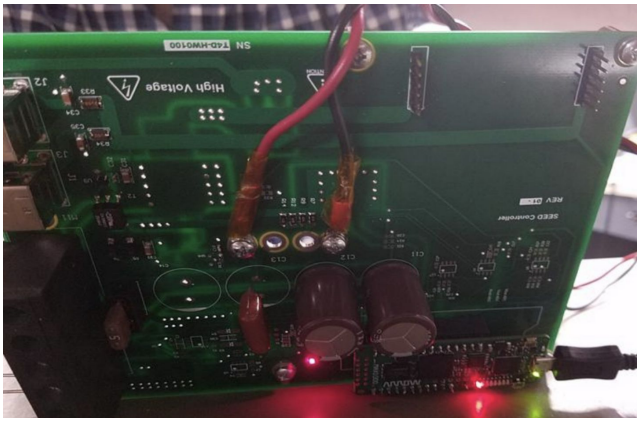
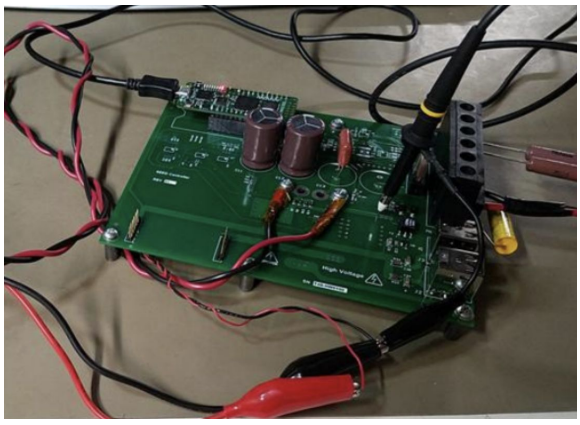
Solar SEED

Technical Assistance Request 3.0



The bench testing of the Second Prototype is close to completion. A small run of the revised 2 layer PCBs was produced at a significantly lower cost than the original 4 layer PCBs. The Firmware has been developed; testing will ensure it is driving the hardware to function correctly. Throughout the iterative design process we paid close attention to maintaining an effective balance between manufacturing costs, performance, and durability. We will continue to do market research while revising and improving the design and functionality of the device, and exploring ideas for new accessories. Field testing is a big part of product development, so we have commitments for pilot projects with a few non-profits, CBOs, and NGOs working internationally and domestically. T4D Lab will perform most of the styling and enclosure design being mindful of form factors and ergonomics to produce an intuitive, easy-to-use product for a variety of end-users. As residents of the NYDesigns Incubator (Connector), the mentorship and Fab Lab have proved to me indispensable. Additionally, we still have access to the NYU Tandon School of Engineering Fab Lab facilities, and students.



Testing and Validation facilities are being engaged now that the first prototype is almost completed. We are in discussion with NREL and Brookhaven Laboratory regarding testing and other opportunities. Unfortunately neither labs can assist with UL, ETL, CE, and other product certifications, applicable standards and codes, so we are in conversation with a contract manufacturer near Rochester, NY called Z-Axis (zaxis.net), who also has the capability to assist with testing and certification. We received an estimate directly from UL Laboratory, so we have an idea of the cost. Once we have tested our circuit and are happy with the performance and functionality, Z-Axis will probably be the next step for both manufacturing and certification.

Marketing and Business Development will be an ongoing process which is something the team has the least amount of experience with, so we have been aggressively securing Advisory & Industry, as well as Development Partners. The Advisory & Industry Partners provide assistance with design, engineering, marketing, manufacturing, investment, legal, and business development to ensure any gaps are filled. Ideally, many of these individuals will become Advisory Board members. We are presently residents in the NYDesign incubator and additionally there are a few American-Made Network members involved in Marketing and Business Development that we have been in touch with including Urban Future Lab, and Greentown Labs. We are also interested in visiting the Powerhouse, and will be interviewed by Launch Alaska to potentially be part of the next Tech Deployment Track cohort.. We maintain a desire to secure partnerships with organizations and firms that understand our goals in developing this device for not only the consumer market, but also, and with equal importance, for humanitarian purposes. This is exemplified in our Development Partners who will assist with field testing, research, and product evaluation. We are beginning to narrow down our initial focal area(s) without abandoning our mission to serve emerging markets, developed markets, emergency response workers, and meeting the needs of displaced individuals in IDP or refugee camps.