

MP23463.2 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C14	2	0.015uF	PHE426MA150JR05	Kemet	CAP, Film, 0.015 uF, 630 V, +/- 20%, TH	13x4mm
2	C2, C3, C8, C9	4	680uF	EK2M350ELL681M2S5	United Chemi-Con	Cap Aluminum Lytic 680uF 35V 20% (10 X 25mm) Radial 5mm 2250mA	RADIAL
3	C4, C5, C10, C11	4	22uF	GMK325B1226MM-P	Taiyo Yuden	CAP, CERM, 22 uF, 35 V +/- 20%, XSR, 1210	1210
4	C6, C7	2	82uF	450HXW82MEFR10XB0	Rubycon	82 uF 450 V Aluminum Electrolytic Capacitors Radial, Can 2000 Hs @ 105°C	RADIAL
5	C12	1	100pF	06035A101FAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 1%, COG/NP0, 0603	0603
6	C13	1	150pF	GRM31A5C2J151JW01D	MuRata	CAP, CERM, 150 pF, 630 V, +/- 5%, COG/NP0, 1206	1206
7	C15	1	1000pF	C245-E23A-103M4NKA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 20%, E, D75 Term	D7518mm
8	C16	1	1000pF	12061A101JAT2A	AVX	CAP, CERM, 100 pF, 100 V, +/- 5%, COG/NP0, 1206	1206
9	C17, C21	2	1uF	GRM188R71C105KE15D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
10	C18, C22	2	2.2uF	C2012XR7V1225K085AC	TDK	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X7R, 0605	0605
11	C20	1	4.7uF	C3216X7R1E475K085AB	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 1206	1206
12	C23	1	1500pF	C0603C152K5RACU	Kemet	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0603	0603
13	C24	1	3300pF	C0603C332K5RACU	Kemet	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
14	C25	1	150pF	C0603A151JAT2A	AVX	CAP, CERM, 150 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
15	C26	1	0.1uF	GRM31C5C1E104JA01L	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 5%, COG/NP0, 1206	1206
16	C27	1	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
17	C30	1	2200pF	C0603222K5RACU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
18	C31, C34	2	220pF	C0603222K5RACU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
19	C32	1	1000pF	04025C102JAT2A	AVX	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, 0402	0402
20	C35	1	22uF	TMK316BBJ226ML-T	Taiyo Yuden	CAP, CERM, 22 uF, 25 V, +/- 20%, XSR, 1206, 190	1206, 190
21	C36, C37	2	0.022uF	GRM32QR72J223KW01L	MuRata	CAP, CERM, 0.022 uF, 630 V, +/- 10%, X7R, 1210	1210
22	Cr, Hs	2		0312-0-15-15-34-27-10-0	Mill-Max	Pin Receptacle, .032-.046" .075" Dia, Gold, TH	Pin Receptacle
23	D1, D2	2	30V	PMEG30106VWJ	Nexperia	Diode, Schottky, 30 V, 1 A, AEC-Q101 SOD-123	SOD-123
24	D3	1	600V	FAIRCHILD	Fairchild Semiconductor	Diode, Signal, 600 V, 1 A, AEC-Q101, SMAF	SMAF
25	D100	1	10V	BZT52C10T-7	Diodes Inc.	Diode, Zener, 10 V, 300 mW, SOD-523	SOD-523
26	J1, J4	2		ED120/4DS	On-Shore Technology	Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block
27	J2, J3	2		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
28	J5, J6, J7, J8, J9, J10, J11, J12, J20	9		923345-06-C	3M	Jumper Wire, 600mil spacing, Blue, pkg of 150, TH	600 mil Jumper Wire
29	J13	1		923345-04-C	3M	Jumper Wire, 400 mil Spacing, Yellow, Pkg of 200	Jumper Wire, 400 mil Spacing, Yellow, Pkg of 200
30	J14, J17, J18	3		923345-03-C	3M	Jumper Wire, 300mil spacing, Orange, pkg of 200	200 mil Jumper Wire
31	J15	1		923345-10-C	3M	Jumper Wire Pre-Formed for Breadboard 1,000' (25.40mm) 22 AWG 100 per Pkg	JUMPER2
32	J16	1		923345-02-C	3M	Jumper Wire, 200mil spacing, Red, pkg of 200	200 mil Jumper Wire
33	J19	1		923345-05-C	3M	Jumper Wire, 500mil spacing, Green, pkg of 200	500 mil Jumper Wire
34	PGND, TP1, TP2, TP4	4		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
35	Q1, Q2, Q5, Q6	4	80V	BSC052N08N55ATMA1	Infineon Technologies	MOSFET, N-CH, 80 V, 95 A, PG-TDSON-8	PG-TDSON-8
36	Q3, Q7	2	600V	IPP60R099C7KXSA1	Infineon Technologies	MOSFET, N-CH, 600 V, 22 A, TO-220AB	TO-220AB
37	Q4, Q8	2	30 V	BC858C-F-F	Diodes Inc.	Transistor, PNP, 30 V, 0.1 A, SOT-23	SOT-23
38	R1, R3	2	22.1k	RC0603FR-0722R1L	Yageo	RES, 22.1 k, 1%, 0.1 W, 0603	0603
39	R2	1	10.0k	CR0603R-0710K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
40	R4	1	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
41	R5	1	165	RC1206FR-07165RL	Yageo America	RES, 165, 1%, 0.25 W, 1206	1206
42	R6, R9	2	2.00k	RC0603FR-072KL	Yageo	RES, 2.00 k, 1%, 0.1 W, 0603	0603
43	R7	1	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
44	R10	1	0	RC0602JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
45	R11	1	0.00k	RC0603FR-079K09L	Yageo	RES, 0.00 k, 1%, 0.1 W, 0603	0603
46	R12	1	0	RC0605JR-070RL	Yageo America	RES, 0, 5%, 0.125 W, 0805	0805
47	R13	1	2.05k	RC0603FR-072K05L	Yageo	RES, 2.05 k, 1%, 0.1 W, 0603	0603
48	R14	1	147k	RC0603FR-07147KL	Yageo	RES, 147 k, 1%, 0.1 W, 0603	0603
49	R15	1	2.2	ERJ-3RQF2R2V	Panasonic	RES, 2.20, 1%, 0.1 W, 0603	0603
50	R16, R34	2	0	RMCF0603Z0R000	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
51	R17, R19, R25	3		KTR18E2PF3304	Rohm Semiconductor	3.3 Mohms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, High Voltage Thick Film	1206
52	R18	1	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
53	R20	1	33.2k	RC0603FR-0733K2L	Yageo	RES, 33.2 k, 1%, 0.1 W, 0603	0603
54	R24	1	1.40Meg	RC1206FR-071M4L	Yageo America	RES, 1.40 M, 1%, 0.25 W, 1206	1206
55	R26	1	78.7k	RC0603FR-0778K7L	Yageo	RES, 78.7 k, 1%, 0.1 W, 0603	0603
56	R27	1	0	RMCF1206Z0R000	Stackpole Electronics	0Ω ±0.25W 1206 Thick Film Chip Resistor AEC-Q200 compliant	1206
57	R28	1	18.2k	RC0603FR-0718K2L	Yageo	RES, 18.2 k, 1%, 0.1 W, 0603	0603
58	R30	1	470k	B57371V2474J060	TDK	NTC Thermistor 470k 0603 (1608 Metric)	0603
59	R31	1	332k	RC0603FR-0733K2L	Yageo	RES, 332 k, 1%, 0.1 W, 0603	0603
60	R32	1	158k	RC0603FR-07158KRL	Yageo	RES, 158 k, 1%, 0.1 W, 0603	0603
61	R33	1	37.4k	RC0603FR-0737K4L	Yageo	RES, 37.4 k, 1%, 0.1 W, 0603	0603
62	R100, R101, R102, R103, R104, R105, R106, R107	8	3.65k	RC1206FR-073K65L	Yageo America	RES, 3.65 k, 1%, 0.25 W, 1206	1206
63	R108	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
64	T1	1		63204	Payton Planar	Backlight LLC Transformer	PTH_XRMS_80MM0_64MM0
65	TP5, VIN	2		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
66	TP6	1		5013	Keystone Electronics	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
67	TP7	1		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
68	U1, U2	2		UCC24612-2DBVT	Texas Instruments	High-Frequency Multi-Mode Synchronous Rectifier Controller, DBV0005A (SOT-23-5)	DBV0005A
69	U3	1		VO618A-3	Vishay-Semiconductor	Optocoupler, 5.3 kV, 100-200% CTR, SMT	DIP-4 Leads, Body 6.86x4.63mm, Pitch 2.54mm
70	U4	1		UCC256603DDBR	Texas Instruments	750kHz Wide VIN/VOUT Range LLC Controller Optimized for Light Load Efficiency	SOIC14
71	U5	1		TL432AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Bi)	DBZ0003A
72	C19	0	4700pF	C0603C47J1GAC7867	Kemet	CAP, CERM, 4700 pF, 100 V, +/- 5%, COG/NP0, 0603	0603
73	C28, C29	0	10uF	C1206C106J3RACAUTO	Kemet	CAP, CERM, 10 uF, 25 V, +/- 5%, X7R, AEC-Q200 Grade 1, 1206	1206
74	C33	0	1000pF	C1608XR2A102K080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
75	D4	0	15V	MM3Z15VST1G	ON Semiconductor	Diode, Zener, 15 V, 300 mW, SOD-323	SOD-323
76	Q9	0	600V	BSS127S-7	Diodes Inc.	MOSFET, N-CH, 600 V, 0.05 A, SOT-23	SOT-23
77	C10, Q11	0	60 V	TM4M12A0SL1TG	ON Semiconductor	Transistor, NPN, 60 V, 0.4 A, AEC-Q101, SOT-23	SOT-23
78	R8	0	1.21k	RC0603FR-071K21L	Yageo	RES, 1.21 k, 1%, 0.1 W, 0603	0603
79	R21	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
80	R22	0	33.2k	RC0603FR-0733K2L	Yageo	RES, 33.2 k, 1%, 0.1 W, 0603	0603
81	R23	0	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	0603
82	R29	0	2.00k	RC0603FR-072KL	Yageo	RES, 2.00 k, 1%, 0.1 W, 0603	0603
83	TP8	0		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint

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