

TIDA010971 REV E2.0 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	Package/Reference
1	PCB	1		ITXAC0071	Any	Printed Circuit Board	
2	1, AGND1, TH_VN	3		117SL46H	Niamei	Natural PCB Test Point Brass, Tin Plating Surface Mount Mounting Type	SAF_TEST_POINT_3 MMWG_MMWG
3	W4, V4, Primary	3		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose TS0001
4	AGND2	1		5006	Keystone Electronics	Test Point, Compact, Black, TH	Black Compact TS0001
5	C1, C18	2	1000pF	OPM388C-1H410M010	Murata	CAP CERAM 1000 pF 50 V +/- 5% C0G/NP0 0603	0603
6	C4, C13	1	0.1uF	800SC180K12A	AVX	CAP CERAM 0.1 uF 10 V +/- 20% X7R 0603	0603
7	C3	1	1uF	OPM155Z71AUSK011	Murata	Chip Multilayer Ceramic Capacitors for General Purpose 0402, 1.0uF, 175C 10% 10V	0402
8	CS, C11	2	100pF	OPM388C-1H410M010	Murata	CAP CERAM 100 pF 50 V +/- 5% C0G/NP0 0603	0603
9	CS, C17, C19	2	0.01uF	800SC180K12A	AVX	CAP CERAM 0.01 uF 10 V +/- 20% X7R 0603	0603
10	CS	2	0.1uF	800SC180K12A	AVX	CAP CERAM 0.1 uF 50 V +/- 5% X7R 0603	0603
11	CL, C17	2	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.1 uF 50 V +/- 5% C0G/NP0 0603	0603
12	C14	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% C0G/NP0 0603	0603
13	C14	1	0.001uF	OPM388C-1H410M010	Murata	CAP CERAM 0.001 uF 50 V +/- 5% C0G/NP0 0603	0603
14	C15	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% C0G/NP0 0603	0603
15	C16, C19	2	1000pF	CL10B100K100M010	Samsung Electro-Mechanics	CAP CERAM 1000 pF 50 V +/- 10% X7R 0402	0402
16	C18	1	0.001uF	OPM388C-1H410M010	Murata	CAP CERAM 0.001 uF 50 V +/- 5% C0G/NP0 0603	0603
17	C20	1	0.01uF	OPM105P7H7SKA110	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0402	0402
18	C21	1	0.1uF	OPM388C-1H410M010	Murata	CAP CERAM 0.1 uF 50 V +/- 5% X7R 0603	0603
19	C22, C23	2	2.2uF	CH057H47W225M0010	TDK	CAP CERAM 2.2 uF 450 V +/- 20%, X7T, AEC-Q200 Grade 1, 6x6x4mm	6x6x4mm
20	C25, C26	2	10uF	OPM105P7H7SKA110	Murata	CAP CERAM 10 uF 50 V +/- 20% X5R 0603	0603
21	C27	1	0.1uF	OPM105P7H7SKA110	Murata	CAP CERAM 0.1 uF 50 V +/- 20% X5R 0603	0603
22	C28	1	0.1uF	OPM105P7H7SKA110	Murata	CAP CERAM 0.1 uF 50 V +/- 20% X5R 0603	0603
23	C29	1	0.01uF	CL10B100K100M010	Samsung Electro-Mechanics	CAP CERAM 0.01 uF 50 V +/- 10% X7R 0603	0603
24	C31, C37, C38	5	0.01uF	OPM105P7H7SKA110	Murata	CAP CERAM 0.01 uF 50 V +/- 20% X7R, AEC-Q200 Grade 1, 0603	0603
25	C39, C39	1	1uF	GRAC547R105K100T	Chi Chip Electronics	1uF 100V 10V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
26	C39	1	0.1uF	OPM388C-1H410M010	Murata	CAP CERAM 0.1 uF 50 V +/- 5% X7R 0603	0603
27	C41, C47, C50	2	0.1uF	800SC180K12A	AVX	CAP CERAM 0.1 uF 25 V +/- 10% X7R 0603	0603
28	C48	1	1000pF	OPM388C-1H410M010	Murata	CAP CERAM 1000 pF 50 V +/- 5% X7R 0603	0603
29	C36, C45, C46	6	1000pF	CL10C100K100M010	Samsung Electro-Mechanics	CAP CERAM 1000 pF 50 V +/- 5% X7R 0603	0603
30	C51, C52, C53	2	0.1uF	OPM388C-1H410M010	Murata	CAP CERAM 0.1 uF 25 V +/- 5% X7R 0603	0603
31	C43, C44, C42	2	1uF	OPM105P7H7SKA110	Murata	1000 pF 100V Ceramic Capacitor X7R 0603 (1005 Metric)	0603
32	C41, C43, C42	3	1000pF	OPM105P7H7SKA110	Murata	CAP CERAM 1000 pF 50 V +/- 20% X7R 0603	0603
33	C41, C43	2	0.1uF	CL10C100K100M010	Murata	CAP CERAM 0.1 uF 50 V +/- 20% X7R 0603	0603
34	C44, C45	2	1uF	100SC180K12A	AVX	CAP CERAM 1 uF 25 V +/- 10% X7R 0603	0603
35	C44, C45, C53	3	0.1uF	800SC180K12A	AVX	CAP CERAM 0.1 uF 25 V +/- 10% X7R 0603	0603
36	C52	1	100pF	OPM388C-1H410M010	Murata	CAP CERAM 100 pF 50 V +/- 5% C0G/NP0 0603	0603
37	C46, C47	2	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
38	C48	1	100pF	OPM388C-1H410M010	Murata	CAP CERAM 100 pF 50 V +/- 20% X7R 0603	0603
39	C49	1	0.01uF	CL10C100K100M010	Murata	CAP CERAM 0.01 uF 50 V +/- 20% X7R 0603	0603
40	C49	1	0.1uF	CL10C100K100M010	Murata	CAP CERAM 0.1 uF 25 V +/- 20% X7R, AEC-Q200 Grade 2, TH	TH
41	C52	1	1000pF	OPM105P7H7SKA110	Murata	CAP CERAM 1000 pF 50 V +/- 5% C0G/NP0 0603	0603
42	C51	1	100pF	Keystone Electronics	Test Point, Compact, Red, TH	Red Compact TS0001	
43	D1, D2, D4	3	000V	CS1408-FL1000	Diodes	Diode, Ultrafast, 600 V, 1 A, 1408 Shode	1408 Shode
44	D5	1	0.2V	AD8250Z-7	Maxim Inc.	Diode, Zener, 0.2 V, 500 mW, SMD-123	SMD-123
45	D6, D8	2	0V	60V-0500	Maxim Semiconductor	Diode, Schottky, 0.5 V, 1 A, 0.5 W, SMD	SMD
46	D9	1	100V	AAAPF0006P00R005	Amphenol	Diode, TVS, 60 V, 0.05 V, 500 mW, 0.5 A, 0.5 W, SMD	SMD
47	D10	1	000V	60V-0500	Maxim Semiconductor	Diode, TVS, 60 V, 0.05 V, 500 mW, 0.5 A, 0.5 W, SMD	SMD
48	D10	1	0.2V	88M141EWS2	Maxim Semiconductor	Diode, TVS, 0.2 V, 3.3 V, AEC-Q200, SMD	SMD
49	FL, F2, F3	3		FL0005-RR	Amphenol	4 Pin V-Act 120 V Act Pin Header (Cantilever Style) Exposed Surface Mount 2-SMD, Square End Block	SAF_TEST_POINT_2 MMWG
50	GND, F20, F103	3		0A1	QSA	Plated metal, there is nothing to buy or mount	0A1
51	Q1N, Neutral	1		0A1	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose TS0001
52	HS, HS, HS, HS	4		HS7-1N-4-0	HS7 Fastener Supply	Hex, Hex, 4-40, Nylon	
53	J1, J1, J1, J1	3		118P-105-07-0-8	Samsic	Header, 100pin, 2x, Gold, TH	2x Header
54	J2, J2, J2, J2	3		050120105-12	Samsic	Receptacle, 140pin, 120, TH, TH	140 Receptacle
55	J3, J3, J4, J5	7		050120105	On Shore Technology	Terminal Block, 5.08 mm, 2x4, Brass, TH	2x4 5.08 mm Terminal Block
56	K1	1		071E1400P	Avnet Electronics	Relay, SPDT, 1 Form C, 1 V, 10 V, TH	1140000000000
57	L1	1	20uH	060-1000000000000P	Pulse Electronics	Inductor, General Purpose Multi-Layer Inductor 20% Inductance 0.06A, 1.00mm DCR 0603	0603
58	L1	1	000uH	14000000000000	Avnet Electronics	Inductor, Wirewound, Ferrite, 0.001 uH, 0.2 A, 0.5 W, SMD	0.001 uH, 0.2 A, 0.5 W, SMD
59	L1	1	000uH	00000000000000	Avnet Electronics	Inductor, Wirewound, Ferrite, 0.001 uH, 0.2 A, 0.5 W, SMD	0.001 uH, 0.2 A, 0.5 W, SMD
60	L4	1	1.5uH	50000000000000	Colecraft	Inductor, Wirewound, Ferrite, 0.5 uH, 0.2 A, 1.5 ohm, AEC-Q200 Grade 1, SMD	1.5 uH, 0.2 A, 1.5 ohm
61	L5	1	100uH	00000000000000	Colecraft	Inductor, Wirewound, Ferrite, 0.001 uH, 0.2 A, 0.5 ohm, AEC-Q200 Grade 1, SMD	0.001 uH, 0.2 A, 0.5 ohm
62	MP1, MP2, MP3, MP4	4		4856	Keystone	Hex Standoff Threaded #4-40 Nylon 1.000" (25.40mm) 1" Natural	HEX_STNDIFF_4-40
63	Q1	1	120V	CS11000Q2	Texas Instruments	MOSFET, N-CH, 12 V, 22 A, PQFN0050 040904-0	0409000000
64	Q2, Q3	2	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
65	Q5, R4	2	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
66	Q6	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
67	Q7	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
68	Q8	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
69	Q9	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
70	Q10	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
71	Q11	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
72	R10, R25, R30	5	100K	CH0603R-070000	Vishay Dale	RES, 100 K, 1%, 0.1 W, 0603	0603
73	R11, R22	2	100K	CH0603R-070000	Vishay Dale	RES, 100 K, 1%, 0.1 W, 0603	0603
74	R13, R14, R15, R16, R17, R18, R19, R20	12	100K	CH0603R-070000	Vishay Dale	RES, 100 K, 1%, 0.1 W, 0603	0603
75	R16	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
76	R16	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
77	R17, R22	2	1.1K	CH0603R-070000	Vishay Dale	RES, 1.1 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
78	R18	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
79	R21, R25, R27, R28, R29, R31, R32, R37	9	0	CH0603R-100R	Vishay	0 Ohm Jumper Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film	0603
80	R33	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
81	R34	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
82	R35	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
83	R36	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
84	R37	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
85	R38	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
86	R39	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
87	R40	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
88	R41	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
89	R42	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
90	R43	1	0.01uF	OPM388C-1H410M010	Murata	CAP CERAM 0.01 uF 50 V +/- 5% X7R 0603	0603
91	R44, R45, R46, R47, R48, R49, R50	12	100K	CH0603R-070000	Vishay Dale	RES, 100 K, 1%, 0.1 W, 0603	0603
92	R46, R48	2	1.0K	CH0603R-070000	Vishay Dale	RES, 1.0 K, 1%, 0.1 W, 0603	0603
93	R44, R45, R46	3	100K	CH0603R-070000	Vishay Dale	RES, 100 K, 1%, 0.1 W, 0603	0603
94	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
95	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
96	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
97	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
98	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
99	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
100	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
101	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
102	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
103	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
104	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
105	R47, R48	2	10K	CH0603R-070000	Vishay Dale	RES, 10 K, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
106	SH-31, SH-35, SH	3	1x2	25H-BK-G	Samsic	Shunt, 2mm, Gold plated, Black	2mm Shunt, Closed Type
107	TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30, TP31, TP32, TP33, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP48, TP49, TP50, TP51, TP52, TP53, TP54, TP55, TP56, TP57, TP58, TP59, TP60, TP61, TP62, TP63, TP64, TP65, TP66, TP67, TP68, TP69, TP70, TP71, TP72, TP73, TP74, TP75, TP76, TP77, TP78, TP79, TP80, TP81, TP82, TP83, TP84, TP85, TP86, TP87, TP88, TP89, TP90, TP91, TP92, TP93, TP94, TP95, TP96, TP97, TP98, TP99, TP100, TP101, TP102, TP103, TP104, TP105, TP106, TP107, TP108, TP109, TP110, TP111, TP112, TP113, TP114, TP115, TP116, TP117, TP118, TP119, TP120, TP121, TP122, TP123, TP124, TP125, TP126, TP127, TP128, TP129, TP130, TP131, TP132, TP133, TP134, TP135, TP136, TP137, TP138, TP139, TP140, TP141, TP142, TP143, TP144, TP145, TP146, TP147, TP148, TP149, TP150, TP151, TP152, TP153, TP154, TP155, TP156, TP157, TP158, TP159, TP160, TP161, TP162, TP163, TP164, TP165, TP166, TP167, TP168, TP169, TP170, TP171, TP172, TP173, TP174, TP175, TP176, TP177, TP178, TP179, TP180, TP181, TP182, TP183, TP184, TP185, TP186, TP187, TP188, TP189, TP190, TP191, TP192, TP193, TP194, TP195, TP196, TP197, TP198, TP199, TP200, TP201, TP202, TP203, TP204, TP205, TP206, TP207, TP208, TP209, TP210, TP211, TP212, TP213, TP214, TP215, TP216, TP217, TP218, TP219, TP220, TP221, TP222, TP223, TP224, TP225, TP226, TP227, TP228, TP229, TP230, TP231, TP232, TP233, TP234, TP235, TP236, TP237, TP238, TP239, TP240, TP241, TP242, TP243, TP244, TP245, TP246, TP247, TP248, TP249, TP250, TP251, TP252, TP253, TP254, TP255, TP256, TP257, TP258, TP259, TP260, TP261, TP262, TP263, TP264, TP265, TP266, TP267, TP268, TP269, TP2						

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