

BILL OF MATERIALS

TI DESIGNS TIDA - 00221

Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
1	!PCB1	Printed Circuit Board	Any	TIDA-00221		
2	C1, C7	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	TDK	C1608X7R1C105K	0603	
2	C2, C13	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU	0603	
11	C3, C4, C14, C39, C45, C48, C51, C52, C53, C54, C57	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	AVX	06033C104JAT2A	0603	
0	C5, C6	CAP, CERM, 0.01uF, 25V, +/-5%, COG/NP0, 0603	TDK	C1608C0G1E103J	0603	DNI
0	C8, C9, C16	CAP, CERM, 100pF, 50V, +/-1%, COG/NP0, 0603	AVX	06035A101FAT2A	0603	DNI
0	C10, C12	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	AVX	06033C104JAT2A	0603	DNI
2	C11, C15	CAP, CERM, 12pF, 50V, +/-5%, COG/NP0, 0603	AVX	06035A120JAT2A	0603	
1	C17	CAP, TA, 4.7uF, 35V, +/-10%, 1.9 ohm, SMD	Vishay-Sprague	293D475X9035C2TE3	6032-28	
7	C18, C19, C20, C21, C22, C23, C24	CAP, CERM, 0.015uF, 50V, +/-10%, X7R, 0805	AVX	08055C153KAT2A	0805_HV	
14	C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38	CAP, CERM, 47pF, 500V, +/-5%, COG/NP0, 0805	MuRata	GRM21A5C2E470JW01D	0805_HV	
0	C40, C43	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	AVX	06033C104JAT2A	0603	DNI
3	C41, C42, R66	RES 0.0 OHM 1/10W JUMP 0603 SMD	Vishay-Dale	CRCW06030000Z0EA	0603	
5	C44, C49, C50, C55, C56	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	AVX	0603ZD475KAT2A	0603	
2	C46, C47	CAP, CERM, 0.47uF, 25V, +/-10%, X7R, 0603	MuRata	GRM188R71E474KA12J	0603	
2	D1, D2	LED, 5MM, RED, TH	VISHAY	TLHR6405	LED_5MM	
1	D3	LED SmartLED Green 570NM	OSRAM	LG L29K-G2J1-24-Z	LED0603AA	
1	D4	Diode, Switching, 200V, 0.2A, SOT-23	Diodes Inc.	BAS21-7-F	SOT-23	
1	D5	DIODE ZENER 3.9V 500MW SOD123	Diodes Incorporated	MMSZ5228B-7-F	sod-123	
0	FB1, FB3	FERRITE BEAD, 42 OHM, 4 A, DCR0.008 OHM, SMT-0805	TAIYO YUDEN	FBMJ2125HS420-T	0805_hv	DNI
1	FB2	FERRITE CHIP 1000 OHM 300MA 0603	TDK Corporation	MMZ1608B102C	0603	
1	J1	Header, Male 5-pin, 100mil spacing,	TE Connectivity	826926-5	HEADER_5P	
1	J2	Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator	FCI	67997-424HLF	TSW-112-07-G-D	
1	J3	Header, 8x2, 100mil, TH	FCI	67997-416HLF	TSW-108-07-G-D	
1	J4	Header, Male 2x5-pin, 100mil spacing	FCI	67997-410HLF	HDR2X5	
1	J5	3 pin berger	FCI	68001-403HLF	HDR1X3	
1	J6	Header, 2x2-pin, 100mil spacing	FCI	67997-404HLF	HDR_2X2	
0	J7	TERMINAL BLOCK 5.08MM VERT 2POS, TH	On-Shore Technology	ED120/2DS	CONN_ED120-2DS	DNI
1	J8	Header, 7x2, 100mil, SMT	Molex	N2514-6002-RB	3M_N2514-6002-RB	
8	J9, J10, J11, J12, J13, J14, J15, J16	TERMINAL BLOCK 5.08MM VERT 2POS, TH	On-Shore Technology	ED120/2DS	CONN_ED120-2DS	
2	Q1, Q2	MOSFET, N-CH, 30V, 22A, SON 2X2 MM	TEXAS INSTRUMENTS	CSD17571Q2	SON_CSD17571Q2	
6	R1, R2, R62, R63, R68, R69	RES, 2.2k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06032K20JNEA	0603	
3	R3, R4, R16	RES, 300 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603300RJNEA	0603	
4	R5, R8, R13, R17	RES 10K OHM 1/10W 5% 0603 SMD	Vishay-Dale	CRCW060310K0JNEA	0603	
0	R6, R7, R22, R29	RES, 100 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100RFKEA	0603	DNI
0	R9, R92	RES 390K OHM 1/10W 1% 0603 SMD	Vishay Dale	CRCW0603390KFKEA	0603	DNI
0	R10, R91	RES, 200k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603200KFKEA	0603	DNI
0	R11, R12	RES 2.40K OHM 1/8W 1% 0805 SMD	Vishay-Dale	CRCW08052K40FKEA	0805_hv	DNI
0	R14, R15, R18, R19	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA	0603	DNI
0	R20, R25, R27, R28	RES, 332k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW0805332KFKEA	0805_HV	DNI
1	R21	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA	0603	
0	R23, R24	RES 10K OHM 1/10W 5% 0603 SMD	Vishay-Dale	CRCW060310K0JNEA	0603	DNI
0	R26	RES, 30k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060330K0JNEA	0603	DNI
0	R30	RES, 470 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603470RJNEA	0603	DNI
0	R31	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	0603	DNI
0	R32	RES 1.00M OHM 1/10W 1% 0603 SMD	Vishay-Dale	CRCW06031M00FKEA	0603	DNI
14	R33, R34, R35, R36, R37, R38, R39, R40, R42, R43, R44, R45, R46, R47	RES, 1.0k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031K00JNEA	0603	
0	R41	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	0805_HV	DNI
0	R48, R49, R50, R51, R52, R53, R55	RES, 13.0 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080513R0FKEA	0805_HV	DNI
7	R54, R56, R57, R58, R59, R60, R61	RES, 13.0 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080513R0FKEA	0805_HV	

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0	R64, R65, R67	RES 560K OHM 1/10W 1% 0603 SMD	Vishay-Dale	CRCW0603560KFKEA	0603	DNI
20	R70, R71, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	0805_HV	
1	R72	RES, 10 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW080510R0JNEA	0805_HV	
1	S1	Switch, Tactile, SPST-NO, 0.1A, 16V, SMT	Bourns	7914G-1-000E	SW_7914G-1-000E	
1	U1	IC, 300-mA 40-V LOW-DROPOUT REGULATOR WITH 25-uA QUIESCENT CURRENT	Texas Instruments	TPS7A6533QKVURQ1	KVU_1	
0	U2	LOW-VOLTAGE RAIL-TO-RAIL OUTPUT OPERATIONAL AMPLIFIERS, PW0014A	Texas Instruments	OPA4314AIPW	PW0014A_N	DNI
1	U3	IC, MCU 16BIT 512KB FLASH, LQFP-128	Texas Instruments	MSP430F6779IPEU	QFP50P1600X220 0X160-128N	
0	U4	IC, Micropower Shunt Voltage Reference 100 ppm/°C, 45µA-12mA, Adjustable	Texas Instruments	LM4041BIDBZ	SOT-23	DNI
1	Y1	CRYSTAL, 32.768KHz, 6PF, +/- 20PPM, SMD-3P	CITIZEN	CMR200T-32.768KDZBT	XTAL_CM200T	

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