# Microelectronic/Semiconductor Engineer: Associate Principal Microelectronic/Semiconductor Engineer

Researches, designs and develops new microelectronic, optoelectronic, micro-electromechanical and sensor manufacturing processes, devices, components, or systems, semiconductors, semiconductor-based integrated and hybrid approaches with Si, GaA's and related III-IV materials, and other materials (e.g. quartz, Si-based and compound semiconductor and related materials), materials growth and processing. Develops and applies inspection and test procedures for micro-components and micro-systems.

#### Discretion/Latitude

Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives of assignment. Completed work is reviewed from a relatively long-term perspective, for desired results.

# Knowledge, Skills and Abilities

Applies extensive technical expertise, and has full knowledge of other related disciplines. Answer technical questions regarding products and services, and may take part in putting together proposals, configurations, and product offerings.

### **Problem Solving**

Develops technical solutions to complex problems that require the regular use of ingenuity and creativity.

#### **Impact**

Regularly called upon to function in a project leadership role. Erroneous decisions or recommendations would typically result in failure to achieve major organization objectives.

## Liaison

Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.

### Minimum Education and Experience

10-12+ years with BS in designated Engineering or related field. Employees usually have advanced degree in field of specialization.