

**PMP40766 REV E2 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2	2	0.47uF	R46KI347050P0K	Kemet	CAP, Film, 0.47 uF, X2 275 VAC, +/- 10%, TH	18x8.5mm
C3, C15, C17	3	4.7uF	C2012X7R1E475K125AB	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	0805
C4	1	2200pF	GRM1885C1H222JA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C5	1	1.2uF	ECW-FD2W125K	Panasonic Electronic Compon	CAP, Film, 1.2 uF, 450 V, +/- 10%, TH	B32922_17.5mm
C6	1	1000pF	GRM1885C1H102FA01J	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
C7, C21	2	2.2uF	08053C225KAT2A	AVX	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, 0805	0805
C8	1	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C9	1	270pF	GRM1885C1H271JA01D	MuRata	CAP, CERM, 270 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C10, C13	2	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
C11	1	220uF	450HXG220MEFCSN25X40	Rubycon	CAP, AL, 220 uF, 450 V, +/- 20%, TH	D25xL40mm
C12	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, 0603	0603
C14	1	0.022uF	ECW-F6223HL	Panasonic	CAP, Film, 0.022 uF, 630 V, +/- 3%, TH	12.5x6.2mm
C16, C29, C32, C35, C36, C43, C45, C47, C57	9	0.1uF	C0603X104K3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C18	1	3.9pF	06035A3R9CAT2A	AVX	CAP, CERM, 3.9 pF, 50 V, +/- 6%, C0G/NP0, 0603	0603
C19	1	0.47uF	C0603C474K4RACTU	Kemet	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, 0603	0603
C20, C28	2	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C22, C23	2	0.022uF	ECW-H8223HA	Panasonic Electronic Compon	CAP, Film, 0.022 uF, 800 V, +/- 3%, TH	15x7mm
C24, C26	2	47pF	VJ1206A470JXGAT5Z	Vishay-Vitramon	CAP, CERM, 47 pF, 1000 V, +/- 5%, C0G/NP0, 1206	1206
C25	1	8200pF	CL10B822KB8NNNC	Samsung Electro-Mechanics	CAP, CERM, 8200 pF, 50 V,+/- 10%, X7R, 0603	0603
C27	1	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	0603
C30	1	2200pF	C921U222MVDDBA7317	Kemet	CAP, CERM, 2200 pF, X1 400 VAC/Y1 400 VAC, +/- 20%, Y5V, D9xL13mm	D9xL13mm
C31	1	0.01uF	C0603X103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C33	1	1000pF	C0603C102K3GACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 10%, C0G/NP0, 0603	0603
C34	1	470pF	C0603X471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
C37, C38	2	100pF	CL21C101JECNNWC	Samsung Electro-Mechanics	CAP, CERM, 100 pF, 250 V,+/- 5%, C0G/NP0, 0805	0805
C39, C41	2	680uF	EEUFS1K681	Panasonic Electronic Compon	CAP, AL, 680 uF, 80 V, +/- 20%, TH	D16xL25mm
C40	1	0.22uF	C1608X7R1E224K080AC	TDK	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	0603
C42	1	0.01uF	C0603X103K1RACTU	Kemet	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
C44, C46	2	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
C48	1	22uF	25ML22MEFC5X5	Rubycon	CAP, AL, 22 uF, 25 V, +/- 20%, TH	RCAP, 5x5mm
C49	1	100uF	EEU-FM1E101	Panasonic	CAP, AL, 100 uF, 25 V, +/- 20%, 0.13 ohm, TH	6.3x11.2mm
C50	1	1uF	C1608X7R1E105K080AE	TDK	CAP, CERM, 1 uF, 25 V,+/- 10%, X7R, 0603	0603
C51, C53	2	470pF	08051A471JAT2A	AVX	CAP, CERM, 470 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
C52, C58	2	2200pF	GRM31BR72J222KW01L	MuRata	CAP, CERM, 2200 pF, 630 V, +/- 10%, X7R, 1206	1206
C54	1	220uF	EKZE250ELL221MHB5D	Chemi-Con	CAP, AL, 220 uF, 25 V, +/- 20%, TH	D8xL11.5
C55, C56	2	1uF	GRM216R61E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0805	0805
CY1, CY2	2	2200pF	DE6E3KJ222MN3A	MuRata	CAP, CERM, 2200 pF, 300 V, +/- 20%, E, TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm	TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm
D1	1	600V	GBJ2506-BP	Micro Commercial Component	Diode, P-N-Bridge, 600 V, 25 A, TH	Diode Bridge, TH
D2	1	250V	BAV23CLT1G	ON Semiconductor	Diode, Switching, 250 V, 0.4 A, SOT-23	SOT-23

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D3	1	600V	1N5406	Vishay-Semiconductor	Diode, Switching-Bridge, 600 V, 3 A, TH	DO-201AD
D4, D7, D8	3	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D5	1	600V	C3D04060A	Cree	Diode, Schottky, 600 V, 4 A, TH	TO-220-F2
D6	1	5.1V	MM3Z5V1ST1G	ON Semiconductor	Diode, Zener, 5.1 V, 300 mW, SOD-323	SOD-323
D9	1	600V	ES1JTR	SMC Diode Solutions	Diode, Superfast Rectifier, 600 V, 1 A, SMA	SMA
D10	1	30V	BAT54AWT-TP	Micro Commercial Component	Diode, Schottky, 30 V, 0.2 A, SOT-323	SOT-323
D11, D12	2	200V	TST20L200CW C0G	Taiwan Semiconductor Corpor	Diode, Schottky, 200 V, 20 A, TH	TO-220AB
D13, D14, D15, D16	4	30V	BAT43WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
D17	1		MT6224-AHRG-A	Marktech Optoelectronics	LED GRN/RED DIFF 5MM ROUND T/H	RADIAL
D18	1	5.6V	MM3Z5V6ST1G	ON Semiconductor	Diode, Zener, 5.6 V, 300 mW, SOD-323	SOD-323
D19	1	75V	1N4148WX-TP	Micro Commercial Component	Diode, Switching, 75 V, 0.15 A, SOD-323	SOD-323
D20, D22	2	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
D21	1	1000V	US1M-13-F	Diodes Inc.	Diode, Ultrafast, 1000 V, 1 A, SMA	SMA
D23	1	11V	BZX384-C11,115	NXP Semiconductor	Diode, Zener, 11 V, 300 mW, SOD-323	SOD-323
F1	1		0216008.MXEP	Littelfuse	Fuse, 10 A, 250 VAC, TH	Fuse, 20x5.2mm
H1	1		40mm*120mm			
H2	1		40mm*40mm			
J1	1		1714968	Phoenix Contact	Terminal Block, 3x1, 6.35 mm, TH	19x21.5x12.5mm
J2	1		691216510002S	Würth Elektronik	Receptacle, 5.08mm, 2x1, Brass, TH	Receptacle, 5.08mm, 2x1, TH
L2	1		YXBCM020013007C	YAXIN ELECTRONICS	8.3mH @ 10kHz 2 Line Common Mode Choke Through Hole DCR 12mOhm	PTH_CHOKE_12MM5_25MM0
L3	1	7mH	7448040707	Würth Elektronik	Coupled inductor, 7 mH, 7 A, 0.02 ohm, TH	19x28mm
L4	1	340uH	YXS70360T	YAXIN ELECTRONICS	Transformer, 340 uH, TH	PQ3230
L5	1	58uH	YXS50666T	YAXIN ELECTRONICS	Transformer, 58uH, TH	PQ2020
Q1	1	600V	IPW60R080P7XKSA1	Infineon Technologies	MOSFET, N-CH, 600 V, 37 A, TO-247	TO-247
Q2	1	40 V	MMBT2222ALT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.6 A, SOT-23	SOT-23
Q3	1	60 V	MMBT2907ALT1G	ON Semiconductor	Transistor, PNP, 60 V, 0.6 A, SOT-23	SOT-23
Q4	1	600V	IPD60R180P7SAUMA1	Infineon Technologies	MOSFET, N-CH, 600 V, 18 A, DPAK	DPAK
Q5	1	40 V	MMBT3906LT1G	ON Semiconductor	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q6, Q11, Q14	3	40 V	MMBT3904LT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q7, Q8	2	600V	IPA60R170CFD7XKSA1	Infineon Technologies	MOSFET, N-CH, 600 V, 8 A, TO-220FP	TO-220FP
Q9, Q10, Q12, Q13	4	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
Q15	1	40 V	2N4401-AP	Micro Commercial Component	Transistor, NPN, 40 V, 0.5 A, TO-92AP	TO-92AP
R1, R2, R3	3	330k	RC1206FR-07330KL	Yageo America	RES, 330 k, 1%, 0.25 W, 1206	1206
R4, R18, R74	3	0	RC1206JR-070RL	Yageo America	RES, 0, 5%, 0.25 W, 1206	1206
R5	1	220	RC0603FR-07220RL	Yageo	RES, 220, 1%, 0.1 W, 0603	0603
R6	1	21.5k	RC0603FR-0721K5L	Yageo	RES, 21.5 k, 1%, 0.1 W, 0603	0603
R7	1	0.02	CSRN2512FK20L0	Stackpole Electronics Inc	RES, 0.02, 1%, 2 W, 2512	2512
R8, R20, R33, R34, R42, R44, R52, R84	8	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R9, R12, R13	3	3.30	RC1206FR-073R3L	Yageo America	RES, 3.30, 1%, 0.25 W, 1206	1206
R10	1	11.5k	RC0603FR-0711K5L	Yageo	RES, 11.5 k, 1%, 0.1 W, 0603	0603
R11, R67, R70	3	10.0	RC0603FR-0710RL	Yageo	RES, 10.0, 1%, 0.1 W, 0603	0603
R14, R15, R16	3	1.00Meg	RC1206FR-071ML	Yageo America	RES, 1.00 M, 1%, 0.25 W, 1206	1206
R17	1	39.0k	RC0603FR-0739KL	Yageo	RES, 39.0 k, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R19, R21, R22, R64	4	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	0603
R23	1	121k	RC0603FR-07121KL	Yageo	RES, 121 k, 1%, 0.1 W, 0603	0603
R24, R25, R26	3	4.99Meg	CRCW12064M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R27	1	4.53k	RC0603FR-074K53L	Yageo	RES, 4.53 k, 1%, 0.1 W, 0603	0603
R28, R29	2	1.00	RC1206FR-071RL	Yageo America	RES, 1.00, 1%, 0.25 W, 1206	1206
R30, R31, R48, R49, R50, R51, R75, R81	8	10.0	RC1206FR-0710RL	Yageo America	RES, 10.0, 1%, 0.25 W, 1206	1206
R32	1	2.20	RC0805FR-072R2L	Yageo America	RES, 2.20, 1%, 0.125 W, 0805	0805
R35, R79	2	82.0k	RC0603FR-0782KL	Yageo	RES, 82.0 k, 1%, 0.1 W, 0603	0603
R36	1	51.0k	RC0603FR-0751KL	Yageo	RES, 51.0 k, 1%, 0.1 W, 0603	0603
R37	1	200k	RC0603FR-07200KL	Yageo	RES, 200 k, 1%, 0.1 W, 0603	0603
R38	1	180	RC0603FR-07180RL	Yageo	RES, 180, 1%, 0.1 W, 0603	0603
R39, R41, R56, R82	4	3.00k	RC0603FR-073KL	Yageo	RES, 3.00 k, 1%, 0.1 W, 0603	0603
R40	1	6.04k	RC0603FR-076K04L	Yageo	RES, 6.04 k, 1%, 0.1 W, 0603	0603
R43	1	301k	RC0603FR-07301KL	Yageo	RES, 301 k, 1%, 0.1 W, 0603	0603
R45, R47, R58	3	5.10k	RC0603FR-075K1L	Yageo	RES, 5.10 k, 1%, 0.1 W, 0603	0603
R46	1	7.50k	RC0603FR-077K5L	Yageo	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R53	1	68.0k	RC0603FR-0768KL	Yageo	RES, 68.0 k, 1%, 0.1 W, 0603	0603
R54, R57	2	2.40k	RC0603FR-072K4L	Yageo	RES, 2.40 k, 1%, 0.1 W, 0603	0603
R55	1	187	RC0603FR-07187RL	Yageo	RES, 187, 1%, 0.1 W, 0603	0603
R59	1	499	RC0603FR-07499RL	Yageo	RES, 499, 1%, 0.1 W, 0603	0603
R60	1	2.00k	RC0603FR-072KL	Yageo	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R61, R63	2	20.0	RC0603FR-0720RL	Yageo	RES, 20.0, 1%, 0.1 W, 0603	0603
R62	1	12.4k	CRCW060312K4FKEA	Vishay-Dale	RES, 12.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R65	1	5.11k	RC0603FR-075K11L	Yageo	RES, 5.11 k, 1%, 0.1 W, 0603	0603
R66, R83	2	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R68, R69	2	0.01	CSR1206FK10L0	Stackpole Electronics Inc	RES, 0.01, 1%, 0.5 W, 1206	1206
R71, R72	2	510	RC0603FR-07510RL	Yageo	RES, 510, 1%, 0.1 W, 0603	0603
R73	1	3.60k	RC0603FR-073K6L	Yageo	RES, 3.60 k, 1%, 0.1 W, 0603	0603
R76	1	200k	RC1206FR-07200KL	Yageo America	RES, 200 k, 1%, 0.25 W, 1206	1206
R77	1	200	RC1206FR-07200RL	Yageo America	RES, 200, 1%, 0.25 W, 1206	1206
R78	1	1.80k	RC0603FR-071K8L	Yageo	RES, 1.80 k, 1%, 0.1 W, 0603	0603
R80	1	30.0k	RC0603FR-0730KL	Yageo	RES, 30.0 k, 1%, 0.1 W, 0603	0603
R87	1	150k	RC0603FR-07150KL	Yageo	RES, 150 k, 1%, 0.1 W, 0603	0603
RF1	1	47	EMC2-47RKI	TT Electronics/IRC	RES, 47, 10%, 2 W, Axial resistor	Axial resistor
RV1	1	275V	S10K275E2	TDK	Varistor 275V RMS 10MM Radial, TH	10mm Radial
T1	1	200uH	YXS61212T	YAXIN ELECTRONICS	Transformer, 200 uH, PQ3230	PQ3230
T2	1	1800uH	YXS61211T	YAXIN ELECTRONICS	Transformer, 1.8mH, TH	EE13
U1	1		UCC28180DR	Texas Instruments	8-PIN CONTINUOUS CONDUCTION MODE (CCM) PFC CONTROLLER, D0008A (SOIC-8)	D0008A
U2	1		UCC256403DDBR	Texas Instruments	Switching Controllers LLC resonant controller with ultra-low power and ultra-quiet standby operation 14-SOIC -40 to 125	SOIC14
U3, U4	2		FOD817A	Fairchild Semiconductor	Optocoupler, 5 kV, 80-160% CTR, TH	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U5	1		TL431LIAIDBZR	Texas Instruments	Programmable Shunt Regulator with Optimized Reference Current, DBZ0003A (SOT-23-3)	DBZ0003A

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U6	1		LMV393IDR	Texas Instruments	GENERAL-PURPOSE LOW-VOLTAGE COMPARATORS, D0008A (SOIC-8)	D0008A
U7	1		TL103WAIDR	Texas Instruments	Dual Operational Amplifier with Internal Reference, 3 to 32 V, -40 to 105 degC, 8-pin SOIC (D8), Green (RoHS & no Sb/Br)	D0008A
U8	1		INA180A2IDBVR	Texas Instruments	Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0005A (SOT-5)	DBV0005A
U9	1		UCC28910DR	Texas Instruments	700V Flyback Switcher with Constant-Voltage Constant-Current and Primary-side Control, D0007A (SOIC-7)	D0007A
J3	0		705430001	Molex	Header(shrouded), 2.54mm, 2x1, Gold, TH	Header(shrouded), 2.54mm, 2x1, TH
J4	0		22284043	Molex	Header, 2.54mm, 4x1, Tin, TH	Header, 2.54mm, 4x1, TH
L1	0	32uH	744842932	Würth Elektronik	Coupled inductor, 8.5 A, 0.0055 ohm, TH	18.5x14.5mm
R85	0	10.0k	RC1206FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.25 W, 1206	1206
R86	0	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603

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