

Module USB v1.2 is a USB driver module in the M5Stack stackable module series, using the MAX3421E chip solution, providing a standard USB interface, supporting USB host and peripheral functions. It is compatible with various USB devices and operating systems, connecting to the system via SPI communication. The board features two DIP switches to adapt to different M5 series hosts, and reserved pins for controlling external devices or reading their status. It also includes a battery holder, enhancing its flexibility and practicality. This device is suitable for smart homes, industrial control, consumer electronics, medical devices, as well as education and research fields.

Features

- Standard USB 2.0 interface
- SPI communication protocol
- GPIO pin expansion (5x input, 5x output)
- Lithium battery holder
- DIP switch for adapting to different hosts

Includes

- 1 x Module USB v1.2

Applications

- USB host/peripheral

Specifications

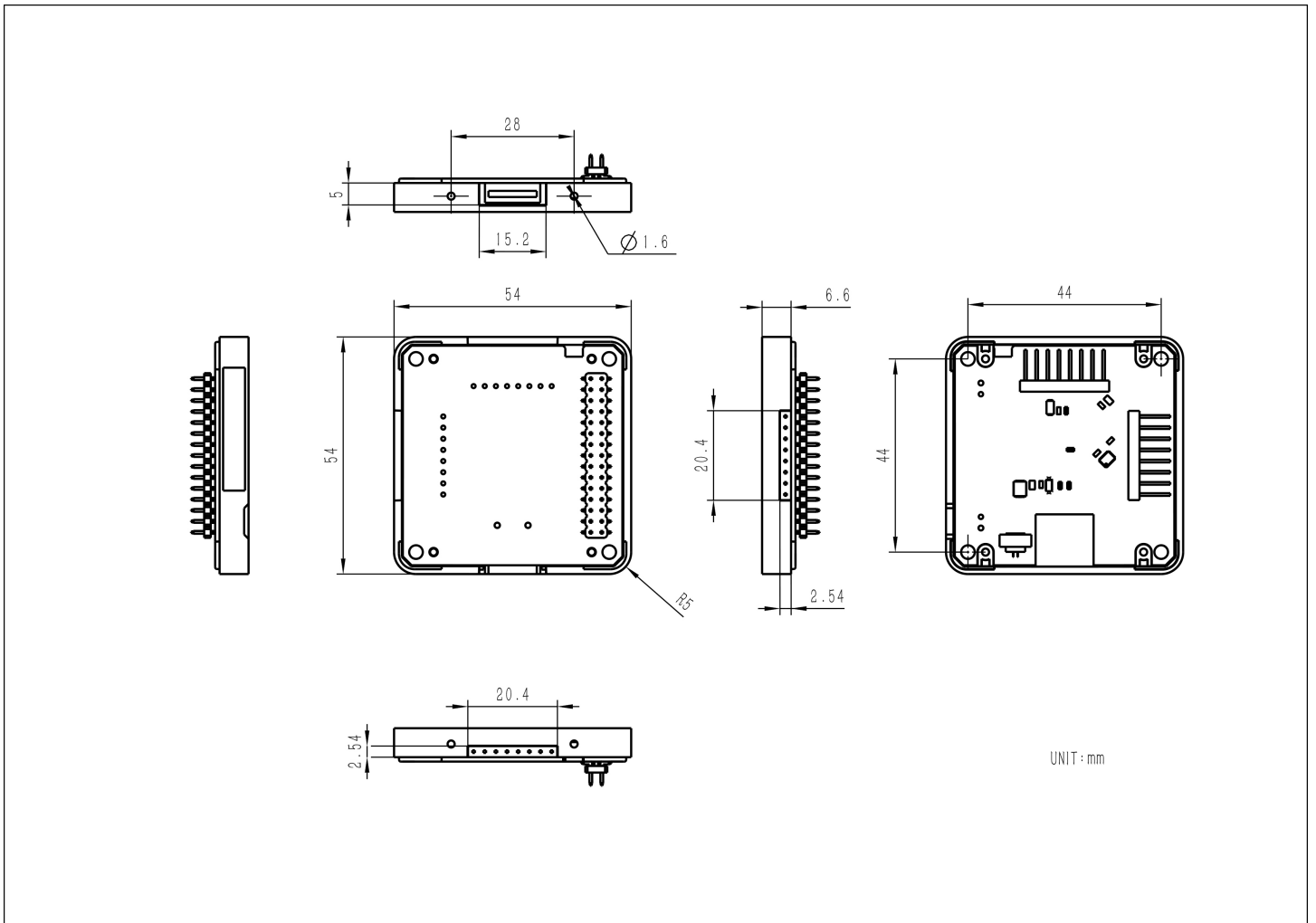
Specification	Parameter
Chip Model	MAX3421E
Supported USB Standard	USB 2.0
Interface Type	SPI
Operating Temperature	0 ~ 40°C
Product Weight	13.3g
Product Size	54.0 x 54.0 x 12.8mm
Package Size	132.0 x 95.0 x 16.0mm
Gross Weight	28.0g

Schematics

- [Module USB v1.2 Schematics PDF](#)

PIN	LEFT	RIGHT	PIN
GND	1	2	INT (SW)
GND	3	4	
GND	5	6	EN
SPI_MOSI	7	8	
SPI_MISO	9	10	
SPI_SCLK	11	12	3V3
	13	14	
	15	16	
	17	18	
	19	20	SPI_CS (SW)
	21	22	SPI_CS (SW)
	23	24	SPI_CS (SW)
	25	26	INT (SW)
	27	28	5V
	29	30	

| Model Size



Datasheets

- [MAX3421E](#)

Softwares

Arduino

- [Module USB v1.2 Arduino Library](#)
- [Module USB v1.2 Mouse Example](#)

UiFlow1

- [Module USB v1.2 UiFlow1 Docs](#)

Video

- [Module USB v1.2 Features and Case Studies](#)

[M020-V12 USB V1.2 MODULE 视频.mp4](#)

[USB Interface.mp4](#)

Version Change

Release Date	Product Changes	Notes
-	Initial release	/
2023.1	Driver chip model changed from MAX3421EEHJ+ to MAX3421EETJ+ (not compatible with Core2/CoreS3 hosts)	Version V1.1
2024.3	Added DIP switch to adapt to basic/Core2/CoreS3 hosts	Version V1.2