

# Product Carbon Footprint Verification Statement

**The inventory of Product Carbon Footprint emissions of  
P2CB21457 Printed Circuit Board (PCB) manufactured by  
Shenzhen Sunshine Circuits Technology Co., Ltd.**

which is made by

**Green Manufacturing and Eco-Design Research Group**

has been verified meeting the requirements of

**ISO/TS 14067: 2013**

For the following activities

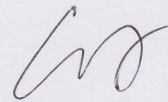
**Business to Business**

Following activities were conducted during verification

- Document review, site visit, and on-site audit

Following information and data were verified

1. The level of assurance agreed by all parties is Reasonable Assurance Level
2. The materiality required of the verification is 5%
3. The functional unit is defined as one m<sup>2</sup> of PCB with primary packaging (packaging film and bubble wrap) and secondary packaging (silica gel, humidity card, carton box, stickers, and poly strap)
4. System boundary of this product is from Cradle to Gate, as from raw material extraction, through manufacturing, to product distribution, but emission in distribution stage is not included, though reported for reference only
5. LCA software or database used: Ecoinvent 2.2, Umberto for Carbon Footprint 1.2, G-BOM Analyzer\*
6. Product carbon footprint inventory report period: February 2014 to August 2014
7. Allocation is applied for the electricity, water, consumables, and the generated waste in the manufacturing stage
8. Manufacturing location: Shenzhen, Guangdong Province, China
9. There is no GHG emissions offsetting activities in the product life cycle
10. Total product carbon footprint result: 282.93 kg CO<sub>2</sub> eq. per m<sup>2</sup>



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\*G-BOM (Green Bill of Materials) Analyzer is an online product carbon footprint analyzer developed by The Hong Kong Polytechnic University