12 Bit Absolute Encoder is Compact

CUI has added a new absolute encoder to its high resolution, low-cost AMT modular encoder line. The AMT203 outputs 12 bits of absolute position information in a very small (1.35”x1.13”x 0.45”) modular package. Unique among its peers, the AMT203 generates absolute position information using CUI’s patented, capacitive code generation system coupled with a proprietary ASIC, creating a reliable, economical and durable control and positioning solution.

The AMT203 consumes a maximum 10 mA at 5 Vdc making it ideal for applications where power consumption is a concern. Available options include nine mounting patterns and ten bore sizes, creating a flexible platform that is able to mate with many industry standard motors.

The AMT203’s SPI (Serial Peripheral Interface) affords higher throughput and simpler hardware interfacing than I²C or SMBus. Using TCL code, the on-board PIC 16F690 MCU operates at up to 2MHz providing for high speed applications. Zero position may be set by SPI command or ground trigger, eliminating the need for time consuming mechanical alignment in the mounting process. Additionally, the AMT203 provides a non-magnetic index pulse and may be configured to output incremental position data after zero position is established to approach throughput of up to 10MHz. Optional Cnt and U/D for direct drive of up/down counter are also available. A demo board is available for stand-alone demonstration, PC access to SPI interface and example TCL code.

The AMT203 and AMT203 demo kit will be available through Digi-Key in Q2 of 2010

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