Variant: 001
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TID #: TIDA-01471

TIDA-01471 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-01471	Any	Printed Circuit Board	
2	C1, C3, C7, C16, C21, C26, C29, C39	8	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
3	C2, C4, C8, C17, C27, C30	6	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
4	C5, C9, C10, C20, C22, C28	6	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
5	C6, C19	2	2200pF	GRM1885C1H222JA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
6	C11	1	10pF	GRM1885C2A100JA01D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
7	C12	1	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 µF, 25 V, +/- 10%, X7R, 0603	0603
8	C13	1	4700pF	C0603C472J1GAC7867	Kemet	CAP, CERM, 4700 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
9	C14	1	1000pF	C0603C102J5GAC	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
10	C15	1	0.022uF	GRM21B5C1H223JA01L	MuRata	CAP, CERM, 0.022 µF, 50 V, +/- 5%, C0G/NP0, 0805	0805
11	C18	1	5pF	GRM1885C2A5R0CA01D	MuRata	CAP, CERM, 5 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
12	C23, C25	2	0.01uF	GRM1885C1H103JA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 5%, C0G/NP0, 0603	0603
13	C24	1	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210
14	C31, C32, C34, C36, C37, C38	6	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
15	C33	1	100pF	06035A101JAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
16	C35	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0603	0603
17	C40	1	0.022uF	CGA3E2X7R2A223K080AA	TDK	CAP, CERM, 0.022 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
18	C41, C42, C43	3	1000pF	885012206034	Wurth Elektronik	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603	0603
19	C44	1	2pF	C0603C209C5GACTU	Kemet	CAP, CERM, 2 pF, 50 V, +/- 12.5%, C0G/NP0, 0603	0603
20	D1, D2	2	Red	LTST-C190CKT	Lite-On	LED, Red, SMD	Red LED, 1.6x0.8x0.8mm
21	D3	1	30V	BAT54S-E3-08	Vishay-Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
22	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
23	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
24	J1	1		TSW-120-08-L-S-RA-013	Samtec	Header, 100mil, 20x1 minus 13, Gold with Tin Tail, R/A, TH	20x1 R/A Header - Pin 13 removed
25	J2	1		TSW-110-07-G-S	Samtec	Header, 100mil, 10x1, Gold, TH	10x1 Header
26	J3, J4, J7, J8, J9, J10	6		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
27	J5	1		TSW-104-07-L-D	Samtec	Header, 2.54mm, 4x2, Gold, TH	Header, 2.54mm, 4x2, TH
28	J6	1		1-1478035-0	TE Connectivity	Connector, BNC, Jack, 50 ohm, R/A, TH	Connector, BNC, Jack, 50 ohm, R/A, TH
29	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"H x 0.200"W
30	Q1	1	60 V	MMBT2907A	Fairchild Semiconductor	Transistor, PNP, 60 V, 0.8 A, SOT-23	SOT-23
31	Q2	1	-60V	BSP613PH6327XTSA1	Infineon Technologies	MOSFET, P-CH, -60 V, -2.9 A, SOT-223	SOT-223
32	R1, R2, R3, R4, R5	5	499	RT0603BRD07499RL	Yageo America	RES, 499, 0.1%, 0.1 W, 0603	0603
33	R6, R24, R45, R52, R53	5	2.00k	RC0603FR-072KL	Yageo America	RES, 2.00 k, 1%, 0.1 W, 0603	0603
34	R7, R18, R20, R21, R22, R32, R50, R51	8	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.1 W, 0603	0603
35	R8, R13, R15	3	10.0	CRT0603-BY-10R0ELF	Bourns	RES, 10.0, 0.1%, 0.1 W, 0603	0603
36	R9, R64, R68	3	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
37	R10, R11, R16, R17	4	1.00k	RT0603BRD071KL	Yageo America	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603
38	R12, R14, R40, R41	4	15.0	CRCW060315R0FKEA	Vishay-Dale	RES, 15.0, 1%, 0.1 W, 0603	0603
39	R19	1	60.4k	RT0603DRE0760K4L	Yageo America	RES, 60.4 k, 0.5%, 0.1 W, 0603	0603
40	R23, R25, R28, R29, R30, R31, R34, R35, R36, R37, R65	11	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
41	R26	1	820	RC0603JR-07820RL	Yageo America	RES, 820, 5%, 0.1 W, 0603	0603
42	R27	1	15k	CRCW060315K0JNEA	Vishay-Dale	RES, 15 k, 5%, 0.1 W, 0603	0603
43	R33, R60	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
44	R38	1	0.047	ERJ-L03KF47MV	Panasonic	RES, 0.047, 1%, 0.1 W, 0603	0603
45	R39	1	121k	RC0603FR-07121KL	Yageo America	RES, 121 k, 1%, 0.1 W, 0603	0603
46	R42	1	1.47k	RT0603BRD071K47L	Yageo America	RES, 1.47 k, 0.1%, 0.1 W, 0603	0603
47	R43, R44	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
48	R46	1	6.04k	CRCW06036K04FKEA	Vishay-Dale	RES, 6.04 k, 1%, 0.1 W, 0603	0603
49	R47	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
50	R48	1	14.0k	RC0603FR-0714KL	Yageo America	RES, 14.0 k, 1%, 0.1 W, 0603	0603
51	R49	1	1.10Meg	CRCW06031M10FKEA	Vishay-Dale	RES, 1.10 M, 1%, 0.1 W, 0603	0603
52	R54	1	127k	RT0603DRE07127KL	Yageo America	RES, 127 k, 0.5%, 0.1 W, 0603	0603
53	R55	1	63.4k	RT0603DRE0763K4L	Yageo America	RES, 63.4 k, 0.5%, 0.1 W, 0603	0603
54	R56	1	31.6k	RT0603DRE0731K6L	Yageo America	RES, 31.6 k, 0.5%, 0.1 W, 0603	0603
55	R57, R58	2	15.8k	RT0603DRE0715K8L	Yageo America	RES, 15.8 k, 0.5%, 0.1 W, 0603	0603
56	R59	1	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, 0603	0603
57	R61, R63, R66, R67	4	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
58	R62	1	4.99Meg	CRCW06034M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.1 W, 0603	0603
59	SH-J3, SH-J4, SH-J5, SH-J7, SH-J8, SH-J9, SH-J10	7	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
60	TP1, TP2, TP3, TP4	4	Double	1573-2	Keystone	Terminal, Turret, TH, Double	Keystone1573-2
61	TP10, TP12	2	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
62	U1	1		ADS127L01IPBSR	Texas Instruments	24-Bit, 512kSPS, Delta-Sigma ADC, PBS0032A (TQFP-32)	PBS0032A
63	U2	1		THS4551IRGTR	Texas Instruments	Low Noise, Precision, 150MHz, Fully Differential Amplifier, RGT0016C (VQFN-16)	RGT0016C
64	U3	1		SN74HC595PW	Texas Instruments	8-Bit Shift Registers With 3-State Output Registers, PW0016A, TUBE	PW0016A
65	U4	1		REF6025IDGKR	Texas Instruments	High-Precision Voltage Reference with Integrated High-Bandwidth Buffer, DGK0008A (VSSOP-8)	DGK0008A
66	U5	1		DAC5311IDCKR	Texas Instruments	8bit, Single Channel, 80uA, 1.8V-5.5V DAC in SC70 Package, DCK0006A (SOT-SC70-6)	DCK0006A
67	U6	1		TS3A5017RSVR	Texas Instruments	14-Ohm Dual SP4T Analog Switch 3.3-V/2.5-V Analog Multiplexer/Demultiplexer, RSV0016A (UQFN-16)	RSV0016A
68	U7	1		XTR111AIDGQT	Texas Instruments	Precision Voltage-to-Current Converter/Transmitter, DGQ0010D	DGQ0010D
69	U8, U10	2		LMV751M5/NOPB	Texas Instruments	Low Noise, Low Offset, Single CMOS Input Op Amp, DBV0005A	DBV0005A
70	U9	1		LP2901D	Texas Instruments	Quad, Low-Power, General Purpose Differential Comparator, D0014A	D0014A
71	Y1	1		ASEMB-8.000MHZ-LY-T	Abracon Corporation	OSC, 8 MHz, 1.8 - 3.3V, SMD	4-Pin SMD, Body 3.2 x 2.5 mm , Height 0.9 mm
72	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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