

PMP4486 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C65	2	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C2, C5	2	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
C3	1	100uF	EEV-FK1K101Q	Panasonic	CAP, AL, 100 µF, 80 V, +/- 20%, 0.32 ohm, AEC-Q200 Grade 2, SMD	SMT Radial H13
C4	1	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	1206
C6, C22, C47, C48, C60, C61	6	2.2µF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
C7, C8, C29, C30, C31, C32, C33, C39, C44, C49, C58, C62	12	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C9, C19, C27, C37, C40, C46, C50, C51, C59, C63	10	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0603	0603
C10	1	0.22uF	GRM188R70J224KA88D	MuRata	CAP, CERM, 0.22 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C11, C24	2	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C12, C13	2	470uF	2TPE470MAJGB	Panasonic	CAP, Tantalum Polymer, 470 µF, 2 V, +/- 20%, 0.011 ohm, 3.5x1.9x2.8mm SMD	3.5x1.9x2.8mm
C14, C15, C16, C17, C18	5	47uF	GRM32ER70J476KE20L	MuRata	CAP, CERM, 47 µF, 6.3 V, +/- 10%, X7R, 1210	1210
C20, C21, C25, C26, C42, C43, C68, C69	8	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
C23	1	0.1uF	C1608X7R1C104K	TDK	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
C28, C34, C36, C70, C71	5	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603	0603
C35	1	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0603	0603
C38	1	0.1uF	GRM188R70J104KA01D	MuRata	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C41, C52	2	68uF	EEHZA1V680XP	Panasonic	CAP, Polymer Hybrid, 68 µF, 35 V, +/- 20%, 35 ohm, 6.3x7.7 SMD	6.3x7.7
C45, C57	2	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
C53, C54, C55, C56	4	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210
C64	1	3300pF	GRM1885C1H332JA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C66	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C67	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
C72, C73, C74, C75, C76, C77, C78	7	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D2	1	40V	NSR0240V2T1G	ON Semiconductor	Diode, Schottky, 40V, 0.25A, SOD-523	SOD-523
J1, J2, J6	3		1715721	Phoenix Contact	Terminal Block, 5.08 mm, 2x1, TH	2POS Terminal Block
J3, J4	2		2142-0		Output Pin For 1/8 Brick, D1.5mm*D2.5mm*L11.6mm	
J5	1		TSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	5x1 Header
J7	1		29-3653-02	AMPHENOL	SMA JACK 50 OHM, R/A, SMT	COAX_AMC_PB-FR
L1	1	100uH	74408943101	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 100 µH, 0.52 A, 0.77 ohm, SMD	4.8x3.8x4.8mm
L2, L3	2	330nH	APX10C80MR33	Coilank	Inductor, Shielded Drum Core, Ferrite, 330 nH, 27 A, 0.00018 ohm, SMD	10.1x8x7mm
L4, L5	2	2.2uH	CMLE063T-2R2MS	Cyntec	Inductor, 2.2 µH, 9 A, 0.0128 ohm, SMD	6.95x2.8x6.6mm
Q1, Q2, Q3, Q4	4	30V 60A 1.3mE	EPC2023	EPC	30V 60A 1.3mE	EPC2x40L
R1	1	30.0k	RC0603FR-0730KL	Yageo America	RES, 30.0 k, 1%, 0.1 W, 0603	0603
R2, R3, R5, R8, R29, R30, R31, R34, R35, R36, R43, R45, R47	13	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R4, R17, R28, R33	4	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R6, R7	2	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, 0603	0603
R9, R10	2	150k	RC0603FR-07150KL	Yageo America	RES, 150 k, 1%, 0.1 W, 0603	0603
R11, R12, R13	3	1.00	RC0603FR-071RL	Yageo America	RES, 1.00, 1%, 0.1 W, 0603	0603
R14	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
R15	1	200	RC0603FR-07200RL	Yageo America	RES, 200, 1%, 0.1 W, 0603	0603
R16	1	22.0k	RC0603FR-0722KL	Yageo America	RES, 22.0 k, 1%, 0.1 W, 0603	0603
R18	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, 0603	0603
R19, R20, R21, R22, R23, R26	6	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R24	1	10.0k	RCG060310K0FKEA	Vishay Draloric	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R25	1	3.32k	RC0603FR-073K32L	Yageo America	RES, 3.32 k, 1%, 0.1 W, 0603	0603
R27, R32	2	300	RC0603FR-07300RL	Yageo America	RES, 300, 1%, 0.1 W, 0603	0603
R37	1	47.0k	RC0603FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.1 W, 0603	0603
R38	1	330k	RC0603FR-07330KL	Yageo America	RES, 330 k, 1%, 0.1 W, 0603	0603
R39	1	120k	RC0603FR-07120KL	Yageo America	RES, 120 k, 1%, 0.1 W, 0603	0603
R40	1	4.30k	RC0603FR-074K3L	Yageo America	RES, 4.30 k, 1%, 0.1 W, 0603	0603
R41	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
R42	1	3.90k	CRCW06033K90FKEA	Vishay-Dale	RES, 3.90 k, 1%, 0.1 W, 0603	0603
R44	1	120	CRCW1206120RJNEA	Vishay-Dale	RES, 120, 5%, 0.25 W, 1206	1206
R46	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
T1	1	6:1	ER18-3-10-TP5B (3F46)-S	TDG (Ferrotec)	PCB Planar Transformer, 48W, ER18-3-10-TP5B	Plannar Transformer
TP1	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP2	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U1	1		LM5161PWPR	Texas Instruments	Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, PWP0014A	PWP0014A
U2, U8, U10	3		INA286AIDR	Texas Instruments	High-Accuracy, Wide Common-Mode Range, Bi-Directional CURRENT SHUNT MONITOR Zero-Drift Series, D0008A	D0008A
U3	1		TLV70433DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U4, U7, U9	3		PLMG5200MOFT	Texas Instruments	PLMG5200MOFT, MOF0009A	MOF0009A
U5	1	LM5113	LM5113SD/NOPB	TI	IC, 5A, 100V Half-Bridge Gate Driver	LLP-10
U6	1	UCD3138ARMH	UCD3138ARMH	TI	IC, Highly Integrated Digital Controller for Isolated Power	QFN-40
U11	1		TLV70450DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A

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