### **Featured Products**











#### **IPX8** waterproof rated

## Compact Waterproof High Accuracy Barometric Pressure Sensor

BM1390GLV

- Compact waterproof IPX8 rated package
  - Delivers superior water resistance in the same small package as conventional products, making it ideal for applications requiring waterproof performance
- Ceramic package suppresses characteristics fluctuations during measurement due to stress
   Minimizes characteristics fluctuations after mounting on board, contributing to greater flexibility in board layout design
- Built-in temperature compensation circuit ensures stable measurement accuracy from low to high temperatures

Eliminates the need for an external MCU for temperature correction calculation, reducing design load

\* IPX8: The IP code indicates the against foreign particles a

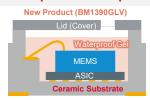


 \* IPX8: The IP code indicates the level of protection against foreign particles and water.
 IPX8 represents the highest waterproof rating.

#### IPX8 Rated Waterproof Performance

#### Utilizes a special gel to protect the IC internals and provide waterproof performance





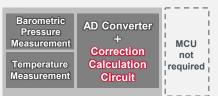
Ceramic Package Suppresses Characteristics Fluctuations

# Small Stress Stress Simulation Comparison When Mounted on Board Conventional Product New Product (BM1390GLV) Large characteristics fluctuation with resin package Minimal characteristics fluctuation with ceramic package

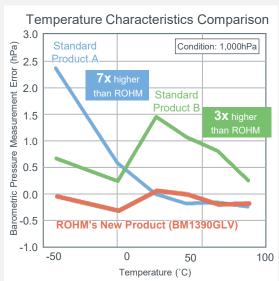
#### **■** Built-in High Accuracy Temperature Compensation Function

#### **New Product (BM1390GLV)**

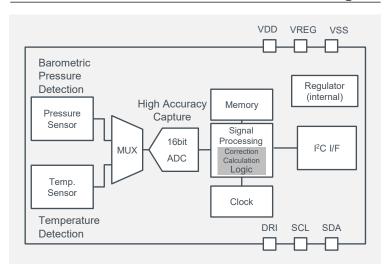
Barometric Pressure Block Diagram



- Eliminating the need for an external MCU for temperature correction calculation reduces design load
- Achieves stable measurement accuracy from low to high temperatures



#### ■ Barometric Pressure Sensor IC Block Diagram

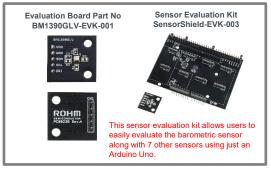


#### Evaluation Kit

Online Distributors: Chip One Stop, Core Staff Evaluation Board Part No: BM1390GLV-EVK-001

Support Page: https://www.rohm.com/sensor-shield-support/pressure-

sensor2





#### Application Examples

#### New methods of applying barometric pressure and altitude data expand system functionality

- · Consumer appliances such as rice cookers and vacuum cleaners that require pressure control
- Industrial equipment demanding waterproof performance
- Compact IoT devices and drones used outdoors



Pressure control optimization by measuring barometric pressure



Altitude measurement and activity analysis



#### Pressure Sensor IC Specifications

Part No.	Supply Voltage (V)	Barometric Pressure Range (hPa)	Relative Pressure Accuracy (hPa)(Typ)	Absolute Pressure Accuracy (hPa)(Typ)	Operating Temperature Range (°C)	Package (mm)
New BM1390GLV Web Page	1.7 to 3.6	300 to 1,300	±0.06	±1	-40 to +85	RLGA10VG020T 2.0× 7.75× 1.0



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