


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

<b>Manufacturer:</b>	<a href="#">Analog Devices, Inc</a>
<b>Package/Case:</b>	SOP8
<b>Product Type:</b>	Drivers
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The ADM485 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 ADM485 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 -7V 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 ADM485 is fabricated on 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 ADM485 features extremely fast switching speeds. Minimal driver propagation delays permit transmission at data rates up to 5 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 packages.

## Key Features

Meets EIA RS-485 standard

5Mbps Data rate

-7 to +12V Bus common-mode range

High speed, low power BiCMOS

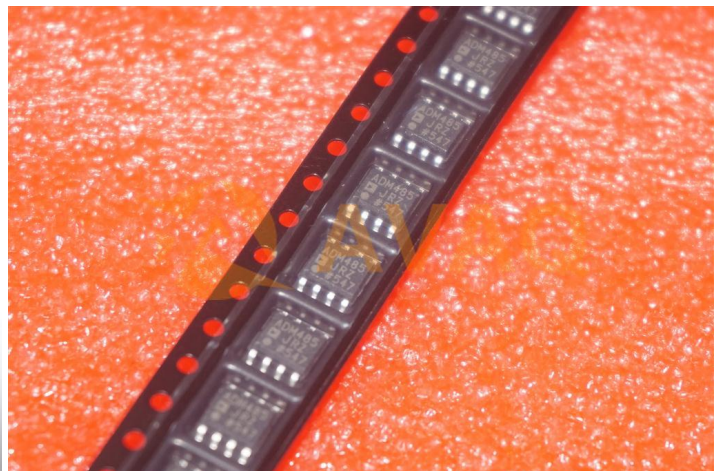
Thermal shutdown protection

Short-circuit protection

10ns Typical driver propagation delay

15ns Typical receiver propagation delay

High-Z outputs with power off



## Recommended For You

### **ADM3490EARZ**

Analog Devices, Inc

SOP-8

### **ADuM3160BRWZ-RL**

Analog Devices, Inc

SOP16

### **ADM3232EARUZ**

Analog Devices, Inc

TSSOP-16

### **ADuM5211ARSZ**

Analog Devices, Inc

SSOP20

### **ADuM1201BRZ-RL7**

Analog Devices, Inc

SOP8

### **ADV7623BSTZ**

Analog Devices, Inc

LQFP144

**ADuMI410BRWZ**

Analog Devices, Inc  
SOP16

**AD698APZ**

Analog Devices, Inc  
PLCC28

**ADMB251EARWZ**

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**

Analog Devices, Inc  
TQFP144