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Parts In Stock
Look for the "Buy Online" icon on our Website. Most NVE sensors and virtually all isolators are in stock and available for immediate shipment to anywhere in North America.

NVE Online Store orders generally qualify for $9.95 flat-rate ground shipping, and overnight shipping is available.

Buy Online $9.95 shipping

Awards & Accolades
NVE Corporation ranked 39th in the list of the **200 Best Small Companies** in the October 27, 2008 issue of *Forbes*.
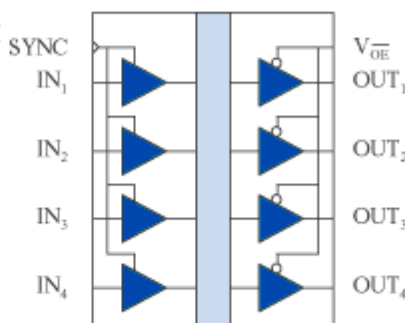<More Accolades>

Fun Fact
The critical conduction layers in NVE sensors and isolators are around two nanometers thick, which is six atomic layers and less than one-ten thousandth the thickness of tissue paper.
<More Fun Facts>

Product News

IL515 Expands IL500 Line

The IsoLoop IL500 Isolator family has a new member, the IL515. The four-channel part has an output enable and an external clocking option. It is an ideal alternative to optocouplers in a number of applications including isolated D/A converters.

Compared to NVE's industry-standard IL700-Series isolators, which have speeds up to 150 Mbps, IL500-Series isolators operate at two Mbps, offer a DC-correct design, and have an external clocking option on some models.

A patented, controllable refresh clock ensures that outputs will be synchronized to inputs within 9 μs. Alternatively, on models such as the IL515, the user can supply an external synchronization clock.

Priced at $0.53 per channel in 1,000-piece quantities, the IL515 is NVE's most cost-effective isolator.

A number of IL500-Series isolators are currently in stock and available for immediate delivery.

Key IL500-Series isolator features include:

- 2 Mbps; 10 ns PWD
- DC Correct
- External Clock Option (IL510; IL515)
- Output Enable (IL510; IL514; IL515)
- 1, 2, 3, or 4 Channels
- -40°C to 85°C Temp. Range
- 2.5 kVrms Isolation (1 min.)
- UL1577 Approval
- IEC 61010-2001 Pending
- MSOP and SOIC Packages

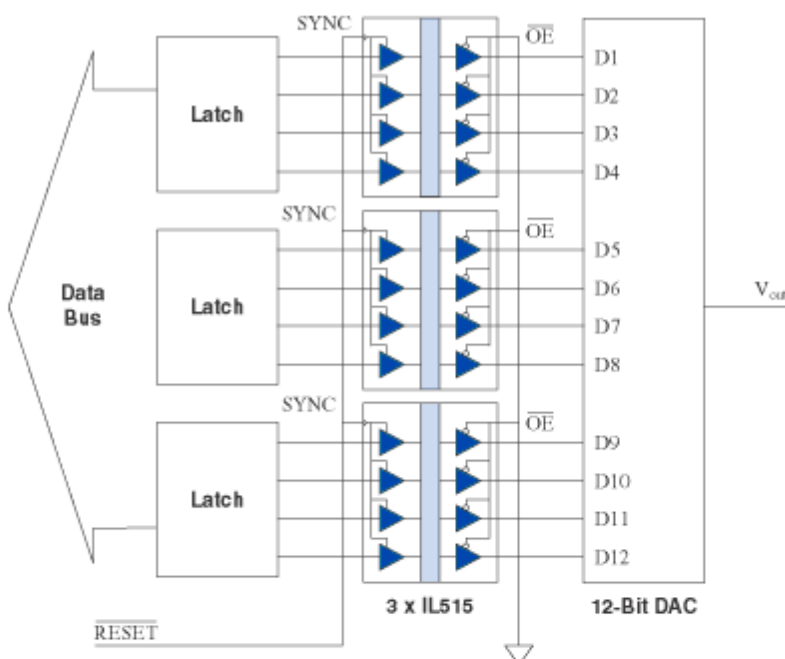**Buy Online $9.95 shipping**

<IL500-Series Selector Guide>

Application Corner

12-Bit DAC Isolation
By Sandy Templeton
Director, Isolator Product Development and Applications

The IL515 is a four-channel digital isolator ideally suited for parallel bus isolation. Though not as fast as the IL715, The IL515 has an internal clock that provides input data refresh pulses. The clock gives the device DC-correct inputs, meaning device outputs will never be out of sync with device inputs for longer than the pulse width of the clock. That's especially useful in applications where device outputs must be the same as device inputs at power up.

The circuit above uses three IL515s to isolate a 12-bit DAC. The unique SYNC function allows the internal clock to be shut off, eliminating the small amount of noise associated with this clock. A reset pulse is applied at power-on to ensure correct data on the isolator outputs. After the reset pulse goes high, data transfer from input to output is initiated by the leading edge of each changing data bit.

IsoLoop The Opto Alternative

<More Isolator Applications>

Isolator Part Numbering

The IsoLoop part numbering system is really quite straightforward once you get to know it, as summarized below:

IL 7 11 T - 3 E TR7

Base Part Number	Channel Config.	Variant
2 = 5-Channel Digital Input	10 = 1 Channel	Blank = Standard
4 = Industry-Standard Xovr	11 = 2 Transmit	A = Open Drain Output
5 = 2 Mbps, DC-Correct	12 = 1 Xmit; 1 Rcv	S = 150 Mbps
6 = Passive Input	13 = 3 Transmit	T = 125°C
7 = High Speed, Digital Input	14 = 2 Xmit; 1 Rcv	W = RS-485 Handshake
31 = Passive-In, 5 Mbps Xovr	15 = 4 Transmit	
32 = Passive-In, 1/8-Load Xovr	16 = 2 Xmit; 2 Rcv	
34 = Passive-In, 20 Mbps Xovr	17 = 3 Xmit; 1 Rcv	
35 = Digital-In, 40 Mbps Xovr	22 = RS-422	
36 = PROFIBUS Transceiver	60 = 5 Transmit	
	61 = 4 Xmit; 1 Rcv	
	62 = 3 Xmit; 2 Rcv	
	85 = RS-485	

Package Size	Package Material	Bulk Packaging
1 = MSOP	Blank = Lead (Pb)	Blank = Tube
2 = PDIP	E = RoHS	TR7 = 7" Tape & Reel
3 = 0.15" SOIC		TR13 = 13" T & R
5 = Bare die		
Blank = 0.30" SOIC		