

Digital Temperature and Humidity Sensor

MMS201

Outline

The MMS201 is a combined relative humidity and temperature sensor module. The dual sensor is also combined with our custom analog front end to provide a fully calibrated and temperature compensated digitized I2C output. The MMS201 proprietary polymer and parallel plate capacitive structure provides excellent

robustness and reliability. No complicated sensor drive or control circuit is required, and high performance sensing is achievable only with the MMS201 and an external microcontroller which works as a host.

Features

(Unless otherwise specified, T_{opr}=+25°C)

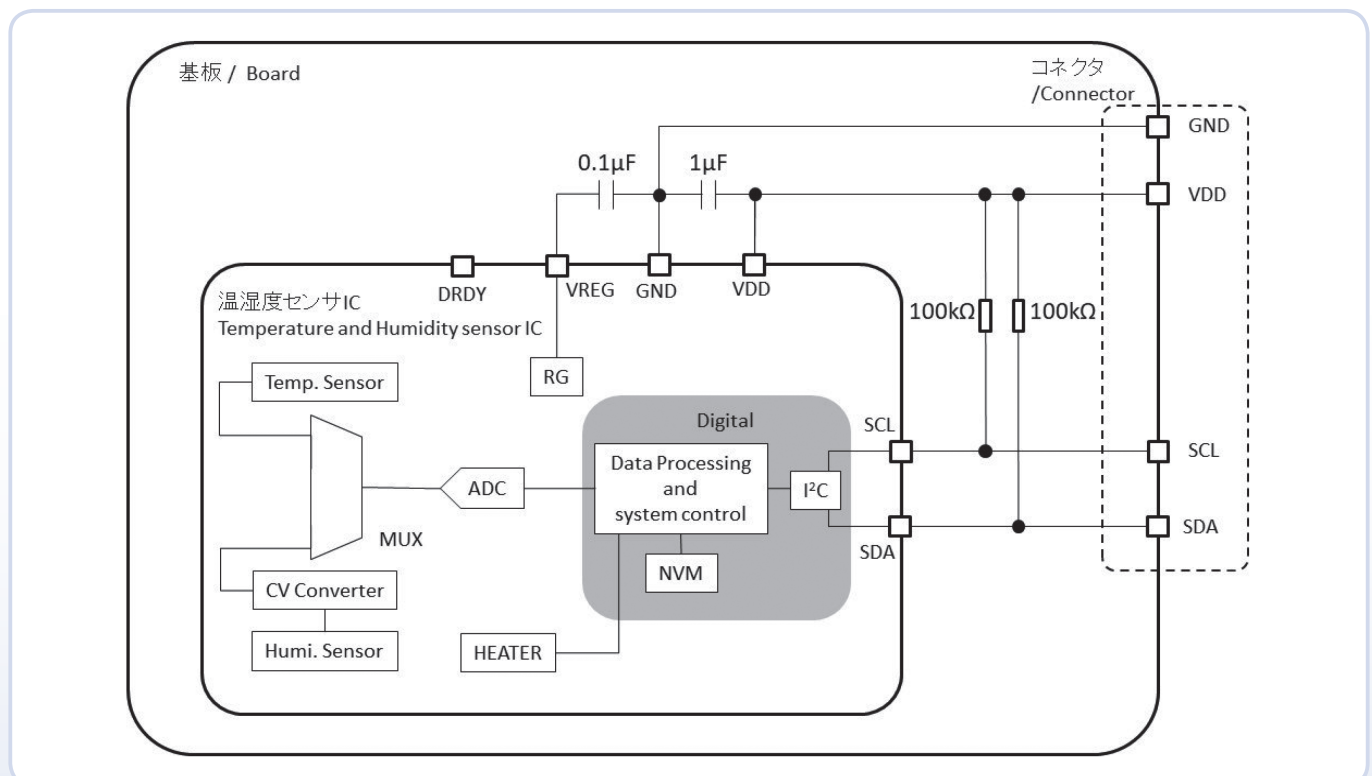
- ① Small module: 24mm(W) × 16mm(D)
- ② Current consumption 8.97μA Typ. (@1sample/sec.) Current consumption at sleep 0.85μA Typ.
- ③ Output corrected humidity value with repeatability of 0.015%RH.
- ④ Equipped with a heater for checking operation
- ⑤ 8-bit I2C address 50h(Write), 51h(Read)
- ⑥ Specifications

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|----------------------------------|--------------------------|
| ● Sensing principle | Capacitive |
| ● Supply voltage | 2.2~5.5V |
| ● Operation temperature | -25~85°C |
| ● Humidity range | 0~100%RH. |
| ● Humidity accuracy @25°C 50%RH. | ±2%RH. |
| ● Humidity hysteresis | ±1%RH. |
| ● Response time | 6sec |
| ● Temperature accuracy @25°C | ±0.6°C |
| ● Interface | I2C |
| ● Size | 24(W) × 16(D) × 8.2(H)mm |

Applications

Air conductor, refrigerator, dehumidification fan, heat exchanger, environmental monitoring, medical

Block diagram



Dimensions

