

Samtel Avionics Ltd.

Job Description: Assistant Manager Hardware - Power Supply

Summary:

Experience: 4 + Years

Location: Samtel Avionics, Gurgaon

Education: ME/M.Tech/ME / B.Tech. – Electronics/Electrical Engineering

Industry Type: R&D, Manufacturing of state-of-the-art aviation displays based on LCD & LED backlights,

Role: Design & Engineering, Product Testing, Prototyping

Functional Area: Analog Electronics, Power Supply Design

Desired Candidate Profile

- Strong skills in Discrete Power Supply Design for electronic boards, strong fundamentals in analog electronics.
- Capable of Using simulation tools/design calculations for design and realization
- Power Supply Design and Electronics Module Design.
- Analog circuit simulation,
- Hardware testing and Verification.
- Design and tested board using Microcontroller and Discrete power controller IC.
- Power Factor correction circuit design for AC-DC Conversion.
- Design and Development of Power Transformers and Inductors for Power Converters.
- Having good knowledge of EMI filter design techniques.
- Having experience in AC-DC Converter & DC-DC Converter design and development.
- Component selection, schematic capture and providing design guidelines for PCB routing and verification of Component Placement and Gerber File.
- Prepared and validated schemes for DC/DC converters like Buck, Boost, Buck boost SEPIC and Forward Converter, EMI filter, LDO, Protection circuits like Over voltage, Over current Temperature monitoring, lighting protection, Inrush current protection and Reverse polarity protection) and RS422 interface for remote power ON/OFF.
- Prepared and validated schemes for AC/DC converters (Boost PFC / Interleaved Boost PFC, Vienna rectifier), EMI filter and Inrush current protection.
- Having knowledge in Push pull converter, half bridge, Swiss Rectifier, Vienna Rectifier and LLC Resonant converter. Bus interface SPI,I2C, RS232 and RS422.
- Design Presentation for the approval of Design Review Committee.
- Drawing up the BOM and Preparation of the Test Jig for Proto board validation.
- Power supply loop tuning using FRA (Frequency Response Analyzer)

Other Attributes

- Good analytical and problem-solving skills will be appreciated
- Compatibility to easily integrate into a team
- Curiosity and eagerness to learn new technologies

Additional Preferences -

- Knowledge of Other Software: Corel Draw, Photoshop, Solid Works, Auto Cad, Lab View, Matlab.