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PMP11769 REV C Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C14, C58_1, C58_2, C59_1, C59_2, C71_1, C71_2	8	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
2	C2, C3, C7, C9, C12, C19_1, C19_2, C23_1, C23_2, C26_1, C26_2, C29_1, C29_2, C30_1, C30_2, C36_1, C36_2, C60_1, C60_2, C66_1, C66_2, C72_1, C72_2, C73_1, C73_2, C77_1, C77_2, C78_1, C78_2, C80_1, C80_2, C81_1, C81_2, C82_1, C82_2, C104, C106	37	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
3	C4, C13, C92, C93	4	1uF	C3216X7R1H105K	TDK	CAP, CERM, 1 μ F, 50 V, +/- 10%, X7R, 1206	1206
4	C5, C6, C10, C11, C67_1, C67_2, C79_1, C79_2	8	10uF	C3225X7R1E106M	TDK	CAP, CERM, 10 μ F, 25 V, +/- 20%, X7R, 1210	1210
5	C8, C17	2	220pF	C1608C0G1H221J	TDK	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
6	C15	1	4.7uF	C2012X7R1A475M	TDK	CAP, CERM, 4.7 μ F, 10 V, +/- 20%, X7R, 0805	0805
7	C16	1	1000pF	C1608X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
8	C18_1, C18_2, C22_1, C22_2, C25_1, C25_2, C32_1, C32_2, C35_1, C35_2, C39_1, C39_2	12	4.7uF	R82CC4470Z330J	Kemet	CAP, Film, 4.7 μ F, 50 V, +/- 5%, TH	7.2x7.2x13mm

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9	C20_1, C20_2, C31_1, C31_2	4	22pF	C1005C0G1H220J050BA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
10	C21_1, C21_2, C24_1, C24_2, C28_1, C28_2, C37_1, C37_2, C38_1, C38_2, C40_1, C40_2, C91	13	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
11	C27_1, C27_2	2	0.1uF	R82DC3100DQ50J	Kemet	CAP, Film, 0.1 µF, 63 V, +/- 5%, TH	7.2x2.5x6.5mm
12	C33_1, C33_2	2	0.22uF	R82DC3220DQ60J	Kemet	CAP, Film, 0.22 µF, 63 V, +/- 5%, TH	7.2x2.5x6.5mm
13	C34_1, C34_2	2	0.15uF	R82DC3150AA60J	Kemet	CAP, Film, 0.15 µF, 63 V, +/- 5%, TH	7.2x2.5x6.5mm
14	C41_1, C41_2, C61_1, C61_2, C68_1, C68_2, C74_1, C74_2	8	0.01uF	C1608X7R1H103K	TDK	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
15	C42_1, C42_2, C43_1, C43_2, C44_1, C44_2, C45_1, C45_2, C109, C110, C113, C114	12	560uF	UPW1G561MHDANE	Nichicon	CAP, AL, 560 µF, 40 V, +/- 20%, 0.045 ohm, TH	D18xL15mm
16	C46_1, C46_2, C47_1, C47_2, C48_1, C48_2, C49_1, C49_2, C50_1, C50_2, C51_1, C51_2, C52_1, C52_2, C53_1, C53_2	16	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0603	0603
17	C54_1, C54_2, C55_1, C55_2, C64_1, C64_2, C65_1, C65_2	8	0.033uF	GRM188R71H333KA61D	MuRata	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0603	0603
18	C56_1, C56_2, C62_1, C62_2, C69_1, C69_2, C75_1, C75_2	8	1uF	PHE426HB7100JR06	Kemet	CAP, Film, 1 µF, 250 V, +/- 5%, TH	18x9.5x17.5mm
19	C57_1, C57_2, C63_1, C63_2, C70_1, C70_2, C76_1, C76_2	8	1000pF	C1608C0G2A102J	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
20	C83, C84	2	220pF	C1608X7R1H221K	TDK	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
21	C85	1	0.068uF	C1608X7R1H683K080AA	TDK	CAP, CERM, 0.068 µF, 50 V, +/- 10%, X7R, 0603	0603

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22	C86, C87	2	4.7uF	C3216X7R1C475M	TDK	CAP, CERM, 4.7 µF, 16 V, +/- 20%, X7R, 1206	1206
23	C88, C89	2	0.22uF	C2012X7R1E224K	TDK	CAP, CERM, 0.22 µF, 25 V, +/- 10%, X7R, 0805	0805
24	C90	1	270pF	GRM188R71H271KA01D	MuRata	CAP, CERM, 270 pF, 50 V, +/- 10%, X7R, 0603	0603
25	C94	1	2.2uF	GCM188R70J225KE22D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
26	C95, C96, C111, C112, C115, C116	6	1000pF	C2012X7R2A102M	TDK	CAP, CERM, 1000 pF, 100 V, +/- 20%, X7R, 0805	0805
27	C97, C99, C100, C102, C103, C105, C117, C119, C120, C122, C123	11	4.7uF	CGA6P3X7R1H475K250AB	TDK	CAP, CERM, 4.7 µF, 50 V, +/- 15%, X7R, 1210	1210
28	C98, C101, C118, C121	4	1200uF	UPA1E122MHDANE	Nichicon	CAP, AL, 1200 µF, 25 V, +/- 20%, 0.036 ohm, TH	D18xL15mm
29	C107, C108	2	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
30	D1	1	Red	551-0303F	Dialight	LED, Yellow, TH	4.57x4.57mm
31	D2	1	Yellow	551-0303F	Dialight	LED, Yellow, TH	4.57x4.57mm
32	D3, D8, D14, D15	4	60V	PMEG6010CEH,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-123F	SOD-123F
33	D4, D5, D6, D7	4	Green	150060GS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
34	D9_1, D9_2, D10_1, D10_2, D11_1, D11_2, D12_1, D12_2, D13_1, D13_2	10	100V	1N4148WFL-G3-08	Vishay-Semiconductor	Diode, Switching, 100 V, 0.15 A, SOD-123FL	SOD-123FL
35	D16, D21	2	60V	SS36-E3/57T	Vishay-Semiconductor	Diode, Schottky, 60 V, 3 A, SMC	SMC
36	D17, D18, D19, D22, D23, D24	6	30V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
37	D20	1	15V	BZX84C15LT1G	ON Semiconductor	Diode, Zener, 15 V, 225 mW, SOT-23	SOT-23
38	FID1, FID2, FID3, FID4	4		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
39	J1, J3	2		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
40	J2, J4, J6_1, J6_2, J7_1, J7_2, J17_1, J17_2, J18_1, J18_2	10		61300311121	Wurth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
41	J5_1, J5_2	2		971	Keystone	RCA Jack, Red, R/A, TH	PC Mount Phono Jack-Red, TH
42	J8_1, J8_2	2		972	Keystone	RCA Jack, Black, R/A, TH	RCA Jack, Black, R/A, TH

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43	J9_1, J9_2, J13_1, J13_2, J19	5		973 582-101	Hirschmann	TEST SOCKET, PCB, 4MM, RED	21x10.5x7.5 mm
44	J10_1, J10_2, J11_1, J11_2, J14_1, J14_2, J15_1, J15_2	8		H3492-01	Harwin	Pin Receptacle, Dia 4 mm, Gold, TH	Pin Receptacle, Dia 4 mm, TH
45	J12_1, J12_2, J16_1, J16_2, J20	5		973 582-100	Hirschmann	TEST SOCKET, PCB, 4MM, BLACK	21x10.5x7.5 mm
46	L1	1	330uH	LPS6235-334MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 330 μ H, 0.3 A, 1.2 ohm, SMD	LPS6235
47	L2, L4	2	500nH	XPL2010-501MLB	Coilcraft	Inductor, Shielded, Composite, 500 nH, 2.3 A, 0.04 ohm, SMD	XPL2010
48	L3	1	1mH	LPS4012-105MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 1 mH, 0.1 A, 21.5 ohm, SMD	LPS4012
49	L5_1, L5_2, L6_1, L6_2, L7_1, L7_2, L8_1, L8_2, L9, L11	10	10uH	SER2918H-103KL	Coilcraft	Inductor, Shielded E Core, Ferrite, 10 μ H, 28 A, 0.0026 ohm, SMD	29.7x17.78x27.94mm
50	L10	1	100nH	IHLP2525AHERR10M01	Vishay-Dale	Inductor, Shielded, Ferrite, 100 nH, 18 A, 0.0035 ohm, SMD	6.47x1.8x6.86
51	Q1, Q2	2	60V	2N7002E-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 0.24 A, SOT-23	SOT-23
52	Q3, Q4, Q5, Q7, Q8, Q9	6	60V	SQD50N06-09L	Vishay-Siliconix	MOSFET, N-CH, 60 V, 50 A, DPAK	DPAK
53	Q6, Q10	2	30V	CSD17570Q5B	Texas Instruments	MOSFET, N-CH, 30 V, 51 A, SON 5x6mm	SON 5x6mm
54	R1, R7	2	47.5k	CRCW060347K5FKEA	Vishay-Dale	RES, 47.5 k, 1%, 0.1 W, 0603	0603
55	R2, R8	2	3.32k	CRCW06033K32FKEA	Vishay-Dale	RES, 3.32 k, 1%, 0.1 W, 0603	0603
56	R3, R6, R25_1, R25_2, R30_1, R30_2, R43_1, R43_2, R53_1, R53_2, R55_1, R55_2, R56_1, R56_2, R59_1, R59_2, R61_1, R61_2, R63_1, R63_2, R64_1, R64_2, R65_1, R65_2, R66_1, R66_2	26	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603

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57	R4, R19_1, R19_2, R20_1, R20_2, R26_1, R26_2, R36_1, R36_2, R37_1, R37_2, R42_1, R42_2	13	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
58	R5	1	80.6k	CRCW060380K6FKEA	Vishay-Dale	RES, 80.6 k, 1%, 0.1 W, 0603	0603
59	R9, R17, R77	3	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
60	R10, R16, R58_1, R58_2, R89, R91, R92, R100, R101	9	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
61	R11, R18	2	14.7k	CRCW060314K7FKEA	Vishay-Dale	RES, 14.7 k, 1%, 0.1 W, 0603	0603
62	R12	1	11.0k	CRCW060311K0FKEA	Vishay-Dale	RES, 11.0 k, 1%, 0.1 W, 0603	0603
63	R13, R14	2	2.94k	CRCW06032K94FKEA	Vishay-Dale	RES, 2.94 k, 1%, 0.1 W, 0603	0603
64	R15	1	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, 0603	0603
65	R21_1, R21_2, R27_1, R27_2, R38_1, R38_2, R39_1, R39_2	8	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
66	R22_1, R22_2	2	13.7k	CRCW060313K7FKEA	Vishay-Dale	RES, 13.7 k, 1%, 0.1 W, 0603	0603
67	R23_1, R23_2, R32_1, R32_2, R40_1, R40_2, R54_1, R54_2, R67, R70, R72, R73, R75, R76, R79, R83	16	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
68	R24_1, R24_2, R41_1, R41_2, R78	5	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
69	R28_1, R28_2, R33_1, R33_2, R81, R84	6	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
70	R29_1, R29_2	2	10K	PTD902-2015F-A103	Bourns	Trimmer Potentiometer, 10K Ohm, 0.025W, TH	9.5x9.65mm
71	R31_1, R31_2, R44_1, R44_2	4	24.3k	CRCW060324K3FKEA	Vishay-Dale	RES, 24.3 k, 1%, 0.1 W, 0603	0603
72	R34_1, R34_2	2	4.53k	CRCW06034K53FKEA	Vishay-Dale	RES, 4.53 k, 1%, 0.1 W, 0603	0603
73	R35_1, R35_2	2	6.81k	CRCW06036K81FKEA	Vishay-Dale	RES, 6.81 k, 1%, 0.1 W, 0603	0603

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74	R45_1, R45_2, R46_1, R46_2, R47_1, R47_2, R48_1, R48_2, R50_1, R50_2, R51_1, R51_2, R52_1, R52_2, R69, R71	16	3.32	CRCW06033R32FKEA	Vishay-Dale	RES, 3.32, 1%, 0.1 W, 0603	0603
75	R49_1, R49_2	2	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.1 W, 0603	0603
76	R57_1, R57_2	2	23.7k	CRCW060323K7FKEA	Vishay-Dale	RES, 23.7 k, 1%, 0.1 W, 0603	0603
77	R60_1, R60_2	2	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
78	R62_1, R62_2	2	365k	CRCW0603365KFKEA	Vishay-Dale	RES, 365 k, 1%, 0.1 W, 0603	0603
79	R68	1	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, 0603	0603
80	R74	1	68.1k	CRCW060368K1FKEA	Vishay-Dale	RES, 68.1 k, 1%, 0.1 W, 0603	0603
81	R80	1	7.68k	CRCW06037K68FKEA	Vishay-Dale	RES, 7.68 k, 1%, 0.1 W, 0603	0603
82	R82	1	37.4k	CRCW060337K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.1 W, 0603	0603
83	R85	1	3.74k	CRCW06033K74FKEA	Vishay-Dale	RES, 3.74 k, 1%, 0.1 W, 0603	0603
84	R86	1	44.2k	CRCW060344K2FKEA	Vishay-Dale	RES, 44.2 k, 1%, 0.1 W, 0603	0603
85	R87, R90, R97, R99	4	8.2	CRCW20108R20JNEF	Vishay-Dale	RES, 8.2, 5%, 0.75 W, 2010	2010
86	R88, R98	2	0.0015	ERJ-M1WTF1M5U	Panasonic	RES, 0.0015, 1%, 1 W, 2512	2512
87	R93, R94, R95, R102, R103, R104	6	4.75	CRCW06034R75FKEA	Vishay-Dale	RES, 4.75, 1%, 0.1 W, 0603	0603
88	R96	1	0.68	ERJ-1TRQJR68U	Panasonic	RES, 0.68, 5%, 1 W, 2512	2512
89	S1	1		431256038716	Würth Elektronik	Switch, SPST-NO, Off-Mom, 0.05 A, 12 V, R/A, TH	7.11x7.16mm
90	U1	1		TPS3803-01QDCKRQ1	Texas Instruments	VOLTAGE DETECTOR, DCK0005A	DCK0005A
91	U2, U3	2		LM2841XQMK/NOPB	Texas Instruments	300 mA/600 mA up to 42V Input Step-Down DC/DC Regulator, 6-pin Tiny SOT23	MK06A
92	U4	1		TPS7A6633QDGNRQ1	Texas Instruments	High-Voltage Ultralow-Iq Low-Dropout Regulator, DGN0008D	DGN0008D
93	U5_1, U5_2, U7_1, U7_2	4		OPA1662AIDRQ1	Texas Instruments	Automotive Catalog, Sound Plus, Low-Power, Low-Noise and Distortion, Audio Operational Amplifier, 3 to 36 V, -40 to 85 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	D0008A
94	U6_1, U6_2	2		OPA1662AIDGKRQ1	Texas Instruments	Automotive Catalog, Sound Plus, Low-Power, Low-Noise and Distortion, Audio Operational Amplifier, 3 to 36 V, -40 to 85 degC, 8-pin SOP (DGK0008A), Green (RoHS & no Sb/Br)	DGK0008A
95	U8_1, U8_2	2		TPA3251D2	Texas Instruments	150W Stereo/300W MONO PurePath HD Analog-input Power Stage, DDV0044D	DDV0044D
96	U9_1, U9_2, U10_1, U10_2	4		LM2904QDRQ1	Texas Instruments	Automotive Dual Low Power Op Amp, D0008A	D0008A
97	U11, U12	2		LM25122QMHX/NOPB	Texas Instruments	Wide Input Synchronous Boost Controller with Multiple Phase Capability, PWP0020A	PWP0020A

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