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.

Contents:
Overview / Introduction

InvenSense Company Profile

Physical analysis
- Package
  -- Package characteristics: view, dimensions, and opening
  -- Package cross-section

- MEMS Die
  -- View, dimensions, and markings
  -- MEMS sensing area: technical description
  -- MEMS cap removed
  -- ASIC delayering and process
  -- Die cross-section: ASIC
  -- Die cross-section: MEMS cap and sensor

- MCU Die
  -- View, dimensions, and markings
  -- Delayering and main block ID
  -- Process and die cross-section
  -- Die process characteristics

Manufacturing Process Flow
- Global overview
- ASIC & MCU front-end process
- MEMS process flow
- ASIC & MCU wafer fabrication unit
- Packaging process flow and assembly unit
Cost Analysis

- Main steps of economic analysis
- Yields hypotheses
- ASIC front-end cost
- MEMS front-end cost
- ASIC/MEMS assembly cost
- MEMS front-end cost per process steps
- Total front-end cost
- Back-end 0: probe test and dicing
- Wafer and die cost
- MCU front-end and back-end 0 cost
- MCU die cost
- Back-end: packaging cost
- Back-end: packaging cost per process steps
- Back-end: final test cost
- Component cost and price

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

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