

SMA Sunny Boy 3000TL – Solar inverter

Reverse Costing Analysis

by System Plus Consulting

October 2009

- **Analyze the cost of projects at the R&D level**
- **Enhance the negotiation power of purchasing managers**
- **Benchmark competitor's products**

System Plus Consulting is proud to publish the reverse costing report of the Solar inverter Sunny Boy 3000TL supplied by SMA. Based on a complete teardown process the report provides an estimation of the production cost as well as the selling price of the product.

This SMA Sunny Boy 3000TL Solar inverter is used to convert direct current (DC) from Solar panels to alternating current (AC). The Solar inverter holds 6 boards : a main electronic board, a multimedia board, a LCD board, a current board, a fuse board and a ceramic power board. With multiple communication channels the Sunny Boy 3000TL is setting new standards in inverter technology.

This report provides complete teardown and cost estimation of the product with :

- **Detailed teardown photos**
- **Material analysis**
- **Schematic assembly description**
- **Manufacturing Process Flow**
- **In-depth economical analysis**
- **Manufacturing cost breakdown**
- **Selling price estimation**



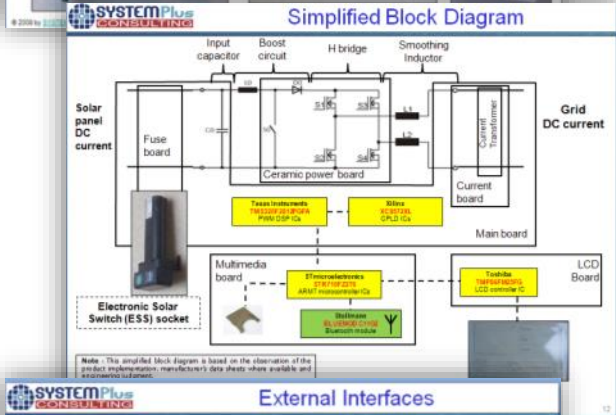
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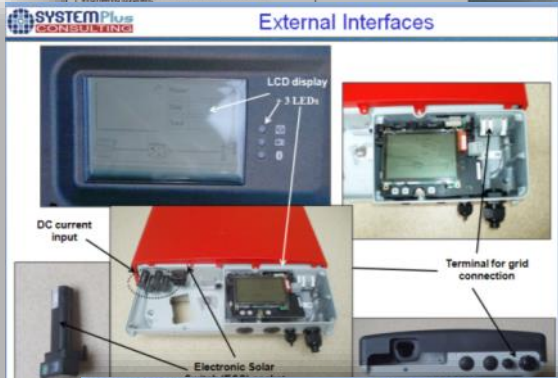
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Views & Dimensions



Simplified Block Diagram



External Interfaces



Main Board

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SMA Company Profile

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- Packaging
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Sunny Boy Family

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- Sunny boy 2500, 3300 and 5000
- Sunny boy 3000TL, 4000TL and 5000TL

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- Assessing the Housing
- Housing
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- Material cost breakdown

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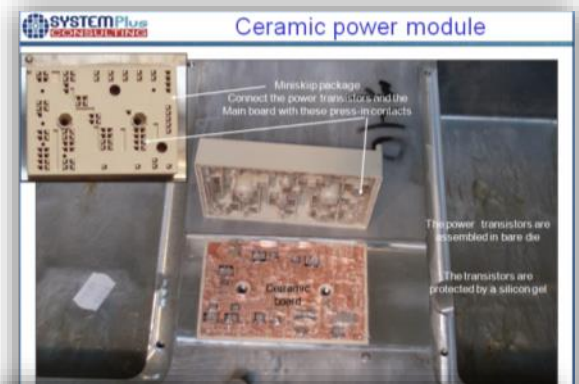
- Assessing the Added Value (AV) cost
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- Manufacturing cost breakdown

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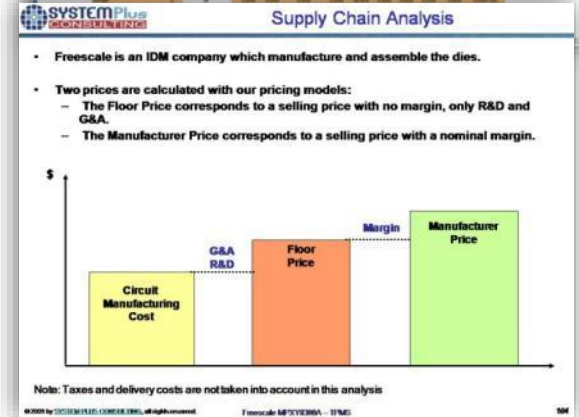
- Supply Chain Analysis
- Manufacturer ratios
- Estimated manufacturer Price

Conclusion



Details of the Main board AV Cost

Item	QTY	UNIT PRICE	TOTAL	%
INVERTER BOARD	1	1000	1000	41%
DISPLAY BOARD	1	200	200	8%
KEYPAD BOARD	1	100	100	4%
DISPLAY MODULE	1	200	200	8%
DISPLAY BOARD	1	200	200	8%
INVERTER BOARD	1	1000	1000	41%
HANDSET HOUSING	1	200	200	8%
BASE HOUSING (including speaker and microphone)	1	900	900	36%
TOTAL			2400	100%



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System Plus Consulting performs reverse costing analyses of

- Integrated circuits Electronic boards
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