

Skills and Competencies

<p>Engineering Mechanical Design Engineering Technological Innovation Research & Development (R&D) Design for Manufacturing/Assembly (DFMA) Design to Cost (DTC) Systems Engineering / Requirements Management Design Verification / Environmental Qualification New Product Development (NPD/NPI) Technical Leadership, Expertise, Oversight</p> <p>Design System Level Mechanical Design Thermal Management Cooling Systems Structural Design Printed Wiring Boards (PWB) Printed Circuit Assemblies (PCA) Electronics Packaging Electronic Components Sheet Metal Design Machined, Extruded, Cast and Formed Part Design Injection Molded Plastics and Foams Electrical Connectors / Interconnects Cable Management (Standard, Coax, Fiber) Power Distribution / High Current Applications Electro-Mechanical Design Human Factors and Ergonomics RF Considerations (Dk, Loss Tangent) Electromagnetic Compatibility (EMC/EMI) Rapid Prototyping Legacy Design Upgrade Test Fixture Design</p> <p>Analysis Finite Element Analysis (FEA) Thermal, Vibration, Shock, Stress & Fatigue Computational Fluid Dynamics (CFD) Thermal Conduction, Natural and Forced Convection, High Altitude, Radiative Effects, Solar Loading, High Current Applications, TECs, Heat Pipes, Vapor Chambers, Liquid Cooling, Solder Joint / PTH / VIA / Board Level Reliability</p> <p>Documentation PWB, PCA, Subassembly Part Drawings Cable and Interconnect Drawings Assembly Drawings and BOMs System Block Diagrams Engineering Change Requests (ECR) Engineering Change Orders (ECO) Full Product Data Management (PDM)</p>	<p>Test Temperature, Temperature Variation, Vibration, Shock, Acceleration, Altitude, Humidity, Water Proofness, Fluids Susceptibility, Explosion Proofness, Sand & Dust, Salt Fog/Mist, Solar Loading & UV Exposure Design Verification Test (DVT) Environmental Qualification Test (EQT) Highly Accelerated Life Test & Stress Screen (HALT/HASS), DVT & EQT Plan, Procedure & Report Development</p> <p>Products Avionics & Aerospace Commercial & Industrial Electronics Defense Electronics Systems Racked Network Systems Flat Panel Mobile SatCom Terminals</p> <p>Software SolidWorks (20k+ hours) SolidWorks Simulation SolidWorks Flow Simulation ANSYS Mechanical Workbench / IcePak / Fluent FloTherm PTC Creo CATIA AutoCAD Arena / JIRA / JAMA / DOORS</p> <p>Communications Multidisciplinary Collaboration Requirements Management Formal Design Reviews (PDR, CDR, TRR) Informal Design Reviews (DFMA, DTC/S) Internal & External Presentations Technical Writing & Memoranda Proposal Development Original Design Manufacturer (ODM) Management</p> <p>Standards</p> <table style="width: 100%; border: none;"> <tr> <td>RTCA DO-160</td> <td>MIL-STD-810G/H</td> </tr> <tr> <td>MIL-STD-202</td> <td>MIL-STD-167</td> </tr> <tr> <td>MIL-S-901D</td> <td>MIL-HNBK-454</td> </tr> <tr> <td>MIL-HNBK-5400</td> <td>IPC-SM-750</td> </tr> <tr> <td>MIL-HNBK-759</td> <td>IPC-D-279</td> </tr> <tr> <td>IPC-TM-650</td> <td>IPC-2221A</td> </tr> <tr> <td>IPC-9701A</td> <td>IPC-7095</td> </tr> <tr> <td>IEC 60529 (IP66/IP67/IP68)</td> <td>IEC 60068</td> </tr> <tr> <td>ARINC 404/600</td> <td>IEC 60945</td> </tr> <tr> <td>ASME Y14.5 GD&T</td> <td>J-STD-001</td> </tr> <tr> <td>EIA-310</td> <td>ASME Y-14.44</td> </tr> </table>	RTCA DO-160	MIL-STD-810G/H	MIL-STD-202	MIL-STD-167	MIL-S-901D	MIL-HNBK-454	MIL-HNBK-5400	IPC-SM-750	MIL-HNBK-759	IPC-D-279	IPC-TM-650	IPC-2221A	IPC-9701A	IPC-7095	IEC 60529 (IP66/IP67/IP68)	IEC 60068	ARINC 404/600	IEC 60945	ASME Y14.5 GD&T	J-STD-001	EIA-310	ASME Y-14.44
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