



PMP22083 REV C Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB100	1		PMP22083	Any	Printed Circuit Board	
C100, C108	2	560uF	LGR2D561MELZ45	Nichicon	CAP, AL, 560 uF, 200 V, +/- 20%, TH	D22xL32mm
C106, C111	2	470pF	VY2471K29Y5SS63V7	Vishay-Bccomponents	CAP, CERM, 470pF, 300V, +/-10%, VY2, 5x7.5 mm	5x7.5 mm
C107	1	0.33uF	ECQ-U2A334ML	Panasonic	CAP, Film, 0.33uF, 275V, +/-20%, TH	RCAP, 17.5x17.5x9.5mm
C109	1	2200pF	AY2222M35Y5US63L7	Vishay-Bccomponents	CAP, CERM, 2200 pF, 300 V, +/- 20%, Y5U, AEC-Q200 Grade 1, D9.5xT5mm	D9.5xT5mm
C112, C113, C114, C115, C116, C117	6	0.01uF	B32671L0103J000	TDK	CAP FILM 10000PF 5% 1KVDC RADIAL	13x6mm
C118	1	22pF	VJ1206A220JXGAT5Z	Vishay-Vitramon	CAP, CERM, 22 pF, 1000 V,+/- 5%, C0G/NP0, 1206	1206
C119	1	150pF	GRM31A5C2J151JW01D	MuRata	CAP, CERM, 150 pF, 630 V, +/- 5%, C0G/NP0, 1206	1206
C120, C121, C122, C123, C128, C165, C166, C167, C168	9	4.7uF	UMK316AB7475KL-T	Taiyo Yuden	CAP, CERM, 4.7 uF, 50 V,+/- 10%, X7R, 1206	1206
C124, C125, C126, C127	4	470uF	25SEK470M	Panasonic	CAP ALUM POLY 470UF 20% 25V T/H	
C129	1	1uF	0805YD105KAT2A	AVX	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0805	0805
C130	1	2.2uF	C1206C225K4RACTU	Kemet	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 1206	1206
C131	1	47pF	C0603C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C132	1	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X5R, 0402	0402
C133	1	0.1uF	C1206C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 1206	1206
C134, C135, C139, C140, C141	5	4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X5R, 0603	0603
C137	1	0.033uF	GRM155R61C333KA01D	MuRata	CAP, CERM, 0.033 uF, 16 V,+/- 10%, X5R, 0402	0402
C138	1	22pF	06035A220JAT2A	AVX	CAP, CERM, 22 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
C142	1	0.47uF	C0603C474Z8VACTU	Kemet	CAP, CERM, 0.47 uF, 10 V,+80/-20%, Y5V, 0603	0603
C143	1	2700pF	GRM188R71E272KA01D	MuRata	CAP, CERM, 2700 pF, 25 V,+/- 10%, X7R, 0603	0603
C144	1	47pF	GRM1885C1H470FA01J	MuRata	CAP, CERM, 47 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
C145	1	220pF	GRM188R71H221KA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
C146	1	2.2pF	06035A2R2CAT2A	AVX	CAP, CERM, 2.2 pF, 50 V, +/- 11%, C0G/NP0, 0603	0603
C147, C148, C160	3	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
C149, C150	2	0.1uF	08053C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V,+/- 5%, X7R, 0805	0805
C152	1	0.01uF	C1206C103KARACTU	Kemet	CAP, CERM, 0.01 uF, 250 V,+/- 10%, X7R, 1206	1206
C153	1	100uF	ECA-1EHG101	Panasonic	CAP, AL, 100 uF, 25 V, +/- 20%, TH	D6.3xL11.2mm
C154	1	0.1uF	08053C104KAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	0805
C156	1	0.022uF	GCM155R71H223KA55D	MuRata	CAP, CERM, 0.022 uF, 50 V,+/- 10%, C0G/NP0, 0402	0402
C157	1	0.01uF	885012206040	Wurth Elektronik	CAP, CERM, 0.01 uF, 16 V,+/- 10%, X7R, 0603	0603
C158	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C159	1	47pF	GRM1555C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C161, C162	2	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V,+/- 10%, X7R, 0603	0603
C163	1	18uF	35ZL18MEFC5X7	Rubycon	CAP, AL, 18uF, 35V, +/-20%, TH	RCAP, 5x5mm
C164	1	2.2uF	GRM188R6YA225KA12D	MuRata	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X5R, 0603	0603
CCset, CVset, PSON, Vout	4		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D100	1	420V	GBU8J-BP	Micro Commercial Component	Diode, Switching-Bridge, 420V, 8A, TH	GBU
D101, D105	2	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D102, D106	2	60V	STPS41L60CT	STMicroelectronics	DIODE ARRAY SCHOTTKY 60V TO220AB	TO-220AB
D103	1	12V	MMSZ4699T1G	ON Semiconductor	Diode, Zener, 12 V, 500 mW, SOD-123	SOD-123
D104	1	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D107	1	600V	ES1JAF	Fairchild Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF	SMAF
D108	1	5.1V	MMSZ5231BS-7-F	Diodes Inc.	Diode, Zener, 5.1 V, 200 mW, SOD-323	SOD-323
D109	1	100V	SS110-TP	Micro Commercial Component	Diode, Schottky, 100 V, 1 A, SMA	SMA
D110	1	160V	1SMB5954BT3G	Diodes Inc.	Diode, TVS, Uni, 160V, 3W, SMB	SMB
D111	1	30V	BAT54A-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
D112	1	1.7V	US1M-13-F	Diodes Inc.	Diode, Ultrafast, 1000V, 1A, SMA	SMA
D113	1		BAS20HT1G		DIODE SWITCH 200V 200MA SOD323	SOD-323
F100	1		37216300001	Littelfuse	Fuse, 6.3 A, 250VAC/VDC, TH	TR5 fuse 8.5mm DIA
H100	1		532602B02500G	Aavid	Heatsink, TO-220 Vertical	Heat Sink, TO-220 Vertical
H101, H102, H103	3		513302B02500G	Aavid	HEATSINK TO-220 W/PINS 2" TALL	TH, 2-Leads, Body 34.92x12.7mm, Pin Spacing 25.4mm
J100	1		1-1318301-3	TE Connectivity	Header, 312mil, 3x1, Tin, TH	19.7x10.7 x8.5 mm
J101	1		ED120/4DS	On-Shore Technology	Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block
J102	1		923345-05-C	3M	Jumper Wire, 500mil spacing, Green, pkg of 200	500 mil Jumper Wire
K100	1		G5LE-1-E-36-DC12	Omron	Relay, SPDT (1 Form C), 16A, 12 VDC, TH	21x16mm
L100	1	5mH	744825605	Würth Elektronik	Coupled inductor, 5 mH, 6A, TH	30x35x21mm
L101	1		61219	Payton Planar	30uH & 8A INDUCTOR	SMT_36MM0_34MM0
Q101, Q103	2	650V	IPP60R090CFD7XKSA1	Infineon Technologies	N-Channel 600V 25A (Tc) 125W (Tc) Through Hole PG-TO220-3	TO-220
Q102, Q104	2	20 V	FMMT718TA	Diodes Inc.	Transistor, PNP, 20 V, 1.5 A, SOT-23	SOT-23
Q106	1	-60V	SI2309CDS-T1-E3	Vishay-Siliconix	MOSFET, P-CH, -60 V, -1.6 A, SOT-23	SOT-23
Q107	1	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
R102, R105, R107, R109	4	1.00Meg	CRCW12061M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.25 W, 1206	1206
R106, R108	2	499k	CRCW1206499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.25 W, 1206	1206
R110, R114	2	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R111, R115	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R112, R113	2	150	CRCW1206150RJNEA	Vishay-Dale	RES, 150, 5%, 0.25 W, 1206	1206
R116, R117	2	0.002	PMR50HZPFV2L00	Rohm	RES, 0.002, 1%, 1 W, 2010	2010
R118	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
R119, R120	2	4.75	RC0603FR-074R75L	Yageo America	RES, 4.75, 1%, 0.1 W, 0603	0603
R121	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R122	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R123, R124, R126	3	4.99Meg	CRCW12064M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.25 W, 1206	1206
R125	1	866k	CRCW1206866KFKEA	Vishay-Dale	RES, 866 k, 1%, 0.25 W, 1206	1206
R127	1	1.00k	CRCW12061K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.25 W, 1206	1206
R128	1	20.5	CRCW120620R5FKEA	Vishay-Dale	RES, 20.5, 1%, 0.25 W, 1206	1206
R129	1	40.2	CRCW060340R2FKEA	Vishay-Dale	RES, 40.2, 1%, 0.1 W, 0603	0603
R130	1	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
R131	1	750k	CRCW0603750KFKEA	Vishay-Dale	RES, 750 k, 1%, 0.1 W, 0603	0603
R132	1	249k	CRCW0603249KFKEA	Vishay-Dale	RES, 249 k, 1%, 0.1 W, 0603	0603
R133	1	6.65k	CRCW06036K65FKEA	Vishay-Dale	RES, 6.65 k, 1%, 0.1 W, 0603	0603
R134, R135	2	39.0k	RC0603FR-0739KL	Yageo America	RES, 39.0 k, 1%, 0.1 W, 0603	0603
R136	1	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
R137	1	5.36k	CRCW06035K36FKEA	Vishay-Dale	RES, 5.36 k, 1%, 0.1 W, 0603	0603
R138, R157	2	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R139, R158	2	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R140	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0k ohm, 5%, 0.1W, 0603	0603
R141	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R142	1	49.9	RC1206FR-0749R9L	Yageo America	RES, 49.9, 1%, 0.25 W, 1206	1206
R143	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
R144	1	1.00	RC0603FR-071RL	Yageo America	RES, 1.00 ohm, 1%, 0.1W, 0603	0603
R145, R151, R155	3	18.7k	CRCW060318K7FKEA	Vishay-Dale	RES, 18.7 k, 1%, 0.1 W, 0603	0603
R146	1	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4k ohm, 1%, 0.1W, 0603	0603
R147	1	20.0k	CRCW120620K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.25 W, 1206	1206
R148, R159	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R149	1	2.43k	CRCW06032K43FKEA	Vishay-Dale	RES, 2.43k ohm, 1%, 0.1W, 0603	0603
R150	1	47.5k	ERJ-3EKF4752V	Panasonic	RES, 47.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R152	1	39.0k	ERJ-8ENF3902V	Panasonic	RES, 39.0 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R153	1	16.5k	CRCW060316K5FKEA	Vishay-Dale	RES, 16.5k ohm, 1%, 0.1W, 0603	0603
R154	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R156	1	2.49k	RC0603FR-072K49L	Yageo America	RES, 2.49 k, 1%, 0.1 W, 0603	0603
RT100	1	50 ohm	B59751B0120A070	TDK	Thermistor NTC, 50 ohm, 25%, D12.5xH16.5mm	D12.5xH16.5mm
SGND	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
SGND	3	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
T100	1		61201	Payton Planar	264W SMPS TRANSFORMER	SMT_XFRMR_44MM 0 34MM0
T101	1		RLTI-1352	Renco	800uH DCM Flyback, 15V	PTH_XFRMR_0IN42_0IN48
U102	1		UCC256403	Texas Instruments	Enhanced LLC Resonant Controller with Driver, DDB0014A	DDB0014A
U103	1		INA180A2IDBV	Texas Instruments	Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0005A (SOT-5)	DBV0005A
U104	1		LM324DR	Texas Instruments	Low Power Quad Operational Amplifier, 14-pin Narrow SOIC	
U105	1		VO618A-3	Vishay-Semiconductor	OPTOISOLATOR 5.3KV TRANS 4-DIP	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U106	1		UCC28910DR	Texas Instruments	700V Flyback Switcher with Constant-Voltage Constant-Current and Primary-side Control, D0007A (SOIC-7)	D0007A
U107	1		PC817X4NSZ0F		Opto-Isolator, 1 Channel, TH	DIP-4
C101, C103	0	2.2uF	885012106018	Wurth Elektronik	CAP, CERM, 2.2 µF, 16 V, +/- 20%, X5R, 0603	0603
C102, C104	0	0.1uF	885012206095	Wurth Elektronik	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C105, C110	0	470pF	VY2471K29Y5SS63V7	Vishay-Bccomponents	CAP, CERM, 470pF, 300V, +/-10%, VY2, 5x7.5 mm	5x7.5 mm
C136, C155	0	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0402	0402
C151	0	2.2uF	225CKE450MJM	Illinois Capacitor	CAP, AL, 2.2 µF, 450 V, +/- 20%, 150.71 ohm, TH	D8xL11.5mm
Q100, Q105	0	80V	CSD19505KCS	Texas Instruments	MOSFET, N-CH, 80 V, 150 A, KCS0003B (TO-220-3)	KCS0003B
R100, R101	0	4.99k	CRCW12064K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.25 W, 1206	1206
R103, R104	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
U100, U101	0		UCC24612-2DBVR	Texas Instruments	UCC24612-2DBV, DBV0005A (SOT-23-5)	DBV0005A

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