

Variant: 001
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QR_65W_PD REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	BD1	1	600V	Z4DGP406L-HF	Comchip Technology	Diode, P-N-Bridge, 600 V, 4 A, Z4-D	Z4-D
2	C2, C3, C17	3	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C4, C5	2	39uF	400LXW39MFR12.5X20	Rubycon	CAP, AL, 39 uF, 400 V, +/- 20%, TH	12.5x20mm
4	C6, C6A	2	15uF	400AX15MEFC8X20	Rubycon	CAP, ALUM 15UF 20% 400V RADIAL	D8xL20mm
5	C7	1	100pF	C0603C101J5GAC	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
6	C8	1	0.01uF	VJ1206Y103KXGAT5Z	Vishay-Vitramon	CAP, CERM, 0.01 uF, 1000 V, +/- 10%, X7R, 1206	1206
7	C9	1	1000pF	GRM31BR73A102KW01L	MuRata	CAP, CERM, 1000 pF, 1000 V, +/- 10%, X7R, 1206	1206
8	C10	1	27pF	GRM1885C1H270JA01D	MuRata	CAP, CERM, 27 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
9	C11	1	10uF	CC0805KK5R8BB106	Yageo	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805
10	C12	1	2.2uF	GRM31CR72A225KA73L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1206_190	1206_190
11	C13, C14	2	10uF	C3216X7R1E106K160AE	TDK	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 1206_190	1206_190
12	C15	1	1000pF	C0603C102J5GACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
13	C16	1	470pF	06031C471KAT2A	AVX	CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0603	0603
14	C18	1	680uF	A750KW687M1EAAE016	KEMET	CAP, ALUM POLY 680UF 20% 25V TH	D8xL16mm
15	C19	1	180uF	EEH-ZKE181XUP	Panasonic	CAP, ALUM POLY HYB 180UF 25V SMD	D6.3xL8mm
16	C20, C21, C25, C26	4	1uF	C1608X7R1V105K080AC	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, 0603	0603
17	C22	1	4700pF	CGA2B2X7R1H472K050BA	TDK	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
18	C23, C24	2	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
19	C27	1	1000pF	C0603C102K3GACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 10%, C0G/NP0, 0603	0603
20	C28	1	1uF	GRM155R70J105KA12D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
21	C29, C30, C31, C32	4	0.033uF	CGA2B3X7R1H333K050BB	TDK	CAP, CERM, 0.033 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
22	C33, C34	2	270pF	GRM1555C1H271JA01D	MuRata	CAP, CERM, 270 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
23	CX1	1	0.33uF	8.90324E+11	Würth Elektronik	CAP FILM 0.33UF 10% 275VAC RAD	
24	CY1, CY2	2	1000pF	VJ1808Y102KXEAT5Z	Vishay-Vitramon	CAP, CERM, 1000 pF, 500 V, +/- 10%, X7R, 1808	1808
25	D1, D2	2	1000V	SM4007PL-TP	Micro Commercial Component	Diode, Standard Recovery Rectifier, 1000 V, 1 A, SOD-123FL	SOD-123FL
26	D3	1	600V	DFLR1600-7	Diodes Inc.	Diode, Standard Recovery Rectifier, 600 V, 1 A, PowerDI123	PowerDI123
27	D4, D7	2	75V	1N4148WS	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
28	D5	1	12V	MM3Z12VST1G	ON Semiconductor	Diode, Zener, 12 V, 300 mW, SOD-323	SOD-323
29	D6, D10, D11	3	250V	BAV21WS	Diodes Inc.	Diode, Switching, 250 V, 0.25 A, AEC-Q101, SOD-323	SOD-323
30	D8	1		ES1JLW	Taiwan Semiconductor	Diode Standard 600V 1A Surface Mount SOD-123W	SOD-123
31	D12	1	40V	PMEG4030ER,115	Nexperia	Diode, Schottky, 40 V, 3 A, AEC-Q101, SOD-123W	SOD-123W
32	D13, D14	2	24V	PESD24VL1BA,115	NXP Semiconductor	Diode, TVS, Bi, 24 V, 70 Vc, SOD323	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
33	F1	1		39213150000	Littelfuse	Fuse, 3.15 A, 250VAC/VDC, TH	8x8.5x4mm
34	J1	1		USB4105-GF-A	GCT	Conenctor USB 2.0 Type C Horizontal SMT	CONN_USB
35	Q1	1	100V	BSS169H6327XTSA1	Infineon Technologies	MOSFET, N-CH, Depletion Mode, 100 V, 0.17 A, AEC-Q101, SOT-23	SOT-23
36	Q2	1		EL1018(TA)-VG	Toshiba	Optoisolator Transistor Output 5000Vrms 1 Channel 6-SO	SO-6
37	Q3	1	100V	BSC070N10NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 100 V, 80 A, PG-TDSON-8	PG-TDSON-8
38	Q4	1	40V	NTTFS5C454NLTAG	ON Semiconductor	MOSFET, N-CH, 40 V, 20 A, 8-PowerWDFN	8-PowerWDFN
39	R2	1	1.0k	CRCW12061K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.25 W, 1206	1206
40	R3	1	240	RC0603FR-07240RL	Yageo	RES, 240, 1%, 0.1 W, 0603	0603
41	R5	1	160k	CRCW0603160KFKEA	Vishay-Dale	RES, 160 k, 1%, 0.1 W, 0603	0603
42	R6	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
43	R7	1	390k	CRCW1206390KJNEA	Vishay-Dale	RES, 390 k, 5%, 0.25 W, 1206	1206
44	R8, R9	2	7.5	CRCW12067R50JNEA	Vishay-Dale	RES, 7.5, 5%, 0.25 W, 1206	1206
45	R10, R12	2	1.80k	RC0603FR-071K8L	Yageo	RES, 1.80 k, 1%, 0.1 W, 0603	0603
46	R11	1	330k	RC0603FR-07330KL	Yageo	RES, 330 k, 1%, 0.1 W, 0603	0603
47	R13, R16, R18	3	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603
48	R14	1	39.0k	RC0603FR-0739KL	Yageo	RES, 39.0 k, 1%, 0.1 W, 0603	0603
49	R15	1	470k	CRCW0603470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.1 W, 0603	0603
50	R17	1	12	ERJ-6GEYJ120V	Panasonic	RES, 12, 5%, 0.125 W, 0805	0805
51	R19, R21	2	300	RC0603JR-07300RL	Yageo	RES, 300, 5%, 0.1 W, 0603	0603
52	R20	1	47k	RC0603JR-0747KL	Yageo	RES, 47 k, 5%, 0.1 W, 0603	0603
53	R22, R26	2	2.0k	CRCW04022K00JNED	Vishay-Dale	RES, 2.0 k, 5%, 0.063 W, 0402	0402
54	R23	1	499	CRCW0402499RFKED	Vishay-Dale	RES, 499, 1%, 0.063 W, 0402	0402
55	R24, R25	2	47	MCR01MZPJ470	Rohm	RES, 47, 5%, 0.063 W, 0402	0402
56	R27	1	10k	RC0603JR-0710KL	Yageo	RES, 10 k, 5%, 0.1 W, 0603	0603
57	R28	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
58	R29	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
59	R30	1	0.005	CSR1206-0R005F1	Riedon	RES, 0.005, 1%, 1 W, 1206	1206
60	R31	1	5.1k	CRCW04025K10JNED	Vishay-Dale	RES, 5.1 k, 5%, 0.063 W, 0402	0402
61	R32	1	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
62	R33	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
63	R34	1	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
64	RT1	1	220k	NCP18W1M224E03RB	MuRata	Thermistor NTC, 220k ohm, 3%, 0603	0603
65	U1	1		NCP1342AMAAACD1R2G	onsemi	Converter Offline Flyback Topology 50kHz	SOIC9
66	U2	1		ILMG3624REQ	Texas Instruments	650-V GaN FET With Integrated Driver and Current Sense Emulation	VQFN38
67	U3	1		MP6908AGJ-Z	Monolithic Power Systems	FAST TURN-OFF INTELLIGENT RECTIF	TSOT23-6
68	U4	1		WT6636F	Weltrend	USB PD/QC4/QC4+ Controller	QFN16
69	-, +, L1, N1	0		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
70	CM1, T1	0		Used in BOM report	Used in BOM report		eg: 0603, used in PnP report
71	R4	0	47k	RC0603JR-0747KL	Yageo	RES, 47 k, 5%, 0.1 W, 0603	0603

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