

---

# **MicroPython MLX90614 Library Documentation**

***Release 1.0***

**Mike Causer**

**Aug 07, 2018**



---

## Contents

---

<b>1</b>	<b><i>mlx90614</i> module</b>	<b>3</b>
1.1	MLX90614 . . . . .	3
<b>2</b>	<b>Usage Examples</b>	<b>5</b>
<b>3</b>	<b>Indices and tables</b>	<b>7</b>
	<b>Python Module Index</b>	<b>9</b>



Contents:



# CHAPTER 1

---

## *mlx90614 module*

---

### 1.1 MLX90614

**class** mlx90614.**MLX90614**(*i2c*[, *address*])

The basic class for handling the communication with the sensor.

The *i2c* parameter is an initialized I<sup>2</sup>C bus, and the optional address specifies which sensor to connect to, if you have more than one and have changed their addresses with the *Addr* pin.

All temperatures are returned in Celsius.

**read\_ambient\_temp()**

Get the ambient sensor temperature

**read\_object\_temp()**

Get the object temperature from the first or only thermopile

**read\_object2\_temp()**

Get the object temperature the second thermopile, if it exists



# CHAPTER 2

---

## Usage Examples

---

Connect your sensor in following way:

- vin 3V
- gnd gnd
- scl gpio5
- sda gpio4

Now, to make basic measurement:

```
import mlx90614
from machine import I2C, Pin
i2c = I2C(scl=Pin(5), sda=Pin(4))
sensor = mlx90614.MLX90614(i2c)
print(sensor.read_ambient_temp())
print(sensor.read_object_temp())
if sensor.dual_zone:
    print(sensor.object2_temp)
```

To perform continuous measurement:

```
import time
while True:
    print(sensor.read_ambient_temp(), sensor.read_object_temp())
    time.sleep_ms(500)
```

**There are some useful properties:**

- .dual\_zone - set to True if the sensor has two thermopiles
- .ambient\_temp - equivalent to read\_ambient\_temp(), also works for object and object2



# CHAPTER 3

---

## Indices and tables

---

- genindex
- modindex
- search



---

## Python Module Index

---

**m**

`mlx90614`, 3



## M

MLX90614 (class in `mlx90614`), [3](#)

`mlx90614` (module), [3](#)

## R

`read_ambient_temp()` (`mlx90614.MLX90614` method), [3](#)

`read_object2_temp()` (`mlx90614.MLX90614` method), [3](#)

`read_object_temp()` (`mlx90614.MLX90614` method), [3](#)