



news release

Akros Silicon Offers Industry's First Integrated Bidirectional 3.4MHz I²C Isolator

Expands company's GreenEdge™ digital isolation technology into the PSE segment of the Power-over-Ethernet market, enabling real-time energy management in network systems.

SUNNYVALE, Calif. – May 22, 2014 – [Akros Silicon Inc.](http://www.akrossilicon.com), a premier supplier of leading-edge intelligent energy management ICs, announces the AS1705 digital isolator. Optimized to enable real-time telemetry and control of Power Sourcing Equipment (PSE) controllers used in Power-over-Ethernet capable (PoE) switches and routers, the AS1705's 3.4 MHz communication speed and integration level are unmatched in the industry.

The AS1705 comprises a dual channel bidirectional I²C digital isolator as well as five unidirectional channels of isolation. Built on Akros' proven GreenEdge™ digital isolation technology, each of the isolation channels are rated to provide 2.5 kV of galvanic isolation. On the bidirectional I²C channels, the AS1705's 3.4 MHz data rate provides the needed bandwidth for a system's processor to dynamically monitor and control the power requirements for multiple PSE controllers within a system. This enables the system to allocate the precise amount of power required by each port while eliminating unnecessary power allocation, which in turn reduces system energy consumption.

The five unidirectional channels replace optocouplers or standalone unidirectional digital isolators and provide all of the isolated communication signals used by a PSE system, including system reset, PSE interrupt and three power good indicators from the system's power supply units. The integrated functionality of the AS1705 enables it to replace: either one I²C digital isolator and five optocouplers or one I²C digital isolator and a five-channel unidirectional digital isolator. In both of these cases, the AS1705 reduces the PCB footprint of the isolation circuitry by 50%, simplifying board layout and reducing design time.

“The 3.4 MHz AS1705 isolator offers the highest speed solution for real-time network power diagnostics for PSE equipment,” said Elie Antoun, President & CEO of Akros Silicon. “This integrated digital isolator simultaneously solves the design challenges of increasing communication bandwidth over the isolation barrier while also reducing PCB area in 48 and 96 port Ethernet switches.”

Availability: Now
Delivery: 8 weeks ARO
Price: \$2.30 for 1K piece quantities

For more information, please visit <http://www.akrossilicon.com>.



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Tags: #PoE, #Akros Silicon, #Akros

About Akros Silicon

Headquartered in Silicon Valley, [Akros Silicon](#) provides leading edge, intelligent energy management ICs. Akros' disruptive silicon technology makes it possible to integrate multiple ICs, high-voltage isolation and discrete components into a single device, thus enabling electronic OEMs to develop cost-effective and energy-efficient solutions.

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