

PMP11136 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	Package
C1, C59	2	1000pF	C1608C0G2A102J	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C2	1	0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01 μF, 100 V, +/- 10%, X7R, 0603	0603
C3	1	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 μF, 50 V, +/- 10%, X7R, 0603	0603
C4	1	100uF	EEE-FK1H101P	Panasonic	CAP, AL, 100 μF, 50 V, +/- 20%, 0.34 ohm, SMD	SMT Radial F
C5, C9, C22, C32	4	4.7uF	C3225X7R1H475M250AB	TDK	CAP, CERM, 4.7uF, 50V, +/-20%, X7R, 1210	1210
C6, C13, C51, C52, C54, C55	6	1uF	C1608X7R1E105K	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C7, C10, C11, C21, C23, C24, C33, C34, C42, C48, C50, C58	12	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C8	1	0.01uF	C1608X7R1H103K	TDK	CAP, CERM, 0.01 μF, 50 V, +/- 10%, X7R, 0603	0603
C12, C49	2	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805
C14, C16, C29, C44	4	22uF	C3225X7R1C226M250AC	TDK	CAP, CERM, 22 μF, 16 V, +/- 20%, X7R, 1210	1210
C15, C20, C27, C39, C40, C57	6				CAP, CERM, open, 0603	0603
C17, C30	2				CAP, open, 1210	1210
C18	1	0.047uF	C1608X7R1H473K	TDK	CAP, CERM, 0.047 μF, 50 V, +/- 10%, X7R, 0603	0603
C19	1	150pF	C1608C0G1H151J	TDK	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C25, C28, C36, C45	4	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0402	0402
C26, C41, C46	3	10pF	C1608C0G1H100D	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C31, C35	2	330pF	C1608C0G1H331J	TDK	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C37	1	0.022uF	C1608X7R1H223K	TDK	CAP, CERM, 0.022 μF, 50 V, +/- 10%, X7R, 0603	0603
C38	1	1500pF	C1608C0G1H152J	TDK	CAP, CERM, 1500 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C43	1				CAP, open, 7343-40 SMD	7343-40
C47, C53, C56	3	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 μF, 10 V, +/- 10%, X7R, 0805	0805
D1, D2	2	45V	MBR1045MFST1G	ON Semi	Diode, Schottky, 45 V, 10 A, 6.15x1.00x5.15mm	6.15x1.00x5.15mm
D3	1	33V	1.5SMC33AT3G	Littelfuse	Diode, TVS, Uni, 33 V, 1500 W, SMC	SMC
D4	1	30V	1PS79SB30	NXP	Diode, Schottky, 30 V, 0.2 A, SOD-523	SOD-523
D5	1	3.3V	MMSZ4684T1G	ON Semi	Diode, Zener, 3.3 V, 500 mW, SOD-123	SOD-123
D6	1	18V	MMSZ4705T1G	ON Semi	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
D7	1	30V	RB070M-30	Rohm	Diode, Schottky, 30V, 1.5A, SOD-123	SOD-123
D8	1	12V	MMSZ4699T1G	ON Semi	Diode, Zener, 12 V, 500 mW, SOD-123	SOD-123
D9, D13	2	60V	MBRS360BT3G	ON Semi	Diode, Schottky, 60V, 3A, SMB	SMB
D10, D11, D14, D18, D21, D22, D23	7	75V	BAS16-7-F	Diodes Inc.	Diode, Ultrafast, 75V, 0.3A, SOT-23	SOT-23
D12, D15, D20	3	2.4V	MMSZ5221B-7-F	Diodes Inc.	Diode, Zener, 2.4V, 500 mW, SOD-123	SOD-123
D16	1	75V	BAT54-E3-08	Vishay	Diode, Ultrafast, 30V, 0.2A, SOT-23	SOT-23
D17, D19	2	60V	MBRS260T3G	ON Semi	Diode, Schottky, 60V, 2A, SMB	SMB

Designator	Quantity	Value	PartNumber	Manufacturer	Description	Package
J1, J3, J7, J9, J23, J24, J26, J31, J33	9		ED555/2DS	On-Shore Tech	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
J2, J4, J5, J6, J8, J11, J12, J13, J16, J17, J18, J19, J22, J25, J28, J29, J30, J35, J36	19		PEC02SAAN	Sullins	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J10, J27, J32, J34	4		PEC03SAAN	Sullins	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
J14, J15, J20, J21	4		676430910	Molex	Connector, Receptacle, USB Standard, R/A, Top Mount TH	Standard USB Rcpt
L1	1	115 ohm	28F0181-1SR-10	Laird	Ferrite Bead, 115 ohm @ 100MHz, 10A, SMD, 2-Leads, Body 8.74x4.65mm	SMD, 2-Leads, Body 8.74x4.65mm
L2, L4	2	2.2uH	CLF6045NIT-2R2N-D	TDK	Inductor, Wirewound, Ferrite, 2.2 uH, 4.1 A, 0.015 ohm, SMD	6.3x6mm
L3, L5	2	4.7uH	CLF6045NIT-4R7N-D	TDK	Inductor, Wirewound, Ferrite, 4.7 uH, 3.1 A, 0.023 ohm, SMD	6.3x6mm
Q1	1	50 V	BCR22PN	Infineon	Transistor, NPN/PNP Pair, 50 V, 0.1 A, SOT-363	SOT-363
Q2	1	45 V	BC847PN	Infineon	Transistor, NPN/PNP Pair, 45 V, 0.1 A, SOT-363	SOT-363
R1	1	7.5	CRCW20107R50JNEF	Vishay-Dale	RES, 7.5, 5%, 0.75 W, 2010	2010
R2	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R3, R4, R13, R14, R31, R34, R36, R44, R49, R50, R53	11	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R5	1	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
R6	1	2.00k	CRCW12062K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.25 W, 1206	1206
R7	1	2.87k	CRCW06032K87FKEA	Vishay-Dale	RES, 2.87 k, 1%, 0.1 W, 0603	0603
R8	1	3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, 0603	0603
R9, R43	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R10	1	34.0k	CRCW060334K0FKEA	Vishay-Dale	RES, 34.0 k, 1%, 0.1 W, 0603	0603
R11	1	110	CRCW0603110RFKEA	Vishay-Dale	RES, 110, 1%, 0.1 W, 0603	0603
R12, R29, R45	3	open			RES, open, 2010	2010
R15, R26	2	11.3k	CRCW060311K3FKEA	Vishay-Dale	RES, 11.3 k, 0.1%, 0.1 W, 0603	0603
R16	1	53.6k	CRCW060353K6FKEA	Vishay-Dale	RES, 53.6 k, 1%, 0.1 W, 0603	0603
R17, R18	2	15.0	CRCW120615R0FKEA	Vishay-Dale	RES, 15.0, 1%, 0.25 W, 1206	1206
R19	1	1.58k	CRCW06031K58FKEA	Vishay-Dale	RES, 1.58 k, 1%, 0.1 W, 0603	0603
R20	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R21, R30, R47	3	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, 0603	0603
R22, R35	2	0.2	CSRN2512FKR200	Stackpole	RES, 0.2, 1%, 2 W, 2512	2512
R23, R37	2	0.01	CSR1206FK10L0	Stackpole	RES, 0.01, 1%, 0.5 W, 1206	1206
R24, R39	2	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, 0603	0603
R25, R32, R41, R46, R52	5	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R27	1	69.8k	CRCW060369K8FKEA	Vishay-Dale	RES, 69.8 k, 1%, 0.1 W, 0603	0603
R28	1	30.1	CRCW060330R1FKEA	Vishay-Dale	RES, 30.1, 1%, 0.1 W, 0603	0603
R33, R48	2	127k	CRCW0603127KFKEA	Vishay-Dale	RES, 127 k, 1%, 0.1 W, 0603	0603

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R38	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R40	1	63.4k	CRCW060363K4FKEA	Vishay-Dale	RES, 63.4 k, 1%, 0.1 W, 0603	0603
R42	1	54.9k	CRCW060354K9FKEA	Vishay-Dale	RES, 54.9 k, 1%, 0.1 W, 0603	0603
R51	1	2.49k	CRCW06032K49FKEA	Vishay-Dale	RES, 2.49 k, 1%, 0.1 W, 0603	0603
R54	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
TP1, TP2, TP4, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP17, TP19, TP20, TP23, TP25, TP26, TP27, TP30, TP32, TP34, TP36, TP37, TP40, TP41, TP42	26	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP3, TP5, TP14, TP15, TP16, TP18, TP21, TP22, TP24, TP28, TP29, TP31, TP33, TP35, TP38, TP39	16	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		TPS7B4250QDBV	Texas Instruments	Low Dropout Voltage Tracking LDO, DBV0005A	DBV0005A
U2, U4	2		LMR14030PQDDAQ1	Texas Instruments	LMR14030PQDDAQ1, DDA0008E	DDA0008E
U3	1		TPS61175PWP	Texas Instruments	3-A High Voltage Boost Converter with Soft-start and Programmable Switching Frequency, PWP0014E	PWP0014E
U5, U7	2		INA213AQDCKRQ1	Texas Instruments	Voltage Output, High or Low Side Measurement, Bi-Directional Zero-Drift Series Current-Shunt Monitor, DCK0006A	DCK0006A
U6	1		TPS57140QDGQRQ1	Texas Instruments	1.5-A 42-V STEP-DOWN SWIFT DC-DC CONVERTER WITH Eco-mode CONTROL, DGQ0010D	DGQ0010D
U8	1		TPS7B6933QDCYRQ1	Texas Instruments	High Voltage Ultra Low Iq - Low Drop Out Regulator, DCY0004A	DCY0004A
U9	1		TPS7B6950QDCYRQ1	Texas Instruments	High Voltage Ultra Low Iq - Low Drop Out Regulator, DCY0004A	DCY0004A
U10	1		TLV70033QDDCRQ1	Texas Instruments	Single Output Automotive LDO, 200 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT (DDC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DDC0005A
U11	1		TLV70018QDDCRQ1	Texas Instruments	Single Output Automotive LDO, 300 mA, Fixed 1.8 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT (DDC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DDC0005A
U12	1		TPS74701QDRCRQ1	Texas Instruments	Single Output Automotive LDO, 500 mA, Adjustable 0.8 to 3.6 V Output, 0.8 to 5.5 V Input, with Programmable Soft Start, 10-pin SON (DRC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRC0010A
U13	1		TPS3808G12QDBVRQ1	Texas Instruments	LOW-QUIESCENT-CURRENT PROGRAMMABLE-DELAY SUPERVISORY CIRCUIT, DBV0006A	DBV0006A

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