

PMP22125D(001)  
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### PMP22125 REV D Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C28, C30, C34, C35, C36, C37, C38	7	0.01uF	885012205031	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
C31	1	220pF	885012005063	Würth Elektronik	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C33	1	47pF	885012005044	Würth Elektronik	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C23	1	560pF	GRM155R71H561KA01D	MuRata	CAP, CERM, 560 pF, 50 V, +/- 10%, X7R, 0402	0402
C2, C5	2	0.01uF	885012206089	Würth Elektronik	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C21	1	0.033uF	GRM188R71C333KA01D	MuRata	CAP, CERM, 0.033 uF, 16 V, +/- 10%, X7R, 0603	0603
C20	1	0.068uF	GRM188R71C683KA01D	MuRata	CAP, CERM, 0.068 uF, 16 V, +/- 10%, X7R, 0603	0603
C1, C4, C32, C39	4	0.1uF	885012206095	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C3, C6	2	0.22uF	885012206048	Würth Elektronik	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0603	0603
C10, C11, C22, C24	4	2.2uF	GRM188Z71C225KE43	MuRata	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
C25	1	10uF	885012207026	Würth Elektronik	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805
C100	1	1uF	885012207103	Würth Elektronik	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C14, C19, C27	3	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
C15, C17, C18	3	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C16	1	47uF	EEE-FK1V470P	Panasonic	CAP, AL, 47 uF, 35 V, +/- 20%, 0.36 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
C7, C12	2	47uF	EEE-FK1H470XP	Panasonic	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D8
D1, D10	2	Rgy	EASV3015RGYA0	Everlight	LED, Rgy, SMD	3x1mm
D3, D4, D5, D7, D8, D9, D11, D12, D14, D15	10	100V	BAS516,115	Nexperia	Diode, Switching, 100 V, 0.25 A, SOD-523	SOD-523
D13	1	60V	PDS360-13	Diodes Inc.	Diode, Schottky, 60 V, 3 A, PowerDI5	PowerDI5
D16	1	40V	SMCJ40CA-TR	STMicroelectronics	Diode, TVS, Bi, 40 V, 64.5 Vc, 1500 W, 24 A, SMC (No Polarity Mark)	SMC (No Polarity Mark)
J1, J2, J3	3		1720033	Phoenix Contact	Conn Terminal Block 2 POS 6.35mm Solder Thru-Hole 32A	HDR2
J6	1		1751138	Phoenix Contact	Fixed Terminal Blocks SMKDS 1/6-3.5	PTH_TBLK_21MM50_10MM00
K1, K2	2		LCC110STR	IXYS	Relay, SPDT (1 Form C), SMD	6.35x9.625mm
L1	1	33uH	XAL6060-333MEB	Coilcraft	Inductor, Shielded, Composite, 33 uH, 3.6 A, 0.105 ohm, AEC-Q200 Grade 1, SMD	IND_6.4x6.1x6.6
Q1, Q4, Q5, Q6, Q7, Q8, Q11, Q12, Q13, Q20, Q21, Q22	12	30V	CSD17313Q2	Texas Instruments	MOSFET, N-CH, 30 V, 5 A, DQK0006C (WSON-6)	DQK0006C
Q15, Q16, Q17, Q18, Q24, Q25, Q26, Q29	8	60V	CSD18531Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 100 A, DQJ0008A (VSONP-8)	DQJ0008A
Q19, Q30	2	40 V	MMBT2222ALT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.6 A, SOT-23	SOT-23
Q41, Q42, Q45, Q46	4	60V	CSD18543Q3A	Texas Instruments	MOSFET, N-CH, 60 V, 35 A, DNH0008A (VSONP-8)	DNH0008A
R52, R59, R67, R73, R77, R78, R82, R85, R91	9	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402

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R6, R9, R17, R34, R69	5	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R16	1	1.05Meg	CRCW04021M05FKED	Vishay-Dale	RES, 1.05 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R86, R87	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R8, R31, R42	3	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R62	1	10.2k	CRCW040210K2FKED	Vishay-Dale	RES, 10.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R79, R83	2	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R28, R29, R38, R41, R53, R76	6	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10, R18	2	12.1k	CRCW040212K1FKED	Vishay-Dale	RES, 12.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R4	1	15.4k	CRCW040215K4FKED	Vishay-Dale	RES, 15.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R75	1	15.8k	CRCW040215K8FKED	Vishay-Dale	RES, 15.8 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R63	1	18.2k	CRCW040218K2FKED	Vishay-Dale	RES, 18.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R70	1	19.1k	CRCW040219K1FKED	Vishay-Dale	RES, 19.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R71	1	19.6k	CRCW040219K6FKED	Vishay-Dale	RES, 19.6 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R27, R30, R37, R40	4	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R81	1	2.94k	CRCW04022K94FKED	Vishay-Dale	RES, 2.94 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R26, R36	2	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R57	1	20.5k	CRCW040220K5FKED	Vishay-Dale	RES, 20.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R56	1	21.5k	CRCW040221K5FKED	Vishay-Dale	RES, 21.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R35, R49	2	24.9k	CRCW040224K9FKED	Vishay-Dale	RES, 24.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11, R19	2	28.0k	CRCW040228K0FKED	Vishay-Dale	RES, 28.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R32, R44	2	3.74k	CRCW04023K74FKED	Vishay-Dale	RES, 3.74 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R1, R2, R3, R13, R14, R15, R22, R23, R24, R25, R45, R46, R47, R48, R50, R51, R54, R64, R65, R68, R72, R88, R89, R94, R95	25	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12	1	33.2k	CRCW040233K2FKED	Vishay-Dale	RES, 33.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R92, R93	2	365	CRCW0402365RFKED	Vishay-Dale	RES, 365, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R90	1	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R80	1	6.04k	CRCW04026K04FKED	Vishay-Dale	RES, 6.04 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R20, R66	2	73.2k	CRCW040273K2FKED	Vishay-Dale	RES, 73.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R39	1	768k	CRCW0402768KFKED	Vishay-Dale	RES, 768 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R55	1	825k	CRCW0402825KFKED	Vishay-Dale	RES, 825 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R74	1	93.1k	CRCW040293K1FKED	Vishay-Dale	RES, 93.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R60, R61	2	0.1	ERJ-3RSFR10V	Panasonic	RES, 0.1, 1%, 0.1 W, 0603	0603
R84	1	0.06	CSRN2010FK60L0	Stackpole Electronics Inc	RES, 0.06, 1%, 1 W, 2010	2010
U1, U2, U10, U12	4		TLV6710DDCR	Texas Instruments	Micropower, 36V Window Comparator with 400mV Reference, DDC0006A (SOT-23-THIN-6)	DDC0006A
U3, U8	2		SN74LVC2G08DCUT	Texas Instruments	Dual 2-Input Positive-AND Gate, DCU0008A (VSSOP-8)	DCU0008A
U4, U5	2		LM5060MMX/NOPB	Texas Instruments	High-Side Protection Controller with Low Quiescent Current, DGS0010A (VSSOP-10)	DGS0010A
U6, U14	2		TPS3803-01DCKR	Texas Instruments	Single Voltage Detector, 1 Supply Monitored, -40 to 85 degC, 5-pin SC70 (DCK), Green (RoHS & no Sb/Br)	DCK0005A
U9	1		TPS7A1650DGNT	Texas Instruments	60V, 5uA Iq, 100mA Low-Dropout (LDO) Voltage Regulator With Enable and Power Good, DGN0008C (VSSOP-8)	DGN0008C

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U11	1		LM5176PWPR	Texas Instruments	55 V Wide VIN Synchronous 4-Switch Buck-Boost Controller, PWP0028C (TSSOP-28)	PWP0028C
U13, U15	2		SN74LV1T32DCKR	Texas Instruments	Single Power Supply 2-INPUT POSITIVE OR GATE with Logic Level Shifter, DCK0005A, LARGE T&R	DCK0005A
U16	1		INA301A2IDGKR	Texas Instruments	Overcurrent protection high-speed, precision current sense amplifier with integrated comparator, DGK0008A (VSSOP-8)	DGK0008A
U17, U18	2		TPS22929DDBVR	Texas Instruments	Low Input Voltage, 1.8 A Single Channel Load Switch with Controlled Turn-On, 1.8 V Logic Compatible, 1.8 A, 1.4 to 5.5 V, -40 to 85 degC, 6-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0006A
U19, U20, U21, U22, U23	5		SN74LVC1G07DCKR	Texas Instruments	Single Buffer/Driver With Open-Drain Output, DCK0005A, LARGE T&R	DCK0005A

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