

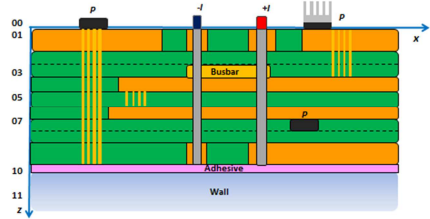
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Board Temperature and Current Carrying Capacity of Traces

Please use this check list to organize and transmit required data for a quote and the simulation.

Required Data for a Calculation

	Yes, I got it	Comment
Project manager		
Other experts in this project		
Contact person while work is in progress		
Scope of the work 		Description in textual form of what should be investigated date of delivery maximum temperature allowed installation situation technological characteristics steady state or time dependent number of variants / calculation runs
Board data		
Layer stack-up		Thickness of copper planes and prepregs .
Layout		Gerber files for each layer
Vias		Drill pattern in Gerber or Excellon files Plated and unplated. Plating thickness.
Material data		Heat conductivity, if not standard FR4. If transient: density and specific heat capacity.
Current-carrying capacity		
Circuitry		Pins or positions with supply and extract of currents (illustration, .ccz or other viewer files) per net. Ampere values. Static or pulsed. Pulse data (illustration, .txt, .xls).
Heat by components		
Position and type		Silk screen in Gerber, IDF Files, .txt or illustration
Heat load		Watt values. Static or pulsed. Pulse data (illustration, .txt, .xls).
Thermal resistances		Heat sinks or underfills.
Environmental conditions		
Ambient temperature		Air temperature around PCB
Cooling conditions		Natural convection (still air), forced convection with air speed, fixed temperature chassis parts, heat sink