

PMP8740 REV E Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	1uF	R75PR4100AA30K	Kemet	CAP, Polypropylene, 1uF, 630V, +/-20%, TH	13x22x32 mm
C2, C3, C13, C14	4	4.7nF	C961U472MYWDBA7317	Kemet	Capacitor, Ceramic Disk X1Y2, 250Vac	0.394 X 0.315 inch Max.
C4, C6, C20, C32, C41	5	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	603
C5, C8, C9, C10	4	330uF	EET-ED2W331EA	Panasonic	Capacitor, Electrolytic, Snap in., 330uF, 450Vdc, 105C, 20%	35mm x 40mm (d x h)
C7	1	2.2uF	ECW-FA2J225J	Panasonic	CAP, Film Polyprop., 2.2uF, 630Vdc, 6Arms @ 200KHz, 20%, TH	26x16.3x21.4mm (LxWxH)
C11, C12	2	0.47uF	ECQ-U2A474ML	Panasonic	CAP, Film, 0.47uF, 275V, +/-20%, TH	Radial 25x8.5x18.5
C15	1	1000pF	CC1206KKX7RCBB102	Yageo America	CAP, CERM, 1000pF, 1000V, +/-10%, X7R, 1206	1206
C16, C34	2	560pF	C1608C0G1H561J	TDK	CAP, CERM, 560pF, 50V, +/-5%, C0G/NP0, 0603	603
C17, C42	2	2700pF	C1608C0G1H272J	TDK	CAP, CERM, 2700pF, 50V, +/-5%, C0G/NP0, 0603	603
C18, C19, C33, C35	4	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	603
C21	1	820pF	C1608C0G1H821J	TDK	CAP, CERM, 820pF, 50V, +/-5%, C0G/NP0, 0603	603
C22	1	3.3uF	GRM31CR71C335KA01L	MuRata	CAP, CERM, 3.3uF, 16V, +/-10%, X7R, 1206	1206
C23	1	0.47uF	C1608X5R1A474K	TDK	CAP, CERM, 0.47uF, 10V, +/-10%, X5R, 0603	603
C24	1	22uF	EKXG451ELL220ML20S	Nippon Chemi-Con	Capacitor, Electrolytic, 105C, 20%	0.571 inch
C25, C27	2	1000pF	C2012X7R2E102K	TDK	CAP, CERM, 1000pF, 250V, +/-10%, X7R, 0805	805
C26	1	100uF	EEE-FK1E101P	Panasonic	CAP, AL, 100uF, 25V, +/-20%, 0.26 ohm, SMD	SMT Radial E
C28	1	1000 uF	UHM1C102MPD	Nichicon	Capacitor, Alum Electrolytic 16 V, 105C, ±20%	10x16mm
C29, C30	2	10uF	C3225X7R1E106M	TDK	CAP, CERM, 10uF, 25V, +/-20%, X7R, 1210	1210
C31	1	22uF	EEE-FK1H220P	Panasonic	CAP, AL, 22uF, 50V, +/-20%, 0.88 ohm, SMD	SMT Radial D
C36, C38	2	220pF	C1608C0G1H221J	TDK	CAP, CERM, 220pF, 50V, +/-5%, C0G/NP0, 0603	603
C37	1	0.22uF	C1608X7R1C224K	TDK	CAP, CERM, 0.22uF, 16V, +/-10%, X7R, 0603	603
C39	1	68pF	C1608C0G1H680J	TDK	CAP, CERM, 68pF, 50V, +/-5%, C0G/NP0, 0603	603
C40	1	0.022uF	C1608X7R2A223K	TDK	CAP, CERM, 0.022uF, 100V, +/-10%, X7R, 0603	603
CB1	1	1 meter	3132-18-1-0500-004-1-TS	CNC Tech	HOOK-UP STRND 18AWG 300V RED 1m	
CB2	1	1 meter	3132-18-1-0500-001-1-TS	CNC Tech	HOOK-UP STRND 18AWG 300V BLK 1m	
CB3	1	0.3m	3365/10 300SF	3M	CBL RIBN 10COND 0.050 GRAY 0.3m	FLAT CABLE x 10
CS1, CS2, CS3, CS4, CS5, CS6, CS7, CS8	8	2081201	2081201	Molex	CONN SOCKET 14-20AWG CRIMP TIN	
D1	1	1N5406	1N5406	Vishay-Semiconductor	Diode, Switching-Bridge, 600V, 3A, TH	DO-201AD
D2	1	IDH10SG60C	IDH10SG60C	Infineon	Diode, Schottky, 600V, 10A, TH	TO-220-2
D3	1	GSIB2060-E3/45	GSIB2060-E3/45	Vishay	Diode, Single-Phase In-Line Bridge Rectifier, 20A, 600V	1.181 x 0.181 inch
D4, D9, D100	3	BAS21	BAS21-7-F	Diodes Inc.	Diode, Switching, 200V, 0.2A, SOT-23	SOT-23
D5	1	S1M-13-F	S1M-13-F	Diodes Inc.	Diode, Standard, 1000V, 1A, SMA	SMA
D6	1	MURA160T3G	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600V, 1A, SMA	SMA
D7	1	MBRS2H100T3G	MBRS2H100T3G	ON Semiconductor	Diode, Schottky, 100V, 2A, SMB	SMB
D8	1	SMD110PL-TP	SMD110PL-TP	Micro Commercial	Diode, Schottky, 100V, 1A, SOD-123FL	SOD-123FL
D10	1	13V	MMSZ5243BS-7-F	Diodes	Diode, Zener, 13V, 9.5-mA, 200mW	SOD-323
F1	1	01020071Z	2 times 01020071Z + fuse 15A 0326015.HXP	Littlefuse	Fuseholder, 1/4" fuses, board mount + 15A Fuse	1.54 x 0.30 inch
FN1	1	12 V, 3600 RPM	AUB0812VH-SP00	Delta Products	Fan DC Axial 12V 80x25.4 3600 RPM	80x80x25.4mm
FN1	1		GRM80-45	Orion Fans	FAN Filter 80mm 45PPI	
HS1	1	2.52C/W	SK 481-50	Fischer	Heatsink, Vertical-mount	30mm x 45mm x 50mm lenght
HS2, HS3	2	2.52C/W	SK 481-100	Fischer	Heatsink, Vertical-mount	30mm x 45mm x 100mm lenght

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
HSO1, HSO2, HSO3, HSO4, HSO5, HSO6	6	5mm	R30-3000702	Harwin	HEX STANDOFF M3 BRASS 7MM	HEX STANDOFF M3 BRASS 7MM
J1	1	15244557	15244557	Molex	Header, 4POS, 200mil, Vertical, Tin, TH	8.5x23.64 mm
J2	1		703W-00/54	Qualtek Electronics Corporation	AC Receptacle, 10A 250VAC	20X50X28.7mm
J3, J4	2	15244048	15244048	Molex	CONN HOUSING 4POS .200 VERTICAL	
J5	1	5103308-1	5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
J6	1	PEC02SAAN	PEC02SAAN	Sullins	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2
J7	1		1757268	Phoenix Contact	Header (shrouded), 5.08 mm, 4x1, R/A, TH	Header (shrouded), 5.08mm, 4x1, R/A, TH
J8, J9	2	Receptacle 5x2 pos.	1658527-4	TE Connectivity AMP Connect	Receptacle, 2.54mm, 5x2, Gold, TH	Row spacing: 2.54mm, Pitch: 2.54mm
K1	1	16A	ALZ51B12	Nais	Relay, SPST, 12V Coil Rating, Contact Rating 16A 250VAC	0.492 x 1.134 inch
L1	1	210uH	170.804 (SDR 15,0-0,21)	Kaschke	Inductor, PFC Choke, 210uH 15A	50x48x26.5mm
L3, L4	2	1mH	7448251201	Würth Elektronik eiSos	Coupled inductor, 1mH, 12A, 0.009 ohm, TH	30x35x21mm
L6	1	2.2uH	7447745022	Würth Elektronik eiSos	Inductor, Drum Core, Ferrite, 2.2uH, 3.5A, 0.03 ohm, SMD	WE-PD2-MS
LW1, LW2, LW3, LW4	4	M3 Lock Washer M3	MLWZ 003	B&F Fastener Supply	M3 Split Lock Washer 0.032" (0.81mm) Thick Steel Zinc	
MW1, MW2, MW3, MW4	4	M3, 0.53mm thickness	5205820-3	B&F Fastener Supply	WASHER FLAT M3 STEEL, 0.53mm th.	
N1, N2, N3, N4, N5, N6	6	M3 Nut	MHNZ 003	B&F Fastener Supply	M3 Hex Nut 0.217" (5.51mm), Zinc	M3 Nut
NW1, NW2, NW3, NW4	4	0.81mm thickness	3349	Keystone	Flat Nylon Washer 0.81mm thickness	Flat Nylon Washer
Q1, Q2	2	IPP65R125C7	IPP65R125C7	Infineon Technologies	MOSFET, N-CH, 650V, 18A, TO-220AB	TO-220AB
Q3	1	BSS138	BSS138	Fairchild Semiconductor	MOSFET, N-CH, 50V, 0.22A, SOT-23	SOT-23
Q4	1	SI2319DS-T1-E3	SI2319DS-T1-E3	Vishay-Siliconix	MOSFET, P-CH, -40V, -2.3A, SOT-23	SOT-23
Q5	1	BSP135	BSP135	Diodes Inc.	MOSFET, N-CH, Depletion Mode, 600V, 20mA, SOT-223	SOT-223
Q6	1	FCD4N60TM	FCD4N60TM	Fairchild Semiconductor	MOSFET, N-CH, 600V, 3.9A, DPAK	DPAK
Q7	1	0.25V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23
R1, R2, R20, R30	4	2.21	CRCW08052R21FKEA	Vishay-Dale	RES, 2.21 ohm, 1%, 0.125W, 0805	805
R3, R4, R13, R21, R28, R35	6	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	603
R5, R6, R8	3	0.03	CSRN2512FK30L0	Stackpole Electronics Inc	RES, 0.03 ohm, 1%, 2W, 2512	2512
R7	1	221	CRCW0603221RFKEA	Vishay-Dale	RES, 221 ohm, 1%, 0.1W, 0603	603
R9, R10, R11	3	332k	CRCW1206332KFKEA	Vishay-Dale	RES, 332k ohm, 1%, 0.25W, 1206	1206
R12, R33	2	16.2k	CRCW060316K2FKEA	Vishay-Dale	RES, 16.2k ohm, 1%, 0.1W, 0603	603
R14	1	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2k ohm, 1%, 0.1W, 0603	603
R15, R41, R48	3	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.1W, 0603	603
R16	1	13.0k	CRCW060313K0FKEA	Vishay-Dale	RES, 13.0k ohm, 1%, 0.1W, 0603	603
R17	1	150k	STD	STD	Resistor, Chip, 0.6W, 1%	2010
R18	1	10k	CRCW251210K0FKEGHP	Vishay-Dale	RES, 10.0k ohm, 1%, 1W, 2512	2512
R19, R38	2	47.5k	CRCW060347K5FKEA	Vishay-Dale	RES, 47.5k ohm, 1%, 0.1W, 0603	603
R22, R23	2	100	CRCW1206100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.25W, 1206	1206
R24	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9 ohm, 1%, 0.1W, 0603	603
R25	1	10Meg	CRCW120610M0JNEA	Vishay-Dale	RES, 10Meg ohm, 5%, 0.25W, 1206	1206
R26	1	23.2k	CRCW060323K2FKEA	Vishay-Dale	RES, 23.2k ohm, 1%, 0.1W, 0603	603
R27	1	6.34k	CRCW06036K34FKEA	Vishay-Dale	RES, 6.34k ohm, 1%, 0.1W, 0603	603
R29	1	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6k ohm, 1%, 0.1W, 0603	603
R31, R32	2	7.50k	CRCW06037K50FKEA	Vishay-Dale	RES, 7.50k ohm, 1%, 0.1W, 0603	603
R34	1	1	CRCW12061R00FKEA	Vishay-Dale	RES, 1.00 ohm, 1%, 0.25W, 1206	1206
R36	1	698k	CRCW1206698KFKEA	Vishay-Dale	RES, 698k ohm, 1%, 0.25W, 1206	1206
R37, R40	2	715k	CRCW1206715KFKEA	Vishay-Dale	RES, 715k ohm, 1%, 0.25W, 1206	1206
R39	1	8.25k	CRCW06038K25FKEA	Vishay-Dale	RES, 8.25k ohm, 1%, 0.1W, 0603	603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R42	1	909k	CRCW0603909KFKEA	Vishay-Dale	RES, 909k ohm, 1%, 0.1W, 0603	603
R43	1	6.81k	CRCW06036K81FKEA	Vishay-Dale	RES, 6.81k ohm, 1%, 0.1W, 0603	603
R44, R45, R46, R47	4	750k	CRCW1206750KFKEA	Vishay-Dale	RES, 750k ohm, 1%, 0.25W, 1206	1206
RF1	1	22 Ohm	EMC2-22RKI	TT Electronics/IRC	RES, 22 ohm, 10%, 2W, Fusible, TH	Axial resistor
RS1, RS2, RS3, RS4, RS5	5		THFU 3	Fischer Elektronik	Retaining Spring for Transistors, 50N	
RT1	1	10 Ohm	B57464S100M	Epcos	Thermistor, 10 Ohms, ±20%	7x26 mm
RV1	1	{Value}	SIOV-S20K275	Epcos	Varistor, Disk, 350V, 1W, TA @ 85C°	D Size
SC1, SC2, SC3, SC4, SC5, SC6, SC7, SC8, SC9, SC10	10	Srew M3 x 10mm	M3 10 PRSTMC Z100	TR Fastenings	Machine Screw, M3, 10 mm, Steel, Bright Zinc, Pan Head Pozidriv	Screw M3 x 10mm
SP1, SP2, SP3	3	Isolation for TO220	WSC3P	Fischer Elektronik	Silicon Insulating Sleeve, Tube 11x25mm	11x25mm
T1	1	2mH	7508111323	Würth Elektronik eiSos	Transformer, 2mH, SMT	26.1x17.8x13.8mm
T2	1	PA3000NL	PA3000NL	Pulse Engineering	Transformer, 4 H, TH	TH, 4-Leads, Body 19x22.3mm
TP1, TP2, TP11, TP12, TP15	5	Orange	5008	Keystone	Test Point, Compact, Orange, TH	Orange Compact Testpoint
TP3	1	Red	5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
TP4, TP5, TP7	3	Blue	5122	Keystone	Test Point, Compact, Blue, TH	Blue Compact Testpoint
TP6	1	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
TP8	1	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP9	1	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
TP10	1	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1, U2	2	UCC27517DBV	UCC27517DBV	TI	IC, 4A Single Channel High-Speed Low-Side Gate Drivers	SOT23-5
U3	1	UCC28180D	UCC28180D	Texas Instruments	8-PIN CONTINUOUS CONDUCTION MODE (CCM) PFC CONTROLLER, D0008A	D0008A
U4, U5, U8	3	FOD817DS	FOD817DS	Fairchild Semiconductor	Optocoupler, 5kV RMS, SMT	DIP-4L Gullwing
U6	1	LM5023MM	LM5023MM	Texas Instruments	IC, AC-DC Quasi-Resonant Current Mode PWM Controller	MSOP
U7, U9	2	LMV431AIMF	LMV431AIMF	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 3-pin SOT-23	MF03A