

MS5534C

Barometer Module

SPECIFICATIONS

- ◆ 10 - 1100 mbar absolute pressure range
- ◆ 6 coefficients for software compensation stored on-chip
- ◆ Piezoresistive silicon micromachined sensor
- ◆ Integrated miniature pressure sensor 9 x 9 mm
- ◆ 16 Bit ADC
- ◆ 3-wire serial interface
- ◆ 1 system clock line (32.768 kHz)
- ◆ Low voltage and low power consumption

The MS5534C is a SMD-hybrid device including a piezoresistive pressure sensor and an ADC-Interface IC. It provides a 16 Bit data word from a pressure and temperature dependent voltage. Additionally the module contains 6 readable coefficients for a highly accurate software calibration of the sensor. MS5534C 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 microcontroller.

The MS5534C is fully software compatible to the previous versions (MS5534A and MS5534B). Compared to the previous versions the ESD sensitivity level has been improved to 4kV on all pins.

FEATURES

- ◆ Supply voltage 2.2 V to 3.6 V
- ◆ Low supply current
- ◆ -40°C to +125°C operation temperature
- ◆ No external components required

APPLICATIONS

- ◆ Mobile altimeter / barometer systems
- ◆ Weather control systems
- ◆ Adventure or multi-mode watches
- ◆ GPS receivers

BLOCK DIAGRAM

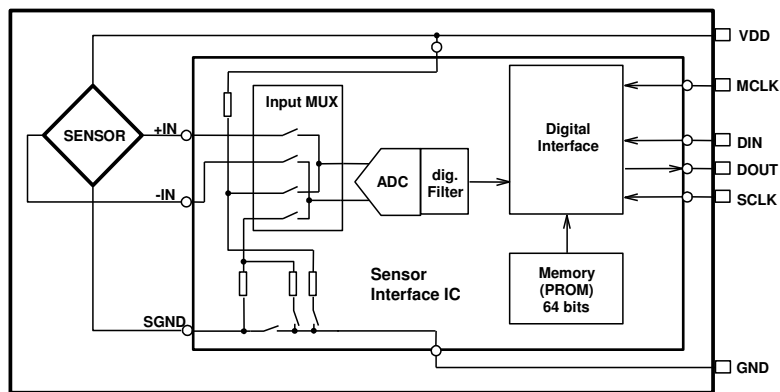


Fig. 1: Block diagram MS5534C