# LT1785CS8#PBF

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

Manufacturer: Analog Devices, Inc.

Package/Case: SOP8

**Product Type:** Drivers

RoHS Compliant/Lead free RoHS:

Lifecycle: Active



Images are for reference only

#### **General Description**

The LT1785/LT1791 are half-duplex and full-duplex differential bus transceivers for RS485 and RS422 applications which feature on-chip protection from overvoltage faults on the data transmission lines. Receiver input and driver output pins can withstand voltage faults up to ±60V with respect to ground with no damage to the device. Faults may occur while the transceiver is active, shut down or powered off.

Data rates to 250kbaud on networks of up to 128 nodes are supported. Controlled slew rates on the driver outputs control EMI emissions and improve data transmission integrity on improperly terminated lines. Drivers are specified to operate with inexpensive cables as low as  $72\Omega$  characteristic impedance. The LT1785A/LT1791A devices have "fail-safe" receiver inputs to guarantee a receiver output high for shorted, open or inactive data lines. On-chip ESD protection eliminates need for external protection devices.

The LT1785/LT1785A are available in 8-lead DIP and SO packages and the LT1791/LT1791A in 14-lead DIP and SO packages.

**Key Features Application** 

Protected from overvoltage line faults to ±60V

Pin compatible with LTC485 and LTC491

High input impedance supports up to 128 nodes

No damage or latch-up to ESD

Controlled slew rates for EMI emissions control

Guaranteed high receiver output state for floating, shorted or inactive inputs

Outputs assume a high impedance when off or powered down

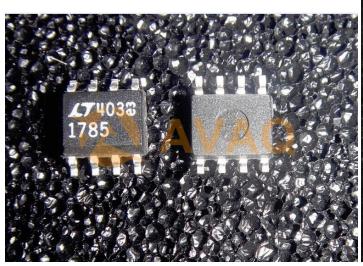
Drives low impedance cables

Short-circuit protection on all outputs

Thermal shutdown protection

Guaranteed operation to 125°C

Industrial, Communications & Networking, HVAC





#### **Recommended For You**

Analog Devices, Inc

BGA44

#### LTC1955EUH

Analog Devices, Inc

QFN

#### LTC4301LCMS8#PBF

Analog Devices, Inc

MSOP-8

# LTC490CN8#PBF

Analog Devices, Inc

DIP8

# LTC4300A-1CMS8#PBF

Analog Devices, Inc

MSOP8

# LTM2886CY-5I#PBF

Analog Devices, Inc

BGA

#### LTC4307IDD-1#PBF

Analog Devices, Inc

DFN-8

#### LT1137ACSW#PBF

Analog Devices, Inc

SOP28

#### LTM2882CY-3#PBF

Analog Devices, Inc

BGA

# LTC1334CSW#PBF

Analog Devices, Inc

SOP-28

#### LTC1344AIG

Analog Devices, Inc

SSOP24

# LTM2894IY#PBF

Analog Devices, Inc

BGA

#### LTM2884CY#PBF

Analog Devices, Inc

BGA44

# LTC4311ISC6#TRMPBF

Analog Devices, Inc

AN

# LTM2884HY#PBF

Analog Devices, Inc

BGA-44