M5STACK

LIGHT SKU:U021

Description

LIGHT is a light intensity sensor unit with an adjustable photoresistor。

A photoresistor is a light-controlled variable resistor. The resistance of a photoresistor decreases with increasing incident light intensity, and vice versa. It exhibits photoconductivity which make it possiable to detect the varies based on Voltage, and use a AD to convert the digital data.

We add some extra work to strengthen the circult, a Dual Differential Comparators LM393, compares the differntial voltage between the photoresistor and the varistor. It could offer larger and accuracy range of light intensity.

Product Features

10K adjustable resistor

Software Development Platform: Arduino, UIFlow(Blocky,Python)

Two Lego-compatible holes

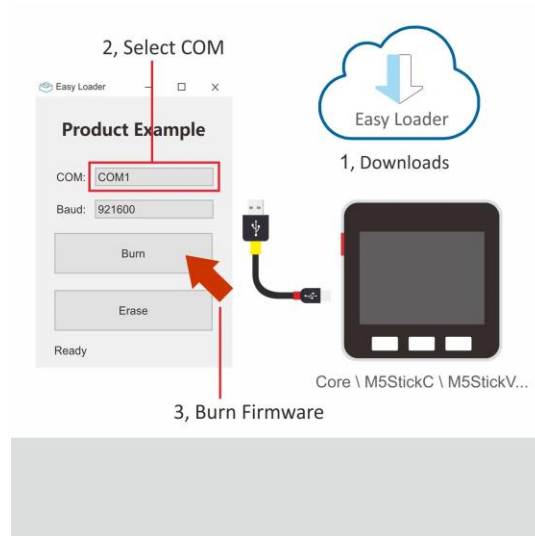Product Size：32.2mm x 24.2mm x 8.5mm

Product weight：8.8g

Include

1x LIGHT Unit

1x Grove Cable

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification. Please install the corresponding driver according to the device type. M5Core host Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)

Windows   MacOS

Example

1. Arduino IDE

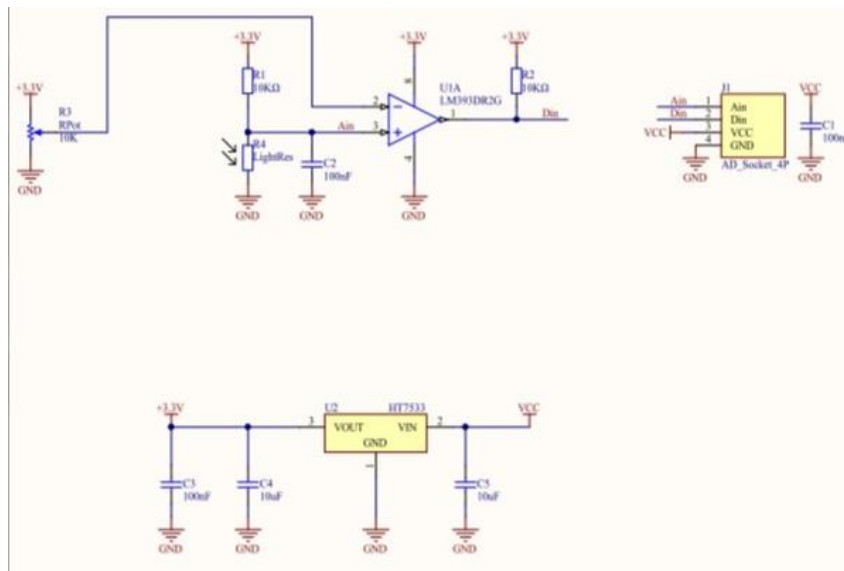The code below is incomplete. To complete code, please click here

2. UIFlow

To get complete code, please click here

Schematic

M5Core(GROVE B)	GPIO36	GPIO26	5V	GND
LIGHT Unit	AnalogSignal Pin	DigitalSignal Pin	5V	GND