

Variant: 001
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TIDA-01527 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01527	Any	Printed Circuit Board	
2	C1, C5	2	18pF	GRM1885C1H180JA01D	MuRata	CAP, CERM, 18 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
3	C2, C6	2	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C3	1	1000pF	GRM1885C1H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
5	C4	1	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
6	C7, C15, C21	3	15pF	GCM1885C1H150JA16D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
7	C8, C9, C10, C11, C12, C20	6	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C13, C14	2	1000pF	GCM1885C2A102JA16D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
9	C16, C17, C18, C19	4	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
10	D1	1	Green	150060GS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
11	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
12	J1	1		GBC07DABN-M30	Sullins Connector Solutions	Header, 2.54mm, 7x2, Gold, Black, SMT	Header, 2.54mm, 7x2, SMT
13	J2	1		MMT-106-02-L-SH	Samtec	Header, 2mm, 6x1, Gold, R/A, SMT	Header, 2mm, 6x1, R/A, SMT
14	Q1, Q2, Q3, Q6, Q7	5	45 V	BC817-25,215	Nexperia	Transistor, NPN, 45 V, 0.5 A, SOT-23	SOT-23
15	Q4, Q5, Q8, Q9	4	45 V	BC807-40LT1G	ON Semiconductor	Transistor, PNP, 45 V, 0.5 A, AEC-Q101, SOT-23	SOT-23
16	Q10	1	50 V	DMC564040R	Panasonic	Transistor, Dual NPN, 50 V, 0.1 A, SOT-363	SOT-363
17	R1	1	12.0k	RC0603FR-0712KL	Yageo America	RES, 12.0 k, 1%, 0.1 W, 0603	0603
18	R2, R3, R12, R13, R19, R23, R27, R28, R35, R37, R39, R46	12	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
19	R4, R14, R16, R25	4	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
20	R5, R9	2	3.90k	RC0603FR-073K9L	Yageo America	RES, 3.90 k, 1%, 0.1 W, 0603	0603
21	R6, R17, R20, R22, R26, R31, R38, R42	8	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
22	R7, R18	2	470k	RC0603FR-07470KL	Yageo America	RES, 470 k, 1%, 0.1 W, 0603	0603
23	R8	1	20.0	RC0603FR-0720RL	Yageo America	RES, 20.0, 1%, 0.1 W, 0603	0603
24	R10	1	15.0k	RC0603FR-0715KL	Yageo America	RES, 15.0 k, 1%, 0.1 W, 0603	0603
25	R11	1	3.00k	RC0603FR-073KL	Yageo America	RES, 3.00 k, 1%, 0.1 W, 0603	0603
26	R15, R21, R24, R32, R43, R50, R51	7	10.0	RC0603FR-0710RL	Yageo America	RES, 10.0, 1%, 0.1 W, 0603	0603
27	R29, R33, R40, R44	4	51.0k	RC0603FR-0751KL	Yageo America	RES, 51.0 k, 1%, 0.1 W, 0603	0603
28	R36, R47	2	62.0k	RC0603FR-0762KL	Yageo America	RES, 62.0 k, 1%, 0.1 W, 0603	0603
29	R48, R49	2	2.20k	RC0603FR-072K2L	Yageo America	RES, 2.20 k, 1%, 0.1 W, 0603	0603
30	U1	1		TLV4171IDR	Texas Instruments	36-V, Single-Supply, EMI-Hardened, Low-Power Operational Amplifiers for Cost-Sensitive Systems, D0014A (SOIC-14)	D0014A
31	U2, U4	2		TLV431BQDBZRQ1	Texas Instruments	Automotive Catalog Low-Voltage Adjustable Precision Shunt Regulator, 15 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
32	U3	1		TLV2171IDR	Texas Instruments	36V, Low Power, RRO, General Purpose Operational Amplifier, D0008A (SOIC-8)	D0008A
33	U5, U6	2		CD4053BPWRG3	Texas Instruments	CMOS Triple 2-Channel Analog Multiplexer/Demultiplexer with Logic-Level Conversion, PW0016A, LARGE T&R	PW0016A
34	R30, R34, R41, R45	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603

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