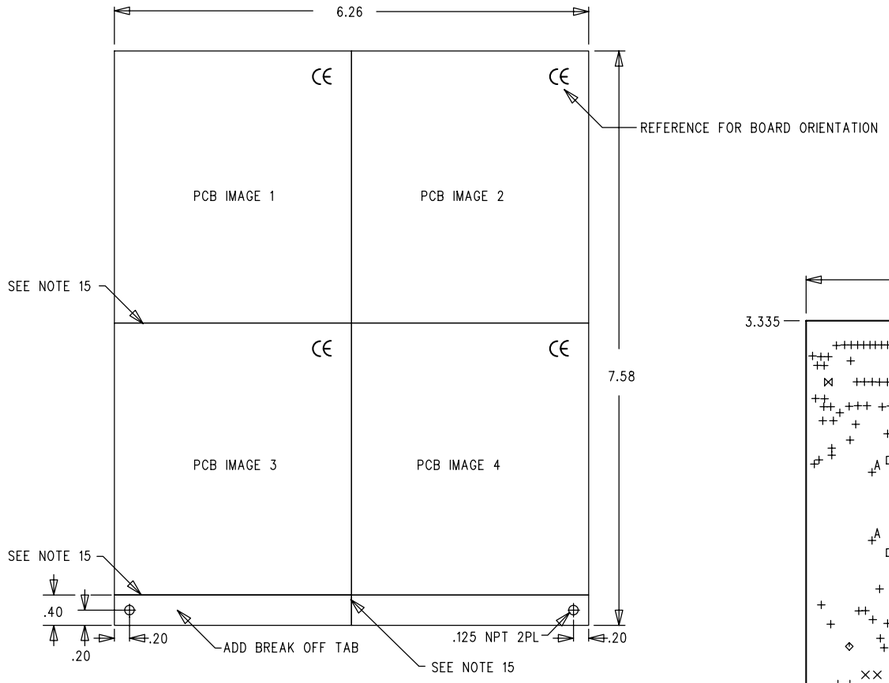
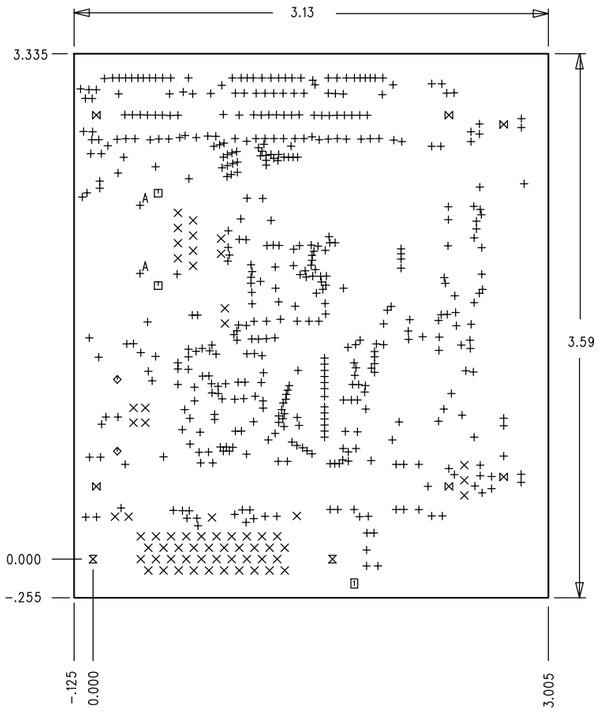
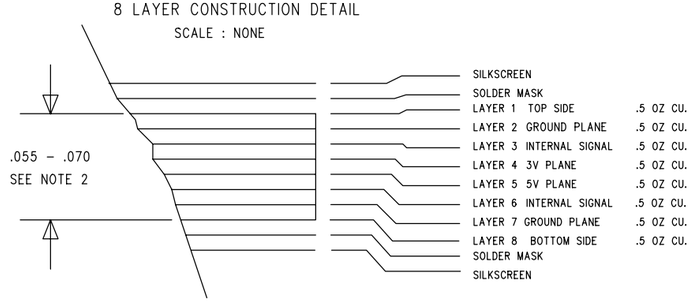
PANEL DETAIL

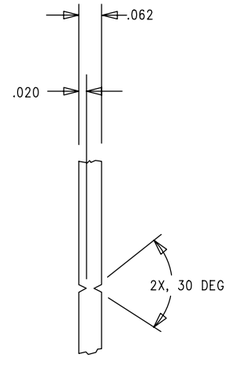




8 LAYER CONSTRUCTION DETAIL

SCALE : NONE





SCORING DETAIL

REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
1.0	NEW RELEASE	EASTERN CIRCUITS	07/13/04	
1.1	REFER TO ECO2004-068	EASTERN CIRCUITS	11/17/04	
1.2	REFER TO ECO2005-044	EASTERN CIRCUITS	03/31/05	
2.0	REFER TO ECO2005-157	EASTERN CIRCUITS	01/04/06	

UNLESS OTHERWISE SPECIFIED

1. BOARD TO BE FABRICATED PER IPC-6012A, CLASS 2.
2. MATERIAL: POLYCLAD FR-370HR OR EQUIVALENT. OUTER LAYERS 1/2 OZ/SQFT CU INNER LAYERS 1/2 OZ/SQFT CU FINISHED .062 (.055 MIN .070 MAX SEE DETAIL). VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
3. 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-6012A WITH AMENDMENT 1, CLASS 2 REQUIREMENTS. WITH NO SINGLE MEASUREMENT LESS THAN 0.00071 IN THE PLATED HOLES.
4. FINISH: SURFACES TO BE COATED BY ENIG OF 2 TO 10 MICROINCHES OVER A MINIMUM OF 60-200 MICROINCHES OF LOW STRESS NICKEL.
5. SOLDERMASK: SOLDER MASK TO BE TRANSPARENT GREEN LPI BOTH SIDES PER GERBER FILES.
6. SILKSCREEN: WHITE EPOXY INK, APPLY TO BOTH SIDES PER GERBER FILES.
7. ARTWORK: MINIMUM FEATURE SIZE = 0.005 MINIMUM AIR GAP = 0.00492
8. ALL DIMENSIONS ARE IN INCHES.
9. CONTROLLED IMPEDANCE: BOARD TO BE BUILT TO YIELD CONTROLLED IMPEDANCE OF 50 OHMS – 70 OHMS ON ALL .005" LINE WIDTHS OF 100 OHMS +/- ON ALL .00349" DIFFERENTIAL PAIR TRACE WIDTHS
10. DO NOT ADD NON-FUNCTIONAL COPPER THIEVING ON OPEN AREAS OF OUTER LAYERS. THIEVING IS ALLOWED ON INNER LAYERS, UNLESS OTHERWISE SPECIFIED.
11. 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.
12. VIA HOLES (.012) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
13. TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
14. USE IPC-D-356A NETLIST AS SUPPLIED FOR CHECKING.
15. V SCORE 3 LINES ON BOTH SIDES OF THE PANEL. SEE DETAIL.
16. SEE PANEL DETAIL FOR PANALIZATION.
17. WHEN STEP AND REPEAT IS COMPLETE A SOLDERPASTE MASK (GERBER FILE) IS NEED FOR THE ASSEMBLY HOUSE FOR THE 6.26" X 7.58" PANEL. PLEASE SUPPLY TO CHIRAG PATEL AT ANALOG DEVICES.
18. REMOVAL OF NON-FUNCTIONAL PADS ON LAYERS 3 AND 6 IS ACCEPTABLE.

SIZE	QTY	SYM	PLATED	TOL
12	472	+	YES	+0.003-0.012
37	63	X	YES	+/-0.003
63	2	⊓	YES	+/-0.003
93	2	◇	YES	+/-0.003
108	2	⧖	YES	+/-0.005
53	6	⋈	NO	+0.003-0.000
128	2	+A	NO	+/-0.005

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		
	APPROVALS	DATE	
MATERIAL SEE NOTES	DRAWN EASTERN CIRCUITS	01/04/06	
	CHECKED		
FINISH SEE NOTES	ENGINEERING		
	QUALITY		
DO NOT SCALE THIS DRAWING	MANUFACTURING		

ANALOG DEVICES
20 Cotton Road
Nashua, New Hampshire 03063
(603) 883-2430 FAX (603) 882-2655

FABRICATION DRAWING

Blackfin USB-LAN EZ-EXTENDER

SIZE	DWG. NO.	REV.
B	A0187-2003	2.0

SCALE 1 : 1 SHEET 1 OF 1