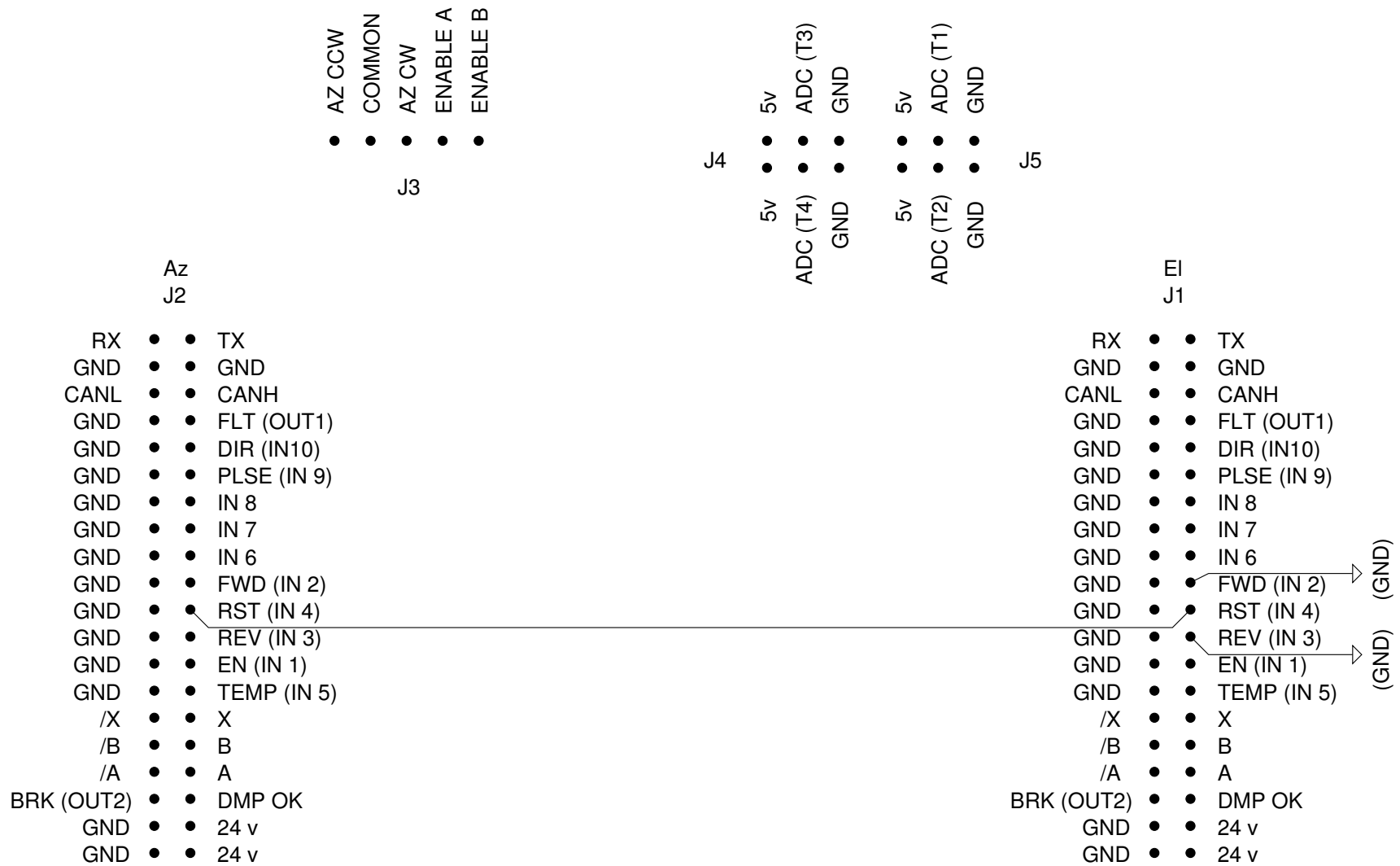
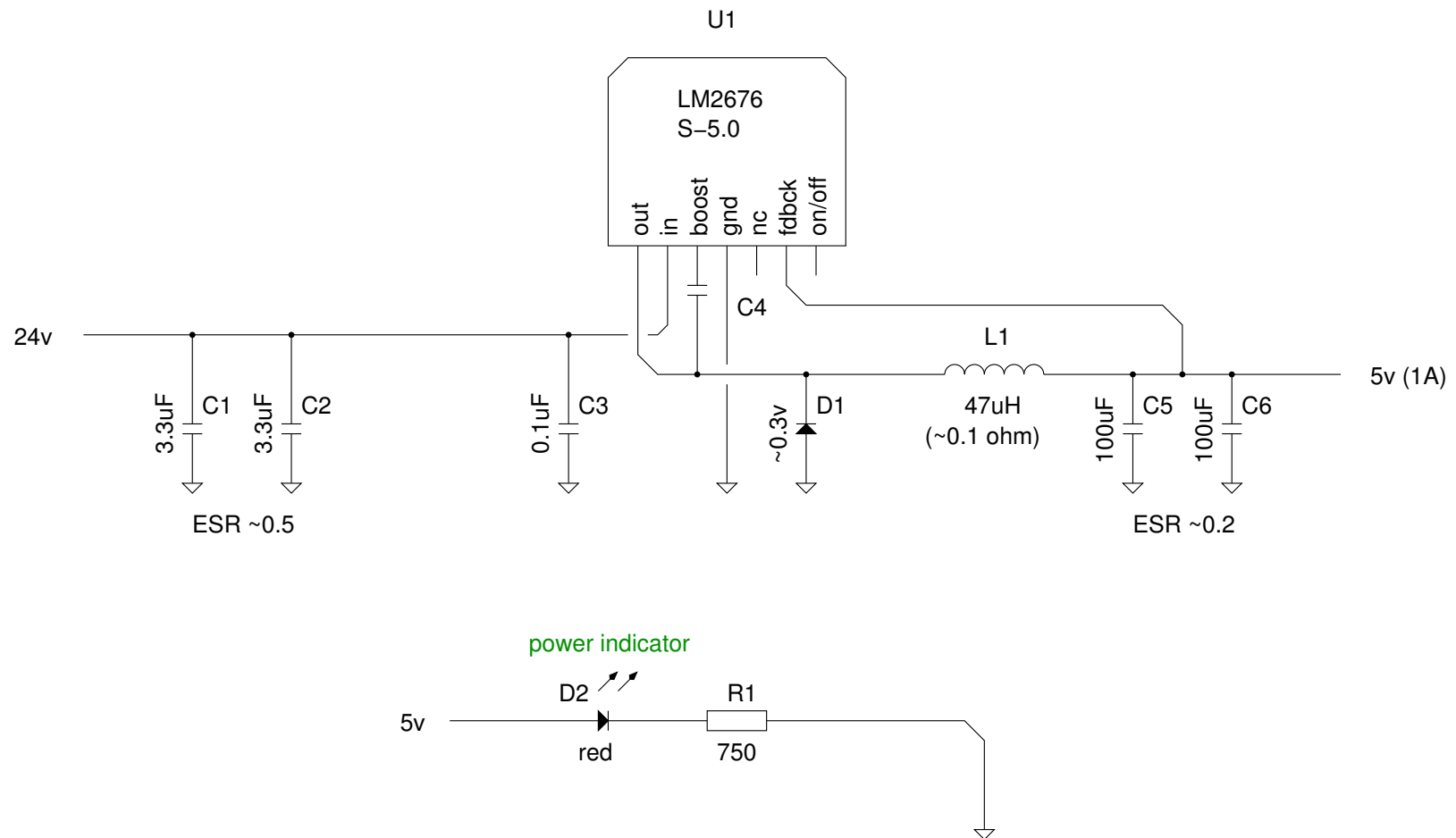


## Drive Box Daughterboard – Connectors (1)

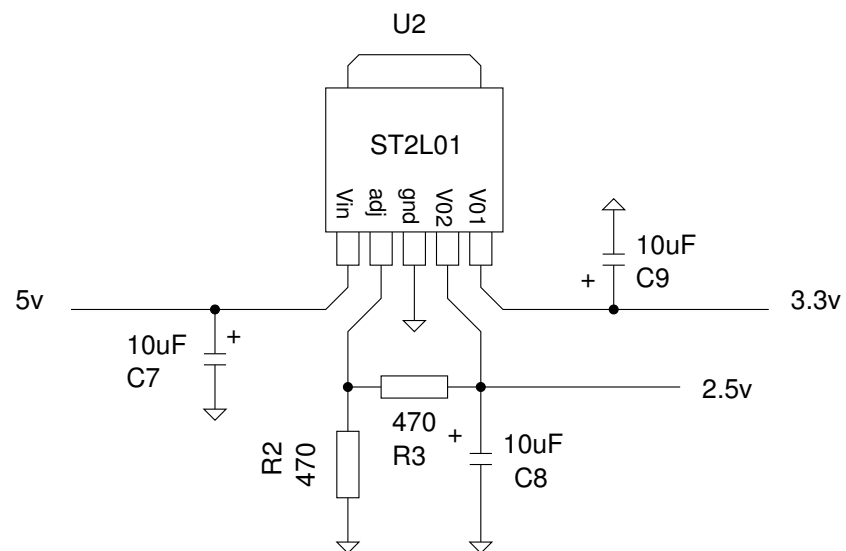


CANL, CANH, A, B, X, /A, /B, /X, IN6, IN7, IN8 are not connected on J1 or J2

## Drive Box Daughterboard – Voltage Regulators (2)

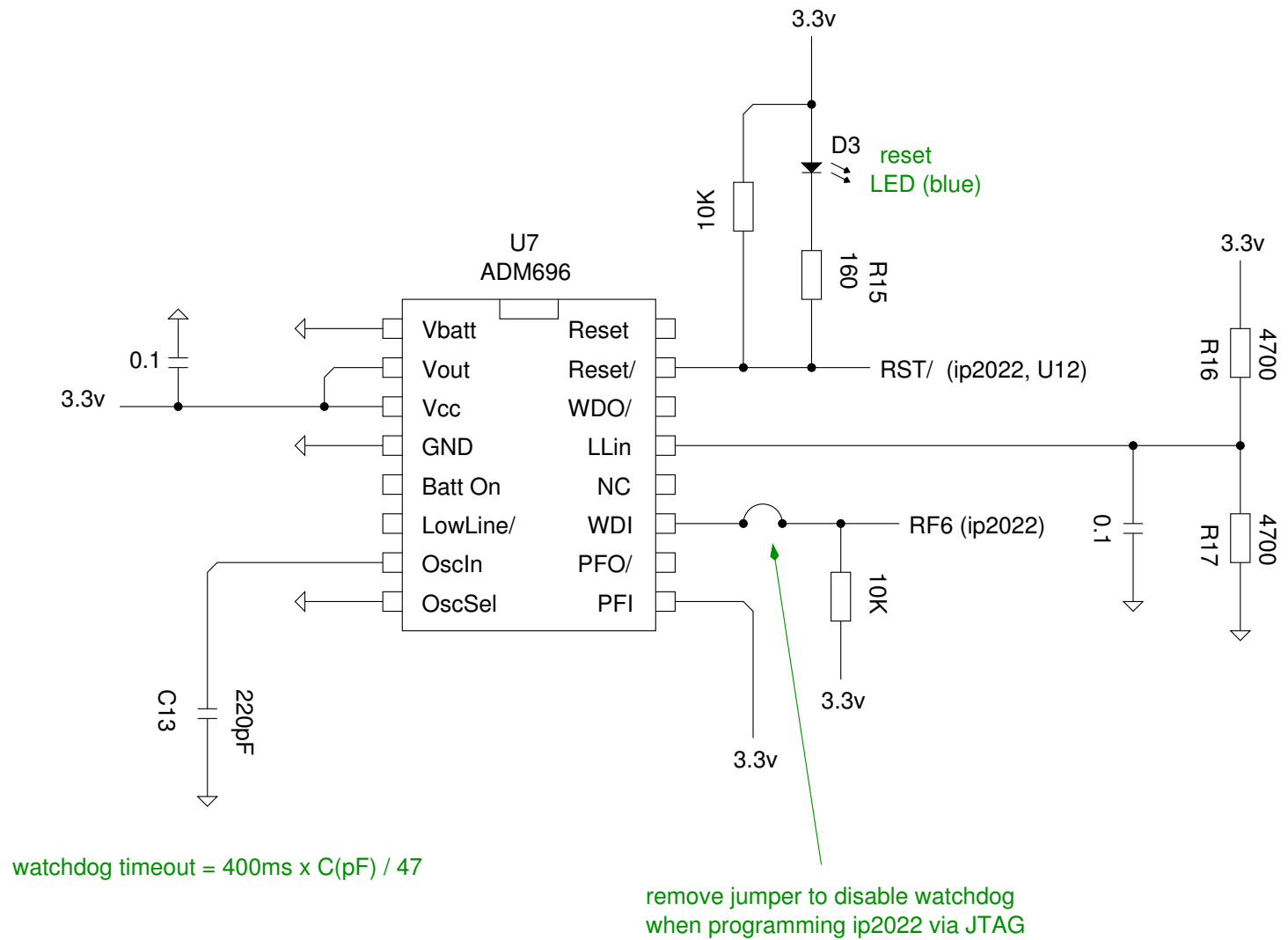


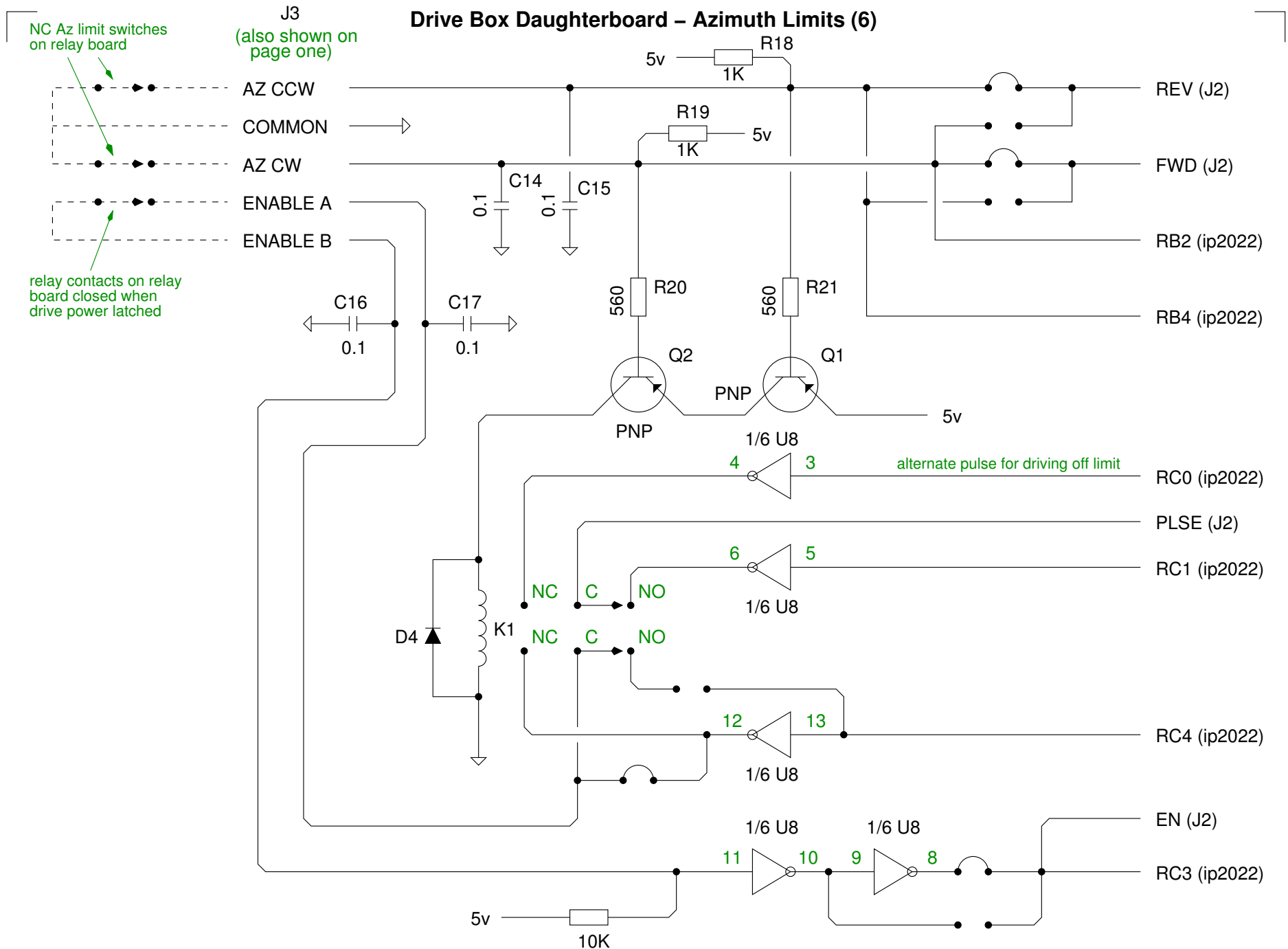
### Drive Box Daughterboard – Voltage Regulators (3)



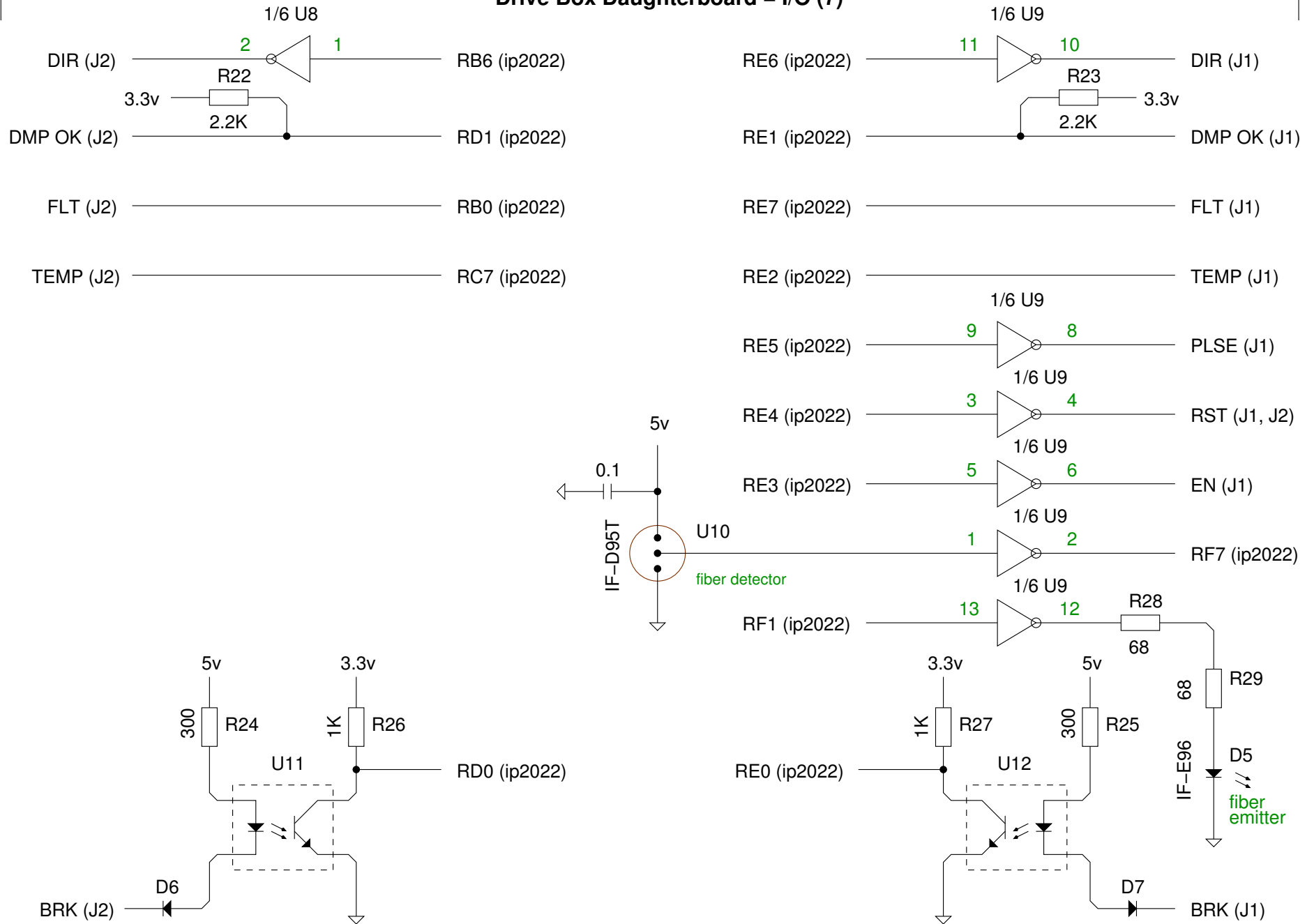


## Drive Box Daughterboard – Watchdog (5)

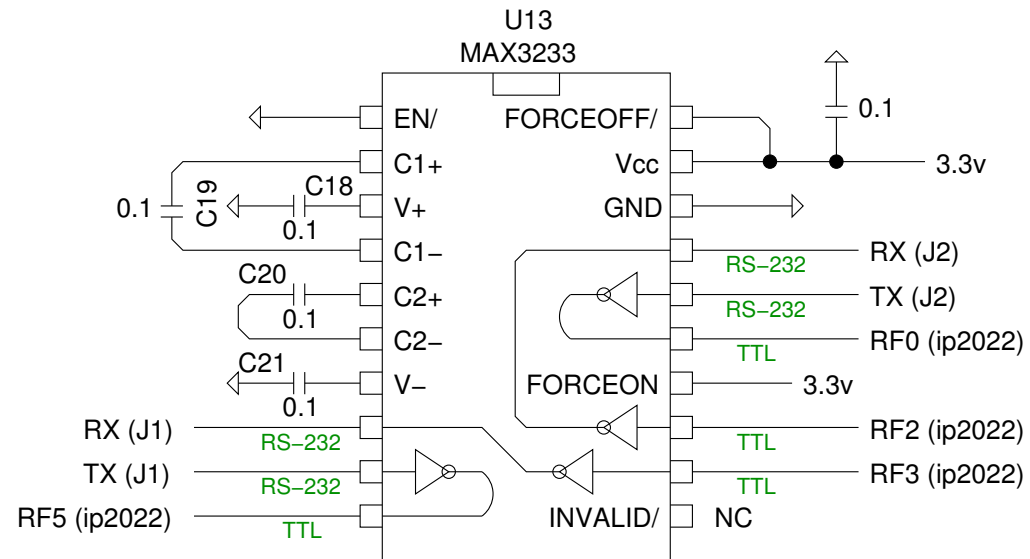




# Drive Box Daughterboard – I/O (7)



## Drive Box Daughterboard – Accelnet Module Serial Interface (8)





## Drive Box Daughterboard – Component List (9)

C1–2	3.3uF	tantalum, SMD, low–ESR, 35v	U1	LM2676S–5.0	high efficiency 3A step–down regulator
C3, C14–17	0.1uF	ceramic capacitor, SMD, 50v	U2	ST2L01	dual 3.3v and adj. output positive regulator
C4	0.01uF	ceramic capacitor, SMD, 50v	U3	ip2022–PQ80	Ubicom microcontroller
C5–6	100uF	tantalum, SMD, low–ESR, 16v	U4	AT45DB041	Atmel serial flash, 8–SOIC
C7–9, C10–12	10uF	tantalum capacitor, SMD, 10v	U5	CMX309FBC24.000MTR	24 MHz oscillator, 3.3v, SMD
C13	220pF	ceramic capacitor, SMD	U6	TC77	Microchip digital temp. sensor, SOT–23–5
C18–21	0.1uF	ceramic capacitor, SMD	U7	ADM696	Analog Devices watchdog, 16–SOIC
D1	30v, 5A	50WQ03FN Schottky	U8–9	74ACT04	hex TTL to CMOS inverter, 14–SOIC
D2	red	LED, 0805 SMD	U10	IF–D95T	fiber optic detector, plastic 1000um
D3	blue	LED, 0805 SMD	U11–12	(NTE3098)	LED to NPN transistor optoisolator
D4, D6–7		GP silicon diode, SMA	U13	MAX3223	RS–232 transceiver
D5		IF–E96 fiber emitter			
J1–2		2x20 100mil header			
J3		1x5 right–angle 100mil header			
J4–5		2x5 right–angle 100mil header			
J6		2x5 100mil header			
K1		5v DPDT PCB relay			
L1		47uH inductor, vertical torroid			
Q1–2	(MJD32C)	GP silicon PNP transistor, DPAK			
R1	750 ohm	1/8W resistor, 0805 SMD			
R2–3	470 ohm	1/8W resistor, 0805 SMD			
R4–5	10 ohm	1/8W resistor, 0805 SMD			
R6, R20–21	560 ohm	1/8W resistor, 0805 SMD			
R7–14	1.0K ohm	1/8W resistor, 0805 SMD, 1%			
R15	160 ohm	1/8W resistor, 0805 SMD			
R16–17	4.7K ohm	1/8W resistor, 0805 SMD			
R18–19, R26–27	1K ohm	1/8W resistor, 0805 SMD			
R22–23	2.2K ohm	1/8W resistor, 0805 SMD			
R24–25	300 ohm	1/8W resistor, 0805 SMD			
R28–29	68 ohm	1/8W resistor, 0805 SMD			

Throughout the schematics are shown unnamed 0.1uF ceramic decoupling capacitors and 10K ohm 1/8W 0805 pull–up resistors.