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**UCC28630 120W Flyback + D2D**

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC B1	1		Printed Circuit Board		PMP10804	Any		
C1	1	2200pF	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, 10.0x8.0x14.0mm	10.0x8.0x14.0mm	DE1E3KX222MN5AA01	MuRata		
C3	1	82uF	CAP, AL, 82 uF, 200 V, +/- 20%, 0.218352 ohm, TH	16x20	EEUE2D2820S	Panasonic		
C4	1	100uF	CAP, AL, 100 uF, 200 V, +/- 20%, 0.243706 ohm, TH	16x25	EEUE2D101	Panasonic		
C6, C7, C8	3	680uF	CAP ALUM 680UF 35V 20% RADIAL	CAPPR5-10x16	UHW1V681MPD6	Nichicon		
C9	1	680uF	CAP ALUM 680UF 35V 20% RADIAL	CAPPR5-10x16	35ZLJ680M10X25	Rubycon		
C10	1	0.1uF	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 1206	1206	C1206C104J5RACTU	Kemet		
C11, C13	2	470pF	CAP, CERM, 470pF, 300V, +/-10%, VY2, 5x7.5 mm	5x7.5 mm	VY2471K29Y5SS63V7	Vishay-Bccomponents		
C12	1	0.33uF	CAP, Film, 0.33uF, 275V, +/-20%, TH	RCAP, 17.5x17.5x9.5mm	ECQ-U2A334ML	Panasonic		
C20	1	1000pF	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0805	0805	C0805C102K1RACTU	Kemet		
C29	1	33uF	CAP ALUM 33UF 35V 20% RADIAL	RCAP, 5x5mm	35ZL33MEFC5X11	Rubycon		
C30	1	10pF	CAP, CERM, 10pF, 50V, +/-5%, COG/NPO, 0603	0603	C0603C100J5GACTU	Kemet		
C31	1	120pF	CAP, CERM, 120 pF, 50 V, +/- 5%, COG/NPO, 0805	0805	GRM2165C1H121JA01 D	MuRata		
C32	1	0.1uF	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 1206	1206	12065C104KAT2A	AVX		
C101	1	1uF	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 1206	1206	C3216X7R1H105K	TDK		
D1	1	100V	DIODE SCHOTTKY 100V 20A TO220AB	TO-220AB	STPS20S2M100ST	ST Microelectronics		
D2, D4	2	140V	TVS DIODE 140VWM 227VC SMC		SMCJ140A	AVX Corporation		
D3	1	GBU6J	RECT BRIDGE GPP 6A 600V GBU	GBU	GBU6J	Micro Commercial Componen		
D6	1	1.7V	Diode, Ultrafast, 1000V, 1A, SMA	SMA	US1M-13-F	Diodes Inc.		
D7, D8	2	1000V	Diode, P-N, 1000V, 1A, TH	DO-41	1N4007	Fairchild Semiconductor		
D9	1	70V	Diode, Switching, 70V, 0.25A, SOT-23	SOT-23	BAV70-V	Vishay-Semiconductor		
D10	1	200V	Diode, Ultrafast, 200V, 1A, SMA	SMA	ES1D-13-F	Diodes Inc.		
D11	1	30V	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323	BAT54HT1G	ON Semiconductor		
D101	1	17V	DIODE ZENER 17V 500MW SOD123	SOD-123	MMSZ5247BT1G	ON Semiconductor		
F1	1		FUSE FAST 250VAC 2A RADIAL	TR5 fuse 8.5mm DIA	37012000410	Littelfuse		
H1	1		BOARD LEVEL HEATSINK .5" TO-220	12.70x50.80x34.92 mm	513002B02500G	Aavid		
H2, H3	2		Heat Sink, TO-220, TH	TO-220 Heat Sink	530614B00000G	Aavid		
J1	1		HEADER, .312 VERT 3POS	19.7x10.7 x8.5 mm	1-1318301-3	TE Connectivity		
J2	1	2x1	Conn Term Block, 2POS, 5.08mm, TH	PhoenixContact_1715 721	1715721	Phoenix Contact		
L1	1	100uH	INDUCTOR 100UH .9A 8095 RAD	Dia 8x10mm	744772101	Würth Elektronik eiSos		
L2	1	1uH	Inductor, Unshielded Drum Core, Ferrite, 1uH, 8A, 0.006 ohm, TH	D6 x 8.5mm	7447462010	Würth Elektronik eiSos		
L3	1		CHOKET TOROID 3.3MH 2.5A VERT	13x22x17.5mm	744823333	Würth Elektronik eiSos		
Q1	1	650V	MOSFET N-CH 650V 10.6A TO220	TO-220AB	IPP65R380CE	Infineon Technologies		None
Q101	1	40 V	Transistor, NPN, 40 V, 1 A, SOT-223	SOT-223	P2T2222A	Fairchild Semiconductor		
R2	1	7.5k	RES, 7.5 k, 5%, 0.25 W, 1206	1206	CRCW12067K50JNEA	Vishay-Dale		
R3	1	10.2	RES, 10.2, 1%, 0.25 W, 1206	1206	CRCW120610R2FKEA	Vishay-Dale		
R6	1	24.3k	RES, 24.3 k, 1%, 0.1 W, 0603	0603	CRCW060324K3FKEA	Vishay-Dale		
R7, R11	2	100k	RES, 100k ohm, 5%, 0.25W, 1206	1206	CRCW1206100KJNEA	Vishay-Dale		
R8, R9	2	80.6k	RES, 80.6 k, 1%, 0.1 W, 0603	0603	CRCW060380K6FKEA	Vishay-Dale		
R10	1	3.9k	RES, 3.9 k, 5%, 0.25 W, 1206	1206	CRCW12063K90JNEA	Vishay-Dale		
R12	1	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	CRCW0603100RfKEA	Vishay-Dale		
R14	1	0	RES, 0, 5%, 0.25 W, 1206	1206	CRCW12060000Z0EA	Vishay-Dale		
R16	1	10	RES, 10 ohm, 5%, 0.1W, 0603	0603	CRCW060310R0JNEA	Vishay-Dale		
R18	1	100k	RES, 100k ohm, 5%, 0.125W, 0805	0805	CRCW0805100KJNEA	Vishay-Dale		
R19	1	1.0k	RES, 1.0k ohm, 5%, 0.1W, 0603	0603	CRCW06031K00JNEA	Vishay-Dale		
R20, R21	2	0.25	RES, 0.25, 1%, 1 W, 2010	2010	C5SRN2010FKR250	Stackpole Electronics Inc		
R101	1	698	RES, 698, 1%, 0.1 W, 0603	0603	CRCW0603698RfKEA	Vishay-Dale		
RT1	1	2.5 ohm	Inrush Current Limiters 2.5 Ohms	Disc, 11.5mmx6mm	B57236S259M	EPCOS Inc		
RT2	1	470k ohm	Thermistor NTC, 470k ohm, 5%, Disc, 5.5x5mm	Disc, 5.5x5mm	B57164K474J	EPCOS Inc		
T1	1	180 uH	Transformer, 180 uH, TH	TH, Body 31x31mm	750813743(Rev01)	Würth Elektronik eiSos		
TP1, TP3, TP5	3	Red	Test Point, TH, Miniature, Red	Keystone5000	5000	Keystone		
TP2, TP4, TP6	3	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone		
U3	1		High-Power Flyback Controller with Primary-Side Regulation and Peak-Power Mode, D0007A	D0007A	UCC28630D	Texas Instruments		Texas Instruments
C2	0	100pF	CAP, CERM, 100pF, 100V, +/-5%, COG/NPO, 0603	0603	C1608C0G2A101J	TDK		
C5	0	10pF	CAP, CERM, 10 pF, 200 V, +/- 5%, COG/NPO, 1206	1206	12062A100JAT2A	AVX		
C14	0	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	0805	0805C3104KAT2A	AVX		
C15	0	470uF	CAP, AL, 470 uF, 16 V, +/- 20%, 0.028 ohm, TH	TH, 2-Leads, Body 8x16mm	16ZLG470MEFC8X16	Rubycon		
C16	0	1000uF	CAP, AL, 1000uF, 16V, +/-20%, TH	CAPPR5-10x16	UHW1C102MPD	Nichicon		
C17	0	2.2uF	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X5R, 1206	1206	12063D225KAT2A	AVX		
C18, C27	0	1uF	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0603	0603	C0603C105K4PACTU	Kemet		
C19	0	0.01uF	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X8R, 0603	0603	C1608X8R1H103K	TDK		
C21, C28	0	0.1uF	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603	C0603C104J4RACTU	Kemet		
C22, C23, C33, C34	0	22uF	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0805	0805	GRM21BR60J226ME39 L	MuRata		
C24, C35	0	22uF	CAP, CERM, 22 uF, 25 V, +/- 10%, X5R, 1210	1210	CL32A226KAJNNNE	Samsung		
C25, C36	0	0.1uF	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603	0603YC104JAT2A	AVX		
C26, C37	0	0.01uF	CAP, CERM, 0.01 uF, 100 V, +/- 20%, X7R, 0603	0603	06031C103MAT2A	AVX		
D5	0	60V	Diode, Schottky, 60 V, 3 A, SMC	SMC	B360-13-F	Diodes Inc.		
J3	0	2x1	Conn Term Block, 2POS, 5.08mm, TH	PhoenixContact_1715 721	1715721	Phoenix Contact		
L4	0	2.2uH	FIXED IND 2.2UH 1.34A 302 MOHM	SMD, 2.5x2mm	74438322022	Würth Elektronik eiSos		
L5	0	3.3uH	Inductor, Shielded Drum Core, Powdered Iron, 3.3 uH, 2.5 A, 0.069 ohm, SMD	Inductor, 4.06x2x4.06mm	74437324033	Würth Elektronik eiSos		
R1	0	DNP	RES, 0 ohm, 5%, 0.125W, 0805	0805	CRCW08050000Z0EA	Vishay-Dale		
R4	0	7.5k	RES, 7.5 k, 5%, 0.25 W, 1206	1206	CRCW12067K50JNEA	Vishay-Dale		
R5	0	0	RES, 0, 5%, 0.1 W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R13, R22	0	10.0k	RES, 10.0 k, 1%, 0.1 W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		
R15	0	73.2k	RES, 73.2 k, 1%, 0.1 W, 0603	0603	CRCW060373K2FKEA	Vishay-Dale		
R17, R24	0	22.1k	RES, 22.1 k, 1%, 0.1 W, 0603	0603	CRCW060322K1FKEA	Vishay-Dale		
R23	0	121k	RES, 121 k, 1%, 0.1 W, 0603	0603	CRCW0603121KfKEA	Vishay-Dale		
U1	0		Micropower 150 mA Low-Noise Ultra Low-Dropout Regulator, 5-pin SOT-23	MF05A	LP2985-10DBVR	Texas Instruments		
U2	0		IC REG BUCK ADJ 2/3A 16HTSSOP	PWP0016C	TPS542951PWPR	Texas Instruments	TPS542951PWPR	Texas Instruments

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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