

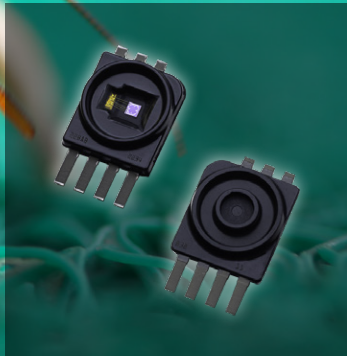
# Melexis

INSPIRED ENGINEERING

**MLX90822**

**ABSOLUTE PRESSURE SENSOR**

**ANALOG 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.

### MLX90822

The MLX90822 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, truck and motorcycle. It can also be used for all combustion powered applications, such as boat, chainsaw, mower tractor... The MLX90822 offers an analog 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...
- ✓ Analog output
- ✓ Fast response time <400 μs
- ✓ 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 A 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

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## MLX9082x PCB-LESS PRESSURE SENSOR

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## MLX90822 PCB-LESS PRESSURE SENSOR APPLICATIONS

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



- ✓ Also for all combustion powered applications

