

NOTES : UNLESS OTHERWISE SPECIFIED

1. MATERIAL: PER IPC-4101/24.
- A. LAMINATE: TYPE GFN, GRADE A, CLASS 2, AND TYPE FR-4

B. FINISHED BOARD:

C. ALL COPPER LAYERS MUST BE SPACED PER DETAIL "A".

D. BOARD THICKNESS IS MEASURED INCLUDING TOP AND BOTTOM SIDES FINISHED COPPER. TIN, TIN/LEAD, OR GOLD PLATING, SOLDERMASK, AND SILKSCREEN LEGEND MUST NOT BE INCLUDED IN FINSHED BOARD THICKNESS.

E. ALL INNER LAYERS MUST BE OXIDE COATED.
2. THE CONDUCTOR PATTERN MUST BE ETCHED USING XXX.ART FILES 880011505-001 REV A SUPPLIED.
3. ALL CONDUCTOR LAYERS MUST BE REGISTERED WITHIN +/- .005 INCH FROM TRUE POSITION.
4. ALL EXTERNAL LAYERS CONDUCTOR WIDTH MUST BE WITHIN +/- .0015 INCH OR 15% OF ARTWORK OR WHICHEVER IS SMALLER.
- ALL INTERNAL LAYERS CONDUCTOR WIDTH MUST BE WITHIN +/- .0010 INCH OR 15% OF ARTWORK OR WHICHEVER IS SMALLER.
5. BOARD MUST BE NC DRILLED USING DRILL DATA: NCDRILL.DAT AND NCDRILL.BIT SUPPLIED.
6. DRILL TOLERANCES AND HOLES SIZE ARE FOR FINISHED BOARD.

ALL .013 DIA. PLATED THRU HOLES ARE + .001 - .010 INCH.

ALL PLATED THRU HOLES TO .080 INCH ARE +/- .003 INCH.

ALL PLATED THRU HOLES OVER .081 INCH ARE +/- .005 INCH.

ALL NOT PLATED THRU HOLES ARE +/- .005 INCH.
7. ALL HOLES MUST BE REGISTERED WITHIN +/- .003 INCH FROM TRUE POSITION.
8. MINIMUM ANNULAR RING MUST BE .002 INCH.
9. PLATING:
- A. PER MIL-C-14550, PLATED THROUGH HOLES MUST BE PLATED WITH .0008 MIN. TO .0015 MAX INCH THICK COPPER.

B. PER QQ-S-571 ONLY AREAS NOT COVERED BY SOLDERMASK OR GOLD MUST BE TIN/LEAD PLATED OVER COPPER, WITH COMPOSITION SN63 .0004 MIN. TO .0015 MAX. INCH THICK.
- OPTIONS: 1. HOT AIR LEVELED PLATE.
2. ELECTROLESS PLATE.

10. IMPEDANCE PER SHEET 3:
- TRACE WIDTH AND LAYER SPACING MAY BE CHANGED TO ACCOMMODATE FABRICATION PROCESS BUT PRIOR APPROVAL IS REQUIRED BEFORE TRACE WIDTH OR LAYER SPACING CHANGES ARE MADE.
11. DO NOT REMOVE SPACING GAUGE COPPER MARKINGS AT BOARD EDGE.

12. WARP AND TWIST OF FINISHED BOARDS MUST NOT EXCEED .007 INCH PER INCH.

13. SOLDERMASK: PER IPC-SM-840

A. SOLDERMASK BOTH TOP AND BOTTOM SIDES.

B. SOLDERMASK MUST CLEAR ALL LANDS SHOWN ON GERBER SOLDERMASK LAYERS.

C. COLOR GREEN AND SOLVENT FREE.

D. LIQUID PHOTO-IMAGEABLE MUST BE .0002 MIN. TO .0008 MAX. INCH THICK.
14. SILKSCREEN TOP AND BOTTOM SIDES USING A GLOSSY WHITE, NONCONDUCTIVE, EPOXY BASED INK. NO SILKSCREEN ALLOWED ON TIN-LEAD OR GOLD AREAS OR IN HOLES.
15. ROUTE BOARD OUTLINE, PER DRAWING DIMENSIONS.
16. VENDOR MUST ENTER VENDOR'S IDENTITY, DATE CODE, AND ALL OTHER ID ON BOTTOM SIDE ETCH APPROXIMATELY WHERE SHOWN.

17. OTHER VENDOR NOMENCLATURE OR MARKINGS SHOULD NOT BE ETCHED OR SILKSCREENED ON BOARD WITHOUT PRIOR PERMISSION.

18. ALL VENDOR IN-PROCESS MARKINGS, QA STAMPS, ETC., MUST BE PLACED ON THE BOTTOM SIDE OF BOARD.

19. FINISHED BOARD MUST MEET UL94V-0 RATING.

20. BOARDS MUST BE NETLIST TESTED FOR OPENS AND SHORTS USING: NETLIST.TXT

21. DOCUMENTATION THAT MUST BE DELIVERED WITH FABRICATED BOARDS.

CROSS SECTION REPORT (SPACING BETWEEN COPPER LAYERS AND COPPER THICKNESS)


ELECTRICAL TEST CERTIFICATION OF COMPLIANCE (ACCORDANCE WITH IPC-ET-652 CLASS II)

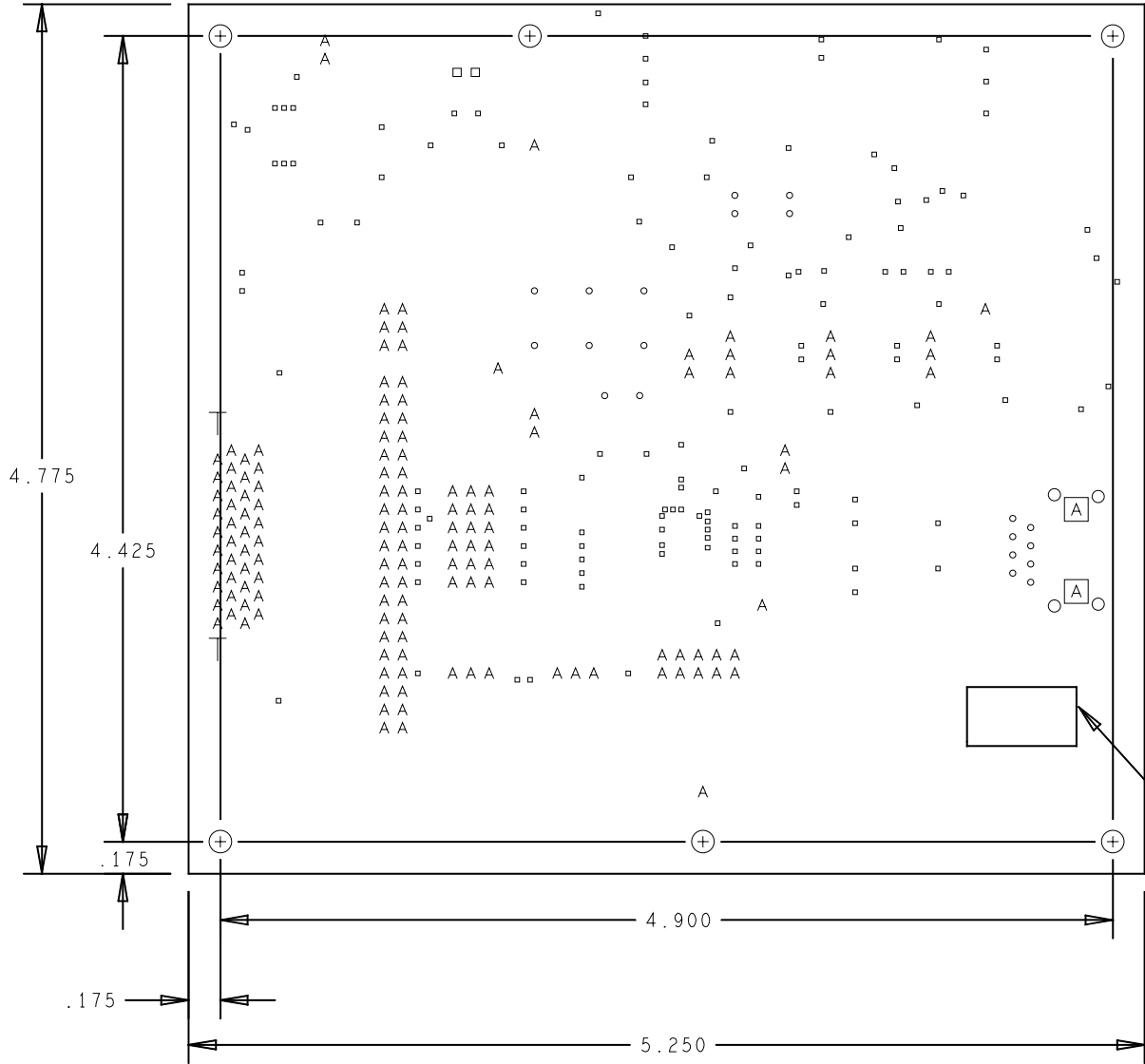
CERTIFICATION OF COMPLIANCE (BOARD HAS BEEN MANUFACTURED TO DRAWING REQUIREMENTS)

IMPEDANCE REPORT (REQUIRED IMPEDANCE TRACES PER NOTE 10)

SOLDER SAMPLE OF BOARD

MICROSECTION CROSS SECTION

IONIC CONTAMINATION REPORT (IF APPLICABLE)
- | BOARD FABRICATION INFORMATION | |
|-------------------------------|------------------|
| | NOMINAL SMALLEST |
| AIR GAP | .007 |
| TRACE SIZE | .010 |
| HOLE SIZE | .013 |
| PAD SIZE | .025 ROUND |
| SUFRACE MOUNT TOP AND BOTTOM | |
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- | UNLESS OTHERWISE SPECIFIED | | |
|---|----------------------------|--------|
| DO NOT SCALE DRAWING | SIGNATURES | DATE |
| DIMENSIONS ARE IN INCHES | DRAWN BY:
BILL LANDUCCI | 2-8-05 |
| TOLERANCES ON:
2 PL DECIMALS ± .01
3 PL DECIMALS ± .005
ANGLES 10° | CHECKED BY: | |
| | APPRVD BY: | |
| | APPRVD BY: | |
| MATERIAL: SEE NOTES | | |
| FINISH: SEE NOTES | | |
- | | | |
|--|-------------------|-----|
| <div> National Semiconductor™
COMMUNICATIONS INTERFACE</div> | | |
| PCB FABRICATION DRAWING
DP83848 AspenPHY DEMO II | | |
| B | DWG 551012505-001 | A |
| SCALE: NONE | SHEET 1 OF 3 | REV |



VIEWED FROM TOP SIDE

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DRILL CHART			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
□	13.0	PLATED	135
○	36.0	PLATED	20
A	40.0	PLATED	142
▣	46.0	PLATED	2
◊	62.0	PLATED	4
⊕	125.0	PLATED	6
T	106.0	NON-PLATED	2
▣A	128.0	NON-PLATED	2

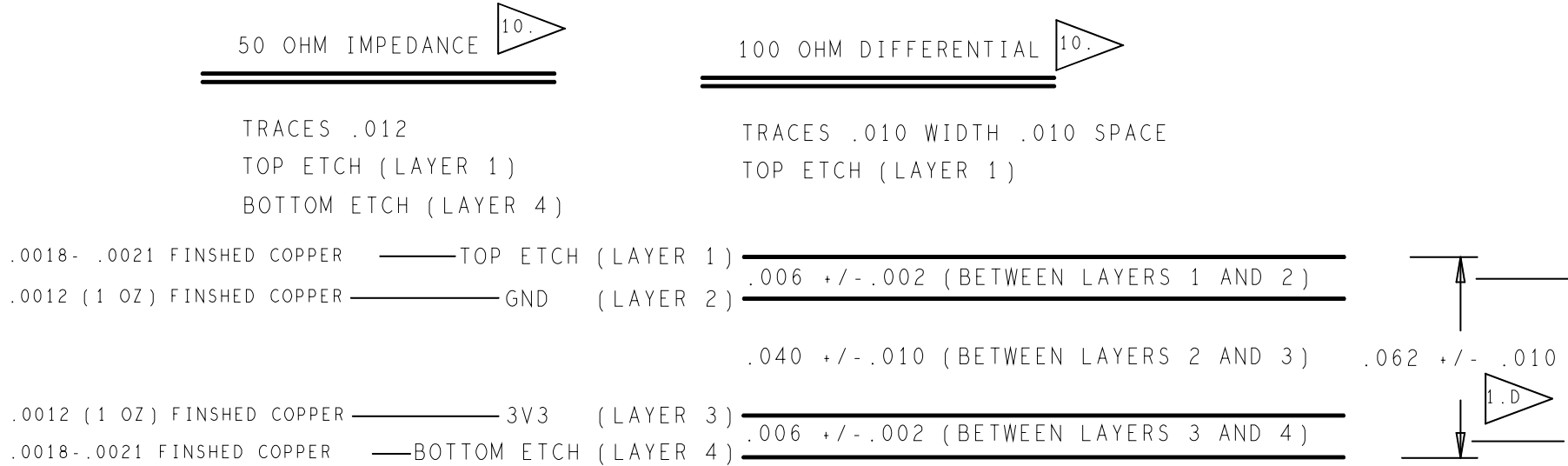
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PCB FABRICATION DRAWING
DP83848 AspenPHY DEMO II

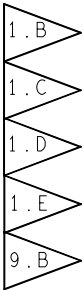
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SCALE: NONE	SHEET 2 OF 3	REV



DETAIL A

LAYER STACK-UP
SCALE: NONE



PCB FABRICATION DRAWING
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