

ST LSM330D

6-Axis MEMS Inertial Module

3D Accelerometer + 3D Gyroscope

Reverse Costing Analysis – August 2012



Physical Analysis of the Devices

Step by Step Reconstruction of the Process Flow

Cost of Manufacturing and Estimation of Selling Price

System Plus Consulting is proud to publish the reverse costing report of the new 6-axis MEMS Inertial Module supplied by STMicroelectronics.

The LSM330D is a system-in-package featuring a 3-axis accelerometer and a 3-axis gyroscope. With a 3x5.5x1mm size, it belongs to the smallest inertial modules for consumer applications. It is manufactured with the same ST THELMA process used for more than 1.5 billion MEMS devices.

The LSM330D is targeted for consumer applications: GPS navigation systems, Impact recognition and logging, Gaming ...

This report provides complete teardown of the MEMS IMU with:

- Detailed photos
- Material analysis
- Schematic assembly description
- Manufacturing Process Flow
- In-depth economical analysis
- Manufacturing cost breakdown
- Selling price estimation

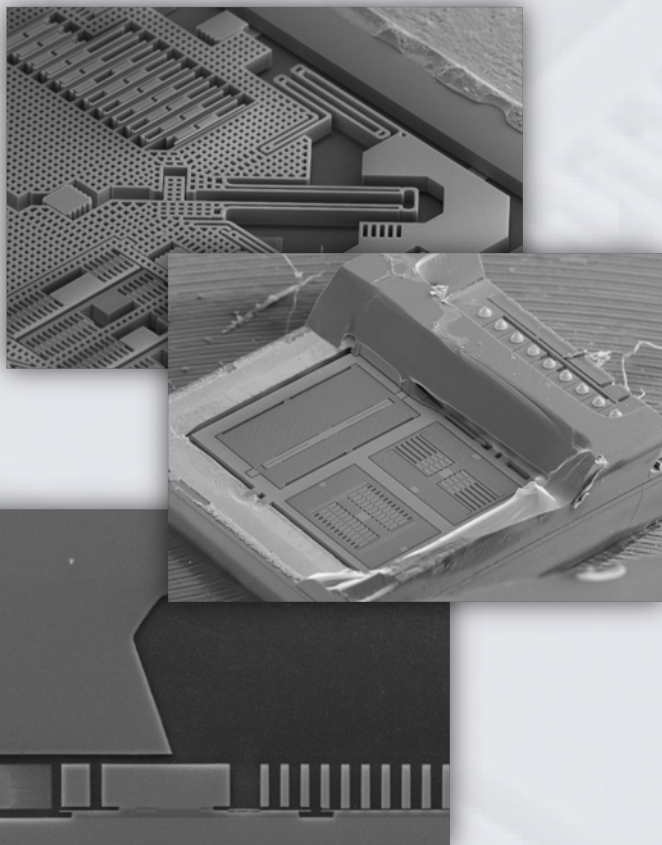


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System Plus Consulting is specialized in the **cost analysis** of electronics from **semiconductor devices** to **electronic systems**.
Around this main line System Plus Consulting developed a complete range of services and costing tools to provide **in-depth production cost studies** and estimation of the **objective selling price** of the product.

COSTING SERVICES

- ✓ **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, Electronic components and Electronic systems

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

COSTING TOOLS

« Purchaser » tools

- ✓ IC Price+ to estimate the cost of any integrated circuit
- ✓ Power Price+ to estimate the cost of any power component or module
- ✓ PCB Price+ for printed circuit boards
- ✓ SYS.Cost a costing tool for electronic boards and systems

Cost Simulation Tools, process flow based

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

- ✓ Other costing models can be developed according to customer specification

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