



## MS5561C

### Micro Altimeter

#### SPECIFICATIONS

- 10 - 1100 mbar / 1 – 110 kPa absolute pressure range
- High accuracy temperature measurement
- Integrated miniature pressure sensor 4.75 x 4.25 mm
- Thin design of 1.6 mm
- Piezoresistive silicon micromachined sensor
- 6 coefficients for software compensation stored on-chip
- 16 Bit ADC, sigma delta converter
- 3-wire serial interface
- 1 system clock line (32.768 kHz)
- Low voltage and low power consumption

The MS5561C is a SMD-hybrid device including a precision piezo-resistive pressure sensor and an ADC-Interface IC. It uses a three-wire serial interface for communication. The module dimensions of 4.75 mm x 4.25 mm and a height of only 1.6 mm allows for up-to-date SMD design. It provides a 16 bit data word from a pressure and temperature dependent voltage. The MS5561C is a low power, low voltage device with automatic power down (ON/OFF) switching. A 3-wire interface is used for all communications with a micro-controller.

## FEATURES

- Pressure resolution 0.1 mbar
- Operating temperature -40°C to +85°C
- Supply voltage 2.2 V to 3.6 V
- Low supply current, typ. 4  $\mu$ A
- Standby current < 0.1  $\mu$ A
- Calibrated temperature and pressure sensor for 2<sup>nd</sup> order compensation
- ESD protected, HBM 4 kV

## APPLICATIONS

- Mobile phones
- GPS receivers
- Altimeter applications
- Personal Navigation Devices (PND)
- Digital cameras with altimeter function

## BLOCK DIAGRAM

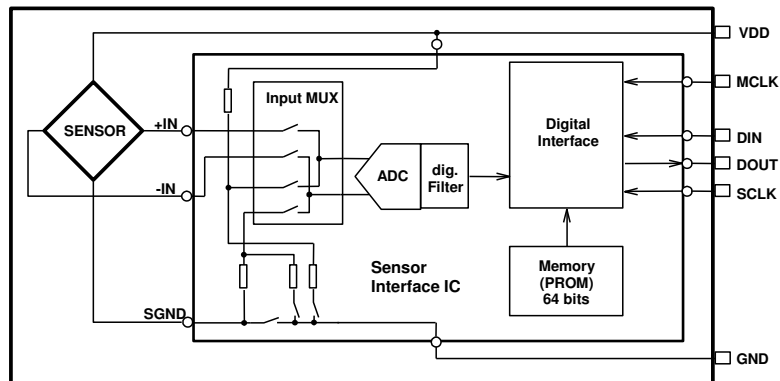


Fig. 1: Block diagram MS5561C