

## STMicroelectronics LSM303D 6-axis electronic compass - Reverse Costing Analysis

**Description:** System Plus Consulting is proud to publish the reverse costing report of the new 6-Axis electronic compass supplied by STMicroelectronics.

The LSM303D is a system-in-package featuring a 3-axis magnetometer and a 3-axis accelerometer. With a 3x3x1mm package size, it belongs to the smallest eCompasses for consumer applications.

The 3-Axis accelerometer uses the TSV process of ST in order to remove the area reserved for I/O pads. The magnetometer dies use the latest process of Honeywell.

The LSM330D is targeted for consumer applications: Tilt compensated compass, Map rotation, Position detection... It provides accurate output across full-scale ranges up to  $\pm 16g$  (linear acceleration) and  $\pm 12$  Gauss (magnetic field).

This report provides complete teardown of the 6-Axis electronic compass 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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- Back-End: Final test & Calibration Cost
- LSM303D Component Cost (FE + BE 0 + BE 1)

#### Estimated Price Analysis

- Manufacturer Financial Ratios
- LSM303D Estimated Selling Price

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