

Main Board Components Bill of Materials				
	Reference	Designator	Package	Qty
	Microcontroller unit			
1	STM32G441KB	U5	STM32G441KBT3	1
	Isolators			
2	MAX14930DASE+	U4,U7	MAX14930DASE&plus_	2
	Motor drivers			
3	DRV8243	U2,U1,U3	PDRV8243HRXYQ1	3
	micro USB connector And reverse voltage protection			
4	10118193-0001LF-Amphenol	USB1	FCI_10118193-0001LF	1
5	CM1223	U6	CM1223-02SO-Level_A	1
6	BUK6Y10-30P	Q1	TO127P600X120-5N	1
	Voltage regulator			
7	NCP164CSN330T1G	IC2	SOP95P275X110-5N	1
8	NCV8730ASN500T1G	IC1	SOT95P275X110-5N	1
	Motors encoders, Thrower, and programmer connectors			
9	215079-4	Thrower,J2,J4,J3	TE_215079-4	4
10	FTSH-105	J9	SAMTEC_FTSH-105	1
	Other connectors			
11	Motors 1, 2 and 3	J2,J3,J4	Solder_pad	1
12	Power	J1		1
	Board indicators			
13	LED	D1,D2	D_0603_1608Metric	2
	Decoupling capacitors			
14	10μF	C4 – C18	C_1206_3216Metric	15
15	1μF	C19 – C22	C_0603_1608Metric	4
16	0.1μF	C1 – C3, C23,C24, C26,C27,C29		8
17	100nF	C25,C28		2
	Resistors			
18	0R	R5,R7,R6	R_0603_1608Metric	3
19	10K	R14,R13,R12, R3,R2,R1,R4		7
20	3.3K	R8 – R11,R15		5
	Reset button			
21	SW Push	SW1	1P1T 6x6mm H9.5mm	1