Variant: 001
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TID #: N/A

XXX### REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		XXX###	Any	Printed Circuit Board	
2	C1, C2	2	0.01uF	C0603H103J3GACTU	Kemet	CAP, CERM, 0.01 uF, 25 V, +/- 5%, C0G/NP0, 0603	0603
3	C3, C4, C5	3	100nF	GRMJN65C1H104GE01J	Murata	0.1 µF ±2% 50V Ceramic Capacitor C0G, NP0 0704 (1810 Metric)	0704
4	C6, C9	2	22µF	GMC21X5R226M35NT	Cal-Chip Electronics	22 µF ±20% 35V Ceramic Capacitor X5R 0805 (2012 Metric)	0805
5	C7, C8, C10, C11, C19, C22, C31, C32	8	0.1uF	06035C104JAT2A	AVX	CAP, CERM, 0.1 µF, 50 V,+/- 5%, X7R, 0603	0603
6	C12, C20	2	1000pF	GRM1885C1E102JA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0603	0603
7	C13, C28	2	270pF	C0603C271J5GACTU	Kemet	CAP, CERM, 270 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
8	C14	1	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	0603
9	C15	1	0.01uF	0402B103K6R3CT	Walsin	CAP, CERM, 0.01 µF, 6.3 V,+/- 10%, X7R, 0402	0402
10	C16	1	0.01uF	GRM155R70J103KA01D	MuRata	CAP, CERM, 0.01 uF, 6.3 V, +/- 10%, X7R, 0402	0402
11	C17	1	470pF	GCM1885C2A471JA16D	Murata Electronics North Am	470pF ±5% 100V Ceramic Capacitor C0G, NP0 0603 (1608 Metric)	0603
12	C18	1	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
13	C21	1	150pF	GRM1885C1H151JA01D	MuRata	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
14	C23, C24, C26, C29	4	100pF	06035A101JAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
15	C25, C30	2	3.3uF	C1608X7S1A335K080AC	TDK	CAP, CERM, 3.3 uF, 10 V, +/- 10%, X7S, 0603	0603
16	C27	1	330pF	GRM1885C1H331JA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
17	C36, C37	2	100nF	AC0805KRX7R8BB104	Yageo	0.1 µF ±10% 25V Ceramic Capacitor X7R 0805 (2012 Metric)	0805
18	J1, J2	2		PPTC031LGBN-RC	Sullins	3 Position Header Connector 0.100" (2.54mm) Through Hole, Right Angle Tin	HDR3
19	J3	1		1729160	Phoenix Contact	Terminal Block, 6x1, 5.08mm, Th	Terminal Block, 6x1, 5.08mm, TH
20	J4, J6, J7, J8, J9, J10	6		HTSW-103-07-F-S	Samtec	Connector Header Through Hole 3 position 0.100" (2.54mm)	HDR3
21	J5	1		6.32723E+11	Wurth	USB-C (USB TYPE-C) USB 3.2 Gen 2 (USB 3.1 Gen 2, Superspeed + (USB 3.1)) Receptacle Connector 24 Position Surface Mount, Right Angle; Through Hole	CONN_USB_8MM74_11MM20
22	L1	1	680nH	MLF1608DR68MTA00	TDK	Ind Power Shielded Multi-Layer 680nH 20% 25MHz 15Q-Factor Ferrite 70mA 0603 Punched Paper T/R	0603
23	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
24	R1	1	100k	ERA-3AEB104V	Panasonic	Res Thin Film 0603 100K Ohm 0.1% 0.1W ±25ppm/°C Molded SMD Punched Carrier T/R	0603
25	R2, R6	2	16.0k	RT0603BRD0716KL	Yageo America	RES, 16.0 k, 0.1%, 0.1 W, 0603	0603
26	R3, R5	2	47.5k	RT0603BRD0747K5L	Yageo America	RES, 47.5 k, 0.1%, 0.1 W, 0603	0603
27	R4	1	8.87k	RT0603BRD078K87L	Yageo America	RES, 8.87 k, 0.1%, 0.1 W, 0603	0603
28	R7	1	50.5k	RT0603BRD0750K5L	Yageo America	RES, 50.5 k, 0.1%, 0.1 W, 0603	0603
29	R8	1	9.88k	RT0603BRD079K88L	Yageo America	RES, 9.88 k, 0.1%, 0.1 W, 0603	0603
30	R9	1	10	MCR01MZPF10R0	Rohm	RES, 10.0, 1%, 0.063 W, 0402	0402
31	R10	1	6.49k	RT0603BRD076K49L	Yageo America	RES, 6.49 k, 0.1%, 0.1 W, 0603	0603
32	R11	1	510	RG1608P-511-B-T5	Susumu Co Ltd	RES, 510, 0.1%, 0.1 W, 0603	0603
33	R12, R28	2	562k	RT0603BRD07562KL	Yageo America	RES, 562 k, 0.1%, 0.1 W, 0603	0603
34	R13, R16, R23	3	221	RG1608P-2210-B-T5	Susumu Co Ltd	RES, 221, 0.1%, 0.1 W, 0603	0603
35	R14, R21	2	5.10k	RG1608P-512-B-T5	Susumu Co Ltd	RES, 5.10 k, 0.1%, 0.1 W, 0603	0603
36	R15	1	402	RC0603FR-07402RL	Yageo	RES, 402, 1%, 0.1 W, 0603	0603
37	R17	1	30.0k	RC0603FR-0730KL	Yageo	RES, 30.0 k, 1%, 0.1 W, 0603	0603
38	R18	1	270k	RG1608P-274-B-T5	Susumu Co Ltd	RES, 270 k, 0.1%, 0.1 W, 0603	0603
39	R19	1	31.6k	RC0603FR-0731K6L	Yageo	RES, 31.6 k, 1%, 0.1 W, 0603	0603
40	R20, R24, R27	3	0	RC0603FR-100RL	Yageo	0 Ohms Jumper Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film	0603
41	R22, R26	2	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
42	R25	1	56.0k	RG1608P-563-B-T5	Susumu Co Ltd	RES, 56.0 k, 0.1%, 0.1 W, 0603	0603
43	R29, R42	2	26.4k	RT0603BRD0726K4L	Yageo America	RES, 26.4 k, 0.1%, 0.1 W, 0603	0603
44	R35	1	294	RT0603BRD07294RL	Yageo America	RES, 294, 0.1%, 0.1 W, 0603	0603
45	R36, R37	2	35.2	RT0603BRD0735R2L	Yageo America	RES, 35.2, 0.1%, 0.1 W, 0603	0603
46	R38	1	30.5	RT0603BRD0730R5L	Yageo America	RES, 30.5, 0.1%, 0.1 W, 0603	0603
47	R39	1	10	RT0603BRD0710RL	Yageo America	RES, 10.0, 0.1%, 0.1 W, 0603	0603
48	R40	1	100	ERA-3AEB101V	Panasonic	RES, 100, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
49	R41	1	470k	RT0603BRD07470KL	Yageo America	RES, 470 k, 0.1%, 0.1 W, 0603	0603
50	SW1	1		76SB06ST	Grayhill	Switch, SPST, Off-On, 6 Pos, 0.15 A, 30 VDC, TH	Body 9.65x17.3mm
51	U1	1		INA333AIDGKT	Texas Instruments	Instrumentation Amplifier 1 Circuit Rail-to-Rail 8-VSSOP	VSSOP8
52	U2	1			Texas Instruments	Switched Capacitor Voltage Converter, 6-pin SOT-23, Pb-Free	DBV0006A
53	U3	1		LOG300RGT	Texas Instruments	80-MHz, Logarithmic Detector With Integrated Low-Noise Amplifier	VQFN16
54	U4, U7	2		TLV9002IDR	Texas Instruments	2-Channel, 1MHz, RRIO, 1.8V to 5.5V Operational Amplifier for Cost-Optimized Systems, D0008A (SOIC-8)	D0008A
55	U5	1		TL081HIDBVR	Texas Instruments	Single, 40-V, 5.25-MHz, 4-mV offset voltage, 20-V/µs, In to V+ op amp with -40°C to 125°C operation	SOT-23-5

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