

Digital output gage pressure sensor

# MMR902A##A



## Outline

This product is digitally outputs a pressure value which was corrected in the module. 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

Blood pressure monitor for home appliance  
Devices using air pressure

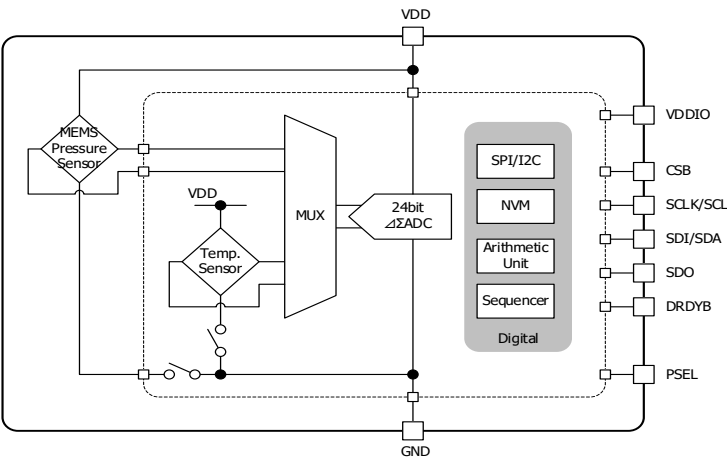
## Features

- ① Small package 7.0(W) ×7.0(D) ×7.2(H)mm
- ② A high-accuracy pressure value can be output
  - Pressure resolution : 0.001mmHg
  - Pressure effective resolution : 0.020mmHgRMS
  - Pressure accuracy : ±2.0mmHg (±266Pa)
- 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,I2C)

## Specification

| ITEM                            | SPECIFICATION                         |
|---------------------------------|---------------------------------------|
| Pressure Type                   | Gage Pressure                         |
| Pressure Medium                 | Air (no Condensation)                 |
| Operating Pressure Range        | -4~47.99kPa(-30~360mmHg)              |
| Operating Temperature Range     | 0 ~ 60℃                               |
| Supply Voltage Range            | 1.7 ~ 3.6V                            |
| Conversion Time                 | 3.91 / 7.81 / 15.625 / 250ms          |
| Current Consumption             | 650uA                                 |
| Current Consumption at Shutdown | 0.1uA Max                             |
| Pressure accuracy               | ±266Pa(±2.0mmHg)                      |
| Pressure effective resolution   | 0.040 / 0.028 / 0.020 / 0.005 mmHgRMS |
| Interface                       | SPI / I2C                             |
| Size                            | 7.0(W) ×7.0(D) ×7.2(H)mm              |

## Block Diagram



## Typical Performance Characteristics

It outputs a pressure value which was corrected the differences of sensors and temperature characteristics

