



Position: Electrical Engineer

General Information

Title: Electrical Engineer	Reports to: (position): Director of Engineering
Department: Engineering	Role(s): Design/Development Engineer
Create Date: 6/12/02	Rev Date: 11/11/11

Detailed Description

Item:	Process Name:	Responsibility:	Description:
1	Design/Development	Execution	Develop electrical prototypes and production units utilizing an electrical design cycle which includes concept / detailed design, test, system integration and manufacturing release. Products include aircraft resident microprocessor-based and non-microprocessor-based electronic products, Audio / Video Cabin Management Systems, LED lighting systems, etc.
2	Schematic Capture	Execution	Utilize schematic capture tools for the electrical design of products.
3	PWB Layout	Execution	Utilize PCB layout / routing tools for the electrical design of products.
4	Product Support	Execution	Participate in sustaining efforts for existing product lines. This includes research and implementation of engineering design changes yielding improvements in manufacturability, reliability, and cost; support of customer design/product reviews, trade shows (as required); technical product demonstrations, product trouble shooting, parts obsolescence, etc.
5	Marketing Support	Execution	Marketing support with drawings, graphics, renderings, and product data to facilitate presentations, proposals, and other marketing activities. Minimal travel is possible to support marketing efforts
6	Supplier Relations	Execution	Work directly with outside contractors and suppliers to define and document economical and efficient components, materials, production assembly sequences, etc.



Minimum Requirements

Item:	Requirement:	Description:
1	Education	BSEE or equivalent.
2	Experience	a) Five (5) or more years of electrical design experience including detailed design, schematic development, PCB layout, functional test, etc. Designs integrate digital, analog and electro-optical circuits within an aerospace or military environment.
3	Software	a) Schematic Capture and PCB Routing Software – must be proficient with at least 3 years experience with OrCAD/Allegro or similar product. Will be required to use OrCAD/Allegro. b) Microsoft Outlook – basic familiarity with Groupware programs c) Microsoft Office – reasonable proficiency in Excel, Word, Powerpoint and Visio.
4	Miscellaneous Considerations	a) FPGA design / tool experience is considered a plus. b) Electro-optical design experience is considered a plus. c) Ethernet design experience is considered a plus. d) Familiarity with FAA and/or Mil Spec requirements considered a plus. e) Formal Six Sigma and/or Lean Manufacturing training a plus.
5	Skill Set (in the event of conflict with competency matrix, this document has precedence.)	a) Strong problem solving skills relating to electrical design. b) Logical thought processes, excellent attention to detail, ability to conceptualize and implement innovative cost effective electrical engineering solutions requiring aggressive completion schedules. c) Must be able to multi-task. d) Requires little supervision. Works well in loosely structured environment. e) Positive interpersonal skills dealing with co-workers, suppliers, customers and other outside firms. f) Knowledge of manufacturing methods, procedures, and cost reduction techniques. g) Understanding of design methodologies and processes for surface mount designs. h) Experience designing and sustaining cost critical consumer and commercial level products. i) Must be proficient with hardware diagnostic tools including oscilloscopes, logic analyzers, spectrum analyzers, etc.