

## Hardware Engineer, Senior (KCI)

### SUMMARY:

Responsible for phone product sustaining, including alternate parts selection, components evaluation, and field return analysis. May perform as the Lead hardware engineer managing the development of RF, digital, analog, and power designs on CDMA handsets in Sustaining. Also responsible for integration of HW, SW, Mechanical, Antenna, Calibration, Test. Cross-functional interaction which requires excellent written and oral communication skills. A seasoned, experienced professional with a full understanding of area of specialization; resolves a wide range of issues in creative ways.

### REQUIREMENTS:

- Bachelor degree in Electronics or equivalent experience
- Masters degree a plus
- 5+ years related experience
- Proven technical leadership record in transceiver design and integration with good understanding of digital and audio design requirements for high volume handsets
- Knowledge of either: CDMA, AMPS, GSM or GPS RF circuits, subsystems, and test equipment
- Strong RF subsystem, circuit analysis, and optimization skills
- Experience in HW qualification of alternative parts
- Strong analytical skills in both circuits and mathematics
- Ability to read schematics and have good hands-on trouble shooting skills
- Working knowledge of memory timing analysis
- Fine pitch component soldering skill a plus
- Thorough knowledge of product structures, BOM, Agile, ECO and deviation process
- Working knowledge of common computer tools including MS Office
- Understanding of microprocessor architecture, particularly I/O functions
- Excellent verbal and written communications skills
- Excellent presentation skills
- Ability to work on sub-system design tasks with minimal supervision
- Excellent troubleshooting skills and strong knowledge of test equipment
- Ability to effectively interact with individuals from other disciplines to coordinate efforts and debug circuits

### KEY RESPONSIBILITIES:

- Performs sustaining engineering functions including design support, development and integration tasks for analog and digital circuits, digital communications baseband processors, and associated memory devices, LCD and LED display devices, electro-acoustic devices and circuits based on requirements generated from Project Leads
- Isolate system failure to component level, characterize failure such that further analysis at the vendor or in Engineering is defined and facilitated
- Seek alternative parts and implement on sustaining products to optimize cost and address part supply issues
- Help ensure that quality is designed into the product and to find a fix quickly in manufacturing and in the field
- Develops test procedures and design documentation
- Independently debugs and integrates analog and digital circuits
- Coordinates with other engineering groups including CAD, Configuration Management, Manufacturing, Test Engineering, Software and Systems
- Under the direction of project leads, performs tradeoff studies involved with modifying/optimizing current products and/or manufacturing processes
- Performs qualification and integration testing of recently redesigned circuit cards, modules, and/or components; and evaluates performance against predicted results and documents the test results
- Write designs and/or manufacturing documentation and presents at design and/or product reviews
- Develops and/or supports high-efficiency power supply circuits including battery charging, power regulation, and power management circuits
- Performs other related duties as needed

### PROBLEM SOLVING:

- Works on problems of diverse scope where analysis of data requires evaluation of identifiable factors
- Demonstrates good judgment in selecting methods and techniques for obtaining solutions
- Networks with internal and external personnel inside and outside own area of expertise

### WORK ENVIRONMENT/PHYSICAL DEMANDS/SAFETY CONSIDERATIONS:

- Works in an office environment
- May require some Travel