# Microelectronic/PC Board Technician: Microelectronic/PC Board Technician

MICROELECTRONIC TECHNICIAN: Performs a variety of duties to support the research and development of new microelectronic, opto-electronic, micro-electromechanical and sensor manufacturing processes, devices, components, or systems, semiconductors, semiconductor-based integrated analog or digital circuits, micro-electromechanical systems, sensors systems and related technologies. Develops and applies inspection and test procedures for micro-components and micro-systems.

PC BOARD DESIGN: Prepares working plans, detailed drawings, and completed mechanical or electrical drawings of printed circuit (PC) board components and assemblies from notes, verbal instructions, and rough or detailed sketches for engineering or manufacturing purposes. Makes engineering computations, write specifications, and make adjustments in drawings and specifications; verifies completed design elements, checks dimensions, materials to be used, and quantities.

#### Knowledge

Little or no knowledge of the job. Moderate understanding of general job aspects and some understanding of the detailed aspects of the job. Ability to read, understand and work to electrical schematics. Basic knowledge of TTL logic devices and op amp theory. Understanding of basic operation of an oscilloscope and spectrum analyzer. Capable of working under a microscope.

## **Supervision Received**

Close supervision involving detailed instructions and constant checking on work performance.

#### **Consequence of Errors**

Errors can be easily and quickly detected within the immediate work unit and would result only in minor disruption or expense to correct.

## **Contacts**

Contacts are primarily within immediate work unit. Contacts involve obtaining or providing information requiring little explanation or interpretation.

## Work Products (Examples may include but are not limited to)

Electrical schematics, TTL logics devices, oscilloscope, spectrum analyzer and microscope.

### Minimum Education & Experience

Entry Level. 0+ Years directly related experience w/ Associate's Degree in Electronics or related field. Basic MS Word, PowerPoint and Excel skills.