4-Relay

Description

4-Relay unit is an integrated 4-way relay module which can be controlled by I2C protocol. The maximum control voltage of each relay is AC-250V/DC-28V, the rated current is 10A and the instantaneous current can hold up to 16A. Each relay can be controlled independently, each on it's own. Each relay has status (LED) indictor as well to show the state of the relay at any given time.

Product Features

- 4-way relay
- AC-250V/DC-28V/10A
- LED status indication
- I2C communication (0x26)

Include

- 1x 4-Relay Unit
- 1x Grove Cable(20cm)
- 4x VH-3.96-4P Plug terminal

Applications

- Digital signal switching
- Programmable power switch

Specification

Resources	Parameter
Maximum input voltage	AC-250V/DC-28V
Rated current	10A
Maximum instantaneous currenta	16A
Communication	I2C(0x26)
Net Weight	40g
Gross Weight	84g
Product Size	112*23*18mm
Package Size	125*65*22mm

EasyLoader

EasyLoader is a precise and fast program writer which has a built-in functionalities related to the 4-Relay unit. The Easyloader program can burn the firmware to the main controller board by simple easy to follow steps. Please install the corresponding driver according to the device type. **Please click here to view the CP210X driver installation tutorial**, M5StickC/V/T/ATOM series can be used without driver)
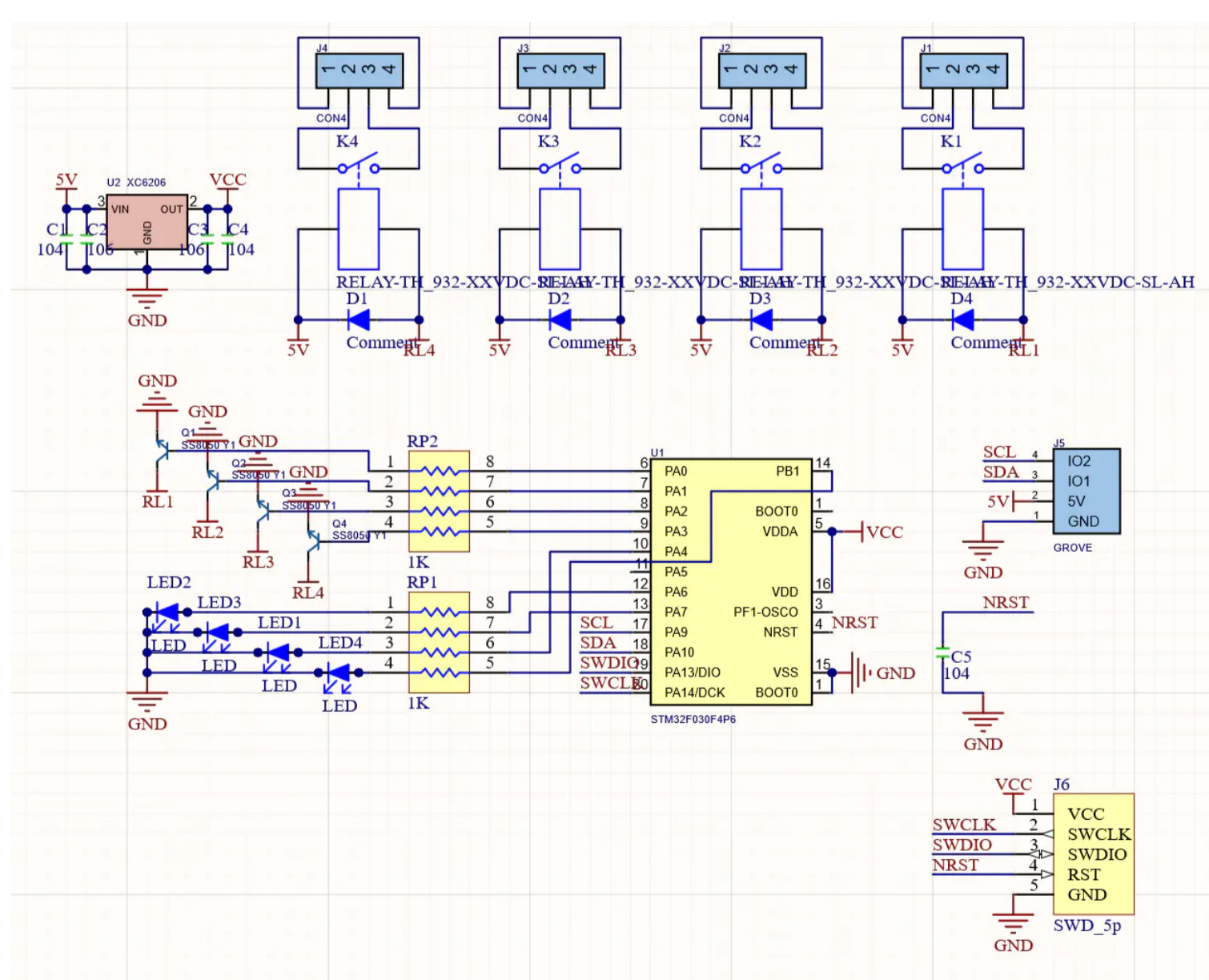
Download Windows Version Easyloader   Download MacOS Version Easyloader

Description:
ButtonA switches relay number, ButtonB switches led sync/ async, Button C controls all relays

Schematic

PinMap

M5Core(GROVE A)	SDA(GPIO21)	SCL(GPIO22)	5V	GND
4-relay Unit	SDA	SCL	5V	GND

Protocol

- Protocol type I2C
- I2C Address: **0x26**

Mode control Reg 0x10

Bit	Desc	R/W
7	R	R/W
6	R	R/W
5	R	R/W
4	R	R/W
3	R	R/W
2	R	R/W
1	R	R/W
0	Sync Mode 0:Async 1:Sync	R/W

RELAY control Reg 0x11

Bit	Desc	R/W
7	LED1 / 1: ON 0:OFF	R/W
6	LED2 / 1: ON 0:OFF	R/W
5	LED3 / 1: ON 0:OFF	R/W
4	LED4 / 1: ON 0:OFF	R/W
3	RELAY1 / 1: ON 0:OFF	R/W
2	RELAY2 / 1: ON 0:OFF	R/W
1	RELAY3 / 1: ON 0:OFF	R/W
0	RELAY4 / 1: ON 0:OFF	R/W

Example

Arduino

click here to get Arduino example