



Avago Technologies Introduces Automotive-Qualified Gate Drive Optocoupler for Hybrid and Electric Vehicles

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Newest R²Coupler(TM) Family Device Meets AEC-Q100 Grade 1 Requirements with Extended Temperature Range Operation for Reliable Power Control in High-End, Stronger Engines

MUNICH, Nov 09, 2010 (BUSINESS WIRE) -- Avago Technologies (Nasdaq:AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced a new automotive-grade optocoupler with extended temperature operation for use in hybrid and electric vehicles, here at the Electronica 2010 trade fair. Increasing consumer demand for hybrid and electrical vehicles with more powerful engines has car makers and their suppliers seeking more robust gate drive optocouplers to help drive higher-capacity engines, as well as battery charger and DC-DC converter systems. The new Avago [ACPL-38JT](#) 2.5-Amp optocoupler is qualified to AEC-Q100 Grade 1 stress test requirements, delivering safe electrical signal isolation from -40 to +125° C.

The highly-integrated ACPL-38JT power control device incorporates a complete Insulated Gate Bipolar Transistor (IGBT) driver for signal switching, along with desaturation detection and fault status feedback systems for constant signal protection. The device is part of the Avago R²Coupler(TM) family of optocouplers with reinforced insulation for reliable signal isolation, which is critical in automotive and high-temperature industrial applications such as isolated IGBT/power Metal Oxide Semiconductor Field Effect Transistor (MOSFET) gate drives, industrial inverters, AC and brushless DC motor drives, and uninterruptable power supplies.

"This newest offering in our R²Coupler family gives Avago the most complete automotive optocoupler portfolio, putting our products in excellent position to grow along with the market for hybrid and electric cars," said Cheng-Dee Lee, Business and Applications Development Director for Isolation Products at Avago. "More than 40 automotive companies, including car manufacturers and tier one suppliers, are using or evaluating our R²Coupler isolation products. Avago optocouplers are well known for their reliable signal and high-voltage isolation with excellent EMI immunity, with more than 35 years of proven field applications in the military, aerospace, mass-transit and industrial markets."

During power-up, the ACPL-38JT optocoupler's under voltage lock-out (UVLO) protection feature protects the IGBT from receiving insufficient gate voltage by forcing lower output. The integrated IGBT gate driver is designed to increase the performance and reliability of a motor drive without the cost, size and complexity of a discrete design. Available in a 16-lead small outline (SO-16) surface mount package, the device is compliant to UL 1577, IEC/EN/DIN EN 60747-5-2 and CSA industrial safety standards.

Avago is exhibiting the ACPL-38JT optocoupler along with a wide range of its isolation, fiber optics, motion control and LED products for the industrial and automotive markets at Electronica 2010 in Hall A4 booth 458 at the New Munich Trade Fair Centre from November 9-12.

Additional ACPL-38JT Product Features

- Drives IGBTs up to $I_C = 150A$, $V_{CE} = 1200V$
- Input CMOS/TTL compatible
- 500 ns max. switching speed
- Soft IGBT turn-off
- 15 kV/us minimum common mode rejection (CMR) at $V_{CM} = 1500V$

U.S. Pricing and Availability

The Avago ACPL-38JT automotive gate drive optocouplers are priced at \$4.15 in 10,000 piece quantities. Samples and production quantities are available now through the Avago direct sales channel and via worldwide distribution partners. More information on Avago isolation amplifiers can be found at www.avagotech.com/optocouplers.

About Avago Technologies

Avago Technologies is a leading supplier of analog interface components for communications, industrial and consumer applications. By leveraging its core competencies in III-V compound and silicon semiconductor design and processing, the company provides an extensive range of analog, mixed signal and optoelectronics components and subsystems to approximately 40,000 end customers. Backed by strong customer service support, the company's products serve four diverse end markets: wireless communications, wired infrastructure, industrial and automotive electronics, and consumer and computing peripherals. Avago has a global employee presence and heritage of technical innovation dating back nearly 50 years to its Hewlett-Packard roots. Information about Avago is available on the Web at www.avagotech.com.

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