

D060431-B

17V variant

Ext.	Quantity	Part Number	Distributor	Value	Description	Designator
15	5	478-2567-1-ND	Digi-Key	2.2u	Capacitor, surface mount	C1, C5, C28, C35, C52
9	2	311-1099-1-ND	Digi-Key	10p	Capacitor, surface mount	C2, C39
7	1	311-1113-1-ND	Digi-Key	150p	Capacitor, surface mount	C3
9	2	399-1805-1-ND	Digi-Key	100n	Capacitor, surface mount	C4, C43
21	8	445-1657-1-ND	Digi-Key	47u	2-chip piled capacitor, surface mount	C6, C7, C8, C9, C53, C54, C55, C56
31	13	478-1395-1-ND	Digi-Key	100n	Capacitor, surface mount	C10, C19, C21, C22, C27, C40, C41, C47, C51, C57, C58, C65, C67
9	2	PCC2319CT-ND	Digi-Key	1u	Capacitor, surface mount	C12, C46
25	10	493-1602-ND	Digi-Key	3900u	Electrolyte capacitor, leaded, radial	C13, C14, C15, C16, C17, C59, C60, C61, C62, C63
9	2	490-1667-1-ND	Digi-Key	150n	Capacitor, surface mount	C18, C49
9	2	490-1670-1-ND	Digi-Key	220n	Capacitor, surface mount	C20, C50
9	2	PCC2414CT-ND	Digi-Key	10u	Capacitor, surface mount	C23, C64
9	2	490-3908-1-ND	Digi-Key	1u	Capacitor, surface mount	C24, C48
23	9	565-1746-ND	Digi-Key	820uF	Electrolyte capacitor, leaded, radial	C25, C26, C29, C30, C31, C32, C33, C37, C38
7	1	311-1111-1-ND	Digi-Key	100p	Capacitor, surface mount	C34
7	1	311-1103-1-ND	Digi-Key	22p	Capacitor, surface mount	C36
7	1	311-1122-1-ND	Digi-Key	1n	Capacitor, surface mount	C42
7	1	490-3328-1-ND	Digi-Key	470n	Capacitor, surface mount	C44
7	1	399-3908-1-ND	Digi-Key	68u	Tantalum capacitor, surface mount	C66
9	2	B1100B-FDICT-ND	Digi-Key		Single shottky diode	D1, D8
9	2	511-STPS41H100CG	Mouser		Dual shottky diode	D2, D9
23	9	SD103AW-FDICT-ND	Digi-Key		Single shottky diode	D3, D7, D10, D11, D13, D14, D15, D16, D17
9	2	BZT52C9V1-FDICT-ND	Digi-Key		Single zener diode	D4, D12
7	1	30CTQ100PBF-ND	Digi-Key		Schottky Rectifier	D5
7	1	BZT52C16-FDICT-ND	Digi-Key		Single zener diode	D6
9	2	HF358-101M-15A	Coilws	100uH	Power inductor, HF358	L1, L5
11	3	MVR1278C-232MLB	Coilcraft	2.2uH	Power inductor, MVR series	L2, L4, L7
9	2	495-1759-1-ND	Digi-Key	220u	Inductor	L3, L6
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
13	4	512-FDB3682	Mouser		Power MOSFET, N-channel	Q1, Q2, Q13, Q14
13	4	512-FDB3652	Mouser		Power MOSFET, N-channel	Q3, Q4, Q16, Q17
11	3	MMBT3906FSCT-ND	Digi-Key		PNP Switching Transistor	Q5, Q7, Q8
9	2	IRF5210S-ND	Digi-Key		Power MOSFET, P-channel	Q6, Q10
7	1	MMBTA14TPMSCT-ND	Digi-Key		NPN Darlington Transistor	Q9
7	1	MMBT3904FSCT-ND	Digi-Key		NPN Switching Transistor	Q11
9	2	FDV301NCT-ND	Digi-Key		FDV301N, Digital FET, N-channel, SOT23	Q12, Q15
7	1	BC856ALT1GOSCT-ND	Digi-Key		PNP Switching Transistor	Q18
9	2	RR12P2.0KBCT-ND	Digi-Key	2K	Resistor, surface mount	R1, R28
9	2	RR12Q15DCT-ND	Digi-Key	15	Resistor, surface mount	R2, R29
9	2	RR12P30.0KBCT-ND	Digi-Key	30.0K	Resistor, surface mount	R3, R30
7	1	RR12P21.5KBCT-ND	Digi-Key	21.5K	Resistor, surface mount	R4

19	7	RR12P10.0KBCT-ND	Digi-Key	10K	Resistor, surface mount	R5, R6, R9, R35, R41, R43, R45
19	7	RR12Q10DCT-ND	Digi-Key	10	Resistor, surface mount	R7, R12, R13, R36, R39, R46, R47
9	2	RR12P549BCT-ND	Digi-Key	549	Resistor, surface mount	R8, R40
13	4	RR12P1.0KBCT-ND	Digi-Key	1K	Resistor	R10, R14, R27, R33
13	4	RR12P4.99KBCT-ND	Digi-Key	4.99K	Resistor, surface mount	R11, R16, R44, R52
11	3	RR12P100KBCT-ND	Digi-Key	100K	Resistor, surface mount	R15, R20, R32
13	4	RR12P20.0KBCT-ND	Digi-Key	20K	Resistor, surface mount	R17, R19, R23, R26
7	1	RR12P3.32KBCT-ND	Digi-Key	3.32K	Resistor, surface mount	R18
9	2	RR12P33.0KBCT-ND	Digi-Key	33.0K	Resistor	R21, R24
7	1	RR12P15.0KBCT-ND	Digi-Key	15K	Resistor, surface mount	R22
7	1	RR12P200KBCT-ND	Digi-Key	200K	Resistor, surface mount	R25
7	1	RR12P3.16KBCT-ND	Digi-Key	3.16K	Resistor, surface mount	R31
7	1	RR12P12.0KBCT-ND	Digi-Key	12K	Resistor, surface mount	R34
7	1	RR12P82.5KBCT-ND	Digi-Key	82.5K	Resistor, surface mount	R37
7	1	RR12P31.6KBCT-ND	Digi-Key	31.6K	Resistor, surface mount	R42
7	1	RR12P24.9KBCT-ND	Digi-Key	24.9K	Resistor, surface mount	R48
9	2	RR12P1.24KBCT-ND	Digi-Key	1.24K	Resistor, surface mount	R49, R50
7	1	RR12P10.5KBCT-ND	Digi-Key	10.5K	Resistor, surface mount	R51
7	1	RR12P110KBCT-ND	Digi-Key	110K	Resistor, surface mount	R53
9	2	311-1.50KFRCT-ND	Digi-Key	1.50K	Resistor, surface mount	RL1, RL2
9	2	311-3.00KFRCT-ND	Digi-Key	3K	Resistor, surface mount	RL3, RL4
7	1	RR12P5.62KBCT-ND	Digi-Key	5.62K	Resistor, surface mount	RO1
7	1	RR12P5.76KBCT-ND	Digi-Key	5.76K	Resistor, surface mount	RO2
9	2	RR12P510BCT-ND	Digi-Key	510	Resistor, surface mount	RX1, RY1
7	1	317-1063-ND	Digi-Key		Thermal switch, N/O	S1
7	1	5005K-ND	Digi-Key		Testpoint, red	TP1
15	5	5006K-ND	Digi-Key		Testpoint, black	TP2, TP3, TP4, TP6, TP7
7	1	5007K-ND	Digi-Key		Testpoint, white	TP5
7	1	5009K-ND	Digi-Key		Testpoint, yellow	TP8
9	2	LTC3703EG#PBF	Digi-Key		Synchronous buck regulator controller, 100V	U1, U4
11	3	OP184ESZ-ND	Digi-Key		Precision Rail-to-Rail Input and Output Operational Amplifier	U2, U5, U6
7	1	LTC1696ES6#TRMCT-ND	Digi-Key		Overvoltage protection controller	U3
7	1	296-17623-1-ND	Digi-Key		Programmable Precision Reference	U7
9	2	LM317D2TR4GOSCT-ND	Digi-Key		Three-Terminal Adjustable Output Positive Voltage Regulator	U8, U9

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2 Number of boards

64 Unique SMD components

154 Total number of SMD components

12 Unique through-hole components

36 Total number of through-hole components

76 Unique components

190 Total number components