## **Engineering Bill of Materials**



Project Name: UCC28630 REFERENCE DESIGN
Project File: PMP9208.PrjPCB

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ltem	Designator	Description	Manufacturer	PartNumber	Quantity	Supplier 1	Supplier Part Number 1	Supplier 2	Supplier Part Number 2
1	!PCB1	Printed Circuit Board	Any	PMP9208	1				
2	BR1	Diode, Switching-Bridge, 800V, 4A, TH	Vishay-Semiconductor	GBU4K-E3/45	1	Digi-Key	GBU4K-E3/45GI-ND	Mouser	625-GBU4K-E3
3	C1	CAP, Film, 0.33uF, 630V, +/-20%, TH	Vishay-Bccomponents	BFC233840334	1	Mouser	594-222233840334	Farnell	1166449
4	C2	CAP, AL, 22uF, 25V, +/-20%, TH	Rubycon	25ML22MEFC5X5	1	Digi-Key	25ML22MEFC5X5-ND	Farnell	8126402
5	C3	CAP, CERM, 1uF, 25V, +/-10%, X7R, 1206	AVX	12063C105KAT2A	1	Digi-Key	478-1567-1-ND	Mouser	581-12063C105K
6	C4	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	Kemet	C0603C104K3RACTU	1	Digi-Key	399-1281-1-ND	Mouser	80-C0603C104K3R
7	C5	CAP, AL, 100uF, 400V, +/-20%, TH	Rubycon	400KXW100MEFC16X30	1	Digi-Key	400KXW100MEFC16X30-ND	Farnell	8126844
8	C6	CAP, CERM, 120pF, 50V, +/-5%, C0G/NP0, 0603	AVX	06035A121JAT2A	1	Digi-Key	478-1176-1-ND	Mouser	581-06035A121J
9	C7	CAP, AL, 27uF, 400V, +/-20%, TH	Nichicon	UCY2G270MHD1TO	1	Digi-Key	493-4825-1-ND		
10	C9	CAP, CERM, 2200pF, 250V, +/-20%, E, Disc 10x8mm	MuRata	DE1E3KX222MA5BA01	1	Digi-Key	490-7048-ND	Mouser	81-DE1010E222M
11	C11	CAP, AL, 680uF, 35V, +/-20%, 0.019 ohm, TH	Nichicon	UHW1V681MPD6	1	Digi-Key	493-6804-ND		
12	C12	CAP, AL, 680uF, 35V, +/-20%, 0.019 ohm, TH	Nichicon	UHW1V681MPD6	1	Digi-Key	493-6804-ND		
13	C13	CAP, CERM, 1uF, 50V, +/-10%, X7R, 1206	TDK	C3216X7R1H105K	1	Digi-Key	445-1423-1-ND	Farnell	1907358
14	C14	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0805	AVX	08051C102KAT2A	1	Digi-Key	478-1352-1-ND	Mouser	581-08051C102K
15	C16	CAP, CERM, 10pF, 200V, +/-5%, C0G/NP0, 1206	AVX	12062A100JAT2A	1	Digi-Key	12062A100JAT2A-ND	Mouser	581-12062A100JAT2A
16	C17	CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0603	AVX	06035A100JAT2A	1	Digi-Key	478-1163-1-ND	Mouser	581-06035A100J
17	D1	Diode, Ultrafast, 200V, 1A, SMA	Diodes Inc.	ES1D-13-F	1	Digi-Key	ES1D-FDICT-ND	Mouser	621-ES1D-F
18	D2	Diode, P-N, 1000V, 1A, TH	Fairchild Semiconductor	1N4007	1	Digi-Key	1N4007FSCT-ND	Mouser	512-1N4007
19	D3	Diode, P-N, 1000V, 1A, TH	Fairchild Semiconductor	1N4007	1	Digi-Key	1N4007FSCT-ND	Mouser	512-1N4007
20	D4	Diode, Switching, 70V, 0.25A, SOT-23	Vishay-Semiconductor	BAV70-V	1	Digi-Key	BAV70-V-GS08CT-ND	Mouser	625-BAV70-V
21	D5	Diode, Ultrafast, 100V, 0.25A, SOD-323	NXP Semiconductor	BAS316,115	1	Digi-Key	568-5003-1-ND	Farnell	8734275
22	D6	Diode, Ultrafast, 600V, 1A, SMB	Diodes Inc.	MURS160-13-F	1	Digi-Key	MURS160-FDICT-ND	Mouser	621-MURS160-F
23	D7	Diode, Schottky, 100V, 15A, TH	ON Semiconductor	NTST30100CTG	1	Digi-Key	NTST30100CTG-ND	Mouser	863-NTST30100CTG
24	D8	Diode, Zener, 82V, 550mW, SMB	ON Semiconductor	1SMB5947BT3G	1	Mouser	863-1SMB5947BT3G	Farnell	1887115
25	D9	Diode, Zener, 100V, 550mW, SMB	ON Semiconductor	1SMB5949BT3G	1	Mouser	863-1SMB5949BT3G	Farnell	1431186
26	D11	Diode, Ultrafast, 100V, 0.25A, SOD-323	NXP Semiconductor	BAS316.115	1	Digi-Key	568-5003-1-ND	Farnell	8734275
27	D11	Diode, Zener, 5.6V, 200mW, SOD-323	Diodes Inc.	MMSZ5232BS-7-F	1	Digi-Key Digi-Key	MMSZ5232BS-FDICT-ND	Mouser	621-MMSZ5232BS-F
28	F1	Fuse, 3.15A, 250V, TH	Littelfuse	39213150000	1	Digi-Key	F5504CT-ND	Mouser	576-3921315000
29	H1	Standoff, Hex, 1"L #6-32 Nylon, M-F	Keystone	4820	1	Digi-Key Digi-Key	4820K-ND	Mouser	534-4820
30									
	H2 H3	Standoff, Hex, 1"L #6-32 Nylon, M-F	Keystone	4820 1902E	1	Digi-Key	4820K-ND	Mouser	534-4820
31		Standoff, Hex, 1"L #4-40 Nylon	Keystone			Digi-Key	1902EK-ND		
32	H4	Standoff, Hex, 1"L #4-40 Nylon	Keystone	1902E	1	Digi-Key	1902EK-ND		534-4820
33	H5	Standoff, Hex, 1"L #6-32 Nylon, M-F	Keystone	4820		Digi-Key	4820K-ND	Mouser	
34	H6	Standoff, Hex, 1"L #6-32 Nylon, M-F	Keystone	4820	1	Digi-Key	4820K-ND	Mouser	534-4820
35	H7	Standoff, Hex, 1"L #4-40 Nylon	Keystone	1902E	1	Digi-Key	1902EK-ND		
36	H8	Standoff, Hex, 1"L #4-40 Nylon	Keystone	1902E	1	Digi-Key	1902EK-ND		
37	H9	1350F Tape	3M	1350F-1 25MM	1				
38	H10	MACHINE SCREW PAN PHILLIPS, 5/16", 4-40	B&F Fastener Supply	PMSSS 440 0031 PH	1	Digi-Key	H704-ND		
39	H11	Washer, Split Lock, #4	Keystone	4693	1	Digi-Key	4693K-ND	Mouser	534-4693
40	H12	Nut, Hex, 1/4" Thick, #4-40	B&F Fastener Supply	HNSS440	1	Digi-Key	H724-ND		
41	H13	MACHINE SCREW PAN PHILLIPS, 5/16", 4-40	B&F Fastener Supply	PMSSS 440 0031 PH	1	Digi-Key	H704-ND		
42	H14	Washer, Split Lock, #4	Keystone	4693	1	Digi-Key	4693K-ND	Mouser	534-4693
43	H15	Nut, Hex, 1/4" Thick, #4-40	B&F Fastener Supply	HNSS440	1	Digi-Key	H724-ND		
44	HS1	BOARD LEVEL HEATSINK .375" TO-220	Aavid Thermalloy	7173DG	1	Digi-Key	HS415-ND		
45	HS2	BOARD LEVEL HEATSINK .375" TO-220	Aavid Thermalloy	7173DG	1	Digi-Key	HS415-ND		
46	J1	AC Receptacle, 2.5A, R/A, TH	Qualtek Electronics Corporation	770W-X2/10	1	Digi-Key	Q273-ND	Mouser	562-770W-X2/10
47	J2	Terminal Block, 2x1, 5.08mm, TH	FCI	20020110-H021A01LF	1	Digi-Key	609-3907-ND	Mouser	649-220110-H021A01LF
48	J3	TERM BLOCK PLUG 2POS 5.08MM	FCI	20020006-H021B01LF	1	Digi-Key	609-3885-ND	Mouser	649-220006-H021B01LF
49	J4	Connector, SMB, Vertical RCP 0-4GHz, 50 ohm, TH	Emerson Network Power	131-3701-261	1	Digi-Key	J613-ND	Mouser	530-131-3701-261
50	JMP1	RES, 0 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12060000Z0EA	1	Digi-Key	541-0.0ECT-ND	Mouser	71-CRCW1206-0-E3
51	L1	Inductor, Toroid, 4.5mH, A, 0.05 ohm, TH	Renco Electronics	RLTI-1099	1				

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52	L2	Inductor, Toroid, 47.7uH, A, 0.04 ohm, TH	Renco Electronics	RLTI-1098	1				
53	LED1	LED, Green, TH	Everlight	HLMP1523	1	Digi-Key	HLMP1523EL-ND	Mouser	638-HLMP1523
54	Q1	MOSFET, N-CH, 600V, 11A, TO-220 FullPAK	ST Microelectronics	STF13NM60ND	1	Digi-Key	497-13865-5-ND	Mouser	511-STF13NM60ND
55	R1	RES, 4.70 ohm, 1%, 0.125W, 0805	Panasonic	ERJ-6RQF4R7V	1	Digi-Key	P4.7DCT-ND	Mouser	667-ERJ-6RQF4R7V
56	R2	RES, 100k ohm, 1%, 0.25W, 1206	Yageo America	RC1206FR-07100KL	1	Digi-Key	311-100KFRCT-ND	Mouser	603-RC1206FR-07100KL
57	R3	RES, 100k ohm, 1%, 0.25W, 1206	Yageo America	RC1206FR-07100KL	1	Digi-Key	311-100KFRCT-ND	Mouser	603-RC1206FR-07100KL
58	R4	RES, 100 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100RFKEA	1	Digi-Key	541-100HCT-ND	Mouser	71-CRCW0603-100-E3
59	R5	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	1	Digi-Key	541-1.00KHCT-ND	Mouser	71-CRCW0603-1.0K-E3
60	R6	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	1	Digi-Key	541-0.0GCT-ND	Mouser	71-CRCW0603-0-E3
61	R7	RES, 22.6k ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW120622K6FKEA	1	Digi-Key	541-22.6KFCT-ND	Mouser	71-CRCW1206-22.6K-E3
62	R8	RES, 39k ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW120639K0JNEA	1	Digi-Key	541-39KECT-ND	Farnell	1540024
63	R9	RES, 180k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-07180KL	1	Digi-Key	311-180KHRCT-ND	Mouser	603-RC0603FR-07180KL
64	R10	RES, 3.90k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-073K9L	1	Digi-Key	311-3.90KHRCT-ND	Mouser	603-RC0603FR-073K9L
65	R11	RES, 47.0 ohm, 1%, 0.25W, 1206	Yageo America	RC1206FR-0747RL	1	Digi-Key	311-47.0FRCT-ND	Mouser	603-RC1206FR-0747RL
66	R13	RES, 4.7 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12064R70JNEA	1	Digi-Key	541-4.7ECT-ND	Mouser	71-CRCW1206J-4.7-E3
67	R15	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA	1	Digi-Key	541-100KHCT-ND	Mouser	71-CRCW0603-100K-E3
68	R16	RES, 0.2 ohm, 1%, 2W, 2512	Stackpole Electronics Inc	CSRN2512FKR200	1	Digi-Key	CSRN2512FKR200CT-ND		
69	R18	RES, 12.0k ohm, 1%, 0.25W, 1206	Yageo America	RC1206FR-0712KL	1	Digi-Key	311-12.0KFRCT-ND	Mouser	603-RC1206FR-0712KL
70	R20	RES, 150k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603150KFKEA	1	Digi-Key	541-150KHCT-ND	Mouser	71-CRCW0603-150K-E3
71	R21	RES, 470k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-07470KL	1	Digi-Key	311-470KHRCT-ND	Mouser	603-RC0603FR-07470KL
72	R22	RES, 150k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603150KFKEA	1	Digi-Key	541-150KHCT-ND	Mouser	71-CRCW0603-150K-E3
73	R23	RES, 47.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0747KL	1	Digi-Key	311-47.0KHRCT-ND	Mouser	603-RC0603FR-0747KL
74	R24	RES, 10.5k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0710K5L	1	Digi-Key	311-10.5KHRCT-ND	Mouser	603-RC0603FR-0710K5L
75	R25	RES, 10.0k ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW120610K0FKEA	1	Digi-Key	541-10.0KFCT-ND	Mouser	71-CRCW1206-10K-E3
76	RT1	Thermistor NTC, 470k ohm, 5%, Disc, 5.5x5mm	EPCOS Inc	B57164K474J	1	Digi-Key	495-2084-ND	Mouser	871-B57164K474J
77	T1	RM10-5pin Custom Transformer		Custom	1				
78	TP1	Test Point, Compact, Red, TH	Keystone	5005	1	Digi-Key	5005K-ND		
79	TP2	Test Point, Compact, White, TH	Keystone	5007	1	Digi-Key	5007K-ND		
80	TP3	Test Point, Compact, Black, TH	Keystone	5006	1	Digi-Key	5006K-ND		
81	TP4	Test Point, Compact, Red, TH	Keystone	5005	1	Digi-Key	5005K-ND		
82	TP5	Test Point, Compact, Black, TH	Keystone	5006	1	Digi-Key	5006K-ND		
83	TP6	Test Point, Compact, Red, TH	Keystone	5005	1	Digi-Key	5005K-ND		
84	TP7	Test Point, Compact, Black, TH	Keystone	5006	1	Digi-Key	5006K-ND		
85	TP8	Test Point, Compact, Black, TH	Keystone	5006	1	Digi-Key	5006K-ND		
86	TP10	Test Point, Compact, Red, TH	Keystone	5005	1	Digi-Key	5005K-ND		
87	U1	Green-Mode Flyback Controller, D0007A	Texas Instruments	UCC28630D	1	ŭ ,			
88	U2	Transistor Output Optocoupler	Lite-On	LTV-357T	1			Mouser	859-LTV-357T
89	U3	IC VREF SHUNT PREC ADJ	Texas Instruments	TLVH432ACDBZR	1	Digi-Key	296-17976-1-ND		
90	U4	IC SNGL DIFF COMPARATOR	Texas Instruments	TL331IDBVT	1	Digi-Key	296-26708-1-ND		
91	V1	Varistor, 430V, 4.5KA, TH	EPCOS Inc	B72214S0271K101	1	Digi-Key	495-1412-ND	Mouser	871-B72214S271K101
92	C8	CAP, CERM, 2700pF, 250V, +/-5%, C0G/NP0, 0805	TDK	C2012C0G2E272J	0	Digi-Key	445-2328-1-ND		
93	C10	CAP, CERM, 0.082uF, 16V, +/-10%, X7R, 0603	AVX	0603YC823KAT2A	0	Digi-Key	478-1238-1-ND	Mouser	581-0603YC823KAT2A
94	D10	Diode, Zener, 100V, 310mW, SOD-323F	NXP Semiconductor	BZX100A, 115	0	Digi-Key	568-6278-1-ND	Mouser	771-BZX100A115
95	R12	RES, 1.00 ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW12061R00FKEA	0	Mouser	71-CRCW1206-1-E3	Farnell	1653087
96	R14	, , , , , , , , , , , , , , , , , , , ,	Vishay / Dale		0				
97	R17	RES, 1.00k ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW12061K00FKEA	0	Digi-Key	541-1.00KFCT-ND	Mouser	71-CRCW1206-1.0K-E3
98	R19	-,,,	Vishay / Dale		0	3 ,			

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