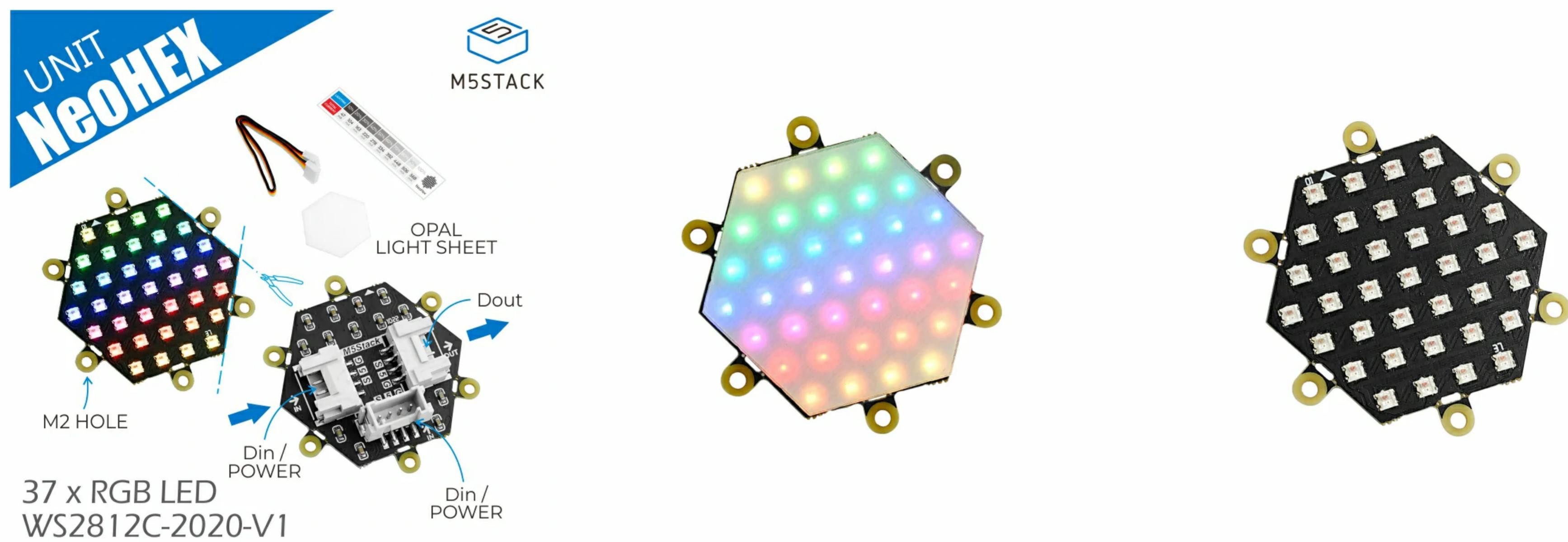


# Unit NeoHEX



SKU:A045-B



## Description

**NeoHEX** is a hexagonal board with 37 RGB LED flexible beads and will be sure to 'WOW' plenty. Use single BUS control, and support multiple boards connecting. Two sets of different angle input connectors are provided for independent power supply + signal control. External structure with fixing ears for easy installation. With its opal light sheet, the diffusion creates a gentle glow and provides innovative solutions to transform your living spaces into unique pieces of functional art.

## Product Features

- WS2812C-2020-V1
- Number of LEDs: 37
- Support multiple boards connection
- 6x fixing ears (removable)
- Comes with opal light sheet
- Single pixel support 256 levels of brightness display, can be combined for 16777216 kinds of full color display

## Included

- 1x NeoHEX Unit
- 1x Opal light sheet
- 1x Power Consumption Reference Card

- 1x HY2.0-4P cable (20cm)

## I Applications

- Lighting decoration

## I Specifications

Specification	Parameters
LED Bead Model	WS2812C-2020-V1
Number of light beads	37
Voltage supply	3.7 ~ 5.3V
Logic input level	-0.3V ~ VDD+0.7
Output/output interface	HY2.0-4P interface: 2x input (signal, power), 1x output (extension)
Refresh Rate	30 frames (1024 cascades)
Power consumption	Actual measurement of power consumption (37 lights are fully lit, brightness 100%): Red Light: DC5V@207mA Green Light: DC5V@109mA Blue Light: DC5V@208mA White light: DC5V@568mA
Adjustable brightness	Level 256
Support Colors	16777216 kinds of colors
Fixing hole diameter	2mm
Net Weight	3.7g

Gross Weight

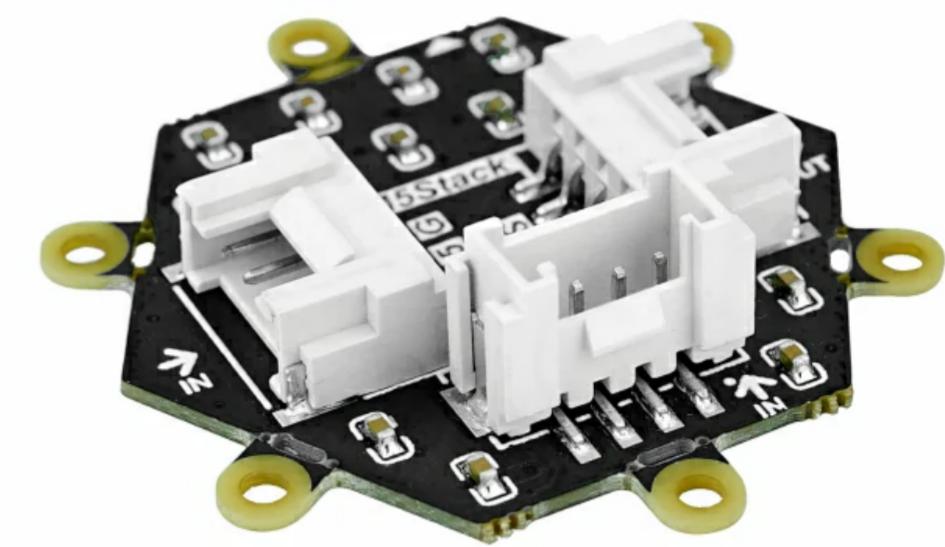
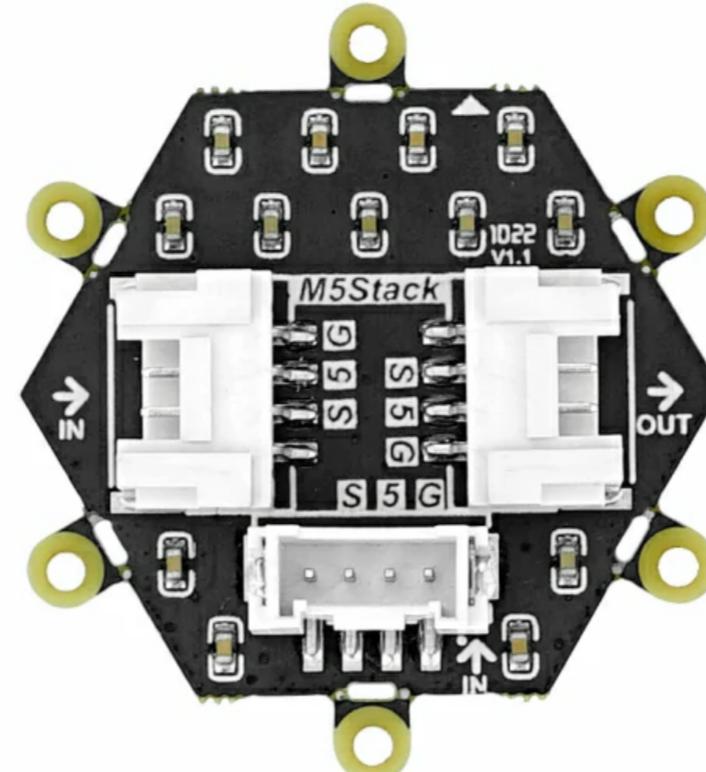
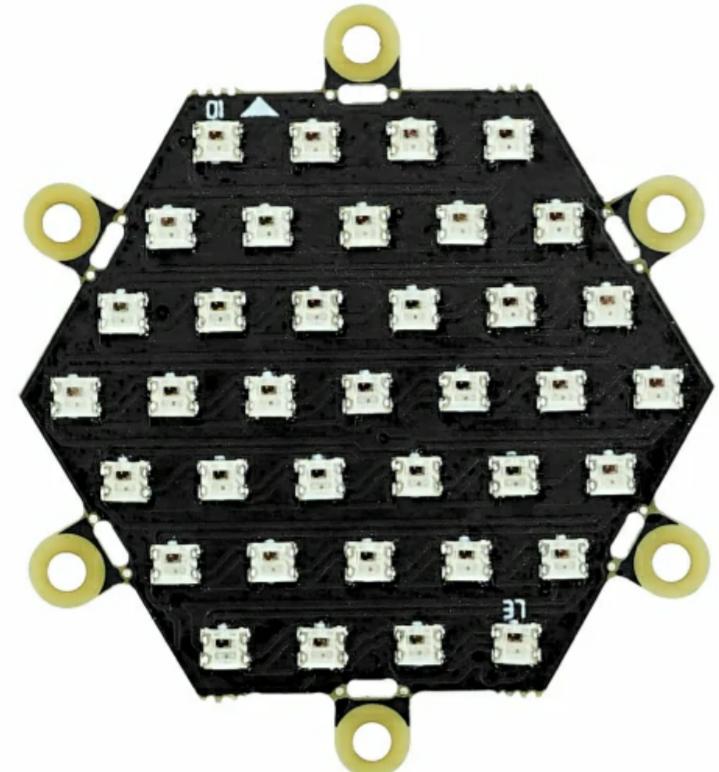
Parameters

Product Size

40\*36\*7mm

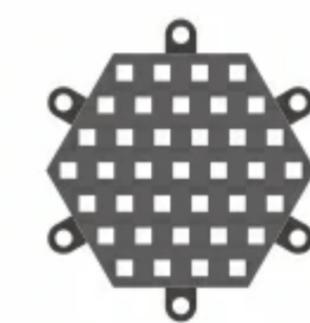
Package Size

93\*138mm



## Brightness/Power consumption reference

LIGHTING	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TOTAL CURRENT	47 mA	104 mA	163 mA	220 mA	278 mA	334 mA	392 mA	448 mA	506 mA	568 mA



NeoHex

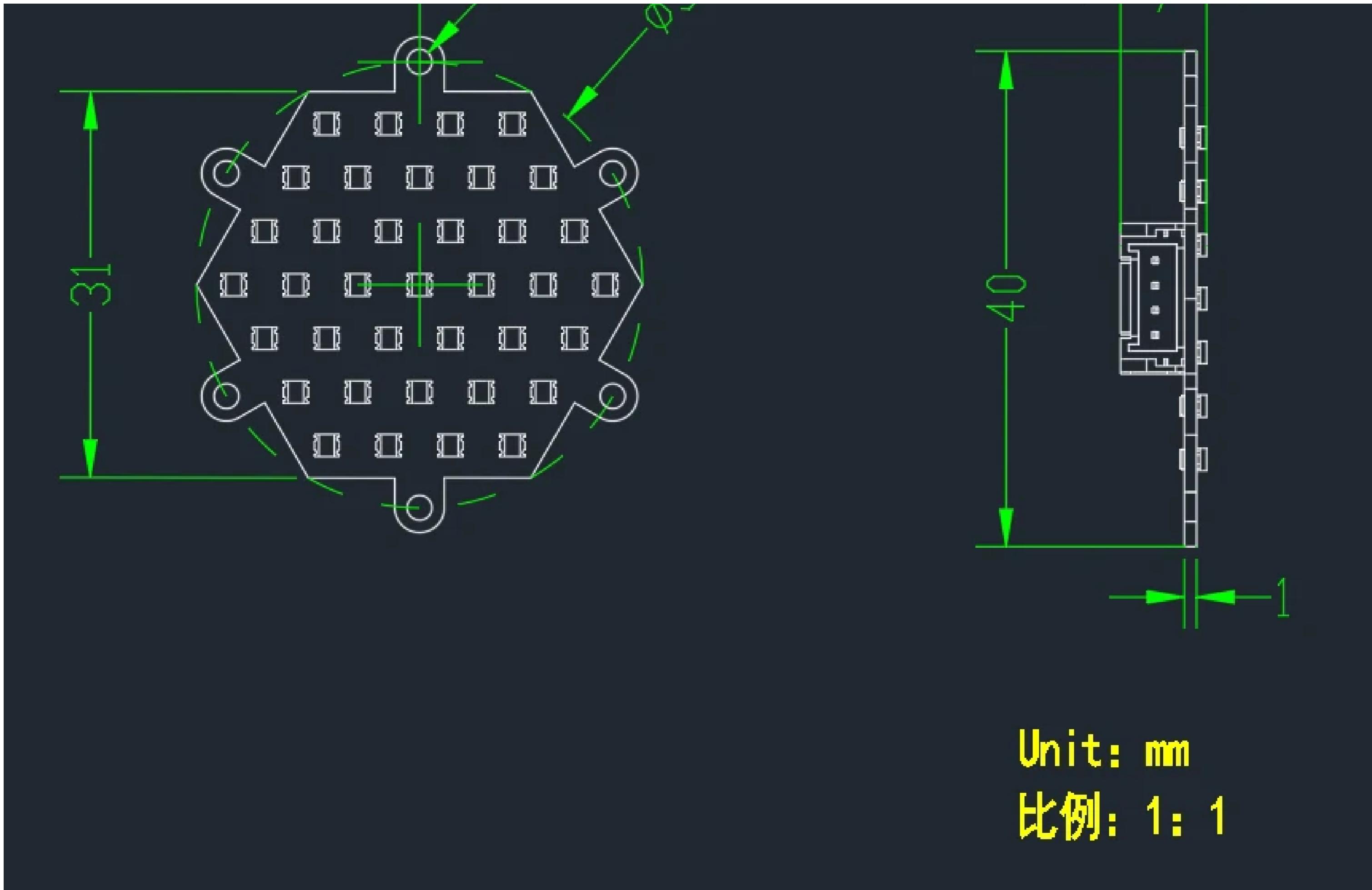
## Drive conditions

Different M5 main control in the USB power supply conditions of the light board drive for reference.

- Actual drive conditions:
  - ATOM: White light brightness is 82% normal drive (>Unable to light up at 86%)
  - CORE: White light brightness is 100% normal drive
  - CORE2: White light brightness is 100% normal drive
  - M5StickC: White light brightness is 86% normal drive (>Unable to light up at 90%)
  - M5StickCPlus: White light brightness 78% normal drive (>Unable to light up at 86%)

## Structure Diagram



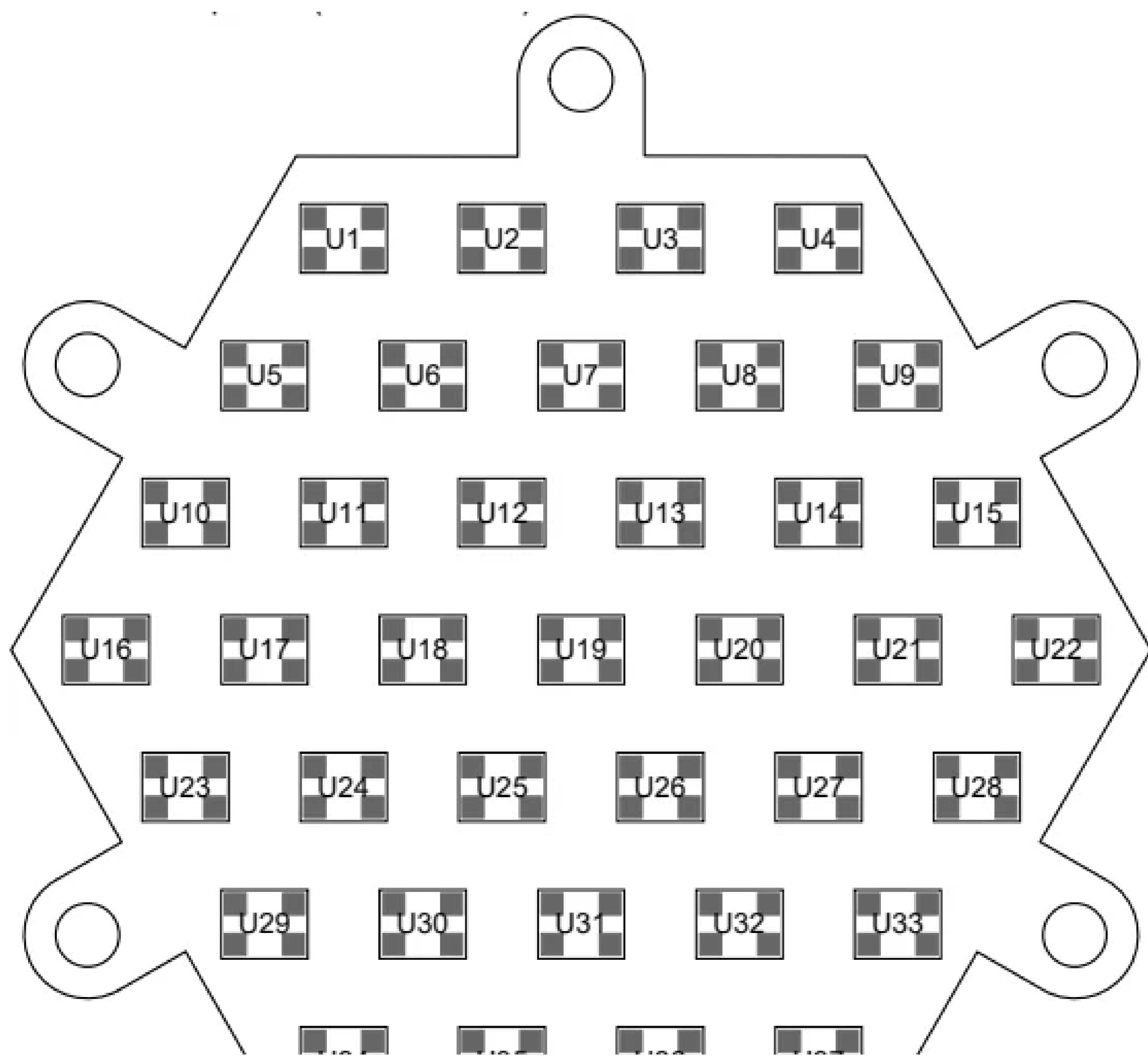


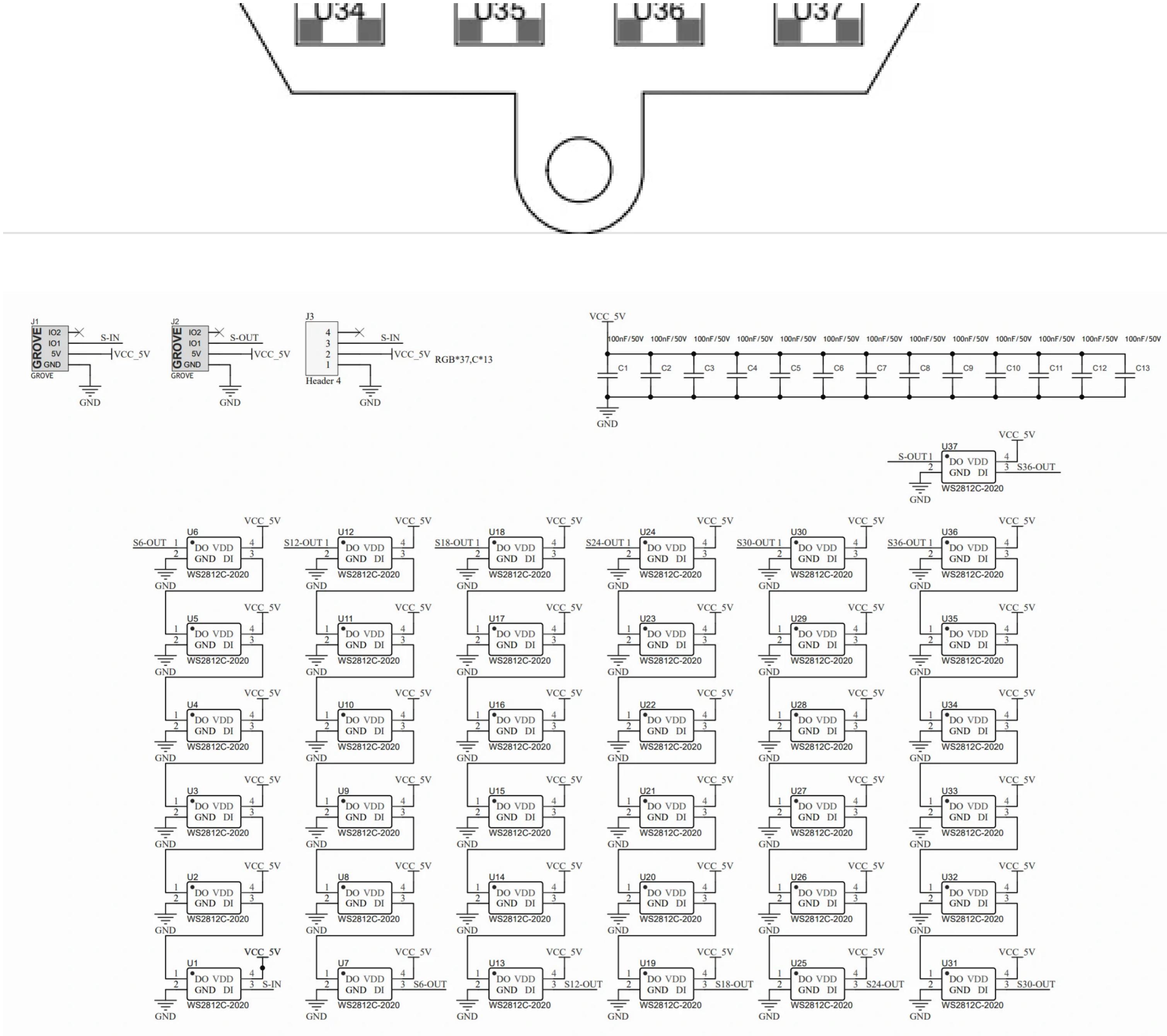
## | Pin Mapping

- M5GO PORT-A

M5Core(PORT A)	GPIO22	GPIO21	5V	GND
Unit NeoHEX	/	Data Pin	5V	GND

## | Schematics





## | Learn



### Simple Watch Device

Make a simple watch device using UIFlow.

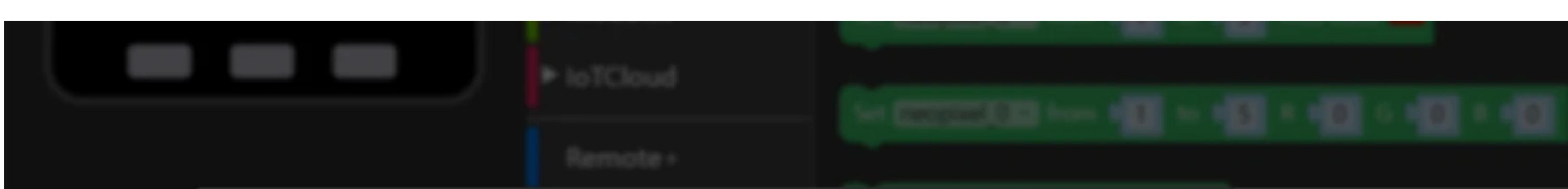
## | Example

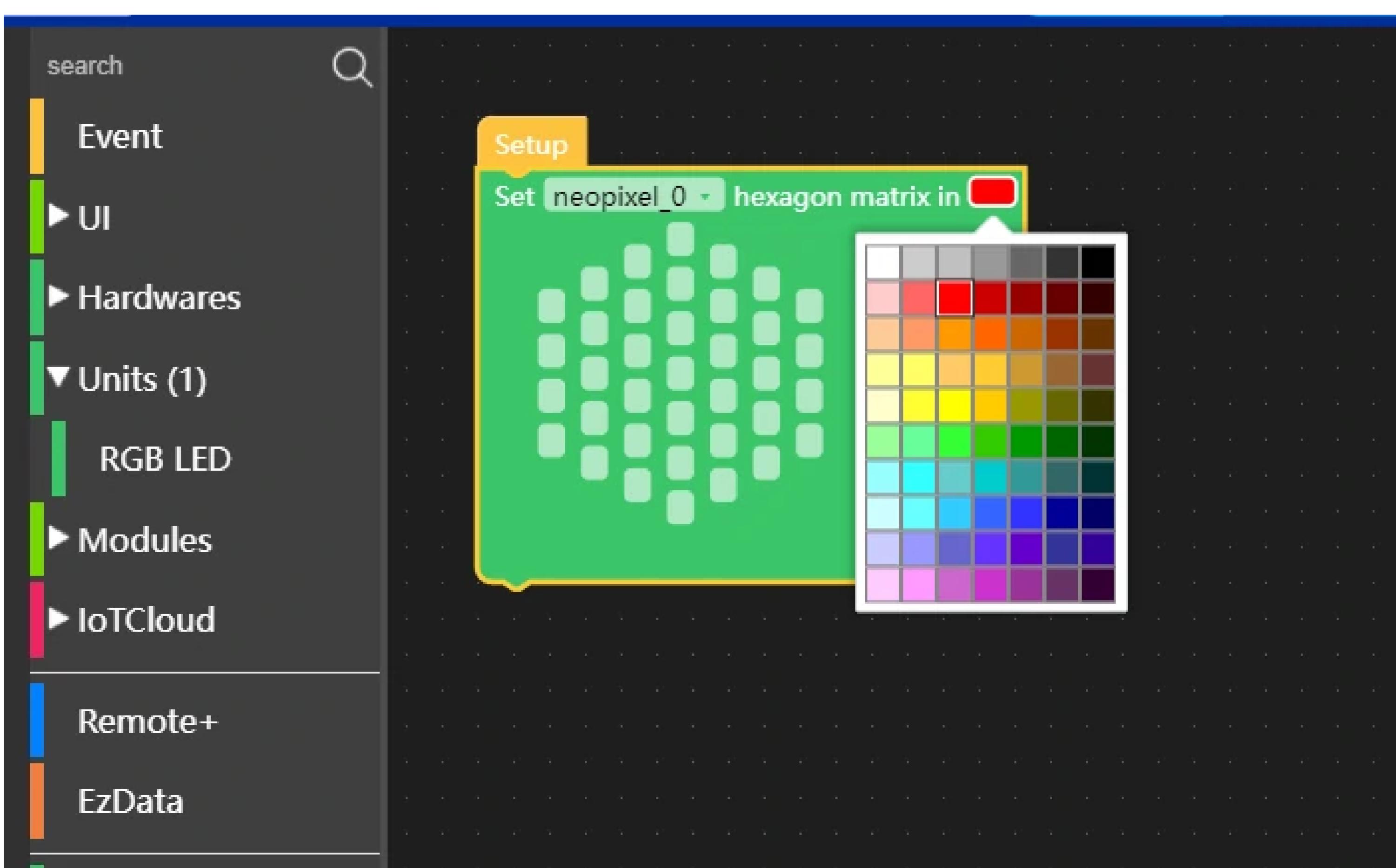
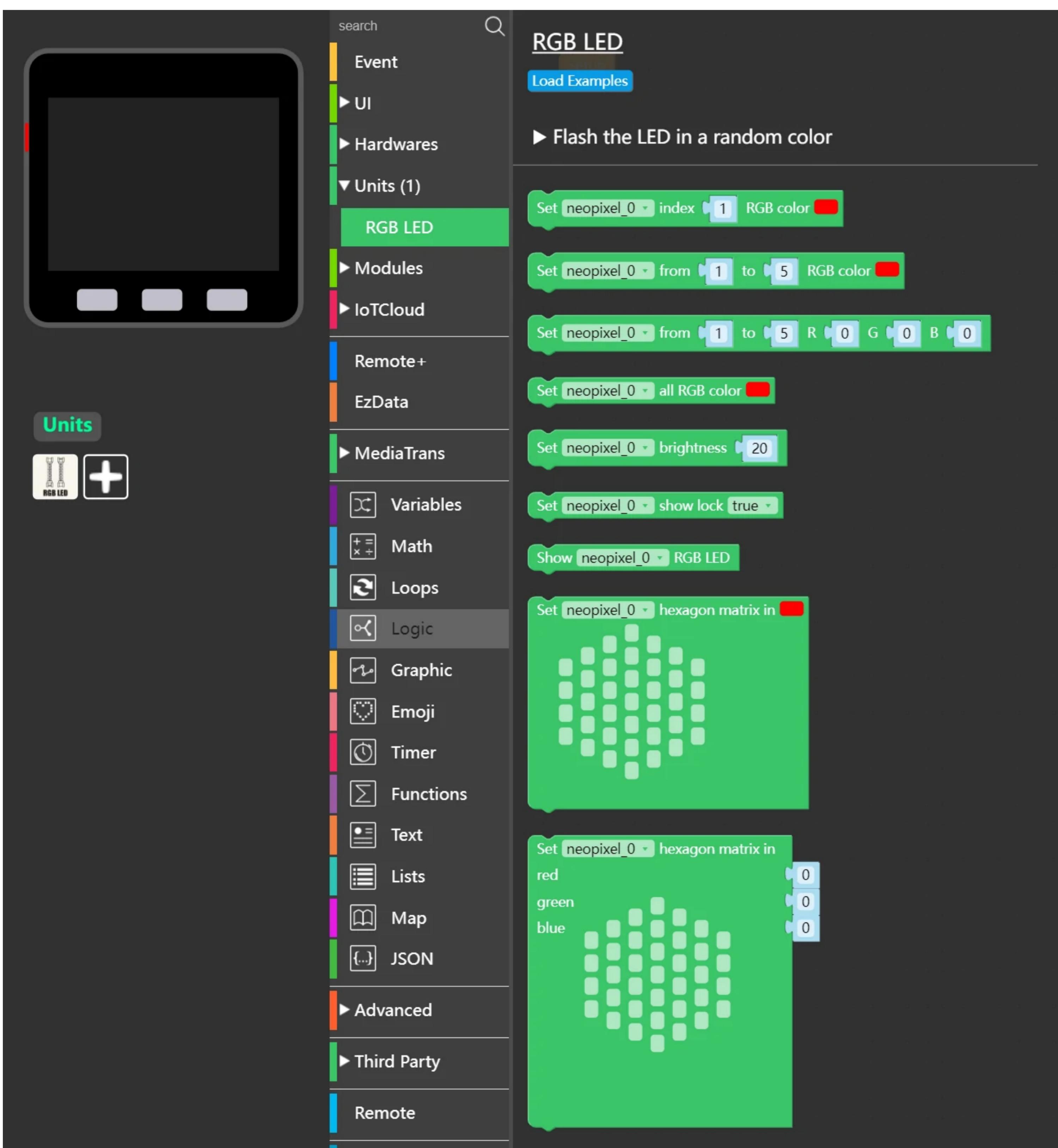
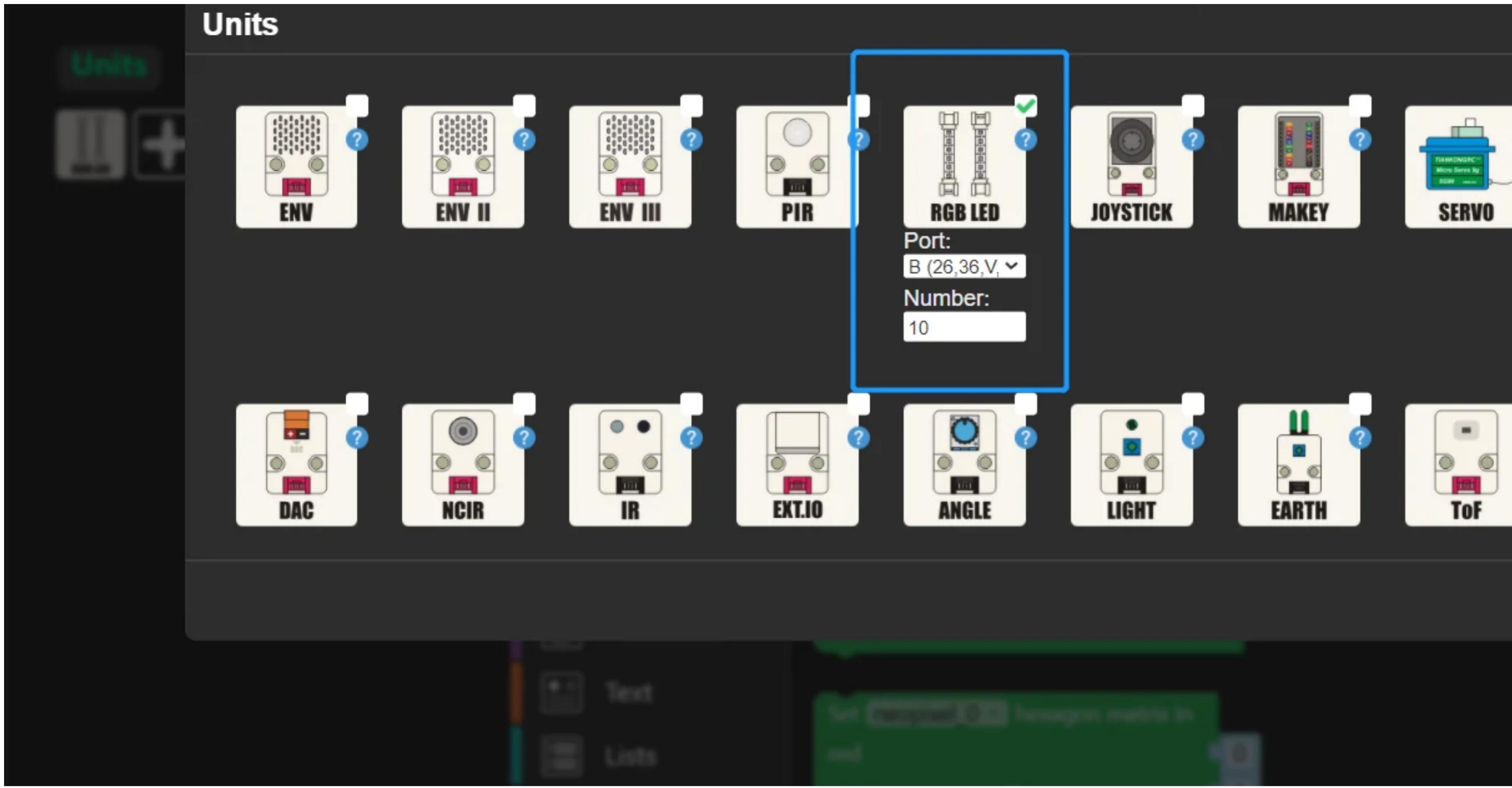
### Arduino

- [NeoHEX Example](#)
- [FastLED Library](#)
- [FastLED API Reference](#)

### UIFlow

- [UNIT NeoHEX UIFlow TEST](#)





## Setup

Set neopixel0 ▾ neopixel hexagon matrix in 



## | FAQ