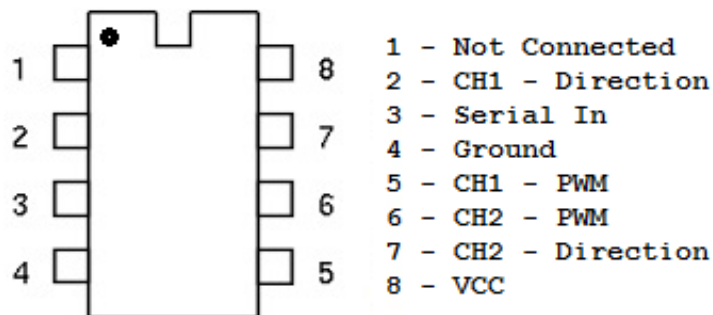




PMW Driver Chip with Serial Interface

This chip gives you two PWM Channels and 2 logic level channels, and is ideal for driving motor driver boards. The serial protocol is easy to follow and as each chip can be addressed, you can drive more than one chip from your serial device.

This chip is designed to run at 5V, but can run on a supply voltage between 3.3V and 5.5V. Its output voltage will be the same as its input voltage. The chip should be connected up as shown below.



The protocol is 4 Bytes for regular use, there are special codes to set the address of the chip. Connect your device at 9600 BAUD (8-N-1).

Byte	Action
255 (0xFF)	Reset the address to 1
254 (0xFE) X Y	Set address on chip X to address Y (E.g. FE 01 02 would set chip at address 1 to address 2)

If an address higher than 127 is used it is ignored and no change will be made.

253 (0xFD) A X (A = Address)	if X = 1 then PWM Freq. = 126Hz
	if X is not 1 then PWM Freq. = 254Hz

To set the Direction Pin & PWM Values use :

128 (0x80) – Address – Channel – Direction - PWM

Address : Current address of the chip to access

Channel : Channel 1 or 2, you can use 3 to apply the settings to both channels

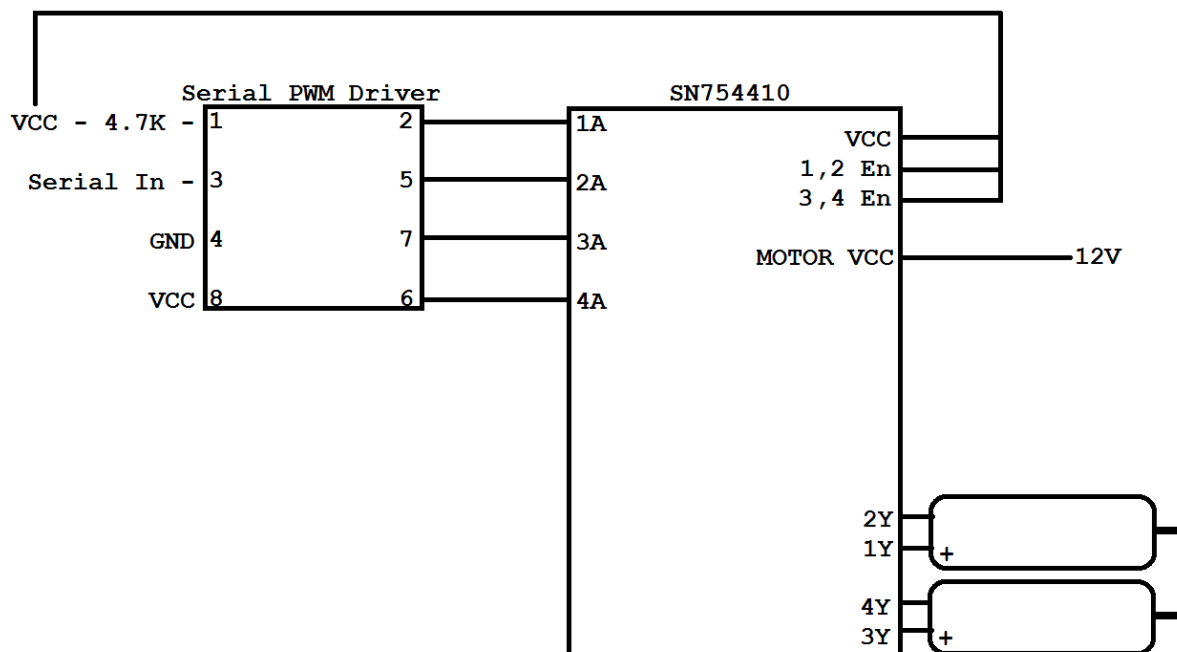
Direction : 0 or 1 (This will be the value on the direction pin)

PWM : The required PWM value 0 – 255

Do not connect or disconnect devices from this chip while the power is connected, this may harm the device or the driver chip.

It is recommended to have a capacitor across the power supply, close to the chip, to help with any Interference from connected devices. In SOME configurations you may have to connect pin 1 to VCC with a resistor (4.7K – 10K).

Example Use with SN754410 Driver Chip



The SN754410 would require a supply for the motors & we have not shown the GND connections on pins 4,5,12 & 13