

JOB DESCRIPTION – Sr. Staff FPGA Engineer

Location: Rolling Meadows, IL

Date: July 14th, 2021

## **Scope of Responsibilities & Position Expectations**

The Rolling Meadows PMP FPGA team is looking for a lead FPGA developer who will be responsible for the following items:

- Contributions in all phases of product development lifecycle from conception through • implementation of features, integration, and test.
- Document designs and interfaces.
- Design and Implement RF control algorithms. •
- Develop and Optimize RF PHY implementation. •
- Refactor existing code to improve efficiencies with respect to Timing closure and Device Fit. •
- Interact and coordinate with members of other engineering and production teams. •
- Assist with the diagnosis and resolution of customer problems. •

## Specific Knowledge/Skills

Required (Technical):

- Experience with design and analysis of static microwave wireless systems including: •
  - RF - MIMO and MU-MIMO OFDM Systems
  - MAC Familiarity with MAC layer design concepts •
  - PHY FFT, Coding, Interleaving
- Experience with FPGA development and debug tools
  - RTL design and simulation using Verilog and VHDL
  - SDC timing constraints
  - Design methods to obtain timing closure and fit
  - FPGA design tools such as Altera Quartus, TimeQuest, SignalTap, Xilinx Vivado
  - Simulator tools such as Aldec Riviera
- Experience with SoC architectures such as Altera Cyclone V SoC and Xilinx Zyng •
- Strong analytical, problem solving and creative abilities. .
- Good verbal and written communication skills. •
- Interface with other Engineering teams (Hardware, System Test, Marketing, Documentation).



## Desirable:

- Knowledge of networking protocols such as TCP/IP stack.
- Knowledge of RF principles.
- Experience with C programming.
- Experience using Oscilloscope and Spectrum Analyzer.
- Experience of working under distributed version control (e.g. GIT or Mercurial).
- Experience of working in cross site, multinational teams.
- Experience with scripting languages like TCL, Python, Linux Shells.