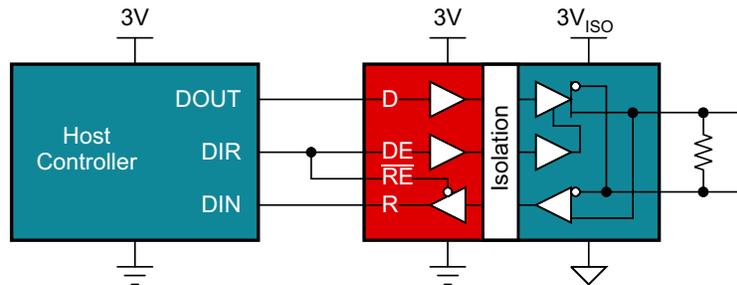


Product Overview

Isolation for RS-485



Example RS-485 Isolation Block Diagram

Design Considerations

- Prevents DC and unwanted AC currents between controller devices and peripheral ICs
- Allows signal and power transfer between controller devices and peripheral ICs
- Protects low voltage parts in a system from high voltage circuits
- Diminishes the effect of ground potential difference
- [\[FAQ\] ISO1410: What is the relationship between cable length and data rate for TI's isolated RS-485 transceivers?](#)
- [\[FAQ\] How do you generate isolated power for an isolated RS-485 node?](#)
- [How to Isolate Signal and Power for an RS-485 System](#)
- [Isolated RS-485 Transceiver Reference Design](#)
- [Top 7 design questions about isolated RS-485 transceivers](#)
- [Digital Isolator Design Guide](#)
- Need additional assistance? Ask our engineers a question on the [TI E2E™ Isolation Support Forum](#)

Recommended Parts

Part Number	Voltage Range	Isolation Voltage	Data Rate	Power
ISOW1432	1.71 - 5.5 V	5 kVrms	12 Mbps	Integrated isolated power
ISOW1412			500 kbps	
ISO1500	3 - 3.6 V	3 kVrms	1 Mbps	Signal Isolation
ISO14xx		5 kVrms	500 kbps – 50 Mbps	
ISO35T	3 - 5.5 V	2.5 kVrms	1 Mbps	Integrated transformer driver
ISO3086T			20 Mbps	
ISO1176T			40 Mbps	

For more devices, browse through the [online parametric tool](#) where you can sort by desired voltage, channel numbers, and other features.

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