Job Description: **Firmware/FPGA Engineer (Position to be in Binghamton, USA)**

Reporting to: **General Manager – DV-USA**

Purpose:

- Develop and implement leading edge firmware designs for D&V emulator based products.
- To research and develop 'next-generation' concepts and technology; targeting future product and / or innovation development

Responsibilities:

- Develop and implement detailed FPGA and microcontroller/ firmware designs
- Develop product firmware; meeting safety, reliability, cost, manufacturing and performance requirements
- Develop and maintain firmware life cycle on D&V products
- Design embedded software for microcontroller based systems in C
- Design FPGA firmware in VHDL
- Establish functional test plans/procedures against design(s), and perform functional verification
- Plan and execute validation and verification requirements
- Develop interfacing logic to enable functionality (FPGA)
- Lead the integration of systems for high-complex mixed-signal applications
- Preparation of technical and regulatory documentation, including drawings, and production documentation
- Use computer assisted design software and tools to perform design tasks
- Participate in design reviews, project meetings and time/cost budgeting
- Liaise with the customer, vendor, internal engineering and manufacturing; to ensure the product meets the customer requirements and standards

Education and Experience:

- Degree in Electronics / Electrical Engineering, Master's degree or higher is preferred
- 5+ years demonstrated experience in full life-cycle of firmware development, verification and certification preferably in custom testing equipment
- Good working experience on analog, digital and power hardware designs
- Experience with hardware/firmware integration
- Experience in VHDL coding for FPGA preferably for devices (typically Altera or Xilinx)
- Hands on experience on Microchip and Analog Sevices Sharc controller/DSP/FPGA based hardware systems
- Must have an understanding of electronics schematics
- Experience in generation of acceptance test procedure (ATP)
- Must have hands on experience on simulation/design validation tools, preferably SignalTap
- Hands on experience on functional testing, debugging, lab equipment and all documentation
- Strong organizational, analytical and problem solving skills required
- Results oriented, self- motivated, and able to work with minimal supervision
- Must be able to live and work in the USA