Job Title

Electrical Engineering Support- Computer Systems Configuration

Reports To

Engineering Manager or Product Development Manager

Description

1. Engineering support for the research, design, development, documentation, and production of computer or electronic equipment. Apply electrical theory and related knowledge to build, test, troubleshoot, repair, and/or modify developmental and production computer systems and related hardware/software.

2. Product Definition: Electro/Mechanical equipment including, but not limited to, computers, displays, test equipment, test fixtures, and other computer peripherals.

Duties and Responsibilities

1. Engineering Support and Documentation for computers, computer related equipment, and their Test/Configuration, as defined in Systel's Product Definition.

2. Interface with all relevant departments, including external customers, throughout the Product Development Cycle.

3. Support Sales/Customer Service in the resolution of computer hardware and software problems/issues.

4. Assist other Engineering support personnel such as Assemblers and Technicians during documentation, prototyping, and testing phases.

5. Support Manufacturing personnel during production.

6. Keep abreast of the latest developments in technology concerning computer hardware and software as well as new technology related to Systel's product structure.

7. Comprehend and Execute on all tasks through project management.

8. Meet due dates for all project or customer related tasks and action items.

Job Activities

1. Information: Identify information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

2. Getting Information: Observing, receiving, and otherwise obtaining information for engineering purposes from all relevant sources.

3. Processing Information: Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying all information or data.

4. Analyzing Information: Identifying the underlying principles, reasons, or facts of information by breaking them down into separate parts.

5. Documentation: Provide detailed Work Instructions for the testing ,configuring, or servicing of all products/systems. Attend design reviews and execute on electrical engineering support action items.

6. Creative Thinking: Develop, design, or create new applications, ideas, relationships, systems, or products, including artistic contributions.

7. Computer Interaction: Use computers and computer systems, (Hardware and Software), to provide support, document, enter data, analyze, process information, communicate, change/revise, report, and manage tasks.

8. Prototyping: Assist with prototypes during the Product Development Cycle. Capture data for documentation and changes in the design. Attend prototype reviews and execute on electrical engineering support action items.

9. Interfacing: Engineering, Sales/Marketing, Planning, Purchasing, Production, Inventory, Shipping/Receiving, Quality, Customer Service, Document Control, Vendors, Manufacturers, Distributors, Regulatory Agencies, and external customers. Travel to Customer's sites and provide system support on behalf of Engineering.

10. Inspection: Inspect equipment or parts to identify the cause of errors or other problems/defects.

11. Testing/Configuration: Conduct testing and configuration of product prototypes in the Engineering Lab.

12. Product Specification: Assist Sales/Marketing in the creation of Product Specification Documents.

13. Product Configuration: Assist Sales/Marketing in the creation of Product Configuration Forms.

14. Product Review: Assist Sales/Marketing by attending Quote Reviews and Contract Reviews.

15. Changes: Revise/Change documentation through Engineering Change Process.

16. Quality: Involvement in the Quality Process through the attendance of meetings, training, and auditing. Comprehension of System Level Procedures and Work Instructions for Engineering

processes as well as other departmental processes that may affect Engineering and/or the Product Development Cycle.

17. Sustaining Engineering: Continuous support for existing product or product lines for issues such as End of Life, Internal/External customer changes or revisions, component/system failure, and new configurations.

18. Product Support: Assist Sales/Customer Service by resolving problems with product on behalf of Engineering.

19. Making Decisions and Solving Problems: Analyze information, evaluate results and choose the best solution to solve problems.

20. Updating and Using Relevant Knowledge: Keep up-to-date technically through hard/electronic publications, seminars, trade shows, Internet, vendors, distributors, manufacturers/reps, organizations, broadcasting, continuous education, and apply new knowledge to job/projects/products/processes.

Knowledge Requirements

1. Engineering: Practical application of engineering science and technology. Includes applying principles, techniques, procedures, and equipment to the support and production of various goods and services.

2. Documentation: Techniques, tools, and principles involved in producing Work Instructions and other types of supporting documentation for production or external customers. Design reviews for design verification.

3. Prototyping: Assembly techniques, tools, and principles involved in producing a working model, including testing/configuration/evaluation for design verification.

4. Mathematics: Arithmetic, algebra, geometry, calculus, statistics, and their applications in solving problems.

5. Fastening: Screws, Bolts, Washers, Nuts, Rivets, Tie-Wraps, Belts, Straps, Adhesives, Welding, Thread Lockers, Clamps, Anchors, Tie-Downs, Captive, and various other methods.

6. Tools: Screw Drivers, Nut Drivers, Wrenches, Ratchets, Sockets, Pliers, Wire Cutters, Strippers and Crimpers, DVM, Testing Software (Burn-in), and/or other types of software for testing/analyzing.

7. Systems/Types of Measurement: Both English and SI (Metric) in length, area, volume, mass, time, temperature, electricity, energy, and sound.

8. Computers and Electronics: Circuit boards, processors, chips, electrical components, electronic equipment, and computer hardware and software, including applications and programming.

9. Manufacturing Processes: Sheet Metal Fabrication, Plastic Injection Molding, Plastic Extruding, and Finishing.

10. Software: MRP, Document Management, Word Processor, Spreadsheet, Databases, Document Viewers, CRM, Testing, Email, and Operating Systems.

11. Standards: ISO and Specifically- 9001, ASTM, ANSI, and EIA.

12. Documentation: Types, Creation, Usage, Formats, Revision, and Control.

Educational Requirements

One or more of the following may apply.

1. Degree/BSEE: Bachelors of Science in Electrical Engineering or equivalent and 5 years experience related to the packaging of Electronic equipment/systems.

2. Degree/BSCE: Bachelors of Science in Computer Engineering or equivalent and 5 years experience related to the packaging of Electronic equipment/systems.

3. Degree/BSCS: Bachelors of Science in Computer Science or equivalent and 5 years experience related to the packaging of Electronic equipment/systems.

4. Degree/AAS: Associate of Applied Science in Electrical Design or equivalent and 8 years experience related to the packaging of Electronic equipment/systems.

5. Degree/AAS: Associate of Applied Science in Computer Science Technology or equivalent and 8 years experience related to the packaging of Electronic equipment/systems.

6. Degree/AAS: Associate of Applied Science in Electronics Technology or equivalent and 8 years experience related to the packaging of Electronic equipment/systems.