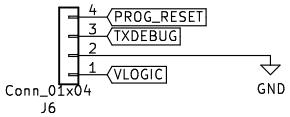
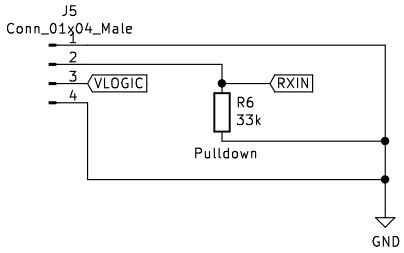
Tiny DC electronic speed controller
For e.g. Antweight combat robots

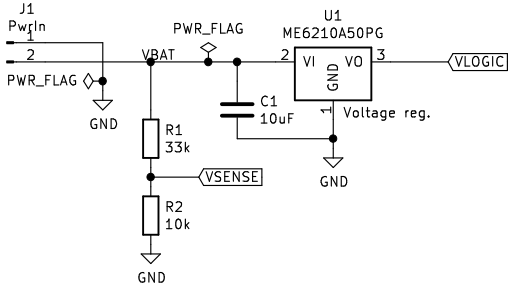
Programming interface

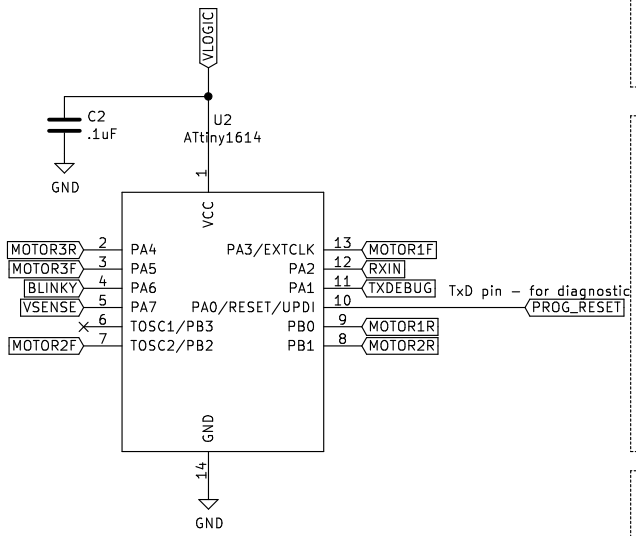


Receiver interface RX
RX interface will be for a CPPM type of single wire pulses, or similar. It might be auto detected at runtime or need to be set in firmware.

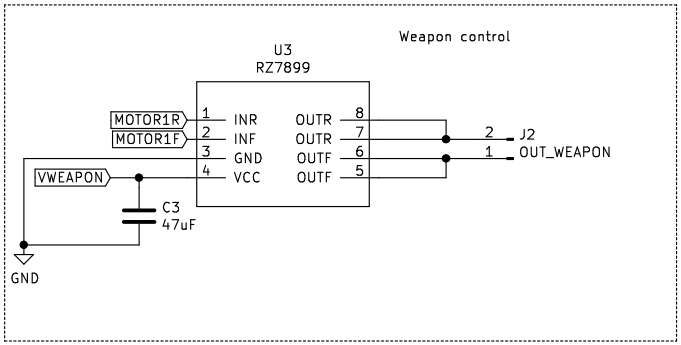


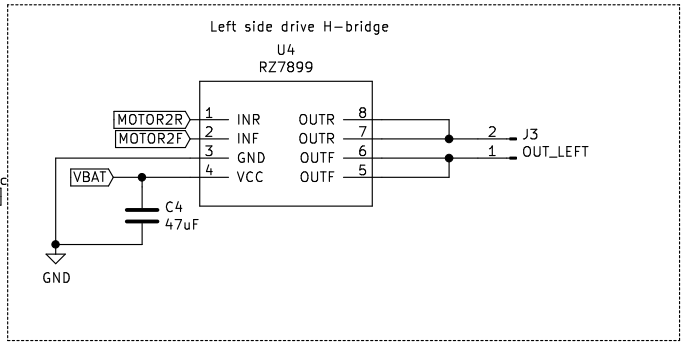
Power in- Battery voltage from 6-14v is permitted, to allow usage of a 2S or 3S lipo pack, or some other type which provides at least 6V

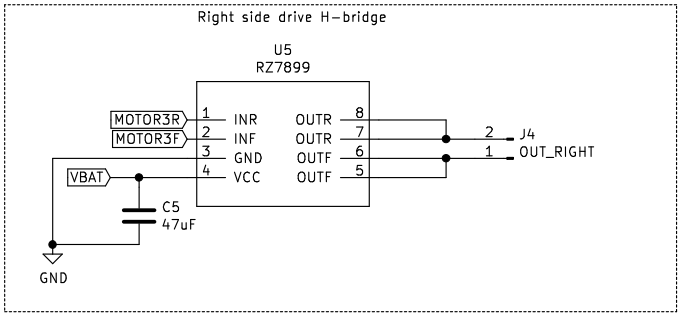




Note: Not all pins can do hardware PWM.
Using TCA1 in split mode we can get up to 6 channels hardware PWM but most of them are on a fixed pin

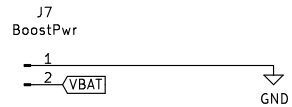


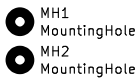


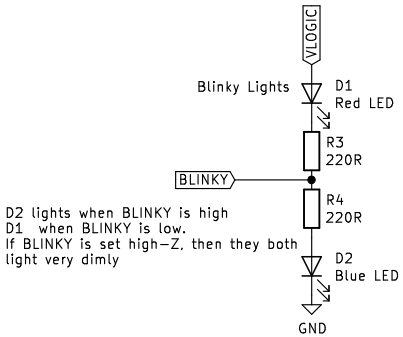


Weapon power could come from VBAT via a simple wire, or have an additional Lipo cell for more volts, or some other power source e.g. a voltage boost module.

Weapon power boost







D2 lights when BLINKY is high
D1 when BLINKY is low.
If BLINKY is set high-Z, then they both light very dimly

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DC Electronic speed controller for small combat robot
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Title: Malenki ESC

Size: A4	Date: 2019-03-05	**Rev:**
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