



BTL India

BTL is one of the major manufacturers of medical equipment globally. BTL's major segments include Rehabilitation & Orthopedics therapy, Cardiovascular systems and Aesthetics medicine.

BTL India focusses on the end-to-end research & development of new medical devices for global market, from idea to serial production at our manufacturing facilities in Europe.

BTL India development center is seeking a highly motivated electronics hardware Engineer with 4 to 8 years of experience to join our dynamic team. The successful candidate will play a key role in the design and development of innovative medical devices.

ROLES AND RESPONSIBILITIES

As part of the New Product Development (NPD) team, the candidate should be able to perform the following duties, but they are not limited to the following:

- Requirement detailing
 - Responsible for understanding the system/product requirements
 - Derive the hardware requirement specifications
 - Derive the Hardware interface specifications for software
- Hardware System / Subsystem design
 - Propose innovative hardware ideas and apply technical expertise to solve complex design challenges.
 - Take ownership and lead the conceptual studies by designing, building, testing, and troubleshooting feasibility prototypes at the module or system level.
 - Involve in component selections, draw the circuit designs (schematics entry), perform circuit simulations, BOM management, PCB design and layout reviews
 - Prepare the hardware detailed design documentations for the designs
 - Contribute to the integration of various hardware sub-systems of the product, including cables and connectors, into the mechanical assembly
 - Identify the technical risks in the design, propose / implement mitigation strategies and actively participate in DFMEA processes
- Design Qualification
 - Prepare the hardware test plans and perform necessary hands-on testing at circuit level / module level / product level to evaluate the circuit design and system performance.
 - Plan and perform pre-compliance testing for EMI/EMC and safety tests
 - Understand the identified technical issues and work on their closures
- Collaboration
 - Work closely with project manager and other hardware engineers to deliver the assigned task/project with quality within the timelines.

- Coordinate with cross functional teams including software and mechanical engineers, purchase team and production teams to ensure cohesive project execution.

ESSENTIAL QUALIFICATION AND EXPERIENCE

QUALIFICATION:

- BE/B.Tech/ME/M.Tech in Electrical/Electronics/Biomedical engineering or equivalent
- 4 to 8 Years of experience in working with Hardware designs

TECHNICAL COMPETENCY:

- Experienced and strong expertise in Analog circuit designs - involving Op-amps, instrumentation amplifiers and ADCs for data acquisition.
- Experienced in hardware design involving Microcontrollers / Microprocessors. Good understanding of their architecture, operation and the hardware requirements for designing circuits using them.
- Familiar with HW-SW interface specification and defining them
- Knowledge of communication protocols like UART, SPI, I2C, RS232, USB, Ethernet
- Know-how on power supply designs: DC- DC converters (Buck/Boost/LDOs)
- Tool competency: Circuit simulation tools, Schematic & Layout tools: Altium or similar
- Experience in using lab equipment like DMMs, Oscilloscopes, power supplies, Signal generators, LCR meter and Electronic load.

BEHAVIOURAL COMPETENCY:

- Good analytical skills
- Passion for success and being proactive
- Systemic and going in-depth approach
- Be flexible, hands-on and willing to learn new technologies
- Be a good team player, with good collaboration skills.

ADDITIONAL COMPETENCY/EXPERIENCE

- Understanding and working knowledge of medical standards IEC60601-1
- Awareness of EMI/EMC tests and design for its compliance.
- Awareness of embedded programming is a plus

BTL is a global leader in the field of development and production of medical devices for physiotherapy and is a well-respected company within the field of cardiology and aesthetics with a constantly growing share of the worldwide market. BTL has its own R&D units in five countries. We have two factories in Europe where our broad product portfolio is produced from which it is distributed under the BTL brand name to more than 100 branches and business partners around the world. From its establishment in 1993, the company has been building up a complex technological know-how across a wide spectrum of fields. The philosophy of the company is to create technologically unique products with high added value, top quality and original industrial design.

