InvenSense ICM-30630: Technology and Cost Comparison

Description: With the emergence of connected objects and wearable devices like the personal fitness coach, InvenSense offers in the ICM-30630 a competitive, complete motion-tracking solution.

The ICM-30630 is the latest version of InvenSense's 6-axis device (3-axis gyroscope + 3-axis accelerometer), based on the same technology used in smartphones like the Apple iPhone, with a MCU included in the package. Compared with the stand-alone sensor hub, this approach eliminates a package and reduces system-level power.

In competition with Bosch Sensortec and STMicroelectronics, InvenSense provides a low-power, highly programmable device for consumer electronics.

ICM-30360 MEMS sensors are fabricated with a low number of masks and are directly assembled on the ASIC by eutectic bonding. The device is shipped in a 3x3x1mm LGA package whose footprint is the same as the previous generation IMU.

Using knowledge obtained from previous acquisitions, InvenSense was able to design its own MCU, which provides a fully open platform.

This report also features a detailed technology and cost comparison with the leading-edge sensor hub from Bosch Sensortec, highlighting the different choices made by the two designers, and InvenSense's incredibly smart design.

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Cost & price comparison with Bosch Sensortec 9-Axis Sensor Hub BMF055

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