



# PCB Data Checklist

For Accurate Quotes and Manufacturing

## Gerber File Package

- |                          |                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | One file for each circuitry layer (from 1 to n).                                                            |
| <input type="checkbox"/> | One file for each soldermask layer or coverlayer.                                                           |
| <input type="checkbox"/> | One file for each silkscreen/legend layer.                                                                  |
| <input type="checkbox"/> | One file for each solder paste layer.                                                                       |
| <input type="checkbox"/> | Outline layer representing PCB contours, including all slots and cutouts.                                   |
| <input type="checkbox"/> | Fabrication drawing in Gerber format whenever possible. <i>(1:1 scale)</i>                                  |
| <input type="checkbox"/> | All files in ODB++ or RS274X Gerber format. <i>Output resolution preferred: 2:5 Imperial or 3:3 Metric.</i> |

## NC Drill and Associated Report Files

- |                          |                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Plated through-hole drill file with tool codes. <i>(Readable text / ASCII format)</i>           |
| <input type="checkbox"/> | Non-plated through-hole drill file with tool codes. <i>(Readable text / ASCII format)</i>       |
| <input type="checkbox"/> | Blind via drill file(s) with tool codes. <i>(Readable text format)</i>                          |
| <input type="checkbox"/> | Buried via drill file with tool codes. <i>(ASCII readable text format)</i>                      |
| <input type="checkbox"/> | Backdrill file(s) with tool codes. <i>(Readable text format)</i>                                |
| <input type="checkbox"/> | Slot file if required. <i>(Slots may also appear on the Gerber outline layer at 1:1 scale.)</i> |

## Board Specifications

- |                          |                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Part # and revision clearly labeled. <i>(From silkscreen layer, title block, or fab drawing — must be consistent across all files.)</i> |
| <input type="checkbox"/> | Overall board dimensions specified. <i>(Carry dimensions to three decimal places; do not round.)</i>                                    |
| <input type="checkbox"/> | Board thickness specified. <i>(Verify that thickness is consistent across all documentation.)</i>                                       |
| <input type="checkbox"/> | Number of copper layers specified.                                                                                                      |
| <input type="checkbox"/> | Copper weight specified for each layer. <i>(Check for consistency between stackup and fabrication notes.)</i>                           |
| <input type="checkbox"/> | Desired finished copper thickness noted for each outer or plated sub-layer. <i>(In mils or inches.)</i>                                 |
| <input type="checkbox"/> | Minimum trace and space specified.                                                                                                      |
| <input type="checkbox"/> | Smallest drilled hole size noted.                                                                                                       |
| <input type="checkbox"/> | Laminate type specified. <i>(Default is 150Tg FR4 if not stated.)</i>                                                                   |

| Fabrication Drawing Requirements |                                                                                                                                                                                                                      |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>         | Basic outline dimensions included.                                                                                                                                                                                   |
| <input type="checkbox"/>         | Dimensions provided for any features where location is critical.                                                                                                                                                     |
| <input type="checkbox"/>         | Drill table included showing hole sizes, tolerances, and plating status. <i>(Verify drill table against actual drill files.)</i>                                                                                     |
| <input type="checkbox"/>         | Cross-sectional view showing layer thicknesses included. <i>(Required for multilayer boards; note if critical.)</i>                                                                                                  |
| <input type="checkbox"/>         | Tolerance information for all features noted. <i>(List linear and hole diameter tolerances separately.)</i>                                                                                                          |
| <input type="checkbox"/>         | Fabricator marking locations defined. <i>(UL logo, flammability rating, date code, and any others.)</i>                                                                                                              |
| <input type="checkbox"/>         | Slots and cutouts called out as plated or non-plated. <i>(Plated = copper pads present on both sides of slot; non-plated = pads absent or on one side only.)</i>                                                     |
| <input type="checkbox"/>         | Countersink and/or counterbore details included. <i>(Specify hole sizes and angles in the fabrication drawing.)</i>                                                                                                  |
| <input type="checkbox"/>         | Gold finger length and bevel angle specified if applicable. <i>(Measure edge-to-edge along the outline. Specify all sides that have fingers. If no bevel information is provided, contact us before submitting.)</i> |
| <input type="checkbox"/>         | Panelization instructions included if board is to be panelized. <i>(Supply a separate drawing or describe the configuration. Include assembly panel requirements if applicable.)</i>                                 |

  

| Finish and Appearance    |                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Solder mask color, sides, and sheen specified. <i>(Default: satin green, both sides.)</i> |
| <input type="checkbox"/> | Silkscreen color and sides specified. <i>(Default: white.)</i>                            |
| <input type="checkbox"/> | Surface finish specified.                                                                 |

  

| Special Requirements     |                                                                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Controlled impedance details provided if required. <i>(Include layer, trace width, spacing, and target value in Ohms.)</i>                                 |
| <input type="checkbox"/> | IPC fabrication and inspection class specified. <i>(Default: IPC 6012 Class 2 fabrication / IPC-A-600 Class 2 inspection.)</i>                             |
| <input type="checkbox"/> | Special handling or compliance requirements noted. <i>(ITAR, medical, military, automotive, aerospace — include applicable standard or specification.)</i> |
| <input type="checkbox"/> | First Article Inspection (FAI) requirements noted if applicable.                                                                                           |
| <input type="checkbox"/> | General specification or customer flow-down document included if applicable.                                                                               |
| <input type="checkbox"/> | All fabrication notes reviewed for completeness before submitting. <i>(Verify that notes are consistent with file contents.)</i>                           |

*Questions? Contact our Customer Service team before submitting your files.*