

Job Description (JD) – Control design Engineer

QUALIFICATION:

B.E/B.Tech/M.E/M.Tech in Electrical Engineering with minimum 70% to have interest to design control system for electromechanical devices.

REQUIREMENTS:

- Expertise in motor control techniques and basic awareness of electrical machines like BLDC, PMSM, VSIM, SRM etc.
- Hands on experience working for various peripherals, analog & digital circuits, power electronics and sensors like serial EEPROM, DMA, ADCs, DACs, various digital interfaces, opto couplers, current/voltage sensors, op-amps, encoders, SMPS, IGBT/MOSFET/Inverter drivers, etc.
- Expertise in embedded development domain on 8/16/32 bit microcontroller and DSP based controllers
- Hands on experience with various communication protocols like I2C, SPI, ModBus, wireless etc. and worked in the field of motor controls.
- Expertise in C, C++, VB, assembly language programming and experience of using communication protocol analyzers, logic analyzers, oscilloscopes, in-circuit emulators & compilers etc.
- Understanding of product life cycle and documentation for design & development, testing for electronics & firmware.
- Understanding & experience of developing the firmware for safety requirements of agencies.
- Basic understanding of UL or CSA agency requirements, EMI or EMC for electronics product.
- Knowledge on Code validation with proto build & testing. Code & circuit optimization for cost & performance.
- Experience of using various simulations for design, tolerance analysis like PSpice, Matlab or Simulink.
- Knowledge & experience with various development platforms like FPGA, TI-DSPs, Micro-chip micro-controllers, etc.
- Experience of manufacturing process for electronics & firmware requirement of the control units.