

PMP20107 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC B1	1		PMP20107	Any	Printed Circuit Board	
C1, C4, C8, C15, C19	5	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 μF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C2, C16, C18	3	0.22uF	C1005X5R1E224M050BC	TDK	CAP, CERM, 0.22 μF, 25 V, +/- 20%, X5R, 0402	0402
C6	1	1uF	C1005X5R1C105K050BC	TDK	CAP, CERM, 1 μF, 16 V, +/- 10%, X5R, 0402	0402
C9, R7, RL1	3	0	CRCW0402000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
C10	1	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
C11	1	0.047uF	C1005X7R1H473K050BB	TDK	CAP, CERM, 0.047 μF, 50 V, +/- 10%, X7R, 0402	0402
C13	1	0.047uF	GRM155R71E473KA88D	MuRata	CAP, CERM, 0.047 μF, 25 V, +/- 10%, X7R, 0402	0402
C14	1	0.015uF	GRM155R71E153KA61D	MuRata	CAP, CERM, 0.015 μF, 25 V, +/- 10%, X7R, 0402	0402
C17	1	220pF	C1005X7R1H221K	TDK	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402	0402
Cin1, Cin2, Cin3	3	10uF	C3216X7R1V106M160AC	TDK	CAP, CERM, 10 μF, 35 V, +/- 20%, X7R, 1206_190	1206_190
Co1, Co2, Co3	3	22uF	GRM31CR71A226ME15L	MuRata	CAP, CERM, 22 μF, 10 V, +/- 20%, X7R, 1206_190	1206_190
Co4	1	100uF	UUD1A101MCL1GS	Nichicon	CAP, AL, 100 μF, 10 V, +/- 20%, 0.44 ohm, SMD	6.3x5.8
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
D6, D7	2	40V	CUS05S40,H3F	Toshiba	Diode, Schottky, 40 V, 0.5 A, SOD-323	SOD-323
L1	1	5.6uH	XAL5050-562MEB	Coilcraft	Inductor, Shielded, Composite, 5.6 μH, 6.3 A, 0.03 ohm, SMD	XAL5050
Q1, Q2, Q3, Q4	4	40V	BSZ097N04LS G	Infineon Technologies	MOSFET, N-CH, 40 V, 40 A, PG-TSDSON-8	PG-TSDSON-8
R1	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R3, R5, R6	3	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	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 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
R21	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 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
RS1	1	0.01	ERJ-B2CFR01V	Panasonic	RES, 0.01, 1%, 1 W, AEC-Q200 Grade 0, 0612	0612
U1	1		LM5175RHFR	Texas Instruments	42-V Wide VIN Synchronous 4-Switch Buck-Boost Controller, RHF0028A	RHF0028A
D4	0	8.2V	MMSZ5237BS-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 200 mW, SOD-323	SOD-323
D5	0	40V	CUS05S40,H3F	Toshiba	Diode, Schottky, 40 V, 0.5 A, SOD-323	SOD-323
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R11	0	95.3k	CRCW040295K3FKED	Vishay-Dale	RES, 95.3 k, 1%, 0.063 W, 0402	0402

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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