

PMP10520

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC81	1		Printed Circuit Board		SAT0109	Any	-	-
C1, C25, C54	3	330pF	CAP, CERM, 330pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H331JA01D	MuRata		
C2, C3, C4, C5, C20, C27, C28, C29, C45, C53	10	22uF	CAP, CERM, 22uF, 16V, +/-20%, X5R, 1206	1206	GRM31CR61C226ME15L	MuRata		
C6, C12, C21, C23, C30, C36, C47, C64, C66	9	1uF	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402	GRM155R61A105KE15D	MuRata		
C7, C18, C31, C42, C63	5	4700pF	CAP, CERM, 4700pF, 25V, +/-10%, X7R, 0402	0402	GRM155R71E472KA01D	MuRata		
C8, C32, C34, C49, C52, C58	6	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X5R, 0402	0402	GRM155R61E104KA87D	MuRata		
C9, C10, C33, C35	4	560uF	CAP, TA, 560uF, 2V, +/-20%, 0.003 ohm, SMD	SMD_7.3x1.9x4.3mm	EEF-GX0D561L	Panasonic		
C11, C17	2	47uF	CAP, CERM, 47uF, 16V, +/-10%, X5R, 1210	1210	GRM32ER61C476KE15L	MuRata		
C13, C14, C15, C16, C26, C37, C38, C39, C40, C41, C55, C56, C61, C67, C68, C69	16	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	1210	GRM32ER60J107ME20L	MuRata		
C19, C43	2	4.7uF	CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0603	0603	GRM188R61C475KAAJ	MuRata		
C22, C46	2	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0402	0402	GRM155R71H103KA88D	MuRata		
C24, C48	2	1000pF	CAP, CERM, 1000pF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E102KA01D	MuRata		
C44	1	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	0805	GRM21BR61A226ME44	MuRata		
C50	1	33pF	CAP, CERM, 33pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H330JA01D	MuRata		
C51	1	3300pF	CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402	0402	GRM155R71H332KA01D	MuRata		
C60	1	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X5R, 0603	0603	GRM188R61E104KA01D	MuRata		
C62	1	1500pF	CAP, CERM, 1500pF, 50V, +/-10%, X7R, 0402	0402	GRM155R71H152KA01D	MuRata		
J1	1	BSE-040-01-L-D-A	Connector, F, 80 pin, SMT, Vertical Header, .8 mm pitch	4.158 x 36.00 mm	BSE-040-01-L-D-A	Samtec		
J2	1	MPS-08-7.70-01-L-V	Connector, Powerstrip F, 8 pin	10.16 x 4.755 mm	MPS-08-7.70-01-L-V	Samtec		
L1	1	330nH	Inductor, Shielded Drum Core, Ferrite, 330nH, 27A, 0.00037 ohm, SMD	10.1x6.8x7mm	744308033	Würth Elektronik eiSos		
L2	1	330nH	Inductor, Shielded Drum Core, Ferrite, 330nH, 40A, 0.00032 ohm, SMD	11.3x8.9x11mm	744301033	Würth Elektronik eiSos		
L3	1	2.2uH	Inductor, Shielded Drum Core, Powdered Iron, 2.2uH, 5.8A, 0.0292 ohm, SMD	5.18x3x5.5mm	IHLP2020CZER2R2M01	Vishay-Dale		
Q1, Q2	2	0.2V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor		
R2, R14, R22, R30	4	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R3, R15, R32	3	0.33	RES, 0.33 ohm, 1%, 0.1W, 0603	0603	ERJ-3RQFR33V	Panasonic		
R4	1	20.0k	RES, 20.0k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-203-B-T5	Susumu Co Ltd		
R5, R60, R61	3	100k	RES, 100k ohm, 5%, 0.1W, 0603	0603	CRCW0603100KJNEA	Vishay-Dale		
R7	1	30.0k	RES, 30.0k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-303-B-T5	Susumu Co Ltd		
R10	1	10	RES, 10 ohm, 5%, 0.063W, 0402	0402	CRCW040210R0JNED	Vishay-Dale		
R11, R23, R41, R46	4	38.3k	RES, 38.3k ohm, 1%, 0.063W, 0402	0402	CRCW040238K3FKED	Vishay-Dale		
R16, R19	2	30.1k	RES, 30.1k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-3012-B-T5	Susumu Co Ltd		
R17	1	100k	RES, 100k ohm, 5%, 0.063W, 0402	0402	CRCW0402100KJNED	Vishay-Dale		
R26	1	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R27, R53	2	36.5k	RES, 36.5k ohm, 1%, 0.063W, 0402	0402	CRCW040236K5FKED	Vishay-Dale		
R29	1	8.66k	RES, 8.66k ohm, 1%, 0.063W, 0402	0402	CRCW04028K66FKED	Vishay-Dale		
R31	1	10.0k	RES, 10.0k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-103-B-T5	Susumu Co Ltd		
R33	1	499	RES, 499 ohm, 1%, 0.063W, 0402	0402	CRCW0402499RFKED	Vishay-Dale		
R34, R36	2	100	RES, 100 ohm, 1%, 0.063W, 0402	0402	CRCW0402100RFKED	Vishay-Dale		
R35	1	4.99k	RES, 4.99k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-4991-B-T5	Susumu Co Ltd		
R37, R39, R40	3	10k	RES, 10k ohm, 5%, 0.063W, 0402	0402	CRCW040210K0JNED	Vishay-Dale		
R38	1	10.5k	RES, 10.5k ohm, 1%, 0.063W, 0402	0402	CRCW040210K5FKED	Vishay-Dale		
R42, R47	2	56.2k	RES, 56.2k ohm, 1%, 0.063W, 0402	0402	CRCW040256K2FKED	Vishay-Dale		
R43, R48	2	86.6k	RES, 86.6k ohm, 1%, 0.063W, 0402	0402	CRCW040286K6FKED	Vishay-Dale		
R44, R49	2	133k	RES, 133k ohm, 1%, 0.063W, 0402	0402	CRCW0402133KFKED	Vishay-Dale		
R45	1	17.8k	RES, 17.8k ohm, 1%, 0.063W, 0402	0402	CRCW040217K8FKED	Vishay-Dale		
R50	1	130k	RES, 130k ohm, 1%, 0.063W, 0402	0402	CRCW0402130KFKED	Vishay-Dale		
R51	1	84.5k	RES, 84.5k ohm, 1%, 0.063W, 0402	0402	CRCW040284K5FKED	Vishay-Dale		
R52	1	54.9k	RES, 54.9k ohm, 1%, 0.063W, 0402	0402	CRCW040254K9FKED	Vishay-Dale		
R57	1	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
TP1, TP2, TP4, TP5, TP6, TP8, TP9, TP11, TP12	9	SMT	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature	5015	Keystone		
U1	1		TPS544B20 18V, 20A PMBUS SYNCHRONOUS BUCK CONVERTERS, RVF0040A	RVF0040A	TPS544B20RVF	Texas Instruments		None
U2	1		Power Sequencer, 6-pin SOT-23	MF06A	LM3880MF-1AA	National Semiconductor		
U3	1		3.0-V TO 20-V PMBus SYNCHRONOUS BUCK CONTROLLER, RHL0024A	RHL0024A	TPS40400RHL	Texas Instruments		None
U4, U5	2	TS3A5017RGY	IC, Dual, 14 Ohms SP4T Analog Switch	TVSOP-16	TS3A5017RGY	TI		None
U6	1	25V	MOSFET, N/P-CH, 25V, 20A, 3.4x1.4x3.4mm	3.4x1.4x3.4mm	CSD86330Q3D	Texas Instruments		None

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U7	1		TPS544C20 18V, 30A PMBUS SYNCHRONOUS BUCK CONVERTERS, RVF0040A	RVF0040A	TPS544C20RVF	Texas Instruments		None
C57, C59	0	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	1210	GRM32ER60J107ME20L	MuRata		
C65	0	330pF	CAP, CERM, 330pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H331JA01D	MuRata		
C73	0	1500pF	CAP, CERM, 1500pF, 50V, +/-10%, X7R, 0402	0402	GRM155R71H152KA01D	MuRata		
C74	0	1000pF	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0402	0402	C1005X7R1H102K	TDK		
FID1, FID2, FID3, FID4, FID5, FID6	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
R1, R8, R13, R20, R28, R54	0	49.9	RES, 49.9 ohm, 1%, 0.063W, 0402	0402	CRCW040249R9FKED	Vishay-Dale		
R55	0	100k	RES, 100k ohm, 5%, 0.063W, 0402	0402	CRCW0402100KJNED	Vishay-Dale		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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