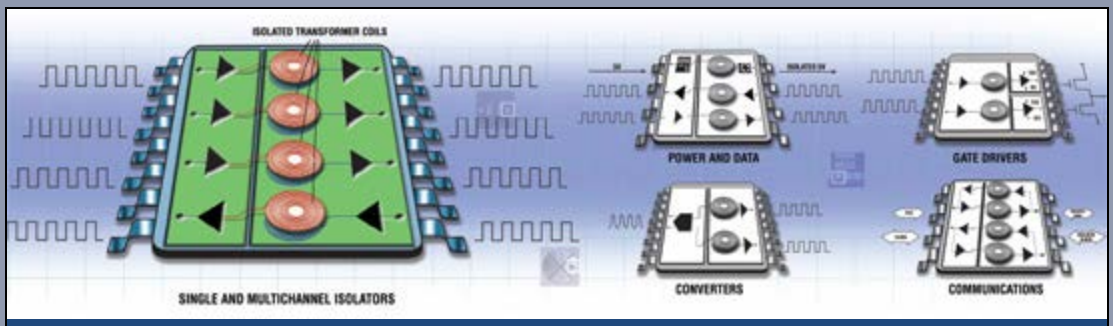

Analog Devices' Digital Isolation Update *i*Coupler® News

New Products

ADuM3211

The ADuM3211 is a dual-channel digital isolator with enhanced system-level ESD reliability. The ADuM3211 offers high temperature operation up to 125°C and data rates up to 10 Mbps.

Learn more about the ADuM3211 here.

ADM2582E/87E – *Now Released*

The ADM2582E/ADM2587E signal and power isolated RS-485/422 transceivers integrate line driver, line receiver, oscillator, rectifier, regulator, and transformers into a single chip that isolates both the data and power lines.

Learn more about the ADM2582E here.

Learn more about the ADM2587E here.

Inside *i*Coupler Technology

Introduction to Safety Certification for *i*Coupler Digital Isolation Products

By Mark Cantrell

Analog Devices' *i*Coupler digital isolators are, first and foremost, safety devices. In many cases they stand between a user and potentially fatal voltages. They do perform other functions, however, it is the safety function that links these products to the regulatory structure provided by the International Electrical commission (IEC), Underwriters Laboratories (UL) and VDE institute. This article discusses how these agencies determine whether an isolator is capable of meeting safety requirements, and how they ensure isolators continue to perform over their production lifetime. This article also discusses additional requirements for medical products that require the highest levels of safety.

Read the entire *i*Coupler article in this PDF. (102,400 bytes)

*N**App**kin **Notes** – written expressly for the* Digital Isolation Update *– are ideas, hints, and tips for building with iCoupler technology.*

Using the AD7400A Isolated ΣΔ Modulator as an Isolated Amplifier

By Michael Mueller-Aulmann

The AD74xx family of isolated ΣΔ ADCs is typically used in combination with an FPGA or DSP, such as a Blackfin®, in motor drives to measure the phase-current across shunts or monitor DC bus voltages. However, where a less capable microcontroller is used, ΣΔ modulation may not be a suitable approach. That doesn't mean the AD74xx cannot be used in such situations, because there's a straightforward way to convert the AD74xx into an isolated amplifier using a simple RC filter. This note describes how to implement an isolated amplifier with an AD7400A.

Read the entire *i*Coupler application note in this PDF. (155,648 bytes)

Circuits from the Lab

16-Bit Fully Isolated Voltage Output Module Using the ADuM1401 Digital Isolator, AD5662 DAC and External Amplifiers

This circuit provides a complete solution for an industrial control output module. This design is suitable for process control programmable logic controllers (PLCs) and distributed control systems (DCSes) that require bipolar output voltage ranges.

Learn more here.

Please visit www.analog.com/icoupler for more information.

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