

PMP31306 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C3, C10, C13, C23, C24, C26, C37	7	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C4	1	4.7uF	GCM32ER71H475KA55L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C9	1	0.47uF	CGA3E3X7R1H474K080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C11, C12, C25, C35	4	220uF	EEH-ZS1H221P	Panasonic Electronic Compon	220uF 50V Aluminum Polymer Capacitor Radial, Can - SMD 13 mOhm 4000 Hrs @ 125°C	RADIAL_SMD
C15, C16, C17, C18, C19, C20	6	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C21	1	1000uF	EMVE500GTR102MMN0S	Chemi-Con	CAP, AL, 1000 uF, 50 V, +/- 20%, SMD	MN0
C22, C36	2	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0402	0402
C27, C28, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63	13	0.01uF	CGA2B3X7S2A103K050BB	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
C29, C30, C31, C32, C33, C34	6	4.7uF	CGA6M3X7S2A475K200AB	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
C38	1	2.2uF	CGA4J3X7R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C39	1	10uF	C0805C106J8RACAUTO	Kemet	CAP, CERM, 10 uF, 10 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0805	0805
C40	1	1000pF	CGA2B2X8R1H102K050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0402	0402
C41	1	4.7uF	CGA4J3X7R1C475K125AE	TDK	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C42	1	0.68uF	C1608X6S1H684K080AC	TDK	CAP, CERM, 0.68 uF, 50 V, +/- 10%, X6S, 0603	0603
C43, C44	2	0.33uF	CGA3E3X7R1H334K080AB	TDK	CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C45, C46, C47, C48, C49, C50, C51, C52	8	0.01uF	CGA2B3X8R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0402	0402
C64, C65	2	1uF	EMK107B7105KAHT	Taiyo Yuden	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
D1	1	33V	SMBJ33CA-13-F	Diodes Inc.	Diode, TVS, Bi, 33 V, SMB	SMB
J1, J5, J6, J7	4		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J2	1		691236510002	Würth Elektronik	Terminal Block, 5.08mm, 2x1, R/A, TH	Terminal Block, 5.08mm, 2x1, R/A, TH
J3, J4, J8	3		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
L2, L3	2	3.3uH	XGL1712-332MED	Coilcraft	Shielded Power Inductors 3.3uH ±20% 41.7A 1.9mOhms	SMT2_17MM2_18MM 2
Q1, Q2, Q3, Q4	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
R2, R8, R9, R15	4	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R3, R4	2		WSLF25121L000FEB	Vishay	1 mOhms ±1% 5W Chip Resistor 2512 (6432 Metric) Automotive AEC-Q200, Current Sense, Moisture Resistant, Pulse Withstanding Metal Element	2512
R5, R6	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R7	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	1	14.0k	CRCW040214K0FKED	Vishay-Dale	RES, 14.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11	1	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12	1	0	PMR03EZPJ000	Rohm	RES, 0, 0%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
R13	1	3.30k	ERJ-2RKF3301X	Panasonic	RES, 3.30 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R14	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R24, R25, R26, R27	4	0	ERJ-2GE0R00X	Panasonic	0 Ohms Jumper Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	0402
T1, T2	2		CB70-14-CY	Panduit	Terminal 90A Lug	CB70-14-CY
TP1, TP2, TP3, TP4, TP5, TP6	6		RCU-0C	TE Connectivity	PC Test Point, SMT	1.6x0.8mm
U1	1		LM74502QDDFQ1	Texas Instruments	Reverse Polarity Protection Controller with Over Voltage Protection	SOT23-8
U2	1		LM5125-Q1RHB	Used in BOM report		eg: 0603, used in PnP report
U3, U4	2		LMG2100R026	Texas Instruments	100-V, 53-A GaN Half-Bridge Power Stage	VQFN-FCRL16
C1, C6, C8	0	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C2	0	10uF	C0805C106J8RACAUTO	Kemet	CAP, CERM, 10 uF, 10 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0805	0805
C5	0	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C7	0	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C14	0	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
D2	0		SML-LX0603SIW-TR	Lumex	Red - LED Indication - Discrete 2V 0603 (1608 Metric) 2V @ 20mA 71.5mcd 48mW	0603
D3	0		SML-LX0603GW-TR	Lumex	Green LED Indication - Discrete 2.2V 0603 (1608 Metric)	0603
J9	0		800-10-005-10-001000	Mill-Max	Header, 100mil, 5x1, TH	Header, 5x1, 100mil, TH
Q5	0	45V	BC847BW,115	Nexperia	Bipolar (BJT) Transistor NPN 45 V 100 mA 100MHz 200 mW Surface Mount SOT-323	SOT323
R1, R17, R20, R23	0	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R16, R19	0	56.0k	RK73H1ETTP5602F	KOA Speer	RES, 56.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R18	0	0.001	CSNL1206FT1L00	Stackpole Electronics Inc	RES, 0.001, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
R21	0	56k	ERJ-3EKF5602V	Panasonic	56 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200 Thick Film ERJ-3EKF5602V	0603
R22	0	3.01k	CRCW04023K01FKED	Vishay-Dale	RES, 3.01 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
U5	0		TPS7B6933QDCYRQ1	Texas Instruments	Automotive High-Voltage Ultra-Low IQ Low-Dropout Regulator/Fixed 3.3-V Output Voltage, DCY0004A (SOT-223-4)	DCY0004A
U6	0		MSPM0L1306SRGE	Texas Instruments	Mixed-Signal Microcontrollers	VQFN24

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