Position: Technology Manager (Systems Engineer)
Facility: Packaging and Systems facility (PASF)
Location: CeNSE, IISc Bengaluru

Position Overview

We are seeking a technically strong, proactive and execution-oriented Team Lead – Systems Engineer to lead multidisciplinary engineering activities at PASF, CeNSE, IISc.

The successful candidate will be responsible for coordinating and driving embedded systems, FPGA and PCB development activities, ensuring timely delivery of engineering milestones, and overseeing laboratory operations and infrastructure.

The role requires a combination of hands-on technical competence, engineering judgment, project management, team leadership and operational accountability. The candidate should be capable of independently identifying technical and operational bottlenecks, developing solutions and ensuring their effective implementation.

Technical Requirements

- Strong understanding of embedded hardware and software development workflows, including C/C++, Python-based scripting and automation, and MATLAB-based simulation and analysis.
- Experience with FPGA design, development, verification and testing using VHDL/Verilog and toolchains such as Vivado or Quartus.
- Working knowledge of PCB schematic capture, layout, fabrication, assembly, testing and debugging, including familiarity with tools such as Altium Designer.
- Ability to review engineering designs, assess technical progress, identify integration challenges and guide engineers in troubleshooting and resolving issues.
- Experience with hardware–software integration, system-level debugging, instrumentation and validation of electronic systems.
- Familiarity with engineering documentation, design reviews, test procedures, quality control and structured development practices.
- Experience coordinating procurement, vendor interactions, equipment installation, commissioning and maintenance.
- Familiarity with laboratory infrastructure, inventory management, safety procedures and administrative processes.
- Experience with electronics assembly and packaging equipment, including pick-and-place systems, would be an advantage.
- Prior experience with staff onboarding, technical training and institutional administrative procedures would be desirable.

Roles and Responsibilities

1. Technical Leadership and Engineering Execution

- Lead and coordinate a multidisciplinary team comprising embedded systems, FPGA and PCB design engineers.
- Translate project objectives into clearly defined technical tasks, milestones, timelines and measurable deliverables.
- Provide technical direction, review engineering progress and ensure that design, development, integration and testing activities meet project requirements.
- Identify technical bottlenecks, facilitate troubleshooting and drive timely resolution of engineering challenges.
- Ensure effective coordination between hardware, firmware, FPGA and PCB development activities.
- Promote rigorous engineering practices, including design reviews, validation, documentation and systematic debugging.

2. Team Management and Accountability

- Allocate responsibilities based on project priorities, technical requirements and individual capabilities.
- Establish clear expectations for deliverables, monitor progress and ensure accountability for assigned responsibilities.
- Mentor engineers, facilitate knowledge sharing and identify technical training requirements.
- Foster a collaborative, disciplined and outcome-oriented working environment.
- Proactively identify resource constraints, execution risks and dependencies, and recommend corrective actions.

3. Project Planning and Delivery

- Independently manage engineering work packages and coordinate their execution from planning through implementation and validation.
- Develop and maintain project schedules, track milestones and communicate progress to the Principal Investigator(s).
- Coordinate cross-functional projects involving electronics, packaging, instrumentation and other technical teams.
- Ensure timely completion of project deliverables while maintaining engineering quality and effective resource utilisation.
- Support the planning and execution of developmental projects, technology initiatives and training programmes under PASF.

4. Laboratory Operations and Infrastructure

- Oversee day-to-day laboratory operations, ensuring that facilities, equipment and technical resources remain functional and accessible.

- Coordinate procurement of components, instruments, tools, software licences and laboratory equipment.
- Manage vendor interactions, purchase processes, equipment servicing, repairs and maintenance.
- Supervise laboratory setup, equipment installation, commissioning, inventory management and workspace organisation.
- Coordinate the development and commissioning of new technical capabilities, including electronics assembly and packaging infrastructure.
- Ensure adherence to laboratory safety, equipment maintenance, documentation and quality standards.

5. Coordination and Reporting

- Serve as a key interface between the engineering team, Principal Investigator(s), institutional administration, vendors and external collaborators.
- Provide structured updates on project progress, technical challenges, resource requirements and upcoming milestones.
- Coordinate administrative activities related to recruitment, onboarding, procurement and laboratory operations.
- Maintain appropriate technical and operational records to ensure continuity, traceability and effective project management.

Key Expectations

The successful candidate will be expected to demonstrate:

- **Technical ownership:** Ability to understand engineering challenges, exercise sound technical judgment and drive solutions rather than merely coordinate activities.
- **Independent execution:** Ability to manage multiple parallel activities with minimal supervision and ensure their timely completion.
- **Leadership and accountability:** Ability to set clear expectations, support team members and take responsibility for collective deliverables.
- **Problem-solving initiative:** A proactive approach to identifying risks, resolving bottlenecks and improving engineering workflows.
- **Operational discipline:** Strong organisational skills, effective resource management and consistent attention to documentation, safety and quality.
- **Effective communication:** Ability to communicate technical and operational matters clearly with researchers, engineers, administrators and external stakeholders.

The position requires an individual who can combine technical depth with organisational effectiveness and take end-to-end responsibility for the execution of engineering activities and the smooth functioning of PASF.

Eligibility:

- **Qualifications:** B.E./B.Tech./M.E./M.Tech. in Electrical Engineering, Electronics and Communication Engineering, or a closely related discipline.
- **Experience:** 5–8 years of relevant industry or laboratory experience in hardware and embedded systems development, including demonstrated experience in technical team leadership and project execution.

Renumeration:
Negotiable, based on experience and interview performance

How to apply:

- Please apply online using the following link:Technology Manager (Systems Engineer) || CeNSE, IISc, Bengaluru- Application Form – Fill out form
- **Deadline to apply: 11-December-2026**