

## Single Transmitter/Receiver RS-232 16-Pin TSSOP T/R

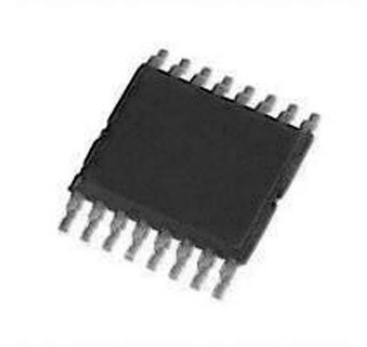
**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** TSSOP16

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active



Images are for reference only

[Inquiry](#)

## General Description

The MAX3221E is a single driver, single receiver RS-232 solution operating from a single VCC supply. The RS-232 pins provide IEC 61000-4-2 ESD protection. The device meets the requirements of TIA/EIA-232-F and provides the electrical interface between an asynchronous communication controller and the serial-port connector. The charge pump and four small external capacitors allow operation from a single 3-V to 5.5-V supply. These devices operate at data signaling rates up to 250 kbit/s and a maximum of 30-V/ $\mu$ s driver output slew rate.

Flexible control options for power management are available. Auto-power down disables driver and charge pump when the receiver is disconnected or the remote driver is power down. The drivers can be manually enabled or disabled. INVALID output goes low when receiver input is unconnected or power off.

## Key Features

ESD Protection for RS-232 Pins  
 $\pm 15$ -kV Human-Body Model (HBM)

$\pm 8$  kV (IEC 61000-4-2, Contact Discharge)

$\pm 15$  kV (IEC 61000-4-2, Air-Gap Discharge)

Meets or Exceeds the Requirements of TIA/EIA-232-F and ITU v.28 Standards

Operates With 3-V to 5.5-V VCC Supply

Operates up to 250 kbit/s

One Driver and One Receiver

Low Standby Current: 1  $\mu$ A Typical

Accepts 5-V Logic Input With 3.3-V Supply

Auto-Power-Down Feature Automatically Disables Drivers for Power Savings

Alternative High-Speed Device (1 Mbit/s)  
SN75C3221E and SN65C3221E

## Recommended For You

---

### MAX3223MDBREP

Texas Instruments, Inc  
SSOP20

### MAX3232EIPWRQ1

Texas Instruments, Inc  
TSSOP16

### MAX232N

Texas Instruments, Inc  
DIP-16

### MAX3221ECDBR

Texas Instruments, Inc  
SSOP16

### MAX3222ECPWR

Texas Instruments, Inc  
TSSOP20

### MAX3222IPWR

Texas Instruments, Inc  
TSSOP20

### MAX3222ECDW

Texas Instruments, Inc  
SOP20

### MAX3223IDW

Texas Instruments, Inc  
SOP20

### MAX3243IPW

Texas Instruments, Inc  
TSSOP

### MAX3221MDBREP

Texas Instruments, Inc  
SSOP-16

### MAX208CDB

Texas Instruments, Inc  
SSOP

### MAX232ECN

Texas Instruments, Inc  
DIP-16

### MAX232IDW

Texas Instruments, Inc  
SOP16

### MAX3232MDBREP

Texas Instruments, Inc  
SSOP16

### DS90LV028AQMA/NOPB

Texas Instruments, Inc  
SOP-8