

TIDA-00489 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-00489	Any	Printed Circuit Board	
A1	1	3.6mVp-p	IRS-B210ST01-R1	MuRata	Pyroelectric Infrared Sensors for Reflow Soldering, 3.6mVp-p, SMD	4.7x4.7mm
BT1	1		BS-7	Memory Protection Devices	Battery Holder, CR2032, Retainer clip, TH	CR2032 holder
C1, C55	2	100uF	C3216X5R1A107M160AC	TDK	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1206_190	1206_190
C2	1	10uF	C1608X5R0J106M	TDK	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603	0603
C3	1	10uF	GRM155R60J106ME44D	MuRata	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	0402
C4, C25	2	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C5	1	1uF	C1005X5R1A105K050BB	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
C6, C7	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C8, C9, C26	3	0.01uF	C1005X7R1C103K	TDK	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
C10, C11, C27, C53, C56, C57	6	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C12, C28	2	100pF	C0402C101J3GACTU	Kemet	CAP, CERM, 100 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C13	1	33uF	C2012X5R1A336M125AC	TDK	CAP, CERM, 33 µF, 10 V, +/- 20%, X5R, 0805	0805
C14, C16, C18, C19, C20, C22, C23	7	0.1uF	C1005X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C15	1	0.01uF	C1005X7R1E103K	TDK	CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	0402
C17	1	3.3uF	C1005X5R1A335K050BC	TDK	CAP, CERM, 3.3 µF, 10 V, +/- 10%, X5R, 0402	0402
C21	1	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C24, C30	2	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
C31, C33, C34, C35, C36, C39	6	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X7R, 0402	0402
C32, C37	2	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0603	0603
C40	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C41, C42	2	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C43, C47	2	3.6pF	GRM1555C1H3R6CA01D	MuRata	CAP, CERM, 3.6 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C44, C51	2	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C48	1	2.7pF	GRM1555C1H2R7CA01D	MuRata	CAP, CERM, 2.7 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C49	1	6.2pF	GRM1555C1H6R2CA01D	MuRata	CAP, CERM, 6.2 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C50	1	3.3pF	GRM1555C1H3R3CA01D	MuRata	CAP, CERM, 3.3 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C52	1	0.6pF	GJM1555C1HR60BB01D	Murata	CAP, CERM, 0.6pF, 50V, NP0/C0G, +-0.1pF, 0402	0402
D2, D3	2	75V	1N4148X-TP	Micro Commercial Component	Diode, Switching, 75 V, 0.3 A, SOD-523	SOD-523
E1	1		ANTENNA_HELICAL	N/A	PCB Antenna. There is nothing to buy or mount.	Antenna
H1, H4, H6, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H2, H3, H5, H7	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H9	1		IML-0669	MuRata	Lens, Ceiling Mount, TH	D12xH8.508mm
J1, J6	2		87898-0204	Molex	Header, 2.54 mm, 2x1, Gold, R/A, SMT	Header, 2.54 mm, 2x1, R/A, SMT
J2	1		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
J3	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
L1	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
L2	1	6.8uH	MLZ2012N6R8LT000	TDK	Inductor, Multilayer, Ferrite, 6.8 µH, 0.11 A, 0.25 ohm, SMD	0805
L3, L5	2	7.5nH	LQW15AN7N5G00D	MuRata	Inductor, Wirewound, 7.5 nH, 0.57 A, 0.13 ohm, SMD	1x.5x.5mm
L4	1	18nH	LQW15AN18NJ00D	MuRata	Inductor, Wirewound, 18 nH, 0.37 A, 0.27 ohm, SMD	1x.5x.5mm
L6, L7	2	6.8nH	LQW15AN6N8G00D	MuRata	Inductor, Wirewound, 6.8 nH, 0.7 A, 0.09 ohm, SMD	1x.5x.5mm
L8	1	11nH	LQW15AN11NG00D	MuRata	Inductor, Wirewound, 11 nH, 0.5 A, 0.14 ohm, SMD	1x.5x.5mm

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Q1	1	-20V	SI2323DS	Vishay-Siliconix	MOSFET, P-CH, -20 V, -3.7 A, SOT-23	SOT-23
R1	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R2	1	619k	CRCW0402619KFKED	Vishay-Dale	RES, 619 k, 1%, 0.063 W, 0402	0402
R3	1	6.81k	CRCW04026K81FKED	Vishay-Dale	RES, 6.81 k, 1%, 0.063 W, 0402	0402
R4	1	1.30Meg	CRCW04021M30FKED	Vishay-Dale	RES, 1.30 M, 1%, 0.063 W, 0402	0402
R5	1	1.50Meg	CRCW04021M50FKED	Vishay-Dale	RES, 1.50 M, 1%, 0.063 W, 0402	0402
R6	1	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, 0402	0402
R7, R8, R9, R10, R11	5	15Meg	RMCF0805JT15M0	Stackpole Electronics Inc	RES, 15 M, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R12, R13	2	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
R14, R16, R18, R19, R20	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R15	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
S1, S2	2		B3U-1000P	Omron Electronic Components	SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm
SH-J1, SH-J3, SH-J6	3	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
TP1, TP2	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP6, TP7	2	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
TP8, TP9, TP13	3	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
U2	1		LPV802DGKR	Texas Instruments	350 nA Rail-to-Rail I/O Nanopower Operational Amplifier Family, DGK0008A	DGK0008A
U3, U4	2		TLV3691IDCK	Texas Instruments	0.9-V to 6.5-V, Nanopower Comparator, DCK0005A	DCK0005A
U5, U6, U7, U8	4		TPD1E10B06DPYR	Texas Instruments	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)	DPY0002A
U9	1		CC1310F128RGZR	Texas Instruments	Sub-1 GHz and 2.4 GHz Multi-standard RF IC Family, RGZ0048A	RGZ0048A
Y1	1		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x.6x1.2mm
Y2	1		TSX-3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
C29	0	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0603	0603
C38	0	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X7R, 0402	0402
C45, C46	0	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C54	0	1pF	GRM1555C1H1R0CA01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
J4	0		TSW-106-07-G-S	Samtec	Header, 100mil, 6x1, Gold, TH	6x1 Header
J5	0		CONSMA001-SMD-G	Linx Technologies	Jack, SMA, PCB, Gold, SMT	SMA Jack
R17	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

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