

PMP20178 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP20178	Any	Printed Circuit Board	
AGND, PGND, PGND1, PGOOD, SW, SYNCIN, SYNCOUT, TP1, TP2, TP4, TP5, TRIM, VCC, VOP, VOUT	15		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
C1	1	22uF	EEE-FK2A220P	Panasonic	CAP, AL, 22 μ F, 100 V, +/- 20%, 1.3 ohm, SMD	SMT Radial F
C2, C3, C4, C5	4	4.7uF	C3225X7S2A475K200AB	TDK	CAP, CERM, 4.7 μ F, 100 V, +/- 10%, X7S, 1210	1210
C6, C7	2	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, 0603	0603
C8	1	100pF	C1608C0G2A101F080AA	TDK	CAP, CERM, 100 pF, 100 V, +/- 1%, C0G/NP0, 0603	0603
C9	1	470uF	6TPE470MAZU	Panasonic	CAP, Tantalum Polymer, 470 μ F, 6.3 V, +/- 20%, 0.035 ohm, 7343-20 SMD	7343-20
C11, C12, C13, C14	4	47uF	GRM32ER71A476KE15L	MuRata	CAP, CERM, 47 μ F, 10 V, +/- 10%, X7R, 1210	1210
C15	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
C16	1	4700pF	GRM188R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
C17	1	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C18	1	0.047uF	C1608X7R1H473K080AA	TDK	CAP, CERM, 0.047 μ F, 50 V, +/- 10%, X7R, 0603	0603
C19	1	3300pF	GRM188R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
D1	1	100V	BAS516,115	NXP Semiconductor	Diode, Switching, 100 V, 0.25 A, SOD-523	SOD-523
D2	1	100V	STPS6M100DEE-TR	STMicroelectronics	Diode, Schottky, 100 V, 6 A, 8-PowerTDFN	8-PowerTDFN
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1, J2, J3, J4	4		575-8	Keystone	Standard Banana Jack, Uninsulated, 8.9mm	Keystone575-8
L1	1	6.8uH	PA4344.682NLT	Pulse Engineering	Inductor, Shielded, 6.8 μ H, 19.0 A, 0.0092 ohm, AEC-Q200 Grade 1, SMD	17.7x17.2mm
PGND2	1		1040	Keystone	TEST POINT SLOTTED .118", TH	Test point, TH Slot Test point
Q1	1	100V	CSD19537Q3	Texas Instruments	MOSFET, N-CH, 100 V, 50 A, VSON-CLIP-8	DQG0008A
Q2	1	80V	BSC072N08NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 80 V, 74 A, PG-TDSON-8	PG-TDSON-8
R1	1	499k	CRCW0805499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.125 W, 0805	0805
R2	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
R3	1	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R4	1	787	CRCW0603787RFKEA	Vishay-Dale	RES, 787, 1%, 0.1 W, 0603	0603
R5	1	2.20	RC0805FR-072R2L	Yageo America	RES, 2.20, 1%, 0.125 W, 0805	0805
R6	1	6.8k	CRCW06036K80JNEA	Vishay-Dale	RES, 6.8 k, 5%, 0.1 W, 0603	0603
R7, R11, R15	3	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R8	1	46.4k	CRCW060346K4FKEA	Vishay-Dale	RES, 46.4 k, 1%, 0.1 W, 0603	0603
R9	1	51.1k	CRCW060351K1FKEA	Vishay-Dale	RES, 51.1 k, 1%, 0.1 W, 0603	0603
R10	1	3.65k	CRCW06033K65FKEA	Vishay-Dale	RES, 3.65 k, 1%, 0.1 W, 0603	0603
R12	1	3.6k	CRCW06033K60JNEA	Vishay-Dale	RES, 3.6 k, 5%, 0.1 W, 0603	0603
R13	1	10.0	CRCW060310R0FKEAHP	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 0603	0603
R14	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
U1	1		LM5145RGYR	Texas Instruments	Wide Input Range Synchronous Buck Controller, RGY0020B	RGY0020B
C10	0	470uF	EEE-FK1A471P	Panasonic	CAP, AL, 470 μ F, 10 V, +/- 20%, 0.16 ohm, SMD	SMT Radial F
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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