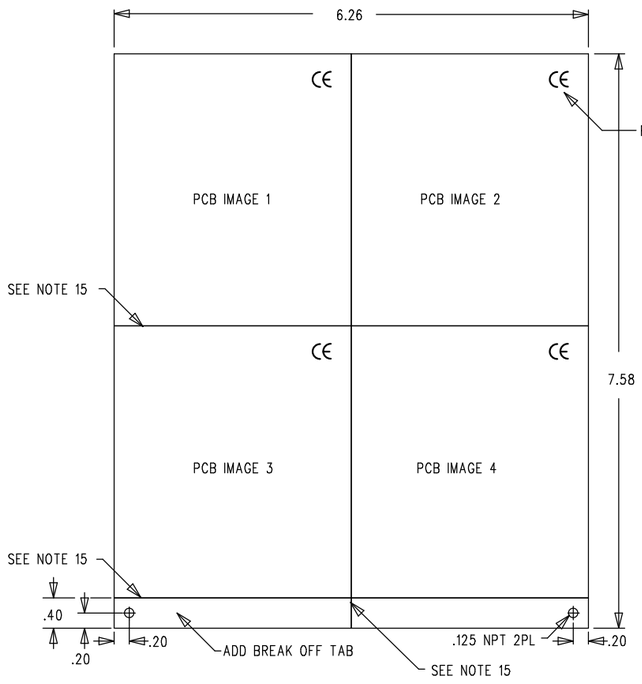
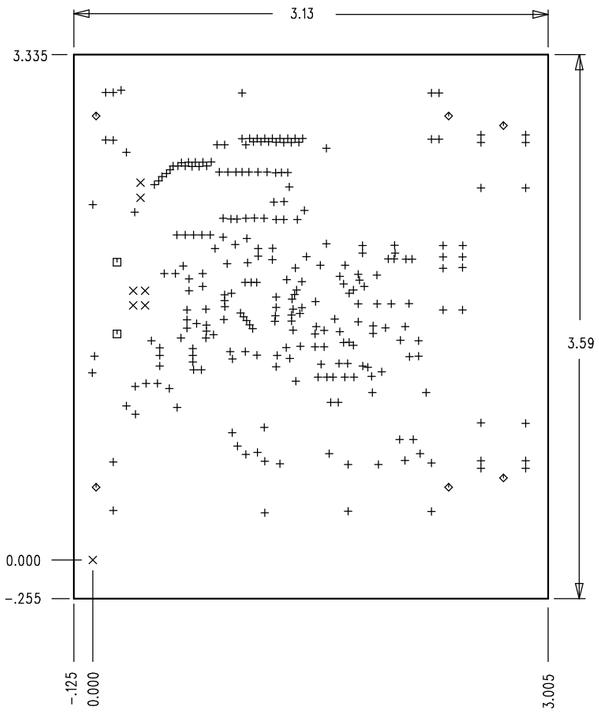
| REVISIONS | | | | |
|---|---|---|---|---|
| REV | DESCRIPTION OF CHANGE | DRFTR | DATE | APPROVED |
| 1.0 | NEW RELEASE | EASTERN CIRCUITS | 04/11/05 | |
| 1.1 | REFER TO ECO2005-082 | EASTERN CIRCUITS | 07/22/05 | |

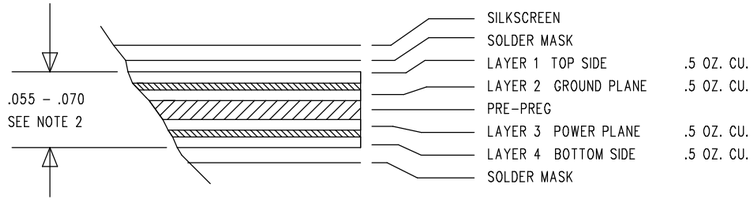
## PANEL DETAIL



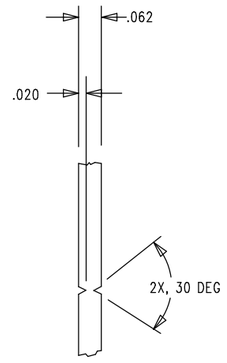

UNLESS OTHERWISE SPECIFIED

1. BOARD TO BE FABRICATED PER IPC-6012A, CLASS 2.
2. MATERIAL: POLYCLAD FR-370HR 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 TOP SIDE PER GERBER FILE.
7. ARTWORK: MINIMUM FEATURE SIZE = 0.00349
   MINIMUM AIR GAP = 0.005
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
10. DO NOT ADD NON-FUNCTIONAL COPPER THIEVING ON OPEN AREAS OF OUTER LAYERS.
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 KEVIN GAGNE AT ANALOG DEVICES.




4 LAYER CONSTRUCTION VIEW
SCALE : NONE

| HOLE SIZE CHART | | | |
|---|---|---|---|
| SYMBOL | DIAMETER | QTY | PLATE |
| + | .012 +.003/-.012 | 261 | YES |
| × | .037 +/- .003 | 7 | YES |
| □ | .093 +/- .003 | 2 | YES |
| ◇ | .053 +/- .003 | 6 | NO |




SCORING DETAIL

| | | | |
|---|---|---|---|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005 | CONTRACT NO. | | ANALOG DEVICES 20 Cotton Road Nashua, New Hampshire 03063 (603) 883-2430 FAX (603) 882-2655 |
| | APPROVALS | DATE | |
| MATERIAL SEE NOTES | DRAWN EASTERN CIRCUITS | 07/22/05 | FABRICATION DRAWING SHARC USB EZ-EXTENDER |
| | CHECKED | | |
| FINISH SEE NOTES | ENGINEERING | | SIZE B DWG. NO. A0197-2005 REV. 1.1 |
| | QUALITY | | |
| DO NOT SCALE THIS DRAWING | MANUFACTURING | | SCALE 1 : 1 SHEET 1 OF 1 |