

GX1832

High-Accuracy Temperature Sensor With One-Wire

1 Features

- Direct Replacement for NTC Thermistors
- Accury: $\pm 0.5^{\circ}\text{C}$
- Supply Range: 2.6V ~ 5.5V
- Temperate Range: $-55^{\circ}\text{C} \sim +150^{\circ}\text{C}$
- Active Current: 40 μA
- Shutdown Current: 0.5 μA
- Resolution: 12 bits (0.0625°C)
- Interface: 1-Wire

2 Applications

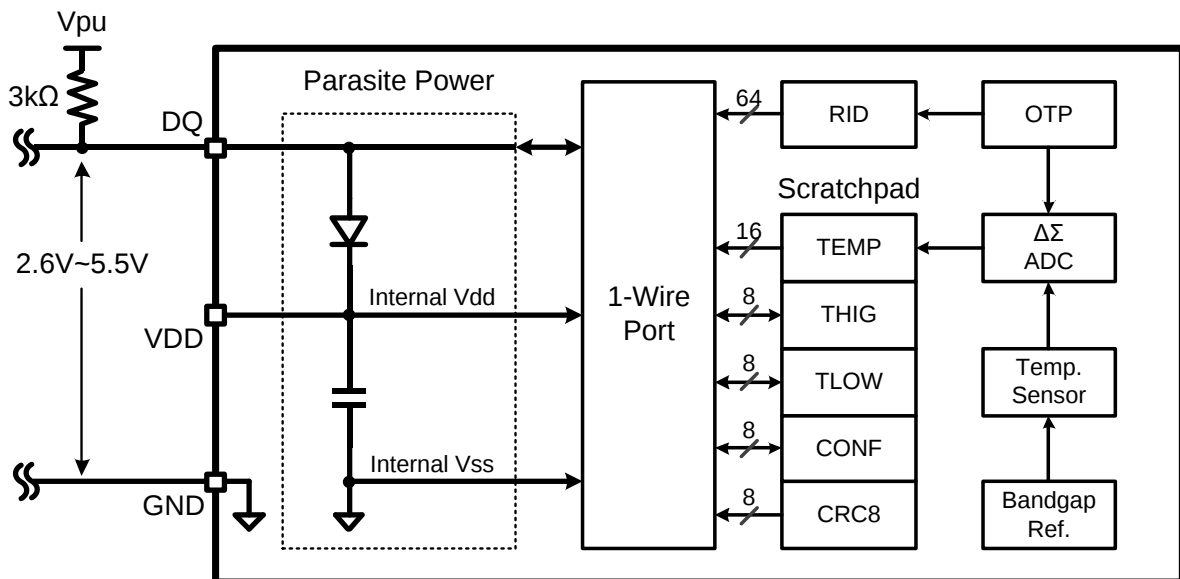
- Digital Output Wired Probes
- Industrial Control
- Cold-Chain Transportation
- Enterprise Servers

3 Description

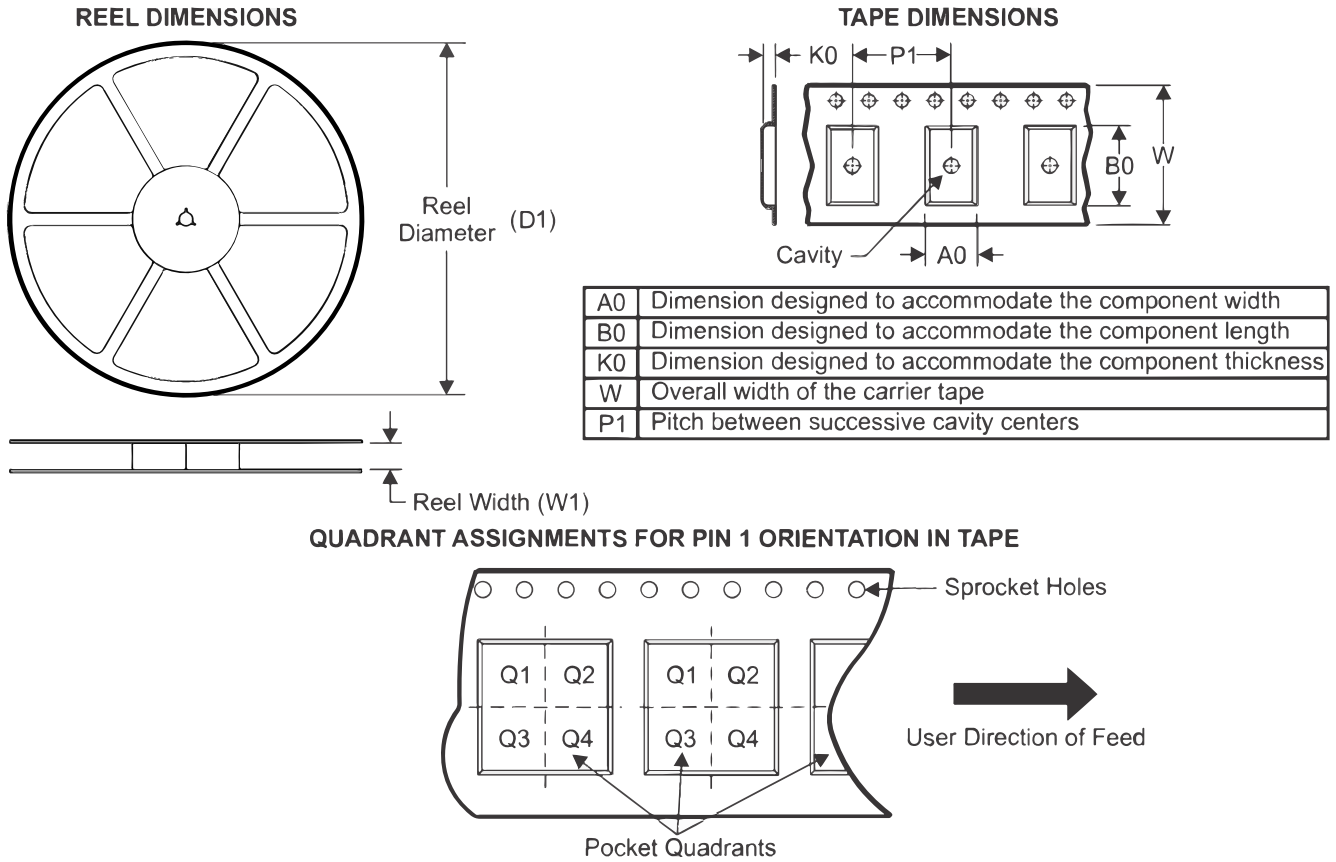
The GX1832 is a fully integrated digital temperature sensor that provides a 12-bit temperature result with a resolution of 0.0625°C and an accuracy of up to $\pm 0.5^{\circ}\text{C}$ with no calibration. The GX1832 is compatible with the one-wire interface and supports up to 32 devices on a single bus. The GX1832 can be easily used as a two wire digital temperature probe or as a direct replacement for NTC thermistors.

Device Information

PART NUMBER	PACKAGE	BODY SIZE
GX1832	TO-92 (3)	4.60 mm × 4.60
GX1832D	DFN (2)	1.60 mm × 0.80
GX1832S	TO-92S (3)	4.00 mm × 3.00
GX1832WS	TO-92S-2 (2)	4.00 mm × 3.00
GX1832G	SOT23-3 (3)	2.90 mm × 1.30



8.6 Tape and Reel Information



PACKAGE	D1 (mm)	W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	PIN1
DFN	180	8.6	1.00	1.80	0.62	4.00	8.00	Q1
SOT23	178	9.5	3.15	2.77	1.22	4.00	8.00	Q3

Note : all of the above dimensions are in millimeters.

9 Order Information

ORDER PN	DEVICE	PACKAGE	SPQ	REMARK
GX1832x-Bu	GX1832x	TO-92 (3)	2000	bulk
GX1832Dx-T&R	GX1832Dx	DFN (2)	4000	tape and reel
GX1832Sx-Bu	GX1832Sx	TO-92S (3)	2000	bulk
GX1832WSx-Bu	GX1832WSx	TO-92S-2 (2)	2000	bulk
GX1832Gx-T&R	GX1832Gx	SOT23-3 (3)	3000	tape and reel

Note: The "x" in the order PN denotes 32 distinct serial numbers.