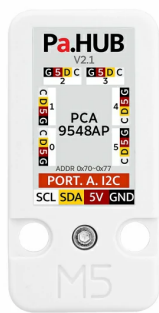
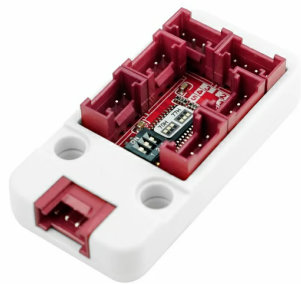
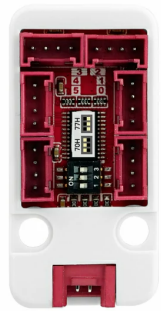


# Unit PaHub v2.1

SKU:U040-B-V21





## Description

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**Unit PaHub v2.1** is an I2C multiplexer unit that uses the **PCA9548AP** chip solution to expand a single I2C interface into six channels. By selecting different channels, it allows multiple devices with the same or different I2C addresses to coexist on the same I2C bus (switching via polling channels). The module is equipped with an onboard **DIP switch** to easily adjust the I2C address of **Unit PaHub v2.1**, supporting multi-unit cascading to connect more I2C devices. Compared to its predecessor, it offers greater flexibility and scalability in scenarios where multiple I2C devices are used in parallel. This product is suitable for scenarios where multiple I2C devices are used simultaneously.

## Features

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- I2C HY2.0-4P PORTA expansion
- Allows multiple nesting
- 6 extended Grove ports
- DIP switch for I2C address switching
- LEGO-compatible holes

## Includes

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- 1 x Unit PaHub v2.1
- 1 x HY2.0-4P Grove cable (20cm)

## Applications

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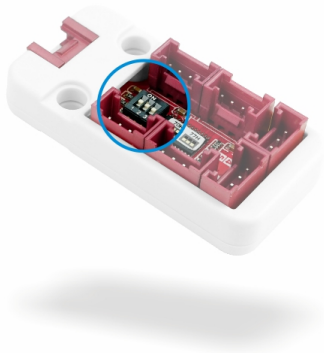
- I2C expansion

## Specifications

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Specification	Parameter
I2C Multiplexer IC	PCA9548AP
Communication Protocol	I2C: 0x70~0x77 (default: 0x70, adjustable via DIP switch)
Operating Temperature	0 ~ 40°C
Product Size	48.0 x 24.0 x 10.8mm
Product Weight	7.3g
Package Size	138.0 x 93.0 x 13.0mm
Gross Weight	12.3g

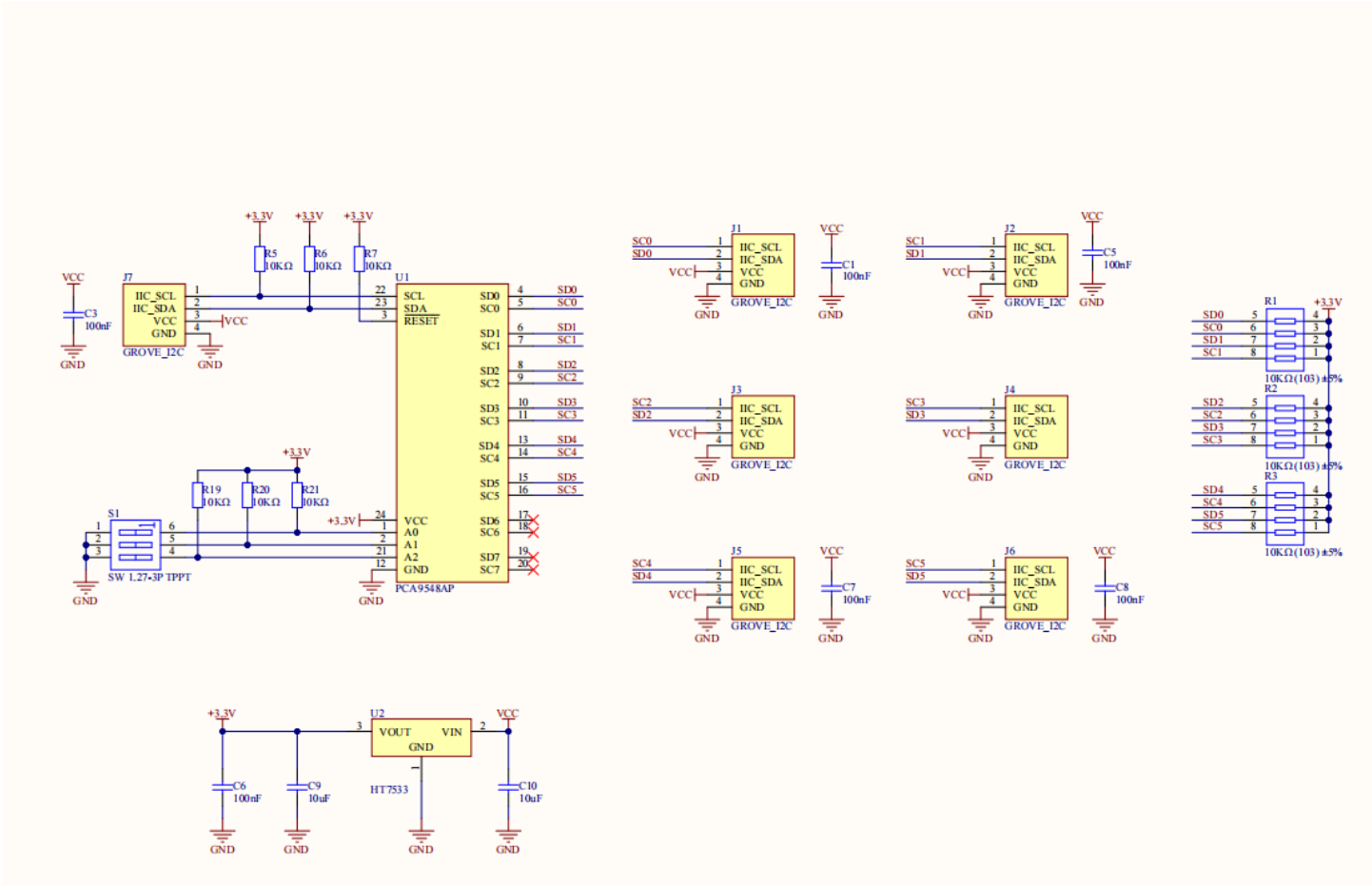
## Learn



INPUTS			I <sup>2</sup> C BUS SLAVE ADDRESS
3	2	1	
L	L	L	112(decimal), 70(hexadecimal)
L	L	H	113(decimal), 71(hexadecimal)
L	H	L	114(decimal), 72(hexadecimal)
L	H	H	115(decimal), 73(hexadecimal)
H	L	L	116(decimal), 74(hexadecimal)
H	L	H	117(decimal), 75(hexadecimal)
H	H	L	118(decimal), 76(hexadecimal)
H	H	H	119(decimal), 77(hexadecimal)

Supports modifying the device address via the DIP switch. Users can adjust the I2C address by configuring the corresponding truth table settings.

## Schematics

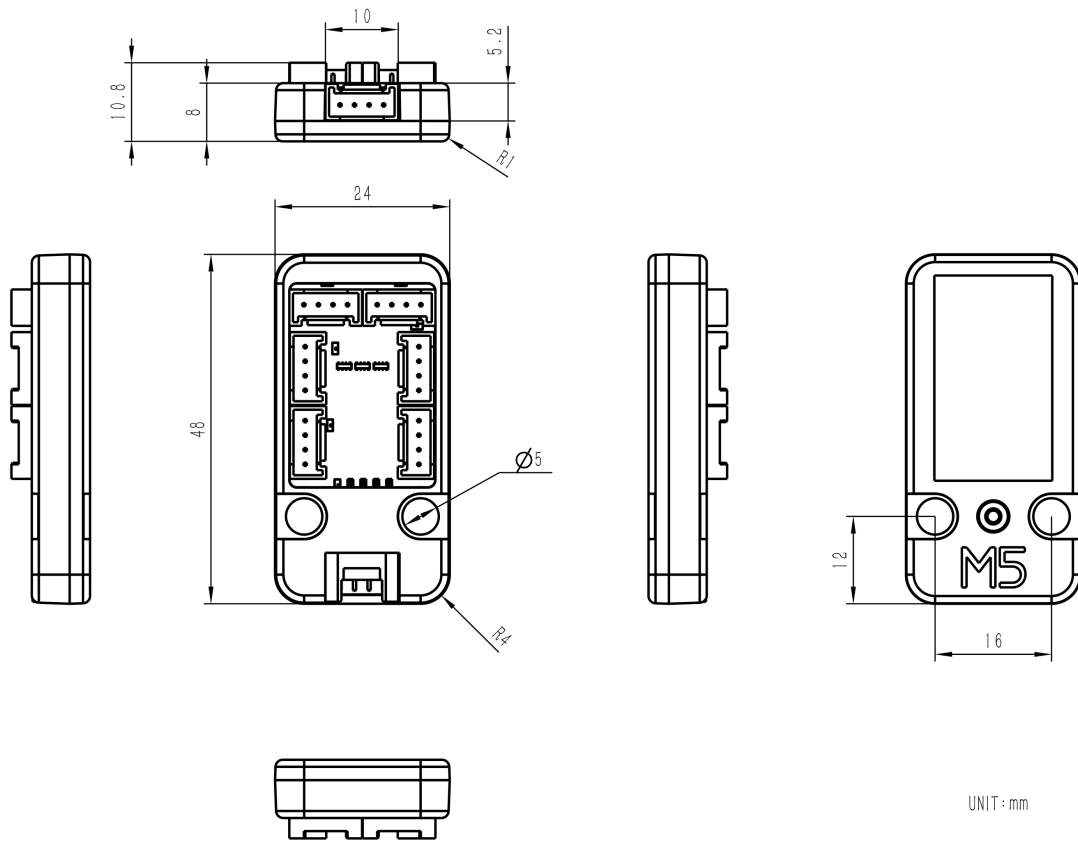


## PinMap

### Unit PaHub v2.1

HY2.0-4P	Black	Red	Yellow	White
PORT.A	GND	5V	SDA	SCL

## Model Size



## Datasheets

- [PCA9548AP](#)

## Softwares

### Arduino

- [Unit PaHub v2.1 Arduino Library](#)

## Video

[U040-B-V21 PaHub V2.1 video.mp4](#)

## Product Comparison

Product Compare



Unit PaHub v2.1



Unit PaHub2



Unit PaHub

Chip Solution	PCA9548A	PCA9548A	TCA9548A
I2C Address Change Method	DIP switch	Onboard resistor soldering	Onboard resistor soldering
Address	0x70~0x77 (default: 0x70)	Default 0x70	Default 0x70