ANALOG DEVICES

Fall 2014

Interface and Isolation Update

New Products

SPIsolator® Digital Isolators: We've Got Your SPI Bus Covered

Supporting up to 40 MHz SPI clock speeds, the new 5 kV rms digital isolators are six times faster, over 80% smaller, and cost as much as 85% less than competing optocoupler or digital isolator-based solutions.

- The ADuM4150 supports a delayed clock output on the master side of the part that can be used with an additional general-purpose port on the master to support up to 40 MHz clock speeds.

The ADuM4150 is production released. Sample and evaluate now.

Learn More | Data Sheet | Buy Eval Board | Buy Product

- The ADuM4151/ADuM4152/ADuM4153 provide four high speed channels and three additional independent, low data rate channels in different configurations.

The ADuM4151/ADuM4152/ADuM4153 is production released. Sample and evaluate now.

Learn More | Data Sheet | Buy Eval Board | Buy Product

- The ADuM4154 digital isolator provides a slave select multiplexing system that allows up to four slave drives to be serviced from one isolator

The ADuM4154 is production released. Sample and evaluate now.

Learn More | Data Sheet | Buy Eval Board | Buy Product

High Accuracy, Isolated Σ-Δ Modulator with LVDS Interface

AD7405 increases the efficiency of motor drivers and power inverters and features:

- 87 dB SINAD (signal noise and distortion ratio), 14.2 ENOB
- Low offset drift (3.8 µV/°C max)
- 1250 V_{PEAK} working insulation voltage
- Conforms to insulation and safety related specifications: UL 1577, CSA, and VDE

The AD7405 is production released. Sample and evaluate now.

Learn More | Data Sheet | Buy Eval Board | Buy Product

CN0349: Fully Isolated Conductivity

Measurement Data Acquisition System

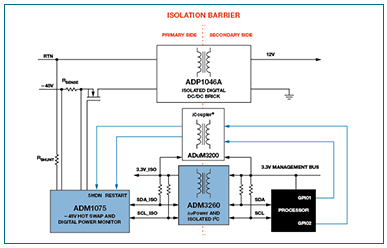
Circuits from the Lab® Reference Designs

This design solution is optimized for high precision and low cost, and it uses only five active devices. The circuit has a total error of less than 1% FSR after calibration. The small footprint of all the components makes the circuit ideal for applications where printed circuit board (PCB) real estate is at a premium. The digital output of the circuit is fully isolated; therefore, the ground loop interference is eliminated, making it ideal for harsh industrial environments.

Read this circuit note and download the design files.

Circuit Note | Explore in Signal Chain Designer

Featured Analog Dialogue



Designing Robust, Isolated I²C/PMBus Data Interfaces for Industrial, Telecommunications, and Medical Applications

Featured Webcast

Working with Digital Isolators in Motor Control Applications; Webcast Now On-Demand

Featured Technical Article


ANALOG DEVICES

Technical Article
MS-2711

Digital Isolators Provide an Alternative Approach to the Design of a 2 Watt Isolated DC-to-DC Power Supply

by Brian Kennedy, applications engineer, Analog Devices, Inc.

Digital Isolators Provide an Alternative Approach to the Design of a 2 Watt Isolated DC-to-DC Power Supply

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