

Item	Qty	Designator	Description	BOM Notes	Manufacturer, Part Number
		REQUIRED CIRCUIT COMPONENTS:			
1	4	C2, C6, C11, C12	CAP.,10uF,X7R,100V,20%,2220,STACKED	Standard	TDK, CKG57NX7R2A106M
2	1	C3	CAP.,150uF,ALUM.ELECT.,25V,20%,8X10.5mm SMD	Standard	SUN ELECTRONIC INDUSTRIES CORP, 25HVH150M
3	2	C4, C8	CAP.,33uF,ALUM. ELECT.,63V,20%,10x10.5mm SMD	Standard	SUN ELECTRONIC INDUSTRIES CORP, 63HVH33M
4	1	C13	CAP.,0.001uF,X7R,100V,+/-10%,1206	Standard	WURTH ELEKTRONIK, 885012208106
5	1	C15	CAP.,1000pF,X7R,16V,10%,0603	Standard	AVX, 0603YC102KAT2A
6	2	C16, C21	CAP.,0.01uF,X7R,100V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206114
7	2	C17, C18	CAP.,0.0033uF,X7R,50V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206086
8	2	C19, C20	CAP.,0.220uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206048
9	2	C22, C24	CAP.,0.470uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206050
10	1	C23	CAP.,2.2uF,X7R,100V,10%,1210	Standard	AVX, 1210IC225KAT2A
11	3	C26, C34, C37	CAP.,0.1uF,X7R,16V,10%,0603	Standard	AVX, 0603YC104KAT2A
12	2	C27, C32	CAP.,1uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206052
13	1	C28	CAP.,1uF,X7R,100V,10%,1210	Standard	AVX, 1210IC105KAT2A
14	3	C29, C30, C31	CAP.,4.7uF,X5R,16V,20%,0603	Standard	MURATA, GRM188R61C475MAAJD
15	2	C33, C35	CAP.,0.0047uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206038
16	1	C36	CAP.,220pF,C0G,50V,5%,0603	Standard	AVX, 06035A221JAT2A
17	1	C38	CAP.,0.0068uF,X7R,50V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206088
18	1	C39	CAP.,0.068uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206045
19	2	D3, D4	DIODE,RECT.,200V,1A,SOD-123F	Standard	CENTRAL SEMI., CMMR1U-02 TR
20	2	D6, D7	DIODE,SCHOTTKY,100V,1A,POWERDI-123	Standard	DIODES INC., DFLS1100-7
21	1	L1	IND.,10uH,SHIELDED, HIGH CURRENT,15%,30A,2.4mOHMS	Standard	WURTH ELEKTRONIK, 7443641000
22	2	M1, M6	XSTR.,MOSFET,N-CH,60V,PG-TDSON-8	Standard	INFINEON, BSC028N06NS
23	1	M2	XSTR.,MOSFET, N-CH,60V,8-PIN PG-TDSON FL	Standard	INFINEON, BSC016N06NSATMA1
24	2	M3, M4	XSTR.,MOSFET, N-CHAN,25V,PG-TDSON-8	Standard	INFINEON, BSC010NE2LSI
25	1	R1	RES.,5m OHMS,1%,2W,2512	Standard	TT ELECTRONICS, LRMAT2512-R005FT4
26	1	R2	RES.,SENSE,3m OHMS,1%,2W,2512	Standard	TT ELECTRONICS, LRMAT2512-R003FT4
27	1	R4	RES.,1.2 OHMS,5%,1/4W,1206	Standard	VISHAY, CRCW12061R20JNEA
28	1	R5	RES.,30.1k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060330K1FKEA
29	1	R6	RES.,8.06k OHMS,1%,1/10W,0603	Standard	YAGEO, RC0603FR-078K06L
30	4	R7, R9, R10, R47	RES.,1 OHM,1%,1/10W,0603	Standard	YAGEO, RC0603FR-071RL
31	7	R8, R11, R23, R29, R36, R44, R66	RES.,0 OHM,1/10W,0603	Standard	BOURNS, CR0603-J/-000ELF
32	8	R12, R18, R21, R22, R26, R27, R41, R63	RES.,10 OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060310R0FKEA
33	1	R13	RES.,3m OHM,1%,3W,1225,METAL,SENSE	Standard	SUSUMU, KRL6432E-M-R003-F-T1
34	6	R17, R49, R55, R58, R73, R74	RES.,4.99k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF4991V
35	1	R20	RES.,3.3 OHMS,1%,1/10W,0603,SENSE	Standard	Stackpole, RMCF0603FT3R30
36	1	R30	RES.,196k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW0603196KFKEA
37	1	R31	RES.,102k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW0603102KFKEA
38	1	R37	RES.,5.9k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF5901V
39	2	R38, R65	RES.,53.6k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060353K6FKEA
40	3	R39, R56, R59	RES.,10k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060310K0FKEC
41	1	R40	RES.,3.48k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW06033K48FKEA
42	1	R42	RES.,1.1k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF1101V
43	1	R43	RES.,11.3k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF1132V
44	1	R46	RES.,49.9k OHMS,1%,1/10W,0603	Standard	NIC, NRC06F4992TRF
45	1	R51	RES.,18.2k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF1822
46	1	R52	RES.,21k OHMS,1%,1/10W,0603	Standard	Rohm, MCR03EZPFX2102
47	1	R53	RES.,3.01k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW06033K01FKEA
48	1	R57	RES.,301k OHMS,1%,1/10W,0603	Standard	NIC, NRC06F3013TRF
49	1	R61	RES.,124k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF1243V
50	1	R64	RES.,110k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EKF1103V
51	1	R67	RES.,35.7k OHMS,1%,1/10W,0603	Standard	NIC, NRC06F3572TRF
52	1	U1	IC., BATTERY CHARGE CONTROLLER	Standard	ANALOG DEVICES, LT8491EUKJ#PBF

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ADDITIONAL DEMO BOARD CIRCUIT COMPONENTS and OPTIONS:					
53	5	C1, C5, C7, C9, C10	CAP.,OPTION,ALUM. ELECT.,SMD	OPT	OPT
54	1	C14	CAP., OPTION, 1206	OPT	OPT
55	1	C41	CAP.,1uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206052
56	1	D8	LED, OPTION, 0603	OPT	Lumex Opto/Components Inc., SML-LX0603SIW-TR
57	1	D9	LED,GREEN,COLORLESS Diffused,0603	Standard	OSRAM, LG L29K-G2J1-24-Z
58	1	F1	FUSE BLADE FAST ACTING,30A,58V,10.9 X 3.8 X 8.8mm	Standard	LITTLEFUSE, 0997030.WXN
59	1	FH1	FUSE HOLDER,125V,2-PIN,THT-HOLE	Standard	LITTELFUSE, 178.6764.0001
60	1	HL1	IND., OPTION	OPT	OPT
61	1	M5	XSTR.,MOSFET, N-CHAN,25V,PG-TDSON-8	OPT	INFINEON, BSC010NE2LSI
62	1	R24	RES.,0 OHM,1/10W,0603	OPT	BOURNS, CR0603-J/-000ELF
63	1	R35	RES., OPTION, 0603	OPT	OPT
64	1	R45	RES.,1.3k OHMS,1%,1/10W,0603	Standard	Vishay, CRCW06031K30FKEA
65	2	R48, R62	RES., OPTION, 0603	OPT	OPT
66	1	R50	RES.,549 OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW0603549RFKEA
67	2	R68, R69	RES.,10k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060310K0FKEC
68	1	R75	RES., OPTION, 1206	OPT	OPT
69	1	R76	RES.,1 OHM,1%,1/10W,0603	OPT	YAGEO, RC0603FR-071RL
70	1	SW1	SWITCH,TACT.,NO SPST,0.05A,12V,J-BEND,SMD 6.0x3.5mm	Standard	WURTH ELEKTRONIK, 434123050816
71	1	U4	IC., MEMORY,EEPROM,2Kb (256x8),TSSOP-8	Standard	Microchip, 24LC025-1/ST
Optional Remote Sense for Vbat: Installed					
72	1	C25	CAP.,0.010uF,X7R,16V,10%,0603	Standard	WURTH ELEKTRONIK, 885012206040
73	3	D1, D2, D10	DIODE,SWITCHING,75V,300mA, 350mW,SOT-23	Standard	DIODES INC., BAV99-7-F
74	1	D5	DIODE, OPTION, SOD-323	OPT	OPT
75	1	J3	CONN.,RJ-25,FEMALE,6 POS,2.54mm,THT RA	Standard	TE CONNECTIVITY, 5555165-1
76	1	Q2	XSTR.,MOSFET, P-CH,50V,0.13A,SOT23-3	Standard	FAIRCHILD SEMI, BSS84
77	2	Q4, Q5	XSTR.,NPN,40V,200mA,SOT23-3	Standard	ON Semiconductor, MMBT3904LT1G
78	1	R14	RES.,100k OHMS,1%,1/10W,0603	Standard	YAGEO, RC0603FR-07100KL
79	2	R15,R60	RES.,100 OHMS,5%,1W,2512	Standard	PANASONIC, ERJ1TYJ101U
80	1	R19	RES., OPTION, 0603	OPT	OPT
81	1	R32	RES.,200k OHMS,1%,1/10W,0603	Standard	NIC, NRC06F2003TRF
82	1	R33	RES.,27.4k OHMS,1%,1/10W,0603	Standard	VISHAY, CRCW060327K4FKEA
83	1	R34	RES.,113k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EF1133V
84	1	U2	IC., OP AMP, SO8	Standard	ANALOG DEVICES, LT1636CS8#PBF
Optional DC Input Source: Installed					
85	1	C40	CAP.,2.2uF,X7R,100V,10%,1210	Standard	AVX, 12101C225KAT2A
86	1	D11	DIODE,TVS,UNI-DIRECT,70V,400W,SMA	Standard	DIODES INC., SMAT70A-13-F
87	1	D12	DIODE,ZENER,12V,150mW,SOD-523	Standard	DIODES INC., DDZ9699T-7
88	1	D13	DIODE,TVS,UNI-DIRECT,24V,400W,SMA	Standard	DIODES INC., SMAJ24A-13-F
89	1	J7	Anderson PP15/45 1x2 Assembled from MP1-MP15	Assy from MP1-15	Anderson Power, Multi-Part PP15
90	1	M7	XSTR.,MOSFET,N-CH,100V,80A,PG-TDSON-8	Standard	INFINEON, BSC070N10NS5
91	1	Q6	XSTR.,NPN,40V,200mA,SOT23-3	Standard	ON Semiconductor, MMBT3904LT1G
92	1	R70	RES.,100k OHMS,1%,1/10W,0603	Standard	YAGEO, RC0603FR-07100KL
93	1	R71	RES.,33.2k OHMS,1%,1/10W,0603	Standard	PANASONIC, ERJ3EF3322V
94	1	R72	RES.,1k OHM,1%,1/10W,0603	Standard	VISHAY, CRCW06031K00FKEA
95	1	U3	IC.,Ideal Diode Controller,6-pin DFN EP	Standard	ANALOG DEVICES, LTC4359CDCB#PBF

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			Optional EXT VCC Disconnect: Not Installed		
96	1	Q1	XSTR.,MOSFET, P-CH,50V,0.13A,SOT23-3	OPT	FAIRCHILD SEMI, BSS84
97	1	Q3	XSTR.,NPN,40V,200mA,SOT23-3	OPT	ON Semiconductor, MMBT3904LT1G
98	1	R3	RES.,100k OHMS,1%,1/10W,0603	OPT	YAGEO, RC0603FR-07100KL
99	1	R16	RES.,10 OHMS,1%,1/10W,0603	OPT	VISHAY, CRCW060310R0FKEA
100	1	R25	RES.,200k OHMS,1%,1/10W,0603	OPT	NIC, NRC06F2003TRF
101	1	R28	RES.,26.1k OHMS,1%,1/10W,0603	OPT	NIC, NRC06F2612TRF
			HARDWARE, CONNECTORS, ETC		
102	2	J1, J2	Anderson PP15/45 1x2 Assembled from MP1-MP15	Assy from MP1-15	Anderson Power, Multi-Part PP15
103	2	J4, J6	CONN.,HDR,MALE,1x4,2.54mm,STR, VERT, THT,AU, HTSW Series	Standard	SAMTEC, HTSW-104-07-G-S
104	1	J5	CONN.,HEADER SHROUDED,M,8 POS,2.54mm,THT-HOLE STR	Standard	WURTH ELEKTRONIK, 61200821621
105	2	J8, J12	CONN.,HEADER,HDR,8POS,2mm,ST THT-HOLE	Standard	AMPHENOL, 98414-G06-08ULF
106	1	J9	CONN.,HDR,SHROUDED,MALE,2x6,2mm,VERT,ST,T HT	Standard	AMPHENOL, 98414-G06-12ULF
107	1	J10	CONN.,HDR,SHROUDED,MALE,2x7,2mm,VERT,ST,T HT	Standard	MOLEX, 87831-1420
108	1	J11	CONN.,HDR,MALE,1x4,2.54mm,STR, VERT, THT,AU, HTSW Series	Standard	SAMTEC, HTSW-104-07-G-S
109	3	MP1, MP6, MP11	CONN.,POWERPOLE,HOUSING,+PIN,RED,15A,1POS	Standard	Anderson Power Products, 1327
110	3	MP2, MP7, MP12	CONN.,POWERPOLE,HOUSING,-PIN,BLACK,15A,1POS	Standard	Anderson Power Products, 1327G6
111	6	MP3, MP4, MP8, MP9, MP13, MP14	CONN.,POWER,SKT,25.7mm,RA/THT-HOLE	Standard	Anderson Power Products, 1377g12-bk
112	3	MP5, MP10, MP15	CONN.,PCB MTG STAPLES,1x2,STR,12x14.5mm	Standard	Anderson Power Products, 114555P2
113	4	MTG1, MTG2, MTG3, MTG4	4-40 X 1/4 PHIL PAN INT SEMS STL ZN CR3 RoHS	Standard	OLANDER CO, 4C25PPIZR
114	4	SO1, SO2, SO3, SO4	STANDOFF,F/F,HEX,4-40 X 1in	Standard	KEYSTONE, 2205
115	13	TP1, TP2, TP3, TP4, TP6, TP7, TP8, TP9, TP10, TP12, TP13, TP14, TP15	TEST POINT,SILVER PLATE,PHOSPHOR BRONZE,3.81mmX2.03mm,2.29mm H,SMT	Standard	KEYSTONE, 5019