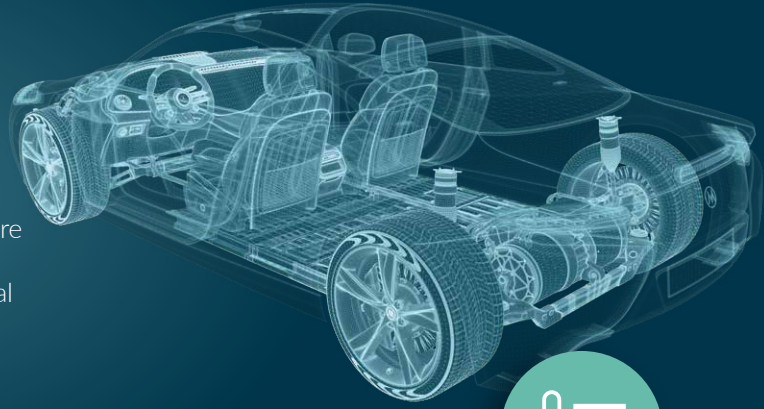


MINIATURE TEMPERATURE SENSOR IC

MLX90637

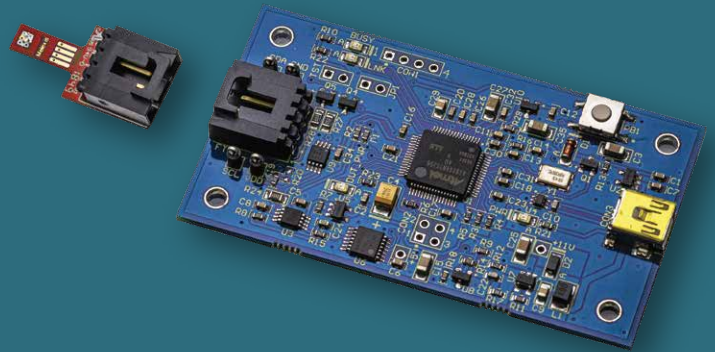
The MLX90637 is an Automotive-grade miniature SMD infrared thermometer IC, delivering highly accurate non-contact temperature measurements. Factory-calibrated and designed for stability, it ensures reliable data even in thermally dynamic environments. Ideal for advanced in-cabin and under-the-hood applications.



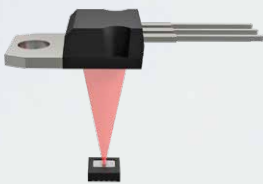
Key features

- ✓ 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

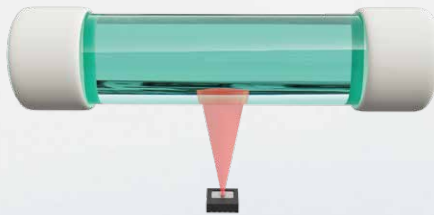
Evaluation



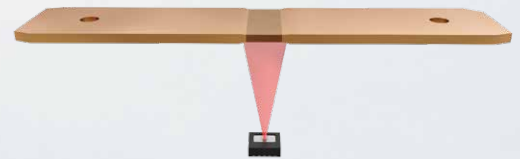
EVB90637
evaluation kit for fast prototyping



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



[melexis.com/MLX90637](https://www.melexis.com/MLX90637)