

(1) +5 V, 5 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC1	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q1	1		TPH11003NL	TOSHIBA	N-ch MOSFET 30 V, 32 A	SOP Advance	5.0x6.0	
3	Q2	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 38 A	SOP Advance	5.0x6.0	
4	D1	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L1	1	6.8 μ H	74439370068	Würth Elektronik	15 A		16.4x15.4	
6	R1	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R3	1	2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R5	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R9	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R10	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R14,R17	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R13	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R19	1	4.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R25	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R26	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R30	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C3	1	100 μ F			Ceramic,16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C5,C7	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C9,C11, C21,C25	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C23	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C13	1	100 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C15	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C17,C19	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C31	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C33	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ1	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E1,E2	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R6,R21, R29	3						1.6x0.8 (0603)	Not Mount
29	C27,C29, C427,C428	4						1.6x0.8 (0603)	Not Mount
30	C475, C476,C520	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(2) +5 V, 5 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC2	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q3	1		TPH11003NL	TOSHIBA	N-ch MOSFET 30 V, 32 A	SOP Advance	5.0x6.0	
3	Q4	1		TPH11003NL	TOSHIBA	N-ch MOSFET 30 V, 32 A	SOP Advance	5.0x6.0	
4	D2	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L2	1	6.8 μ H	74439370068	Würth Elektronik	15 A		16.4x15.4	
6	R2	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R4	1	2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R7	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R11	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R12	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R16,R18	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R15	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R20	1	4.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R27	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R28	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R32	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C4	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C6,C8	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C10,C12, C22,C26	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C24	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C14	1	100 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C16	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C18,C20	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C32	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C34	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ2	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E3,E4	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R8,R22, R31	3						1.6x0.8 (0603)	Not Mount
29	C28,C30, C429,C430	4						1.6x0.8 (0603)	Not Mount
30	C477, C478,C521	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(3) +5 V, 5 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC3	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q5	1		TPH11003NL	TOSHIBA	N-ch MOSFET 30 V, 32 A	TSON Advance	3.3x3.3	
3	Q6	1		TPN8R903NL	TOSHIBA	N-ch MOSFET 30 V, 37 A	TSON Advance	3.3x3.3	
4	D3	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L3	1	2 μ H	744314200	Würth Elektronik	9 A			
6	R33	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R35	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R37	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R38,R39	2	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R40,R41	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
11	R42	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
12	R34	1	8.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R45	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
14	R46	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R48	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	C38	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
17	C39,C40	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C41,C47, C49	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
19	C42	1	4.7 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C48	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C43	1	10 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C44	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C45,C46	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C52	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C53	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ3	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E5,E6	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R36,R43, R47	3						1.6x0.8 (0603)	Not Mount
29	C50,C51, C431,C432	4						1.6x0.8 (0603)	Not Mount
30	C479, C480,C522	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(4) 1+5 V, 8 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC4	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q7	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q8	1		TPH2R903PL	TOSHIBA	N-ch MOSFET 30 V, 124 A	SOP Advance	5.0x6.0	
4	D4	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L4	1	3.3 μ H	74439369033	Würth Elektronik	15 A		11.6x10.5	
6	R49	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R51	1	2.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R53	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R57	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R58	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R62,R65	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R61	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R71	1	2.4 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R73	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R74	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R78	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C57	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C59,C61	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C63,C65, C75,C79	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C77	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C67	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C69	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C71,C73	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C85	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C87	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ4	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E7,E8	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R54,R69, R77	3						1.6x0.8 (0603)	Not Mount
29	C81,C83, C433,C434	4						1.6x0.8 (0603)	Not Mount
30	C481, C482,C523	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(5) +5 V, 8 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC5	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q9	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 57 A	SOP Advance	5.0x6.0	
3	Q10	1		TPH4R803PL	TOSHIBA	N-ch MOSFET 30 V, 90 A	SOP Advance	5.0x6.0	
4	D5	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L5	1	3.3 μ H	74439369033	Würth Elektronik	15 A		11.6x10.5	
6	R50	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R52	1	2.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R59	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R60	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R55	1	100 k			62.5 mW \pm 5 %		1.6x0.8 (0603)	
11	R64,R66	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R63	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R72	1	2.4 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R75	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R76	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R80	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C58	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C60,C62	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C64,C66, C76,C80	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C78	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C68	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C70	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C72,C74	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C86	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C88	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ5	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E9,E10	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R56,R70,R79	3						1.6x0.8 (0603)	Not Mount
29	C82,C84,C435,C436	4						1.6x0.8 (0603)	Not Mount
30	C483,C484,C524	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(6) +5 V, 8 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC6	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q11	1		TPN8R903NL	TOSHIBA	N-ch MOSFET 30 V, 56 A	TSON Advance	3.3x3.3	
3	Q12	1		TPN5R203PL	TOSHIBA	N-ch MOSFET 30 V, 76 A	TSON Advance	3.3x3.3	
4	D6	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L6	1	1.5 μ H	7443340150	Würth Elektronik	15.5 A		8.4x7.9	
6	R81	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R82	1	6.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R83	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R86,R87	2	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R85	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R88,R89	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R92	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R91	1	6.8 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R93	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R94	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R96	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C92	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C93,C94	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C95,C101, C103	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C96	1	5.6 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C102	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
22	C97	1	15 pF			Ceramic, 50 V, \pm 5 % X5R		1.6x0.8 (0603)	
23	C98	1	1 μ F			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
24	C99,C100	2	4.7 μ F			Ceramic, 16 V, \pm 10 % X5R		1.6x0.8 (0603)	
25	C106	1	220 μ F			Ceramic, 6.3 V, \pm 20 % X5R		3.2x2.5 (1210)	
26	C107	1	10 μ F			Ceramic, 6.3 V, \pm 10 % X5R		1.6x0.8 (0603)	
27	PJ6	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E11,E12	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R84,R95	2						1.6x0.8 (0603)	Not Mount
30	C104, C105, C437,C438	4						1.6x0.8 (0603)	Not Mount

(7) +5 V, 12 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC7	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q13	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 84 A	SOP Advance	5.0x6.0	
3	Q14	1		TPH2R003PL	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D7	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L7	1	3.3 μ H	74439369033	Würth Elektronik	15 A		11.6x10.5	
6	R97	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R99	1	2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R101	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R105	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R106	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R110,R113	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R109	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R119	1	3k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R117	1	12 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
15	R121	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R122	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	R126	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
18	C111	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C113,C115	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
20	C117, C119, C129,C133	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C131	1	470 nF			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
22	C121	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
23	C123	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C125,C127	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
25	C139	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
26	C141	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
27	PJ7	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E13,E14	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R102,R125	2						1.6x0.8 (0603)	Not Mount
30	C135, C137, C439,C440	4						1.6x0.8 (0603)	Not Mount
31	C487, C488,C526	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(8) +5 V, 12 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC8	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q15	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q16	1		TPH4R803PL	TOSHIBA	N-ch MOSFET 30 V, 124 A	SOP Advance	5.0x6.0	
4	D8	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2A	ESC	1.6x0.8	
5	L8	1	3.3 μ H	74439369033	Würth Elektronik	15 A		11.6x10.5	
6	R98	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R100	1	2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R103	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R107	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R108	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R112,R114	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R111	1	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R120	1	3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R118	1	12 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
15	R123	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R124	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	R128	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
18	C112	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C114,C116	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
20	C118, C120, C130,C134	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C132	1	470 nF			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
22	C122	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
23	C124	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C126,C128	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
25	C140	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
26	C142	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
27	PJ8	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E15,E16	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R104,R127	2						1.6x0.8 (0603)	Not Mount
30	C136, C138, C441,C442	4						1.6x0.8 (0603)	Not Mount
31	C489, C490,C527	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(9) +5 V, 12 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC9	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q17	1		TPN4R303NL	TOSHIBA	N-ch MOSFET 30 V, 63 A	TSON Advance	3.3x3.3	
3	Q18	1		TPN2R903PL	TOSHIBA	N-ch MOSFET 30 V, 122 A	TSON Advance	3.3x3.3	
4	D9	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2A	ESC	1.6x0.8	
5	L9	1	1 μ H	7443340100	Würth Elektronik	17 A		8.4x7.9	
6	R129	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R130	1	4.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R131	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R133	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R134,R135	2	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R136,R137	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R138	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R139	1	6.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R141	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R142	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R144	1	680			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C146	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C147,C148	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C149, C155,C157	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C156	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C150	1	6.8 nF			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
22	C151	1	22 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
23	C152	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C153,C154	2	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
25	C160	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
26	C161	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
27	PJ9	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E17,E18	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R132,R143	2						1.6x0.8 (0603)	Not Mount
30	C158, C159, C443,C444	4						1.6x0.8 (0603)	Not Mount
31	C491, C492,C528	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(10) +3.3 V, 10 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC10	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q19	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 84 A	SOP Advance	5.0x6.0	
3	Q20	1		TPH2R003PL	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D10	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2A	ESC	1.6x0.8	
5	L10	1	3.1 μ H	7443630310	Würth Elektronik	26 A			
6	R145	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R147	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R149	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R153	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R154	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R158,R161	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R157,R163	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R165	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R171	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R172	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R176	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C165	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C167,C169	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C171, C173, C181,C185	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C183	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C175	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C177	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C179	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C191	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C193	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ10	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E19,E20	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R150,R167,R175	3						1.6x0.8 (0603)	Not Mount
29	C187,C189,C445,C446	4						1.6x0.8 (0603)	Not Mount
30	C493,C494,C529	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(11) +3.3 V, 10 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC11	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q21	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q22	1		TPH4R803PL	TOSHIBA	N-ch MOSFET 30 V, 124 A	SOP Advance	5.0x6.0	
4	D11	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L11	1	3.1 μ H	7443630310	Würth Elektronik	26 A			
6	R146	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R148	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R151	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R155	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R156	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R160,R162	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R159,R164	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R166	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R173	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R174	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R178	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C166	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C168,C170	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C172, C174, C182,C186	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C184	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C176	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C178	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C180	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C192	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C194	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ11	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E21,E22	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R152, R168,R177	3						1.6x0.8 (0603)	Not Mount
29	C188, C190, C447,C448	4						1.6x0.8 (0603)	Not Mount
30	C495, C496,C530	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(12) +3.3 V, 10 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC12	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q23	1		TPN4R303NL	TOSHIBA	N-ch MOSFET 30 V, 63 A	TSON Advance	3.3x3.3	
3	Q24	1		TPN2R903PL	TOSHIBA	N-ch MOSFET 30 V, 122 A	TSON Advance	3.3x3.3	
4	D12	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2A	ESC	1.6x0.8	
5	L12	1	1 μ H	744311100	Würth Elektronik	15 A		6.9x6.9	
6	R179	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R192	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
8	R181	1	100 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
9	R180	1	5.1k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R183	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R184, R185,R188	3	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
12	R186,R187	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
13	R189	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R190	1	3.9k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
15	R193	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R195	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C198	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C199,C200	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C201, C206,C208	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C202	1	5.6 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C207	1	220 nF			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
22	C203	1	22 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
23	C204	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C205	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
25	C211	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
26	C212	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
27	PJ12	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E23,E24	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R182,R194	2						1.6x0.8 (0603)	Not Mount
30	C209, C210, C449,C450	4						1.6x0.8 (0603)	Not Mount
31	C497, C498,C531	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(13) +3.3 V, 13.3 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC13	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q25	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 84 A	SOP Advance	5.0x6.0	
3	Q26	1		TPHR9203PL1	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D13	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L13	1	3.1 μ H	744363310	Würth Elektronik	26 A			
6	R196	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R198	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R200	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R204	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R205	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R209,R212	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R208,R214	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R216	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R222	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R223	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R227	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C216	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C218,C220	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C222, C224, C232,C236	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C234	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C226	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C228	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C230	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C242	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C244	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ13	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E25,E26	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R201, R218,R226	3						1.6x0.8 (0603)	Not Mount
29	C238, C240, C451,C452	4						1.6x0.8 (0603)	Not Mount
30	C499, C500,C532	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(14) +3.3 V, 13.3 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC14	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q27	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q28	1		TPH2R903PL	TOSHIBA	N-ch MOSFET 30 V, 124 A	SOP Advance	5.0x6.0	
4	D14	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L14	1	3.1 μ H	7443630310	Würth Elektronik	26 A			
6	R197	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R199	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R202	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R206	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R207	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R211,R213	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R210,R215	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R217	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R224	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R225	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R229	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C217	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C219,C221	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C223, C225, C233,C237	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C235	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C227	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C229	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C231	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C243	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C245	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ14	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E27,E28	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R203, R219,R228	3						1.6x0.8 (0603)	Not Mount
29	C239, C241, C453,C454	4						1.6x0.8 (0603)	Not Mount
30	C501, C502,C533	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(15) +3.3 V, 13.3 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC15	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q29	1		TPN4R303NL	TOSHIBA	N-ch MOSFET 30 V, 63 A	TSON Advance	3.3x3.3	
3	Q30	1		TPN2R903PL	TOSHIBA	N-ch MOSFET 30 V, 188 A	TSON Advance	3.3x3.3	
4	D15	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L15	1	0.68 μ H	7443340068	Würth Elektronik	19 A		8.4x7.9	
6	R230	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R231	1	2.4 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R232	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R234	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R235, R236,R239	3	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R237,R238	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R240	1	1.8k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R244	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
14	R243	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R246	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	C249	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
17	C250,C251	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C252, C253, C257,C259	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
19	C254	1	33 pF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C258	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C255	1	1 μ F			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
22	C256	1	4.7 μ F			Ceramic, 16 V, \pm 10 % X5R		1.6x0.8 (0603)	
23	C262	1	220 μ F			Ceramic, 6.3 V, \pm 20 % X5R		3.2x2.5 (1210)	
24	C263	1	10 μ F			Ceramic, 6.3 V, \pm 10 % X5R		1.6x0.8 (0603)	
25	PJ15	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
26	E29,E30	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
27	R233, R241,R245	3						1.6x0.8 (0603)	Not Mount
28	C260, C261, C455,C456	4						1.6x0.8 (0603)	Not Mount
29	C503, C504,C534	3				Ceramic, 6.3 V, \pm 20 % X5R		3.2x2.5 (1210)	Not Mount

(16) +3.3 V, 18.2 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC16	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q31	1		TPH3R203NL	TOSHIBA	N-ch MOSFET 30 V, 84 A	SOP Advance	5.0x6.0	
3	Q32	1		TPHR6503PL1	TOSHIBA	N-ch MOSFET 30 V, 420 A	SOP Advance	5.0x6.0	
4	D16	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L16	1	3.1 μ H	7443630310	Würth Elektronik	26 A			
6	R247	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R249	1	1.8 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R251	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R255	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R256	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R260,R263	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R259,R265	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R267	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R274	2	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R269	1	220 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
16	R273	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	R278	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
18	C267	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C269,C271	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
20	C273, C275, C283,C287	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C285	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
22	C277	1	220 pF			Ceramic, 50 V, \pm 5 % X5R		1.6x0.8 (0603)	
23	C279	1	1 μ F			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
24	C281	1	4.7 μ F			Ceramic, 16 V, \pm 10 % X5R		1.6x0.8 (0603)	
25	C293	1	220 μ F			Ceramic, 6.3 V, \pm 20 % X5R		3.2x2.5 (1210)	
26	C295	1	10 μ F			Ceramic, 6.3 V, \pm 10 % X5R		1.6x0.8 (0603)	
27	PJ16	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E31,E32	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R252,R277	2						1.6x0.8 (0603)	Not Mount
30	C289, C291, C457,C458	4						1.6x0.8 (0603)	Not Mount
31	C505, C506,C535	3				Ceramic, 6.3 V, \pm 20 % X5R		3.2x2.5 (1210)	Not Mount

(17) +3.3 V, 18.2 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC17	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q33	1		TPH4R003NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q34	1		TPH2R003PL	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D17	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L17	1	3.1 μ H	7443630310	Würth Elektronik	26 A			
6	R248	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R250	1	1.8 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R253	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R257	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R258	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R262,R264	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R261,R266	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R268	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R270	1	220 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
15	R276	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R275	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	R280	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
18	C268	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C270,C272	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
20	C274, C276, C284,C288	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C286	1	470 nF			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
22	C278	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
23	C280	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C282	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
25	C294	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
26	C296	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
27	PJ17	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
28	E33,E34	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
29	R254,R279	2						1.6x0.8 (0603)	Not Mount
30	C290, C292, C459,C460	4						1.6x0.8 (0603)	Not Mount
31	C507, C508,C536	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(18) +3.3 V, 18.2 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC18	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q35	1		TPN4R303NL	TOSHIBA	N-ch MOSFET 30 V, 63 A	TSON Advance	3.3x3.3	
3	Q36	1		TPN1R603PL	TOSHIBA	N-ch MOSFET 30 V, 188 A	TSON Advance	3.3x3.3	
4	D18	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L18	1	0.47 μ H	7443320047	Würth Elektronik	26 A			
6	R281	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R282	1	2.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R283	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R285	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R286, R287,R290	3	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R288,R289	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R291	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R294	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
14	R295	1	8.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R297	1	1.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	C300	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
17	C301,C302	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C303, C304, C308,C310	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
19	C309	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C305	1	47 pF			Ceramic, 50 V, \pm 5 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C306	1	1 μ F			Ceramic, 50 V, ± 10 % X5R		1.6x0.8 (0603)	
22	C307	1	4.7 μ F			Ceramic, 16 V, ± 10 % X5R		1.6x0.8 (0603)	
23	C313	1	220 μ F			Ceramic, 6.3 V, ± 20 % X5R		3.2x2.5 (1210)	
24	C314	1	10 μ F			Ceramic, 6.3 V, ± 10 % X5R		1.6x0.8 (0603)	
25	PJ18	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
26	E35,E36	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
27	R284, R292,R296	3						1.6x0.8 (0603)	Not Mount
28	C311, C312, C461,C462	4						1.6x0.8 (0603)	Not Mount
29	C509, C510,C537	3				Ceramic, 6.3 V, ± 20 % X5R		3.2x2.5 (1210)	Not Mount

(19) +1.5 V, 10 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC19	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q37	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q38	1		TPH2R003PL	TOSHIBA	N-ch MOSFET 30 V, 320 A	SOP Advance	5.0x6.0	
4	D19	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L19	1	1.5 μ H	7443310150	Würth Elektronik	19.5 A			
6	R298	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R300	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R302	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R306	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R307	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R311,R314	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R310,R316	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R318	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R324	1	2.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R325	1	10 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R329	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C318	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C320,C322	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C324, C326, C334,C338	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C336	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C328	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C330	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C332	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C344	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C346	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ19	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E37,E38	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R303, R320,R328	3						1.6x0.8 (0603)	Not Mount
29	C340, C342, C463,C464	4						1.6x0.8 (0603)	Not Mount
30	C511, C512,C538	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(20) +1.5 V, 10 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC20	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q39	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 57 A	SOP Advance	5.0x6.0	
3	Q40	1		TPH4R803PL	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D20	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L20	1	1.5 μ H	7443310150	Würth Elektronik	19.5 A			
6	R299	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R301	1	1.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R304	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R308	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R309	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R313,R315	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R312,R317	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R319	1	3.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R326	1	2.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R327	1	10 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R331	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C319	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C321,C323	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C325, C327, C335,C339	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C337	1	220 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C329	1	220 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C331	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C333	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C345	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C347	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ20	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E39,E40	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R305, R321,R330	3						1.6x0.8 (0603)	Not Mount
29	C341, C343, C465,C466	4						1.6x0.8 (0603)	Not Mount
30	C513, C514,C539	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(21) +1.5 V, 10 A, 100 % Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC21	1	-	LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q41	1	-	TPN8R903NL	TOSHIBA	N-ch MOSFET 30 V, 56 A	TSON Advance	3.3x3.3	
3	Q42	1	-	TPN2R903PL	TOSHIBA	N-ch MOSFET 30 V, 188 A	TSON Advance	3.3x3.3	
4	D21	1	-	1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L21	1	0.33 μ H	744323033	Würth Elektronik	18 A			
6	R332	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R333	1	4.3 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R334	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R336	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R337, R338,R341	3	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R339,R340	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R342	1	1.5k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R345	1	2.2 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
14	R346	1	10 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R348	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	C351	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
17	C352,C353	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C354, C359,C361	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
19	C355	1	6.8 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C360	1	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C356	1	22 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C357	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C358	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C364	1	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C365	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ21	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E41,E42	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R335, R343,R347	3						1.6x0.8 (0603)	Not Mount
29	C362, C363, C467,C468	4						1.6x0.8 (0603)	Not Mount
30	C515, C516,C540	3				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(22) +1.05 V, 10 A, Optimized for efficiency at 100 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC22	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q43	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 68 A	SOP Advance	5.0x6.0	
3	Q44	1		TPH2R003PL	TOSHIBA	N-ch MOSFET 30 V, 320 A	SOP Advance	5.0x6.0	
4	D22	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L22	1	2.2 μ H	74439369022	Würth Elektronik	16 A			
6	R349	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R351	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R353	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R357	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R358	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R362,R365	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R361,R367	2	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R373	1	2.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R375	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R376	1	82 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R380	1	12 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C369	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C371,C373	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C375, C377, C385,C389	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C387	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C379	1	470 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C381	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C383	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C395, C421, C424	3	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C397	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ22	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E43, E44	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R354, R371, R379	3						1.6x0.8 (0603)	Not Mount
29	C391, C393, C469, C470	4						1.6x0.8 (0603)	Not Mount
30	C517	1				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(23) +1.05 V, 10 A, Optimized for efficiency at 50 % load

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC23	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q45	1		TPH8R903NL	TOSHIBA	N-ch MOSFET 30 V, 57 A	SOP Advance	5.0x6.0	
3	Q46	1		TPH4R803PL	TOSHIBA	N-ch MOSFET 30 V, 180 A	SOP Advance	5.0x6.0	
4	D23	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L23	1	2.2 μ H	74439369022	Würth Elektronik	16 A			
6	R350	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R352	1	1.5 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R355	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R359	1	27 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R360	1	160 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R364,R366	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R356, R363,R368	3	0			62.5 mW \pm 5 %		1.6x0.8 (0603)	
13	R374	1	2.2 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
14	R377	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R378	1	82 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	R382	1	12 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
17	C370	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C372,C374	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
19	C376, C378, C386,C390	4	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C388	1	470 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C380	1	470 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C382	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C384	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C396, C422, C425	3	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C398	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ23	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E45, E46	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R356, R372, R381	3						1.6x0.8 (0603)	Not Mount
29	C392, C394, C471, C472	4						1.6x0.8 (0603)	Not Mount
30	C518	1				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

(24) +1.05 V, 10 A, Optimized for compactness

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC24	1		LTC7803EUD#PBF	Analog Devices	Controller	QFN16	3.0x3.0	
2	Q47	1		TPN8R903NL	TOSHIBA	N-ch MOSFET 30 V, 56 A	TSON Advance	3.3x3.3	
3	Q48	1		TPN2R903PL	TOSHIBA	N-ch MOSFET 30 V, 188 A	TSON Advance	3.3x3.3	
4	D24	1		1SS387,L3F	TOSHIBA	Diode 80 V, 0.2 A	ESC	1.6x0.8	
5	L24	1	0.47 μ H	744316047	Würth Elektronik	15 A			
6	R383	1	2.2			62.5 mW \pm 5 %		1.6x0.8 (0603)	
7	R384	1	9.1 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
8	R385	1	100 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
9	R387	1	62 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
10	R388, R389,R392	3	0			62.5 mW \pm 1 %		1.6x0.8 (0603)	
11	R390,R391	2	0			125 mW \pm 5 %		2.0x1.2 (0805)	
12	R393	1	1.6 k			62.5 mW \pm 1 %		1.6x0.8 (0603)	
13	R396	1	3.3 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
14	R397	1	82 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
15	R399	1	12 k			62.5 mW \pm 0.5 %		1.6x0.8 (0603)	
16	C402	1	100 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
17	C403,C404	2	22 μ F			Ceramic, 16 V, \pm 10 % X5R		3.2x2.5 (1210)	
18	C405, C410,C412	3	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
19	C411	1	100 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	
20	C406	1	3.9 nF			Ceramic, 50 V, \pm 10 % X5R		1.6x0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
21	C407	1	10 pF			Ceramic, 50 V, $\pm 5\%$ X5R		1.6x0.8 (0603)	
22	C408	1	1 μ F			Ceramic, 50 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
23	C409	1	4.7 μ F			Ceramic, 16 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
24	C415, C423, C426	3	220 μ F			Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	
25	C416	1	10 μ F			Ceramic, 6.3 V, $\pm 10\%$ X5R		1.6x0.8 (0603)	
26	PJ24	1		B2P-VH(LF)(SN)	J.S.T.	Connector, 10 A		7.86x8.5	
27	E47, E48	2		OT-007	OSADA	Terminal, 25 A		7.8x7.8	
28	R386, R394, R398	5						1.6x0.8 (0603)	Not Mount
29	C413, C414, C473, C474	4						1.6x0.8 (0603)	Not Mount
30	C519	1				Ceramic, 6.3 V, $\pm 20\%$ X5R		3.2x2.5 (1210)	Not Mount

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