Low-Side Driver IC Targets Automotive Applications

International Rectifier's AUIRS4426S is a dual-channel low-side driver IC for use in automotive applications including hybrid power train drives, direct fuel injection and dc-dc converter applications. Available in an 8-lead SOIC package, the automotive-qualified AUIRS4426S is a rugged low-voltage high-speed power MOSFET and IGBT driver that features matched propagation delay for both channels to help simplify design (see the table and Fig. 1).

"With its ruggedized monolithic construction, the AUIRS4426S is particularly well suited to HEV applications that require a rugged and flexible solution," says Marzak Li, product marketing manager for IR's Automotive Products Business Unit.

The AUIRS4426S features a gate drive supply range from 6 V to 20 V, CMOS Schmitt-triggered inputs, outputs out-of-phase with inputs, and active-low input logic (Fig. 2.) The device is qualified according to AEC-Q100 standards, features an environmentally friendly, lead-free and RoHS-compliant bill of materials, and is part of IR's automotive quality initiative targeting zero defects. Pricing for the AUIRS4426S begins at $0.51 each in 100,000-unit quantities.

Table. Key specifications for the AUIRS4426S dual-channel low-side driver IC.

Part Number	Package	Topology	Voffset	Io+ & Io- (typ)	ton & toff (typ)	Supply voltage
AUIRS4426S	SOIC-8	Dual low-side driver	25 V	2.3 A and 3.3 A	70 ns & 65 ns	6 V to 20V

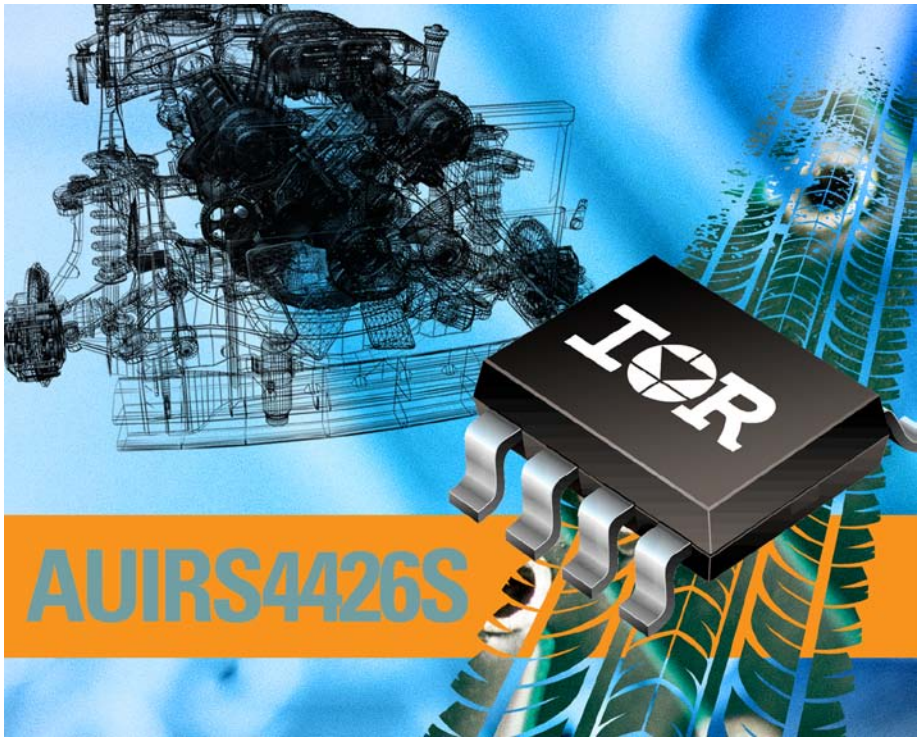

Fig. 1. The AUIRS4426S low-side driver IC's monolithic construction makes it well suited for HEV applications that require a rugged and flexible solution.

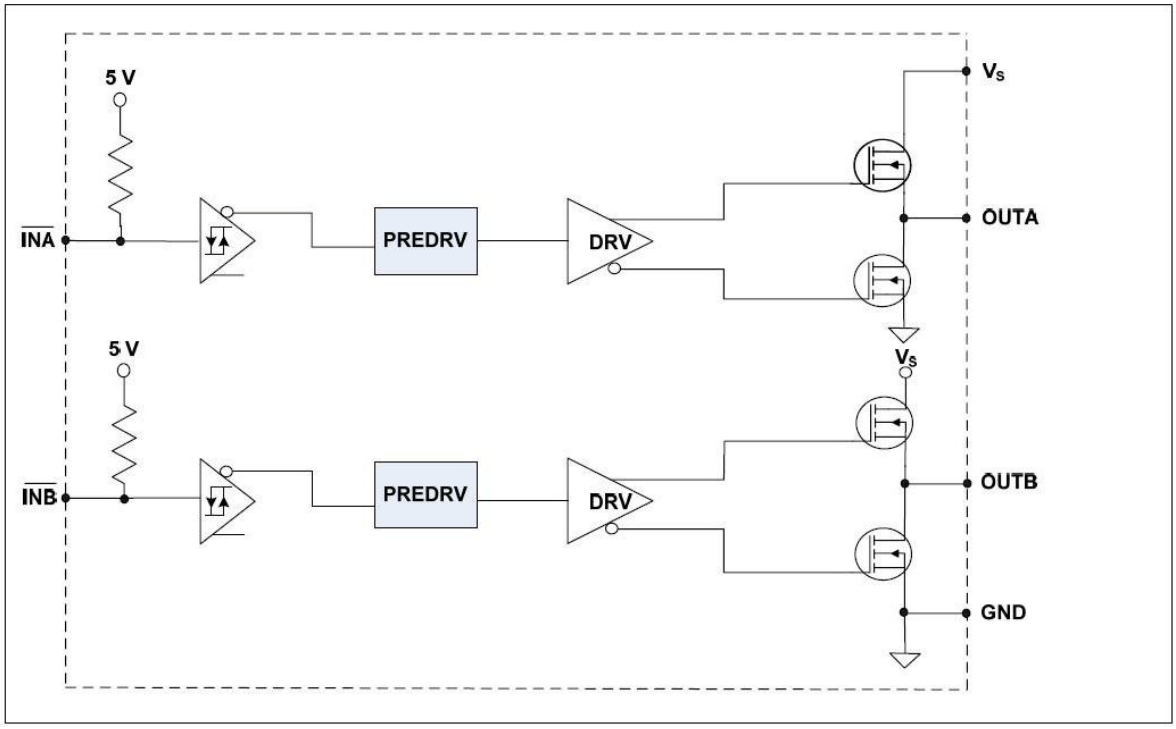

Fig. 2. Internal block diagram of the AUIRS4426S.