Job Posting

SENIOR POWER ELECTRONICS ENGINEER

Electric Torque Machines (ETM) is a high energy team developing and commercializing high performance electric motors and power electronics. We are seeking an experienced ***Senior Power Electronics Engineer*** who is enthusiastic about applying their exceptional skills to make an impact in the motor industry. This engineer plays a critical role in our team to help us continue to stay ahead of the curve, offering proprietary motor solutions drastically different than the incumbents we are replacing.

Responsibilities:

- Design and develop synchronous motor drives from 20W to 50kW including both leading ETM internal design activities and working directly with outside drive companies.
- Analyze and solve problems pertaining to field reliability, DV test and manufacturing of motor drives for ETM's unique motors.
- Perform electrical system performance analysis and trade-off studies.
- This role will involve a mix of time driving both new design and integration of 3rd party designs.

Requirements:

- 10+ years hands-on development of industrial power electronics such as power supplies, AC-DC, DC-DC converters, and 3-phase PWM motor drive circuits from DC to 600VAC.
- Demonstrated development experience including conceptual block diagrams, schematic simulation and capture, component selection, PCBA design, manufacturing and DV test.
- Experience with design requirements for regulatory agency compliance (UL, CSA, CE).
- BSEE is required, MSEE is preferred.
- Working knowledge of microcontroller embedded software.
- Strong communication and organizational skills to successfully partner with ETM internal and external teams.
- The following qualifications are preferred:
    - Familiarity with motor drive test equipment and test methods.
    - Understanding of thermal design and thermal management systems.
    - Proven history of commercialized motor drives used in commercial or industrial environments with medium to high unit volumes.
    - Knowledge of EMI related design issues and appropriate US/CE Federal regulations.