
GX20MH01 Programmable 14-bit resolution single-bus high-precision temperature sensor

1. Fundamental characteristics

- A single port pin is required to communicate with a single bus interface
- Each chip has a globally unique 64-bit serial number
- With the multi-point distributed temperature measurement function
- No peripheral components are required
- Power can be supplied through the data line; the power supply voltage range is 2.5V~5.5V
- The measurement range is -55°C to +125°C (-67°F to +257°F)
- The accuracy was ± 0.1 C in the range from 0°C to 50
- At the 14-bit accuracy, the temperature conversion speed is less than 1.6s
- With user-defined non-volatile temperature alarm settings
- The alarm search command identifies and identifies the device that exceeds the programmed temperature
- Super-static protection capability:
HBM>8000V MM >800V
- The TO-92 package of the 3-feet

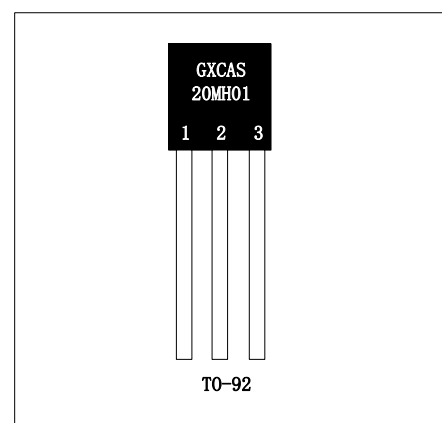
2. Application scenarios

- Body temperature measurement
- Drug storage
- Medical equipment and other fields

3. Chip overview

GX20MH01 Digital thermometer provides temperature measurement at 14bit resolution with a lower temperature limit through a programmable non-volatile storage unit and upper limit alarm. GX20MH01 Use the single bus protocol to communicate with the upper computer, requiring only one signal line and one ground line. It has a temperature measurement range ranging from -55°C to + 125°C. Test accuracy in the range of 0°C to + 50°C can reach ± 0.1 °C. In addition, it can work in parasitic mode, directly powering the chip through signal lines, thus without requiring additional power supply. Each GX20MH01 has a globally unique 64-bit serial number, which can network multiple GX20MH01 in series on the same documentary bus, and requires only one processor to control multiple GX20MH01 distributed in a large area. This networking mode is especially suitable for HVAC environmental control, construction, equipment, food situation temperature measurement, industrial temperature measurement, process monitoring and control and other application fields.

4. Pin configuration



Order information

Purchase code	component	package	Standard packaging quantity	remark
GX20MH01-Bu	GX20MH01	TO92(3)	2000	in bags