Isolated RS485 Unit
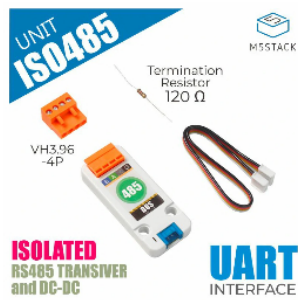
Description

Isolated RS485 Unit is an isolated half duplex transceiver based on the RS485 bus protocol. It can convert TTL level to RS485 level. Since various electrical noises and transient changes of voltage and current may affect communication, Using CA-IS3082W as an interface chip can effectively shield the above noise and provide sufficient protection for expensive control equipment and reduce the risk of damage.

Communication with RS485 devices requiring long-distance signal transmission is possible. The product has a failure protection function whereby in the receiving state, if the input is open or short circuited, the receiver output level is high.

RS485 is a communication protocol standard, which is used to define the electrical characteristics of drivers and receivers used in serial communication systems. It supports Multipoint Systems and is widely used in industrial fields.

When the project equipment needs communication control through RS485 and has high requirements for signal-to-noise ratio and transmission distance, it is a good choice to use ISO485 unit for interface type transfer.

Product Features

- Built in CA-IS3082W isolation chip
- Indicator light
- Isolated DC-DC
- Signal transmission rate: up to 500 Kbps
- Fail safe receiver (bus open, short circuit)
- Supports up to 256 bus nodes
- Up to 1000 VRMs isolation and withstand voltage
- Development platform: Arduino, UIflow (Blockly, Python)
- 2X LEGO™ compatible holes

Include

- 1x Isolated RS485 Unit
- 1x VH-3.96 4P
- 1x 120Ω resistance
- 1x Grove Cable(20cm)

Applications

- Communication between RS485 interface device and microcontroller in industrial equipment

Specification

Resources	Parameter

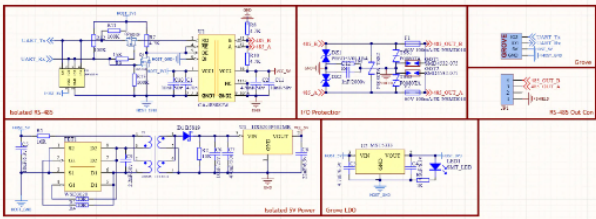|	
Withstand voltage value	1000V
Maximum number of nodes	256个
ESD	±15KV
Protection function	Failure protection, over-current protection and thermal shutdown protection
New Weight	13g
Gross Weight	25g
Product Size	56mm*24mm*11mm
Package Size	70mm*55mm*13mm

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification. Please install the corresponding driver according to the device type. M5Core host Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)

Related Link

Datasheet
ISO485

Schematic

Pin Map

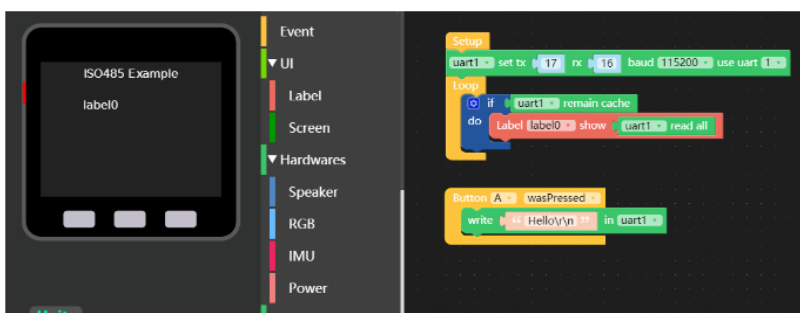| M5Core(GROVE C)	U2RXD(GPIO16)	U2TXD(GPIO17)	5V	GND
ISO485 Unit	RS485 RXD	RS485 TXD	5V	GND

Example

1. Arduino

Click here to download the Arduino example

2. UIFlow

Click here to download the UIFlow example

PURCHASE

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