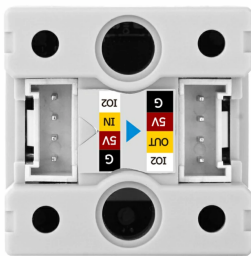
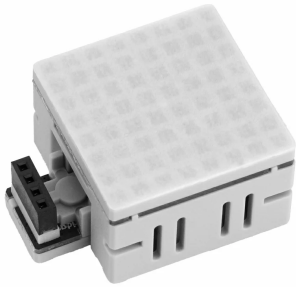
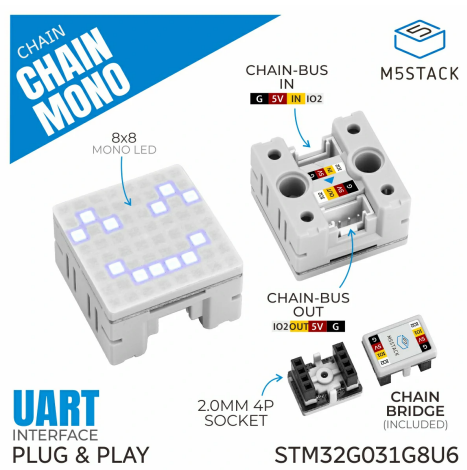
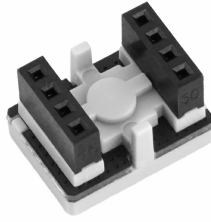
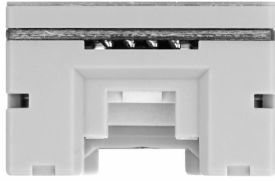


Chain Mono

SKU:U217





Description

Chain Mono is an LED display node from the M5Stack Chain series, featuring an 8×8 monochrome LED dot matrix unit. It supports independent pixel control, batch pixel writing, and fast full-screen buffer refresh. It integrates built-in ASCII character generation, string scrolling, brightness adjustment, and multi-angle screen rotation, enabling diverse dynamic light and pixel animation effects. Ideal for pixel light creations, desktop ambient lighting, creative light signage, and smart device indicator lighting.

Chain Mono is powered by an STM32G031G8U6 main controller and uses a UART serial daisy-chain communication protocol. Through two HY2.0-4P expansion interfaces, it can be extended with more Chain series devices to build richer interactive applications.

Features

- M5Stack Chain series
- STM32G031G8U6 main controller
- 8×8 monochrome LED dot matrix display unit
- Built-in ASCII character generation, supports character drawing
- Supports independent pixel control and batch writing
- 8-byte frame buffer, supports full-screen refresh
- Custom patterns, string scrolling – up to 32 characters per node
- Supports 0°/90°/180°/270° screen rotation
- UART serial daisy-chain communication protocol
- 2× HY2.0-4P expansion interfaces for Chain series devices

Includes

- 1 x Chain Mono
- 1 x Chain Bridge

Applications

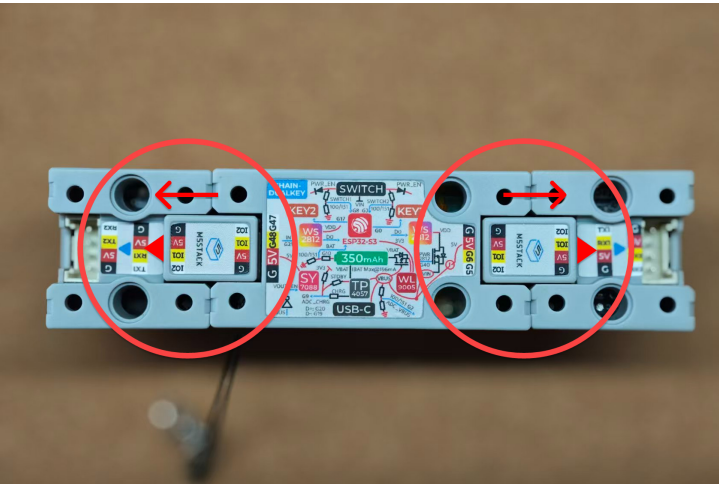
- Pixel light creation
- Desktop ambient lighting
- Creative light signage
- Smart device indicator lighting

Specifications

Specification	Parameter
MCU	STM32G031G8U6
Input Power	DC 5V
Communication	UART 115200bps @ 8N1
Interface	2 x HY2.0-4P
LED Color	White
Standby Power	DC 5V@8.13mA
Operating Power	DC 5V@22.29mA (max brightness, all on)
Operating Temperature	0 ~ 40°C
Product Size	24.0 x 24.0 x 16.0mm
Product Weight	6.2g
Package Size	138.0 x 93.0 x 11.0mm
Gross Weight	13.2g

Learn

Use the Chain Bridge connector to link the main controller Chain DualKey with each Chain series input device. Pay attention to the orientation – the triangular arrow points outward from the Chain DualKey, as shown:



Schematics

- [Chain Mono Schematic PDF](#)

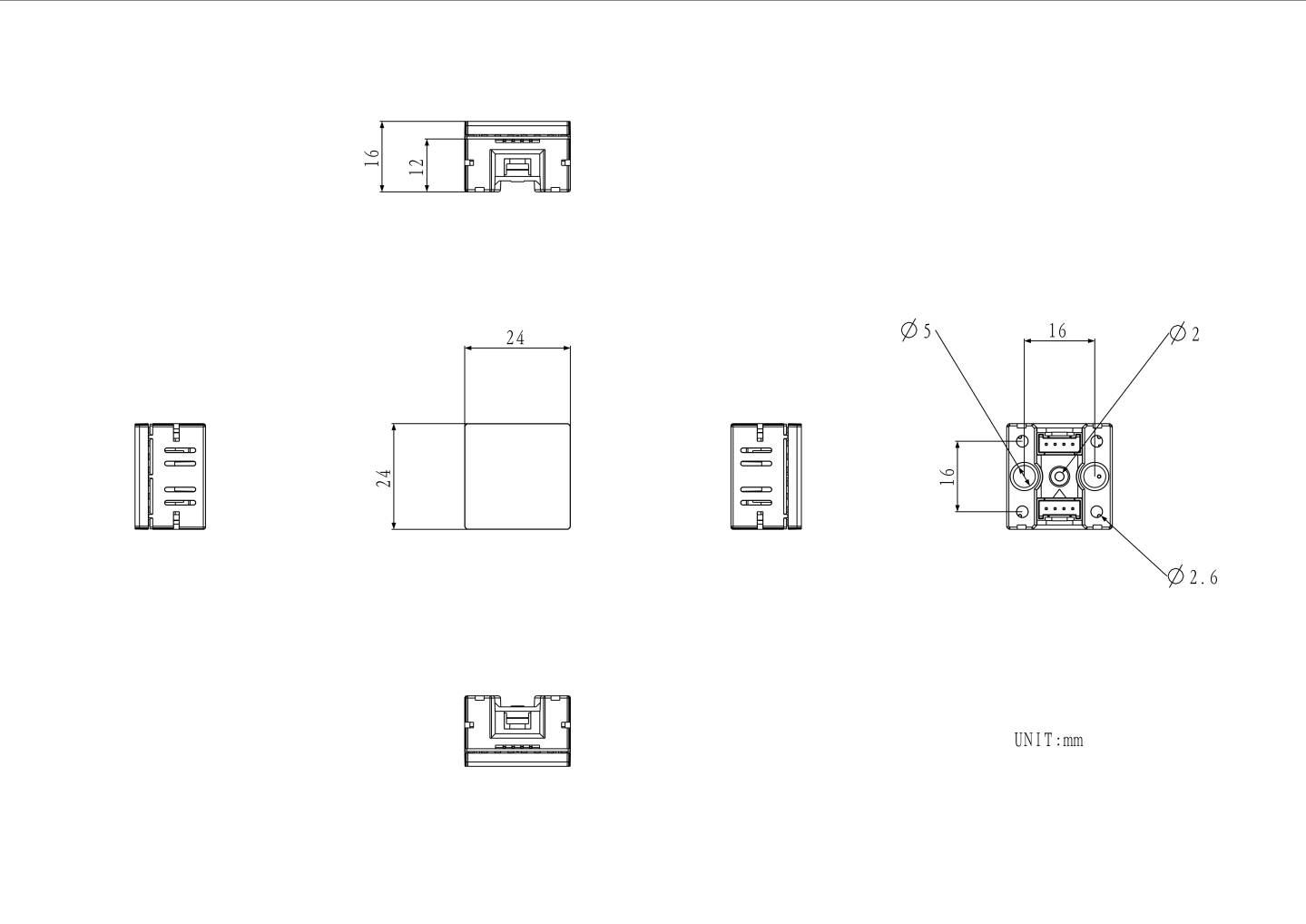
PinMap

UART

STM32G031	PB6	PB7	PA2	PA3
UART1	TXD1	RXD1		
UART2			TXD2	RXD2

Model Size

◦ [Chain Mono Model Size PDF](#)



Softwares

Arduino

◦ [Chain Mono Arduino Tutorial](#)

- [Chain Mono Arduino Library](#)

| Internal Firmware

- [Chain Mono Internal Firmware](#)

| Protocol

- [Chain Mono Communication Protocol](#)

| Video

- Chain Mono Product Introduction and Feature Demonstration

[U217_Chain_Mono_video_EN.mp4](#)