

Features

- Meets EIA/TIA-232F and CCITT V.28/V.24 specifications for V_{CC} at $+3.3V \pm 10\%$ and $+5V \pm 10\%$
- Low Quiescent Current: 0.5mA typ., 1mA max
- Low Shutdown Current (where applicable): 1 μ A typical, 10 μ A max
- Guaranteed High Data Rate 1000Kbps
- Proprietary Switch-Capacitor Regulated Voltage Converters (patent pending)
- Proprietary AUTOGREEN Power Saving (patent pending)
- Latch-up Free

Product Brief

- ESD Protection for RS-232 I/O's
 - $\pm 15kV$ Human Body Model (HBM)
 - $\pm 15kV$ EN61000-4-2 Air Gap Discharge
 - $\pm 8kV$ EN61000-4-2 Contact Discharge
- Drop-in Replacements for MAX3220E, SP3220E, MAX3221E, ICL3221E, MAX3222E, ICL3222E, SP3222EU, MAX3223E, ICL3223E, SP3223EU, MAX3232E, ICL3232E, SP3232EU, LT1385 and SP385E
- Standard Data Rate at 250Kbps Available on ZT32xxE Series

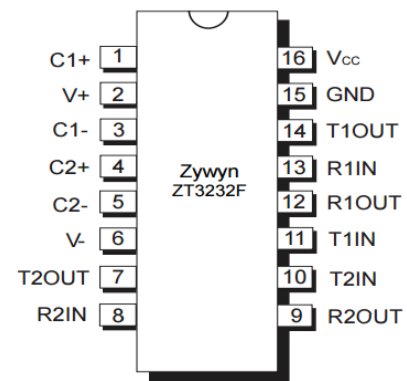
Product Description

The ZT32xxF 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 ZT3220F has a 1Tx and 1Rx configuration. These devices operate from a single 3V to 5.5V power supply at the guaranteed data rate of 1000K bits/sec with enhanced electrostatic discharge (ESD) protection in all RS232 I/O pins exceeding $\pm 15kV$ EN61000-4-2 Air Gap Discharge and $\pm 8kV$ EN61000-4-2 Contact Discharge.

The ZT3221F and ZT3223F 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
ZT3220F	+3V to +5.5V	1	1	1000	RS232 I/O	YES	YES	NO	16	SSOP, TSSOP, WSOIC
ZT3221F	+3V to +5.5V	1	1	1000	RS232 I/O	YES	YES	YES	16	SSOP, TSSOP
ZT3222F	+3V to +5.5V	2	2	1000	RS232 I/O	YES	YES	NO	18, 20	18-WSOIC, 20-SSOP, 20-TSSOP
ZT3232F	+3V to +5.5V	2	2	1000	RS232 I/O	NO	NO	NO	16	NSOIC, WSOIC, SSOP, TSSOP, QFN
ZT3223F	+3V to +5.5V	2	2	1000	RS232 I/O	YES	YES	YES	20	SSOP, TSSOP
ZT1385F	+3V to +5.5V	2	2	1000	RS232 I/O	NO	YES	NO	18, 20	18-WSOIC, 20-SSOP