



Electronics Hardware Engineer – Circuit Design

Role Description

Quantum Dice is hiring an **Electronics Hardware Engineer – Circuit Design** to work on the design of electronics hardware/circuits for our Quantum Random Number Generator (QRNG) products. The successful applicant will be part of the team developing the post-processing electronics behind the Quantum Dice's QRNG chips and will be working alongside the scientists and photonics engineers to develop new products in the Quantum Dice portfolio.

You will be working in a fast-paced and rapidly growing start-up environment, with a friendly, supportive, and ambitious approach. We have a strong culture of trust and respect and can offer lots of varied opportunities and responsibilities for our teams to take ownership of and grow with. We value creativity, integrity, ambition, meaningful teamwork, and fun. We are looking for people with drive and passion. You will be collaborating with a growth minded, diverse team

Skills, Experience and Qualifications

- Proficient in electronics circuit design and using schematics design tools.
- Have strong analytical & design skills in Analog/Digital circuits, communication peripherals and memory interfaces.
- Highly experienced in all stages of hardware product development lifecycle (Idea conception, design knowledge at architecture and circuit level, development, validation and production support of electronic systems).
- Excellent knowledge of high-speed design methodologies and simulations, including high-speed bus technologies such as Ethernet, USB, PCIe etc. Basic knowledge of other interfaces such as UART, SPI, I2C etc.
- Must have worked in system design of either of the following; processing units: Microprocessor/Microcontroller/ SoM/SoC/FPGA and memories: DDRx/FLASH/EEPROM.
- Well versed in board-level power supply designs (Buck, Boost, LDO, Linear etc.)
- Excellent circuit/systems troubleshooting/debugging skills and strong knowledge of test equipment such as mixed-signal oscilloscopes, logic analyzers etc.
- Independently perform PCB layout reviews, component selection, BOM preparation and BOM optimization.
- Experience in simulations and analysis: Signal Integrity (SI), Power Integrity (PI) & Power Distribution Network analysis (PDN).
- Preferred experience with design and simulation tools: Orcad/Altium, Hyperlinx/Sigrity, LTSpice/PSpice.
- Have basic knowledge of various EMC/EMI control methods and implementation at the circuit level.
- Independently perform board bring up, soldering, testing, root cause analysis and design documentation.
- Highly experienced in interacting with component distributors/PCB fab houses/Mechanical vendors.
- Basic understanding and knowledge of RF concepts/systems/circuits will be a plus.
- Experience with photonic chip integration would be beneficial.
- Excellent verbal, analytical and problem-solving skills.
- Ability to work on system-level design tasks with minimal supervision.

Application Template

When applying, please answer the questions below in a separate letter. This will help the person reading your application make a decision based on the same criteria, which we believe, will make the hiring process fair and consistent.

- What do I expect to be doing at Quantum Dice?
- Why am I the right person for this position?
- What are my relevant qualifications/experience for this position?



Job Type

Full-time

Starting Date

Immediately

Benefits

- Stock option plan
- 28 days annual leave
- Career Development
- Mentorship Opportunities
- Rewards and Recognition
- Flexible working from home options

Our Locations

Quantum Dice safely transitioned into our offices and labs at the Oxford Centre for Innovation in Oxford, United Kingdom.

Diversity & Inclusion

We strive to create a diverse environment and to be an equal opportunity employer. This means that all qualified applicants will receive consideration for employment without regard to national origin, age, sex, race, disability, pregnancy, marital status, sexual orientation, gender identity or expression, or religious background.

Please email your CV and Cover Letter to jobs@quantum-dice.com

Quantum Dice Ltd.
New Road, OX1 1BY Oxford
jobs@quantum-dice.com