

# Bill of Materials

Project: Avnet 4G LTE Cellular Arduino Shield  
 Project Name: AES-ATT-M14A2A-IOT  
 Revision: 2  
 Variant: 00



Report Date: 17-Aug-2017

#	Quantity	Designator	Description	Manufacturer 1	Manufacturer Part Number 1	Fitted	Notes
1	1	BOARD_ID1	LABEL 16.51x5.08 amber matt THT-47-426-10 Polyimide Thermal Transfer	BRADY	THT-47-724-10	YES	
2	12	C1,C2,C3,C4,C9,C10,C17,C18,C22,C23,C28,C32	CAP 100n SMT 0402 10% 16V X7R CERAMIC H0.5	TAIYO YUDEN	EMK105B7104KV-[F]	YES	
3	4	C5,C6,C7,C8	CAP 10p SMT 0201 5% 25V C0G CERAMIC H0.33	AVX	02013A100JAT[2;4]A	DNP	
4	5	C11,C12,C13,C14,C15	CAP 33p SMT 0402 5% 50V C0G CERAMIC H0.56	AVX	04025A330JAT[2;4]A	YES	
5	4	C16,C24,C25,C36	CAP 10u SMT 0805 10% 10V X5R CERAMIC H1.45	AVX	0805ZD106KAT[2;4]A	YES	
6	3	C19,C27,C31	CAP 22u SMT 0805 20% 10V X5R CERAMIC H1.4	AVX	0805ZD226MAT[2;4]A	YES	
7	3	C20,C29,C33	CAP 12p SMT 0402 5% 50V C0G CERAMIC H0.5	YAGEO	2238869[1;7]5129	YES	
8	3	C21,C30,C34	CAP 8p SMT 0402 5% 50V C0G CERAMIC H0.55	TDK	C1005COG1H080C050[B]A	YES	
9	1	C26	CAP 22u SMT 0805 20% 10V X5R CERAMIC H1.4	AVX	0805ZD226MAT[2;4]A	DNP	
10	1	C37	CAP 1n SMT 0402 10% 50V X7R CERAMIC H0.55	MURATA	GRM155R71H102KA01D	DNP	
11	1	D1	DIO PROTECT SMT DFN6M50 3.3V 80W RClamp3304P TVS Array 0.5uA	SEMTECH	RCLAMP3304P-TCT	YES	
12	1	D2	DIO PROTECT SMT DFN10M50 6V 150W RClamp0524P TVS Array 1uA	SEMTECH	RCLAMP0524P-TCT	YES	
13	1	D3	DIO SCHOTTKY SMT DO214AA 40V 2A MBRS240L 2mA	ONSEMI	MBRS240L[T3]G	YES	
14	1	D4	DIO SCHOTTKY SMT DO214AA 40V 2A MBRS240L 2mA	ONSEMI	MBRS240L[T3]G	DNP	
15	1	JMP2	CON JUMPER 1x RM2.54 H6.0 red Au 3300097 open housing	CAB	3300097-ROHS KONFORM	YES	
16	1	JP2	CON M 2x1 THT RM2.54 square Au 1001 Series 11.4x5.8x2.5 0.635mm	CAB	1001-161-002-ROHS KONFORM	YES	
17	2	TSTJ1,J5	CON M 2x1 THT RM2.54 square Au 1001 Series 11.4x5.8x2.5 0.635mm	CAB	1001-161-002-ROHS KONFORM	DNP	
18	2	J6,J8	TBD	TBD	TBD	DNP	
19	1	J7	TBD	TBD	TBD	DNP	
20	1	J9	TBD	TBD	TBD	DNP	
21	2	J1_1,J3_1	CON F 8x1 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-108-03-F-S	YES	
22	1	J1_2	CON F 8x2 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-108-03-F-D	DNP	
23	1	J10	CON F 6x1 THT RM2.54 L10.03 Sn 90A* SSW Series 0.64mm	SAMTEC	SSW-106-02-T-S-RA	YES	
24	1	J11	CON M 1x2 THT RM2.54 square Au 90A* 826634 Series 6.7x2.54x3.2 green	TE	826634-1	DNP	
25	1	J2_1	CON F 10x1 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-110-03-F-S	YES	
26	1	J2_2	CON F 10x2 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-110-03-F-D	DNP	
27	1	J3_2	CON F 8x2 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-108-03-F-D	DNP	
28	1	J4_1	CON F 6x1 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-106-03-F-S	YES	
29	1	J4_2	CON F 6x2 THT RM2.54 H8.51 Au SSQ Series 0.64mm	SAMTEC	SSQ-106-03-F-D	DNP	
30	1	LED1	LED G SMT 0603 30mA 35mcd 130A* LTST-C190KGKT colorless-clear - 55+85A°C	LITEON	LTST-C190KGKT	YES	
31	1	LP	PCB AVT Cellular-Shield V1	AVNET	BD-ATT-M14A2A-IOT	YES	
32	1	L1	EMI 90R SMT 0805 25% 330mA 50V 0.35R DLW21S Series -40/+85A°C	MURATA	DLW21SN900SQ2[L]	YES	
33	1	L2	IND 1u5 SMT 4x4x1.2 20% 3.3A 0.065R MCOIL MD Series -40/+125A°C	TAIYO YUDEN	MDMK4040T1R5MF	YES	
34	1	Q1	TRA MOSFET N SMT SOT23/6M95 50V 0.3A 3R DMN5L06DMK Dual-FET 400mW	DIODES	DMN5L06DMK[-7]	YES	
35	4	R1,R23,R24,R25	RES 0R00 SMT 0402	VISHAY	CRCW04020000Z0[EA;EB;ED]E3	YES	
36	4	R2,R5,R10,R36	RES 10k SMT 0402 1% 0.063W TC100	VISHAY	CRCW040210K0FK[EA;EB;ED]E3	DNP	
37	1	R3	RES 100k SMT 0402 1% 0.063W TC100	YAGEO	RC0402FR-[07;10;13]100KL	YES	
38	7	R4,R18,R21,R28,R29,R31,R35	RES 10k SMT 0402 1% 0.063W TC100	VISHAY	CRCW040210K0FK[EA;EB;ED]E3	YES	
39	6	R6,R7,R8,R9,R19,R20	RES 2k00 SMT 0402 1% 0.063W TC100	KOA	RK73H1E1T[D]2001F	YES	
40	4	R11,R12,R13,R14	RES 0R00 SMT 0201	YAGEO	RC0201JR-[07;10;13]0RL	YES	
41	1	R17	RES 10k SMT 0402 1% 0.063W TC100	YAGEO	RC0402FR-[07;10;13]10KL	YES	
42	1	R22	RES 10R0 SMT 0603 1% 0.1W TC100	KOA	RK73H1J1T[D]10R0F	YES	
43	1	R26	RES 56k SMT 0402 1% 0.063W TC100	YAGEO	RC0402FR-[07;10;13]56KL	YES	
44	1	R27	RES 1k00 SMT 0402 1% 0.063W TC100	VISHAY	CRCW04021K00FK[EA;EB;ED]E3	YES	
45	1	R30	RES 10k5 SMT 0402 1% 0.063W TC100	YAGEO	RC0402FR-[07;10;13]10K5L	YES	
46	1	R32	RES 39k0 SMT 0402 1% 0.063W TC100	VISHAY	CRCW04023902F100[RT6]	YES	

47	1	R33	RES 154k SMT 0402 1% 0.063W TC100	PANASONIC	ERJ2RKF1543[X]	DNP	
48	1	R34	RES 86k6 SMT 0402 1% 0.063W TC100	VISHAY	CRCW040286K6FK[ED]	DNP	
49	1	SW1	SWI PUSH 1pol SMT RM4.5 H7.0 OF/ON 1301 Series 6x6 -20/+70°C	SCHURTER	1301.9316.[24]	YES	
50	2	TVS1,TVS3	DIO PROTECT SMT SOD523 3.3V 330W PESD3V3S1UB uni 2uA	NXP	PESD3V3S1UB[,115,;135]	YES	
51	1	TVS2	DIO PROTECT SMT DO214AA 6.4V 600W SMBJ5.0A uni 800uA	VISHAY	SMBJ5.0A-E3[52;5B;2C]	YES	
52	1	U1	IC M14A2A SMT LGA202 3.8V Module LTE -30/+75°C	WNC	M14A2A	YES	
53	2	U2,U3	IC TXS0108E SMT VQFN20M50 1.2-5.5V Translator Voltage-Level -40/+85°C	TEXAS INSTRUMENTS	TXS0108ERGY[R]	YES	
54	1	U4	IC HTS221 SMT LGA6 1.7-3.6V +0.5°C Sensor Humidity/Temp -40/+120°C	ST MICRO	HTS221[TR]	YES	
55	1	U5	VRG ADP2120 SMT DFN10M50 2.9-5.5V 1.25A Step-Down 0.6-5.5V 1.2MHz -40/+125°C	ANALOG DEVICES	ADP2120ACPZ[-R7]	YES	
56	2	X1,X2	CON SMA-F 50R THT RM5.08 RG58 SMA Series 6GHz Au	SAMTEC	SMA-J-P-H-ST-TH1	YES	
57	1	X3	CON CARD EDGE 6pol SMT RM2.54 MICROSIM 503960 Series	MOLEX	503960-0694	YES	
58	2	X4,X5	CON USB-F Typ AB SMT 7.5x5x2.5 90° 47589 Series black with rear shell	MOLEX	47589-1001	YES	
59	5	Z1,Z2,Z3,Z4,Z5	EMI 60R SMT 0603 25% 3000mA 0.04R WE-CBF Series -55/+125°C	WURTH ELEKTRONIK	742792602LF	YES	

Approved

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