

Samtel Avionics Ltd.

Job Description: Manager Hardware

Experience: 8+ Years

Location: Samtel Avionics, Gurgaon

Education: ME /M.Tech /ME / B.Tech. – Electronics & Communications/Telecommunications

Industry Type: R&D, Manufacturing of state-of-the-art Electronics products for Railways applications

Role: Design & Engineering

Desired Candidate Profile

Roles & Responsibilities: Electronics Hardware Design

- Requirement Analysis
- Hardware Architecture Finalization
- Division of features among electronic modules in a system
- Interface & Connectivity analysis among modules in a system
- Major component selection
- Design approach for each module
- Power consumption budgeting & Distribution
- Design implementation for EMI/EMC requirement
- Circuit analysis and simulation
- Preparation of detail schematics
- Preparation of Bill of Material (BOM)
- Obsolescence Analysis
- Comprehending PCB layout & Gerber Files as prepared by the PCB layout engineers
- Signal Integrity Analysis
- Power Integrity Analysis
- De-rating analysis
- Preparation of Card/PCB Assembly drawing
- Preparation of detail Cable diagrams
- Preparation of Card/PCB Level Test procedure
- Preparation of Input Document for Thermal analysis
- Fabrication of PCBs
- Assembly of module & Cables
- Testing of Electronic modules & cables
- Engineering Prototype Integration and performance check

- Incorporating Design Changes raised during development testing
- Preferred: Experience with Railways Systems such as DDU, HMI, RMS, PAPIS, PIS, TCMS , VCU

Skills / Expertise:

- High Speed Micro Processors (Power PC, ARM, INTEL)
- Video & Graphics Processing
- Communication/Interface protocols: MVB, Gigabit Ethernet, USB 2.0/3.0, SATA, CANBus 2.0, PCI / PCIE and other interfaces
- Video Interfaces: STANAG3350, RS343A, DVI,
- DDR2, DDR3 memory interface (with ECC)

Other Attributes

- Good analytical and problem-solving skills
- Easy integration into a cross functional team
- Curiosity and eagerness to learn new technologies
- Sensitivity to “Cost”
- Sensitivity to “Time to Market”