

American-Made Solar Prize Round 4  
Team SEMPS  
Herndon, Virginia 20171

October, 2020

**Subject: TECHNICAL ASSISTANCE REQUEST FOR TEAM SEMPS**

We are TeamSemps, working on a proposal for a Solar Energy Management and Planning System (SEMPS) that will use Artificial Intelligence to take data from the solar-energy harvesting, storage and usage mechanisms, and transform them into useful information fed into a forecast, plan and management model. The final project package will be an integrated circuit featured on an Evaluation Board during Go! Demo Day on September 21.

A prototype board will be designed early on to mitigate risk. It will provide proof-of-concept of the intelligent logic on an off-the-shelf SOC.

This document formally asks the audience for assistance in providing the requested technical assistance to our organization.

Please kindly send any applicable responses to the following address: [djn4space@gmail.com](mailto:djn4space@gmail.com).

Signed by Team SEMPS,  
Herndon, VA 20171 USA

Technical Assistance Request - Team SEMPS

TeamSEMPS Request ID #	Category	Details
Request #1	Data Access	Access to Solar-related data and statistics (pertaining to solar data recorded over different locations nationwide and abroad)
Request #2	Test Software/Modeling	Solar PV models, or solar energy emulators to test solar systems in a Software-in-the-loop configuration
Request #3	Test Facility/National Lab	Access to a testing lab with solar testing equipment, power supplies, electric loads, and oscilloscopes, to test performance of design and evaluate prototype boards.
Request #4	Integrated Circuit Manufacturing	An IC manufacturing company to produce the final integrated chip
Request #5	PCB designer	A resource PCB designer to assist in the development
Request #6	Mechanical and Thermal Engineering	A resource engineer/designer with background in Mechanical and Thermal designs. The resource person will focus on assessing the design's qualifications for the applications and work with the PCB designer to ensure final packaging of the chip and Evaluation board is adequate.
Request #7	Test equipment access	A resource company with testing equipment for sale, rent or free access

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