

PMP40801 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP40801	Any	Printed Circuit Board	
C1	1	68uF	EEHZA1H680P	Panasonic	CAP, Polymer Hybrid, 68 uF, 50 V, +/- 20%, 30 ohm, 8x10 SMD	8x10
C2, C3	2	10uF	CGA6P1X7R1N106M250AC	TDK	CAP, CERM, 10 uF, 75 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
C4, C12	2	1uF	GRT188R61H105ME13D	MuRata	CAP, CERM, 1 uF, 50 V, +/- 20%, X5R, AEC-Q200 Grade 3, 0603	0603
C6, C32, C33, C34, C35	5	0.01uF	GCM155R71H103KA55D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, COG/NP0, 0402	0402
C7, C8, C11	3	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C9	1	1uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C10	1	220uF	EEHZA1E221P	Panasonic	CAP, Polymer Hybrid, 220 uF, 25 V, +/- 20%, 27 ohm, 8x10 SMD	8x10
C13, C14, C15, C16	4	10uF	CGA5L1X7R1H106K160AC	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C17	1	4.7uF	GRT188R61C475KE13D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
C18	1	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0402	0402
C19	1	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C20	1	4700pF	CGA2B2X7R1H472K050BA	TDK	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C21	1	4.7uF	C2012X7R1V475K125AC	TDK	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X7R, 0805	0805
C22, C42, C46	3	22uF	GRM21BD70J226ME44L	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X7T, 0805	0805
C23, C24, C26, C40	4	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C25	1	47uF	GRM21BR60J476ME15L	MuRata	CAP, CERM, 47 uF, 6.3 V, +/- 20%, X5R, 0805	0805
C27, C45, C47	3	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
C28, C29, C30, C38	4	22uF	C1608X5R1A226M080AC	TDK	CAP, CERM, 22 uF, 10 V, +/- 20%, X5R, 0603	0603
C31	1	4.7uF	GRM188R6YA475KE15D	MuRata	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X5R, 0603	0603
C36, C37	2	220pF	GRM033R71E221KA01D	MuRata	CAP, CERM, 220 pF, 25 V, +/- 10%, X7R, 0201	0201
C39	1	1uF	EMK105BJ105KVHF	Taiyo Yuden	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0402	0402
C41, C44	2	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
C43	1	0.1uF	885012205037	Würth Elektronik	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
D1	1	30V	NSR20F30NXT5G	ON Semiconductor	Diode, Schottky, 30 V, 2 A, 2-XFDFN	2-XFDFN
D3	1	White	LW QH8G-Q2S2-3K5L-1	OSRAM	LED, White, SMD	0402, White
J1	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
J2	1		632723300011	Würth Elektronik	Connector, Receptacle, USB Type C, R/A	Connector, Receptacle, USB Type C, R/A, THT/SMT
J3	1		691213710002	Würth Elektronik	Terminal Block, 2x1, Brass, TH	Terminal Block, 2- Leads, Body 10x8.3mm, Pitch 5mm
J4	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
L1	1	4.7uH	XAL1010-472MEB	Coilcraft	Inductor, Shielded, Composite, 4.7 uH, 24 A, 0.01 ohm, SMD	Inductor, 11.3x10x10mm

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L2	1	6.8uH	ME3220-682MLB	Coilcraft	Inductor, Drum Core, Ferrite, 6.8 uH, 1.1 A, 0.27 ohm, SMD	ME3220
L3	1	2.2uH	78438356022	Würth Elektronik	Inductor, Shielded, Powdered Iron, 2.2 uH, 4.7 A, 0.035 ohm, AEC-Q200 Grade 1, SMD	4.1x4.1mm
Q1, Q2	2	40V	IPZ40N04S5L4R8ATMA1	Infineon Technologies	MOSFET, N-CH, 40 V, 40 A, AEC-Q101, SON-8	SON-8
R2	1	147k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R3, R4	2	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R5	1	32.4k	CRCW040232K4FKED	Vishay-Dale	RES, 32.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R6	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R7	1	115k	CRCW0402115KFKED	Vishay-Dale	RES, 115 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R8	1		CRF1206-FZ-R010ELF	Bourns	10 mOhms ±1% 1W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Current Sense, Moisture Resistant Metal Element	1206
R9, R10, R13	3	2.20k	CRCW04022K20FKED	Vishay-Dale	RES, 2.20 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11	1	102k	CRCW0402102KFKED	Vishay-Dale	RES, 102 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12	1	56.2k	CRCW040256K2FKED	Vishay-Dale	RES, 56.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R14	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15	1	6.19k	CRCW04026K19FKED	Vishay-Dale	RES, 6.19 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R16	1	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R17	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R18	1	402k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R19	1	51.1k	CRCW040251K1FKED	Vishay-Dale	RES, 51.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R20	1	133k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R21	1	22.1k	CRCW040222K1FKED	Vishay-Dale	RES, 22.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R22, R23	2	3.83k	CRCW04023K83FKED	Vishay-Dale	RES, 3.83 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R24, R31, R32	3	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201
R25	1	220k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R26, R37, R38, R46	4	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
R27	1	3.48	CRCW04023R48FKED	Vishay-Dale	RES, 3.48, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R28, R34, R40, R41	4	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R35	1	100k	RC0201JR-7D100KL	Yageo America	RES, 100 k, 5%, 0.05 W, 0201	0201
R48, R49, R50, R51	4	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
U1	1		TPS560430YDBVR	Texas Instruments	4V to 36 V 0.6 A Synchronous Step-Down Converter, DBV0006A (SOT-23-6)	DBV0006A
U2	1		TPS55288dev	Texas Instruments	36-V, 16-A Buck-Boost Converter, RPM0026A (VQFN-HR-26)	RPM0026A
U3	1		TPS65987DDHRSHR	Texas Instruments	USB Type-C and USB PD Controller with Integrated Power Switches, RSH0056E (VQFN-56)	RSH0056E
U4	1		TPD6S300ARUKR	Texas Instruments	USB Type-C Port Protector: Short-to-VBUS Overvoltage and IEC ESD Protection, RUK0020B (WQFN-20)	RUK0020B
U5	1		MX25L8006EM1I-12G	Macronix International Co.,LT	8Mb, 86MHz, NOR Flash, SOP-8	8-SOP
U6	1		TPS2500DRCR	Texas Instruments	Integrated USB Power Switch with Boost Converter, DRC0010J (VSON-10)	DRC0010J
C5	0	2200pF	GRM21AR72E222KW01D	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 10%, X7R, 0805	0805
R1	0	2.20	ERJ-8RQF2R2V	Panasonic	RES, 2.20, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206

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