NOTES: UNLESS OTHERWISE SPECIFIED

1. CL ASS 3 PWB PER IPC-6011.
2. TYPE 3 PWB PER IPC-6012A
3. MATERIAL:
   A. LAMINATE AND PREPREG SHALL COMPLY WITH IPC-4101A WITH AMMENDMENT 1, SPECIFICATION SHEET IPC-4101/40 (MIL-S-13949, TYPE GIN).
   B. COPPER FOIL: IPC-4562/03 1/2 OZ CU E3 H N XS 3 (HIGH-TEMPERATURE ELONGATION ELECTRODEPOSITED COPPER, NO BOND TREATMENT, 1/2 OZ.)
   C. PREPREG SHALL BE TWO PLIES MINIMUM
   D. PLATE COPPER WITH 3.8 UM (150 MICROINCHES) NICKEL.
   E. PLATE NICKEL WITH 3.8 UM (150 MICROINCHES) TIN. 
   F. SOLDERMASK SHALL BE GREEN LIQUID PHOTOIMAGEABLE PER IPC-840C, CLASS H. BACKSIDE SOLDERMASK IS NOT REQUIRED.
4. MINIMUM CONDUCTOR WIDTH SHALL BE 0.1 MM (0.004 IN).
5. MINIMUM CONDUCTOR SPACING SHALL BE 0.1 MM (0.004 IN).
6. MINIMUM ANNULAR RING SHALL BE 0.0508 MM (0.002 IN) PER LAT-DS-01448.
7. BOTTOM SIDE KAPTON SHALL COVER EVERYTHING EXCEPT MOUNTING HOLES AND ASSOCIATED COUNTERSINKS.
8. BOTTOM SIDE KAPTON SHALL EXTEND TO 27.9 MM FROM PWB DATUM B.
9. FABRICATE USING GERBER DATA LAT-DS-01448. IN ACCORDANCE WITH LAT-DS-01448.
10. ELECTRICAL TEST OF 100% OF NET LIST TO 250 V MINIMUM PER IPC-6012A REQUIRED.
11. MARK WITH SERIAL NUMBER STARTING WITH 1001 AT APPROXIMATE LOCATION SHOWN.
12. LAT-DS-00368 is a "MAKE" ASSEMBLY PERFORMED BY SLAC IN TWO MAJOR OPERATIONS. FIRST, PWB FABRICATION SUPPLIER DELIVERS PWB AS DEFINED ON SHEETS 1 & 2 OF THIS DRAWING. SECOND, FINAL MACHINING PERFORMED BY USER PER SHEET 3 OF THE DRAWING.

REV: 06/03/2004 00:00 AM
LAT-DS-00368

DRAWING NUMBER

1. TO 03/08/2004 - 11/04/2004
2. 1/2 OZ CU AVDDA/DVDD PLANE
3. 1/2 OZ CU AGND PLANE
4. 1/2 OZ CU TOP SIDE
5. 1/2 OZ CU LAYER 1
6. 1/2 OZ CU LAYER 2
7. 1/2 OZ CU LAYER 3
8. 1/2 OZ CU LAYER 4
9. 1/2 OZ CU LAYER 5
10. 1/2 OZ CU LAYER 6
11. 1/2 OZ CU LAYER 7
12. 1/2 OZ CU LAYER 8

LAT TRACKER
HEAVY CONVERTER TRAY
TMCM ASSEMBLY
TMCM PWB MASTER DRAWING

STANFORD, CALIFORNIA
STANFORD UNIVERSITY

CD: 7/02/04
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SECTION E-E

DETAIL F

ENERGY. RECIPIENT SHALL NOT PUBLISH THE INFORMATION UNLESS OTHERWISE SPECIFIED IN ACCORDANCE WITH ASME Y14.5M-1994.

DIMENSIONING AND TOLERANCING IS IN .001 INCH. TOLERANCES:

FRACTIONS .XX

DIMENSIONS ARE IN .XXX

BREAK EDGES 0.1 - 0.3 MM.

INTERNAL CORNERS R 0.3 MAX

ALL SURF

ENGR DWN

CHKR
NOTES (CONTINUED FROM SHEET 1 OF 3. DIMENSIONS, GEOMETRIC TOLERANCES AND NOTES SHOWN ON THIS SHEET PERTAIN TO FINAL MACHINING OPERATION PERFORMED ON PWB AS RECEIVED FROM PWB FABRICATION SUPPLIER.

13. NO COOLANT ALLOWED DURING MACHINING. BOARD MUST BE KEPT CLEAN, DRY AND HANDLED WITH CARE.

14. NO DELAMINATION ALLOWED AT MACHINING.

15. SLAC TO PROVIDE (R 1.00) FORM CUTTER.

16. AFTER FINAL MACHINING TO OBTAIN WIDTH DIMENSION (22.69), PARALLEL 0.05 MM TO DATUM "B" AND RADIUS 1.00 MM, PROVIDE INSPECTION REPORT WITH THE FOLLOWING INFORMATION:
   - SERIAL NUMBER
   - WIDTH (22.69) MAX, AND MIN DIMENSIONS.
   - PARALLELISM OF TOP EDGE WITH RESPECT TO DATUM "B".

17. PERFORM INSPECTION ON EACH UNIT PRIOR TO PROCEEDING WITH MACHINING SUBSEQUENT UNIT.

18. USE ONLY METRIC INSTRUMENT FOR MEASUREMENTS.

19. AFTER MACHINING IS COMPLETED, SLAC SHALL PERFORM 100% DIMENSIONAL INSPECTION OF WIDTH (22.69), AND PARALLELISM OF TOP EDGE WITH RESPECT TO DATUM "B" AS SHOWN ON PAGE 3 DETAIL G. RECORD SERIAL NUMBER AND DATE WITH ACTUAL MEASUREMENT DATA AND SUBMIT INSPECTION REPORT LAT QA FOR RECORD RETENTION.

20. LAT QA SHALL PERFORM 100% VISUAL INSPECTION AFTER MACHINING OF PWB PER IPC-A-600 REF F INCLUDING DELAMINATION, MEASLING AND HALOING.