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Record Sales

In May NVE reported record quarterly product sales.

Thanks to our existing and new customers for making this possible.

Recent Papers

NVE Research Physicist Dr. Maria Torija co-authored a paper, **"Magnetocaloric effect and critical behavior in Pr_{0.5}Sr_{0.5}MnO₃: An analysis on the validity of Maxwell relation and nature of phase transitions"** at InterMag in May.

Senior Research Physicist Dr. Joe Davies co-authored a symposium, **"Magnetization Reversal in Nanostructures with Graded Perpendicular Anisotropy"** at the MRS Spring Meeting in San Francisco.

[<Links to Papers>](#)

Low-Power Isolated CAN Transceiver

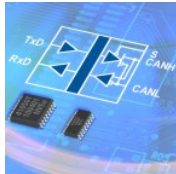
NVE announced an expansion of the IsoLoop® IL41050 isolated CAN transceiver family with the introduction of the low-power IL41050TA-3E.

The new "A" version boasts 10% lower quiescent and dynamic supply current than the original IL41050T versions, but is still plenty fast for CAN and has an ultra-rugged ±500 volts Charged Device Model (CDM) ESD rating:

| Part Number | Max. Quiesc. Supply (Rec.) | Max. Bus-Side Dyn. Supply (Dom.) | Max. Loop Delay | CDM ESD | Package |
|---------------|----------------------------|----------------------------------|-----------------|---------|---------------|
| IL41050 TA-3E | 12 mA | 70 mA | 250 ns | ±500 V | 0.15" SOIC-16 |
| IL41050 TAE | 12 mA | 70 mA | 250 ns | ±500 V | 0.3" SOIC-16 |
| IL41050 T-3E | 13 mA | 78 mA | 210 ns | ±200 V | 0.15" SOIC-16 |
| IL41050 TE | 13 mA | 78 mA | 210 ns | ±200 V | 0.3" SOIC-16 |

The ground-breaking IL41050 family of isolated CAN transceivers was introduced in 2010. Narrow-body versions, designated the IL41050T-3E and IL41050TA-3E, provide a remarkably small footprint.

IL41050-family parts integrate transceiver and isolation functions in a single device with improved performance and reduced chip count compared to discrete transceivers and traditional optocouplers.



Advanced features allow unmatched versatility and reliable bus operation. Unpowered nodes do not disturb the bus, and a unique nonvolatile programmable power-up feature prevents unstable nodes. The devices also have a hardware-selectable silent mode that disables the transmitter.

The narrow-body version of the new part, the IL41050TA-3E, is [in stock](#) for immediate delivery; a wide-body version will be available soon.

[<Product Datasheet>](#)

Buy Online
\$9.95 shipping

Recent Exhibitions



NVE products were on display at **PCIM Europe** and **Sensor+Test 2012**. Both Exhibitions were in May, in Nürnberg, Germany.



Dr. Joe Davies of NVE chaired the "Patterned Films and Elements" session at **InterMag 2012** in Vancouver.

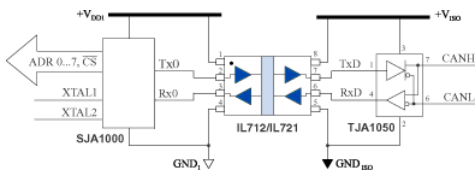
Application Corner

You Can Isolate CAN

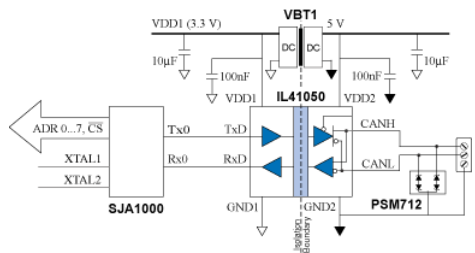
In today's CAN networks, node-to-node isolation is increasingly recommended by designers to reduce EMI susceptibility, especially in high-speed applications and Battery Management Systems.

Isolation allows higher speed and more reliable CANbus operation by eliminating ground loops and reducing susceptibility to noise and EMI.

In the illustrative application below, an IL712 or IL721 isolates a stand-alone CAN transceiver from a microcontroller:



An IL41050 single-chip isolated CAN transceiver (see story above) simplifies the circuit even more, as this reference design shows:



The isolator operates on the 3.3 V microcontroller power supply, and a low-cost dc-dc convertor provides 5 V to power the bus side. The IL41050 can withstand 200 V transients on the bus; the PSM712 provides additional ESD protection if necessary.

For more information, watch this [technical video](#):

[Video: You CAN Isolate CAN](#)

[<More Reference Designs>](#)