PMP23637 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP23637	Any	Printed Circuit Board	
C1, C2, C3, C4, C5, C6, C15, C16, C17, C18, C19, C25, C26, C27, C28, C29, C30, C31, C57, C58, C59, C60	22	10uF	GRM21BR61H106KE43L	muRata	CAP, CERM, 10 µF, 50 V,+/- 10%, JB, 0805	805
C7, C8, C24, C33	4	1uF	C1608X5R1H105K080AB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X5R, 0603	603
C9, C10, C20	3	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0603	603
C11, C12	2	1000pF	04025C102JAT2A	AVX	CAP, CERM, 1000 pF, 50 V,+/- 5%, X7R, 0402	402
C13, C14	2	10uF	GMK316AB7106KL-TR	Taiyo Yuden	CAP, CERM, 10 uF, 35 V, +/- 10%, X7R, 1206_190	1206_190
C21, C22, C61	3	33uF	T521X336M050ATE050	Kemet	CAP, Tantalum Polymer, 33 uF, 50 V, +/- 20%, 0.05 ohm, 7343-43 SMD	7343-43
C32	1	10uF	GRM188R6YA106MA73D	Murata	CAP, CERM, 10 uF, 35 V, +/- 20%, X5R, 0603	603
C34	1	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	402
C39, C44, C48	3	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
C40, C41, C43, C45	4	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	402
C42, C51	2	2.2uF	GRM155R61E225ME15D	MuRata	CAP, CERM, 2.2 µF, 25 V,+/- 20%, X5R, 0402	402
C46, C47	2	0.1uF	C1005X7R1H104K050BE	TDK	CAP, CERM, 0.1 uF, 50 V,+/- 10%, X7R, 0402	402
C50	1	0.47uF	GRM155R61E474KE01D	MuRata	CAP, CERM, 0.47 uF, 25 V,+/- 10%, X5R, 0402	402
C53, C54, C55, C56	4	0.033uF	CGA2B3X7R1H333K050BB	TDK	CAP, CERM, 0.033 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
C62	1	1uF	GCM21BR71H105KA03K	MuRata	CAP, CERM, 1 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
D1	1	Green	LTST-C190GKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
D3	1	70V	BAV70-E3-08	Vishay-Semiconductor	Diode, Switching, 70 V, 0.25 A, AEC-Q101, SOT-23	SOT-23
H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1, J3, J4	3		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
J2	1		22053041	Molex	Connector Header Through Hole, Right Angle 4 position 0.100" (2.54mm)	HDR4
JP1, JP2	2		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
L1_A, L1_B	2	2.2uH	HBUD053T-2R2MS	Cyntec	2.2 µH Shielded Inductor 12 A 9.8mOhm Max	SMT25MM4_5MM2
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
Q1A, Q1B, Q2	3		AONP36336	Alpha & Omega Semiconducto	Mosfet Array 30V 50A (Tc) 3.4W (Ta), 33W (Tc), 3.1W (Ta), 30W (Tc) Surface Mount 8-DFN-EP (3.3x3.3)	DFN3.3x3.3B
Q3	1	30V	CSD17577Q3A	Texas Instruments	MOSFET, N-CH, 30 V, 19 A, DNH0008A (VSONP-8)	DNH0008A
Q5	1	60V	2N7002ET1G	ON Semiconductor	MOSFET, N-CH, 60 V, 0.26 A, SOT-23	SOT-23
R1	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R2	1	10	ERJ-8ENF10R0V	Panasonic	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R3, R11, R17, R26, R27, R28	6	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R5, R15	2	300k	CRCW0402300KFKED	Vishay-Dale	RES, 300 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R6	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	402
R7	1	33.0k	RC0402FR-0733KL	Yageo America	RES, 33.0 k, 1%, 0.063 W, 0402	402
R8, R9	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R10	1	2.0Meg	CRCW04022M00JNED	Vishay-Dale	RES, 2.0 M, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R12	1	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R14	1	3.57k	CRCW04023K57FKED	Vishay-Dale	RES, 3.57 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R16	1	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R20	1	1	CRCW06031R00JNEA	Vishay-Dale	RES, 1.0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R21, R22, R23, R24	4	4.99	CRCW04024R99FKED	Vishay-Dale	RES, 4.99, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R29, R30	2	3.9	CRCW12063R90JNEA	Vishay-Dale	RES, 3.9, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
RAC_A, RAC_B	2	0.01	WSLP1206R0100FEA	Vishay-Dale	RES, 0.01, 1%, 1 W, 1206	1206
RSR	1	0.005	CSNL2010FT5L00	Stackpole Electronics Inc	RES, 0.005, 1%, 1.5 W, 2010	2010
SH-JP1	1	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
TP1, TP8, TP10	3		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP9	2		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP3, TP4, TP5	3		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP7	1		5015	Keystone Electronics	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
U1	1		BQ25773REER	Texas Instruments	I2C 2- to 5-Cell Narrow VDC Dual Phase Buck-Boost Battery Charge Controller With System Power Monitor and Processor Hot Monitor	WQFN36
U2	1		LM3480IM3-3.3/NOPB	Texas Instruments	100 mA, Quasi Low-Dropout Linear Voltage Regulator, 3-pin SOT-23, Pb-Free	DBZ0003A
C23	0	33uF	T521X336M050ATE050	Kemet	CAP, Tantalum Polymer, 33 uF, 50 V, +/- 20%, 0.05 ohm, 7343-43 SMD	7343-43
C35, C38	0	0.022uF	GRM155R71H223KA12D	MuRata	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0402	402
C36, C49, C52	0	330pF	GRM188R71H331KA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0603	603
C37	0	0.068uF	CGA2B3X7R1H683K050BB	TDK	CAP, CERM, 0.068 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
D2	0	40V	B240A-13-F	Diodes Inc.	Diode, Schottky, 40 V, 2 A, SMA	SMA
R4	0	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R13, R18, R19	0	56	CRCW060356R0JNEA	Vishay-Dale	RES, 56, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R25	0	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
SH-JP2	0	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you fully indemnify TI and its representatives against any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI’s products are provided subject to TI’s Terms of Sale, TI’s General Quality Guidelines, or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI’s provision of these resources does not expand or otherwise alter TI’s applicable warranties or warranty disclaimers for TI products. Unless TI explicitly designates a product as custom or customer-specified, TI products are standard, catalog, general purpose devices.

TI objects to and rejects any additional or different terms you may propose.

Last updated 10/2025