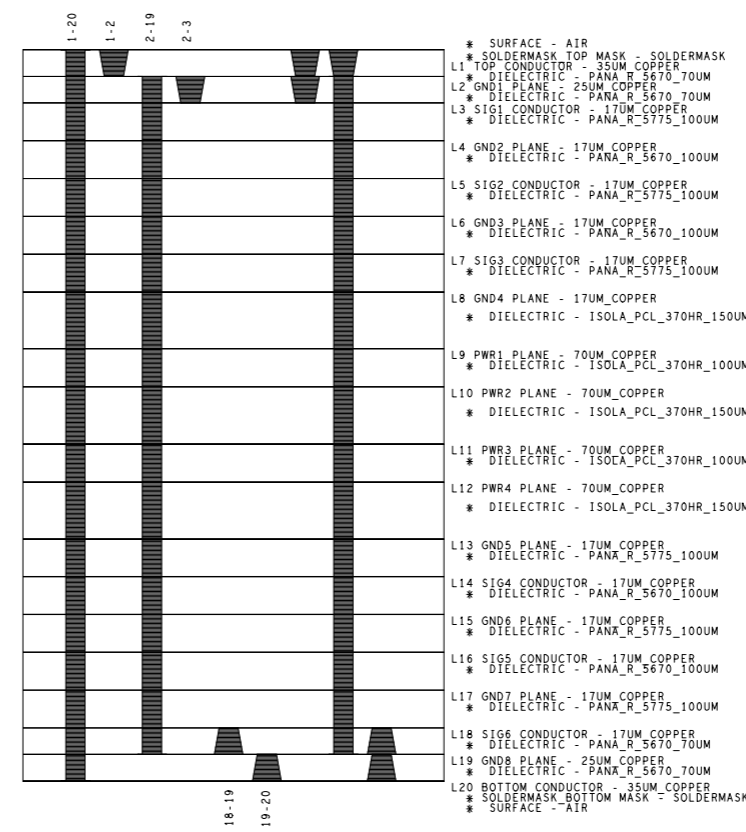
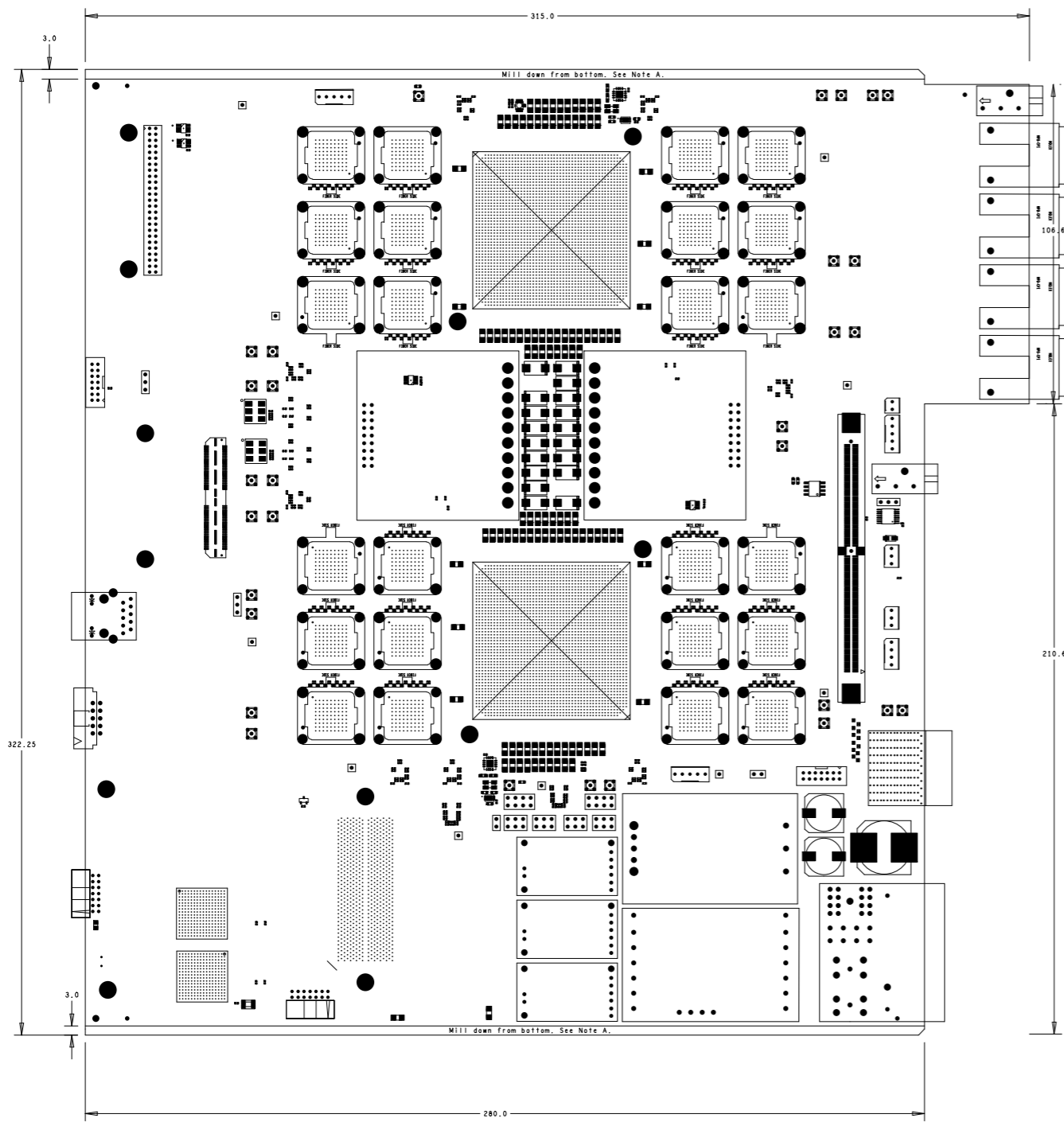


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



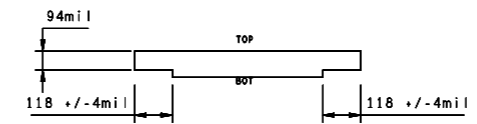
- * SURFACE - AIR
- * SOLDERMASK TOP MASK - SOLDERMASK
- L1 TOP CONDUCTOR - 35UM COPPER
- * DIELECTRIC - PANAR_5670_70UM
- L2 GND1 PLANE - 25UM COPPER
- * DIELECTRIC - PANAR_5670_70UM
- L3 SIG1 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L4 GND2 PLANE - 17UM COPPER
- * DIELECTRIC - PANAR_5670_100UM
- L5 SIG2 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L6 GND3 PLANE - 17UM COPPER
- * DIELECTRIC - PANAR_5670_100UM
- L7 SIG3 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L8 GND4 PLANE - 17UM COPPER
- * DIELECTRIC - ISOLA_PCL_370HR_150UM
- L9 PWR1 PLANE - 70UM COPPER
- * DIELECTRIC - ISOLA_PCL_370HR_100UM
- L10 PWR2 PLANE - 70UM COPPER
- * DIELECTRIC - ISOLA_PCL_370HR_150UM
- L11 PWR3 PLANE - 70UM COPPER
- * DIELECTRIC - ISOLA_PCL_370HR_100UM
- L12 PWR4 PLANE - 70UM COPPER
- * DIELECTRIC - ISOLA_PCL_370HR_150UM
- L13 GND5 PLANE - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L14 SIG4 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5670_100UM
- L15 GND6 PLANE - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L16 SIG5 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5670_100UM
- L17 GND7 PLANE - 17UM COPPER
- * DIELECTRIC - PANAR_5775_100UM
- L18 SIG6 CONDUCTOR - 17UM COPPER
- * DIELECTRIC - PANAR_5670_70UM
- L19 GND8 PLANE - 25UM COPPER
- * DIELECTRIC - PANAR_5670_70UM
- L20 BOTTOM CONDUCTOR - 35UM COPPER
- * SOLDERMASK BOTTOM MASK - SOLDERMASK
- * SURFACE - AIR

CONTROLLED IMPEDANCE REQUIREMENTS
 100 OHM +/- 10% FOR DIFFERENTIAL PAIRS ON LAYERS 1,3,5,7,14,16,18,20
 FINISHED CONDUCTOR WIDTH:
 TOP & BOT: 100/125/100 um INNER: 90/120 90 um
 THESE NUMBERS ARE FOR REFERENCE ONLY. FINAL WIDTHS AND SEPARATIONS TO ACHIEVE
 THE CORRECT IMPEDANCE SHALL BE THE RESPONSIBILITY OF THE BOARD FABRICATOR

- FABRICATION NOTES**
- 1) FINISHED TRACE LINE WIDTHS SHOULD MATCH SUPPLIED GERBER FILES (EXCEPT IF NOTED)
 - 2) MATERIAL: MEGTRON-6, ISOLA PCL
 - 3) COPPER WEIGHT: AS DESCRIBED ON STACKUP DETAIL
 - 4) SOLDER MASK (SOLDER MASK) (SOLDER MASK)
 - 5) OVERALL BOARD THICKNESS
 - 6) BARE BOARD ELECTRICAL TEST:
 - 7) HOLE DIAMETER TOLERANCES ARE:
 - 8) SILK SCREEN USING EPOXY BASED INK.
 - 9) MINIMUM ANNUAL RING:
 - 10) PLANE REGISTRATION
 - 11) MINIMUM PLATING THROUGH ALL HOLES IS:
 - 12) FABRICATE IN ACCORDANCE WITH IPC-6012, CLASS 2
 - 13) AS PER IPC ENIG SPECIFICATION 4522, 0.0508 - 0.1016 MICROMETERS IMMERSION GOLD OVER 3.048-6.096 MICROMETERS NICKEL
 - 14) WARP AND TWIST:
 - 15) ACCEPTABILITY: 100% (100%)
 - 16) MANUFACTURER TO ADD MFR'S LOGO, DATE CODE, UL CODE AND ET STAMP

DESIGN CROSS SECTION CHART
 TOTAL THICKNESS 2.574 MM

Mill down board into 94 +/- 4 mil from bottom side. See detail below
 NOTE A:



UNLESS OTHERWISE SPECIFIED			SIGNATURES	DATE	UNIVERSITY OF MAINZ		
			DRANN Bruno Bous	18.04.2018	L1-TOPO-PHASE-I PreProduction		
			CHECKED				
			ENGRG				
			ISSUED				
					SIZE D	FSCM NO	DWG NO
					DO NOT SCALE	SHEET	