1 Schematic

☐ Setup

    ☐ Has DRC been configured?
    ☐ Has a grid size been picked?
    ☐ Has a paper size been selected for sheets?

☐ Symbols

    ☐ are explicit and informative
    ☐ resemble electrical circuit symbols
    ☐ reflect functionality or logical structure of the component
    ☐ Pins are assigned the correct type (passive, power, in, out, etc.)
    ☐ Are active-high and active-low marked consistently?
    ☐ Are power and ground pins consistently placed and marked?
    ☐ Are mating connectors on different boards matched in pin-out?
    ☐ Check all pin numbers for custom generated parts

☐ Electrical

    ☐ Are reset pins pulled to high/low?
    ☐ Is reset filtered?
    ☐ Are polarized components protected against reverse voltage?
    ☐ Are resistors operating within the specified voltage/power range?
    ☐ Acceptable net connections are followed
    ☐ Power and ground symbols are correctly used (earth vs. chassis vs signal)

☐ Testing

    ☐ Are there ground connection points for probes?
    ☐ Have necessary test points been added?

☐ Documentation

    ☐ Unpopulated parts are clearly labeled
    ☐ Are destinations noted if they go to other sheets?
    ☐ Has special PCB or layout requirements been noted?

        • Ground planes

        • keep-out

        • routing

        • references to datasheet's recommendations
    ☐ Notes and boxes are used to provide clarity

☐ Drafting

    ☐ No overlap between text, notes references, wires, symbols etc.
    ☐ All wire turns are at least one grid square from component pins
    ☐ Consistent font size used throughout
    ☐ Components are evenly spaced on drawing
    ☐ Is all text Horizontal?
    ☐ Do all components have reference and value?

        • Are all values in a uniform format?

- Are references using standard designators?
- Are references placed unambiguously?
- Are decimal points avoided?

☐ Are all junctions dotted?
☐ Are non-connects marked?
☐ No 4-way connections
☐ No upwards pointing ground symbols
☐ Are component references ordered by schematic layout?
☐ Are Power nets connected? (Vcc, Vss, Vdd)
☐ Are net names on top of lines?
☐ Are unused nets left unlabeled?
☐ All connections/markings have a purpose

☐ Sheet

☐ Sheets are consistently sized
☐ Readable when printed
☐ Logical layout, left to right and then top to bottom
☐ header block is complete

- Name of author
- Name of reviewer
- Revision information
- Date
- Company/organization
- Drawing number and sheet number

☐ Did DRC pass cleanly?