

InvenSense MP67B

6-Axis MEMS IMU in iPhone 6 & 6 Plus

InvenSense's first design win in Apple iPhone

InvenSense's Second Generation Axis Devices for Consumer Applications

With 74.5 million units of iPhone sold during the last quarter 2014, InvenSense made a very good deal by replacing STMicroelectronics as the supplier of the gyroscope for the iPhone 6 and 6 Plus.

The MP67B is a custom version of InvenSense 6-Axis device (3-Axis gyroscope 3-Axis accelerometer) made for Apple. Compared to / v A v ^ standard 6-Axis device MPU-6500 specific modifications have been realized. The main ones consist in the package modification with the use of a LGA substrate compared to a QFN lead frame and in the ASIC which has been redesigned.

The MP67B uses a different design than / v A v ^ first generation 6-axis device with a new design of the 3-axis gyroscope which now uses a single structure vibratory compared to three different structures for the previous generation of gyros. This new design results in a shrink of 40% of the 3-axis gyro area. The second benefit of this new design is that Nasiri process has been changed: cavities which were traditionally etched in the ASIC to allow MEMS structures moving are no longer used, thus resulting in cost reduction.

The report includes a complete comparison with InvenSense standard 6-Axis (MPU-6500) and with InvenSense first generation 6-Axis device.

REVERSE COSTING ANALYSIS

REPORT BY 

MEMS 6-Axis IMU

109 pages

February 2015

Pdf file

Xls file

COMPLETE TEARDOWN WITH:

Detailed Photos

Precise Measurements

Material Analysis

Manufacturing Process Flow

Supply Chain Evaluation

Manufacturing Cost Analysis

Selling Price Estimation

Comparison with MPU-6500

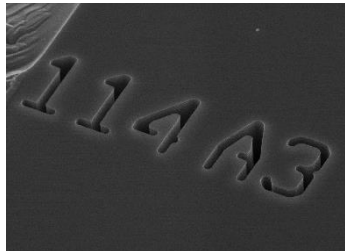
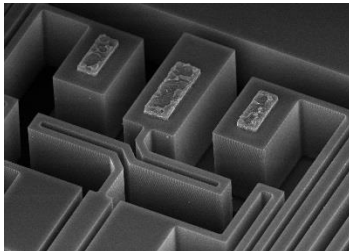


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Ref.: SP15204

*For price in dollars please use the day's exchange rate

*All reports are delivered electronically in pdf format

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** Technology Analysis report contains only Physical Analysis & Manufacturing Process Flow

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The present document is valid 6 months after its publishing date: February 3rd, 2015.

ABOUT SYSTEM PLUS CONSULTING

System Plus Consulting specializes in the **cost analysis** of electronics, from **semiconductor devices** to **electronic systems**, and has developed a complete range of services and costing tools to provide **in-depth production cost studies** and to estimate the **objective selling price** of a product.

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- ✓ SYS.Cost+ for electronic boards and systems

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- ✓ LED CoSim+ ✓ TSV CoSim+ (thru silicon vias)

- ✓ Sapphire CoSim+

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