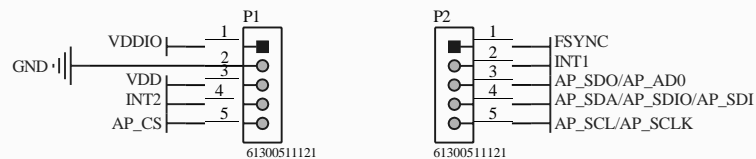
- Ultra-small 16.3x13.8mm (0.59"x0.5") breakout board with .1"/2.54mm header spacing that can be directly soldered into a prototype or used with a breadboard.
- 7.62mm (300mil) header-header spacing.
- All ICM-42670-P pins are mapped to header pins




If AP_SDO/AP_AD0 is pulled to GND
- AP_AD0 = 0
- I2C address is 1101000

If AP_SDO/AP_AD0 is pulled to VDD
- AP_AD0 = 1
- I2C address is 1101001

Connect FSYNC to GND if not used



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