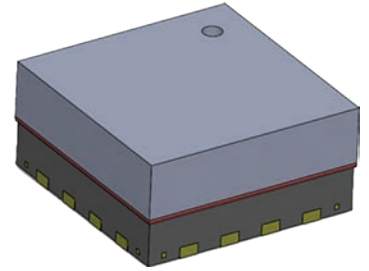


NPB 102 | Barometric Pressure Sensor

NovaSensor NPB 102 is an absolute pressure sensor with digital output for low power consumption and wide operating temperature range applications. Digital compensation of the signal offset, sensitivity, and non-linearity is accomplished via 26-bit internal digital signal processor (DSP) running a correction algorithm. Calibration coefficients are stored on-chip in highly reliable, nonvolatile, multi-time programmable (MTP) memory. It is available in two standard pressure ranges with custom pressure ranges available upon request.

Packaged in a QFN configuration, the assembly is intended for surface mount printed circuit board assembly. The package contains the pressure sensing element and all necessary signal conditioning electronics. Absolute pressure is measured through the port opening on top of the package (near pin 1). This series provides a cost-effective solution that fits a standard PCBA footprint for barometric applications.



Features

- Pressure Ranges: 260 to 1260mBar and 50 to 200kPa
- Operating Temperature Range: -40°C to 125°C
- AEC-Q 100 qualified
- I2C and SPI interface available
- 4x4mm QFN package
- Ultra low current consumption in sleep mode
- 18-bit pressure and 16-bit temperature resolution
- Die Dimensions (LxWxH): 4 mm x 4 mm x 1.65 mm
- QFN package allows AVI to detect the solder joint

Applications

- Thermal Runaway
- Infotainment System
- Indoor and Outdoor Navigation
- Consumer Drones
- Weather Forecast Applications
- Altimeter and Barometer for Portable Devices
- Enhanced GPS Navigation

