







## ASMPCB-STAC-V1

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Quantity to Build: 7  
 Part List Revision: A  
 Kit Release Number: 002  
 Kit Release Date: 12/15/2023

Item Loc	Qty	Part Number Sort Code	Description	Reference	
		Vendor Name	Vendor Part Number	Manf Name	Manf Part Number
1	300	BW-663-053 CAPC-0603 0.1uF 16V D3	Cap ceramic 0.1uF 16V 5% X7R 0603 Kemet C0603C104J4RACTU	C4 C23 C24 C25 C26 C27 C28 C29 C32 C34 C44 C45 C46 C47 C48 C49 C50 C51 C52	
		Digi-Key	399-C0603C104J4RAC7867TR-ND	Kemet	C0603C104J4RACTU
2	100	BW-367-353 CAPC-0603 0.47uF 10V R5	Cap ceramic 0.47uF 10V 10% X7R 0603 Yageo CC0603KRX7R6BB474	C11 C14	
		Digi-Key	311-1798-1-ND	Yageo	CC0603KRX7R6BB474
3	100	BW-183-150 CAPC-0603 3.3uF 10V H8	Cap ceramic 3.3uF 10V 10% X5R 0603 Samsung CL10A335KP8NNNC	C36	
		Digi-Key	1276-1892-1-ND	Samsung	CL10A335KP8NNNC
4	100	BW-171-235 CAPC-0603 4.7uF 35V L2	Cap ceramic 4.7uF 35V 10% X5R 0603 Murata GRM188R6YA75KE15D	C9 C10 C12 C13 C31 C33	
		Digi-Key	490-7205-1-ND	Murata	GRM188R6YA75KE15D
5	140	BW-224-068 CAPC-0603 10uF 25V U8	Cap ceramic 10uF 25V 20% X5R 0603 Murata GRM188R61E106MA73D	C1 C3 C15 C16 C17 C18 C19 C20 C21 C22 C30 C35 C37 C38 C39 C40 C41 C42 C43	
		Digi-Key	490-7202-1-ND	Murata	GRM188R61E106MA73D
6	35	BW-998-821 CAPE-AL-GP 220uF 16V W1	Cap aluminum polymer 220uF 16V 20% SMD, 6.3mm dia. Panasonic 16SVPK220M	C2 C5 C6 C7 C8	
		Digi-Key	P124158CT-ND	Panasonic	16SVPK220M
7	14	BW-038-636 CON-100 TSW 2 A5	Con 2 pin 100 mil pitch 1x2 TSW str male thru 0.230" post h	J19 J23	
		Digi-Key	SAM1029-02-ND	Samtec	TSW-102-07-G-S
8	21	BW-517-054 CON-100 TSW 3 K6	Con 3 pin 100 mil pitch 1x3 TSW str male thru 0.230" post h	J2 J3 J18	
		Digi-Key	SAM1029-03-ND	Samtec	TSW-103-07-G-S
9	7	BW-491-171 CON-100 TSW 4 K5	Con 4 pin 100 mil pitch 1x4 TSW str male thru 0.230" post h	J7	
		Digi-Key	SAM1029-04-ND	Samtec	TSW-104-07-G-S
10	21	BW-623-913 CON-100 TSW 8 V2	Con 8 pin 100 mil pitch 2x4 TSW str male thru 0.230" post h	J20 J21 J22	
		Digi-Key	SAM1030-04-ND	Samtec	TSW-104-07-L-D
11	21	BW-220-198 CON-100 TSW 12 F3	Con 12 pin 100 mil pitch 2x6 TSW RA male thru 0.230" post h	J4 J8 J10	
		Digi-Key	SAM1041-06-ND	Samtec	TSW-106-08-L-D-RA

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12	7	BW-137-712 CON-100 SSW 12 E6	Con 12 pin 100 mil pitch 2x6 SSW socket female thru 0.230" Samtec SSW-106-01-G-D	J14 
		Digi-Key SAM1208-06-ND	Samtec SSW-106-01-G-D	
13	7	BW-510-530 CON-100 TSW 16 T5	Con 16 pin 100 mil pitch 2x8 TSW str male thru Samtec TSW-108-07-L-D	J12 
		Digi-Key SAM1030-08-ND	Samtec TSW-108-07-L-D	
14	7	BW-350-204 CON-2.5MM Nano Fit 6 H7	Con 6 pin 2.5mm pitch 2x3 Nano Fit RA male thru shrouded Molex 1053141106	J1 
		Digi-Key WM16908-ND	Molex 1053141106	
15	49	BW-867-891 CON-RF SMA edge mnt D4	Con SMA female jack end launch 50 ohm 18GHz PCB long pin Cinch 142-0701-801	J5 J6 J9 J11 J13 J15 J16 
		Digi-Key J502-ND	Cinch 142-0701-801	
16	7	BW-536-719 CON-USB C R1	Con USB-C 2.0 recp R/A SMT Amphenol 12402012E212A	J17 
		Digi-Key 664-12402012E212ACT-ND	Amphenol Comme 12402012E212A	
17	7	BW-479-949 CRY-OSC 12MHz J3	Osc 12MHz with capacitors 3-pin Murata CSTNE12M0GH5L000R0	X1 
		Digi-Key 490-17947-1-ND	Murata CSTNE12M0GH5L000R0	
18	7	BW-023-157 DIE-CUSTOM STAC-V1 D1	IC custom STAC-V1 die 64 pins 0.5mm pitch QFN-64 w/EP BWRC	U6 
19	100	BW-633-217 FUSE 1.5A M7	Fuse PTC reset 6V 1.5A 1206 Eaton PTLR12066V150	F1 
		Digi-Key 283-PTSLR12066V150CT-ND	Eaton PTLR12066V150	
20	7	BW-674-698 IC TS3A27518EPWR U7	IC TS3A27518EPWR 6-ch analog mux TSSOP-24 TI TS3A27518EPWR	U9 
		Digi-Key 296-24570-1-ND	Texas Instrume TS3A27518EPWR	
21	7	BW-250-920 IC IS25LP128-JBLE K2	IC IS25LP128-JBLE 128Mbit QSPI flash SOIC-8 ISSI IS25LP128-JBLE	U10 
		Digi-Key 706-1341-ND	ISSI IS25LP128-JBLE	
22	7	BW-913-765 IC 93LC56BT-I/OT B2	IC 93LC56BT-I/OT 2K I2C EEPROM SOT23-6 Microchip 93LC56BT-I/OT	U8 
		Digi-Key 93LC56BT-I/OTCT-ND	Microchip 93LC56BT-I/OT	
23	7	BW-157-496 IC FT2232HL M3	IC FT2232HL USB to UART/FIFO LQFP-64 FTDI FT2232HL	U7 
		Digi-Key 768-1024-1-ND	FTDI FT2232HL-REEL	
24	14	BW-746-991 IC LT3042 U8	IC LT3042 adj LDO regulator 200mA MSOP-EP-10 Analog Devices LT3042IMSE#TRPBF	U3 U5 
		Digi-Key LT3042IMSE#TRPBFCT-ND	Analog Devices LT3042IMSE#TRPBF	

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		Vendor Name	Vendor Part Number	Manf Name	Manf Part Number
25	7	BW-849-997	IC LT3083 LDO regulator 3A TAB pkg		U1
		IC LT3083 D7	Analog Devices LT3083EQ#PBF		
	Digi-Key		505-LT3083EQ#PBF-ND	Analog Devices	LT3083EQ#PBF
26	7	BW-843-693	IC LTC4365CTS8#TRMPBF		U4
		C LTC4365CTS8#TRMPBF H7	Analog Devices LTC4365 Surge Suppressor		
	Digi-Key		505-LTC4365CTS8#TRMPBFCT-ND	Analog Devices	LTC4365CTS8#TRMPBF
27	7	BW-818-101	IC APS6404L-3SQR-SN PseudoSRAM PSRAM 8Mx8bits SPI/Q'		U11
		IC APS6404L-3SQR-SN G4	AP Memory APS6404L-3SQR-SN		
	Mouser		878-APS6404L-3SQR-SN	AP Memory	APS6404L-3SQR-SN
28	100	BW-227-124	Inductor 1uH 3.3A shielded 1008 pkg		L1 L2
		IND-1008 1uH 3.3A K4	Murata DFE252012F-1R0M=P2		
	Digi-Key		490-13053-1-ND	Murata	DFE252012F-1R0M=P2
29	100	BW-885-747	LED 470nm (blue) 2.65V 2mA 0603 SMT		D3 D5 D6
		LED blue P4	Kingbright APT1608LVBC/D		
	Digi-Key		754-1933-1-ND	Kingbright	APT1608LVBC/D
30	100	BW-747-432	LED 565nm (green) 2.2V 0603 surface-mount		D1 D2 D8
		LED green R5	Lumex SML-LX0603GW-TR		
	Digi-Key		67-1549-1-ND	Lumex	SML-LX0603GW-TR
31	100	BW-219-501	LED 660nm (red) 1.7V 0603 SMT		D4
		LED red N8	VCC 7017X1		
	Digi-Key		7017X1CT-ND	VCC	7017X1
32	100	BW-087-782	LED 631nm (red) 2V 5mA 0603 SMT		D7
		LED red B8	Lite-On LTST-C193KRKT-5A		
	Digi-Key		160-1830-1-ND	Liteon	LTST-C193KRKT-5A
33	7	BW-471-924	MOSFET N-CH dual 60V 35A SOT-1205		U2
		Q-NMOS BUK9K12-60EX J7	Nexperia BUK9K12-60EX		
	Digi-Key		1727-1897-1-ND	Nexperia	BUK9K12-60EX
34	100	BW-528-389	Res 12K 0.5% 1/10W 0603		R30
		R.5%-0603 12K D5	Panasonic		
	Digi-Key		P123739CT-ND	Panasonic	ERA-3AED123V
35	100	BW-708-683	Res 10 1% 1/10W 0603		R20 R21
		R1%-0603 10 C6	Stackpole RMCF0603FT10R0		
	Digi-Key		RMCF0603FT10R0CT-ND	Stackpole	RMCF0603FT10R0
36	100	BW-146-387	Res 75 1% 1/10W 0603		R15
		R1%-0603 75 V7	Stackpole RMCF0603FT75R0		
	Digi-Key		RMCF0603FT75R0CT-ND	Stackpole	RMCF0603FT75R0
37	100	BW-784-622	Res 250 0.1% 1/10W 0603		R12 R28
		R1%-0603 250 K1	Yageo RT0603BRE07250RL		
	Digi-Key		13-RT0603BRE07250RLCT-ND	Yageo	RT0603BRE07250RL

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		Vendor Name	Vendor Part Number	Manf Name Manf Part Number
38	100	BW-354-763 R1%-0603 301 T8	Res 301 1% 1/10W 0603 Panasonic ERA-3AEB3010V	R8 R11 R16 
		Digi-Key P301DBCT-ND	Panasonic ERA-3AEB3010V	
39	100	BW-457-217 R1%-0603 330 R3	Res 330 1% 1/10W 0603 Panasonic ERJ-U03F3300V	R14 R18 R19 R22 
		Digi-Key 10-ERJ-U03F3300VCT-ND	Panasonic ERJ-U03F3300V	
40	100	BW-812-714 R1%-0603 909 E3	Res 909 1% 1/10W 0603 Panasonic ERJ-3EKF9090V	R1 
		Digi-Key P909HCT-ND	Panasonic ERJ-3EKF9090V	
41	100	BW-005-683 R1%-0603 2.2K P4	Res 2.2K 1% 1/10W 0603 Yageo RC0603FR-132K2L	R33 
		Digi-Key 13-RC0603FR-132K2LCT-ND	Yageo RC0603FR-132K2L	
42	100	BW-725-833 R1%-0603 4.7K W1	Res 4.7K 1% 1/10W 0603 Panasonic ERJ-3EKF4701V	R26 
		Digi-Key P4.70KHCT-ND	Panasonic ERJ-3EKF4701V	
43	126	BW-200-113 R1%-0603 5.1K B6	Res 5.1K 1% 1/10W 0603 Panasonic ERJ-3EKF5101V	R23 R24 R34 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44 R45 R46 R47 R48 R49 
		Digi-Key P5.10KHCT-ND	Panasonic ERJ-3EKF5101V	
44	100	BW-038-468 R1%-0603 10K C1	Res 10K 1% 1/10W 0603 Yageo RC0603FR-0710KL	R27 R29 R31 R32 
		Digi-Key 311-10.0KHRCT-ND	Yageo RC0603FR-0710KL	
45	100	BW-446-612 R1%-0603 15K P8	Res 15K 1% 1/10W 0603 Panasonic	R6 
		Digi-Key P15.0KHCT-ND	Panasonic ERJ-3EKF1502V	
46	100	BW-628-791 R1%-0603 33.2K R6	Res 33.2K 1% 1/10W 0603 Panasonic ERJ-3EKF3322V	R13 
		Digi-Key P33.2KHCT-ND	Panasonic ERJ-3EKF3322V	
47	100	BW-131-959 R1%-0603 82.5K H6	Res 82.5K 1% 1/10W 0603 Panasonic ERJ-3EKF8252V	R7 
		Digi-Key P82.5KHCT-ND	Panasonic ERJ-3EKF8252V	
48	100	BW-303-795 R1%-0603 100K N3	Res 100K 1% 1/10W 0603 Panasonic ERJ-3EKF1003V	R2 
		Digi-Key P100KHCT-ND	Panasonic ERJ-3EKF1003V	
49	100	BW-760-287 R1%-0603 200K M2	Res 200K 1% 1/10W 0603 Panasonic ERJ-3EKF2003V	R3 
		Digi-Key P200KHCT-ND	Panasonic ERJ-3EKF2003V	
50	100	BW-560-201 R1%-0603 215K K4	Res 215K 1% 1/10W 0603 Panasonic ERJ-3EKF2153V	R10 
		Digi-Key P215KHCT-ND	Panasonic ERJ-3EKF2153V	

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Vendor Name		Vendor Part Number	Manf Name	Manf Part Number
51	100	BW-514-032 R1%-0603 510K N6	Res 510K 1% 1/10W 0603 Panasonic ERJ-3EKF5103V	R4
		Digi-Key P510KHCT-ND	Panasonic ERJ-3EKF5103V	
52	100	BW-421-162 R5%-0603 2.7M C5	Res 2.7M 5% 1/10W 0603 Panasonic ERJ-3GEYJ275V	R5
		Digi-Key P2.7MGCT-ND	Panasonic ERJ-3GEYJ275V	
53	100	BW-532-263 RES 0 L1	Res 0 1/10W 0603 Panasonic ERJ-3GEY0R00V	R17
		Digi-Key P0.0GCT-ND	Panasonic ERJ-3GEY0R00V	
54	7	BW-257-784 RVAR 5K R3	Res var trimmer pot 5K 1/4W 3-pin SMT Bourns 3214X-1-502E	R9
		Digi-Key 3214X-1-502ECT-ND	Bourns 3214X-1-502E	
55	14	BW-522-992 SW SPDT H6	Switch slide SPDT 3A 125V ST thru NKK CS12ANW03	S1 S2
		Digi-Key 360-2131-ND	NKK CS12ANW03	
56	7	BW-431-238 SW SPDT U7	Switch slide SPDT ST thru Würth 450301014042	S3
		Digi-Key 450301014042-ND	Würth 450301014042	
57	21	BW-591-967 SW SPST-NO A6	Switch momentary SPST-NO tactile 2 pin J-lead low-profile 2 C&K PTS636 SK25J SMTR LFS	S4 S6 S7
		Digi-Key CKN12326-1-ND	C&K PTS636 SK25J SMTR LFS	
58	7	BW-977-175 SW DIP-6 N2	Switch DIP 6 position, 12 pin, SMT Würth 418121270806	S5
		Digi-Key 732-6964-1-ND	Würth 418121270806	
59	100	BW-697-885 TASIL-BI PGB1010603MR K7	Diode TVS 24VWM 150VC 0603 Littelfuse PGB1010603MR	E1 E2
		Digi-Key F2594CT-ND	Littlefuse PGB1010603MR	
60	7	BW-602-053 TEST-PT 1 E6	Test point loop 63mil dia hole orange Keystone 5008	T4
		Digi-Key 36-5008-ND	Keystone 5008	
61	7	BW-966-768 TEST-PT 1 M8	Test point loop 63mil dia hole black Keystone 5006	T10
		Digi-Key 36-5006-ND	Keystone 5006	
62	14	BW-067-710 TEST-PT 1 V7	Test point loop 63mil dia hole yellow Keystone 5009	T12 T13
		Digi-Key 36-5009-ND	Keystone 5009	