

# Water Footprint Verification Statement

## The Inventory of Water Footprint of Organizational Level

which is calculated by

## Nan Ya Printed Circuit Board Corporation

No. 334, 336, 338, Sec. 1 Nankan Rd., Luchu Dist.,  
Taoyuan City, Taiwan

Based on life cycle assessment verified  
as meeting the requirements of

## ISO 14046:2014

### Basis of Assessment

Cradle-to-Gate

Authorized by



Stephen Pao  
Business Assurance Director  
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TGP58-15-3 2501  
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Organization	Nan Ya Printed Circuit Board Corporation			
Activity	Manufacturing and sales of Conventional PCB, High Density Interconnection (HDI), Rigid-Flex, ABF (Ajinomoto Build-up Film) Substrate, and PP (Prepreg) Substrate			
Water Footprint Profile				
Water Footprint Impact Assessment				Functional Unit WFP (Unit:by indicator)
Boundary	Indicators	Unit	Total	
Jinshing Plant	Water consumption	m <sup>3</sup>	2,462,621.29	2,462,621.29
	Water scarcity	m <sup>3</sup> H <sub>2</sub> Oeq	1,294,388.37	1,294,388.37
Shulin Plant	Water consumption	m <sup>3</sup>	998,163.36	998,163.36
	Water scarcity	m <sup>3</sup> H <sub>2</sub> Oeq	524,648.69	524,648.69
Nan Ya Printed Circuit Board Corporation	Water consumption	m <sup>3</sup>	3,460,784.6	3,460,784.6
	Water scarcity	m <sup>3</sup> H <sub>2</sub> Oeq	1,819,037.1	1,819,037.1

SGS has been commissioned by Nan Ya Printed Circuit Board Corporation (hereinafter referred to as "NY PCB"), No. 334, 336, 338, Sec. 1 Nankan Rd., Luchu Dist., Taoyuan City, Taiwan to conduct the life cycle water footprint (hereinafter referred to as "WFP") verification of Organizational Level in accordance with ISO 14046:2014 against the requirements of

## **ISO 14046:2014**

### **Roles and responsibilities**

The management of NY PCB is responsible for the organization's WFP information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of the life cycle WFP for organization information and the reported life cycle WFP of the organization.

It is SGS's responsibility to express an independent WFP verification opinion on the life cycle WFP of the organization.

SGS conducted a third party verification of the provided WFP assertion against the principles of ISO, ISO 14046:2014, ISO 14040: 2006 and ISO 14044: 2006 in the period 01 July 2025 to 18 July 2025. The verification was based on the verification scope, objectives and criteria as agreed between NY PCB and SGS.

### **Scope**

NY PCB has commissioned an independent verification by SGS Taiwan of the reported Cradle-to-Gate life cycle WFP of the organization, to establish conformance with ISO 14046:2014 within the scope of the verification as outlined below.

This engagement covers verification of WFP from Cradle-to-Gate life cycle assessment within the system boundary defined by ISO 14046:2014.

- Title or description of activities: water footprint verification of the Cradle-to-Gate life cycle WFP of organization as below boundary:
  - Manufacturing and sales of Conventional PCB, High Density Interconnection (HDI), Rigid-Flex, ABF (Ajinomoto Build-up Film) Substrate, and PP (Prepreg) Substrate.
- System boundary : Covers a Cradle-to-Gate assessment of the full life cycle emissions; the system boundary was clearly defined in accordance with ISO 14040:2006.
- Data resources : The primary data collection is from manufacturing and operational control phases. The secondary data collection is from WULCA (Boulay et al 2018) database.



- Life cycle assessment tool and index :
  - Life cycle emissions are calculated by Excel.
  - Category indicators of Water Scarcity are applied in this inventory.
- Boundary of location :
  - Jinshing Plant : No. 334, 336, 338, Sec. 1 Nankan Rd., Luchu Dist., Taoyuan City, Taiwan
  - Shulin Plant : No. 57, Weiwang St., Shulin Dist., New Taipei City, Taiwan
- WFP information for the following activity period was verified : 01 January 2024 to 31 December 2024.
- Intended use of the verification statement : Private.

### Objective

The purpose of this verification exercise is, by review of objective evidence, to independently review:

- Whether the life cycle WFP of the organization are as declared by the organization's WFP assertion.
- The data reported is accurate, complete, consistent, transparent and free of material error or omission.

### Criteria

Criteria against which the verification assessment is undertaken is the principles of ISO 14046:2014.

### Materiality

The materiality required of the verification was considered by SGS to 5%, based on the needs of the intended user of the WFP Assertion.

### Conclusion

NY PCB provided the WFP assertion based on the requirements of ISO 14046:2014. The data had been verified by SGS, consistent with the agreed verification scope, objectives and criteria.

The WFP of each object is described as below:

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SGS's approach is risk-based, drawing on an understanding of the risks associated with reporting the life cycle WFP of organization information and the controls in place to mitigate these risks. Our examination included assessment and a test of evidence relevant to the amounts and disclosures in relation to the reported life cycle WFP of the organization.

We conducted our verification with regard to the WFP assertion of NY PCB, which included assessment of the company WFP information system, monitoring and reporting protocol. This assessment included the collection of evidence that support the reported data and verification of whether the provisions of the protocol reference were consistently and appropriately applied.

In SGS's opinion, the presented WFP assertion :

- is materially correct and is a fair representation of the WFP data and information, and
- is prepared in accordance with ISO 14046:2014 in relation to WFP quantification, monitoring and reporting.

### Confidentiality

The reports and attachments may contain relevantly confidential information of the clients. In addition to being submitted as governmental application or certification documents, the reports and attachments are not allowed to be edited, duplicated, or published without the clients' agreement in written form.

### Avoidance of Conflict of Interest

The reports and attachments are completely complied with the standards and procedures that related-authorities established. The reports and attachments of auditing process are conduct with fairness and honesty. If not, the auditing institution not only has to bear the relevant compensation duties, but also to receive legal charge and punishment.

**Verifier Group**

Above statements coincide with auditing process with fairness and impartiality, and aim at the WFP of clients.

Lead Verifier:

Kevin Hsieh

Verifier:

Victor Tseng

This statement shall be interpreted with the WFP assertion of NY PCB as a whole.

Note: This Statement is issued, on behalf of Client, by SGS Taiwan Ltd. ("SGS") under its General Conditions for Water footprint Verification Services available at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). The findings recorded hereon are based upon an audit performed by SGS. This Statement does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.