Orbit Grid Private Limited
Decouple the growth of Intelligence from the limits of the Earth.
303-B Harsh Residency, Sunpharma Road, Vadodara, 390020
CIN: U61309GJ2026PTC174394 GSTIN: 24AAFCO0876N1Z2

Job Description

Role: Avionics/ Electrical Engineer **Location:** Remote initially, transitioning to Ahmedabad within 6 months. **Type:** Full-Time

About Orbit Grid

As global data processing demands outpace terrestrial land, power, and environmental constraints, Orbit Grid is pioneering the next tier of digital infrastructure: multi-tenant, shared orbital datacenters. We are building the foundational hardware and software stacks that allow high-performance, server-class compute infrastructure to be deployed, shared, and scaled directly in space.

The Engineering Challenge

We work at the intersection of aerospace, high-density compute, and systems engineering to build spaceborne hosting capabilities. Operating shared compute clusters in Low Earth Orbit requires routing unprecedented levels of power to multi-kilowatt payloads, while maintaining deterministic command, control, and data handling across a distributed spacecraft architecture.

You will be architecting the power conditioning and distribution networks, avionics compute stack, and high-speed interfaces required to keep heavy digital infrastructure stable under fluctuating multi-tenant compute loads, in an environment defined by extreme thermal gradients, radiation exposure, and zero tolerance for failure.

What You Will Do

- **System Architecture & Trades:** Define avionics and power subsystem architectures from first principles. Conduct trade studies across power topologies, bus voltage selection, processor and FPGA platforms, and communication protocols. Produce block diagrams, interface control documents, and requirements flow-down to component level.
- **Power Delivery Architecture:** Design and develop high-efficiency power electronics and conditioning systems.
- **Custom PCB Design:** Route high-speed digital and power interfaces, balancing stringent EMI/EMC requirements for spaceflight.
- **Hardware Integration:** Integrate and interface with complex silicon architectures, ensuring reliable data transmission and power stability under heavy load variations.
- **Testing & Validation:** Develop test benches and hardware-in-the-loop simulations to stress-test power systems before integration.

Qualifications

- **Base Qualifications:** 1–2 years of professional experience in PCB layout and power electronics design. High proficiency in Altium Designer, KiCad, or similar tools. Solid understanding of DC-DC converters and board-level power distribution.
- **Advanced Qualifications:** 4+ years of experience designing complex, multi-layer high-speed digital or heavy power boards (aerospace, electric vehicles, or server hardware). Expert knowledge of signal integrity, power integrity, and EMI/EMC mitigation strategies.

Compensation and Benefits

- Initial monthly stipend during the remote onboarding period.
- Substantial founding-team equity package with standard vesting terms.
- Full-time salary matching local deep-tech standards upon relocation to Ahmedabad.
- Relocation assistance to Ahmedabad within the 6-month window.

To Apply: Send your CV, a portfolio demonstrating structural analysis/mechanism design, and a brief write-up to **contact@orbitgrid.in**