

Press Release

Google Little Box Challenge – ECPE sponsors 6 Competence Centre Teams

ECPE supports six research teams from different ECPE Competence Centres with a financial donation to promote their work on high power density inverters in the frame of the Google Little Box Challenge. Google is offering \$1 million for the most compact power electronics inverter in the 2 kW power range with an efficiency > 95%.



Nuremberg/Germany, 18th March 2015 – The Little Box Challenge is a design contest presented by Google in cooperation with the IEEE Power Electronics Society to spur innovation in power inverter design. The aim is to design a power inverter with the smallest size and the highest power density > 50 W/in³ (~ 3 kW/litre). The inverter should be shrinked down from the current size to something less than the size of a tablet computer. The ultimate idea for the competition in the end is more solar-powered homes as well as more efficient distributed electrical grids and it brings electricity to the most remote parts of the planet.

A considerable number of universities and research institutes from the **ECPE Network** have registered for the participation in this challenge and intend to submit a technical concept as well as a demonstrator of their inverter.

In this context the ECPE European Center for Power Electronics e.V. decided to sponsor the ECPE Competence Centre Teams who have registered for the challenge with a financial donation of 7.500 € for each team. The six research teams are from University of Nottingham (UK), ETH Zurich (CH)/Fraunhofer IZM Berlin (D), Universidad Politécnica de Madrid (ES), University of Stuttgart (D), Reutlingen University (D) and University of Bristol (UK).

Up to 18 finalist teams will be invited to the National Renewable Energy Laboratory (NREL) in Golden, Colorado, USA to bring their inverters for extended testing (up to approximately 100 hours) at NREL's Energy Systems Integration Facility. When they come to Colorado, the finalists will also be invited to attend an event hosted by Google, IEEE PELS and NREL where they will get a chance to discuss and present on their designs. The grand price winner is expected to be announced in January 2016.

ECPE wishes good luck and success to the ECPE Competence Centre teams.