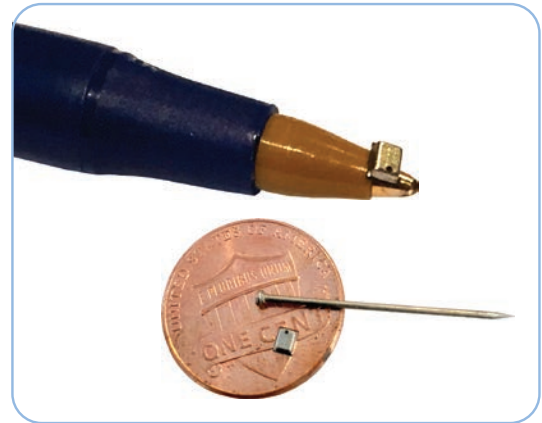


NPB 101 Digital Barometric Pressure Sensor

The NovaSensor NPB 101 is an absolute pressure sensor with digital output for low cost applications. Its low power consumption and compact size makes it ideal for battery-powered and mobile applications, or any application where size is a constraint. In today's growing market for portable electronics and wearables with multiple parameters being measured, there are many applications that require an accurate measurement of barometric pressure to determine factors, such as altitude.

Features

- Absolute Pressure Range: 260 mbar to 1260 mbar
- Temperature measurement included
- Sleep State Current: <250nA (25°C)
- Temperature Resolution: <0.003K/LSB
- Pressure and Temperature Resolution: 16-bit
- Operating Temperature: -40°C to +85°C
- Absolute Accuracy: ±0.2 mbar / Relative Accuracy: ±0.1 mbar
- I²C Interface
- Operating Range: 1.7V ~ 3.6V
- Small Size Package: 2.0mm x 2.5mm x 1.0mm
- 8-HCLGA Package
- No external components required
- Fully calibrated and compensated



Digital compensation of the signal offset, sensitivity, temperature, and non-linearity is accomplished via 18-bit internal digital signal processor (DSP) running a correction algorithm. Calibration coefficients are stored on-chip in highly reliable, nonvolatile, multiple-time programmable (MTP) memory.

Applications

- Mobile devices (smart phones, smart watches, tablets)
- Indoor and outdoor navigation
- Enhancement of GPS navigation
- Altimeter and barometer for portable devices
- Weather station equipment
- Leisure and sports (wearables)
- Hard Disk Drive (HDD)
- Weather forecast
- Thermal runaway detection

Amphenol Advanced Sensors is a leading innovator in advanced sensing technologies and Innovative embedded measurement solutions customized for regulatory and industry driven applications, creating value by providing critical information for real time data decisions. We offer industry leading domain expertise, rapid customization, world-class manufacturing capability and lasting customer relationships to deliver the greatest value in cost of ownership to our customers.