

Up to 50Mbps EFT and ESD Protected RS-485 Transceivers

PRODUCT FAMILY

MxL83211	0.25Mbps	Half Duplex
MxL83212	0.5Mbps	Half Duplex
MxL83214	50Mbps	Half Duplex

PERFORMANCE

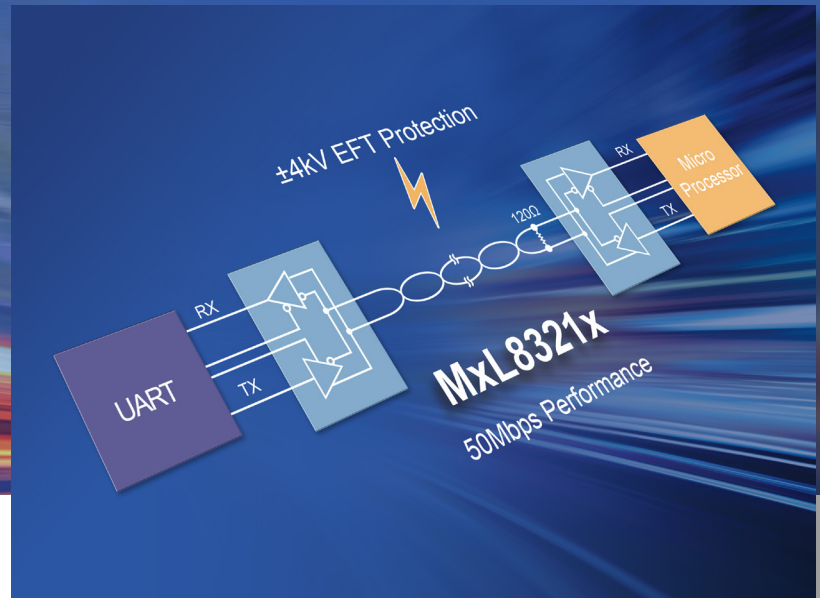
Supply Voltage Range	3.0V to 5.5V
Operating Temp Range	-40°C to 125°C
Supply Current (max)	3mA
Shutdown Supply Current (max)	1µA
High Common Mode	±15V
EFT (IEC 61000-4-4)	±4kV
ESD Contact (IEC 61000-4-2)	±12kV
ESD HBM	±15kV

FEATURES

- Meets or exceeds the requirements of the TIA/EIA-485A standard
- Differential output exceeds 2.1V for PROFIBUS compatibility with a 5V supply
- ±4kV Electrical fast transient protection (EFT)
- ±12kV Contact ESD
- 1µA Shutdown mode
- Enhanced failsafe protection for open, short, and idle
- Extended operational common-mode range of ±15V
- Extended operating temperature range from -40°C to 125°C
- Glitch-free power-up/down hot plug capability
- 1/8 Unit load (256 bus nodes)
- Small form factor MSOP and VSON packages

BENEFITS

- ±4kV EFT tolerance protects systems from fast transients caused by relays and plugging/unplugging power sources
- Extended operating range from -40°C to 125°C for operation in harsh environments



The MxL83211, MxL83212, and MxL83214 (MxL8321x) family of RS-485 transceivers supports up to 50Mbps communication in harsh industrial environments. The bus pins tolerate high levels of IEC electrical fast transients (EFT) and IEC electrostatic discharge (ESD).

The wide range of product options includes slow controlled 250kbps, 500kbps speeds and high speed 50Mbps varieties in three different package options. This broad portfolio can be used across many different applications ranging from solar panel arrays to wireless infrastructure to high-speed motor drives.

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

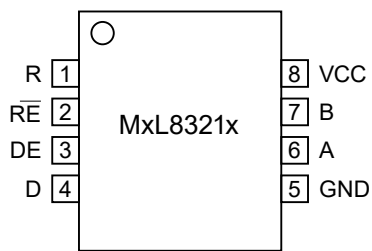
APPLICATIONS:

- Motor Drives
- BBU and RRU Telecom Equipment
- Industrial and Single Board Computers
- Smart Grid
- Building Security and Automation
- Industrial and Process Control Equipment
- Industrial Transport

Product Information

Ordering Part Number	Date Rate (Mbps)	Package	Duplex	Packaging Method	Operating Temperature Range
MxL83211					
MXL83211E-ADA-R	0.25	NSOIC8	Half	Reel	-40°C to 125°C
MxL83212					
MXL83212E-ADA-R	0.5	NSOIC8	Half	Reel	-40°C to 125°C
MXL83212E-ARA-R	0.5	MSOP8	Half	Reel	-40°C to 125°C
MXL83212E-AHA-R	0.5	VSON8	Half	Reel	-40°C to 125°C
MxL83214					
MXL83214E-ADA-R	50	NSOIC8	Half	Reel	-40°C to 125°C
MXL83214E-ARA-R	50	MSOP8	Half	Reel	-40°C to 125°C
MXL83214E-AHA-R	50	VSON8	Half	Reel	-40°C to 125°C

Industry Standard Pinouts



Not to scale



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