



DC MOTOR DRIVE MODULE EDP-AM-MC2

Twin dsPIC33FJ128MC804 capable of 40MIPS

Brushless DC Motor Control

- Ability to drive two sensored motors, with Hall sensor outputs, for basic 6 step commutation drive
- The motor drive can also drive sensorless motors, which use back EMF sensing for commutation
- Operate with a rotary encoder in replace of the Hall sensors for more accurate position control/measurement
- Each output drive stage is rated for a 100W motor at 24V, giving a total of 200W per module

Brushed DC Motor Control

- The Motor Drive can be reconfigured as a full bridge, brushed DC, motor speed controller
- Each dsPIC controller has one full H bridge and one half bridge available to it
- By networking the two dsPIC MCU's together it is therefore possible to have three complete H bridge drivers
- In Brushed DC mode the Hall sensors input are not required and can be used as additional three general purpose inputs per dsPIC

Other Features Include

- Additional smoothed current sense input and a logic level current FAULT comparator input
- DC bus voltage sense for the motor
- Each dsPIC motor drive MCU can read a local demand speed pot, and a local push button mounted on the board
- Additional IO from EDP Baseboard
- Dedicated RS232 communications interface
- Connection to the Control I2C bus gaining access to other RS-EDP modules and baseboard
- Optional connection to the external CAN bus on RS-EDP Baseboard
- Optional connection to the serial UART0 interface, through RS-EDP Baseboard and modules
- Up to four dsPIC modules can be connected to each base board
- Independent debugging for both dsPIC

And much more....

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