

Reverse Costing analysis



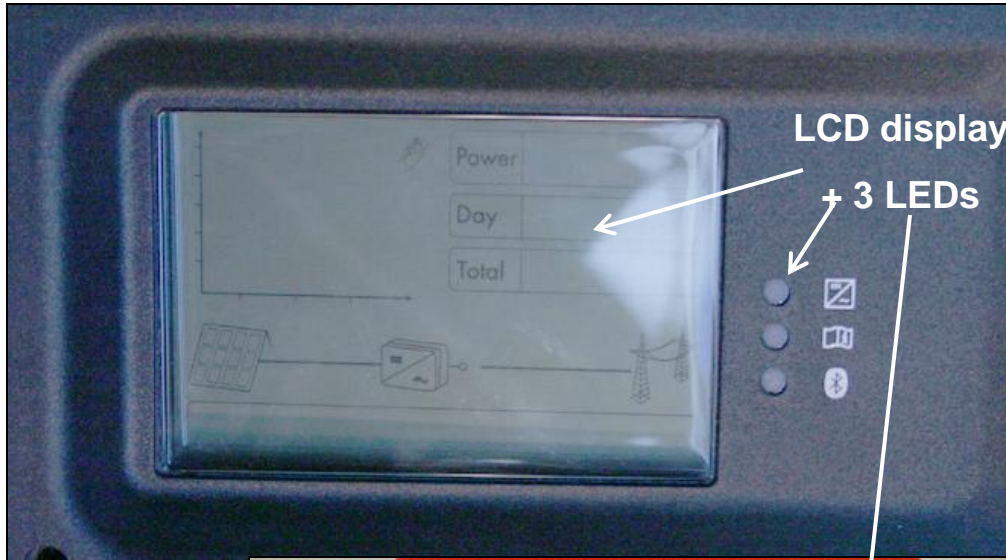
SMA Sunny Boy 3000TL Solar inverter transformerless

September 2009 - Version 1

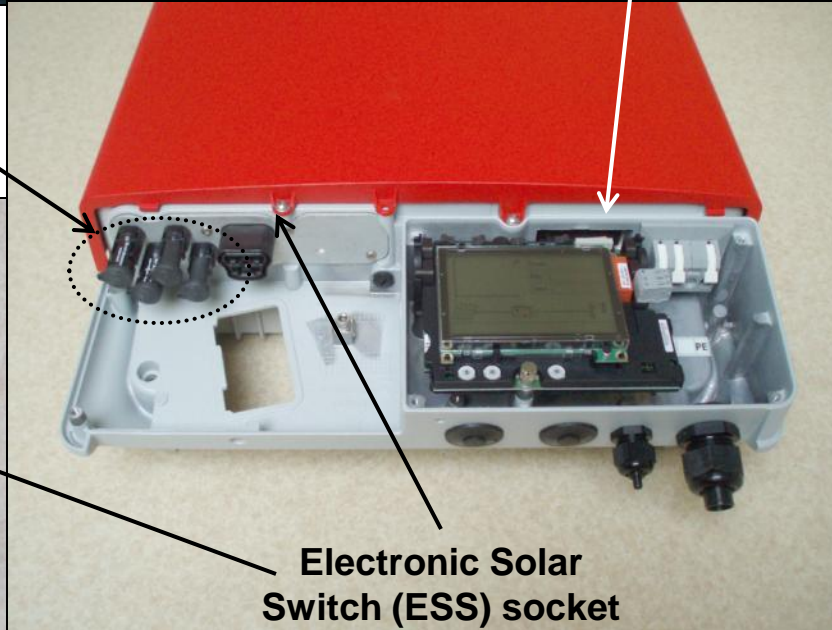
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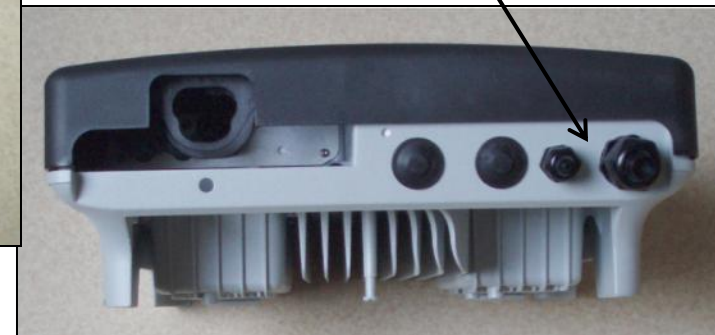
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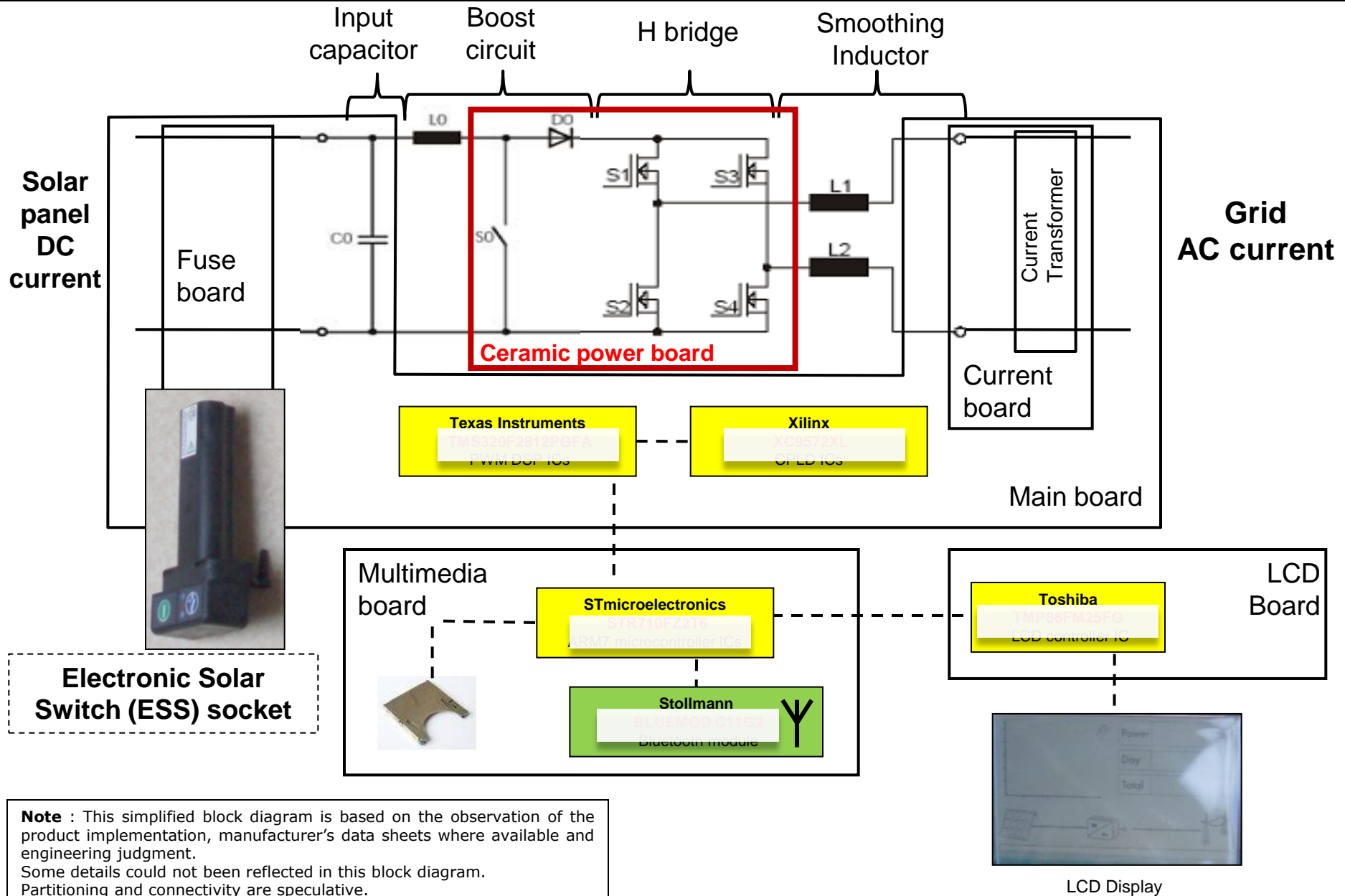
DC current input

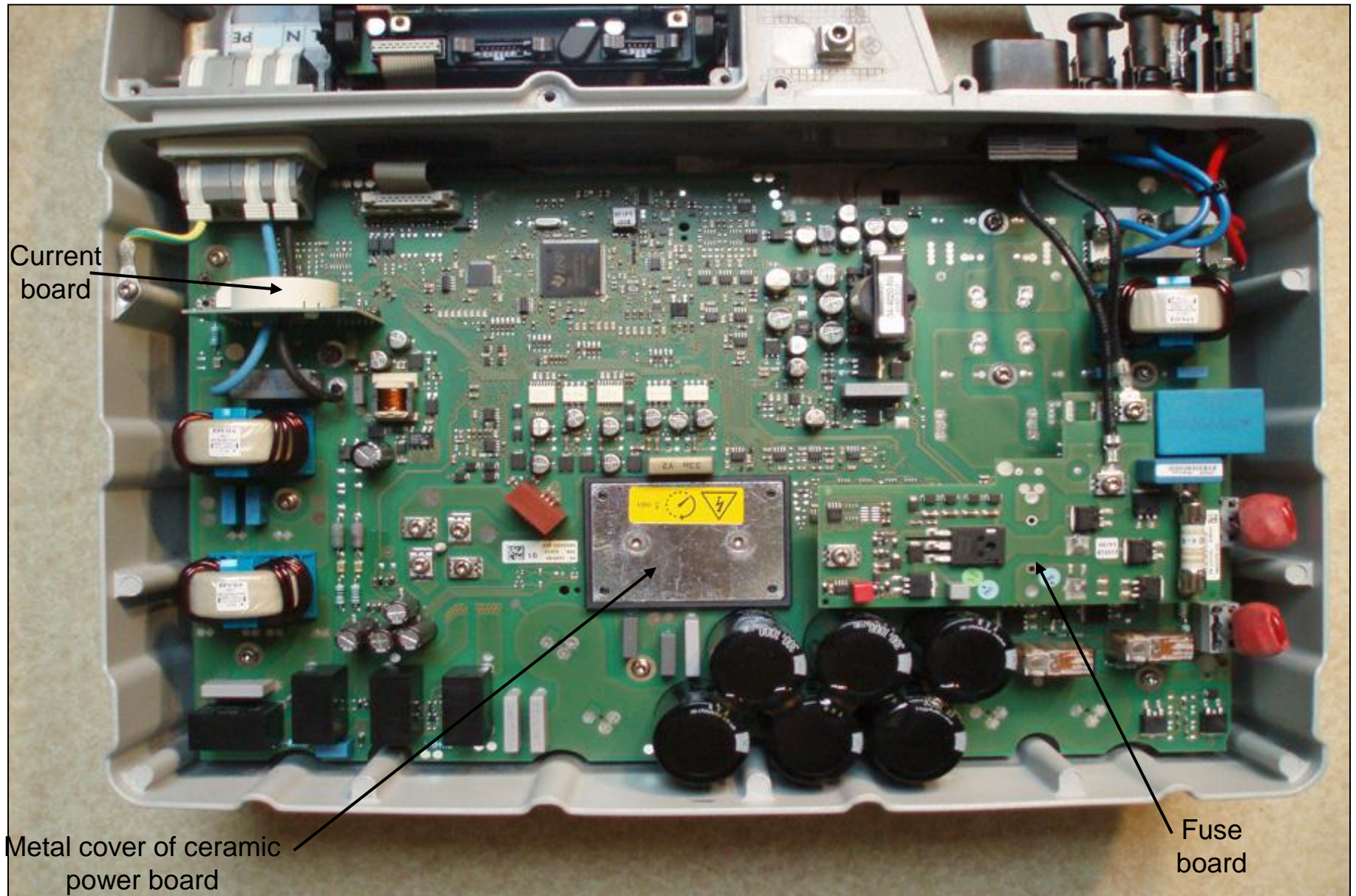


Terminal for grid connection



Simplified Block Diagram



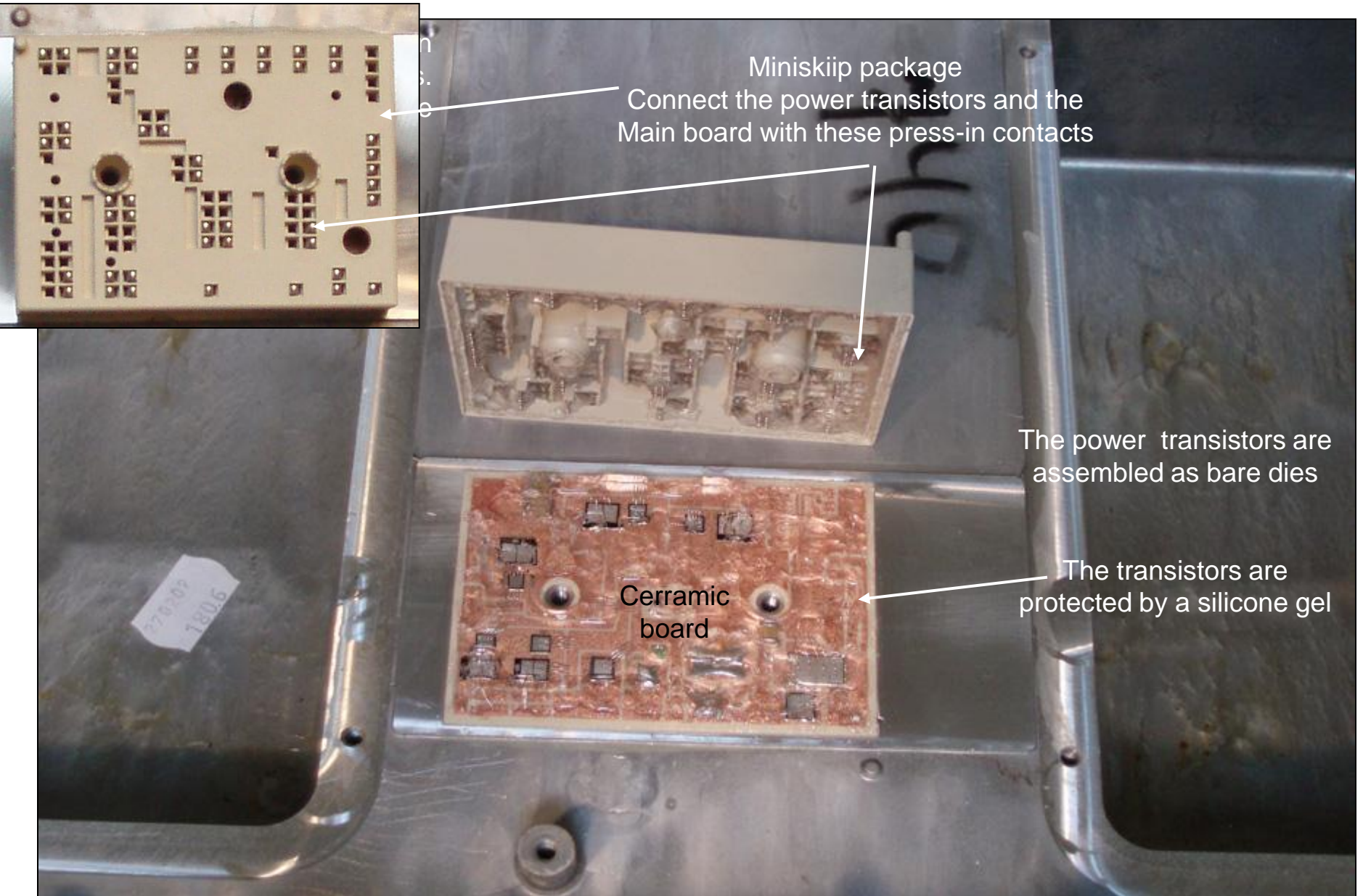


Current board

Metal cover of ceramic power board

Fuse board

Ceramic power module



PCB : FR4, 2 layers, class
154mm x 90mm

STmicroelectronics

L78L33B

Positive voltage
regulator 3,3V

Infineon

IGW60T120

IGBT trenchstop
1200V 60A

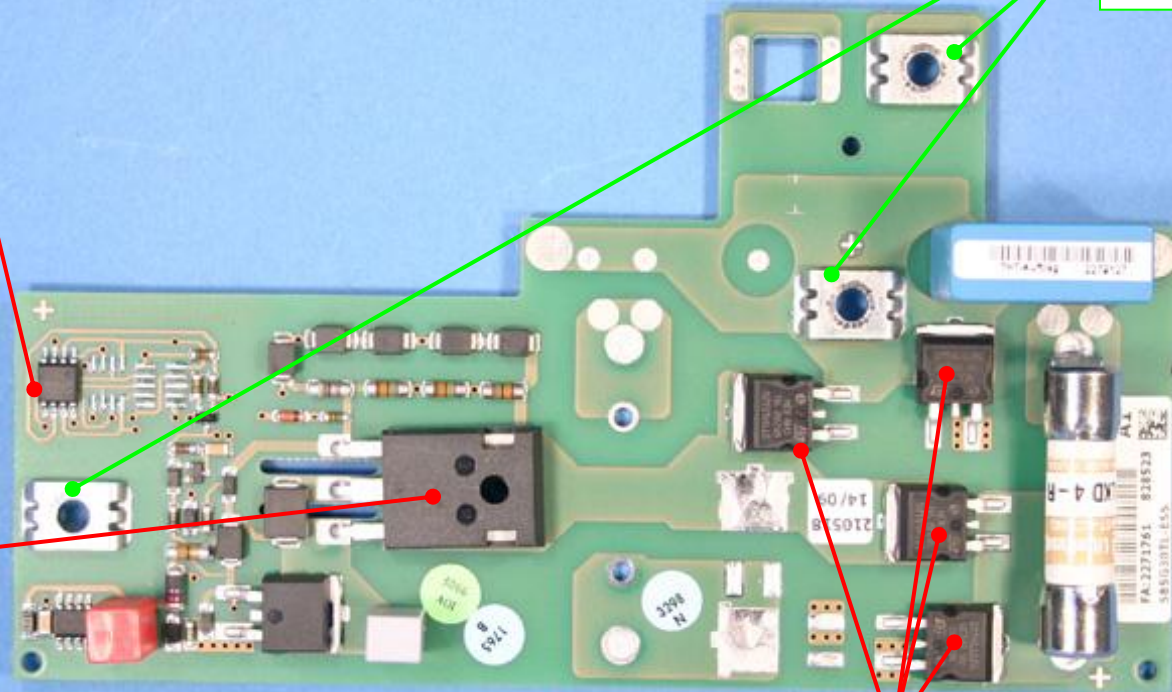
Stmicroelectronics

STTH1512G

Ultrafast recovery diode 1200V 50A

PCB nut x 3

Connect the Fuse board
to Main board and solar
electronic switch



Material cost breakdown

SMA Sunny Boy 3000 TL		MATERIAL COST		%
SMA	PACKAGING LEVEL (Germany)	\$16,58	11,61 €	4%
SMA	BASE HOUSING (Germany)	\$150,99	105,69 €	38%
SMA	MAIN BOARD (Germany)	\$137,40	96,18 €	35%
SMA	MULTIMEDIA BOARD (Germany)	\$39,85	27,89 €	10%
EDT	LCD BOARD (China)	\$12,42	8,69 €	3%
Bender	CURRENT BOARD (Germany)	\$4,37	3,06 €	1%
SMA	FUSE BOARD (Germany)	\$14,65	10,26 €	4%
Vincotech	POWER CERAMIC BOARD (Hungary)	\$18,79	13,15 €	5%
TOTAL		\$395,04	276,53 €	100%

