Texas Instruments

Bill of Materials

TI DESIGNS

PMP7804

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	AA1		Printed Circuit Board	TBD	Used in BOM Report			
2	4	C1, C2, C28, C29		CAP, POSCAP, 330uF, 4.0V, +/-20%, 0.018 ohm, Case Code R SMD	Sanyo	4TPE330MI	NONE		
3	9	C3, C4, C8, C25, C26, C41, C42, C43, C44		CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	Taiyo Yuden	EMK212BJ106KG-T			
4	15	C5, C9, C11, C22, C24, C27, C38, C45, C49, C51, C59, C64, C66, C73, C76		CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	Kemet	C0603C105K4PACTU	399-5090-1-ND		
5	10	C6, C17, C20, C31, C33, C37, C46, C47, C58, C72		CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603	Kemet	C0603C103J1RACTU	399-3190-1-ND		
6	1	C7		CAP, CERM, 0.1uF, 25V, +80/-20%, Y5V, 0603	TDK	C1608Y5V1E104Z	445-1325-1-ND		
7	4	C10, C14, C50, C61		CAP, CERM, 3900pF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H392KA01D	490-1504-1-ND		
8	1	C12		CAP, POSCAP, 330uF, 2.5V, +/-20%, 0.009 ohm, SMD	Sanyo	2R5TPE330M9C2	NONE		
9	5	C13, C18, C32, C52, C65		CAP, CERM, 100pF, 25V, +/-10%, X7R, 0603	AVX	06033C101KAT2A			
10	13	C15, C16, C34, C35, C36, C54, C55, C56, C57, C68, C69, C70, C71		CAP, POSCAP, 330uF, 2.0V, +/-20%, 0.006 ohm, SMD	Sanyo	2TPE330M6	NONE		
11	1	C19		CAP, CERM, 2200pF, 50V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C1H222JA01D	490-1459-1-ND		
12	1	C21		CAP, CERM, 1uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C105K8PACTU	399-3118-1-ND		
13	5	C23, C48, C62, C63, C75		CAP, CERM, 47uF, 6.3V, +/-20%, X5R, 0805	Taiyo Yuden	JMK212BJ476MG-T	587-1779-1-ND		
14	1	C30		CAP, CERM, 4700pF, 50V, +/-5%, X7R, 0603	Kemet	C0603C472J5RACTU	399-1088-1-ND		
15	4	C39, C40, C77, C78		CAP, POSCAP, 470uF, 4.0V, +/-20%, 0.010 ohm, SMD	Sanyo	4TPF470ML	NONE		
16	2	C53, C67		CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0603	Kemet	C0603C332K5RACTU	399-1086-1-ND		
17	1	C60		CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C470J5GACTU	399-1056-1-ND		
18	2	D2, D3		Diode, Schottky, 30V, 0.2A, SOT-23	Diodes Inc.	BAT54-7-F	BAT54-FDICT-ND		
19	6	FID1, FID2, FID3, FID4, FID5, FID6		Fiducial mark. There is nothing to buy or mount.	N/A	N/A			

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
20	1	J1		CONN HEADER 10POS .200" T/H	SAMTEC	HPM-10-05-T-S	HPM-10-05-T-S-ND		
21	1	J2		CONN HEADER 8POS .200" T/H	Samtec	HPM-08-05-T-S			
22	1	J3		CONN HEADER DUAL ROW 5POS .050" SM	Samtec	FW-05-05-F-D-361-085	None		
23	1	J4		Header, TH, 100mil, 2x2, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-102-07-G-D	SAM1028-02-ND		
24	1	L1		Inductor, Shielded Drum Core, Powdered Iron, 10uH, 6.8A, 0.009 ohm, SMD	Vishay/Dale	IHLP4040DZER100M01	541-1295-1-ND		
25	2	L2, L3		Inductor, Shielded Drum Core, Powdered Iron, 2.2uH, 12A, 0.009 ohm, SMD	Vishay-Dale	IHLP4040DZER2R2M01	541-1299-1-ND		
26	2	L4, L5		Inductor, Shielded Drum Core, Powdered Iron, 1.5uH, 15A, 0.009 ohm, SMD	Vishay/Dale	IHLP4040DZER1R5M01	541-1301-1-ND		
27	5	R1, R10, R12, R34, R37		RES, 49.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060349K9FKEA	541-49.9KHCT-ND		
28	1	R2		RES, 12.1k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060312K1FKEA	541-12.1KHCT-ND		
29	2	R3, R32		RES, 7.06k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD077K06L			
30	1	R4		RES, 9.09k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD079K09L			
31	8	R5, R15, R18, R31, R33, R43, R45, R63		RES, 100 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603100RJNEA	541-100GCT-ND		
32	1	R6		RES, 1.24k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K24FKEA	541-1.24KHCT-ND		
33	2	R7, R14		RES, 1.50k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K50FKEA	541-1.50KHCT-ND		
34	11	R9, R17, R23, R29, R35, R48, R50, R51, R56, R58, R65		RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	541-0.0GCT-ND		
35	4	R11, R26, R42, R57		RES, 453 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603453RFKEA	541-453HCT-ND		
36	5	R13, R21, R25, R27, R40		RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	541-1.00KHCT-ND		
37	1	R19		RES, 19.1k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060319K1FKEA	541-19.1KHCT-ND		
38	3	R20, R53, R54		RES, 20.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K0FKEA	541-20.0KHCT-ND		
39	4	R24, R38, R52, R67		RES, 1.0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031R00JNEA	541-1.0GCT-ND		
40	1	R30		RES, 15.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060315K0FKEA			
41	1	R39		RES, 3.16k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06033K16FKEA	541-3.16KHCT-ND		
42	2	R41, R55		RES, 8.06k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD078K06L			
43	2	R44, R59		RES, 12.0k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD0712KL			
44	2	R46, R64		RES, 24.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060324K9FKEA	541-24.9KHCT-ND		

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
45	4	R68, R69, R70, R71		RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	541-10.0KHCT-ND		
46	10	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10		Test Point, TH, Miniature, Red	Keystone	5000	5000K-ND		
47	10	TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20		Test Point, TH, Miniature, Black	Keystone	5001	5001K-ND		
48	5	TP21, TP22, TP23, TP24, TP25		Test Point, TH, Miniature, Yellow	Keystone	5004	5004K-ND		
49	4	TV1, TV2, TV5, TV6		THERMAL VIAS 12 X 12 12 MIL DRILL 26 MIL PAD FOR LMZ22010	None	THERMAL VIAS 12 X 12	None		
50	2	U1, U4		10A SIMPLE SWITCHER® Power Module with 20V Maximum Input and Current Sharing, 11 pin TO-PMOD, 32 Rail	Texas Instruments	LMZ22008TZ/NOPB	LMZ22008TZ/NOPB-ND		
51	1	U2		36V, 3A Synchronous Buck Regulator with Frequency Synchronization, 20-pin TSSOP-EP, Pb-Free	Texas Instruments	LM20333MH/NOPB	LM20333MH-ND		
52	4	U3, U5, U8, U10		12A High Efficiency Synchronous Buck Regulator with Frequency Synchronization, 20-pin TSSOP-EP, 73 Rail	Texas Instruments	LM21212MH-1/NOPB	LM21212MH-1/NOPB-ND		
53	2	U6, U7		10A SIMPLE SWITCHER® Power Module with 20V Maximum Input and Current Sharing, 11 pin TO-PMOD, 32 Rail	Texas Instruments	LMZ22010TZ/NOPB	LMZ22010TZ/NOPB-ND		
54	1	U9		CMOS Timer, 8-pin Mini SOIC, Pb-Free	Texas Instruments	LMC555CMM/NOPB	LMC555CMMCT-ND		
55	0	C74		CAP, CERM, 47uF, 6.3V, +/-20%, X5R, 0805	Taiyo Yuden	JMK212BJ476MG-T	587-1779-1-ND		
56	0	D1		Diode, Zener, xxV, xxxmW, [PackageReference]	Used in BOM report	DNP	?		
57	0	R8, R16, R22, R28, R36, R47, R49, R60, R61, R62, R66		RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	541-0.0GCT-ND		

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