

TIDA-010034 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-010034	Any	Printed Circuit Board	
2	1.1V, 1.1V, 1.5VA, 1.5VA, 1.8VA, 1.8VA, 1.8VD, 1.8VD, 1.35V, 1.35V, 2.8VA, 2.8VA, 3.3V, 3.3VA, 3.3VA, 3.3VD, 5V, 5V, 12V, EARTH, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, GND, Loop, PGND, RSNS, SEQ1_FLAG1, SEQ1_FLAG2, SEQ1_FLAG3, SEQ2_FLAG1, SEQ2_FLAG2, SEQ2_FLAG3, VBIAS, VCC, VLED1, VLED1_FB, VLED2, VLED2_FB, VPD, VSS	56		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
3	+12V_PoE	1	Yellow	150060YS75000	Würth Elektronik	LED, Yellow, SMD	LED_0603
4	C1, C2, C27, C28	4	2200pF	C4532X7R3D222K130KA	TDK	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1812	1812
5	C3, C14	2	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
6	C4	1	10uF	EEE-2AA100UP	Panasonic	CAP, AL, 10 uF, 100 V, +/- 20%, AEC-Q200 Grade 3, SMD	SMT Radial E
7	C5, C6	2	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
8	C7, C8	2	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
9	C10	1	680pF	06031C681KAT2A	AVX	CAP, CERM, 680 pF, 100 V, +/- 10%, X7R, 0603	0603
10	C11, C16	2	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
11	C12, C15, C26	3	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
12	C17	1	100pF	885012005061	Würth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
13	C18	1	0.01uF	06031C103MAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 20%, X7R, 0603	0603
14	C19, C20, C54, C55	4	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
15	C22, C25	2	0.1uF	C1608X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
16	C24	1	2200pF	GRM188R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
17	C29, C30, C38, C39, C46, C50, C76, C137	8	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
18	C31, C40, C47, C51	4	47uF	C2012X5R1A476M125AC	TDK	CAP, CERM, 47 uF, 10 V, +/- 20%, X5R, 0805	0805
19	C32, C138	2	33uF	C3216X5R1E336M160AC	TDK	CAP, CERM, 33 uF, 25 V, +/- 20%, X5R, 1206	1206
20	C33, C35, C41, C44, C48, C52, C83, C84, C139	9	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
21	C34, C36, C42, C45, C49, C53, C80, C85, C88, C91, C94, C95, C128, C140	14	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
22	C37, C141	2	0.082uF	GRM155R71A823KA01D	MuRata	CAP, CERM, 0.082 uF, 10 V, +/- 10%, X7R, 0402	0402
23	C43, C81, C82	3	47uF	GRM32ER61C476ME15L	MuRata	CAP, CERM, 47 uF, 16 V, +/- 20%, X5R, 1210	1210

24	C56, C74, C75, C142	4	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V,+/- 10%, X7R, 0603	0603
25	C57	1	1000pF	GR443QR73D102KW01L	MuRata	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
26	C58, C59, C60, C61	4	0.01uF	GRM188R72A103KA01D	MuRata	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
27	C77, C92	2	10uF	GRM21BR71A106ME51L	MuRata	CAP, CERM, 10 uF, 10 V,+/- 20%, X7R, 0805	0805
28	C78	1	75pF	GRM1555C1H750JA01D	MuRata	CAP, CERM, 75 pF, 50 V,+/- 5%, COG/NP0, 0402	0402
29	C79, C87, C90, C93	4	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 uF, 16 V,+/- 10%, X7R, 0805	0805
30	C86, C89	2	22uF	GRM31CR61C226ME15L	MuRata	CAP, CERM, 22 uF, 16 V,+/- 20%, X5R, 1206	1206
31	C96, C97, C98, C100, C102, C103	6	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 uF, 10 V,+/- 10%, X5R, 0402	0402
32	C99, C101, C129, C130, C131, C132, C133, C134, C135, C136	10	1uF	GRM188R71C105KA12D	MuRata	CAP, CERM, 1 uF, 16 V,+/- 10%, X7R, 0603	0603
33	C125, C126	2	4700pF	1812GC472KAT1A	AVX	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	1812
34	D1	1	60V	PDS360-13	Diodes Inc.	Diode, Schottky, 60 V, 3 A, PowerDI5	PowerDI5
35	D2	1	200V	RF071M2S	Rohm	Diode, Ultrafast, 200 V, 1 A, SOD-123	SOD-123
36	D3, D4, D7	3	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123
37	D8	1	6.8V	MMSZ5235B-7-F	Diodes Inc.	Diode, Zener, 6.8 V, 500 mW, SOD-123	SOD-123
38	D9, D11	2	400V	HD04-T	Diodes Inc.	Diode, Switching-Bridge, 400V, 0.8A, MiniDIP	MiniDIP
39	D10	1	58V	SMAJ58A	Diodes Inc.	Diode, TVS, Uni, 58 V, 400 W, SMA	SMA
40	D14	1	13V	SMAJ13CA	Littelfuse	Diode, TVS, Bi, 13 V, SMA	SMA
41	F1	1		3413.0119.11	Schurter	Fuse, 2 A, 125VAC/VDC, SMD	3.2x1.6mm
42	F2	1		3413.0113.11	Schurter	Fuse, 0.5 A, 125VAC/VDC, SMD	3.2x1.6mm
43	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
44	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
45	J1, J9, J12, J13, J15, J17, J24, J25, J27, J29, J31, J34, J36, J39, J40, J43, J54, J55, J57	19		ED555/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
46	J2	1		PJ-202AH	CUI Inc.	Connector, DC Jack 2.1X5.5 mm, TH	Conn, DC Jack, pin 2mm Dia.
47	J3	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
48	J4, J6, J7, J10, J11, J14, J16, J22, J23, J26, J28, J30, J32, J33, J35, J37, J38, J41, J42, J56, J58, J59	22		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
49	J8, J60	2		GRPBO52VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
50	J18	1		1-406541-1	TE Connectivity	RJ-45, No LED, tab up, R/A, TH	16.26x14.54x15.75
51	L1	1	3.3uH	ME3220-332MLB	Coilcraft	Inductor, Drum Core, Ferrite, 3.3 uH, 1.6 A, 0.14 ohm, SMD	ME3220
52	L2, L4	2	220 ohm	BLM18SG221TN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2.5 A, 0603	0603
53	L5	1	4.7uH	LQH5BPN4R7N38L	MuRata	Inductor, Wirewound, Ferrite, 4.7 uH, 3.5 A, 0.0312 ohm, SMD	4.9x4.9x4.3mm
54	L6	1	150uH	LPS8045B-154MRB	Coilcraft	Inductor, Shielded, Ferrite, 150 uH, 0.95 A, 0.379 ohm, SMD	8x4.5x8mm
55	L7	1	10uH	1255AY-100M=P3	MuRata	Inductor, Shielded, Ferrite, 10 uH, 2.9 A, 0.0564 ohm, SMD	6.3x4.5x6.3mm
56	L8	1	4.7uH	XFL5030-472MEC	Coilcraft	Inductor, Shielded, Composite, 4.7 uH, 2.5 A, 0.022 ohm, AEC-Q200 Grade 1, SMD	5.48x5.28mm
57	L9	1	15uH	SRT8045-153MEB	Coilcraft	Inductor, Shielded, Ferrite, 15 uH, 4 A, 0.048 ohm, AEC-Q200 Grade 1, SMD	8x8.4mm
58	L10	1	2.2uH	XFL5030-222	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 3.5 A, 0.012 ohm, AEC-Q200 Grade 1, SMD	5.48x5.28mm
59	L12, L15	2	330 ohm	BLM18SG331TN1D	MuRata	Ferrite Bead, 330 ohm @ 100 MHz, 1.5 A, 0603	0603
60	L18, L23	2	2.2uH	XEL4030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 6.1 A, 0.0201 ohm, AEC-Q200 Grade 1, SMD	4x4mm
61	L19	1	10uH	SRT8045-103MEB	Coilcraft	Inductor, Shielded, Ferrite, 10 uH, 4.2 A, 0.037 ohm, AEC-Q200 Grade 1, SMD	8x8.4mm
62	L20	1	15uH	1217AS-H-150M=P3	MuRata	Inductor, Shielded, Ferrite, 15 uH, 3.5 A, 0.0528 ohm, SMD	8x8mm
63	L21, L22	2	1uH	XEL4030-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 uH, 9 A, 0.0089 ohm, AEC-Q200 Grade 1, SMD	4x4mm
64	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch

65	Q1	1	60V	2N7002	Fairchild Semiconductor	MOSFET, N-CH, 60 V, 115 A, SOT-23	SOT-23
66	R1	1	39k	CRCW080539K0JNEA	Vishay-Dale	RES, 39k ohm, 5%, 0.125W, 0805	0805
67	R2	1	24	CRCW120624R0JNEA	Vishay-Dale	RES, 24, 5%, 0.25 W, 1206	1206
68	R3	1	10.0	RC0805FR-0710RL	Yageo America	RES, 10.0, 1%, 0.125 W, 0805	0805
69	R4	1	8.06k	CRCW06038K06FKEA	Vishay-Dale	RES, 8.06 k, 1%, 0.1 W, 0603	0603
70	R5	1	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, 0603	0603
71	R6	1	100	CRCW2512100RJNEG	Vishay-Dale	RES, 100, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
72	R7	1	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5 k, 1%, 0.1 W, 0603	0603
73	R8	1	0	MCT06030Z0000ZP500	Vishay/Beyschlag	RES, 0, 5%, 0.125 W, 0603	0603
74	R9, R20	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
75	R10, R11	2	0.91	CRM0805-FX-R910ELF	Bourns	RES, 0.91, 1%, 0.25 W, 0805	0805
76	R12, R15	2	24.9k	CRCW040224K9FKED	Vishay-Dale	RES, 24.9 k, 1%, 0.063 W, 0402	0402
77	R13	1	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
78	R14	1	49.9	RMCF0402F49R9	Stackpole Electronics Inc	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
79	R16	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
80	R17	1	649	CRCW0603649RFKEA	Vishay-Dale	RES, 649, 1%, 0.1 W, 0603	0603
81	R18	1	8.66k	CRCW04028K66FKED	Vishay-Dale	RES, 8.66 k, 1%, 0.063 W, 0402	0402
82	R19	1	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
83	R21	1	6.49k	CRCW04026K49FKED	Vishay-Dale	RES, 6.49 k, 1%, 0.063 W, 0402	0402
84	R22	1	100 ohm	3314J-1-101E	Bourns	3314 - 4 mm Square Trimpot Trimming Potentiometer	5x4.5mm
85	R24	1	237k	CRCW0402237KFKED	Vishay-Dale	RES, 237 k, 1%, 0.063 W, 0402	0402
86	R25	1	20 ohm	3314J-1-200E	Bourns	3314 - 4 mm Square Trimpot Trimming Potentiometer	5x4.5mm
87	R27	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, 0603	0603
88	R28	1	60.4k	CRCW040260K4FKED	Vishay-Dale	RES, 60.4 k, 1%, 0.063 W, 0402	0402
89	R29	1	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
90	R30	1	4.42k	CRCW04024K42FKED	Vishay-Dale	RES, 4.42 k, 1%, 0.063 W, 0402	0402
91	R31, R111, R116, R118	4	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
92	R32, R37, R38, R40, R42	5	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
93	R33, R119	2	910	CRCW0402910RJNED	Vishay-Dale	RES, 910, 5%, 0.063 W, 0402	0402
94	R34	1	7.87	CRCW12067R87FKEA	Vishay-Dale	RES, 7.87, 1%, 0.25 W, 1206	1206
95	R35	1	7.68k	CRCW04027K68FKED	Vishay-Dale	RES, 7.68 k, 1%, 0.063 W, 0402	0402
96	R36	1	56.2k	CRCW040256K2FKED	Vishay-Dale	RES, 56.2 k, 1%, 0.063 W, 0402	0402
97	R39	1	33.2k	CRCW040233K2FKED	Vishay-Dale	RES, 33.2 k, 1%, 0.063 W, 0402	0402
98	R41	1	13.3k	CRCW040213K3FKED	Vishay-Dale	RES, 13.3 k, 1%, 0.063 W, 0402	0402
99	R43, R128	2	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, 0402	0402
100	R44	1	27.4k	CRCW040227K4FKED	Vishay-Dale	RES, 27.4 k, 1%, 0.063 W, 0402	0402
101	R45, R46, R47, R48	4	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0 ohm, 1%, 0.1W, 0603	0603
102	R55	1	510k	CRCW0402510KJNED	Vishay-Dale	RES, 510 k, 5%, 0.063 W, 0402	0402
103	R56	1	442k	CRCW0402442KFKED	Vishay-Dale	RES, 442 k, 1%, 0.063 W, 0402	0402
104	R57, R60, R63	3	100k	CRCW0402100KDHP	Vishay-Dale	RES, 100 k, 0.5%, 0.063 W, 0402	0402
105	R58, R65	2	97.6k	CRCW040297K6FKED	Vishay-Dale	RES, 97.6 k, 1%, 0.063 W, 0402	0402
106	R59	1	13.7k	CRCW040213K7FKED	Vishay-Dale	RES, 13.7 k, 1%, 0.063 W, 0402	0402
107	R61	1	120k	CRCW0402120KFKED	Vishay-Dale	RES, 120 k, 1%, 0.063 W, 0402	0402
108	R62	1	124k	CRCW0402124KFKED	Vishay-Dale	RES, 124 k, 1%, 0.063 W, 0402	0402
109	R64	1	196k	CRCW0402196KFKED	Vishay-Dale	RES, 196 k, 1%, 0.063 W, 0402	0402
110	R66, R67, R68, R113, R114, R115	6	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
111	R101, R102	2	1.00Meg	HVCB2010FKC1M00	Stackpole Electronics Inc	RES, 1.00 M, 1%, 1 W, 2010	2010
112	R120	1	0.1	CSR1206FKR100	Stackpole Electronics Inc	RES, 0.1, 1%, 0.5 W, 1206	1206
113	R121	1	0.033	ERJ-8CWFRO033V	Panasonic	RES, 0.033, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
114	R125, R130	2	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
115	R126	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
116	R127	1	91k	CRCW060391K0JNEA	Vishay-Dale	RES, 91 k, 5%, 0.1 W, 0603	0603
117	R129	1	4.87k	CRCW04024K87FKED	Vishay-Dale	RES, 4.87 k, 1%, 0.063 W, 0402	0402
118	T1	1	150uH	LDT0950-50	Linkcom Manufacturing Co.	Transformer, 150 uH, SMT	14x15.1mm
119	T2	1	350uH	H2019FNLT	Pulse Engineering	Transformer, 350uH, SMT	358x236x500mil
120	U1	1		TPS23755RJJ	Texas Instruments	IEEE 802.3at PoE PD with No-Opto Flyback DC-DC Controller, RJJ0023B (VQFN-23)	RJJ0023B
121	U2	1		TPS2121RUXR	Texas Instruments	2.7V-22V, 4A, 50mohm Priority Power MUX, RUX0012A (VQFN-HR-12)	RUX0012A
122	U3	1		HM-HA2801A	Fairchild Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	Mini Flat Package
123	U4	1		TPS562208DDCR	Texas Instruments	4.5V to 17V Input, 2A Output, Synchronous SWIFT Step-Down Converter, DDC0006A (SOT-23-T-6)	DDC0006A
124	U5, U31	2		TPS54201DDCR	Texas Instruments	4.5V to 28V Input Voltage, Synchronous Buck LED Driver, DDC0006A (SOT-23-T-6)	DDC0006A

125	U6	1		TPS561208DDCR	Texas Instruments	4.5-V to 17-V Input, 2-A Synchronous Step-Down Voltage Regulator, DDC0006A (SOT-6)	DDC0006A
126	U7, U9	2		TPS561201DDCR	Texas Instruments	4.5-V to 17-V Input, 2-A Synchronous Step-Down Voltage Regulator, DDC0006A (SOT-23-T-6)	DDC0006A
127	U8	1		TPS562201DDCR	Texas Instruments	4.5V to 17V Input, 2A Output, Synchronous Step-Down Converter, DDC0006A (SOT-23-T-6)	DDC0006A
128	U13, U17	2		TLV62568DRLR	Texas Instruments	1-A High Efficiency Step-Down Converter in SOT Package, DRL0006A (SOT-OTHER-6)	DRL0006A
129	U14	1		TPS54202HDDCR	Texas Instruments	4.5-V TO 28-V INPUT, 2-A OUTPUT, EMI FRIENDLY SYNCHRONOUS STEP-DOWN CONVERTOR, DDC0006A (SOT-23-T-6)	DDC0006A
130	U15	1		TLV62569ADRLR	Texas Instruments	2-A High Efficiency Synchronous Buck Converter with Forced PWM Feature, DRL0006A (SOT-OTHER-6)	DRL0006A
131	U16	1		TLV62568ADRLR	Texas Instruments	1-A High Efficiency Synchronous Buck Converter with Forced PWM Feature, DRL0006A (SOT-OTHER-6)	DRL0006A
132	U18, U27	2		LM3880MF-1AA/NOPB	Texas Instruments	Power Sequencer, 6-pin SOT-23, Pb-Free	MF06A
133	U19, U26	2		TLV74218PDQNR	Texas Instruments	200-mA, Small Size, Low-Dropout Linear Voltage Regulator, DQN0004A (X2SON-4)	DQN0004A
134	U20, U28	2		TLV74228PDQNR	Texas Instruments	200-mA, Small Size, Low-Dropout Linear Voltage Regulator, DQN0004A (X2SON-4)	DQN0004A
135	U21, U29	2		TLV74233PDQNR	Texas Instruments	200-mA, Small Size, Low-Dropout Linear Voltage Regulator, DQN0004A (X2SON-4)	DQN0004A
136	U22, U30	2		TLV74215PDQNR	Texas Instruments	200-mA, Small Size, Low-Dropout Linear Voltage Regulator, DQN0004A (X2SON-4)	DQN0004A
137	+3.3V, LED0_H, LED0_L, LED2_H, LED2_L	0	Green	QTLP630C4TR	Everlight	LED, Green, SMD	2x1.25mm
138	C9	0	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V,+/- 10%, X7R, 1210	1210
139	C13	0	0.22uF	GRM21AR72A224KAC5L	MuRata	CAP, CERM, 0.22 uF, 100 V,+/- 10%, X7R, 0805	0805
140	C62, C63, C72, C73, C119, C120, C121, C122	0	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
141	C64	0	1uF	GRM188R71C105KE15D	MuRata	CAP, CERM, 1 uF, 16 V,+/- 10%, X7R, 0603	0603
142	C65, C68, C71	0	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V,+/- 20%, X5R, 0603	0603
143	C66, C67	0	2.2uF	GRM188Z71C225KE43	MuRata	CAP, CERM, 2.2 uF, 16 V,+/- 10%, X7R, 0603	0603
144	C69	0	470pF	GRM1555C1E471JA01D	MuRata	CAP, CERM, 470 pF, 25 V, +/- 5%, COG/NP0, 0402	0402
145	C70	0	0.1uF	GCM155R71C104KA55D	MuRata	CAP, CERM, 0.1 uF, 16 V,+/- 10%, X7R, 0402	0402
146	C104	0	1000pF	C1005NP01H102J050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
147	C105, C108	0	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V,+/- 10%, X7R, 0603	0603
148	C106	0	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 uF, 25 V,+/- 10%, X7R, 0603	0603
149	C107	0	4.7uF	C1608X5R1V475K080AC	TDK	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X5R, 0603	0603
150	C109	0	10uF	EMZA350ADA100ME61G	Chemi-Con	CAP, AL, 10 uF, 35 V, +/- 20%, 0.7 ohm, SMD	E61
151	C110, C111, C112, C115, C117	0	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
152	C113, C114	0	10pF	GRM1555C1H100RA01D	MuRata	CAP, CERM, 10 pF, 50 V,+/- 4%, COG/NP0, 0402	0402
153	C116, C118	0	10uF	CL05A106MP8NUB8	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 10 V,+/- 20%, X5R, 0402	0402
154	C123	0	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402
155	C124, C127	0	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V,+/- 5%, COG/NP0, 0402	0402
156	D5	0	30V	B230-13-F	Diodes Inc.	Diode, Schottky, 30 V, 2 A, SMB	SMB
157	D6	0	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123
158	D12	0	20V	SBRO220T5-7-F	Diodes Inc.	Diode, Schottky, 20 V, 0.2 A, SOD-523	SOD-523
159	D13	0	5.5V	D5V0M1U2LP3-7	Diodes Inc.	Diode, TVS, Uni, 5.5 V, 11 Vc, 2-XFDFN	2-XFDFN
160	J5, J20, J48	0		HTSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	Header, 100mil, 3x1, TH
161	J19	0		10118194-0001LF	FCI	Receptacle, USB 2.0, Micro-USB Type B, R/A, SMT	USB-micro B USB 2.0, 0.65mm, 5 Pos, R/A, SMT
162	J44	0		TSW-102-07-G-D	Samtec	Header, 100mil, 2x2, Gold, TH	2x2 Header
163	J45	0		PRPC010DAAN-RC	Sullins Connector Solutions	Header, 2.54mm, 10x2, Gold, TH	Header, 2.54mm, 10x2, TH
164	J47, J50	0		5-1814832-1	TE Connectivity	SMA Straight PCB Socket Die Cast, 50 Ohm, TH	SMA Straight PCB Socket Die Cast, TH
165	J49, J51, J52, J53	0		HTSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
166	L3	0		DLW5BTM102TQ2	MuRata	Coupled inductor, 0.056 ohm, SMD	SMD, 5x5mm
167	L11, L13	0	200uH	ACT45L-201-2P-TL000	TDK	Coupled inductor, 200 uH, A, 4.5 ohm, SMD	4.5x3.2mm
168	L14	0		DLW44SM242SK2L	MuRata	Coupled inductor, 0.105 ohm, SMD	4.2x4.2mm

169	L16, L17	0	1000 ohm	BLM18AG102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.4 A, 0603	0603
170	MCU_LEDs	0	Rg	HSMF-C165	Avago	LED, Rg, SMD	1.6x0.8mm
171	R23, R26	0	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
172	R49, R52, R112, R117	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
173	R50	0	100k	CRCW0402100KDHP	Vishay-Dale	RES, 100 k, 0.5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
174	R51, R95, R97, R99, R122	0	470	CRCW0402470RJNED	Vishay-Dale	RES, 470, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
175	R53	0	165k	CRCW0402165KFKED	Vishay-Dale	RES, 165 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
176	R54	0	33	CRCW040233R0JNED	Vishay-Dale	RES, 33, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
177	R69, R70	0	470	RC0201JR-07470RL	Yageo America	RES, 470, 5%, 0.05 W, 0201	0201
178	R71, R72, R100, R105, R108, R124	0	0	ERJ-1GE0R00C	Panasonic	RES, 0, 5%, 0.05 W, AEC-Q200 Grade 1, 0201	0201
179	R73, R77, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R94	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
180	R74	0	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
181	R75	0	1.40k	CRCW04021K40FKED	Vishay-Dale	RES, 1.40 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
182	R76	0	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
183	R78, R79	0	27	CRCW040227R0JNED	Vishay-Dale	RES, 27, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
184	R91	0	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
185	R92	0	6.49k	CRCW04026K49FKED	Vishay-Dale	RES, 6.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
186	R93	0	2.2k	CRCW02012K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.05 W, 0201	0201
187	R96, R98, R103, R106, R107, R109, R110, R123	0	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
188	R104	0	1.00Meg	RC0402FR-071ML	Yageo America	RES, 1.00 M, 1%, 0.063 W, 0402	0402
189	R131, R132	0	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
190	RESET	0		B3U-1100P	Omron Electronic Components	Switch, SPST-NO, Off-Mom, 12 V, SMD	SMD, 3-Leads, Body 3x2.5mm
191	U10	0		TL5209DR	Texas Instruments	Single Output Low Noise LDO. 500 mA, Adjustable 1.3 to 6.5 V Output, 2.5 to 16 V Input, 8-pin SOIC (D), -40 to 125 degC, Green (RoHS & no Sb/Br)	D0008A
192	U11	0		TPD2EUSB30DRTR	Texas Instruments	ESD Solution for Super-Speed (6 Gbps) USB 3.0 Interface, 2 Channels, -40 to +85 degC, 3-pin SOT (DRT), Green (Rohs & No Sb/Br)	DRT0003A
193	U12	0		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
194	U23	0		MSP430F5529IPN	Texas Instruments	25 MHz Mixed Signal Microcontroller with 128 KB Flash, 8192 B SRAM and 63 GPIOs, -40 to 85 degC, 80-pin QFP (PN), Green (RoHS & no Sb/Br)	PN0080A
195	U24	0		TPD4E05U06DQAR	Texas Instruments	4-Channel Ultra-Low-Capacitance IEC ESD Protection Diode, DQA0010A (USON-10)	DQA0010A
196	U25	0		DP83825IRLLR	Texas Instruments	DP83825IRLLR, RLL0024A (VQFN-24)	RLL0024A
197	XTAL1	0		ECS-250-12-33Q-JES-TR	ECS Inc.	Crystal, 25 MHz, 20 ppm, AEC-Q200 Grade 1, SMD	2.5x3.2mm
198	Y1	0		CSTCR4M00G15L99-R0	MuRata	Resonator, 4 MHz, 1000 ppm, 39 pF, SMD	4.5x1.2x2 mm

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