

PMP31263 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2, C18	3	1000uF	EMVE500GTR102MMN0S	Chemi-Con	CAP, AL, 1000 uF, 50 V, +/- 20%, SMD	MN0
C6, C7, C8, C9, C10, C11, C12, C13, C22, C23, C24, C25, C41, C42, C48, C49, C50, C51, C54, C55	20	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C14, C15, C20, C21, C28, C29, C38, C40, C43	9	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C26, C27, C36	3	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C30	1	2.2uF	CGA4J3X7R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C31	1	4.7uF	CGA4J3X7R1C475K125AE	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C32	1	4700pF	GCM155R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C33	1	0.22uF	CL10B224K08VPNC	Samsung	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C34, C35	2	0.33uF	CGA3E3X7R1H334K080AB	TDK	CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C37	1	47uF	EEEF1H470AP	Panasonic	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	D6.3xL5.8mm
C39	1	4.7uF	GCM32ER71H475KA55L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C44	1	0.47uF	CGA3E3X7R1H474K080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C52, C53	2	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
D1	1	33V	SMBJ33CA-13-F	Diodes Inc.	Diode, TVS, Bi, 33 V, SMB	SMB
J1, J8	2		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
J2, J4	2		PBC04SAAN	Sullins Connector Solutions	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54 mm, 4x1, TH
J3, J5, J6, J7, J9	5		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
L1, L2	2	3.3uH	SER2915H-332KL	Coilcraft	Inductor, Shielded E Core, Ferrite, 3.3 uH, 30 A, 0.00186 ohm, SMD	29.7x15.36x27.94mm
Q1, Q2, Q7, Q8	4		NVMFS5C638NLT1G	ON Semiconductor	N-Channel 60V 26A (Ta), 133A (Tc) 4W (Ta), 100W (Tc) Surface Mount 5-DFN (5x6) (8-SOFL)	DFN5
Q3, Q4, Q5, Q6	4	80V	NVMFS6H818NWFT1G	ON Semiconductor	MOSFET, N-CH, 80 V, 123 A, AEC-Q101, SO-8FL	SO-8FL
Q9, Q10, Q11, Q12	4	60V	NVMFS5C670NLWFAFT1G	ON Semiconductor	MOSFET, N-CH, 40 V, AEC-Q101, SO-8FL, MOSFET, N-CH, 40 V, AEC-Q101, SO-8FL	SO-8FL
R1, R2, R26, R27, R30, R31	6	0	PMR03EZPJ000	Rohm	RES, 0, 0%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
R3, R4	2	1.5m	WSLP25121L500FEA	Vishay Dale	1.0 mOhms ±1% 3W Chip Resistor 2512 (6432 Metric) Anti-Sulfur, Automotive AEC-Q200, Current Sense, Moisture Resistant, Pulse Withstanding Metal Element	2512
R5, R6, R7, R8	4	0	RK73Z1ETTP	KOA Speer	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R9, R10, R11, R12	4	3.9	CRCW06033R90JNEA	Vishay-Dale	RES, 3.9, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R13	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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R14, R16, R21, R24, R25, R29, R34, R35, R36, R37, R38, R39	12	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15, R18	2	1.54k	CRCW04021K54FKED	Vishay-Dale	RES, 1.54 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R17	1	14.0k	CRCW040214K0FKED	Vishay-Dale	RES, 14.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R19	1	1.91k	CRCW04021K91FKED	Vishay-Dale	RES, 1.91 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R20	1	68k	RMCF0402FT68K0	Stackpole Electronics	68kΩ ±1% 0.063W 0402 Thick Film Chip Resistor AEC-Q200 compliant	0402
R22	1	13.3k	CRCW040213K3FKED	Vishay-Dale	RES, 13.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R23	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R28	1	0	ERJ-6GEY0R00V	Panasonic	RES, 0, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
T1, T3	2		CB70-14-CY	Panduit	Terminal 90A Lug	CB70-14-CY
T2, T4	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
TP1, TP2, TP3, TP4, TP5, TP6, TP8, TP10, TP11, TP12	10		RCU-0C	TE Connectivity	PC Test Point, SMT	1.6x0.8mm
U1	1		LM5125-Q1RHB	Used in BOM report		eg: 0603, used in PnP report
U2	1		LM74502QDDFQ1	Texas Instruments	Reverse Polarity Protection Controller with Over Voltage Protection	SOT23-8
C3, C4, C5, C16, C17, C19	0	1000uF	EMVE500GTR102MMN0S	Chemi-Con	CAP, AL, 1000 uF, 50 V, +/- 20%, SMD	MN0
C45	0	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C46, C47	0	1500pF	CGA3E2X7R2A152K080AA	TDK	CAP, CERM, 1500 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
D2, D3	0	60V	PMEG6030EVPX	Nexperia	Diode, Schottky, 60 V, 3 A, SOD-128	SOD-128
L3	0	0.45uH	XAL1010-451MEB	Coilcraft	Shielded Power Inductors - XAL1010 0.45uH AEC Q-200 20% 0.72mohm SRF: 66MHz 40A	SMD2
R32, R33	0	102	CRCW1206102RFKEA	Vishay-Dale	RES, 102, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206

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