

PMP30670 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C6, C8, C10, C11, C19, C26, C33, C34, C61, C62, C63	12	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
C2, C3, C4, C5	4	22uF	GCM31CR71A226KE02	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C7, C58	2	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
C9	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C12	1	47uF	EEE-FK1H470XP	Panasonic	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D8
C13, C14, C17, C27, C28, C29, C30, C31, C32	9	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C15	1		EEVTG1H221Q	Panasonic Electronic Compon	Cap Aluminum Lytic 220uF 50V 20% (12.5 X 13.5mm) SMD 0.23 Ohm 600mA 2000h 125C T/R	RADIAL
C16	1	0.22uF	GRM155R71C224KA12D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	0402
C18	1	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
C20, C21	2	22uF	GRM32ER71A226ME20L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, 1210	1210
C22	1	22pF	GRM1555C1H220FA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
C23	1	1uF	GRM21BR71A105KA01L	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7R, 0805	0805
C24, C25	2	100uF	EEH-ZC1H101P	Panasonic	CAP, Polymer Hybrid, 100 uF, 50 V, +/- 20%, 0.028 ohm, AEC-Q200 Grade 1, D10xL10.2mm SMD	D10xL10.2mm
C35, C36	2	47uF	GRM32ER71A476ME15L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 20%, X7R, 1210	1210
C37, C41	2		HHXB160ARA471MJA0G	United Chemi-Con	Cap Aluminum Polymer 470uF 16VDC 20% (10 X 10mm) SMD 0.018 Ohm 2600mA 5000h 105C Automotive T/R	RADIAL
C38, C39	2	10uF	GRM32DR71A106MA01L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 1210	1210
C40, C42	0	2200pF	GRM21AR72E222KW01D	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 10%, X7R, 0805	0805
C43	1	0.47uF	GRM188R71A474KA61D	MuRata	CAP, CERM, 0.47 uF, 10 V, +/- 10%, X7R, 0603	0603
C44, C45, C46	3	2.2uF	GRM188Z71C225KE43	MuRata	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
C47, C48	2	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
C49, C50	2	2200pF	GRM155R72A222KA01D	MuRata	CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, 0402	0402
C51	1	33pF	GRM1555C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C52	1	0.033uF	GRM155R71A333KA01D	MuRata	CAP, CERM, 0.033 uF, 10 V, +/- 10%, X7R, 0402	0402
C53	1	0.068uF	GRM155R71A683KA01D	MuRata	CAP, CERM, 0.068 uF, 10 V, +/- 10%, X7R, 0402	0402
C54	1	0.33uF	GRM188R71A334KA61D	MuRata	CAP, CERM, 0.33 uF, 10 V, +/- 10%, X7R, 0603	0603
C55	1	150pF	GRM1555C1H151JA01D	MuRata	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C56	1	0.022uF	GRM155R71C223KA01D	MuRata	CAP, CERM, 0.022 uF, 16 V, +/- 10%, X7R, 0402	0402
C57	1	0.033uF	GRM155R71C333KA01D	MuRata	CAP, CERM, 0.033 uF, 16 V, +/- 10%, X7R, 0402	0402
C59	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C60	1	22uF	GRM32ER71C226ME18L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 20%, X7R, 1210	1210
C64	1	4.7uF	GRM21BR71A475KA73L	MuRata	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X7R, 0805	0805
C101	1	330pF	GRM188R72E331KW07D	MuRata	CAP, CERM, 330 pF, 250 V, +/- 10%, X7R, 0603	0603
D1	1	33V	SMBJ33CA-13-F	Diodes Inc.	Diode, TVS, Bi, 33 V, SMB	SMB
D2, D3	2	60V	PMEG6010CEH,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-123F	SOD-123F
D4	1	100V	1N4148WFL-G3-08	Vishay-Semiconductor	Diode, Switching, 100 V, 0.15 A, SOD-123FL	SOD-123FL
J1, J2, J7, J8, J11, J12, J13, J14	8		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
J3, J6, J9, J10	4		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
J4	1		973 582-101	Hirschmann	TEST SOCKET, PCB, 4MM, RED	21x10.5x7.5 mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J5	1		973 582-100	Hirschmann	TEST SOCKET, PCB, 4MM, BLACK	21x10.5x7.5 mm
J15	1		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
J16	1		TSW-108-07-G-D	Samtec	Header, 100mil, 8x2, Gold, TH	8x2 Header
J17	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J18	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
L1	1	200nH	XPL2010-201MLB	Coilcraft	Inductor, Shielded, Composite, 200 nH, 2.8 A, 0.02 ohm, SMD	XPL2010
L2	1	560nH	XEL4020-561MEB	Coilcraft	Inductor, Shielded, Composite, 560 nH, 11.3 A, 0.008 ohm, AEC-Q200 Grade 1, SMD	
L3	1	4.7uH	XAL1060-472MEB	Coilcraft	Inductor, Shielded, Composite, 4.7 uH, 14 A, 0.0098 ohm, AEC-Q200 Grade 1, SMD	Inductor, 10x6x11.3mm
L4	1	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 9.2 A, 0.01 ohm, AEC-Q200 Grade 1, SMD	5.3x31.x5.5mm
L5	1	10uH	XAL6060-103MEB	Coilcraft	Inductor, Shielded, Composite, 10 uH, 7 A, 0.02982 ohm, AEC-Q200 Grade 1, SMD	IND_6.4x6.1x6.6
L6	1	1.5uH	XAL1010-152MEB	Coilcraft	Inductor, Shielded, Composite, 1.5 uH, 36.6 A, 0.0016 ohm, SMD	Inductor, 11.3x10x10mm
Q1, Q2	2	60V	SQJA60EP	Vishay-Siliconix	MOSFET, N-CH, 60 V, 30 A, AEC-Q101, PowerPAK_SO-8L	PowerPAK_SO-8L
Q3, Q4, Q5, Q6, Q7, Q8	6	40V	IPZ40N04S5L4R8ATMA1	Infineon Technologies	MOSFET, N-CH, 40 V, 40 A, AEC-Q101, SON-8	SON-8
Q9	1	40V	BSC093N04LS G	Infineon Technologies	MOSFET, N-CH, 40 V, 49 A, PG-TDSON-8	PG-TDSON-8
R1	0	0	ERJ-8GEY0R00V	Panasonic	RES, 0, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R2, R7, R26, R27, R31, R32	6	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3	1	39.2k	CRCW060339K2FKEA	Vishay-Dale	RES, 39.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4	1	9.09k	CRCW06039K09FKEA	Vishay-Dale	RES, 9.09 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R5	1	47.0k	CRCW060347K0FKEA	Vishay-Dale	RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R6	1	0.12	ERJ-3RSFR12V	Panasonic	RES, 0.12, 1%, 0.1 W, 0603	0603
R8	1	46.4k	CRCW060346K4FKEA	Vishay-Dale	RES, 46.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R9	1	7.68k	CRCW06037K68FKEA	Vishay-Dale	RES, 7.68 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R10, R37, R38	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R11	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R12	1	0.013	PRL1632-R013-F-T1	Susumu Co Ltd	RES, 0.013, 1%, 1 W, 0612	0612
R13, R15	2	0.005	CSNL2010FT5L00	Stackpole Electronics Inc	RES, 0.005, 1%, 1.5 W, 2010	2010
R14	0	1.0	CRCW08051R00JNEA	Vishay-Dale	RES, 1.0, 5%, 0.125 W, 0805	0805
R16	0	1.00	CRCW12061R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R17	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R18, R21, R23, R24, R25, R28, R29, R30	8	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
R19, R20, R101	3	2.00	CRCW06032R00FKEA	Vishay-Dale	RES, 2.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R22	1	3.01	CRCW06033R01FKEA	Vishay-Dale	RES, 3.01, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R33	1	73.2k	CRCW060373K2FKEA	Vishay-Dale	RES, 73.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R34	1	45.3k	CRCW060345K3FKEA	Vishay-Dale	RES, 45.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R35	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R36	1	18.2k	CRCW060318K2FKEA	Vishay-Dale	RES, 18.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R39	1	54.9k	CRCW060354K9FKEA	Vishay-Dale	RES, 54.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R40	1	0.01	OAR3R010FLF	TT Electronics/IRC	RES, 0.01, 1%, 3 W, 15.2x1.0x25.4	15.2x1.0x25.4
R41, R42, R43, R44, R45, R46, R47, R48, R49, R50	10	3.3	CRCW25123R30JNEG	Vishay-Dale	RES, 3.3, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R51, R52	2	12.1	CRCW251212R1FKEG	Vishay-Dale	RES, 12.1, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512
R53, R54, R55, R56, R57, R58	6	3.9	CRCW25123R90JNEG	Vishay-Dale	RES, 3.9, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R59, R60	2	71.5k	CRCW060371K5FKEA	Vishay-Dale	RES, 71.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R61	1	1.0	CRCW06031R00JNEA	Vishay-Dale	RES, 1.0, 5%, 0.1 W, 0603	0603
TP1, TP2, TP6, TP9, TP10, TP15, TP17, TP19, TP20	9		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP3, TP7, TP8, TP11, TP14, TP16, TP18, TP25, TP26	9		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP4, TP12, TP23, TP24	4		5014	Keystone	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
TP5, TP13, TP21, TP22	4		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP27, TP28	2		5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
U1	1		TPS62810QWRWYRQ1	Texas Instruments	Automotive Low Input Voltage, Adjustable-Frequency Step-down Converter, RWY0009A (VQFN-HR-9)	RWY0009A
U2	1		LM74700QDBVRQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A
U3	1		LM63635DQPWPTQ1	Texas Instruments	3.5-V to 36-V, 3.5-A Synchronous Step-Down Voltage Regulator with Spread Spectrum, PWP0016D (TSSOP-16)	PWP0016K
U4	1		LM5143QRWGRQ1	Texas Instruments	3.5-V to 65-V Low IQ, Dual Synchronous Buck DC-DC Controller, RWG0040A (VQFN-40)	RWG0040A
U5	1		LMC555CM/NOPB	Texas Instruments	CMOS Timer, 8-pin Narrow SOIC, Pb-Free	D0008A
U6	1		UCC27517DBVR	Texas Instruments	4A/4A Single Channel High-speed Low-side Gate Driver, DBV0005A (SOT-23-5)	DBV0005A
U7	1		TL750L05CD	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 V Output, 6 to 26 V Input, with Low IQ, 8-pin SOIC (D), 0 to 125 degC, Green (RoHS & no Sb/Br)	D0008A

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