Industry’s Smallest Isolated DC-to-DC Converter

Analog Devices, Inc. is expanding its extensive portfolio of digital isolation products with the industry’s smallest isolated dc-to-dc converter. Offering a 5-kV rms (root-mean square) isolation rating in a 10-mm × 10-mm package, the ADuM6000 is a 0.5 watt device that integrates ADI’s proprietary iCoupler digital isolation technology and isoPower dc-to-dc converter. The new digital isolator allows designers to free up valuable circuit-board real estate while eliminating the time-consuming step of securing medical or other safety approvals (such as IEC-60601-1), all at a fraction of the cost of alternative devices, including optocouplers. Safety is a key requirement in medical and industrial designs, and the ADuM6000 protects the device and end users from exposure to voltage levels that could compromise safety and reliability. Watch a video on the ADuM6000 digital isolators.

The ADuM6000 digital isolator enables designers to reduce the form factor of their system module or to maintain the same form factor even as they add more features and functions. With alternate solutions, such as optocouplers and separate, isolated dc-to-dc converters, it may not be possible to add new functionality to existing system modules.

Also now available are the ADuM620x series of dual-channel digital isolators that feature isoPower integrated, isolated dc-to-dc converter technology and 5-kV rms isolation rating. The ADuM620x series includes the ADuM6200, ADuM6201 and ADuM6202 digital isolation products that differ by channel configuration.

Availability, Pricing and Complementary Components

Product Availability Price Each per 1,000 Channel Configuration Package
ADuM6000 Now $3.96 - 16-lead SOIC
ADuM6200 Now $5.12 2/0 16-lead SOIC
ADuM6201 Now $5.12 1/1 16-lead SOIC
ADuM6202 Now $5.12 0/2 16-lead SOIC

In some designs requiring USB (universal serial bus) isolation and isolated power, the ADuM4160 USB isolator can be used together with the ADuM6xxx devices.

Source URL (retrieved on *03/12/2014 - 1:25pm*):
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