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Earth Day April 22

An Earth Day reminder that virtually all NVE sensors and isolators are available in REACH, RoHS, and WEEE-compliant lead-free packages.

Most parts are also available in tin-lead versions for customers who need tin-lead reliability or solderability.



April Fool's Application Corner

Magnetic Suit

April 1—Make your own magnetic suit like the one worn by Jeremy Renner in *Mission: Impossible Ghost Protocol*.



You too can jump down a shaft and be caught by a magnetic field*.

Get a Spandex or Lycra bodysuit and a bunch of [NVE magnets](#). We recommend** the [part no. 12031](#) 5/16" diameter by 1/8" sintered Type 5 ceramic disk magnet. If you prefer working in metric, use the [12216](#) 6 mm diameter by 4 mm magnet.

Glue the magnets to the front of the bodysuit with Super Glue. It's important to put all the magnets with the same face (north or south) facing out, with the same magnetic polarity as the electromagnet at the bottom of the shaft.

Depending on your budget, you can determine magnetic polarity with either a gaussmeter or a Dollar Store compass.

You'll need about one magnet per square inch (one every six square centimeters for you metric folks). Depending on your surface area, that's about a thousand magnets.

Then steel your nerves and jump down the shaft.

What could go wrong?***

*Actually, it seems kind of dangerous to us. The math for a magnetic suit doesn't really work out.

** "Recommend" is a bit of an exaggeration.

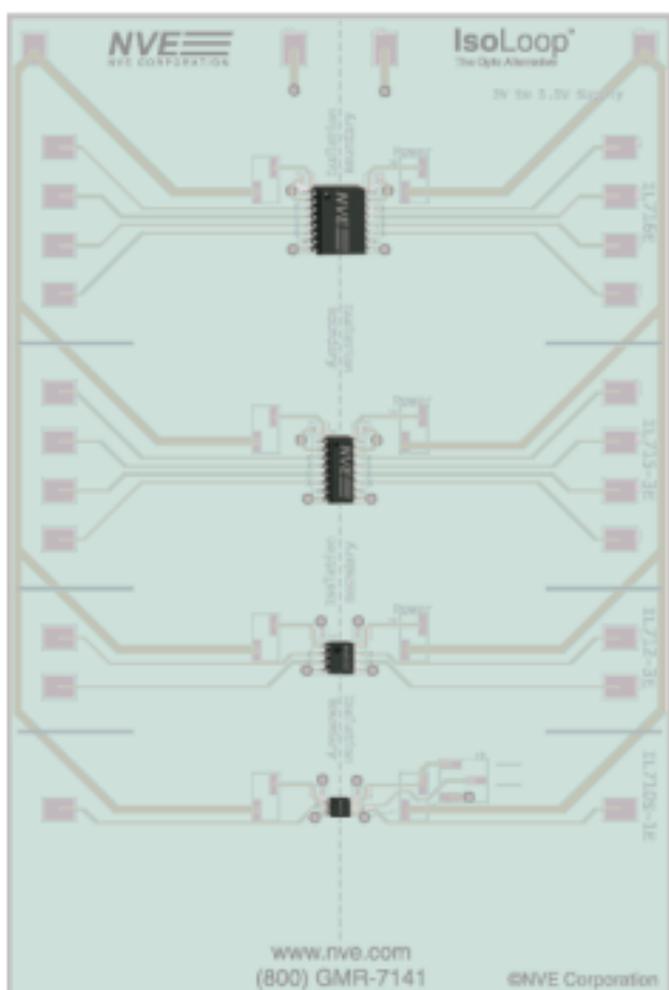
***Quite a bit could go wrong.

IL700-Series Evaluation Board

The new IL700-Series evaluation board lets you try a variety of NVE's flagship series of award-winning IsoLoop Isolators.

The board has four IL700-Series Isolators in four package types:

- [L716E](#) (wide-body SOIC-16)
- [L715-3E](#) (narrow-body SOIC-16)
- [L712-3E](#) (SOIC-8)
- [L710S-1E](#) (MSOP-8)



IL700-Series Evaluation Board

IL700-Series Isolators use patented spintronic GiantMagnetoresistive (GMR) technology. The symmetric magnetic coupling barrier provides a typical propagation delay of only 10 ns and a pulse width distortion as low as 300 ps, the best of any isolator. And their real ceramic/polymer barriers last pretty much forever.

Buy Online
\$9.95 shipping

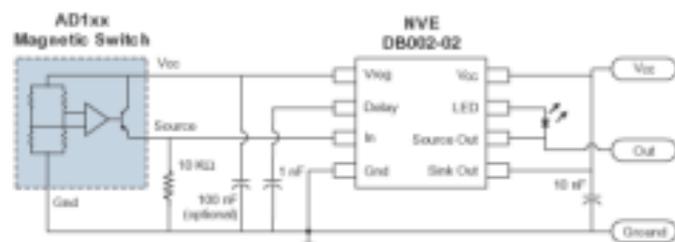
Application Corner

Foolproof Interface IC

Short-circuit outputs, reverse power supplies, and thermal overload. Stuff happens April Fool's day and year round.

But the unique NVE DB002-02 signal processing IC makes sensor systems virtually foolproof.

The eight-pin SOIC works with any current sourcing or CMOS/TTL output sensor, including, of course, NVE's AD1xx-Series magnetic switches. A typical circuit is illustrated below:



The DB002-02 provides a sourcing or sinking output up to 300 mA. Integrated transient protection makes the circuit especially useful for driving capacitive or inductive loads.

The LED is driven with 3 mA when the output is on. Shutdown delay after a short-circuit is set by the 1 nF capacitor. A larger capacitor can be used for a longer delay.

Watch our [video](#) for more information on foolproofing sensor circuits:

[Foolproofing Sensor Circuits](#)

[<DB002-02 Data Sheet \(.pdf\)>](#)

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\$9.95 shipping