



ART FILM - SILK_BOTTOM





ART FILM - SILK_TOP













+

8 6 NOTES (UNLESS OTHERWISE SPECIFIED): 1. THIS DRAWING SPECIFIES THE REQUIREMENTS FOR A PRINTED WIRING BOARD IN ACCORDANCE. WITH SPECIFICATION IPC-A-600 CLASS 2 (LATEST REVISION). 2. THE PWB MUST BE LEAD FREE ASSEMBLY PROCESS COMPATIBLE AND MUST BE ABLE TO HANDLE A MINIMUM OF 5 CYCLES AT 260 DEGREES CELSIUS FOR 10 SECONDS. 3. BASE MATERIAL - LAMINATE AND PREPREG SHALL MEET IPC-4101B-26, 83 or 98 Tg - MUST BE GREATER THAN OR EQUAL TO 150 DEGREES CELSIUS. Td - MUST BE GREATER THAN OR EQUAL TO 330 DEGREES CELSIUS. 4. COPPER FOIL WEIGHT - SEE STACKUP DETAIL 'A' 5. CHARACTERISTIC IMPEDANCE - SEE DETAIL 'B' 6. MINIMUM CONDUCTIVE WIDTH/SPACING TO BE .00473"/.004" 7. PLATING FINISH - BOTH SIDES ENIG (ELECTROLESS NICKEL IMMERSION GOLD): .05080-.232 MICRON (2-8 MICROINCH) OF GOLD OVER 2.540-6.350 MICRON (100-250 MICROINCH) OF NICKEL. ∠8 ALL THROUGH HOLE VIAS MAY BE PLATED SHUT AND BE FILLED WITH OIL. COPPER PLATING:0.025--0.050MM 9. SOLDERMASK - GREEN COLOR (TAIYO OR EQUIVALENT), BOTH SIDES. MODIFICATION OF SOLDERMASK IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM NXP. 10. SILKSCREEN - WHITE EPOXY INK, BOTH SIDES. NO SILK ON PADS. 11. ELECTRICAL TEST - 100% IPCD356. 12. PRINTED WIRING BOARD IS TO BE INDIVIDUALLY BAGGED. 13. DRC'S MUST BE RUN ON THE GERBER BEFORE BUILDING BOARDS, UNLESS PRIOR APPROVAL IS GIVEN IN WRITING BY NXP. 14. TEARDROPS MAYBE ADDED AT THE FAB HOUSE TO ALL SIGNAL LAYERS. 15. TWO SOLDER SAMPLES TO BE PROVIDED. 16 BASIC GRID INCREMENT AT 1:1 IS .0001. 17 SUPPLIER MARKINGS - ON SOLDER SIDE ONLY, WHERE SHOWN. - MUST BE UL RECOGNIZED AND MUST HAVE AN ID THAT CONFORMS TO UL94V-0 18. THE PWB WILL BE MARKED AS LEAD FREE BY USE OF AN INK STAMP (PK) 19. THE PWB WILL BE MARKED AS LEAD FREE PROCESS COMPATIBLE BY USE OF AN INK STAMP $(260~^{\circ}\mathrm{C})$ \rightarrow 20. ALL PLATED AND NON-PLATED THROUGH HOLES ARE TO BE DRILLED AT PRIMARY DRILL STEP. ALL HOLE LOCATION TOLERANCES ARE TO BE +/-.002 IN NXP TO THE PRIMARY DATUM. 21. FINISHED PCB MUST BE PANELIZED FOR ASSEMBLY ACCORDING TO CONTRACT MANUFACTURERS REQUIREMENTS. THE ADDITION OF RAILS AND .125"NON-PLATED TOOLING HOLES ARE AT THE DISCRETION OF CONTRACT MANUFACTURER.PANELIZATION MUST BE APPROVED BY CONTRACT MANUFACTURER. 22. THE MANUFACTURE HAS THE OPTION TO ADD COPPER THIEVING ON OUTER AND INNER LAYERS, KEEP A MINIMUM DISTANCE OF .100" FROM ANY BOARD FEATURES. В Layers Trace (mm) L1_TOP L4_BOTTOM 0.1



ART FILM - FAB



VIEW FROM PRIMARY SIDE

DETAIL B IMPEDANCE REQUIREMENTS IMPEDANCE TOLERANCE IS 10%

| ingle | Ended | | Differen | tial | | Differen | tial | | Differen | tial | |
|--------------|---------------------|---------------------|-----------------------------------|---------------------|---------------------|-----------------------------------|---------------------|---------------------|-----------------------------------|---------------------|--|
| e Width) | Impedance (Ohms) | Trace Width (mm) | Trace Spacing "Airgap" (mm) | Impedance (Ohms) | Trace Width (mm) | Trace Spacing "Airgap" (mm) | Impedance (Ohms) | Trace Width (mm) | Trace Spacing "Airgap" (mm) | Impedance (Ohms) | |
| 1004 | 50 | | | | 0.1003 | 0.1797 | 95 | 0.1001 | 0.1199 | 90 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 1004 | 50 | | | | 0.1003 | 0.1797 | 95 | 0.1001 | 0.1199 | 90 | |

 Δ

ART FILM - FAB

DETAIL A LAYER STACKUP SCALE: NONE





5

4

| | | | 2 | | BEVISIONS | 1 | 1 | |
|--------------------------------|-------------------------|----------|----------|------------|----------------------|------------------|----------|---|
| | | ZONE REV | ORIGINAL | RELEASE | DESCRIPTION | DATE 10-27-18 | APPROVED | - |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | C |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| SCALE: NON | IE | A LAVER | 1 1 1 | ТОР | 0 333 oztolati | D d | | B |
| PP:0.065 | mm (| LAYER | 2 L2_ | PWR | 0.5 oz. | "y. | | |
| | | | | | | | | |
| CORE : 1 . 2 | 5mm | | | | | | | |
| PP:0.065 | mm (|] LAYER | 9 L3_ | GND | 0.5 oz. | | | |
| | |] LAYER | 10 L10 | BOTTOM | 0.333 oz+pl | ating. | | |
| | | | | | | | | |
| | | | | | | | | - |
| | YARI NU. X | X X X X | | Com | npany | | | |
| | | | | ADDRE | SS | | | |
| FIED ES [MM] ES | APPF DRAWN | ROVALS | DATE | TITLE: | PRINTED WIRING BOARD | | | |
| D' SURFACES AND CORNERS, | CHECKED DESIGN ENGIN | IEER | | SIZE CAD F | FILE NAME DWG. NO. | | REV | - |
| SCALE. IC PROJECTION | | | | SCALE | DO NOT SCALE DRAWING | SHEET 1 | OF 1 | - |
| | | | 2 | | | 1 | | |















| DRILL CHART: TOP to BOTTOM | | | | | | | |
|----------------------------|-----------|--------------|-----|--|--|--|--|
| ALL UNITS ARE IN MILS | | | | | | | |
| FIGURE | SIZE | PLATED | QTY | | | | |
| ٥ | 10.0 | PLATED | 385 | | | | |
| • | 11.811 | PLATED | 152 | | | | |
| ۵ | 18.0 | PLATED | 22 | | | | |
| ۰ | 20.0 | PLATED | 6 | | | | |
| o | 27.559 | PLATED | 72 | | | | |
| 2 | 35.0 | PLATED | 10 | | | | |
| ٥ | 40.0 | PLATED | 4 | | | | |
| • | 63.0 | PLATED | 2 | | | | |
| A | 118.11 | PLATED | 4 | | | | |
| © | 43.307 | NON - PLATED | 2 | | | | |
| 0 | 44.0 | NON-PLATED | 2 | | | | |
| 0 | 63.0 | NON - PLATED | 2 | | | | |
| Ē | 92.52 | NON-PLATED | 4 | | | | |
| • | 127.953 | NON-PLATED | 2 | | | | |
| ٥ | 80.0x40.0 | PLATED | 2 | | | | |

