HMI Module 🛒
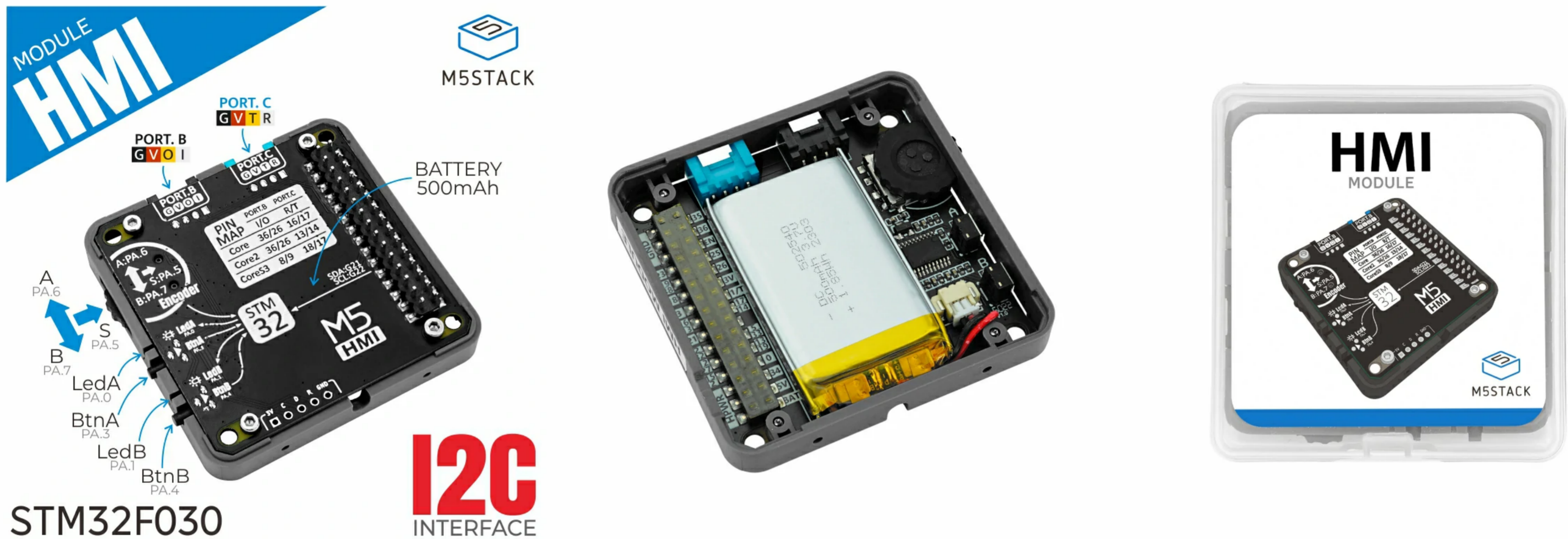
Description

HMI Module is a human-computer interactive module that provides rotary encoder, two input buttons and two LED indicators, using STM32F030 as the acquisition and communication MCU, and communicating with the M5 host through I2C. In addition, there are portB and portC interfaces on the module, and a 500mAh lithium battery is built-in. The module is suitable for a variety of applications that require handheld operator interaction.

Features

- STM32F030F4P6, ARM Cortex-M0 @ 16 KB Flash and 4 KB SRAM
- Human-machine interaction (rotary encoder, two input buttons and two indicator lights)
- PORT B and PORT C interfaces
- Programming platform: Arduino, UIFlow
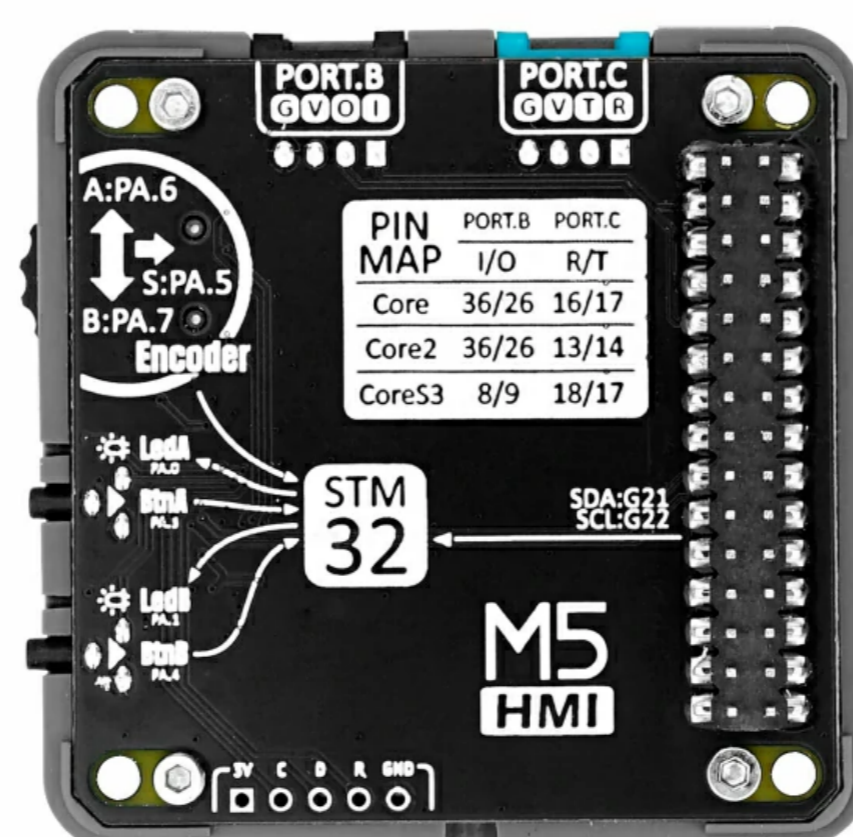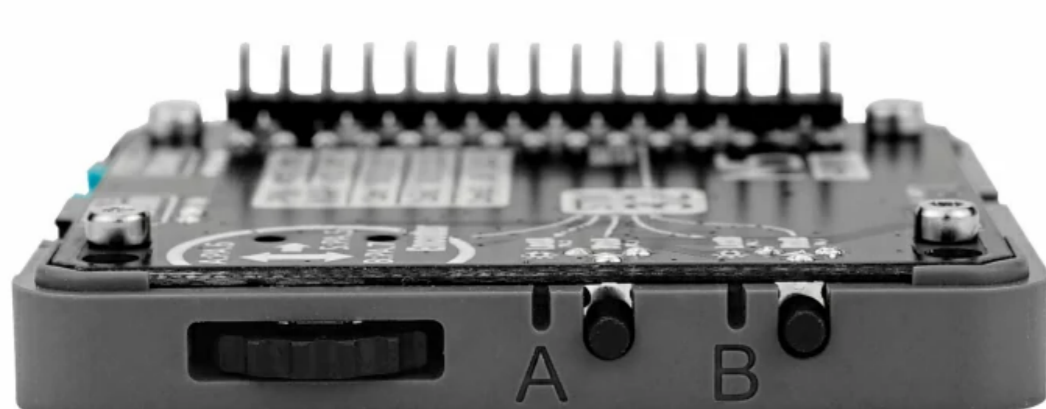
Includes

- 1×HMI Module

Applications

- Industrial control

- Industrial control
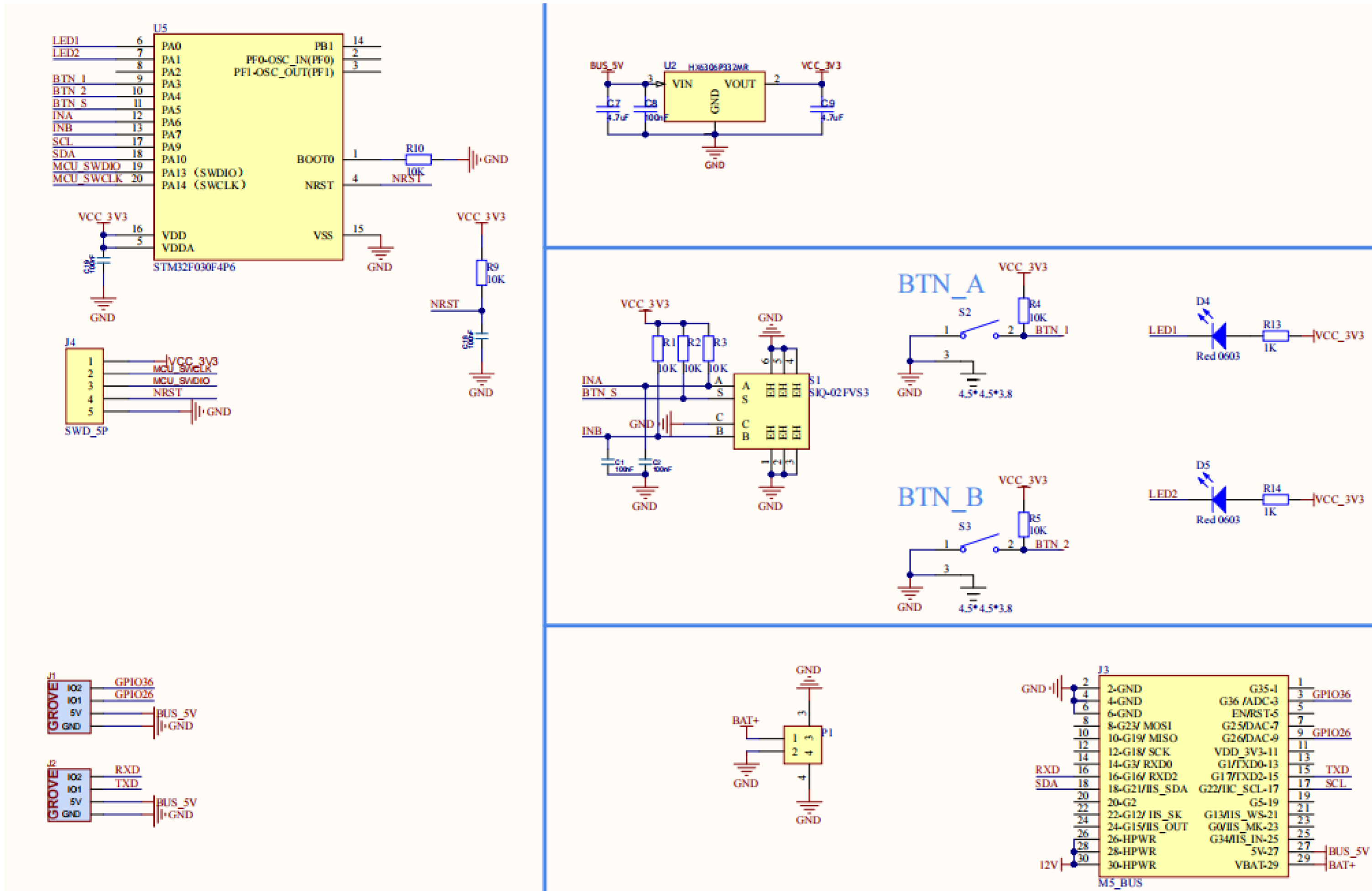- Embedded systems
- Smart home

Specification

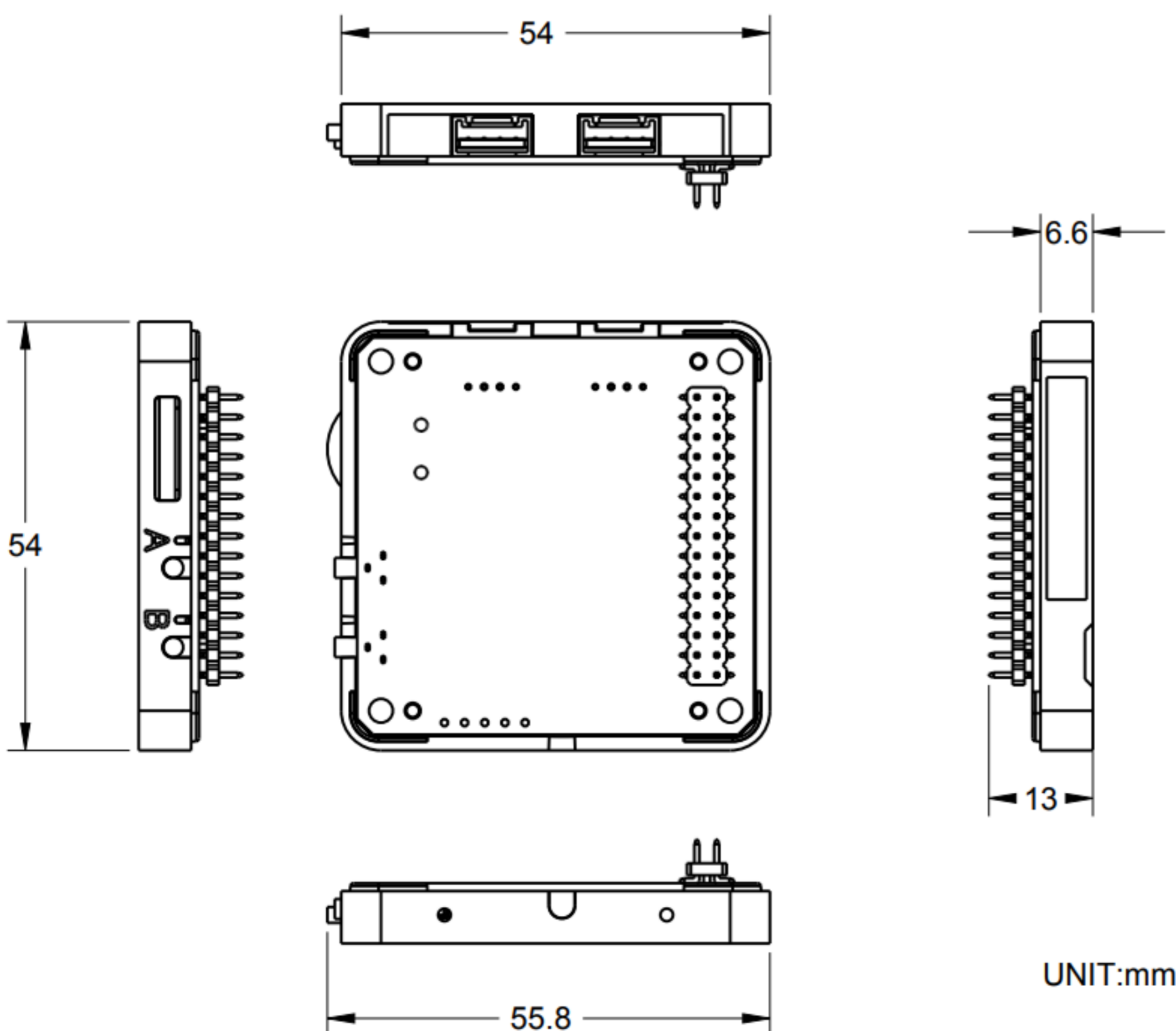| Resources	Parameters
MCU	STM32F030F4P6
Interactive peripherals	The rotary encoder of the dial wheel, two input buttons and two indicator lights
Battery	500mAh polymer battery
Input voltage	5v
Operating temperature	0-40°C
Product Size	54*54*6.6mm
Package Size	60*57*17mm
Product Weight	22.5g
Package Weight	43g

Related Link

- STM32F030F4P6 Datasheet

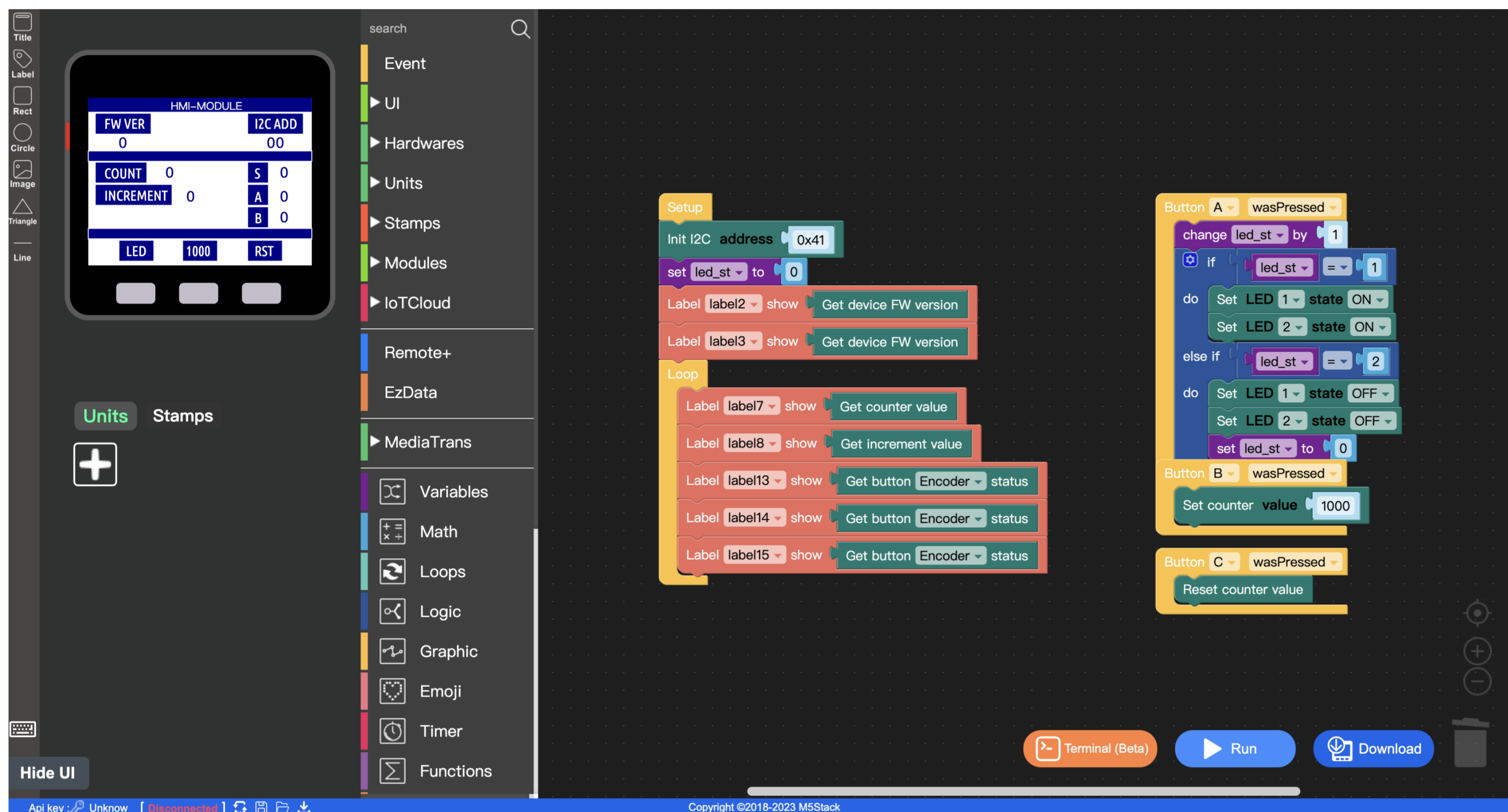# Schematic

Module Size

UNIT:mm

Examples

Arduino

- [Arduino Example](#)

- [Arduino Firmware](#)

UIFlow

- [HMI Module UIFlow Example](#)

| UIFlow Blocks

- Init I2C address

- Get counter value

- Get increment value

Get increment value

- Get button status

Get button Encoder ▾ status

- Get device FW version

Get device FW version

- Set counter value

Set counter value [1000]

- Set LED state

Set LED 1 ▾ state ON ▾

- Set I2C address

Set device I2C address [0x41]