Filename: TIDA-01364A(001) BOM.xls

Variant: 001

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## **TIDA-01364 Backlight Control and Proximity Sensing**

Designator	Description	Manufacturer	PartNumber	Quantity
!PCB	Printed Circuit Board	Any	TIDA-01364	1
BL1	LED Backlight, White	Electronic Assembly	EA LED55X46-W	1
C1	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206_190	Johanson Technology	202R18W102KV4E	1
C2	CAP, CERM, 0.01 μF, 50 V, +/- 5%, X7R, 0805	AVX	08055C103JAT2A	1
C3, C4, C5,	CAP, CERM, 1 μF, 16 V, +/- 10%, X7R, 0603, CAP,	TDK	C1608X7R1C105K	15
C6, C8, C9,	CERM, 1 µF, 16 V, +/- 10%, X7R, 0603, CAP, CERM,			
C10, C11,	1uF, 16V, +/-10%, X7R, 0603, CAP, CERM, 1uF, 16V,			
C12, C13,	+/-10%, X7R, 0603, CAP, CERM, 1uF, 16V, +/-10%,			
C14, C15,	X7R, 0603, CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603,			
	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603, CAP,			
C30	CERM, 1uF, 16V, +/-10%, X7R, 0603, CAP, CERM,			
	1uF, 16V, +/-10%, X7R, 0603, CAP, CERM, 1uF, 16V,			
	+/-10%, X7R, 0603, CAP, CERM, 1uF, 16V, +/-10%,			
	X7R, 0603, CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603,			
	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603, CAP,			
	CERM, 1uF, 16V, +/-10%, X7R, 0603, CAP, CERM,			
	1uF, 16V, +/-10%, X7R, 0603			
C7	CAP, CERM, 4.7 μF, 10 V, +/- 20%, X5R, 0603	MuRata	GRM188R61A475ME15	1
C16	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	MuRata	GRM188R61E105KA12D	1
C17, C21,	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	MuRata	GRM155R71C104KA88D	4
C28, C31				
C19, C22	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X7R, 0805	TDK	C2012X7R0J106M125AB	2
C23, C24,	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, AEC-Q200	TDK	CGA2B2X7R1H222K050BA	3
C25	Grade 1, 0402			
C29	CAP, CERM, 0.1 μF, 25 V, +/- 5%, X7R, 0603	AVX	06033C104JAT2A	1
C32	CAP, CERM, 0.01 μF, 25 V, +/- 10%, X7R, 0603	MuRata	GRM188R71E103KA01D	1
C33	CAP, CERM, 0.01 μF, 16 V, +/- 10%, X7R, 0402	MuRata	GRM155R71C103KA01D	1
C34	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	MuRata	GRM1885C2A330JA01D	1
C35	CAP, CERM, 0.22 μF, 10 V, +/- 10%, X5R, 0603	MuRata	GRM188R61A224KA01D	1
D1	Diode, TVS, Bi, 6 V, 600 W, SMB	Littelfuse	SMBJ6.0CA	1
D2	Diode, Schottky, 40 V, 0.5 A, SOD-123	ON Semiconductor	MBR0540T1G	1
D3	Diode, Schottky, 5V, 0.03A, SOD-323	Toshiba	1SS315TPH3F	1
D4	LED, Green, SMD	Rohm	SML-P12PTT86	1
	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	4
	Standoff, Hex, 1"L #4-40 Nylon	Keystone	1902E	4
H8	,	•		
H11, H12	Nylon Screw, Panhead, Phillips, 2-56	B&F Fastener Supply	NY PMS 256 0025 PH	2
H13, H14	Nylon Nut, 2-56, 3/16"	B&F Fastener Supply	NY HN 256	2
J1, J3	Header, 100mil, 2x1, Tin, TH	Molex	90120-0122	2
J2	Connector, Receptacle, USB TYPE B, Vertical, TH	Molex	1051330001	1
J4, J5	Straight Low Profile Header, 10x2 Position,1.27 mm Pitch, SMT	Samtec	TFM-110-02-L-D-A	2
J6	Receptacle, 1.27mm, 6x1, Gold, SMT	Sullins Connector Solutions	LPPB061NFSC-RC	1
J7	Header, 100mil, 4x2, Gold, SMT	Molex	0015910080	1
L1, L3, L5,		MuRata	BLM18SG331TN1D	4
L6	Bead, 330 ohm @ 100 MHz, 1.5 A, 0603, 1.5A Ferrite			
	Bead, 330 ohm @ 100MHz, SMD, 1.5A Ferrite Bead,			
	330 ohm @ 100MHz, SMD			
L2	Inductor, Wirewound, Ferrite, , 0.3 A, 0.45 ohm, SMD	Bourns	SRF2012-361YA	1
		TDV	\(\(\text{\tinit}\\ \text{\tin}\exittt{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\tex{\text{\text{\text{\text{\text{\text{\tin}\tint{\ti}\text{\	
L4	Inductor, Shielded, Ferrite, 10uH, 0.47A, 0.24 ohm,	TDK	VLF252015MT-100M	1
	SMD			

Designator	Description	Manufacturer	PartNumber	Quantity
L7	Inductor, Shielded, Ferrite, 18 µH, 0.12 A, 3.3 ohm, SMD	Bourns	CMH322522-180KL	1
Q1	MOSFET, N-CH, 50V, 0.22A, SOT-23	Fairchild Semiconductor	BSS138	1
R1	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	1
R8, R9,	RES, 0 ohm, 5%, 0.063W, 0402, RES, 0 ohm, 5%, 0.063W,	Vishay-Dale	CRCW04020000Z0ED	14
R12, R13, R14, R15, R24, R25,	0402, RES, 0 ohm, 5%, 0.063W, 0402, RES, 0 ohm, 5%,			
R26	0.063W, 0402, RES, 0 ohm, 5%, 0.063W, 0402, RES, 0, 5%, 0.063 W, 0402, RES, 0, 5%, 0.063 W, 0402, RES, 0, 5%, 0.063 W, 0402			
R16, R17, R23	RES, 4.99k ohm, 1%, 0.063W, 0402, RES, 4.99k ohm, 1%, 0.063W, 0402, RES, 4.99 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04024K99FKED	3
R18, R19, R20	RES, 47.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040247K5FKED	3
R21	RES, 221 ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW0402221RFKED	1
R22	RES, 10 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0JNED	1
R28	RES, 8.06, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06038R06FKEA	1
S1, S2, S3	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	TE Connectivity	4-1437565-1	3
SH-J1, SH- J2, SH-J3, SH-J4	Shunt, 2mm, Gold plated, Black	Samtec	2SN-BK-G	4
TP1, TP2, TP3	Test Point, Miniature, Red, TH	Keystone	5000	3
TP4	Test Point, Miniature, Black, TH	Keystone	5001	1
TP5, TP6	Test Point, Miniature, Yellow, TH	Keystone	5004	2
Ü1	Capacitor-Free, 150-mA, Low-Dropout Regulator with Foldback Current Limit for Portable Devices, DBV0005A	Texas Instruments	TLV71333PDBVR	1
U2	DUAL CHANNEL HIGH SPEED ESD PROTECTION DEVICE, DRL0005A	Texas Instruments	TPD2E2U06DRLR	1
U3	Module, 128x64-pixel graphics display	Electronic Assembly	EA DOGM128W-6	1
U4	High Brightness White LED Driver, 3 to 18 V, -40 to 85 degC, 6-pin SOT23 (DBV6), Green (RoHS & no Sb/Br)	Texas Instruments	TPS61165DBVR	1
U5, U6	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	Texas Instruments	TPD1E10B06DPYR	2
U7	Mixed Signal Microcontroller, RGZ0048B	Texas Instruments	MSP430FR5969IRGZ	1
U8	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, YPA0008AGAE	Texas Instruments	HDC1010YPAR	1
U9	Ambient Light Sensor, DNP0006A	Texas Instruments	OPT3001DNPR	1
U10	Multi-Channel 12/26-Bit Capacitance to Digital Converter (FDC) for Capacitive Sensing, DNT0012B	Texas Instruments	FDC2212DNTR	1
Y2	OSC, 40 MHz, 1.6 to 3.63 V, SMD	AVX	KC2520B40.0000C10E00	1

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