

## **PRELIMINARY**

Digital output micro pressure sensor

# **MMR920**

#### Outline

The MMR920 series is a Gauge pressure sensor module that includes a MEMS pressure die with a dedicated analog front end IC to provide a fully calibrated and temperature compensated digital output (I2C/SPI). Its unique packaging structure provides protection from aggressive media since electronics are not exposed to the high pressure port.

The MMR920 series is ideal for low pressure application requiring high accuracy and robustness.

#### **Applications**

Devices using air pressure

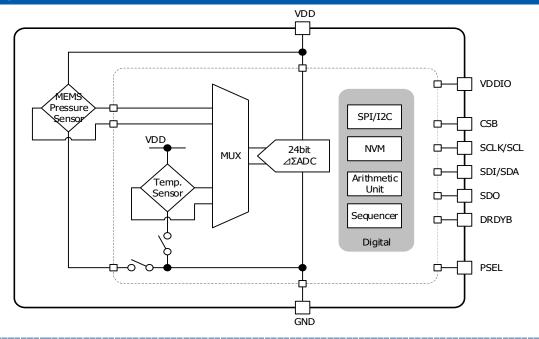
#### **Features**

- ① Small package  $7.0(W) \times 7.0(D) \times 7.2(H)$ mm
- ② A high-accuracy pressure value can be output Pressure accuracy: ±0.5%FS
- ③ It corrects the differences of sensors and temperature characteristics when shipped from our factory
- 4 It digitally outputs pressure value (SPI,I2C)

#### **Specification**

ITEM	SPECIFICATION
Pressure Type	Gage Pressure
Pressure Medium	Air (no Condensation)
Operating Pressure Range	C02rank:±1.96kPa(±20cmH2O)
	C04rank:±3.92kPa(±40cmH2O)
	C07rank:±6.86kPa(±70cmH2O)
	C10rank:±9.8kPa(±100cmH2O)
Operating Temperature Range	0 ∼ 50℃
Supply Voltage Range	$3.0 \sim 3.6 \text{V} (3.3 \text{V typ.})$
Conversion Time	0.4 / 0.8 / 1.6 / 3.2ms
Current Consumption	1,000uA
Pressure accuracy	±0.5%FS
Pressure effective resolution	(TBD)
Interface	SPI / I2C
Size	7.0(W) ×7.0(D) ×7.2(H)mm

### **Block Diagram**









https://mtm-sec.mitsumi.co.jp/web/ic/

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