

Features

- Meets or exceeds the requirements of ANSI Standard TIA/EIA-485-A and ISO 8482:1987(E) specifications for V_{CC} at +5V ±10%
- Low quiescent current – 0.5mA typ., 1mA max
- Low shutdown current (where applicable) - 1µA typical, 10µA max
- Guaranteed standard data rate 250Kbps or 10Mbps
- 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
 - ±15kV Human Body Model (HBM)
- Drop-in Replacements for MAX483E, MAX485E, MAX488E, MAX489E, MAX490E, MAX491E
- High fanout driving 1/8 unit load (256 devices) available on the ZT485H Series

Product Description

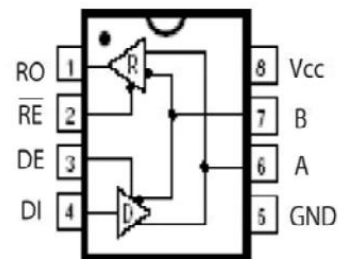
The ZT485E series devices are 5V differential data line transceivers for RS485/RS422 communication that consist of one driver and one receiver with high level of ESD protection. They are designed for balanced transmission lines interface that meet ANSI standard TIA/EIA-485-A and ISO 8482:1987(E) specifications.

The ZT485E series devices span out with half or full duplex, data rate guaranteed at 250K bit per second or 10Mbps, and allow one unit load that fan out 32 devices sharing a common bus. The I/Os are enhanced-electrostatic discharge (ESD) protected, exceeding ±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

ZT483E/ZT485E



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
ZT483E	Half	1/1	0.25	32	Yes	Yes	Yes	Yes	± 15kV	8	MAX483E
ZT485E	Half	1/1	10	32	No	No	Yes	Yes	± 15kV	8	MAX485E
ZT488E	Full	1/1	0.25	32	Yes	Yes	No	No	± 15kV	8	MAX488E
ZT489E	Full	1/1	0.25	32	Yes	Yes	Yes	Yes	± 15kV	14	MAX489E
ZT490E	Full	1/1	10	32	No	No	No	No	± 15kV	8	MAX490E
ZT491E	Full	1/1	10	32	No	No	Yes	Yes	± 15kV	14	MAX491E