

# CIRCUIT DESIGN CHECKLIST



Product Name:

Date:

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Product requirement specification defined      Yes  
No

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Artwork and Mechanical approved      Yes  
No

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Mechanical Board Constraints

- Board outline
- Mounting holes
- Connector locations and Orientations
- Hardware clearances and fasteners
- Max height of components
- Strain relief for cables
- Clearance for bend radius of cables

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Components:

- Footprints match the manufacturers specifications
  - Component to component clearance
  - Component to Mounting Hole or board edge
  - Component height clearance
  - check pin numbers of all custom-generated parts
  - Voltage ratings of components checked
  - Pin one or Polarity clearly marked
  - All parts on the BOM
  - All Parts have company part numbers
  - Sample request sent to Purchasing
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## Circuit Design

Phase Checked

Ground checked

Trace Widths appropriate to current carrying

Sufficient power rails for analog circuits

Separate analog signals from noisy or digital signals

Digital and analog signal commons joined at only one point

Check all power and ground connections to ICs

TBD And DNS components identified

Sch forced updated to corporate library

Check for traces running under noisy or sensitive components

Acute Angles or etch traps removed

Break out from pads sufficient? Fillets needed

Copper pour, 25mil back off from PCB edge

Even Copper Distribution

Board name and part number with revision

Title Block and Rev Block filled in

Mounting holes electrically isolated or not

Component and trace keepout areas observed

Run DRC before generating Gerbers

Automated netlist check

Vias are covered by soldermask

Part obsolescence review

Ref Des re Numbered and back annotated to sch

Special Assembly requirements on Assy layer

Gerbers approved