Alex Bahk

Leadership RF Engineering
Johns Creek, GA
-Email me on Indeed: http://www.indeed.com/r/Alex-Bahk/ff95b8cc2515c667

Leadership position in Wireless/RF Hardware Engineering

Willing to relocate: Anywhere
Authorized to work in the US for any employer

Work Experience

Lead RF Engineer
Acuity Brands Inc. - Johns Creek, GA
August 2018 to Present

• Prepared regulatory documents and submit for regulatory agency to obtain government regulatory certifications.
• Performed compliance tests, analyze the data and set compliance strategies.
• Designed antenna with EM simulation software, developed and verified antenna system performance.
• Designed 802.15 and BT RF circuits with ADS, developed and verified RF circuit with Python scripts.
• Worked with sales team and customer to evaluate new business opportunities and help prepare proposals and technical solutions.
• Managed, coached and mentored staff engineers.
• Provided wireless subject matter support and directives to cross functional teams in all phases of product life cycle.

Senior Staff RF Engineer
Universal Electronics - Irvine, CA
May 2011 to July 2018

•Select, review and qualify RF technology chipsets from various semiconductor manufacturers.
•Design and develop RF Electronic Products with various RF technologies including Bluetooth, Bluetooth Low Energy, Wifi, Zigbee, Zwave, SubGHz and NFC.
• Design and develop Antenna for 2.4GHz, 5GHz, and NFC using ADS, Momentum, FEM, and FDTD.
• Develop and implement RF Production Test for manufacturing.
• Conduct feasibility study, and set direction for wireless technology.
• Set RF specification for both internal and external customers.
• Create design verification test plan and manufacturing test plan.
• Drive Bluetooth, Zigbee, Wifi certification and FCC, CE, IC Government type approval.
• Resource manage RF engineers and support other functions including sales, marketing, and application engineers.

RF System Engineer
Amazon Lab126 - Cupertino, CA
June 2010 to April 2011

• Developed UMTS RF module for E-book Device.
• Developed RF Test Applications for development, production, and service center.

• Developed Production Test Data Analysis tool for Six Sigma.
• Managed and Production Supported Contract Manufacturer in China.

Senior Staff Engineer
Motorola
2003 to May 2010

•Developed Google's Android based UMTS - WCDMA/GSM product: PCB layout and stack up analysis, Microstrip and Stripline Design with ADS/Momentum, Schematic Entry, Impedance Matching with Network Analyzer and ADS, Loadpull Transmitter/PA, Sourcepull Receiver/LNA, Radiated RX sensitivity optimization.
Programmed and utilized Automated Test for TX/RX using Visual Basic.
•Developed RF TX Section of Symbian OS based UMTS flip phone.
•Developed RF Section for Rizr Z3. Z3 is GSM/GPRS/EDGE Cellular Phone shipped to T-Mobile.
•DFSS (Design for Six Sigma) Black Belt trained.
• Product Life Supporting CDMA products including V710, E815, T300P, V60x, V60p, V60s, V65p, T720C, and C343A.
• Worked with Software and Manufacturing team to drive product build performance, product improvement, cost reductions, quality improvements, and manufacturability improvements.
• Act as a focal point for problem solving issues involving electrical product design, factory, customer, and material issues. Stimulates root cause analysis, best solution selection and solution implementation.
• Identifies, communicates, and eliminates the technical product, production, and customer issues.
• Field testing CDMA products and resolve Network/System related issues including Call Performance, Authentication, and etc.
• Mentor Junior Engineers and Technicians.

Engineering Section Manager
Motorola - Seguin, TX
September 2002 to September 2003

•Worked directly with the customers at Verizon and General Motors.
•Filed FCC, Canadian, and Mexico Certification.

Lead RF Engineer
Motorola
January 2000 to September 2002

• Developed and launched TDMA V60 Mobile Handset.
• Supported production in manufacturing facilities in U.S. and Brazil.
• Achieved 15% cost reduction by redesigning and developing new components with new and existing vendors.
• Lead CDMA RF Team to redesign TX lineup to achieve cost reduction on CDMA StarTac.
• Worked with Purchasing, Commodity, Sourcing group and Sales to maintain cost effective production and to secure profit margin.

Senior RF Engineer
Motorola
January 1997 to January 2000

• Developed RF Power Amplifier, RF Coupler and Detector.
• Performed test on SAW filter, SAW Duplex, Antenna Switch, and overall RF operation of TDMA Cellular product against IS-137 RF requirement.

• Developed component specification for filters, PA, and Switch.
• Worked with multiple vendors to develop required parts and negotiated price.
• Developed RF Power Transmit Power Phasing Program, RSSI phasing program, Conducted Spur test program and others with Visual Basic.
• Worked with manufacturing from prototype to production stage on manufacturing process and engineering issues.

RF Engineer II
Motorola
June 1995 to December 1996

• Developed 500 watts Linear Power Amplifier for Two Way Paging Base Station.
• Performed Accelerated Life Test on Base Station. Performed FCC regulatory test.
• Performed Chinese Government regulatory test.
• Conducted Field Performance Test at customer's antenna sites.
• Worked with manufacturing engineer to develop manufacturing process and demonstrated to line workers.

RF Engineer I
Motorola
January 1994 to May 1995

Repaired and analyzed customer returned Power Amplifier for Paging Base Station.
•Developed Back Plane Board for Paging Base Station.
•Performed RF test on PA, Low Pass Filter, Detector, Circulator, Isolator, Combiner, Splitter and Antenna Cable.

Education

Bachelor of Science in Electrical Engineering
Illinois Institute of Technology - Chicago, IL
1993

Skills

• Test Automation

• C/C++

• ADS, EMPRO, HFSS, Xfdtd, Altium, Power Meter, Network Analyzer, Spectrum Analyzer, Signal Generator