Position Summary

Title	Digital Design Engineer
Team	R&D
Location	Montreal
Employment Type	Permanent

Job Description

Introspect seeks a full-time, experienced and dynamic FPGA designer to join our outstanding R&D team. As a member of our world-class team of ASIC and transceiver-based FPGA specialists, you will be actively involved in architecture definition, system design specification, development, verification and support of ASIC, FPGA and system-on-a-chip (SoC) semiconductor products that are integrated into Introspect's equipment.

This position offers a unique opportunity to work at a rapidly growing global company and to serve leading edge technologies such as MIPI, PCI Express, USB, and 100G/400G telecommunications standards. It also offers the opportunity to explore highly sophisticated digital design techniques and advanced discrete-time signal processing and filtering technologies. Designs developed by successful candidates will be used to enable communications systems, machine-learning platforms, data-center accelerators, as well as low-power mobile solutions.

The ideal candidate is a driven, self-motivated, and highly cooperative top performer who thrives in a flexible engineering environment. The ideal candidate also possesses characters of good judgment, communication, and eagerness to learn and adapt, and he/she is very helpful to his/her peers.

Responsibilities

- Implementation and documentation of highly sophisticated SerDes-based FPGA designs at the RTL level and embedded software level;
- Development and documentation of system-on-chip IP cores for internal or external use;
- Development and documentation of test benches, verification flows, and functional models;
- Key contribution to system, board and FPGA design and implementation;
- Analysis of customer requirements and proposal of architectural solutions;
- Key contribution to our design process and methodology;
- Participation in the debug, performance verification, maintenance and documentation processes;

Qualifications

- Only self-motivated and highly cooperative top performers will be considered for this position;
- Bachelor's degree in Electrical Engineering or equivalent; a Master's degree is highly desired;
- Minimum of 5 years of experience in FPGA or ASIC design with emphasis on SerDes technology;
- Hardware design experience (Verilog and SystemVerilog);
- Advanced knowledge of ASIC and FPGA design flows; strong digital debug insights;
- Experience with high-end FPGA tools targeting Intel, Xilinx, and Lattice;
- Advanced knowledge in timing analysis and leading-edge synthesis tools;
- Meticulousness combined with excellent organizational skills to achieve quality, cost and delivery objectives;
- Rigor: possesses a strong sense of organization, detailed execution in order to achieve quality, cost and time objectives;