

LED

IC

MEMS

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SMA Sunny Island 6.0H Off-grid and On-grid Solar Battery Inverter

A high-performance and polyvalent battery inverter.



With a nominal power of 4.6kW and a peak efficiency of 96%, the Sunny Island 6.0H battery inverter enables several configurations for off-grid or on-grid applications. The Sunny Island supplies AC loads from a battery or charges the battery with the energy provided by different external energy sources (PV inverter, generator or public grid). Its IP54 classification and its performant cooling system able the inverter to be used in a wide range of environment. Moreover it can be used with Li-Ion as well as Lead Acid Batteries.

Title: SMA Sunny Island 6.0H Inverter
Pages: 94
Date: March 2016
Format: pdf + xls

COMPLETE TEARDOWN WITH:

- Detailed Photos
- Material Analysis
- Bill of Material
- Manufacturing Process Flow
- Manufacturing Cost Analysis
- Selling Price Estimation

The system integrates four electronic boards and, thanks to an optimized design, contains only very few wires and cables. The power conversion is provided by HEXFET Power MOSFETs from International Rectifier (Infineon) and aluminum electrolytic capacitors from EPCOS (TDK). The control board, brain of the system, is equipped with MCUs from NXP Semiconductor and Texas Instrument. The cooling is performed by two fans placed in the bottom of the Housing.

Based on a complete teardown analysis, the reverse costing report of the SMA Sunny Island 6.0H Battery Inverter provides the bill-of-material of the product and an estimation of the production cost of the inverter.

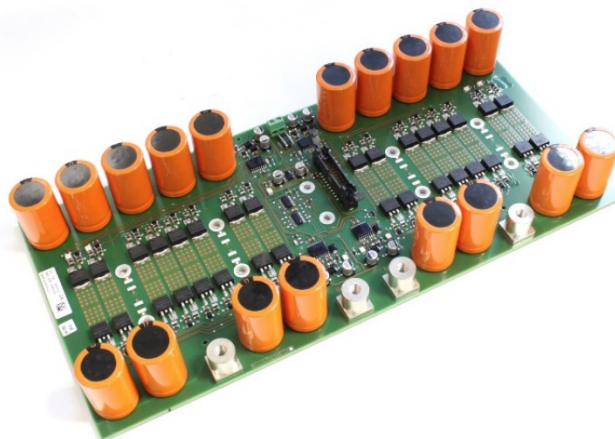


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David Le Gac has joined System Plus Consulting as a cost engineer in 2013. He is in charge of reverse costing with a focus on boards and systems.

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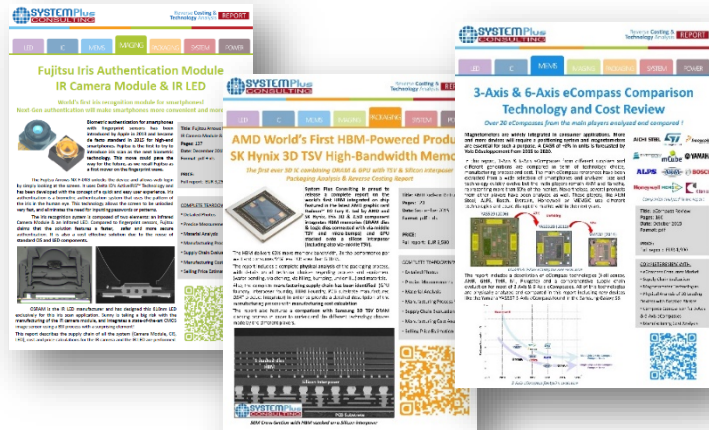
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