Avago Enables Unprecedented Miniaturization of Motor Encoding Systems with Industry's Smallest Three-Channel Reflective Encoders

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Highly-Integrated, Small-Footprint Modules Feature Built-In Interpolator for High-Resolution Motion Feedback in Consumer, Commercial and Industrial Applications

SAN JOSE, Calif. & SINGAPORE, Mar 15, 2011 (BUSINESS WIRE) -- Avago Technologies (Nasdaq:AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced the market's smallest three-channel reflective encoder. The new AEDR-850x encoders feature built-in interpolation for high-resolution measurement that is ideal for a wide range of applications, including closed-loop stepper motors, miniature motors, printers, copiers, card readers, insulin pumps and other types of industrial, consumer and medical equipment.

A standard reflective encoder module contains two digital output channels for direction sensing, with another module required for indexing purposes. For motion feedback applications requiring high-resolution measurement, an external interpolation device had previously been necessary. The Avago AEDR-850x reflective encoders integrate an LED light source, photodetecting and interpolator circuitry, and the three channels in a single package with a 3.95-mm-by-3.40-mm footprint. With high resolution encoding of 304 lines per inch (12 lines per mm), the compact, highly-integrated modules enable a new level of miniaturization for applications where size and space are primary concerns.

Avago will present a webinar giving an overview of the AEDR-850x encoders on March 31, 2011 at 9:00 a.m. Pacific Time. More information and registration for the webinar are available here.

"The integrated third-channel, compact size and high-resolution encoding performance of the Avago AEDR-850x modules is truly revolutionary, enabling smaller motor encoding systems than ever before possible," said Hassan Hussain, general manager of the Motion Control Products Division at Avago. "These innovative modules cut design costs and save PCB board space for our customers, and expand the reach of our reflective encoder offerings into the industrial automation and medical segments."

The AEDR-850x encoders offer interpolation of up to 4X and enable various resolution designs by changing the codewheel size. The optical-based modules are significantly less susceptible to EMI compared with Hall Effect devices. With an absolute operating temperature range of -20° C to 85° C, the rugged encoders are suitable for commercial and industrial operation environments.

Additional AEDR-850x Features

- Small surface mount leadless package measuring 3.95 mm by 3.40 mm by 0.95 mm
- TTL compatible, allowing outputs to be interfaced directly with most of the signal processing circuitries
- Factors of 1X, 2X and 4X for interpolation selectable via external pinouts
- Single 5V supply

U.S. Pricing and Availability

The Avago AEDR-8500 reflective encoder is gated 90, the AEDR-8501 encoder is gated 180 and the AEDR-8502 encoder is ungated 360. The encoders are priced at $6.75 each in 100 piece quantities. Samples and production quantities will be available in April 2011 through the Avago direct sales channel and via worldwide distribution partners.

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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