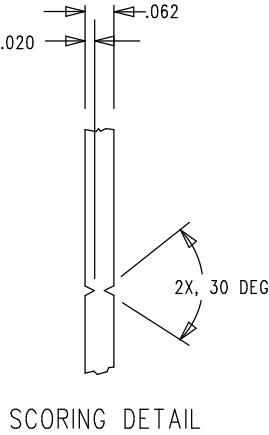
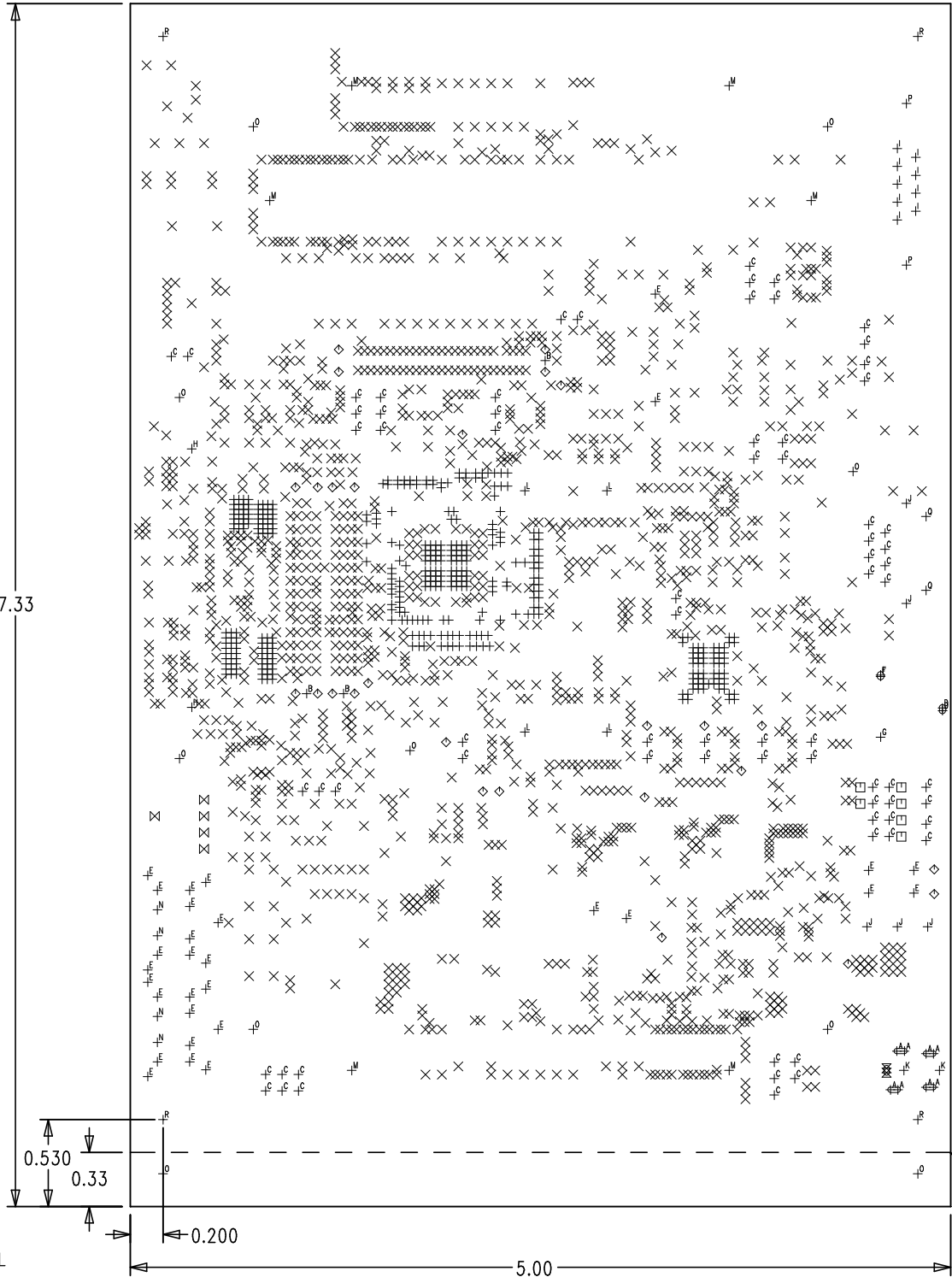


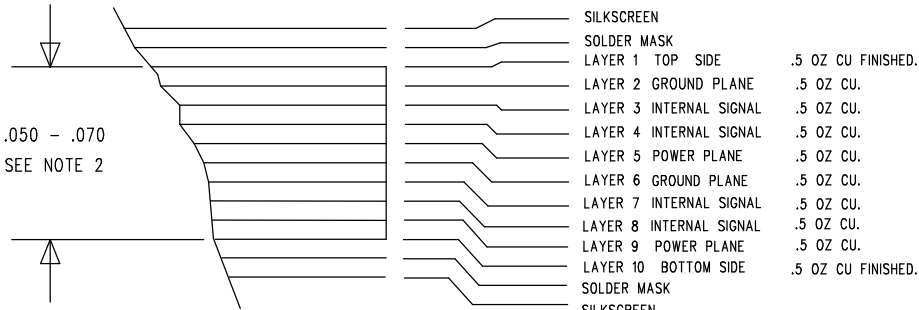
REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	C.C.D.	04/08/08	
0.2	REFER TO ECO 2008-054	C.C.D.	07/15/08	
1.0	REFER TO ECO 2008-094	C.C.D.	12/05/08	
1.1	REFER TO ECO 2009-028	C.C.D.	5/13/09	


- UNLESS OTHERWISE SPECIFIED
- BOARD TO BE FABRICATED PER IPC-6012B, CLASS 2.
  - MATERIAL: FR-370HR OR EQUIVALENT. OUTER LAYERS 1/2 OZ/SQFT CU INNER LAYERS 1/2 OZ/SQFT CU FINISHED .062 (.050 MIN .070 MAX SEE DETAIL). VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
  - PLATING: ADDITIONAL CU PLATING 1 OZ/SQFT ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND. MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE PER IPC-6012B 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 3 TO 5 MICROINCHES OVER A MINIMUM OF 150-200 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 = 0.005 MINIMUM AIR GAP = 0.004
  - ALL DIMENSIONS ARE IN INCHES.
  - CONTROLLED IMPEDANCE: BOARD TO BE BUILT TO YIELD CONTROLLED IMPEDANCE OF 60 OHMS +/-10% (SINGLE ENDED) ON ALL .005" LINE WIDTHS. ALL .0079" LINE WIDTHS TO BE 45 OHMS SINGLE ENDED AND 90 OHMS DIFFERENTIAL +/-10%.
  - NON-FUNCTIONAL COPPER THIEVING IS ALLOWED ON OPEN AREAS.
  - 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 APERATURES 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.
  - VIA HOLES (.008 & .012) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
  - TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
  - REMOVAL OF NON-FUNCTIONAL PADS ON LAYERS 3, 4, 7, AND 8 IS ACCEPTABLE.
  - USE IPC-D-356A NETLIST AS SUPPLIED FOR CHECKING.
  - V SCORE 1 LINE ON BOTH SIDES OF THE BOARD. SEE DETAIL.
  - BUILD AS 1-UP PCB.
  - THE FOLLOWING NETS ARE INTENTIONALLY SHORTED AND RESULT IN IPC NETLIST ERRORS:  
AT W2 : GND & AGND4 (LAYER 1)  
AT W3 : GND & AGND3 (LAYER 1)  
AT W4 : GND & AGND2 (LAYER 1)

SIZE	QTY	SYM	PLATED	TOL
0.008	378	+	YES	+/-0.003
0.012	1699	×	YES	+/-0.003
0.02	6	□	YES	+/-0.003
0.028	27	◇	YES	+/-0.003
0.032 x 0.06	1	⊠	YES	+/-0.003
0.032	5	⊠	YES	+/-0.003
0.032 x 0.078	4	+A	YES	+/-0.003
0.033	3	+B	NO	+/-0.003
0.038	72	+C	YES	+/-0.003
0.039 x 0.055	1	+D	NO	+/-0.003
0.043	30	+E	YES	+/-0.003
0.043 x 0.051	1	+F	NO	+/-0.003
0.043	1	+G	NO	+/-0.003
0.046	2	+H	NO	+/-0.003
0.047	9	+I	YES	+/-0.003
0.063	5	+J	YES	+/-0.003
0.063	2	+K	NO	+/-0.003
0.068	4	+L	NO	+/-0.003
0.07	6	+M	NO	+/-0.003
0.117	4	+N	NO	+/-0.005
0.125	10	+O	NO	+/-0.005
0.125	2	+P	YES	+/-0.005
0.128	2	+Q	NO	+/-0.005
0.156	4	+R	NO	+/-0.005



10 LAYER CONSTRUCTION DETAIL  
SCALE : NONE



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 C.C.D.	5/13/09	FABRICATION DRAWING ADZS-BF526 EZBRD	
FINISH SEE NOTES	CHECKED			
DO NOT SCALE THIS DRAWING	ENGINEERING QUALITY		SIZE B	REV. 1.1
	MANUFACTURING		DWG. NO. A0212-2007	SHEET 1 OF 1