**Sr. Power Electronics Engineer**

at Overair, Inc.

Santa Ana, CA

**Company Overview**:

At Overair, we are dedicated to bring next generation sustainable air transportation to everyone.  Our answer is Butterfly, an all-electric vertical takeoff and landing (VTOL) aircraft designed to safely and affordably carry passengers over traffic and congestion.  Butterfly leverages over two decades of VTOL aircraft development, patented VTOL technology, and flight vehicle experience.

Overair believes in the lofty goals of sustainable air mobility and we are committed to solving the hard challenges along the way.  We are building an industry leading team covering an expanse of skills, talents, and expertise in order to build a superior electric VTOL aircraft.  If you enjoy solving difficult problems, and seeing your ideas and visions expressed in flying aircraft, we want you on our team.

**Job Overview**:

Overair is seeking a talented power electronics engineer to own the design and development of high power, highly reliable motor-controllers and DC/DC converters. This engineer will work closely with mechanical, software, and other engineering teams to develop lightweight and efficient solutions. The ideal candidate has experience in developing and supporting hardware though the design lifecycle, from prototype to deployed hardware. They will need to have hands on power electronics development experience.

**Roles and Responsibilities:**

* Power electronics hardware design to meet performance and reliability requirements
* Collaborate with mechanical engineers to optimize placement of high power modules/components
* Create clear and readable schematics for power electronics boards
* Component selection for minimum mass and maximum reliability
* Work with PCB suppliers to create reliable and low-weight layouts
* Write requirements, participate in FMEAs, create and carry out test and validation plans

**Required Qualifications:**

* B.S. in electrical engineering or related discipline and 5 yrs industry experience with power electronics
* Experience designing and developing power electronics, in particular inverters for driving 500W to 200kW motors
* Schematic capture and PCB design
* Experience with component selection
* Completed (designed/built/tested) high voltage/high power designs

**Desired Qualifications:**

* M.S./Ph.D. in relevant discipline with a focus in power electronics
* Experience with wide bandgap semiconductors
* Experience with DO-254, DO-178 and other relevant certification standards
* Experience with design-for-reliability, including use of FMEA
* Experience designing for HIRF environments
* Experience writing embedded software in C for control of inverters and/or other power electronics
* Knowledge of brushless motor control theory