

## SPECIAL ANNOUNCEMENT

In addition to our award winning digital isolator products, Analog Devices also offers a wide range of interface products. In order for you to be updated on our wide breadth of interface and digital isolator products and solutions, we've expanded our Digital Isolator Update to now be called the Interface and Isolation Update. Look for your Update quarterly!

## New Products

### Market's First Complete, Single-Chip, HART Modem IC

This device requires the lowest power in the industry and is fully compliant with the HART Communication Protocol. It accurately encodes and decodes HART communication signals in noisy, harsh industrial environments. Consuming 38 percent less power than alternative solutions, the new modem IC requires 60 percent less external support components and is the first to incorporate an internal low-power 0.5 percent accurate oscillator, internal receive filtering and an internally buffered HART output. This integration provides a greater than 75 percent saving in board area over competing products.

- » Learn more about the [AD5700](#): Industries Lowest Power, Complete HART Modem Register with HART Communication Foundation
- » Learn more about the [AD5700-1](#): Industries, Low Power Complete HART Modem with Internal 0.5% Precision Oscillator.

### Guaranteed Latch-Up Prevention in High-Voltage Applications and Provide Industry Leading ESD Protection

The new ADG5412 family of switches guarantees latch-up prevention in high voltage industrial applications operating up to  $\pm 22$  V. These switches are designed for instrumentation, automotive and other harsh environments that are prone to latch-up. Other features include:

- Latch-up proof
  - 8-kV HBM ESD rating
  - Low on resistance:  $< 10 \Omega$
  - $\pm 9$  V to  $\pm 22$  V dual supply operation
  - 9 V to 40 V single supply operation
- » Learn more about the [ADG5412 family](#)
  - » Learn more about the similar [ADG5212](#) family of guaranteed latch-up proof low charge injection parts

### Industry's First Family of MLVDS Transceivers with 8kV IEC ESD on Bus Pins

The ADN4690E and ADN4692E are the latest in a family of eight Multipoint LVDS (MLVDS) transceivers released. These products have the industry's highest ESD rating on the bus pins (8kV IEC61000-4-2, Contact Discharge) with glitch-free power-up for card insertion. These products are targeted for multipoint data and clock distribution in the 100 Mbps (slew-rate limited for EMI) to 200 Mbps data rate range (50 MHz-100 MHz clock freq). They provide a 1:32 fan out function for clocks or a 32 node bus for data communication across a single differential transmission medium (PCB or cable), saving connector cost, board area and reducing the power consumption required compared to having more than two LVDS lanes in parallel.

- » Learn more about the [ADN4690E](#)

## Did You Know?

Join the Interface and Isolation team at the PCIM (Power Conversion Intelligent Motion) trade show in Nuremberg May 8-10th. [Learn more and register to attend.](#)

## Inside iCoupler Technology:

### Surge Testing of Digital Isolators

Many applications require isolation of hazardous voltages in order to meet international safety standards. To ensure the safety of equipment and operators, these standards often require that isolating components, such as digital isolators or optocouplers, survive high voltage surges in excess of 10kV (peak). The ability to test the surge capability of an isolator is, therefore, an essential part of developing safe and reliable components. Learn more [here](#).

*NAppkin Notes - written expressly for the Interface and Isolation Update - are ideas, hints, and tips for*

*building with interface and isolation technology. This issue we present: **HART Communication Made Easy.** [Read whole note here.](#)*



**ENGINEER™**  
**ZONE** Answers. Right. Now.

[Get support in the Interface and Isolation Support Community on EngineerZone.](#)

» Learn more about the [ADN4692E](#)  
» View the full [MLVDS portfolio](#)

## Featured Video

### Interface and Isolation Demo at Embedded World 2012



## Check Out What Else is New

[Application Note: CAN Circuit Implementation Guide](#)

[Customer Success Story: Lantronix New Wireless Medical Devices.  
Replacing Older and Less Reliable Optocoupler Base](#)

[Technical Article: Digital Isolators Offer Performance Advantages in Industrial  
Motor Drive Applications](#)

[Technical Article: Switch and Multiplexer Design Considerations for Hostile  
Environments](#)

[Updated \*i\*Coupler and \*iso\*Power Selection Guide](#)

Our relationship with you is very important. To manage your newsletter subscriptions, visit our [subscription center](#). To no longer receive this type of email, continue to our [unsubscribe page](#). [View our privacy policy](#).

© 2012 Analog Devices, Inc. All Rights Reserved. Trademarks and registered trademarks are the property of their respective companies.

Analog Devices, Inc.  
Corporate Headquarters  
3 Technology Way  
Norwood, MA 02062  
U.S.A.