

TIDA-01027 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01027	Any	Printed Circuit Board	
C1, C2, C3, C30, C31, C32, C53, C54, C55, C57, C60, C61, C62, C86, C87, C88, C112, C113	18	10uF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X7R, 1206_190	1206_190
C5, C64, C90	3	220uF	10TPB220M	Panasonic	CAP, Tantalum Polymer, 220 uF, 10 V, +/- 20%, 0.04 ohm, 7343-40 SMD	7343-40
C6, C7, C8, C9, C65, C66, C67, C68, C91, C92, C93, C94	12	10uF	GRM32DR71E106KA12L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 1210	1210
C10, C11, C12, C13, C14, C15, C16, C17, C69, C70, C71, C72, C73, C74, C75, C76, C95, C96, C97, C98, C99, C100, C101, C102	24	47uF	GRM32ER71A476KE15L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 10%, X7R, 1210	1210
C18, C19, C24, C37, C38, C42, C77, C78, C83, C103, C104, C109	12	10uF	GRM21BR61C106KE15L	MuRata	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 0805	0805
C20, C23, C39, C40, C56, C79, C82, C105, C108	9	47uF	GRM219R60G476ME44D	MuRata	CAP, CERM, 47 µF, 4 V, +/- 20%, X5R, 0805	0805
C22, C81, C107	3	1000pF	C0402C102J3RACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 5%, X7R, 0402	0402
C25, C26, C33, C34, C36, C41, C43, C58, C84, C85, C110, C111, C114	13	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
C27, C46, C52	3	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
C28	1	47uF	C3216X5R1C476M160AB	TDK	CAP, CERM, 47 uF, 16 V, +/- 15%, X5R, 1206	1206
C29	1	22uF	GRM31CR61E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X5R, 1206	1206
C35	1	0.1uF	CGA3E2X8R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
C44, C45	2	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
C47, C51, C115	3	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
C48, C49, C50	3	22uF	JMK212BJ226MG-T	Taiyo Yuden	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0805	0805
C59	1	1uF	08053D105KAT2A	AVX	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0805	0805
D1, D2, D3	3	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
D4	1	30V	B330B-13-F	Diodes Inc.	Diode, Schottky, 30 V, 3 A, SMB	SMB
D5	1	Green	LTST-C191TGKT	Lite-On	LED, Green, SMD	LED_0603

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FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J1, J2	2		SSW-116-01-G-D	Samtec	Receptacle, 2.54mm, 16x2, Gold, TH	Receptacle, 2.54mm, 16x2, TH
J3, J4	2		SSQ-106-02-G-D	Samtec	Receptacle, 2.54 mm, 6x2, Gold, TH	Receptacle, 2.54 mm, 6x2, TH
J5, J6, J7, J8, J9, J10	6		310-43-102-41-001000	Mill-Max	Socket Strip, 2x1, 100mil, Black, Tin, TH	Socket Strip, 100mil, 2pin
J11	1		142-0701-201	Emerson Network Power	Connector, TH, SMA	SMA
J12, J71	2		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
L1, L3, L5, L7, L9	5	1000 ohm	BLM41PG102SN1L	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 1.5 A, 1806	1806
L2, L4, L6, L8, L10	5	880Ω	74279252		WE-CBF SMD EMI Suppression Ferrite Bead, 1812, 880Ω	
L11	1	750 ohm	742792045	Würth Elektronik	Ferrite Bead, 750 ohm @ 100 MHz, 0.2 A, 0805	0805
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, R29, R38, R41, R66	5	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R2, R42, R67	3	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3, R43, R68	3	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4, R44, R69	3	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R5, R45, R70	3	30.9k	CRCW060330K9FKEA	Vishay-Dale	RES, 30.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R6, R46, R71, R99	4	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R7, R31, R47, R72	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R8, R13, R22, R23, R32, R48, R53, R62, R63, R73, R78, R87, R118	13	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R9, R18, R19, R20, R21, R24, R25, R49, R58, R59, R60, R61, R64, R65, R74, R83, R84, R85, R86, R89, R90, R91, R93, R95, R96, R98, R101, R102, R103, R104, R105, R110, R111, R112, R113, R114, R115, R116, R117	39	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R10	1	4.22k	CRCW06034K22FKEA	Vishay-Dale	RES, 4.22 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R11	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R14, R16, R36, R51, R54	5	0.01	WSLT2512R0100FEA	Vishay-Dale	RES, 0.01, 1%, 1 W, 2512	2512
R15, R55	2	89.8k	RT0603BRD0789K8L	Yageo America	RES, 89.8 k, 0.1%, 0.1 W, 0603	0603

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R17	1	10.5k	RT0603BRD0710K5L	Yageo America	RES, 10.5 k, 0.1%, 0.1 W, 0603	0603
R26, R35	2	38.3k	CRCW040238K3FKED	Vishay-Dale	RES, 38.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R27, R37	2	25.5k	CRCW040225K5FKED	Vishay-Dale	RES, 25.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R28, R30	2	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201
R33	1	24.3k	CRCW060324K3FKEA	Vishay-Dale	RES, 24.3 k, 1%, 0.1 W, 0603	0603
R34	1	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5 k, 1%, 0.1 W, 0603	0603
R39	1	118k	CRCW0402118KFKED	Vishay-Dale	RES, 118 k, 1%, 0.063 W, 0402	0402
R40	1	105k	CRCW0402105KFKED	Vishay-Dale	RES, 105 k, 1%, 0.063 W, 0402	0402
R50	1	8.87k	CRCW06038K87FKEA	Vishay-Dale	RES, 8.87 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R57	1	3.36k	RT0603BRD073K36L	Yageo America	RES, 3.36 k, 0.1%, 0.1 W, 0603	0603
R75	1	2.10k	CRCW06032K10FKEA	Vishay-Dale	RES, 2.10 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R80	1	48.7k	CRCW060348K7FKEA	Vishay-Dale	RES, 48.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R82	1	24.0k	RT0603BRD0724KL	Yageo America	RES, 24.0 k, 0.1%, 0.1 W, 0603	0603
R88	1	51	RC0201JR-0751RL	Yageo America	RES, 51, 5%, 0.05 W, 0201	0201
R92	1	158k	CRCW0603158KFKEA	Vishay-Dale	RES, 158 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R97	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R100, R106, R107, R108	4	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R109	1	10k	RC0603JR-0710KL	Yageo	RES, 10 k, 5%, 0.1 W, 0603	0603
S1, S2	2		TCBS-6-01	Richco Plastics	HEX STANDOFF SPACER, 9.53 mm	7.9x9.5 mm
TP1, TP2, TP3, TP4, TP5, TP7, TP26	7		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP6	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP8, TP10, TP11, TP22	4	STD	STD	STD	Test Point, 0.025"	
TP9, TP23, TP24, TP25, TP27, TP28	6		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP12, TP13, TP14, TP15, TP16	5		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_ Miniature
TP17, TP18, TP19, TP20, TP21	5		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1, U5, U8, U10, U13	5	27 uF	NFM31PC276B0J3L	MuRata	FILTER LC HIGH FREQ 27uF 1206	3.2x1.6mm
U2, U11, U14	3		TPSM84824MOLR	Texas Instruments	4.5V-17V Input, 0.6V-10.0V Output, 8-A SWIFT(TM) Power Module , MOL0024A (QFM-24)	MOL0024A
U3, U12, U15	3		TPS7A8400RGR	Texas Instruments	High-Current (3 A), High-Accuracy (1%), Low-Noise (4.4 µVRMS), LDO Voltage Regulator, RGR0020A (VQFN-20)	RGR0020A
U4, U7	2		LMZM23601SILR	Texas Instruments	36-V 1-A Step-Down DC-DC Nano Module, SIL0010A (uSIP-10)	SIL0010A
U6	1		TPS7A8300RGR	Texas Instruments	2A, Low-Dropout Voltage Regulator for High Speed Communication Systems, RGR0020A (VQFN-20)	RGR0020A
U9	1		TPS7A3301RGWT	Texas Instruments	Single Output High PSRR LDO, 1 A, Adjustable -1.18 to -33 V Output, -3 to -36 V Input, with Ultra-Low Noise, 20-pin VQFN (RGW), -40 to 125 degC, Green (RoHS & no Sb/Br)	RGW0020A
U16	1		TPS7A4901DGNR	Texas Instruments	Single Output High PSRR LDO, 150 mA, Adjustable 1.2 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
U17	1		CD74HC4017PWR	Texas Instruments	High Speed CMOS Logic Decade Counter/Divider with 10 Decoded Outputs, PW0016A (TSSOP-16)	PW0016A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U18	1		SN74AVC4T245DGVR	Texas Instruments	4-Bit Dual-Supply Bus Transceiver with Configurable Voltage-Level Shifting and 3-State Outputs, DGV0016A (TVSOP-16)	DGV0016A
U19	1		SN74LVC2G04DBVR	Texas Instruments	Dual Inverter, DBV0006A, LARGE T&R	DBV0006A

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