TIDA-01427 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01427	Any	Printed Circuit Board	
C1, C7, C10, C13, C14, C18, C25	7	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
C2, C9, C24	3	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C3, C5	2	1uF	GRM188R61H105KAALD	MuRata	CAP, CERM, 1 µF, 50 V, +/- 10%, X5R, 0603	0603
C4	1	47uF	GRM32EC81C476ME15L	MuRata	CAP, CERM, 47 µF, 16 V, +/- 20%, X6S, 1210	1210
C6, C11, C12, C19, C21, C26	6	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V, +/- 5%, X7R, 0603	0603
C8, C22, C23	3	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22uF, 25V, +/-10%, X7R, 1210	1210
C15	1	4.7uF	GRM319R61E475KA12D	MuRata	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X5R, 1206	1206
C16	1	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C17	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C20	1	1000pF	GRM188R71H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, 0603	0603
C27, C28, C30, C33, C34, C43, C45, C52	8	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
C29, C32, C35, C38, C40, C42, C56, C58, C61, C62, C73	11	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
C31, C39, C41, C44, C57, C60, C63, C64, C74, C77	10	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
C59, C75	2	750pF	C0603C751J5GACTU	Kemet	CAP, CERM, 750 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C65, C67	2	20pF	GQM2195C1H200JB01D	MuRata	CAP, CERM, 20 pF, 50 V, +/- 5%, C0G/NP0, 0805	0805
C66, C70	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
C68	1	1500pF	08055A152JAT2A	AVX	CAP, CERM, 1500 pF, 50 V, +/- 5%, C0G/NP0, 0805	0805
C69, C76	2	10uF	0805YD106KAT2A	AVX	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 0805	0805
C71, C72	2	150pF	06035A151JAT2A	AVX	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
D1, D2, D4, D5	4	30V	DFLS130L-7	Diodes Inc.	Diode, Schottky, 30 V, 1 A, PowerDI123	PowerDI123
D3	1	60V	RB160M-60TR	Rohm	Diode, Schottky, 60 V, 1 A, SOD-123	SOD-123
GND, N13V, N15V, P5V, P13V, P15V, REF_N10V_B, REF_P10V, REF_P10V_B, VOCM	10		5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
H1, H2, H3, H4	4		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	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1	1		ED555/3DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 3x1, TH	10.5x8.2x6.5mm
J2	1		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
J3	1		61301011121	Wurth Elektronik	Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm, 10x1, TH
J4, J5, J6, J7	4		901-144-8RFX	Amphenol RF	SMA Straight Jack, Gold, 50 Ohm, TH	SMA Straight Jack, TH

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
L1	1	100uH	SRF1260-101M	Bourns	Inductor, Drum Core, Ferrite, 100 µH, 1.78 A, 0.171 ohm, SMD	12.5x12.5mm
L2, L4	2	1000 ohm	MPZ2012S102AT000	TDK Corporation	FERRITE BEAD 1 KOHM 0805 1LN	0805
R1, R2, R3, R6, R11, R18, R20, R21, R22, R23, R31, R35, R37, R39, R40, R43, R45, R53, R54	19	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R4	1	102k	CRCW0603102KFKEA	Vishay-Dale	RES, 102 k, 1%, 0.1 W, 0603	0603
R5	1	3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, 0603	0603
R7	1	10.2k	RC0603FR-0710K2L	Yageo America	RES, 10.2 k, 1%, 0.1 W, 0603	0603
R8	1	768k	CRCW0603768KFKEA	Vishay-Dale	RES, 768 k, 1%, 0.1 W, 0603	0603
R9	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R10, R15	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R12	1	137k	CRCW0603137KFKEA	Vishay-Dale	RES, 137 k, 1%, 0.1 W, 0603	0603
R13	1	115k	CRCW0603115KFKEA	Vishay-Dale	RES, 115 k, 1%, 0.1 W, 0603	0603
R14	1	22.6k	CRCW060322K6FKEA	Vishay-Dale	RES, 22.6 k, 1%, 0.1 W, 0603	0603
R16	1	10.5k	RC0603FR-0710K5L	Yageo America	RES, 10.5 k, 1%, 0.1 W, 0603	0603
R17, R24, R25, R36, R41, R47, R51, R57, R58, R59	10	1.00k	RT0603DRE071KL	Yageo America	RES, 1.00 k, 0.5%, 0.1 W, 0603	0603
R19	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
R29	1	4.02k	RT0603DRE074K02L	Yageo America	RES, 4.02 k, 0.5%, 0.1 W, 0603	0603
R33	1	374	RT0603DRE07374RL	Yageo America	RES, 374, 0.5%, 0.1 W, 0603	0603
R38, R49	2	348	CRCW2010348RFKEF	Vishay-Dale	RES, 348, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R42, R48	2	499	RT0603DRE07499RL	Yageo America	RES, 499, 0.5%, 0.1 W, 0603	0603
R44, R46	2	28.0	RT1206DRD0728RL	Yageo	RES, 28.0, 0.5%, 0.25 W, 1206	1206
R56	1	590	RT0603DRE07590RL	Yageo America	RES, 590, 0.5%, 0.1 W, 0603	0603
U1	1		TPS7A4700RGWR	Texas Instruments	36-V, 1-A, 4.17-uVRMS, RF LDO Voltage Regulator, RGW0020A (VQFN-20)	RGW0020A
U2	1		TPS7A3901DSC	Texas Instruments	Wide-VIN (+/-33 V), 150-mA, Spilt-Rail Output, Positive and Negative LDO Voltage Regulator with Startup Tracking, DSC0010J (WSON-10)	DSC0010J
U3	1		LM5160DNTR	Texas Instruments	Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, DNT0012B	DNT0012B
U4	1		REF5010AIDGKR	Texas Instruments	Low Noise, Very Low Drift, Precision Voltage Reference, -40 to 125 degC, 8-pin MSOP (DGK), Green (RoHS & no Sb/Br)	DGK0008A
U5, U8	2		OPA2209AIDGKR	Texas Instruments	2.2 nV/rtHz, 18 MHz, Precision, RRO, Operational Amplifier, 4.5 to 36 V, -40 to 125 degC, 8-pin SOP (DGK0008A), Green (RoHS & no Sb/Br)	DGK0008A
U9	1		DAC8802IPWR	Texas Instruments	Dual, Serial Input 14-Bit Multiplying Digital-to-Analog Converter, PW0016A (TSSOP-16)	PW0016A
U10	1		THS4130IDGNR	Texas Instruments	Fully Differential Input/Output Low Noise Amplifier, DGN0008D (VSSOP-8)	DGN0008D
VCNTLM, VCNTLP	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R34, R50	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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