

Ref. No: AF/EE/2024/JD/1

<u>Detailed Job Description</u>

Job title : Hardware Design Engineer

Reporting to : Manager – Electronics Department

Salary: Industry par CTC

Hours : Full time

Location: Vidyaranyapura office, Bangalore.

Travel: Occasional National and International travel required

Purpose of the position

To be part of the Embedded Design Team and deliver quality Hardware & PCB design outputs which meets high standard product design.

Candidate profile

- Strong knowledge of Hardware Design & Development with experience of 3 5 years.
- Experience with Analog, Digital and mixed signal circuit design.
- Knowledge of Micro-Controller architectures and its interfacing.
- Ability to design circuits, perform design calculations and simulations.
- Microprocessor / Controller Experience TI, NXP, Renesas & STM32 Microcontrollers.
- Hands-on experience with communication protocols like CAN, I2C, SPI and RS-485.
- RF, Analog, DAC.
- Wired Connectivity Ethernet, USB etc.
- Test and Debug (skill using emulators and debugger) Board Bring Up, Interface testing, Level zero coding.
- Should be proficient with usage of LAB equipment's like oscilloscopes, logic analyzers, current and voltage probes etc.
- Study the customer requirements and project guidelines/execution methodologies and quality assurance programmes.
- Hands-on experience for electronic component/packages selection and ability to interact with suppliers whenever needed.
- Experience in working on component obsolescence, product sustenance and design enhancement projects.
- Basic knowledge of OrCAD, Allegro PCB.



- Basic knowledge of Schematic & PCB designs.
- Basic knowledge in Firmware development using C/C++.
- Responsible for complete documentation package including BOM, layout, fabrication & assembly drawings.
- Candidate will also work directly with PCB fabricators on technical questions and fabrication issues.
- Self-driven and proactive on problem solving and test/debug of the designed product.
- Skills in device driver development, Linux porting on ARM processors is an added advantage.
- Handled the tasks of preparing documentation of detailed design of circuits.
- Possess good judgment and decision-making skills.
- Possess Good Communication skills.

Academic & trades qualifications

Essential	Desirable
B.E. / Diploma in Electronics / B.Sc /	Any certification on Embedded
M.Sc	Design courses.

Work experience & skills

Essential	Desirable
Exposure on Micro-	
controller/processors, TI, NXP, STM32	Live project experiences.
Micro-controllers. Exposure on debugging skill using	Experience with Analog, Digital and mixed signal circuit design.
emulators and debugger – Board Bring Up, Interface testing, Level zero coding. C/C++, Linux porting on ARM	Hands-on experience with communication protocols like CAN, I2C, SPI and RS-485.
processors, Schematics and PCB design.	



Personal qualities & behavioral traits

Essential	Desirable
Excellent Written and verbal communication skills.	Self-driven and proactive on problem solving and test/debug of the designed product.

