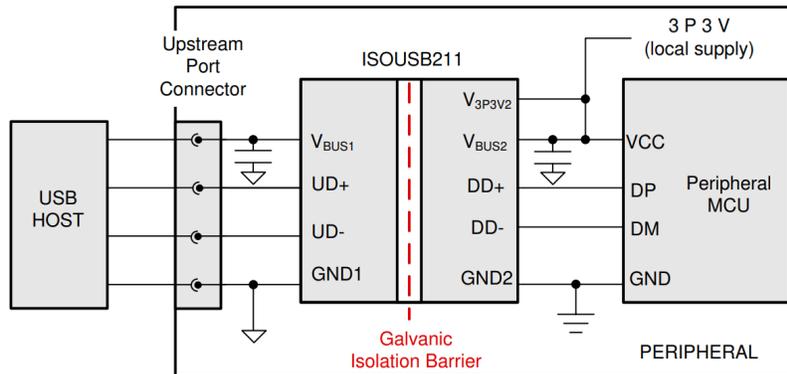


Product Overview

Isolated USB Repeater



Example: Provide High-Voltage Protection and Enhanced Signal Integrity for USB 2.0

Design Considerations

- [How to Implement an Isolated USB 2.0 High Speed, Type-C® DRP](#)
- [Compensate for Channel Loss with Equalizer Settings on High-Speed USB Isolators](#)
- [Protect your Designs with Low-Emissions USB 2.0 Compliant 480 Mbps Isolators](#)

What do Isolated USB Repeaters Provide?

- Compliance with the low-speed, full-speed, and high-speed USB 2.0 standard
- Built-in high-speed test mode that is required for end-equipment USB 2.0 compliance tests
- Built-in equalizer and pre-emphasis for channel loss compensation
- Support Charging Downstream Port (CDP) advertising, role-reversing, and auto speed detection
- Support sleep power management state
- Meets CISPR32 Class B radiated emissions

Need additional assistance? Ask our engineers a question on the TI [E2E™ Isolation Support Forum](#)

Recommended Parts

Part Number	Isolated	USB2.0 Speed	Features	Application	
ISOUSB211DP	Reinforced	480Mbps	Equalizer and pre-emphasis, support HS test mode, auto speed detection, role-reversal, CPD advertising, and SSOP-28 package	Factory automation and control: Programmable logic controller, Industrial PC	
ISOUSB111DW	Reinforced	12Mbps	Auto speed detection, role-reversal, CPD advertising.	Motor drive: Servo motor drive, AC Inverter	
ISOUSB111DWX	Reinforced	12Mbps	Auto speed detection, role-reversal, CPD advertising in ultra-small package.	Medical: Patient monitor, CPAP machine	
				Test and measurement: Semiconductor tester, Instrumentation	
ESD Device Name	Working Voltage	Clamping Voltage	Capacitance	IEC 61000-4-2 Rating	IEC 61000-4-5 Rating
ESD341 (Data)	3.6 V	8.8 V	0.66 pF	30 kV	5.4 A
ESD441 (Power)	5.5 V	7.6 V	1.0 pF	30 kV	4.4 A

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