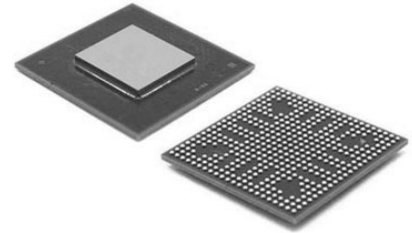


RS232 Transceiver Isolated, 2 Drivers, 3V to 5.5V Supply, BGA-44

| | |
|---------------|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | CSP_BGA-44 |
| Product Type | RS-232 / RS-422 / RS-485 / RS-562 ; Isolated RS-232 |
| RoHS | Rohs |
| Lifecycle | |



Images are for reference only

Please submit RFQ for ADM3252EABCZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADM3252E is a high speed, 2.5 kV fully isolated, dual-channel RS-232/V.28 transceiver device that is operational from a single 3.3 V or 5 V power supply. Because of high ESD protection on the RIN1, RIN2, TOUT1, and TOUT2 pins, the ADM3252E is ideally suited for operation in electrically harsh environments or where RS-232 cables are frequently plugged and unplugged.

The ADM3252E provides four independent isolation channels using the integrated and isolated power of isoPower™. There is no requirement to use a separate isolated dc-to-dc converter. Chip scale transformer iCoupler® technology from Analog Devices, Inc., is used for both the isolation of the logic signals and the integrated dc-to-dc converter. The result is a total isolation solution.

isoPower™ technology in the ADM3252E uses high frequency switching elements to transfer power through its transformer. Special care must be taken during printed circuit board (PCB) layout to meet emissions standards. Refer to Application Note AN-0971, Recommendations for Control of Radiated Emissions with isoPower Devices, for details on board layout considerations.

The ADM3252E conforms to the EIA/TIA-232E and ITU-T V.28 specifications and operates at data rates of up to 460 kbps. Four external 0.1 μF charge pump capacitors are used for the voltage doubler/inverter, permitting operation from a single 3.3 V or 5 V supply. The ADM3252E is available in a 44-ball, chip scale package ball grid array (CSP_BGA) and is specified over the -40°C to +85°C temperature range.

Features

2.5 kV fully isolated (power and data) RS-232 transceiver

isoPower integrated, isolated dc-to-dc converter

Operational from single 3.3 V or 5 V supply

460 kbps data rate

2 × Tx and 2 × Rx channels

Meets EIA/TIA-232E specifications

ESD protection on RINx and TOUTx pins-- Contact discharge: ±8 kV-- Air gap discharge: ±15 kV

0.1 μF charge pump capacitors

High common-mode transient immunity: >25 kV/μs

Operating temperature range: -40°C to +85°C

44-ball chip scale package ball grid array (CSP_BGA)

See data sheet for additional features

Application

Isolated RS-232 interface

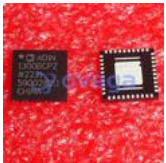
High noise data communications

Industrial communications

Industrial/telecommunications diagnostic ports

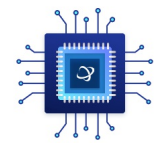
Medical equipment

Related Products



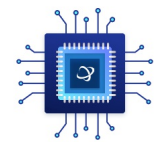
[ADIN1300BCPZ-R7](#)

Analog Devices, Inc
40-Lead LFCSP (6mm x 6mm x 0.75mm w/ EP)



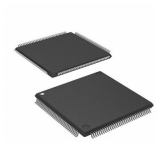
[AD9575-EVALZ-LVD](#)

Analog Devices, Inc
1Box



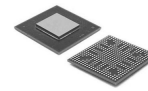
[MAX24287ETK+](#)

Analog Devices, Inc
MAX24287Series1Gbps



[DS26303L-120](#)

Analog Devices, Inc
144-ELQFP



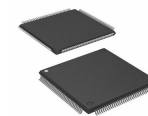
[AD9549BCPZ](#)

Analog Devices, Inc
LFCSP64



[LT5400ACMS8E-1](#)

Analog Devices, Inc
MSOP8



[DS26303LN-75](#)

Analog Devices, Inc
LQFP-144 EP



[LT1207CS](#)

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SOP16