

**PMP40274 REV E1 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	0.047uF	12061C473JAT2A	AVX	CAP, CERM, 0.047 μF, 100 V,+/- 5%, X7R, 1206	1206
C2	1	100uF	EEEFTH101XAP	Panasonic	CAP, AL, 100 μF, 50 V, +/- 20%, 0.34 ohm, AEC-Q200 Grade 2, SMD	D6.3xL7.7mm
C3, C4, C5	3	3.3uF	C3216X7R1H335K160AC	TDK	CAP, CERM, 3.3 μF, 50 V, +/- 10%, X7R, 1206_190	1206_190
C6, C7, C18, C19	4	470pF	C0603X471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
C8, C9	2	220uF	6TPE220MAZB	Panasonic	CAP, Tantalum Polymer, 220 μF, 6.3 V, +/- 20%, 0.035 ohm, 3.5x1.9x2.8mm SMD	3.5x1.9x2.8mm
C10	1	10uF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 μF, 25 V, +/- 20%, X7R, 1206_190	1206_190
C11, C12, C14, C20	4	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1 μF, 25 V, +/- 5%, X7R, 0603	0603
C13	1	100pF	VJ1210Y101KXGAT5Z	Vishay-Vitramon	CAP, CERM, 100 pF, 1000 V, +/- 10%, X7R, 1210	1210
C15, C24	2	3.3uF	C2012X7R1E335K125AB	TDK	CAP, CERM, 3.3 μF, 25 V, +/- 10%, X7R, 0805	0805
C16	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 μF, 50 V, +/- 10%, X7R, 0805	0805
C17	1	0.22uF	06033D224KAT2A	AVX	CAP, CERM, 0.22 μF, 25 V,+/- 10%, X5R, 0603	0603
C21	1	180pF	C0603C181J5GACTU	Kemet	CAP, CERM, 180 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
C22	1	0.015uF	C0603C153J3GACTU	Kemet	CAP, CERM, 0.015 μF, 25 V,+/- 5%, C0G/NP0, 0603	0603
C23	1	1000pF	GRM1885C1E102JA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0603	0603
D1	1	15V	BZT52C15T-7	Diodes Inc.	Diode, Zener, 15 V, 300 mW, SOD-523	SOD-523
D2	1	40V	SS14FL	Fairchild Semiconductor	Diode, Schottky, 40 V, 1 A, AEC-Q101, SOD-123F	SOD-123F
D3	1	100V	MURA110T3G	ON Semiconductor	Diode, Ultrafast, 100 V, 2 A, SMA	SMA
D4	1	30V	BAT54A-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
D6, D8	2	5.6V	BZT52C5V6T-7	Diodes Inc.	Diode, Zener, 5.6 V, 300 mW, SOD-523	SOD-523
D7, D9, D10, D11	4	30V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
D12	1	33V	DFLZ33-7	Diodes Inc.	Diode, Zener, 33 V, 1 W, PowerDI123	PowerDI123
L1	1	1.15uH	744310115	Würth Elektronik	Inductor, Shielded Drum Core, Superflux, 1.15 μH, 8.5 A, 0.009 ohm, SMD	7.0x3.0x6.9mm
ON/OFF, SENSE+, SENSE-, TRIM, Vin(+), Vin(-), Vout(+), Vout(-)	8		3103-1-00-15-00-00-08-0	Mill-Max	PCB Pin, 0.04" DIA, TH	PCB Pin, 0.04" DIA, TH
Q1	1	40V	CSD18502Q5B	Texas Instruments	MOSFET, N-CH, 40 V, 100 A, SON 5x6mm	SON 5x6mm
Q2, Q5, Q7, Q8	4	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q3	1	100V	CSD19533Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 13 A, SON 5x6mm	SON 5x6mm
Q4	1	40 V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q6	1	60V	2N7002P,215	NXP Semiconductor	MOSFET, N-CH, 60 V, 0.36 A, SOT-23	SOT-23
R1, R2	2	18k	CRCW080518K0JNEA	Vishay-Dale	RES, 18 k, 5%, 0.125 W, 0805	0805
R3	1	10	CRCW120610R0JNEA	Vishay-Dale	RES, 10, 5%, 0.25 W, 1206	1206
R4	1	75k	CRCW060375K0JNEA	Vishay-Dale	RES, 75 k, 5%, 0.1 W, 0603	0603
R5, R14	2	2.0	CRCW06032R00JNEA	Vishay-Dale	RES, 2.0, 5%, 0.1 W, 0603	0603
R6	1	300k	CRCW0603300KJNEA	Vishay-Dale	RES, 300 k, 5%, 0.1 W, 0603	0603
R7	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R8	1	10	CRCW080510R0JNEA	Vishay-Dale	RES, 10, 5%, 0.125 W, 0805	0805

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R9	1	56k	CRCW060356K0JNEA	Vishay-Dale	RES, 56 k, 5%, 0.1 W, 0603	0603
R10, R11	2	0.033	ERJ-8CWFR033V	Panasonic	RES, 0.033, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
R12	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, 0603	0603
R13	1	160k	CRCW0603160KJNEA	Vishay-Dale	RES, 160 k, 5%, 0.1 W, 0603	0603
R15, R17, R20, R23, R25, R30, R31	7	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R16, R22, R26, R27, R28, R39, R42	7	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R18, R44	2	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47, 5%, 0.1 W, 0603	0603
R19, R33, R34, R35, R36, R37	6	39k	CRCW060339K0JNEA	Vishay-Dale	RES, 39 k, 5%, 0.1 W, 0603	0603
R21	1	30k	CRCW060330K0JNEA	Vishay-Dale	RES, 30 k, 5%, 0.1 W, 0603	0603
R24	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603	0603
R29	1	270k	CRCW0603270KJNEA	Vishay-Dale	RES, 270 k, 5%, 0.1 W, 0603	0603
R32, R38, R40, R41, R43	5	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
T1	1	12uH	750313102	Würth Elektronik	Transformer, 12 uH, SMT	23.11x29.08mm
U1	1		TPS40210DGQR	Texas Instruments	4.5-V TO 52-V INPUT CURRENT MODE BOOST CONTROLLER, DGQ0010D	DGQ0010D
U2	1		UCC24610DR	Texas Instruments	GREEN Rectifier Controller Device, D0008A	D0008A
U3, U5	2		TLP291(GRL-TP,SE	Toshiba	Optocoupler, 3.75 kV, 100-200% CTR, SMT	SOP, 4-Leads, Body 2.65x4.60mm, Pitch 1.27mm
U4, U6	2		TLV431ACDBZR	Texas Instruments	Low Voltage Adjustable Precision Shunt Regulator, 39 ppm / degC, 15 mA, 0 to 70 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

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