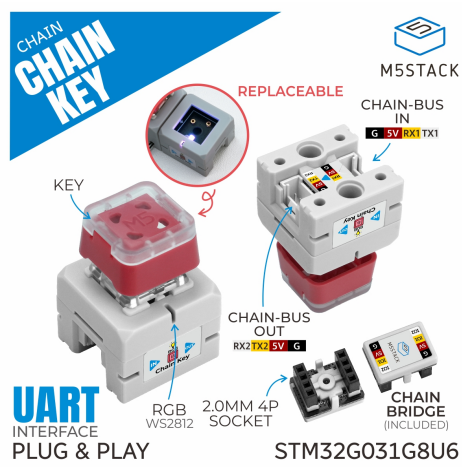
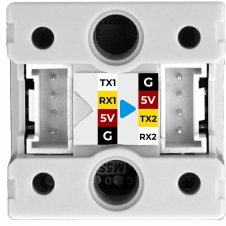


Chain Key

SKU:U206





Description

Chain Key is a single-button input node in the M5Stack Chain series. The button adopts a hot-swappable mechanical keyboard design with a blue tactile switch and integrates a programmable RGB LED. It is suitable for human-machine interaction and smart home control scenarios.

Chain Key integrates an STM32G031G8U6 core MCU and uses a UART serial cascading communication protocol. Through two HY2.0-4P expansion interfaces, it can connect more Chain series devices, enabling more complex and interactive applications.

Features

- M5Stack Chain series
- Single button input
- STM32G031G8U6 core MCU
- Hot-swappable mechanical keyboard blue switch
- 2x RGB LED
- Uses UART cascading communication protocol
- 2x HY2.0-4P expansion interfaces to extend Chain series devices

Includes

- 1 x Chain Key
- 1 x Chain Bridge
- 1 x Keycap Sticker

Applications

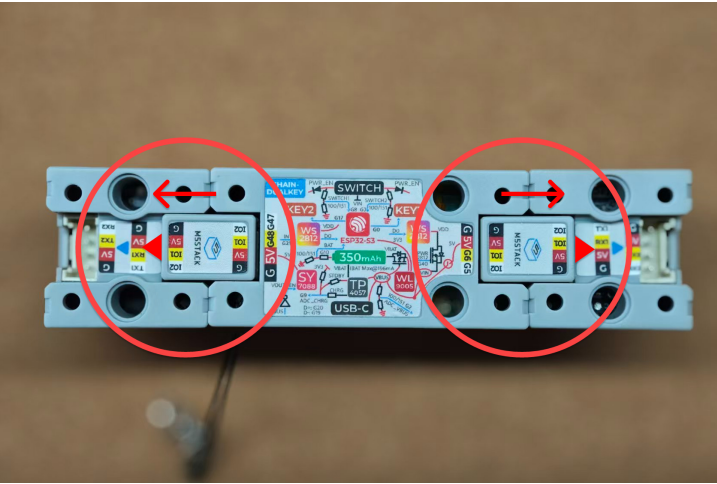
- Smart home control
- Human-machine interaction

Specifications

Specification	Parameter
MCU	STM32G031G8U6
Input Power	DC 5V
Communication Method	UART 115200bps@8N1
Interface Spec	2x HY2.0-4P
RGB LED	2x WS2812B
Working Power Consumption	28.24mA
Working Temperature	0 ~ 40°C
Product Size	23.9 x 23.9 x 34.4mm
Product Weight	9.1g
Package Size	138.0 x 93.0 x 26.0mm
Gross Weight	14.4g

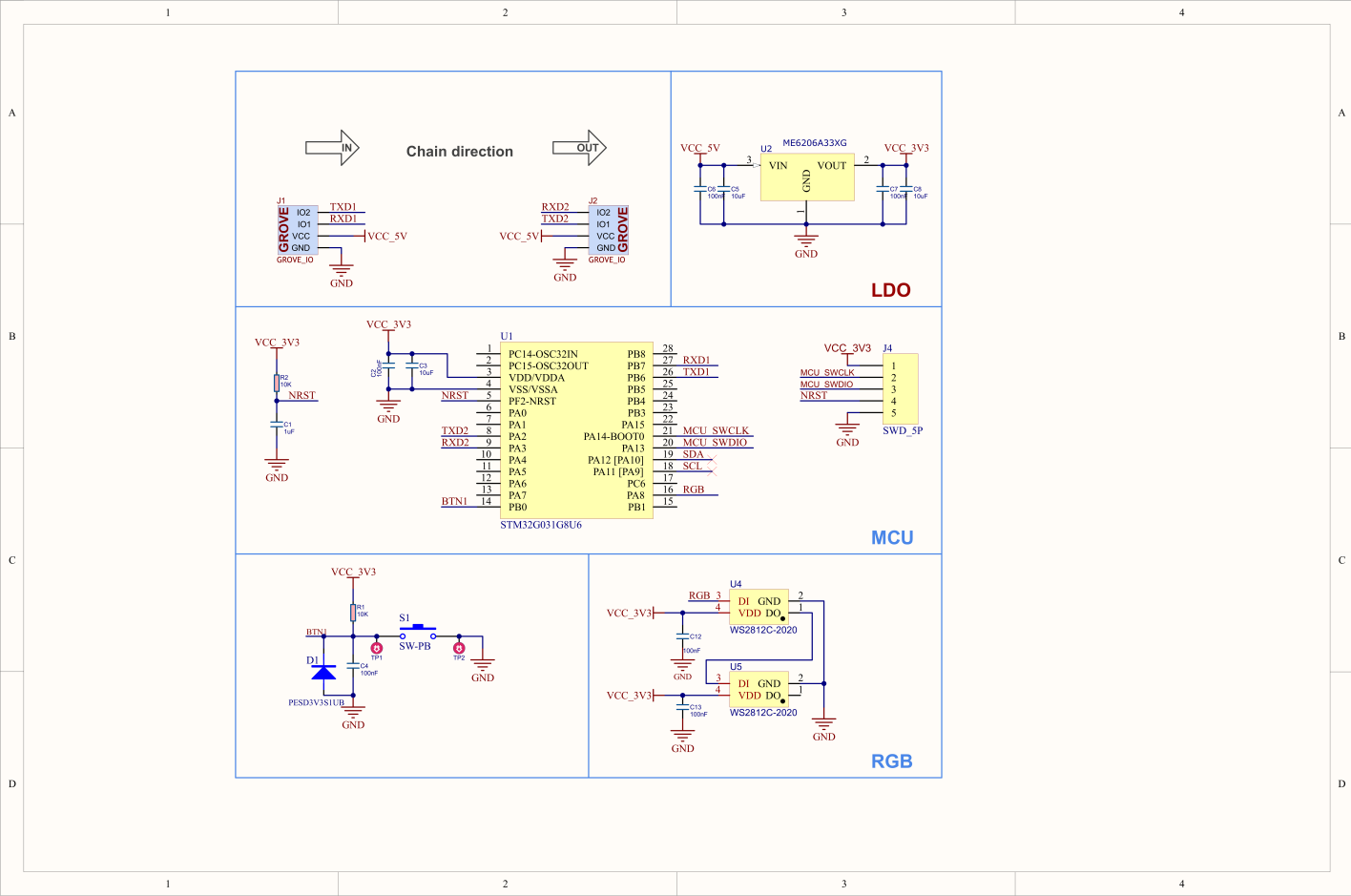
Learn

Use the Chain Bridge connector to connect the main controller Chain DualKey and various Chain series input devices. Pay attention to the direction when connecting — the triangle arrow should point outward from the main controller Chain DualKey, as shown below:



Schematics

- [Chain Key Schematics PDF](#)



PinMap

RGB LED

STM32G031	PA8
WS2812C	RGB

Button

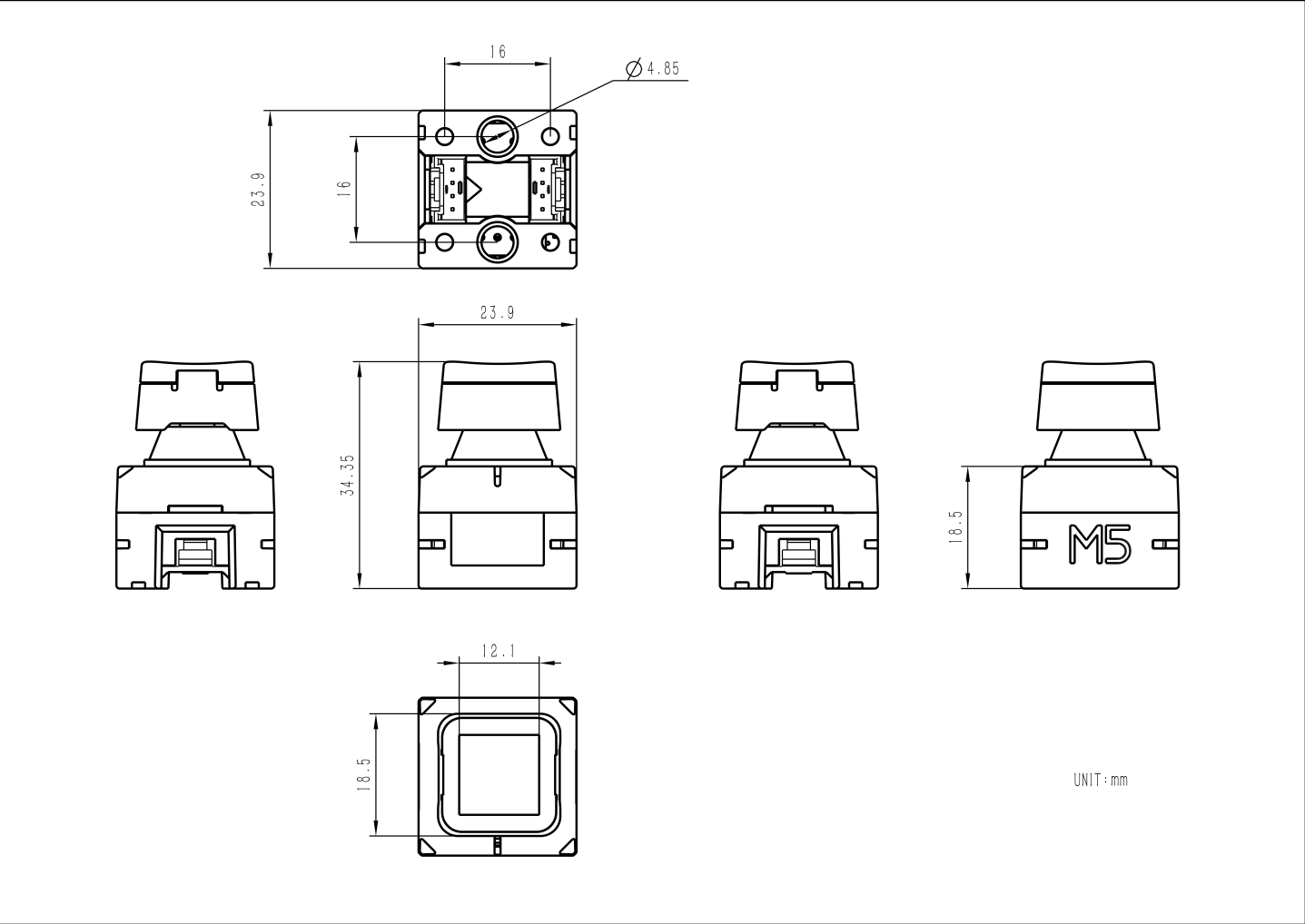
STM32G031	PB0
Button	Input

UART

STM32G031	PB6	PB7	PA2	PA3
UART1	TXD1	RXD1		
UART2			TXD2	RXD2

Model Size

- [Chain Key Model Size PDF](#)



Softwares

Arduino

- [Chain Key Arduino Quick Start](#)
- [Chain Key Arduino Library](#)
- [Chain Key Example Program](#)

Internal Firmware

- [Chain Key Internal Firmware](#)

Protocol

- [Chain Key Communication Protocol](#)

Video

- Chain Key product introduction and functionality demonstration

[U206-Chain-Key-video-EN.mp4](#)