

PMP4435 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
Q1, Q2, Q3, Q7, Q8, Q9	6	100V 60A 3.2mE	EPC2022	Efficient Power Conversion Co	100V 60A 3.2mE	EPC2x40XL
T2	1		MA5401-AE	Coilcraft Inc.	Common Mode Filter for Power Line	MA5401-AE
Q4	1	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60V, 0.17A, SOT-23	SOT-23
C42	1	1000pF	C1210C102KGRACTU	Kemet	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1210	1210
C14, C44, C48, C49	4	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C1, C7, C10, C12, C15, C16, C17, C19, C31, C35, C39	11	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0402	0402
C33	1	1000pF	GRM155R71C102KA01D	MuRata	CAP, CERM, 1000pF, 16V, +/-10%, X7R, 0402	0402
C2, C11, C13, C26, C27, C28, C30, C40, C41, C51, C58, C61	12	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0402	0402
C46, C52	2	10uF	GRM31CR71E106KA12L	MuRata	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206
C50, C55	2	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C37	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1uF, 6.3V, +/-10%, X7R, 0603	0603
C21, C22, C23, C24	4	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 ?, 100 V, +/- 10%, X7R, 1210	1210
C25, C34, C36, C45, C53, C59	6	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603	0603
C57	1	2200pF	GRM155R71E222KA01D	MuRata	CAP, CERM, 2200pF, 25V, +/-10%, X7R, 0402	0402
C56	1	220pF	GRM1555C1H221JA01D	MuRata	CAP, CERM, 220pF, 50V, +/-5%, C0G/NP0, 0402	0402
C8, C9	2	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22uF, 10V, +/-10%, X7R, 1206	1206
C3, C4, C5, C6	4	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22uF, 25V, +/-10%, X7R, 1210	1210
C43	1	3300pF	GRM188R72A332KA01D	MuRata	CAP, CERM, 3300pF, 100V, +/-10%, X7R, 0603	0603
C29	1	560pF	GRM155R71H561KA01D	MuRata	CAP, CERM, 560pF, 50V, +/-10%, X7R, 0402	0402
C47, C54, C60	3	8200pF	GRM155R71E822KA01D	MuRata	CAP, CERM, 8200pF, 25V, +/-10%, X7R, 0402	0402
D1, D2, D3, D4, D7, D8, D11	7	100V	MBR1H100SFT3G	ON Semiconductor	Diode, Schottky, 100V, 1A, SOD-123FL	SOD-123FL
D9, D10, D12, D13, D14, D15	6	40V	NSR0240V2T1G	ON Semiconductor	Diode, Schottky, 40V, 0.25A, SOD-523	SOD-523
J5	1		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
U7, U9, U10	3		LMZ21701SIL	Texas Instruments	1A SIMPLE SWITCHER Nano Module with 17V Maximum Input Voltage, SIL0008E	SIL0008E
U5	1		LM60CIM3	Texas Instruments	2.7V Temperature Sensor, 3-pin SOT-23	MF03A

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U2	1		ISO7420FEDR	Texas Instruments	50 Mbps Low Power Dual Channels, Digital Isolator, 3.3 V / 5 V, -40 to +125 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A
U1	1		OPA365AIDBVRG4	Texas Instruments	50 MHz, Low-Noise, Single-Supply Rail-to-Rail Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A
U3, U11, U12	3	LM5113TME	LM5113TME	TI	IC, 5A, 100V Half-Bridge Gate Driver	USMD12
U6	1	UCD3138ARMH	UCD3138ARMH	TI	IC, Highly Integrated Digital Controller for Isolated Power	QFN-40
U8	1	LM34927SD	LM34927SD	TI	IC, Integrated Secondary Side Bias Regulator	LLP-8
L2	1	100nH	IHLP1616BZERR10M01	Vishay	IHLP1616BZERR10M01, 100nH, 5mOHM, 35A	IHLP1616BZ
R33, R34, R35, R36, R37, R38, R39, R40	8	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
R8	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R7	1	0.01	WSLP1206R0100FEA	Vishay-Dale	RES, 0.01 ohm, 1%, 1W, 1206	1206
R23	1	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, 0402	0402
R21, R24, R26, R27, R30, R51, R55, R58, R63	9	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R12	1	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00Meg ohm, 1%, 0.063W, 0402	0402
R9, R10	2	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0k ohm, 5%, 0.063W, 0402	0402
R29	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10 ohm, 5%, 0.063W, 0402	0402
R13, R14, R15, R68, R69	5	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0 ohm, 1%, 0.063W, 0402	0402
R6	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.25W, 1206	1206
R22	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R47	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100 ohm, 1%, 0.063W, 0402	0402
R28	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
R25	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
R43, R57	2	120k	CRCW0402120KJNED	Vishay-Dale	RES, 120k ohm, 5%, 0.063W, 0402	0402
R11	1	130k	CRCW0402130KFKED	Vishay-Dale	RES, 130k ohm, 1%, 0.063W, 0402	0402
R59	1	15k	CRCW040215K0JNED	Vishay-Dale	RES, 15k ohm, 5%, 0.063W, 0402	0402
R3, R4	2	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00k ohm, 1%, 0.063W, 0402	0402
R42	1	21.5k	CRCW040221K5FKED	Vishay-Dale	RES, 21.5k ohm, 1%, 0.063W, 0402	0402
R46	1	27k	CRCW040227K0JNED	Vishay-Dale	RES, 27k ohm, 5%, 0.063W, 0402	0402
R18, R19, R64, R65, R66, R67	6	3R3	CRCW04023R30JNED	Vishay-Dale	RES, 3.3, 5%, 0.063 W, 0402	0402
R32	1	3.32k	CRCW04023K32FKED	Vishay-Dale	RES, 3.32k ohm, 1%, 0.063W, 0402	0402
R49	1	3.9k	CRCW04023K90JNED	Vishay-Dale	RES, 3.9k ohm, 5%, 0.063W, 0402	0402
R53	1	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1k ohm, 1%, 0.063W, 0402	0402
R1	1	33.2k	CRCW040233K2FKED	Vishay-Dale	RES, 33.2 k, 1%, 0.063 W, 0402	0402
R45	1	330k	CRCW0402330KJNED	Vishay-Dale	RES, 330k ohm, 5%, 0.063W, 0402	0402

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R50, R61	2	35.7k	CRCW040235K7FKED	Vishay-Dale	RES, 35.7k ohm, 1%, 0.063W, 0402	0402
R54	1	4.32k	CRCW04024K32FKED	Vishay-Dale	RES, 4.32k ohm, 1%, 0.063W, 0402	0402
R48	1	4.3k	CRCW04024K30JNED	Vishay-Dale	RES, 4.3k ohm, 5%, 0.063W, 0402	0402
R31	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9k ohm, 1%, 0.063W, 0402	0402
R56	1	5.11k	CRCW04025K11FKED	Vishay-Dale	RES, 5.11k ohm, 1%, 0.063W, 0402	0402
R2, R5	2	51R	CRCW060351R0JNEA	Vishay-Dale	RES, 51 ohm, 5%, 0.1W, 0603, RES, 51, 5%, 0.1 W, 0603	0603
R44, R52, R62	3	6.81k	CRCW04026K81FKED	Vishay-Dale	RES, 6.81k ohm, 1%, 0.063W, 0402	0402
R60	1	6.8k	CRCW04026K80JNED	Vishay-Dale	RES, 6.8k ohm, 5%, 0.063W, 0402	0402
R41	1	82k	CRCW080582K0JNEA	Vishay-Dale	RES, 82k ohm, 5%, 0.125W, 0805	0805
L1	1	3Ts	RM6S/ILP, TP5 RM6S/ILP, PC50	TDG TDK	PCB Inductor, 3Ts	RM6
T1	1	6Ts:2Ts:2Ts	RM6S/ILP, TP5 RM6S/ILP, PC50	TDG TDK	PCB Transformer, 6:2:2	RM6
J1, J2, J3, J4, J6	5		2142-0, Input & Output Pins		Output Pin For 1/8 Brick, D1.5mm*D2.5mm*L11.6mm, Output Pin For 1/8 Brick, D1.5mm*D2.5mm*L11.6mm, Input Pin For 1/8 Brick, D1.0mm*D2.0mm*L11.6mm, Input Pin For 1/8 Brick, D1.0mm*D2.0mm*L11.6mm, Input Pin For 1/8 Brick, D1.0mm*D2.0mm*L11.6mm	

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