

Ritron, Incorporated 505 W. Carmel Drive · Carmel, IN 46032 Ph: 317-846-1201 Fax: 317-846-4978 Email: ritron@ritron.com Web Site: www.ritron.com

# **RF Design Engineer**

Ritron, Inc. a designer and manufacturer of wireless voice and data communications products is looking for an RF Design Engineer to support our growing engineering team in Carmel, Indiana (suburb of Indianapolis).

## Summary

Looking for an experienced hands-on individual contributor in the design and development of wireless products, RF circuits and signal processing components for conventional and software defined radio products. Should be experienced with PCBA development and troubleshooting and in resolving product design issues during the entire RF product lifecycle. Reports to the Chief Engineer.

#### **Major Duties**

- Design circuits and radio subsystems to meet product specifications and best practices
- Specifies components for BOM, creates detailed circuit schematics and other design documents
- Design for FCC compliance and EMI mitigation and adheres to applicable industry standards
- Provides technical collaboration with other engineers as needed
- Conducts or directs lab testing using oscilloscopes, data analyzers, VSGs, VSAs, and VNAs
- Tracks multiple tasks and projects. Identifies and reports obstacles
- Supports needs of manufacturing, test, and marketing departments throughout product lifecycle
- Supports FCC Certification and compliance working with third party test and certification services

## **Requirements for the Job**

#### Essential

- Able to design analog and RF circuits from baseband to 1GHz
- Able to design to applicable electrical and environmental standards
- Knowledgeable in Communications theory and modulation systems
- Experience with common RF design elements such as impedance matching networks, tuned circuits, lumped filters, micro strip and strip line circuits and RF power transistor matching networks
- Competence using RF lab testing and troubleshooting techniques and tools including oscilloscopes, VSGs, VSAs, and VNAs
- Time management and organizational skills with an ability to balance multiple priorities
- Excellent English written and verbal communication skills
- Ability to self-manage and adapt to occasional difficult working conditions
- Likes to work in a team environment and tolerates occasional travel

#### Desirable

- Designs FPGA firmware using VHDL and/or Verilog and writes microcontroller and DSP code using C/C++ and assembly language. Familiarity with digital logic and microcontrollers
- Grasp of networking basics and familiarity with 802.11, GPS, Ethernet
- US, Canadian, and ETSI certification experience and working knowledge of FCC Parts 2, 15 and 90,

# **Minimum Education and Experience**

- Bachelor's degree in Electrical Engineering, Master's preferred.
- Track record in radio (RF) product development and manufacturing
- At least 4 years of experience in RF communications product design

# Send resume to: nwilhelm@ritron.com or mail to Ritron Human Resources at 505 W. Carmel Drive, Carmel IN 46032

Ritron, Inc. is an Equal Opportunity Employer. Qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.