

Low Supply Voltage, Digital Output Gage Pressure Sensor

MMR906XAN

Outline

This product digitally outputs a 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.

Features

(Unless otherwise specified, $T_a=+25^{\circ}\text{C}$)

- (1) Small package: 5.0(W) × 6.0(D) × 7.2(H)mm
- (2) It is able to output pressure value with high precision.
 - Effective resolution: 0.025mmHgRMS (3.4PaRMS) (at MODE1)
 - Pressure measurement error (With OffsetCancel): ±2.0mmHg(±267Pa)
 - Pressure measurement error (With UserCalibration): ±1.0mmHg(±133pa)
- (3) It corrects the differences of sensors and temperature characteristics when shipped from our factory.
- (4) It digitally outputs pressure value by a built-in sequencer (SPI)
- (5) Noise reduction is possible by a built-in second order LowPassFilter.

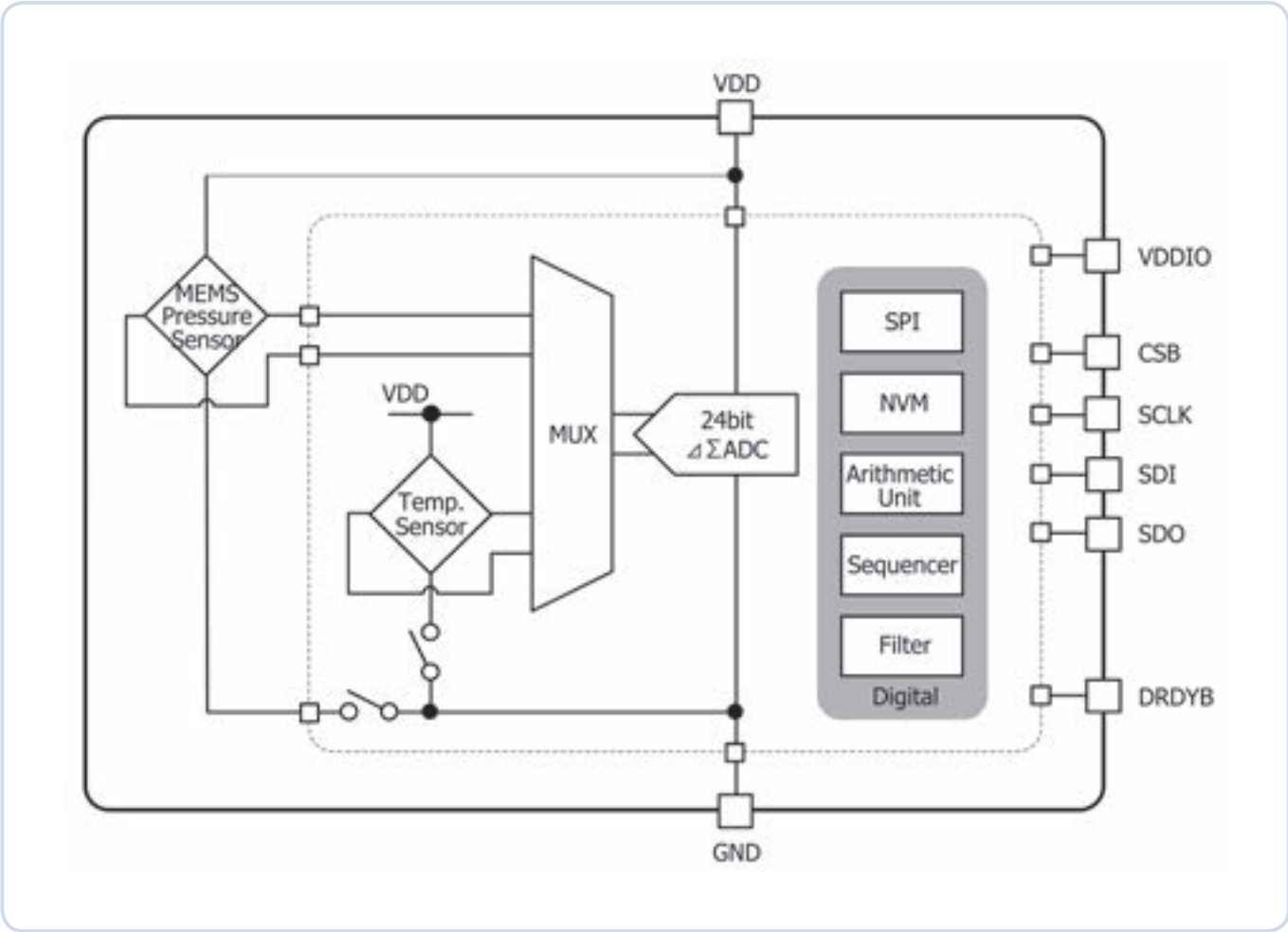
Applications

- (1) for Sphygmomanometer

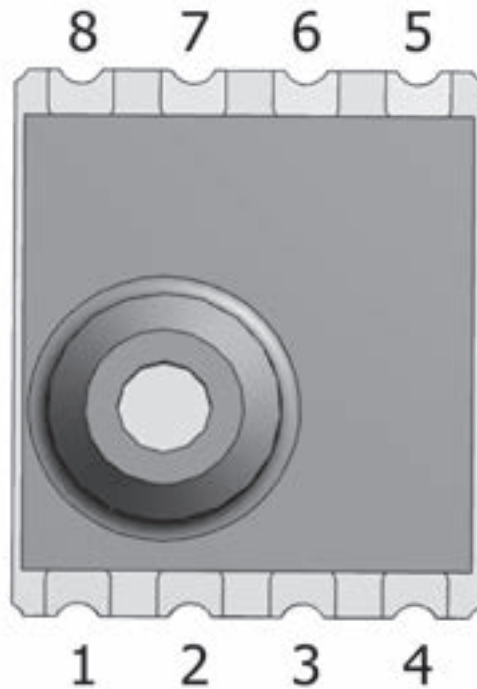
Package

MEMS-8B

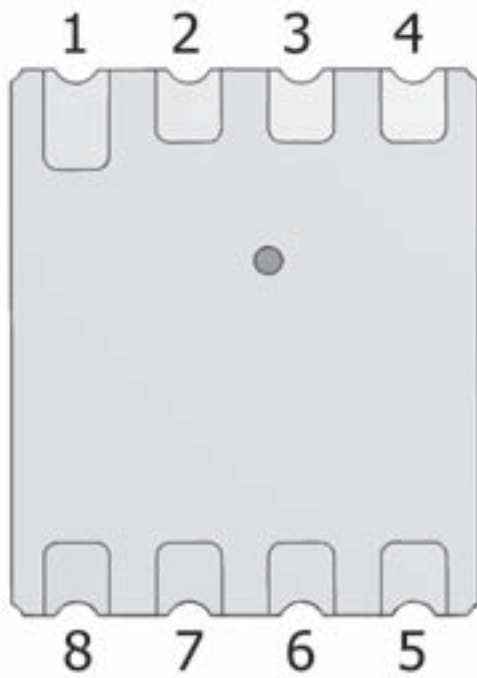
Block diagram



Pin configuration



Pin configuration(Top view)

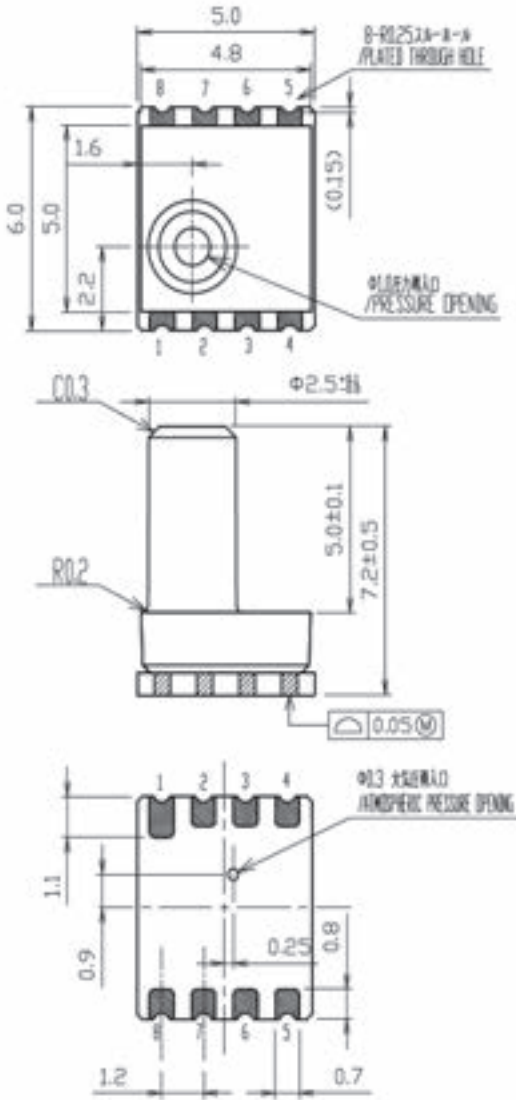


Pin configuration(Bottom view)

Terminal explanations

No.	Pin Name	TYPE	FUNCTION
1	SCLK	I	Serial clock (SCLK)
2	DRDYB	O	Output terminal which notifies the completion of pressure measurement and calculation correction (negative logic)
3	VDD	I	Power-supply for analog circuit
4	VDDIO	I	Power-supply for digital I/O
5	GND	-	GND
6	CSB	I	Chip select
7	SDO	O	Serial Data Output(SDO=MISO)
8	SDI	I	Serial Data Input(SDI=MOSI)

Dimensions



No.	Pin Name
1	SCLK
2	DRDYB
3	VDD
4	VDDIO
5	GND
6	CSB
7	SDO
8	SDI