Features：

- Transceiver with AutoDirection Control
- Operating voltage: 3.3V/5.0V
- I/O-Isolation3000 VDC
- Baud rate：115200bps(MAX)
- Bus protection
- Quiescent Current<35mA(Typ)
- No External Components Required
- ESD Protection （Contact：±4KV；Air：±8KV）
- Operating temperature：-40℃ ～+85℃
- Input reverse connect protection

Description

RE485 series is the fully isolation and half duplex transceiver, which integrates with the power isolation,electrical isolation, the RS-485 interface chip and the bus protection function. It is suitable for the data transmission for bidirectional data communication or multi node bus, The maximum transmission data rate is up to 115200bps. It is built-in isolated DC/DC inverter, with the isolation voltage up to 3000VD, It is small, no need peripheral circuit, convenient to embed the user equipment. The bus is with the ESD protection function, meets the standard of IEC61000-4-2.

Model Selection Guide

Order Code	Input Voltage		Baud rate(Kbps)	Input reverse connect protection	Package
	Vin(VDC)	Range(VDC)			
RE3485HT1	3.3	3.17-3.45	115.2	Yes	DIP10
RE485HT1	5.0	4.75-5.25	115.2	Yes	DIP10

Parameter

Item	Specification	Min	Typ	Max	Units
Input Voltage		4.75	5.0	5.25	VDC
		3.17	3.3	3.45	VDC
Operating Temperature		-40		+85	℃
Storage Temperature		-55		+125	℃
Isolation voltage			3000		VDC
Isolation capacitance			40		pF
Humidity		10		95	%
Quiescent Current			35		mA
Device Amounts		32		128	Point
Propagation delay time		50		100	μS
CON pin current				5	mA
ESD Protection	Contact			±4	KV
	Air			±8	KV

Receiver Function

Input(V_{A-B})	Output(RXD)
$V_{A-B} \geq$+0.2VDC	1
$V_{A-B} \leq$-0.2VDC	0

Driver Function

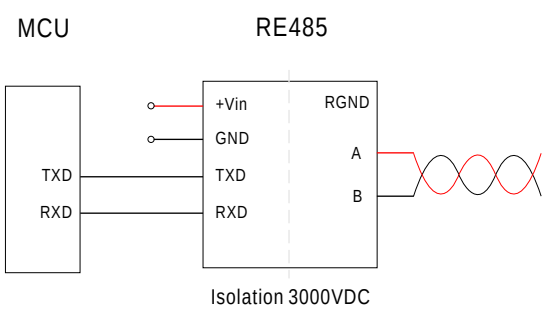
Input(TXD)	Output(A)	Output(B)
1	1	0
0	0	1

Application

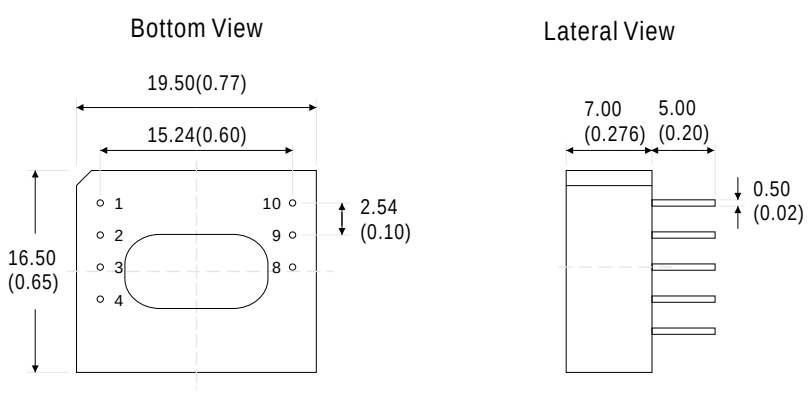
Application Area

- Industry control
- Automatic control on electrical power system
- Building Control Systems
- Communication
- Programmable Logic Controller
- Mining

Typical Circuit



Mechanical Dimension



Units：mm （inch）
Tolerances：±0.25mm （±0.01inch）

Pin Connections

Pin	Function	Description
1	+Vin	positive pole
2	GND	negative pole
3	TXD	Driver input date
4	RXD	Receiver output data
8	B	RS485 B pin
9	A	RS485 A pin
10	RGND	RS485 Bus Isolated Ground