XinaBox Datasheet SW10 - Temperature Sensor

Contents

Overview

This xCHIP is a temperature-to-digital converter using an on-chip band gap temperature sensor and Sigma-Delta A-to-D conversion technique with an over-temperature detection output.

Product Highlights

- I2C-bus interace with up to 8 devices on the same bus
- Temperature range from -55°C to +125°C
- Frequency range 20 Hz to 400 kHz with bus fault time-out

Applications

- System thermal management
- Personal computers
- Electronics equipment
- Industrial controllers

Specifications

- I2C-bus interace with up to 8 devices on the same bus
- Temperature range from -55°C to +125°C
- Frequency range 20 Hz to 400 kHz with bus fault time-out to prevent hanging up the bus
- Programmable temperature threshold and hysteresis set points
- Supply current of 1.0 µA in shutdown mode for power conservation
- Stand-alone operation as thermostat at power-up

External Links

Datasheets

- LM75 From NXP Semiconductors (https://www.nxp.com/docs/en/data-sheet/LM75B.pdf)

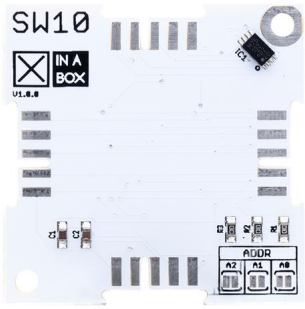
Shop

- Buy SW10 (https://xinabox.cc/products/SW10)

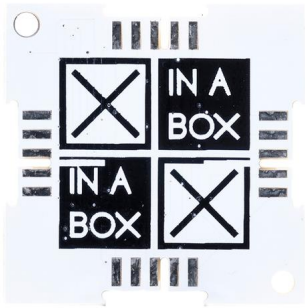
GitHub

- SW10 on GitHub (https://github.com/xinabox/xSW10)

SW10 - Temperature Sensor (LM75B)



Front



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☒CHIP	
Main Category	Sensor
Sub Category	Temperature
Introduced	1 January 2017
Current version	1.0.0
Current version date	1 January 2017
Dimensions	
Size	2x2U (32x32mm)
Weight	2.8 g
Height	2.3/0/0 mm
Main Chip Set	
Main Chip	LM75
I²C Configuration	
Default Address	0x48
Alternative Addresses	0x49 0x4A 0x4B 0x4C 0x4D 0x4E 0x4F
Change Setting	Solder