



# COMPONENT NEWS

EVALUATION ENGINEERING

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## CIRCUIT BOARD LAYOUT INFORMATION NEEDED

When time is short, ordinary difficulties become more acute and extra effort is needed to reduce unnecessary roadblocks to the completion of a design. At present, both design and support groups could benefit from increased cooperation in the area of information exchange.

As we all know, board design can be time consuming. One area where this time can be reduced a great deal and fewer errors made is by providing the layout person complete information on the schematic.

Some design engineers are great in providing good, complete schematics for us to work from, while other schematics are inadequate and information is incomplete to enable us to do our job. The time a layout person spends running down the information is time he, or she, could be spending on the layout. The more explicit you can be in telling us what you want, the faster and more accurately we can complete your job.

Here is the information we would like on the schematics.

1. GENERAL INFORMATION (usually placed in lower right hand corner of schematic).
  - a. Board name, instrument number, and corporate project number (if any).
  - b. Board size (length and width). If possible, resolve the size among the electrical designer, mechanical designer, and etched circuit layout technician before starting a layout.
  - c. Material (type and thickness).
  - d. Electrical designer (name, phone number, and delivery station).
  - e. Mechanical designer (name, phone number, and delivery station).
  - f. Number of boards requested.
  - g. Requested delivery date of the boards. (We will confirm the delivery date or notify you of any delivery delays.)

2. SPECIAL PARAMETERS

Any special electrical considerations that are pertinent to the layout, such as high current, high voltages, high impedance signal circuits, special grounding problems, etc.

3. COMPONENT IDENTIFICATION ON SCHEMATIC

<u>COMPONENT*</u>	<u>PREFERRED IDENTIFICATION</u>	<u>SECONDARY</u>
Resistors	Power rating, resistance value, type	Part Number
Capacitors	Voltage rating, capacitance value, type (polarity on electrolytics)	Part Number
Diodes	Part Number	Type, body style
Transistors	Socket, body style	Part Number
Integrated Circuits	Type, body style	Part Number
Pots	Type, body style, value	Part Number
Switches	Type and contact arrangement as well as vendor's drawing new parts	
Relays	Type and contact arrangement	
Neon Bulb	Part Number	
Fuses	Rating and holder type (size)	Part Number
Plastic Holders	Part Number	Sample
Diode Bridges	Part Number	
Shield or Shielding Placement**	Drawn on Schematic	
Test Points & Square Pins (.025)	Indicated on schematic	
Square Pin (.025)	Indicated on schematic	
Edge Connector	Number of Pins and Spacing between Pins	Part Number
Switches & Relays	Sketch of contact closure table (truth table). Also, mechanical layout for bearing block and contact locations.	
Others	Part Number	

\*If part is new (no part number) give sketch showing maximum outline and lead breakout and size. Don't use a part to replace the sketch.

\*\*If this refers to a separate component, as one of sheet metal, we need a sketch or drawing of the part.

So please, take some time to be sure you have supplied this information on the schematic – you will find it well spent in providing a faster and more accurate job for you. For further information call Ext. 7980.

-Dave Davis