Bloomberg US Listed Semiconductor Top 30 Index Methodology

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Introduction

The Bloomberg US Listed Semiconductor Top 30 Index tracks the performance of the top 30 Semiconductor companies listed in the US.

Section 1: Overview

Name	Bloomberg US Listed Semiconductor Top 30 Index			
Base date	2015-09-28			
Inception Date	2024-02-16			
Reconstitution	Annual			
Share Rebalance	Quarterly			
Publication	Weekdays			
Currency	USD			
	BULST30 (Price Return)			
Tickers	BULST30T (Total Return)			
	BULST30N (Net Return)			

Section 2: Index Eligibility Process

Security Type

Common Stock, Tracking Stock, New York Registry Shares, and ADR security types are eligible.

Exchange Listing

Security must be listed on one of the following exchanges:

Code	Name		
UR	NASDAQ CM		
UW	NASDAQ GS		
UQ	NASDAQ GM		
UN	New York		
UA	NYSE American		
UF	Cboe BZX		

Sector

Security must belong to Semiconductor (sector code 191011) as defined by Bloomberg Industry Classification System.

Seasoning

A security must have traded for at least 3 months to be eligible for selection.

Minimum Free Float Percentage

A security must have a free float percentage of at least 10%.

Minimum Free Float Market Capitalization

A security must have a minimum free float market capitalization of \$100 million.

Minimum Liquidity

A security must have $\frac{\text{Composite } 90-\text{day average daily traded value}}{\text{Security free float market capitalization}} \ge 0.001$

Multiple Classes of Securities

One security per issuer is permitted. If an issuer has multiple securities, then the security currently in the Index will take precedence if it has met all other criteria for eligibility. Otherwise, the security with the highest 90-day average daily value traded is eligible for inclusion in the Index.

Sanctions

A security must not be under sanctions issued by the US Office of Financial Assets Control (OFAC), the US Department of Defense (DOD), the European Union (EU), the United Nations (UN) or the United Kingdom (UK).

Section 3: Index Construction Process

Index Selection Process

All securities that satisfy the Index Eligibility Process in Section 2 are ranked by their issuer free float market capitalization scaled by inclusion factor, and top 30 securities are selected for index inclusion.

Issuer free float market capitalization scaled by inclusion factor is calculated as the sum of free float market capitalization of all securities multiplied by respective inclusion factor, under the same issuer, that satisfy the Index Eligibility Process in Section 2.

Security Type	Inclusion Factor
Common Stock	1.00
Tracking Stock	1.00
New York Registry Shares	0.15
ADR	0.15

Index Weighting

The Index is modified market cap weighted. The initial weights, W_i , are set, as shown below, according to the Issuer Free Float Market Capitalization scaled by inclusion factor.

$$W_i = \frac{IFMC_i}{\sum_{1}^{M} IFMC_i}$$

Where:

 W_i Weight of security i M Number of Index Members

IFMC_i Issuer Free Float Market Capitalization scaled by inclusion factor of security i

Securities' weights are then capped such that:

- The weight of top 3 securities by Issuer Free Float Market Capitalization scaled by inclusion factor may not exceed 12%, 10%, 8% respectively.
- Securities outside of the top 3 by Issuer Free Float Market Capitalization scaled by inclusion factor with weight greater than 4% have their weight capped at 4%.

Any excess weight from capping is distributed proportionally to all the remaining uncapped securities until all the above conditions are satisfied.

Index Rebalance and Reconstitution

The Index is reconstituted annually in September and rebalanced for share changes quarterly in March, June, September, and December.

Selection Date

The Index Eligibility Process and Index Selection Process are applied using data as of the last Wednesday in July.

Index Share Determination Date

Index are determined using prices, float shares as of the last Wednesday in January, April, July and October.

Index Announcement Date

An Index reconstitution and rebalance for share changes are announced on the last Wednesday in February, May, August, and November.

Index Effective Date

The Index reconstitutions and rebalances go effective after the close of trading on the second Wednesday in March, June, September, and December.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Selection Date (Eligibility)	Last Wednesday							X					
Share Determination Date (Weighting)	Last Wednesday	Х			Х			Χ			Х		
Announcement Date	Last Wednesday		Х			Х			Х			Х	
Effective Date	Second Wednesday			Χ			Х			Х			Х

Section 4: Index Maintenance

Index Calculation

Refer to the Bloomberg Global Equity Indices Methodology for index calculation details.

Deletion Policy

Index securities are not deleted outside of the Index Rebalance and Reconstitution window except in the case of a delisting.

Addition Policy

Index securities are not added outside of the Index Reconstitution.

Replacement Policy

Index securities are not replaced outside of the Index Reconstitution.

Corporate Actions

Refer to Bloomberg Global Equity Indices Non-Market Cap Corporate Action Methodology for the treatment of corporate actions.

Section 5: Backtest Assumptions

For the periods before 2021, BICS data as of 2021-02-19 is used for the sector eligibility process.

Point-in-time data, unless otherwise noted, were used for the historical index eligibility and construction process described in Section 2 and 3 since the base date of the index.

Section 6: Risks and Limitations of the Indices

Risks

The following is a summary of certain risks associated with the Index but is not meant to be an exhaustive list of all risks associated with the Index. Although the Index is designed to be representative of the markets it is measuring, it may not be representative of

every use case. There is also inherent, though transparent, judgment in its construction, as outlined in this Methodology. The Index is designed for general applicability and not to address the individual circumstances and needs of users. BISL does not advise about the usefulness of the Index to a particular circumstance; users are therefore encouraged to seek their own counsel for such matters. This Methodology is subject to change, which may impact its usefulness to users. Although efforts will be made to alert users of any change, every individual user may not be aware of them. Such changes may also significantly impact the usefulness of the Index. BISL may also decide to cease publication of this Index. BISL maintains internal policies regarding user transitions, but no guarantee is given that an adequate alternative is available generally or for a particular use case. Markets for stocks, as with all markets, can be volatile. As the Index is designed to measure this market, it could be materially impacted by market movements, thus significantly affecting the use or usefulness of the Index for some or all users. Also, certain equity markets are less liquid than others — even the most liquid markets may suffer periods of illiquidity. Illiquidity can have an impact on the quality or amount of data available to BISL for calculation and may cause the Index to produce unpredictable results.

Limitations of the index

Though the Index is designed to be representative of the markets it measures or otherwise aligns with its stated objective, it may not be representative in every case or achieve its stated objective in all instances. It is designed and calculated strictly to follow the rules of this Methodology, and any Index level or other output is limited in its usefulness to such design and calculation.

Markets can be volatile, including those market interests that the Index measures or upon which the Index is dependent to achieve its stated objective. For example, illiquidity can have an impact on the quality or amount of data available to the administrator for calculation and may cause the Index to produce unpredictable or unanticipated results.

In addition, market trends and changes to market structure may render the objective of the Index unachievable or to become impractical to replicate by investors.

In particular, the Index measures global equity markets. As with all equity investing, the Index is exposed to market risk. The value of equities fluctuate with the changes in economic forecasts, interest rate policies established by central banks and perceived geopolitical risk. The Index does not take into account the cost of replication and as a result a tracking portfolio's returns will underperform the Index with all else equal. As the Index is designed to measure those markets, it could be materially impacted by market movements, thus significantly impacting the use or usefulness of the fixings for some or all users.

In addition, certain sub-indices may be designed to measure smaller subsets of the Index such as specific styles, size, and sector. Some of these sub-indices have very few qualifying constituents and may have none for a period of time. During such period, the sub-index will continue to be published at its last value, effectively reporting a 0% return, until new constituents qualify. If no constituents are expected to qualify (due to changes in market structure and other factors), the sub-index may be discontinued. In such an event, this discontinuation will be announced to index users.

Section 7: Benchmark Oversight and Governance

Benchmark governance, audit and review structure

Please refer to the BISL Benchmark Procedures Handbook available here.

Index and data reviews

Please refer to the BISL Benchmark Procedures Handbook available here.

Expert judgement

Please refer to the BISL Benchmark Procedures Handbook available here.

Conflicts of interest

Please refer to the BISL Benchmark Procedures Handbook available <u>here</u>.

Restatement policy

Please refer to the BISL Benchmark Procedures Handbook available here.

Section 8: Methodology Changes

Date	Update
February 2024	Document Creation
	Update of "Section 3: Index Weighting", to change the weight capping constraint as follows:
	Previous:
May 2024	 No security's weight shall exceed 8% The top 5 securities by Issuer Free Float Market Capitalization scaled by inclusion factor may have a weight exceeding 4% Securities outside of the top 5 by Issuer Free Float Market Capitalization scaled by inclusion factor with weight greater than 4% have their weight capped at 4%
	 The weight of top 3 securities by Issuer Free Float Market Capitalization scaled by inclusion factor may not exceed 12%, 10%, 8% respectively. Securities outside of the top 3 by Issuer Free Float Market Capitalization scaled by inclusion factor with weight greater than 4% have their weight capped at 4%.

Appendix A: ESG Disclosure

Item 1. Name of the benchmark administrator.	Bloomberg Index Services Limited ("BISL")				
Item 2. Type of benchmark or family of benchmarks.	Equity				
Choose the relevant underlying asset from the list provided in Annex II to Commission Delegated Regulation (EU)2020/1816.					
tem 3. Name of the benchmark or family of benchmarks.	Bloomberg US Listed Semiconductor Top 30 Index				
Item 4. Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	No				
Item 5. Where the response to Item 4 is positive, please list below, for each family of benchmarks, t account in the benchmark methodology, taking into account the ESG factors listed in Annex II to De					
Please explain how those ESG factors are used for the selection, weighting or exclusion of underlyin The ESG factors shall be disclosed at an aggregated weighted average value at the level of the fam					
a) List of environmental factors considered:	Not applicable				
b) List of social factors considered:	Not applicable				
c) List of governance factors considered:	Not applicable				
benchmark methodology, taking into account the ESG factors listed in Annex II to Delegated Regul relevant underlying asset concerned. Please explain how those ESG factors are used for the selection, weighting or exclusion of underlying. The ESG factors shall not be disclosed for each constituent of the benchmark, but shall be disclosed value of the benchmark.	ng assets.				
Alternatively, all of this information may be provided in the form of a hyperlink to a website of the b explanation. The information on the website shall be easily available and accessible. Benchmark ad published on their website remains available for five years.					
a) List of environmental factors considered:	As above				
b) List of social factors considered:	As above				
c) List of governance factors considered:	As above				
Item 7. Data and standards used					
a) Data input. (i) Describe whether the data are reported, modelled or, sourced internally or externally. (ii) Where the data are reported, modelled or sourced externally, please name the third party data provider.	Not Applicable				
	Not Applicable				
b) Verification and quality of data. Describe how data are verified and how the quality of those data is ensured. c) Reference standards Describe the international standards used in the benchmark methodology.	Not Applicable				

May 23, 2024 **Bloomberg Equity Indices**

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