Features

Product Brief

- Meets EIA/TIA-232F and CCITT V.28/V.24 specifications for V_{CC} at +3.3V ±10% and +5V ±10%
- Low Quiescent Current: 0.5mA typ., 1mA max
- Low Shutdown Current (where applicable): 1µA typical, 10µA max
- Guaranteed Data Rate 250Kbps
- Proprietary Switch-Capacitor Regulated Voltage Converters (patent pending)
- Proprietary AUTOGREEN Power Saving (patent pending)
- Latch-up Free

- ESD Protection for RS-232 I/O's
  - ±15kV Human Body Model (HBM)
  - ±15kV EN61000-4-2 Air Gap Discharge
  - ±8kV EN61000-4-2 Contact Discharge
- Drop-in Replacements for MAX3220E, SP3220E, MAX3221E, ICL3221E, MAX3222E, ICL3222E, SP3222E, MAX3223E, ICL3223E, SP3223E, MAX3232E, ICL3232E, SP3232E, LT1385, SP385E, IS3232E
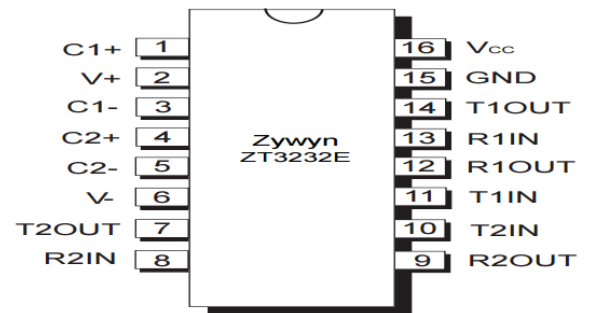- High Data Rate at 1000Kbps Available on ZT32xxF Series

Product Description

The ZT32xxE series devices are 3V powered EIA/TIA-232 and V.28/V.24 communication interfaces with low power requirements. They consist of two line drivers, two line receivers and the proprietary switch-capacitor regulated voltage converters. The ZT3220E has a 1Tx and 1Rx configuration. These devices operate from a single 3V to 5.5V power supply at the guaranteed data rate of 250K bits/sec with enhanced electrostatic discharge (ESD) protection in all RS232 I/O pins exceeding ±15kV EN61000-4-2 Air Gap Discharge and ±8Kv EN61000-4-2 Contact Discharge.

The ZT3221E and ZT3223E features the AUTOGREEN (patent pending) proprietary function which automatically powers down the on-chip regulated voltage converters and driver circuits when an RS-232 cable is disconnected from the host interface or when a connected peripheral device is turned off.

Target Applications

- Battery-Powered And Hand-Held Applications
- Notebooks, Subnotebooks, and Palmtops
- Industrial and Embedded PCs
- Data Cables for Cell Phones and PDAs
- Terminal Adapters and POS terminals
- Peripherals interface
- Routers and HUBs

Product Selection Guide

Part Number	Power Supply	RS232 Drivers	RS232 Receivers	Data Rate (kbps)	15KV ESD IEC1000 4-2	Receiver Enable	SHUTDOWN Enable	AUTOGREEN Function	Number of Pins	Package Type
ZT3220E	+3V to +5.5V	1	1	250	RS232 I/O	YES	YES	NO	16	SSOP, TSSOP, WSOIC
ZT3221E	+3V to +5.5V	1	1	250	RS232 I/O	YES	YES	YES	16	SSOP, TSSOP
ZT3222E	+3V to +5.5V	2	2	250	RS232 I/O	YES	YES	NO	18, 20	18-WSOIC 20-SSOP, 20-TSSOP
ZT3232E	+3V to +5.5V	2	2	250	RS232 I/O	NO	NO	NO	16	NSOIC, WSOIC, SSOP, TSSOP, QFN
ZT3223E	+3V to +5.5V	2	2	250	RS232 I/O	YES	YES	YES	20	SSOP, TSSOP
ZT1385E	+3V to +5.5V	2	2	250	RS232 I/O	NO	YES	NO	18, 20	18-WSOIC, 20-SSOP