Line #	Name	Description	Designator	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	SSM3K36TU	N-Channel 20V 500mA (Ta) 800mW (Ta) Surface Mount UFM	Q1	1				SSM3K36TULFCT-ND	Digi-Key		
	VCNT2020	REFLECTIVE SENSOR WITH PTR OUTPU	U7, U8	2				RS	161-2156		
	4.7uF	CAP CER 4.7UF 10V X5R 0402	C14, C15	2	Samsung	CL05A475MP5NRNC	Volume Production	LCSC	C23733	0.0159	0.795
	10uF	CAP CER 10UF 10V X5R 0402	C3, C4, C16	3	Murata	GRM155R61A106ME44D	Unknown	LCSC	C77000	0.0398	0.796
	12K	RES SMD 12K OHM 1% 1/16W 0402	R1, R2, R3, R4, R5	5				LCSC	C114760		
	100nF	CAP CER 0.1UF 16V X7R 0402	C1, C5, C6, C7, C8, C9, C10, C11, C12, C13, C17, C18, C19	13	Samsung	CL05B104KO5NNNC	Volume Production	LCSC	C1525	0.0036	0.36
	100pF	CAP CER 100PF 50V C0G/NP0 0402	C2	1	Samsung	CL05C101JB5NNNC	Volume Production	LCSC	C26409	0.0046	0.23
	330R	RES SMD 330R OHM 1% 1/16W 0402	R6, R7, R8, R9, R10	5				LCSC	C105875		
	DRV8833RTYR	IC MOTOR DRIVER	U5, U6	2	Texas Instruments	DRV8833RTYR	Volume Production	LCSC	C154936	0.9823	1.96
	TCA6424ARGJR	IC I/O EXPANDER I2C 24B 32UQFN	U3	1	Texas Instruments	TCA6424ARGJR	Volume Production	LCSC	C80692	1.45	1.45
	32MHz	2.0X1.6X0.65MM 32MHZ CRYSTAL	X1	1	Murata	XRCGB32M000F1H01R0	Unknown	Digi-Key	490-18334-1-ND	0.48	0.48
	AMCA31-2R450G-S1F-T3	RF ANT 2.4GHZ CHIP SOLDER SMD	ANT1	1	Abracon	AMCA31-2R450G-S1F-T3	Volume Production	Digi-Key	535-14095-1-ND	0.53	0.53
	LSM6DSMTR	IMU ACCEL/GYRO I2C/SPI 14LGA	U4	1	STMicroelectronics	LSM6DSMTR	Not Recommended for New Design	Digi-Key	497-16696-1-ND	2.92	2.92
	MLPF-WB55-01E3	RF FILTER LOW PASS 2.45GHZ 6SMD	U2	1	STMicroelectronics	MLPF-WB55-01E3	Unknown	Digi-Key	497-19088-1-ND	0.33	0.33
	STM32WB50CGU5	ULTRA-LOW-POWER DUAL CORE ARM CO	U1	1	STMicroelectronics	STM32WB50CGU5	Unknown	Digi-Key	497-STM32WB50CGU5-ND	4.96	4.96

ANT1

X1

U2

U5

Q1

Cube Brain V0.2
s2cube 06/06/20

sd

U8

U6

U4

U7

U3

R7

R8

R9

R6