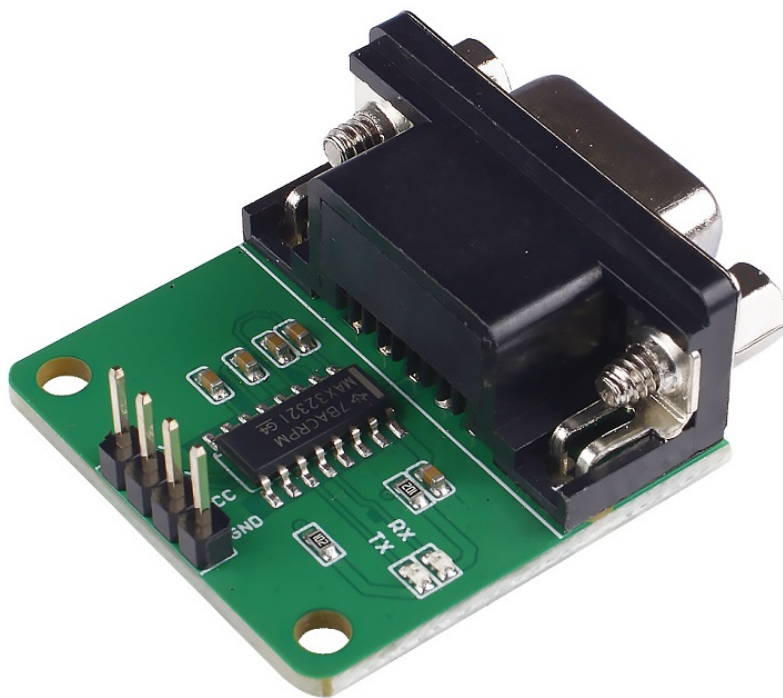# RS-232 To TTL Conveter (MAX3232IDR)

Most of the MCUs use TTL levels, and the computer serial port generally uses 232 levels. If we want the computer to communicate with the MCU, we need this **RS-232 To TTL Conveter (MAX3232IDR)**.

This module is based on Max3232, it supports multiple baud rate communication and theoretically supports communication up to 230400bps baud.

[https://www.seeedstudio.com/RS-232-To-TTL-Conveter-MAX3232IDR-p-2851.html]

Version

Product Version	Changes	Released Date
RS-232 To TTL Conveter (MAX3232IDR)	Initial	Sep 2018

Feature

- Easy to use
- Stable, high speed
- High cost performance
- ±15-kV ESD Protection
- Low power consumption
- Two Drivers and Two Receivers

Specification

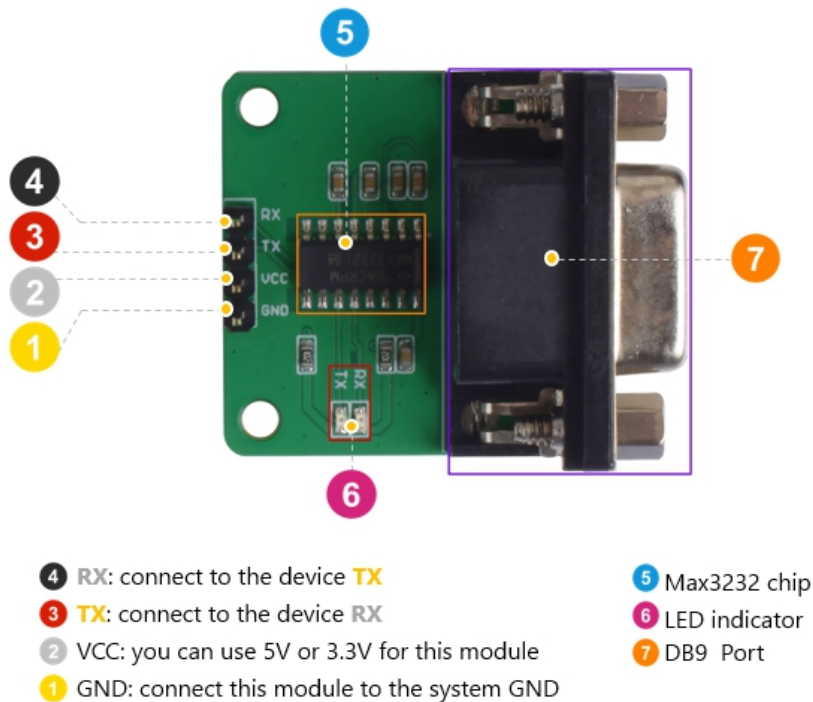| Item	Value
Supply Voltage	3.3V / 5V
Driver input voltage	0V ~ 5.5V
Receiver input voltage	-25V ~ +25V
Supply current(No load)	0.3mA
Operating free-air temperature	-40℃ ~ 85℃
Storage temperature range	-65℃ ~ 150℃
Maximum data rate	250 Kbit/s
Support baud rate	300bps ~ 230400bps
Size	L: 35mm W: 30mm H: 15mm
Weight	10.9g
Package size	L: 150mm W: 100mm H: 15mm
Gross Weight	14g

> ⚠ **Attention**
> When using a higher baud rate, you need to pay attention to whether the connected MCU supports it.

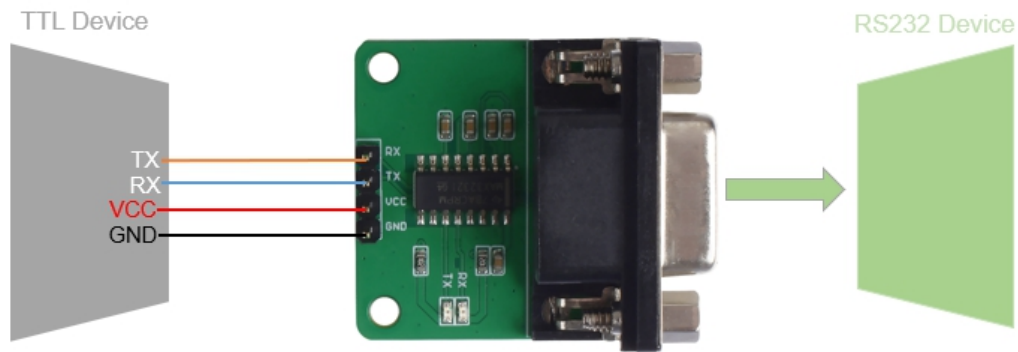# Typical Applications

- Hand-Held Equipment

- Palmtop PCs

Hardware Overview

Pin Out

④ RX: connect to the device TX
③ TX: connect to the device RX
② VCC: you can use 5V or 3.3V for this module
① GND: connect this module to the system GND

⑤ Max3232 chip
⑥ LED indicator
⑦ DB9 Port

Getting Started

This is a simple module that only needs to connect the corresponding interface to the corresponding device to transfer data using the serial port tool. You should note that when connecting a TTL device, the RX pin of the module needs to be connected to the TX pin of the device, and vice versa, the TX pin of the module needs to be connected to the RX pin of the device.

Schematic Online Viewer

Resources

- **[Zip]** RS-232 To TTL Conveter (MAX3232IDR) Eagle Files
  [https://files.seeedstudio.com/wiki/RS-232_To_TTL_Conveter-MAX3232IDR/res/RS232%20to%20TTL%20Converter%20(MAX3232IDR).zip]

- **[PDF]** MAX3232 Datasheet
  [https://files.seeedstudio.com/wiki/RS-232_To_TTL_Conveter-MAX3232IDR/res/Max3232.pdf]

- **[PDF]** PDF Format Wiki [https://files.seeedstudio.com/wiki/RS-232_To_TTL_Conveter-MAX3232IDR/res/RS-232_To_TTL_Conveter-MAX3232IDR.pdf]

Tech Support

Please do not hesitate to submit the issue into our forum [https://forum.seeedstudio.com/]

[https://www.seeedstudio.com/act-4.html?utm_source=wiki&utm_medium=wikibanner&utm_campaign=newproducts]