

Infineon SP37 Tire Pressure Monitoring Sensor

REVERSE COSTING ANALYSIS – February 2014

Highly Integrated & Reliable Tire Pressure Monitoring Sensor

With more than 150 million TPMS sensors sold worldwide, Infineon Technologies is one of the leaders on the TPMS market.

The latest generation of Infineon's TPMS, the SP37, is a highly integrated TPM sensor which embeds measurement of pressure and radial acceleration (2 DoF) with a low-power microcontroller, a LF receiver and an RF transmitter in a system in package integrating only two dies. This high integration of functions allows to build a complete system with few external components and thus enable system cost savings.

The SP37 inherits its MEMS technology from the acquisition of the Norwegian Sensoror in 2003. Therefore, highly reliable measurements in harsh environments are possible by the use of the mature and low-cost triple stack hermetic wafer bonding technology in combination with buried piezoresistors and conductors.

The SP37 is assembled in a Small Outline 14-pin package and operates under a temperature range of -40 to +125°C.

This report will provide a complete teardown of the TPMS with:

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

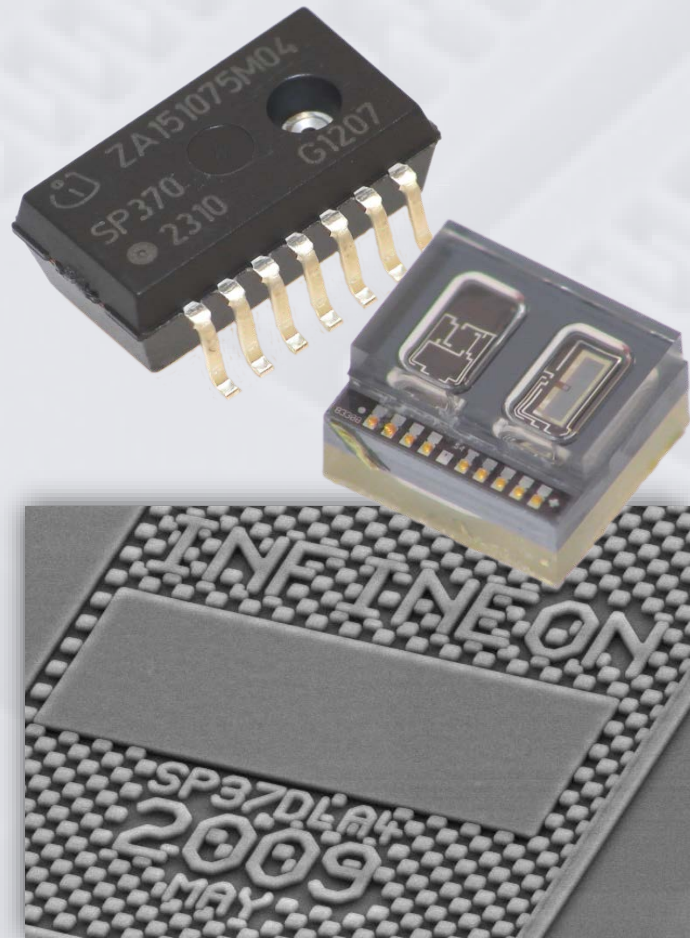


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Please process my order for "Infineon SP37 TPMS" Reverse Costing Analysis:

Ref.: SP14154

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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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.

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, 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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« Purchaser » tools

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

Cost Simulation Tools, process flow based

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

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System Plus Consulting remains sole owner of the delivered services until total payment of the invoice.

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The delivery schedule on the purchase order is given for information only and cannot be strictly guaranteed. Consequently any reasonable delay in the delivery of services will not allow the buyer to claim for damages or to cancel the order.

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The transport costs and risks are fully born by the Buyer. Should the customer wish to ensure the goods against lost or damage on the base of their real value, he must imperatively point it out to System Plus Consulting when the shipment takes place. Without any specific requirement, insurance terms for the return of goods will be the carrier current ones (reimbursement based on good weight instead of the real value).

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System Plus Consulting responsibility will not be involved in non execution or late delivery of one of its duties described in the current terms and conditions if these are the result of a force majeure case. Therefore, the force majeure includes all external event unpredictable and irresistible as defined by the article 1148 of the French Code Civil?

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