

PMP23242 REV B Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	Package/Reference
1	PCB	1		4MP23242	TDK	Printed Circuit Board	
2	C1, C2	2	0.33uF	CGA5L2X3R1H33M160A	TDK	CAP. CERM. 0.33 uF, 50 V, +/-10%, XGR, AEC-Q200 Grade 0, 1206	1206
3	C3, C22	2	1uF	CGA5E1X7R1E106R08AD	TDK	CAP. CERM. 1 uF, 25 V, +/-10%, X2R, AEC-Q200 Grade 1, 0803	0803
4	C4	1	47uF	EEF-FK10H47P	Panasonic	CAP. AL. 47 uF, 50 V, +/-20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	SMT Radial E
5	C5, C6, C9, C10	4	10uF	C3232XR1H10R2520AB	TDK	CAP. CERM. 10 uF, 50 V, +/-10%, XGR, 1210	1210
6	C7, C11	2	0.1uF	CGA5E1X7R1E106R08AD	TDK	CAP. CERM. 0.1 uF, 25 V, +/-10%, X2R, AEC-Q200 Grade 1, 0803	0803
7	C8	1	100uF	EEF-FK1101P	Panasonic	CAP. AL. 100 uF, 63 V, +/-20%, 0.35 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
8	C12, C13, C16, C17	4	47uF	GCM32CET1A476K02K	Murata	Ceramic Capacitor for Automotive 47uF +/-10% 10VDC X7S 1210	1210
9	C14, C19	2	2.2uF	GRM18BR11A222KE15J	MuRata	Empoosic TR	
10	C15	1	0.1uF	CGA5E1X7R1E106R08AD	TDK	CAP. CERM. 0.1 uF, 25 V, +/-10%, X2R, AEC-Q200 Grade 1, 0402	0402
11	C18	1	0.1uF	EEF-FC10H01P	Panasonic	CAP. AL. 0.1 uF, 10 V, +/-20%, AEC-Q200 Grade 3, SMD	0402
12	C20, C21, C30, C38, C43, C91, C93, C94, C95, C98, C99, C101, C102	13	0.1uF	CGA02C10K4RACAUTO	Kemet	CAP. CERM. 0.1 uF, 16 V, +/-10%, XPR, AEC-Q200 Grade 1, 0402	0402
13	C23, C24, C27, C28, C29, C44, C45, C48, C49, C50, C83, C84, C88, C89, C90	15		GCM18B070J100ME36D	Murata	Chip Multilayer Ceramic Capacitors for Automotive	0603
14	C25, C32, C36, C46, C90, C93, C95	7	470pF	CGA2B02XR1H471K050BA	TDK	CAP. CERM. 470 pF, 50 V, +/-10%, XTR, AEC-Q200 Grade 1, 0402	0402
15	C35, C39, C47, C92, C98	5	10pF	GCM1555C1H100JA16D	MuRata	CAP. CERM. 10 pF, 50 V, +/-5%, COG/NPO, AEC-Q200 Grade 1, 0402	0402
16	C31, C34, C35, C37	4	2.2uF	GRT156C1A226KE13	MuRata	CAP. CERM. 2.2 uF, 10 V, +/-10%, XTS, AEC-Q200 Grade 1, 0402	0402
17	C33, C40, C68, C74	4	0.47uF	JMK105B74740V1F	Taiyo Yuden	CAP. CERM. 0.47 uF, 6.3 V, +/-10%, XPR, 0402	0402
18	C41, C42, C58, C92	4	2.2uF	C1603XR1A222K090AC	TDK	CAP. CERM. 2.2 uF, 10 V, +/-10%, XTR, 0603	0603
19	C52	1	220pF	GCM1555R1H222KA10D	MuRata	CAP. CERM. 220 pF, 50 V, +/-10%, XTR, AEC-Q200 Grade 1, 0402	0402
20	C56	1	0.47uF	GRM18BR11A472KE15J	MuRata	CAP. CERM. 0.47 uF, 16 V, +/-10%, XTR, 0803	0803
21	C58, C61	2	10uF	GCM21BR71A10K6E2L	MuRata	CAP. CERM. 10 uF, 10 V, +/-10%, XTR, 0805	0805
22	C60, C70, C75, C76	4	20pF	GCM31CR71A22K6E2L	MuRata	CAP. CERM. 22 pF, 10 V, +/-10%, XTR, AEC-Q200 Grade 1, 1206	1206
23	C71, C72, C73, C77, C78, C79	6	100uF	GRT32ER60J1071ME13L	MuRata	CAP. CERM. 100 uF, 6.3 V, +/-20%, XGR, AEC-Q200 Grade 3, 1210	1210
24	C81	1	6800pF	GCM1555R71H682KA5D	MuRata	CAP. CERM. 6800 pF, 50 V, +/-10%, XTR, 0402	0402
25	C82	1	33V	CR0505CA-33V	Coiled Inc.	Coiled, 33 V, 33 V, 3300	0402
26	FID1, FID2, FID3	3		NA	NA	Fiducial mark. There is nothing to buy or mount.	NA
27	J1, J2, J20, J22	4		975-8	Keystone	Standard Banana Jack, Unshielded, 6.9mm	Keyston575-B
28	J2, J19	2		TSW-103-07-T-S	Santec	Header, 100mil, 2x1, Tin, TH	0402
29	J4, J7, J10, J12, J14, J15, J27, J29	8		6130031121	Würth Elektronik	Header, 2.54mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
30	J5, J6, J9, J11, J13, J26	6		6.91214E+11	Würth Elektronik	Terminal Block, 2x1, Brass, TH	Terminal Block, 2-Leads Body 10x8.3mm, Pitch 5mm
31	J8, J16	2		6130021121	Würth Elektronik	Header, 2.54mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
32	J17, J18, J30	3		TSW-102-07-T-S	Santec	Header, 2.54mm, 2x1, Tin, TH	Header, 2.54mm, 2x1, TH
33	J21, J25	2		TSW-103-07-T-S	Santec	Header, 2.54mm, 3x1, Tin, TH	Header, 2.54mm, 3x1, TH
34	J23, J24	2		PE0225AAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
35	J28	1		N2510-6002-8B	SM	Header (through-hole), 100mil, 5x2, High-Temperature, Gold, TH	G2 Shrouded Header
36	J31, J32	2		UJL-R-SMT-(101)	Hirose Electric Co. Ltd.	Receptacle, Ultra Miniature Coaxial, Male Pin, 50 ohm, SMT	Ultra small CO-AX SMD
37	L1	1	2.4uH	74432540	Würth Elektronik	Inductor, Shielded Drum Core, Superflux, 2.4 uH, 14 A, 0.0046 ohm, SMD	WE-HC6
38	L2, L3	2	470nH	DFE252012PD-R47M	MuRata Toko	Inductor, Shielded, 470 nH, 4.7 A, 0.021 ohm, SMD	1008
39	L4	1	0.11uH	XGL4020-111MEC	Colcraft	Fixed Inductors XGL4020 High Current 0.11uH with 20%, 29A, DCR 1.7mΩ	SMT_4MM0_4MM0
40	L5	1	80uH	CR0505050	Multicomp	Inductor, Shielded, Metal Composite, 80 uH, 3.1 A, 0.043 ohm, SMD	1.62mm RUBBER_BUMPER
41	MP1, MP2, MP3, MP4	4		2563	Multicomp	Pumper / Feet, Stick On, Pack, Adhesive, 6.4 mm, 12.7 mm, Round, Tipped	
42	Q2	1	80V	DMF7600LPS-13	Dodes Inc.	MOSFET, N-CH, 60 V, 15 A, AEC-Q101, 8-PowerTDFN	8-PowerTDFN
43	Q3	1	80V	CR0505050	Texas Instruments	MOSFET, N-CH, 60 V, 15 A, AEC-Q101, 8-PowerTDFN	8-PowerTDFN
44	R1, R4, R5, R7	4	0	CR05050500020EA	Vishay-Dale	RES, 0.05, 0.1 W, AEC-Q200 Grade 0, 0603	0603
45	R2, R6, R8, R9, R11, R14, R16, R18, R19, R22, R25, R30, R31, R35	14	100k	CR050402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
46	R3	1	51	ERA-3AE8510V	Panasonic	Res Thin Film 0603 51 Ohm 0.1% 1/10W Zippm/C Molded SMD SMD	0603
47	R10, R17	2	80.0k	CR05040280KFKED	Vishay-Dale	Digited Center TR	
48	R12, R20	2	40.2k	CR05040240KFKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
49	R13, R23, R34	3	8.06k	CR05040280KFKED	Vishay-Dale	RES, 8.06 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
50	R18	1	35.7k	CR05040235KFKED	Vishay-Dale	RES, 35.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
51	R20	1	39.2k	CR05040239KFKED	Vishay-Dale	RES, 39.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
52	R26	1	1.30k	CR05040213KFKED	Vishay-Dale	RES, 1.30 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
53	R28	1	6.18k	CR05040261KFKED	Vishay-Dale	RES, 6.18 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
54	R29	1	4.02k	CR05040240KFKED	Vishay-Dale	RES, 4.02 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
55	R33	1	87.0k	ERJ-29KF970X	Panasonic	RES, 87 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
56	R36, R37	2	2.00k	CR05040220KFKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
57	R43	1	300k	CR05040230KFKED	Vishay-Dale	RES, 300 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
58	R44	1	15.0k	CR05040215KFKED	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
59	R51	1	87.0k	RC0402FR-07870	Vyco America	RES, 87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
60	R-G81	1	0.1	PR0-1832-R100-F-T1	Samura Co Ltd	RES, 0.1, 1%, 1 W, 0612	0612
61	R-G81, R29a1, R29a2	2	49.9	CR05040249KFKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
62	R-SG1	1	1	CR0504021R00KFKED	Vishay-Dale	RES, 1.00, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
63	R-SG2	1	10.0k	CR05040210KFKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
64	TP1, TP3, TP5, TP7, TP9, TP11, TP13, TP14	8		5006	Keystone	Test Port, Compact, Black, TH	Black Compact Testpoint
65	TP2, TP4, TP6, TP8, TP10, TP12, TP15	7		5006	Keystone	Test Port, Compact, Black, TH	Black Compact Testpoint
66	U1	1		LM74700QDRVRQ1	Texas Instruments	Low IQ Always ON Smart Diode Controller, DRV0006A (SOT-23-6)	DRV0006A
67	U2	1		LM1482QDRVRQ1	Texas Instruments	LM1482QDRVRQ1, 0.9A/0.1A/1.0A/1.0A/1.0A	DRV0006A
68	U3, U6	2		DRV0006A	Texas Instruments	2.7V to 6V Adjustable Frequency Step-Down Converter in SOT23-6 Package	FCST01B
69	U4	1		LP81201ADRVRQ1	Texas Instruments	Automotive 500-mA Low-Noise, Low-IQ LDO, DRV0006A (WSON-8)	DRV0006A
70	U5	1		TPS74501PQDRVRQ1	Texas Instruments	500-mA LDO With Power-Good in Small Wettable Flank WSON Package, DRB0000UJ (VSON-8)	DRB0000UJ
71	U7	1		TPS3806EG3DRVRQ1	Texas Instruments	Low-Quiescent-Current, Programmable-Delay Supervisory Circuit for Automotive	SOT-23-6
72	U8	1			Texas Instruments	Automotive Catalog Dual 2-Input Positive-AND Gate, DCT0008A, LARGE T&R	DCT0008A
73	U9	1		SN74LVCG3QDRVRQ1	Texas Instruments	Automotive Catalog Single 2-Input Positive-OR Gate, DRV0005A (SOT-23-5)	DRV0005A
74	U11	1		TPS6211QWRVRQ1	Texas Instruments	2.7V to 6V Input, 6-A/3-A/12-A and 15-A, Stackable, Fast Transient Response, Step-Down Converter	VGFNF-CRFL-16
75	U12	1		TPS628501QDRLRQ1	Texas Instruments	2.7V to 6V Adjustable-Frequency Step-Down Converter in SOT23-6 Package	FCST01B
76	C92	0	10uF	LMJ1250R7100R0MH	Taiyo Yuden	CAP. CERM. 10 uF, 50 V, +/-10%, XTR, AEC-Q200 Grade 1, 1210	1210
77	C93	0	22uF	GCM31CR71A22K6E2L	MuRata	CAP. CERM. 22 uF, 10 V, +/-10%, XTR, AEC-Q200 Grade 1, 1206	1206
78	C94, C96, C97, C98, C99, C100, C101	0	4700pF	GCM1555R71H472KA37D	MuRata	CAP. CERM. 4700 pF, 50 V, +/-10%, XTR, AEC-Q200 Grade 1, 0402	0402
79	C95	0	2.2uF	C1603XR1A222K090AC	TDK	CAP. CERM. 2.2 uF, 10 V, +/-10%, XTR, 0603	0603
80	J33	0		6130021121	Würth Elektronik	Header, 2.54mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
81	J34, J35, J36	0		6130031121	Würth Elektronik	Header, 2.54mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
82	J37	0		N2510-6002-8B	SM	Header (through-hole), 100mil, 5x2, High-Temperature, Gold, TH	8x2 Shrouded Header
83	Q1	0	80V	DMF7600LPS-13	Dodes Inc.	MOSFET, N-CH, 60 V, 17.8 A, AEC-Q101, 8-PowerTDFN	8-PowerTDFN
84	Q27	0	100k	CR050402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
85	Q	0	0	CR05040200020EA	Vishay-Dale	RES, 0.05, 0.1 W, AEC-Q200 Grade 0, 0603	0603
86	Q38	0	10.0k	CR05040210KFKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
87	Q39	0	10.0k	RC0402FR-0710K	Vyco America	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
88	Q40	0	18.2k	CR05040218KFKED	Vishay-Dale	RES, 18.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
89	Q41, Q42	0	2.00k	CR05040220KFKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
90	TP16	0		5006	Keystone	Test Port, Compact, Red, TH	Black Compact Testpoint
91	TP17	0		5006	Keystone	Test Port, Compact, Black, TH	Black Compact Testpoint
92	U13	0		TPS7B8150QDRVRQ1	Texas Instruments	150-mA High-Voltage Ultralow-IQ Low-Dropout Regulator, DRV0006A (VSON-8)	DRV0006A
93	U14	0		TPS3800URTERQ1	Texas Instruments	ASL-D Multichannel Overvoltage and Undervoltage I2C Programmable Voltage Supervisor and Monitor	WQFN16

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