

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, Short, Bus Idle) Receiver
- -7V to +12V common-mode input voltage range
- Half-Duplex mode configuration

Product Brief

- Allows up to 1/8 unit load (256 devices) on the same common bus
- 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)
- Alternative replacement for MAX308x, MAX1308x, SN75HVD308x, SN65HVD308x
- Standard fanout driving 1 unit load (32 devices) on the ZT485E Series

Product Description

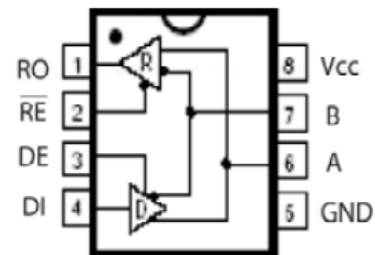
The ZT485H series devices are 5V differential data line transceivers for RS485/RS422 communication that consist of one driver and one receiver with high level of ESD protection. They are designed for balanced transmission lines interface that meet ANSI standard TIA/EIA-485-A and ISO 8482:1987(E) specifications.

The ZT485H series devices spans out with half or full duplex, data rate guaranteed at 250K bit per second or 10Mbps, and allow one-eighth of an unit load that fan out 256 devices sharing a common bus. The I/Os are enhanced-electrostatic discharge (ESD) protected, exceeding ±15kV Human Body Model (HBM).

Target Applications

- RS422/RS485 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
- Industrial, security CATV and camera applications

ZT483H/ZT485H



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	Package Types	Pin-to-Pin Cross Reference
ZT483H	Half	1/1	0.25	256	Yes	Yes	Yes	Yes	± 15kV	8-PDIP, 8-nSOIC	MAX3060, MAX3082E, SN65HVD3082E, SN75HVD3082E
ZT485H	Half	1/1	10	256	No	No	Yes	Yes	± 15kV	8-PDIP, 8-nSOIC	MAX3085E, MAX3088E, SN65HVD3085E
ZT488H	Full	1/1	0.25	256	Yes	Yes	No	No	± 15kV	8-PDIP, 8-nSOIC	MAX3084E
ZT489H	Full	1/1	0.25	256	Yes	Yes	Yes	Yes	± 15kV	14-PDIP, 14-nSOIC	MAX3083E
ZT490H	Full	1/1	10	256	No	No	No	No	± 15kV	8-PDIP, 8-nSOIC	MAX3087E
ZT491H	Full	1/1	10	256	No	No	Yes	Yes	± 15kV	14-PDIP, 14-nSOIC, 10-MSOP	MAX3086E