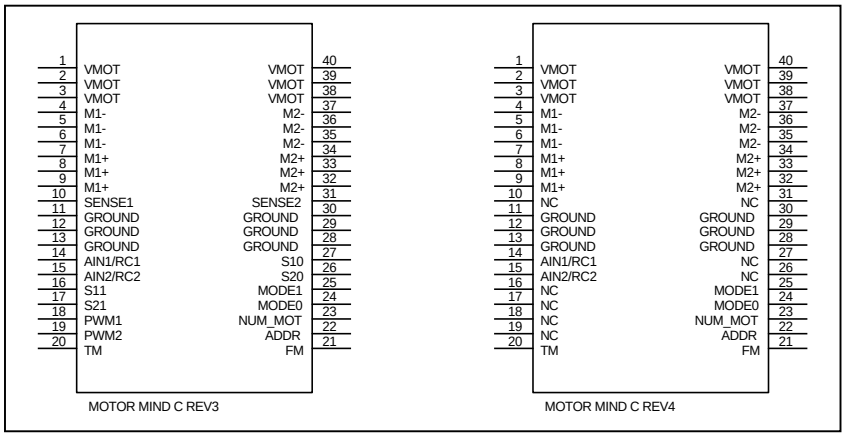
MMC_REV3 versus MMC_REV4 Differences

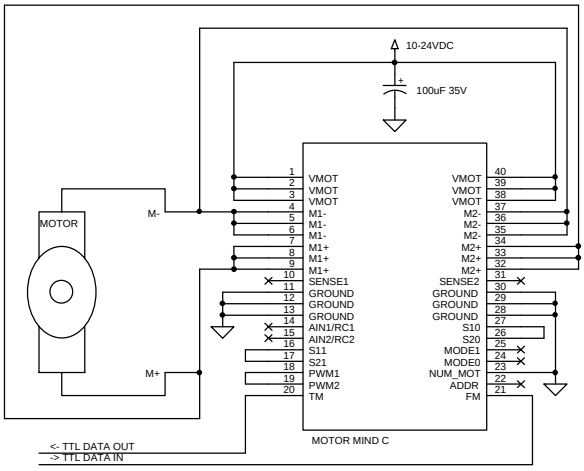
Due to a discontinued component the Motor Mind C (MMC) has been modified with replacement components. There are a variety of changes; some minor and some not so minor that may be of importance to previous users of the product. As of April 2003 all new MMC units will be of the REV4 variety. These parts are physically distinguishable in that the MMC_REV3 has a silver heat sink, while the MMC_REV4 has no heat sink.

Subject of Change	MMC_REV3	MMC_REV4
Single Motor Mode	Motors leads paralleled (M2+ tied to M1+, etc) and many other pins are tied together	Only M1+ and M1- are used to connect to the motor (motor leads cannot be paralleled)
Motor Supply Voltage	10-24V	6-24V
Continuous Current	4.0A (4.0A single motor)	4.5A (2.25A single motor)
Over-temperature fault	165°C	150°C
PWM Frequency	19.2KHZ	1.2KHZ (19.2KHZ with Change Frequency command and a serious loss of resolution)
PCB Size (both fit 40 pin 0.6" DIP socket)	2.35"L x 0.74"W x 0.5"H	2.4"L x 0.74"W x 0.36"H
Clearing faults in serial mode	Done by sending SetDC command	Done by sending Clear Fault command
AMPS1 / AMPS2 registers	Stores approximate motor current	No current measurements made or available to user
BRAKE_MODE register	Dynamic or free-spinning brake modes when under serial control, free spinning brake under analog or R/C control	Dynamic or free-spinning brake modes when under all modes of control

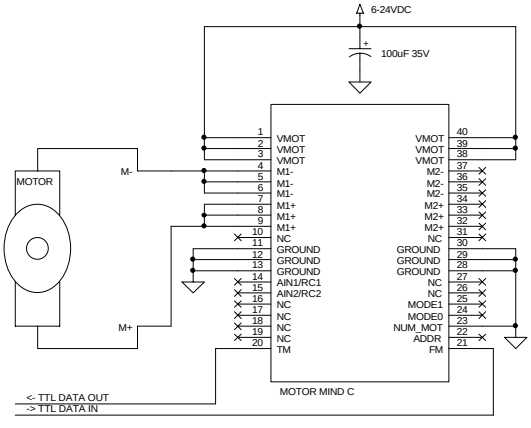
Pinout Changes MMC_3 to MMC_4



Changes in Single Motor Connections (REV4 Drives Cannot be Paralleled)



MOTOR MIND C REV3 CONFIGURED FOR SINGL
MOTOR DRIVE, SERIAL CONTROL, 38.4KBPS



MOTOR MIND C CONFIGURED FOR SINGLE
MOTOR DRIVE, SERIAL CONTROL, 38.4KBPS

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