

## Senior RF Design Engineer

The ideal candidate will have a minimum of a BSEE and with 7-10 years of practical work experience in RF and communication systems design activities. The position will offer the opportunity to work on the latest wireless technologies including Bluetooth, ZigBee, Wi-Fi, GPS and proprietary 900 MHz and 2.4/5.8 GHz radios. Experience with the design and integration of single chip, low power wireless transceivers from TI, Freescale, Atmel, Analog Devices, Broadcom, Marvell etc. is considered highly desirable. Digital radio design, wireless protocol experience and a familiarity with EMC/EMI regulatory and compliance standards is considered a plus.

Must be highly motivated and a self-starter that is able to work independently in a high paced and technology challenging environment servicing some of the leading wireless communications companies worldwide. Project management skills related to developing project proposals, managing project scope, budget and schedule are essential.

LS Research is located in historic Cedarburg, WI just 30 minutes north of downtown Milwaukee. Along with a competitive salary, we offer an excellent employee benefits package including health and dental coverage, eye care reimbursement, life and disability insurance, 401k profit sharing plan, 10 paid holidays, vacation and company events. Travel requirements are minimal.

Basic RF skills must include: filter design, impedance matching network design, small-signal (S-parameter) and power amplifier design. Further skill requirements include RF VCO and PLL design and implementation, register based single-chip transceiver application and integration. The candidate must be familiar with vector network analysis and BER measurement, proficient in the use of spectrum analyzers and digital signal generators and RF design and simulation tools such as ADS and CAD.

Communication system skills must include: link budget calculations, transmitter and receiver cascade calculations, phase noise and residual FM impairments analysis, developing radio system architectures and deriving frequency channel plans. In addition, experience with interference mitigation and managing coexistence with other radios is desired.

Additional skills desired: specific knowledge of standards-based wireless systems such as IEEE 802.11a/b/g/n, 802.15.4 (ZigBee), Bluetooth, GPS and FCC Part 90 land-mobile radio services. Familiarity with Electromagnetic Compatibility (EMC) standards: FCC Part 15, ETSI and device regulatory certification and compliance testing. Good project management skills using Microsoft Project to assess project schedule, budget and scope are essential.

Additional skills considered a plus include: Knowledge of DSP and DSP realizations in either DSP processors or FPGA's (using Matlab, Simulink, VHDL and Verilog), experience with antenna design and simulation utilizing CST Microwave Studio and the familiarity with the design of production test fixtures including developing automated test systems for Design Validation Testing (DVT) and Design for Manufacturing (DFM).