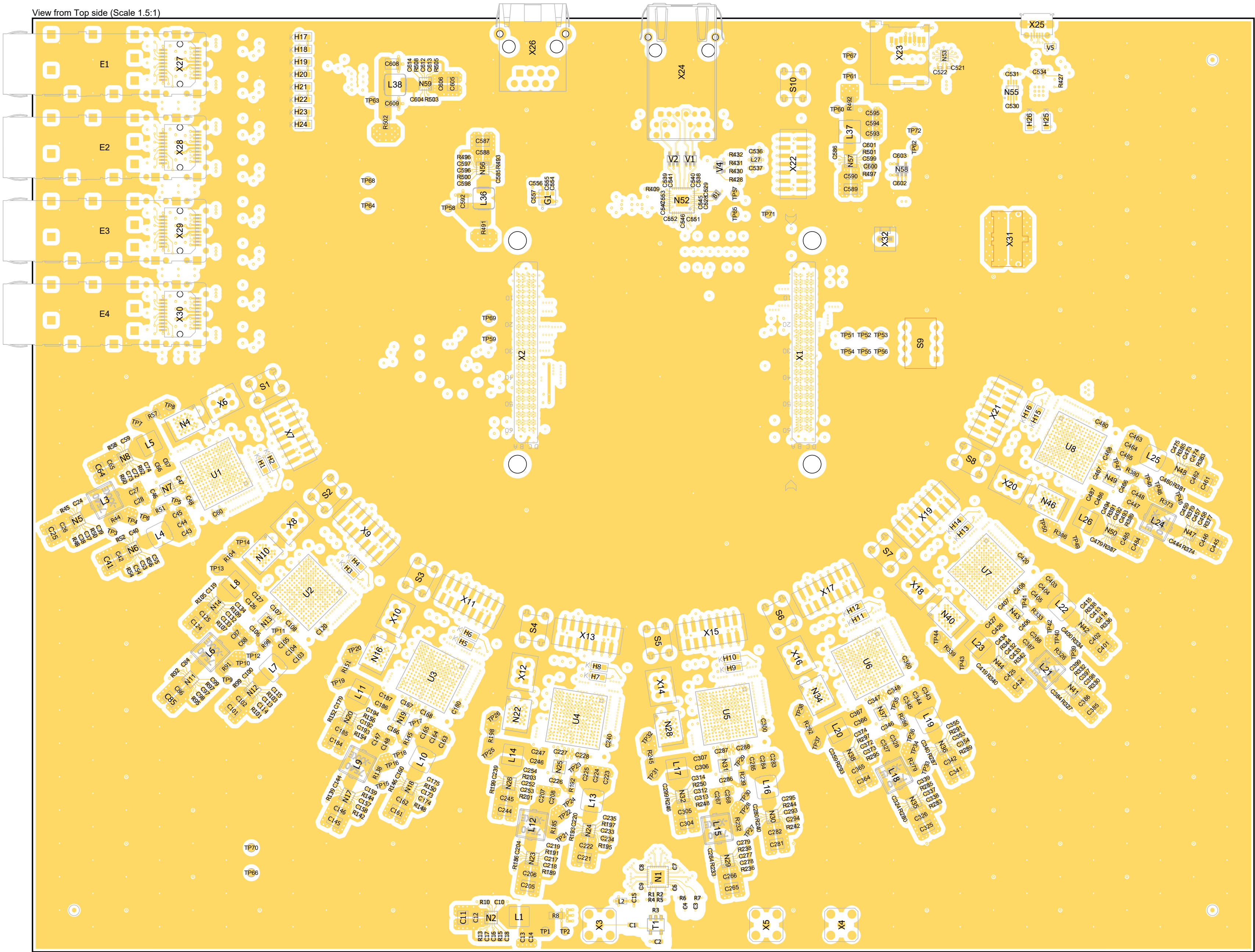


View from Top side (Scale 1.5:1)



NOTES:

1. ACCEPTANCE CRITERIA: ASSEMBLY TO BE IAW IPC-A-610D CLASS 2
2. WORKMANSHIP AND PROCESSING: TO BE IAW IPC J-STS-001E
3. REMOVE ANY TARNISH FROM EXPOSED COPPER PADS PRIOR TO FITTING COMPONENTS
4. FINISHED ASSEMBLY TO BE SEALED IN ANTI-STATIC SLEEVE.

A	---	---	---	---	---
Rev	Date	Description	Drawn	Checked	Zone

DRN	EARL	3JUL23
CHKD		
APPD		
DRAWING STANDARD	AS1100	
ASSOCIATED PCB FILE.	P00662	
CONTRACTOR		

Australian Government
Department of Defence
Science and Technology

HIGH FREQUENCY
RADAR BRANCH
PO BOX 1500
EDINBURGH SA 5111

TITLE

ARRAY DIGITISER - DIGITAL PROTOTYPE
PCB Assembly Drawing

DCCM

Z4831

DRG NO

ISRD00068 3020

SHEET SIZE

A2

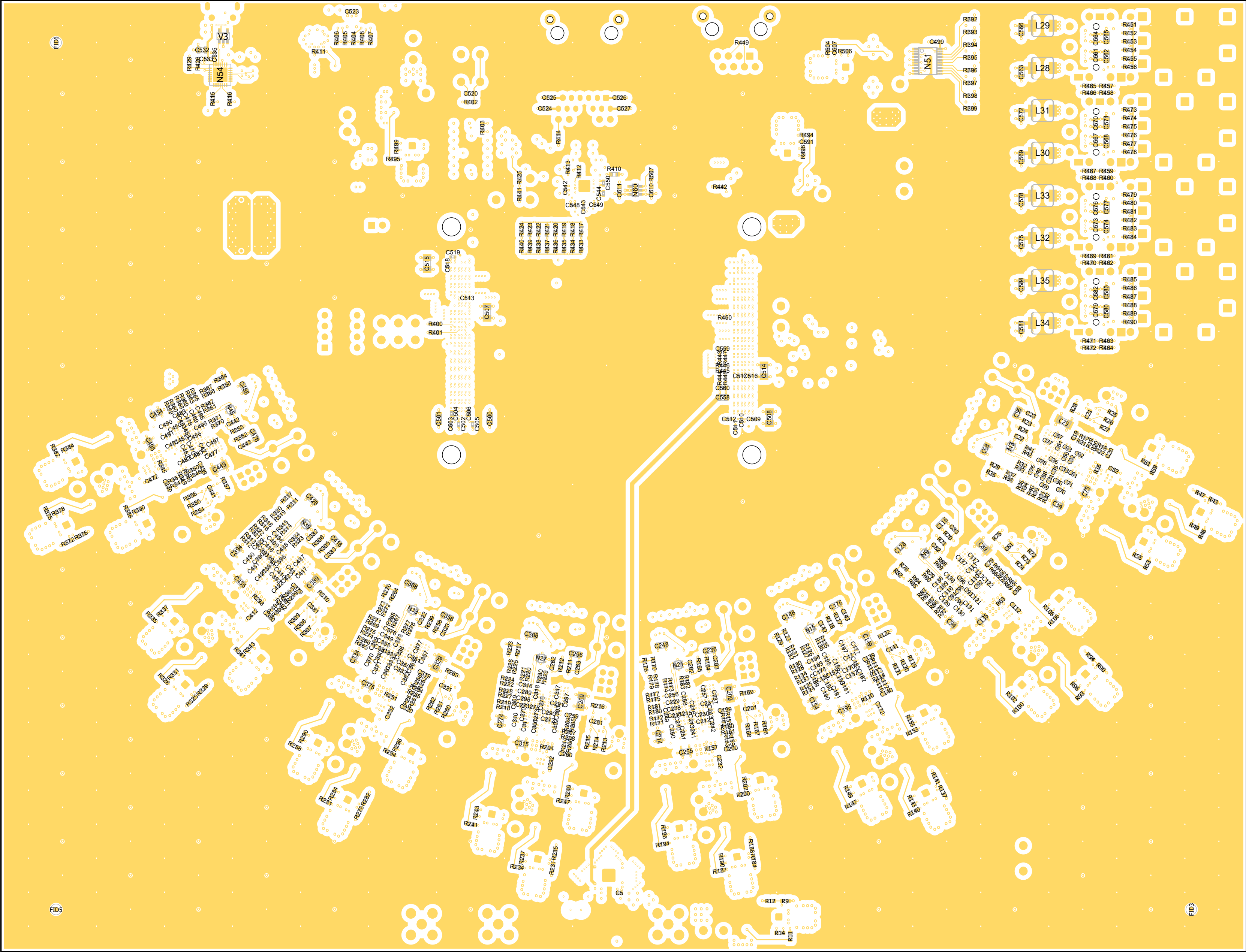
SECURITY CLASSIFICATION

OFFICIAL

SHEET NO

1

View from Bottom side (Scale 1.5:1)



A	---	---	---	---	---
Rev	Date	Description	Drawn	Checked	Zone

DRN	EARL	3JUL23
CHKD		
APPD		
DRAWING STANDARD	AS1100	
ASSOCIATED PCB FILE.	P00662	
CONTRACTOR		

Australian Government
Department of Defence
Science and Technology

HIGH FREQUENCY
RADAR BRANCH
PO BOX 1500
EDINBURGH SA 5111

TITLE
ARRAY DIGITISER - DIGITAL PROTOTYPE
PCB Assembly Drawing

DCCM
Z4831

DRG NO
ISRD00068 3020

SHEET NO
2

SHEET SIZE
A2

USED ON					
Bill Of Materials					
Line #	Designator	Quantity	Description	Manufacturer	PartNumber
1	B1	1	CRYSTAL, 25MHz, ±20PPM, 2.0 X 1.6MM, (ELEMENT14 405-9126)	ECS INC INTERNATIONAL	ECS-250-10-37B-CTN-TR
2	C1, C2, C557	3	CAPACITOR, CERAMIC, 10nF ±10%, 50V, X7R, 0603 SMD, (ELEMENT14 141-4609)	KEMET	C0603C103K5RACTU
3	C5, C6, C7, C8, C9, C502, C503, C504, C505, C506, C509, C510, C511, C512, C513, C516, C517, C518, C519, C521, C522, C533, C535, C538, C539, C542, C543, C544, C548, C549, C550	31	CAPACITOR, CERAMIC, 100nF ±10%, 16V, X7R, 0402 SMD, (ELEMENT14 406-1691)	WURTH	885012205037R
4	C10, C19, C20, C21, C22, C23, C24, C40, C59, C79, C80, C81, C82, C83, C84, C100, C119, C139, C140, C141, C142, C143, C144, C160, C179, C199, C200, C201, C202, C203, C204, C220, C239, C259, C260, C261, C262, C263, C264, C280, C299, C319, C320, C321, C322, C323, C324, C340, C359, C379, C380, C381, C382, C383, C384, C400, C419, C439, C440, C441, C442, C443, C444, C460, C479, C498, C520, C523, C524, C525, C526, C527, C530, C531, C559, C560, C561, C564, C567, C570, C573, C576, C579, C582, C585, C586, C588, C604, C606	89	CAPACITOR, CERAMIC, 100nF, ±10%, 10V, X7R, 0603 SMD, (ELEMENT14 252-4817)	WALSIN	0603B104K100CT
5	C11, C25, C41, C64, C85, C101, C124, C145, C161, C184, C205, C221, C244, C265, C281, C304, C325, C341, C364, C385, C401, C424, C445, C461, C484, C587, C589, C592, C605, C608	30	CAPACITOR, CERAMIC, 47µF ±10%, 16V, X5R, 1210 SMD, (ELEMENT14 328-9029)	AVX	1210YD476KAT2A
6	C12, C26, C42, C65, C86, C102, C125, C146, C162, C185, C206, C222, C245, C266, C282, C305, C326, C342, C365, C386, C402, C425, C446, C462, C485, C590	26	CAPACITOR, CERAMIC, 100nF ±10%, 25V, X7R, 0805 SMD, (ELEMENT14 174-0665)	AVX	08053C104KAT2A
7	C13, C14, C66, C67, C126, C127, C186, C187, C246, C247, C306, C307, C366, C367, C426, C427, C486, C487	18	CAPACITOR, CERAMIC, 22µF ±20%, 6.3V, X5R, 0603 SMD, (ELEMENT14 249-4232)	MURATA	GRM188R60J226MEA0D
8	C15, C536, C537, C556, C602, C603, C610, C611	8	CAPACITOR, CERAMIC, 1.0µF, ±10%, 16V, X7R, 0603 SMD, (ELEMENT14 249-6835)	WALSIN	0603B105K160CT
9	C16, C72, C132, C192, C252, C312, C372, C432, C492	9	CAPACITOR, CERAMIC, 120pF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 249-6885)	WALSIN	0603N121J500CT
10	C17, C73, C133, C193, C253, C313, C373, C433, C493	9	CAPACITOR, CERAMIC, 15nF ±5%, 25V, NP0, 0603 SMD, (ELEMENT14 299-1247)	KEMET	C0603C153J3GECTU
11	C18, C39, C55, C74, C99, C115, C134, C159, C175, C194, C219, C235, C254, C279, C295, C314, C339, C355, C374, C399, C415, C434, C459, C475, C494, C601	26	CAPACITOR, CERAMIC, 15nF ±10%, 50V, X7R, 0603 SMD, (ELEMENT14 249-6840)	WALSIN	0603B153K500CT
12	C27, C28, C43, C44, C45, C87, C88, C103, C104, C105, C147, C148, C163, C164, C165, C207, C208, C223, C224, C225, C267, C268, C283, C284, C285, C327, C328, C343, C344, C345, C387, C388, C403, C404, C405, C447, C448, C463, C464, C465, C593, C594, C595	43	CAPACITOR, CERAMIC, 10µF ±10%, 10V, X5R, 0805 SMD, (ELEMENT14 146-3362)	KEMET	C0805C106K8PACTU
13	C29, C89, C149, C209, C269, C329, C389, C449	8	CAPACITOR, CERAMIC, 100µF ±20%, 4V, X5R, 1206 SMD, (MOUSER 81-GRM31CR60G107MEABL)	MURATA	GRM31CR60G107MEABL
14	C30, C31, C35, C49, C90, C91, C95, C109, C150, C151, C155, C169, C210, C211, C215, C229, C270, C271, C275, C289, C330, C331, C335, C349, C390, C391, C395, C409, C450, C451, C455, C469	32	CAPACITOR, CERAMIC, 4.7µF ±20%, 4V, X5R, 0402 SMD, (ELEMENT14 173-5525)	MURATA	GRM155R60G475ME87D
15	C32, C33, C36, C50, C51, C57, C58, C61, C62, C63, C69, C70, C71, C76, C77, C78, C92, C93, C96, C110, C111, C117, C118, C121, C122, C123, C129, C130, C131, C136, C137, C138, C152, C153, C156, C170, C171, C177, C178, C181, C182, C183, C189, C190, C191, C196, C197, C198, C212, C213, C216, C230, C231, C237, C238, C241, C242, C243, C249, C250, C251, C256, C257, C258, C272, C273, C276, C290, C291, C297, C298, C301, C302, C303, C309, C310, C311, C316, C317, C318, C332, C333, C336, C350, C351, C357, C358, C361, C362, C363, C369, C370, C371, C376, C377, C378, C392, C393, C396, C410, C411, C417, C418, C421, C422, C423, C428, C430, C431, C436, C437, C438, C452, C453, C456, C470, C471, C477, C478, C481, C482, C483, C489, C490, C491, C496, C497, C498	128	CAPACITOR, CERAMIC, 470nF ±10%, 6.3V, X5R, 0402 SMD, (ELEMENT14 336-9133)	YAGEO	CC0402KRX5R5BB474
16	C34, C48, C56, C60, C68, C75, C94, C108, C116, C120, C128, C135, C154, C168, C176, C180, C188, C195, C214, C228, C236, C240, C248, C255, C274, C288, C296, C300, C308, C315, C334, C348, C356, C360, C368, C375, C394, C408, C416, C420, C428, C435, C454, C468, C476, C480, C488, C495, C500, C501	50	CAPACITOR, CERAMIC, 47µF, ±20%, 10V, X5R, 0805 SMD, (ELEMENT14 261-1939)	MURATA	GRM21BR61A476ME15L
17	C37, C97, C157, C217, C277, C337, C397, C457	8	CAPACITOR, CERAMIC, 160pF ±2%, 50V, NP0, 0603 SMD, (MOUSER 81-GRM1885C1H161GA1J)	MURATA	GRM1885C1H161GA01J
18	C38, C98, C158, C218, C278, C338, C398, C458	8	CAPACITOR, CERAMIC, 10nF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 245-6107)	MURATA	GRM1885C1H103JA01D
19	C46, C47, C106, C107, C166, C167, C226, C227, C286, C287, C346, C347, C406, C407, C466, C467	16	CAPACITOR, CERAMIC, 4.7µF ±10%, 10V, X7R, 0603 SMD, (ELEMENT14 358-2862)	MURATA	GRM188Z71A475KE15D
20	C52, C112, C172, C232, C292, C352, C412, C472	8	CAPACITOR, CERAMIC, 1.0nF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 249-6882)	WALSIN	0603N102J500CT
21	C53, C113, C173, C233, C293, C353, C413, C473	8	CAPACITOR, CERAMIC, 180pF ±10%, 50V, NP0, 0603 SMD, (MOUSER 581-06035A181K)	AVX	06035A181KAT2A
22	C54, C114, C174, C234, C294, C354, C414, C474	8	CAPACITOR, CERAMIC, 33nF ±5%, 50V, NP0, 0805 SMD, (ELEMENT14 221-0953)	TDK	CGA4J2C0G1H333J125AA
23	C507, C508, C514, C515	4	CAPACITOR, CERAMIC, 22µF ±10%, 10V, X7R, 1206 SMD, (ELEMENT14 301-3530)	SAMSUNG	CL31B226KPHNNNE
24	C528, C529	2	CAPACITOR, CERAMIC, 10pF ±5%, 50V, NP0, 0402 SMD, (ELEMENT14 181-6723)	YAGEO	CC0402JRNPO9BN100
25	C532, C534, C558	3	CAPACITOR, CERAMIC, 2.2µF, ±10%, 10V, X7R, 0805 SMD, (ELEMENT14 301-3491)	SAMSUNG	CL21B225KPFNNNE
26	C540, C541, C545, C546, C547, C551, C552, C553, C554, C555	10	CAPACITOR, CERAMIC, 10nF ±10%, 10V, X7R, 0402 SMD, (ELEMENT14 253-3974)	WURTH	885012205012
27	C562, C563, C565, C568, C569, C571, C572, C574, C575, C577, C578, C580, C581, C583, C584	16	CAPACITOR, CERAMIC, 22µF, ±20%, 6.3V, X5R, 0805 SMD, (ELEMENT14 301-3461)	SAMSUNG	CL21A226MQQNNNE
28	C591	1	CAPACITOR, CERAMIC, 82pF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 249-6914)	WALSIN	0603N820J500CT
29	C596, C607	2	CAPACITOR, CERAMIC, 47pF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 376-4457)	YAGEO	CC0603JPNPO9BN470
30	C597	1	CAPACITOR, CERAMIC, 4.7nF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 261-1918)	MURATA	GRM1885C1H472JA01D
31	C598, C614	2	CAPACITOR, CERAMIC, 3.9nF ±10%, 10V, X7R, 0603 SMD, (MOUSER 581-06032C392KAT2A)	AVX	06032C392KAT2A
32	C599	1	CAPACITOR, CERAMIC, 110pF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 289-6851)	KEMET	C0603C111J5GACTU
33	C600	1	CAPACITOR, CERAMIC, 12nF, ±5%, 50V, NP0, 0805 SMD, (ELEMENT14 249-7013)	MURATA	GCM2195C1H123JA16D
34	C609	1	CAPACITOR, CERAMIC, 10µF ±10%, 25V, X7R, 1206 SMD, (ELEMENT14 182-8837)	MURATA	GRM31CR71E106KA12L
35	C612	1	CAPACITOR, CERAMIC, 33pF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 249-6900)	WALSIN	0603N330J500CT
36	C613	1	CAPACITOR, CERAMIC, 2.7nF ±5%, 50V, NP0, 0603 SMD, (ELEMENT14 376-4204)	WALSIN	MT18N272J500CT
37	E1, E2, E3, E4	4	SFP+ CAGE, 1.8mm SOLDER PIN, (MOUSER 571-2227303-3)	TE CONNECTIVITY	2227303-3
38	G1	1	CRYSTAL OSCILLATOR, LVDS, 156.25MHz, ±25PPM, 2.5-3.3V, (MOUSER 520-ECX2LMV3CN156250)	ECS	ECX2-LMV-3CN-156.250
39	H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H23, H24, H25, H26	26	LED, ORANGE, 0805 SMD, (ELEMENT14 579-0864)	BROADCOM	HSMD-C170
40	L1, L5, L8, L11, L14, L17, L20, L23, L26	9	INDUCTOR, 2.7µH, 2A, 4848 SMD, (ELEMENT14 221-1445)	WURTH	7440420027
41	L2, L27	2	FERRITE BEAD, 1k, 800mA, 0603 SMD, (ELEMENT14 377-3584)	YAGEO	BBPY00160808102Y00
42	L3, L6, L9, L12, L15, L18, L21, L24	8	INDUCTOR, 1.4µH ±20%, 14A, SHIELDED, (MOUSER 994-MLC7540-142MEC)	COILCRAFT	MLC7540-142MEC
43	L4, L7, L10, L13, L16, L19, L22, L25	8	INDUCTOR, 5.6µH ±20%, 3A, SHIELDED, (ELEMENT14 377-9987)	VISHAY	IHL P2020CZER5R6M01
44	L28, L29, L30, L31, L32, L33, L34, L35	8	INDUCTOR, 4.7µH, 3A, (ELEMENT14 174-1314)	VISHAY	IHL P2020BZER4R7M11
45	L36, L38	2	INDUCTOR, 680nH ±20%, 15A, SHIELDED, (ELEMENT14 118-7061)	VISHAY	IHL P2525CZER68M01
46	L37	1	INDUCTOR, 2.2µH, 5.5A, S252 SMD, (ELEMENT14 230-9885)	BOURNS	SRP5030T-2R2M
47	MTG1, MTG2, MTG3, MTG4	4	STANDOFF, JACKING, 5.15MM, PRESS FIT, (MOUSER 200-JSOM-0515-01)	SAMTEC	JSOM-0515-01
48	N1	1	LVPECL 1:10 DIFFERENTIAL FANOUT BUFFER, VQFN-32, (MOUSER 595-CDCLVP111RHBR)	TEXAS INSTRUMENTS	CDCLVP111RHBR
49	N2, N5, N6, N8, N11, N12, N14, N17, N18, N20, N23, N24, N26, N29, N30, N32, N35, N36, N38, N41, N42, N44, N47, N48, N50, N57	26	VOLTAGE REGULATOR, SWITCHING, 4A, (MOUSER 595-TPS54418ARTET)	TEXAS INSTRUMENTS	TPS54418ARTE
50	N3, N9, N15, N21, N27, N33, N39, N45	8	BUFFER, DUAL INVERTING, SOT363 SMD, (ELEMENT14 344-2072)	NEXPERIA	74LVC2G06GW,125
51	N4, N10, N16, N22, N28, N34, N40, N46	8	SERIAL FLASH MEMORY, 256Mb, SPI/QSPI, TFBGA-24, (MOUSER 870-IS25LP256D-RHLE)	ISSI	IS25LP256D-RHLE
52	N7, N13, N19, N25, N31, N37, N43, N49	8	VOLTAGE REGULATOR, LDO, LOW NOISE, 1.8V, 1A, LFCSP-8, (ELEMENT14 402-6750)	ANALOG DEVICES	ADM7171ACPZ-1.8
53	N51	1	BUFFER, OCTAL INVERTING, TSSOP-20, (MOUSER 757-74LCX540FTAE)	TOSHIBA	74LCX540FT
54	N52	1	TRANSEIVER, 1000 BASE-T, 40 LEAD LFCSP-EP, (ELEMENT14 402-6129)	ANALOG DEVICES	ADIN1300BCPZ
55	N53	1	SD CARD VOLTAGE TRANSLATOR, QFN-20, (ELEMENT14 391-2110)	NXP	NVT4858HKZ
56	N54	1	USB - UART INTERFACE, QFN-20, (MOUSER CP2102N-A02-GQFN28)	SILICON LABS	CP2102N-A02-GQFN20
57	N55	1	BUFFER, DUAL BIDIRECTIONAL VOLTAGE TRANSLATING, SSOP-08, (ELEMENT14 312-0980)	TEXAS INSTRUMENTS	TXS0102DCT

Line #	Designator	Quantity	Description	Manufacturer	PartNumber
58	N56, N59	2	VOLTAGE REGULATOR, SWITCHING, 7A, (MOUSER 595-TPS54719RTET)	TEXAS INSTRUMENTS	TPS54719RTE
59	N58	1	VOLTAGE REGULATOR, LDO, +1.8V, 150mA, SOT23-5, (ELEMENT14 157-8368)	MICROCHIP	MCP1801T-1802/OT
60	N60	1	VOLTAGE REGULATOR, LDO, +900mV, 150mA, SOT23-5, (MOUSER 579-MCP1801T-0902/OT)	MICROCHIP	MCP1801T-0902/OT
61	R1, R2	2	RESISTOR, 96.5Ω ±1%, 63mW, 0402 SMD, (MOUSER 660-RN73H1ETP96R5F50)	KOA	RN73H1ETTP96R5F50
62	R3, R449, R450	3	RESISTOR, 100Ω ±1%, 63mW, 0402 SMD, (ELEMENT14 233-1443)	TE CONNECTIVITY	CRG0402F100R
63	R4, R5	2	RESISTOR, 105Ω ±1%, 63mW, 0402 SMD, (MOUSER 603-RT0402FRE07105RL)	YAGEO	RT0402FRE07105RL
64	R8, R44, R51, R57, R91, R98, R104, R138, R145, R151, R185, R192, R198, R232, R239, R245, R279, R286, R292, R326, R333, R339, R373, R380, R386, R491, R492, R502	28	RESISTOR, 10mΩ ±1%, 1W, 1206 SMD, (ELEMENT14 407-0202)	EATON BUSSMANN	MFSA1206R0100FCM
65	R9, R43, R90, R137, R184, R231, R278, R325, R372	9	RESISTOR, 133k ±1%, 100mW, 0603 SMD, (ELEMENT14 395-0825)	YAGEO	RC0603FR-07133KL
66	R10, R45, R52, R58, R92, R99, R105, R139, R146, R152, R186, R193, R199, R233, R240, R246, R280, R287, R293, R327, R334, R340, R374, R381, R387, R404, R405, R406, R407, R408, R411, R429	32	RESISTOR, 47k ±1%, 100mW, 0603 SMD, (ELEMENT14 399-4559)	WALSIN	SR06X4702FTL
67	R11, R59, R106, R153, R200, R247, R294, R341, R388, R494	10	RESISTOR, 51k ±1%, 100mW, 0603 SMD, (ELEMENT14 266-8282)	WALSIN	WR06X5102FTL
68	R12, R47, R94, R141, R188, R235, R282, R329, R376	9	RESISTOR, 105k ±1%, 100mW, 0603 SMD, (ELEMENT14 349-5720)	YAGEO	RC0603FR-07105KL
69	R13, R54, R60, R101, R107, R148, R154, R195, R201, R242, R248, R289, R295, R336, R342, R383, R389, R497	18	RESISTOR, 24k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0709)	WALSIN	WR06X2402FTL
70	R14, R61, R108, R155, R202, R249, R296, R343, R390	9	RESISTOR, 3.24k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0754)	WALSIN	WR06X3241FTL
71	R15, R50, R56, R62, R97, R103, R109, R144, R150, R156, R191, R197, R203, R238, R244, R250, R285, R291, R297, R332, R338, R344, R379, R385, R391, R501	26	RESISTOR, 165k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0657)	WALSIN	WR06X1653FTL
72	R16, R63, R110, R157, R204, R251, R298, R345, R412, R427	10	RESISTOR, 1k ±1%, 100mW, 0603 SMD, (ELEMENT14 146-9740)	VISHAY DRALORIC	CRCW06031K00FKEA
73	R17, R18, R64, R65, R111, R112, R158, R159, R205, R206, R252, R253, R299, R300, R346, R347, R443, R444	18	RESISTOR, 249Ω ±1%, 63mW, 0402 SMD, (ELEMENT14 349-5566)	YAGEO	RC0402FR-07249RL
74	R19, R20, R30, R31, R32, R33, R34, R36, R37, R38, R39, R40, R41, R42, R66, R67, R77, R78, R79, R80, R81, R83, R84, R85, R86, R87, R88, R89, R113, R114, R124, R125, R126, R127, R128, R130, R131, R132, R133, R134, R135, R136, R160, R161, R171, R172, R173, R174, R175, R177, R178, R179, R180, R181, R182, R183, R207, R208, R218, R219, R220, R221, R222, R224, R225, R226, R227, R228, R229, R230, R254, R255, R265, R266, R267, R268, R269, R271, R272, R273, R274, R275, R276, R277, R301, R302, R312, R313, R314, R315, R316, R318, R319, R320, R321, R322, R323, R324, R348, R349, R359, R360, R361, R362, R363, R365, R366, R367, R368, R369, R370, R371, R445, R446	114	RESISTOR, 0 OHMS, 0402 SMD, (ELEMENT14 117-4140)	NEOHM	CRG0402ZR
75	R21, R22, R68, R69, R115, R116, R162, R163, R209, R210, R256, R257, R303, R304, R350, R351, R447, R448	18	RESISTOR, 62.6Ω ±1%, 63mW, 0402 SMD, (MOUSER 660-RN73H1ETP62R6F50)	KOA	RN73H1ETTP62R6F50
76	R23, R26, R27, R28, R70, R73, R74, R75, R117, R120, R121, R122, R164, R167, R168, R169, R211, R214, R215, R216, R258, R261, R262, R263, R305, R308, R309, R310, R352, R355, R356, R357, R451, R452, R453, R454, R459, R456, R457, R458, R459, R460, R461, R462, R463, R464, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490	64	RESISTOR, 4.7k ±1%, 100mW, 0603 SMD, (ELEMENT14 923-8565)	YAGEO	RC0603FR-074K7L
77	R24, R71, R118, R165, R212, R259, R306, R353	8	RESISTOR, 330Ω ±1%, 100mW, 0603 SMD, (ELEMENT14 290-8371)	BOURNS	CR0603-JW-331ELF
78	R25, R72, R119, R166, R213, R260, R307, R354	8	RESISTOR, 2.4k ±1%, 100mW, 0603 SMD, (ELEMENT14 250-2435)	WALSIN	WR06X2401FTL
79	R29, R35, R76, R82, R123, R129, R170, R176, R217, R223, R264, R270, R311, R317, R358, R364, R392, R393, R394, R395, R396, R397, R398, R399, R415, R416	26	RESISTOR, 180Ω ±1%, 100mW, 0603 SMD, (ELEMENT14 923-8395)	YAGEO	RC0603FR-07180RL
80	R46, R93, R140, R187, R234, R281, R328, R375, R496, R505	10	RESISTOR, 25.5k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0720)	WALSIN	WR06X2552FTL
81	R48, R95, R142, R189, R236, R283, R330, R377	8	RESISTOR, 102k ±1%, 100mW, 0603 SMD, (ELEMENT14 395-0987)	YAGEO	RC0603FR-07102KL
82	R49, R96, R143, R190, R237, R284, R331, R378	8	RESISTOR, 2.1k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0688)	WALSIN	WR06X2101FTL
83	R53, R100, R147, R194, R241, R288, R335, R382, R495	9	RESISTOR, 75k ±1%, 100mW, 0603 SMD, (ELEMENT14 266-8286)	WALSIN	WR06X7502FTL
84	R55, R102, R149, R196, R243, R290, R337, R384, R413	9	RESISTOR, 3.01k ±1%, 100mW, 0603 SMD, (ELEMENT14 399-4401)	WALSIN	MR04X3011FTVL
85	R400, R401	2	RESISTOR, 2.21k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0696)	WALSIN	WR06X2211FTL
86	R402, R403, R428	3	RESISTOR, 0 OHMS, 0603 SMD, (ELEMENT14 146-9739)	VISHAY DRALORIC	CRCW0603000020EA
87	R409, R410	2	RESISTOR, 1.5k ±1%, 100mW, 0603 SMD, (ELEMENT14 233-3563)	BOURNS	CR0603-FX-1501ELF
88	R414	1	RESISTOR, 220Ω ±1%, 100mW, 0603 SMD, (ELEMENT14 207-8903)	WELWYN	ASC0603-220RFT5
89	R426	1	RESISTOR, 20k ±1%, 100mW, 0603 SMD, (ELEMENT14 395-1043)	YAGEO	RC0603FR-1320KL
90	R431	1	RESISTOR, 10k ±1%, 100mW, 0603 SMD, (ELEMENT14 923-8603)	YAGEO	RC0603FR-0710KL
91	R432, R507	2	RESISTOR, 100k ±1%, 100mW, 0603 SMD, (ELEMENT14 399-4537)	WALSIN	SR06X1003FTL
92	R433, R503	2	RESISTOR, 86.6k ±1%, 100mW, 0603 SMD, (ELEMENT14 349-5919)	YAGEO	RC0603FR-0786K6L
93	R498	1	RESISTOR, 5.9k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0855)	WALSIN	WR06X5901FTL
94	R499	1	RESISTOR, 4.02k ±1%, 100mW, 0603 SMD, (ELEMENT14 353-9950)	KOA	RK73H1JTTD4021F
95	R500, R508	2	RESISTOR, 32.4k ±1%, 100mW, 0603 SMD, (ELEMENT14 267-0755)	WALSIN	WR06X3242FTL
96	R504	1	RESISTOR, 115k ±1%, 100mW, 0603 SMD, (ELEMENT14 395-0818)	YAGEO	RC0603FR-07115KL
97	R506	1	RESISTOR, 8.06k ±1%, 100mW, 0603 SMD, (ELEMENT14 266-8287)	WALSIN	WR06X8061FTL
98	S1, S2, S3, S4, S5, S6, S7, S8, S10	1	SWITCH, PUSHBUTTON, SPNO MOMENTARY, (ELEMENT14 176-432)	OMRON	B3F-1000
99	S9	1	SWITCH, DIP, 4PST, (ELEMENT14 243-5170)	C&K SWITCHES	SDA04H1BD
100	T1	1	RF 1:1 TRANSMISSION LINE TRANSFORMER, (MOUSER 937-ETC1-1-13TR)	MACOM	ETC1-1-13
101	U1, U2, U3, U4, U5, U6, U7, U8	8	PPGA, SPARTAN-7, 225CSGA, (DIGIKEY 122-2121-ND)	AMD	XC7S25-2CSGA225C
102	V1, V2	2	ESD PROTECTION DIODE ARRAY, SOT23-5, (MOUSER 595-ESDS314DBVR)	TEXAS INSTRUMENTS	ESDS314DBVR
103	V3	1	ESD PROTECTION DIODE ARRAY, SOT23-5, (MOUSER 595-ESDS314DBVR)	TEXAS INSTRUMENTS	ESDS314DBVR
104	V4	1	NPN SILICON TRANSISTOR, 500mA, SOT-23 SMD, (ELEMENT14 242-3100)	NEXPERIA	BC817-25W,115
105	V5	1	ESD PROTECTION DIODE, ±5.5V, SOT-523, (MOUSER 595-TPD1E10B06DYAR)	TEXAS INSTRUMENTS	TPD1E10B06DYAR
106	X1	1	MEZZANINE CONNECTOR, MALE, 240 PIN, (ELEMENT14 413-1878)	SAMTEC	ADM6-60-01.5-L-4-2-A
107	X2	1	MEZZANINE CONNECTOR, MALE, 240 PIN, (ELEMENT14 413-1878)	SAMTEC	ADM6-60-01.5-L-4-2-A
108	X3, X4, X5	3	SMA SOCKET, STRAIGHT, (ELEMENT14 124-8990)	TE CONNECTIVITY	5-1814832-1
109	X6, X8, X10, X12, X14, X16, X18, X20	8	HEADER, BOXED, 6 WAY, STRAIGHT, 2.0mm PITCH, (ELEMENT14 139-3817)	MOLEX	87831-0641
110	X7, X9, X11, X13, X15, X17, X19, X21, X22	8	HEADER, BOXED, 14 WAY, STRAIGHT, 2.0mm PITCH, (ELEMENT14 210-2706)	MOLEX	87832-1420
111	X23	1	SOCKET, MICRO SD CARD, PUSH-PUSH, (ELEMENT14 208-1363)	WURTH ELECTRONIK	693071010811
112	X24	1	SOCKET, RJ45 WITH INTEGRATED MAGNETICS, 2 LEDs, (ELEMENT14 327-9617)	BEL	0826-1G1T-43F
113	X25	1	SOCKET, USB MICRO B, RIGHT ANGLE, (ELEMENT14 229-3836)	MOLEX	105017-0001
114	X26	1	MODULAR JACK, 8P8C, CAT5, SHIELDED, RIGHT ANGLE, (ELEMENT14 107-7747)	HIROSE	TM21R-5C-88(50)
115	X27, X28, X29, X30	4	SOCKET, 20 PIN, SFP+, R/A, (ELEMENT14 175-5785)	TE CONNECTIVITY	1888247-2
116	X31	1	PLUG, MICROFIT 6 WAY, THROUGH-HOLE STRAIGHT, (ELEMENT14 101-2248)	MOLEX	43045-0612
117	X32	1	HEADER, STRAIGHT, LOCKING, 2 WAY, 2.54mm PITCH, (ELEMENT14 973-1148)	MOLEX	22-27-2021