

PCB Prototype Ordering Checklist

This checklist helps you ensure all critical factors are considered when ordering a PCB prototype. Review each item to confirm your design aligns with manufacturing capabilities and project requirements. Use the notes section for additional details.

Category and Checklist Item	Check
1. Materials <ul style="list-style-type: none">- Confirm material (e.g., FR-4, Polyimide) matches project electrical and thermal needs.- Verify material availability with manufacturer.	
2. PCB Layers <ul style="list-style-type: none">- Select layer count (single, double, multilayer) based on design complexity.- Ensure layer count supports fast prototype delivery.	
3. Dimensions and Shape <ul style="list-style-type: none">- Check PCB size fits manufacturer's maximum limits (e.g., 500mm x 500mm).- Optimize for rectangular shape to minimize material waste.	
4. Thickness <ul style="list-style-type: none">- Choose thickness (e.g., 1.6mm for FR-4) based on component weight and durability needs.- Confirm thickness compatibility with manufacturer.	
5. Trace Width and Spacing <ul style="list-style-type: none">- Verify trace width/spacing (e.g., minimum 2.5 mils) meets design rules.- Balance density with manufacturing cost.	
6. Holes <ul style="list-style-type: none">- Specify via and drilling hole sizes for components and connections.- Confirm manufacturer's drilling capabilities (mechanical or laser).	
7. Solder Mask <ul style="list-style-type: none">- Select solder mask color (e.g., green, white) for visibility and aesthetics.- Ensure mask protects traces and prevents short circuits.	
8. Surface Finish <ul style="list-style-type: none">- Choose finish (e.g., HASL, ENIG) based on solderability and reliability needs.- Verify finish compatibility with project budget and environment.	
9. Copper Thickness <ul style="list-style-type: none">- Select copper weight (e.g., 1oz) for electrical and thermal performance.- Confirm thickness aligns with current requirements.	
10. Silkscreen <ul style="list-style-type: none">- Ensure silkscreen labels (e.g., white, black) are clear and legible.- Verify printing quality supports assembly and testing.	

Notes:
