

PMP41158 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		PMP41158	Any	Printed Circuit Board	
2	C1, C2, C3, C4, C9, C12, C17, C18, C49, C50, C51, C52, C57, C60, C65, C66, C77, C78, C79, C80	20	0.01uF	CGA3E2X7R2A103K080AA	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C5, C6, C7, C8, C10, C11, C13, C14, C15, C16, C20, C21, C53, C54, C55, C56, C58, C59, C61, C62, C63, C64	22	10uF	CGA6P3X7S1H106K250AE	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
4	C19, C83	2	0.1uF	GCM21BR72A104KA37L	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
5	C22, C23, C24, C25	4	2.2uF	CGA4J3X7R1H225K125AE	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
6	C26	1	330uF	EEV-FK1H331Q	Panasonic	CAP, AL, 330 uF, 50 V, +/- 20%, 0.12 ohm, AEC-Q200 Grade 2, SMD	SMT Radial H13
7	C27, C28, C29, C32, C33, C34, C67, C68, C69, C72, C73, C74, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103	32	47uF	CGA6P1X7S1A476M250AC	TDK	CAP, CERM, 47 uF, 10 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
8	C30, C31, C37, C38, C45, C46, C70, C71	8	0.1uF	GCM188R71E104KA57D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
9	C35, C36, C75, C76	4	10pF	GCM1885C2A100JA16D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
10	C39, C40	2	4.7uF	GRT188C71C475KE13D	Murata	AEC-Q200 Compliant Chip Multilayer Ceramic Capacitor for Infotainment 4.7uF +/-10% 16V X7S SMD 0603	0603
11	C41, C44	2	1uF	GCM188R71C105KA64J	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	C42, C43, C47, C81	4	0.1uF	HMK107B104KAHT	Taiyo Yuden	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
13	C48	1	2200pF	CGA3E2X7R2A222K080AA	TDK	CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
14	C82	1	33pF	CGA3E2NP01H330J080AA	TDK	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
15	C108, C109, C110, C111	4	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
16	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Phillips panhead	Screw
17	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
18	J1	1		S-146261-1	TE Connectivity	Header, 100mil, 2x1, Gold, TH	Header, 2x1, 100mil
19	J2, J3	2		MMCX-J-P-H-ST-TH1	Samtec	Connector, MMCX 50 ohm, TH	Connector, MMCX, TH
20	J4, J5	2		TS-108-G-AA	Samtec	Header, 2.54mm, 8x1, Gold, TH	Header, 2.54mm, 8x1, TH
21	L1	1	220nH	SRP1245A-R22M	Bourns	Inductor, Wirewound, 220 nH, 52 A, 0.0005 ohm, AEC-Q200 Grade 0, SMD	13.5x12.5mm
22	L2, L3, L4, L5	4	1.5uH	784373680015	WURTH	Power Choke Coil type 1.5uH 20% 4.2mOhm 24.8A	SMT2_10MM85_10M M0
23	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
24	Q1, Q2, Q3, Q4, Q6, Q6, Q7, Q8	8	40V	IPC50N04S5L5R5ATMA1	Infineon Technologies	MOSFET, N-CH, 40 V, 50 A, AEC-Q101, SON-8	SON-8
25	Q9	1	25V	CSD16556Q5B	Texas Instruments	MOSFET, N-CH, 25 V, 40 A, DNK0008A (VSON-CLIP-8)	DNK0008A
26	R1, R10, R11, R15, R16, R35	6	0	RC0603FR-100RL	Yageo	0 Ohms Jumper Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film	0603
27	R2, R13	2	75.0k	CRCW060375K0FKEA	Vishay-Dale	RES, 75.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
28	R3, R50	2	16.2k	CRCW060316K2FKEA	Vishay-Dale	RES, 16.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R4, R5, R40, R41	4	3m	KRL6432E-M-R003-F-T1	Susumu	3 mOhms +/-1% 3W Chip Resistor Wide 2512 (6432 Metric), 1225 Automotive AEC-Q200, Current Sense Metal Foil	2512
30	R6, R7, R42, R43	4	249	CRCW0603249FKEA	Vishay-Dale	RES, 249, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
31	R8, R9, R23, R24	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
32	R12	1	1.54	CRCW06031R54FKEA	Vishay-Dale	RES, 1.54, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R14	1	18k	CRCW060318K0JNEA	Vishay-Dale	RES, 18 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
34	R17	1	41.2k	CRCW060341K2FKEA	Vishay-Dale	RES, 41.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
35	R18, R34	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
36	R19, R21	2	57.6k	CRCW060357K6FKEA	Vishay-Dale	RES, 57.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R20	1	90.9k	CRCW060390K9FKEA	Vishay-Dale	RES, 90.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R22, R25, R26, R27, R28, R29	6	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
39	R30, R31, R32, R33	4	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R46	1	10.0k	TNPW060310K0BEEA	Vishay-Dale	RES, 10.0 k, 0.1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
41	R47, R48	2	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
42	R49	1	0.01	CRA2512-FZ-R010ELF	Bourns	RES, 0.01, 1%, 3 W, 2512	2512
43	T1, T2, T3, T4	4		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
44	U1, U2	2		LM5137FQQRHARQ1	Texas Instruments	Automotive, 4-V to 80-V, Functional Safety-Compliant, Dual Synchronous Buck Controller With Low IQ	VQFN96
45	C104, C105, C106, C107	0	150uF	EEE-FK1A151P	Panasonic	CAP, AL, 150 uF, 10 V, +/- 20%, 0.36 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
46	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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