## STACKUP CROSSECTION - 607-13449-1000-B01.pdf

NOTES: 1. UNLESS OTHERWISE SPECIFIED ON THE 606 FAB DRAWING: WHERE GOLD EDGE FINGERS EXIST,
TARGET THICKNESS APPLIES ONLY TO THE GOLD FINGER REGION, AND DOES NOT INCLUDE SOLDERMASK.

- 2. STRIPLINE LAYERS MAY BE USED FOR PLANE REFERENCES (REF). LAYERS WITHOUT TRACES SHOULD BE CONSIDERED PLANES.
- 3. \*DESIGN USES TRACE WIDTHS WITH VARIATION OF +/- 1um COMPARED TO TARGET WIDTH. CONSIDER IMPEDANCE CONTROLLED BASED ON TARGET WIDTH.
- 4. DK VALUES: IMPEDANCE CALCULATIONS ASSUME A DK VALUE BASED ON THE DISTRIBUTION OF MATERIALS AVAILABLE. THE FABRICATOR IS ALLOWED TO ADJUST TRACE WIDTHS +/- 20% FOR NOMINAL LINE WIDTHS OF >0.127mm or +/-0.0254mm FOR TRACE WIDTHS <0.127mm TO COMPENSATE FOR THE Dk VALUE OF THE ACTUAL MATERIAL USED IN THE STACK-UP.
- 5. MULTI PLY CORE IS DENOTED BY x2, x3 IN THE MATERIAL NAME, e.g. EM-890K 0.006 1078(rc63.5)x2 Core
- 6. MATERIAL: HALOGEN FREE.

Target Thickness: 1.57
Tolerance: +0.15/-0.15

| Name   | Negative<br>Artwork | Layer<br>Usage |
|--------|---------------------|----------------|
| TOP    |                     | Signal Layer   |
| L2     |                     | Plane Layer    |
| L3     |                     | Plane Layer    |
| воттом |                     | Signal Layer   |

| Material                   |       |  |  |  |  |
|----------------------------|-------|--|--|--|--|
| Air                        |       |  |  |  |  |
| Soldermask                 |       |  |  |  |  |
| Copper .5oz (Plated)       | 0.043 |  |  |  |  |
| FR-4 0.0027 1080x1 Prepreg |       |  |  |  |  |
| Copper 1oz                 |       |  |  |  |  |
| FR-4 0.051 Filler          |       |  |  |  |  |
| Copper 1oz                 |       |  |  |  |  |
| FR-4 0.0027 1080x1 Prepreg |       |  |  |  |  |
| Copper .5oz (Plated)       | 0.043 |  |  |  |  |
| Soldermask                 |       |  |  |  |  |
| Air                        |       |  |  |  |  |

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## LEGEND:



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## STACKUP IMPEDANCES - 607-13449-1000-B01.pdf (Impedance Tolerance = +/- 10% unless otherwise noted)

| Single Ended | SEZ  | LW    | Ref(above) | Ref(below) |
|--------------|------|-------|------------|------------|
| TOP          | 50.0 | 0.112 |            | L2         |
| L2           | 50.0 | 0.084 | TOP        | L3         |
| ВОТТОМ       | 50.0 | 0.112 | L3         |            |

| Differential (Edge) | DEZ  | SEZ | LW    | LineGap | NeckLW NeckLineGap Ref(above) | Ref(below) |
|---------------------|------|-----|-------|---------|-------------------------------|------------|
| TOP                 | 85.0 |     | 0.106 | 0.102   |                               | L2         |
| TOP                 | 90.0 |     | 0.101 | 0.12    |                               | L2         |
| TOP                 | 95.0 |     | 0.102 | 0.179   |                               | L2         |
| BOTTOM              | 85.0 |     | 0.106 | 0.102   | L3                            |            |
| BOTTOM              | 90.0 |     | 0.101 | 0.12    | L3                            |            |
| BOTTOM              | 95.0 |     | 0.102 | 0.179   | L3                            |            |

## LEGEND:

SEZ = Single Ended Impedance
DEZ = Differential Edge Coupled Impedance (pair on one layer)
DBZ = Differential Broadside Coupled Impedance (pair on two layers)



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