TIDA-01371 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDA-01371	Any	Printed Circuit Board	
C1, C31, C32	3	10uF	GRM21BR61E106MA73	MuRata	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0805	0805
C2, C11, C12, C13, C22	5	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C3	1	1000pF	GRM21AR72E102KW01D	MuRata	CAP, CERM, 1000 pF, 250 V, +/- 10%, X7R, 0805	0805
C4, C5, C6, C19, C20, C21	6	330uF	EEUED2D331	Panasonic	CAP, AL, 330 µF, 200 V, +/- 20%, 0.07385 ohm, TH	18x40
C7	1	1uF	GRM55DR72E105KW01L	MuRata	CAP, CERM, 1 µF, 250 V, +/- 10%, X7R, 2220	2220
C8, C14, C15	3	10uF	C3216X5R1H106K160AB	TDK	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206	1206
C9, C17	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
C10	1	1uF	C2012X7S2A105K125AB	TDK	CAP, CERM, 1 µF, 100 V, +/- 10%, X7S, 0805	0805
C18	1	330pF	GRM188R72E331KW07D	MuRata	CAP, CERM, 330 pF, 250 V, +/- 10%, X7R, 0603	0603
C24	1	4.7uF	400AX4.7MTA8X9	Rubycon	CAP, AL, 4.7 µF, 400 V, +/- 20%, TH	D8xL9mm
C25, C27	2	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 µF, 100 V, +/- 5%, X7R, 0603	0603
C29	1	2.2uF	GRM188R61H225KE11D	MuRata	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X5R, 0603	0603
C30	1	10uF	ULV2G100MNL1GS	Nichicon	CAP, AL, 10 µF, 400 V, +/- 20%, SMD	D10xL13.5mm
D1, D3, D4	3	12V	MMSZ5242B-7-F	Diodes Inc.	Diode, Zener, 12 V, 500 mW, SOD-123	SOD-123
D2	1	100V	B1100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMA	SMA
D5	1	150V	BAV20WS-TP	Micro Commercial Component	Diode, P-N, 150 V, 0.2 A, SOD-323	SOD-323
D6, D7	2	20V	3SMAJ5932B-TP	Micro Commercial Component	Diode, Zener, 20 V, 3 W, SMA	SMA
D8, D9	2	36V	CDSOD323-T36S	Bourns	Diode, TVS, Uni, 36 V, 75 Vc, SOD-323	SOD-323
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
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H13, H14	2		ATS-TI10P-521-C1-R1	Advanced Thermal Solutions	HEAT SINK FOR TI MOD, 50x13.9mm	HEAT SINK, 50x13.9mm
J1, J2, J5	3		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
J3, J4, J6, J7	4		393800102	Molex	Terminal Block, 6.35mm, 2 Pos, Tin, R/A, TH	Terminal Block, 6.35mm, 2 Pos, R/A, TH
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
Q1, Q2, Q10, Q11, Q13, Q14	6	100V	CSD19533KCS	Texas Instruments	MOSFET, N-CH, 100 V, 86 A, KCS0003B (TO-220-3)	KCS0003B
Q3, Q4, Q7, Q8, Q12, Q15	6	150 V	MMBT5401LT1G	ON Semiconductor	Transistor, PNP, 150 V, 0.5 A, SOT-23	SOT-23
Q5, Q6, Q9	3	300 V	FMMT497	Zetex	Transistor, NPN, 300 V, 0.5 A, SOT-23	SOT-23
R1, R2, R28, R29, R31, R32	6	0.47	CSRN2512FKR470	Stackpole Electronics Inc	RES, 0.47, 1%, 2 W, 2512	2512
R3, R4, R24, R25, R30, R33	6	47	CRCW080547R0JNEA	Vishay-Dale	RES, 47, 5%, 0.125 W, 0805	0805
R5	1	390k	RR1220P-394-D	Susumu Co Ltd	RES, 390 k, 0.5%, 0.1 W, 0805	0805
R6, R15, R17, R22, R45	5	1.00k	CRCW08051K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.125 W, 0805	0805
R7	1	22k	CRCW080522K0JNEA	Vishay-Dale	RES, 22 k, 5%, 0.125 W, 0805	0805
R8	1	2.2k	CRCW08052K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.125 W, 0805	0805
R10, R37, R46	3	47	CRCW120647R0JNEA	Vishay-Dale	RES, 47, 5%, 0.25 W, 1206	1206
R11	1	1.37k	CRCW08051K37FKEA	Vishay-Dale	RES, 1.37 k, 1%, 0.125 W, 0805	0805
R12	1	20.5k	CRCW080520K5FKEA	Vishay-Dale	RES, 20.5 k, 1%, 0.125 W, 0805	0805

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R13, R14, R23, R27	4	10.0k	CRCW120610K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.25 W, 1206	1206
R16	1	90.9k	CRCW080590K9FKEA	Vishay-Dale	RES, 90.9 k, 1%, 0.125 W, 0805	0805
R18	1	47.0k	RT0805BRD0747KL	Yageo America	RES, 47.0 k, 0.1%, 0.125 W, 0805	0805
R19	1	1.00Meg	RG2012P-105-B-T5	Susumu Co Ltd	RES, 1.00 M, 0.1%, 0.125 W, 0805	0805
R20	1	390k	ERJ-6GEYJ394V	Panasonic	RES, 390 k, 5%, 0.125 W, 0805	0805
R21	1	1.80k	RR1220P-182-D	Susumu Co Ltd	RES, 1.80 k, 0.5%, 0.1 W, 0805	0805
R26	1	24.9k	CRCW080524K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.125 W, 0805	0805
R35	1	22	CRCW201022R0JNEF	Vishay-Dale	RES, 22, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R39, R41, R42, R43, R44	5	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R47	1	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
U1	1		TLV171IDBVR	Texas Instruments	36-V, Single-Supply, Low-Power Operational Amplifiers for Cost-Sensitive Systems, DBV0005A (SOT-5)	DBV0005A
U2	1		TPS7A4701RGWR	Texas Instruments	36-V, 1-A, 4-uVRMS, RF LDO Voltage Regulator, RGW0020A (VQFN-20)	RGW0020A
U3	1		TLV2171IDR	Texas Instruments	36-V, Single-Supply, Low-Power Operational Amplifier for Cost-Sensitive Systems, D0008A (SOIC-8)	D0008A
U4	1		TPS7A3301RGWR	Texas Instruments	Single Output High PSRR LDO, 1 A, Adjustable -1.18 to -33 V Output, -3 to -36 V Input, with Ultra-Low Noise, 20-pin VQFN (RGW), -40 to 125 degC, Green (RoHS & no Sb/Br)	RGW0020A
C16	0	1uF	GRM55DR72E105KW01L	MuRata	CAP, CERM, 1 µF, 250 V, +/- 10%, X7R, 2220	2220
C23	0	4.7uF	400AX4.7MTA8X9	Rubycon	CAP, AL, 4.7 µF, 400 V, +/- 20%, TH	D8xL9mm
C26, C28	0	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R9, R36	0	0	CRCW08050000Z0EAHP	Vishay-Dale	RES, 0, 5%, 0.333 W, 0805	0805
R34	0	22	CRCW201022R0JNEF	Vishay-Dale	RES, 22, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R38	0	1.00Meg	RG2012P-105-B-T5	Susumu Co Ltd	RES, 1.00 M, 0.1%, 0.125 W, 0805	0805
R40	0	1.00Meg	CRCW12061M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.25 W, 1206	1206

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