

PMP20042 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB	1		PMP20042	Any	Printed Circuit Board	
C1, C2, C8, C16	4	0.22uF	C1005X5R1E224M050BC	TDK	CAP, CERM, 0.22 μ F, 25 V, +/- 20%, X5R, 0402	0402
C3, C10	2	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
C4, C15	2	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 μ F, 25 V, +/- 10%, X7R, 0402	0402
C6	1	1uF	C1005X5R1C105K050BC	TDK	CAP, CERM, 1 μ F, 16 V, +/- 10%, X5R, 0402	0402
C9, R7, RH2, RL1, RL2	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
C11	1	0.047uF	C1005X7R1H473K050BB	TDK	CAP, CERM, 0.047 μ F, 50 V, +/- 10%, X7R, 0402	0402
C13	1	0.068uF	CGA2B3X7R1H683K050BB	TDK	CAP, CERM, 0.068 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C14	1	470pF	GRM1555C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C17	1	220pF	C1005X7R1H221K	TDK	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402	0402
Cin1, Co4	2	68uF	EEE-FK1J680UP	Panasonic	CAP, AL, 68 μ F, 63 V, +/- 20%, 0.65 ohm, SMD	SMT Radial F
Cin2, Cin3, Cin4, Co1, Co2, Co3	6	10uF	C3216X7R1V106M160AC	TDK	CAP, CERM, 10 μ F, 35 V, +/- 20%, X7R, 1206_190	1206_190
D1	1	30V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
D2, D3	2	100V	BAS516,115	NXP Semiconductor	Diode, Switching, 100V, 0.25A, SOD-523	SOD-523
J1, J2, J3, J4	4		575-4	Keystone	Standard Banana Jack, Uninsulated, 5.5mm	Keystone_575-4
J5	1		PEC03DAAN	Sullins Connector Solutions	Header, 100mil, 3x2, Tin, TH	3x2 Header
L1	1	4.7uH	7443320470	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 4.7 μ H, 15.5 A, 0.0064 ohm, SMD	12.1x9.5x11.4mm
Q1, Q2, Q3, Q4	4	40V	BSC054N04NS G	Infineon Technologies	MOSFET, N-CH, 40 V, 81 A, PG-TDSON-8	PG-TDSON-8
Qx1, Qx2, Qx3	3	60V	2N7002E-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60V, 0.24A, SOT-23	SOT-23
R1	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R2, R3, R5, R6	4	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
R4	1	46.4k	CRCW040246K4FKED	Vishay-Dale	RES, 46.4 k, 1%, 0.063 W, 0402	0402
R9	1	20k	CRCW040220K0JNED	Vishay-Dale	RES, 20 k, 5%, 0.063 W, 0402	0402
R10	1	24.3k	CRCW040224K3FKED	Vishay-Dale	RES, 24.3 k, 1%, 0.063 W, 0402	0402
R11, R21	2	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
R12	1	84.5k	CRCW040284K5FKED	Vishay-Dale	RES, 84.5 k, 1%, 0.063 W, 0402	0402
R13, R15	2	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
R18	1	47	CRCW040247R0JNED	Vishay-Dale	RES, 47, 5%, 0.063 W, 0402	0402
R19	1	4.02k	CRCW04024K02FKED	Vishay-Dale	RES, 4.02 k, 1%, 0.063 W, 0402	0402
R20	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R22	1	37.4k	CRCW040237K4FKED	Vishay-Dale	RES, 37.4 k, 1%, 0.063 W, 0402	0402
R24	1	9.53k	CRCW04029K53FKED	Vishay-Dale	RES, 9.53 k, 1%, 0.063 W, 0402	0402
RH1	1	3.0	CRCW04023R00JNED	Vishay-Dale	RES, 3.0, 5%, 0.063 W, 0402	0402
RS2	1	0.006	ERJ-M1WSF6M0U	Panasonic	RES, 0.006, 1%, 1 W, 2512	2512
Rx1, Rx2	2	88.7k	CRCW060388K7FKEA	Vishay-Dale	RES, 88.7 k, 1%, 0.1 W, 0603	0603
TP1, TP2	2	Red	5000	Keystone	Test Point, TH, Miniature, Red	Keystone5000
TP3, TP4	2	Black	5001	Keystone	Test Point, TH, Miniature, Black	Keystone5001
TP6	1	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP12, TP13	2	Triple	1598-2	Keystone	Terminal, Turret, TH, Triple	Keystone1598-2
U1	1		LM5175RHFR	Texas Instruments	42-V Wide VIN Synchronous 4-Switch Buck-Boost Controller, RHF0028A	RHF0028A
C5	0	0.022uF	C1005X7R1E223K	TDK	CAP, CERM, 0.022 μ F, 25 V, +/- 10%, X7R, 0402	0402
C7	0	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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