

## **Job Title:** 5G NR Open DU Card – HW/SW Integration Engineer

**Job Summary:** We are seeking an experienced engineer to drive hardware–software integration for a 5G NR Open Distributed Unit (O-DU) card. This role involves close interaction between board-level hardware, FPGA/SoC platforms, and Layer 1 RTL to ensure seamless bring-up, validation, and performance optimization of DU systems in an O-RAN environment.

### **Key Responsibilities:**

- Lead integration of Open DU cards software and hardware based FPGA platform
- Integrate RTL of **PHY Layer (L1)** software with hardware accelerators
- Develop and debug **device drivers**, BSP, and low-level interfaces (PCIe, Ethernet, etc.)
- Perform system-level debugging involving logs, traces, and hardware probes (oscilloscopes, logic analyzers)

### **Required Skills:**

- Strong experience in **5G NR or LTE systems**, especially DU architecture
- Hands-on experience in hardware–software integration / board bring-up
- Proficiency in **C/C++** and embedded systems programming
- Solid understanding of Linux kernel, device drivers, and BSP development
- Experience with high-speed interfaces: PCIe, Ethernet, etc
- Familiarity with **FPGA/SoC platforms** (e.g., Xilinx, Intel)
- Understanding of **Layer 1 (PHY)** processing and real-time constraints
- Experience with debugging tools: JTAG, oscilloscopes, protocol analyzers
- Knowledge of **eCPRI / O-RAN Open Fronthaul**

### **Educational Qualifications:**

- Bachelor's or Master's degree in Electronics, Electrical Engineering, Telecommunications, or Computer Engineering. FRESHERS ARE NOT ALLOWED.
- ❖ Interested candidates may email their resumes to [comet@iiitb.ac.in](mailto:comet@iiitb.ac.in) and mention the role for which you are applying clearly in the subject of the email.