

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB200	1		Printed Circuit Board		built on PCB PMP20292 rev A	Any	-	-
BodeTP, PGOOD	2		Test Point, Miniature, White, TH	White Miniature Testpoint	5002	Keystone		
C1, C3, C12, C14	4	1uF	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	0603	C1608X5R1E105K080A C	TDK		
C2, C13	2	1000pF	CAP, CERM, 1000 pF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E102KA01 D	MuRata		
C4, C5, C6, C7, C8, C9, C10, C11	8	22uF	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210	GRM32ER71E226KE15 L	MuRata		
C15, C16	2	0.1uF	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C104KA88 D	MuRata		
C17, C20	2	1500pF	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H152KA01 D	MuRata		
C18, C19	2	1000pF	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0805	0805	C0805C102K1RACTU	Kemet		
C21	1	10pF	CAP, CERM, 10 pF, 50 V, +/- 5%, COG/NP0, 0402	0402	GRM1555C1H100JA01 D	MuRata		
C22, C24, C25, C26	4	4.7uF	CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0603	0603	GRM188R61C475KAAJ	MuRata		
C23, C27	2	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C104KA88 D	MuRata		
C29, C30, C31, C32	4	470uF	CAP, Aluminum Polymer, 470 µF, 2.5 V, +/- 20%, 4.5 ohm, 7.3x1.8x4.3mm SMD	7.3x1.8x4.3mm	EEFSX0E471E4	Panasonic		
C33, C35, C508, C509	4	100uF	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1210	1210	GRM32ER60J107ME20 L	MuRata		
C34, C510, C515	0	DNP	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1210	1210	GRM32ER60J107ME20 L	MuRata		
C36	1	22pF	CAP, CERM, 22 pF, 50 V, +/- 5%, COG/NP0, 0402	0402	GRM1555C1H220JA01 D	MuRata		
C500, C501, C502, C503	4	0.1uF	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402	GRM155R61C104KA88 D	MuRata		
C506	1	1uF	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402	GRM155R61A105KE15 D	MuRata		
C507, C540	2	0.1uF	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E104KA87 D	MuRata		
C511, C512	2	270uF	CAP, Aluminum Polymer, 270 µF, 16 V, +/- 20%, 0.01 ohm, TH	8.0x9.0mm	16SEPC270MX	Panasonic		
D500	1	30V	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323	BAT54WS-7-F	Diodes Inc.		
D501	1	Red	LED, Red, SMD	LED 0805	LTST-C170KRKT	Lite-On		
D502, D503	2	30V	Diode, Schottky, 30 V, 0.5 A, SOD-123	SOD-123	MBR0530T1G	ON Semiconductor		
exc_rtn, GndTP, TP502, TP504	4	Black	Test Point, Miniature, Black, TH	Black Miniature Testpoint	5001	Keystone		
ext_clk, TP501, TP503, TP506, VoutTP	5	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
H200, H201, H202, H203	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply		
H204, H205, H206, H207	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
int_clk_EN, int_clk_sel	2		Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator	PBC02SAAN	Sullins Connector Solutions		
J1	1		Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header	5103308-1	TE Connectivity		
J2	1		Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin	PEC02SAAN	Sullins Connector Solutions		
J502, J541	2		Connector, Ultra-Mini Coaxial, SMD	Ultra small CO-AX SMD	U.FL-R-SMT-1	Hirose Electric Co. Ltd.		
J503, J506	2	90A	Terminal 90A Lug	CB70-14-CY	CB70-14-CY	Panduit		
J507	1		Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block	ED120/4DS	On-Shore Technology		
J510	1		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm	ED555/2DS	On-Shore Technology		
J540	1		Header, 100mil, 2x1, Gold, TH	2x1 Header	TSW-102-07-G-S	Samtec		
L1, L2	2	330nH	Inductor, Ferrite, 330 nH, 32.8 A, 0.00033 ohm, SMD	SMD, 2-Leads, Body 10.2x10mm	VLB10090HT-R33K-B2	TDK	S16100010	Würth Electronics
Q500	1	25V	MOSFET, N-CH, 25 V, 113 A, DualCool SON 5x6mm	DualCool SON 5x6mm	CSD16408Q5C	Texas Instruments		None
Q540	1	25V	MOSFET, N-CH, 25 V, 100 A, SON 5x6mm	SON 5x6mm	CSD16325Q5	Texas Instruments		None
R1, R2, R540	3	1.0	RES, 1.0, 5%, 0.063 W, 0402	0402	CRCW04021R00JNED	Vishay-Dale		
R3, R4, R18	3	0	RES, 0, 5%, 0.063 W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R5	1	1.50k	RES, 1.50 k, 1%, 0.063 W, 0402	0402	CRCW04021K50FKED	Vishay-Dale		
R6, R8, R13, R15, R23, R24, R28, R29, R502, R541	10	10.0k	RES, 10.0 k, 1%, 0.063 W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R7, R27	2	51	RES, 51, 5%, 0.063 W, 0402	0402	CRCW040251R0JNED	Vishay-Dale		
R9	1	20.0k	RES, 20.0 k, 1%, 0.063 W, 0402	0402	CRCW040220K0FKED	Vishay-Dale		
R10, R11	2	1.0	RES, 1.0, 5%, 0.25 W, 1206	1206	CRCW12061R00JNEA	Vishay-Dale		
R14	1	100k	RES, 100 k, 1%, 0.063 W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
R12, R16, R17	0	DNP	DNP	0402	DNP	Vishay-Dale		
R19	1	187k	RES, 187 k, 1%, 0.063 W, 0402	0402	CRCW0402187KFKED	Vishay-Dale		
R20	1	121k	RES, 121 k, 1%, 0.063 W, 0402	0402	CRCW0402121KFKED	Vishay-Dale		
R21, R22	2	47.5k	RES, 47.5 k, 1%, 0.063 W, 0402	0402	CRCW040247K5FKED	Vishay-Dale		
R25, R26	2	51.1k	RES, 51.1 k, 1%, 0.063 W, 0402	0402	CRCW040251K1FKED	Vishay-Dale		
R500, R503	2	8.06k	RES, 8.06 k, 1%, 0.063 W, 0402	0402	CRCW04028K06FKED	Vishay-Dale		
R501	1	200k	RES, 200 k, 1%, 0.063 W, 0402	0402	CRCW0402200KFKED	Vishay-Dale		
R504	1	330	RES, 330, 5%, 0.063 W, 0402	0402	CRCW0402330RJNED	Vishay-Dale		

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R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515	11	0.3	RES, 0.3, 1%, 2 W, 2512	2512	CSRN2512FKR300	Stackpole Electronics Inc		
R527, R543	2	49.9	RES, 49.9, 1%, 0.063 W, 0402	0402	CRCW040249R9FKED	Vishay-Dale		
R528	1	75.0	RES, 75.0, 1%, 0.1 W, 0603	0603	CRCW060375R0FKEA	Vishay-Dale		
R529	1	249	RES, 249, 1%, 0.1 W, 0603	0603	CRCW0603249RFKEA	Vishay-Dale		
R542	1	0.01	RES, 0.01, 1%, 1 W, 2512	2512	ERJ-M1WSF10MU	Panasonic		
TP500, TP505	2		Test Point, Compact, SMT	Testpoint_Keystone_ Compact	5016	Keystone		
U1, U2	2		4.5V-18V, 35A PMBUS STACKABLE SYNCHRONOUS BUCK CONVERTERS, RVF0040A	RVF0040A	TPS546C23RVFR	Texas Instruments	TPS546C23RVFT	Texas Instruments
U501	1		LinCMOS Timer, D0008A	D0008A	TLC555CD	Texas Instruments		Texas Instruments
U502	1		DUAL 4-A PEAK HIGH SPEED LOW- SIDE POWER MOSFET DRIVERS, D0008A	D0008A	UCC27324D	Texas Instruments		Texas Instruments

Notes:

All parts may be substituted with equivalents, except for L1, L2, U1, U2, Q500, Q540, U501, U502. L1 & L2 show two sources, both have been tested with. See Test report.

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