BlueStar Asia Technology Index

Index Methodology Guide v1.0

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Produced by:

BlueStar Global Investors, LLC d/b/a BlueStar Indexes
1350 Avenue of the Americas, Fourth Floor, New York, NY 1009
www.bluestarindexes.com

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Chapter 1: Introduction and Index Description

This document summarizes the methodology and rules used to construct, calculate, and maintain the BlueStar Asia Technology Index ("BSEAQ").

BSEAQ is a rules-based index that tracks the performance of a group of globally-listed stocks of companies that are domiciled in Developed or Emerging Markets in China, Hong Kong or Southeast Asia Index components are reviewed semi-annually for eligibility, and the weights are re-set accordingly.

Companies may not apply and may not be nominated for inclusion in the Index. Companies are added or removed by BlueStar based on the methodology described herein. The BlueStar Index Advisory Committee advises on index methodology construction. Whenever possible, BlueStar will publicly announce changes to the index on its website at least five trading days in advance of the actual change. The Index is calculated and maintained by Standard & Poor's based on a methodology developed by BlueStar.

BSEAQ is calculated on a price, total return and net total return basis in real-time. The index is denominated in US Dollars (USD). The net total return index is disseminated in real-time via the CME Group, Inc (CME) and market data vendors every day the exchange of at least one index component is open. Real-time index values for the net total return index are available on Bloomberg by entering "BSEAQNTR INDEX <GO>", and end-of-day values are freely available on BlueStar's website, www.bluestarindexes.com, and/or through market data vendors.

The index is denominated in USD. Real time index prices are calculated using spot prices for foreign exchange rates throughout each trading day. Official end-of-day index values are calculated using Reuters spot rates which are captured at 12:00 GMT.

Chapter 2: Index Construction

This chapter outlines and defines the key steps in constructing and calculating the index, including: eligibility requirements, formulas, initial component selection, and special adjustments

2.1 Base Date and Value

BSEAQ has the following variants, base dates and values:

Name	Index Symbol	Base Date	Base Value
BlueStar Asia Technology Index (Price Index)	BSEAQ	June 28, 2013	100
BlueStar Asia Technology Index Total Return	BSEAQTR	June 28, 2013	100
BlueStar Asia Technology Index Net Total Return	BSEAQNTR	June 28, 2013	100

2.2 Component Eligibility Requirements

All the following requirements must be met for a company's security to be included in BSEAQ:

1. BlueStar screens a universe of global securities for companies domiciled in China, Hong Kong, South Korea, Singapore, Thailand, India, or Taiwan involved in one or more of the following industries: information technology, internet services, movies and entertainment, consumer electronics, biotechnology, or medical devices. Collectively, companies involved in those fields are referred to as Asia Tech companies.

2. Companies included in the global universe of Asia Tech companies are then screened to meet Index market capitalization and liquidity criteria. Only those companies included in the global universe of Asia Tech companies which have a 20-day average bid-ask spread less than 1%, free-float percentage greater than 10%, market capitalization of at least $500 million USD equivalent and a six-month average daily value traded of at least $1mm USD equivalent will be selected for inclusion in the index. For securities that do not have six months of average daily value traded data available, three months of data will be used and their eligibility for inclusion will be reviewed by the BlueStar Index Advisory Committee, which will consider factors such as liquidity over the time frame for which data is available and market capitalization.

3. Securities denominated only in the following currencies may be included in the index:

Currencies				
US Dollar	Australian Dollar	Israeli Shekel	Japanese Yen	Singapore Dollar
Euro	Canadian Dollar	British Pound	Swiss Franc	Hong Kong Dollar

2.3 Initial Component Selection

The following steps are taken to select the initial components for BSEAQ at each semi-annual rebalance period:

1. Establish the list of index components according to Chapter 2.2

2. Determine the index weight of each security in the list of index components:
    a. Determine whether each component is domiciled in China or Hong Kong ("CHN") or elsewhere ("NCHN")
    b. Assign each component an Initial Weight as follows:

$$IW_{CHNi} = 0.40 * \frac{\text{Market Cap in USD of Component}_{CHNi}}{\sum_{CHNi=1}^{N} \text{Market Cap in USD of Component}_{CHNi}}$$

Where:
IW_{CHNi} = Initial Weight of component$_{CHNi}$
N = Number of CHN companies included in the index

$$IW_{NCHNi} = 0.60 * \frac{\text{Market Cap in USD of Component}_{NCHNi}}{\sum_{NCHNi=1}^{N} \text{Market Cap in USD of Component}_{NCHNi}}$$

Where:
IW_{NCHNi} = Initial Weight of component$_{NCHNi}$
N = Number of NCHN companies included in the index

    c. Set weight threshold to 6%

    d. If any component's IW_{CHNi} or IW_{NCHNi}, as determined in step 2.b, above, is greater than the weight threshold, set that component's First Modified Weight (MW'_{CHNi} or MW'_{NCHNi}) to 6%

    e. Take the aggregate difference between IW_{CHNi} and MW'_{CHNi} and distribute evenly among stocks whose IW_{CHNi} was not modified in step 2d, above. Take the aggregate difference between IW_{NCHNi} and MW'_{NCHNi} and distribute evenly among stocks whose IW_{NCHNi} was not modified in step 2.d, above.

    f. Repeat steps 2.d and 2.e, above, until all components have been assigned a weight less than or equal to the weight threshold.

    g. If the aggregate Modified Weight of securities denominated in US Dollars (USD) is greater than or equal to 75% then the weights as determined in step 2.f, above, will be each component's Final Weight

h. If the aggregate Modified Weight of securities denominated in US Dollars (USD), as determined in step 2.f, above, is less than 75% then find each component's Final Weight by redistributing the weight of non-USD-denominated (NUSD) such that the aggregate weight of USD-denominated securities is equal to 75%, no stocks weight is greater than the weight threshold, and the aggregate weight of CHN companies does not exceed 40% as follows:

$$WUSD_{CHNi} = W'USD_{CHNi} + DIST_{CHNUSD} \quad AND \quad WNUSD_{CHNi} = WNUSD'_{CHNi} - DIST_{CHNNUSD}$$

$$WUSD_{NCHNi} = W'USD_{NCHNi} + DIST_{NCHNUSD} \quad AND \quad WNUSD_{NCHNi} = WNUSD'_{NCHNi} - DIST_{NCHNNUSD}$$

Where:

$$DIST_{CHNUSD} = \frac{.75 - AW_{CHNUSD}}{N_{CHNUSD}} \quad AND \quad DIST_{CHNNUSD} = \frac{.75 - AW_{CHNUSD}}{N_{CHNNUSD}}$$

$$DIST_{NCHNUSD} = \frac{.75 - AW_{NCHNUSD}}{N_{NCHNUSD}} \quad AND \quad DIST_{NCHNNUSD} = \frac{.75 - AW_{NCHNUSD}}{N_{NCHNNUSD}}$$

And:

W_{CHNUSD} = Final Weight of USD-denominated CHN index components
$W_{CHNNUSD}$ = Final Weight of non-USD-denominated CHN index components
$W_{NCHNUSD}$ = Final Weight of USD-denominated CHN index components
$W_{NCHNNUSD}$ = Final Weight of non-USD-denominated CHN index components
$W'_{CHNUSDi}$ = Modified Weight of USD-denominated CHN index components found in step 2.g
$W'_{CHNNUSDi}$ = Modified Weight of non-USD-denominated CHN index components found in step 2.g
$W'_{NCHNUSDi}$ = Modified Weight of USD-denominated NCHN index components found in step 2.g
$W'_{NCHNNUSDi}$ = Modified Weight of non-USD-denominated NCHN index components found in step 2.g
$DIST_{CHNUSD}$ = Weight to be added to each USD-denominated CHN index component with W' less than the weight threshold
$DIST_{CHNNUSD}$ = Weight to be subtracted from each non-USD-denominated CHN index component with W' less than the weight threshold
$DIST_{NCHNUSD}$ = Weight to be added to each USD-denominated NCHN index component with W' less than the weight threshold
$DIST_{NCHNNUSD}$ = Weight to be subtracted from each non-USD-denominated NCHN index component with W' less than the weight threshold
AW_{CHNUSD} = Aggregate Modified Weight of USD-denominated CHN index components
$AW_{NCHNUSD}$ = Aggregate Modified Weight of USD-denominated NCHN index components
N_{CHNUSD} = Total number of USD-denominated CHN index components with W' less than the weight threshold
$N_{NCHNUSD}$ = Total number of non-USD-denominated index components with W' less than the weight threshold

i. Repeat step 2.h, above, until no company's Final Weight exceeds the weight threshold, the aggregate weight of CHN components does not exceed 40%, and the aggregate weight of USD components is greater than or equal to 75%

2.4 Dividend Treatment

The price index does not take normal dividend payments into account. Dividends are accounted for by reinvesting them daily. BSEAQ uses the ex-dividend date to determine the total daily dividends for each day. Special dividends require an index advisor adjustment, as described in Chapter 3, to prevent such distributions from distorting the price index.

2.5 Index Equations

1. The price index is calculated using the following basic equations:

$$I_{(t)} = \frac{\sum_{i=1}^{n} P_{i(t)} * S_{i(t)}}{D_{(t)}}$$

Where:

$I_{(t)}$ = Index value at time $_{(t)}$
$D_{(t)}$ = Divisor at time $_{(t)}$
n = Number of stocks in the index
t = The time that the index is calculated
$P_{i(t)}$ = Price of stock $_i$ at time $_t$ in USD terms
$S_{i(t)}$ = Number of assigned shares of stock $_i$ at time $_t$

Where:

$$D_{(t)} = \frac{\sum_{i=1}^{n} P_{i(t-1)} * S_{i(t-1)}}{I_{(t-1)}}$$

Where:

$I_{(t-1)}$ = Index value at time $_{t-1}$
$D_{(t)}$ = Divisor at time $_t$
n = Number of stocks in the index
$P_{i(t-1)}$ = Closing price of stock $_i$ at time $_{t-1}$ in USD terms
$S_{i(t-1)}$ = Number of assigned shares of stock $_i$ at time $_{t-1}$

Where:

$$D_{(0)} = \frac{\sum_{i=1}^{n} P_{i(0)} * S_{i(0)}}{I_{(0)}}$$

Where:

$I_{(0)}$ = Index value at time $_0$ 100
$D_{(o)}$ = Divisor at time $_0$
n = Number of stocks in the index
$P_{i(t-1)}$ = Closing price of stock $_i$ at time $_0$ in USD terms
$S_{i(t-1)}$ = Number of assigned shares of stock $_i$ at time $_0$

2. Assigned shares are the number of shares needed for each component such that the component conforms to the weighting distribution outlined in Chapter 2.3.2

3. Changes to the index composition require divisor adjustments to retain index continuity before and after specific events, as outlined in Chapter 3. Divisor changes are made according to the following equation:

$$D_{(t+1)} = D_{(t)} * \frac{\sum_{i=1}^{n} P_{i(t+1)} * S_{i(t+1)}}{\sum_{i=1}^{n} P_{i(t)} * S_{i(t)}}$$

Where:

$D_{(t+1)}$ = Initial Divisor after changes are made to the index

Chapter 3: Index Maintenance

This chapter describes the circumstances that require index changes, as well as the details on performing those changes

3.1 Divisor Changes

Changes to the index composition due to corporate actions or component eligibility changes will require adjustments to the index divisor, as follows:

Spinoff*
   1. Subtract the following from the price of the parent company:

$$\frac{\text{Spinoff stock price}}{\text{Share exchange ratio}}$$

   2. Adjust the component's assigned shares such that its weighting is not changed because of the spinoff

Special Cash Dividend
   1. Subtract special dividend from share price

Rights Offering
   1. Subtract the following from the price of the parent company:

$$\frac{\text{Price of rights}}{\text{Rights ratio}}$$

   2. Adjust the component's assigned shares such that its weighting is not changed because of the rights offering

Divisor changes are usually make on the date the corporate action becomes effective. For example, BSEAQ uses the ex-dividend date rather than the payment date to determine when making divisor adjustments.

*If a company being spun-off is only trading on a "when-issued" basis, the "when-issued" price will be used to adjust the parent company's closing price.

3.2 Details of Share Changes

Stock splits and reverse splits do not require index divisor adjustments because the corresponding change to the stock price equally offsets the number of assigned shares, therefore not affecting the component's influence in the index.

3.3 Scheduled Component Changes and Review

BSEAQ has a semi-annual review in June and December of each year. Fundamental data, prices and trading volumes are captured on the Tuesday before the second Friday of June and December. The new number of assigned shares for each component is determined based on the component's weight as determined in 2.3 and the closing price of that component on the Tuesday before the second Friday of June and December. Component changes are announced and made available after the close on the second Friday of June and December. Component changes are made after the close on the third Friday of June and December and are effective at the opening on the Monday following the third Friday of June and December.

3.4 Interim Component Changes

1. Component changes may occur between regularly-scheduled review periods if a specific corporate event makes an existing component ineligible. The following events may require a component's removal or replacement:

   Merger or Acquisition
   If a merger or acquisition results in one component absorbing another, the resulting company will remain a component and the absorbed company will be removed or replaced. If a non-component company absorbs a component company, the original component will be removed, unless the non-component company, after absorbing the assets of the component company, would be considered a Robotics company as described in Chapter 2.2. If a component is the target of an acquisition BlueStar may decide to remove or reduce the weight of that component after the "go-shop" period concludes in order to reduce potential volatility or liquidity risk in the index.

   Spin-Off
   If a company splits or spins off a portion of its business to form one or more new companies, the resulting company with the highest market value will remain a component if it meets the eligibility requirement. The remaining companies will be evaluated for eligibility and possible addition to the index.

   Bankruptcy
   A component company will be removed and replaced immediately after bankruptcy filing. Exceptions are made on a case-by-case basis. For example, a security may not be removed immediately if bankruptcy filing is not the result of operating or financial difficulties.

   Delisting
   A component company will be removed or replaced immediately after being delisted from its primary market.

Whenever possible, interim component changes are announced on BlueStar's publicly-available website at least three trading days prior to component changes becoming effective.

3.5 Unscheduled Component Weight Adjustments

The absolute weight limit for any component between rebalance periods shall be 25%

If the aggregate weight of non-USD-denominated securities rises above 29% between regularly-scheduled rebalance periods, the index components will be rebalanced such that the aggregate weight of all non-US-listed securities will be 25% or less of the total index.

Whenever possible, unscheduled component weight adjustments are announced on BlueStar's publicly available website at least three trading days prior to the adjustments becoming effective.

Chapter 4: Index Calculation and Dissemination

This chapter summarizes calculation and dissemination practices, quality assurance practices, and the circumstances requiring calculation corrections.

4.1 Price Calculation

Price, total return, and net total return indexes for BSEAQ are calculated by Standard & Poor's on both an end-of-day and real-time basis. The BSEAQ is calculated using the last traded price for each company in the Index from the relevant exchanges and markets.

Index values are rounded to two decimal places and divisors are rounded to 14 decimal places.

4.2 Calculation Frequency and Dissemination

BSEAQ is calculated on a real-time basis beginning when the first traded price of any of the Index components is received by Standard & Poor's. Prices are delivered to CME every 15 seconds and subsequently published at that frequency. Net total return index values are available on a real-time basis through the Bloomberg information system under the index symbol "BSEAQNTR INDEX". End-of-day net total return index values are posted on BlueStar's publicly available website, www.bluestarindexes.com.

If the exchange a stock is listed on is closed or if trading in a stock is suspended prior to the market opening, the stock's adjusted closing price from the previous day will be used in the Index calculation until trading commences. If trading in a stock is suspended while the relevant market is open, the last traded price for that stock will be used for all subsequent Index calculations until trading resumes.

4.3 Input Data

Standard & Poor's uses various quality assurance tools to audit, monitor, and maintain the accuracy of its input data. While every reasonable effort is taken to ensure high standards of data integrity, there is no guarantee against errors. Please refer to the Data Correction section for more detail.

The index closing price is calculated using the closing prices issued by the primary exchange for each component stock in the index. If the primary exchange changes the closing price of a component stock, the new price will be used to calculate the index closing price. A final check of closing prices is done between one hour and one and one-half hours after the close of markets. This timeframe may be expanded at S&P's discretion on days where trading volume is unusually large at the close. For example, futures and options expiration dates, and large index rebalancing dates often result in unusually large volume. Only changes received prior to this final check are used in the closing price calculation.

Real time index prices are calculated using spot prices for foreign exchange rates throughout each trading day. Official end-of-day index values are calculated using Reuters spot rates which are captured at 12:00 GMT.

4.4 Data Corrections

Incorrect index component data, corporate action data, or Index Divisors will be corrected upon detection. If such errors are discovered within five days of occurrence, they will be corrected that same day. If discovered after five days, adjustments will be handled on a case-by-case basis depending on the significance of the error and the feasibility of a correction.

Incorrect intraday index tick data will not be corrected. However, incorrect opening and closing values will be corrected as soon as possible after detection.

Appendices

This section provides additional information related to BSEAQ as well as changes to this document.

Appendix A. BlueStar Asia Technology Index Constituents

As of June 15, 2018

Company Name	Ticker	Exchange	Weight
ALIBABA GROUP HOLDING-SP ADR	BABA	New York	6.00%
TENCENT HOLDINGS LTD	700	Hong Kong	6.00%
INFOSYS LTD-SP ADR	INFY	New York	6.00%
SAMSUNG ELECTR-GDR	SMSN	London Intl	6.00%
TAIWAN SEMICONDUCTOR-SP ADR	TSM	New York	6.00%
WIPRO LTD-ADR	WIT	New York	5.35%
VENTURE CORP LTD	VMS	Singapore	3.57%
MAKEMYTRIP LTD	MMYT	NASDAQ GS	3.54%
RAZER INC	1337	Hong Kong	3.39%
WNS HOLDINGS LTD-ADR	WNS	New York	3.38%
IGG INC	799	Hong Kong	3.32%
SILICON MOTION TECHNOL-ADR	SIMO	NASDAQ GS	3.29%
KULICKE & SOFFA INDUSTRIES	KLIC	NASDAQ GS	3.28%
HIMAX TECHNOLOGIES INC-ADR	HIMX	NASDAQ GS	3.26%
FABRINET	FN	New York	3.25%
EROS INTERNATIONAL PLC	EROS	New York	3.19%
HI-P INTERNATIONAL LTD	HIP	Singapore	3.19%
BAIDU INC - SPON ADR	BIDU	NASDAQ GS	2.69%
JD.COM INC-ADR	JD	NASDAQ GS	1.74%
NETEASE INC-ADR	NTES	NASDAQ GS	1.10%
CTRIP.COM INTERNATIONAL-ADR	CTRP	NASDAQ GS	0.93%
TAL EDUCATION GROUP- ADR	TAL	New York	0.93%
IQIYI INC-ADR	IQ	NASDAQ GS	0.90%
SUNNY OPTICAL TECH	2382	Hong Kong	0.86%
WEIBO CORP-SPON ADR	WB	NASDAQ GS	0.85%
AAC TECHNOLOGIES HOLDINGS IN	2018	Hong Kong	0.76%
WUXI BIOLOGICS CAYMAN INC	2269	Hong Kong	0.61%
AUTOHOME INC-ADR	ATHM	New York	0.59%
58.COM INC-ADR	WUBA	New York	0.54%
BEIGENE LTD-ADR	BGNE	NASDAQ GS	0.52%
MOMO INC-SPON ADR	MOMO	NASDAQ GS	0.51%
ALIBABA HEALTH INFORMATION T	241	Hong Kong	0.50%
TRAVELSKY TECHNOLOGY LTD-H	696	Hong Kong	0.47%
VIPSHOP HOLDINGS LTD - ADR	VIPS	New York	0.44%
PING AN HEALTHCARE AND TECHN	1833	Hong Kong	0.43%
YY INC-ADR	YY	NASDAQ GS	0.42%
51JOB INC-ADR	JOBS	NASDAQ GS	0.41%
SINA CORP	SINA	NASDAQ GS	0.41%
3SBIO INC	1530	Hong Kong	0.41%
SEMICONDUCTOR MANUFACTURING	981	Hong Kong	0.41%
LENOVO GROUP LTD	992	Hong Kong	0.40%
ASM PACIFIC TECHNOLOGY	522	Hong Kong	0.38%
BILIBILI INC-SPONSORED ADR	BILI	NASDAQ GS	0.37%
KINGSOFT CORP LTD	3888	Hong Kong	0.35%
MEITU INC	1357	Hong Kong	0.35%
KINGDEE INTERNATIONAL SFTWR	268	Hong Kong	0.33%
BAOZUN INC-SPN ADR	BZUN	NASDAQ GS	0.33%
BYD ELECTRONIC INTL CO LTD	285	Hong Kong	0.33%
VTECH HOLDINGS LTD	303	Hong Kong	0.31%
YANGTZE OPTICAL FIBRE AND-H	6869	Hong Kong	0.31%
CHINA BIOLOGIC PRODUCTS HOLD	CBPO	NASDAQ GS	0.30%
HUA HONG SEMICONDUCTOR LTD	1347	Hong Kong	0.30%
CHINASOFT INTERNATIONAL LTD	354	Hong Kong	0.29%
FANG HOLDINGS LTD - ADR	SFUN	New York	0.29%
BITAUTO HOLDINGS LTD-ADR	BITA	New York	0.28%
CHEETAH MOBILE INC - ADR	CMCM	New York	0.28%
SKYWORTH DIGITAL HLDGS LTD	751	Hong Kong	0.27%
SOHU.COM INC	SOHU	NASDAQ GS	0.27%
TONGDA GROUP HOLDINGS LTD	698	Hong Kong	0.27%
NETDRAGON WEBSOFT HOLDINGS L	777	Hong Kong	0.27%
TCL MULTIMEDIA TECHNOLOGY	1070	Hong Kong	0.26%
TIAN GE INTERACTIVE HOLDINGS	1980	Hong Kong	0.26%
XUNLEI LTD-ADR	XNET	NASDAQ GS	0.26%
Q TECHNOLOGY GROUP CO LTD	1478	Hong Kong	0.26%
21VIANET GROUP INC-ADR	VNET	NASDAQ GS	0.26%
TUNIU CORP-SPON ADR	TOUR	NASDAQ GM	0.26%
CAMSING INTERNATIONAL HOLDIN	2662	Hong Kong	0.26%
LEYOU TECHNOLOGIES HOLDINGS	1089	Hong Kong	0.26%
CHANGYOU.COM LTD-ADR	CYOU	NASDAQ GS	0.26%
COGOBUY GROUP	400	Hong Kong	0.25%
TRULY INTERNATIONAL HOLDINGS	732	Hong Kong	0.25%
HC INTERNATIONAL INC	2280	Hong Kong	0.25%
RENREN INC-ADR	RENN	New York	0.25%
PAX GLOBAL TECHNOLOGY LTD	327	Hong Kong	0.25%
SINOSOFT TECHNOLOGY GROUP LT	1297	Hong Kong	0.25%
O-NET TECHNOLOGIES GROUP LTD	877	Hong Kong	0.25%
ESSEX BIO-TECHNOLOGY LTD	1061	Hong Kong	0.25%

Appendix B. Document Change History

A history of significant changes to this document is shown in the table below

Issue	Date	Change
1.0	June 25, 2018	Initial publication