

Senior Millimeter-Wave/RFIC Designer

Description and Responsibilities

Peraso Technologies, Inc. is seeking an experienced RFIC designer responsible for the development of complex circuits from DC to 80 GHz to be used in fully integrated millimeter-wave (mm-wave) transceivers. The successful candidate must have hands-on experience designing several of the following circuits:

High-frequency (>10 GHz) front end: LNA, PA, modulator, mixer, LC-VCO, frequency divider/multiplier, switch, filter and phase shifter.

Mixed Signal: PLL/DLL, ADC, DAC, VGA/AGC

The candidate must also be skilled in the design and modeling of custom inductors, baluns, hybrids, transformers and transmission lines.

Additional responsibilities include:

- Develop high performance RFIC blocks for mm-wave transceivers using Cadence tools.
- Understand mm-wave transceiver specifications and translate them into circuit-level specifications. Excellent problem solving and analytical skills are essential.
- Design and verification of calibration algorithms such as DC cancelation, VCO setting, LO rejection, IQ gain and phase mismatch. Use of internal ADC/DAC for digitally controlled loops.
- Proficient in Spice-like block level simulation (Spectre, Goldengate) for linear, non-linear, and noise analysis. 3D EM simulation experience is a plus.
- Execute physical layout of all circuits and have a thorough understanding of all layout requirements.
- Participate in IC assembly, SOC verification and lab evaluation.
- Present and participate in regular design reviews.
- Prepare and maintain project documentation including general specification, circuit description, and evaluation reports.

Requirements

M.Sc. in Electrical Engineering or related field. Ph.D. is highly desired.

At least 5 years of design experience in transistor-level RFIC circuit design including both state-of-the-art deep sub-micron CMOS and BiCMOS technologies; III-V experience could be considered.

Experience at or above K-band is highly desired.

Experience with Verilog-A/AMS and Matlab for system modeling and verification is an asset

Experience with high volume IC manufacturing is a plus.

Hands-on experience with high-speed test equipment and bench test skills.

Ability to take on tasks outside area of expertise.

How to Apply

If you are interested in applying for this position send your resume to jobs@perasotech.com