

Position Specification

Design Engineer SLPE

I have received a copy of this position specification and I understand the scope of my responsibilities and leadership duties:

Incumbent _____ Date _____

Manager / Title _____ Date _____

Approval Signatures	Approval Date
Department Head:	
Human Resources:	
President:	

POSITION SPECIFICATION

POSITION TITLE: Design Engineer
COMPANY: SL Power Electronics Corp. [SLPE]
POSITION LOCATION: Shanghai China
REPORTS TO: Shanghai Engineering Mgr (David Dai)
DIRECT REPORTS: None
DOTTED LINE REPORTS: None

OVERVIEW:

The design engineer will take the new development per the product specification or customer's requirement, and modification based on exist design platform. support engineering manager or (Sr. engineer) work for EVT and documentation creation, Manufacture pilot run supporting. The position requires communication with the engineering manager, NPI manager cross function team (DVT, mechanical, documentation, Safety) and manufacture engineering etc.

KEY RESPONSIBILITIES:

- Specification review and comments to team and NPI product manager, breadboard built and functionality /reliability estimate.
- Schematics study and make the schematics drawing with Pads, components study and selection, SPR submit, preliminary BOM extraction from power logic schematics drawing
- Setup development schedule with team leader and NPI manager, BOM cost estimate.
- Work with PCB engineers, mechanical engineer to get the PCB layout and mechanical parts designed, DFM reviewed, create design checklist. Drive the schedule.
- Transformer design / calculation, work with mechanical engineer to make the magnetics drawings
- Support proto operators to make the engineering samples, work with supplier , magnetic vender, to get the new parts /magnetics samples, drive materials.
- EVT testing, EVT checklist making and review with team leader, engineering manager.
- Support DVT samples building in manufacture, DFM review with manufacture engineering team,
- DVT checklist identifying, DVT samples confirming, support DVT performing. DVT checklist review with team leader, engineering manager and engineering VP.
- Documentation creating and release, drive the ECN signoff process
- Support the engineering team in analysis and troubleshooting of various power circuits and assemblies.
- Travel to manufacture in case technologies /engineering required for products pilot run, RMA etc.
- Travel to customer in case sales/marketing need for new products introduction /or failure analysis.
- Source, use and provide technical leadership for outside resources required to expedite and simplify new technologies and platforms.
- Perform other duties required.

EDUCATION/EXPERIENCE/QUALIFICATIONS:

- Bachelor's degree and 3+ years of experience in switching power supply design. Equivalent work experience in Electronics Engineering (power conversion focus is helpful), 8+ years in power supply design/development experience.
- Knowledge of eCAD products such as Pads software to make schematics and review PCB layouts.
- Familiarity with Labview is desirable
- Successful record of bringing products to production – switching power supply (for lighting or medical application and 500W+ should be helpful), as a designer.
- Demonstrated ability to initiate design method improvement plans and drive change.
- Strong understanding of the techniques and design tools required to speed development and reduce design errors. Like Mathcad etc.
- Knowledge of magnetics design, assembly and integration in power conversion circuits.
- Good verbal and written technical communication skills (specifications, technical writing, theory).
- Good English speaking, listen and written.
- Must be willing to travel to manufacturing and customer sites – typically < 4 - 6 days / quarter.

LEADERSHIP CHARACTERISTICS:

See attached scorecard –