

Morningstar® Global Markets Technology and Comm Services Moat Focus IndexSM

20-Sep-24

The index follows a staggered rebalancing approach in which the index is divided into two sub-portfolios, each containing 25 stocks. One sub-portfolio reconstitutes in December and June; the other sub-portfolio reconstitutes in March and September. The information here pertains only to the subportfolio being reconstituted.

For More Information:
<http://indexes.morningstar.com>
 US: +1 312 384-3735
 Europe: +44 20 3194 1082

Reconstituted Holdings

Name	Ticker	Country	Sector	Moat Rating	Price/Fair Value	Weight (%)
Tencent Holdings Ltd.	00700	China	Communication Services	Wide	0.52	4.00
Sensata Technologies Holding PLC	ST	United States	Technology	Narrow	0.54	4.00
Infineon Technologies	IFX	Germany	Technology	Narrow	0.57	4.00
Win Semiconductors Corp. Ordinary Shares	3105	Taiwan	Technology	Narrow	0.61	4.00
Samsung Electro-Mechanics	009150	South Korea	Technology	Narrow	0.64	4.00
Taiwan Semiconductor Manufacturing Common Stock	2330	Taiwan	Technology	Wide	0.66	4.00
Murata Mfg Co. Ltd 100	6981	Japan	Technology	Wide	0.68	4.00
Pinterest Inc Ordinary Shares Cls A	PINS	United States	Communication Services	Narrow	0.68	4.00
Block Inc Common Stock	SQ	United States	Technology	Narrow	0.68	4.00
Telus Corporation Shs	T	Canada	Communication Services	Narrow	0.68	4.00
BT Group PLC	BT.A	United Kingdom	Communication Services	Narrow	0.70	4.00
Rogers Communications Inc Common Stock B	RCI.B	Canada	Communication Services	Narrow	0.70	4.00
NXP Semiconductors NV Common Stock	NXPI	United States	Technology	Wide	0.70	4.00
Liberty Global Ltd Class C	LBTYK	United States	Communication Services	Narrow	0.71	4.00
Alphabet Inc Class A	GOOGL	United States	Communication Services	Wide	0.71	4.00
Sino-American Silicon Products	5483	Taiwan	Technology	Narrow	0.72	4.00
GlobalWafers Co Ltd Shs	6488	Taiwan	Technology	Narrow	0.73	4.00
Zscaler Inc shs	ZS	United States	Technology	Narrow	0.73	4.00
Sony Group Corp Common Stock	6758	Japan	Technology	Wide	0.73	4.00
Samsung Electronics Ltd. Common Stock	005930	South Korea	Technology	Narrow	0.74	4.00
Lyft Inc Shs Class A	LYFT	United States	Technology	Narrow	0.75	4.00
Mediatek Inc. Common Stock	2454	Taiwan	Technology	Narrow	0.81	4.00
Cognizant Technology Solutions Corporation A	CTSH	United States	Technology	Narrow	0.81	4.00
Verizon Communications Inc.	VZ	United States	Communication Services	Narrow	0.82	4.00
SS&C; Technologies Holdings Inc	SSNC	United States	Technology	Narrow	0.83	4.00

Added Holdings

Name	Ticker	Country	Sector	Weight(%)	Previous Recon Failed Screen			
					Moat Rating	Price/Fair Value	12-month momentum	Others
Liberty Global Ltd Class C*	LBTYK	United States	Communication Services	4.23				•
BT Group PLC	BT.A	United Kingdom	Communication Services	4.22				•
Rogers Communications Inc Common Stock B	RCI.B	Canada	Communication Services	4.11				•
Telus Corporation Shs	T	Canada	Communication Services	4.08				•
Tencent Holdings Ltd.	00700	China	Communication Services	4.01				•
Block Inc Common Stock	SQ	United States	Technology	3.91		•		
Sensata Technologies Holding PLC	ST	United States	Technology	3.75				•
GlobalWafers Co Ltd Shs	6488	Taiwan	Technology	3.68		•		
Win Semiconductors Corp. Ordinary Shares	3105	Taiwan	Technology	1.97				•
Pinterest Inc Ordinary Shares Cls A**	PINS	United States	Communication Services	1.97				•
NXP Semiconductors NV Common Stock	NXPI	United States	Technology	1.97		•		
Zscaler Inc shs	ZS	United States	Technology	1.97		•		
Sony Group Corp Common Stock	6758	Japan	Technology	1.97	•			
Samsung Electronics Ltd. Common Stock	005930	South Korea	Technology	1.97		•		

*Addition to Universe

**Country/Sector Constraints

Morningstar® Global Markets Technology and Comm Services Moat Focus IndexSM

Removed Holdings

Name	Ticker	Country	Sector	Failed Screen (Reason for removal)			
				Moat Rating	Price/Fair Value	12-month momentum	Others
Roblox Corp Ordinary Shares - Class A	RBLX	United States	Communication Services		•		
Smartsheet Inc shs Class A	SMAR	United States	Technology		•		
Quebecor Inc. B	QBR/B	Canada	Communication Services		•		
Skyworks Solutions Inc.	SWKS	United States	Technology		•		
Largan Precision Co. Ltd. Common Stock	3008	Taiwan	Technology		•		
Teradyne Inc.	TER	United States	Technology		•		
DoorDash Inc Ordinary Shares - Class A	DASH	United States	Communication Services		•		
Tyler Technologies Inc.	TYL	United States	Technology		•		
Comcast Corporation A	CMCSA	United States	Communication Services				•
ON Semiconductor Corporation	ON	United States	Technology				•
Sirius XM Holdings Inc.	SIRI	United States	Communication Services				•
Ubisoft Entertainment	UBI	France	Communication Services				•
SOITEC	SOI	France	Technology				•
NetEase Inc Ordinary Shares	9999	China	Communication Services				•

Next Potential Holdings

Name	Ticker	Country	Sector	Moat Rating	Price/Fair Value
Universal Music Group NV	UMG	Netherlands	Communication Services	Wide	0.74
ASML Holding NV Common Stock Bearer Form	ASML	Netherlands	Technology	Wide	0.75
Millicom International Cellular SA SEDR	TIGO SDB	Sweden	Communication Services	Narrow	0.77
The Walt Disney Co Shs	DIS	United States	Communication Services	Wide	0.77
Adyen NV Ordinary Shares	ADYEN	Netherlands	Technology	Wide	0.78
Elastic N.V Ordinary Shares	ESTC	United States	Technology	Narrow	0.78
Vontier Corp Ordinary Shares	VNT	United States	Technology	Narrow	0.80
Interpublic Group of Companies	IPG	United States	Communication Services	Narrow	0.80
CrowdStrike Holdings Inc Ordinary Shares - Class A	CRWD	United States	Technology	Narrow	0.83
Littelfuse Inc.	LFUS	United States	Technology	Narrow	0.83

Index Holdings

Name	Ticker	Country	Sector	Weight(%)
SS&C; Technologies Holdings Inc	SSNC	United States	Technology	4.41
Cognizant Technology Solutions Corporation A	CTSH	United States	Technology	4.33
Liberty Global Ltd Class C	LBTYK	United States	Communication Services	4.23
BT Group PLC	BT.A	United Kingdom	Communication Services	4.22
Verizon Communications Inc.	VZ	United States	Communication Services	4.22
Rogers Communications Inc Common Stock B	RCI.B	Canada	Communication Services	4.11
Telus Corporation Shs	T	Canada	Communication Services	4.08
Tencent Holdings Ltd.	00700	China	Communication Services	4.01
Block Inc Common Stock	SQ	United States	Technology	3.91
Samsung Electro-Mechanics	009150	South Korea	Technology	3.76
Sino-American Silicon Products	5483	Taiwan	Technology	3.75
Sensata Technologies Holding PLC	ST	United States	Technology	3.75
GlobalWafers Co Ltd Shs	6488	Taiwan	Technology	3.68
Infineon Technologies	IFX	Germany	Technology	3.51
Lyft Inc Shs Class A	LYFT	United States	Technology	3.46

Morningstar® Global Markets Technology and Comm Services Moat Focus IndexSM

Index Holdings

Name	Ticker	Country	Sector	Weight(%)
Cogent Communications Holdings Inc Common Stock	CCOI	United States	Communication Services	2.70
Adobe Inc Shs	ADBE	United States	Technology	2.56
Largan Precision Co Ltd	3008	Taiwan	Technology	2.29
DoorDash Inc Ordinary Shares - Class A	DASH	United States	Communication Services	2.24
Millicom International Cellular SA SEDR	TIGO SDB	Sweden	Communication Services	2.19
Comcast Corporation A	CMCSA	United States	Communication Services	2.12
Fortive Corp Shs	FTV	United States	Technology	2.00
Pinterest Inc Ordinary Shares Cls A	PINS	United States	Communication Services	1.97
Win Semiconductors Corp. Ordinary Shares	3105	Taiwan	Technology	1.97
Samsung Electronics Ltd. Common Stock	005930	South Korea	Technology	1.97
Sony Group Corp Common Stock	6758	Japan	Technology	1.97
Zscaler Inc shs	ZS	United States	Technology	1.97
Taiwan Semiconductor Manufacturing Common Stock	2330	Taiwan	Technology	1.97
Murata Mfg Co. Ltd 100	6981	Japan	Technology	1.97
NXP Semiconductors NV Common Stock	NXPI	United States	Technology	1.97
Alphabet Inc Class A	GOOGL	United States	Communication Services	1.97
Mediatek Inc. Common Stock	2454	Taiwan	Technology	1.97
NICE	NICE	Israel	Technology	1.83
NetEase Inc Ordinary Shares	09999	China	Communication Services	1.68
STMicroelectronics NV.	STMPA	France	Technology	1.26