

Isolated Power Conversion

Broad portfolio of robust, safe, integrated solutions.

Industrial motion control requires sensing and feedback of several variables, such as motor winding current or voltage.

Isolated gate drivers, isolated sigma-delta ADCs, isolated power, and isolated amplifiers from ADI enable the next generation of robust and reliable intelligent motion systems that deliver higher efficiency and productivity.

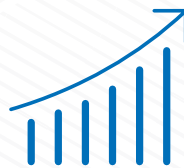
Our Solutions Enable



Higher
Efficiency



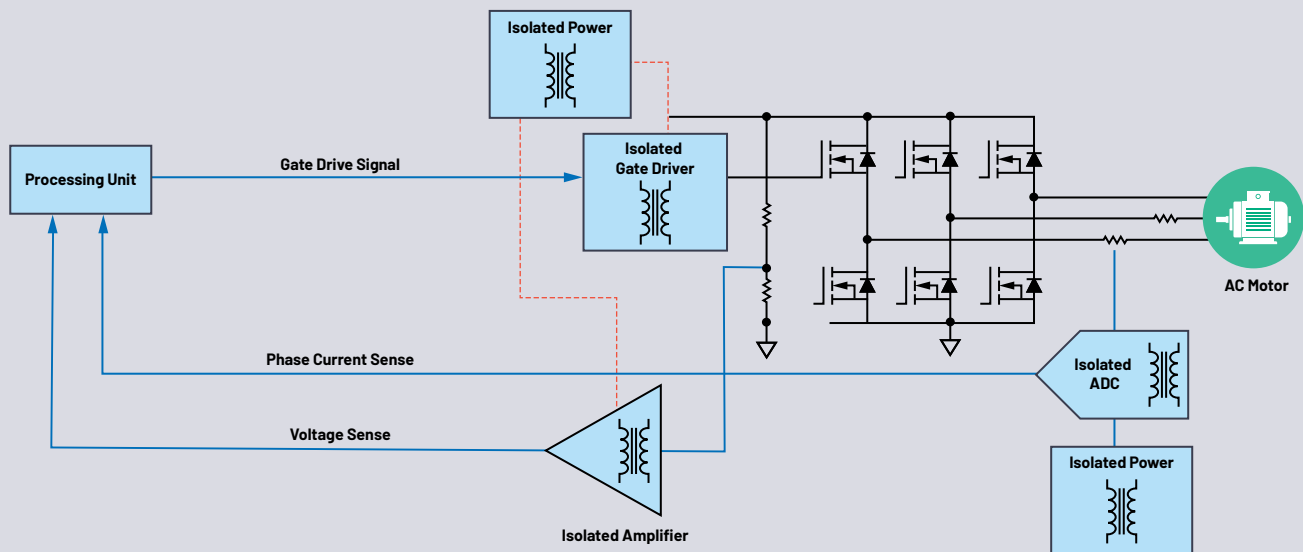
Compact
Solutions



Higher Energy
Density



SiC and
GaN Compatibility



Isolated Gate Drivers

Analog Devices small form factor isolated gate drivers are designed to enable higher switching speeds and to meet system size constraints. These isolated gate drivers leverage ADI's proven iCoupler® technology.

The high pulse fidelity architecture enables higher efficiency levels. ADI's isolated gate drivers are particularly suited to drive new generation SiC and GaN, providing industry's fastest short-circuit protection (SCP) response time and short propagation delay.

ADuM4135	Single-/dual-supply high voltage isolated IGBT gate driver with Miller clamp
ADuM4122	Single gate, adjustable slew rate, isolated gate driver
MAX22700/MAX22701/MAX22702	Family of high CMTI, isolated gate drivers
ADuM4221	Isolated, half-bridge gate driver with adjustable dead time and dual input

Isolated Amplifiers

Our isolated amplifiers deliver more reliable performance over life and temperature against traditional optocoupler-based solutions, enabling robust current and voltage sensing for both AC and DC applications.

Low thermal drift and the ease of implementation simplify your motion control design.

ADuM3190	2.5 kV rms isolated amplifier
ADuM4190	High stability isolated amplifier

Isolated ADCs

High performance sigma-delta modulators from Analog Devices enable highly reliable accurate motor control and increase efficiency by reducing the shunt size requirements. Low offset and gain drift reduce torque ripple delivering superior motion control performance.

High CMTI ratings enable use with SiC and GaN devices and a small package size solution with an integrated LDO regulator enables compact system design.

AD7401A	16-bit, isolated sigma-delta modulator
ADuM7701/ADuM7702/ ADuM7703/ADuM7704	Family of 16-bit, isolated sigma-delta modulators

Isolated Power

Analog Devices isoPower® technology utilizes proprietary iCoupler chip scale transformers to integrate isolated DC-to-DC controllers with data isolation into a single package.

This enables designers to implement robust, reliable and high energy density drives that can be integrated with the motor itself.

Our solutions enable isolated power transfer with fast design cycle time.

ADuM6028	Low emission isolated DC-to-DC converter
ADuM6421A	Quad-channel isolators with integrated DC-to-DC converter

Isolated Flyback Controller

Our flyback controllers feature proprietary iCoupler and no-opto flyback technology that provide robust galvanic isolation and enable a compact motion control solution by integrating the voltage feedback loop and reducing the external component count.

LT8300/LT8301/LT8302/LT8304	Family of isolated flyback controllers
MAX17690	No-opto isolated flyback controller
ADP1071-1/ADP1071-2	Isolated synchronous flyback controllers with integrated iCoupler