UNIT Scales

SKU:U108



Description

UNIT Scales is a high precision low-cost I2C port weighing sensor, with a total weighing range of 20kgs. Adopt **STM32F030** as the controller, **HX711** as sampling chip and 20 kgs weighing sensor. With tare button and programable **RGB** LED. This Unit offers the customer with a highly integrated weighing solution, suitable for the applications of weighing, item counting, item movement Checking and so on.

Product Features

- ∘ HX711:
 - High precision 24bit ADC
 - o Programmable gain amplification 32, 64 and 128
 - 10SPS output data rate
- I2C port
- Development platform: Arduino, UIFlow(To be supported soon)

Included

- 1x Scales Unit
- 1x HY2.0-4P Cable (20cm)

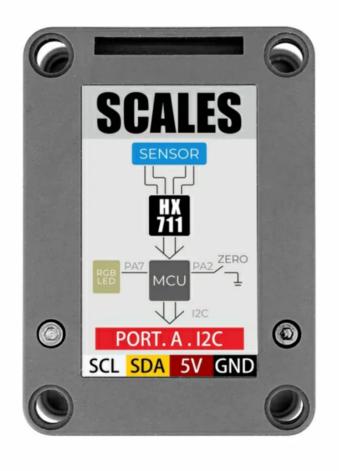
Application

- Smart scales
- Kitchen scale
- Item counting device

Specifications

Spec	Parameters		
MCU	STM32F030		
ADC	HX711		
Communication	12C:0x26		
LED	SK6812(PA7)		
Function Button	Tare (PA2)		
Gross Weight	96g		
Net Weight	87g		
Package Size	56*40*41mm		
Product Size	42*43*58mm		
Enclosure Material	Plastic (PC)		



















EasyLoader



download EasyLoader

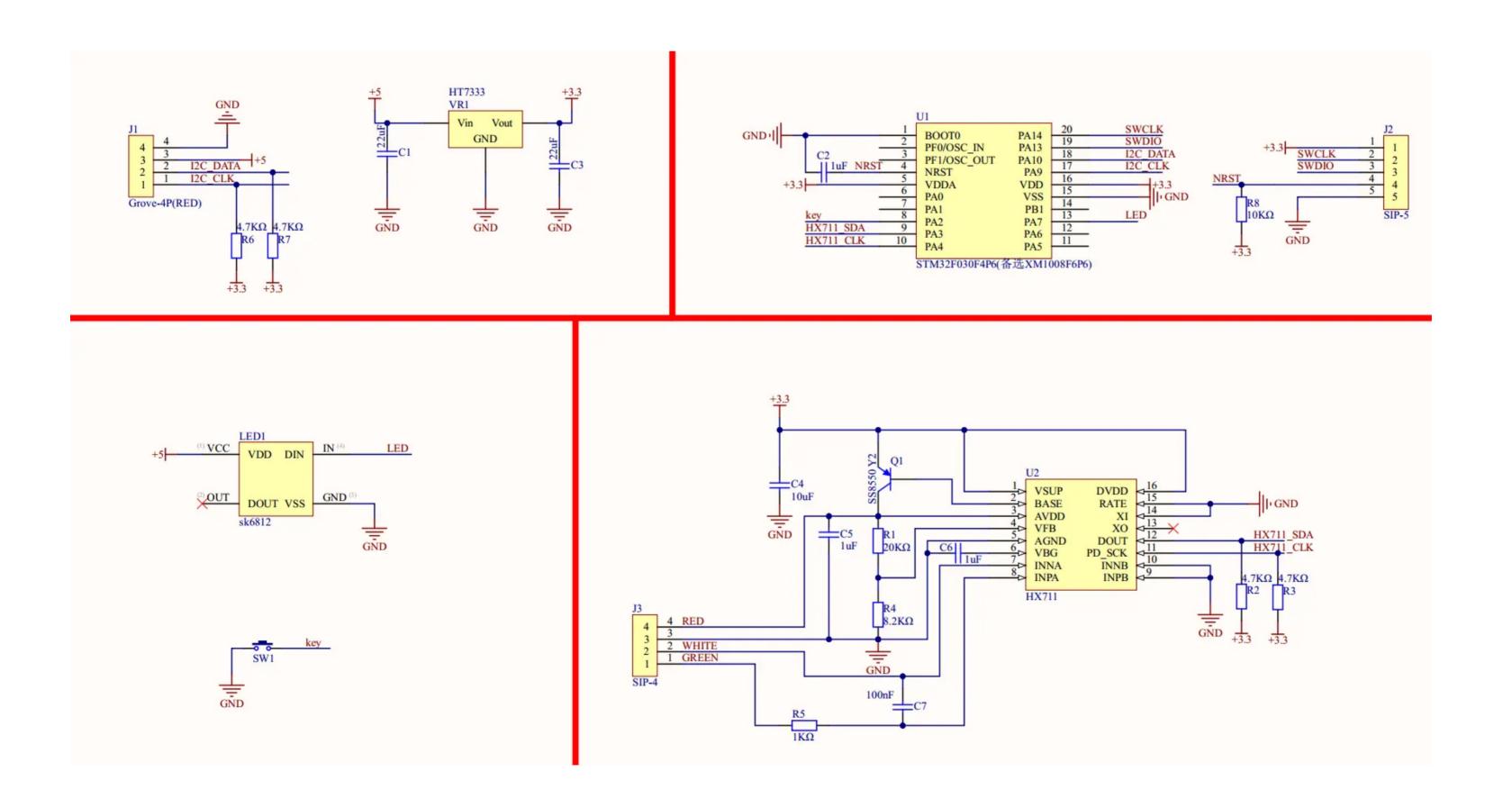
1.EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

2.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/M5StickC PLUS burning, please Set the baud rate to 750000 or 115200)

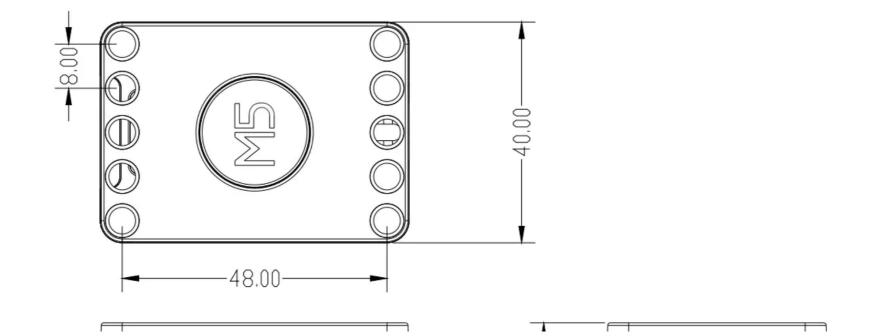
PinMap

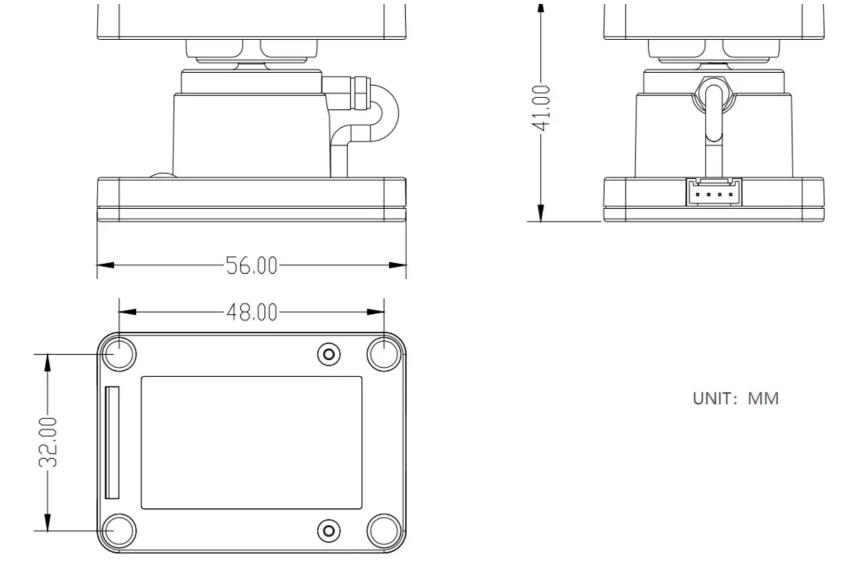
Scales Unit	SCL	SDA	5V	GND
M5Core(PORT A)	GPIO22	GPIO21	5V	GND
M5Core2(PORT A)	GPIO22	GPIO21	5V	GND
M5Atom(PORT A)	GPIO32	GPIO26	5V	GND
M5StickC/Plus(PORT A)	GPIO33	GPIO32	5V	GND
M5Station(PORT A1,A2)	GPIO33	GPIO32	5V	GND

Schematic



Size





Related Link

Datasheet - HX711

Example

Arduino

- Config Scales Unit I2C Address
- Scales Demo

UIFlow example

```
Event
     WEIGHT: label2
                                    Hardwares
                                                                                                                             Button A wasPressed v
                                                             set sync_var * to 0
                                                                                                                              scales_3 Set offset current ADC value
     BUTTON STATUS: label3
                                    ▶ Units (1)
     SYSTEM STATUS: label7
                                                              Label [abel7 * show | scales_3 * Get device status FW_VERSION *
                                    Modules
                                    ▶ IoTCloud
                                                              Label label7 * show scales_3 * Get device status I2C_ADDRESS *
                                                                                                                             Button C 🔻 wasPressed
                                      Remote+
                                                                Label [abel2 * show ] scales_3 * Get scale WEIGHT GRAM * value
                                      EzData
                                                                                                                              do scales_3 * Set RGB color R 200 G 0 B 0
                                                                Label label3 * show scales_3 * Get button STATUS *
                                   ▶ MediaTrans
                                                                                                                              else if color_var v = v 2
                                                                                                                              do scales_3 * Set RGB color R 0 G 200 B 0 0
                                     X Variables
SCALES +
                                                                                                                              else if color_var v = v 3
                                                               Button B v wasPressed v
                                    + = Math
                                                               change sync_var by 1
                                                                                                                              do scales_3 * Set RGB color R 1 0 G 1 0 B 1 200
                                     Loops
                                                                O if Sync_var v = v 1
                                                                                                                                  set color_var * to 0
                                                                do scales_3 * Set RGB LED sync ENABLE *

✓ Logic

                                                                else if sync_var v = v 2
                                    Graphic
                                                               do scales_3 * Set RGB LED sync DISABLE *
set sync_var * to 0
                                    C Emoji
                                     (t) Timer
                                    ∑ Functions
```