











Comment	Description	Designator	Footprint	LibRef	Quantity
7.4V	2 Holes	Batt1, Batt2, Engine	PCBComponent_1 -	Header 2	3
7.74	2 110103	Supply	duplicate	ricauci z	, ,
6.1V-7.4V	Header, 2-Pin	BrainSupply, conuC, GenSupply	TB002V50002BE	Header 2	3
EMK105 B7104KVHF	EMK107B7104KA-T, C3216X6S1V106K16	Cboot1, Cbst2, Cinx2	CAPC1005X55N	EMK107B7104KA-T, C3216X6S1V106K160A C	3
GCM155R71E333K	C3216X6S1V106K16	Ccomp2	CAPC0603X33N	C3216X6S1V106K160A C	1
GCM1555C1H820J*	C3216X6S1V106K16	Ccomp3	CAPC1005X55N	C3216X6S1V106K160A	1
C1005C0G1H220J	C0402C240J3GACTU	Cff1	CAPC1005X55N	C0402C240J3GACTU	1
C2012X7S1C106K	C3216X6S1V106K16	Cic	CAPC1005X55N	C3216X6S1V106K160A C	1
GCJ31CC71E106K	GRM31CR71E106KA1	Cin1	CAPC3216X200N	GRM31CR71E106KA1 2L	1
C2012X7S1C106K	C3216X6S1V106K16	Cin2	CAPC2012X145N	C3216X6S1V106K160A C	1
GCM188C71A225K	C1608X7R1A225K08, GRM188R71A225KE1, C3216X6S1V106K16	Cinx1, Cvcc1, Cvcc2	CAPC1608X80N	C1608X7R1A225K080 AC, GRM188R71A225KE15 D, C3216X6S1V106K160A C	3
EMK325ABJ107MM-T	CUSTOM1	Cout1	CAPC3225X270N	GENERIC_CAPACITOR	1
CKG57KX7R1E476K	C3216X6S1V106K16	Cout2	CAPC3225X270N	C3216X6S1V106K160A C	1
C1608X7R1H154K	GRM155R61A124KE1	Css1	CAPC1005X55N	GRM155R61A124KE19 D	1
Vbr=6V2	Zener Diode	D1	SOT65P210X110-3N	BZX84W-C15F	1
BZX84W-C15F	Zener Diode	D2 D3	SOT95P230X110-3N SOT95P230X110-3N	BZX84W-C15F	1
Vbr=6V2 PZU6.2B2A-QX	Zener Diode Zener Diode	D3 D4	PZU62B2AQX	BZX84W-C15F PZU6.2B2A-QX	1
SZBZX84C18ET1G	Zener Diode	D5, D6	SOT95P230X110-3N	BZX84W-C15F	2
0451015.MRL	Fuse	F1, F2	FUSC6127X294N	0451015.MRL	2
TPS548A28RWWR	No Description Available	IC1	RWW0021A	TPS548A28RWWR	1
TPS61288RQQR	Integrated Circuit	IC2	TPS61288RQQR	TPS61288RQQR	1
INA180A2QDBVRQ1	Attenuator or Isolator	IC3	SOT95P280X145-5N	INA180A2QDBVRQ1	1
IHLP4040DZERR47M1	IHLP4040DZERR47M	L1	IHLP4040DZERR47M1	IHLP4040DZERR47M1	1
DR127-3R3-R	Inductor	L2	INDPM125125X800N	Inductor	1
SMLVN6RGB1U1	LED	LED	SMLVN6RGB1U1	SMLVN6RGB1U1	1
5V	Header, 2-Pin	LoudSpeaker, ServoSupply, Switch PMOS	TB002V50002BE	Header 2	3
BC846B	NPN Bipolar Transistor	Q1, Q2, Q3, Q6	SOT95P230X110-3N	NPN	4
BC856B	PNP Bipolar Transistor	Q5	SOT95P230X110-3N	PNP	1
BSS138BK-215 SQD50P04-09L_GE3	MOSFET (N-Channel) MOSFET (P-Channel)	Q7, Q8 Q10, Q11, Q12, Q13	SOT95P230X110-3N SQD50P0409L_GE3	BSS138BK-215 SQD50P04-09L_GE3	2 4
MCR03PFX1051	Resistor	R1	RESC1608X55N	Res1	1
MCR03PFX7680	Resistor	R2	RESC1608X55N	Res1	1
RK73H1JPT2150F	Resistor	R5	ERJ2RKD1004X	Res1	1
MCR03PFX1000	Resistor	R6, R8, R23	RESC1608X55N	Res1	3
SMM0204 50 150R 1 %	Resistor	R7	SMM02040D1501BB3 00	Res1	1
MCR03PFX1002	Resistor	R9, R10, R11, R12, R13, R14, R15, R16, R20, R21, R24, R25, R31	RESC1608X55N	Res1	13
8909013012	Resistor	R17	ERJ2RKD1004X	Res1	1
MCR03PFX1002	Resistor	R18, R19, R22	ERJP06D1000V	Res1	3
SMM0204 50 34K 1 %	Resistor	Rcomp2	RESC1608X55N SMM02040D1501BB3	Res1	1
SMM0204 50 10K 1 % SMM0204 50 48K7 1	CRCW040210K0FKED	Rfbb1	00 SMM02040D1501BB3	CRCW040210K0FKED	1
% SMM0204 50 73K2 1	Resistor	Rfbb2	00	Res1	1
% SMM0204 50 931K 1	CRCW040273K2FKED	Rfbt1	ERJ2RKD1004X	CRCW040273K2FKED	1
% SMM0204 50 30K1 1	Resistor	Rfbt2	RESC1608X55N SMM02040D1501BB3	Res1	1
% WSLP25122L500FEA	CRCW040230K1FKED Resistor	Rmode1, Rpg1	00 RESC6432X89N	CRCW040230K1FKED WSLP25122L500FEA	2
SMM0204 50 7K32 1	Resistor SMM0204 50 7K32 1	Rshunt			
TP	%	Rtrip1 TP3, TP4, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP28, TP26, TP27, TP28, TP29, TP30, TP31, TP32, TP30, TP31, TP32, TP36, TP37, TP38, TP50, TP51, TP7	ER/2RKD1004X Test_Point0.5x0.5	CRCW04027K32FKED TEst_Point_0.5x0.5	37