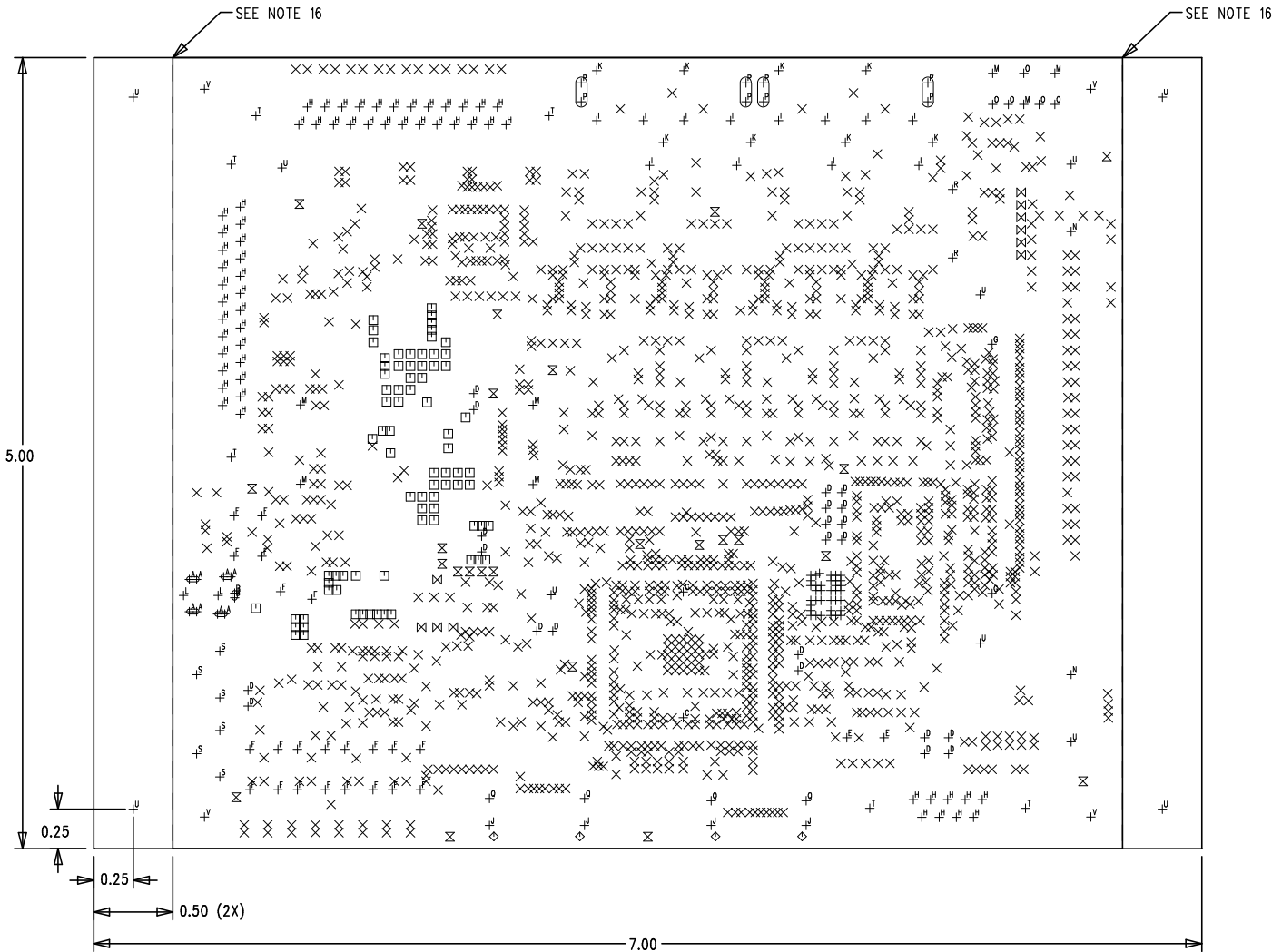
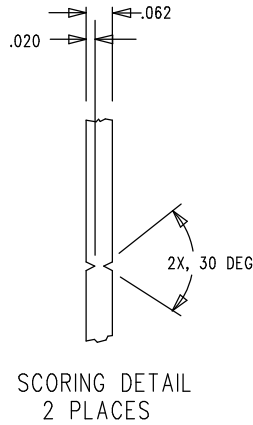
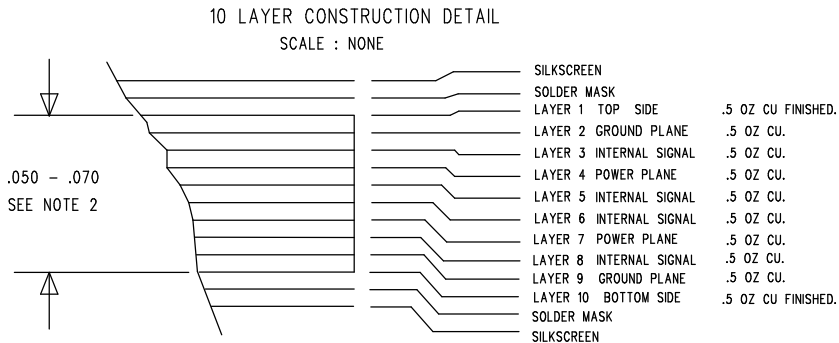



REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	C.C.D.	9/19/09	

SIZE	QTY	SYM	PLATED	TOL
0.008	36	+	YES	+/-0.003
0.012	1582	X	YES	+/-0.003
0.02	79	□	YES	+/-0.003
0.025	4	◇	YES	+/-0.003
0.028	25	⊠	YES	+/-0.003
0.032	10	⊞	YES	+/-0.003
0.032 x 0.078	4	+ <sup>A</sup>	YES	+/-0.003
0.032 x 0.06	1	+ <sup>B</sup>	YES	+/-0.003
0.038	22	+ <sup>D</sup>	YES	+/-0.003
0.039	2	+ <sup>E</sup>	NO	+/-0.003
0.04	2	+ <sup>C</sup>	NO	+/-0.003
0.043	22	+ <sup>F</sup>	YES	+/-0.003
0.046	2	+ <sup>G</sup>	NO	+/-0.003
0.047	59	+ <sup>H</sup>	YES	+/-0.003
0.051	12	+ <sup>I</sup>	YES	+/-0.003
0.057	4	+ <sup>J</sup>	NO	+/-0.003
0.059	8	+ <sup>K</sup>	YES	+/-0.003
0.063	2	+ <sup>L</sup>	NO	+/-0.003
0.068	7	+ <sup>M</sup>	NO	+/-0.003
0.07	2	+ <sup>N</sup>	NO	+/-0.003
0.071 x 0.19	4	+ <sup>P</sup>	NO	+/-0.003
0.071	5	+ <sup>O</sup>	YES	+/-0.003
0.075	4	+ <sup>Q</sup>	YES	+/-0.003
0.079	2	+ <sup>R</sup>	YES	+/-0.003
0.085	6	+ <sup>S</sup>	YES	+/-0.003
0.125	6	+ <sup>T</sup>	YES	+/-0.005
0.125	10	+ <sup>U</sup>	NO	+/-0.005
0.156	4	+ <sup>V</sup>	NO	+/-0.005



- 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 .0049" LINE WIDTHS TO BE 100 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, 5, 6, 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 W1 : GND & PGND (LAYER 1) AT W2 : GND & PGND2 (LAYER 1)
  - UNUSED PINS ARE TIED TO A NET CALLED "NOT\_CONNECTED" AND BROUGHT OUT TO VIAS. THIS RESULTS IN IPC NETLIST ERRORS. THESE ARE INTENTIONAL.



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	DRAWN C.C.D.	09/19/09	FABRICATION DRAWING ADSP-21489 EZ-BOARD
SEE NOTES	CHECKED		
FINISH	ENGINEERING		SIZE B DWG. NO. A0228-2009 REV. 0.1
SEE NOTES	QUALITY		
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1 SHEET 1 OF 1