Gate-drive IC shrinks automotive high-current switching systems while boosting performance

International Rectifier introduced the highly compact AUIR08152S automotive-qualified gate drive IC featuring high output current in excess of 10A that shrinks system size and boosts performance in automotive and industrial high-power switching applications.

The AUIR08152S buffer gate driver enables the use of any standard low current gate driver, opto-coupler or CMOS isolator to drive large size IGBTs or MOSFETs in switching applications and efficiently boosts any low or under-powered gate drive into a high current drive system. Available in a compact SO8 package, the highly integrated buffer IC can replace up to 10 discrete components for simpler, smaller and more robust system design.

The new device’s very low output impedance and power losses permit operation in harsh and high temperature environments. The AUIR08152S additionally features negative Vgs driving and continuous on-state capability as a result of an integrated PMOS output in parallel to the high-side pull-up NMOS. The OUTH and OUTL separated outputs allow selection of two different external resistors for charging and discharging the gate essential for controlling EMI and CdV/dT effect in high power motor driver and SMPS applications.

The device is qualified according to AEC-Q100 standards, housed in an industry standard SO-8 package that features an environmentally friendly, lead-free and RoHS compliant bill of materials and is part of IR's automotive quality initiative targeting zero defects.

Specifications

Part Number	Package	Io	Vcc-VEE	Rout	Ton Toff	Tr Tf
AUIR08152S	SO-8	Io>10A	15V to 35V	100mOhm / 200mOhm typ	150ns/230ns typ	150ns/15

Datasheets and qualification standards are available on the International Rectifier website at www.irf.com [1].

Availability and pricing

Available in an 8-pin SOIC package, pricing for the AUIR08152S begins at US $0.99 each in 10,000-unit quantities. Production orders are available immediately. Prices are subject to change.

Source URL (retrieved on *07/28/2014 - 11:15pm*):
http://www.ecnmag.com/product-releases/2013/12/gate-drive-ic-shrinks-automotive-high-current-switching-systems-while-boosting-performance

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[1] http://www.irf.com/