

# Bosch Sensortec BMA355

## 3-Axis MEMS Accelerometer

Discover the first MEMS device using TSV in ASIC and WLCSP to reach the smallest size (only 1.4mm<sup>3</sup>!)

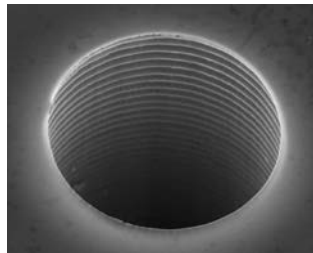
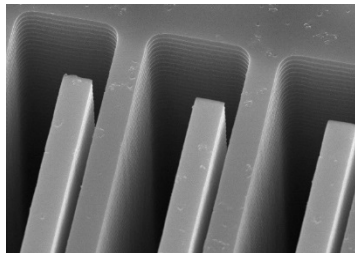
After being integrated in the latest Apple's iPhone in 2013, Bosch is now the top MEMS supplier according to Yole's Top 30 MEMS Ranking 2014. This strong growth is both due to the consumer and automotive businesses of Bosch.

With a size of only 1.4mm<sup>3</sup> (1.2x1.5x0.8mm), the BMA355 is the smallest MEMS accelerometer on the market and features **60% volume reduction** compared to state of the art 2x2x0.9mm MEMS accelerometers. This size reduction has been made possible by the use of **Through-Silicon Vias (TSVs) in the ASIC, enabling a WLCSP package**. All the manufacturing steps are realized at the wafer-level. This is the first introduction of a MEMS component with TSV Via-Middle process.

The BMA355 is a 12-bit digital resolution accelerometer well suited for applications requiring extremely small form factors.

The report is including a detailed technical and cost comparison with state of the art MEMS accelerometers from STMicroelectronics and mCube.

Discover all the details in the report!



REVERSE COSTING ANALYSIS  
REPORT BY 

MEMS 3-Axis Accelerometer  
148 pages  
July 2014  
Pdf file  
Xls file

#### PRICE :

Full report: EUR 2,990  
Technology report: EUR 1,990

#### COMPLETE TEARDOWN WITH:

- Detailed Photos
- Precise Measurements
- Material Analysis
- Manufacturing Process Flow
- Supply Chain Evaluation
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### Estimated Price Analysis

Consumer 3-Axis Accelerometer Cost Comparison (Bosch Sensortec, STMicroelectronics & mCube)

# ORDER FORM

Please process my order for "Bosch BMA355 WLCSP MEMS Accelerometer" Reverse Costing Analysis:

Ref.: SP14174

Full Reverse Costing report: EUR 2,990\*

Technology Analysis\*\* report: EUR 1,990

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

\*All reports are delivered electronically in pdf format

\*For French customer, add 20 % for VAT

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

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Our prices are subject to change.

Please check our new releases and price changes on [www.systemplus.fr](http://www.systemplus.fr)

The present document is valid 6 months after its publishing date: July 17<sup>th</sup>, 2014.

## 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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- ✓ On demand **Reverse Costing studies** are performed on ICs, ASICs, MEMs, Power Devices, ECUs, electronic boards and full electronic systems.
- ✓ The **catalog of available reports** includes cost analyzes on MEMS, LEDs, Modules and Electronic systems.

All these analyses are performed using in-house developed, proprietary costing tools and their technological databases.

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- ✓ IC Price+ to estimate the cost of any integrated circuit
- ✓ Power Price+ for any power component or module

- ✓ PCB Price+ for printed circuit boards
- ✓ SYS.Cost for electronic boards and systems

#### Cost Simulation Tools, process flow based

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

- ✓ Sapphire CoSim+

Other costing models can be developed according to customer specifications

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