**Engineer: Please complete Sections A, B, and C.**

|  |
| --- |
| **Board Name / Part Number** |
| **A** | **Part No** |  |  |
| **Board Name** |  |
| **Category** | **Analog Digital RF Hi-Speed Power Other** |
| **Application** | **Avionics Medical Commercial** |
| **Date** |  |
| **Contact Info** |
| **B** | **Company Name** |  |  |
| **Company Address**  |  |
|  |
| **Contact name**  |  |
| **Contact Phone** |  |
| **Contact email** |  |
| **Specification Documents Attached** |
| **C** | **Schematic** |  |  |
| **BOM/Parts List** |  |
| **Board Outline Dwg** |  |
| **Layout Instructions** |  |
| **Netlist** |  |

**Engineer: Sections D through K serve as a checklist for required data. Use this form to add any details missing from your specification documents. We’ll fill in the rest when we review your documents.**

|  |
| --- |
| **Mechanical** |
| **D** | **Board size MAX X** |  |  |
| **Board size MAX Y**  |  |
| **Board Shape** | **Rectangular round other** |
| **Units** | **mm inch** |
| **Usable area** | **(we’ll calculate this)** |
| **Board mounts how?** | **Screws Standoffs Card Guides Connectors** |
| **Top Side indicated?** |  |
| **Parts** |
| **E** | **Part count** | **(we’ll count from BOM)** |  |
| **Wired pin count** | **(we’ll count from netlist)** |
| **Has SMT parts** | **Yes none** |
| **Has thru-hole parts** | **Yes none** |
| **Has BGAs** | **Yes none** |
| **Parts mount on which side** | **top bottom both** |
| **Constraints** |
| **F** | **Part heights restricted on either side of board** | **Top Bottom** **Max height Max height** |  |
| **Has Keep out zones** | **Top side Bottom side**  |
| **Has Isolated circuits** | **No Yes Volts isolation= RMS Peak**  |
| **Layer count desired****if possible** |  |
| **Min allowable trace widths (mils)** | **5 8 10 25 50 Other**  |
| **Min allowed electrical spacings (mils)** | **5 8 10 15 Other** |
| **Planes required** | **No Yes Internal External** |
| **IEF Maximums** |
| **G** | **Max current, Amps** |  |  |
| **Max voltage, Volts** |  |
| **Max signal freq, MHz** |  |
| **Signal Integrity** |
| **H** | **Hi-speed signaling** | **No Yes** |  |
| **Edge rate max** |  |
| **Differential pairs?** | **No Yes Zo=** |
| **Microstrip** | **No Yes Zo=** |
| **Stripline** | **No Yes Zo=** |
| **Special shielding** | **No Yes** |
| **Segregated circuit blocks** | **Analog/Digital HV/LV Other** |
| **Special Requirements** |
| **I** | **Use part manufacturer’s reference layouts?**  | **No Yes** |  |
| **ATE test access** | **No Top Bottom** |
| **EMI/EMC issues** | **No Yes** |
| **Thermal issues** | **No Yes** |
| **Special safety specs** | **No Yes** |
| **Manufacturing** |
| **J** | **Intended Use** | **Initial prototype Volume production** |  |
| **Material** |  |
| **Finish Plating** | **None Tin/Lead Tin ENIG Silver Other** |
| **Silkscreen** | **Top Bottom Color=** |
| **Soldermask** | **LPI Dry film Epoxy Other Color=** |
| **RoHS compliance** | **No Yes** |
| **Panelize** | **No Yes** |
|  |  |
| **Drawings** |
| **K** | **Fabrication Drawing**  | **Our format Your format**  |  |
| **Assembly Drawing** | **Our format Your format** |

Notes:

Section C, PADS netlist: Most schematic-capture systems will output a netlist in PADS format. We can translate other formats.

Section F, Height Constraints: If parts are tall enough to interfere with the enclosure or other nearby object, we’ll need details in order to correctly position parts to avoid interferences.

Section I, Reference designs: Please indicate components requiring a specific layout recommended by the component manufacturer. Switching regulators, WiFi modules, etc are best layed out using a known working design.

Section I, ATE: We can provide 100% test access for automated testers, if you require. Full test access can place constraints on component placement and routing, resulting in the need for additional layers in some cases. The result is higher costs for layout and higher cost for fabrication.

Section I, EMI/EMC: If your board must pass EMC testing, we’ll want to discuss preventative measures early on.

Section I, Thermal issues. Let us know which, if any, parts require heatsinking into the board. We’ll check the data sheets for recommended areas.

Section I, Safety issues. Let us know if your board must meet special safety standards. Obvious examples are aircraft systems and medical/surgical equipment, and there are others.

Section L, Drawings: Our standard format is normally used for all documentation drawings. Examples of this format can be viewed on our website. If you prefer or require drawings in your custom company format, please provide us a master file in DXF, DWG, or PADS format.