

Vaisala PMB100 barometer module

Output quantity:	Pressure (hPa)
Supply voltage:	9...16 VDC
Output voltage:	Output signal 0...2.5 V Reference 2.5 V \pm 2% (type LM4431 M3)
Operating pressure range:	800 ... 1100 hPa
Operating temperature range:	-5... +45°C
Operating humidity range:	< 80% RH
Electrical connectors:	Two 6-pin pin headers, 2.54 mm grid

Connections

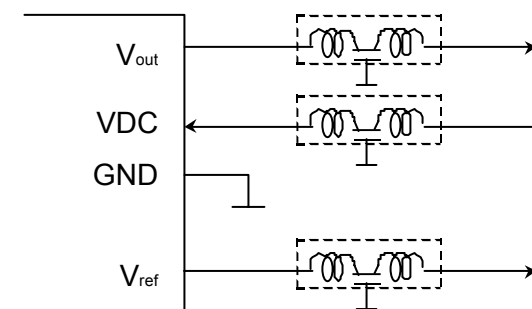
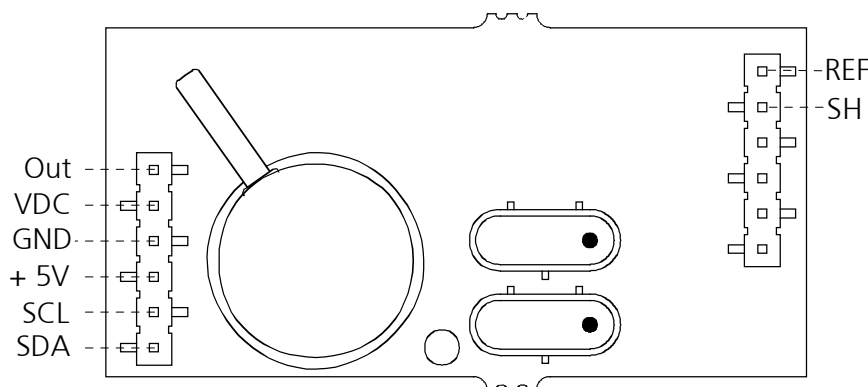
Connect 8...16 VDC supply voltage (typically 2 mA) to the pin VDC and the ground plane directly to the pin GND. The output signal (0...2.5 VDC) is measured from the pin OUT and the reference signal (2.5 VDC \pm 2%) from the pin REF.

If the coefficients are read from the EEPROM, the pin +5 V, SCL and SDA are also connected. The +5 V-pin is used for supply voltage of the EEPROM. The pins SCL and SDA are for data transfer between the EEPROM and a microprocessor.

Temperature of the module is measured with an external T sensor, which should be placed as close to the module as possible.

The module can also be switched to shut down mode by using a TTL level trigger on the pin SH. A signal 0.7 V or lower activates and a signal higher than 2 V switches the module off.

Pin assignments



Electromagnetic interference protection of the PMB100. Filters, for example, T-type EMI suppression filters with capacitance of 47pF (like Murata, DSS310-55Y5S470M100). This connection setup fulfills the RF field immunity standard EN61000-4-3.