Layout Design Checklist

Client:
Part No.:

Schematic:

1. A circuit diagram (electronic) Y/N
2. Draft Y/N
3. The clear symbols, labels, pins marked in the circuit Y/N
4. Special requests Y/N
5. By-pass capacitors are included in the circuit Y/N

FAQ: __ unclear labels showing the number of pins.
     __ repeat seq. number.
     __ do not separate the A/D portions of the circuit.

Bill of Material (BOM):

1. All parts are packed, including the data information for sizes and pins? Y/N
2. Orders with by-pass capacitors included? Y/N
3. All information in regard to components is properly stored? Y/N

FAQ: __ the pins are E-B-C.
     __ pitch error.
     __ layout and the size of actual board do not match.

Mechanical Drawing:

1. Definitions for frame shapes, tooling holes, and screw holes. Y/N
2. Marked with connector locations and pins? Y/N
3. Tooling holes and screw holes are grounded? Y/N
4. Components on restricted areas for layout are prohibited? Y/N
5. Special requests on font types, symbols? Y/N
6. Numbers of layers? Y/N

FAQ: __ incorrect layer counts
     __ direction for connection with the incorrect pins
     __ mechanical deficiencies (zero point)
Note: Placement Guideline

1. There are special restrictions, height, heat, distance, the signal length? Y/N
2. Specified parts are displayed properly? Y/N
3. Components remain fixed in place? Y/N
4. Ability to add or remove the excess by-pass capacitors? Y/N

Note: Layout Guideline

1. Special indications for layers of boards? Y/N
2. Special traces need to be shown (interruptions)? Y/N
3. Special patterns for specifications of line width/ spacing (electronic flow). Y/N
4. Identifying marks on the board. Y/N
5. The minimum required line width/ spacing ______
6. Via size? (pad & hole size) _____________ Y/N
7. Requirements for copper foil. Y/N
8. Additional via holes
   (to separate electronic flow and strengthen their position in the content integration layer) Y/N

PCB layout design requires all four of the following:

**Mechanical Drawing:** base scope and locations of performance are shown with possibility in completing on the actually boards. Such mechanical drawing is a must and either electronic form or TEXT (brief descriptions included) can be provided.

**Bill of Material (BOM):** components sizes and assembling are relevant to each other and thus, errors cannot be existed. The most important part is the packing for components (package SIP-2, DIP-8…etc.). For the unspecified packing materials, certain information must be provided for reference.

**Schematic:** a drawing showing the relation between the parts; it can be provided in TEXT. file

**Netlist:** can be provided in text form (brief descriptions included); electronic form in Orcad 10.5 or Protel, Bitmap or PPT.

Note: there are various possibilities for layout designs. If brief descriptions are not given on mechanical drawing or in the circuit, we will proceed with your request as per our engineer’s instructions to prepare for the variation order accordingly.
Examples
Mechanical drawing includes the special frame shapes, tooling holes, locations of components.