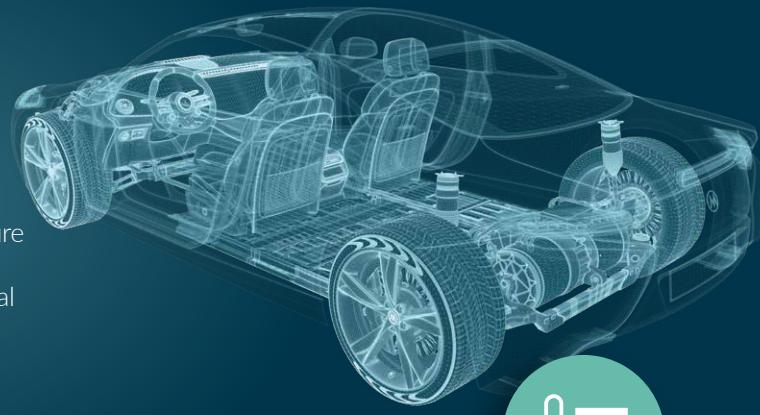


MINIATURE TEMPERATURE SENSOR IC

MLX90637

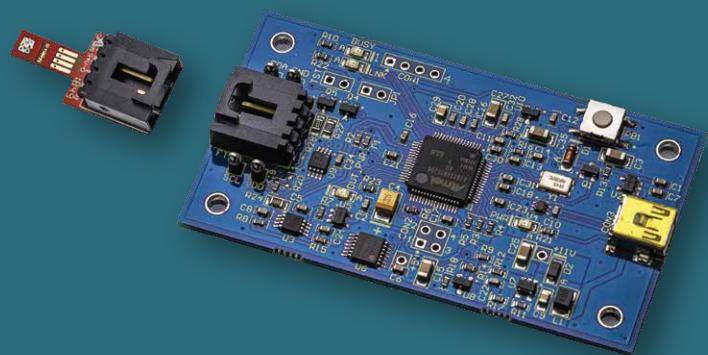
The MLX90637 is an Automotive-grade miniature SMD infrared thermometer IC, delivering highly accurate non-contact temperature measurements. Factory-calibrated and designed for stability, it ensures reliable data even in thermally dynamic environments. Ideal for advanced in-cabin and under-the-hood applications.



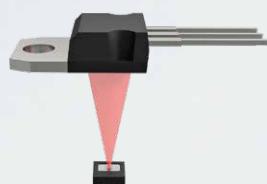
Key features

- Small size SMD package 3x3mm2 RoHS-compliant SFN 5-pin
- Factory calibrated
- Field of View of 50°
- Standard measurement resolution 0.02°C
- Sleep current less than 2.5µA
- I2C interface
- Software definable I2C address with 1 LSB bit external address pin
- Wide refresh rate range
- Integrated post-calibration option
- Ambient operating temperature from -40°C to 125°C
- AEC-Q100 qualified
- Diagnostics as Quality Management Device

Evaluation



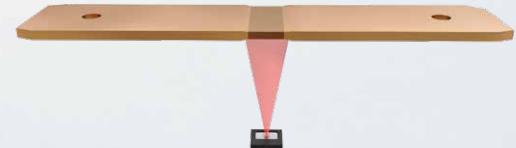
EVB90637
evaluation kit for fast prototyping



Power FET



Coolant



Busbar

Applications

- Power semiconductor surface temperature
- Bus bar monitoring
- Stator/rotor temperature measurement
- Cooling circuits thermal management
- HVAC in-cabin temperature

- Traction inverter
- Battery pack
- ECUs



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