# Register Addresses:

0x00: M1\_CONTROL

0X01: M2\_CONTROL

0X02: M1\_POWER

0X03: M2\_POWER

0X04-0X08: M1\_ENCODER\_RAW

0X09-0X0C: M2\_ENCODER\_RAW

0X0D: M1\_RATE

0X11: M2\_RATE

# Register maps and descriptions:

**0x01: M1\_Control**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| MSB | 6 | 5 | 4 | 3 | 2 | 1 | LSB |
| RSV | RSV | (CURD) | (ENCD) | ENCE | CTRL | BRK | DIR |

DIR: Direction control, 0 is forward

BRK: Brake control. 0 brakes motor, 1 allows motor to coast (only at 0 power)

CTRL: Control type. Selects between speed (encoder ticks / **X** clock cycles) or power control (0-100%). 0 is power control, 1 is speed.

ENCE: Encoder enable. Enables or disables encoder readings. 0 is disabled, 1 is enabled

ENCD: Encoder data. Indicates true when new encoder value is available. Planned feature

CURD: Current data. Indicates true when new current sense data is available. Planned feature

RSV: Reserved for future use. Changing these values won’t have an effect

**0x02: M2\_Control**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| MSB | 6 | 5 | 4 | 3 | 2 | 1 | LSB |
| RSV | RSV | (CURD) | (ENCD) | ENCE | CTRL | BRK | DIR |

DIR: Direction control, 0 is forward

BRK: Brake control. 0 brakes motor, 1 allows motor to coast (only at 0 power)

CTRL: Control type. Selects between speed (encoder ticks / **X** clock cycles) or power control (0-100%). 0 is power control, 1 is speed.

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