TIDA-01013 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDA-01013	Any	Printed Circuit Board	
C1, C3, C4, C13, C14, C16, C17, C22, C24, C26, C28, C29	12	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
C2, C6, C9, C15, C27, C31, C89	7	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402
C7, C10, C32, C90	4	1uF	GRM155R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0402	0402
C8, C11, C23, C25, C34, C57	6	0.01uF	GRM188R61H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X5R, 0603	0603
C12	1	0.47uF	GRM188R61E474KA12D	MuRata	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X5R, 0603	0603
C18	1	91pF	GRM1555C1H910JA01D	MuRata	CAP, CERM, 91 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C19	1	68uF	C3216X5R1A686M160AC	TDK	CAP, CERM, 68 µF, 10 V, +/- 20%, X5R, 1206_190	1206_190
C21	1	2.2uF	C1005X5R1E225K050BC	TDK	CAP, CERM, 2.2 µF, 25 V, +/- 10%, X5R, 0402	0402
C30	1	13pF	GRM1555C1H130JA01D	MuRata	CAP, CERM, 13 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C46, C60, C64, C66, C68, C77, C79	7	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0402	0402
C47	1	47uF	GRM21BR61A476ME15	MuRata	CAP, CERM, 47 µF, 10 V, +/- 20%, X5R, 0805	0805
C50, C69, C70, C73, C74, C75, C80	7	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
C51	1	0.22uF	C1005X5R1A224K050BC	TDK	CAP, CERM, 0.22 µF, 10 V, +/- 10%, X5R, 0402	0402
C52, C62	2	270pF	GRM1885C2A271JA01D	MuRata	CAP, CERM, 270 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C53	1	470pF	C1608C0G2A471J	TDK	CAP, CERM, 470 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C54	1	1000pF	C1608C0G2A102J080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C55	1	1600pF	GRM2165C2A162JA01D	MuRata	CAP, CERM, 1600 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
C56, C59, C61, C63, C65, C67, C76, C78, C81, C82, C83, C84, C85, C86, C87	15	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	0402
C71	1	10pF	06035A100JAT2A	AVX	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C72	1	10pF	GRM1885C2A100JA01D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
D1	1	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
D2	1	100V	BAT41KFILM	STMicroelectronics	Diode, Schottky, 100 V, 0.2 A, SOD-523	SOD-523
FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
H1, H2	2		SJ61A2	3M	Bumpon, Hemisphere, 0.375 X 0.235, Black	Black Bumpon
J1, J2, J4, J5, J11, J12	6		GRPB021VWVN-RC	Sullins Connector Solutions	Header, 50mil, 2x1, Gold, TH	2x1 Header
J3	1		GRPB031VWVN-RC	Sullins Connector Solutions	Header, 50mil, 3x1, Gold, TH	Header, 3x1, 50mil, TH
J7, J8	2		901-144-8RFX	Amphenol RF	SMA Straight Jack, Gold, 50 Ohm, TH	SMA Straight Jack, TH

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J9	1		PPTC052LFBN-RC	Sullins Connector Solutions	Receptacle, 2.54mm, 5x2, Gold, TH	Receptacle, 2.54mm, 5x2, TH
J10	1		TSW-104-07-G-S	Samtec	Header, 100mil, 4x1, Gold, TH	4x1 Header
L1, L2, L4	3	10uH	SRN2010TA-100M	Bourns	Inductor, Shielded, Ferrite, 10 µH, 0.45 A, 0.864 ohm, AEC-Q200 Grade 1, SMD	2.0x1.6x1.0mm
L3	1	22uH	SRU2016-220Y	Bourns	Inductor, Drum Core, Ferrite, 22 µH, 0.37 A, 0.99 ohm, SMD	2.8x1.65x2.8mm
L7	1	600 ohm	HZ0603C601R-10	Laird-Signal Integrity Products	Ferrite Bead, 600 ohm @ 100 MHz, 0.3 A, 0603	0603
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
R1, R13, R19, R76	4	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R2, R57	2	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R3, R6, R7, R15, R23, R48, R51, R52, R54, R56, R58, R64, R70, R72, R73, R74	16	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R5	1	30.9k	CRCW040230K9FKED	Vishay-Dale	RES, 30.9 k, 1%, 0.063 W, 0402	0402
R8	1	75.0k	CRCW040275K0FKED	Vishay-Dale	RES, 75.0 k, 1%, 0.063 W, 0402	0402
R9	1	105k	CRCW0402105KFKED	Vishay-Dale	RES, 105 k, 1%, 0.063 W, 0402	0402
R11	1	17.4k	CRCW040217K4FKED	Vishay-Dale	RES, 17.4 k, 1%, 0.063 W, 0402	0402
R14	1	39.2k	CRCW040239K2FKED	Vishay-Dale	RES, 39.2 k, 1%, 0.063 W, 0402	0402
R16	1	36k	CRCW040236K0JNED	Vishay-Dale	RES, 36 k, 5%, 0.063 W, 0402	0402
R18	1	10.5k	CRCW040210K5FKED	Vishay-Dale	RES, 10.5 k, 1%, 0.063 W, 0402	0402
R20	1	97.6k	ERJ-2RKF9762X	Panasonic	RES, 97.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R22	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
R25	1	30.1k	RC0402FR-0730K1L	Yageo America	RES, 30.1 k, 1%, 0.063 W, 0402	0402
R27	1	17.8k	CRCW040217K8FKED	Vishay-Dale	RES, 17.8 k, 1%, 0.063 W, 0402	0402
R32	1	0.22	ERJ-2BQFR22X	Panasonic	RES, 0.22, 1%, 0.125 W, 0402	0402
R34, R49	2	120k	CRCW0402120KFKED	Vishay-Dale	RES, 120 k, 1%, 0.063 W, 0402	0402
R35, R45	2	1.00k	ERA-2AEB102X	Panasonic	RES, 1.00 k, 0.1%, 0.063 W, 0402	0402
R36, R40	2	3.40k	CRCW04023K40FKED	Vishay-Dale	RES, 3.40 k, 1%, 0.063 W, 0402	0402
R37, R41	2	330	ERJ-2RKF3300X	Panasonic	RES, 330, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R38, R43	2	10.0	CPF0402B10RE1	TE Connectivity	RES, 10.0, 0.1%, 0.063 W, 0402	0402
R39, R44	2	4.99	CRCW04024R99FKED	Vishay-Dale	RES, 4.99, 1%, 0.063 W, 0402	0402
R46, R62, R67	3	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R47	1	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R60	1	10.0k	RK73H1ETTP1002F	KOA Speer	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R65, R66	2	43.2	CRCW040243R2FKED	Vishay-Dale	RES, 43.2, 1%, 0.063 W, 0402	0402
R75	1	49.9k	PCF0402-03-49K9BT1	TT Electronics/IRC	RES, 49.9 k, 0.1%, 0.063 W, 0402	0402
U1, U5, U7	3		TPS560200DBVR	Texas Instruments	17V Input, 500mA Synchronous Step-Down Regulator in SOT-23 with Advanced Eco-Mode(TM), DBV0005A (SOT-5)	DBV0005A
U2, U3	2		TPS79133DBVR	Texas Instruments	Single Output High PSRR LDO, 100 mA, Fixed 3.3 V Output, 2.7 to 5.5 V Input, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U4	1		LMR23610ADDAR	Texas Instruments	SIMPLE SWITCHER, 36V 1A Synchronous Step-Down Converter, DDA0008E (SOIC-8)	DDA0008E
U6	1		TPS7A3001DGNR	Texas Instruments	Single Output High PSRR LDO, 200 mA, Adjustable -1.18 to -33 V Output, -3 to -36 V Input, with Ultra-Low Noise, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008D

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U8	1		TPS79101DBVR	Texas Instruments	Single Output High PSRR LDO, 100 mA, Adjustable 1.2 to 5.5 V Output, 2.7 to 5.5 V Input, 6-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0006A
U10	1		REF6030IDGKR	Texas Instruments	High-Precision Voltage Reference with Integrated High-Bandwidth Buffer, DGK0008A (VSSOP-8)	DGK0008A
U12, U18	2		OPA191IDBVR	Texas Instruments	36-V, Low Power, Precision, CMOS, Rail-to-Rail Input/Output, Low Offset Voltage, Low Input Bias Current Op Amp, DBV0005A (SOT-5)	DBV0005A
U13	1		THS4551IRGTR	Texas Instruments	Low Noise, Precision, 150MHz, Fully Differential Amplifier, RGT0016C (VQFN-16)	RGT0016C
U14	1		ADS127L01IPBSR	Texas Instruments	24-Bit, 512kSPS, Delta-Sigma ADC, PBS0032A (TQFP-32)	PBS0032A
U15	1		LMK00804BPW	Texas Instruments	Low Skew, 1-to-4 Multiplexed Differential/LVCMOS-to-LVCMOS/TTL Fanout Buffer, PW0016A	PW0016A
U16, U17	2		SN74AUP1G80DCKR	Texas Instruments	LOW-POWER SINGLE POSITIVE-EDGE-TRIGGERED D-TYPE FLIP-FLOP, DCK0005A	DCK0005A
U19	1		TPS73118DBVR	Texas Instruments	Single Output Fast Transient Response LDO, 150 mA, Fixed 1.8 V Output, 1.7 to 5.5 V Input, 5-pin SOT-23 (DBV), -40 to 85 degC, Green (RoHS & no Sb/Br)	DBV0005A
Y1	1		ASEMB-16.000MHZ-XY-T	Abracon Corporation	Oscillators, 16MHz, CMOS, 1.8 to 3.3V, SMD	4-Pin SMD, Body 3.2 x 2.5 mm , Height 0.9 mm
C5, C20, C33	0	0.039uF	GRM155R71A393KA01D	MuRata	CAP, CERM, 0.039 µF, 10 V, +/- 10%, X7R, 0402	0402
R4, R12, R26, R42, R61, R71	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R10, R17	0	1.00k	RC0402FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.0625 W, 0402	0402
R50, R53, R55, R59, R63, R68, R69	0	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, 0402	0402
R78, R79, R80, R81, R82	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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