TIDA-00365 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C2	2	100uF	860040875005	Wurth Elektronik	CAP, AL, 100 µF, 100 V, +/- 20%, 0.2 ohm, TH	D10xL25mm
2	C3, C4, C5, C40	4	3.3uF	C3216X7S2A335M160AB	TDK	CAP, CERM, 3.3 µF, 100 V, +/- 20%, X7S, 1206_190	1206_190
3	C6, C7	2	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
4	C8, C9, C14, C15	4	2200pF	06031C222JAT2A	AVX	CAP, CERM, 2200 pF, 100 V, +/- 5%, X7R, 0603	0603
5	C10, C12	2	1uF	C2012X7S2A105K125AB	TDK	CAP, CERM, 1 µF, 100 V, +/- 10%, X7S, 0805	0805
6	C11, C13	2	0.01uF	06031C103KAT2A	AVX	CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, 0603	0603
7	C16, C46	2	0.01uF	885012205031	Wurth Elektronik	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
8	C17, C19	2	1uF	885012106017	Wurth Elektronik	CAP, CERM, 1 µF, 16 V, +/- 20%, X5R, 0603	0603
9	C18, C36, C39, C44, C48	5	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 20%, X7R, 0402	0402
10	C20	1	4700pF	GRM155R72A472KA01D	MuRata	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0402	0402
11	C21, C22, C23	3	100pF	885012205055	Wurth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
12	C26, C27, C28, C29, C30, C31, C32, C33, C45, C47, C51	11	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
13	C34	1	3300pF	GRM188R72A332KA01D	MuRata	CAP, CERM, 3300 pF, 100 V, +/- 10%, X7R, 0603	0603
14	C35	1	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0603	0603
15	C37, C38	2	4.7uF	GRM188R61E475KE11D	MuRata	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X5R, 0603	0603
16	C41, C42, C43	3	1uF	C1608X5R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0603	0603
17	C49	1	1000pF	885012205044	Wurth Elektronik	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0402	0402
18	C50	1	0.1uF	885012205044	Wurth Elektronik	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0402	0402
19	D1, D2, D5, D6, D9	5	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
20	D3, D4	2	91V	MMSZ5270BT1G	ON Semiconductor	Diode, Zener, 91 V, 500 mW, SOD-123	SOD-123
21	D7, D8, D13	3	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
22	D10, D11	2	Green	150060GS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
23	D12	1	3.9V	BZT52C3V9T-7	Diodes Inc.	Diode, Zener, 3.9 V, 300 mW, SOD-523	SOD-523
24	D14	1	75V	BAV99W-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, SOT-323	SOT-323
25	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
26	H1, H2, H3, H4	4		1514409	Farnell	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Screw, M3, 6mm, Nylon
27	H5	1		691351500003	Wurth Elektronik	TERM BLOCK PLUG 3POS 5.08MM	
28	H6, H7, H8, H9	4		1902C	Standoff	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Hexagon Spacer
29	H10	1		691352510002	Wurth Elektronik	TERM BLOCK PLUG 2POS 5.08MM	
30	J1, J4	2		61030421121	Wurth Elektronik	Header, 2.54mm, 2x2, Gold, SMT	Header, 2.54mm, 2x2, Gold, TH
31	J2	1		61031221121	Wurth Elektronik	Header, 2.54mm, 6x2, Gold, SMT	Header, 2.54mm, 6x2, Gold, TH
32	J3	1		691311500103	Wurth Elektronik	Header (Shrouded), 5.08mm, 3x1, Tin, TH	Header (Shrouded), 5.08mm, 3x1, TH
33	J5	1		691311500002	Wurth Elektronik	Header (Shrouded), 5.08mm, 2x1, Tin, TH	Header (Shrouded), 5.08mm, 2x1, TH
34	L1	1	100uH	74404041101	Wurth Elektronik	Inductor, Wirewound, Ferrite, 100 µH, 0.35 A, 1.697 ohm, SMD	3.7x4mm
35	L2	1	10uH	74479887310	Wurth Elektronik	Inductor, Shielded Drum Core, Metal Composite, 10 µH, 0.35 A, 0.7 ohm, SMD	2.5x1x2mm
36	Q1, Q2, Q3, Q4	4	100V	CSD19534Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 10 A, SON 5x6mm	SON 5x6mm
37	R1	1	0.01	CRA2512-FZ-R010ELF	Bourns	RES, 0.01, 1%, 3 W, 2512	2512
38	R2, R3, R8, R9	4	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47, 5%, 0.1 W, 0603	0603
39	R4, R5, R10, R11	4	2.7	CRCW08052R70JNEA	Vishay-Dale	RES, 2.7, 5%, 0.125 W, 0805	0805
40	R6, R7	2	3.0	CRCW06033R00JNEA	Vishay-Dale	RES, 3.0, 5%, 0.1 W, 0603	0603
41	R12, R13, R43	3	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
42	R14, R15	2	1.50k	CRCW04021K50FKED	Vishay-Dale	RES, 1.50 k, 1%, 0.063 W, 0402	0402
43	R17	1	23.2k	CRCW040223K2FKED	Vishay-Dale	RES, 23.2 k, 1%, 0.063 W, 0402	0402
44	R18, R19	2	180k	CRCW0402180KJNED	Vishay-Dale	RES, 180 k, 5%, 0.063 W, 0402	0402
45	R20	1	16.5k	CRCW040216K5FKED	Vishay-Dale	RES, 16.5 k, 1%, 0.063 W, 0402	0402
46	R21, R22	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
47	R25, R26, R27, R28, R65, R66	6	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
48	R29, R30, R33, R34, R35, R36, R37, R38	8	22	CRCW040222R0JNED	Vishay-Dale	RES, 22, 5%, 0.063 W, 0402	0402
49	R31, R32	2	3.32k	CRCW04023K32FKED	Vishay-Dale	RES, 3.32 k, 1%, 0.063 W, 0402	0402
50	R39, R40, R56	3	1.2k	CRCW04021K20JNED	Vishay-Dale	RES, 1.2 k, 5%, 0.063 W, 0402	0402
51	R41	1	3.0	CRCW04023R00JNED	Vishay-Dale	RES, 3.0, 5%, 0.063 W, 0402	0402
52	R42, R49, R50, R55, R57, R58, R62, R63	8	51k	CRCW040251K0JNED	Vishay-Dale	RES, 51 k, 5%, 0.063 W, 0402	0402
53	R44	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
54	R45	1	9.1k	CRCW04029K10JNED	Vishay-Dale	RES, 9.1 k, 5%, 0.063 W, 0402	0402
55	R46, R47	2	200k	CRCW0402200KJNED	Vishay-Dale	RES, 200 k, 5%, 0.063 W, 0402	0402
56	R48	1	2.26k	CRCW040222K6FKED	Vishay-Dale	RES, 2.26 k, 1%, 0.063 W, 0402	0402
57	R51	1	7.5k	CRCW04027K50JNED	Vishay-Dale	RES, 7.5 k, 5%, 0.063 W, 0402	0402
58	R52	1	475	CRCW0402475RFKED	Vishay-Dale	RES, 475, 1%, 0.063 W, 0402	0402
59	R53	1	820	CRCW0402820RJNED	Vishay-Dale	RES, 820, 5%, 0.063 W, 0402	0402
60	R54	1	806	CRCW0402806RFKED	Vishay-Dale	RES, 806, 1%, 0.063 W, 0402	0402
61	R59	1	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
62	R60	1	3.24k	CRCW04023K24FKED	Vishay-Dale	RES, 3.24 k, 1%, 0.063 W, 0402	0402
63	R61	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
64	R64	1	1.8k	CRCW04021K80JNED	Vishay-Dale	RES, 1.8 k, 5%, 0.063 W, 0402	0402
65	R67	1	6.8k	CRCW04026K80JNED	Vishay-Dale	RES, 6.8 k, 5%, 0.063 W, 0402	0402
66	R68	1	487k	CRCW0402487KFKED	Vishay-Dale	RES, 487 k, 1%, 0.063 W, 0402	0402
67	R69	1	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
68	R70	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
69	R71	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
70	R72	1	3.09k	CRCW04023K09FKED	Vishay-Dale	RES, 3.09 k, 1%, 0.063 W, 0402	0402
71	SW1	1		TL1015AF160QG	E-Switch	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	Switch, 4.4x2x2.9 mm
72	TP1	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
73	U1	1		SM72295MAX/NOPB	Texas Instruments	Photovoltaic Full Bridge Driver, DW0028A	DW0028A
74	U2	1		ATL431BQDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A	DBZ0003A
75	U3	1		LM5018MRX/NOPB	Texas Instruments	100V, 300mA Constant On-Time Synchronous Buck Regulator, DDA0008B	DDA0008B
76	U4	1		LM317LIPK	Texas Instruments	3-Terminal Adjustable Regulator, PK0003A	PK0003A
77	U5	1		SN74LVC1G175DCKR	Texas Instruments	SINGLE D-TYPE FLIP-FLOP WITH ASYNCHRONOUS CLEAR, DCK0006A	DCK0006A
78	U6	1		LM2901VQD	Texas Instruments	Quad Comparator, D0014A	D0014A
79	U7	1		LMT89DCKR	Texas Instruments	2.4V, 10µA, SC70, DSBGA Temperature Sensor, DCK0005A	DCK0005A
80	U8	1		TL431QDBZT	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
81	C24, C25	0	0.01uF	885012205031	Wurth Elektronik	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
82	Q5	0	160 V	DMMT5551-7-F	Diodes Inc.	Transistor, Dual NPN, 160 V, 0.2 A, SOT-26	SOT-26
83	R16	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
84	R23	0	24k	CRCW040224K0JNED	Vishay-Dale	RES, 24 k, 5%, 0.063 W, 0402	0402
85	R24	0	33.2k	CRCW040233K2FKED	Vishay-Dale	RES, 33.2 k, 1%, 0.063 W, 0402	0402

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