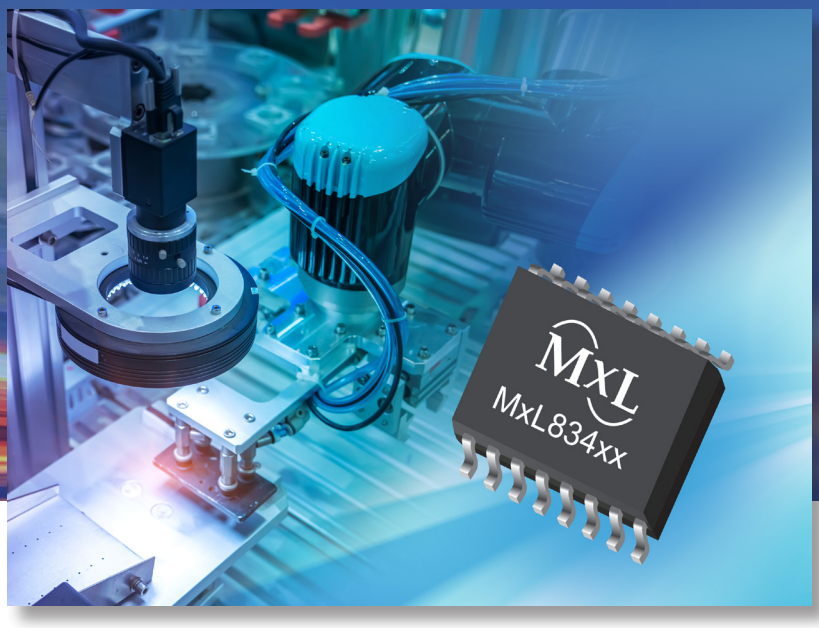
MAXLINEAR

MxL834xx

Quad RS-485/422 Receivers with IEC ESD and EFT



PRODUCTS

MxL83411	10Mbps	Global Enable
MxL83433	32Mbps	Global Enable
MxL83434	32Mbps	Paired Enable
MxL83435	65Mbps	Global Enable
MxL83436	65Mbps	Paired Enable
MxL83437	80Mbps	Global Enable
MxL83438	80Mbps	Paired Enable

OVERVIEW

Supply Voltage Range	3.3V to 5V
Operating Temperature	-40°C to +125°C
Packages	SOIC, TSSOP

PERFORMANCE

Data Rate	10-80Mbps
EFT (IEC 61000-4-4)	±4kV
ESD Contact (IEC 61000-4-2)	±12kV
ESD HBM	±15kV

FEATURES

- Meets or exceeds TIA/EIA-485A Standard requirements
- Up to ±4kV Electrical Fast Transient protection
- Up to ±12kV Contact ESD
- Low channel-channel skew
- Failsafe protection for OPEN bus condition
- Extended operational common-mode range up to ±15V
- Extended operating temperature of -40°C to 125°C

BENEFITS

- ±4kV EFT tolerance protects systems from fast transients caused by relays and supply disconnects
- Low channel-channel skew ensures balanced transmission across channels
- Extended operating range of -40°C to 125°C for operation in harsh environments

APPLICATIONS

- Motor Drives
- Wireless Infrastructure
- Factory Automation

Product Description

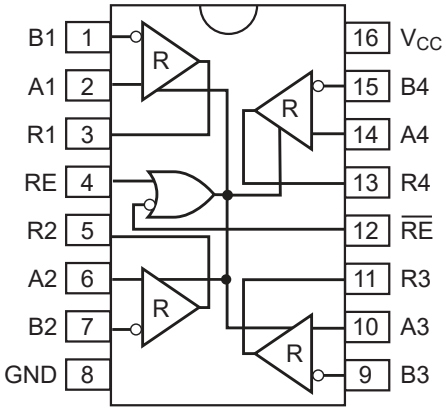
The MxL834xx family of quad RS-485 receivers are specifically designed to support up to 80Mbps communication in harsh industrial environments. The bus pins are designed to tolerate high levels of IEC electrical fast transients (EFT) and IEC electrostatic discharge (ESD).

The family includes a wide range of product options including group and paired enables, SOIC and TSSOP packages, 10Mbps, 32Mbps, 65Mbps, and 80Mbps speeds, and various protection levels. This broad portfolio provides users with a selection of products that are optimized for use across many different applications ranging from servo motor encoders to wireless infrastructure to industrial process control.

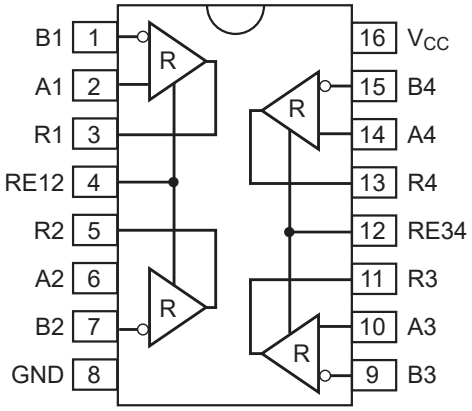
The combination of integrated EFT and ESD protection in small packages makes these products ideally suited for space-constrained applications that require robust, high performance communication.

Product Information

Ordering Part Number	Data Rate (Mbps)	Enable	Common Mode	Contact Discharge ESD	EFT	Packages	Temperature
MXL83411E-ADA-R	10	Global	-7 to +12V	±8kV	±2kV	SOIC-16	–40˚C to +125˚C
MXL83411I-ADA-R							–40˚C to +85˚C
MXL83411E-AGA-R						TSSOP-16	–40˚C to +125˚C
MXL83411I-AGA-R							–40˚C to +85˚C
MXL83433E-ADA-R	32	Global	±15V	±12kV	±4kV	SOIC-16	–40˚C to +125˚C
MXL83433I-ADA-R							–40˚C to +85˚C
MXL83433E-AGA-R						TSSOP-16	–40˚C to +125˚C
MXL83433I-AGA-R							–40˚C to +85˚C
MXL83434E-ADA-R		Paired				SOIC-16	–40˚C to +125˚C
MXL83434I-ADA-R							–40˚C to +85˚C
MXL83434E-AGA-R						TSSOP-16	–40˚C to +125˚C
MXL83434I-AGA-R							–40˚C to +85˚C
MXL83435E-ADA-R	65	Global				SOIC-16	–40˚C to +125˚C
MXL83435E-AGA-R						TSSOP-16	
MXL83436E-ADA-R		Paired				SOIC-16	
MXL83436E-AGA-R						TSSOP-16	
MXL83437E-ADA-R	80	Global				SOIC-16	
MXL83437E-AGA-R						TSSOP-16	
MXL83438E-ADA-R		Paired				SOIC-16	
MXL83438E-AGA-R						TSSOP-16	



Global Enable



Paired Enable

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