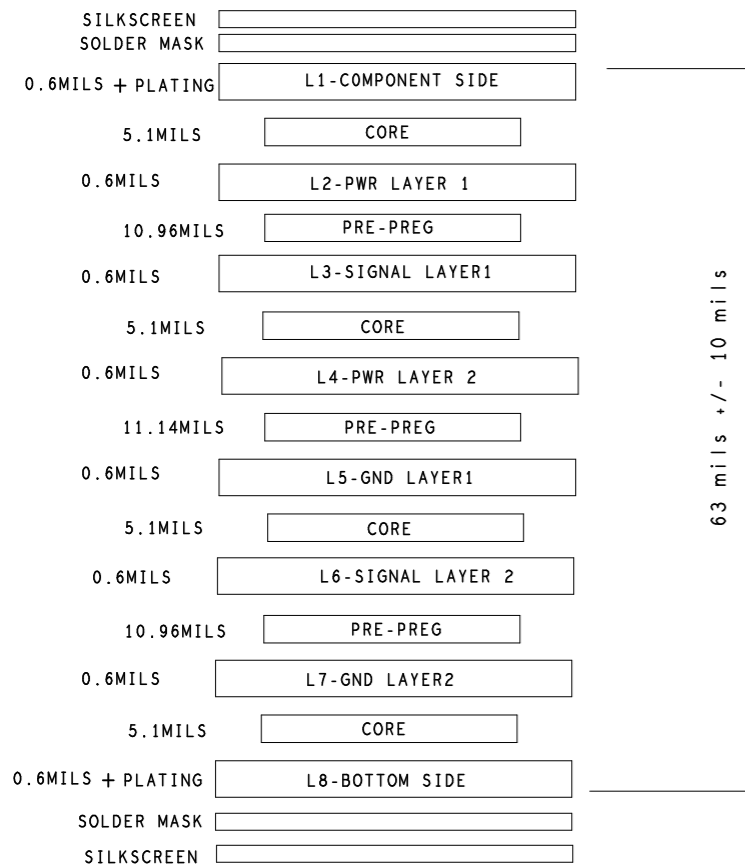
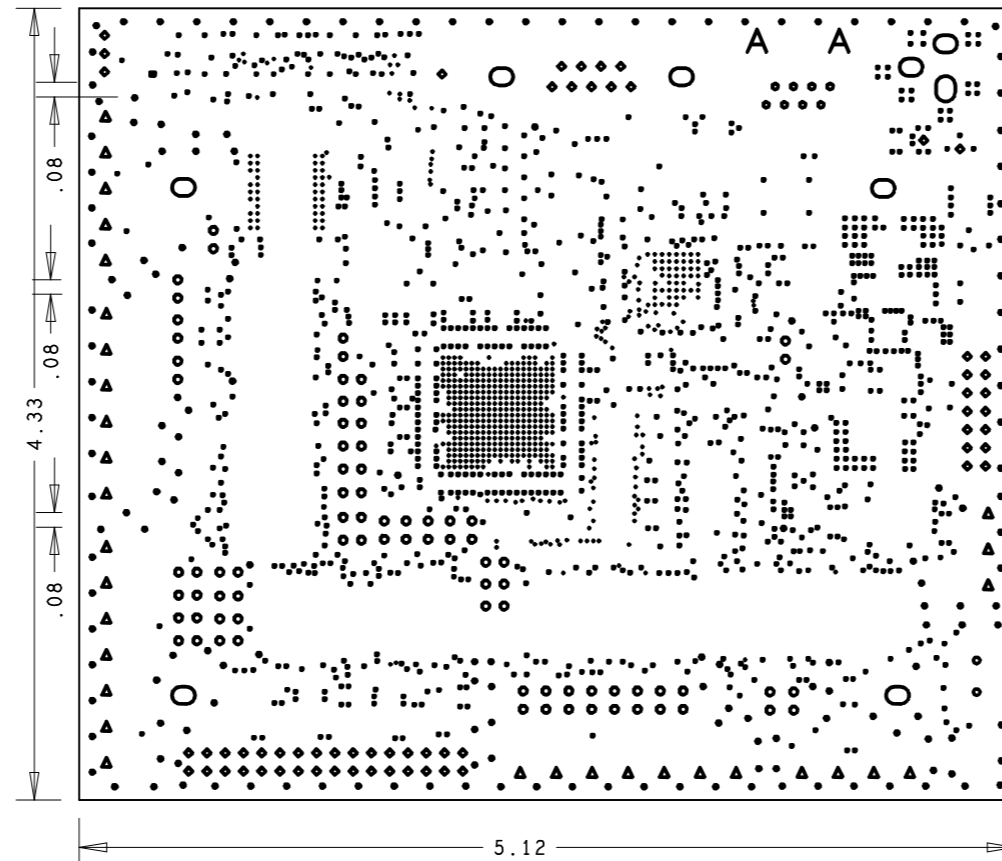


8-LAYER STACK-UP DETAILS:



DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+0.0/-0.0	PLATED	572
•	12.0	+0.0/-0.0	PLATED	1088
•	24.0	+2.0/-2.0	PLATED	173
•	35.0	+2.0/-2.0	PLATED	8
•	40.0	+3.0/-3.0	PLATED	80
◆	43.0	+2.0/-2.0	PLATED	61
▲	51.18	+2.0/-2.0	PLATED	32
○	125.0	+3.0/-3.0	PLATED	8
○	140.0	+3.0/-3.0	PLATED	1
▪	27.56	+2.0/-2.0	NON-PLATED	1
•	35.0	+2.0/-2.0	NON-PLATED	2
A	125.0	+3.0/-3.0	NON-PLATED	2




REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
1.0	NEW RELEASE	VVDN	01/30/12	
1.1	Updated Header Drill Size & SS Text	VVDN	04/12/12	
1.2	RFO_3.1 CAD Services- Changes updated	VVDN	10/15/12	

UNLESS OTHERWISE SPECIFIED

- BOARD TO BE FABRICATED PER IPC-6012A, CLASS 2.
- MATERIAL: POLYCLAD FR-370HR OR EQUIVALENT. OUTER LAYERS 1/2 OZ/SOFT CU INNER LAYERS 1/2 OZ/SOFT CU FINISHED .063 VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 14.
- PLATING: ADDITIONAL CU PLATING 1 OZ/SOFT ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND. MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE PER IPC-6012A WITH AMENDMENT 1, CLASS 2 REQUIREMENTS. WITH NO SINGLE MEASUREMENT LESS THAN 0.00071 IN THE PLATED HOLES.
- FINISH: SURFACES TO BE COATED BY ENIG OF 2 TO 10 MICROINCHES OVER A MINIMUM OF 60-200 MICROINCHES OF LOW STRESS NICKEL.
- SOLDERMASK: SOLDER MASK TO BE TRANSPARENT GREEN LPI BOTH SIDES PER GERBER FILES.
- SILKSCREEN: WHITE EPOXY INK, APPLY TO BOTH SIDES PER GERBER FILES.
- ARTWORK: MINIMUM FEATURE SIZE = 0.0047 MINIMUM AIR GAP = 0.0045
- ALL DIMENSIONS ARE IN INCHES.
- DO NOT ADD NON-FUNCTIONAL COPPER THIEVING ON OPEN AREAS OF OUTER LAYERS. THIEVING IS ALLOWED ON INNER LAYERS, UNLESS OTHERWISE SPECIFIED.
- VIAS SHOULD BE COVERED ACCORDING TO ONE OF THE FOLLOWING METHODS. METHOD 1 IS PREFERRED. METHOD 1: VIAS MUST BE FILLED WITH SOLDERMASK MATERIAL AFTER ELECTROLESS NICKEL/IMMERSION GOLD AND BEFORE PRIMARY LPI MASK. AFTER THE FILL IS CURED, THE PRIMARY MASK IS THEN APPLIED WITH NO VIA APERTURES BOTH SIDES. METHOD 2: AFTER APPLICATION OF FULL BODY ELECTROLESS NICKEL/IMMERSION GOLD, APPLY PRIMARY MASK WITH REDUCED VIA APERTURES THAT ARE 6 MILS LARGER THAN DRILLED HOLE DIAMETER BOTH SIDES. THEN APPLY SOLDER MASK PLUG ON COMPONENT SIDE.
- TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
- USE IPC-D-356A NETLIST AS SUPPLIED FOR CHECKING.
- THERE ARE IMPEDENCE CONTROLLED SIGNALS RUNNING INSIDE BOARD. VENDOR SHOULD NOT MODIFY ARTWORK EXCEPT FOR PROCESS CONTROL. REFER IMPEDANCE REQUIREMENTS TABLE.

IMPEDANCE REQUIREMENTS:

Layers	Single Ended-50 OHMS	Differential-90 OHMS		Differential-100 OHMS		Differential-120 OHMS	
	Trace Width (Mils)	Trace Width (Mils)	Spacing (Mils)	Trace Width (Mils)	Spacing (Mils)	Trace Width (Mils)	Spacing (Mils)
L1_TOP	8.0	7	5	7	9	4.7	8.8
L3_SIG1	5.5	—	—	5	8	—	—
L6_SIG2	5.5	—	—	—	—	—	—
L8_BOTTOM	8.0	7	5	7	9	4.7	8.8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		 20 Cotton Road Nashua, New Hampshire 03063 (603) 883-2430 FAX (603) 882-2655	
	APPROVALS	DATE		
MATERIAL SEE NOTES	DRAWN VVDN	10/11/12	FABRICATION DRAWING EZLXN-IIIDE-EBZ	
FINISH SEE NOTES	CHECKED			
DO NOT SCALE THIS DRAWING	ENGINEERING		SIZE B	REV. 1.0
	QUALITY		DWG. NO. A0001-2012-REF	
	MANUFACTURING		SCALE 1 : 1	SHEET 1 : 1