

MIKE KLITZKE

Nevada City, CA 95959
530-574-5901 cell
mikeklitzke@hotmail.com

EXPERIENCE

Application Engineer **September 2003/Present**

GE Sensing (NovaSensor), Fremont, CA.

Perform technical and financial analysis of new customer opportunities received from global sales force. Develop sensor solutions from the die to system level. Research and evaluate available technologies and manufacturing resources to optimize solution for performance and cost effectiveness. Develop new product proposals for marketing including competitive analysis, risk assessment, deliverables, schedules, resources, and budgets. Interface with Sales, Marketing, and Engineering to facilitate the new product introduction process. Hand off approved projects to engineering. Manage key product development projects. Work with Sales and Marketing to develop product road maps and sales strategies. Provide training and technical support to GE Sensing Sales Team. Interface with customers including visits, trade shows, and presentations.

Senior Packaging Engineer **March 2002/September 2002**

Megasense Inc., Sunnyvale CA. (*startup*)

Design and develop packaging for products for variable optical attenuators (VOA's) and optical switches. Technologies include co-fired ceramics, borosilicate glass capillaries, seam sealing, injection molding, and die cast housings. Analyze performance and financials of competing technologies and products. Generate solid models of package components and assemblies. Optimize designs for low-cost, high volume manufacturing with emphasis on yields and reliability. Analyze, characterize, and optimize manufacturing processes. Insure product conformance with Telcordia specifications.

Senior Member of Technical Staff **August 2000/February 2002**

Nayna Networks Inc., Milpitas CA. (*startup*)

Design and develop packaging for MOEMS (MicroOptoElectroMechanical Systems) for an optical telecommunications switch fabric. Design high density electrical interconnect packaging--technologies include multi-layer co-fired ceramic substrates, PCB, thin film & thick film metalizations, BGA's, CCGA's, mBGA, high density flip chip arrays, SMT, and wire bond. Create mechanical and thermal models from component to system level. Design the switch fabric's heat sink and thermal management scheme. Design fiber management for multi-port optical routing/performance monitoring cards. Optimize design and material selection for TCE effects and the thermal sequencing of the assembly steps. Interface with cross-disciplinary teams to insure overall design compatibility. Evaluate, select, and manage key vendors. Direct the transfer of novel technologies to contract manufacturers. Insure product conformance with Telcordia specifications.

Design Engineer **July 1999/August 2000**

TRW, NovaSensor, Fremont, CA.

Design of packaging for MEMS based sensors--technologies include thick film ceramic substrates, flex circuitry, injection molded housings, transfer mold lead frames, stainless steel glass fired headers, die attach, and wire bonding. Generate solid models of packaging components and assemblies. Develop novel solutions for customer specific applications—such as integrating a PZT transducer and pressure sensor into a single package. Materials include silicone rtvs, epoxies, & dielectric gels. Project management--implement feasibility studies, budgets, schedules & reviews. Supervise fabrication of prototypes and first builds. Interface with customers as primary contact.

Lead Design Engineer **August 1995/July 1999**

EXAR, Silicon Microstructures Division, Fremont, CA.

Design of packaging for MEMS based sensor products for high volume automotive, industrial, and medical applications—technologies include thick film ceramic substrates, injection molded housings, transfer mold lead frames, SMT, die attach, and wire bonding. Materials include silicone rtvs, epoxies, dielectric gels, polymer coatings, and encapsulants. Manage product development from prototypes to production handoff. Interface with customers to facilitate product development. Direct the transfer of key product lines to overseas manufacturing and test facilities. Supervise and direct an associate engineer and four engineering technicians. Create and implement performance specifications, supplier specifications, DFMEA's, PFMEA's, control plans, and measurement systems analysis. Assist in the implementation of a QS-9000 certified system.

Design Engineer

June 1994/August 1995

EG&G, ICSensors, Milpitas, CA.

Design of packaging for MEMS based pressure sensors, capacitive accelerometers, and microvalves. Products include pressure regulators and pilot valves. Develop novel assembly processes. Design of engineering test systems. Manage projects including budgets, timelines, and reviews. Supervise fabrication of prototypes and first builds. Create product documentation including assembly procedures, test procedures, and performance specifications. Program test and manufacturing equipment. Perform failure analysis. Interface with customer to facilitate product development.

Graduate Student Researcher

September 1993/June 1994

Electrical Engineering Department, UCLA, Los Angeles, CA.

Design MEMS structures including thermally actuated robotic arms. Designs utilize commercial fabrication processes—MCNC and MOSES. Model and analyze kinematics and dynamics of mechanical structures. Experiment with various release methods to optimize yield of functional structures.

EDUCATION

B.S., Mechanical Engineering

June 11, 1993

California Institute of Technology, Pasadena, CA.

B.A., Physics

May 16, 1993

Pomona College, Claremont, CA.

(3-2 Dual Degree Program)

SKILLS

Design Tools: Solid Works, SDRC Ideas, ProE, Flotherm, Autocad, Visual Basic, MathCad,
Other Tools: Siebel, Oracle, MS Office Suite (Word, Excel, Access, etc.)

GE Crotonville Course: "Presentation Skills at GE"

AWARDS

Lockheed Scholarship, Pomona College, Claremont, CA.

1990-1991

Max Beeler Alcorn Scholarship, Caltech, Pasadena, CA.

1992-1993

National Science Foundation Honorable Mention

1993

REFERENCES

Dale Gee,	Vice President of Sensing	Symyx
Abhijeet Sathe,	Manager Micro and Nano Structures Technologies,	GE Global Research
Kevin Flynn,	Marketing Manager,	Linear Technologies

Complete reference information provided upon request.