

Microelectronic/ Semiconductor Engineer: Sr. 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, GaAs 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

Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.

Knowledge, Skills and Abilities

Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts. Widely recognized for achievements, technical expertise and meritorious standing within professional field. Identifies, analyzes and develops new business opportunities. Establishes customer contacts, conducts research and analysis into their future plans and needs, assists with the development of their specifications, develops proposals, and delivers marketing presentations.

Problem Solving

Works on unusually complex technical problems and provides solutions which are highly innovative and ingenious.

Impact

Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and affect the image of the organization's technological capability. Functions in a program leadership role. Plays a key role in implementing programs/projects and makes significant contributions to department goals and overall functional strategic planning efforts.

Liaison

Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Often instrumental in attracting and obtaining major new company business.

Minimum Education and Experience

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