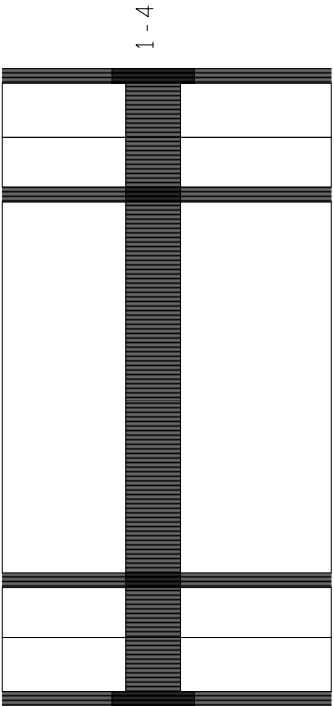
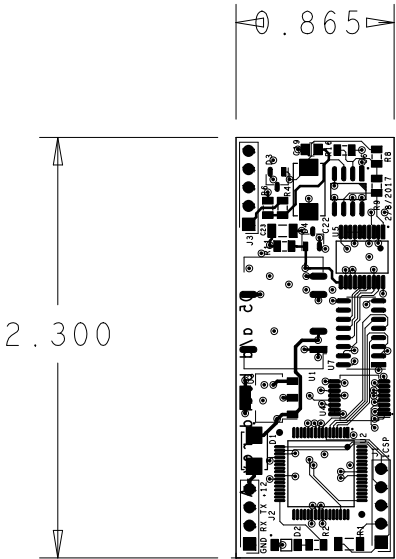




\* SURFACE - AIR 0 MIL  
L1: TOP CONDUCTOR - COPPER 1.4 MIL  
\* DIELECTRIC - FR-4 5.1 MIL  
\* DIELECTRIC - FR-4 4.7 MIL  
L2: IN1 CONDUCTOR - COPPER 1.4 MIL  
\* DIELECTRIC - FR-4 35 MIL  
L3: IN2 CONDUCTOR - COPPER 1.4 MIL  
\* DIELECTRIC - FR-4 4.7 MIL  
\* DIELECTRIC - FR-4 5.1 MIL  
L4: BOTTOM CONDUCTOR - COPPER 1.4 MIL  
\* SURFACE - AIR 0 MIL

DESIGN CROSS SECTION CHART  
TOTAL THICKNESS 60.2 MIL



| REVISIONS |             |      |          |
|-----------|-------------|------|----------|
| REV       | DESCRIPTION | DATE | APPROVED |
|           |             |      |          |

| DRILL CHART: TOP to BOTTOM |      |        |     |
|----------------------------|------|--------|-----|
| ALL UNITS ARE IN MILS      |      |        |     |
| FIGURE                     | SIZE | PLATED | QTY |
| o                          | 10.0 | PLATED | 88  |
| T44                        | 44.0 | PLATED | 14  |

- CLASS II FABRICATION NOTES: (UNLESS OTHERWISE SPECIFIED)
- BOARDS SHALL BE 100% NET LIST TESTED FOR OPENS AND SHORTS PER PROVIDED IPC-D-356 NETLIST.
  - THIS BOARD SHALL BE MANUFACTURED IN ACCORDANCE WITH IPC-6012A CLASS II SPECIFICATIONS AND MEET IPC-600 CLASS II ACCEPTABILITY STANDARDS.
  - MATERIAL:
    - FR4 PER IPC 4101B/24 /26, OR /28.
    - SIGNAL LAYERS TO BE 1 OZ. COPPER.
    - PLANE LAYERS TO BE 1 OZ. COPPER.
    - OVERALL THICKNESS TO BE 0.062" +/- 10%
  - LEGEND:
    - WHITE NON-CONDUCTIVE EPOXY INK BOTH SIDES.
  - SOLDERMASK:
    - APPLY LIQUID PHOTO-IMAGABLE (LPI) SOLDER MASK OVER BARE COPPER PER IPC-SM-840 CLASS H, COLOR GREEN, BOTH SIDES.
  - PLATING FINISH:
    - HOT AIR SOLDER LEVELING (HASL) SN63A SnPb SOLDER.
    - ~~IMMERSION SILVER TAG.~~
  - PROCESS ALLOWANCES:
    - MAXIMUM BOW AND TWIST SHALL NOT EXCEED .007" PER INCH
    - HOLE DIMENSIONS APPLY AFTER PLATING.
    - ALL HOLES SHALL BE LOCATED WITHIN 0.003" DIAMETER OF TRUE POSITION.
    - LAYER TO LAYER REGISTRATION SHALL BE WITHIN 0.003".
    - CONDUCTOR WIDTHS AND SPACING SHALL BE WITHIN +/- 0.002".
    - REMOVE ALL BURRS AND BREAK SHARP EDGES 0/015" MAX.
    - CUT OUTSIDE OF 0.001" BOARD OUTLINE.

| UNLESS OTHERWISE SPECIFIED | SIGNATURES               | DATE | O5 A/D BOARD                             |            |             |
|----------------------------|--------------------------|------|------------------------------------------|------------|-------------|
|                            |                          |      | MONTEREY BAY AQUARIUM RESEARCH INSTITUTE |            |             |
|                            |                          |      | 7700 SANDHOLDT ROAD                      |            |             |
|                            |                          |      | MOSS LANDING, CA                         |            |             |
|                            | DESIGNED BY: CRAIG OKUDA |      | SIZE B                                   | REVISION - | DWG NO 0000 |
| LAYOUT BY: JOSE ROSAL      |                          |      | SCALE 1-1                                | SHEET 1-1  |             |