Avago Technologies' Automotive-Grade Optocouplers Selected for Use in Mazda's New Hydrogen/Gas Powered Hybrid Vehicle

January 6, 2010

R2Coupler Isolation Products Being Used for Electric Power Generation Automaker's Premacy 'Green Cars'

SAN JOSE, Calif. & SINGAPORE, Jan 06, 2010 (BUSINESS WIRE) -- Avago Technologies (Nasdaq: AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced that Yaskawa Electric Corporation has selected two of its latest R2Coupler(TM) isolation products for use in the futuristic Mazda Premacy hydrogen/gas powered hybrid vehicle. Yaskawa, which makes the electronic motor inverter system for the Premacy, is using Avago's ACPL-782T automotive grade isolation amplifier and ACPL-312T gate drive optocoupler in its electronic motors.

Mazda's Premacy hybrid vehicle is an innovative concept car, which combines a hydrogen rotary engine and a hybrid system. The vehicle is a bi-fuel version of Mazda's compact MPVMazda5 and has a fuel efficient hybrid system that substantially increases its driving range and power over other hybrid vehicles in its class. The ACPL-312T provides isolated gate drive switching capability to drive the vehicle's high powered insulated gate bipolar transistors/metal oxide semiconductor field effect transistors (IGBTs/MOSFETS) while the ACPL-782T isolation amplifier is used for motor inverter current/voltage monitoring and measurement.

"We're delighted that Yaskawa Electric Corporation, which is one of Mazda's key electronic motor system suppliers has chosen our R^2Coupler products for integration into their electronic motors," said Tze Siong Chong, vice president and general manager, Isolation Products Division, Avago Technologies. "The adoption of these products for use in the electronic motor that is being used in the Premacy is validation that our automotive-grade isolation products meet the stringent reliability and reinforced capabilities that designers of automotive electronic motor inverter systems require."

Avago's ACPL-782T isolation amplifier is designed with a tight +/-2 percent gain tolerance which provides high accuracy measurement and stability over the time needed to accurately monitor motor current or voltage in high noise motor control environments. The ACPL-312T grade gate drive optocoupler provides up to 2.5 amps of peak output current to drive high powered IGBTs/MOSFETs used in electric motor inverters. Additionally, it has a low proprogation delay of 0.5 us which allows the circuit designer to reduce switching dead time and improve inverter efficiency. Both of Avago's new R^2Coupler products offer enhanced construction with superior thermal conductivity making them ideal for providing isolation in inverter and power management systems.

"We used Avago's ACPL-782T, which is indispensable, for the inverter control DC voltage detector in automotive applications and have succeeded in developing an instantaneous voltage monitoring system," said Kiyotaka Fuji, Inverter Division Engineering Department, Yaskawa Electronic Corporation. "The system is enabled to control the vehicle's power and allow us to provide a high output inverter control according to our customer's specifications. In automotive (EMC) immunity environments, the isolation amplifier produced by Avago Technologies has provided distinguished performance while satisfying the criteria of the test environment. Additionally, we used Avago's ACPL-312T for the IGBT drive to shorten the dead time, thereby achieving highly efficient inverter control."

The ACPL-782T and ACPL-312T are designed to operate over a wide operating temperature range and are qualified to AEC-Q100 Grade 1 automotive stress test requirements and manufactured under TS16949 automotive quality standards. Moreover, these R^2Couplers from Avago provide reinforced insulation and reliability that delivers safe signal isolation which is critical in automotive and high temperature industrial applications. More information on Avago's R^2Coupler series can be found at the following URL: http://www.avagotech.com/pages/en/optocouplers_plastic/plastic_automotive_optocoupler/.

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 40 years to its Hewlett-Packard roots. Information about Avago is available on the Web at www.avagotech.com

Follow Avago on Twitter at http://twitter.com/Avagotech.

Safe Harbor Statement

This announcement and supporting materials may contain forward-looking statements which address our expected future business and financial performance. These forward looking statements are based on current expectations, estimates, forecasts and projections of future Company or industry performance based on management's judgment, beliefs, current trends and market conditions, and involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. Accordingly, we caution you not to place undue reliance on these statements. Avago Technologies Finance Pte. Ltd.'s Annual Report on Form 20-F filed with the SEC on December 17, 2008, recent Current Reports on Form 6-K, and other filings with the U.S. Securities and Exchange Commission ("SEC") (which you may obtain for free at the SECs website at http://www.sec.gov) discuss some of the important risk factors that may affect our business, results of operations, and financial condition.

SOURCE: Avago Technologies

Avago Technologies
Alain Dangerfield, +1-408-435-6385
alain.dangerfield@avagotech.com