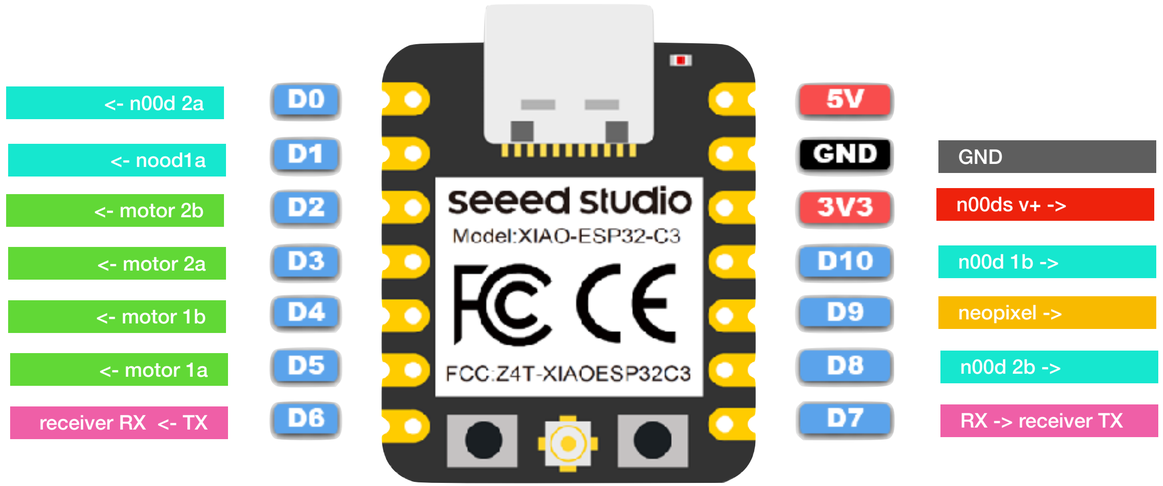
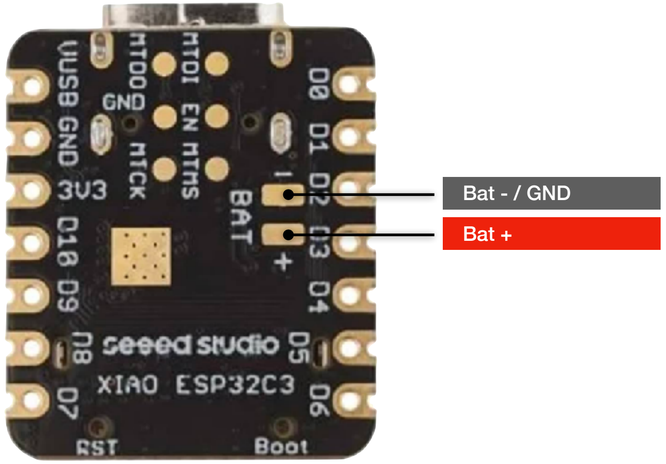
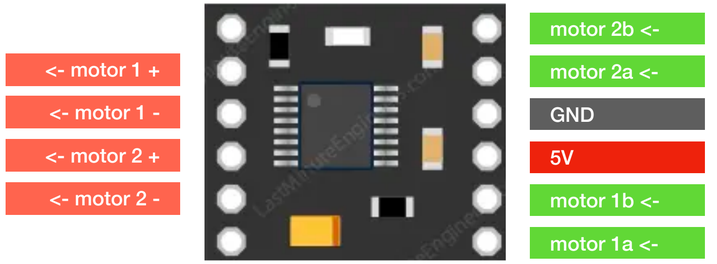
XIAO ESP32-C3

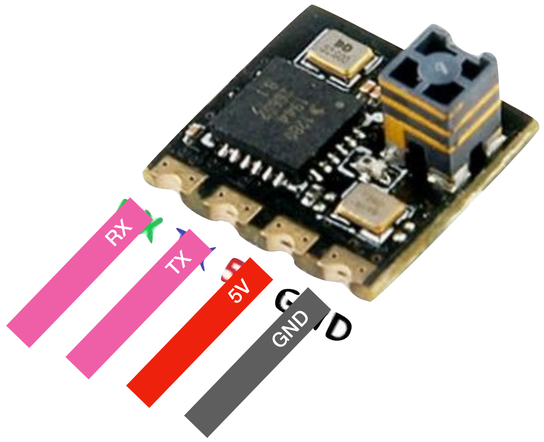




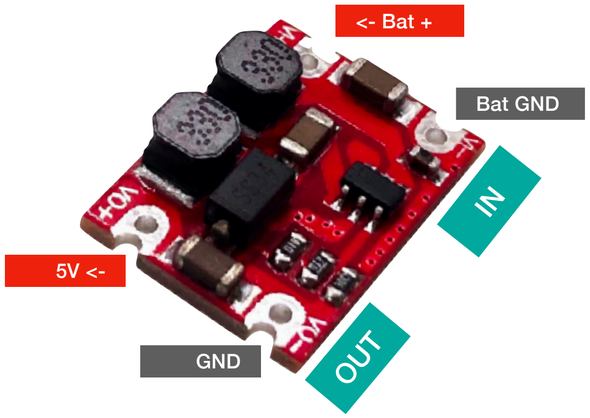
Generic DRV8833 motor driver



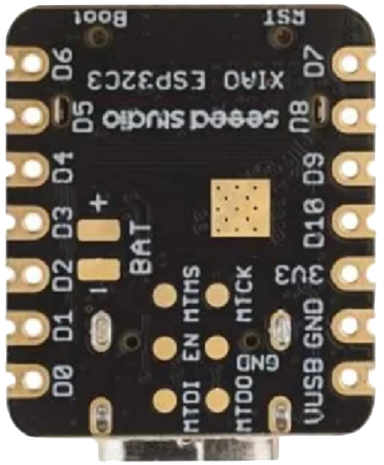
Happymodel EP2 TXCO ELRS rx

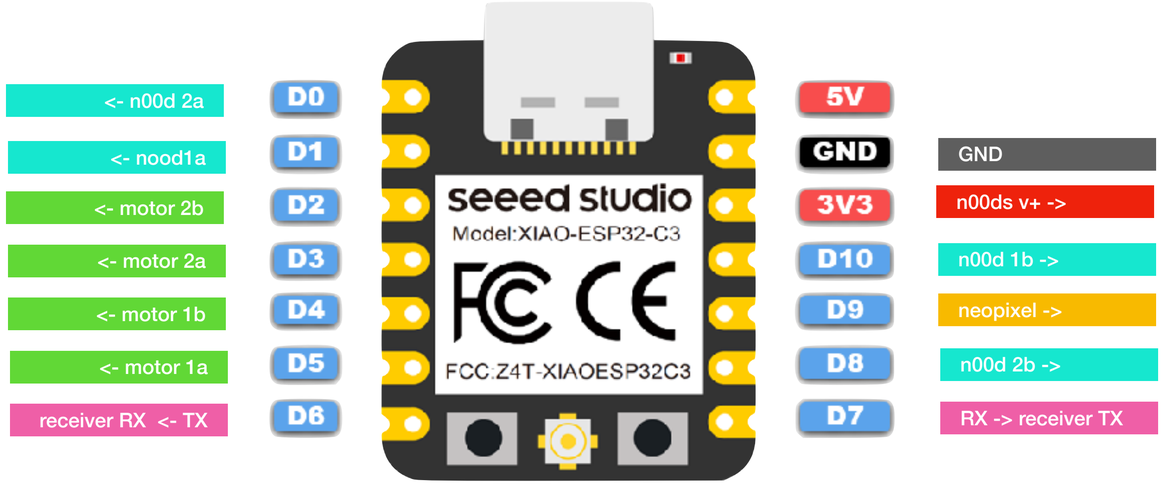


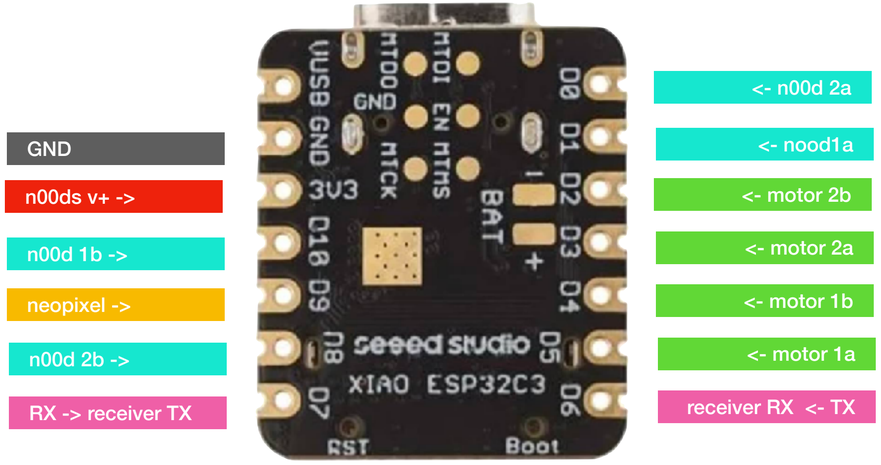
600ma 5v boost converter

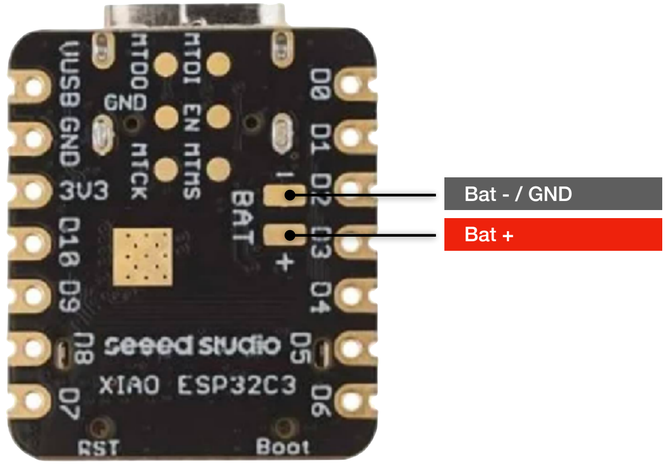


XIAO ESP32-C3









Comm protocol of n00ds

* Midi is 0-127
* ExpressLRS is theoretically 0-2000, but the absolute range on the receiving end is in fact 191-1792. This is 1601 values in theory, and we map this back to 0-1023 to be able to apply binary logic

0-1023 is 10 bits

* top 3 bits are used to encode the index of the n00d (1, 2, 3, 4) - psuedo big-endian

n00d blue - front

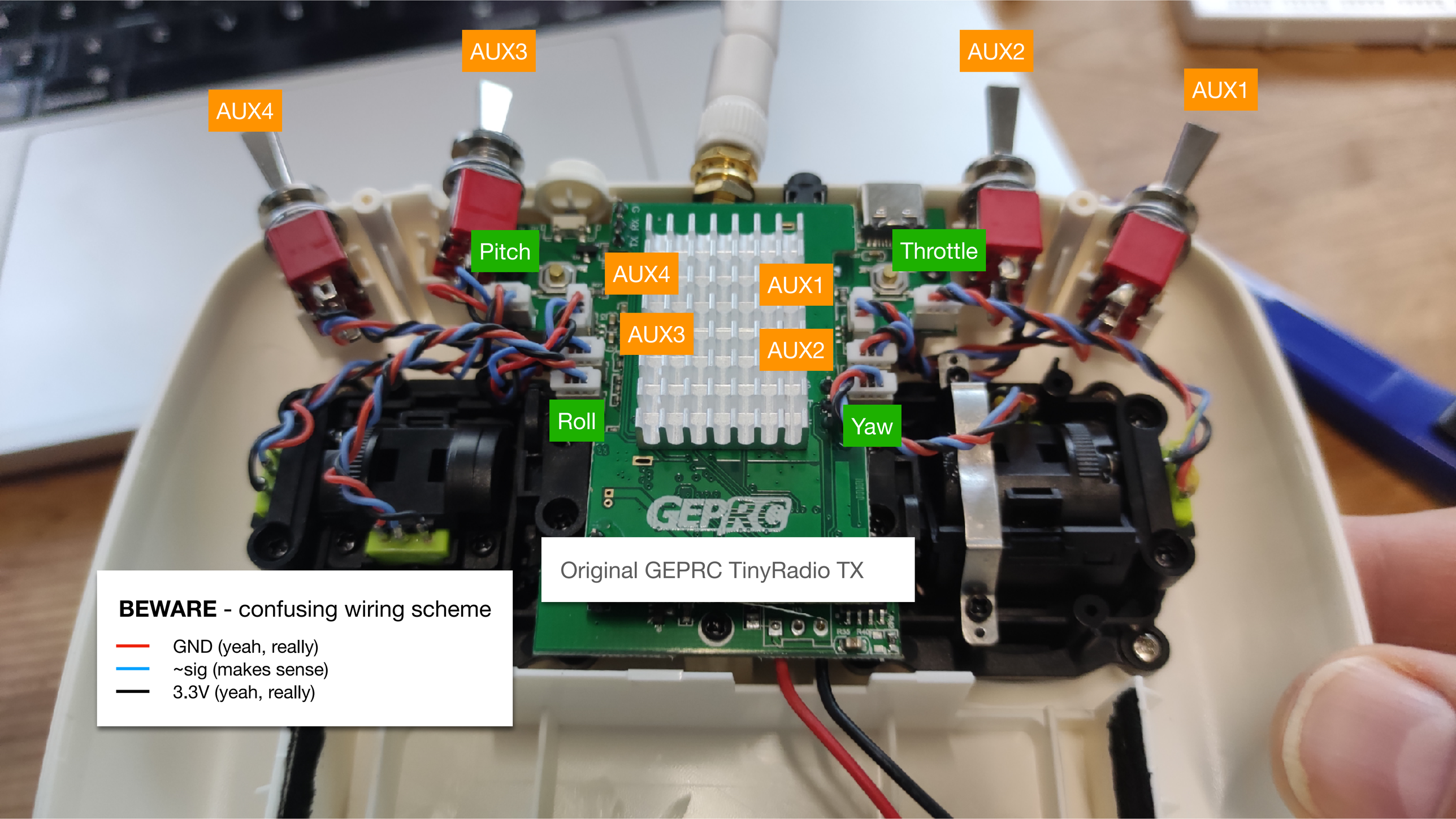
n00d blue - back

n00d pink - back

n00d pink - back

* bottom 7 bits (0-127) are used for the value of the n00d
* I effectively used 0-111. This is 16 values less, to prevent incidental binary overflow upwards in the case of signal jitter

n00d value (example)


AUX3
AUX2
AUX4
AUX1
Pitch
Throttle
AUX4
AUX1
AUX3
AUX2
Roll
Yaw
GEPRC
Original GEPRC TinyRadio TX
BEWARE - confusing wiring scheme
GND (yeah, really)
~sig (makes sense)
3.3V (yeah, really)