

Bill of material list for RCExplorer Tricopter F3FC POWER frame

Name	Value	Comment	Package
B1	EVQP7C / EVQP7L	http://www.aliexpress.com/item/Free-Shipping-100pcs-Tact-Push-Butto	EVQP7C / EVQP7L
Beep	Do not mount		Beeper 7.6mm hole spacing
Byg	Selector between voltages	Do not mount, Do not bridge	
C1	Tantal 22uF 25 VDC	Capacitor - Tantalum 25V rating	Cap 2312 (C case)
C2	100nF		Cap 0603
C3	100pF		Cap 0603
C4	Tantal 100uF 25 VDC	Capacitor Tantalum 25V	Cap 2917
C5	0.1uF		Cap 0603
C6	4.7uF		Cap 0603
C7	10uF		Cap 0603
C8	1uF		Cap 0603
C9	1uF		Cap 0603
C10	100nF		Cap 0603
C11	1uF		Cap 0603
C12	100nF		Cap 0603
C13	100nF		Cap 0603
C14	100nF		Cap 0603
C15	100nF		Cap 0603
C16	100nF		Cap 0603
C17	1uF		Cap 0603
C18	1uF		Cap 0603
C19	2.2nF		Cap 0603
C20	100nF		Cap 0603
D1	Schottky SX34	http://www.aliexpress.com/item/NEW-SX34-SS34-Schottky-diode-SMA-	DO-214AB (SMC)
D2	Schottky Diode - PMEG3005CT	http://www.nxp.com/documents/data_sheet/PMEG3005CT.pdf	Sot-23
D3	Led_SMD_0603 ORANGE	Color not that important. You can use the colors you use on your other flight controllers if you wish as long as they are 3 different colors	Led 0603
D4	Led_SMD_0603 BLUE	Color not that important. You can use the colors you use on your other flight controllers if you wish as long as they are 3 different colors	Led 0603
D5	Led_SMD_0603 GREEN	Color not that important. You can use the colors you use on your other flight controllers if you wish as long as they are 3 different colors	Led 0603
SWD	Do not mount	Test pads	
L1	Power Inductor CDRH104R-220 3A 22UH	Must not be larger than 10.2x10.2mm and must handle 2.9A or more	According to CDRH104R-220 3A 22UH datasheet

R1	32K ohm		Res 0603
R2	56K ohm		Res 0603
R3	10K ohm		Res 0603
R4	15K ohm		Res 0603
R5	0.5mOhm CSS2725FTL500	http://www.alibaba.com/product-detail/Chip-Resistors-CSS2725FTL500	Res 2725
R6	73.2K ohm		Res 0603
R7	30K ohm		Res 0603
R8	0 ohm	Should be 0805 capsule - See "Mounting instructions" for placement	Res 0805
R9	10K ohm		Res 0603
R10	1K ohm		Res 0603
R11	10K ohm		Res 0603
R12	10K ohm		Res 0603
R13	0 ohm	Should be 0805 capsule - See "Mounting instructions" for placement	Res 0805
R14	1K ohm		Res 0603
R15	10K ohm		Res 0603
R16	120 ohm		Res 0603
R17	1.5K ohm		Res 0603
R18	10K ohm		Res 0603
R19	330 ohm		Res 0603
R20	330 ohm		Res 0603
R21	330 ohm		Res 0603
R22	10K ohm		Res 0603
R23	10K ohm		Res 0603
T1	NPN Transistor - 2SC2712 NPN	http://www.alibaba.com/product-detail/High-quality-and-Power-NPN-SM	SO-G3
U1	LM3485	Switching regulator	8VSSOP
U2	3.3V regulator - TPS7B6933-Q1	http://www.ti.com/lit/ds/symlink/tps7b6950-q1.pdf	SOT-23-5
U3	5V regulator - MCP1755S	http://ww1.microchip.com/downloads/en/DeviceDoc/25160A.pdf	SOT-23-5
U4	INA169	http://www.ti.com/lit/ds/symlink/ina139.pdf	SOT23-5
U5	AO4407	30V P-Channel MOSFET. Has to be AO4407 http://aosmd.com/pdfs/datasheet/AO4407.pdf	SOP8
U6	Pressure Sensor - MS5611-01ba03	http://www.meas-spec.com/product/pressure/MS5611-01BA03.aspx	MS5611-01ba03
U7	Gyro/ACC - MPU6000	http://43zrtwysvxb2gf29r5o0athu.wpengine.netdna-cdn.com/wp-content/uploads/2015/06/MPU6000.pdf	4x4x0.9mm (QFN)
U8	CAN controller - MAX3051EKA+TCT-ND	https://www.maximintegrated.com/en/products/interface/transceivers/MAX3051EKA.html	SOIC(N)/8
U9	Processor - STM32F303CC	http://www.st.com/st-web-ui/static/active/en/resource/technical/document/processor/STM32F303CC.pdf	LQFP-48
USB	USB Mini	http://www.mouser.se/ProductDetail/Wurth-Electronics/65100516121/?qs=65100516121	USB Mini
X1	8MHZ Crystal - CSTCE8.000M	http://www.aliexpress.com/item/Free-shipping-200pcs-CSTCE8-000M-8MHz-32KHz-3Pin-Crystal/	3.20x1.30mm - 3 Pin