

TIDA-01555 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-01555	Any	Printed Circuit Board	
C1, C2, C11, C12, C76, C77, C86, C87, C114, C115, C124, C125, C152, C153, C162, C163, C190, C191, C200, C201, C228, C229, C238, C239	24	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C3, C4, C17, C18, C30, C31, C35, C36, C78, C79, C92, C93, C105, C106, C110, C111, C116, C117, C130, C131, C143, C144, C148, C149, C154, C155, C168, C169, C181, C182, C186, C187, C192, C193, C206, C207, C219, C220, C224, C225, C230, C231, C244, C245, C257, C258, C262, C263	48	47pF	C0603C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C5, C8, C80, C83, C118, C121, C156, C159, C194, C197, C232, C235	12	1uF	LMK212B7105KD-T	Taiyo Yuden	CAP, CERM, 1 μ F, 10 V, +/- 10%, X7R, 0805	0805
C6, C9, C81, C84, C119, C122, C157, C160, C195, C198, C233, C236	12	10uF	TAJA106M010RNJ	AVX	CAP, TA, 10 μ F, 10 V, +/- 20%, 3 ohm, SMD	3216-18
C7, C10, C82, C85, C120, C123, C158, C161, C196, C199, C234, C237	12	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 μ F, 10 V, +/- 10%, X5R, 0402	0402

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C13, C14, C22, C23, C32, C33, C37, C38, C88, C89, C97, C98, C107, C108, C112, C113, C126, C127, C135, C136, C145, C146, C150, C151, C164, C165, C173, C174, C183, C184, C188, C189, C202, C203, C211, C212, C221, C222, C226, C227, C240, C241, C248, C250, C259, C260, C264, C265	48	100pF	06035A101FAT2A	AVX	CAP, CERM, 100 pF, 50 V,+/- 1%, C0G/NP0, 0603	0603
C15, C16, C19, C20, C21, C27, C28, C29, C48, C90, C91, C94, C95, C96, C102, C103, C104, C128, C129, C132, C133, C134, C140, C141, C142, C166, C167, C170, C171, C172, C178, C179, C180, C204, C205, C208, C209, C210, C216, C217, C218, C242, C243, C246, C247, C249, C254, C255, C256	49	0.01uF	C1608X7R1H103K080AA	TDK	CAP, CERM, 0.01 µF, 50 V,+/- 10%, X7R, 0603	0603
C24, C99, C137, C175, C213, C251	6	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 µF, 10 V,+/- 10%, X7R, 0805	0805
C25, C100, C138, C176, C214, C252	6	22uF	C3225X7R1C226K250AC	TDK	CAP, CERM, 22 µF, 16 V,+/- 10%, X7R, 1210	1210
C26, C101, C139, C177, C215, C253, C272	7	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V,+/- 10%, X7R, 0603	0603

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C34, C75, C109, C147, C185, C223, C261, C266, C267, C268, C269, C270, C271, C273	14	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
C39	1	10uF	885012208069	Wurth	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206
C40	1	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C41, C43, C44, C45, C47, C54, C56, C57, C58, C59	10	4.7uF	C3216X7R1E475M160AC	TDK	CAP, CERM, 4.7 µF, 25 V, +/- 20%, X7R, 1206	1206
C42	1	4.7uF	293D475X9025C2TE3	Vishay-Sprague	CAP, TA, 4.7 µF, 25 V, +/- 10%, 2 ohm, SMD	6032-28
C46, C51, C60, C67	4	0.01uF	GRM188R70J103KA01D	MuRata	CAP, CERM, 0.01 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C49	1	0.22uF	C0603C224K9RACTU	Kemet	CAP, CERM, 0.22 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C50, C52	2	10pF	C0603C100J5GACTU	Kemet	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C53, C61, C65	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
C55, C63, C69	3	1uF	GRM188R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	0603
C62, C68	2	10uF	GMK325AB7106MM-T	Taiyo Yuden	CAP, CERM, 10uF, 35V, +/-20%, X7R, 1210	1210
C64, C66	2	2.2uF	C0805C225K8RACTU	Kemet	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0805	0805
C70	1	4.7uF	C2012X5R1H475M125AB	TDK	CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805	0805
C71, C74	2	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C72, C73	2	1uF	CGA3E3X5R1H105K080AB	TDK	CAP, CERM, 1uF, 50V, +/-10%, X5R, 0603	0603
D1, D2, D3, D4, D5, D6, D8, D9, D18, D19, D20, D21, D22, D23, D25, D26, D27, D28, D29, D30, D31, D32, D34, D35, D36, D37, D38, D39, D40, D41, D43, D44, D45, D46, D47, D48, D49, D50, D52, D53, D54, D55, D56, D57, D58, D59, D61, D62	48	70V	DESD1P0RFWQ-7	Diodes Inc.	Diode, TVS, Uni, 70 V, SOT-323	SOT-323
D7, D24, D33, D42, D51, D60	6	Green	LG M67K-G1J2-24-Z	OSRAM	LED, Green, SMD	2x1.4mm
D10, D15	2	20V	MBRM120ET1G	ON Semiconductor	Diode, Schottky, 20 V, 1 A, POWERMITE	POWERMITE
D11, D14	2	15V	DZ2W15000L	Panasonic	Diode, Zener, 15V, 1W, SOD-123	SOD-123
D12	1	5.6V	MMSZ5232B-7-F	Diodes Inc.	Diode, Zener, 5.6 V, 500 mW, SOD-123	SOD-123
D13, D17	2	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
D16	1	3.6V	MMSZ4685T1G	On semiconductor	Diode, Zener, 3.6V, 500mW, SOD-123	SOD-123
FB1	1	1000 ohm	MMZ1608B102CTA00	TDK	Ferrite Bead, 1000 ohm @ 100 MHz, 0.3 A, 0603	0603
H1, H2, H3, H4, H9, H10	6		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, H11, H12	6		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1, J6, J7, J8, J9, J10	6		SBH11-PBPC-D10-ST-BK	Sullins Connector Solutions	Header (Shrouded), 2.54mm, 10x2, Gold, Black, TH	Header (Shrouded), 2.54mm, 10x2, TH

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J2, J4	2		5-146280-2	TE Connectivity	Header, 100mil, 2x1, Gold, TH	2x1 Header
J3	1		PJ-002AH-SMT-TR	CUI Inc.	Power Jack, SMT	14.8x11x12.6mm
J5	1		ZSS-120-01-L-D-529	Samtec	Elevated Header, 100 mil, 20x2, TH	Elevated Header, 20x2
J11, J12	2		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
L1, L2	2	4.7uH	VLF504012MT-4R7M	TDK	Inductor, Shielded, Ferrite, 4.7 µH, 1.83 A, 0.1 ohm, SMD	IND_5x1.2x4mm
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, Q3, Q4, Q5, Q6, Q7	7	30V	CSD17571Q2	Texas Instruments	MOSFET, N-CH, 30 V, 22 A, DQK0006C (WS0N-6)	DQK0006C
R1, R2, R3, R4, R18, R19, R20, R21, R35, R36, R37, R38, R40, R41, R44, R45, R73, R74, R75, R76, R90, R91, R92, R93, R107, R108, R109, R110, R112, R113, R116, R117, R118, R119, R120, R121, R135, R136, R137, R138, R152, R153, R154, R155, R157, R158, R161, R162, R163, R164, R165, R166, R180, R181, R182, R183, R197, R198, R199, R200, R202, R203, R206, R207, R208, R209, R210, R211, R225, R226, R227, R228, R242, R243, R244,	96	51k	CRCW060351K0JNEA	Vishay-Dale	RES, 51 k, 5%, 0.1 W, 0603	0603

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R5, R6, R7, R8, R9, R10, R11, R12, R47, R51, R53, R58, R59, R61, R65, R67, R77, R78, R79, R80, R81, R82, R83, R84, R122, R123, R124, R125, R126, R127, R128, R129, R167, R168, R169, R170, R171, R172, R173, R174, R212, R213, R214, R215, R216, R217, R218, R219, R257, R258, R259, R260, R261, R262, R263, R264, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309	68	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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R13, R14, R15, R17, R22, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R85, R86, R87, R89, R94, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R130, R131, R132, R134, R139, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R175, R176, R177, R179, R184, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R220, R221, R222, R224, R229, R231, R232, R233, R234, R235, R236,	96	357	CRCW0402357RFKED	Vishay-Dale	RES, 357, 1%, 0.063 W, 0402	0402
R16, R23, R88, R95, R133, R140, R178, R185, R223, R230, R268, R275	12	47.0k	RC0603FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.1 W, 0603	0603
R39, R43, R68, R72, R111, R115, R156, R160, R201, R205, R246, R250, R291, R295	14	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
R42, R71, R114, R159, R204, R249, R294	7	0	RMCF0603ZT0R00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R46	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.25W, 1206	1206
R48	1	820	RC0603FR-07820RL	Yageo America	RES, 820, 1%, 0.1 W, 0603	0603
R49	1	576k	CRCW0603576KFKEA	Vishay-Dale	RES, 576 k, 1%, 0.1 W, 0603	0603
R50, R54, R55	3	49.9k	RG1608P-4992-B-T5	Susumu Co Ltd	RES, 49.9 k, 0.1%, 0.1 W, 0603	0603
R52	1	620k	CRCW0603620KFKEA	Vishay-Dale	RES SMD 620K OHM 1% 1/10W 0603	0603
R56	1	1.00	CR0603-J/-1R0ELF	Bourns inc	RES SMD 1 OHM 5% 1/10W 0603	0603
R57	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R60, R62	2	274k	CRCW0603274KFKEA	Vishay-Dale	RES, 274 k, 1%, 0.1 W, 0603	0603

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R63	1	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, 0603	0603
R64	1	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300 ohm, 5%, 0.1W, 0603	0603
R66	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
R69, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338	30	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R70	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.125W, 0805	0805
SH-J1, SH-J2	2		881545-2	TE Connectivity	Shunt, 100mil, Gold plated, Black	Shunt 2 pos. 100 mil
TP1, TP5	2	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP4, TP6, TP7, TP8	5		0253-0-15-15-30-27-10-0	Mill-Max	Pin Receptacle, Dia 0.015-0.025", Length 0.173", Gold, TH	Pin Receptacle, Dia 0.015-0.025 inch, Length 0.173 inch, TH
TP3	1	Green	5126	Keystone	Test Point, Multipurpose, Green, TH	Green Multipurpose Testpoint
U1, U2, U12, U13, U16, U17, U20, U21, U24, U25, U28, U29	12		OPA4197IPWR	Texas Instruments	36-V, Precision, Rail-to-Rail Input Output, Low Offset Voltage Op Amp, PW0014A (TSSOP-14)	PW0014A
U3, U14, U18, U22, U26, U30	6		ADS8688IDBT	Texas Instruments	16-Bit, 500-kSPS, 8-Channel, Single-Supply, SAR ADCs with Bipolar Input Ranges, DBT0038A (TSSOP-38)	DBT0038A
U4, U10, U15, U19, U23, U27, U31, U32, U33, U34, U35, U36	12		SN74LVC1G17DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A (SOT-SC70-5)	DCK0005A
U5	1		TPS22914YFP	Texas Instruments	Single Channel Ultra-Low Resistnace Load Switch, YFP0004ABAB (DSBGA-4)	YFP0004ABAB
U6	1		LP2992AILD-5.0/NOPB	Texas Instruments	Micropower 250 mA Low-Noise Ultra Low-Dropout Regulator, 6-pin LLP, Pb-Free	LDE06A
U7	1		TPS65131RGET	Texas Instruments	Positive and Negative Output DC-DC Converter, 2.7 to 5.5 V, -40 to 85 degC, 24-pin QFN (RGE24), Green (RoHS & no Sb/Br)	RGE0024B
U8	1		TPS7A3901DSC	Texas Instruments	Wide-VIN (± 33 V), 150-mA, Spilt-Rail Output, Positive and Negative LDO Voltage Regulator with Startup Tracking, DSC0010J	DSC0010J
U9	1		TPS7A6533QKVURQ1	Texas Instruments	Automotive 300-mA 40-V Low-Dropout Regulator With Ultra-Low Quiescent Current, KVU0003A (TO-252-3)	KVU0003A
U11	1		SN74LV1T04DCKR	Texas Instruments	Single Power Supply INVERTER Gate logic level shifter, DCK0005A, LARGE T&R	DCK0005A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial