Overview

Freescale’s FXTH870s family of tire pressure monitoring sensors (TPMS) is the smallest, fully integrated 7 x 7 mm package footprint on the market which is 40% smaller than Freescale’s previous-generation QFN 9 x 9 mm package. It also provides the lowest transmitting power consumption (less than 8 mA Idd), largest customer memory size (8 kB) and unique dual-axis accelerometer architecture. Freescale’s TPMS solution integrates an 8-bit microcontroller (MCU), pressure sensor, XZ-axis or Z-axis accelerometer and RF transmitter.

Freescale’s portfolio with pressure ranges of 100-450 kPa and 100–900 kPa support cars and light trucks TPMS markets. These TPMS markets are mainly regulation driven with new mandates, resulting in significant growth. Freescale continues to produce TPMS products that meet the latest mandates with ease to accommodate customer requirements.

FXTH870x TPMS Family Block Diagram

Target Applications

- Tire pressure monitoring systems
- Ultra low-power wireless sensing

Implementations

- Measures pressure for passenger/light duty vehicles
- Measures dual-axis acceleration
- Measures temperature
- Measures battery voltage
- Bi-directional communication
For more information, visit freescale.com/TPMS

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