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Overview

This xCHIP forms part of the sensor modules and is equipped with a light sensor that is capable of measuring the luminosity (<https://en.wikipedia.org/wiki/Luminosity>) (Wide Dynamic Range — 3 lux to 220k lux) (visual brightness), UVA and UVB radiation. The light sensor converts solar UV light intensity to digital data and has displayed reliable performance of UV radiation measurement inner long time solar UV exposure.

Product Highlights

- UVA, UVB and visible light sensor
- Simple Direct Lux (<https://en.wikipedia.org/wiki/Lux>) Output
- 16-bit Digital Output with I²C Compatibility

Applications

- Lighting Control

Specifications

- Based on VEML6075 From Vishay Semiconductor Opto Division and TSL4531 From Texas Advanced Optoelectronic Solutions Inc
- Temperature range: -40°C to 85°C
- Output type: I²C bus
- Peak Sensitivity UVA, UVB(nm):365, 330
- Wide Dynamic Range — 3 lux to 220k lux
- Simple Direct Lux Output
- Three User-Selectable Integration Times (400 ms, 200 ms, and 100 ms)

External Links

Documents

- VEML6075 From Vishay Semiconductor Opto Division (<http://www.vishay.com/docs/84304/veml6075.pdf>)
- Designing the VEML6075 Into an Application (<https://www.vishay.com/docs/84339/designingveml6075.pdf>)
- TSL4531 From Texas Advanced Optoelectronic Solutions Inc. (<https://media.digikey.com/pdf/Data%20Sheets/Austriamicrosystems%20PDFs/TSL4531.pdf>)

Shop

- Buy SL01 (<https://xinabox.cc/products/SL01>)

GitHub

- SL01 on GitHub (<https://github.com/xinabox/xSL01>)

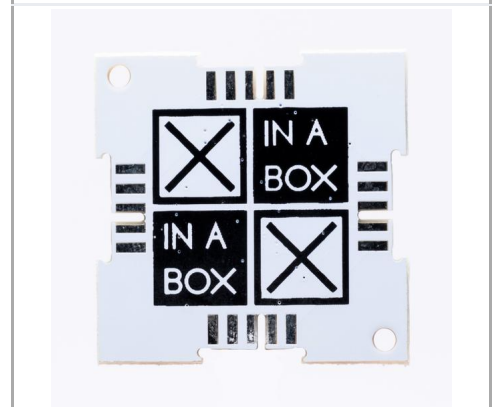
Projects

- VEML6075 UVA and UVB Light (<http://www.mouser.co.za/new/vishay/vishay-veml6075-sensor/>)

SL01 - UVA, UVB, Light (VEML6075, TSL4531)



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✘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 g
Height	2.6/1/0 mm
Main Chip Set	
Main Chip	VEML6075/TSL4531
I²C Configuration	
Default Address	0x10; 0x29