XinaBox Datasheet SL19 - IR Temperature

SL19 - IR Temperature (MLX90614)

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Overview

This xCHIP is equipped to measure temperature as a function of infrared light/radiation (IR) (http s://en.wikipedia.org/wiki/Infrared) radiating from objects in its field of view. SL19 is based on the MLX90614 in which a IR sensitive thermopile detector chip and signal conditioning ASIC (https://e n.wikipedia.org/wiki/Application-specific_integrated_circuit) are integrated.

The MLX90614 is factory calibrated in wide temperature ranges: -40-125˚C for the ambient temperature and -70-380˚C for the object temperature. The measured value is the average temperature of all objects in the Field Of View of the sensor. The MLX90614 offers a standard accuracy of ±0.5˚C around room temperatures.

Applications

- High precision non-contact temperature measurements
- Thermal Comfort sensor for Mobile Air Conditioning control system
- Temperature sensing element for residential, commercial and industrial building air conditioning

Specifications

- Based on the MLX90614 From Melexis Technologies NV
- Operating Temperature Range -40 +85°C
- Measurement resolution of 0.02°C
- High accuracy of 0.5°C in a wide temperature

External Links

Documents

- MLX90614ESF-BCC-000-TU From Melexis Technologies NV (https://www.melexis.com/e n/product/MLX90614/Digital-Plug-Play-Infrared-Thermometer-TO-Can)
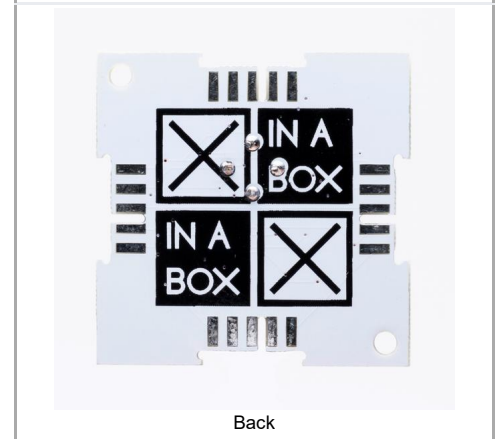
Shop

- Buy SL19 (https://xinabox.cc/products/SL19)

GitHub

- SL19 on GitHub (https://github.com/xinabox/xSL19)

⊠CHIP	
Main Category	Sensor
Sub Category	Light
Introduced	1 January 2017
Current version	1.0.0
Current version date	1 January 2017
Dimensions	
Size	2x2U (32x32mm)
Weight	3.7 g
Height	6.1/0/0 mm
Main Chip Set	
Main Chip	MLX90614