

TIDA-01426 REV E1 Bill of Materials



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-01426	Any	Printed Circuit Board	
C1	1	1uF	UMK212F105ZG-T	Taiyo Yuden	CAP CER 1UF 50V Y5V 0805	0805
C2, C9	2	0.01uF	C1206C103MDRACTU	KEMET	CAP CER 10000PF 1KV X7R 1206	1206
C3, C4, C7	3	1uF	105CKE450M	Illinois Capacitor	CAP_AL 1 uF, 450 V, +/- 20%, 331.57 ohm, TH	D10xL12.5mm
C5	1	820pF	06035A821JAT2A	AVX	CAP_CERM, 820 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C6	1	1000pF	GRM1885C1H102FA01J	MuRata	CAP_CERM, 1000 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
C8, C13	2	0.01uF	06031C103JAT2A	AVX	CAP_CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
C10, C14	2	0.1uF	06033C104JAT2A	AVX	CAP_CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
C11	1	0.33uF	GRM21AR72A334KAC5L	MuRata	CAP_CERM, 0.33 uF, 100 V, +/- 10%, X7R, 0805	0805
C12, C17, C18	3	0.01uF	06031C103MAT2A	AVX	CAP_CERM, 0.01 uF, 100 V, +/- 20%, X7R, 0603	0603
C15	1	0.47uF	CGA4J3X7S2A474K125AB	TDK	CAP_CERM, 0.47 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0805	0805
C16	1	0.022uF	GRM21BR72A223KA01L	MuRata	CAP_CERM, 0.022 uF, 100 V, +/- 10%, X7R, 0805	0805
D1, D2, D4, D6	4	1000V	UF4007-TP	Micro Commercial Components	Diode, Ultrafast, 1000 V, 1 A, TH	DO-41
D3	1	800V	MB8S-TP	Micro Commercial Components	DIODE BRIDGE 800V 500MA MBS-1	TO269AA
D5	1	33V	1SMB5937BT3G	ON Semiconductor	Diode, Zener, 33 V, 550 mW, SMB	SMB
D7, D8	2	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
F1	1		0468003.NR	Bel Fuse Inc	FUSE BRD MNT 1.5A 63VAC/VDC 1206	1206
H1, H2, H3, H4	4		NSP-4-3-01	Essentra Components	MACHINE SCREW PAN PHILLIPS 4-40	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H9, H10, H11, H12	0		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1	1		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
J2	1		393800102	Molex	EUROSTYLE 6 35 MM FIXED 2 CIR	2POS Terminal Block
L1, L2	2	4.7mH	SDR0503-472JL	Bourns	Inductor, Drum Core, Ferrite, 4.7 mH, 0.04 A, 48 ohm, SMD	5x3x4.8mm
LBL1	0		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	2	100V	CSD19538Q3A	Texas Instruments	MOSFET, N-CH, 100 V, 5 A, DNH0008A (VSONP-8)	DNH0008A
Q3	1	600V	BSS127S-7	Diodes Inc.	MOSFET, N-CH, 600 V, 0.05 A, SOT-23	SOT-23
Q4, Q5, Q7	3	60 V	DNBT8105-7	Diodes Inc.	Transistor, NPN, 60 V, 1 A, AEC-Q101, SOT-23	SOT-23
Q6, Q8	2	60 V	DPBT8105-7	Diodes Inc.	Transistor, PNP, 60 V, 1 A, AEC-Q101, SOT-23	SOT-23
R1, R5	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R2, R38	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R3, R6, R11, R13, R15	5	4.99k	RC0603FR-074K99L	Yageo America	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R4, R8	2	1.00k	RG1608P-102-B-T5	Susumu Co Ltd	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603
R7	1	3.3Meg	CHV1206-FX-3304ELF	Bourns Inc	RES SMD 3.3M OHM 1% 1/4W 1206	1206
R9	1	100k	RG1608P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.1 W, 0603	0603
R10	1	16.5k	CRCW060316K5FKEA	Vishay-Dale	RES, 16.5 k, 1%, 0.1 W, 0603	0603
R12	1	1.00	CRCW20101R00FKEF	Vishay-Dale	RES, 1.00, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R14	1	1.20k	RC0603FR-071K2L	Yageo America	RES, 1.20 k, 1%, 0.1 W, 0603	0603
R16, R19	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R17	1	18Meg	CHV0805-JW-186ELF	Bourns Inc	RES SMD 18M OHM 5% 1/8W 0805	0805
R18	1	442k	KTR10EZPF4423	Rohm Semiconductor	RES SMD 442K OHM 1% 1/8W 0805	0805
R20	1	143k	RC0603FR-07143KL	Yageo America	RES, 143 k, 1%, 0.1 W, 0603	0603
R21	1	10.0k	RNCF0603TKY10K0	Stackpole Electronics Inc	RES, 10.0 k, 0.01%, 0.063 W, 0603	0603
R22	1	10.5k	RC0603FR-0710K5L	Yageo America	RES, 10.5 k, 1%, 0.1 W, 0603	0603
R23	1	105k	CRCW0603105KFKFA	Vishay-Dale	RES, 105 k, 1%, 0.1 W, 0603	0603
R24	1	2.21Meg	CRCW06032M21FKFA	Vishay-Dale	RES, 2.21 M, 1%, 0.1 W, 0603	0603
R25	1	88.7k	RT0603DRE0788K7L	Yageo America	RES, 88.7 k, 0.5%, 0.1 W, 0603	0603
R26, R36, R37	3	49.9k	CRCW060349K9FKFA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R27	1	536k	CRCW0603536KFKFA	Vishay-Dale	RES, 536 k, 1%, 0.1 W, 0603	0603
R28	1	270k	RC0603FR-07270KL	Yageo America	RES, 270 k, 1%, 0.1 W, 0603	0603
R29	1	536k	RT0603BRD07536KL	Yageo America	RES, 536 k, 0.1%, 0.1 W, 0603	0603
R32, R34	2	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603
R35	1	887	CRCW0603887RFKFA	Vishay-Dale	RES, 887, 1%, 0.1 W, 0603	0603
T1	1		750343584	WURTH ELEKTRONIK	TRANSFORMER, 150uH, 1%, SMD-10P	
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12	12		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Minature
U1	1		TL494ID	Texas Instruments	Pulse-Width-Modulation Control Circuit with Voltage Control, 45 % Duty Cycle, -40 to +85 degC, 16-pin SOIC (D), Green (RoHS & no Sb/Br)	D0016A
U2	1		OPA348IDBVR	Texas Instruments	Automotive, 1MHz, 45uA, RRIO Single Operational Amplifier, DBV0005A (SOT-23-5)	DBV0005A
U3, U4	2		TL431IDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R30, R31, R33	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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