Job Description

Position Title	Embedded Design Research Engineer

A. Position Purpose & Summary:
Tasks includes electronic circuit and hardware design and testing. Development of software to test the hardware as well as software tools for writing firmware are also required. The selected candidate will be an integral part of the entire process from initial idea to finished product.

	B. Primary Duties & Responsibilities:
1	Realization of complex system requirements to provide robust and reliable hardware solutions
2	Design and implement software of embedded devices and systems from requirements to production and commercial deployment
3	Responsible for the complete implementation of detailed technical items/features and an understanding/appreciation of system level items.
4	Design, develop, code, test and debug system software
5	Support software QA and optimize I/O performance
6	Interface with hardware design and development
7	Coordinate with lead engineer and team manager on product / project execution on a continuous basis.
8	Assess third party and open source software
9	Responsible to produce IP's (if any) from novel design for patent submissions, journal, conference papers

C. Accountability & Authority
1. Successful design, verification, qualification of embedded product and system
2. Take responsibility for design and overall quality of the embedded hardware and software part of product
3. Grow Intellectual Property Profile: IP Filed, Trade Secret, Commercialized IP

Position Requirements

C. Academic Qualification:

■ Phd   ■ Master's   ☐ Degree   Others (Pls specify)_____

■ Engineering   ☐ Information Technology   ☐ Science   ☐ Marketing / Business

☐ Finance / Management   ☐ Others (Pls specify) _____

D. Experiences:

☐ Fresh   ■ 3 years   ☐ 5-10 years   ☐ More than 10 years

■ R&D   ☐ Information Technology   ☐ Manufacturing   ☐ Oil & Gas   ☐ Finance / Admin

☐ Sales / Marketing   ☐ Others (Pls specify)

E. Technical Skills	F. Soft Skills
Experience in hands-on development and troubleshooting on embedded targets	Excellent written and oral communications skills
Proven experience in embedded systems design with preemptive, multitasking real-time operating systems	Able to work independently on complex technical and/or engineering tasks
Minimum of 2 years of technical engineering experience in embedded control based designs	Flexible to respond to dynamic work and customer needs environment
Excellent knowledge of analogue and digital electronic circuit design.	Must be willing to work in an unstructured environment
Familiarity with software configuration management tools, defect tracking tools, and peer review	Excellent hardware / embedded software troubleshooting skills.
Experience with microcontrollers (for example, MSP430, ARM Cortex, TI C2000.)	
Able to support/debug system integration	
Excellent knowledge of OS coding techniques, IP protocols, interfaces and hardware subsystems	

Additional Preferences
Preferably a Master's or PhD candidate
Experience in Product level Testing, Characterization and Qualification
Knowledge of Power Electronics and Control Engineering