

Features

- Meets or exceeds the requirements of ANSI Standard TIA/EIA-485-A and ISO 8482:1987(E) specifications for V_{CC} at $+3.3V \pm 10\%$
- Low quiescent current – 0.5mA typ., 1.5mA max
- Low shutdown current (where applicable) - 0.05 μ A typical, 10 μ A max
- Guaranteed standard data rate 250Kbps or 16Mbps
- True Fail-Safe (Open and Short) Receiver
- -7V to +12V common-mode input voltage range
- Half-Duplex or Full-Duplex configuration
- Allows up to 1 unit load (32 devices) on the same common bus

Product Brief

- Controlled driver output slew rate and receiver input filtering
- Active-high driver enable and active-low receiver enable
- ESD Protection on bus terminals
 - $\pm 15kV$ Human Body Model (HBM)
- Drop-in Replacements for MAX3483E, MAX3485E, MAX3488E, MAX3490E, MAX3491E
- High fanout driving 1/8 unit load (256 devices) available on ZT3070E Series

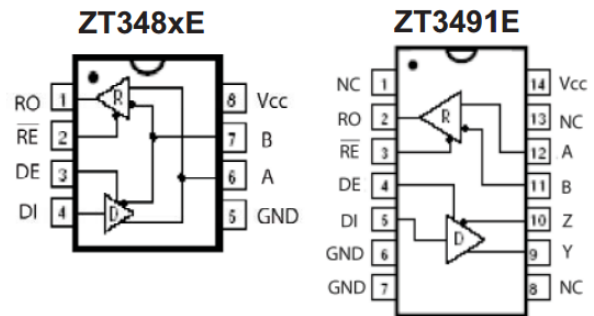
Product Description

The ZT3485E series devices are 3V differential data line transceivers for RS485/RS422 communication that consist of one driver and one receiver with high level of ESD protection. They are designed for balanced transmission lines interface that meet ANSI standard TIA/EIA-485-A and ISO 8482:1987(E) specifications.

The ZT3485E series devices span out with half or full duplex, data rate guaranteed at 250Kbps or 16Mbps, and allow one unit load that fan out 32 devices sharing a common bus. The I/Os are enhanced-electrostatic discharge (ESD) protected, exceeding $\pm 15kV$ Human Body Model (HBM).

Target Applications

- RS-422/RS-485 communications
- Utility meters
- Industrial process control
- Building automation
- Level translators
- Transceivers for EMI-sensitive applications
- Routers and HUBs
- Industrial-controlled Local Area Networks
- Industrial PCs, embedded PCs and peripherals



Product Selection Guide

Part Number	Duplex	# Of Tx/Rx	Data Rate (Mbps)	# of Tx/Rx on Bus	Slew Rate Limit	Rx Input Filtering	Low-Power Shutdown	Tx/Rx Enable	ESD on Tx/Rx	Number of Pins	Pin-to-Pin Cross Reference
ZT3483E	Half	1/1	0.25	32	Yes	Yes	Yes	Yes	$\pm 15kV$	8	MAX3483E
ZT3485E	Half	1/1	16	32	No	No	Yes	Yes	$\pm 15kV$	8	MAX3485E
ZT3488E	Full	1/1	0.25	32	Yes	Yes	No	No	$\pm 15kV$	8	MAX3488E
ZT3490E	Full	1/1	16	32	No	No	No	No	$\pm 15kV$	8	MAX3490E
ZT3491E	Full	1/1	16	32	No	No	Yes	Yes	$\pm 15kV$	14	MAX3491E