



Analog Devices Launches Isolation Technology to Maximize Power Efficiency and Minimize Emissions as Factories Migrate to Industry 4.0

[Analog Devices, Inc.](#), an Industry 4.0 technology leader, today announced a simple power solution that maximizes efficiency and minimizes electromagnetic (EM) emissions of motion systems as customers migrate to higher density automation. The ADuM4122, an isolated, dual-drive strength output driver that uses *iCoupler*® technology, empowers designers to harness the benefits of higher efficiency power switch technologies.

Electric motor-driven systems account for 40% of global electricity consumption, according to the [International Energy Agency](#), and improvements in motor efficiency can have wide-reaching economic and environmental benefits. With the increased adoption of industrial automation and IoT within smart factories, there is a growing demand for intelligent technology and features within systems to ensure maximum efficiency. The ADuM4122 is the first simple solution that accomplishes this by controlling how fast or slow a MOSFET or IGBT turns on or off by user command, on the fly, thereby controlling motor currents.

“Flexibility and efficiency are two key tenets of a secure, connected enterprise. Previously, the typical solution was to choose a gate driver strength that would enable adherence to EM system regulations at all operating points, meaning systems were often over-engineered and under-utilized,” said Mack Lund, Director of Interface and Isolation Technology Group at Analog Devices. “Now, users can dynamically move from a slower to a faster switching transition, thus optimizing EM emissions without sacrificing efficiency. In short, you no longer have to leave performance on the table when trying to achieve lower emissions and power consumption.”

The new ADuM4122 is a simple dual-drive strength output driver that efficiently toggles between two slew rates controlled by a digital signal. Smaller than existing discrete or complex

integrated solutions that have 20 or more pins, the ADuM4122 features only eight pins and works in a variety of operating conditions.

- View the ADuM4122 product page, download the data sheet and order samples: <http://www.analog.com/ADuM4122>
- View the iCoupler page: <https://www.analog.com/en/products/interface-isolation.html>
- More information about Industry 4.0: <http://www.analog.com/industry4.0>
- Link to order Evaluation Board: <https://www.analog.com/en/design-center/evaluation-hardware-and-software/evaluation-boards-kits/EVAL-ADuM4122.html>

The ADuM4122 further improves system capabilities with high common-mode transient immunity and low propagation delay for high performance applications such as motion control, robotics and energy.

Pricing & Availability

Product	Production Availability	Price Each per 1,000	Package
ADuM4122	Now	Starts at \$2.53	8-lead SOIC

About Analog Devices

Analog Devices is a leading global high-performance analog technology company dedicated to solving the toughest engineering challenges. We enable our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure, power, connect and interpret. Visit <http://www.analog.com>.

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