

## MOTOR CONTROLLER

### New Powerful, Versatile, and Easy-to-Use Motor Controller

The CS110100 from A-WIT Technologies is a multi-functional, high-current two-axis motor driver with motion control. It features on-board, over-current protection and over-temperature protection. Maximum DC current per motor channel is 10A. For DC motors with incremental encoder feedback, the CS110100 is able to drive the motor in velocity mode or position

mode. For DC motors without encoder feedback, the CS110100 is able to drive the motor via PWM. The on-board motion processor allows users to change motion control parameters, such as PID parameters, motor configuration, etc.



Top

Bottom

The motor controller has three operating modes: UART Mode – the CS110100 is able to interface with a host controller, such as the C Stamp (sold separately) via the serial port. In this mode, the CS110100 will receive AT commands sent from the host controller to change its speed, position, etc; I<sup>2</sup>C Mode – the CS110100 is able to interface with the host controller via an I<sup>2</sup>C port. The I<sup>2</sup>C address is selectable from 0x70 to 0x7E. The host controller is able to control the CS110100 by I<sup>2</sup>C commands; Radio Control PWM Mode – the CS110100 can be connected to RC receivers directly so that the motor speeds can be controlled by the RC remote controller. In this mode, users may choose to run the two motors under coordinated mode or independent mode. This mode is especially useful in building RC remote robots. Some technical specifications are:

- Power Supply Voltage: 7V-24V
- Power Consumption: 2W (without motors)
- Processor Speed: 40 MHz
- On-Board Motion Control for brushed DC Motors (Velocity Mode, Position Mode)
- On-Board MOSFET PWM drivers
- Able to drive Two DC motors at the same time
- MAX DC Current Per Motor = 10A
- PEAK DC Current Per Motor = 20 A
- On-Board fan for efficient heat dissipation
- Protection for Reverse Polarity, Over-Current, and Over-Heating
- Controllable by RC Servo PWM pulses directly
- Controllable by a serial interface
- Controllable by an I2C interface
- User can control the PWM output to the motors directly
- Switching power supply for lowest battery power consumption
- Compact size of 75 mm x 65 mm

For further information, please contact:

A-WIT  
Technologies, Inc.

656 Ironwood Dr.  
Williamstown, NJ 08094  
800 • 985 • AWIT Fax: 800 • 985 • 2948  
Email: [info@a-wit.com](mailto:info@a-wit.com)  
Website: [www.c-stamp.com](http://www.c-stamp.com)