<table>
<thead>
<tr>
<th>Item</th>
<th>Technical Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layers:</td>
<td>2-50 layers</td>
</tr>
<tr>
<td>Max manufacturing size:</td>
<td>650mm*1100mm</td>
</tr>
<tr>
<td>Copper foil thickness:</td>
<td>0.5 oz-20.0 oz</td>
</tr>
<tr>
<td>Board thickness:</td>
<td>Double sided: 0.2mm-6.0mm</td>
</tr>
<tr>
<td>4 layers:</td>
<td>0.4mm-8.0mm</td>
</tr>
<tr>
<td>6 layers:</td>
<td>0.8mm-8.0mm</td>
</tr>
<tr>
<td>8 layers:</td>
<td>1.0mm-8.0mm</td>
</tr>
<tr>
<td>10 layers:</td>
<td>1.2mm-8.0mm</td>
</tr>
<tr>
<td>12 layers:</td>
<td>1.5mm-8.0mm</td>
</tr>
<tr>
<td>14 layers:</td>
<td>1.5mm-8.0mm</td>
</tr>
<tr>
<td>16 layers:</td>
<td>1.6mm-8.0mm</td>
</tr>
<tr>
<td>18 layers:</td>
<td>2.2mm-8.0mm</td>
</tr>
<tr>
<td>20 layers:</td>
<td>2.4mm-8.0mm</td>
</tr>
<tr>
<td>Min line width/space:</td>
<td>3mil/3mil</td>
</tr>
<tr>
<td>Min finished holes size:</td>
<td>0.15mm</td>
</tr>
<tr>
<td>Aspect ratio:</td>
<td>12:01</td>
</tr>
<tr>
<td>Impedance control:</td>
<td>+/-10%</td>
</tr>
<tr>
<td>Surface treatment:</td>
<td>HASL; LF HASL; ENIG; Immersion Silver; Immersion Tin; Gold Finger; Flash Gold; OSP</td>
</tr>
<tr>
<td>Materials:</td>
<td>FR4, Tg: 130°C/170°C, IT 180A, Bergquist, Rogers, Arlon, Taconic, PTFE.</td>
</tr>
<tr>
<td>Special technique:</td>
<td>blind &amp; buried holes, via in pad, Semi-plating holes, countersink holes, Step mounting holes, controlled depth holes, Edge-plating PCB and metal base PCB.</td>
</tr>
<tr>
<td>Item</td>
<td>Technical Parameters</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Min. Line Width (mil)</td>
<td>3/4mil</td>
</tr>
<tr>
<td>Min. Space (mil)</td>
<td>3/4mil  4/5mil</td>
</tr>
<tr>
<td>Min. Annular Ring Width (mil)</td>
<td>vias:3mil</td>
</tr>
<tr>
<td>Component Holes:6mils</td>
<td></td>
</tr>
<tr>
<td>Min. Hole Size</td>
<td></td>
</tr>
<tr>
<td>Board Thickness &lt; 2.0mm</td>
<td>0.15mm</td>
</tr>
<tr>
<td>Board Thickness ≥ 2.0mm</td>
<td>Aspect Ratio ≤ 12</td>
</tr>
<tr>
<td>Max. Board Thickness</td>
<td></td>
</tr>
<tr>
<td>Single and Double Sided</td>
<td>6.0mm</td>
</tr>
<tr>
<td>Multilayer</td>
<td>8.0mm</td>
</tr>
<tr>
<td>Min. Board Thickness</td>
<td></td>
</tr>
<tr>
<td>Single and Double Sided</td>
<td>0.15mm</td>
</tr>
<tr>
<td>Multilayer</td>
<td>4 layers:0.4mm; 6 layers:0.6mm; 8 layers:0.8mm;10 layers:1.0mm</td>
</tr>
<tr>
<td>Max. Board Size</td>
<td></td>
</tr>
<tr>
<td>Single and Double Sided</td>
<td>650*1100mm</td>
</tr>
<tr>
<td>Multilayer</td>
<td>650*1100mm</td>
</tr>
<tr>
<td>Distance between Line to Board edge</td>
<td>Outline:0.20mm</td>
</tr>
<tr>
<td>V-CUT:0.4mm</td>
<td></td>
</tr>
<tr>
<td>Max. Layers</td>
<td>50 layers</td>
</tr>
<tr>
<td>Solder mask</td>
<td>Mask Window (mil)</td>
</tr>
<tr>
<td>Mask Bridge (mil)</td>
<td>6mil</td>
</tr>
<tr>
<td>Color</td>
<td>White, Black, Blue, Green, Yellow, Red, etc.</td>
</tr>
<tr>
<td>Legend</td>
<td>Min. Line Width (mil)</td>
</tr>
<tr>
<td>Color</td>
<td>White, Black, Yellow (orange), etc.</td>
</tr>
</tbody>
</table>
### Surface Plating

HALS (with Pb free), ENIG, immersion silver, immersion tin, OSP, gold plating etc.

<table>
<thead>
<tr>
<th>Plating Thickness (micron)</th>
<th>Technique</th>
<th>Plating Type</th>
<th>Min. Thickness</th>
<th>Max. Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plated Ni/Au</td>
<td>Ni</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Au</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Immersion Ni/Au</td>
<td>Ni</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Au</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Gold Finger</td>
<td>Ni</td>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Au</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>

### Copper Plating Hole (micron)

Copper Thickness: 20um to 30um

### Base Copper Thickness

<table>
<thead>
<tr>
<th>Inner Layers and Outer Layers (OZ)</th>
<th>0.5</th>
<th>6</th>
</tr>
</thead>
</table>

### Finished Copper Thickness

<table>
<thead>
<tr>
<th>Outer Layers</th>
<th>1</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Layers</td>
<td>0.5</td>
<td>6</td>
</tr>
</tbody>
</table>

### Insulation Layer (mm)

| 0.06mm | --- |

| Line width shouldn't be less than the required value under ensure of space. |

### Board Material

FR-4; Aluminum Base; High Frequency; PTFE; FPC; Thick Copper; BT Base; PI Base; Tg130°C / Tg170°C, IT180A, Rogers, Berquist, Thermagon, (Taconic)

### Finished Product Thickness Tolerance:

- $T \geq 1.0$mm, tolerance $+/-0.1$mm;
- $1.0mm < T \leq 1.6$mm, tolerance $+/-0.13$mm;
- $1.6mm < T < 2.0$mm, tolerance $+/-0.16$mm;
- $T \geq 2.0$mm, tolerance $+/-8$%

### Tolerance of Impedance Control:

$+/-10\%$