



THURLBY THANDAR INSTRUMENTS LIMITED

Job Title:	Senior Design Engineer FPGA Design	Level/Salary Range:	Senior Engineer
Department	Development	Position Type:	Full time
		Travel Required:	No
Head line			
<p>An (MSc /PhD) or graduate engineer with min 5 years' experience in high speed digital hardware FPGA design and verification using VHDL.</p> <p>This is an exciting opportunity for an FPGA Design Engineer to lead the digital design within a team to extend and enhance Aim-TTi branded test and measurement products.</p> <ul style="list-style-type: none"> • Specify and design future bench top and handheld for the test and measurement market e.g. Signal Generators and Spectrum analyzers • Supervise and inspire junior engineers. • Support existing designs in production 			
Job Description			
<p>ROLE AND RESPONSIBILITIES</p> <ol style="list-style-type: none"> 1. Working within a team to develop products to agreed requirements, specification, cost and time scales. 2. Maintain product and company reputation by complying with required statutory regulations. 3. Evaluate applications, products and components by designing and conducting research programs. 4. Prepare product reports by collecting, analysing and summarizing information and trends. 5. Provide engineering information and customer support by answering questions and requests. 6. Maintain professional and technical knowledge by attending educational workshops; reviewing professional publications; establishing personal networks; participating in professional societies. 7. Contribute to team effort by accomplishing related results as needed. <p>QUALIFICATIONS AND EDUCATION REQUIREMENTS</p> <ol style="list-style-type: none"> 1. Minimum 5 years of experience in digital hardware FPGA design and verification using VHDL. 2. PhD, MSc or BSc in Electronics Design or related course. <p>REQUIRED SKILLS</p> <ol style="list-style-type: none"> 1. Thorough understanding of VHDL, the FPGA design process and the tools used to generate the FPGA designs (MATLAB, VHDL, Synthesis, Place and Route, Simulation, Timing Analysis and Timing Closure), then integrate and test of the FPGA on the circuit card assembly 2. A strong background of high-speed FPGA design using VHDL for Digital Signal Processing designs including: FIR, IIR, CIC digital filters, data sample manipulation, DMA, DDR RAM, communication protocols. 3. Experience with Direct Digital Synthesis (DDS) 4. Experience with FPGA Development tools: Xilinx Vivado and or Intel (Altera) Quartus Prime <p>PREFERRED SKILLS</p> <ol style="list-style-type: none"> 1. Knowledge of embedded processors, C programming language imbedded processors (ARM preferred) 2. Experienced Digital hardware design – schematic design of digital Hardware Processor and FPGA PCB. 3. Knowledge of Xilinx SoC, integrated processor, on FPGA 4. Experience with HF, UHF and/or RFID software defined radio-based systems desired 5. Experience in Test Automation is a plus 			