

# Freescale FXTH87

## Tire Pressure Monitoring Sensor (TPMS)

*The TPMS solution featuring the smallest footprint and lowest RF power consumption*

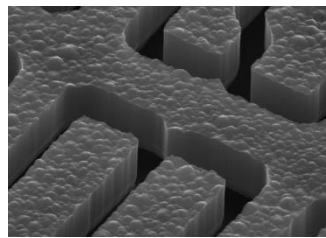
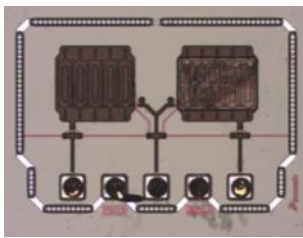
Pressure sensor market growth is mainly driven by TPMS due to legislation and quick adoption around the world. Freescale is competing head to head with Infineon on this application.

The FXTH87 is the 4<sup>th</sup> generation TPMS from Freescale. It features the smallest footprint with 7x7mm<sup>2</sup>, the smallest RF power consumption with 7mA I<sub>dd</sub> and the largest customer memory size with 8kB flash. In the report we make a comparison with Infineon SP37 device in order to understand the technologies differences and highlight each cost structures.

This system in package includes a dual-axis accelerometer (XZ), pressure and temperature sensors, an integrated MCU, a RF transmitter and a low frequency receiver. It is 40% smaller than Freescale's previous-generation QFN 9x9mm package and 50% smaller than Infineon SP37 TPMS solution .

The pressure sensor is based on Freescale's MEMS capacitive pressure cell without signal conditioning. The accelerometer included in the FXTH87 can be a single axis (Z) or a dual axis (XZ) and is manufactured with Freescale's surface micromachining poly-Si MEMS process.

Assembled in a Film-Assisted Molding (FAM) 7x7mm QFN package with gel fill, the FXTH87 is certified AEC-Q100 and qualified for operating temperature range from -40°C to +125°C.



### REVERSE COSTING ANALYSIS

REPORT BY 

MEMS TPMS

150 pages

January 2015

Pdf file

Xls file

### PRICE :

Full report: EUR 2,990

Technology report: EUR 1,990

### COMPLETE TEARDOWN WITH:

- Detailed Photos
- Precise Measurements
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Please process my order for "Freescale FXTH87 MEMS TPMS" Reverse Costing Analysis:

Ref.: SP15203

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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Our prices are subject to change.

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The present document is valid 6 months after its publishing date: January 22<sup>th</sup>, 2015.

## ABOUT SYSTEM PLUS CONSULTING

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.

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- ✓ Power Price+ for any power component or module

- ✓ PCB Price+ for printed circuit boards
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#### Cost Simulation Tools, process flow based

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- ✓ LED CoSim+ ✓ TSV CoSim+ (thru silicon vias)

- ✓ Sapphire CoSim+

Other costing models can be developed according to customer specifications

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