

## Performance, Reliability and Measurement Confidence in Harsh Industrial Environments Improved with Industry's Fastest LVDS Digital Isolators

NORWOOD, Mass.--(BUSINESS WIRE)-- <u>Analog Devices, Inc.</u> today introduced a low-voltage differential signal (LVDS) digital isolator series designed to improve performance, reliability and power consumption in industrial instrumentation and programmable logic controller (PLC) applications that previously required redesign of the interface to support LVDS signal isolation. Incorporating ADI's award-winning iCoupler® digital isolator technology, the ADN465x series ensures safety and reliability through proven galvanic isolation in a single package while delivering data throughput rates of 600 Mbps (up to four times faster than competing digital isolators), ultralow jitter at 70 ps, and 4.5-ns max propagation delay. With ADN465x devices, high-speed serial LVDS signals can now be directly isolated without needing to deserialize as compared to previous custom implementations. Design resources and time are saved by offering an off-the-shelf, high-performance, LVDS-compatible solution.

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- View the new LVDS isolators product page, download data sheet, order samples and evaluation boards: <a href="http://www.analog.com/en/products/interface-isolation/isolation/isolated-lvds.html">http://www.analog.com/en/products/interface-isolation/isolation/isolated-lvds.html</a>
- Connect with engineers and ADI product experts on EngineerZone®, an online technical support community: https://ez.analog.com/community/interface-isolation

In industrial PLC backplanes, data generated from an increasing number of sensors is distributed between processing nodes for improved control, while also maintaining robustness to interference for system dependability. With ultra-low jitter of 70 ps, full compliance to the TIA/EIA-644-A standard, reinforced insulation with surge protection tested at 10 kVpk, and the ability to withstand voltage ratings up to 5 kVrms, the new LVDS digital isolators enable advanced I/O extension integration across meters of cable at high signal rates.

Real time analysis of grid supply is paramount as server farm density increases to support the ever-increasing rise in consumption. Smart power quality analyzers that enable real-time analysis require precise data at high speeds. In addition to supporting up to 600-Mbps data rates, ADN465x LVDS digital isolators support 300-MHz clocks to enable isolation of precision convertors with LVDS interfaces. Source synchronous interfaces are supported with low channel-to-channel skew of 200 ps. Ultra-low additive phase jitter of 380 fs enables A/D converter sampling clocks to be isolated while maintaining low aperture jitter for full A/D converter performance and resolution.

## **LVDS Digital Isolators Key Features**

- 600-Mbps throughput, 4.5-ns max propagation delay, 70-ps total jitter
- LVDS I/O, high-speed isolator and LDO for flexible 2.5/3.3V supply combined in a single SOIC-W package
- 10-kVpk basic and 6-kV reinforced surge protection ratings, 5 KVrms withstand, 350-Vrms working voltage
- 3-channel configurations, LVDS fail-safe options, flexible 2.5/3.3V supply

## **Pricing and Availability**

Product	Availability	Fail Safe Receiver Inputs	Total Channels	Price Each per 1,000	Packaging
ADN4650	Now	No	Dual-Channel (same direction)	\$5.50	20-lead SOIC-W
ADN4651	Now	Yes	Dual-Channel (one each direction)	\$5.50	20-lead SOIC-W
ADN4652	April 2016	Yes	Dual-Channel (one each direction opposite pin-out)	\$5.50	20-lead SOIC-W

## **About Analog Devices**

Analog Devices (NASDAQ: ADI) designs and manufactures semiconductor products and solutions. We enable our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure and connect. Visit <a href="http://www.analog.com">http://www.analog.com</a>

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