NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
2. MATERIAL:
   COPPER CLAD EPOXY GLASS, IS410 OR EQUIVALENT WITH TG170
   DEGREES C. UL94V-1 MINIMUM. ALL BOARD MUST BE RoHS COMPLIANT.
3. THE PCB SHALL BE FABRICATED TO IPC-6012, TYPE X, CLASS2.
   WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
4. OVERALL BOARD THICKNESS REFER TO LAMINATION DIAGRAM. TOLERANCE APPLIES
   AFTER ALL LAMINATION AND PLATING PROCESSES. IT IS TO BE MEASURED FROM
   TOP PCB METAL TO BOTTOM PCB METAL UNLESS OTHERWISE SPECIFIED.
5. BOW & TWIST NOT TO EXCEED 0.0075 IN. (0.75%) PER LINEAR INCH.
   BOW & TWIST SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.22.
6. PHOTO ETCH CIRCUITRY PER ENCLOSED GERBER RS274X OR ODB++ FORMAT FILE.
   DRILL LOCATION AND SIZE CONTROLLED BY EXCELLON CNC DRILL FILE.
7. IF STATED IN THE LAMINATION DIAGRAM, THE DIELECTRIC THICKNESS OF ANY
   CONTROLLED IMPEDANCE LAYER IS FOR REFERENCE ONLY. FINAL ACCEPTANCE
   SHALL BE DETERMINED BY THESE LAYERS HAVING A CHARACTERISTIC
   IMPEDANCE OF +/-10% OHMS AS STATED IN THE LAMINATION DIAGRAM. THE
   VENDOR CAN MAKE ADJUSTMENTS AS LONG AS THE STATED IMPEDANCE AND
   OVERALL BOARD THICKNESS IS MAINTAINED. ANY ADJUSTMENT MADE TO TRACE
   WIDTH OR SPACING MUST HAVE PRIOR WRITTEN APPROVAL FROM ZGLUE.
8. LAYER TO LAYER REGISTRATION OF THE CONDUCTOR PATTERNS SHALL BE WITHIN
   0.003 IN DIAMETER TRUE POSITION, WITH AN ABSOLUTE MINIMUM OF 0.002 IN
   BETWEEN PLATE THRU HOLE WALL AND ADJACENT CONDUCTIVE SURFACES, ANNULAR RING.
   LEGEND TO LEGEND +/-0.007 INCHES.
9. FINISH:
   THE STARTING WEIGHT FOR OUTER LAYERS CAN BE 0.5 OZ/SQ FT AS LONG AS THE
   FINISH COPPER WEIGHT IS 1OZ/SQ FT.
10. CHECK ALL THAT APPLY
    ( ) LEAD FREE AND RoHS COMPLIANT PLATING.
    (X) FINISH CONDUCTOR SURFACES: IMMERSION GOLD, 2-5 MICRO INCHES
        OVER 118-236 MICRO INCHES MINIMUM OF ELECTROLESS NICKEL.
    ( ) FINISH CONDUCTOR SURFACES: ENEPIG. 118-275 MICRO INCHES NICKEL,
        4-13.8 MICRO INCHES PALLADIUM, 4-11.8 MICRO INCHES IMMERSION GOLD MIN.
11. DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN
    0.005 DTP. MINIMUM BARREL PLATING OF 0.001 IN. PLATED HOLES SHALL NOT BE
    ROUGH OR IRREGULAR SO AS TO HINDER PROPER SOLDER WICKING.
12. ALL TOLERANCES ARE NON-ACCUMULATIVE.
13. CHECK ALL THAT APPLY
    ( ) BLUE SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO
        IMAGEABLE INK (LPI).
    (X) BLUE TAIYO PSR-4000.
    ( ) BLUE SOLDERMASK OVER BARE COPPER/BARE GOLD (BOTH SIDES) WITH LIQUID PHOTO
        IMAGEABLE INK (LPI) PER IPC-5M-84DC, CLASS T, COLOR GREEN.
14. APPLY SILKSCREEN OVER SOLDER MASK USING NON-CONDUCTIVE, WHITE EPOXY BASED INK
    PER ARTWORK.
15. VENDOR LOGO & DATE CODE REQUIRED IN INK ON BOTTOM SIDE ONLY. DATE CODE FORMAT
    MUST BE YYWW ONLY.
16. FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-356 NETLIST OR ODB++
    FORMAT FILE. (REQUIRED UNLESS OTHERWISE SPECIFIED IN QUOTE).
    THE PCB SHALL HAVE A VERIFICATION STAMP.
17. A TIME DOMAIN REFLECTOMETER REPORT FOR EACH IMPEDANCE CONTROLLED LAYER AND A
    CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT.
18. FINISHED SURFACE CONTACTS AND FILLED VIAS TO BE FREE OF ANY PITS. SCRATCHES
    PROBE MARKS OR OTHER DEFORMITIES THAT COULD EFFECT THE APPERANCE AND PERFORNACE
    OF THE CONTACT SURFACE. CONTACTS ARE TO BE AS FLAT AS POSSIBLE. NOT TO EXCEED
    +/-0.001 IN OF FLATNESS.
19. NO THIEVING ALLPW UNDER PCB ANTENNA ON ANY LAYER.

IMPEDANCE TABLE				
LAYER	50 OHM	XX OHM	90 OHM TRACE / SPACE	100OHM TRACE / SPACE
TOP	12MIL	-	7.5/5.0MIL	xxxxxxxMIL
BOTTOM		-	7.5/5.0MIL	xxxxxxxMIL

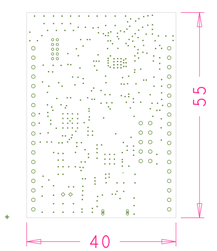
LAMINATION DIAGRAM				
LAYER NUMBER	LAYER NAME	FINISHED CU WEIGHT (OZ)	DIELECTRIC THICKNESS (in.)	DIELECTRIC MATERIAL
1	TOP	1		FOIL
			0.0074	
2	GND	1		
			0.0275	
3	PWR	1		
			0.0074	
4	BOTTOM	1		FOIL

THE FINISHED PCB THICKNESS TO BE: 0.047" +/- 0.006"

zGlue

HARDWARE NAME:ZUES2_ISTANBUL_LGA_DEVKIT_P1

DATE:12/09/2019 LAYER:FAB DWG



DRILL CHART: TOP to BOTTOM ALL UNITS ARE IN MILS						
FIGURE	FINISHED_SIZE	ROTATION	TOLERANCE_DRILL	TOLERANCE_TRAVEL	PLATED	QTY
·	8.0	-	+0.0/-3.0	-	PLATED	327
·	8.0	-	+3.0/-8.0	-	PLATED	1
·	10.0	-	+0.0/-3.0	-	PLATED	33
◦	27.56	-	+2.99/-2.99	-	PLATED	10
○	40.0	-	+0.0/-0.0	-	PLATED	46
◦	40.0	-	+3.0/-3.0	-	PLATED	2
▯	59.06x23.62	90.000	+3.0/-3.0	+3.0/-3.0	PLATED	2