**PRINTED CIRCUIT FABRICATION SPECIFICATIONS**

**PCB :** LANGUETTE\_03.pcb

Date

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CAD System PADS Layout X

Laminate type FR-4 HR

Board final thickness 80 mils

Nominal circuit board size (irregular) (unit) 12638x 4921 mil

Quantity Required 40

1 solder sample

File : LPII\_Languette-Lapin-03.zip

| **Aspect** | **Requirement** | **Standard** |
| --- | --- | --- |
| Laminate type | 370HR |  |
| Number of layer(s) | 14 |  |
| Layer thickness (outer layers) | 0.5oz (17.5μm)  0.815oz  1 ½ oz (52.5μm)  2oz (70μm)  3oz (105μm)  Copper weight is to be considered “finished” |  |
| Layer thickness (inner layers) | Please refer to Stackup  0.5oz (17.5μm)  1oz (35μm)  1 ½ oz (52.5μm)  2oz (70μm)  3oz (105μm)  Copper weight is to be considered “finished”  Please refer to Stackup |  |
| Stackup | | |
| Core and Prepreg to be in accordance with IPC-4101/24 or IPC-4101/26;  Material must meet UL 94V-0 flammability rating; | | |
| Drilling | * Diameter tolerance should be better than ± 3 mils; * Total error including layer-to-layer registration, drill size and drill position must be within 5 mils for all layers |  | |
| Surface finish process | * Apply liquid photo imageable solder mask SMOBC GREEN MATTE (Solder-mask-over-bare-copper) to both sides of the board; * Solder Mask Image must NOT be enlarged. | per IPC-SM-840, class H | |

| **Aspect** | **Requirement** |
| --- | --- |
| Plating | * All exposed conductive pattern areas not covered with solder mask shall be plated with *Immersion Gold over Electrolysis Nickel over copper (ENIG)* * Surface mount pad plating must be flat to a maximum of 3 mils above board surface; |
| Via | * Full Stack via from Layer 1 to Layer 14 |
| Silkscreen on top and bottom layer | * White, permanent, organic, non-conductive ink; * There shall be no silkscreen on any solderable component pad; |
| Standard logos, manufacturer's id and date code | * CSA and UL logos, manufacturer's identification and date code letter shall be rendered in silkscreen on the bottom side of the board; |
| Mechanical behavior | * Warp or twist of board shall not exceed 1%; |
| Electrical testing | * 100% netlist electrical verification for opens and shorts; |

|  |  |
| --- | --- |
| Panelization  500mils | Mouse bite  500mils    Mouse bite |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| #layer | Layer name |  | trace | diff spacing | desired Imp |
| 1 | TOP | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |
| 3 | Sign1 | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |
| 5 | Sign2 | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |
| 10 | Sign3 | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |
| 12 | Sign4 | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |
| 14 | Bottom | single ended | 4.7 |  | 50 |
| diff | 4 | 6 | 100 |