

D060512-A

12V variant

Ext.	Quantity	Part Number	Distributor	Value	Description	Designator
15	5	478-2567-1-ND	Digi-Key	2.2u	Capacitor, surface mount	C1, C4, C25, C26, C38
9	2	478-1482-1-ND	Digi-Key	150p	Capacitor, surface mount	C2, C32
9	2	399-1805-1-ND	Digi-Key	100n	Capacitor, surface mount	C3, C33
21	8	445-1657-1-ND	Digi-Key	47u	2-chip piled capacitor, surface mount	C5, C6, C7, C8, C39, C40, C41, C42
13	4	311-1179-1-ND	Digi-Key	100n	Capacitor, surface mount	C9, C17, C34, C43
19	7	PCC1893CT-ND	Digi-Key	1u	Capacitor, surface mount	C10, C18, C35, C36, C50, C51, C52
25	10	493-1574-ND	Digi-Key	5600u	Electrolyte capacitor, leaded, radial	C11, C12, C13, C14, C15, C45, C46, C47, C48, C49
9	2	478-1558-1-ND	Digi-Key	150n	Capacitor, surface mount	C16, C37
9	2	PCC2414CT-ND	Digi-Key	10u	Capacitor, surface mount	C19, C44
25	10	565-1746-ND	Digi-Key	820uF	Electrolyte capacitor, leaded, radial	C20, C21, C22, C23, C24, C27, C28, C29, C30, C31
9	2	B1100B-FDICT-ND	Digi-Key		Single shottky diode	D1, D3
9	2	B3100-FDICT-ND	Digi-Key		Single shottky diode	D2, D4
11	3	B140B-FDICT-ND	Digi-Key		Single shottky diode	D5, D6, D7
9	2	HF358-101M-15A	Coilws	100uH	Power inductor, HF358	L1, L4
11	3	MVR12	Coilcraft	2.2uH	Power inductor, MVR series	L2, L3, L5
11	3	WM5964-ND	Digi-Key		Terminal block, 10.16mm, 2-Pin	P1, P2, P3
7	1	A31169-ND	Digi-Key		Header, 8-Pin, Dual row	P4
7	1	A31170-ND	Digi-Key		Header, 10-Pin, Dual row	P5
7	1	281-1297-ND	Digi-Key		Terminal block, 5.08mm, 2-Pin	P6
13	4	512-FDB3672	Mouser		Power MOSFET, N-channel	Q1, Q2, Q9, Q10
13	4	512-FDB3652	Mouser		Power MOSFET, N-channel	Q3, Q4, Q11, Q12
13	4	MMBT3906FSCT-ND	Digi-Key		PNP Switching Transistor	Q5, Q6, Q7, Q8
7	1	MJD112T4GOSCT-ND	Digi-Key		Darlington Silicon Power NPN Transistor, 8A, 80V, 65 Watts	Q13
9	2	311-2.00KFRCT-ND	Digi-Key	2K	Resistor, surface mount	R1, R16
9	2	311-30.0KFRCT-ND	Digi-Key	30.0K	Resistor, surface mount	R2, R17
9	2	311-21.5KFRCT-ND	Digi-Key	21.5K	Resistor, surface mount	R3, R18
9	2	311-8.45KFRCT-ND	Digi-Key	8.45K	Resistor, surface mount	R4, R20
11	3	311-10.0FRCT-ND	Digi-Key	10	Resistor, surface mount	R5, R21, R38
9	2	RR12P10.0KBCT-ND	Digi-Key	10K	Resistor, surface mount	R6, R22
9	2	311-549FRCT-ND	Digi-Key	549	Resistor, surface mount	R7, R23
13	4	RR12P1.0KBCT-ND	Digi-Key	1K	Resistor	R8, R9, R15, R19
7	1	311-3.32KFRCT-ND	Digi-Key	3.32K	Resistor, surface mount	R10
11	3	311-20.0KFRCT-ND	Digi-Key	20K	Resistor, surface mount	R11, R13, R40
9	2	RR12P26.1KBCT-ND	Digi-Key	26.1K	Resistor	R12, R14
11	3	311-100KFRCT-ND	Digi-Key	100K	Resistor, surface mount	R27, R28, R30
7	1	311-0.0ERCT-ND	Digi-Key	0	Resistor, surface mount	R29
7	1	311-15.4KFRCT-ND	Digi-Key	15.4K	Resistor, surface mount	R31
7	1	311-10.0KFRCT-ND	Digi-Key	10.0K	Resistor, surface mount	R32

7	1	311-24.9KFRCT-ND	Digi-Key	24.9K	Resistor, surface mount	R33
7	1	311-910FRCT-ND	Digi-Key	910	Resistor, surface mount	R34
7	1	311-3.00KFRCT-ND	Digi-Key	3K	Resistor, surface mount	R35
7	1	311-95.3KFRCT-ND	Digi-Key	95.3K	Resistor, surface mount	R36
9	2	311-15.0KFRCT-ND	Digi-Key	15K	Resistor, surface mount	R37, R41
7	1	311-4.99KFRCT-ND	Digi-Key	4.99K	Resistor, surface mount	R39
9	2	RR12P732BCT-ND	Digi-Key	732	Resistor, surface mount	RX1, RY1
9	2	311-29.4KFRCT-ND	Digi-Key	29.4K	Resistor, surface mount	RX2, RY2
15	5	5009K-ND	Digi-Key		Testpoint, yellow	TP1, TP2, TP3, TP7, TP9
11	3	5005K-ND	Digi-Key		Testpoint, red	TP4, TP6, TP10
11	3	5006K-ND	Digi-Key		Testpoint, black	TP5, TP8, TP11
9	2	LTC3703EG#PBF	Digi-Key		Synchronous buck regulator controller, 100V	U1, U3
9	2	OP184ESZ-ND	Digi-Key		Precision Rail-to-Rail Input and Output Operational Amplifier	U2, U4
7	1	LT1006S8#PBF-ND	Digi-Key		Precision Rail-to-Rail Input and Output Operational Amplifier	U5
7	1	296-17623-1-ND	Digi-Key		Programmable Precision Reference	U6

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2 Number of boards

43 Unique SMD components

103 Total number of SMD components

10 Unique through-hole components

39 Total number of through-hole components

53 Unique components

142 Total number components