

Comment	Description	Designator
100nF		C1, C2, C3, C4, C5, C10
10uF	Capacitor 1206	C6, C7, C8, C17, C23, C
1uF		C9, C11, C22, C24
CM1223	TVS diode, USB	D1
LED red		D2, D3, D4, D5
MicroUSB_K	microUSB port	J1
37D motor	Wheel motor	J2, J3, J4
ST-LINK	Programmer for microcontroller	J7
Encoder	Encoder for motor	J8, J9, J10
Thrower	Thrower motor	J11
4,7k		R1, R3, R4, R7
3,3k		R2, R5, R6
100k		R9, R13, R17
BUK6Y10-30P	Reverse voltage protection	T1
DRV8243H-Q1	Motor driver	U1, U2, U3
STM32G441	Microcontroller	U4
MAX14930	4 channel isolator	U5, U8
NCP164	TSOP-5 microcontroller voltage regulator	U6
NCV8730	TSOP-5 Voltage regulator motor driver	U9

Quantity	Farnell	Mouser	TME
15			
9			
4			
1	8607672	748-CM1223-02SO	
4			
1			
3			
1		200-FTSH10501LDVK	
3			AMP-7-215079-4
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4			
3			
3			
1	8438512	771-BUK6Y10-30PX	
3			
1	8132405	511-STM32G431KBT6	
2	8257451	700-MAX14930DASE+	
1	8367831	863-NCP164CSN330T1G	
1	8463974	863-NCV8730ASN500T1G	

[DRV8243-\(](#)

Q1