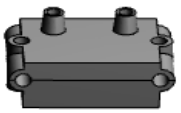
MITSUMI

PRELIMINARY

Digital output micro differential pressure sensor

MMR940



Outline

The MMR940 digitally outputs a micro differential pressure value which was corrected. Customers need no correction because it corrects and outputs the differences of sensors and temperature characteristics. It does not require complicated sensor drive or control circuit, and devices with high performance can be made only with this module and an external microcontroller which will be the host.

Applications

Devices using air pressure

Features

① Dual nozzle package

② A high-accuracy pressure value can be output
Operating pressure range -40~+40cmH2O
Effective resolution: 0.002cmH2ORMS
Pressure measurement error: ±0.5[%FS]

③ It corrects the differences of sensors and temperature characteristics when shipped from our factory

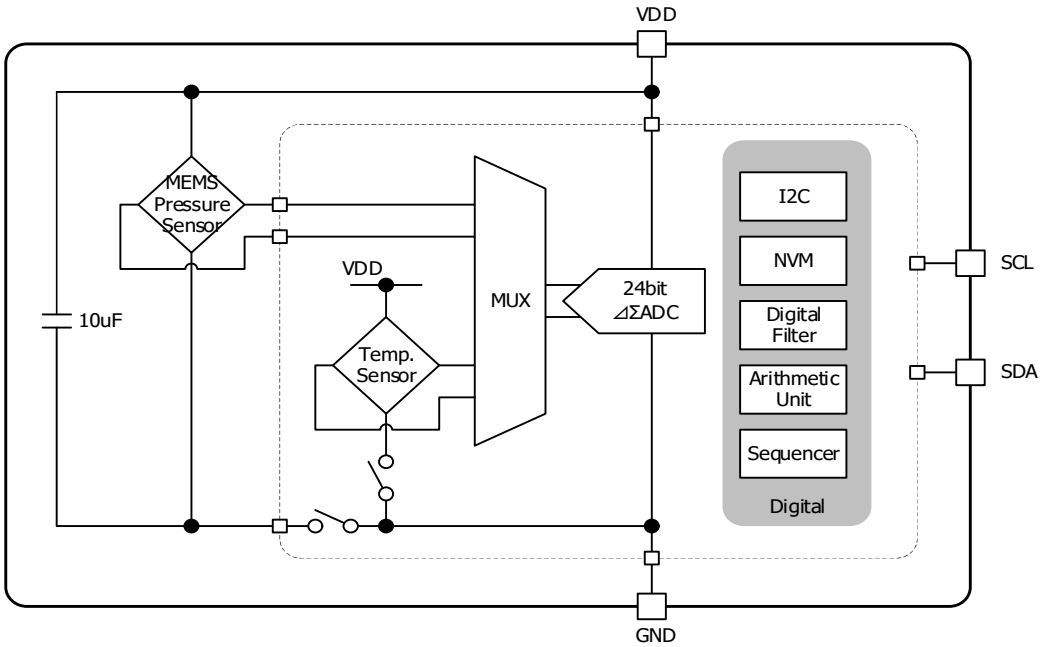
④ It digitally outputs pressure value (I2C)

⑤ Noise reduction is possible by a built-in LowPassFilter.

Specification

ITEM	SPECIFICATION
Pressure Type	Gage Pressure
Pressure Medium	Air (no Condensation)
Operating Pressure Range	±40cmH_2O (±3.92kPa)
Operating Temperature Range	0 ～ 50℃
Supply Voltage Range	3.0 ～ 3.6V(3.3V typ.)
Conversion Time	0.4 / 0.8 / 1.6 / 3.2ms
Current Consumption	0.8mA
Pressure accuracy	±0.5%FS
Pressure effective resolution	0.002cmH2O
Interface	I2C
Size	29(W) ×18(D) ×17.15(H)mm

Block Diagram



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