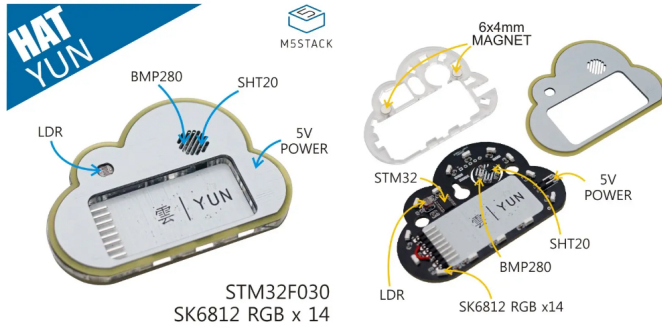


YUN HAT SKU:YUN



Description

YUN HAT is a cloud-shaped multi-function environment information measurement base. Built-in temperature and humidity sensor SHT20, air pressure sensor BMP280, photoresistor, 14 RGB LEDs. The board is build with Embedded Microprocessor *STM32F030F4**, which implemented a concise and efficient program APIs. YUN HAT features a pretty appearance which could be used as a decoration for your space. The base is designed for the M5StickC, like other HAT devices. It is compatible with top socket of M5stickC. The overall structure adopts a three-layer design, and the upper and lower PCB boards serve as fixed structure and main circuit respectively, which is beneficial to the circuit conduct long hours of work. the board also provides an independent external power interface. The middle layer is a light-guided acrylic component. To achieve a better light display effect, The acrylic outer contour cutting surface is partially polished, and the purpose is to effectively reduce the scattering of light, making it evenly saturated with light effects. One hook hole and two 6mm magnet mounting positions are reserved on the board, so users can easily magnet or hang in any corner of space.

Product Features

- Compatible with M5StickC
- On-board Microprocessor STM32F030F4
- Temperature and Humidity sensor SHT20
- Air pressure sensor BMP280
- Photoresistance
- 14 x SK6812 4020 RGBLED
- Three-layer structure design:
 - 1 x hook hole
 - 2 x 6*4mm magnet mounting position
 - 1 x finishing Acrylic profile surface
- Development platform: Arduino, UIFlow(Blockly,Python)

Include

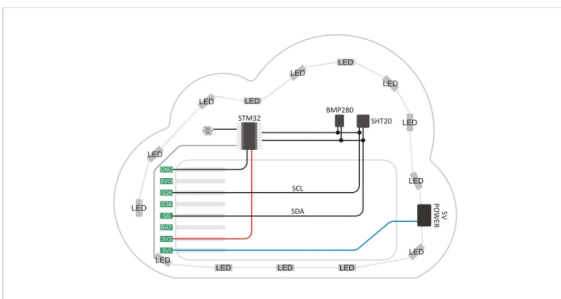
- 1x YUNHAT
- 2x Dupont



Applications

- Environmental information collection
- Smart home decoration
- Fridge Magnet

Schematic



Links

- [datasheet](#)
- [SHT20](#)
- [BMP280](#)

EasyLoader

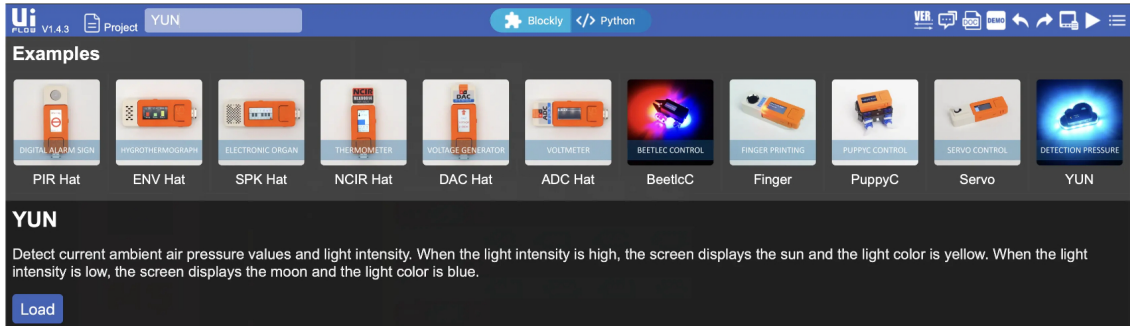
1.EasyLoader is a simple and fast program burner. Every product page in EasyLoader provides a product-related case program. It can be burned to the master through simple steps, and a series of function verification can be performed.(Currently EasyLoader is only available for Windows OS)

After downloading the software, double-click to run the application, connect the M5 device to the computer through the data cable, select the port parameters, click "Burn" to start burning. (For M5StickC burning, please Set the baud rate to 750000 or 115200)

Example

UIFlow

Open <http://flow.m5stack.com> and Load Demo



The screenshot shows the UIFlow web interface. At the top, there's a navigation bar with 'UiFlow V1.4.3', 'Project YUN', and 'Blockly Python'. Below the navigation bar, there's a section titled 'Examples' with a grid of 11 project thumbnails: PIR Hat, ENV Hat, SPK Hat, NCIR Hat, DAC Hat, ADC Hat, BeetlcC, Finger, PuppyC, Servo, and YUN. The 'YUN' example is selected and expanded, showing a description: 'Detect current ambient air pressure values and light intensity. When the light intensity is high, the screen displays the sun and the light color is yellow. When the light intensity is low, the screen displays the moon and the light color is blue.' Below the description is a 'Load' button.

Arduino

To get complete code, please click [here](#)

Pin Map

M5StickC	GND	5V OUT	GPIO26	GPIO0	GPIO36	BAT	3V3	5V IN
YUN HAT	GND	+5V	SCL	SDA	/	BAT	+3.3V	+5V IN