

	A	B	C	D	E
1	Item	Qty	Ref - Des	Desc	Manufacturer's Part Number
2	1	2	C1,C85	CAP, 56uF 20% 63V ELEC	SUNCON 63HVP56M
3	2	6	C3,C9,C23,C44,C54,C60	CAP, 0603 0.1uF 10% 100V X7R	MURATA GRM188R72A104KA35J
4	3	2	C4,C5	CAP, 0603 10nF 10% 100V X7R	AVX 06031C103KAT2A
5	4	1	C6	CAP, 0603 1nF 10% 100V X7R	AVX 06031C102KAT2A
6	5	9	C7,C8,C21,C22,C41,C42,	CAP, 1210 2.2uF 10% 100V X7R	MURATA GRM32ER72A225KA35L
7			C58,C59,C74		
8	6	16	C10,C11,C12,C24,C25,C26,	CAP, 1210 22uF 20% 16V X7R	MURATA GRM32ER71C226MEA8L
9			C46,C47,C48,C61,C62,C67,		
10			C88,C89,C90,C93		
11	7	4	C13,C28,C55,C68	CAP, 0603 1nF 10% 16V X7R	AVX 0603YC102KAT2A
12	8	8	C14,C15,C29,C30,C50,C52,	CAP, 150uF 16V ELEC. OS-CON	PANASONIC 16SVP150M
13			C63,C64		
14	9	0	C16,C17,C31,C32,C51,C53,	CAP, 7343 OPTION	OPTION
15			C65,C66		
16	10	1	C18	CAP, 0603 8.2nF 10% 50V X7R	AVX 06035C822KAT2A
17	11	0	C19,C34,C35,C56,C69,C73	CAP, 0603 OPTION	OPTION
18	12	2	C20,C36	CAP, 0603 100pF 5% 50V C0G	AVX 06035A101JAT2A
19	13	4	C27,C33,C82,C83	CAP, 0603 10nF 10% 25V X7R	AVX 06033C103KAT2A
20	14	2	C37,C38	CAP, 0603 2.2uF 10% 16V X5R	AVX 0603YD225KAT2A
21	15	2	C39,C45	CAP, 0603 4.7uF 10% 10V X5R	AVX 0603ZD475KAT2A
22	16	2	C40,C43	CAP, 0603 4.7uF 10% 16V X5R	MURATA GRM188R61C475KAAJD
23	17	2	C49,C57	CAP, 0603 10pF 5% 50V C0G	AVX 06035A100JAT2A
24	18	2	C70,C103	CAP, 0805 2.2uF 10% 16V X7R	AVX 0805YC225KAT2A
25	19	0	C71,C77,C91,C92	CAP, 0805 OPTION	OPTION
26	20	1	C72	CAP, 0603 47nF 10% 25V X7R	AVX 06033C473KAT2A
27	21	0	C75	CAP, 1210 OPTION	OPTION
28	22	1	C76	CAP, 0603 0.1uF 10% 25V X7R	AVX 06033C104KAT2A
29	23	1	C78	CAP, 0805 220nF 10% 100V X7R	MURATA GRM21AR72A224KAC5L
30	24	2	C79,C80	CAP, 1210 100uF 20% 10V X5R	MURATA GRM32ER61A107ME20L
31	25	1	C81	CAP, 0603 220pF 10% 50V X7R	AVX 06035C221KAT2A
32	26	2	C84,C101	CAP, 0603 100nF 20% 16V X7R	AVX 0603YC104MAT2A
33	27	0	C86,C87	CAP, ELEC OPTION	OPTION
34	28	2	C94,C95	CAP, 1812 10uF 20% 100V X7S	TDK CKG45NX7S2A106M500JH
35	29	4	C96,C97,C98,C99	CAP, 1206 2.2uF 10% 100V X7R	MURATA GRM31CR72A225KA73L
36	30	1	C100	CAP, 0603 150pF 5% 50V NPO	AVX 06035A151JAT2A
37	31	1	C102	CAP, 0603 1uF 20% 25V X5R	AVX 06033D105MAT2A
38	32	4	D1,D2,D3,D4	DIODE, SCHOTTKY 100V, 1A	DIODES/ZETEX, DFLS1100-7

	A	B	C	D	E
39	33	4	D5,D6,D13,D14	LED, 0603 GREEN	OSRAM LG L29K-G2J1-24-Z
40	34	1	D7	LED, 0603 RED	OSRAM LS L29K-H1J2-1-Z
41	35	0	D8	DIODE, ZENER OPTION	OPTION
42	36	0	D9,D12	DIODE, OPTION	OPTION
43	37	26	E1,E2,E3,E4,E5,E6,E7,E8,	TURRET	MILL-MAX 2501-2-00-80-00-00-07-0
44			E11,E12,E14,E16,E18,E20,		
45			E21,E22,E23,E24,E25,E26,		
46			E27,E29,E30,E32,E35,E36		
47	38	5	JP1,JP2,JP3,JP5,JP6	HEADER, 3 PIN 2mm	SULLINS NRPN031PAEN-RC
48	39	6	J1,J2,J3,J4,J5,J6	STUD, TESTPIN	PEM KFH-032-10
49	40	2	J7,J12	CONN, BNC, 5 PINS	CONNEX 112404
50	41	1	J9	HEADER, 14PIN DUAL ROW R/A	MOLEX 87760-1416
51	42	1	J10	CONN, SOCKET 14PIN DUAL ROW R/A	SULLINSINC. NPPN072FJFN-RC
52	43	1	J11	HEADER, 12PIN 2mm STR DL	FCI 98414-G06-12ULF
53	44	10		LUG RING, #10	KEYSTONE 8205
54	45	4	L1,L2,L3,L4	IND, 8.6uH	WURTH ELEKTRONIK 7443630860
55	46	1	L5	IND, 68uH	SUMIDA CDRH105RNP-680NC
56	47	0	L1,L2,L3,L4	IND, 6.8uH OPTION	COILCRAFT SER2915H-682KL OPTION
57		0	L1,L2,L3,L4 - ALTERNATE	IND, 6.8uH OPTION	COILCRAFT SER2918H-682KL OPTION
58	48	4	MH1,MH2,MH3,MH4	STANDOFF, SNAP ON	KEYSTONE_8831
59	49	20		NUT, BRASS 10-32	ANY #10-32
60	50	4	Q1,Q6,Q11,Q15	XSTR, MOSFET N-CH 60V 25A 5 PIN LPAK	RENESAS RJK0651DPB
61	51	0	Q2,Q4,Q5,Q8,Q12,Q14,Q16,	XSTR, OPTION	OPTION
62			Q17		
63	52	4	Q3,Q7,Q13,Q18	XSTR, MOSFET N-CH 60V 45A 5 PIN LPAK	RENESAS RJK0653DPB
64	53	2	Q9,Q10	XSTR, PNP GENERAL PURPOSE SOT-323	DIODES INC. MMST3906-7-F
65	54	1	Q19	XSTR, MOSFET N-CH 30V 30A 5 PIN LPAK	RENESAS RJK0305DPB-00#J0
66	55	1	Q20	XSTR, MOSFET P-CH 20V 5.2A SOT-23	VISHAY SI2365EDS-T1-GE3
67	56	4	Q22,Q23,Q28,Q29	XSTR, MOSFET N-CH 60V 115mA SOT23	FAIRCHILD 2N7002A
68	57	0	Q27	XSTR, N-CHANNEL DMOS FET OPTION	OPTION
69	58	2	R2,R122	RES, 2512 0.003 OHMS 1% 1W	PANASONIC ERJ-M1WTF3M0U
70	59	2	R3,R4	RES, 0603 1k OHMS 5% 1/10W	VISHAY CRCW06031K00JNEA
71	60	6	R5,R6,R7,R8,R124,R125	RES, 2512 0 OHMS JUMPER	VISHAY CRCW25120000Z0EG
72	61	7	R9,R12,R30,R38,R52,R53,	RES, 0603 2 OHMS 5% 1/10W	VISHAY CRCW06032R00JNEA
73			R67		
74	62	12	R10,R11,R13,R15,R16,R18,	RES, 0603 10k OHMS 5% 1/10W	VISHAY CRCW060310K0JNEA
75			R23,R25,R28,R89,R112,		
76			R113		

	A	B	C	D	E
77	63	4	R14,R37,R58,R70	RES, 2010 3m OHMS 1% 1/2W	VISHAY WSL20103L000FEA
78	64	36	R17,R21,R22,R27,R43,R44,	RES, 0603 0 OHMS JUMPER	VISHAY CRCW06030000Z0EA
79			R45,R56,R57,R59,R60,R61,		
80			R62,R64,R66,R69,R73,R74,		
81			R78,R80,R81,R96,R98,R106,		
82			R109,R118,R121,R128,R129,		
83			R130,R131,R132,R148,R168,		
84			R173,R174		
85	65	0	R19,R20,R29,R31,R32,R33,	RES, 0603 OPTION	OPTION
86			R34,R35,R36,R39,R40,R41,		
87			R42,R46,R47,R48,R49,R54,		
88			R55,R71,R72,R77,R79,R82,		
89			R83,R97,R100,R101,R102,		
90			R103,R104,R105,R108,R110,		
91			R111,R116,R117,R144,R145,		
92			R147,R169		
93	66	9	R24,R26,R50,R51,R63,R65,	RES, 0603 100 OHMS 5% 1/10W	VISHAY CRCW0603100RJNEA
94			R75,R76,R155		
95	67	2	R68,R158	RES, 0603 49.9K OHMS 1% 1/10W	VISHAY CRCW060349K9FKEA
96	68	4	R87,R88,R171,R172	RES, 0603 200 OHMS 5% 1/10W	VISHAY CRCW0603200RJNEA
97	69	0	R90,R92,R94,R95	RES, 0805 OPTION	OPTION
98	70	1	R91	RES, 2010 0.01 OHMS 1% 1/2W	VISHAY WSL2010R0100FEA
99	71	1	R93	RES, 0603 127 OHMS 1% 1/10W	VISHAY CRCW0603127RFKEA
100	72	1	R99	RES, 0603 220k OHMS 5% 1/10W	VISHAY CRCW0603220KJNEA
101	73	0	R107	RES, 1206 OPTION	OPTION
102	74	2	R114,R115	RES, 0603 10 OHMS 5% 1/10W	VISHAY CRCW060310R0JNEA
103	75	2	R119,R120	RES, 0603 4.99K OHMS 1% 1/10W	VISHAY CRCW06034K99FKEA
104	76	1	R146	RES, 0805 4.7 OHMS 1% 0.125W	VISHAY CRCW08054R70FKEA
105	77	1	R151	RES, 0603 1M OHMS 5% 1/10W	VISHAY CRCW06031M00JNEA
106	78	1	R152	RES, 0603 681K OHMS 1% 1/10W	VISHAY CRCW0603681KFKEA
107	79	1	R153	RES, 0603 3.3 OHMS 1% 1/10W	VISHAY CRCW06033R30FKEA
108	80	1	R154	RES, 0603 82.5 OHMS 1% 1/10W	VISHAY CRCW060382R5FKEA
109	81	1	R157	RES, 0603 2 OHMS 5% 1/10W	VISHAY CRCW06032R00JNEA
110	82	1	R158	RES, 0603 27.4k OHMS 1% 1/10W	VISHAY CRCW060327K4FKEA
111	83	1	R159	RES, 0603 226K OHMS 1% 1/10W	VISHAY CRCW0603226KFKEA
112	84	1	R160	RES, VARIABLE 5K	BOURNS 3386P-1-502-LF
113	85	1	R161	RES, 0603 20K OHMS 5% 1/10W	VISHAY CRCW060320K0JNEA
114	86	2	R162,R163	RES, 1206 0 OHMS JUMPER	VISHAY CRCW12060000Z0EA

	A	B	C	D	E
115	87	1	R170	RES, 0603 340 OHMS 5% 1/10W	VISHAY CRCW0603340RJNEA
116	88	2	SW1,SW2	SWITCH, SUBMINATURE SLIDE	C&K JS202011CQN
117	89	1	U1	ASSY, IC, WIDE INPUT AND OUTPUT DC/DC CONVERTER	LINEAS TECH. LTC3886IUKG#10E3-1PBF-ES
118	90	1	U2	IC, POLYPHASE STEP-DOWN SLAVE CONTROLLER	LINEAR TECH. LTC3870EUFDPBF
119	91	1	U3	IC, SYNCHRONOUS STEP-DOWN CONVERTER	LINEAR TECH. LTC3630EMSE#PBF
120	92	1	U4	IC, 24LC05-I/ST	MICROCHIP 24LC025-I/ST
121	93	1	U5	IC, LTC6992	LINEAR TECH. LTC6992IS6-1
122	94	1	U6	IC, SINGLE OP AMP	LINEAR TECH. LT1803IS5
123	95	10		WASHER, #10 TIN PLATED BRASS	ANY #10 EXT BZ TN
124	96	5	XJP1,XJP2,XJP3,XJP5,XJP6	SHUNT	SAMTEC 2SN-BK-G