

Background

- Over 30 years experience in electronics manufacturing, design and processes with direct ownership and responsibility of specific product lines for engineering support in manufacturing
- I have demonstrated ability to work across global teams and across all aspects of Management, Procurement, Design and Manufacturing.
- Project leader for roadmap projects to reduce costs and implement new technologies. Led project roadmap for common platform products which reduced number of new design iterations across a product family, substantially reducing development costs and providing shorter time-to-market opportunities.
- Experienced in high reliability military and space engineering. Re-developed cost reduced COTS product for strategic military customers. Successfully completed qualification and first article requirements ahead of schedule.
- RF circuit design experience both analog and digital in high performance oscillators and precision timing modules for use in wireless and fiber optic systems as well as defense and space based applications
- ARM Cortex, CPLD, FPGA and PIC Microcontroller design integration in various products
- DMAIC / Lean Design for Six Sigma Black Belt
- Assisted in design of compensated low G-sensitivity oscillator for mission critical military application.
- Experience in Agilent ADS, Ansoft HFSS, Altera Quartus, Autocad, Pro Engineer, Solidworks, 3D printing, CNC

Employment History

Joseph Machine Co.

Automation Controls Engineer Sr. Lead – May 2018 to present

- Design control systems and integrate sub-systems into the machine designs
- Tune servos and coordinated motion systems for CNC tooling
- Support and mentor production personnel
- Program Trio and Allen Bradley PLCs and write and modify code as required
- Recommend and implement new technologies to improve performance and lower cost

Greenray Industries

Senior Design Engineer / Assistant Eng Manager - June 2014 to May 2018

- Assistant Engineering Manager
- Manage product roadmaps and competitive benchmarking of new technologies
- Design and develop oscillators and timing modules
- Write custom test software using Visual Basic, C++ and C#
- Design custom test systems and hardware
- Write technical documents for testing and production deployment as well as create presentations for marketing and lectures at trade seminars
- Conduct interviews of potential candidates and advise or approve of candidate selections.

Esterline / Souriau

Development Engineer - December 2012 to March 2014

- Primary Electrical Engineering contact
- Primarily responsible for testing and signal integrity support for commercial and aerospace connector and cable products including Ethernet, Profinet, CANBUS and Fibrechannel.
- Develop embedded circuit applications for cable assemblies and custom value added products.
- Develop software solutions to automate test processes.

Peak Solutions (under contract at Transcore) - Harrisburg, PA

Systems Engineer - March 2012 to December 2012

- Designed and developed systems for PA Turnpike toll collection and violations processing.
- Designed all electronic toll system for PA Turnpike interchange at Malvern, PA
- Coordinated toll installation with site foremen and engineers and scheduled activities to complete the project on time.
- Managed a team of technicians to implement installation of toll road designs.

TE Connectivity – Harrisburg, PA

Development Engineer, RF Coax Connectors – May 2007 to Jan 2012

- Developed solutions for microwave interconnect components for commercial and military applications in both RF and high speed designs.
- Key success areas included design of custom mobile radio connector system for a strategic OEM customer. Also developed a cost reduced SMA family suited to automated assembly and reduced manufacturing costs.
- Applicant on various patents for connector technology

**Vectron International/Corning Frequency Control/Oak Frequency Control
Mt Holly Springs, PA**

Engineer - RF Oscillators and Timing Modules - 1997 to 2007

- Completed my BSEE while working fulltime.
- Re-designed the Eurocase OCXO platform products to a common platform approach. This led to a lower cost design and increased flexibility for other configurations.
- Assisted in development of an MEMS based active compensated low-G sens OCXO for military application in an aircraft environment.
- Re-designed legacy Piezo oscillator platforms for cost reduced manufacturing.
- Assisted heavily during the Vectron acquisition in which an entire product family from a sister facility was incorporated into the Mt Holly facility, requiring re-qualification and re-design of many products.
- Designed a 100MHz Stratum III DOCXO as a saleable oscillator in a 3 month period for completion of my Senior Project for Penn State. The design incorporated PLL technology, microcontroller, OCXO and hybrid VCO technology. The design was scalable from 80 MHz to 644 Mhz with software configuration.

Education

Graduate Management Certificate in Advanced Studies in Business
Shippensburg University - 2023

Bachelor of Science in Electrical Engineering Technology, Graduated 2007
Penn State Capital College, Middletown, PA
GPA 3.15
Senior Project – 100 MHz DOCXO Stratum 3e PLL Oscillator Module

Associate of Science in Electrical Engineering, Graduated 2002
Harrisburg Area Community College, Harrisburg, PA
GPA 3.50
Awards – Outstanding Sophomore Student Achievement Award

Additional Training or Coursework

- Failure Mode and Effects Analysis
- Autocad Level 1
- ProEngineer Wildfire 4
- Voice of the Customer
- DMAIC / Lean Design for Six Sigma Black Belt
- Fundamentals of Connector Design
- Geometric Dimensioning and Tolerancing
- Innovation for Results
- Penn State Signal Integrity Symposium Participant

Accomplishments

- Co-applicant on patent application for directly heated quartz crystal technology.
- Currently hold 5 patents related to RF connector technology.
- Awarded 2011 TE Connectivity Corporate Innovation Award