

- **Location : Suwon**
- **Team/Dept. : Advanced Component Group**
- **Division : Mobile BU**
- **Title : Power System Architect**

Position Summary

As a power system architect, you will define key power components of mobile devices, their interactions and interfaces and decide on the technologies and resources to be used in the design/development. Work across organizations to gather various product and component requirements. You will also cooperate with our silicon suppliers to prepare new IPs, process and technologies for future silicon. Brainstorm and invent potential solutions. Analyze and compare solutions, and then drive team insights and architecture forward into system implementation and PMICs. Optimize power delivery trade-offs such as efficiency, solution size, performance impact, cost, development risk and other system considerations. Conduct feasibility studies and work with development teams to deliver solutions.

Department Responsibilities

- Architect and implement power solutions guided by data-driven to optimize system parameters.
- Design and implement proof of concept power solutions to target next generation designs;
- Work with hardware engineers to analyze power tree architecture and component selection trade-offs; Work cross-functionally across the organization to drive holistic solutions.
- Communicate with leading power IC vendors and track vendor roadmaps; Collaborate and influence these partners to obtain robust solutions for Samsung devices.
- Provide hand-off of designs to execution team with design analysis, risk assessments and mitigation plans, technical support for production issue debug and resolution; perform rigorous design reviews with silicon vendors and internal engineering teams.

Preferred Skills & Experience

- 5+ years of experience in PMIC design and/or definition
- Comprehensive understanding of Analog and mixed circuit operation
- Comprehensive understanding of Power conversion circuit operation (LDO, Buck, Boost, Buck-boost)
- Circuit simulation (Simplis, Pspice)