Maxim Integrated MAX21100 – 6-Axis MEMS IMU Technology Analysis

Description: With the same process used for their 3-Axis gyro and acquired from the purchasing of SensorDynamics in 2011, the MAX21100 combines on only one MEMS die a 3-Axis gyroscope and a 3-Axis accelerometer.

The PSM-X2 technology platform used to build the sensor includes a proprietary surface micromachining process and a gold silicon eutectic wafer bonding allowing an hermetic encapsulation and a dual pressure wafer-level capping of the sensors.

Assembled in a LGA 3.0×3.0×0.83mm package, the MAX21100 is a low power consumption (3.45mA) 3-Axis gyroscope plus 3-Axis accelerometer IMU with integrated 9-axis sensor fusion (6+3 DoF) targeted for consumer applications.

The report is including a detailed technical and cost comparison with state of the art 6-Axis MEMS IMUs (3-Axis gyroscope + 3-Axis accelerometer) from STMicroelectronics, Bosch Sensortec and InvenSense. Surprisingly, Maxim is able to provide a very competitive component due to an important silicon area reduction.

Discover all the details in the report!

The Technology Analysis report provides information on Physical Analysis & Manufacturing Process Flow. A full reverse costing analysis is also available, for more information please click on the link below.

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