Variant: 001
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XXX### REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		XXX###	Any	Printed Circuit Board	
2	C1, C4, C10, C12, C15, C17	6	10pF	GCM1885C2A100JA16D	MuRata	CAP, CERM, 10 pF, 100 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
3	C2, C11, C18	3	6800pF	CGA3EANP02A682J080AC	TDK	CAP, CERM, 6800 pF, 100 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
4	C3, C7	2	2.2uF	GRT188R61H225KE13D	MuRata	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
5	C5	1	100nF	885012205018	Wurth Electronics	0.1µF ±10% 10V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
6	C6, C9	2	15pF	GRM1555C1H150JA01D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
7	C8	1	1uF	CGA3E1X7R1E105M080AC	TDK	CAP, CERM, 1 µF, 25 V,+/- 20%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C13, C16, C19, C20, C21, C35	6	0.1uF	CGA3E2X8R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
9	C14, C34	2	10uF	GRM188R61A106KAALD	MuRata	CAP, CERM, 10 µF, 10 V,+/- 10%, X5R, 0603	0603
10	C22, C26, C29, C32, C37, C42	6	0.068uF	GRM31C5C1H683JA01L	MuRata	CAP, CERM, 0.068 uF, 50 V, +/- 5%, C0G/NP0, 1206	1206
11	C23, C44	2	1µF	KAM05CR71A105MH	KYOCERA AVX	1 µF ±20% 10V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
12	C24, C27, C31, C36, C39, C43	6	1uF	GRM155R61E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0402	0402
13	C25, C28	2	0.1uF	C0603X104K3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
14	C30	1	220nF	CGA2B2X7R1C224K050BE	TDK Corporation	Cap Ceramic 220nF 16V X7R 10% Pad SMD 0402 +125°C Automotive T/R	0402
15	C33	1	0.47uF	GRM188R61A474KA61D	MuRata	CAP, CERM, 0.47 uF, 10 V, +/- 10%, X5R, 0603	0603
16	C38	1	10nF	885012205050	Wurth Electronics	10000pF ±10% 25V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
17	C40, C41	2	1uF	CGA3E1X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
18	D1, D2	2	75V	1N4148WT	Fairchild Semiconductor	Diode, Switching, 75 V, 0.3 A, SOD-523F	SOD-523F
19	D3, D4	2	Red	CMD17-21SRC/TR8	Visual Communications Com	LED, Red, SMD	2x1.25mm
20	J1, J9, J10	3		691210910003	Wurth	3 Position Wire to Board Terminal Block Horizontal with Board 0.100" (2.54mm) Through Hole	HDR3
21	J2, J3, J4, J7	4		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
22	J5, J6	2		961102-6404-AR	3M	Header, 2.54mm, 2x1, TH	Header, 2.54mm, 2x1, TH
23	J8	1		FTSH-105-01-L-DV-K	Samtec	Header(Shrouded), 1.27mm, 5x2, Gold, SMT	Header(Shrouded), 1.27mm, 5x2, SMT
24	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
25	R1, R2, R3, R4, R11, R12, R13, R14, R21, R22, R23, R24	12	330k	TNPV1206330KBEEN	Vishay Draloric	RES, 330 k, 0.1%, 1 W, 1206	1206
26	R5, R10, R15, R18, R25, R28	6	1.00k	RT0603DRD071KL	Yageo	RES, 1.00 k, 0.5%, 0.1 W, 0603	0603
27	R6, R7	2	470	RC0402FR-07470RL	Yageo America	RES, 470, 1%, 0.063 W, 0402	0402
28	R8, R16, R26	3		820542711	Wurth Electronics	430 V 4.5 kA Varistor 1 Circuit Through Hole Disc 14mm	RADIAL
29	R9, R17, R27	3	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
30	R19, R20, R45	3	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R29	1	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
32	R30	1	10k	EXB2HV103JV	Panasonic	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 1, Resistor Array - 8x1	Resistor Array - 8x1
33	R31, R37, R39, R43, R46, R50	6	1.00Meg	RMCF0402FT1M00	Stackpole Electronics Inc	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
34	R32, R36	2	100k	RG1005P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.063 W, 0402	0402
35	R33, R34, R40, R41, R47, R48	6	1.00k	ERA-2AEB102X	Panasonic	RES, 1.00 k, 0.1%, 0.063 W, 0402	0402
36	R35, R38, R42, R44, R49, R51	6	301k	CRCW0402301KFKED	Vishay-Dale	RES, 301 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
37	R52, R53	2	10.0k	PCF0402-12-10KBT1	TT Electronics/IRC	RES, 10.0 k, 0.1%, 0.063 W, 0402	0402
38	RS1	1		2-5747706-0	TE Connectivity	Receptacle, D-SUB-9, 2.74mm, Gold, TH	Receptacle, D-SUB-9, 2.74mm, TH
39	SW1, SW2	2		416131160803	Wurth Electronics	Dip Switch SPST 3 Position Surface Mount Slide (Standard) Actuator 25mA 24VDC	SMT_SW_5MM8_4MM98
40	SW3	1		TDA01H0SB1R	C&K Components	Dip Switch SPST 1 Position Surface Mount Slide (Standard) Actuator 25mA 24VDC	SMT_SW_2MM40_6MM20
41	SW4	1		TL1015AF160QG	E-Switch	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	Switch, 4.4x2x2.9 mm
42	U1	1		TPS70933DBVR	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DBV0005A (SOT-23-5)	DBV0005A
43	U2	1				3-V to 5.5-V Multichannel RS-232 Line Driver / Receiver with ±15-kV IEC ESD Protection, -40 to 85 degC, 16-Pin SSOP (DB), Green (RoHS & no Sb/Br)	DB0016A
44	U3	1		TLV4387PWR	Texas Instruments	Quad, ultra-high-precision (10 µV) zero-drift (0.01 µV/°C) low-input-bias-current op amp 14-TSSOP -40 to 125	TSSOP-14
45	U4	1		ISO6731DWR	Texas Instruments		SOIC16
46	U5	1		ADS131M08IPBSR	Texas Instruments	8-Channel, 24-Bit, Simultaneously-Sampling, Delta-Sigma ADC, PBS0032A (TQFP-32)	PBS0032A
47	U6	1		MSPM0G1506SRHB	Texas Instruments	Mixed-Signal Microcontrollers	VQFN32
48	Y1	1		CDC6CE05000CDLE	Texas Instruments	Crystal replacement: Ultra-low Power LVCMOS Oscillator 4-pin, VSON 3.2 x 2.5 x 0.9mm	VSON4

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