

In This Issue

- [IEC MSOP Isolators](#)
- [Application Corner](#)
- [MSOP Isolator Parts](#)

Quick Links

- [Recent Issues](#)
- [Sensor Selector Guide](#)
- [Isolator Selector Guide](#)
- [Online Store](#)
- [Contact Us](#)

Exhibitions

 NVE products were on display at the 2008 Embedded Technology Exhibition in Yokohama, Japan in cooperation with distributor K.K. Rocky.

Online Store Updated

The popular [NVE Online Store](#) has been updated for faster navigation. As always, hundreds of parts are available for immediate shipment with flat-rate shipping and no minimum order.


Buy Online
\$9.95 shipping

Awards & Accolades

In November NVE Corporation was named to Deloitte's 2008 Technology Fast 500, an annual listing of the 500 fastest growing technology, media, telecommunications and life sciences companies in North America.

[<More Accolades>](#)

Faster Than Light?

 Not faster than the speed of light, but the lightning-fast IL700S-Series isolators have a typical pulse-width distortion of 300 ps, which is the time it takes light to travel about three inches. At 1 Mbps, the distortion is analogous to 1,000-foot wires matched within three inches.

[<More Fun Facts>](#)

Product News

MSOP Isolators IEC Approved

NVE's highly-acclaimed MSOP isolators recently received IEC 61010-2001 approval to 150 Vrms, a remarkable achievement for the world's smallest isolators of their type.



Unique MSOP Isolators are 3 mm square

MSOP isolators can reduce board area by up to a factor of ten compared to single-channel PDIP isolators. Like all IsoLoop Isolators, these products feature excellent transient immunity and unlimited life. IsoLoop MSOP Isolators are available in a variety of input, output, and channel configurations.

Key MSOP isolator features include:

- Passive or Digital Inputs
- One or Two Channels
- CMOS or Open-Drain Outputs
- 150 Mbps (S-Series)
- 125°C (T-Series)
- Failsafe (IL600-Series)
- DC Correct (IL500-Series and IL600-Series)
- 2.3 kVrms Isolation (1 min.)
- IEC 61010-2001 Approved

[<Links to Datasheets>](#)

[<Buy Samples>](#)

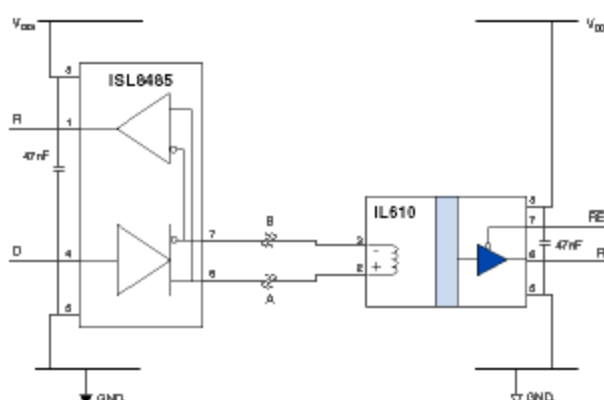


Application Corner

Single-Component RS-485 Receiver Using IL610

By **Sandy Templeton**
Director, Isolator Product Development and Applications

An IL610 can be used as a simple isolated RS-485/RS-422 receiver. No external resistors are required, and cabling is greatly simplified by eliminating the need to power the input side of the receiving board:



The circuit is failsafe because the IL610 is guaranteed to switch to the high state when the coil input current is less than 500 µA. No current-limiting resistor is needed for a single receiver because it will draw less current than the driver maximum. Line termination resistors are not necessary in most IL610 line receiver applications below a data rate of about 10 Mbps because the IL610 coil resistance of approximately 70 Ohms is close to the characteristic impedance of most cables.

The IL610 provides 2.5 kVrms isolation (one minute) and 20 kV/µs transient immunity. Parts are available in 8-pin PDIP, SOIC, or NVE's unique IEC approved MSOP.

For more information on using IL600-Series Isolators as differential receivers, see [Application Bulletin No. 10 \(.pdf\)](#).

[<More Isolator Applications>](#)

MSOP Isolators

Part No.	Data Rate (Mbps)	Transmit/Receive Channels	Input	Output	Features	Max. Temp.
IL510-1	2	1/0	Digital	CMOS	Ext. Sync; DC Correct	85°C
IL511-1	2	2/0	Digital	CMOS	DC Correct	85°C
IL610-1	100	1/0	Passive	CMOS	Failsafe; DC Correct; Output Enable	85°C
IL610A-1	10	1/0	Passive	Open-drain	Failsafe; DC Correct; Output Enable	85°C
IL611-1	100	2/0	Passive	CMOS	Failsafe; DC Correct	85°C
IL611A-1	10	2/0	Passive	Open-drain	Failsafe; DC Correct	85°C
IL710-1	110	1/0	Digital	CMOS	Output Enable	100°C
IL711-1	110	2/0	Digital	CMOS		100°C
IL712-1	110	1/1	Digital	CMOS		100°C
IL710T-1	110	1/0	Digital	CMOS	High Temp.; Output Enable	125°C
IL711T-1	110	2/0	Digital	CMOS	High Temp.	125°C
IL712T-1	110	1/1	Digital	CMOS	High Temp.	125°C
IL710S-1	150	1/0	Digital	CMOS	Ultra-high Speed; Output Enable	100°C
IL711S-1	150	2/0	Digital	CMOS	Ultra-high Speed	100°C
IL712S-1	150	1/1	Digital	CMOS	Ultra-high Speed	100°C

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