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.

	Level 1	Level 2	Level 3	Level 4
	Microelectronic Technician I	**Microelectronic Technician II**	**Microelectronic Technician III**	**Sr. Lead Microelectronic Technician**
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.	Full knowledge of the job. Substantial acquaintance with, and understanding of, general aspects of the job with a broad understanding of the detailed aspects of the job. Requires ability to work in a collaborative team environment. Basic knowledge of RF test and tuning methods and test equipment. Understanding of the test equipment required to perform component level tuning and testing. Able to follow written and verbal test directions.	Considerable knowledge of the job. Complete acquaintance with, and understanding of, the general and detailed aspects of the job and their practical applications to problems and situations ordinarily encountered. Requires ability to work under Engineering direction in lieu of detailed procedures. Knowledge of RF and Microwave circuit theory, terminology and test techniques. Ability to perform manual RF tuning of circuits. Knowledge of Mil spec 883 test requirements. Ability to use microscope and demonstrate dexterity skills.	Extensive knowledge in specialized functions. A wide and comprehensive acquaintance with, and understanding of, both general and specific aspects of the job and their practical application to complex problems and situations ordinarily encountered. Requires in depth knowledge of testing RF, analog and Microwave designs. Capable of training and guiding junior team members in all phases of testing. Ability to set up test stations to perform high frequency impedance sensitive components. Ability to operate independently and generate accurate and detailed test and status reports. Interfaces with other technical disciplines.
Supervision Received	Close supervision involving detailed instructions and constant checking on work performance.	General supervision and instructions given for routine work and detailed instructions given for new activities or special assignments.	Limited supervision. No instructions needed on routine work and general instructions given on new lines of work or special assignments.	Minimal supervision. Work may be done without established procedures.
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.	Errors may be detected and corrected but may cause moderate loss of time or customer/user dissatisfaction.	Errors may be difficult to detect and would normally result in loss of customer business, material or equipment to resolve.	Errors are very difficult to detect and would normally require significant expenditures to resolve.
Contacts	Contacts are primarily within immediate work unit. Contacts involve obtaining or providing information requiring little explanation or interpretation.	Contacts are typically with individuals within own department and occasionally with contacts outside own organization. Contacts involve obtaining or providing information or data requiring some explanation or interpretation.	Contacts are frequent with individuals representing other departments and/or representing outside organizations. Contacts involve obtaining or providing information or data on matters of moderate importance to the function of the department or which may be of sensitive nature.	Contacts are frequent with individuals representing outside organizations and/or individuals of significant importance within the company. Contacts involve planning and preparation of the communications, require skill, tact, persuasion and/or negotiation to accomplish the objectives of the communication.
Work Products (Examples may include but are not limited to)	Electrical schematics, TTL logics devices, oscilloscope, spectrum analyzer and microscope.	Electrical schematics, TTL logics devices, oscilloscope, spectrum analyzer, microscope, RF test and tuning methods and test equipment.	Electrical schematics, TTL logics devices, oscilloscope, spectrum analyzer, microscope, RF test and tuning methods, test equipment and Mil spec 883 test requirements.	Electrical schematics, TTL logics devices, oscilloscope, spectrum analyzer, microscope, RF test and tuning methods, test equipment and Mil spec 883 test requirements.
Minimum Education and Experience	AA in Electronics preferred.	AA in Electronics preferred and 1 year of related experience.	AA in Electronics preferred and 3 years of related experience.	AA in Electronics preferred and 6 years of related experience.