

Assembly Bill of Materials

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Project Name:	TIDA-00558
Project File:	SM72295EvalBoard REVC.PrjPcb
Base ID:	<Parameter PRJ_Number not found>
Schematic Rev:	<Parameter SCH_Rev not found>
Assembly Variant:	001
Build Quantity:	100
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Item	Designator	Description	RoHS	Manufacturer	PartNumber	Quantity	Required	Supplier 1	Supplier Part Number 1	Supplier 2	Supplier Part Number 2	Alternate Manufacturer	Alternate PartNumber
1	IPC81	Printed Circuit Board	O	Any	PRJ_Number	1	100						
2	C1, C19	CAP, CERM, 47 uF, 100 V, +/- 20%, X7R, 1075x300mil	Y	AVX	RT201C476MAJ10	2	200						
3	C2	CAP, CERM, 220 pF, 100 V, +/- 5%, COG/NP0, 0805	Y	Kemet	C0805C221J1GACTU	1	100	Digi-Key	399-1128-1-ND	Mouser	80-C0805C221J1G		
4	C3, C20, C39, C40	CAP, CERM, 0.015 uF, 100 V, +/- 5%, X7R, 1206	Y	AVX	12061C153JAT2A	4	400	Digi-Key	478-3787-1-ND	Mouser	581-12061C153JAT2A		
5	C4, C17, C21, C33	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0805	Y	AVX	08055C104KAT2A	4	400	Digi-Key	478-1395-1-ND	Mouser	581-08055C104K		
6	C5, C11, C14, C27	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0805	Y	AVX	08053C104KAT2A	4	400	Digi-Key	478-3755-1-ND	Mouser	581-08053C104K		
7	C6, C12, C22, C26	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, 0805	Y	TDK	C2012X7R1E474K	4	400	Digi-Key	445-1353-1-ND	Farnell	1844282		
8	C7, C10, C23, C25	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	Y	TDK	C2012X7R1E105K	4	400	Digi-Key	445-1354-1-ND	Farnell	1907348		
9	C8, C24	CAP, CERM, 220 uF, 50 V, +/- 20%, X7R, 1075x300mil	Y	AVX	RT203C227MAJ10	2	200						
10	C9	CAP, CERM, 220 pF, 50 V, +/- 5%, COG/NP0, 0805	Y	AVX	08055A221JAT2A	1	100	Digi-Key	478-1320-1-ND	Mouser	581-08055A221J		
11	C13, C18	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0805	Y	Kemet	C0805C223K5RACTU	2	200	Digi-Key	399-1163-1-ND	Mouser	80-C0805C223K5R		
12	C15, C28	CAP, CERM, 0.68 uF, 100 V, +/- 10%, X7R, 1206_190	Y	TDK	CGA5L2X7R2A684K160AA	2	200	Digi-Key	445-12899-1-ND	Mouser	810-CGA5L2X7R2A684KA		
13	C16, C32	CAP, CERM, 0.33 uF, 100 V, +/- 10%, X7R, 1206	Y	TDK	C3216X7R2A334K130AA	2	200	Digi-Key	445-4464-1-ND	Mouser	810-C3216X7R2A334K		
14	C29	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0805	Y	AVX	08055C103JAT2A	1	100	Digi-Key	478-3768-1-ND	Mouser	581-08055C103J		
15	C30, C31, C36	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 1206	Y	MuRata	GRM31CR71E106KA12L	3	300	Mouser	81-GRM31CR71E106KA12	Farnell	182837		
16	C35	CAP, CERM, 10 uF, 16 V, +/- 20%, X7R, 0805	Y	Taiwo Yuden	EMK212BB7106MG-T	1	100	Digi-Key	587-3319-1-ND	Mouser	963-EMK212BB7106MG-T		
17	C37, C38	CAP, CERM, 33 pF, 50 V, +/- 5%, COG/NP0, 0805	Y	AVX	08055A330JAT2A	2	200	Digi-Key	478-1310-1-ND	Mouser	581-08055A330J		
18	C41	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0805	Y	AVX	08055A101JAT2A	1	100	Digi-Key	478-1316-1-ND	Mouser	581-08055A101J		
19	C42	CAP, AL, 680 uF, 80 V, +/- 20%, 0.041 ohm, TH	Y	Chem-Con	EGPA800ELL681MM30S	1	100	Digi-Key	565-3420-ND	Mouser	661-EGPA800ELL681MM30S		
20	D1, D2, D3	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	Y	Diodes Inc.	1N4148W-F-F	3	300	Digi-Key	1N4148W-FDICT-ND	Mouser	621-1N4148W-F		
21	F1, F3	FUSE BOARD MNT 12A 125VAC 86VDC	RoHS Compliant	Bel Fuse Inc	SSQ 12	2	200	Digi-Key	507-1058-1-ND				
22	F2, F4	FUSE BOARD MNT 30A 125VAC 72VDC	RoHS Compliant	Littelfuse Inc	0456030.ER	2	200	Digi-Key	F3345CT-ND				
23	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	Y	N/A	N/A	6	600						
24	H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Phillips panhead	Y	B&F Fastener Supply	NY PMS 440 0025 PH	4	400	Digi-Key	H542-ND				
25	H5, H6, H7, H8	Standoff, Hex, 0.5" L #4-40 Nylon	Y	Keystone	1902C	4	400	Digi-Key	1902CK-ND				
26	H9, H10, H11, H12, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H23, H24, H25, H26, H27, H28, H65, H66, H67, H68	Machine Screw Pan PHILLIPS M3, TH	Y	APM HEXSEAL	RM3X12MM 2701	24	2400	Digi-Key	335-1157-ND	Mouser	608-RM3X12MM2701		
27	H29, H30, H31, H32, H33, H34, H35, H36, H37, H38, H40, H41, H42, H43, H44, H45, H46, H47, H48, H49	PushPIN™ Heat Sink Attachments, 14 mm	Y	Advanced Thermal Solutions	ATS-PPS-06	20	2000	Digi-Key	ATS1893-ND				
28	H39	Ultra Soft Thermal Conductive Pad	Y	t-Global Technology	TG6050-150-150-0.5-0	1	100	Digi-Key	1168-1341-ND				
29	H50, H51	HOLE INDUCTOR	Y	Used in BOM report	NONE	2	200	DIGIKEY					
30	H60	Fan Leg Kit for 92mm and 120mm Fans, 1.25" elevation	Y	Custom	FNLK-120-01	1	100						
31	H61	AC/DC Adapter, 12 V, 12 W	Y	Triad Magnetics	WSU120-1000	1	100	Digi-Key	237-1455-ND	Mouser	553-WSU120-1000		
32	H62	Fan, DC 12 V, 120mm square x 38mm 134 CFM	Y	Scythe	DFS123812H-3000	1	100						
33	H63	Heat Sink Fan Shroud, 5.4x5.4x1.5 Inch	Y	Custom	HSS-5.4-1.5-AL-01	1	100						
34	H64	Heat Sink 5.4 x 5.4 x 1.4 Inch	Y	Custom	HS-5.4-5.4-1.4-01	1	100						
35	H69, H70	MACH SCREW PAN PHILLIPS 1/4-20	Y	APM HEXSEAL	R1/4-20X3/8 2701	2	200	Digi-Key	335-1068-ND				
36	H71, H72	HEX SEAL NUT 7/16" STEEL 1/4-20	Y	APM HEXSEAL	1/4-20 AJ 6	2	200	Digi-Key	335-1050-ND	Mouser	608-1/4-20AJ6		
37	H73, H74	Screw Combination Head 10-32	Y	Keystone	F1283	2	200	Digi-Key	F1283-ND				
38	H75, H76	Machine Screw Nut, Hex, 3/8"?, Stn, Steel, 10-32	Y	B&F Fastener Supply	HNS5 102	2	200	Digi-Key	H727-ND				
39	J1	CONN JACK POWER 2.1MM PCB	RoHS Compliant	CUI Inc	PJ-102A	1	100	Digi-Key	CP-102A-ND				
40	J2	CONN HEADER 3POS .100 VERT TIN	Y	Molex	22-27-2031	1	100	Digi-Key	WM4112-ND	Mouser	538-22-27-2031		
41	J3, J4	DEV STICK USB PICCOLO F28069 HALF PART	RoHS Compliant By Exemption			2	200	Digi-Key	SAM1212-08-ND				
42	L1, L2	Inductor, Shielded E Core, Ferrite, 6.8uH, 28A, 0.0026 ohm, SMD	Y	Coilcraft	SER2918H-682KL	2	200						
43	LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Y	Brady	THT-14-423-10	1	100	Farnell	2065596	Newark	97C5133		
44	PCBA1	Printed Circuit Board Assembly	Y	Texas Instruments	TMDX28069USB	1	100	Digi-Key	296-28115-ND	Mouser	595-TMDX28069USB		

45	Q1, Q2, Q3, Q6, Q7, Q8, Q9, Q10, Q13, Q14, Q15, Q17, Q18, Q19, Q20, Q21	MOSFET, N-CH, 80V, 55A, PG-TDSON-8	Y	Infineon Technologies	BSC123N08NS3 G	16	1600	Digi-Key	BSC123N08NS3 GCT-ND	Mouser	726-BSC123N08NS3G	None	
46	Q4, Q11	MOSFET, N-CH, 30 V, 0.18 A, SOT-323	Y	NXP Semiconductor	NX3020NAKW,115	2	200	Digi-Key	568-10508-1-ND	Mouser	771-NX3020NAKW115	None	
47	Q5, Q12, Q16, Q22	Transistor, NPN, 120 V, 0.05 A, SOT-23	Y	Fairchild Semiconductor	FJV1845FMTF	4	400	Digi-Key	FJV1845FMTFCT-ND	Mouser	512-FJV1845FMTF		
48	R1, R36	RES, 0.012, 1%, 1 W, 2412	Y	Ohmite	LVK24R012FER	2	200	Mouser	588-LVK24R012FER	Farnell	1462310		
49	R2	RES, 39.2 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW080539K2FKEA	1	100	Digi-Key	541-39.2KCCT-ND	Mouser	71-CRCW0805-39.2K-E3		
50	R3, R17	RES, 2.00 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08052K00FKEA	2	200	Digi-Key	541-2.00KCCT-ND	Mouser	71-CRCW0805-2.0K-E3		
51	R4, R5, R6, R21, R22, R23, R24, R25, R37, R38, R41, R47, R48, R49, R51	RES, 3.01, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08053R01FKEA	15	1500	Digi-Key	541-3.01CCCT-ND	Mouser	71-CRCW08053R01FKEA		
52	R7, R8, R39, R40, R63, R64, R65, R66	RES, 105, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW0805105RFKEA	8	800	Digi-Key	541-105CCT-ND	Mouser	71-CRCW0805105RFKEA		
53	R9, R10, R18, R19	RES, 10.0 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW080510K0FKEA	4	400	Digi-Key	541-10.0KCCT-ND	Mouser	71-CRCW0805-10K-E3		
54	R11, R33, R42, R51	RES, 9.76 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08059K76FKEA	4	400	Digi-Key	541-9.76KCCT-ND	Mouser	71-CRCW0805-9.76K-E3		
55	R12, R15, R20, R26, R30, R43, R45, R46, R52	RES, 1.00, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08051R00FKEA	9	900	Mouser	71-CRCW0805-1-E3	Farnell	1563923		
56	R13, R44	RES, 0.002, 1%, 3 W, 6.6x3x6.9mm	RoHS Compliant	Vishay Dale	WSL27262L000FEB	2	200	Digi-Key	WSLQ-.002CT-ND	Mouser	71-WSL27262L000FEB		
57	R14	RES, 8.25 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08058K25FKEA	1	100	Digi-Key	541-8.25KCCT-ND	Mouser	71-CRCW0805-8.25K-E3		
58	R16	RES, 499, 1%, 0.25 W, 1206	Y	Vishay-Dale	CRCW1206499RFKEA	1	100	Digi-Key	541-499FCT-ND	Mouser	71-CRCW1206-499-E3		
59	R27, R31, R34, R35	RES, 4.99 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08054K99FKEA	4	400	Digi-Key	541-4.99KCCT-ND	Mouser	71-CRCW0805-4.99K-E3		
60	R28, R29, R54, R55	RES, 196, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW0805196RFKEA	4	400	Digi-Key	541-196CCT-ND	Mouser	71-CRCW0805-196-E3		
61	R32, R57	RES, 392, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW0805392RFKEA	2	200	Digi-Key	541-392CCT-ND	Mouser	71-CRCW0805-392-E3		
62	R50	RES, 3.0, 5%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08053R00JNEA	1	100	Digi-Key	541-3.0ACT-ND	Mouser	71-CRCW08053R00JNEA		
63	R58	RES, 100 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW0805100KFKEA	1	100	Digi-Key	541-100KCCT-ND	Mouser	71-CRCW0805-100K-E3		
64	R59	RES, 1.00 k, 1%, 0.125 W, 0805	Y	Vishay-Dale	CRCW08051K00FKEA	1	100	Digi-Key	541-1.00KCCT-ND	Mouser	71-CRCW0805-1.0K-E3		
65	T1, T2	Terminal 50A Lug	Y	Panduit	CB35-36-CY	2	200	Digi-Key	CB35-36-CY-ND				
66	T3, T4	Terminal 90A Lug	Y	Panduit	CB70-14-CY	2	200	Digi-Key	CB70-14-CY-ND				
67	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, 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	Test Point, Miniature, SMT	Y	Keystone	5015	56	5600	Digi-Key	5015KCT-ND				
68	U1, U4	IC, Photovoltaic Full Bridge Driver		TI	SM72295MA	2	200					None	
69	U2	Low-Power, Digital Temperature Sensor with Two-Wire Interface in WCSP, YFF0004AAAA	Y	Texas Instruments	TMP103AYFF	1	100					Texas Instruments	
70	U3	Low-Power, Digital Temperature Sensor with Two-Wire Interface in WCSP, YFF0004AAAA	Y	Texas Instruments	TMP103BYFF	1	100					Texas Instruments	
71	U5	Single Output Low Noise LDO, 150 mA, Fixed 10 V Output, 2.2 to 16 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)		Texas Instruments	LP2985-10DBVT	1	100	Digi-Key	296-32147-2-ND	Digi-Key	296-32147-1-ND	None	Equivalent
72	U6	Single Output Fast Transient Response LDO, 1.5 A, Fixed 3.3 V Output, 2.1 to 20 V Input, 6-pin SOT-223 (DCQ), -40 to 125 degC, Green (RoHS & no Sb/Br)		Texas Instruments	TPS7A4533DCQCT	1	100	Digi-Key	296-32587-2-ND	Digi-Key	296-32587-1-ND	None	Equivalent

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