

## Single Transmitter/Receiver RS-422/RS-485 8-Pin SOIC N T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** SOP8

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The ADM1485 operates from a single +5 V power supply. Excessive power dissipation caused by bus contention or by output shorting is prevented by a thermal shutdown circuit. This feature forces the driver output into a high impedance state if during fault conditions a significant temperature increase is detected in the internal driver circuitry.

Up to 32 transceivers may be connected simultaneously on a bus, but only one driver should be enabled at any time. It is important therefore that the remaining disabled drivers do not load the bus. To ensure this, the ADM1485 driver features high output impedance when disabled and also when powered down. This minimizes the loading effect when the transceiver is not being utilized. The high impedance driver output is maintained over the entire common-mode voltage range from -7 V to +12 V.

The receiver contains a fail safe feature which results in a logic high output state if the inputs are unconnected (floating).

The ADM1485 is fabricated in BiCMOS, an advanced mixed technology process combining low power CMOS with fast switching bipolar technology. All inputs and outputs contain protection against ESD; all driver outputs feature high source and sink current capability. An epitaxial layer is used to guard against latch-up.

The ADM1485 features extremely fast switching speeds. Minimal driver propagation delays permit transmission at data rates up to 30 Mbits/s while low skew minimizes EMI interference.

The part is fully specified over the commercial and industrial temperature range and is available in an 8-pin DIL/SOIC package.

## Key Features

Meets EIA RS-485 Standard

30 Mb/s Data Rate

Single +5 V Supply

High Speed, Low Power BiCMOS

Thermal Shutdown Protection

Short Circuit Protection

Zero Skew Driver

Driver Propagation Delay: 10 ns

Receiver Propagation Delay: 25 ns

High Z Outputs with Power Off

Superior Upgrade for LTC1485

## Recommended For You

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### **ADM3490EARZ**

Analog Devices, Inc

SOP-8

### **ADuMB160BRWZ-RL**

Analog Devices, Inc

SOP16

### **ADM3232EARUZ**

Analog Devices, Inc

TSSOP-16

### **ADuM5211ARSZ**

Analog Devices, Inc

SSOP20

### **ADuMI201BRZ-RL7**

Analog Devices, Inc

SOP8

### **ADV7623BSTZ**

Analog Devices, Inc

LQFP144

### **ADuMI410BRWZ**

Analog Devices, Inc

SOP16

### **AD698APZ**

Analog Devices, Inc

PLCC28

### **ADM3251EARWZ**

Analog Devices, Inc

SOP20

### **ADM485ANZ**

Analog Devices, Inc

DIP

### **ADuM6400ARWZ**

Analog Devices, Inc

SOP16

### **ADuMI281BRZ**

Analog Devices, Inc

SOP8

### **ADUMI42E0BRZ**

Analog Devices, Inc

SOP-16

### **ADuMI412BRWZ**

Analog Devices, Inc

SOP16

### **ADV7622BSTZ**

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TQFP144