Comment	Description	Designator	Footprint	LibRef	Manufacturer 1	Manufacturer Part Number 1	Quantity	Supplier 1	Supplier Currency 1	Supplier Order Qty 1	Supplier Part Number 1	Supplier Stock 1	Supplier Subtotal 1	Supplier Unit Price 1	Value
BATT	Socket	+	MOTOR_PLUG_F_35	Socket			1								
LTC7103		5V_BUCK	LTC7103	LTC7103	LINEAR TECHNOLOGY	LTC7103IUHE#PBF	1	Newark	USD	5000	24AC4318	61	40250	8.05	
Motor_pad	Socket	A, B, C	MOTOR_PLUG_F_35	Socket			3								
DF40C-30-DS	CONN RCPT 30POS 0.4MM SMD GOLD	AUX	DF-40C-30DS	DF40C-30-DS	Hirose Electric Co Ltd	DF40C(2.0)-30DS-0.4V(51)	1	Digi-Key	USD	5000	H11771TR-ND	4000	2552.86892	0.51057	
22uF	CAP CER 22UF 6.3V X5R 0402	C1	0201-cap	CAP0805	AVX Corporation	04026D226MAT2A	1	Digi-Key	USD	10000	478-9839-2-ND	0	1999.28564	0.19993	
PartNumber	CAP, CERM, 1000pF, 16V, +/- 10%, X7R, 0603	C1_A, C1_B, C1_C	0603-CAP	GRM188R71C102KA01D			3	Digi-Key	Loading...		GRM188R71C102KA01D-ND	0			1000pF
4u7	CAP CER 4.7UF 6.3V X5R 0201	C2	0201-cap	CAP0603	Murata Electronics North America	GRM035R60J475ME15D	1	Digi-Key	USD	10000	490-13230-2-ND	150000	951.4725	0.09515	
1u	CAP CER 1UF 6.3V X5R 0201	C3	0201-cap	CAP0603	Murata Electronics North America	GRM033R60J105MEA2D	1	Digi-Key	USD	15000	490-7229-2-ND	120000	259.74037	0.01732	
0u1	CAP CER 0.1UF 16V Y5V 0402, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201, CAP CER 0.1UF 6V Y5V 0201	C4, C19, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C45_A, C45_B, C45_C	0201-cap	CAP0402	Murata Electronics North America	GRM033C81E104ME14D	15	Digi-Key	USD	75000	490-10404-2-ND	30000	681.65548	0.00909	
PartNumber	CAP, CERM, 22 µF, 10 V, +/- 20%, X7S, 1206	C5	1206_180L	C3216X7S1A226M160AC	TDK Corporation	C3216X7S1A226M160AC	1	Digi-Key	USD	5000	445-8035-1-ND	3454	1572.11487	0.31442	22uF
PartNumber	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	C6	1210L	HMK325B7225KN-T	Taiyo Yuden	HMK325B7225KN-T	1	Digi-Key	USD	5000	587-1778-1-ND	0	890.77552	0.17818	2.2uF
0u1	CAP CER 0.1UF 16V Y5V 0402	C7, C13, C48, C50	0402-CAP	CAP0402	Murata Electronics North America	GRM155R62A104KE14D	4	Digi-Key	USD	20000	490-10458-2-ND	360000	82.03575	0.0041	0u1
PartNumber	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X7R, 0603	C8, C11, C47, C53	0603-CAP	GRM188R70J105KA01D	Murata Electronics North America	GRM188R70J105KA01D	4	Digi-Key	USD	20000	490-3898-1-ND	19	4259.53665	0.21298	1uF
PartNumber	CAP, CERM, 0.047 µF, 100 V, +/- 10%, X7S, 0603	C9	0603-CAP	C1608X7S2A473K080AB	TDK Corporation	C1608X7S2A473K080AB	1	Digi-Key	USD	5000	445-6032-1-ND	3845	210.89828	0.04218	0.047uF
1u	CAP CER 1UF 16V Y5V 0603	C10	0805-CAP	CAP0603	Murata Electronics North America	GRM219R72A105KE01L	1	Digi-Key	USD	5000	490-14464-2-ND	0	505.6681	0.11913	1u
PartNumber	CAP, CERM, 4.7 µF, 80 V, +/- 10%, X7R, 1210	C12	1210_270L	GRM32ER71K475KE14L	Murata Electronics North America	GRM32ER71K475KE14L	1	Digi-Key	USD	5000	490-9972-1-ND	0	2161.3023	0.43226	4.7uF
CAP CER 10000PF 50V X7R 0402	CAP CER 10000PF 50V X7R 0402	C14	CAPC1005L	Cap	TDK Corporation	CGA2B3X7R1H103K050BB	1	Digi-Key	USD	5000	445-6893-1-ND	469988	82.78656	0.01656	10nF
2u2	CAP CER 2.2UF 16V 10% X6S 0603	C15, C17	0603-CAP	CAP0603	TDK Corporation	C1608X6S1C225K080AC	2	Digi-Key	USD	10000	445-7438-1-ND	67717	687.74098	0.06877	2u2
0u1	CAP CER 0.1UF 16V Y5V 0402	C18	0402-CAP	CAP0402	Yageo	CC0402ZRY5V7BB104	1	Digi-Key	USD	5000	311-1047-1-ND	1554056	15.88554	0.00318	0u1
Cap	Capacitor	C20, C21, C22, C23, C24, C25, C29, C30, C31, C46	CAPC5750L	Cap	TDK	CGA9P3X7S2A155M250KB	10	Newark	USD	50000	80X3236	0	173500	3.47	15uF
8p	CAP CER 8PF 50V NPO 0201	C39, C40	0201-cap	CAP0402	Murata Electronics North America	GRM0335C1H8R0DA01J	2	Digi-Key	USD	10000	490-13331-1-ND	31391	27.26622	0.00273	
GRM21BR60G107ME15L		C41, C42	C0805	Capacitor	Murata Electronics North America	GRM21BR60G107ME15L	2	Digi-Key	USD	10000	490-10510-1-ND	395480	4264.35763	0.42644	100uF
2u2	CAP CER 2u2uF 6V Y5V 0201	C43, C44	0201-cap	CAP0402	Murata Electronics North America	GRM033R60J225ME15D	2	Digi-Key	USD	10000	490-13224-1-ND	853118	534.49693	0.05345	
PartNumber	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	C49	0603-CAP	0603YC104JAT2A	AVX Corporation	0603YC104JAT2A	1	Digi-Key	USD	5000	478-3726-1-ND	98603	311.78329	0.06236	0.1uF
100u		C51	1206-CAP	CAPACITOR-1206	TDK Corporation	C3216X5R1A107M160AC	1	Digi-Key	USD	5000	445-6007-2-ND	0	2537.57612	0.50752	
JST_GH_V4	BM04B-GHS-TBT	CAN1_CAN1, CAN1_CAN2, CAN1_CAN3, CAN2_CAN1, CAN2_CAN2, CAN2_CAN3	JST_GH_V4	JST_GH_V4	JST Sales America Inc.	BM04B-GHS-TBT(LF)(SN)(N)	6	Digi-Key	USD	30000	455-1580-2-ND	135000	5165.40739	0.17218	
PartNumber	Diode, Schottky, 100 V, 1 A, SOD-123FL	D1	SOD-123FL	MBR1H100SFT3G	ON Semiconductor	MBR1H100SFT3G	1	Digi-Key	USD	5000	MBR1H100SFT3GOSCT-ND	0	1971.30812	0.39426	100V
Schottky barrier diode	DIODE SCHOTTKY 30V 0.03A SOD323	D2	SOD323	DIODE-SCHOTTKY_SOD323	ON Semiconductor	RB751V40T1G	1	Digi-Key	USD	5000	RB751V40T1GOSCT-ND	136004	308.22682	0.06165	30V
Filter	EMIFIL (Capacitor type) Single Circuit Type for Signal Lines	Filter	NFM18CC	NFM18CC222R1C3	Murata Electronics North America	NFM18PC225B1A3D	1	Digi-Key	USD	5000	490-6972-1-ND	40819	793.05181	0.15861	2.2uF
PartNumber	Inductor, Shielded Drum Core, Ferrite, 15 µH, 1.1 A, 0.122 ohm, SMD	L1	SD53	SD53-150-R	Eaton	SD53-150-R	1	Digi-Key	USD	5000	513-1458-1-ND	11660	5353.50478	1.0707	15uH
732-3880-2-ND	Description FIXED IND 18UH 7.5A 22 MOHM SMD	L2	WE_IND	SD53-150-R	Wurth Electronics Inc.	7443551181	1	Digi-Key	USD	5000	732-3880-2-ND	800	13940.54605	2.78811	18uH
JST_SUR_6	Connector, Header, 6Pos, .8mm IDC, R/A, SMD, Tin	P106	JST_SUR_H6	JST_SUR_6	JST Sales America Inc.	SM06B-SURS-TF(LF)(SN)	1	Digi-Key	USD	5000	SM06B-SURS-TF(LF)(SN)-ND	0	2236.65981	0.44733	
MOSFET.N	N-Channel MOSFET	Q1_A, Q1_B, Q1_C, Q2_A, Q2_B, Q2_C, Q5_A, Q5_B, Q5_C, Q6_A, Q6_B, Q6_C, QAS1, QAS2	Q5B	MOSFET-N	Texas Instruments	CSD19502Q5B	14	Digi-Key	USD	70000	296-37194-1-ND	452	91061.82177	1.30088	
RES SMD 10K OHM 5% 1/16W 0402	RES SMD 10K OHM 5% 1/16W 0402	R2, R8	0402-RES	Resistor	Yageo	RC0402JR-0710KL	2	Digi-Key	USD	10000	311-10KJRTR-ND	3695000	14.38392	0.00144	10K
Current sense resistor	2W, 0.001R 5025 current sense resistor	R3_A, R3_B, R3_C	4RESC5125X09N	WSLP2010L000FEK	Stackpole Electronics Inc.	CSNL2010FTL00	3	Digi-Key	USD	15000	CSNL2010FTL00CT-ND	10308	3289.49151	0.2193	0.001R
2K	RES 2K OHM 1/16W 1% 0402 SMD	R4, R5, R11, R12, R13	0402-RES	RESISTOR0402-RES			5	Digi-Key	Loading...		311-2.0KLRCT-ND	0			
PartNumber	RES, 28.0 k, 1%, 0.1 W, 0603	R6	0603L	CRCW06032K80FKEA	Vishay Dale	CRCW06032K80FKEA	1	Digi-Key	USD	5000	541-28.0KHCT-ND	55972	28.60977	0.00572	28.0k
PartNumber	RES, 8.45 k, 1%, 0.1 W, 0603	R7	0603L	CRCW06038K45FKEA	Vishay Dale	CRCW06038K45FKEA	1	Digi-Key	USD	5000	541-8.45KHCT-ND	8	28.60977	0.00572	8.45k
RES	RES SMD 18K OHM 1% 1/8W 0805	R9_A, R9_B, R9_C, R16	R0805	R00155	Yageo	RC0805FR-0718KL	4	Digi-Key	USD	20000	311-18.0KCRCT-ND	471419	71.28733	0.00356	18k
RES	RES SMD 1K OHM 1% 1/8W 0805	R10_A, R10_B, R10_C, R18	R0805	R00095	Yageo	RC0805FR-071KL	4	Digi-Key	USD	20000	311-1.00KCRCT-ND	6418408	71.28733	0.00356	1k
PWR163	The PWR163 Series is a DPAK style surface mount power resistor.	R15	PWR163	Resistor 25W 1R DPAK	Bourns Inc.	PWR163S-25-1R00J	1	Digi-Key	USD	5000	PWR163S-25-1R00J-ND	84	5545.86993	1.10917	
10K	RES 10K OHM 1/16W 1% 0402 SMD	R19, R24	0402-RES	RESISTOR0402-RES	Yageo	RC0402FR-0710KL	2	Digi-Key	USD	10000	311-10.0KLRCT-ND	11784980	20.07426	0.00201	
1K	RES 1K OHM 1/16W 1% 0402	R20	0402-RES	RESISTOR0402-RES	Samsung Electro-Mechanics America, Inc.	RC1005F102CS	1	Digi-Key	USD	5000	1276-3430-1-ND	54956	9.76052	0.00195	1K
120R	RES 120 OHM 1/16W 1% 0402 SMD	R21	0402-RES	RESISTOR0402-RES	Yageo	RC0402FR-07120RL	1	Digi-Key	USD	5000	311-120LRCT-ND	607469	10.03713	0.00201	
0R	RES 0OHM 1/16W 1% 0201 SMD	R22, R23	0201-RES	RESISTOR0402-RES	Panasonic Electronic Components	ERJ-1GN0R00C	2	Digi-Key	USD	15000	P15979TR-ND	6360000	41.01788	0.00273	
VL53L0X		TOF1	VL53L0X	VL53L0X	STMicroelectronics	VL53L0CXV0DH/1	1	Digi-Key	USD	5000	497-16538-2-ND	10000	13256.20347	2.65124	
DRV8323R		U1	PQFP-G48	DRV8323R	Texas Instruments	DRV8323RHRGZR	1	Digi-Key	USD	5000	DRV8323RHRGZR-ND	0	13278.17451	2.65563	
TJA1052i		U1_CAN1, U1_CAN2, U1_CAN3	TJA1052i	TJA1052i	NXP USA Inc.	TJA1052IT/5Y	3	Digi-Key	USD	15000	568-11942-1-ND	5217	56370.89266	3.75808	
NCV8154	IC REG LDO 1.8v and 2.8v	U2	NCV8154	NCV8154	ON Semiconductor	NCV8154MTW180280TCG	1	Digi-Key	USD	5000	80TCGCT3E-ND	3000	1486.68072	0.29734	
MA700	MA700	U4	QFN16	MA700	Monolithic Power Systems Inc.	MA700GQ-Z	1	Digi-Key	USD	5000	MA700GQ-Z-ND	0	13722.25823	2.74445	
ICM20649		U5	ICM20649	ICM20649	Supplier disabled	Supplier disabled	1	Octopart	Supplier disabled		Component Distributors Inc. - ICM-20649				
LTC4316		U7	LTC4316	LTC4316	Linear Technology	LTC4316IDD#PBF	1	Digi-Key	USD	5000	LTC4316IDD#PBF-ND	899	10459.95391	2.09199	
STM32F769AI	STM32F7	U22	WLCSP180	STM32F769AI	STMICROELECTRONICS	STM32F769AIY6TR	1	Newark	USD	5000	84Y8745	0	48000	9.6	
Crystal Oscillator in	CRYSTAL 24MHZ 8P	X1	OSCILLATOR-1.8x1	OSCILLATOR-3.2X2	TIXC CORPORATION	SQ-24.000MEEV-T	1	Digi-Key	USD	5000	887-1846-2-ND	0	4712.15589	0.94243	