

Review and ordering of PCB designs

A review of your PCB layout needs to be carried out before ordering the PCB, any feedback labeled “Critical” needs to be corrected and documented corrected.

The key to a successful review is proper documentation of PCB, components, and its ideal function. To make the process easier for the reviewer (And you’ll get the review back faster), please follow these steps to get the review process started. Please read this carefully and do not deviate from the description eg. File type or missing documents. If so, the review will not happen.

Preparing the PCB for review:

1. Version / Revision number should be updated as well as date after changes. (Edit page



settings)

2. Make sure the schematic is properly drawn and all connections is correct, run the DRC as well to catch easy mistakes like “unconnected”.
3. Consider and ensure correct footprints for chosen components
4. Check the PCB with the DRC, check for “unconnected” and “Courtyard overlap”.
5. Consider voltages and currents, is the traces appropriate?
6. Check also the PCB in the 3D viewer, to make sure it looks reasonable.
7. Export into a folder called “gerber” the gerber files, both drill files and copper and zip it into a **.zip** file (!!)
8. Include the CAD project (Original schematic and PCB files) together with a Bill-of-Material of special components (IC’s, sensors, non-standard connectors) Capacitors and Resistors can be excluded. Make sure that each IC in the BOM has a designator referring to the schematic(like U1 or U2) You will be contacted if more information is needed. Zip it all into a **.zip** file (!1)
9. Create a small description of the conceptual working of the PCB. A brief thought on input and output voltages and currents as well as source for the project (Battery, wall plug, Lab Powersupply).

All of the above will be relatively easy to forward if you truly are ready to order a PCB, otherwise it’s a good checklist to ensure that you are on the correct path. When you have forwarded the files, a response will be given shortly.

The PCB is in review, and you will be receiving a review document when the review is done. For the PCB to be ordered, you must return the same review document with at least an answer to the feedback labeled “Critical”. If these answers and corrections are accepted in review 2, the PCB will be approved for ordering. You will get notified in both situations.

Example:

<i>Location</i>	<i>Severity (Critical, non-critical, formatting)</i>	<i>Screen dump</i>	<i>Reviewer comment</i>	<i>Proposed action</i>	Designers action
<i>Will be filled out during the review</i>	<i>Will be filled out during the review</i>	<i>Will be filled out during the review</i>	<i>Will be filled out during the review</i>	<i>Will be filled out during the review</i>	Your answer should be here

If you have any questions to the process, please send an email!

Forward your zipped files to your Supervisor/assistant supervisor. Put your group name/number in the title of the e-mail