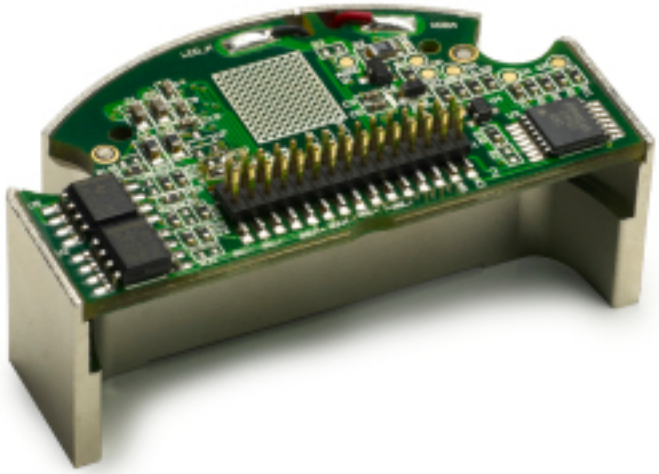
High resolution single-turn encoder is optimised for servo and motor feedback applications

ECN Europe

Avago [1]’s latest addition is a high-resolution absolute optical encoder for high-performance servo and motor feedback applications.



[2]

Picture: Avago

The AEAT-9000 ultra-precision absolute encoder provides excellent accuracy for smooth motor drive performance. The device is available in a modular package that enables it to be mounted in space-constrained locations with various mounting requirements, simplifying design and shortening assembly time.

The AEAT-9000 offers up to 17-bit resolution for precise angle measurement over a full rotation of 360 degrees. The device’s modular design consists of a read head module and a high-precision code disc. Unlike conventional encoders, the modular package of the AEAT-9000 encoder enables it to be directly integrated on the motor, promising system cost savings and better overall performance.

Using differential internal and external signal paths, the absolute encoder delivers superior noise cancellation for robust system noise-immunity in industrial environments, making it ideal for servo motors, industrial and maritime valve control applications, high-precision test and measurement equipment, factory

automation equipment and more.

The AEAT-9000 encoder delivers high-accuracy positioning with 2-channel true differential Sine/Cosine outputs and A/B incremental analogue outputs all with 2048 counts per rotation. The multiple output formats offer flexibility to support both absolute and incremental position information. In addition, the encoder incorporates photo detectors for electrical alignment on the radial and tilt.

SOURCE [3]

Source URL (retrieved on *12/10/2013 - 11:41pm*):
http://www.ecnmag.com/blogs/2011/09/high-resolution-single-turn-encoder-optimised-servo-and-motor-feedback-applications

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