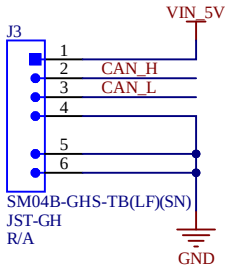
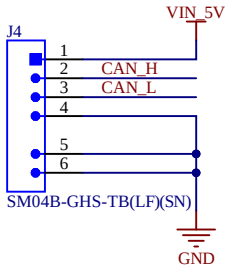
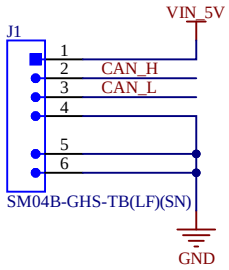
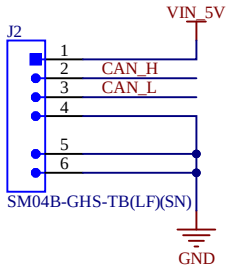
CAN Splitter

Impedance and timing matching on this PCBA layout is extremely poor. Do not use at higher datarates. Intended to minimize board space and keep the board cost low. If we end up using this board a lot it might be worth making a mechanically larger version with smaller vias/spacings to make it properly. Including proper mounting holes and putting all components on one side would be nice when the board is larger.





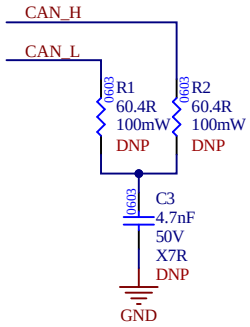


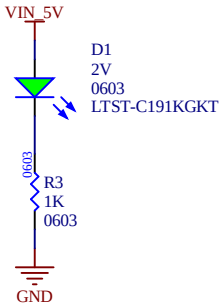


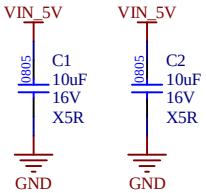
PCBA is intended for 3 A maximum passthrough between any connector's 5V pin.

Follows DS-009 Pixhawk Connector Standard

For wiring and twisting instruction refer to https://docs.px4.io/main/en/assembly/cable_wiring.html







WARG

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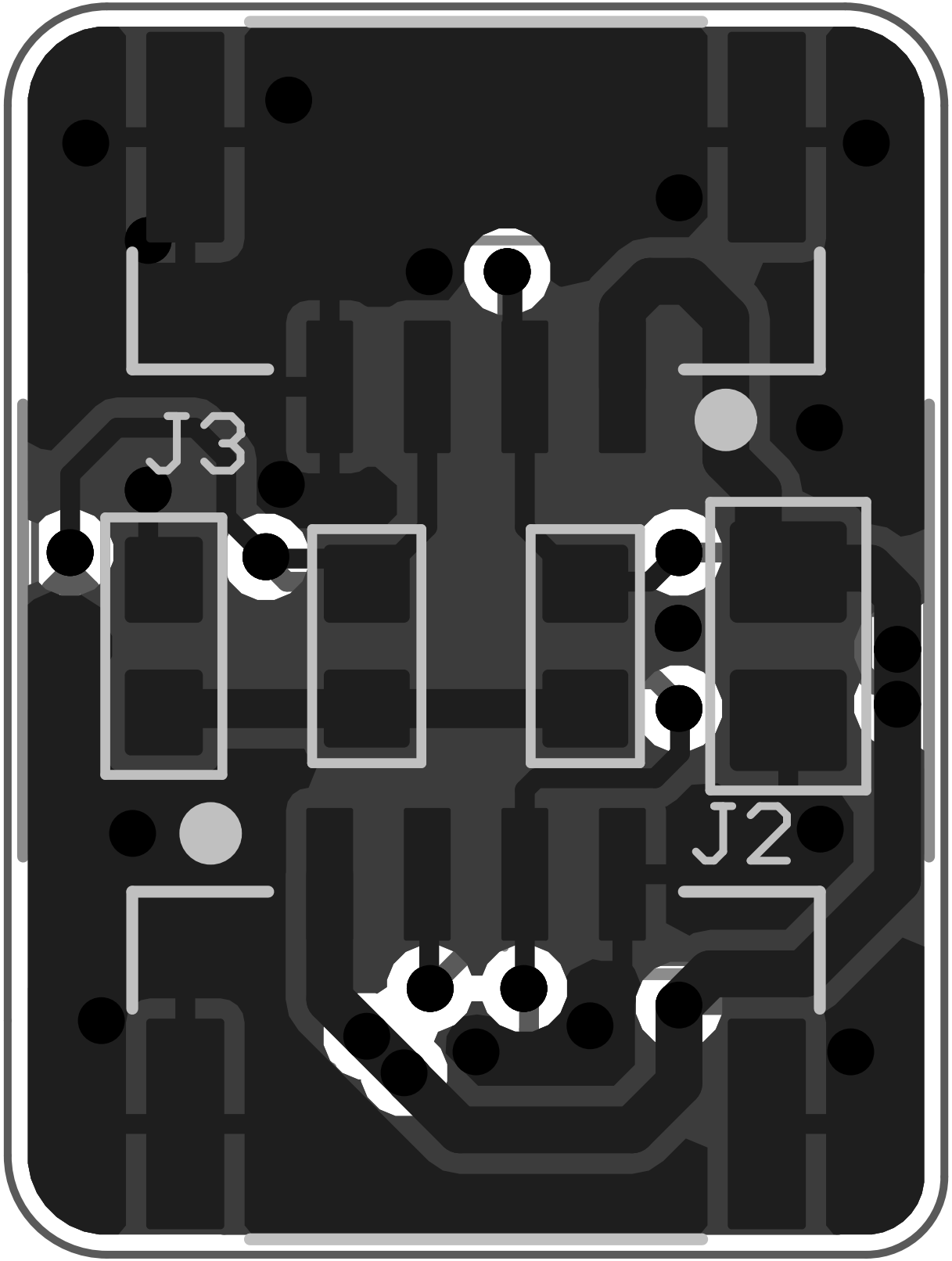
PROJECT: CAN Splitter.PrjPcb, [No Variations]	REVISION: *
DOCUMENT: Schematic.SchDoc	MODIFIED: 9/3/2024
ENGINEER: Daniel Puratich / REVIEWER: *	SHEET * OF *


J3
J2

Comment	Description	Designator	Footprint	LibRef	Quantity
CL21A106KOQNNNE	CAP CER 10UF 16V X5R 0805	C1, C2	.CAP_0805-Footprint-1	CMP-001-00016-5	2
GCM188R71H472KA37D	CAP CER 4700PF 50V X7R 0603	C3	.CAP_0603-Footprint-1	CMP-001-00080-1	1
LTST-C191KGKT	LED GREEN 2V 0603	D1	.LED_0603-Footprint-1	CMP-001-00018-5	1
SM04B-GHS-TB(LF)(SN)	Conn Shrouded Header HDR 4 POS 1.25mm Solder RA SMD Reel	J1, J2, J3, J4	CONN_SM04B-GHS-TB_JST	CMP-068-000000-2	4
RC0603FR-1360R4L	RES 60.4 OHM 1% 1/10W 0603	R1, R2	RES0603	CMP-00245-1	2
RC0603FR-071KL	RES 1k OHM 1% 1/10W 0603	R3	.RES_0603-Footprint-1	CMP-009-00012-3	1