

Yamaha YAS532B

3-Axis Geomagnetic Compass

REVERSE COSTING ANALYSIS – NOVEMBER 2013

*The new 3-axis Geomagnetic Sensor from Yamaha for consumer applications
Used in the Samsung Galaxy S4 Smartphone.*

More than 6 years after the release of its first electronic Compass for consumer applications, Yamaha has released its third 3-Axis geomagnetic sensor.

In a market largely dominated by AKM, Yamaha has launched its new very small eCompass, 1.46mm x 1.46mm, based on a GMR principle, in order to gain market shares. The manufacturing process combines GMR deposition and surface micromachining, allowing to measure the 3-axis with one die. The YAS532B has the same performances that the new AKM device with an area 17% smaller.

Manufactured in a old foundry fully depreciated, the YAS532B is very cheap.

The YAS532B integrates an ingenious magnetic concentrator.

This report provides a complete teardown of the 3-axis Geomagnetic Compass with:

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

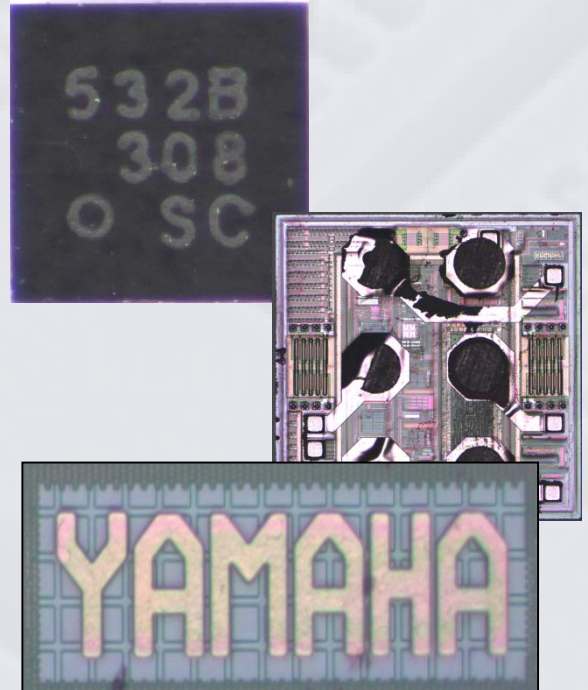


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