

## PMP41092 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C17, C18, C19, C37, C38, C54	7	10uF	GRT31CD71H106KE13	MuRata	CAP, CERM, 10 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206_190
C2, C21, C22, C25, C28, C39, C41, C42, C48, C50, C58, C65	12	0.1uF	GRT155R71H104KE01	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C3, C6	2	4.7uF	CGA5L3X7R1H475K160AE	TDK	CAP, CERM, 4.7 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C4, C5	2	4700pF	GRT155R71H472KE01	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C7	1	100uF	EEE-FK1H101P	Panasonic	CAP, AL, 100 uF, 50 V, +/- 20%, 0.34 ohm, AEC-Q200 Grade 2, SMD	SMT Radial F
C8, C9	2	10uF	CGA5L1X7R1H106K160AC	TDK	CAP, CERM, 10 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C10, C24, C47	3	1uF	CGA3E3X5R1H105M080AB	TDK	CAP, CERM, 1 µF, 50 V,+/- 20%, X5R, AEC-Q200 Grade 3, 0603	0603
C11, C16, C40, C44, C51	5	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C12, C13	2	2200pF	GRM1885C1H222JA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C14, C15	2		GCM188L81H104KA57D	Murata Electronics North Ame	0.1µF ±10% 50V Ceramic Capacitor X8L 0603 (1608 Metric)	0603
C23, C43	2	100uF	EEHZK1V101XP	Panasonic	CAP, AL, 100 uF, 35 V, AEC-Q200 Grade 2, SMD	D6.3xL7.7mm
C26, C62	2	4.7uF	GCM21BR71C475KA73K	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C29, C49	2	0.22uF	CGA2B1X7R1V224K050BC	TDK	CAP, CERM, 0.22 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C30	1	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C31	1	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C32	1	4700pF	GCM155R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C33	1	1000pF	GCM1885C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C34	1	3300pF	GRM188R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
C36, C53, C55	3	4.7µF	GRT21BC71H475KE13	MuRata	Cap Ceramic 4.7uF 50V X7R 10% Pad SMD 0805 +125°C Automotive T/R	0805
C57	1	0.47uF	CGA3E3X7R1H474K080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C59, C61, C64	3	0.1uF	GRT155R71C104KE01	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
C60, C63	2	10uF	GRT188D70J106ME13D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 10%, B, 0603	0603
C66, C67, C68, C69	4	330pF	GRT155R71H331KE01	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0402	0402
C71	1	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
C72	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
D1	1	28.2V	P6SMB33CA	Littelfuse	Diode, TVS, Bi, 28.2 V, 45.7 Vc, SMB	SMB
FB1, FB2	2		BLM21SP181SZ1D	Murata	Chip FFERRITE BEAD 180 OHM 0805 1LN	0805
I2C	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
J1	1		691313510002	Würth Electronics	TERM BLK HDR 5.08MM HORZ PCB 2P	TRM_BLK_HDR2
J2, J3	2				632722200212 WR-COM_USB 3.1_Type C_Horizontal_SMT	
L2	1	4.7uH	XAL6060-472MEB	Coilcraft	Inductor, Shielded, Composite, 4.7 µH, 10.5 A, 0.0144 ohm, AEC-Q200 Grade 1, SMD	IND_6.4x6.1x6.6
L3, L4, L6, L9	4	50 ohm	BLM31SN500SZ1L	MuRata	Ferrite Bead, 50 ohm @ 100 MHz, 12 A, 1206	1206
L7, L8	2	4.7uH	XAL7070-472MEB	Coilcraft	Inductor, Shielded, Composite, 4.7 uH, 13.6 A, 0.01 ohm, SMD	7.2x7x7.5mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
Q1	1	40V	IPZ40N04S5L-2R8	Infineon Technologies	MOSFET, N-CH, 40 V, 40 A, AEC-Q101, SON-8	SON-8
R1, R2	2	2.20	ERJ-8RQF2R2V	Panasonic	RES, 2.20, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R3, R20	2		CRF1206-FZ-R010ELF	Bourns	10 mOhms ±1% 1W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Current Sense, Moisture Resistant Metal Element	1206
R4, R6	2	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R5	1	0	RK73Z1ETTP	KOA Speer	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R7	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R8	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R9	1	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	1	27.4k	CRCW040227K4FKED	Vishay-Dale	RES, 27.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15, R17	2	1.10	CRCW12061R10FKEA	Vishay-Dale	RES, 1.10, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R16	1	47.0k	CRCW060347K0FKEA	Vishay-Dale	RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R19	1	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
R21	1	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R22, R24	2	10k	ERJ-2GEJ103X	Panasonic	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R23	1	10.0	RC1206FR-0710RL	Yageo America	RES, 10.0, 1%, 0.25 W, 1206	1206
R25, R26	2	3.30k	RK73H1ETTP3301F	KOA Speer	RES, 3.30 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
RT1	1		TMP6131QDECRQ1	Texas Instruments	Thermistor, DEC0002A (X1SON-2)	DEC0002A
SH1	1					
SWD1	1		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
U1	1		TPS55289QWRYQRQ1	Texas Instruments	36-V, 8-A Buck-boost Converter with I2C Interface	VQFN21
U2	1		TPS25772CQRQLRQ1	Texas Instruments	Automotive Single/Dual USB Type-C Power Delivery Controller with Buck-Boost Regulator	VQFN-HR29
U3	1		24LC256-I/ST	Microchip	256K I2C CMOS Serial EEPROM, TSSOP-8	TSSOP-8
U4	1		LM74700QDBVRQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A
C20	0	10uF	GCJ21BR71A106KE01L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C27	0	0.1uF	GRT155R71H104KE01	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C35	0	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
R11	0		ERJ-3GEY0R00V	Panasonic	0 Ohms Jumper 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200 Thick Film	0603
R12, R13	0	3.30k	RK73H1ETTP3301F	KOA Speer	RES, 3.30 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
U5	0		MSPM0C1104SDDFR	Texas Instruments	Mixed-Signal Microcontroller, SOT23-8	SOT23-8

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