

High-Accuracy, Ultra-Low-Power, 16-bit Relative Humidity and Temperature Sensor

Datasheet_V1.6
Jul. 2025

1 Features

- Relative humidity accuracy: $\pm 2.5\%RH$
- Temperature accuracy: $\pm 0.2\text{ }^{\circ}C$
- Supply voltage: 1.6 V to 5.5 V
- Average current: 0.4 μA (at meas. rate 1 Hz)
- Idle current: 0.1 μA
- Resolution: 0.01%RH, 0.01 $^{\circ}C$
- Operating range: 0-100%RH, -40~125 $^{\circ}C$
- Communication Interface: I²C, up to 1 MHz
- Variable power heater
- NIST traceability
- JEDEC JESD47 qualification
- Package Information:

PRODUCT	PACKAGE	DETAILS
GXHTV4-AD	DFN4	See Fig.2 , addr:0x44

2 Applications

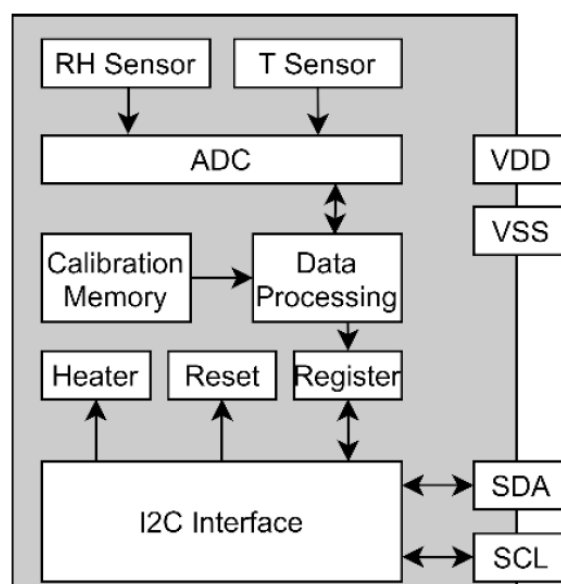
- Automotive cabin
- Industrial control
- Smart home
- Consumer electronics
- Medical devices

3 Description

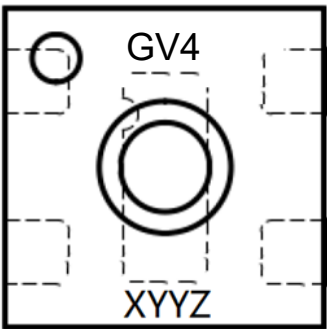
GXHTV4 is a new-generation single-chip integrated temperature and humidity sensor of Galaxy-CAS, which can offer configurable I²C addresses. The built-in heater can be activated in anti-dew occasions, and the heater power is configurable.

The four-pin dual-flat-no-leads package is suitable for surface mount technology (SMT) processing.

Functional Block Diagram of GXHTV4 Family



8.4 Marking Information



GV4: indicates the model GXHTV4;

XYZZ: X is the year, YY is the week, Z is the internal version number. For example, 5066 indicates production in the 6th week of 2025, version 6.

9 Ordering Information

ORDER NUMBER	DEVICE	PACKAGE	SPQ	NOTE
GXHTV4-AD-R2-T&R	GXHTV4-AD	DFN-4	2000	Addr:0x44, Tape & Reel
GXHTV4-AD-R3-T&R	GXHTV4-AD	DFN-4	10000	Addr:0x44, Tape & Reel