



INDEX METHODOLOGY

PHLX US AI SEMICONDUCTOR™ INDEX

ASOX™

INDEX DESCRIPTION

The PHLX US AI Semiconductor Index is designed to track the performance of companies engaged in the AI semiconductor value chain. The companies are selected based on classification by Tianfeng Research Institute.

SECURITY ELIGIBILITY CRITERIA

To qualify for index inclusion, securities must meet the following Security Eligibility Criteria which are applied as of the Reconstitution reference date.

Security types

Eligible security types include common stocks and American Depositary Receipts (“ADRs”) including New York Registry Shares.

Multiple classes of securities

One security per company is permitted. If a company has multiple otherwise-eligible securities, one of which is an Index Security as of the Reconstitution reference date, only that security may be eligible; otherwise, only the security with the highest three-month average daily traded value may be eligible.

Listing exchanges

Securities must be listed on the Nasdaq Stock Market or the New York Stock Exchange.

Industries and sectors

A company must be classified under one of the five AI semiconductor value chain categories, as defined by the Tianfeng Research Institute.

The categories are:

- 1) Equipment

- 2) Fabless
- 3) IP& EDA
- 4) Packaging, Assembly & Testing
- 5) Foundry

Additionally, to be eligible, a company must not be identified as having an exclusion condition. Details of the category definitions and exclusion conditions are further outlined in *Appendix A: AI Semiconductor Value Chain Categories*.

Market capitalization

Each security must have a minimum market capitalization of \$300 million USD.

Liquidity

Each security must have a three-month average daily traded value of at least \$1 million USD.

Seasoning

To be eligible for initial index inclusion, a security must have been listed and available for trading on an eligible exchange for at least three full calendar months, not including the month of initial listing. For seasoning purposes, eligible exchanges include the Nasdaq Stock Market and the New York Stock Exchange. The seasoning eligibility is determined as of the Reconstitution reference date and includes that month.

For example, to be considered for inclusion at the September Reconstitution, a security must have been listed and available for trading on an eligible exchange no later than the last trading day of May, with seasoning occurring over the months June, July, and August.

Any security that is already a member of the Index, including those added as the result of a spin-off event, will be exempt from the seasoning requirement.

Other eligibility criteria

If, at reconstitution, Nasdaq becomes aware that an issuer or security will soon undergo a fundamental change that makes it ineligible, Nasdaq will generally remove the security from consideration. This includes entering into a definitive merger or acquisition agreement or other pending arrangement that would make it ineligible for Index inclusion, or a filing of bankruptcy or similar protection from creditors, or other events as described in Section 3 of **Corporate Actions and Events Manual – Equities**.

CONSTITUENT SELECTION

A Reconstitution is conducted on a semi-annual basis, at which time all eligible securities are ranked based on market capitalization, as of the Reconstitution reference date.

Once ranked, securities are selected for index inclusion based on the following criteria:

- The top 20 eligible securities with the largest market capitalizations are selected for the Index.
- In the event of a tie in the ranking, free float market capitalization as of the Reconstitution reference date will be used as the tiebreaker.

The final number of constituents can be less than 20 if there are less than 20 eligible securities.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Index is a modified market capitalization-weighted index.

Constituent weighting process

Index Securities' initial weights are determined by dividing each Index Security's market capitalization by the aggregate market capitalization of all Index Securities. These initial weights are then adjusted to meet the following weight constraints, resulting in the final weights:

- The weights of the top three (3) Index Securities by market capitalization, may not exceed 20%, 17%, 15%, respectively. The weight of a top three (3) Index Security is only adjusted downward if it exceeds its respective constraint.
- The individual weights of other Index Securities may not exceed 12%; only the top three (3) may exceed this constraint.

Should any Index Security's weight exceed its respective constraint, the excess weight is proportionally redistributed to the lower weighted Index Securities by market capitalization. This redistribution is done iteratively, following the sequence outlined above, until all Index Securities are at or below their respective constraints.

For additional information about index weighting, see **Nasdaq Index Weight Adjustment Guidelines**.

INDEX CALENDAR

Reconstitution & Rebalancing schedule

Reconstitution Frequency	Semi-annually
Rebalance Frequency	Quarterly
Reconstitution Reference Dates	Last trading day of February and August, respectively
Reconstitution Announcement Dates	After the close on the second Friday in March and September
Reconstitution Effective Dates	At market open on the first trading day following the third Friday in March and September
Rebalance Reference Dates	Last trading day of February, May, August, and November, respectively
Rebalance Announcement Dates	After the close on the second Friday in March, June, September, and December
Rebalance Effective Dates	At market open on the first trading day following the third Friday in March, June, September, and December

Holiday schedule

The Indexes are calculated Monday through Friday, except on days when the US markets are closed.

Index calculation and dissemination schedule

The index is calculated during the trading day and is disseminated once per second from 09:30:01 to 17:16:00 ET. The closing value of the indexes may change up until 17:15:00 ET due to corrections to the Last Sale Price of the Index Securities.

INDEX MAINTENANCE

Deletion policy

If, at any time other than an Index Reconstitution, Nasdaq determines that an Index Security has or will undergo a fundamental alteration that would make it ineligible for Index inclusion, the Index Security is removed as soon as practicable. Such alterations may include merger, acquisition, or other major corporate event that would otherwise adversely impact the integrity of the Index.

Replacement policy

Index securities deleted at any time during the year other than the Index Reconstitution(s) are not replaced.

Corporate actions

In the periods between scheduled index reconstitution and rebalancing events, individual Index securities may be the subject to a variety of corporate actions and events that require maintenance and adjustments to the Index. Specific treatment of each type of corporate action or event is described in **Nasdaq Corporate Actions and Events Manual – Equities**, which is incorporated herein by reference.

In certain cases, corporate actions and events are handled according to the weighting scheme or other index construction techniques employed. Wherever alternate methods are described, the Index will follow the “Market Cap Corporate Action Method.”

Index share adjustments

Other than as a direct result of corporate actions, the Index does not normally experience share adjustments between scheduled Index Rebalance and Reconstitution events.

ADDITIONAL INFORMATION

Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website at <http://indexes.nasdaq.com>.

For more information on the general Index Announcement procedures, refer to the **Nasdaq Index Methodology Guide**.

Unexpected market closures

For information on Unexpected Market Closures, refer to the **Nasdaq Index Methodology Guide**.

Calculation types

For information on the Index calculation types as well as the mathematical approach used to calculate the Index(es), refer to the **Nasdaq Index Policies & Procedures: Calculation Manual – Equities and Commodities**.

Recalculation and restatement policy

For information on the Recalculation and Restatement Policy, refer to the **Nasdaq Index Recalculation Policy**.

Data sources

For information on data sources, refer to the **Nasdaq Index Methodology Guide**.

Contact information

For any questions regarding an Index, contact the Nasdaq Index Client Services team at indexservices@nasdaq.com.

Index dissemination

Index values and weightings information are available through Nasdaq Global Index Watch (GIW) website at <https://indexes.nasdaq.com/> as well as the Nasdaq Global Index FlexFile Delivery Service (GIFFD) and Global Index Dissemination Services (GIDS). Similar to the GIDS offerings, Genium Consolidated Feed (GCF) provides real-time Index values and weightings for the Nordic Indexes.

For more detailed information regarding Index Dissemination, refer to the **Nasdaq Index Methodology Guide**.

Website

For further information, refer to Nasdaq GIW website at <https://indexes.nasdaq.com/>.

FTP and dissemination service

Index values and weightings are available via FTP on the Nasdaq Global Indexes FlexFile Delivery Service (GIFFD). Index values are available via Nasdaq's Global Index Dissemination Services (GIDS).

GOVERNANCE

All Nasdaq Indexes are managed by the governance committee structure and have transparent governance, oversight, and accountability procedures for the index determination process. For further details on the Index Methodology and Governance overlay, refer to the **Nasdaq Index Methodology Guide**.

GLOSSARY OF TERMS AS USED IN THIS DOCUMENT

For the glossary of key terms, refer to the **Nasdaq Index Methodology Guide**.

APPENDIX A: AI SEMICONDUCTOR VALUE CHAIN CATEGORIES

Category	Definition	Exclusion Condition
Equipment	Refers to the tools and machinery used in the various stages of semiconductor device fabrication and assembly. This includes production, testing and packaging of integrated circuits (ICs). Semiconductor equipment is essential for ensuring precision, efficiency, and quality in the manufacturing process.	N/A
Fabless	Refers to a business model in the semiconductor industry where a company focuses on the design and development of integrated circuits (ICs) without owning or operating their own manufacturing facilities (fabs). Instead, fabless companies outsource the fabrication of their designed chips to specialized foundries. This model offers significant advantages, including reduced capital expenditure, increased flexibility, and a focus on core design capabilities. Companies included in this category must have generate revenue for AI accelerators (CPU, GPU, NPU, TPU, FPGA, ASIC) or Network Infrastructure (controller, switch).	Any company that has its top revenue source from Analog IC is excluded. Any company that is classified as an IDM (Integrated Device Manufacturer) is excluded.
IP & EDA	Intellectual Property (IP) and Electronic Design Automation (EDA) are essential components in the design and development of integrated circuits (ICs) and systems on chips (SoCs). IP refers to pre-designed, reusable blocks of logic or functions that can be licensed and integrated into IC designs. These IP blocks can significantly reduce development time and costs by providing ready-made solutions for common functions. EDA refers to the category of software tools used to design, simulate, verify, and produce semiconductor devices. EDA tools are critical in managing the complexity of modern IC design. Companies shall be providing IP blocks for AI accelerators or Interfaces for high-speed communications (CXL, PCIe, SerDes).	N/A
Packaging, Assembly & Testing	Refers to the final stages of semiconductor manufacturing, where individual semiconductor dies are assembled into usable packages, tested for functionality and reliability, and then prepared for shipment to customers. This process is crucial for ensuring the performance, durability, and reliability of semiconductor devices.	N/A
Foundry	Factories where semiconductor chips come to life. They mass-produce chips based on the designs created using EDA tools. Leading foundries employ cutting-edge fabrication technologies, including advanced lithography, to produce chips with increasingly smaller transistor sizes, enhancing computational power and energy efficiency.	Any company without stated revenue from 7nm or smaller chip products is excluded. Any company that is classified as an IDM

		(Integrated Device Manufacturer) is excluded.
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DISCLAIMER

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity, including but not limited to, quantitative inclusion criteria. Nasdaq may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the index construction and calculation. Nasdaq does not guarantee that any Index accurately reflects future market performance.

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