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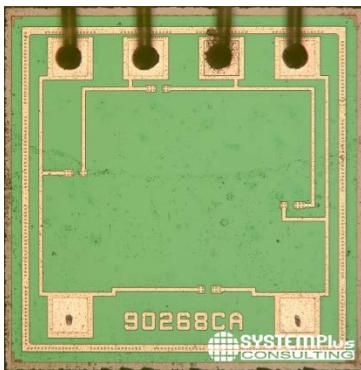
SYSTEM

POWER

# Melexis MLX91802

## Absolute Pressure Sensor

*An absolute pressure sensor used in car and truck tire pressure monitoring systems for harsh environments*



The Melexis MLX91802 is an absolute pressure sensor used in industrial and automotive applications for harsh environments (-40°C to 150°C), particularly in tire pressure monitoring systems (TPMS) for cars and trucks, with a pressure range of up to 1,400 KPa. The Melexis ASIC die integrates an LF transmitter at 125 KHz to facilitate

the integration of the MLX91802 in a TPMS.

It is easy to use with either the factory calibration, Melexis' firmware, or custom firmware, and is compatible with other integrated functions like the temperature sensor and battery monitoring.

This Melexis-designed MEMS pressure sensor is based on very reliable technology, with a thick membrane and a sealed cavity. Melexis' smart packaging approach makes it easy to integrate into a system, and it is inexpensive. The absolute pressure measurement uses a soft coating rather than complex packaging with manifolds.

This report presents a detailed analysis of sensor structure and cost, as well as a characteristics comparison between Infineon's SP37, Freescale's FXTH87, and Melexis' MLX91802, highlighting the different technical choices made by each company.

**Title:** Melexis MLX91802

**Pages:** 96

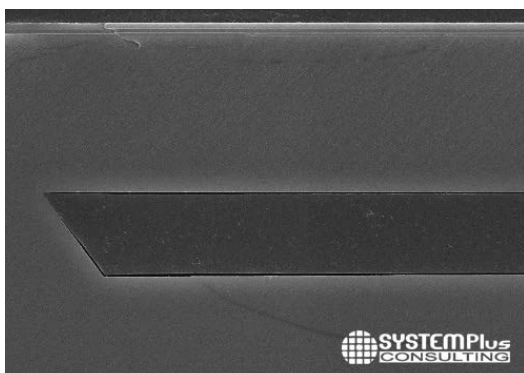
**Date:** September 2016

**Format:** PDF & Excel file

**Price:** Full report: EUR 2,990

### COMPLETE TEARDOWN WITH:

- Detailed photos
- Precise measurements
- Materials analysis
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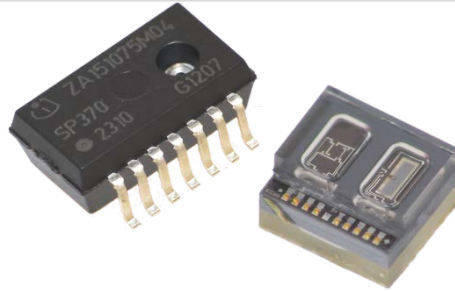
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### Infineon SP37 Tire Pressure Monitoring Sensor

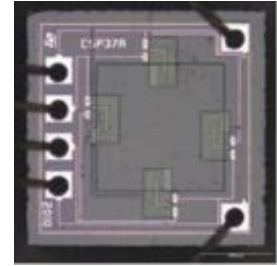
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### STMicroelectronics LPS331AP MEMS Pressure Sensor

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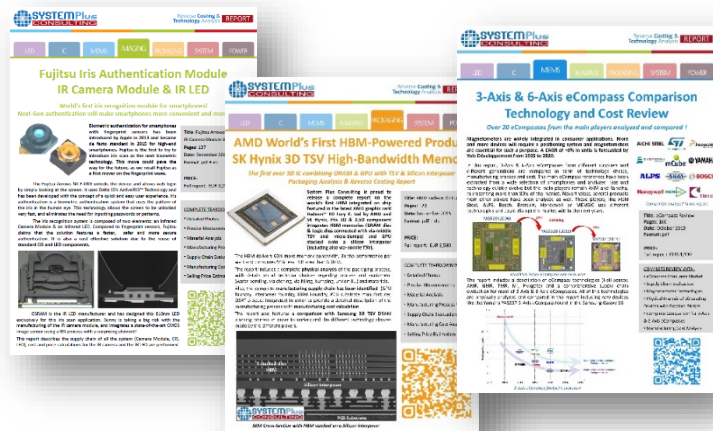
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