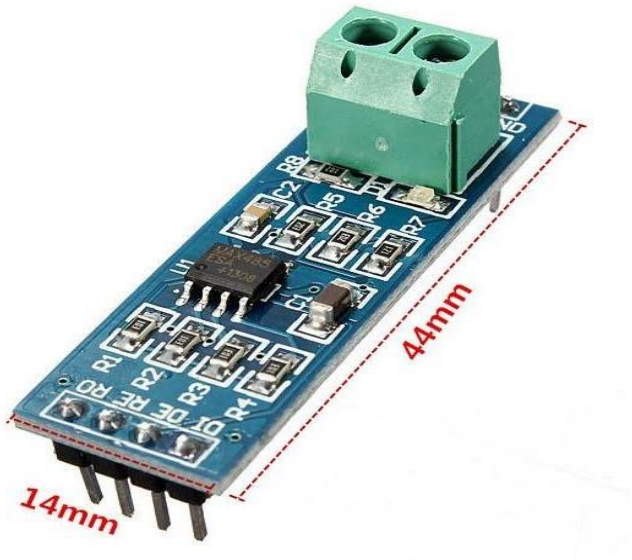
MAX485 TTL to RS485 Converter Module

Product Details

MAX485 TTL to RS485 Converter Module

AA119
5V MAX485 TTL To RS485 Converter Module Board for Arduino **Feature:**
Operating voltage: 5V
On-board MAX485 chip
A low power consumption for the RS-485 communication
Slew-rate limited transceiver
5.08mm pitch 2P terminal
Convenient RS-485 communication wiring
All pins of chip have been lead to can be controlled through the microcontroller
Board size: 44 x 14mm **Package included:**
2 x MAX485 TTL to RS485 module



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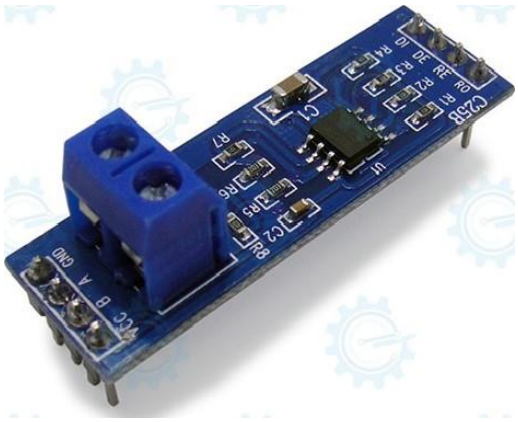

This module interfaces an Arduino or similar microcomputer to RS-485. RS485 is used for Serial Communications over longer distances than direct RS232 or TTL, and supports multiple units on the same bus (Multi-Drop).

General Specifications:

Input Supply Voltage: 5VDC

Distance: up to 1.2 km

Type of cable: straight/crossover

Dimensions: 44mm x 18mm

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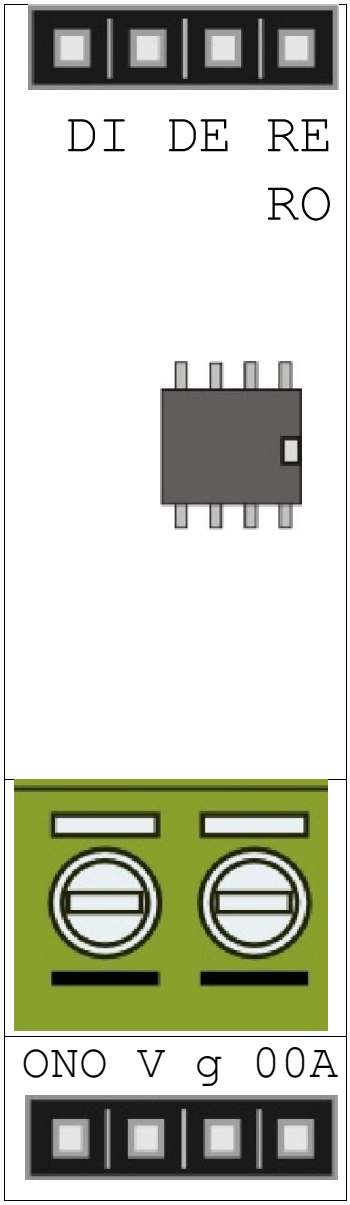
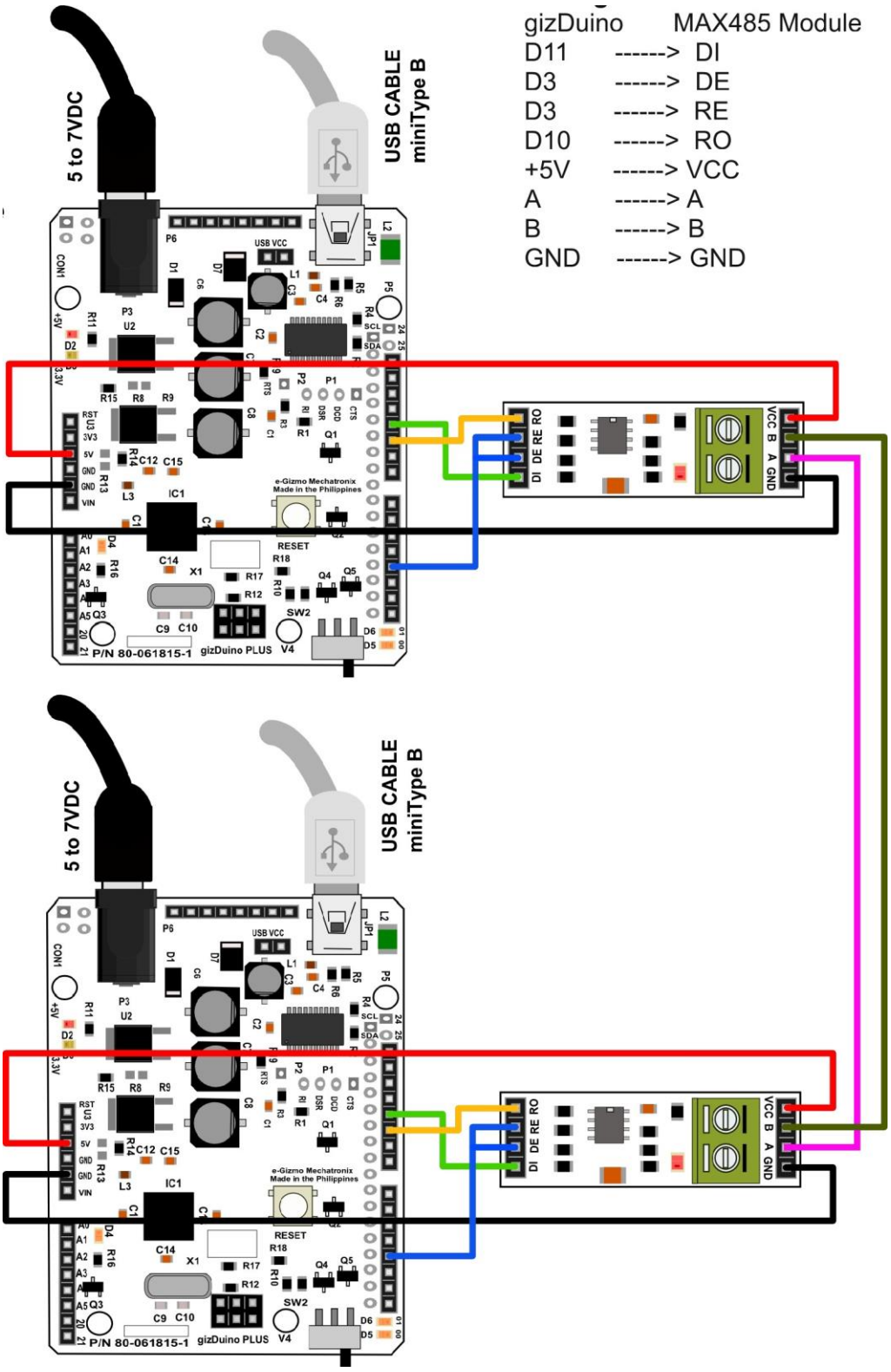


Figure 1. PCB Major Presentation

Wiring connections



RemoteMaster

Figure 2. Sample connections

```
Upload this code to the gizDuino PLUS
Microcontroller. then Open the Serial
Monitor.

 Master Sketch for MAX485 module 5v TLL to RS-485 converter

This sample code is for interface an Arduino used for
Serial Communications over longer distances than
direct RS232/TTL, Supports multiple units on the same
bus.

Open Serial Monitot, type in top window.
Should see same characters echoed back from
remote Arduino. Wiring Connections:
gizDuino    board    RS-485
module DI (Data In) Dil
RO (Receive out)
DIO    DE    (Data
Enable) D3and RE
(receive enable)
vcc
          A (anotherRS-485
          B *
GND         GND

- To other unit pins 11
(Cross Over) - Pin 3 used for
RS485 direction control

Refernce:
https://arduino-info.wikispaces.com/SoftwareSerialRS485ExampIe


Written by:
e-Gizmo Mechatronix
Central
http://www.e-
gizmo.com March 23,
2017

#include <SoftwareSeriaI.h>

#define RXpin10 //SeriaI Receive pin
#define TXpin11 //Serial Transmit pin

#define TXcontrol 3 //RS485 Direction control
#define RS485Tx HIGH
#define RS485RxLOW
```

```
#define LED 13
```

Figure 3. Sample Code for Master

```
SoftwareSerial RS485(RXpin, TXpin); // RX, TX
int
byteReceive
d;      int
byteSend;
void
setup()
 Serial.begin(9600);
Serial.println("USE SERIAL MONITOR, TYPE IN UPPER WINDOW,
 SEND!");  pinMode(LED,  OUTPUT);  pinMode(TXcontrol,
 OUTPUT); digitalWrite(TXcontrol, RS485Rx);
 RS485.begin(4800); // set the data rate


void loop()
 digitalWrite(LED,
 HIGH);            if
 (Serial.available())
 byteReceived       =
 Serial.read();
  digitalWrite(TXcontrol,  RS485Tx);  //  Enable  RS485
  Transmit  RS485.write(byteReceived);  //  Send  byte  to
  Remote Arduino
  digitalWrite(LED, LOW); // Show activity
  delay(10);        digitalWrite(TXcontrol,
  RS485Rx); // Disable RS485 Transmit
 if  (RS485.available())  //Look  for  data  from  other
 Arduino
  digitalWrite(LED,   HIGH);   //   Show
  activity byteReceived = RS485.read();
  //      Read      received      byte
  Serial.write(byteReceived); // Show on
  Serial       Monitor       delay(10);
```

```
    digitalWrite(LED,    LOW);    //    Show
    activity
```

```
  Remote Sketch for MAX485 module 5v TLL to RS-485 converter

  This sample code is for interface an Arduino used for
  Serial  Communications  over  longer  distances  than
  direct RS232/TTL, Supports multiple units on the same
  bus.

  Remote  received  data  and  it
  loops back Wiring Connections:
gizDuino board RS-485 module
DI (Data In)  Dil
   RO  (Receive  out)
   DIO    DE    (Data
   Enable) D3and  RE
   (receive enable)
   vcc
             A (another RS-485)*
             B *
   GND         GND

   -    To other unit pins 11  (Cross Over)
   -    Pin 3 used for RS485 direction control
   -    Pin 13 LED blinks when data is received

   Refernce:
   https://arduino-
   info.wikispaces.com/SoftwareSerialRS485Example


  Written by:
  e-Gizmo  Mechatronix
  Central
  http://www.e-
  gizmo.com March 23,
  2017


 #include <SoftwareSerial.h>
```

```
#define RXpin10 //Serial Receive pin
#define TXpin11 //Serial Transmit pin

  #define TXcontroI 3 //RS485 Direction control
  #define RS485Tx HIGH
  #define RS485Rx LOW

#define LED  13

  SoftwareSerial RS485(RXpin, TXpin); // RX, TX
  int
  byteReceive
  d;      int
  byteSend;
```

Figure 4. Sample Code for Remote

```
void setup()

 Serial.begin(9600);
 pinM0de(LED,   OUTPUT);
 pinM0de(TXcontrol,
 OUTPUT);
 digitalWrite(TXcontrol
 , RS485Rx);
 RS485.begin(4800); // set the data rate


void loop() if

 (RS485.availa

 ble())

  byteSend = RS485.read();
  Serial.println("e-Gizmo
  Mechatronix          Central");
  digitalWrite(LED,        HIGH);
  delay(10);    digitalWrite(LED,
  LOW);


  digitalWrite(TXcontrol
  , RS485Tx);
  RS485.write(byteSend);
  delay(10);
  digitalWrite(TXcontrol
  , RS485Rx);
```

IA cow

x

USE SERIAL YÆNIIZR, IN WINDOW,

Autoscroll

Figure 5. Serial Monitor from master

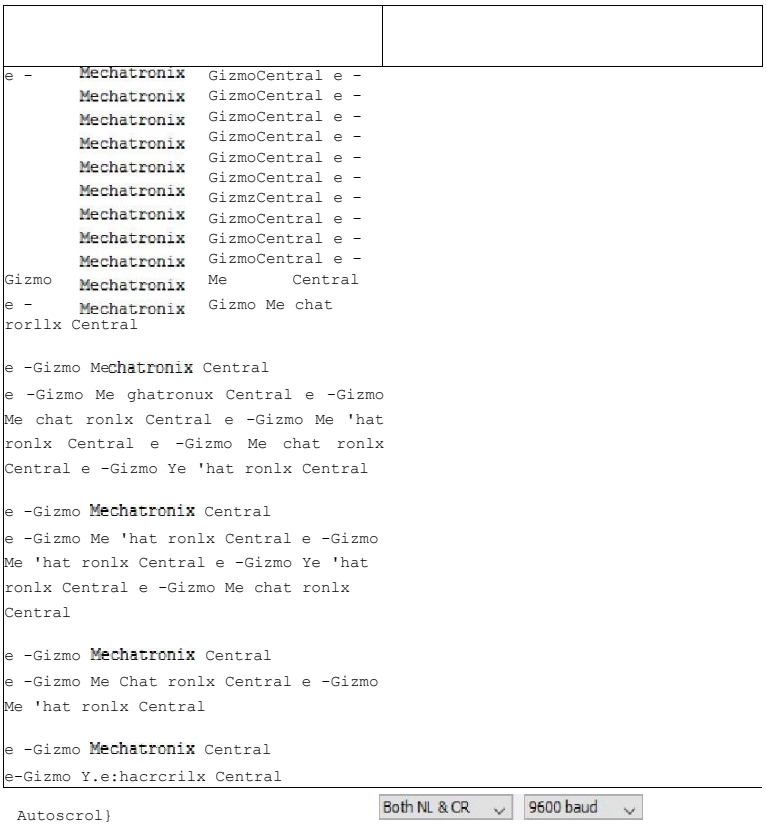


Figure 6. Serial Monitor from the remote