

GX103 series Low power digital temperature sensor in WCSP package, compatible with SMBus and IC² communication

1 Features

- **Multiple Device Access (MDA)**
 - Global read and write operations
 - Temperature range: **-40°C to +125°C**
 - Measurement accuracy: **±1°C (-40°C ~ +125°C)**
 - Package: **4-Ball WCSP (DSBGA)**
 - Supply voltage
 - GX103x: 1.4V ~ 2.8V**
 - GX103S: 1.4V ~ 3.6V**
 - Low static current
 - Normal operation: **≤3μA (0.25Hz)**
 - Off mode: **≤1μA**
 - Resolution
 - GX103x: 8Bits**
 - GX103S: 11Bits**
 - Digital output: **compatible with SMBus and I²C**
- interfaces

2 Applications

- Phone
- Laptop
- Solid State Drive (SSDs)
- Server
- Set top box
- Low power environment
- Sensor

3 Description

The GX103 series temperature sensors are all in 4-

Ball wafer-level packages, of which the GX103 has a resolution of 1°C and the GX103S has a resolution of 0.125°C.

The two-wire interface of the GX103 series is compatible with SMBus and IC² communication modes, and supports multi-chip access (MDA) commands, which can realize the communication between the host and multiple chips on the bus at the same time, without sending separate read and write commands to each GX103 series chip. GX103 supports up to 8 different address chips to be mounted on a main line, and GX103S supports 16 different address chips to be mounted.

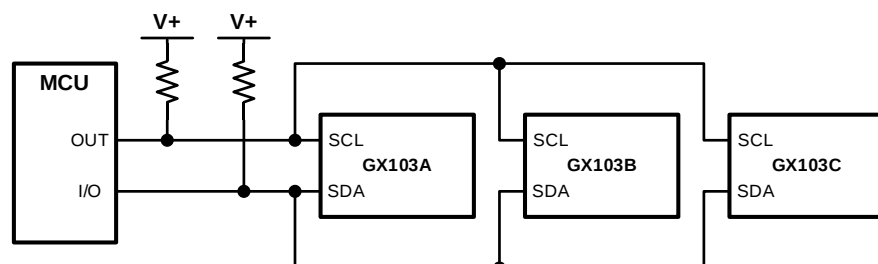
The GX103 series is suitable for the system with limited temperature measurement area, temperature sensitivity, and multi-temperature area measurement and monitoring. The rated operating temperature range of the GX103 series is -40°C ~ +125°C.

Device Information

Product	Package	Chip body area
GX103x	WCSP (4)	0.86mm x 0.86mm
GX103S	WCSP (4)	0.86mm x 0.86mm

Note: "x" represents different addresses A/B/C.

GX103 Application Diagram



9 Ordering Information

Order Number	Chip Model	Package	SPQ	Note
GX103A-T&R	GX103A	WLCSP	4000	Tape & Reel