



Statement of Conformity CN24/00004588

# Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in  
01 Jan. 2023 to 31 Dec. 2023 of

## Alpha & Omega Semiconductor (Shanghai) Ltd.

Business address: 8/9 Building, No. 91, Lane 109, Rongkang Road,  
Xiao Kunshan Town, Songjiang District, Shanghai  
Organization boundary: 8/9 Building, No. 91, Lane 109, Rongkang Road,  
Songjiang Export Processing Zone (B), No. 888, Songzheng Road,  
Songjiang District, Shanghai, P.R. China



has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

# ISO 14064-1:2018

**Direct Emissions**  
418.2759 tonnes of CO<sub>2</sub>e  
**Indirect Emissions**  
26,089.2465 tonnes of CO<sub>2</sub>e  
**Total Emissions Quantified**  
26,507.5224 tonnes of CO<sub>2</sub>e

The specific categories of indirect greenhouse gas emissions are detailed in the appendix  
of this statement, which is an integral part of this statement

Authorised by  
David Xin  
Sr. Director - Business Assurance  
DATE: 18 Jul. 2024

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of this document is unlawful.

SGS has been contracted by Alpha & Omega Semiconductor (Shanghai) Ltd. (hereinafter referred to as “CLIENT”), for the verification of direct and indirect Greenhouse Gas emissions in accordance with

**ISO 14064-3:2019**

as provided by Alpha & Omega Semiconductor (Shanghai) Ltd. (hereinafter referred to as “RESPONSIBLE PARTY”), in the Greenhouse Gas (GHG) Assertion in the form of GHG Report covering GHG emissions of the period 01 Jan. 2023 to 31 Dec. 2023 (hereinafter referred to as “REPORT PERIOD”).

**Roles and responsibilities**

The management of the RESPONSIBLE PARTY is responsible for the organization’s GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is SGS’s responsibility to express an independent GHG verification opinion on the GHG statement as provided by the RESPONSIBLE PARTY for the REPORT PERIOD.

According to ISO 14064-3:2019, SGS has conducted a third-party verification of the provided GHG statement by RESPONSIBLE PARTY against the requirements of ISO 14064-1:2018 in the period 18 Jul. 2024. The verification is based on the verification scope, objectives and criteria as agreed between the CLIENT and SGS on 18 Jul. 2024.

**Level of Assurance**

The level of assurance agreed is that of Reasonable assurance.

**Scope**

The CLIENT has commissioned an independent verification by SGS in according to ISO 14064-3:2019 to assure the reported GHG emissions of RESPONSIBLE PARTY, in conformance with ISO 14064-1:2018 requirements within the scope of the verification as outlined below. The data and information supporting the GHG statement is historical in nature.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases included within the organization’s boundary:

- The organizational boundary is established following Operational control approach
- Location/boundary of the activities: detail boundary information has been listed in Annex
- Physical infrastructure, activities, technologies and processes: Package design and manufacturing of Power Semiconductor Devices
- GHG sources, sinks and/or reservoirs included: GHG sources as presented in the GHG inventory and report of the RESPONSIBLE PARTY
- Types of GHGs included: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>
- GHG information for the following period was verified: 01 Jan. 2023 to 31 Dec. 2023
- GWP adopted: IPCC 6 Assessment Report.
- Intended user of the verification statement: Clients, the public, etc

**Objective**

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the GHG emissions are as declared by the organization’s GHG statement

- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

**Criteria**

Criteria against which the verification assessment is undertaken are the requirements of ISO 14064-3:2019.

**Materiality**

The materiality required of the verification is considered by SGS to 5%, based on the needs of the intended user of the GHG statement.

**Verification approach**

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

We plan and perform our work to obtain the information, explanations and evidence that we considered necessary to provide a reasonable level of assurance that the GHG emissions for the REPORT PERIOD are fairly stated.

We conduct our verification with regard to the GHG statement of GHG Report of the RESPONSIBLE PARTY which includes assessment of GHG information system and reporting plan/protocol. This assessment includes the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, are consistently and appropriately applied.

**Verification opinion conclusion**

The RESPONSIBLE PARTY provided the GHG statement based on the requirements of ISO 14064-1:2018 that total emission 26,507.5224 tonnes of CO<sub>2</sub>e in the organization boundary for the REPORT PERIOD.

The verification opinion as below is issued by SGS after an independent verification for RESPONSIBLE PARTY's GHG statement base on agreed Reasonable assurance:

**Unmodified**

The GHG statement submitted by RESPONSIBLE PARTY is prepared in accordance with ISO 14064-1:2018 on GHG quantification and reporting, is a fair representation materially, the GHG data and information in statement are explicit and supported by adequacy and appropriate evidence.

**Modified**

The GHG statement submitted by RESPONSIBLE PARTY has no material misstatement, however has some deficiencies which will prevent the issuance of unmodified verification opinion.

**Adverse opinion**

The GHG statement submitted by RESPONSIBLE PARTY:  
 - has no material misstatement or  
 - there is insufficient or inappropriate evidence to support an unmodified or modified opinion.

**Disclaiming the issuance of an opinion**

It is unable to obtain sufficient and appropriate objective evidence to form an opinion as to whether the GHG statement submitted is presented fairly in accordance with ISO 14064-1:2018



This statement shall be interpreted with the GHG statement of GHG Report of the RESPONSIBLE PARTY as a whole.

Note: This Statement is issued by SGS-CSTC Standards Technical Services Co., Ltd. ("SGS") under its General Conditions for Greenhouse Gas Validation & Verification Services. The findings recorded hereon are based upon a verification performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted from RESPONSIBLE PARTY. This Statement does not relieve Client from compliance with any by laws, 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.

The verification statement of greenhouse gases is concluded in English. Any translation differences, the English version shall prevail.

Appendix A: List of Organizational Boundaries

**List of Organizational Boundaries**

Organization name	Description of organizational boundary
Alpha & Omega Semiconductor (Shanghai) Ltd.	8/9 Building, No. 91, Lane 109, Rong Kang Road, Songjiang Export Processing Zone (B), No. 888, Songzheng Road, Songjiang District, Shanghai City, P.R. China

**Appendix B Greenhouse Gas Emissions Inventory (ISO14064-1:2018)**

**Greenhouse Gas Emissions Inventory (ISO14064-1:2018)**

<b>Organization name</b>	Alpha & Omega Semiconductor (Shanghai) Ltd.	
<b>Organizational boundary</b>	8/9 Building, No. 91, Lane 109, Rong Kang Road, Songjiang Export Processing Zone (B), No. 888, Songzheng Road, Songjiang District, Shanghai City, P.R. China	
<b>Reporting period</b>	01 Jan. 2023 to 31 Dec. 2023	
	<b>Report boundary</b>	<b>Greenhouse gas emissions (Unit: tonnes of CO<sub>2</sub>e)</b>
	<b>Category</b>	
<b>Direct GHG emissions</b>	Category 1 direct GHG emissions	418.2759
<b>Indirect GHG emissions</b>	Category 2 indirect GHG emissions from imported energy	25,733.9880
	Category 3 indirect GHG emissions from transportation	355.2585
	Category 4 indirect GHG emissions from products used by organization	0
	Category 5 indirect GHG emissions associated with the use of products from the organization	0
	Category 6 indirect GHG emissions from other sources	0