

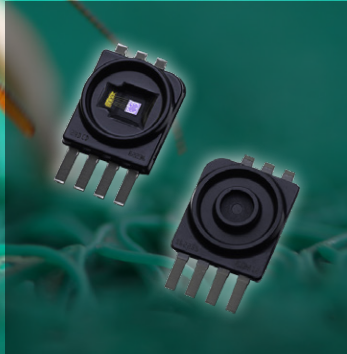
# Melexis

INSPIRED ENGINEERING

**MLX90824**

**ABSOLUTE PRESSURE SENSOR**

**SENT PRESSURE WITH A  
PCB-LESS SOLUTION**



Hermit crabs are members of the superfamily of Paguroidea that have adapted to occupy empty shells. This robust shell-less animal represents our family of PCB-less pressure sensors. Their ability to adapt easily to a new shelter is an analogy to the ease of integrating sensors.

## FACTORY CALIBRATED AND HIGHEST DEGREE OF ACCURACY OVER LIFE-TIME

Very accurate and stable pressure measurements allow optimal engine management to guarantee fuel savings and emission reductions.

### MLX90824

The MLX90824 is a packaged PCB-less, factory calibrated, absolute pressure sensor measuring spans from 1 to 4 bars. It makes it ideal for MAP, TMAP and air management especially for automotive and truck.

The MLX90824 offers a digital SENT output signal.



### KEY FEATURES

- ✓ PCB-less absolute pressure sensor
- ✓ Up to 0.5% full scale accuracy over extended mission profiles
- ✓ Operating temperature from -40°C to 160°C
- ✓ Robustness
  - Over (+40V) and reverse (-40V) voltage capabilities
  - Excellent module level EMC performance
  - Harsh media resistance against halogens, acids...
- ✓ Digital SENT output
- ✓ Pre-calibrated NTC thermistor input
- ✓ All-in-one: MEMS, interface and passive components
- ✓ Certification
  - AEC-Q100 (automotive) and AEC-Q103-002 (pressure sensor MEMS)
  - ASIL compliant developed as an ASIL B SEooC (ISO 26262)
- ✓ Factory calibrated or fully programmable through the connector with PTC04 for customized calibration curves
- ✓ Configurable diagnostic features
- ✓ Package RoHS compliant SMP-7 (XP)
  - Ridges to enable glued pressure seals

## MLX9082x PCB-LESS PRESSURE SENSOR

---



## MLX90824 PCB-LESS PRESSURE SENSOR APPLICATIONS

---

- ✓ Absolute pressure measurement from 1 bar to 4 bar
- ✓ MAP, TMAP and air management
  - Automotive
  - Trucks

