



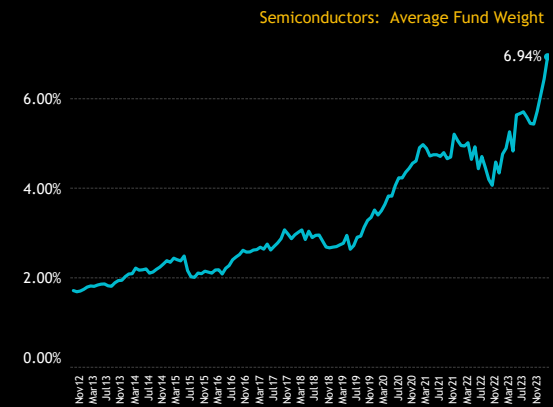
Semiconductors  
Winners Emerge As Allocations Hit Record Highs

# Semiconductors Winners Emerge As Allocations Hit Record Highs

In this report, we analyse Semiconductors allocations among 339 actively managed Global equity funds.

Copley Fund Research  
March 27, 2024  
Steven Holden  
steven.holden@copleyfundresearch.com

- **Semiconductor Sector Hits Historic Highs:** Record allocations highlight investor confidence in the sector as second phase of bull market drives allocations to fresh peak.
- **Industry Rotation Accelerates:** Semiconductors Overtake Pharmaceuticals as 2nd largest allocation whilst Banks suffer.
- **Country Dynamics Shift:** Peak Ownership in Taiwan, USA, Netherlands, while German Semiconductor holdings see strategic pullback through Infineon closures.
- **Value vs. Growth:** Semiconductor's modest underweight led by caution from Value investors, while Growth funds' hit record highs.
- **Front Runners Emerge:** TSMC, ASML, and NVIDIA establish dominance, reflecting investors' preference for companies at the forefront of technological innovation, while traditional players like Infineon, Intel, and Texas Instruments face declining investor interest.



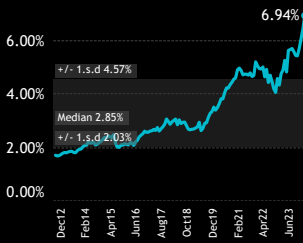
For further information on our data collection and calculation methodology, as well as how we classify fund Styles, please view the Appendices at the back of this report.

# Semiconductors: Winners Emerge as Allocations Hit Record Highs

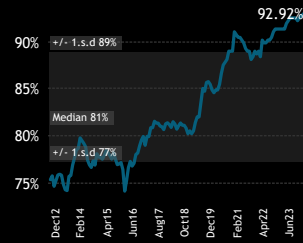
## Time-Series Analysis

Semiconductor weights in active Global equity funds printed new highs again last month. The average holding weight among the 339 funds in our analysis hit a new peak of 6.94% (ch1) as of 02/29/2024, with a new high of 92.9% of funds invested in the sector (ch2). Benchmark weights did the same but at a faster rate (ch4), pushing active funds to a record underweight of -0.67% (ch7). However, the percentage of funds positioned overweight the SPDRs ACWI ETF sits just under half at 42.8% and in the middle of the long-term range (ch8), so Semiconductors are far from a consensus underweight holding.

1. Average Fund Weight



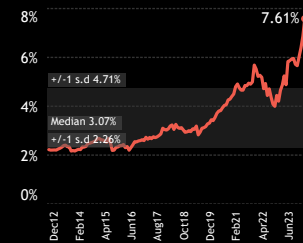
2. Funds Invested %



3. Combined Fund AUM, \$



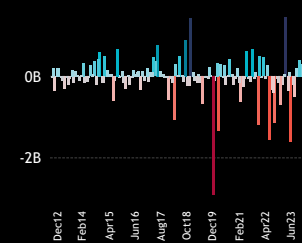
4. ACWI Weight



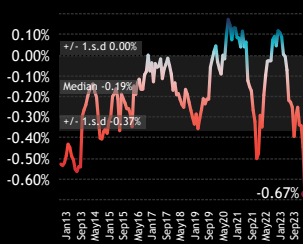
5. # of Companies Invested



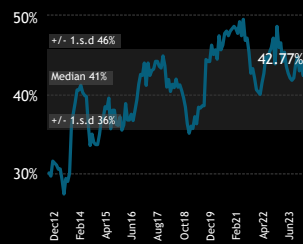
6. Monthly Fund Flows, \$



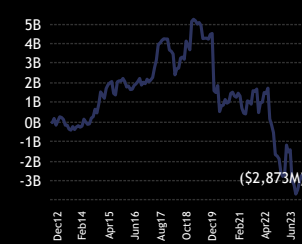
7. Average Weight vs ACWI



8. Funds O/W %



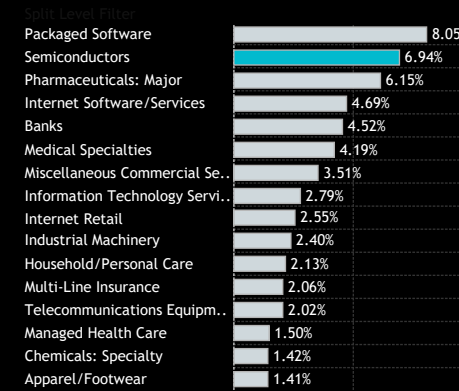
9. Cumulative Fund Flows, \$



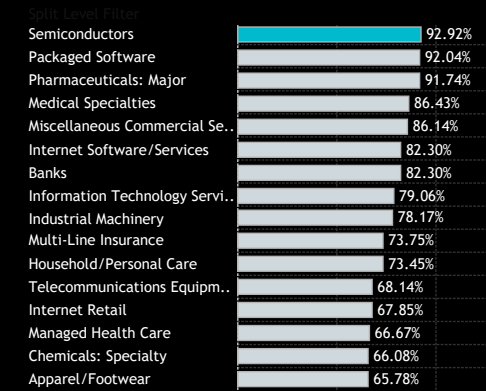
## Peer Group Positioning

Semiconductors have become a pivotal holding in Global equity funds, ranking as the second-largest holding by average weight, trailing only Packaged Software (Ch10), and standing out as the most widely held industry group among global peers (ch11). Semiconductors are among the top 10 largest industry underweights, though not nearly as pronounced as the heavy underweights seen in Telecommunications Equipment, Banks, and Motor Vehicles. In contrast, Global funds are overweight Miscellaneous Commercial Services, Medical Specialties, and Household / Personal Care.

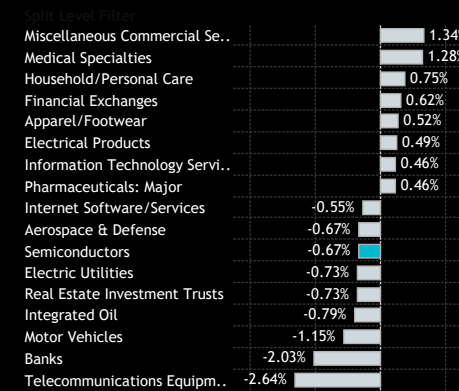
10: Average Fund Weight As of 2/29/2024



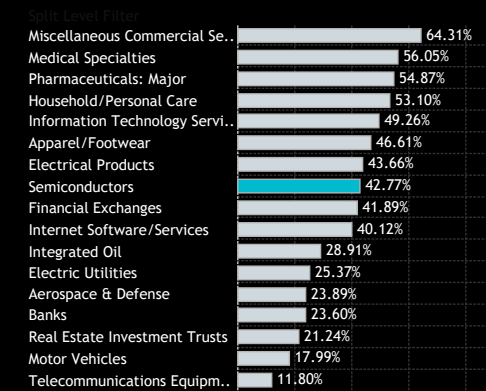
11: Percentage of Funds Invested As of 2/29/2024



12: Average Fund Weight vs ACWI As of 2/29/2024



13: Percentage of Funds Overweight As of 2/29/2024



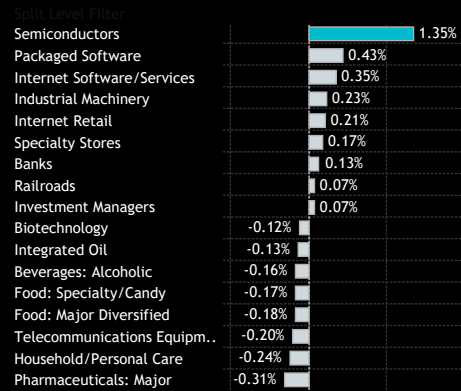


# Semiconductors: Winners Emerge as Allocations Hit Record Highs

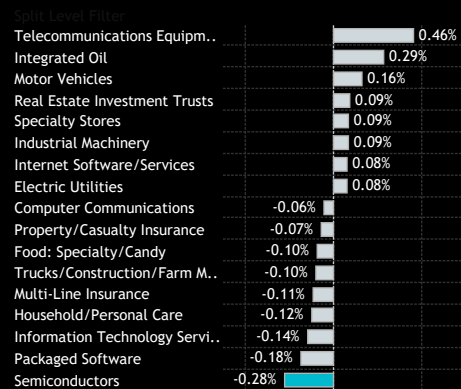
## Peer Group Activity

The recent surge in Semiconductor allocations has outpaced all other industry groups. Between the filing dates of 08/31/2023 and 02/29/2024, the average weight in Semiconductors rose by +1.35%, surpassing the combined increases of Packaged Software, Internet Software/Services, and Industrial Machinery (Ch1). This growth comes against a backdrop of -\$4.2bn in net outflows for the asset class overall, making the semiconductor net inflow of +\$775 million all the more impressive (Ch4). Despite this favorable shift, active managers remained behind the curve in matching benchmark gains, resulting in the net underweight widening by -0.28%, the largest increase observed in any industry group (Ch3).

1: Average Fund Weight Change  
Between 8/31/2023 and 2/29/2024



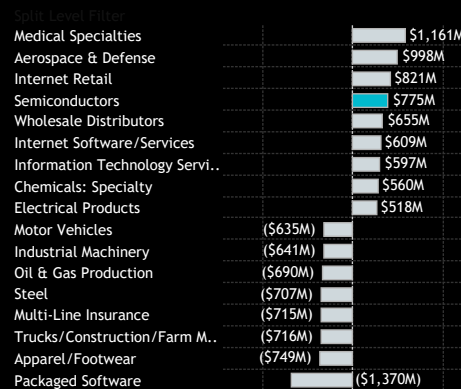
3: Average Weight vs ACWI Change  
Between 8/31/2023 and 2/29/2024



2: # Buyers - # Sellers  
Between 8/31/2023 and 2/29/2024



4: Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

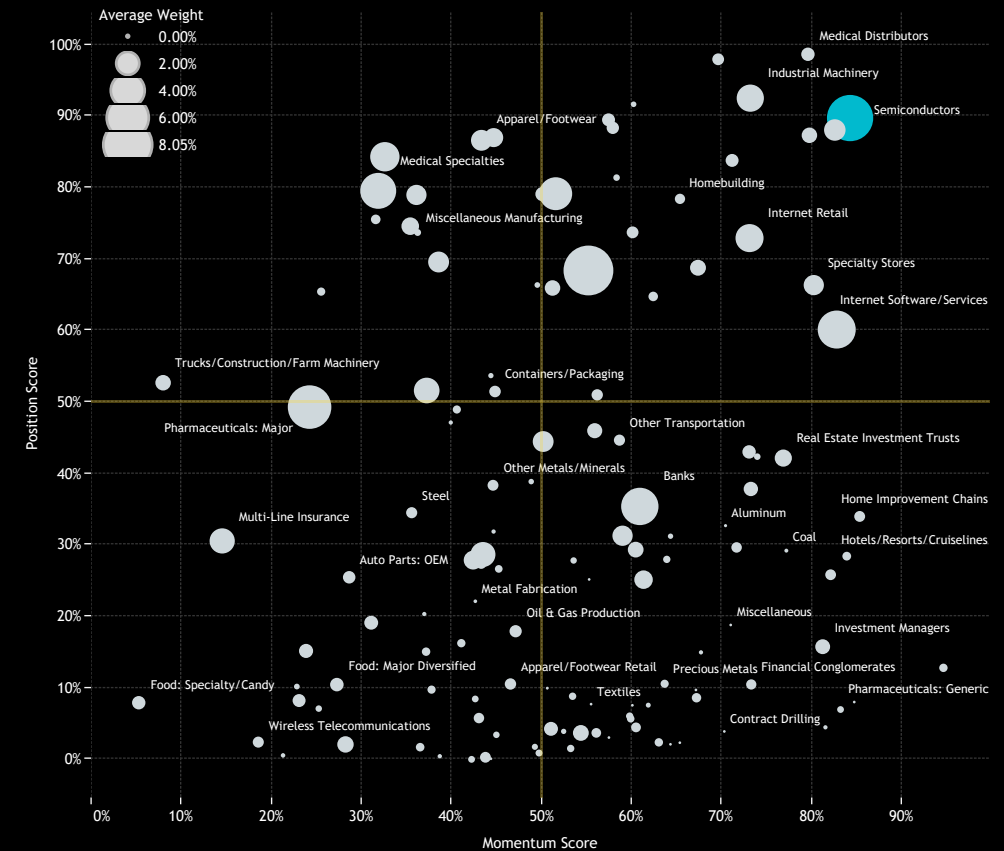


## Country Sentiment

The Sentiment Grid maps the relationship between current and long-term fund positioning, alongside recent fund manager activity across the Global fund universe for each Industry group. The Y-axis, showing the 'Position Score,' compares current positioning to historical data from 2008, on a 0-100% scale. The X-axis 'Momentum Score' tracks recent fund manager activity from 08/31/2023 to 02/29/2024, with values from 0% (most negative) to 100% (most positive).

The positioning of Semiconductors in the top-right corner underscores the sector's growing appeal among fund managers and heightened exposure levels, and stands in contrast to peers such as Multi-Line Insurance and Major Pharmaceuticals.

Chart 5: Country Sentiment Grid  
Momentum Measure Between 8/31/2023 - 2/29/2024



Source: Factset, Copley Fund Research  
For more information on the methodology behind the Sentiment Grid, please see Appendix 4 at the back of this report.

# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## Fund Weight Distribution & Style Split

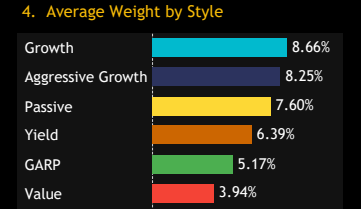
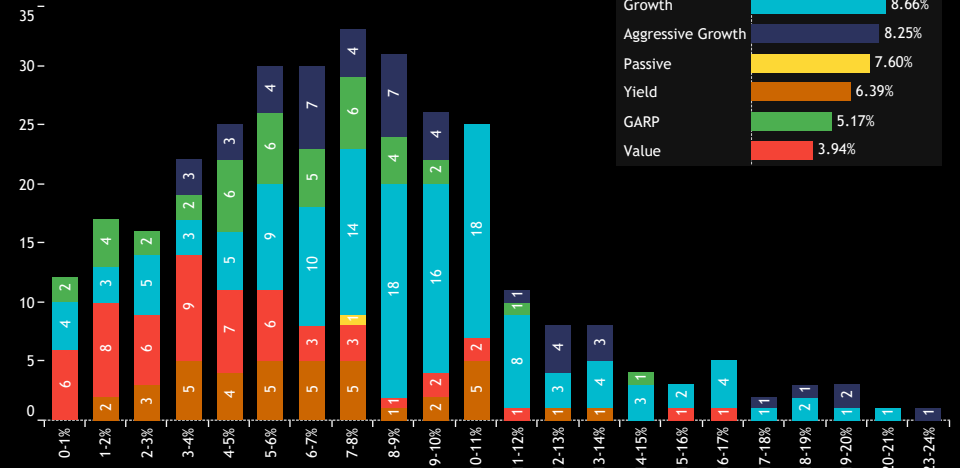
Chart 2 displays a histogram for fund weights in the Semiconductor sector, highlighting a positively skewed distribution with the right tail extending beyond 20%. Away from the bullish tail, 80% of Semiconductor allocations fall between the lower and upper quintiles of 3.85% and 10.3% (ch3). Semiconductors remain an attractive proposition for Growth investors, who allocate about twice as much as their Value counterparts (ch4). Indeed, the upper tail of the distribution is led by high-growth funds such as Liontrust Global Innovation (23.7%) and Swedbank Globalfond (20.4%), with most funds holding more than 5 stocks in the sector (ch1).

1: Semiconductors - Largest Fund Weights / Number of Holdings  
As of 2/29/2024

| Fund Name  | Market Cap Focus | Weight (%) | Number of Holdings |
|--|------------------|------------|--------------------|
| Liontrust Investment Funds I - Global Innovation Fund          | Large/Megacap    | 23.71%     | 7                  |
| Swedbank Robur Globalfond                                      | Large/Megacap    | 20.41%     | 9                  |
| MainFirst SICAV - Global Equities Fund                         | Large/Megacap    | 19.54%     | 5                  |
| Guinness Atkinson Global Innovators Fund                       | Large/Megacap    | 19.22%     | 5                  |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr.   | Large/Megacap    | 19.20%     | 4                  |
| Salamos Global Equity Fund                                     | Large/Megacap    | 18.65%     | 7                  |
| Sands Capital Funds Plc - Global Growth Fund                   | Large/Megacap    | 18.55%     | 4                  |
| Ninety One Glb. Strat. Fd. - Global Dynamic Fund               | Large/Megacap    | 18.19%     | 5                  |
| Janus Henderson Sustainable/Responsible Funds-Global Sus Eq.   | Large/Megacap    | 17.54%     | 7                  |
| JPMorgan Funds - Global Growth Fund                            | Large/Megacap    | 17.46%     | 6                  |
| Baron Global Advantage Fund                                    | Large/Megacap    | 16.71%     | 2                  |
| Baillie Gifford Investment Funds ICVC - Positive Change Fund   | Large-cap        | 16.62%     | 2                  |
| Acatix Aktien Global Fonds UI                                  | Large/Megacap    | 16.43%     | 5                  |
| JPMorgan Funds - Global Focus Fund                             | Large/Megacap    | 16.14%     | 6                  |
| Scottish Mortgage Investment Trust Plc                         | Large/Megacap    | 16.06%     | 2                  |
| FTIF SICAV - Global Climate Change Fund                        | Large-cap        | 15.97%     | 5                  |
| American Funds New Economy Fund                                | Large/Megacap    | 15.48%     | 14                 |
| CT Inv. Funds ICVC - Global Select Fund                        | Large/Megacap    | 15.32%     | 8                  |
| Chautauqua Global Growth Fund                                  | Large/Megacap    | 14.75%     | 4                  |
| Premier Miton Global Sustainable Growth Fund                   | Large-cap        | 14.23%     | 5                  |
| Ninety One Glb. Strat. Fd. - Global Strategic Equity Fund      | Large/Megacap    | 14.18%     | 6                  |
| JPMorgan Investment Funds - Global Select Equity Fund          | Large/Megacap    | 14.13%     | 6                  |
| Steward Global Equity Income Fund                              | Large-cap        | 13.84%     | 8                  |
| Ninety One Glb. Strat. Fd. - Global Equity                     | Large/Megacap    | 13.71%     | 5                  |
| ERSTE Stock Global   | Large/Megacap    | 13.58%     | 5                  |
| PGIM Jennison Global Opportunities Fund                        | Large/Megacap    | 13.44%     | 3                  |
| Danske Invest Global Sustainable Future - Akkumulierende       | Large/Megacap    | 13.44%     | 4                  |
| Columbia Threadneedle (UK) ICVC - Sustainable Opp. Glb. Eq.Fd. | Large/Megacap    | 13.43%     | 4                  |
| AZ Fund 1 - Equity - Global Growth                             | Large/Megacap    | 13.30%     | 7                  |
| T Rowe Price Global Stock Fund                                 | Large/Megacap    | 13.14%     | 6                  |
| SEB Fund 1 - Global Fund                                       | Large/Megacap    | 12.78%     | 5                  |
| SEB Aktiesparfond  | Large/Megacap    | 12.64%     | 5                  |
| Fidelity Advisor Global Capital Appreciation Fund              | Large/Megacap    | 12.58%     | 5                  |
| Artisan Global Discovery Fund                                  | Large-cap        | 12.49%     | 6                  |
| Fidelity Funds SICAV - Global Thematic Opportunities Fund      | Large/Megacap    | 12.39%     | 23                 |
| Comgest Monde  | Large/Megacap    | 12.38%     | 3                  |
| Comgest Growth Plc - Growth Global Flex Fund                   | Large/Megacap    | 12.38%     | 3                  |
| AEGON ASSET Mgmt. Inv. Co. (Ireland) Plc - Global Eq. Income   | Large/Megacap    | 12.31%     | 3                  |
| Quilter Investors Ethical Equity                               | Large/Megacap    | 11.98%     | 5                  |
| Deka - GlobalChampions CF/TF                                   | Large/Megacap    | 11.80%     | 5                  |

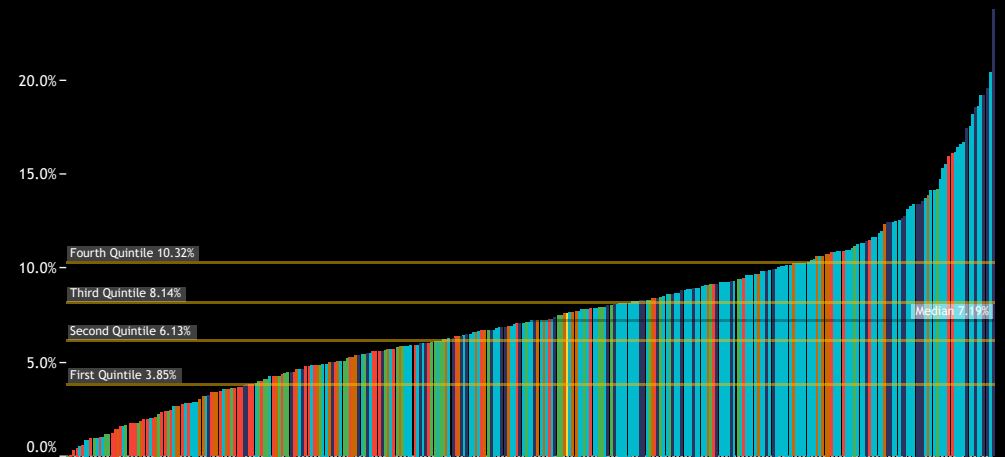
Source: Factset, Copley Fund Research

2: Semiconductors - Histogram of Fund Weights  
As of 2/29/2024



Source: Factset, Copley Fund Research

3: Semiconductors - Distribution of Fund Weights  
As of 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## 1: Semiconductors - Fund Activity Metrics Between 8/31/2023 and 2/29/2024

| # New Positions    | # Funds Increasing Weight | # Funds Buying  | Estimated Net Fund Flows, \$ |
|--------------------|---------------------------|-----------------|------------------------------|
| 5                  | 269                       | 135             |                              |
| # Closed Positions | # Funds Decreasing Weight | # Funds Selling |                              |
| 4                  | 51                        | 126             |                              |

## 2: Semiconductors - Largest Increases in Fund Weight Between 8/31/2023 and 2/29/2024

| Fund Name  | Market Cap Focus | New or Closed | % Change | Flow    |
|--|------------------|---------------|----------|---------|
| Liontrust Investment Funds I - Global Innovation Fund        | Large/Megacap    |               | 10.61%   | \$13M   |
| Delaware Global Equity Fund II                               | Large/Megacap    | New           | 10.22%   | \$21M   |
| Delaware Global Equity Fund                                  | Large/Megacap    | New           | 10.20%   | \$15M   |
| SEB Fund 1 - Global Fund                                     | Large/Megacap    |               | 9.47%    | \$65M   |
| AXA IM Equity Trust - Global Equity QI                       | Large/Megacap    |               | 6.70%    | \$26M   |
| American Century Focused Global Growth Fund                  | Large/Megacap    |               | 6.27%    | \$20M   |
| Calamos Global Equity Fund                                   | Large/Megacap    |               | 6.19%    | \$3M    |
| Carmignac Investissement                                     | Large/Megacap    |               | 5.89%    | \$77M   |
| Ariel Global Fund  | Large-cap        | New           | 5.58%    | \$4M    |
| Federated Hermes Invt. Funds - Global Equity ESG Fnd         | Large/Megacap    |               | 5.46%    | \$49M   |
| JPMorgan Funds - Global Growth Fund                          | Large/Megacap    |               | 5.45%    | \$10M   |
| JPMorgan Funds - Global Focus Fund                           | Large/Megacap    |               | 5.39%    | \$206M  |
| JOHCM Umbrella Fund Plc - Global Select Fund                 | Large-cap        |               | 4.96%    | \$68M   |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr. | Large/Megacap    |               | 4.83%    | (\$45M) |
| AZ Fund 1 - Equity - Global Growth                           | Large/Megacap    |               | 4.59%    | \$10M   |

## 3: Semiconductors - Largest Decreases in Fund Weight Between 8/31/2023 and 2/29/2024

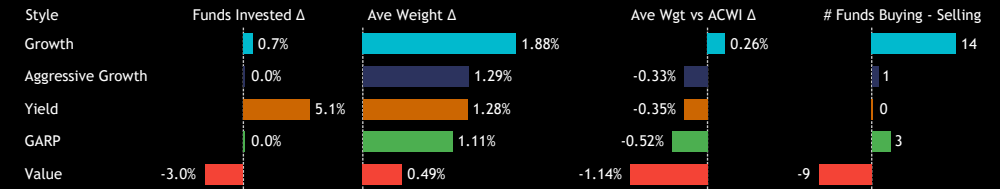
| Fund Name   | Market Cap Focus | New or Closed | % Change | Flow     |
|---|------------------|---------------|----------|----------|
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Conviction Fund | Large-cap        |               | -5.93%   | (\$4M)   |
| FP WHEB Asset Mgmt. Fds. - Sustainability Fund                | Large-cap        |               | -5.12%   | (\$48M)  |
| Artemis SmartGARP Paris-Aligned Global Equity Fund            | Large-cap        |               | -3.49%   | (\$1M)   |
| PGIM Jennison Global Opportunities Fund                       | Large/Megacap    |               | -2.62%   | (\$292M) |
| GAM Star Fund Plc - Worldwide Equity                          | Large/Megacap    |               | -2.50%   | \$0M     |
| FTIF SICAV - Growth (Euro) Fund                               | Large-cap        |               | -2.27%   | (\$191M) |
| Fidelity Inv. Trust - Worldwide Fund                          | Large/Megacap    |               | -2.15%   | (\$75M)  |
| Fonditalia - Equity Global High Dividend                      | Large-cap        |               | -2.12%   | (\$24M)  |
| M&G (Lux) Investment Funds 1 - Positive Impact Fund           | Large-cap        |               | -1.92%   | (\$1M)   |
| Fidelity Funds SICAV - Global Focus Fund                      | Large/Megacap    |               | -1.67%   | (\$25M)  |
| Templeton Growth Fund Inc.                                    | Large-cap        |               | -1.61%   | (\$184M) |
| DWS Concept DJE Globale Aktien                                | Large/Megacap    |               | -1.55%   | (\$16M)  |
| Artisan Global Equity Fund                                    | Large/Megacap    |               | -1.53%   | (\$4M)   |
| UBS (Lux) Equity SICAV - Global Income Sustainable (USD)      | Large-cap        |               | -1.36%   | (\$13M)  |
| ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds       | Large-cap        |               | -1.29%   | (\$53M)  |

## Fund Activity & Style Trends

Chart set 1 breaks down the fund level activity further. Given the strong performance of the sector, 269 funds saw weights increase compared to 51 decrease. On the active side the metrics are skewed to the buy side, with positive fund flows backed up by more buyers than sellers and 5 openings versus 4 closings. Opening positions were also larger in magnitude, led by Delaware Global Equity (10.2%) and Ariel Global (5.6%).

Chart 5 below looks at long-term Semiconductor allocations relative to benchmark for each of the 5 Style groups. Value and GARP funds are at record underweights compared to record overweights for Growth funds. Interesting that overweights from the Aggressive Growth category are well off the highs. Changes over the last 6-months in chart 4 confirm a strategic shift away from the sector by Value managers.

## 4. Fund Ownership Change Metrics by Style Between 8/31/2023 and 2/29/2024



## 5: Semiconductors - Average Weight vs Benchmark by Fund Style

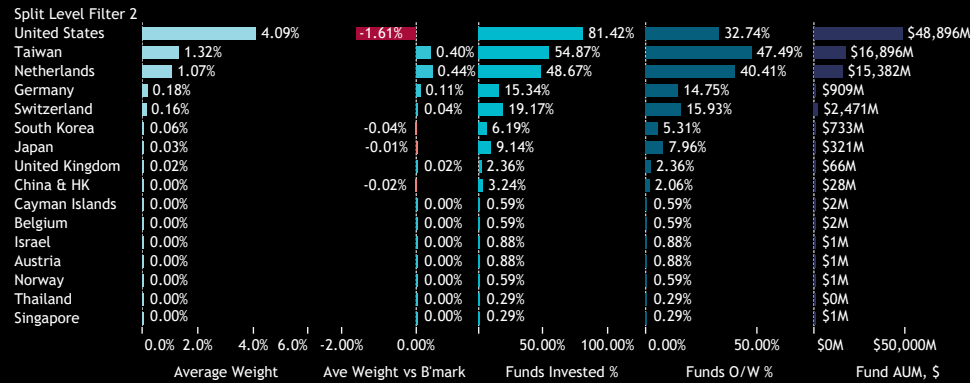


# Semiconductors: Winners Emerge as Allocations Hit Record Highs

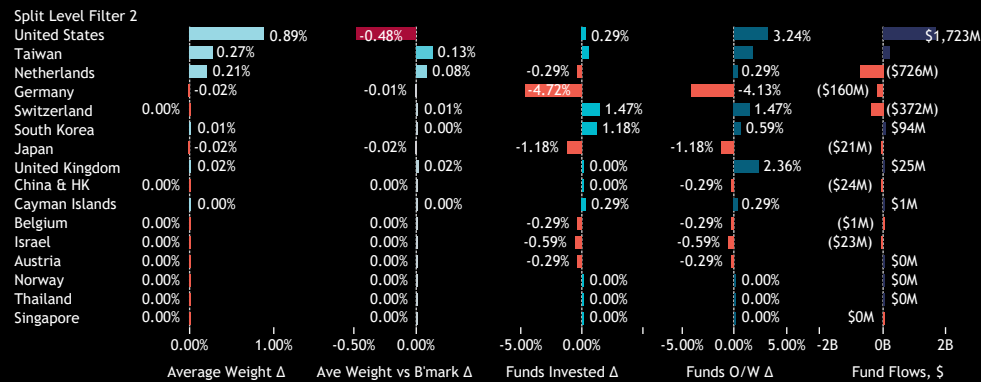
## Country Positioning & Activity

US Semiconductors are the largest exposure and most widely held country allocation, with an average weight of 4.1% and 81.4% of funds invested (ch1). Taiwan and the Netherlands make up a 2nd tier and share similar ownership characteristics. Together, these three countries represent 6.48% of the total 6.94% allocated to semiconductors, with Germany, Switzerland, and South Korea making smaller contributions. The United States is the primary contributor to the sector's underweight, being -1.61% below the benchmark on average, though this is partially offset by overweights in Taiwan and the Netherlands. Over the last six months, there has been a positive shift towards the United States and Taiwan, while exposure to German semiconductors decreased as 4.7% of funds closed their exposure.

1: Semiconductors - Latest Sector Ownership Statistics  
As of 2/29/2024

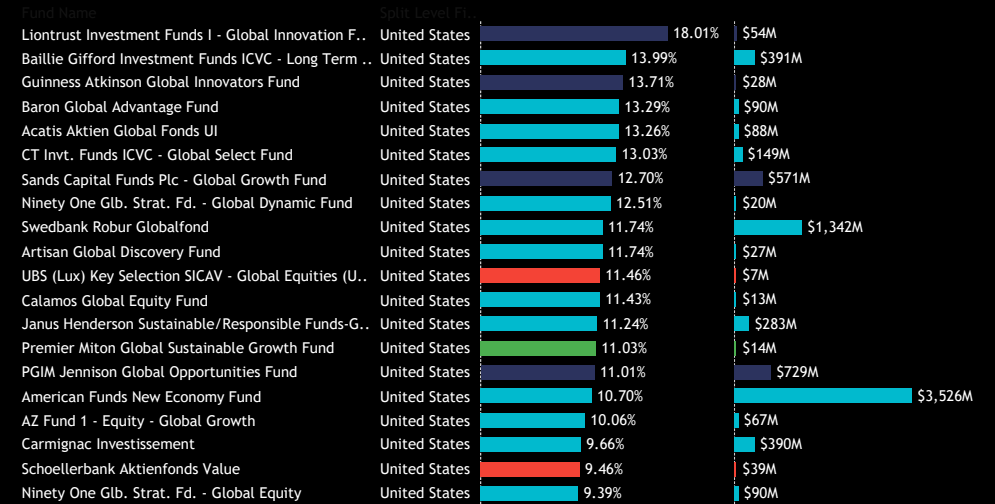


2: Semiconductors - Largest Sector Ownership Change Statistics  
Between 8/31/2023 and 2/29/2024

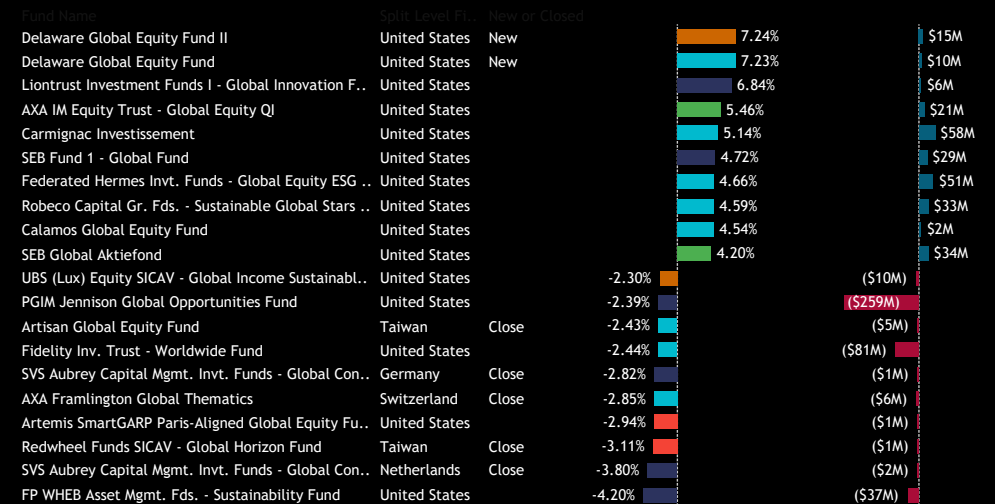


## Country Fund Level Positioning & Activity

3: Semiconductors - Largest Sector Level Fund Weights / Fund AUM, \$  
As of 2/29/2024



4: Semiconductors - Largest Sector Level Fund Weight Changes / Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## Country Long-Term Trends

The chart below plots the time series of Semiconductor country weights against the SPDRs MSCI ACWI weight (ch1) and the percentage of funds invested in each country (ch2). The United States stands out, with underweights surging to a record low of -1.61% but at the same time the percentage of funds invested moving to a peak of 81.4%. Active managers are still increasing allocations to US Semiconductors, but strong performance on an existing underweight is driving underweights lower. Both Taiwan and the Netherlands Semiconductor exposure are a record high on both measures.

1: Semiconductors - Average Weight vs ACWI per Country



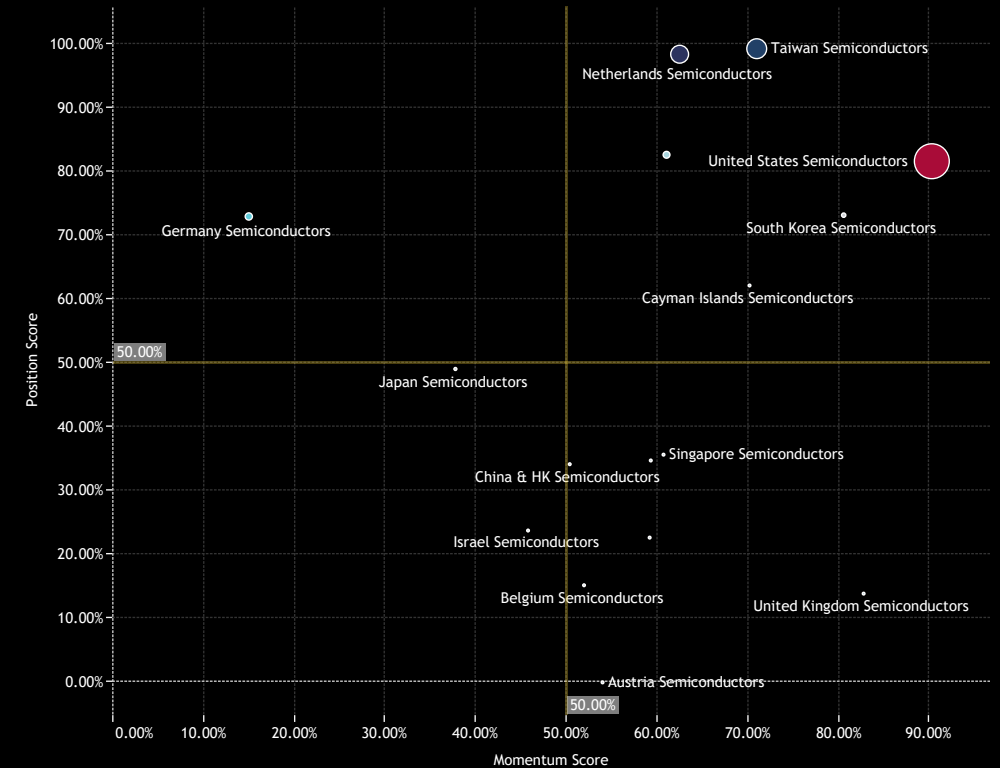
2: Semiconductors - Funds Invested % per Country



## Semiconductors Country Sentiment

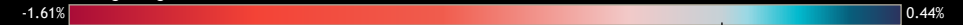
The Sentiment Grid below focuses on the Semiconductor country groups, and highlights the strong positioning and momentum for companies in Taiwan, the Netherlands, and the United States. Conversely, German semiconductor allocations are experiencing a decline, though still remain at the upper end of their historical range.

3: Semiconductors: Country Sentiment Grid  
Momentum Measure between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research  
For more information on the methodology behind the Sentiment Grid, please see Appendix 4 at the back of this report.

Colour: Average Weight vs Benchmark





# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## Aggregate Stock Holdings

At the stock level, TSMC leads as the most widely held company, featured in 50.15% of funds, closely followed by NVIDIA at 45.1%, and ASML Holding at 44.5% (ch1). There is a significant ownership gap to Broadcom Inc. with 28% of funds invested, though total AUM is bolstered by significant investments from the American Funds World Growth & Income and New Perspective Funds (ch3). Underweights are led by NVIDIA as Global funds trail the benchmark by -1.09%, Broadcom Inc (-0.27%) and Advanced Micro Devices (-0.2%). Of the larger individual fund-level stock holdings as shown in chart 2, NVIDIA and ASML dominate the largest 20 positions.

1: Semiconductors - Aggregate Stock Ownership Data [ranked by most widely held companies]  
As of 2/29/2024

| Ticker    | Stock Name                      | Funds Invested % | Average Weight % | Average Weight vs Bmark | Fund AUM \$ |
|-----------|---------------------------------|------------------|------------------|-------------------------|-------------|
| 2330-TW   | Taiwan Semiconductor Manuf..    | 50.15%           | 1.18%            | 0.43%                   | \$15,703M   |
| NVDA-US   | NVIDIA Corporation              | 45.13%           | 1.68%            | -1.09%                  | \$17,348M   |
| ASML-NL   | ASML Holding NV                 | 44.54%           | 0.97%            | 0.43%                   | \$14,823M   |
| AVGO-US   | Broadcom Inc.                   | 28.61%           | 0.54%            | -0.27%                  | \$16,701M   |
| TXN-US    | Texas Instruments Incorporat..  | 23.01%           | 0.25%            | 0.03%                   | \$2,453M    |
| LRCX-US   | Lam Research Corporation        | 17.40%           | 0.18%            | 0.01%                   | \$1,182M    |
| ADI-US    | Analog Devices, Inc.            | 16.81%           | 0.18%            | 0.06%                   | \$1,791M    |
| AMD-US    | Advanced Micro Devices, Inc.    | 16.22%           | 0.24%            | -0.20%                  | \$1,695M    |
| QCOM-US   | QUALCOMM Incorporated           | 15.63%           | 0.14%            | -0.12%                  | \$663M      |
| IFX-DE    | Infineon Technologies AG        | 14.75%           | 0.17%            | 0.10%                   | \$901M      |
| KLAC-US   | KLA Corporation                 | 14.16%           | 0.14%            | 0.01%                   | \$817M      |
| NXPI-US   | NXP Semiconductors NV           | 13.86%           | 0.10%            | 0.01%                   | \$559M      |
| INTC-US   | Intel Corporation               | 12.98%           | 0.13%            | -0.13%                  | \$1,009M    |
| TEL-US    | TE Connectivity Ltd.            | 12.68%           | 0.11%            | 0.04%                   | \$2,000M    |
| MU-US     | Micron Technology, Inc.         | 11.50%           | 0.12%            | -0.02%                  | \$1,491M    |
| ON-US     | ON Semiconductor Corporation    | 10.91%           | 0.08%            | 0.03%                   | \$869M      |
| MCHP-US   | Microchip Technology Incorpo..  | 9.73%            | 0.05%            | -0.01%                  | \$263M      |
| STMPA-FR  | STMicroelectronics NV           | 9.14%            | 0.04%            | 0.00%                   | \$471M      |
| MRVL-US   | Marvell Technology, Inc.        | 8.85%            | 0.11%            | 0.02%                   | \$791M      |
| 2454-TW   | MediaTek Inc                    | 7.96%            | 0.08%            | 0.01%                   | \$907M      |
| SWKS-US   | Skyworks Solutions, Inc.        | 7.37%            | 0.03%            | 0.00%                   | \$132M      |
| FSLR-US   | First Solar, Inc.               | 6.78%            | 0.04%            | 0.02%                   | \$130M      |
| 000660-KR | SK hynix Inc.                   | 5.60%            | 0.06%            | -0.03%                  | \$731M      |
| 6723-JP   | Renesas Electronics Corporati.. | 5.31%            | 0.02%            | -0.01%                  | \$283M      |
| ENPH-US   | Enphase Energy, Inc.            | 5.01%            | 0.02%            | 0.00%                   | \$251M      |
| ENTG-US   | Entegris, Inc.                  | 3.24%            | 0.05%            | 0.02%                   | \$569M      |
| ARRY-US   | Array Technologies Inc          | 3.24%            | 0.01%            | 0.01%                   | \$44M       |
| 6963-JP   | Rohm Co., Ltd.                  | 3.24%            | 0.01%            | 0.00%                   | \$22M       |
| QRVO-US   | Qorvo, Inc.                     | 2.95%            | 0.02%            | -0.01%                  | \$40M       |
| WOLF-US   | Great Wolf Resorts Inc.         | 2.65%            | 0.00%            | 0.00%                   | \$150M      |

## Fund Level Stock Holdings

2: Semiconductors - Largest Individual Fund Level Stock Holdings (%)  
As of 2/29/2024

| Fund Name  | Ticker  | Stock Name                               | Percentage |
|--|---------|--|------------|
| Baron Global Advantage Fund                          | NVDA-US | NVIDIA Corporation                       | 13.29%     |
| Baillie Gifford Investment Funds ICVC - Long Ter..   | NVDA-US | NVIDIA Corporation                       | 9.24%      |
| Baillie Gifford Investment Funds ICVC - Positive C.. | ASML-NL | ASML Holding NV                          | 9.07%      |
| Ninety One Glb. Strat. Fd. - Global Dynamic Fund     | NVDA-US | NVIDIA Corporation                       | 8.95%      |
| Ninety One Glb. Strat. Fd. - Global Franchise Fund   | ASML-NL | ASML Holding NV                          | 8.93%      |
| Calamos Global Equity Fund                           | NVDA-US | NVIDIA Corporation                       | 8.83%      |
| PGIM Jennison Global Opportunities Fund              | NVDA-US | NVIDIA Corporation                       | 8.55%      |
| Ninety One Glb. Strat. Fd. - Global Quality Equity.. | ASML-NL | ASML Holding NV                          | 8.29%      |
| Scottish Mortgage Investment Trust Plc               | ASML-NL | ASML Holding NV                          | 8.17%      |
| Scottish Mortgage Investment Trust Plc               | NVDA-US | NVIDIA Corporation                       | 7.89%      |
| Swedbank Robur Globalfond                            | 2330-TW | Taiwan Semiconductor Manufacturing Co... | 7.83%      |
| Baillie Gifford Investment Funds ICVC - Positive C.. | 2330-TW | Taiwan Semiconductor Manufacturing Co... | 7.56%      |
| Allianz Global Investors Fund - Global Equity Gro..  | ASML-NL | ASML Holding NV                          | 7.37%      |
| Acatis Aktien Global Fonds UI                        | NVDA-US | NVIDIA Corporation                       | 7.35%      |
| Ninety One Glb. Strat. Fd. - Global Equity           | NVDA-US | NVIDIA Corporation                       | 7.19%      |
| MainFirst SICAV - Global Equities Fund               | NVDA-US | NVIDIA Corporation                       | 7.14%      |
| Columbia Threadneedle (UK) ICVC - Sustainable O..    | NVDA-US | NVIDIA Corporation                       | 7.09%      |
| AEGON ASSET Mgmt. Inv. Co. (Ireland) Plc - Glob..    | AVGO-US | Broadcom Inc.                            | 7.02%      |
| Ninety One Glb. Strat. Fd. - Global Quality Divide.. | ASML-NL | ASML Holding NV                          | 6.76%      |
| Liontrust Investment Funds I - Global Innovation F.. | NVDA-US | NVIDIA Corporation                       | 6.63%      |

3: Semiconductors - Largest Individual Fund Level Stock Holdings (USD)  
As of 2/29/2024

| Fund Name  | Ticker  | Stock Name                               | Value    |
|--|---------|--|----------|
| American Funds Capital World Growth & Income F..   | AVGO-US | Broadcom Inc.                            | \$5,760M |
| American Funds New Perspective Fund                | AVGO-US | Broadcom Inc.                            | \$3,903M |
| American Funds New Perspective Fund                | ASML-NL | ASML Holding NV                          | \$3,410M |
| American Funds New Perspective Fund                | 2330-TW | Taiwan Semiconductor Manufacturing Co... | \$3,264M |
| American Funds Capital World Growth & Income F..   | 2330-TW | Taiwan Semiconductor Manufacturing Co... | \$2,809M |
| American Funds Capital World Growth & Income F..   | ASML-NL | ASML Holding NV                          | \$2,208M |
| American Funds New Economy Fund                    | AVGO-US | Broadcom Inc.                            | \$2,134M |
| American Funds New Perspective Fund                | NVDA-US | NVIDIA Corporation                       | \$2,074M |
| Scottish Mortgage Investment Trust Plc             | ASML-NL | ASML Holding NV                          | \$1,473M |
| Scottish Mortgage Investment Trust Plc             | NVDA-US | NVIDIA Corporation                       | \$1,422M |
| UniGlobal  | NVDA-US | NVIDIA Corporation                       | \$1,013M |
| Old Westbury Large Cap Strategies Fund             | NVDA-US | NVIDIA Corporation                       | \$961M   |
| Swedbank Robur Globalfond                          | 2330-TW | Taiwan Semiconductor Manufacturing Co... | \$895M   |
| American Funds Capital World Growth & Income F..   | NVDA-US | NVIDIA Corporation                       | \$778M   |
| Ninety One Glb. Strat. Fd. - Global Franchise Fund | ASML-NL | ASML Holding NV                          | \$757M   |
| UniFavorit: Aktien                                 | NVDA-US | NVIDIA Corporation                       | \$705M   |
| American Funds New Economy Fund                    | 2330-TW | Taiwan Semiconductor Manufacturing Co... | \$679M   |
| American Funds New Economy Fund                    | NVDA-US | NVIDIA Corporation                       | \$678M   |
| American Funds New Perspective Fund                | TEL-US  | TE Connectivity Ltd.                     | \$661M   |
| Swedbank Robur Globalfond                          | AVGO-US | Broadcom Inc.                            | \$618M   |

# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## Aggregate Stock Level Activity

The largest increases in stock ownership between 08/31/2023 and 02/28/2024 are highlighted in Chart 1. NVIDIA leads the pack having captured new investment from a further +5.9% of funds over the period, followed by Broadcom Inc. (+4.4%) and Lam Research Corp (+2%). Of the decreases in Chart 2, Infineon Technologies AG saw the percentage of funds invested fall by -4.4%, whilst Micron Technology lost 2% of funds on the back of \$792m in net fund outflows. Specific fund movements include new investments in NVIDIA by American Century, SEB, and Camignac, contrasted by the exit from ASML by Aubrey Global Conviction and TSMC by Redwheel Global Horizon (Ch3). Chart 4 tracks the investment trends for key sector names, illustrating a growing divide. TSMC, NVIDIA, and ASML are pulling ahead, reaching record investment levels, while Texas Instruments, Intel, and Infineon face declining ownership from Global managers. Broadcom Inc. stands in the middle, achieving its highest ownership yet but still trailing the front runners.

1: Semiconductors - Aggregate Stock Ownership Change Data [largest increases in funds invested %]  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                     | Funds Invested % Δ | Ave Wgt % Δ | Ave Wgt vs Bmark Δ | Fund Flows, \$ |
|-----------|--------------------------------|--------------------|-------------|--------------------|----------------|
| NVDA-US   | NVIDIA Corporation             | 5.90%              | 0.61%       | -0.26%             | \$1,286M       |
| AVGO-US   | Broadcom Inc.                  | 4.42%              | 0.16%       | -0.05%             | \$873M         |
| LRCX-US   | Lam Research Corporation       | 2.06%              | 0.03%       | 0.00%              | (\$65M)        |
| KLAC-US   | KLA Corporation                | 2.06%              | 0.04%       | 0.02%              | \$41M          |
| TEL-US    | TE Connectivity Ltd.           | 1.77%              | 0.00%       | 0.01%              | (\$88M)        |
| SWKS-US   | Skyworks Solutions, Inc.       | 1.77%              | 0.01%       | 0.01%              | \$28M          |
| 000660-KR | SK hynix Inc.                  | 1.18%              | 0.01%       | 0.00%              | \$94M          |
| INTC-US   | Intel Corporation              | 0.88%              | 0.02%       | -0.01%             | (\$40M)        |
| 2454-TW   | MediaTek Inc                   | 0.88%              | 0.02%       | 0.00%              | \$23M          |
| TXN-US    | Texas Instruments Incorporat.. | 0.59%              | -0.01%      | 0.02%              | \$499M         |
| ON-US     | ON Semiconductor Corporation   | 0.59%              | -0.02%      | -0.01%             | \$182M         |
| NXPI-US   | NXP Semiconductors NV          | 0.59%              | 0.02%       | 0.01%              | (\$55M)        |
| ADI-US    | Analog Devices, Inc.           | 0.59%              | 0.02%       | 0.02%              | \$106M         |
| 6890-JP   | Ferrotec Holdings Corporation  | 0.59%              | 0.00%       | 0.00%              | \$1M           |
| SLAB-US   | Silicon Laboratories Inc.      | 0.29%              | 0.00%       | 0.00%              | (\$3M)         |

2: Semiconductors - Aggregate Stock Ownership Change Data [largest decreases in funds invested %]  
Between 8/31/2023 and 2/29/2024

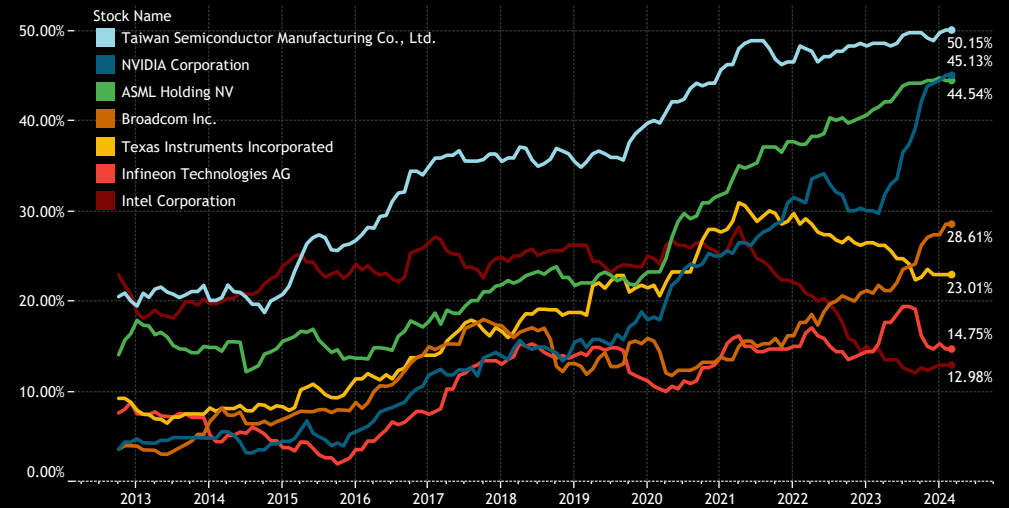
| Ticker    | Stock Name                      | Funds Invested % Δ | Ave Wgt % Δ | Ave Wgt vs Bmark Δ | Fund Flows, \$ |
|-----------|---------------------------------|--------------------|-------------|--------------------|----------------|
| IFX-DE    | Infineon Technologies AG        | -4.42%             | -0.02%      | -0.01%             | (\$166M)       |
| ENPH-US   | Enphase Energy, Inc.            | -2.36%             | -0.01%      | -0.01%             | \$39M          |
| MU-US     | Micron Technology, Inc.         | -2.06%             | 0.01%       | -0.01%             | (\$792M)       |
| AMD-US    | Advanced Micro Devices, Inc.    | -2.06%             | 0.08%       | -0.10%             | (\$303M)       |
| QRVO-US   | Qorvo, Inc.                     | -1.47%             | -0.01%      | -0.01%             | (\$24M)        |
| QCOM-US   | QUALCOMM Incorporated           | -1.47%             | 0.02%       | -0.03%             | (\$14M)        |
| 2303-TW   | United Microelectronics Corp.   | -1.18%             | 0.00%       | 0.00%              | (\$5M)         |
| 6723-JP   | Renesas Electronics Corporati.. | -1.18%             | -0.02%      | -0.02%             | (\$24M)        |
| MRVL-US   | Marvell Technology, Inc.        | -0.88%             | 0.00%       | -0.01%             | \$60M          |
| 300661-CN | SG Micro Corp. Class A          | -0.59%             | 0.00%       | 0.00%              | (\$8M)         |
| 3034-TW   | Novatek Microelectronics Corp.  | -0.59%             | 0.00%       | 0.00%              | (\$1M)         |
| 968-HK    | Xinyi Solar Holdings Ltd.       | -0.59%             | 0.00%       | 0.00%              | (\$16M)        |
| FSLR-US   | First Solar, Inc.               | -0.59%             | -0.01%      | -0.01%             | \$7M           |
| IPGP-US   | IPG Photonics Corporation       | -0.59%             | -0.01%      | -0.01%             | (\$18M)        |
| POWI-US   | Power Integrations, Inc.        | -0.59%             | -0.01%      | -0.01%             | (\$13M)        |

## Fund Level Stock Holding Changes

3: Semiconductors - Largest Fund Level Stock Weight Changes  
Between 8/31/2023 and 2/29/2024

| Fund Name  | Ticker   | Stock Name                 | New or Closed | Change |
|--|----------|----------------------------|---------------|--------|
| American Century Focused Global Growth Fund          | NVDA-US  | NVIDIA Corporation         | New           | 6.41%  |
| SEB Global Aktiefond                                 | NVDA-US  | NVIDIA Corporation         | New           | 4.78%  |
| Camignac Investissement                              | NVDA-US  | NVIDIA Corporation         | New           | 4.43%  |
| SEB Fund 1 - Global Fund                             | 2330-TW  | Taiwan Semiconductor Man.. | New           | 4.18%  |
| AXA IM Equity Trust - Global Equity QJ               | NVDA-US  | NVIDIA Corporation         | New           | 3.66%  |
| SEB Dynamisk Aktiefond                               | NVDA-US  | NVIDIA Corporation         |               | 3.62%  |
| Baron Global Advantage Fund                          | NVDA-US  | NVIDIA Corporation         |               | 3.55%  |
| Liontrust Investment Funds I - Global Innovation F.. | 2330-TW  | Taiwan Semiconductor Man.. | New           | 3.49%  |
| Fidelity Funds SICAV - First All Country World       | NVDA-US  | NVIDIA Corporation         | New           | 3.49%  |
| Kepler Ethik Aktienfonds                             | NVDA-US  | NVIDIA Corporation         |               | 3.45%  |
| Robeco Capital Gr. Fds. - Sustainable Global Stars.. | STMPA-FR | STMicroelectronics NV      | Close         | -2.11% |
| Columbia Select Global Equity Fund                   | ASML-NL  | ASML Holding NV            | Close         | -2.15% |
| Redwheel Funds SICAV - Global Horizon Fund           | LRCX-US  | Lam Research Corporation   | Close         | -2.17% |
| Artisan Global Equity Fund                           | 2330-TW  | Taiwan Semiconductor Man.. | Close         | -2.43% |
| American Century Focused Global Growth Fund          | MRVL-US  | Marvell Technology, Inc.   | Close         | -2.57% |
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Co..   | TPE-DE   | PVA TePla AG               | Close         | -2.82% |
| AXA Framlington Global Thematics                     | TEL-US   | TE Connectivity Ltd.       | Close         | -2.85% |
| Fonditalia - Equity Global High Dividend             | AVGO-US  | Broadcom Inc.              | Close         | -2.89% |
| Redwheel Funds SICAV - Global Horizon Fund           | 2330-TW  | Taiwan Semiconductor Man.. | Close         | -3.11% |
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Co..   | ASML-NL  | ASML Holding NV            | Close         | -3.80% |

4: Semiconductors - Funds Invested % per Company (Key Holdings)

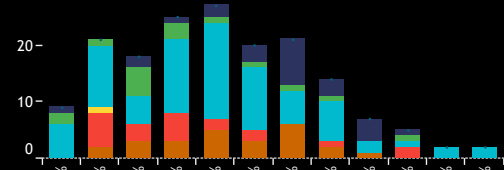


# Stock Ownership Profile: Taiwan Semiconductor Manufacturing Co., Ltd.

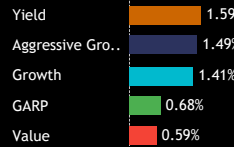
\* More stock ownership profiles in the chart pack following this report

Average Weight % **1.18%** Funds Invested % **50.1%** Fund AUM, \$ **\$15,703M**

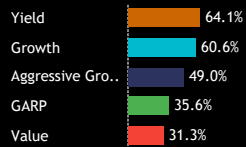
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



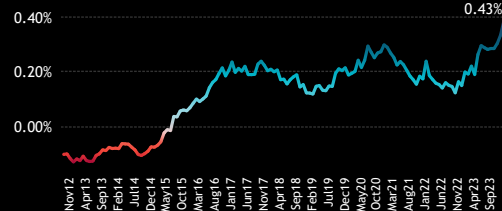
3. Funds Invested by Style



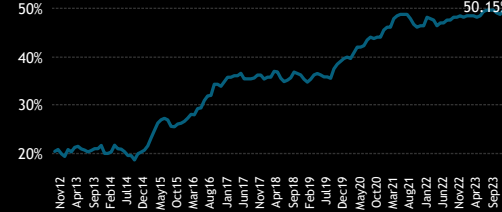
4. Average Fund Weight



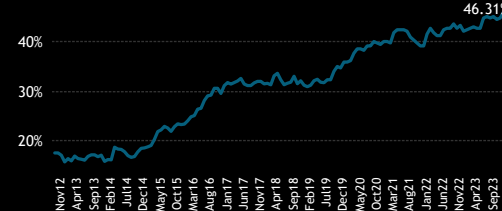
7. Average Weight vs ACWI



5. Funds Invested %



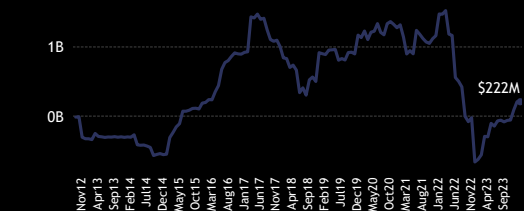
8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**0.29%**

Average Weight Δ

**0.23%**

# New Positions

**9**

# Closed Positions

**8**

# Funds Buying

**60**

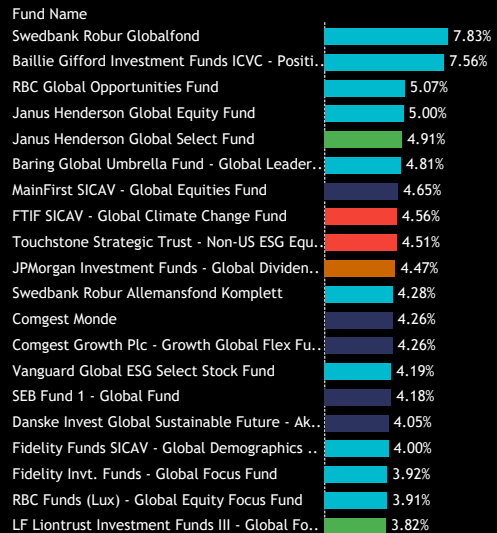
# Funds Selling

**66**

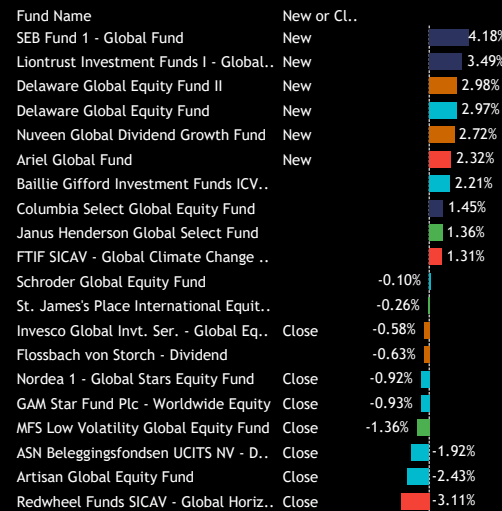
Estimated Net Fund Flows, \$

**\$266.5M**

10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Winners Emerge as Allocations Hit Record Highs

## Conclusions

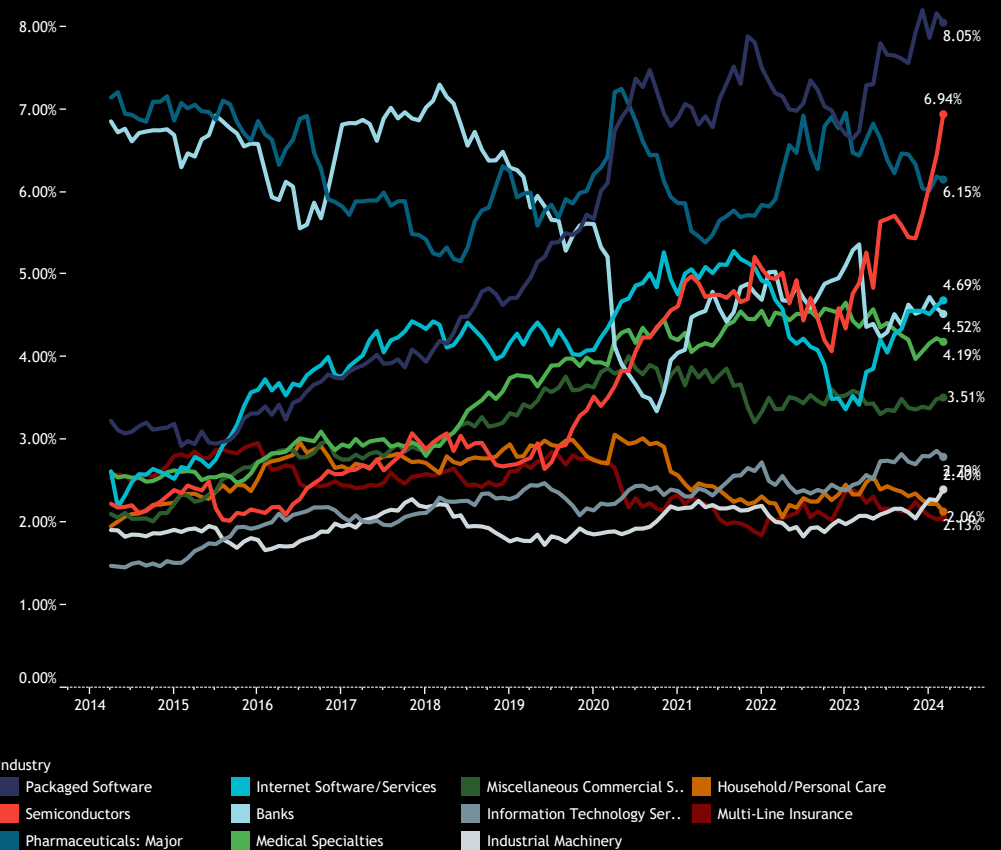
Semiconductors have transitioned from a bit-part player to a key industry allocation among Global investors, driven by significant technological advancements, including the rapid expansion of artificial intelligence (AI), cutting-edge computing technologies, and the increasing demand for semiconductor components in a wide range of applications from consumer electronics to industrial automation.

The chart opposite shows the remarkable rise in Semiconductor exposure among active Global funds over the last decade. Originally hovering below 2.5%, Semiconductor allocations experienced a significant jump during the 2019-2020 COVID-19 pandemic and took another leap forward in 2023 as the growth in artificial intelligence became a central investment theme. This has propelled Semiconductors past Major Pharmaceuticals into the second-largest industry exposure, and closing in on Packaged Software over the last 12 months. Banks have been the main casualty of this multi-year industry rotation.

Record holdings in the sector have coincided with an all-time low underweight, though the size of the underweight is modest at -0.67% and still more than 42% of funds are overweight compared to the SPDRs ACWI ETF. This slight underweight is almost entirely due to NVIDIA, whose significant price rally has escalated index weights, outpacing the increases in investment seen by active managers over the past year. The underweight has also been driven by the Value managers in our analysis who have become more cautious in their Semiconductor positioning in recent months. However, record underweights among Value funds have coincided with record overweights by Growth funds, emphasizing the necessity for the sector to sustain growth to keep investment levels stable.

On a stock level, there is a growing divide among the key players. TSMC, ASML and NVIDIA are becoming the clear frontrunners, reflecting investors' preference for companies at the forefront of technological innovation, while traditional players like Infineon, Intel, and Texas Instruments face declining investor interest. As the landscape continues to evolve, watching how investment levels change and which companies will emerge as the enduring leaders will be crucial.

Global Funds: Average Fund Weight per Industry Group  
 Top Industry Groups





Semiconductors  
Active Global Fund Ownership Chart Pack  
2/29/2024

# Semiconductors

## Active Global Fund Ownership Chart Pack

2/29/2024

## Introduction

Copley Fund Research specialises in the analysis of equity fund holdings. In this chart pack, we analyze Semiconductors holdings within our active Global fund universe. We analyze the latest published filings for all funds and aggregate them together as of 2/29/2024. We show the most recent snapshot in positioning, time series data going back to 9/30/2012 and recent allocation shifts by the managers in our analysis. The current fund sample spans 339 active funds with a combined AUM of \$1,076.42Bn.

For benchmark comparisons, we use the SPDR MSCI ACWI UCITS ETF, proportionally adjusted to remove any cash holdings. All Fund Flow calculations are on a best estimates basis. We use monthly position changes and month end prices to estimate the net buying and selling value for each stock within each fund in our analysis.

All activity data is calculated between the filing dates of 8/31/2023 and 2/29/2024

For further information on the calculation methodology that we use in the analysis and the classification of fund Styles, please view the Glossary on page 61.

# Semiconductors

## Active Global Fund Ownership Chart Pack

2/29/2024

### Contents

#### Section 1

##### **Semiconductors Industry Positioning Overview**

- Industry Peer Group Analysis
- Time-Series Analysis
- Fund Level Holdings and Activity
- Industry Sentiment

#### Section 2

##### **Semiconductors Country Positioning Overview**

- Country Positioning & Activity
- Fund Level Country Holdings and Activity
- Country Sentiment
- Country Profiles

#### Section 3

##### **Semiconductors Stock Positioning Overview**

- Stock Positioning & Activity
- Fund Level Stock Holdings and Activity
- Stock Sentiment
- Company Profiles

#### Section 4

##### **Semiconductors Style Positioning Overview**

- Long-Term Fund Positioning by Style
- Sector and Stock Positioning by Style
- Style Profiles

#### Section 5

##### **Semiconductors Gap Analysis & Investor Targeting**

- Historical Positioning Levels by Fund
- Largest Potential Buyers and Sellers based on Benchmark Weights
- Largest Drops in Stock Ownership





Section 1  
Semiconductors  
Industry Positioning Overview

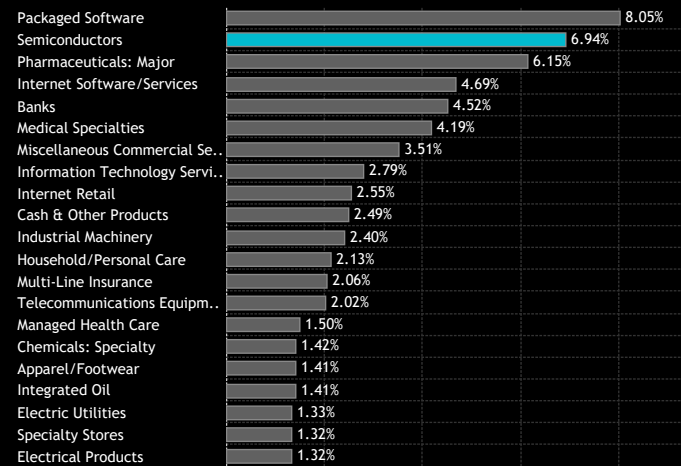


# Semiconductors: Active Fund Ownership Report

## Industry Peer Group Positioning

### 1: Average Fund Weight

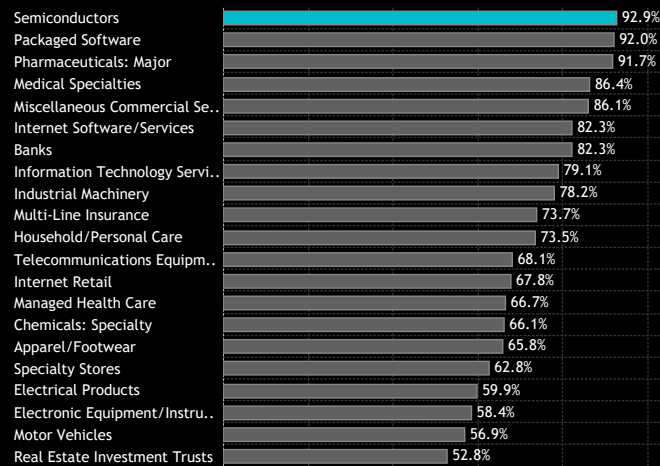
As of 2/29/2024



Source: Factset, Copley Fund Research

### 2: Percentage of Funds Invested

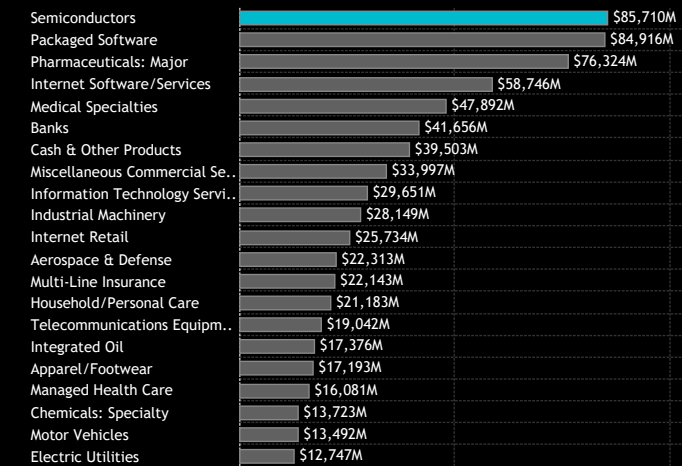
As of 2/29/2024



Source: Factset, Copley Fund Research

### 3: Combined Fund AUM, \$

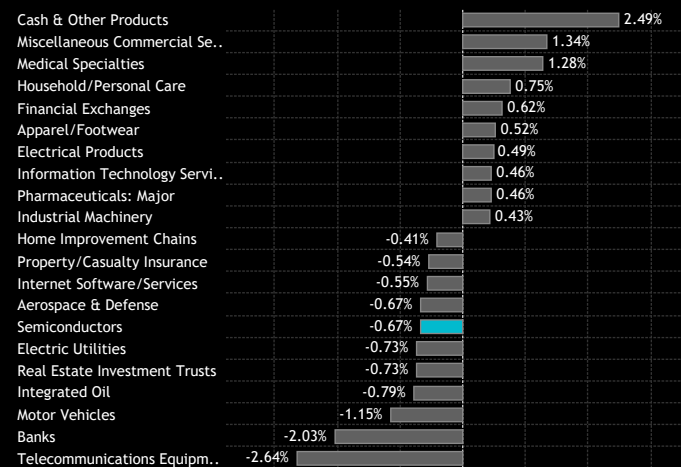
As of 2/29/2024



Source: Factset, Copley Fund Research

### 4: Average Fund Weight vs ACWI

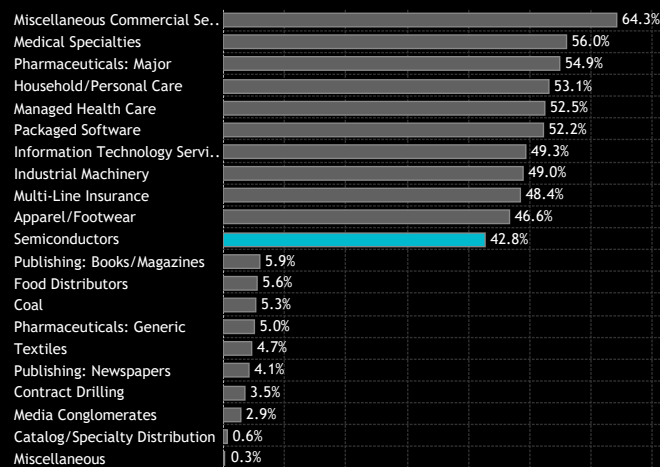
As of 2/29/2024



Source: Factset, Copley Fund Research

### 5: Percentage of Funds Overweight

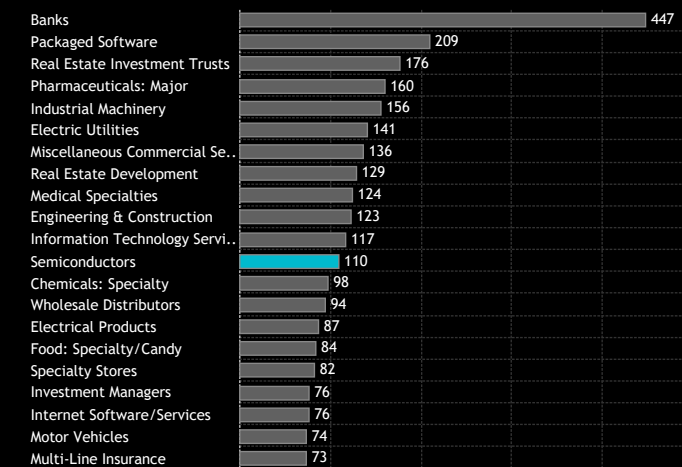
As of 2/29/2024



Source: Factset, Copley Fund Research

### 6: Number of Companies Invested

As of 2/29/2024

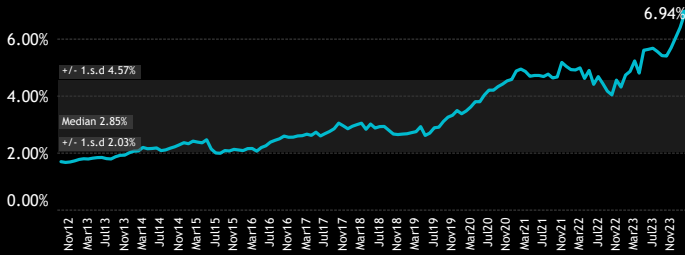


Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Time-Series Analysis

### 1. Semiconductors Average Fund Weight



Source: Factset, Copley Fund Research

### 2. Semiconductors Funds Invested %



Source: Factset, Copley Fund Research

### 3. Semiconductors Combined Fund AUM, \$



Source: Factset, Copley Fund Research

### 4. Semiconductors SPDR MSCI ACWI UCITS ETF Weight



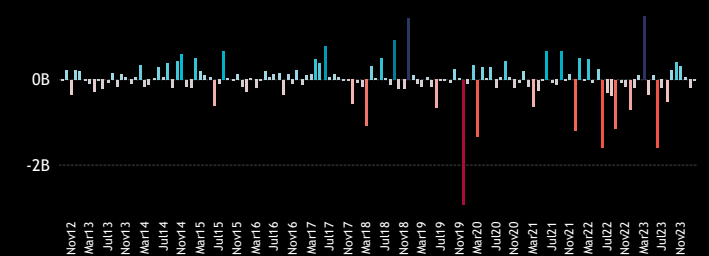
Source: Factset, Copley Fund Research

### 5. Semiconductors Number of Companies Invested



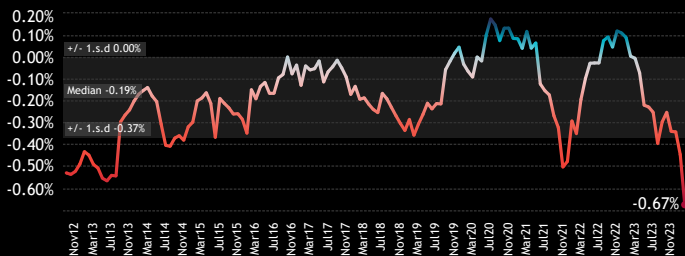
Source: Factset, Copley Fund Research

### 6. Semiconductors Monthly Fund Flows, \$



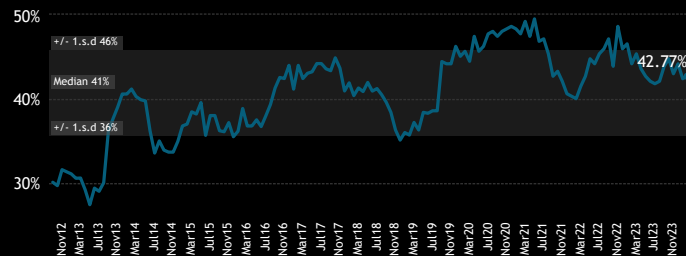
Source: Factset, Copley Fund Research

### 7. Semiconductors Average Weight vs ACWI



Source: Factset, Copley Fund Research

### 8. Semiconductors Funds Overweight %



Source: Factset, Copley Fund Research

### 9. Semiconductors Cumulative Fund Flows, \$

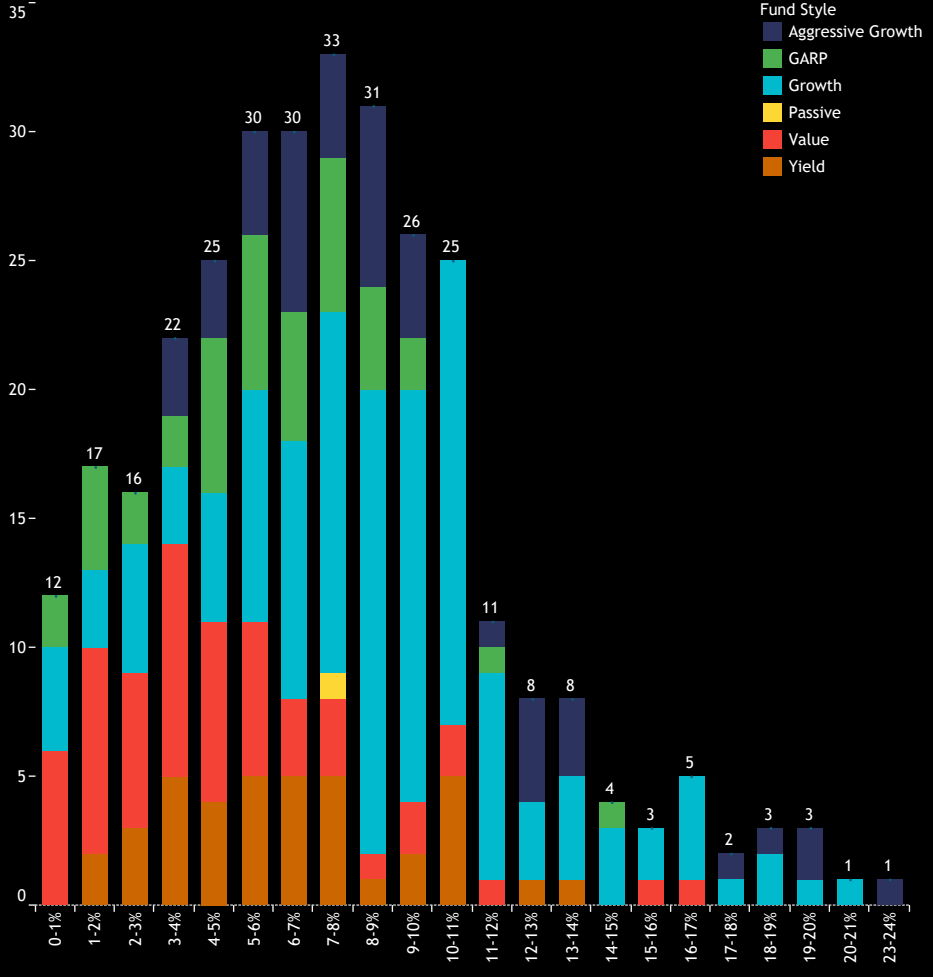


Source: Factset, Copley Fund Research

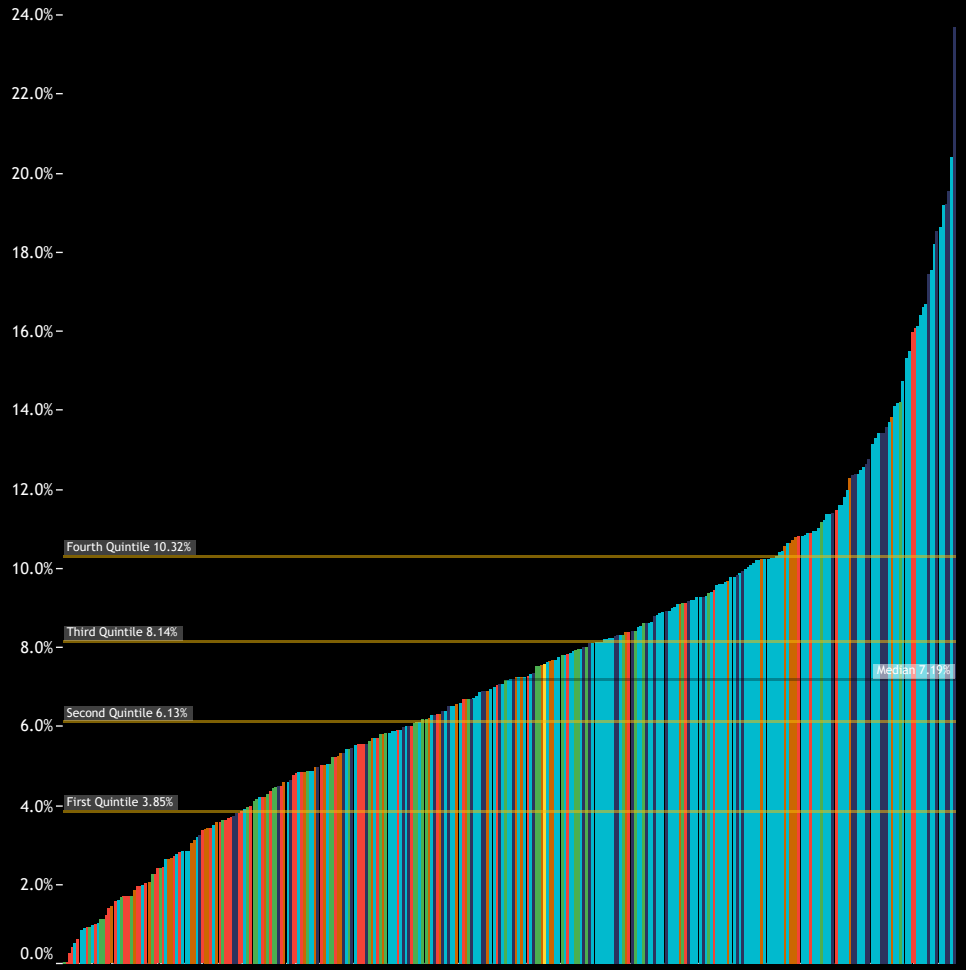
# Semiconductors: Active Fund Ownership Report

## Fund Level Holding Distributions

1: Semiconductors - Histogram of Fund Weights  
As of 2/29/2024



2: Semiconductors - Distribution of Fund Weights  
As of 2/29/2024



# Semiconductors: Active Fund Ownership Report

## Fund Level Holdings Detail

### 1: Semiconductors - Largest Fund Weights / Number of Holdings

As of 2/29/2024

| Fund Name   | Market Cap Focus | Latest Fund Weight | # Holdings |
|---|------------------|--------------------|------------|
| Liontrust Investment Funds I - Global Innovation Fund           | Large/Megacap    | 23.71%             | 7          |
| Swedbank Robur Globalfond                                       | Large/Megacap    | 20.41%             | 9          |
| MainFirst SICAV - Global Equities Fund                          | Large/Megacap    | 19.54%             | 5          |
| Guinness Atkinson Global Innovators Fund                        | Large/Megacap    | 19.22%             | 5          |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr.    | Large/Megacap    | 19.20%             | 4          |
| Calamos Global Equity Fund                                      | Large/Megacap    | 18.65%             | 7          |
| Sands Capital Funds Plc - Global Growth Fund                    | Large/Megacap    | 18.55%             | 4          |
| Ninety One Glob. Strat. Fd. - Global Dynamic Fund               | Large/Megacap    | 18.19%             | 5          |
| Janus Henderson Sustainable/Responsible Funds-Global Sus Eq.    | Large/Megacap    | 17.54%             | 7          |
| JPMorgan Funds - Global Growth Fund                             | Large/Megacap    | 17.46%             | 6          |
| Baron Global Advantage Fund                                     | Large/Megacap    | 16.71%             | 2          |
| Baillie Gifford Investment Funds ICVC - Positive Change Fund    | Large-cap        | 16.62%             | 2          |
| Acatiss Aktien Global Fonds UI                                  | Large/Megacap    | 16.43%             | 5          |
| JPMorgan Funds - Global Focus Fund                              | Large/Megacap    | 16.14%             | 6          |
| Scottish Mortgage Investment Trust Plc                          | Large/Megacap    | 16.06%             | 2          |
| FTIF SICAV - Global Climate Change Fund                         | Large-cap        | 15.97%             | 5          |
| American Funds New Economy Fund                                 | Large/Megacap    | 15.48%             | 14         |
| CT Invt. Funds ICVC - Global Select Fund                        | Large/Megacap    | 15.32%             | 8          |
| Chautauqua Global Growth Fund                                   | Large/Megacap    | 14.75%             | 4          |
| Premier Miton Global Sustainable Growth Fund                    | Large-cap        | 14.23%             | 5          |
| Ninety One Glob. Strat. Fd. - Global Strategic Equity Fund      | Large/Megacap    | 14.18%             | 6          |
| JPMorgan Investment Funds - Global Select Equity Fund           | Large/Megacap    | 14.13%             | 6          |
| Steward Global Equity Income Fund                               | Large-cap        | 13.84%             | 8          |
| Ninety One Glob. Strat. Fd. - Global Equity                     | Large/Megacap    | 13.71%             | 5          |
| ERSTE Stock Global  | Large/Megacap    | 13.58%             | 5          |
| PGIM Jennison Global Opportunities Fund                         | Large/Megacap    | 13.44%             | 3          |
| Danske Invest Global Sustainable Future - Akkumulierende        | Large/Megacap    | 13.44%             | 4          |
| Columbia Threadneedle (UK) ICVC - Sustainable Opp. Glob. Eq.Fd. | Large/Megacap    | 13.43%             | 4          |
| AZ Fund 1 - Equity - Global Growth                              | Large/Megacap    | 13.30%             | 7          |
| T Rowe Price Global Stock Fund                                  | Large/Megacap    | 13.14%             | 6          |
| SEB Fund 1 - Global Fund  | Large/Megacap    | 12.78%             | 5          |
| SEB Aktiesparfond   | Large/Megacap    | 12.64%             | 5          |
| Fidelity Advisor Global Capital Appreciation Fund               | Large/Megacap    | 12.58%             | 5          |
| Artisan Global Discovery Fund                                   | Large-cap        | 12.49%             | 6          |
| Fidelity Funds SICAV - Global Thematic Opportunities Fund       | Large/Megacap    | 12.39%             | 23         |
| Comgest Monde   | Large/Megacap    | 12.38%             | 3          |
| Comgest Growth Plc - Growth Global Flex Fund                    | Large/Megacap    | 12.38%             | 3          |
| AEGON ASSET Mgmt. Inv. Co. (Ireland) Plc - Global Eq. Income    | Large/Megacap    | 12.31%             | 3          |
| Quilter Investors Ethical Equity                                | Large/Megacap    | 11.98%             | 5          |
| Deka - GlobalChampions CF/TF                                    | Large/Megacap    | 11.80%             | 5          |

Source: Factset, Copley Fund Research

### 2: Semiconductors - Largest Fund AUM / Average Holding Size, \$

As of 2/29/2024

| Fund Name  | Market Cap Focus | Latest Fund AUM | Average Holding Size |
|--|------------------|-----------------|----------------------|
| American Funds New Perspective Fund                          | Large/Megacap    | \$14,352M       | \$1,435M             |
| American Funds Capital World Growth & Income Fund            | Large/Megacap    | \$13,197M       | \$1,200M             |
| American Funds New Economy Fund                              | Large/Megacap    | \$5,100M        | \$364M               |
| Scottish Mortgage Investment Trust Plc                       | Large/Megacap    | \$2,895M        | \$1,447M             |
| Old Westbury Large Cap Strategies Fund                       | Large/Megacap    | \$2,584M        | \$112M               |
| Swedbank Robur Globalfond                                    | Large/Megacap    | \$2,332M        | \$259M               |
| First Eagle Global Fund                                      | Large-cap        | \$1,842M        | \$460M               |
| UniGlobal  | Large/Megacap    | \$1,783M        | \$594M               |
| SJP Global Quality Fund                                      | Large-cap        | \$1,118M        | \$102M               |
| UniFavorit: Aktien   | Large/Megacap    | \$1,098M        | \$275M               |
| Deka - DividendenStrategie                                   | Large/Megacap    | \$1,004M        | \$126M               |
| DWS Top Dividende  | Large-cap        | \$938M          | \$188M               |
| Swedbank Robur Allemansfond Komplet                          | Large/Megacap    | \$920M          | \$184M               |
| American Funds Global Insight Fund                           | Large/Megacap    | \$901M          | \$90M                |
| PGIM Jennison Global Opportunities Fund                      | Large/Megacap    | \$890M          | \$297M               |
| Deka - GlobalChampions CF/TF                                 | Large/Megacap    | \$837M          | \$167M               |
| Sands Capital Funds Plc - Global Growth Fund                 | Large/Megacap    | \$835M          | \$209M               |
| T Rowe Price Global Stock Fund                               | Large/Megacap    | \$834M          | \$139M               |
| JPMorgan Funds - Global Focus Fund                           | Large/Megacap    | \$825M          | \$137M               |
| UniGlobal - net -  | Large/Megacap    | \$807M          | \$269M               |
| St. James's Place Unit Trust - Global Value                  | Large-cap        | \$784M          | \$157M               |
| JPMorgan Investment Funds - Global Select Equity Fund        | Large/Megacap    | \$757M          | \$126M               |
| Ninety One Glob. Strat. Fd. - Global Franchise Fund          | Large/Megacap    | \$757M          | \$757M               |
| Wellington Mgmt. Fds. (LU) - Global Quality Growth Fund      | Large/Megacap    | \$729M          | \$121M               |
| Fidelity Funds SICAV - Global Dividend Fund                  | Large-cap        | \$614M          | \$205M               |
| UniNachhaltig Aktien Global                                  | Large/Megacap    | \$589M          | \$147M               |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr. | Large/Megacap    | \$537M          | \$134M               |
| Guinness Asset Mgmt. Fund Plc - Global Equity Income Fund    | Large/Megacap    | \$535M          | \$178M               |
| Swedbank Robur Kapitalinvest                                 | Large/Megacap    | \$516M          | \$103M               |
| Swedbank Robur Aktiefond Pension                             | Large/Megacap    | \$504M          | \$63M                |
| St. James's Place Unit Trust - Sust. & Responsible Eq.       | Large-cap        | \$504M          | \$168M               |
| St. James's Place International Equity Unit Trust            | Large/Megacap    | \$496M          | \$165M               |
| Baillie Gifford Investment Funds ICVC - Positive Change Fund | Large-cap        | \$485M          | \$243M               |
| Carmignac Investissement                                     | Large/Megacap    | \$459M          | \$153M               |
| Janus Henderson Sustainable/Responsible Funds-Global Sus Eq. | Large/Megacap    | \$441M          | \$63M                |
| Long Term Themes USD   | Large-cap        | \$421M          | \$105M               |
| Vanguard Global Equity Fund                                  | Large/Megacap    | \$411M          | \$59M                |
| JPMorgan Investment Funds - Global Dividend Fund             | Large/Megacap    | \$402M          | \$100M               |
| Folksam LO Varlden   | Large/Megacap    | \$383M          | \$192M               |
| Handelsbanken Global Tema                                    | Large/Megacap    | \$370M          | \$93M                |

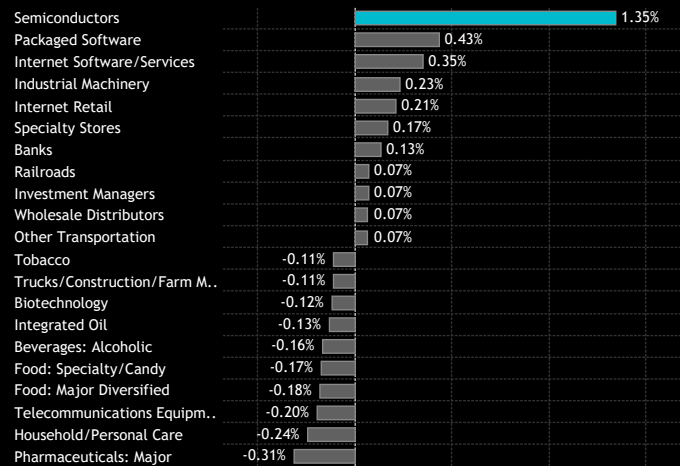
Source: Factset, Copley Fund Research



# Semiconductors: Active Fund Ownership Report

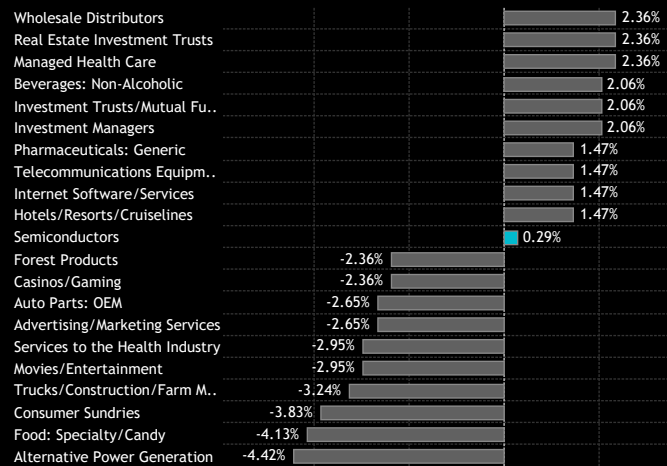
## Industry Peer Group Ownership Changes

1: Average Fund Weight Change  
Between 8/31/2023 and 2/29/2024



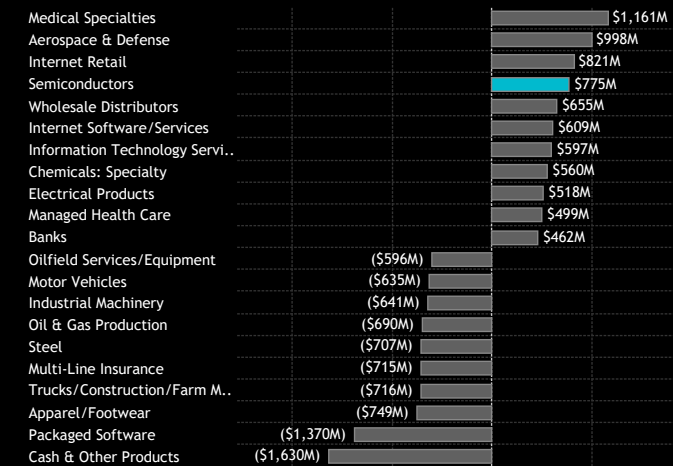
Source: Factset, Copley Fund Research

2: Percentage of Funds Invested Change  
Between 8/31/2023 and 2/29/2024



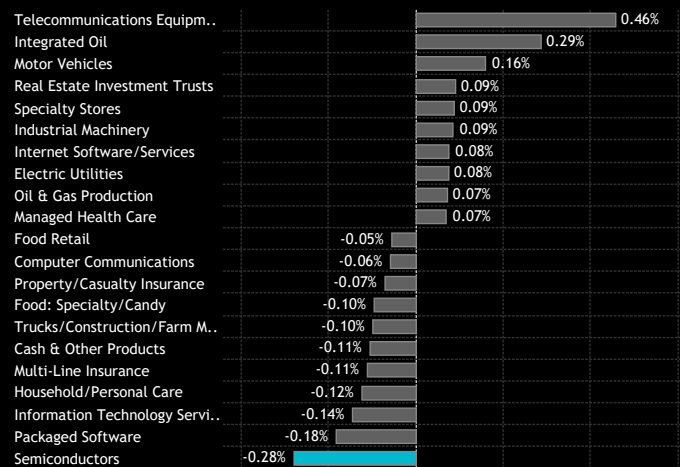
Source: Factset, Copley Fund Research

3: Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



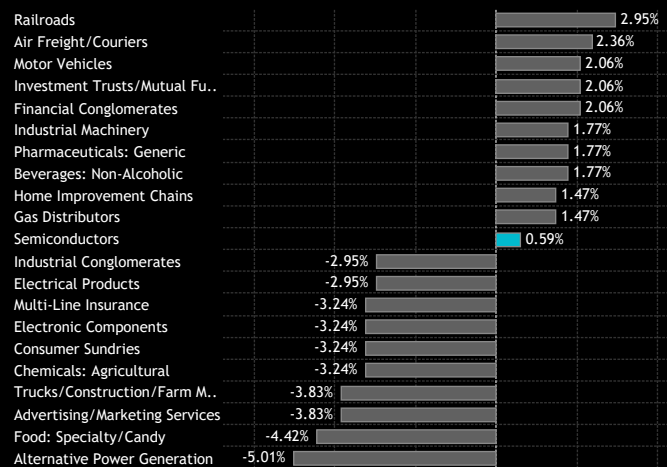
Source: Factset, Copley Fund Research

4: Average Fund Weight vs ACWI Change  
Between 8/31/2023 and 2/29/2024



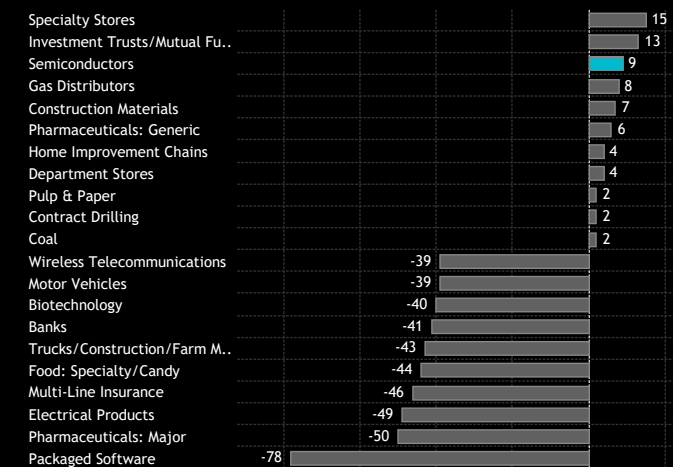
Source: Factset, Copley Fund Research

5: Percentage of Funds Overweight Change  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

6: Number of Buyers - Number of Sellers  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Fund Level Activity, %

### 1: Semiconductors - Fund Activity Metrics Between 8/31/2023 and 2/29/2024

# New Positions

5

# Closed Positions

4

# Funds Increasing Weight

269

# Funds Decreasing Weight

51

### 2: Semiconductors - Largest Increases in Fund Weight Between 8/31/2023 and 2/29/2024

| Fund Name  | Market Cap Focus | New or Closed | Latest Fund Weight | Fund Weight Change |
|--|------------------|---------------|--------------------|--------------------|
| Liontrust Investment Funds I - Global Innovation Fund          | Large/Megacap    |               | 23.71%             | 10.61%             |
| Delaware Global Equity Fund II                                 | Large/Megacap    | New           | 10.22%             | 10.22%             |
| Delaware Global Equity Fund                                    | Large/Megacap    | New           | 10.20%             | 10.20%             |
| SEB Fund 1 - Global Fund                                       | Large/Megacap    |               | 12.78%             | 9.47%              |
| AXA IM Equity Trust - Global Equity QI                         | Large/Megacap    |               | 8.62%              | 6.70%              |
| American Century Focused Global Growth Fund                    | Large/Megacap    |               | 11.36%             | 6.27%              |
| Calamos Global Equity Fund                                     | Large/Megacap    |               | 18.65%             | 6.19%              |
| Carmignac Investissement                                       | Large/Megacap    |               | 11.35%             | 5.89%              |
| Ariel Global Fund  | Large-cap        | New           | 5.58%              | 5.58%              |
| Federated Hermes Invt. Funds - Global Equity ESG Fnd           | Large/Megacap    |               | 11.61%             | 5.46%              |
| JPMorgan Funds - Global Growth Fund                            | Large/Megacap    |               | 17.46%             | 5.45%              |
| JPMorgan Funds - Global Focus Fund                             | Large/Megacap    |               | 16.14%             | 5.39%              |
| JOHCM Umbrella Fund Plc - Global Select Fund                   | Large-cap        |               | 7.25%              | 4.96%              |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr.   | Large/Megacap    |               | 19.20%             | 4.83%              |
| AZ Fund 1 - Equity - Global Growth                             | Large/Megacap    |               | 13.30%             | 4.59%              |
| JPMorgan Investment Funds - Global Select Equity Fund          | Large/Megacap    |               | 14.13%             | 4.42%              |
| Baillie Gifford Investment Funds ICVC - Positive Change Fund   | Large-cap        |               | 16.62%             | 4.34%              |
| Danske Invest Global Sustainable Future - Akkumulierende       | Large/Megacap    |               | 13.44%             | 4.32%              |
| T Rowe Price Global Stock Fund                                 | Large/Megacap    |               | 13.14%             | 4.29%              |
| AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund          | Large/Megacap    |               | 8.21%              | 4.28%              |
| Delaware Ivy Global Growth Fund                                | Large/Megacap    |               | 10.87%             | 4.24%              |
| Ninety One Glob. Strat. Fd. - Global Equity                    | Large/Megacap    |               | 13.71%             | 4.22%              |
| Steward Global Equity Income Fund                              | Large-cap        |               | 13.84%             | 4.15%              |
| Baring Global Umbrella Fund - Global Leaders Fund              | Large/Megacap    |               | 10.95%             | 3.99%              |
| DWS SDG Global Equities  | Large/Megacap    |               | 8.88%              | 3.98%              |
| Sands Capital Funds Plc - Global Growth Fund                   | Large/Megacap    |               | 18.55%             | 3.98%              |
| Baron Global Advantage Fund                                    | Large/Megacap    |               | 16.71%             | 3.91%              |
| Fidelity Funds SICAV - First All Country World                 | Large/Megacap    |               | 7.21%              | 3.86%              |
| Ninety One Glob. Strat. Fd. - Global Dynamic Fund              | Large/Megacap    |               | 18.19%             | 3.85%              |
| Sarasin Funds ICVC - Thematic Global Equity                    | Large/Megacap    |               | 10.32%             | 3.82%              |
| FTIF SICAV - Global Climate Change Fund                        | Large-cap        |               | 15.97%             | 3.78%              |
| Handelsbanken Global Tema                                      | Large/Megacap    |               | 9.41%              | 3.73%              |
| Quilter Investors Ethical Equity                               | Large/Megacap    |               | 11.98%             | 3.53%              |
| MainFirst SICAV - Global Equities Fund                         | Large/Megacap    |               | 19.54%             | 3.51%              |
| Columbia Threadneedle (UK) ICVC - Sustainable Opp. Glob. Eq... | Large/Megacap    |               | 13.43%             | 3.49%              |
| Chautauqua Global Growth Fund                                  | Large/Megacap    |               | 14.75%             | 3.45%              |
| CT Invt. Funds ICVC - Global Select Fund                       | Large/Megacap    |               | 15.32%             | 3.36%              |
| Ninety One Glob. Strat. Fd. - Global Strategic Equity Fund     | Large/Megacap    |               | 14.18%             | 3.35%              |
| RBC Funds (Lux) - Global Equity Focus Fund                     | Large/Megacap    |               | 10.11%             | 3.34%              |
| Skagen Focus   | Small/Midcap     |               | 4.78%              | 3.30%              |

Source: Factset, Copley Fund Research

### 3: Semiconductors - Largest Decreases in Fund Weight Between 8/31/2023 and 2/29/2024

| Fund Name  | Market Cap Focus | New or Closed | Latest Fund Weight | Fund Weight Change |
|--|------------------|---------------|--------------------|--------------------|
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Conviction Fund  | Large-cap        |               | 6.29%              | -5.93%             |
| Redwheel Funds SICAV - Global Horizon Fund                     | Large-cap        | Close         | 0.00%              | -5.27%             |
| FP WHEB Asset Mgmt. Fds. - Sustainability Fund                 | Large-cap        |               | 8.32%              | -5.12%             |
| Artemis SmartGARP Paris-Aligned Global Equity Fund             | Large-cap        |               | 0.27%              | -3.49%             |
| PGIM Jennison Global Opportunities Fund                        | Large/Megacap    |               | 13.44%             | -2.62%             |
| GAM Star Fund Plc - Worldwide Equity                           | Large/Megacap    |               | 6.40%              | -2.50%             |
| FTIF SICAV - Growth (Euro) Fund                                | Large-cap        |               | 3.63%              | -2.27%             |
| Fidelity Inv. Trust - Worldwide Fund                           | Large/Megacap    |               | 9.78%              | -2.15%             |
| Fonditalia - Equity Global High Dividend                       | Large-cap        |               | 3.05%              | -2.12%             |
| M&G (Lux) Investment Funds 1 - Positive Impact Fund            | Large-cap        |               | 6.32%              | -1.92%             |
| BNP Paribas Funds - Sustainable Global Low Vol Equity          | Large-cap        | Close         | 0.00%              | -1.87%             |
| Fidelity Funds SICAV - Global Focus Fund                       | Large/Megacap    |               | 7.24%              | -1.67%             |
| Templeton Growth Fund Inc.                                     | Large-cap        |               | 3.85%              | -1.61%             |
| DWS Concept DJE Globale Aktien                                 | Large/Megacap    |               | 6.94%              | -1.55%             |
| Artisan Global Equity Fund                                     | Large/Megacap    |               | 0.90%              | -1.53%             |
| UBS (Lux) Equity SICAV - Global Income Sustainable (USD)       | Large-cap        |               | 7.25%              | -1.36%             |
| ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds        | Large-cap        |               | 6.51%              | -1.29%             |
| Columbia Select Global Equity Fund                             | Large/Megacap    |               | 9.83%              | -1.07%             |
| Virtus NFJ Global Sustainability Fund                          | Large-cap        |               | 4.15%              | -1.02%             |
| St. James's Place Unit Trust - Global                          | Large-cap        |               | 1.97%              | -0.79%             |
| Jupiter Global Fund (The) - Global Value Fund                  | Blend            |               | 2.02%              | -0.73%             |
| Deka - DividendenStrategie                                     | Large/Megacap    |               | 6.21%              | -0.58%             |
| Thornburg Global Opportunities Fund                            | Large/Megacap    |               | 3.96%              | -0.46%             |
| Erste Responsible Stock Global                                 | Large/Megacap    |               | 10.26%             | -0.46%             |
| Artisan Global Discovery Fund                                  | Large-cap        |               | 12.49%             | -0.45%             |
| Storebrand Global Multifactor                                  | Large-cap        |               | 3.43%              | -0.45%             |
| LSV Global Managed Volatility Fund                             | Large-cap        |               | 0.98%              | -0.41%             |
| Schroder ISF - Global Equity Yield                             | Large-cap        |               | 3.56%              | -0.39%             |
| Robeco Capital Gr. Fds. - BP Global Premium Equities           | Large-cap        |               | 2.28%              | -0.36%             |
| Pictet - Quest Global Sustainable Equities                     | Large/Megacap    |               | 3.92%              | -0.34%             |
| Flossbach von Storch - Dividend                                | Large/Megacap    |               | 2.65%              | -0.34%             |
| Davis Global Fund  | Large/Megacap    | Close         | 0.00%              | -0.28%             |
| Franklin Mutual Ser. Fds. - Quest Fund                         | Large-cap        | Close         | 0.00%              | -0.27%             |
| Ninety One Glob. Strat. Fd. - Global Value Equity Fund         | Blend            |               | 3.98%              | -0.27%             |
| Franklin Mutual Ser. Fds. - Global Discovery Fund              | Large-cap        |               | 1.25%              | -0.27%             |
| Fidelity Funds SICAV - Global Dividend Fund                    | Large-cap        |               | 4.98%              | -0.24%             |
| Hermes Invt. Funds Plc - Impact Opportunities Equity Fund      | Large-cap        |               | 2.79%              | -0.24%             |
| Artemis SmartGARP Global Equity Fund                           | Large-cap        |               | 0.41%              | -0.22%             |
| Covea Actions Monde  | Large/Megacap    |               | 3.50%              | -0.17%             |
| Russell Invt. Co. Plc - Acadian Sustainable Glob. Equity UCITS | Large-cap        |               | 0.94%              | -0.17%             |

Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Fund Level Activity, \$

### 1: Semiconductors - Fund Activity Metrics Between 8/31/2023 and 2/29/2024

# Funds Buying

135

# Funds Selling

126

Estimated Net Fund Flows, \$

\$774.7M

### 2: Semiconductors - Largest Estimated Fund Inflows, \$ Between 8/31/2023 and 2/29/2024

| Fund Name   | Market Cap Focus | New or Closed | Latest Fund AUM | Fund Flows |
|---|------------------|---------------|-----------------|------------|
| American Funds New Perspective Fund                           | Large/Megacap    |               | \$14,352M       | \$964M     |
| DWS Top Dividende   | Large-cap        |               | \$938M          | \$272M     |
| JPMorgan Funds - Global Focus Fund                            | Large/Megacap    |               | \$825M          | \$206M     |
| JPMorgan Investment Funds - Global Select Equity Fund         | Large/Megacap    |               | \$757M          | \$204M     |
| First Eagle Global Fund                                       | Large-cap        |               | \$1,842M        | \$111M     |
| Swedbank Robur Globalfond                                     | Large/Megacap    |               | \$2,332M        | \$105M     |
| T Rowe Price Global Stock Fund                                | Large/Megacap    |               | \$834M          | \$84M      |
| St. James's Place International Equity Unit Trust             | Large/Megacap    |               | \$496M          | \$81M      |
| Carmignac Investissement                                      | Large/Megacap    |               | \$459M          | \$77M      |
| JPMorgan Investment Funds - Global Dividend Fund              | Large/Megacap    |               | \$402M          | \$71M      |
| JOHCM Umbrella Fund Plc - Global Select Fund                  | Large-cap        |               | \$116M          | \$68M      |
| Old Westbury Large Cap Strategies Fund                        | Large/Megacap    |               | \$2,584M        | \$67M      |
| SEB Fund 1 - Global Fund                                      | Large/Megacap    |               | \$107M          | \$65M      |
| FTIF SICAV - Global Climate Change Fund                       | Large-cap        |               | \$235M          | \$56M      |
| Federated Hermes Invt. Funds - Global Equity ESG Fnd          | Large/Megacap    |               | \$289M          | \$49M      |
| SJP Global Quality Fund                                       | Large-cap        |               | \$1,118M        | \$48M      |
| St. James's Place Unit Trust - Sust. & Responsible Eq.        | Large-cap        |               | \$504M          | \$48M      |
| Swedbank Robur Aktiefond Pension                              | Large/Megacap    |               | \$504M          | \$47M      |
| Swedbank Robur Kapitalinvest                                  | Large/Megacap    |               | \$516M          | \$45M      |
| Sands Capital Funds Plc - Global Growth Fund                  | Large/Megacap    |               | \$835M          | \$43M      |
| BlackRock Global Funds - Systematic Global Equity High Income | Large/Megacap    |               | \$308M          | \$42M      |
| Invesco Global Invt. Ser. - Global Equity Fund (UK)           | Large/Megacap    |               | \$165M          | \$41M      |
| Threadneedle (Lux) - Global Focus Fund                        | Large/Megacap    |               | \$310M          | \$39M      |
| Handelsbanken Global Tema                                     | Large/Megacap    |               | \$370M          | \$38M      |
| Janus Henderson Global Select Fund                            | Large/Megacap    |               | \$254M          | \$35M      |
| Deka-MegaTrends   | Large/Megacap    |               | \$193M          | \$31M      |
| Baillie Gifford UK & Bal. Fds. - Global Alpha Growth          | Large/Megacap    |               | \$245M          | \$30M      |
| AXA IM Equity Trust - Global Equity QI                        | Large/Megacap    |               | \$56M           | \$26M      |
| HBOS International Invt. Funds ICVC - International Growth    | Large/Megacap    |               | \$212M          | \$26M      |
| Ninety One Glb. Strat. Fd. - Global Equity                    | Large/Megacap    |               | \$131M          | \$26M      |
| Delaware Global Equity Fund II                                | Large/Megacap    | New           | \$28M           | \$21M      |
| UniGlobal - net -   | Large/Megacap    |               | \$807M          | \$21M      |
| Dodge & Cox Global Stock Fund                                 | Large-cap        |               | \$170M          | \$20M      |
| American Century Focused Global Growth Fund                   | Large/Megacap    |               | \$73M           | \$20M      |
| UniFavorit: Aktien  | Large/Megacap    |               | \$1,098M        | \$19M      |
| AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund         | Large/Megacap    |               | \$50M           | \$18M      |
| DPAM B - Equities World Sustainable                           | Large/Megacap    |               | \$167M          | \$17M      |
| Nordea 1 - Global Stars Equity Fund                           | Large/Megacap    |               | \$172M          | \$16M      |
| UniGlobal   | Large/Megacap    |               | \$1,783M        | \$15M      |
| Candriam Equities L - Global Demography                       | Large/Megacap    |               | \$128M          | \$15M      |

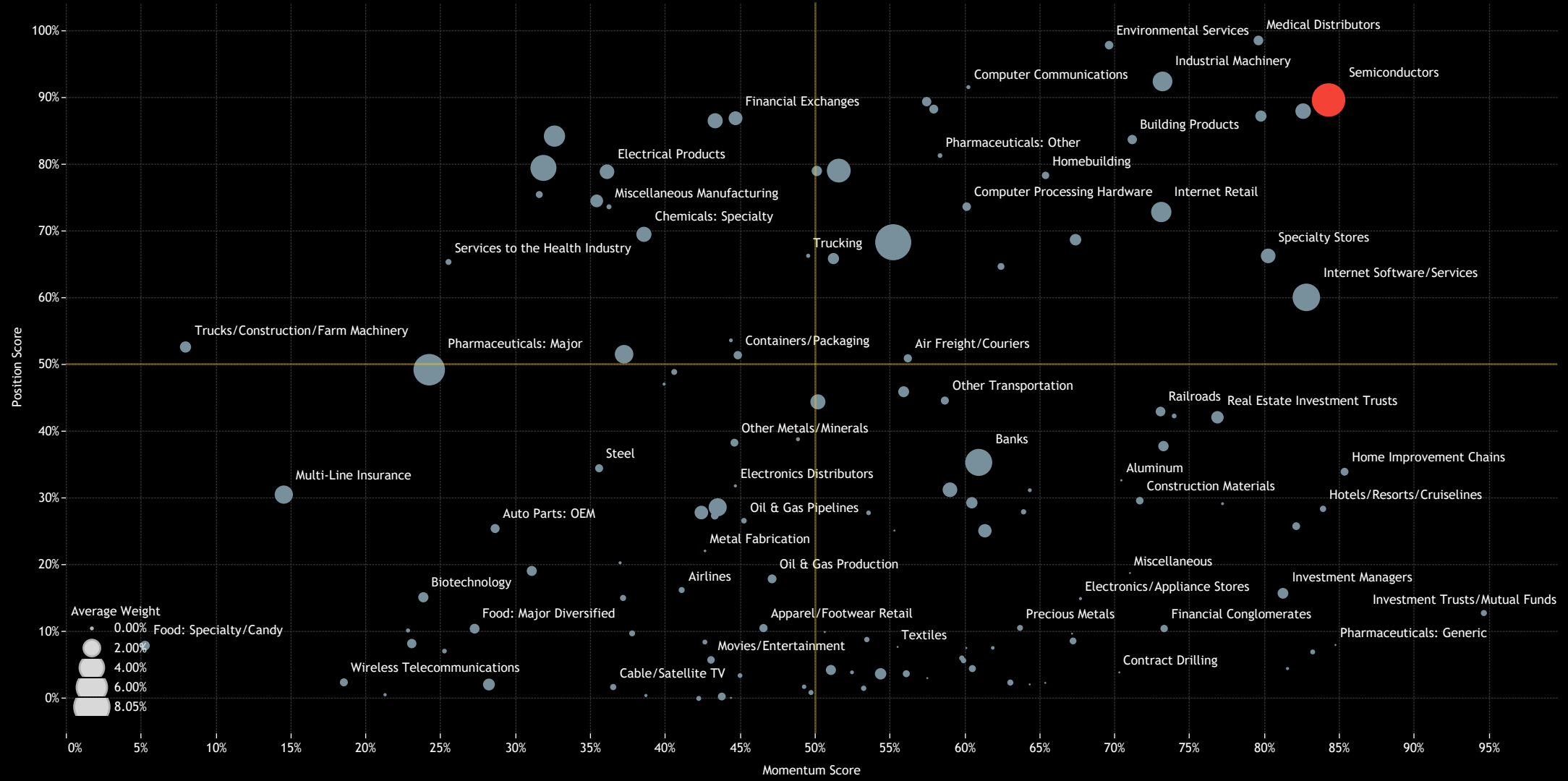
### 3: Semiconductors - Largest Estimated Fund Outflows, \$ Between 8/31/2023 and 2/29/2024

| Fund Name  | Market Cap Focus | New or Closed | Latest Fund AUM | Fund Flows |
|--|------------------|---------------|-----------------|------------|
| American Funds Capital World Growth & Income Fund            | Large/Megacap    |               | \$13,197M       | (\$595M)   |
| PGIM Jennison Global Opportunities Fund                      | Large/Megacap    |               | \$890M          | (\$292M)   |
| Scottish Mortgage Investment Trust Plc                       | Large/Megacap    |               | \$2,895M        | (\$239M)   |
| FTIF SICAV - Growth (Euro) Fund                              | Large-cap        |               | \$295M          | (\$191M)   |
| Templeton Growth Fund Inc.                                   | Large-cap        |               | \$325M          | (\$184M)   |
| Deka - DividendenStrategie                                   | Large/Megacap    |               | \$1,004M        | (\$172M)   |
| Fidelity Funds SICAV - Global Dividend Fund                  | Large-cap        |               | \$614M          | (\$96M)    |
| Fidelity Inv. Trust - Worldwide Fund                         | Large/Megacap    |               | \$289M          | (\$75M)    |
| Folksams LO Varlden  | Large/Megacap    |               | \$383M          | (\$59M)    |
| UniNachhaltig Aktien Global                                  | Large/Megacap    |               | \$589M          | (\$54M)    |
| ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds      | Large-cap        |               | \$123M          | (\$53M)    |
| Brown Advisory Funds Plc - Global Leaders                    | Large/Megacap    |               | \$235M          | (\$49M)    |
| FP WHEB Asset Mgmt. Fds. - Sustainability Fund               | Large-cap        |               | \$79M           | (\$48M)    |
| American Funds New Economy Fund                              | Large/Megacap    |               | \$5,100M        | (\$48M)    |
| Baillie Gifford Investment Funds ICVC - Long Term Global Gr. | Large/Megacap    |               | \$537M          | (\$45M)    |
| St. James's Place Unit Trust - Global                        | Large-cap        |               | \$75M           | (\$44M)    |
| Fidelity Funds SICAV - Global Focus Fund                     | Large/Megacap    |               | \$64M           | (\$25M)    |
| Baron Global Advantage Fund                                  | Large/Megacap    |               | \$114M          | (\$25M)    |
| Fonditalia - Equity Global High Dividend                     | Large-cap        |               | \$32M           | (\$24M)    |
| Janus Henderson Sustainable/Responsible Funds-Global Sus Eq. | Large/Megacap    |               | \$441M          | (\$22M)    |
| Robeco Capital Gr. Fds. - BP Global Premium Equities         | Large-cap        |               | \$121M          | (\$21M)    |
| Columbia Select Global Equity Fund                           | Large/Megacap    |               | \$70M           | (\$21M)    |
| Swedbank Robur Allemansfond Komplet                          | Large/Megacap    |               | \$920M          | (\$19M)    |
| BNY Mellon Investment Fds. - Global Income Fund              | Large-cap        |               | \$156M          | (\$19M)    |
| Ninety One Glb. Strat. Fd. - Global Strategic Equity Fund    | Large/Megacap    |               | \$203M          | (\$18M)    |
| CIF - Capital Group Global Equity Fund Lux                   | Large/Megacap    |               | \$62M           | (\$18M)    |
| Rathbone Global Opportunities Fund                           | Large/Megacap    |               | \$341M          | (\$18M)    |
| Covea Actions Monde  | Large/Megacap    |               | \$39M           | (\$16M)    |
| DWS Concept DJE Globale Aktien                               | Large/Megacap    |               | \$38M           | (\$16M)    |
| Franklin Mutual Ser. Fds. - Global Discovery Fund            | Large-cap        |               | \$114M          | (\$16M)    |
| BNP Paribas Funds - Sustainable Global Low Vol Equity        | Large-cap        | Close         | \$0M            | (\$15M)    |
| BNY Mellon Investment Fds. - Global Equity Fund              | Large/Megacap    |               | \$41M           | (\$14M)    |
| Janus Henderson Global Research Fund                         | Large/Megacap    |               | \$353M          | (\$13M)    |
| UBS (Lux) Equity SICAV - Global Income Sustainable (USD)     | Large-cap        |               | \$32M           | (\$13M)    |
| Rolinco NV   | Large/Megacap    |               | \$118M          | (\$13M)    |
| Erste Responsible Stock Global                               | Large/Megacap    |               | \$69M           | (\$13M)    |
| Raiffeisen Nachhaltigkeitsfonds Aktien                       | Large-cap        |               | \$102M          | (\$12M)    |
| Vanguard Global Equity Fund                                  | Large/Megacap    |               | \$411M          | (\$12M)    |
| M&G Investment Funds (1) OEIC - Global Themes Fund           | Large-cap        |               | \$254M          | (\$11M)    |
| Schroder Global Equity Fund                                  | Large/Megacap    |               | \$179M          | (\$11M)    |

# Semiconductors: Active Fund Ownership Report

## Industry Sentiment

Chart 1: Country Sentiment Grid  
Momentum Measure Between 8/31/2023 - 2/29/2024



Source: Factset, Copley Fund Research





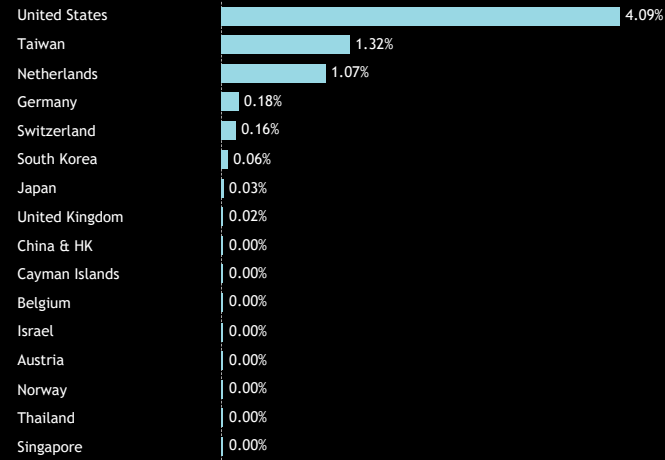
Section 2  
Semiconductors  
Country Positioning Overview



# Semiconductors: Active Fund Ownership Report

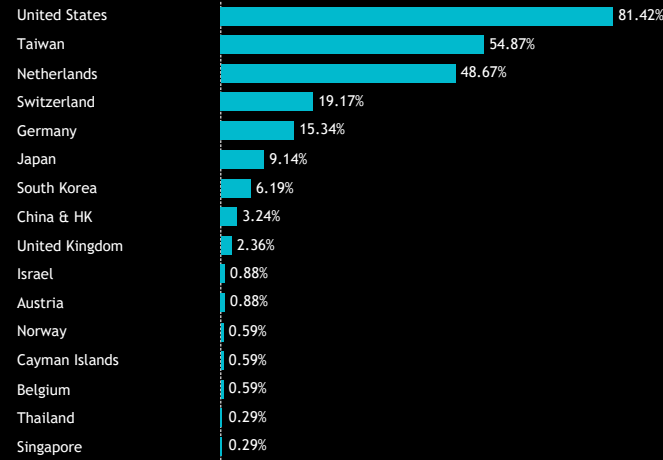
## Aggregate Country Ownership

1: Semiconductors - Average Fund Weight per Country  
As of 2/29/2024



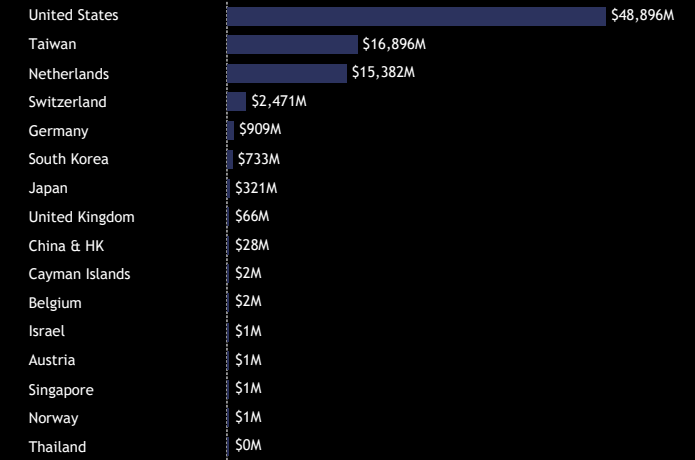
Source: Factset, Copley Fund Research

2: Semiconductors - Funds Invested per Country  
As of 2/29/2024



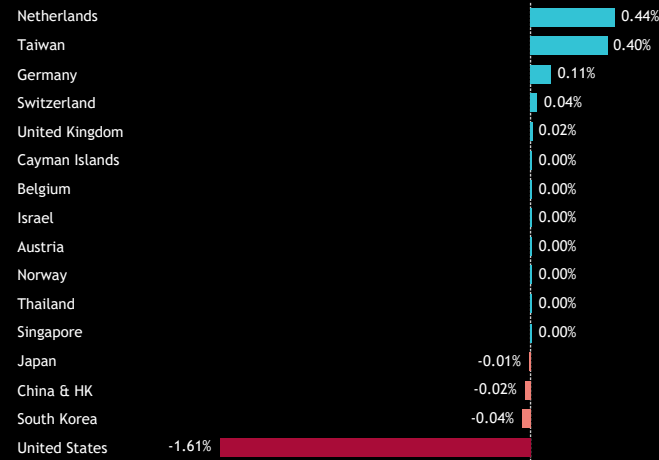
Source: Factset, Copley Fund Research

1: Semiconductors - Fund AUM per Country  
As of 2/29/2024



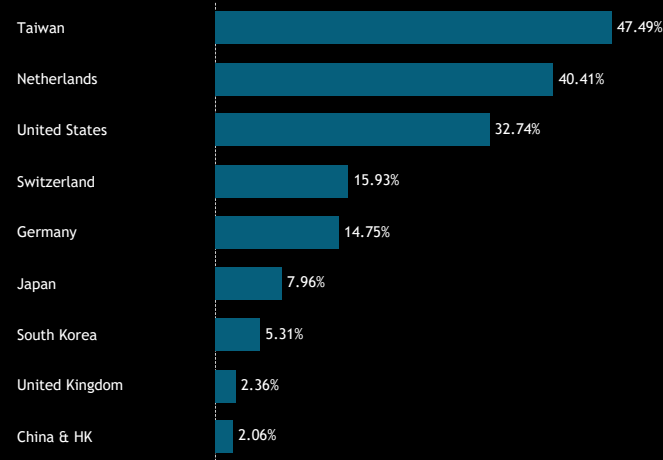
Source: Factset, Copley Fund Research

1: Semiconductors - Average Weight - ACWI per Country  
As of 2/29/2024



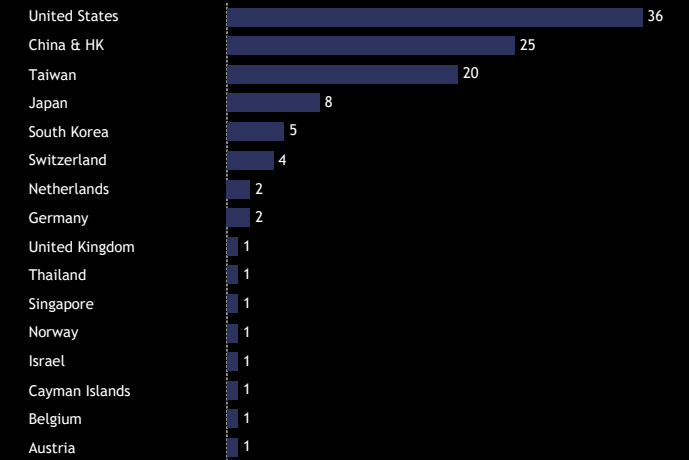
Source: Factset, Copley Fund Research

1: Semiconductors - Percentage Funds O/W per Country  
As of 2/29/2024



Source: Factset, Copley Fund Research

1: Semiconductors - # Companies Invested per Country  
As of 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

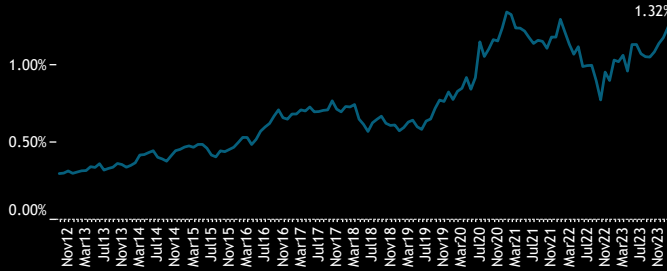
## Country Level Time-Series: Average Fund Weights

1: United States Average Weight %



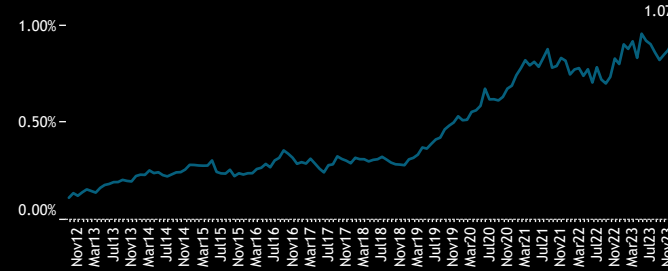
Source: Factset, Copley Fund Research

2: Taiwan Average Weight %



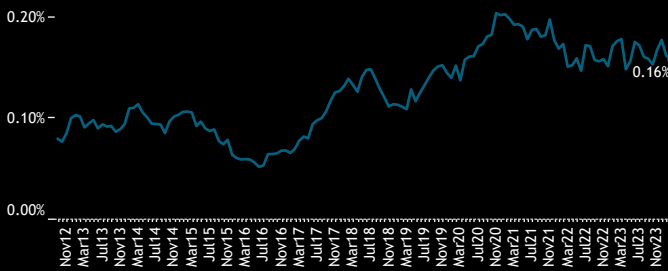
Source: Factset, Copley Fund Research

3: Netherlands Average Weight %



Source: Factset, Copley Fund Research

4: Switzerland Average Weight %



Source: Factset, Copley Fund Research

5: Germany Average Weight %



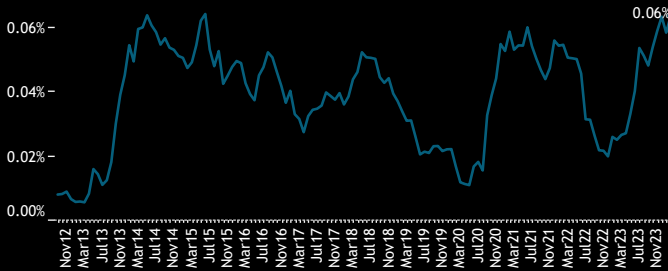
Source: Factset, Copley Fund Research

6: Japan Average Weight %



Source: Factset, Copley Fund Research

7: South Korea Average Weight %



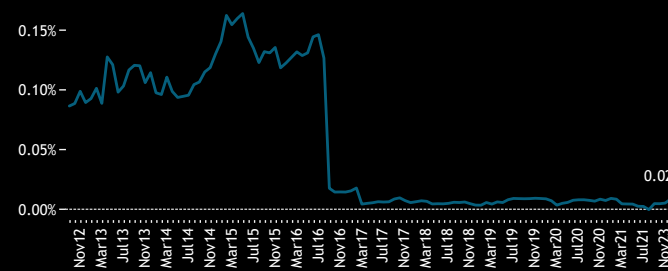
Source: Factset, Copley Fund Research

8: China & HK Average Weight %



Source: Factset, Copley Fund Research

9: United Kingdom Average Weight %

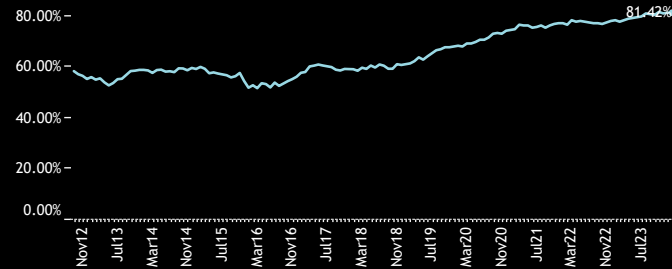


Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

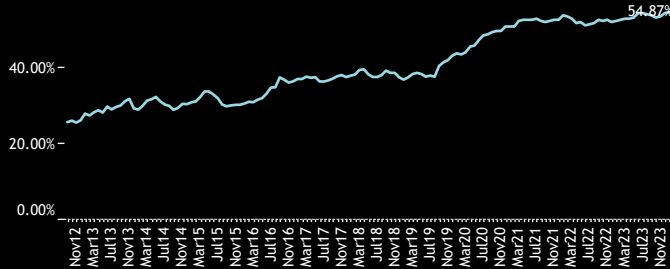
## Country Level Time-Series: Funds Invested %

1: United States Funds Invested %



Source: Factset, Copley Fund Research

2: Taiwan Funds Invested %



Source: Factset, Copley Fund Research

3: Netherlands Funds Invested %



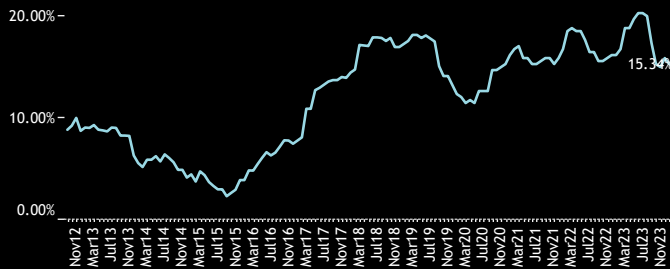
Source: Factset, Copley Fund Research

4: Switzerland Funds Invested %



Source: Factset, Copley Fund Research

5: Germany Funds Invested %



Source: Factset, Copley Fund Research

6: Japan Funds Invested %



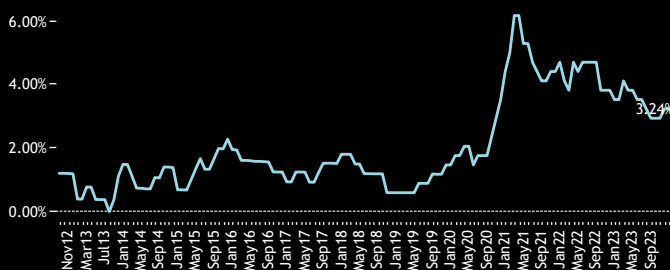
Source: Factset, Copley Fund Research

7: South Korea Funds Invested %



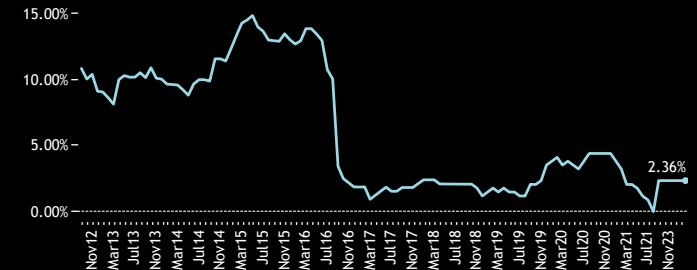
Source: Factset, Copley Fund Research

8: China & HK Funds Invested %



Source: Factset, Copley Fund Research

9: United Kingdom Funds Invested %



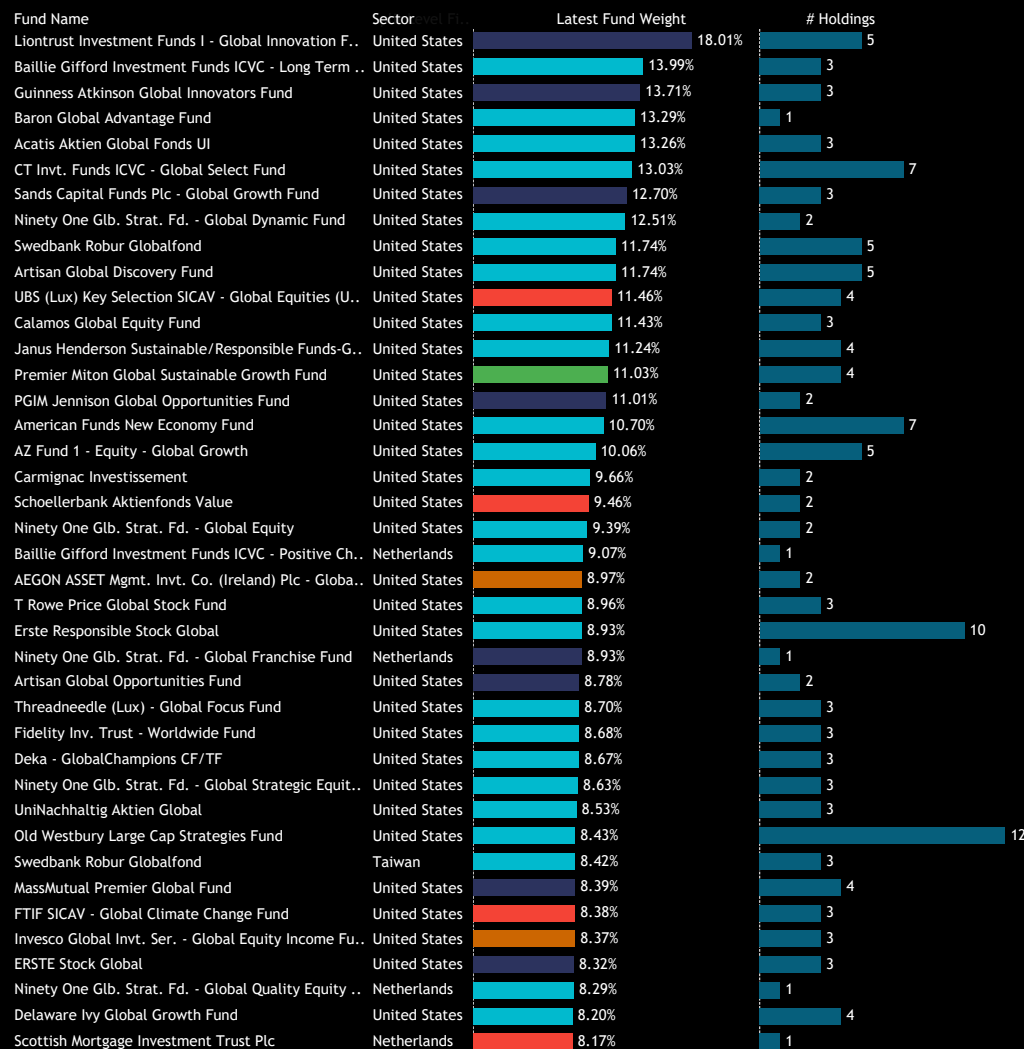
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Fund Level Country Holdings

### 1: Semiconductors - Largest Country Level Fund Weights / # Companies Invested

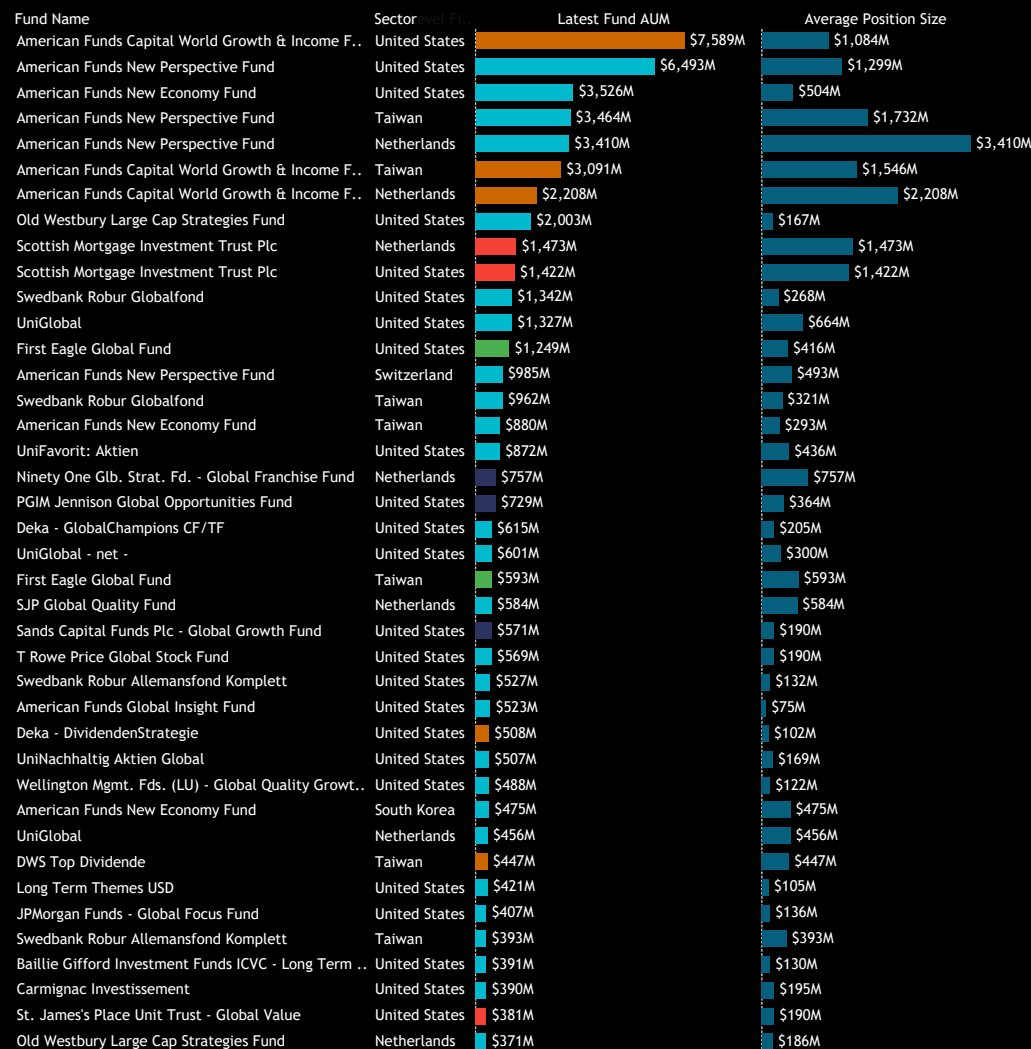
As of 2/29/2024



Source: Factset, Copley Fund Research

### 2: Semiconductors - Largest Country Level Fund AUM / Average Position Size, \$

As of 2/29/2024

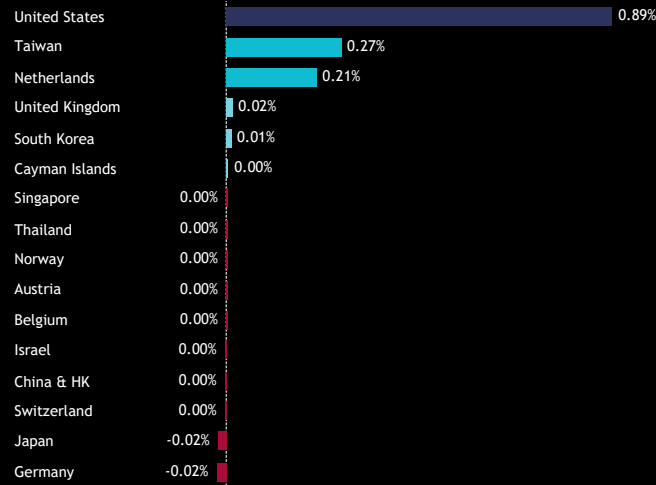


Source: Factset, Copley Fund Research

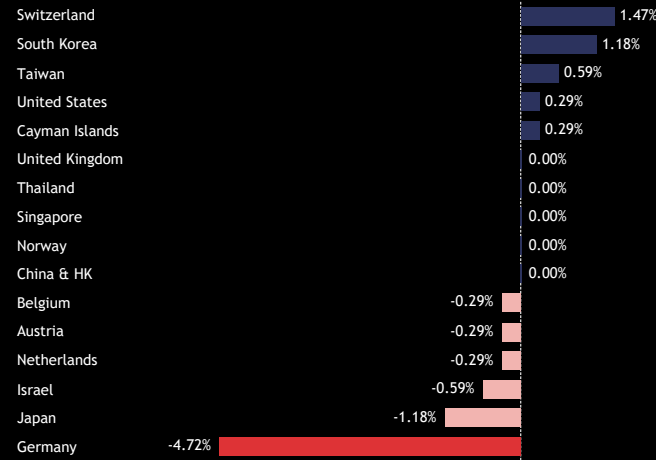
# Semiconductors: Active Fund Ownership Report

## Country Level Ownership Changes

1: Semiconductors - Average Fund Weight Δ per Country  
Between 8/31/2023 and 2/29/2024

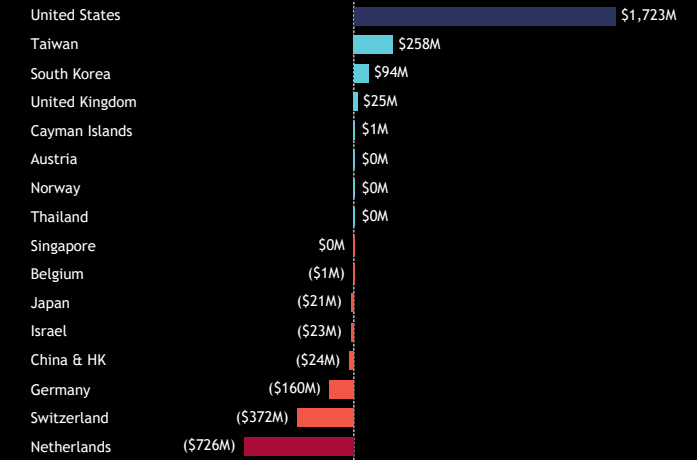


2: Semiconductors - Funds Invested Δ per Country  
Between 8/31/2023 and 2/29/2024



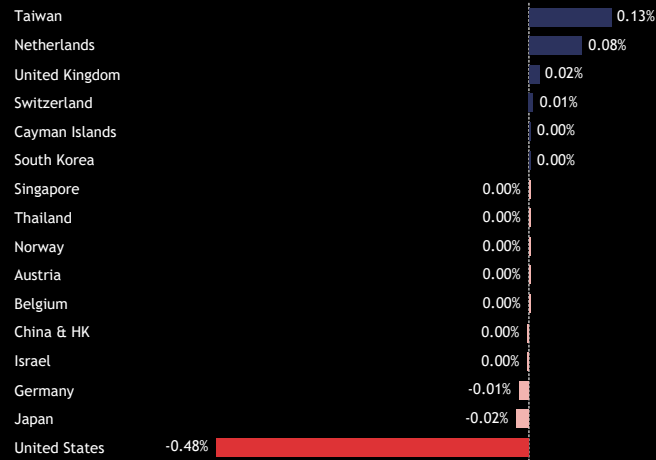
Source: Factset, Copley Fund Research

3: Semiconductors - Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



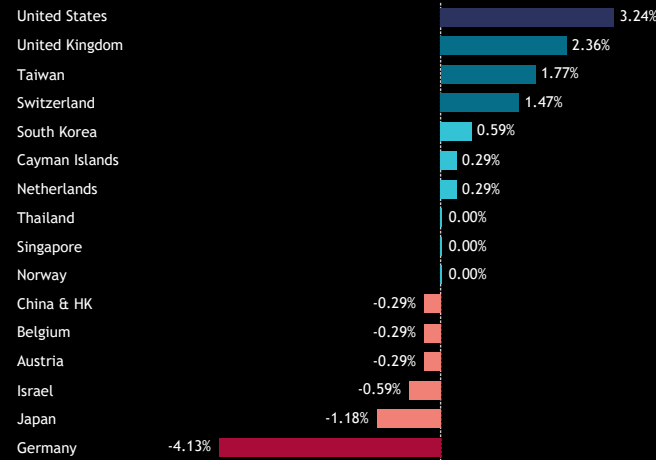
Source: Factset, Copley Fund Research

4: Semiconductors - Average Weight vs ACWI Δ per Country  
Between 8/31/2023 and 2/29/2024



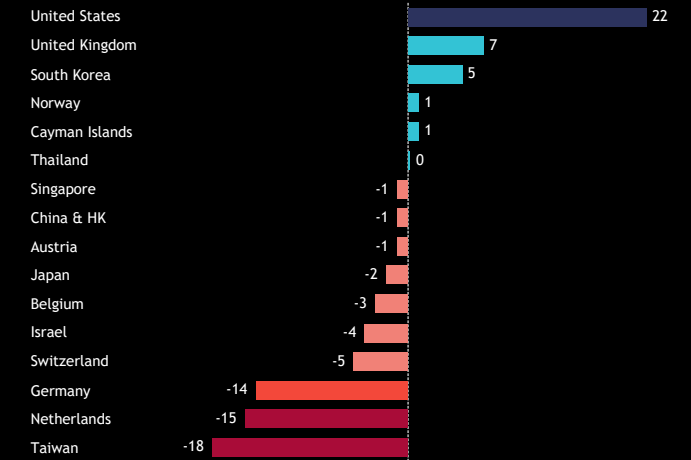
Source: Factset, Copley Fund Research

5: Semiconductors - Percent Funds O/W Δ per Country  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

6: Semiconductors - Number of Buyers - Number of Sellers  
Between 8/31/2023 and 2/29/2024



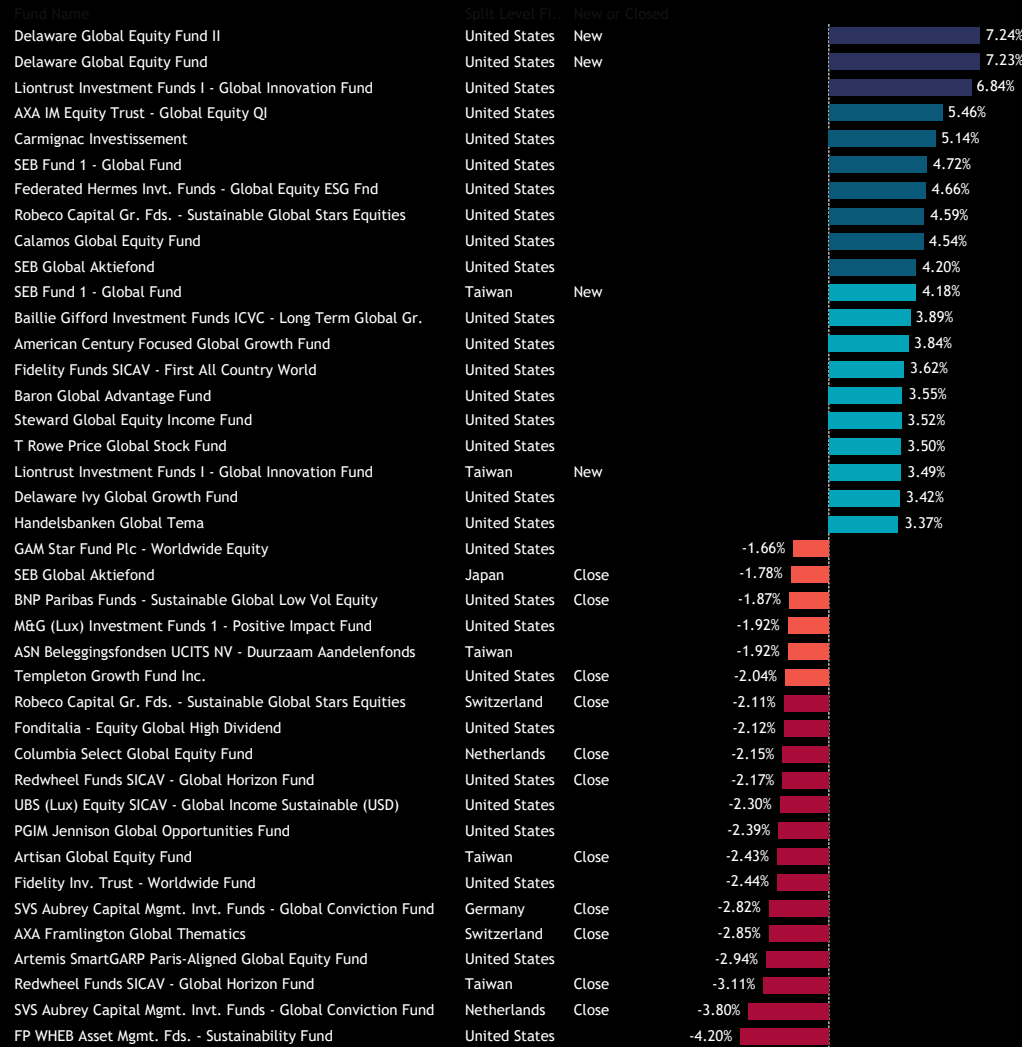
Source: Factset, Copley Fund Research



# Semiconductors: Active Fund Ownership Report

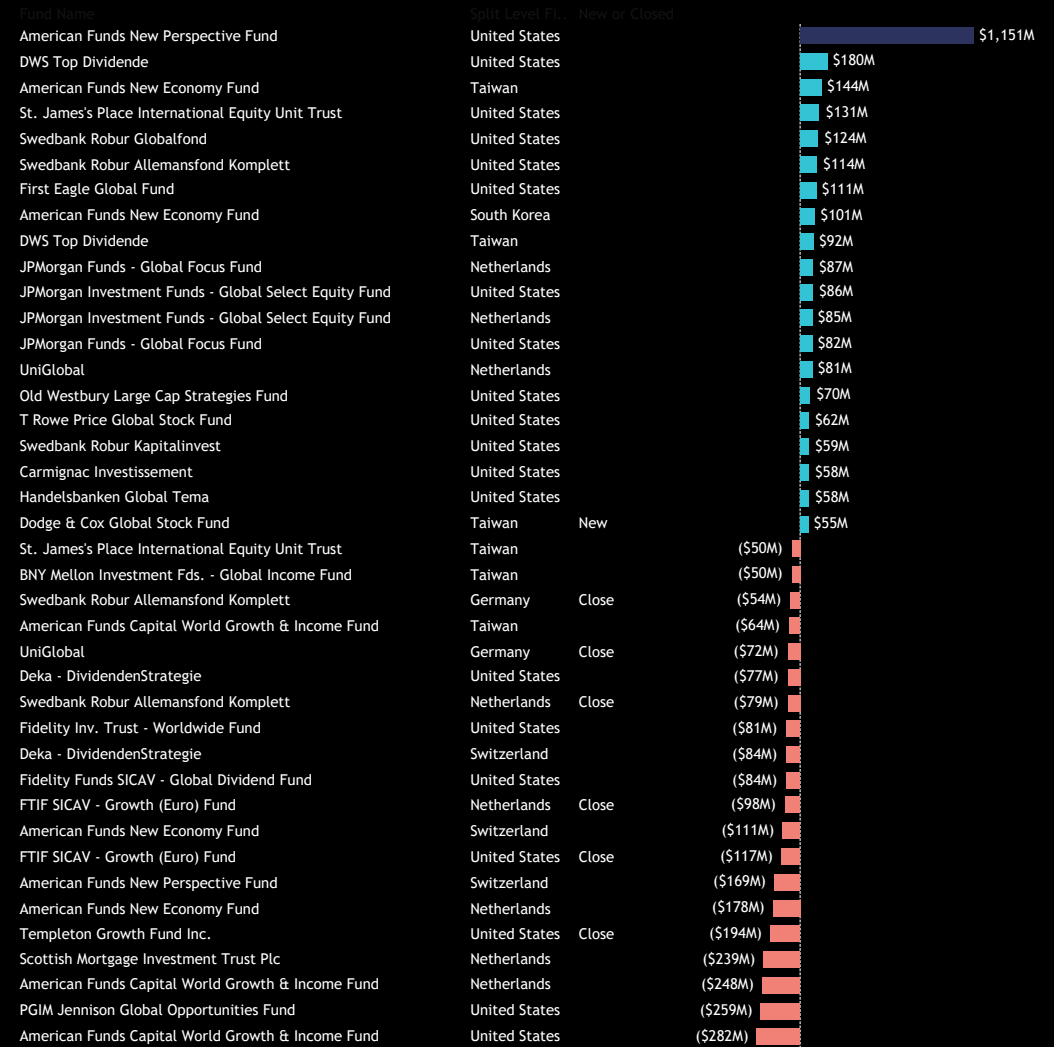
## Fund Level Sector Ownership Activity

### 1: Semiconductors - Largest Country Level Fund Weight Changes Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

### 3: Semiconductors - Largest Country Level Estimated Fund Flows, \$ Between 8/31/2023 and 2/29/2024

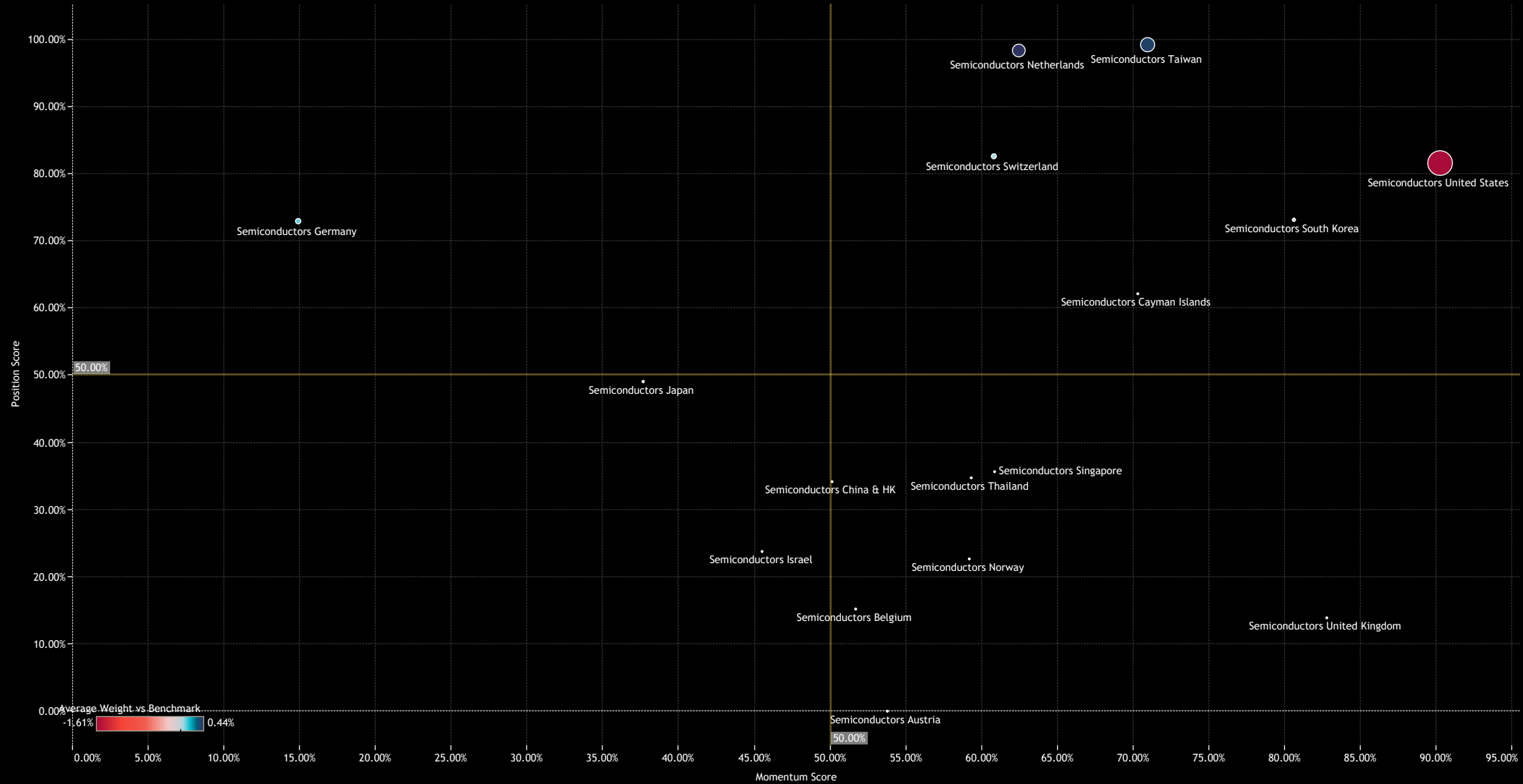


Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Country Sentiment

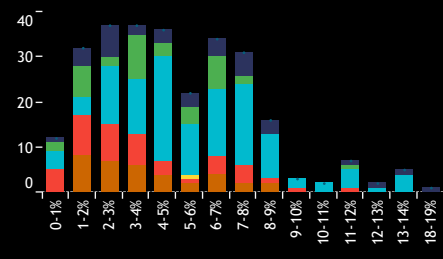
2: Semiconductors - Country Sentiment Grid  
 Momentum Measure between 8/31/2023 and 2/29/2024



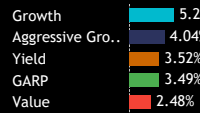
# Semiconductors: Active Fund Ownership Report

## United States Fund Ownership Profile

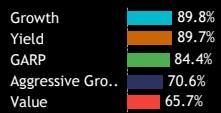
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



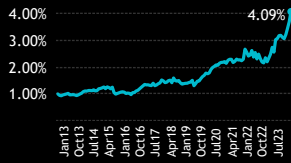
4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Liontrust Investment Funds I - Global Innovat..  | 18.01% |
| Baillie Gifford Investment Funds ICVC - Long ..  | 13.99% |
| Guinness Atkinson Global Innovators Fund         | 13.71% |
| Baron Global Advantage Fund                      | 13.29% |
| Acatis Aktien Global Fonds UI                    | 13.26% |
| CT Invnt. Funds ICVC - Global Select Fund        | 13.03% |
| Sands Capital Funds Plc - Global Growth Fund     | 12.70% |
| Ninety One Glob. Strat. Fd. - Global Dynamic ... | 12.51% |
| Swedbank Robur Globalfond                        | 11.74% |
| Artisan Global Discovery Fund                    | 11.74% |

5. Largest Stock Level Fund Weights

| Fund Name                      | Stock Name         | Weight |
|--------------------------------|--------------------|--------|
| Baron Global Advantage Fu..    | NVIDIA Corporation | 13.29% |
| Baillie Gifford Investment ..  | NVIDIA Corporation | 9.24%  |
| Ninety One Glob. Strat. Fd. .. | NVIDIA Corporation | 8.95%  |
| Calamos Global Equity Fund     | NVIDIA Corporation | 8.83%  |
| PGIM Jennison Global Oppo..    | NVIDIA Corporation | 8.55%  |
| Scottish Mortgage Investm..    | NVIDIA Corporation | 7.89%  |
| Acatis Aktien Global Fonds ..  | NVIDIA Corporation | 7.35%  |
| Ninety One Glob. Strat. Fd. .. | NVIDIA Corporation | 7.19%  |
| MainFirst SICAV - Global Eq..  | NVIDIA Corporation | 7.14%  |
| Columbia Threadneedle (U..     | NVIDIA Corporation | 7.09%  |

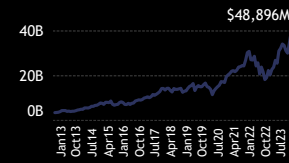
6. Average Fund Weight



7. Funds Invested %



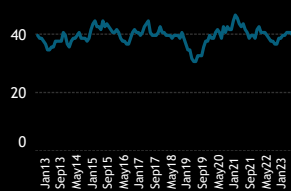
8. Combined Fund AUM, \$



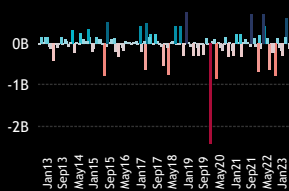
9. ACWI Weight



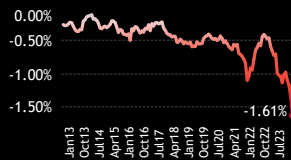
10. # of Companies Invested



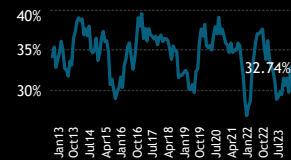
11. Monthly Fund Flows, \$



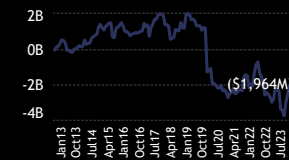
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                          | Change |
|------------------------------------|--------|
| Delaware Global Equity Fund II     | 7.24%  |
| Delaware Global Equity Fund        | 7.23%  |
| Liontrust Investment Funds I - ... | 6.84%  |
| AXA IM Equity Trust - Global E..   | 5.46%  |
| PGIM Jennison Global Opportu..     | -2.39% |
| Fidelity Inv. Trust - Worldwide..  | -2.44% |
| Artemis SmartGARP Paris-Alig..     | -2.94% |
| FP WHEB Asset Mgmt. Fds. - S..     | -4.20% |

17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                      | Stock Name           | Change |
|--------------------------------|----------------------|--------|
| American Century Focused ..    | NVIDIA Corporation   | 6.41%  |
| SEB Global Aktiefond           | NVIDIA Corporation   | 4.78%  |
| Carmignac Investissement       | NVIDIA Corporation   | 4.43%  |
| AXA IM Equity Trust - Glob..   | NVIDIA Corporation   | 3.66%  |
| SEB Fund 1 - Global Climat..   | First Solar, Inc.    | -1.56% |
| FP WHEB Asset Mgmt. Fds. ..    | First Solar, Inc.    | -1.56% |
| GAM Star Fund Plc - World..    | NVIDIA Corporation   | -1.59% |
| AIM Fds. Grp. (IFG) - Invesc.. | Analog Devices, Inc. | -1.98% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                                | Flow     |
|--|----------|
| American Funds New Perspect..            | \$1,151M |
| DWS Top Dividende                        | \$180M   |
| St. James's Place International..        | \$131M   |
| Swedbank Robur Globalfond                | \$124M   |
| Fidelity Inv. Trust - Worldwide..(\$81M) | (\$81M)  |
| Fidelity Funds SICAV - Global .. (\$84M) | (\$84M)  |
| PGIM Jennison Global Opportu..           | (\$259M) |
| American Funds Capital World..           | (\$282M) |

18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                   | Stock Name              | Flow     |
|-----------------------------|-------------------------|----------|
| American Funds New Persp..  | NVIDIA Corporation      | \$737M   |
| American Funds New Persp..  | Broadcom Inc.           | \$324M   |
| American Funds Capital Wo.. | Texas Instruments Inc.. | \$310M   |
| UniGlobal                   | Broadcom Inc.           | \$223M   |
| American Funds New Econo..  | Micron Technology, Inc. | (\$149M) |
| PGIM Jennison Global Oppo.. | NVIDIA Corporation      | (\$179M) |
| American Funds Capital Wo.. | Broadcom Inc.           | (\$195M) |
| American Funds Capital Wo.. | Micron Technology, Inc. | (\$346M) |

19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|--------------------------------|------------------|------------------|---------------------|-------------|
| NVDA-US | NVIDIA Corporation             | 45.13%           | 1.68%            | -1.09%              | \$17,348M   |
| AVGO-US | Broadcom Inc.                  | 28.61%           | 0.54%            | -0.27%              | \$16,701M   |
| TXN-US  | Texas Instruments Corporat..   | 23.01%           | 0.25%            | 0.03%               | \$2,453M    |
| LRCX-US | Lam Research Corporation       | 17.40%           | 0.18%            | 0.01%               | \$1,182M    |
| ADI-US  | Analog Devices, Inc.           | 16.81%           | 0.18%            | 0.06%               | \$1,791M    |
| AMD-US  | Advanced Micro Devices, Inc.   | 16.22%           | 0.24%            | -0.20%              | \$1,695M    |
| QCOM-US | QUALCOMM Incorporated          | 15.63%           | 0.14%            | -0.12%              | \$663M      |
| KLAC-US | KLA Corporation                | 14.16%           | 0.14%            | 0.01%               | \$817M      |
| INTC-US | Intel Corporation              | 12.98%           | 0.13%            | -0.13%              | \$1,009M    |
| MU-US   | Micron Technology, Inc.        | 11.50%           | 0.12%            | -0.02%              | \$1,491M    |
| ON-US   | ON Semiconductor Corporation   | 10.91%           | 0.08%            | 0.03%               | \$869M      |
| MCHP-US | Microchip Technology Incorpo.. | 9.73%            | 0.05%            | -0.01%              | \$263M      |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                   | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|---------|------------------------------|------------------|-------------|----------------|
| NVDA-US | NVIDIA Corporation           | 5.90%            | 0.61%       | \$1,286M       |
| AVGO-US | Broadcom Inc.                | 4.42%            | 0.16%       | \$873M         |
| LRCX-US | Lam Research Corporation     | 2.06%            | 0.03%       | (\$65M)        |
| KLAC-US | KLA Corporation              | 2.06%            | 0.04%       | \$41M          |
| SWKS-US | Skyworks Solutions, Inc.     | 1.77%            | 0.01%       | \$28M          |
| INTC-US | Intel Corporation            | 0.88%            | 0.02%       | (\$40M)        |
| MRVL-US | Marvell Technology, Inc.     | -0.88%           | 0.00%       | \$60M          |
| QCOM-US | QUALCOMM Incorporated        | -1.47%           | 0.02%       | (\$14M)        |
| QRVO-US | Qorvo, Inc.                  | -1.47%           | -0.01%      | (\$24M)        |
| AMD-US  | Advanced Micro Devices, Inc. | -2.06%           | 0.08%       | (\$303M)       |
| MU-US   | Micron Technology, Inc.      | -2.06%           | 0.01%       | (\$792M)       |
| ENPH-US | Enphase Energy, Inc.         | -2.36%           | -0.01%      | \$39M          |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

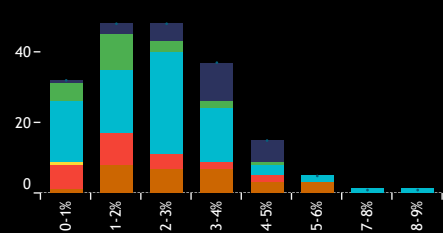
| Ticker  | Stock Name                        | Flow     |
|---------|-----------------------------------|----------|
| NVDA-US | NVIDIA Corporation                | \$1,286M |
| AVGO-US | Broadcom Inc.                     | \$873M   |
| TXN-US  | Texas Instruments Incorporated    | \$499M   |
| ON-US   | ON Semiconductor Corporation      | \$182M   |
| ADI-US  | Analog Devices, Inc.              | \$106M   |
| MRVL-US | Marvell Technology, Inc.          | \$60M    |
| WOLF-US | Great Wolf Resorts Inc.           | (\$29M)  |
| INTC-US | Intel Corporation                 | (\$40M)  |
| MCHP-US | Microchip Technology Incorporated | (\$49M)  |
| LRCX-US | Lam Research Corporation          | (\$65M)  |
| AMD-US  | Advanced Micro Devices, Inc.      | (\$303M) |
| MU-US   | Micron Technology, Inc.           | (\$792M) |

Source: Factset, Copley Fund Research

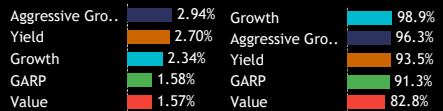
# Semiconductors: Active Fund Ownership Report

## Taiwan Fund Ownership Profile

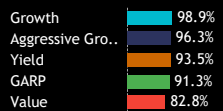
1. Histogram of Fund Weights  
As of 2/29/2024



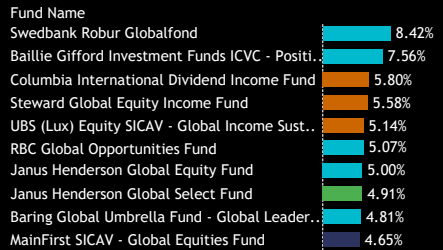
2. Ave Wgt by Style



3. Funds Invested by Style



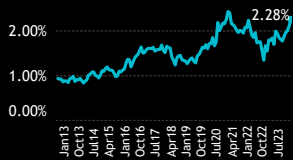
4. Largest Fund Weights



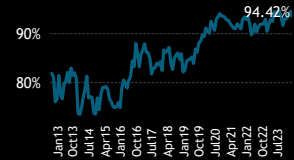
5. Largest Stock Level Fund Weights



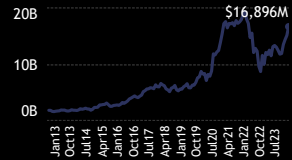
6. Average Fund Weight



7. Funds Invested %



8. Combined Fund AUM, \$



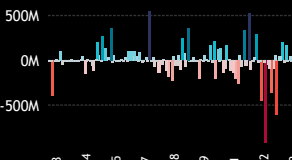
9. ACWI Weight



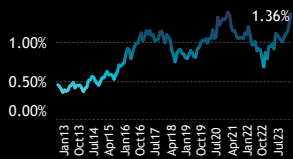
10. # of Companies Invested



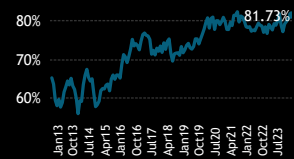
11. Monthly Fund Flows, \$



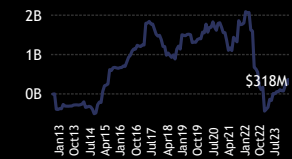
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|--------------------------------|------------------|------------------|---------------------|-------------|
| 2330-TW | Taiwan Semiconductor Manuf..   | 86.29%           | 2.04%            | 1.28%               | \$15,703M   |
| 2454-TW | MediaTek Inc                   | 13.71%           | 0.14%            | 0.07%               | \$907M      |
| 3034-TW | Novatek Microelectronics Corp. | 3.05%            | 0.01%            | 0.01%               | \$23M       |
| 2379-TW | Realtek Semiconductor Corp     | 3.05%            | 0.01%            | 0.00%               | \$13M       |
| 3443-TW | Global Unichip Corp.           | 2.03%            | 0.00%            | 0.00%               | \$11M       |
| 2303-TW | United Microelectronics Corp.  | 2.03%            | 0.01%            | -0.01%              | \$14M       |
| 6239-TW | Powertech Technology Inc.      | 1.52%            | 0.01%            | 0.01%               | \$1M        |
| 5483-TW | Sino-American Silicon Produc.. | 1.52%            | 0.01%            | 0.01%               | \$9M        |
| 3711-TW | ASE Technology Holding Co., .. | 1.52%            | 0.02%            | 0.00%               | \$11M       |
| 3529-TW | eMemory Technology, Inc.       | 1.52%            | 0.00%            | -0.01%              | \$127M      |
| 6415-TW | Silergy Corp.                  | 1.02%            | 0.00%            | 0.00%               | \$5M        |
| 6147-TW | Chipbond Technology Corpor..   | 1.02%            | 0.00%            | 0.00%               | \$1M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                     | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|---------|--------------------------------|------------------|-------------|----------------|
| 2454-TW | MediaTek Inc                   | 1.46%            | 0.04%       | \$23M          |
| 3661-TW | Alchip Technologies Ltd.       | 0.51%            | 0.00%       | \$1M           |
| 6239-TW | Powertech Technology Inc.      | 0.50%            | 0.00%       | \$0M           |
| 3443-TW | Global Unichip Corp.           | 0.50%            | 0.00%       | \$0M           |
| 2379-TW | Realtek Semiconductor Corp     | 0.49%            | 0.00%       | \$1M           |
| 2330-TW | Taiwan Semiconductor Manuf..   | 0.07%            | 0.39%       | \$266M         |
| 3529-TW | eMemory Technology, Inc.       | -0.01%           | 0.00%       | (\$47M)        |
| 4966-TW | Parade Technologies, Ltd.      | -0.51%           | 0.00%       | (\$7M)         |
| 6415-TW | Silergy Corp.                  | -0.52%           | 0.00%       | (\$1M)         |
| 3711-TW | ASE Technology Holding Co., .. | -0.52%           | 0.00%       | (\$2M)         |
| 3034-TW | Novatek Microelectronics Corp. | -1.04%           | 0.00%       | (\$1M)         |
| 2303-TW | United Microelectronics Corp.  | -2.05%           | 0.00%       | (\$5M)         |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

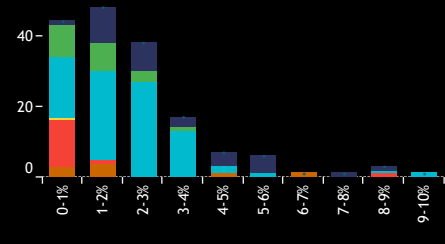
| Ticker  | Stock Name                         | Flow    |
|---------|------------------------------------|---------|
| 2330-TW | Taiwan Semiconductor Manufacturi.. | \$266M  |
| 6531-TW | AP Memory Technology Corp.         | \$36M   |
| 2454-TW | MediaTek Inc                       | \$23M   |
| 3661-TW | Alchip Technologies Ltd.           | \$1M    |
| 2379-TW | Realtek Semiconductor Corp         | \$1M    |
| 6239-TW | Powertech Technology Inc.          | \$0M    |
| 6415-TW | Silergy Corp.                      | (\$1M)  |
| 3711-TW | ASE Technology Holding Co., Ltd.   | (\$2M)  |
| 5274-TW | ASPEED Technology, Inc.            | (\$4M)  |
| 2303-TW | United Microelectronics Corp.      | (\$5M)  |
| 4966-TW | Parade Technologies, Ltd.          | (\$7M)  |
| 3529-TW | eMemory Technology, Inc.           | (\$47M) |

Source: Factset, Copley Fund Research

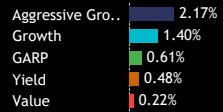
# Semiconductors: Active Fund Ownership Report

## Netherlands Fund Ownership Profile

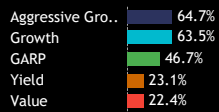
1. Histogram of Fund Weights  
As of 2/29/2024



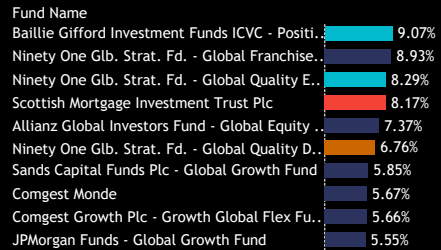
2. Ave Wgt by Style



3. Funds Invested by Style



4. Largest Fund Weights



5. Largest Stock Level Fund Weights



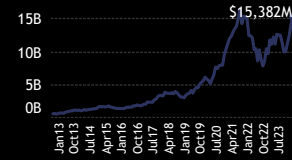
6. Average Fund Weight



7. Funds Invested %



8. Combined Fund AUM, \$



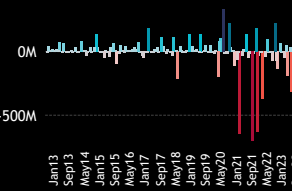
9. ACWI Weight



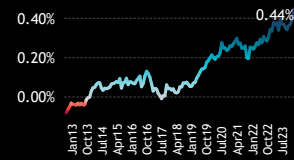
10. # of Companies Invested



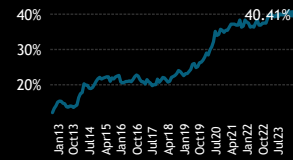
11. Monthly Fund Flows, \$



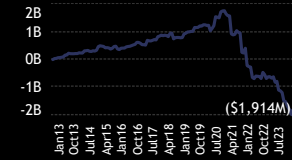
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name            | Funds Invested % | Average Weight % | Average Weight vs .. | Fund AUM \$ |
|---------|-----------------------|------------------|------------------|----------------------|-------------|
| ASML-NL | ASML Holding NV       | 44.54%           | 0.97%            | 0.43%                | \$14,823M   |
| NXPI-US | NXP Semiconductors NV | 13.86%           | 0.10%            | 0.01%                | \$559M      |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name            | Funds Invested % Δ | Ave Wgt % Δ | Fund Flows, \$ |
|---------|-----------------------|--------------------|-------------|----------------|
| NXPI-US | NXP Semiconductors NV | 0.59%              | 0.02%       | (\$55M)        |
| ASML-NL | ASML Holding NV       | 0.29%              | 0.19%       | (\$671M)       |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name            | Flow     |
|---------|-----------------------|----------|
| NXPI-US | NXP Semiconductors NV | (\$55M)  |
| ASML-NL | ASML Holding NV       | (\$671M) |

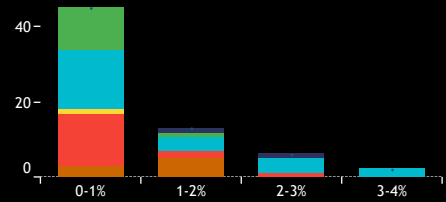
Source: Factset, Copley Fund Research



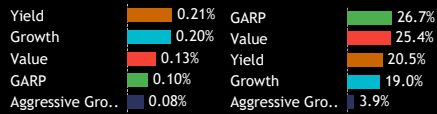
# Semiconductors: Active Fund Ownership Report

## Switzerland Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style

4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Waverton Invnt. Fds. Plc - Global Equity Fund    | 3.32%  |
| PineBridge Global Funds - Global Focus Equit..   | 3.03%  |
| Hermes Invnt. Funds Plc - Impact Opportuni...    | 2.79%  |
| Skagen Focus                                     | 2.57%  |
| BNY Mellon Investment Fds. - Global Opportu..    | 2.51%  |
| Impax Global Environmental Markets Fund          | 2.44%  |
| Janus Henderson Sustainable/Responsible Fu..     | 2.35%  |
| St. James's Place Unit Trust - Sust. & Respon..  | 2.23%  |
| Threadneedle Specialist Invnt. Fds. - Global E.. | 1.73%  |
| SEB Fund 1 - Global Climate Opportunity Fund     | 1.69%  |

5. Largest Stock Level Fund Weights

| Fund Name                      | Stock Name            | Weight |
|--------------------------------|-----------------------|--------|
| Waverton Invnt. Fds. Plc - G.. | TE Connectivity Ltd.  | 3.32%  |
| PineBridge Global Funds - ..   | TE Connectivity Ltd.  | 3.03%  |
| Hermes Invnt. Funds Plc - I..  | STMicroelectronics NV | 2.79%  |
| Skagen Focus                   | STMicroelectronics NV | 2.57%  |
| BNY Mellon Investment Fds..    | TE Connectivity Ltd.  | 2.51%  |
| Impax Global Environmen..      | TE Connectivity Ltd.  | 2.44%  |
| Janus Henderson Sustainab..    | TE Connectivity Ltd.  | 2.35%  |
| St. James's Place Unit Trus..  | TE Connectivity Ltd.  | 2.23%  |
| Threadneedle Specialist In..   | TE Connectivity Ltd.  | 1.73%  |
| SEB Fund 1 - Global Climat..   | STMicroelectronics NV | 1.69%  |

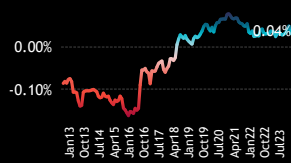
6. Average Fund Weight



9. ACWI Weight



12. Average Weight vs ACWI



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                        | Change |
|----------------------------------|--------|
| SEB Fund 1 - Global Climate O..  | 1.69%  |
| Quoniam Fds. Selection SICAV ..  | 1.45%  |
| Sarasin Funds ICVC - Thematic..  | 1.25%  |
| Skagen Focus                     | 1.09%  |
| American Funds New Economy..     | -0.37% |
| Robeco Capital Gr. Fds. - BP G.. | -0.59% |
| Deka - DividendenStrategie       | -0.60% |
| FP WHEB Asset Mgmt. Fds. - S..   | -1.65% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | Flow     |
|-----------------------------------|----------|
| St. James's Place Unit Trust - .. | \$25M    |
| Sarasin Funds ICVC - Thematic..   | \$9M     |
| Candriam Equities L - Global D..  | \$8M     |
| UBS Lux Equity SICAV - Global ..  | \$8M     |
| Robeco Capital Gr. Fds. - BP G..  | (\$33M)  |
| Deka - DividendenStrategie        | (\$84M)  |
| American Funds New Economy..      | (\$111M) |
| American Funds New Perspect..     | (\$169M) |

7. Funds Invested %



10. # of Companies Invested



13. Funds Overweight %



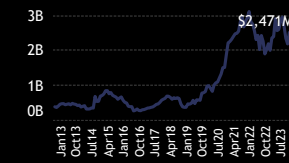
17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                     | Stock Name            | Change |
|-------------------------------|-----------------------|--------|
| SEB Fund 1 - Global Climat..  | STMicroelectronics NV | 1.69%  |
| Quoniam Fds. Selection SIC..  | TE Connectivity Ltd.  | 1.45%  |
| Sarasin Funds ICVC - Them..   | TE Connectivity Ltd.  | 1.25%  |
| Skagen Focus                  | STMicroelectronics NV | 1.09%  |
| SEB Dynamisk Aktiefond        | STMicroelectronics NV | -0.27% |
| American Funds New Econo..    | TE Connectivity Ltd.  | -0.37% |
| Robeco Capital Gr. Fds. - B.. | STMicroelectronics NV | -0.59% |
| FP WHEB Asset Mgmt. Fds. ...  | TE Connectivity Ltd.  | -1.65% |

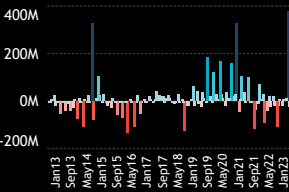
18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                     | Stock Name            | Flow     |
|-------------------------------|-----------------------|----------|
| St. James's Place Unit Trus.. | TE Connectivity Ltd.  | \$25M    |
| Sarasin Funds ICVC - Them..   | TE Connectivity Ltd.  | \$9M     |
| Candriam Equities L - Glob..  | TE Connectivity Ltd.  | \$8M     |
| UBS Lux Equity SICAV - Glo..  | TE Connectivity Ltd.  | \$8M     |
| FP WHEB Asset Mgmt. Fds. ...  | TE Connectivity Ltd.  | (\$18M)  |
| Robeco Capital Gr. Fds. - B.. | STMicroelectronics NV | (\$32M)  |
| American Funds New Econo..    | TE Connectivity Ltd.  | (\$111M) |
| American Funds New Persp..    | STMicroelectronics NV | (\$154M) |

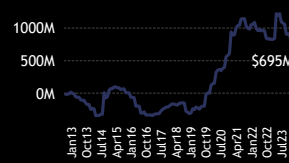
8. Combined Fund AUM, \$



11. Monthly Fund Flows, \$



14. Cumulative Fund Flows, \$



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker   | Stock Name                    | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|----------|-------------------------------|------------------|------------------|---------------------|-------------|
| TEL-US   | TE Connectivity Ltd.          | 12.68%           | 0.11%            | 0.04%               | \$2,000M    |
| STMPA-FR | STMicroelectronics NV         | 9.14%            | 0.04%            | 0.00%               | \$471M      |
| MBTN-CH  | Meyer Burger Technology AG    | 0.59%            | 0.00%            | 0.00%               | \$0M        |
| SENS-CH  | Sensirion Holding AG          | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| STM-FR   | STMicroelectronics NV         |                  | 0.00%            | 0.00%               | \$0M        |
| MASN-CH  | Micronas Semiconductor Hold.. |                  | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker   | Stock Name                    | Funds Invested % Δ | Ave Wgt % Δ | Fund Flows, \$ |
|----------|-------------------------------|--------------------|-------------|----------------|
| TEL-US   | TE Connectivity Ltd.          | 1.77%              | 0.00%       | (\$88M)        |
| STMPA-FR | STMicroelectronics NV         | 0.00%              | -0.01%      | (\$284M)       |
| STM-FR   | STMicroelectronics NV         | 0.00%              | 0.00%       | \$0M           |
| SENS-CH  | Sensirion Holding AG          | 0.00%              | 0.00%       | \$0M           |
| MBTN-CH  | Meyer Burger Technology AG    | 0.00%              | 0.00%       | \$0M           |
| MASN-CH  | Micronas Semiconductor Hold.. | 0.00%              | 0.00%       | \$0M           |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

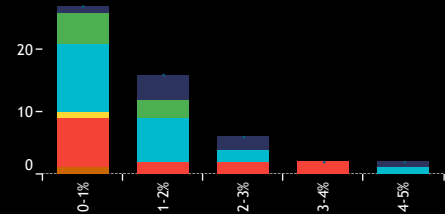
| Ticker   | Stock Name                        | Flow     |
|----------|-----------------------------------|----------|
| STM-FR   | STMicroelectronics NV             | \$0M     |
| SENS-CH  | Sensirion Holding AG              | \$0M     |
| MBTN-CH  | Meyer Burger Technology AG        | \$0M     |
| MASN-CH  | Micronas Semiconductor Holding AG | \$0M     |
| TEL-US   | TE Connectivity Ltd.              | (\$88M)  |
| STMPA-FR | STMicroelectronics NV             | (\$284M) |

Source: Factset, Copley Fund Research

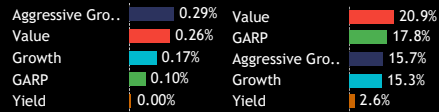
# Semiconductors: Active Fund Ownership Report

## Germany Fund Ownership Profile

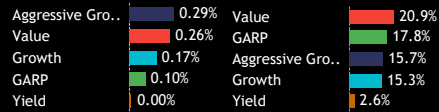
1. Histogram of Fund Weights  
As of 2/29/2024



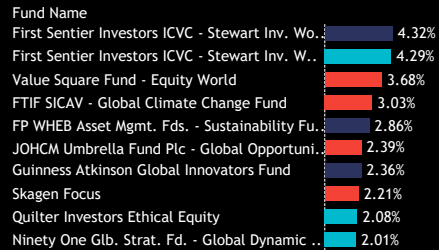
2. Ave Wgt by Style



3. Funds Invested by Style



4. Largest Fund Weights



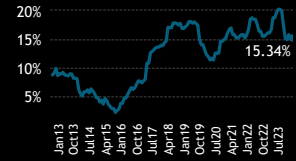
5. Largest Stock Level Fund Weights



6. Average Fund Weight



7. Funds Invested %



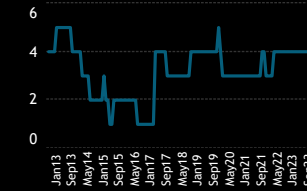
8. Combined Fund AUM, \$



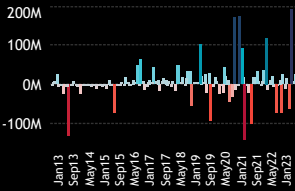
9. ACWI Weight



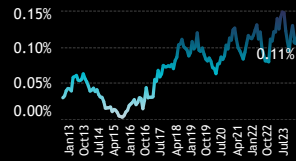
10. # of Companies Invested



11. Monthly Fund Flows, \$



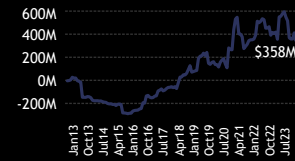
12. Average Weight vs ACWI



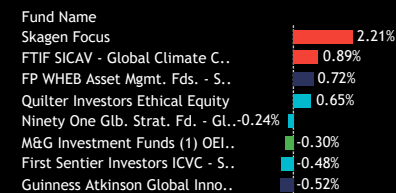
13. Funds Overweight %



14. Cumulative Fund Flows, \$



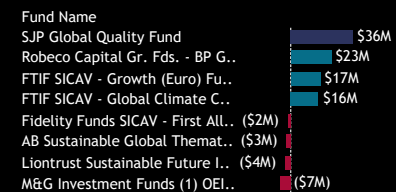
15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



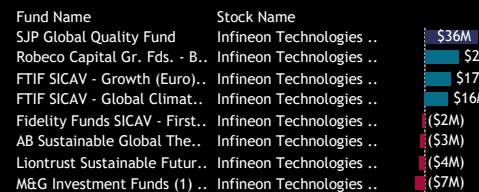
17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                    | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|-------------------------------|------------------|------------------|---------------------|-------------|
| IFX-DE  | Infineon Technologies AG      | 14.75%           | 0.17%            | 0.10%               | \$901M      |
| WAF-DE  | Siltronic AG                  | 0.59%            | 0.01%            | 0.01%               | \$8M        |
| TPE-DE  | PVA TePla AG                  |                  | 0.00%            | 0.00%               | \$0M        |
| SNG-DE  | SINGULUS TECHNOLOGIES AG      |                  | 0.00%            | 0.00%               | \$0M        |
| SIS-DE  | First Sensor AG               |                  | 0.00%            | 0.00%               | \$0M        |
| IFXB-DE | Infineon Technologies AG TEMP |                  | 0.00%            | 0.00%               | \$0M        |
| ELG-DE  | Elmos Semiconductor SE        |                  | 0.00%            | 0.00%               | \$0M        |
| CTNK-DE | centrotherm international AG  |                  | 0.00%            | 0.00%               | \$0M        |
| CGYK-DE | Conergy AG                    |                  | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                    | Funds Invested % Δ | Ave Wgt % Δ | Fund Flows, \$ |
|---------|-------------------------------|--------------------|-------------|----------------|
| WAF-DE  | Siltronic AG                  | 0.00%              | 0.01%       | \$7M           |
| TPE-DE  | PVA TePla AG                  | 0.00%              | -0.01%      | (\$1M)         |
| SNG-DE  | SINGULUS TECHNOLOGIES AG      | 0.00%              | 0.00%       | \$0M           |
| SIS-DE  | First Sensor AG               | 0.00%              | 0.00%       | \$0M           |
| IFXB-DE | Infineon Technologies AG TEMP | 0.00%              | 0.00%       | \$0M           |
| ELG-DE  | Elmos Semiconductor SE        | 0.00%              | 0.00%       | \$0M           |
| CTNK-DE | centrotherm international AG  | 0.00%              | 0.00%       | \$0M           |
| CGYK-DE | Conergy AG                    | 0.00%              | 0.00%       | \$0M           |
| IFX-DE  | Infineon Technologies AG      | -4.42%             | -0.02%      | (\$166M)       |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

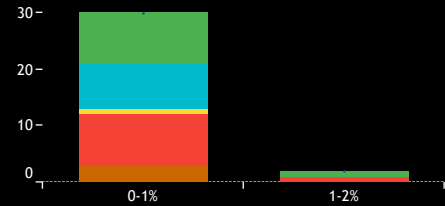
| Ticker  | Stock Name                    | Flow     |
|---------|-------------------------------|----------|
| WAF-DE  | Siltronic AG                  | \$7M     |
| SNG-DE  | SINGULUS TECHNOLOGIES AG      | \$0M     |
| SIS-DE  | First Sensor AG               | \$0M     |
| IFXB-DE | Infineon Technologies AG TEMP | \$0M     |
| CTNK-DE | centrotherm international AG  | \$0M     |
| CGYK-DE | Conergy AG                    | \$0M     |
| ELG-DE  | Elmos Semiconductor SE        | \$0M     |
| TPE-DE  | PVA TePla AG                  | (\$1M)   |
| IFX-DE  | Infineon Technologies AG      | (\$166M) |

Source: Factset, Copley Fund Research

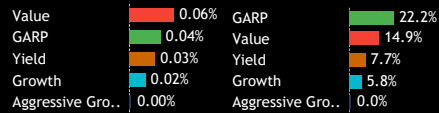
# Semiconductors: Active Fund Ownership Report

## Japan Fund Ownership Profile

1. Histogram of Fund Weights As of 2/29/2024



2. Ave Wgt by Style



4. Largest Fund Weights



5. Largest Stock Level Fund Weights



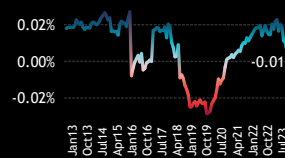
6. Average Fund Weight



9. ACWI Weight



12. Average Weight vs ACWI



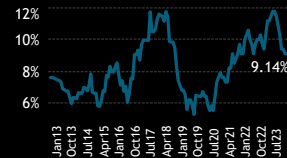
15. Largest Changes in Fund Weight Between 8/31/2023 and 2/29/2024



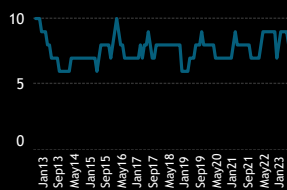
16. Largest Estimated Fund Flows, \$ Between 8/31/2023 and 2/29/2024



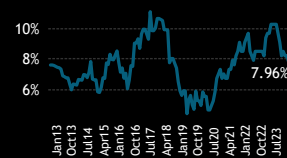
7. Funds Invested %



10. # of Companies Invested



13. Funds Overweight %



17. Largest Changes in Stock Weight Between 8/31/2023 and 2/29/2024



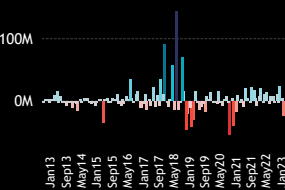
18. Largest Estimated Stock Fund Flows, \$ Between 8/31/2023 and 2/29/2024



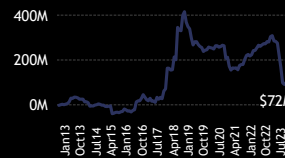
8. Combined Fund AUM, \$



11. Monthly Fund Flows, \$



14. Cumulative Fund Flows, \$



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                      | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|---------------------------------|------------------|------------------|---------------------|-------------|
| 6723-JP | Renesas Electronics Corporati.. | 5.31%            | 0.02%            | -0.01%              | \$283M      |
| 6963-JP | Rohm Co., Ltd.                  | 3.24%            | 0.01%            | 0.00%               | \$22M       |
| 6890-JP | Ferrotec Holdings Corporation   | 0.88%            | 0.00%            | 0.00%               | \$2M        |
| 6832-JP | AOI Electronics Co., Ltd.       | 0.88%            | 0.00%            | 0.00%               | \$0M        |
| 6770-JP | Alps Alpine Co., Ltd.           | 0.88%            | 0.00%            | 0.00%               | \$2M        |
| 6526-JP | Socionext Inc.                  | 0.29%            | 0.00%            | 0.00%               | \$12M       |
| 4185-JP | JSR Corp.                       | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| 3156-JP | Restar Holdings Corporation     | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| 7631-JP | Macnica, Inc.                   | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 7558-JP | Tomen Electronics Corp.         | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 6957-JP | Shibaura Electronics Co., Ltd.  | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 6871-JP | Micronics Japan Co., Ltd.       | 0.00%            | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested. Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                      | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|---------|---------------------------------|------------------|-------------|----------------|
| 6890-JP | Ferrotec Holdings Corporation   | 0.59%            | 0.00%       | \$1M           |
| 6770-JP | Alps Alpine Co., Ltd.           | 0.29%            | 0.00%       | \$1M           |
| 7631-JP | Macnica, Inc.                   | 0.00%            | 0.00%       | \$0M           |
| 7558-JP | Tomen Electronics Corp.         | 0.00%            | 0.00%       | \$0M           |
| 6957-JP | Shibaura Electronics Co., Ltd.  | 0.00%            | 0.00%       | \$0M           |
| 6871-JP | Micronics Japan Co., Ltd.       | 0.00%            | 0.00%       | \$0M           |
| 4217-JP | Hitachi Chemical Company, L..   | 0.00%            | 0.00%       | \$0M           |
| 4185-JP | JSR Corp.                       | 0.00%            | 0.00%       | \$0M           |
| 3445-JP | RS Technologies Co. Ltd.        | 0.00%            | 0.00%       | \$0M           |
| 3156-JP | Restar Holdings Corporation     | 0.00%            | 0.00%       | \$0M           |
| 6963-JP | Rohm Co., Ltd.                  | -0.29%           | 0.00%       | \$1M           |
| 6723-JP | Renesas Electronics Corporati.. | -1.18%           | -0.02%      | (\$24M)        |

21. Largest Stock Level Estimated Fund Flows Between 8/31/2023 and 2/29/2024

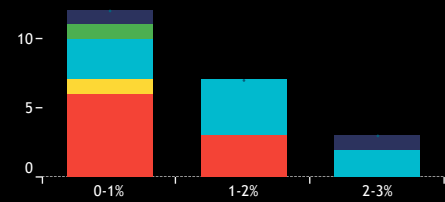
| Ticker  | Stock Name                         | Flow (\$M) |
|---------|------------------------------------|------------|
| 6963-JP | Rohm Co., Ltd.                     | \$1M       |
| 6770-JP | Alps Alpine Co., Ltd.              | \$1M       |
| 6890-JP | Ferrotec Holdings Corporation      | \$1M       |
| 3156-JP | Restar Holdings Corporation        | \$0M       |
| 7631-JP | Macnica, Inc.                      | \$0M       |
| 7558-JP | Tomen Electronics Corp.            | \$0M       |
| 6274-JP | Yamaha Motor Robotics Holdings C.. | \$0M       |
| 4217-JP | Hitachi Chemical Company, Ltd.     | \$0M       |
| 4185-JP | JSR Corp.                          | \$0M       |
| 3445-JP | RS Technologies Co. Ltd.           | \$0M       |
| 6677-JP | SK-Electronics Co., Ltd.           | \$0M       |
| 6723-JP | Renesas Electronics Corporation    | (\$24M)    |

Source: Factset, Copley Fund Research

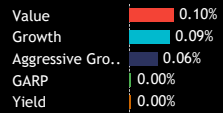
# Semiconductors: Active Fund Ownership Report

## South Korea Fund Ownership Profile

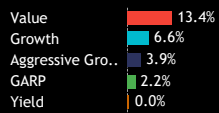
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



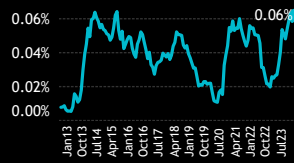
4. Largest Fund Weights



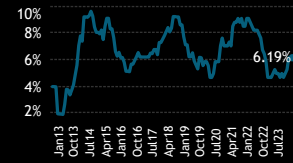
5. Largest Stock Level Fund Weights



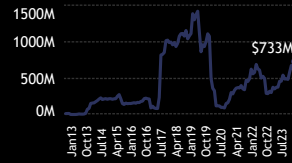
6. Average Fund Weight



7. Funds Invested %



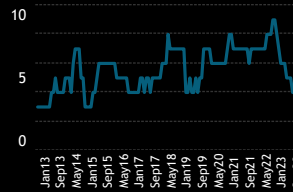
8. Combined Fund AUM, \$



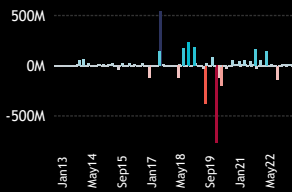
9. ACWI Weight



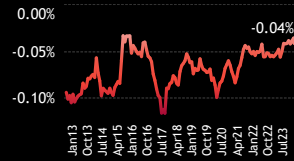
10. # of Companies Invested



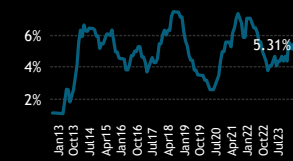
11. Monthly Fund Flows, \$



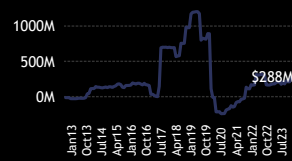
12. Average Weight vs ACWI



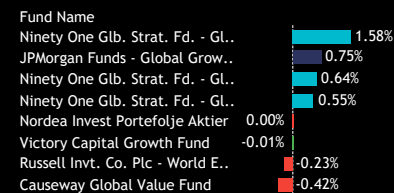
13. Funds Overweight %



14. Cumulative Fund Flows, \$



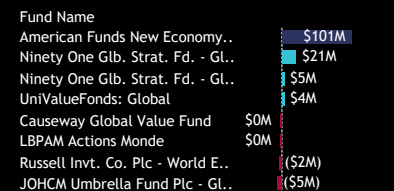
15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker    | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|-----------|--------------------------------|------------------|------------------|---------------------|-------------|
| 000660-KR | SK hynix Inc.                  | 5.60%            | 0.06%            | -0.03%              | \$731M      |
| 272290-KR | INNOX Advanced Materials Co..  | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| 166090-KR | Hana Materials Inc.            | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| 009150-KR | Samsung Electro-Mechanics C..  | 0.29%            | 0.00%            | 0.00%               | \$1M        |
| 009830-KR | HANWHA SOLUTIONS CORPOR..      | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| MX-US     | Magnachip Semiconductor Co..   | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 363280-KR | TY Holdings Co. Ltd.           | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 322000-KR | Hyundai Energy Solutions Co... | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 265520-KR | Advanced Process Systems Co..  | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 222800-KR | Simmtech Co., Ltd.             | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 183300-KR | KoMiCo Ltd.                    | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 123260-KR | PineNex Co., Ltd.              | 0.00%            | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker      | Stock Name                     | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|-------------|--------------------------------|------------------|-------------|----------------|
| 000660-KR   | SK hynix Inc.                  | 1.18%            | 0.01%       | \$94M          |
| MX-US       | Magnachip Semiconductor Co..   | 0.00%            | 0.00%       | \$0M           |
| 363280-KR   | TY Holdings Co. Ltd.           | 0.00%            | 0.00%       | \$0M           |
| 322000-KR   | Hyundai Energy Solutions Co... | 0.00%            | 0.00%       | \$0M           |
| 272290-KR   | INNOX Advanced Materials Co..  | 0.00%            | 0.00%       | \$0M           |
| 265520-KR   | Advanced Process Systems Co..  | 0.00%            | 0.00%       | \$0M           |
| 0098301C-KR | HANWHA SOLUTIONS CORPOR..      | 0.00%            | 0.00%       | \$0M           |
| 009830-KR   | HANWHA SOLUTIONS CORPOR..      | 0.00%            | 0.00%       | \$0M           |
| 009155-KR   | Samsung Electro-Mechanics C..  | 0.00%            | 0.00%       | \$0M           |
| 009150-KR   | Samsung Electro-Mechanics C..  | 0.00%            | 0.00%       | \$0M           |
| 001210-KR   | Kumho Electric, Inc.           | 0.00%            | 0.00%       | \$0M           |
| 000990-KR   | DB HiTek Co. LTD               | 0.00%            | 0.00%       | \$0M           |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

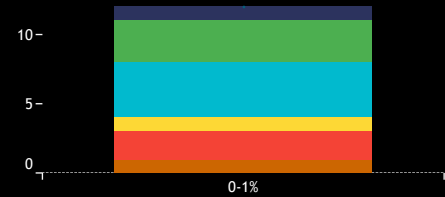
| Ticker      | Stock Name                          | Flow  |
|-------------|-------------------------------------|-------|
| 000660-KR   | SK hynix Inc.                       | \$94M |
| 272290-KR   | INNOX Advanced Materials Co., Ltd.  | \$0M  |
| 009150-KR   | Samsung Electro-Mechanics Co., Ltd  | \$0M  |
| MX-US       | Magnachip Semiconductor Corp.       | \$0M  |
| 363280-KR   | TY Holdings Co. Ltd.                | \$0M  |
| 322000-KR   | Hyundai Energy Solutions Co., Ltd.  | \$0M  |
| 017900-KR   | AUK CORP.                           | \$0M  |
| 0098301C-KR | HANWHA SOLUTIONS CORPORATION..      | \$0M  |
| 009830-KR   | HANWHA SOLUTIONS CORPORATION..      | \$0M  |
| 009155-KR   | Samsung Electro-Mechanics Co Ltd .. | \$0M  |
| 001210-KR   | Kumho Electric, Inc.                | \$0M  |
| 000990-KR   | DB HiTek Co. LTD                    | \$0M  |

Source: Factset, Copley Fund Research

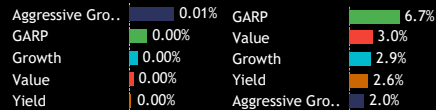
# Semiconductors: Active Fund Ownership Report

## China & HK Fund Ownership Profile

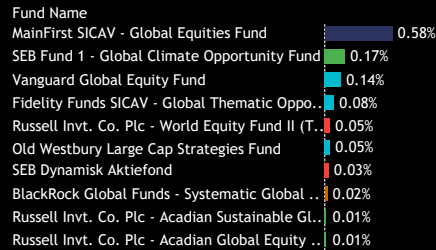
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



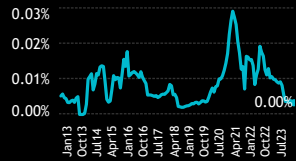
4. Largest Fund Weights



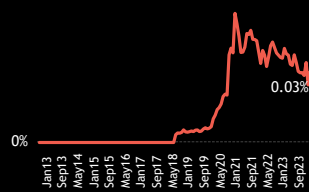
5. Largest Stock Level Fund Weights



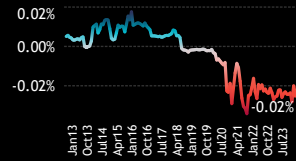
6. Average Fund Weight



9. ACWI Weight



12. Average Weight vs ACWI



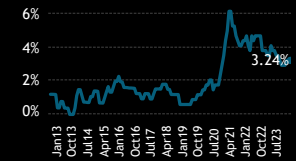
15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



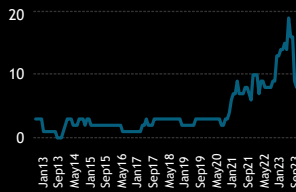
16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



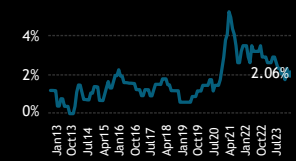
7. Funds Invested %



10. # of Companies Invested



13. Funds Overweight %



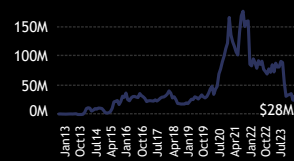
17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



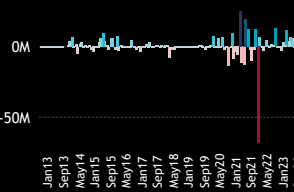
18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



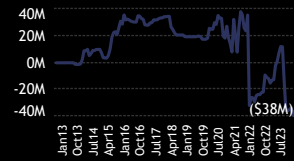
8. Combined Fund AUM, \$



11. Monthly Fund Flows, \$



14. Cumulative Fund Flows, \$



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker    | Stock Name                       | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|-----------|----------------------------------|------------------|------------------|---------------------|-------------|
| 300274-CN | Sungrow Power Supply Co., L..    | 1.18%            | 0.00%            | 0.00%               | \$6M        |
| 3315-HK   | Goldpac Group Ltd.               | 0.88%            | 0.00%            | 0.00%               | \$0M        |
| 603501-CN | Will Semiconductor Ltd. Class..  | 0.59%            | 0.00%            | 0.00%               | \$12M       |
| 601012-CN | LONGI Green Energy Technol..     | 0.59%            | 0.00%            | 0.00%               | \$3M        |
| 688099-CN | Amlogic (Shanghai) Co., Ltd. ..  | 0.29%            | 0.00%            | 0.00%               | \$1M        |
| 300724-CN | Shenzhen S.C New Energy Te..     | 0.29%            | 0.00%            | 0.00%               | \$1M        |
| 300661-CN | SG Micro Corp. Class A           | 0.29%            | 0.00%            | 0.00%               | \$6M        |
| 300308-CN | Zhongji Innolight Co., Ltd. Cl.. | 0.29%            | 0.00%            | 0.00%               | \$0M        |
| 968-HK    | Xinyi Solar Holdings Ltd.        | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 688521-CN | VeriSilicon Microelectronics (.. | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 688256-CN | Cambricon Technologies Corp..    | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| 688223-CN | Jinko Solar Co., Ltd. Class A    | 0.00%            | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                       | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|-----------|----------------------------------|------------------|-------------|----------------|
| 603501-CN | Will Semiconductor Ltd. Class..  | 0.29%            | 0.00%       | \$0M           |
| 300724-CN | Shenzhen S.C New Energy Te..     | 0.29%            | 0.00%       | \$1M           |
| 300308-CN | Zhongji Innolight Co., Ltd. Cl.. | 0.29%            | 0.00%       | \$0M           |
| 300274-CN | Sungrow Power Supply Co., L..    | 0.29%            | 0.00%       | \$1M           |
| YGE-US    | Yingli Green Energy Holding ..   | 0.00%            | 0.00%       | \$0M           |
| SPRD-US   | Spreadtrum Communications,..     | 0.00%            | 0.00%       | \$0M           |
| 002129-CN | Tianjin Zhonghuan Semicond..     | 0.00%            | 0.00%       | \$0M           |
| 002049-CN | Unigroup Guoxin Microelectro..   | 0.00%            | 0.00%       | \$0M           |
| 688223-CN | Jinko Solar Co., Ltd. Class A    | -0.29%           | 0.00%       | (\$1M)         |
| 600732-CN | Shanghai Aiko Solar Energy C..   | -0.29%           | 0.00%       | \$0M           |
| 968-HK    | Xinyi Solar Holdings Ltd.        | -0.59%           | 0.00%       | (\$16M)        |
| 300661-CN | SG Micro Corp. Class A           | -0.59%           | 0.00%       | (\$8M)         |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                           | Flow (\$M) |
|-----------|--------------------------------------|------------|
| 300724-CN | Shenzhen S.C New Energy Technolo..   | \$1M       |
| 300274-CN | Sungrow Power Supply Co., Ltd. Cl..  | \$1M       |
| 603501-CN | Will Semiconductor Ltd. Class A      | \$0M       |
| 002129-CN | Tianjin Zhonghuan Semiconductor ..   | \$0M       |
| 300308-CN | Zhongji Innolight Co., Ltd. Class A  | \$0M       |
| YGE-US    | Yingli Green Energy Holding Co. Lt.. | \$0M       |
| 002151-CN | Beijing BDStar Navigation Co., Ltd.. | \$0M       |
| 002049-CN | Unigroup Guoxin Microelectronics ..  | \$0M       |
| 600732-CN | Shanghai Aiko Solar Energy Co., Lt.. | \$0M       |
| 688223-CN | Jinko Solar Co., Ltd. Class A        | (\$1M)     |
| 300661-CN | SG Micro Corp. Class A               | (\$8M)     |
| 968-HK    | Xinyi Solar Holdings Ltd.            | (\$16M)    |

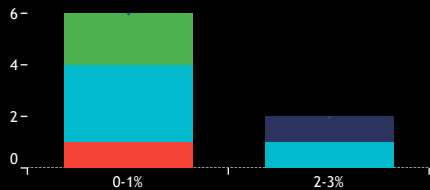
Source: Factset, Copley Fund Research



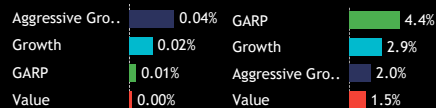
# Semiconductors: Active Fund Ownership Report

## United Kingdom Fund Ownership Profile

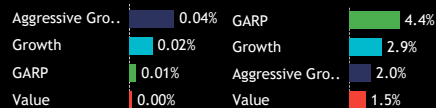
1. Histogram of Fund Weights  
As of 2/29/2024



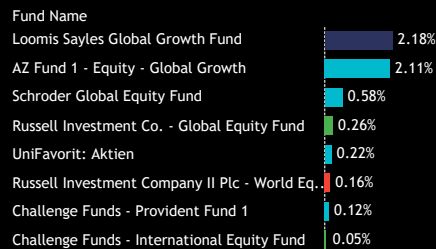
2. Ave Wgt by Style



3. Funds Invested by Style



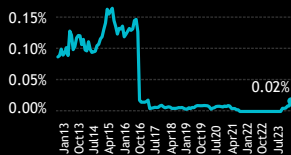
4. Largest Fund Weights



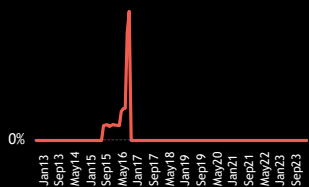
5. Largest Stock Level Fund Weights



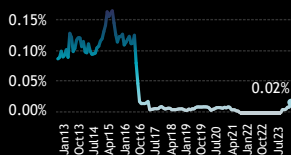
6. Average Fund Weight



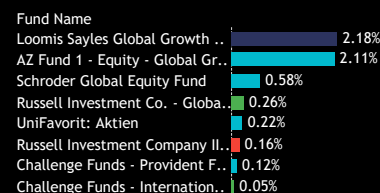
9. ACWI Weight



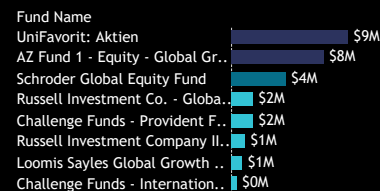
12. Average Weight vs ACWI



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



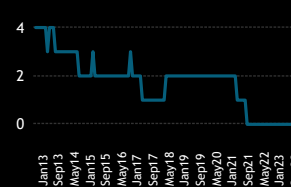
16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



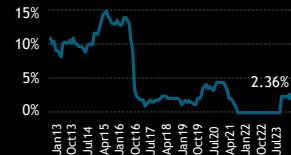
7. Funds Invested %



10. # of Companies Invested



13. Funds Overweight %



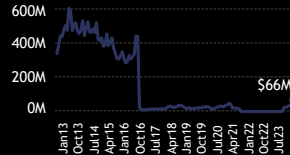
17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



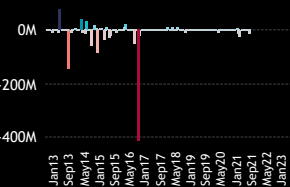
18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



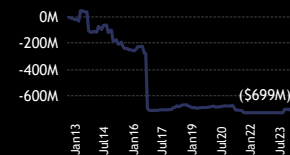
8. Combined Fund AUM, \$



11. Monthly Fund Flows, \$



14. Cumulative Fund Flows, \$



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|--------|--------------------------------|------------------|------------------|---------------------|-------------|
| ARM-US | ARM Holdings PLC ADR           | 2.36%            | 0.02%            | 0.02%               | \$66M       |
| IQE-GB | IQE plc                        | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| IMG-GB | Imagination Technologies Gro.. | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| DLG-DE | Dialog Semiconductor plc       | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| CSR-GB | CSR plc                        | 0.00%            | 0.00%            | 0.00%               | \$0M        |
| ARM-GB | ARM Holdings plc               | 0.00%            | 0.00%            | 0.00%               | \$0M        |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker | Stock Name                     | Funds Invested % Δ | Ave Wgt % Δ | Fund Flows, \$ |
|--------|--------------------------------|--------------------|-------------|----------------|
| IQE-GB | IQE plc                        | 0.00%              | 0.00%       | \$0M           |
| IMG-GB | Imagination Technologies Gro.. | 0.00%              | 0.00%       | \$0M           |
| DLG-DE | Dialog Semiconductor plc       | 0.00%              | 0.00%       | \$0M           |
| CSR-GB | CSR plc                        | 0.00%              | 0.00%       | \$0M           |
| ARM-US | ARM Holdings PLC ADR           | 0.00%              | 0.02%       | \$25M          |
| ARM-GB | ARM Holdings plc               | 0.00%              | 0.00%       | \$0M           |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker | Stock Name                         | Fund Flows, \$ |
|--------|------------------------------------|----------------|
| ARM-US | ARM Holdings PLC ADR               | \$25M          |
| IQE-GB | IQE plc                            | \$0M           |
| IMG-GB | Imagination Technologies Group plc | \$0M           |
| DLG-DE | Dialog Semiconductor plc           | \$0M           |
| CSR-GB | CSR plc                            | \$0M           |
| ARM-GB | ARM Holdings plc                   | \$0M           |

Source: Factset, Copley Fund Research



Section 3  
Semiconductors  
Stock Positioning Overview

# Semiconductors: Active Fund Ownership Report

## Stock Level Ownership

### 1: Semiconductors - Aggregate Stock Ownership Data [ranked by most widely held companies]

As of 2/29/2024

| Ticker    | Stock Name                      | Funds Invested % | Average Weight % | Average Weight vs Bmark | Fund AUM \$ |
|-----------|---------------------------------|------------------|------------------|-------------------------|-------------|
| 2330-TW   | Taiwan Semiconductor Manuf..    | 50.15%           | 1.18%            | 0.43%                   | \$15,703M   |
| NVDA-US   | NVIDIA Corporation              | 45.13%           | 1.68%            | -1.09%                  | \$17,348M   |
| ASML-NL   | ASML Holding NV                 | 44.54%           | 0.97%            | 0.43%                   | \$14,823M   |
| AVGO-US   | Broadcom Inc.                   | 28.61%           | 0.54%            | -0.27%                  | \$16,701M   |
| TXN-US    | Texas Instruments Incorporat..  | 23.01%           | 0.25%            | 0.03%                   | \$2,453M    |
| LRCX-US   | Lam Research Corporation        | 17.40%           | 0.18%            | 0.01%                   | \$1,182M    |
| ADI-US    | Analog Devices, Inc.            | 16.81%           | 0.18%            | 0.06%                   | \$1,791M    |
| AMD-US    | Advanced Micro Devices, Inc.    | 16.22%           | 0.24%            | -0.20%                  | \$1,695M    |
| QCOM-US   | QUALCOMM Incorporated           | 15.63%           | 0.14%            | -0.12%                  | \$663M      |
| IFX-DE    | Infineon Technologies AG        | 14.75%           | 0.17%            | 0.10%                   | \$901M      |
| KLAC-US   | KLA Corporation                 | 14.16%           | 0.14%            | 0.01%                   | \$817M      |
| NXPI-US   | NXP Semiconductors NV           | 13.86%           | 0.10%            | 0.01%                   | \$559M      |
| INTC-US   | Intel Corporation               | 12.98%           | 0.13%            | -0.13%                  | \$1,009M    |
| TEL-US    | TE Connectivity Ltd.            | 12.68%           | 0.11%            | 0.04%                   | \$2,000M    |
| MU-US     | Micron Technology, Inc.         | 11.50%           | 0.12%            | -0.02%                  | \$1,491M    |
| ON-US     | ON Semiconductor Corporation    | 10.91%           | 0.08%            | 0.03%                   | \$869M      |
| MCHP-US   | Microchip Technology Incorpo..  | 9.73%            | 0.05%            | -0.01%                  | \$263M      |
| STMPA-FR  | STMicroelectronics NV           | 9.14%            | 0.04%            | 0.00%                   | \$471M      |
| MRVL-US   | Marvell Technology, Inc.        | 8.85%            | 0.11%            | 0.02%                   | \$791M      |
| 2454-TW   | MediaTek Inc                    | 7.96%            | 0.08%            | 0.01%                   | \$907M      |
| SWKS-US   | Skyworks Solutions, Inc.        | 7.37%            | 0.03%            | 0.00%                   | \$132M      |
| FSLR-US   | First Solar, Inc.               | 6.78%            | 0.04%            | 0.02%                   | \$130M      |
| 000660-KR | SK hynix Inc.                   | 5.60%            | 0.06%            | -0.03%                  | \$731M      |
| 6723-JP   | Renesas Electronics Corporati.. | 5.31%            | 0.02%            | -0.01%                  | \$283M      |
| ENPH-US   | Enphase Energy, Inc.            | 5.01%            | 0.02%            | 0.00%                   | \$251M      |
| ENTG-US   | Entegris, Inc.                  | 3.24%            | 0.05%            | 0.02%                   | \$569M      |
| ARRY-US   | Array Technologies Inc          | 3.24%            | 0.01%            | 0.01%                   | \$44M       |
| 6963-JP   | Rohm Co., Ltd.                  | 3.24%            | 0.01%            | 0.00%                   | \$22M       |
| QRVO-US   | Qorvo, Inc.                     | 2.95%            | 0.02%            | -0.01%                  | \$40M       |
| WOLF-US   | Great Wolf Resorts Inc.         | 2.65%            | 0.00%            | 0.00%                   | \$150M      |
| MPWR-US   | Monolithic Power Systems, Inc.  | 2.65%            | 0.02%            | -0.03%                  | \$25M       |
| LSCC-US   | Lattice Semiconductor Corpo..   | 2.36%            | 0.02%            | 0.00%                   | \$16M       |
| IPGP-US   | IPG Photonics Corporation       | 2.36%            | 0.01%            | 0.01%                   | \$335M      |
| ARM-US    | ARM Holdings PLC ADR            | 2.36%            | 0.02%            | 0.02%                   | \$66M       |
| 3034-TW   | Novatek Microelectronics Corp.  | 1.77%            | 0.01%            | 0.00%                   | \$23M       |
| 2379-TW   | Realtek Semiconductor Corp      | 1.77%            | 0.00%            | 0.00%                   | \$13M       |
| SHLS-US   | Shoals Technologies Group, I..  | 1.47%            | 0.01%            | 0.01%                   | \$31M       |
| SLAB-US   | Silicon Laboratories Inc.       | 1.18%            | 0.01%            | 0.01%                   | \$28M       |
| RMBS-US   | Rambus Inc.                     | 1.18%            | 0.00%            | 0.00%                   | \$5M        |
| CRUS-US   | Cirrus Logic, Inc.              | 1.18%            | 0.00%            | 0.00%                   | \$1M        |

### 2: Semiconductors. Top 10 Stock Weights, Percentage of Semiconductors Total, Cumulative Percentage Total.

As of 2/29/2024

| Ticker  | Stock Name                     | Average Weight % | Funds Invested % | Average Weight % | Fund AUM \$ |
|---------|--------------------------------|------------------|------------------|------------------|-------------|
| NVDA-US | NVIDIA Corporation             | 1.68%            | 24.26%           | 8.10%            |             |
| 2330-TW | Taiwan Semiconductor Manuf..   | 1.18%            | 17.06%           | 27.66%           |             |
| ASML-NL | ASML Holding NV                | 0.97%            | 13.98%           | 38.68%           |             |
| AVGO-US | Broadcom Inc.                  | 0.54%            | 7.83%            | 43.42%           |             |
| TXN-US  | Texas Instruments Incorporat.. | 0.25%            | 3.63%            | 49.05%           |             |
| AMD-US  | Advanced Micro Devices, Inc.   | 0.24%            | 3.50%            | 50.48%           |             |
| ADI-US  | Analog Devices, Inc.           | 0.18%            | 2.65%            | 52.69%           |             |
| LRCX-US | Lam Research Corporation       | 0.18%            | 2.63%            | 55.35%           |             |
| IFX-DE  | Infineon Technologies AG       | 0.17%            | 2.43%            | 58.83%           |             |
| KLAC-US | KLA Corporation                | 0.14%            | 1.97%            | 60.34%           |             |

### 3: Semiconductors - Aggregate Stock Ownership Data, Top Overweights

As of 2/29/2024

| Ticker  | Stock Name                     | Average Weight vs Bmark | Funds Invested % | Average Weight % | Fund AUM \$ |
|---------|--------------------------------|-------------------------|------------------|------------------|-------------|
| ASML-NL | ASML Holding NV                | 0.43%                   | 44.54%           | 0.97%            | \$14,823M   |
| 2330-TW | Taiwan Semiconductor Manuf..   | 0.43%                   | 50.15%           | 1.18%            | \$15,703M   |
| IFX-DE  | Infineon Technologies AG       | 0.10%                   | 14.75%           | 0.17%            | \$901M      |
| ADI-US  | Analog Devices, Inc.           | 0.06%                   | 16.81%           | 0.18%            | \$1,791M    |
| TEL-US  | TE Connectivity Ltd.           | 0.04%                   | 12.68%           | 0.11%            | \$2,000M    |
| ON-US   | ON Semiconductor Corporation   | 0.03%                   | 10.91%           | 0.08%            | \$869M      |
| TXN-US  | Texas Instruments Incorporat.. | 0.03%                   | 23.01%           | 0.25%            | \$2,453M    |
| FSLR-US | First Solar, Inc.              | 0.02%                   | 6.78%            | 0.04%            | \$130M      |
| ENTG-US | Entegris, Inc.                 | 0.02%                   | 3.24%            | 0.05%            | \$569M      |
| MRVL-US | Marvell Technology, Inc.       | 0.02%                   | 8.85%            | 0.11%            | \$791M      |
| ARM-US  | ARM Holdings PLC ADR           | 0.02%                   | 2.36%            | 0.02%            | \$66M       |
| IPGP-US | IPG Photonics Corporation      | 0.01%                   | 2.36%            | 0.01%            | \$335M      |
| NXPI-US | NXP Semiconductors NV          | 0.01%                   | 13.86%           | 0.10%            | \$559M      |
| 2454-TW | MediaTek Inc                   | 0.01%                   | 7.96%            | 0.08%            | \$907M      |
| SHLS-US | Shoals Technologies Group, I.. | 0.01%                   | 1.47%            | 0.01%            | \$31M       |

### 4: Semiconductors - Aggregate Stock Ownership Data, Top Underweights

As of 2/29/2024

| Ticker    | Stock Name                      | Average Weight vs Bmark | Funds Invested % | Average Weight % | Fund AUM \$ |
|-----------|---------------------------------|-------------------------|------------------|------------------|-------------|
| NVDA-US   | NVIDIA Corporation              | -1.09%                  | 45.13%           | 1.68%            | \$17,348M   |
| AVGO-US   | Broadcom Inc.                   | -0.27%                  | 28.61%           | 0.54%            | \$16,701M   |
| AMD-US    | Advanced Micro Devices, Inc.    | -0.20%                  | 16.22%           | 0.24%            | \$1,695M    |
| INTC-US   | Intel Corporation               | -0.13%                  | 12.98%           | 0.13%            | \$1,009M    |
| QCOM-US   | QUALCOMM Incorporated           | -0.12%                  | 15.63%           | 0.14%            | \$663M      |
| 000660-KR | SK hynix Inc.                   | -0.03%                  | 5.60%            | 0.06%            | \$731M      |
| MPWR-US   | Monolithic Power Systems, Inc.  | -0.03%                  | 2.65%            | 0.02%            | \$25M       |
| MU-US     | Micron Technology, Inc.         | -0.02%                  | 11.50%           | 0.12%            | \$1,491M    |
| 6723-JP   | Renesas Electronics Corporati.. | -0.01%                  | 5.31%            | 0.02%            | \$283M      |
| 2303-TW   | United Microelectronics Corp.   | -0.01%                  | 1.18%            | 0.01%            | \$14M       |
| MCHP-US   | Microchip Technology Incorpo..  | -0.01%                  | 9.73%            | 0.05%            | \$263M      |
| 3529-TW   | eMemory Technology, Inc.        | -0.01%                  | 0.88%            | 0.00%            | \$127M      |
| QRVO-US   | Qorvo, Inc.                     | -0.01%                  | 2.95%            | 0.02%            | \$40M       |
| 3661-TW   | Alchip Technologies Ltd.        | -0.01%                  | 0.59%            | 0.00%            | \$4M        |
| 3711-TW   | ASE Technology Holding Co., ..  | -0.01%                  | 0.88%            | 0.01%            | \$11M       |



# Semiconductors: Active Fund Ownership Report

## Fund Level Stock Level Ownership

1: Semiconductors - Largest Individual Fund Level Stock Holdings (%)  
As of 2/29/2024

| Fund Name   | Ticker  | Stock Name                               | Percentage |
|---|---------|--|------------|
| Baron Global Advantage Fund                           | NVDA-US | NVIDIA Corporation                       | 13.29%     |
| Baillie Gifford Investment Funds ICVC - Long Ter...   | NVDA-US | NVIDIA Corporation                       | 9.24%      |
| Baillie Gifford Investment Funds ICVC - Positive C... | ASML-NL | ASML Holding NV                          | 9.07%      |
| Ninety One Glob. Strat. Fd. - Global Dynamic Fund     | NVDA-US | NVIDIA Corporation                       | 8.95%      |
| Ninety One Glob. Strat. Fd. - Global Franchise Fund   | ASML-NL | ASML Holding NV                          | 8.93%      |
| Calamos Global Equity Fund                            | NVDA-US | NVIDIA Corporation                       | 8.83%      |
| PGIM Jennison Global Opportunities Fund               | NVDA-US | NVIDIA Corporation                       | 8.55%      |
| Ninety One Glob. Strat. Fd. - Global Quality Equity.. | ASML-NL | ASML Holding NV                          | 8.29%      |
| Scottish Mortgage Investment Trust Plc                | ASML-NL | ASML Holding NV                          | 8.17%      |
| Scottish Mortgage Investment Trust Plc                | NVDA-US | NVIDIA Corporation                       | 7.89%      |
| Swedbank Robur Globalfond                             | 2330-TW | Taiwan Semiconductor Manufacturing Co... | 7.83%      |
| Baillie Gifford Investment Funds ICVC - Positive C... | 2330-TW | Taiwan Semiconductor Manufacturing Co... | 7.56%      |
| Allianz Global Investors Fund - Global Equity Gro...  | ASML-NL | ASML Holding NV                          | 7.37%      |
| Acatris Aktien Global Fonds UI                        | NVDA-US | NVIDIA Corporation                       | 7.35%      |
| Ninety One Glob. Strat. Fd. - Global Equity           | NVDA-US | NVIDIA Corporation                       | 7.19%      |
| MainFirst SICAV - Global Equities Fund                | NVDA-US | NVIDIA Corporation                       | 7.14%      |
| Columbia Threadneedle (UK) ICVC - Sustainable O...    | NVDA-US | NVIDIA Corporation                       | 7.09%      |
| AEGON ASSET Mgmt. Inv. Co. (Ireland) Plc - Glob...    | AVGO-US | Broadcom Inc.                            | 7.02%      |
| Ninety One Glob. Strat. Fd. - Global Quality Divide.. | ASML-NL | ASML Holding NV                          | 6.76%      |
| Liontrust Investment Funds I - Global Innovation F..  | NVDA-US | NVIDIA Corporation                       | 6.63%      |
| PineBridge Global Funds - Global Focus Equity Fund    | NVDA-US | NVIDIA Corporation                       | 6.58%      |
| JPMorgan Funds - Global Growth Fund                   | NVDA-US | NVIDIA Corporation                       | 6.49%      |
| American Funds New Economy Fund                       | AVGO-US | Broadcom Inc.                            | 6.48%      |
| Artisan Global Opportunities Fund                     | AMD-US  | Advanced Micro Devices, Inc.             | 6.47%      |
| American Century Focused Global Growth Fund           | NVDA-US | NVIDIA Corporation                       | 6.41%      |
| Fidelity Inv. Trust - Worldwide Fund                  | NVDA-US | NVIDIA Corporation                       | 6.40%      |
| AZ Fund 1 - Equity - Global Growth                    | NVDA-US | NVIDIA Corporation                       | 6.21%      |
| Janus Henderson Sustainable/Responsible Funds...      | NVDA-US | NVIDIA Corporation                       | 6.15%      |
| Deka - GlobalChampions CF/TF                          | NVDA-US | NVIDIA Corporation                       | 6.15%      |
| UniFavorit: Aktien                                    | NVDA-US | NVIDIA Corporation                       | 6.14%      |
| T Rowe Price Global Stock Fund                        | NVDA-US | NVIDIA Corporation                       | 6.11%      |
| Sands Capital Funds Plc - Global Growth Fund          | NVDA-US | NVIDIA Corporation                       | 5.97%      |
| Sands Capital Funds Plc - Global Growth Fund          | ASML-NL | ASML Holding NV                          | 5.85%      |
| UniGlobal   | NVDA-US | NVIDIA Corporation                       | 5.81%      |
| UniGlobal II  | NVDA-US | NVIDIA Corporation                       | 5.81%      |
| Invest Global   | NVDA-US | NVIDIA Corporation                       | 5.80%      |
| UniGlobal - net -                                     | NVDA-US | NVIDIA Corporation                       | 5.79%      |
| Mirova Global Sustainable Equity Fund                 | NVDA-US | NVIDIA Corporation                       | 5.76%      |
| Holberg Global  | NVDA-US | NVIDIA Corporation                       | 5.69%      |
| Comgest Monde   | ASML-NL | ASML Holding NV                          | 5.67%      |

Source: Factset, Copley Fund Research

2: Semiconductors - Largest Individual Fund Level Stock Holdings (USD)  
As of 2/29/2024

| Fund Name   | Ticker    | Stock Name                               | Value (USD) |
|---|-----------|--|-------------|
| American Funds Capital World Growth & Income F..    | AVGO-US   | Broadcom Inc.                            | \$5,760M    |
| American Funds New Perspective Fund                 | AVGO-US   | Broadcom Inc.                            | \$3,903M    |
| American Funds New Perspective Fund                 | ASML-NL   | ASML Holding NV                          | \$3,410M    |
| American Funds New Perspective Fund                 | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$3,264M    |
| American Funds Capital World Growth & Income F..    | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$2,809M    |
| American Funds Capital World Growth & Income F..    | ASML-NL   | ASML Holding NV                          | \$2,208M    |
| American Funds New Economy Fund                     | AVGO-US   | Broadcom Inc.                            | \$2,134M    |
| American Funds New Perspective Fund                 | NVDA-US   | NVIDIA Corporation                       | \$2,074M    |
| Scottish Mortgage Investment Trust Plc              | ASML-NL   | ASML Holding NV                          | \$1,473M    |
| Scottish Mortgage Investment Trust Plc              | NVDA-US   | NVIDIA Corporation                       | \$1,422M    |
| UniGlobal   | NVDA-US   | NVIDIA Corporation                       | \$1,013M    |
| Old Westbury Large Cap Strategies Fund              | NVDA-US   | NVIDIA Corporation                       | \$961M      |
| Swedbank Robur Globalfond                           | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$895M      |
| American Funds Capital World Growth & Income F..    | NVDA-US   | NVIDIA Corporation                       | \$778M      |
| Ninety One Glob. Strat. Fd. - Global Franchise Fund | ASML-NL   | ASML Holding NV                          | \$757M      |
| UniFavorit: Aktien                                  | NVDA-US   | NVIDIA Corporation                       | \$705M      |
| American Funds New Economy Fund                     | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$679M      |
| American Funds New Economy Fund                     | NVDA-US   | NVIDIA Corporation                       | \$678M      |
| American Funds New Perspective Fund                 | TEL-US    | TE Connectivity Ltd.                     | \$661M      |
| Swedbank Robur Globalfond                           | AVGO-US   | Broadcom Inc.                            | \$618M      |
| Old Westbury Large Cap Strategies Fund              | AVGO-US   | Broadcom Inc.                            | \$601M      |
| First Eagle Global Fund                             | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$593M      |
| SJP Global Quality Fund                             | ASML-NL   | ASML Holding NV                          | \$584M      |
| PGIM Jennison Global Opportunities Fund             | NVDA-US   | NVIDIA Corporation                       | \$566M      |
| First Eagle Global Fund                             | ADI-US    | Analog Devices, Inc.                     | \$513M      |
| American Funds New Economy Fund                     | MU-US     | Micron Technology, Inc.                  | \$481M      |
| American Funds New Economy Fund                     | 000660-KR | SK hynix Inc.                            | \$475M      |
| First Eagle Global Fund                             | TXN-US    | Texas Instruments Incorporated           | \$469M      |
| UniGlobal - net -                                   | NVDA-US   | NVIDIA Corporation                       | \$459M      |
| UniGlobal   | ASML-NL   | ASML Holding NV                          | \$456M      |
| American Funds Capital World Growth & Income F..    | TXN-US    | Texas Instruments Incorporated           | \$451M      |
| DWS Top Dividende                                   | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$447M      |
| Deka - GlobalChampions CF/TF                        | NVDA-US   | NVIDIA Corporation                       | \$436M      |
| Swedbank Robur Globalfond                           | NVDA-US   | NVIDIA Corporation                       | \$435M      |
| Swedbank Robur Allemansfond Komplet                 | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | \$393M      |
| T Rowe Price Global Stock Fund                      | NVDA-US   | NVIDIA Corporation                       | \$388M      |
| Old Westbury Large Cap Strategies Fund              | ASML-NL   | ASML Holding NV                          | \$370M      |
| American Funds New Perspective Fund                 | ON-US     | ON Semiconductor Corporation             | \$349M      |
| American Funds Global Insight Fund                  | AVGO-US   | Broadcom Inc.                            | \$339M      |
| American Funds New Perspective Fund                 | STMPA-FR  | STMicroelectronics NV                    | \$324M      |

Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Stock Level Ownership Changes

### 1: Semiconductors - Aggregate Stock Ownership Change Data [largest increases in funds invested %]

Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                      | Funds Invested % Δ | Ave Wgt % Δ | Ave Wgt vs Bmark Δ | Fund Flows, \$ |
|-----------|---------------------------------|--------------------|-------------|--------------------|----------------|
| NVDA-US   | NVIDIA Corporation              | 5.90%              | 0.61%       | -0.26%             | \$1,286M       |
| AVGO-US   | Broadcom Inc.                   | 4.42%              | 0.16%       | -0.05%             | \$873M         |
| LRCX-US   | Lam Research Corporation        | 2.06%              | 0.03%       | 0.00%              | (\$65M)        |
| KLAC-US   | KLA Corporation                 | 2.06%              | 0.04%       | 0.02%              | \$41M          |
| TEL-US    | TE Connectivity Ltd.            | 1.77%              | 0.00%       | 0.01%              | (\$88M)        |
| SWKS-US   | Skyworks Solutions, Inc.        | 1.77%              | 0.01%       | 0.01%              | \$28M          |
| 000660-KR | SK hynix Inc.                   | 1.18%              | 0.01%       | 0.00%              | \$94M          |
| INTC-US   | Intel Corporation               | 0.88%              | 0.02%       | -0.01%             | (\$40M)        |
| 2454-TW   | MediaTek Inc                    | 0.88%              | 0.02%       | 0.00%              | \$23M          |
| TXN-US    | Texas Instruments Incorporat..  | 0.59%              | -0.01%      | 0.02%              | \$499M         |
| ON-US     | ON Semiconductor Corporation    | 0.59%              | -0.02%      | -0.01%             | \$182M         |
| NXPI-US   | NXP Semiconductors NV           | 0.59%              | 0.02%       | 0.01%              | (\$55M)        |
| ADI-US    | Analog Devices, Inc.            | 0.59%              | 0.01%       | 0.02%              | \$106M         |
| 6890-JP   | Ferrotec Holdings Corporation   | 0.59%              | 0.00%       | 0.00%              | \$1M           |
| SLAB-US   | Silicon Laboratories Inc.       | 0.29%              | 0.00%       | 0.00%              | (\$3M)         |
| FN-US     | Fabrinet                        | 0.29%              | 0.00%       | 0.00%              | \$1M           |
| 6770-JP   | Alps Alpine Co., Ltd.           | 0.29%              | 0.00%       | 0.00%              | \$1M           |
| 6239-TW   | Powertech Technology Inc.       | 0.29%              | 0.00%       | 0.00%              | \$0M           |
| 603501-CN | Will Semiconductor Ltd. Class.. | 0.29%              | 0.00%       | 0.00%              | \$0M           |

### 2: Semiconductors - Aggregate Stock Ownership Change Data [largest decreases in funds invested %]

Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                      | Funds Invested % Δ | Ave Wgt % Δ | Ave Wgt vs Bmark Δ | Fund Flows, \$ |
|-----------|---------------------------------|--------------------|-------------|--------------------|----------------|
| IFX-DE    | Infineon Technologies AG        | -4.42%             | -0.02%      | -0.01%             | (\$166M)       |
| ENPH-US   | Enphase Energy, Inc.            | -2.36%             | -0.01%      | -0.01%             | \$39M          |
| MU-US     | Micron Technology, Inc.         | -2.06%             | 0.01%       | -0.01%             | (\$792M)       |
| AMD-US    | Advanced Micro Devices, Inc.    | -2.06%             | 0.08%       | -0.10%             | (\$303M)       |
| QRVO-US   | Qorvo, Inc.                     | -1.47%             | -0.01%      | 0.00%              | (\$24M)        |
| QCOM-US   | QUALCOMM Incorporated           | -1.47%             | 0.02%       | -0.03%             | (\$14M)        |
| 2303-TW   | United Microelectronics Corp.   | -1.18%             | 0.00%       | 0.00%              | (\$5M)         |
| 6723-JP   | Renesas Electronics Corporati.. | -1.18%             | -0.02%      | -0.02%             | (\$24M)        |
| MRVL-US   | Marvell Technology, Inc.        | -0.88%             | 0.00%       | -0.01%             | \$60M          |
| 300661-CN | SG Micro Corp. Class A          | -0.59%             | 0.00%       | 0.00%              | (\$8M)         |
| 3034-TW   | Novatek Microelectronics Corp.  | -0.59%             | 0.00%       | 0.00%              | (\$1M)         |
| 968-HK    | Xinyi Solar Holdings Ltd.       | -0.59%             | 0.00%       | 0.00%              | (\$16M)        |
| FSLR-US   | First Solar, Inc.               | -0.59%             | -0.01%      | -0.01%             | \$7M           |
| IPGP-US   | IPG Photonics Corporation       | -0.59%             | -0.01%      | -0.01%             | (\$18M)        |
| POWI-US   | Power Integrations, Inc.        | -0.59%             | -0.01%      | -0.01%             | (\$13M)        |
| RMBS-US   | Rambus Inc.                     | -0.59%             | 0.00%       | 0.00%              | (\$2M)         |
| SHLS-US   | Shoals Technologies Group, I..  | -0.59%             | -0.01%      | -0.01%             | (\$16M)        |
| TSEM-US   | Tower Semiconductor Ltd         | -0.59%             | 0.00%       | 0.00%              | (\$23M)        |
| 3711-TW   | ASE Technology Holding Co., ... | -0.29%             | 0.00%       | 0.00%              | (\$2M)         |

### 3: Semiconductors - Aggregate Stock Level Estimated Net Fund Inflows, \$

Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                                   | Estimated Net Fund Inflows, \$ |
|-----------|--|--------------------------------|
| NVDA-US   | NVIDIA Corporation                           | \$1,286M                       |
| AVGO-US   | Broadcom Inc.                                | \$873M                         |
| TXN-US    | Texas Instruments Incorporated               | \$499M                         |
| 2330-TW   | Taiwan Semiconductor Manufacturing Co., Ltd. | \$266M                         |
| ON-US     | ON Semiconductor Corporation                 | \$182M                         |
| ADI-US    | Analog Devices, Inc.                         | \$106M                         |
| 000660-KR | SK hynix Inc.                                | \$94M                          |
| MRVL-US   | Marvell Technology, Inc.                     | \$60M                          |
| KLAC-US   | KLA Corporation                              | \$41M                          |
| ENPH-US   | Enphase Energy, Inc.                         | \$39M                          |
| 6531-TW   | AP Memory Technology Corp.                   | \$36M                          |
| SWKS-US   | Skyworks Solutions, Inc.                     | \$28M                          |
| ARM-US    | ARM Holdings PLC ADR                         | \$25M                          |
| 2454-TW   | MediaTek Inc                                 | \$23M                          |
| ARRY-US   | Array Technologies Inc                       | \$20M                          |
| FSLR-US   | First Solar, Inc.                            | \$7M                           |
| WAF-DE    | Siltronic AG                                 | \$7M                           |
| 6963-JP   | Rohm Co., Ltd.                               | \$1M                           |
| 6770-JP   | Alps Alpine Co., Ltd.                        | \$1M                           |
| 3661-TW   | Alchip Technologies Ltd.                     | \$1M                           |

### 4: Semiconductors - Aggregate Stock Level Estimated Gross Fund Flows, \$

Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                                   | Estimated Gross Fund Flows, \$ |
|-----------|--|--------------------------------|
| NVDA-US   | NVIDIA Corporation                           | \$2,340M                       |
| AVGO-US   | Broadcom Inc.                                | \$2,040M                       |
| ASML-NL   | ASML Holding NV                              | \$1,504M                       |
| 2330-TW   | Taiwan Semiconductor Manufacturing Co., Ltd. | \$1,084M                       |
| MU-US     | Micron Technology, Inc.                      | \$1,035M                       |
| TXN-US    | Texas Instruments Incorporated               | \$930M                         |
| AMD-US    | Advanced Micro Devices, Inc.                 | \$469M                         |
| IFX-DE    | Infineon Technologies AG                     | \$464M                         |
| QCOM-US   | QUALCOMM Incorporated                        | \$449M                         |
| MRVL-US   | Marvell Technology, Inc.                     | \$383M                         |
| ADI-US    | Analog Devices, Inc.                         | \$365M                         |
| STMPA-FR  | STMicroelectronics NV                        | \$326M                         |
| ON-US     | ON Semiconductor Corporation                 | \$250M                         |
| TEL-US    | TE Connectivity Ltd.                         | \$231M                         |
| 2454-TW   | MediaTek Inc                                 | \$195M                         |
| NXPI-US   | NXP Semiconductors NV                        | \$191M                         |
| 000660-KR | SK hynix Inc.                                | \$175M                         |
| LRCX-US   | Lam Research Corporation                     | \$172M                         |
| KLAC-US   | KLA Corporation                              | \$136M                         |
| INTC-US   | Intel Corporation                            | \$127M                         |

### 5: Semiconductors - Aggregate Stock Level Estimated Net Fund Outflows, \$

Between 8/31/2023 and 2/29/2024

| Ticker   | Stock Name                              | Estimated Net Fund Outflows, \$ |
|----------|---|---------------------------------|
| MU-US    | Micron Technology, Inc.                 | (\$792M)                        |
| ASML-NL  | ASML Holding NV                         | (\$671M)                        |
| AMD-US   | Advanced Micro Devices, Inc.            | (\$303M)                        |
| STMPA-FR | STMicroelectronics NV                   | (\$284M)                        |
| IFX-DE   | Infineon Technologies AG                | (\$166M)                        |
| TEL-US   | TE Connectivity Ltd.                    | (\$88M)                         |
| LRCX-US  | Lam Research Corporation                | (\$65M)                         |
| NXPI-US  | NXP Semiconductors NV                   | (\$55M)                         |
| MCHP-US  | Microchip Technology Incorporated       | (\$49M)                         |
| 3529-TW  | eMemory Technology, Inc.                | (\$47M)                         |
| INTC-US  | Intel Corporation                       | (\$40M)                         |
| WOLF-US  | Great Wolf Resorts Inc.                 | (\$29M)                         |
| 6723-JP  | Renesas Electronics Corporation         | (\$24M)                         |
| QRVO-US  | Qorvo, Inc.                             | (\$24M)                         |
| TSEM-US  | Tower Semiconductor Ltd                 | (\$23M)                         |
| IPGP-US  | IPG Photonics Corporation               | (\$18M)                         |
| LSCC-US  | Lattice Semiconductor Corporation       | (\$18M)                         |
| SHLS-US  | Shoals Technologies Group, Inc. Class A | (\$16M)                         |
| 968-HK   | Xinyi Solar Holdings Ltd.               | (\$16M)                         |
| QCOM-US  | QUALCOMM Incorporated                   | (\$14M)                         |



# Semiconductors: Active Fund Ownership Report

## Fund Level Stock Level Ownership Activity

1: Semiconductors - Largest Individual Fund Level Stock Weight Changes (%)  
Between 8/31/2023 and 2/29/2024

| Fund Name  | Ticker   | Stock Name                               | New or Closed | Weight Change (%) |
|--|----------|--|---------------|-------------------|
| American Century Focused Global Growth Fund          | NVDA-US  | NVIDIA Corporation                       | New           | 6.41%             |
| SEB Global Aktiefond                                 | NVDA-US  | NVIDIA Corporation                       | New           | 4.78%             |
| Carmignac Investissement                             | NVDA-US  | NVIDIA Corporation                       | New           | 4.43%             |
| SEB Fund 1 - Global Fund                             | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | New           | 4.18%             |
| AXA IM Equity Trust - Global Equity QJ               | NVDA-US  | NVIDIA Corporation                       | New           | 3.66%             |
| SEB Dynamisk Aktiefond                               | NVDA-US  | NVIDIA Corporation                       | New           | 3.62%             |
| Baron Global Advantage Fund                          | NVDA-US  | NVIDIA Corporation                       | New           | 3.55%             |
| Liontrust Investment Funds I - Global Innovation F.. | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | New           | 3.49%             |
| Fidelity Funds SICAV - First All Country World       | NVDA-US  | NVIDIA Corporation                       | New           | 3.49%             |
| Kepler Ethik Aktienfonds                             | NVDA-US  | NVIDIA Corporation                       | New           | 3.45%             |
| Sands Capital Funds Plc - Global Growth Fund         | NVDA-US  | NVIDIA Corporation                       | New           | 3.33%             |
| Ariel Global Fund                                    | INTC-US  | Intel Corporation                        | New           | 3.26%             |
| Artemis Global Select Fund                           | NVDA-US  | NVIDIA Corporation                       | New           | 3.14%             |
| Federated Hermes Invt. Funds - Global Equity ES..    | NVDA-US  | NVIDIA Corporation                       | New           | 3.11%             |
| Liontrust Investment Funds I - Global Innovation F.. | AMD-US   | Advanced Micro Devices, Inc.             | New           | 3.03%             |
| Calamos Global Equity Fund                           | NVDA-US  | NVIDIA Corporation                       | New           | 3.03%             |
| Delaware Global Equity Fund II                       | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | New           | 2.98%             |
| Delaware Global Equity Fund                          | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | New           | 2.97%             |
| T Rowe Price Global Stock Fund                       | NVDA-US  | NVIDIA Corporation                       | New           | 2.97%             |
| Ninety One Glb. Strat. Fd. - Global Equity           | NVDA-US  | NVIDIA Corporation                       | New           | 2.90%             |
| GAM Star Fund Plc - Worldwide Equity                 | NVDA-US  | NVIDIA Corporation                       | New           | -1.59%            |
| FP WHEB Asset Mgmt. Fds. - Sustainability Fund       | TEL-US   | TE Connectivity Ltd.                     | New           | -1.65%            |
| SEB Global Aktiefond                                 | 6723-JP  | Renesas Electronics Corporation          | Close         | -1.78%            |
| BNP Paribas Funds - Sustainable Global Low Vol E..   | TXN-US   | Texas Instruments Incorporated           | Close         | -1.87%            |
| ASN Beleggingsfondsen UCITS NV - Duurzaam Aan..      | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | Close         | -1.92%            |
| AIM Fds. Grp. (IFG) - Invesco Global Core Equity F.. | ADI-US   | Analog Devices, Inc.                     | Close         | -1.98%            |
| Templeton Growth Fund Inc.                           | MU-US    | Micron Technology, Inc.                  | Close         | -2.04%            |
| Carmignac Investissement                             | MRVL-US  | Marvell Technology, Inc.                 | Close         | -2.07%            |
| UBS (Lux) Equity SICAV - Global Income Sustainab..   | AVGO-US  | Broadcom Inc.                            | Close         | -2.08%            |
| Nuveen Global Dividend Growth Fund                   | TXN-US   | Texas Instruments Incorporated           | Close         | -2.09%            |
| Robeco Capital Gr. Fds. - Sustainable Global Stars.. | STMPA-FR | STMicroelectronics NV                    | Close         | -2.11%            |
| Columbia Select Global Equity Fund                   | ASML-NL  | ASML Holding NV                          | Close         | -2.15%            |
| Redwheel Funds SICAV - Global Horizon Fund           | LRCX-US  | Lam Research Corporation                 | Close         | -2.17%            |
| Artisan Global Equity Fund                           | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | Close         | -2.43%            |
| American Century Focused Global Growth Fund          | MRVL-US  | Marvell Technology, Inc.                 | Close         | -2.57%            |
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Co..   | TPE-DE   | PVA TePla AG                             | Close         | -2.82%            |
| AXA Framlington Global Thematics                     | TEL-US   | TE Connectivity Ltd.                     | Close         | -2.85%            |
| Fonditalia - Equity Global High Dividend             | AVGO-US  | Broadcom Inc.                            | Close         | -2.89%            |
| Redwheel Funds SICAV - Global Horizon Fund           | 2330-TW  | Taiwan Semiconductor Manufacturing Co... | Close         | -3.11%            |
| SVS Aubrey Capital Mgmt. Invt. Funds - Global Co..   | ASML-NL  | ASML Holding NV                          | Close         | -3.80%            |

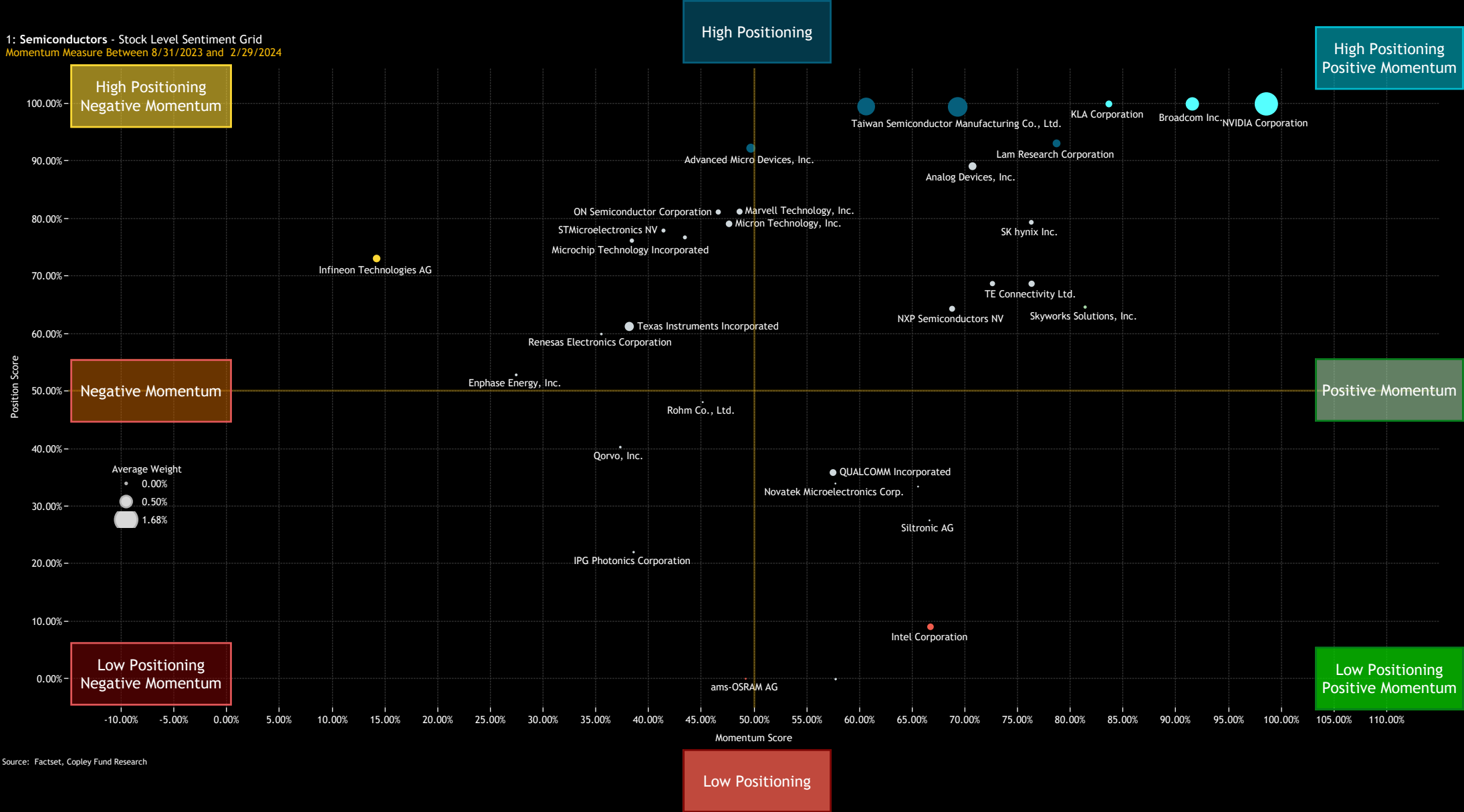
2: Semiconductors - Largest Individual Fund Level Stock Flows (USD)  
Between 8/31/2023 and 2/29/2024

| Fund Name   | Ticker    | Stock Name                               | New or Closed | Flow (USD) |
|---|-----------|--|---------------|------------|
| American Funds New Perspective Fund               | NVDA-US   | NVIDIA Corporation                       | New           | \$737M     |
| American Funds New Perspective Fund               | AVGO-US   | Broadcom Inc.                            | New           | \$324M     |
| American Funds Capital World Growth & Income F..  | TXN-US    | Texas Instruments Incorporated           | New           | \$310M     |
| UniGlobal   | AVGO-US   | Broadcom Inc.                            | New           | \$223M     |
| American Funds New Economy Fund                   | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | New           | \$183M     |
| UniFavorit: Aktien                                | MRVL-US   | Marvell Technology, Inc.                 | New           | \$136M     |
| Swedbank Robur Globalfond                         | AVGO-US   | Broadcom Inc.                            | New           | \$133M     |
| St. James's Place International Equity Unit Trust | NVDA-US   | NVIDIA Corporation                       | New           | \$131M     |
| Old Westbury Large Cap Strategies Fund            | AVGO-US   | Broadcom Inc.                            | New           | \$114M     |
| DWS Top Dividende                                 | TXN-US    | Texas Instruments Incorporated           | New           | \$111M     |
| Carmignac Investissement                          | NVDA-US   | NVIDIA Corporation                       | New           | \$110M     |
| Swedbank Robur Allemansfond Komplet               | AVGO-US   | Broadcom Inc.                            | New           | \$108M     |
| American Funds Capital World Growth & Income F..  | 2454-TW   | MediaTek Inc                             | New           | \$102M     |
| UniGlobal - net -                                 | AVGO-US   | Broadcom Inc.                            | New           | \$101M     |
| American Funds New Economy Fund                   | NVDA-US   | NVIDIA Corporation                       | New           | \$101M     |
| American Funds New Economy Fund                   | 000660-KR | SK hynix Inc.                            | New           | \$101M     |
| DWS Top Dividende                                 | QCOM-US   | QUALCOMM Incorporated                    | New           | \$98M      |
| American Funds New Perspective Fund               | ON-US     | ON Semiconductor Corporation             | New           | \$94M      |
| DWS Top Dividende                                 | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | New           | \$92M      |
| Long Term Themes USD                              | AVGO-US   | Broadcom Inc.                            | New           | \$92M      |
| Fidelity Funds SICAV - Global Dividend Fund       | TXN-US    | Texas Instruments Incorporated           | Close         | (\$63M)    |
| UniGlobal   | IFX-DE    | Infineon Technologies AG                 | Close         | (\$72M)    |
| Carmignac Investissement                          | MRVL-US   | Marvell Technology, Inc.                 | Close         | (\$77M)    |
| Swedbank Robur Allemansfond Komplet               | ASML-NL   | ASML Holding NV                          | Close         | (\$79M)    |
| PGIM Jennison Global Opportunities Fund           | AVGO-US   | Broadcom Inc.                            | Close         | (\$80M)    |
| Deka - DividendenStrategie                        | STMPA-FR  | STMicroelectronics NV                    | Close         | (\$84M)    |
| FTIF SICAV - Growth (Euro) Fund                   | NXPI-US   | NXP Semiconductors NV                    | Close         | (\$98M)    |
| American Funds New Economy Fund                   | TEL-US    | TE Connectivity Ltd.                     | Close         | (\$111M)   |
| FTIF SICAV - Growth (Euro) Fund                   | MU-US     | Micron Technology, Inc.                  | Close         | (\$117M)   |
| UniGlobal   | AMD-US    | Advanced Micro Devices, Inc.             | Close         | (\$136M)   |
| American Funds New Economy Fund                   | MU-US     | Micron Technology, Inc.                  | Close         | (\$149M)   |
| American Funds New Perspective Fund               | STMPA-FR  | STMicroelectronics NV                    | Close         | (\$154M)   |
| American Funds Capital World Growth & Income F..  | 2330-TW   | Taiwan Semiconductor Manufacturing Co... | Close         | (\$166M)   |
| American Funds New Economy Fund                   | ASML-NL   | ASML Holding NV                          | Close         | (\$178M)   |
| PGIM Jennison Global Opportunities Fund           | NVDA-US   | NVIDIA Corporation                       | Close         | (\$179M)   |
| Templeton Growth Fund Inc.                        | MU-US     | Micron Technology, Inc.                  | Close         | (\$194M)   |
| American Funds Capital World Growth & Income F..  | AVGO-US   | Broadcom Inc.                            | Close         | (\$195M)   |
| Scottish Mortgage Investment Trust Plc            | ASML-NL   | ASML Holding NV                          | Close         | (\$239M)   |
| American Funds Capital World Growth & Income F..  | ASML-NL   | ASML Holding NV                          | Close         | (\$248M)   |
| American Funds Capital World Growth & Income F..  | MU-US     | Micron Technology, Inc.                  | Close         | (\$346M)   |

# Semiconductors: Active Fund Ownership Report

## Stock Sentiment Grid

1: Semiconductors - Stock Level Sentiment Grid  
Momentum Measure Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Stock Sentiment Detail

### 1: High Positioning Negative Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name               | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|--------------------------|----------------|------------------|--------------------|----------------|--------------------|
| Infineon Technologies AG | 73.13%         | 14.75%           | 4.7%               | 14.17%         | -4.42%             |

### 2: High Positioning Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name                   | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|------------------------------|----------------|------------------|--------------------|----------------|--------------------|
| ASML Holding NV              | 99.55%         | 44.54%           | 0.3%               | 60.60%         | 0.29%              |
| Taiwan Semiconductor Manuf.. | 99.48%         | 50.15%           | 0.0%               | 69.28%         | 0.29%              |
| Lam Research Corporation     | 93.14%         | 17.40%           | 2.1%               | 78.65%         | 2.06%              |
| Advanced Micro Devices, Inc. | 92.31%         | 16.22%           | 2.9%               | 49.66%         | -2.06%             |

### 3: High Positioning Positive Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name         | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|--------------------|----------------|------------------|--------------------|----------------|--------------------|
| NVIDIA Corporation | 100.00%        | 45.13%           | 0.0%               | 98.55%         | 5.90%              |
| Broadcom Inc.      | 100.00%        | 28.61%           | 0.0%               | 91.53%         | 4.42%              |
| KLA Corporation    | 100.00%        | 14.16%           | 0.0%               | 83.62%         | 2.06%              |

### 4: Negative Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name                     | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|--------------------------------|----------------|------------------|--------------------|----------------|--------------------|
| Texas Instruments Incorporat.. | 61.31%         | 23.01%           | 8.0%               | 38.13%         | 0.59%              |
| Analog Devices, Inc.           | 89.17%         | 16.81%           | 1.2%               | 70.68%         | 0.59%              |
| QUALCOMM Incorporated          | 35.91%         | 15.63%           | 12.0%              | 57.45%         | -1.47%             |
| NXP Semiconductors NV          | 64.39%         | 13.86%           | 2.9%               | 68.75%         | 0.59%              |
| TE Connectivity Ltd.           | 68.74%         | 12.68%           | 1.8%               | 76.29%         | 1.77%              |
| Micron Technology, Inc.        | 79.16%         | 11.50%           | 6.2%               | 47.59%         | -2.06%             |
| ON Semiconductor Corporation   | 81.21%         | 10.91%           | 0.6%               | 46.57%         | 0.59%              |
| Microchip Technology Incorpo.. | 76.23%         | 9.73%            | 1.5%               | 38.37%         | -0.29%             |
| STMicroelectronics NV          | 77.99%         | 9.14%            | 0.9%               | 41.37%         | 0.00%              |
| Marvell Technology, Inc.       | 81.27%         | 8.85%            | 2.1%               | 48.57%         | -0.88%             |
| MediaTek Inc                   | 68.76%         | 7.96%            | 4.1%               | 77.57%         | 0.88%              |

### 5: Mid Positioning & Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name                     | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|--------------------------------|----------------|------------------|--------------------|----------------|--------------------|
| Texas Instruments Incorporat.. | 61.31%         | 23.01%           | 8.0%               | 38.13%         | 0.59%              |
| Analog Devices, Inc.           | 89.17%         | 16.81%           | 1.2%               | 70.68%         | 0.59%              |
| QUALCOMM Incorporated          | 35.91%         | 15.63%           | 12.0%              | 57.45%         | -1.47%             |
| NXP Semiconductors NV          | 64.39%         | 13.86%           | 2.9%               | 68.75%         | 0.59%              |
| TE Connectivity Ltd.           | 68.74%         | 12.68%           | 1.8%               | 76.29%         | 1.77%              |
| Micron Technology, Inc.        | 79.16%         | 11.50%           | 6.2%               | 47.59%         | -2.06%             |
| ON Semiconductor Corporation   | 81.21%         | 10.91%           | 0.6%               | 46.57%         | 0.59%              |
| Microchip Technology Incorpo.. | 76.23%         | 9.73%            | 1.5%               | 38.37%         | -0.29%             |
| STMicroelectronics NV          | 77.99%         | 9.14%            | 0.9%               | 41.37%         | 0.00%              |
| Marvell Technology, Inc.       | 81.27%         | 8.85%            | 2.1%               | 48.57%         | -0.88%             |
| MediaTek Inc                   | 68.76%         | 7.96%            | 4.1%               | 77.57%         | 0.88%              |

### 6: Positive Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name               | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|--------------------------|----------------|------------------|--------------------|----------------|--------------------|
| Skyworks Solutions, Inc. | 64.68%         | 7.4%             | 1.7%               | 81.36%         | 1.77%              |

### 7: Low Positioning Negative Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name        | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|-------------------|----------------|------------------|--------------------|----------------|--------------------|
| Intel Corporation | 9.10%          | 13.0%            | 15.3%              | 66.70%         | 0.88%              |
| ams-OSRAM AG      | 0.07%          | 0.9%             | 6.6%               | 49.18%         | -0.29%             |

### 8: Low Positioning Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name        | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|-------------------|----------------|------------------|--------------------|----------------|--------------------|
| Intel Corporation | 9.10%          | 13.0%            | 15.3%              | 66.70%         | 0.88%              |
| ams-OSRAM AG      | 0.07%          | 0.9%             | 6.6%               | 49.18%         | -0.29%             |

### 9: Low Positioning Positive Momentum Momentum Measure Between 8/31/2023 and 2/29/2024

| Stock Name        | Position Score | Funds Invested % | Funds Inv % vs Max | Momentum Score | Funds Invested % Δ |
|-------------------|----------------|------------------|--------------------|----------------|--------------------|
| Intel Corporation | 9.10%          | 13.0%            | 15.3%              | 66.70%         | 0.88%              |
| ams-OSRAM AG      | 0.07%          | 0.9%             | 6.6%               | 49.18%         | -0.29%             |

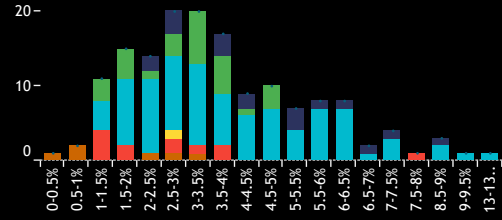
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

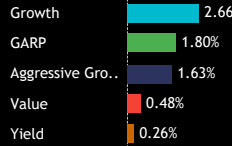
## Fund Ownership Profile: NVIDIA Corporation

Average Weight % **1.68%** Funds Invested % **45.1%** Fund AUM, \$ **\$17,348M**

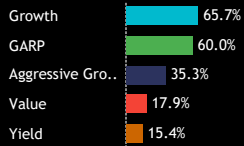
1. Histogram of Fund Weights  
As of 2/29/2024



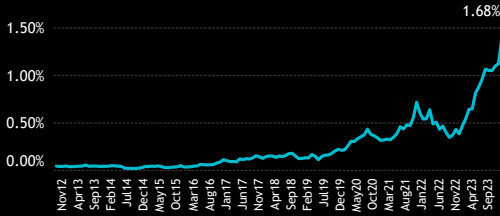
2. Ave Wgt by Style



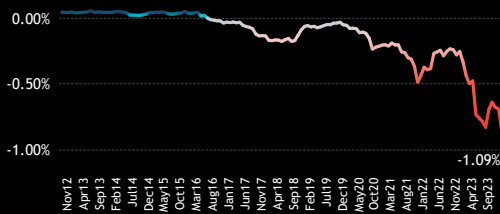
3. Funds Invested by Style



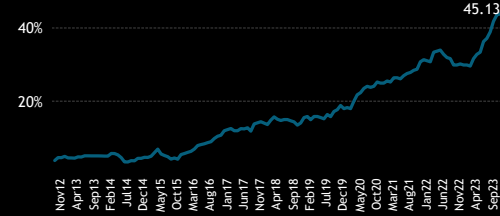
4. Average Fund Weight



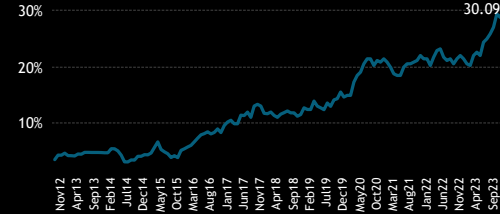
7. Average Weight vs ACWI



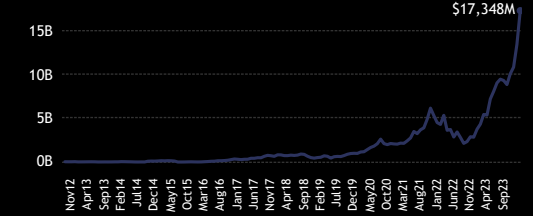
5. Funds Invested %



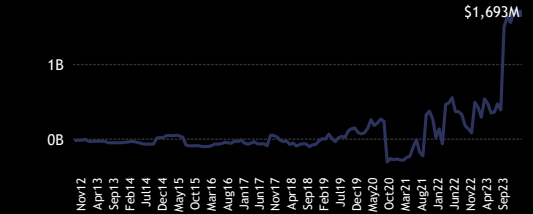
8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**5.90%**

Average Weight Δ

**0.61%**

# New Positions

**20**

# Closed Positions

**0**

# Funds Buying

**73**

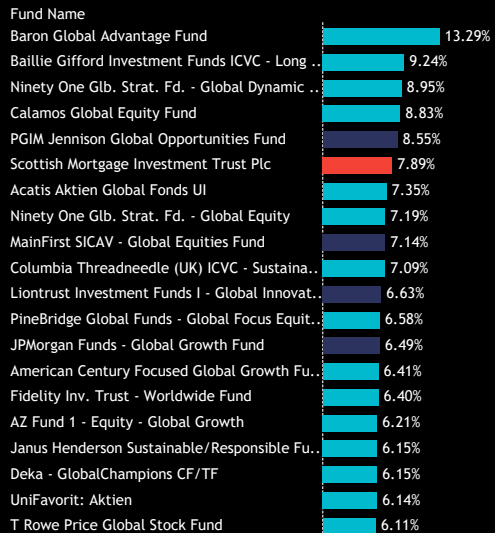
# Funds Selling

**57**

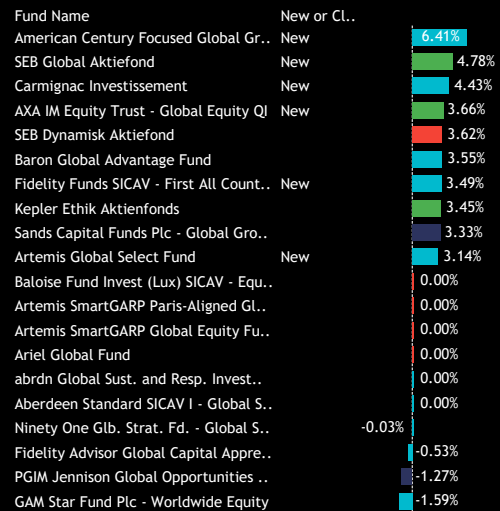
Estimated Net Fund Flows, \$

**\$1,285.8M**

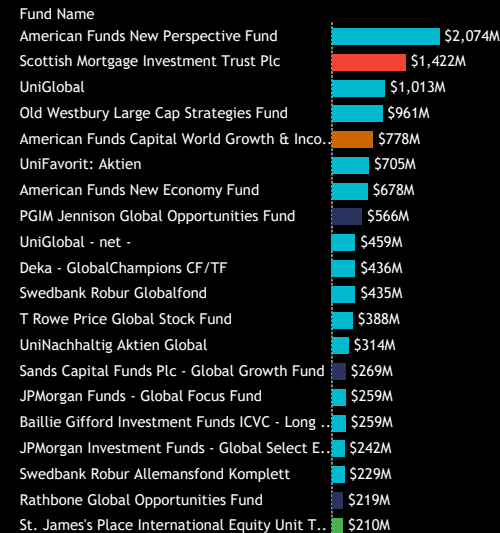
10. Largest Fund Weights



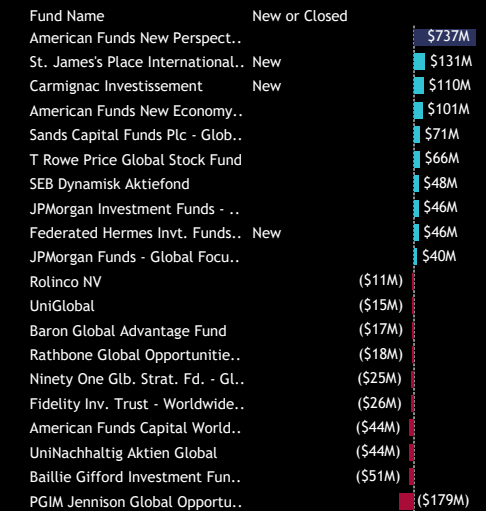
11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



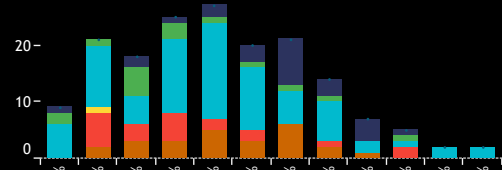
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

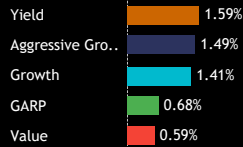
## Fund Ownership Profile: Taiwan Semiconductor Manufacturing Co., Ltd.

Average Weight % **1.18%** Funds Invested % **50.1%** Fund AUM, \$ **\$15,703M**

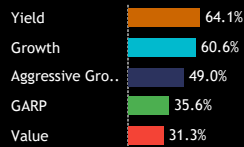
1. Histogram of Fund Weights  
As of 2/29/2024



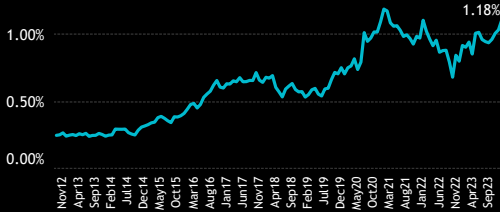
2. Ave Wgt by Style



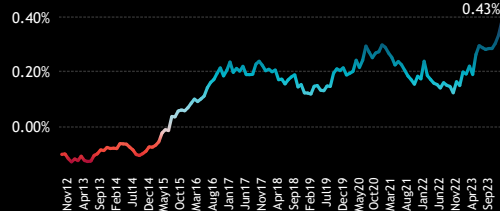
3. Funds Invested by Style



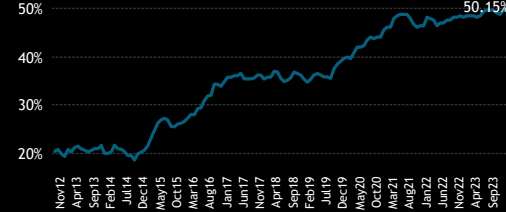
4. Average Fund Weight



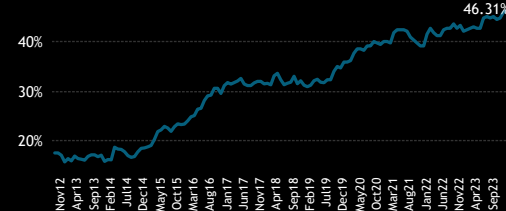
7. Average Weight vs ACWI



5. Funds Invested %



8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**0.29%**

Average Weight Δ

**0.23%**

# New Positions

**9**

# Closed Positions

**8**

# Funds Buying

**60**

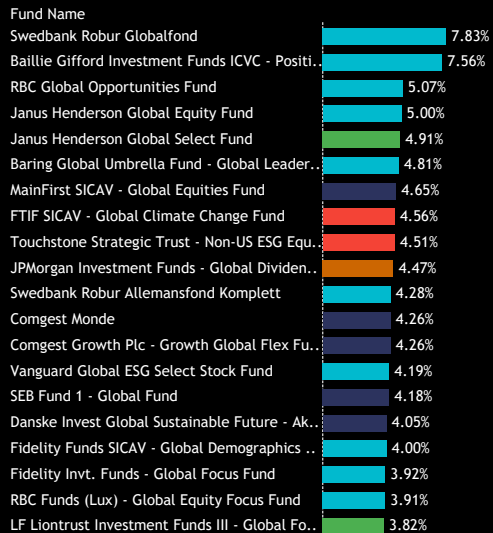
# Funds Selling

**66**

Estimated Net Fund Flows, \$

**\$266.5M**

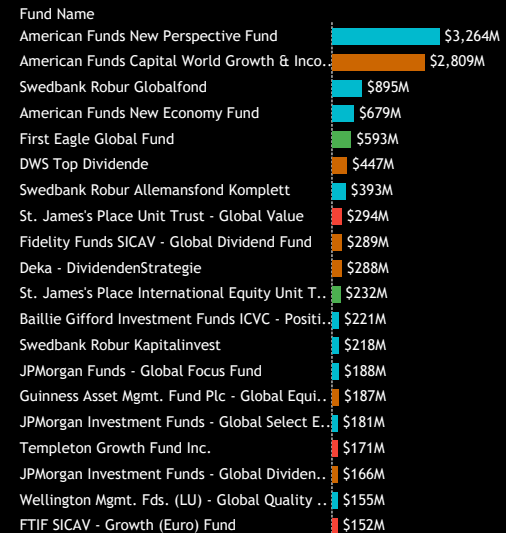
10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

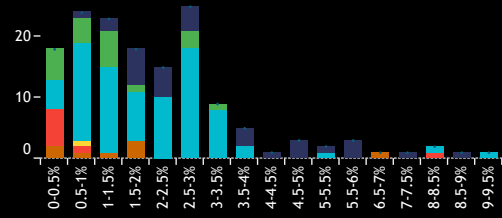


# Semiconductors: Active Fund Ownership Report

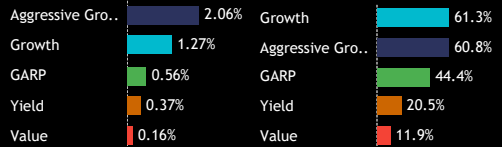
## Fund Ownership Profile: ASML Holding NV

Average Weight % **0.97%** Funds Invested % **44.5%** Fund AUM, \$ **\$14,823M**

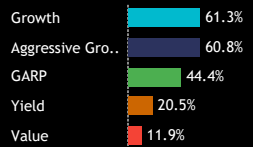
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



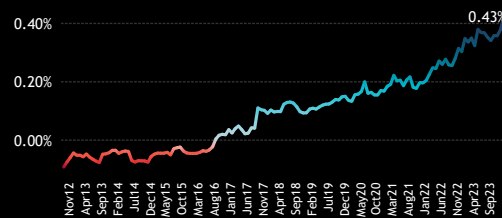
3. Funds Invested by Style



4. Average Fund Weight



7. Average Weight vs ACWI



5. Funds Invested %



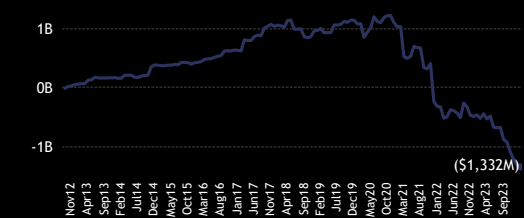
8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**0.29%**

Average Weight Δ

**0.19%**

# New Positions

**5**

# Closed Positions

**4**

# Funds Buying

**46**

# Funds Selling

**60**

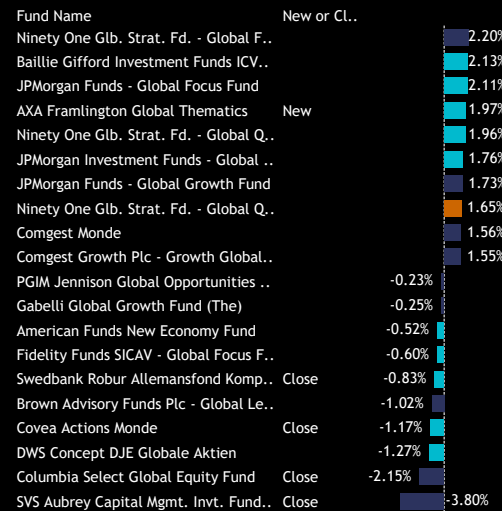
Estimated Net Fund Flows, \$

**(\$671.0M)**

10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



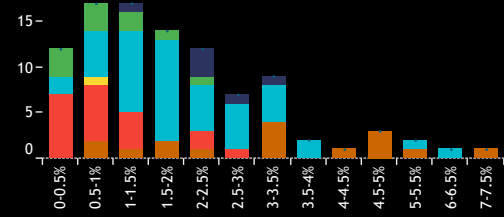
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Fund Ownership Profile: Broadcom Inc.

Average Weight % **0.54%** Funds Invested % **28.6%** Fund AUM, \$ **\$16,701M**

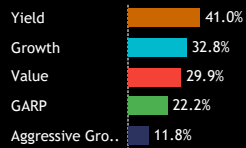
1. Histogram of Fund Weights  
As of 2/29/2024



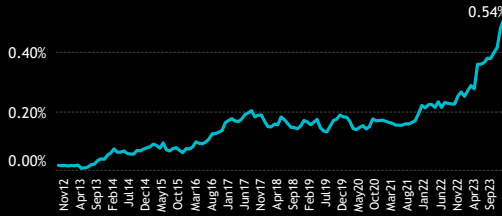
2. Ave Wgt by Style



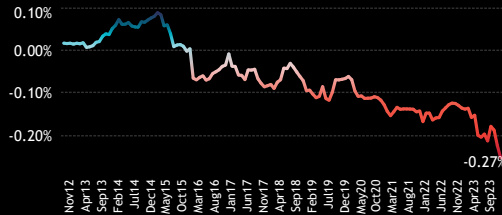
3. Funds Invested by Style



4. Average Fund Weight



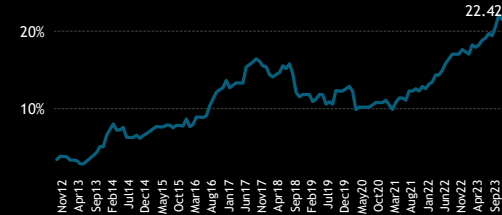
7. Average Weight vs ACWI



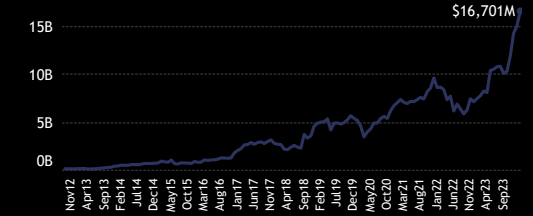
5. Funds Invested %



8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**4.42%**

Average Weight Δ

**0.16%**

# New Positions

**21**

# Closed Positions

**6**

# Funds Buying

**45**

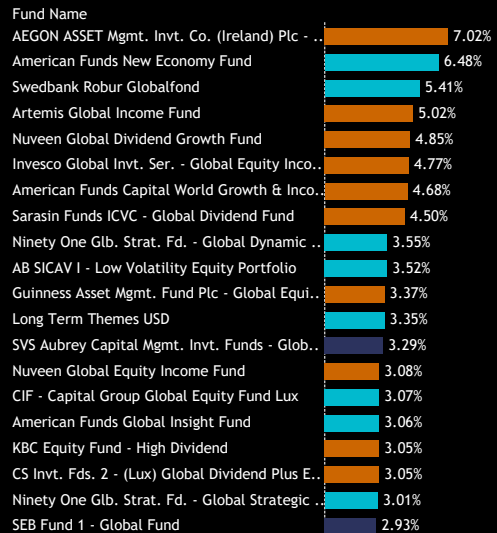
# Funds Selling

**41**

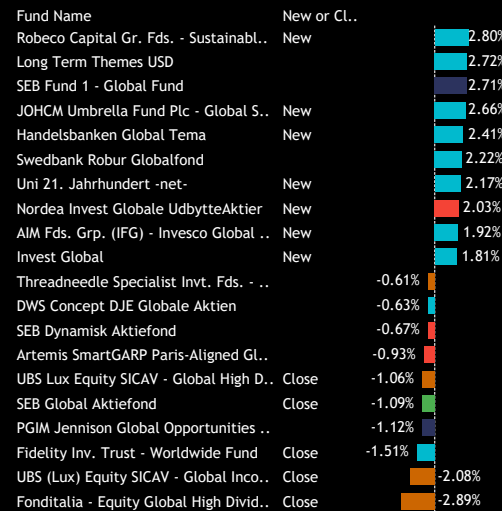
Estimated Net Fund Flows, \$

**\$872.9M**

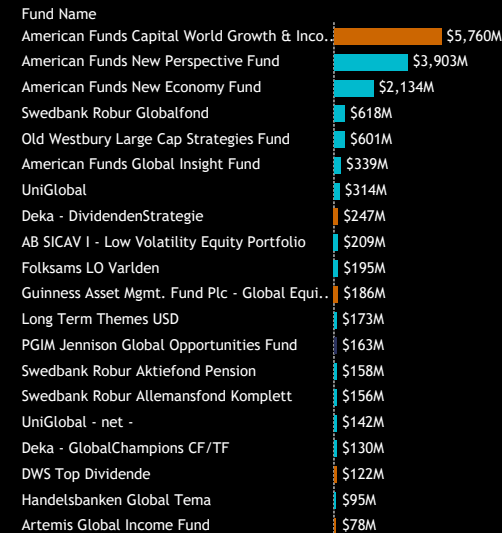
10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

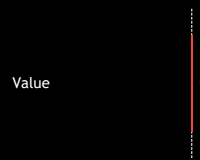
## Fund Ownership Profile: Texas Competitive Electric Holdings Co. LLC 11.5% PERP

Average Weight % **0.00%** Funds Invested % **0.00%** Fund AUM, \$ **\$0M**

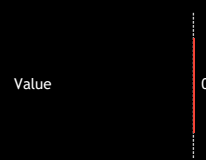
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



Funds Invested Δ **0.00%**

Average Weight Δ **0.00%**

# New Positions **0**

# Closed Positions **0**

# Funds Buying **0**

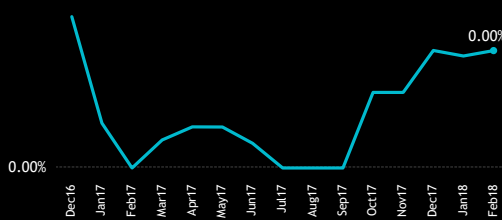
# Funds Selling **0**

Estimated Net Fund Flows, \$ **\$0.0M**

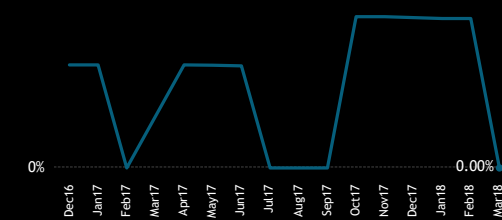
10. Largest Fund Weights

| Fund Name                                | New or Cl.. | Weight |
|--|-------------|--------|
| Franklin Mutual Ser. Fds. - Quest Fund   |             | 0.00%  |
| Franklin Mutual Ser. Fds. - Global Dis.. |             | 0.00%  |
| Franklin Mutual Ser. Fds. - Beacon F..   |             | 0.00%  |

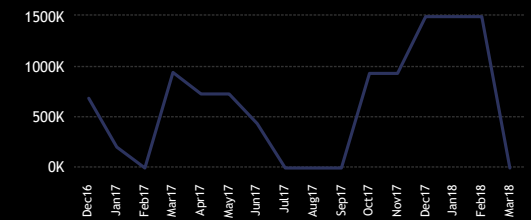
4. Average Fund Weight



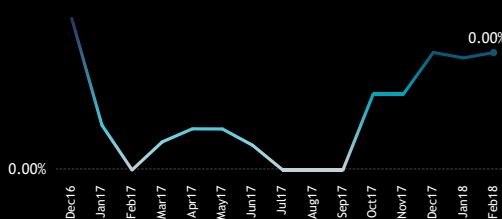
5. Funds Invested %



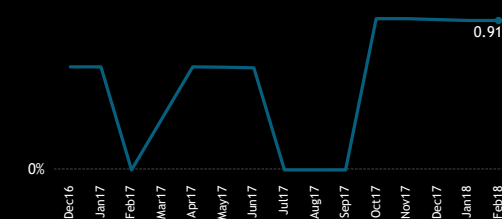
6. Combined Fund AUM, \$



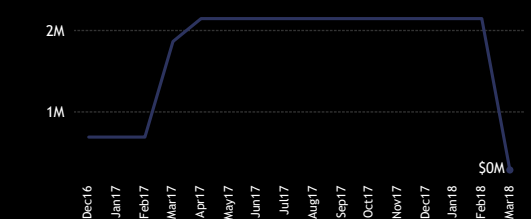
7. Average Weight vs ACWI



8. Funds Overweight %



9. Cumulative Fund Flows, \$



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                                | New or Cl.. | Change |
|--|-------------|--------|
| Franklin Mutual Ser. Fds. - Quest Fund   |             | 0.00%  |
| Franklin Mutual Ser. Fds. - Global Dis.. |             | 0.00%  |
| Franklin Mutual Ser. Fds. - Beacon F..   |             | 0.00%  |

12. Largest Fund AUM, \$

| Fund Name                         | New or Closed | AUM  |
|-----------------------------------|---------------|------|
| Franklin Mutual Ser. Fds. - Qu..  |               | \$0M |
| Franklin Mutual Ser. Fds. - Glo.. |               | \$0M |
| Franklin Mutual Ser. Fds. - Be..  |               | \$0M |

13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | New or Closed | Flows |
|-----------------------------------|---------------|-------|
| Franklin Mutual Ser. Fds. - Qu..  |               | \$0M  |
| Franklin Mutual Ser. Fds. - Glo.. |               | \$0M  |
| Franklin Mutual Ser. Fds. - Be..  |               | \$0M  |

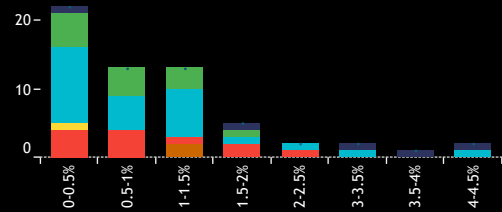
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

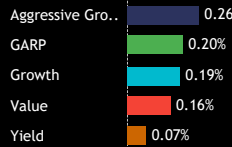
## Fund Ownership Profile: Lam Research Corporation

Average Weight % **0.18%** Funds Invested % **17.4%** Fund AUM, \$ **\$1,182M**

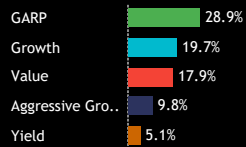
1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



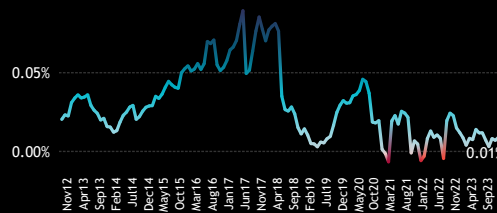
3. Funds Invested by Style



4. Average Fund Weight



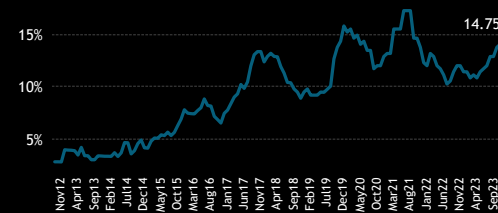
7. Average Weight vs ACWI



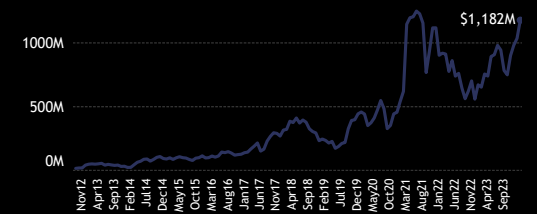
5. Funds Invested %



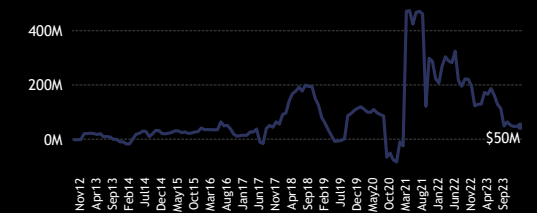
8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**2.06%**

Average Weight Δ

**0.03%**

# New Positions

**8**

# Closed Positions

**0**

# Funds Buying

**20**

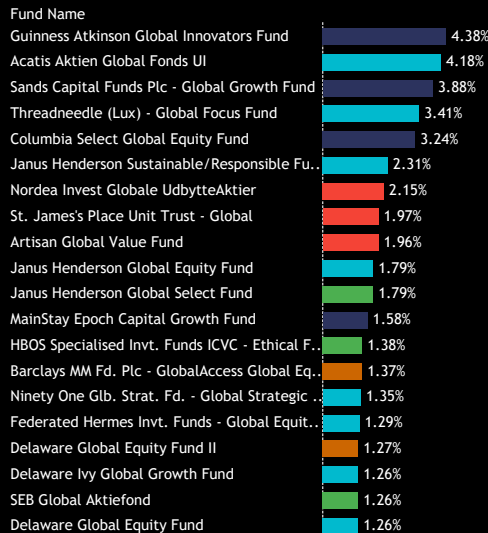
# Funds Selling

**25**

Estimated Net Fund Flows, \$

**(\$65.4M)**

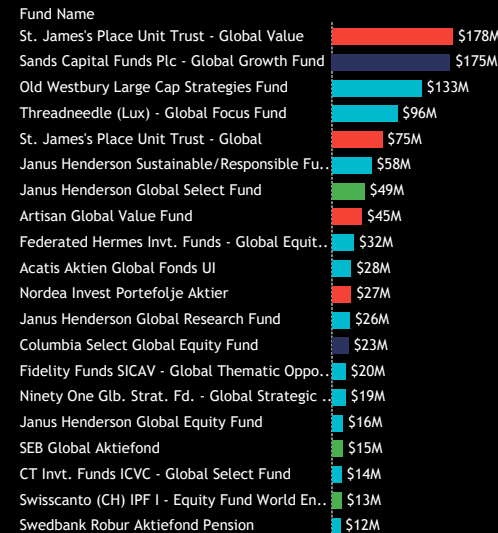
10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



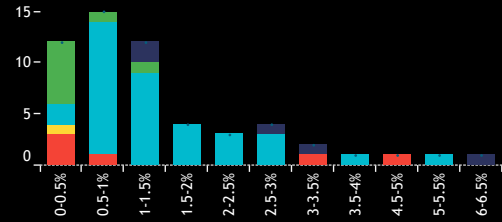
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

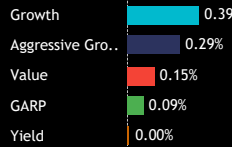
## Fund Ownership Profile: Advanced Micro Devices, Inc.

Average Weight % **0.24%** Funds Invested % **16.2%** Fund AUM, \$ **\$1,695M**

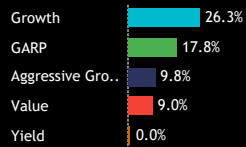
1. Histogram of Fund Weights  
As of 2/29/2024



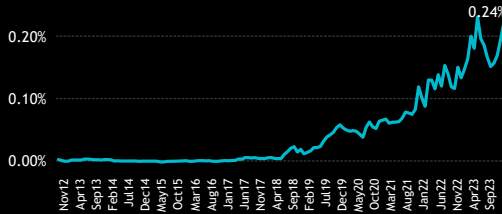
2. Ave Wgt by Style



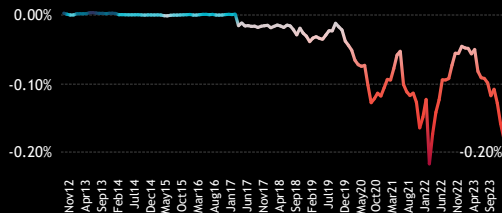
3. Funds Invested by Style



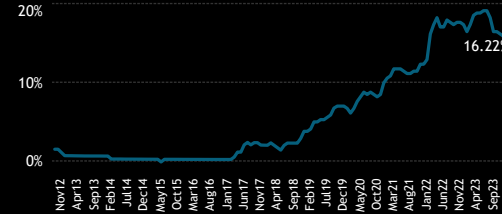
4. Average Fund Weight



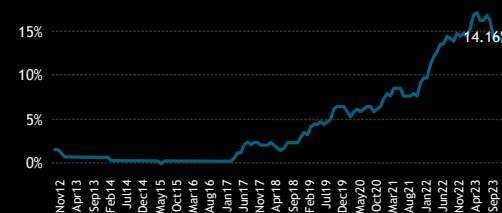
7. Average Weight vs ACWI



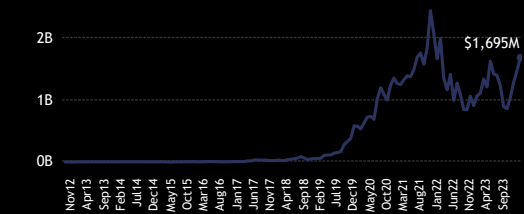
5. Funds Invested %



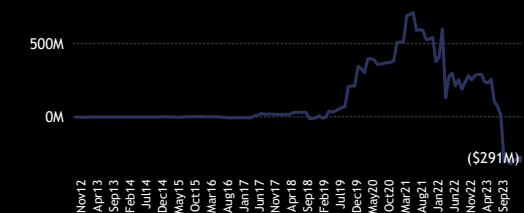
8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**-2.06%**

Average Weight Δ

**0.08%**

# New Positions

**4**

# Closed Positions

**11**

# Funds Buying

**22**

# Funds Selling

**32**

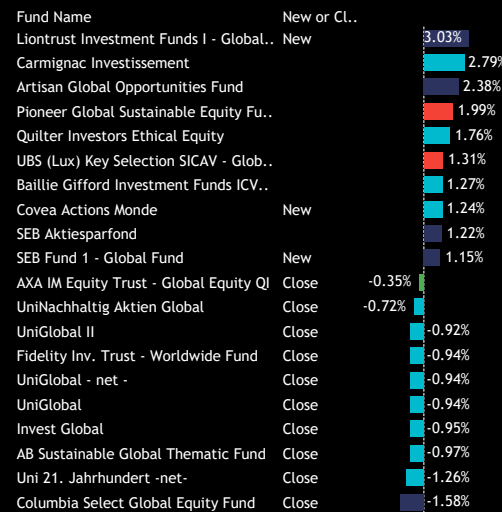
Estimated Net Fund Flows, \$

**(\$302.6M)**

10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

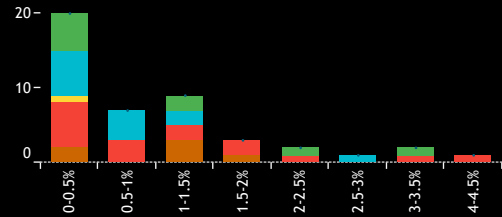


# Semiconductors: Active Fund Ownership Report

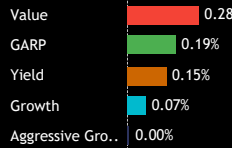
## Fund Ownership Profile: Intel Corporation

Average Weight % **0.13%** Funds Invested % **13.0%** Fund AUM, \$ **\$1,009M**

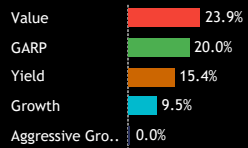
1. Histogram of Fund Weights  
As of 2/29/2024



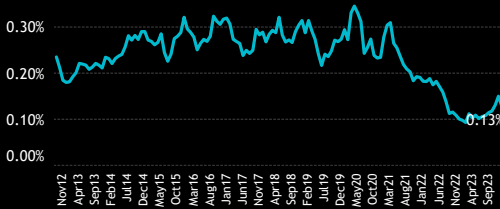
2. Ave Wgt by Style



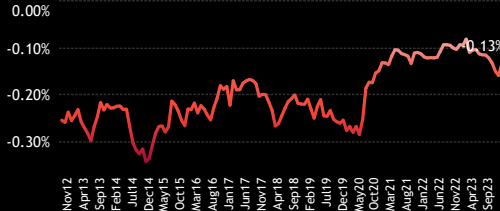
3. Funds Invested by Style



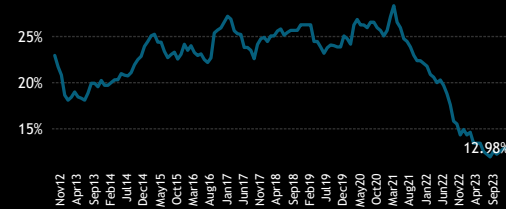
4. Average Fund Weight



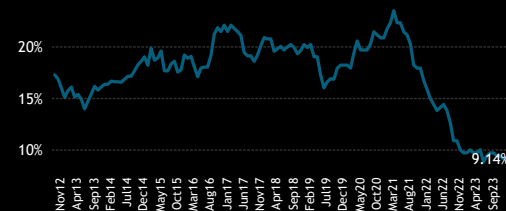
7. Average Weight vs ACWI



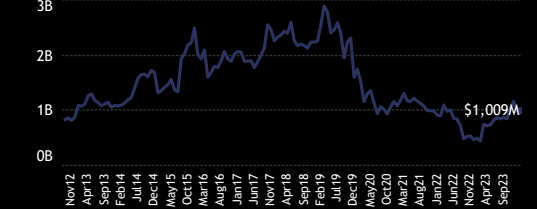
5. Funds Invested %



8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**0.88%**

Average Weight Δ

**0.02%**

# New Positions

**7**

# Closed Positions

**4**

# Funds Buying

**14**

# Funds Selling

**19**

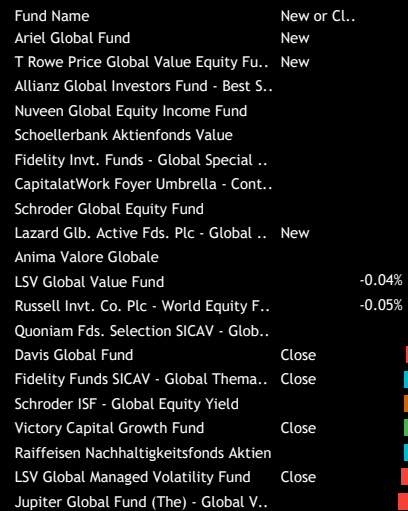
Estimated Net Fund Flows, \$

**(\$39.9M)**

10. Largest Fund Weights



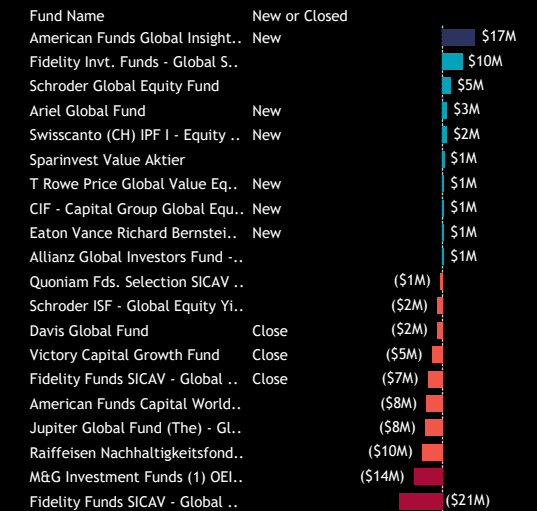
11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



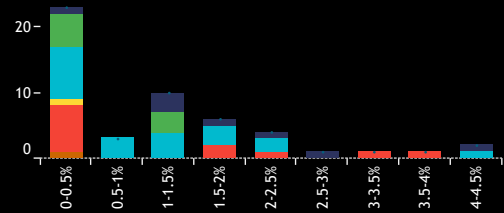
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Fund Ownership Profile: Infineon Technologies AG

Average Weight % **0.17%** Funds Invested % **14.7%** Fund AUM, \$ **\$901M**

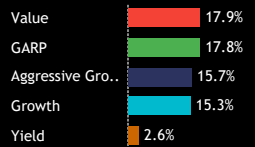
1. Histogram of Fund Weights  
As of 2/29/2024



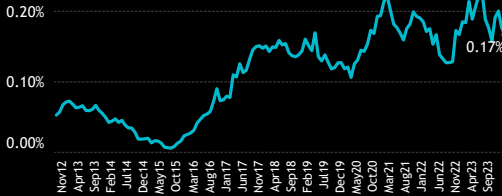
2. Ave Wgt by Style



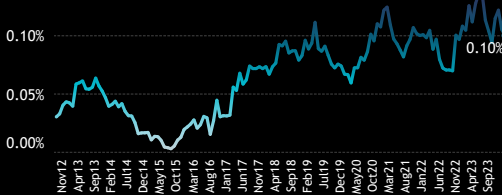
3. Funds Invested by Style



4. Average Fund Weight



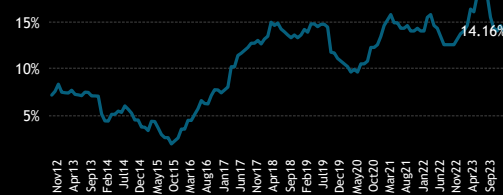
7. Average Weight vs ACWI



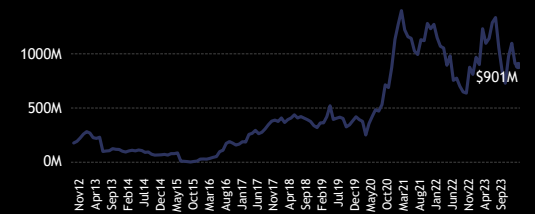
5. Funds Invested %



8. Funds Overweight %



6. Combined Fund AUM, \$



9. Cumulative Fund Flows, \$



Funds Invested Δ

**-4.42%**

Average Weight Δ

**-0.02%**

# New Positions

**3**

# Closed Positions

**18**

# Funds Buying

**23**

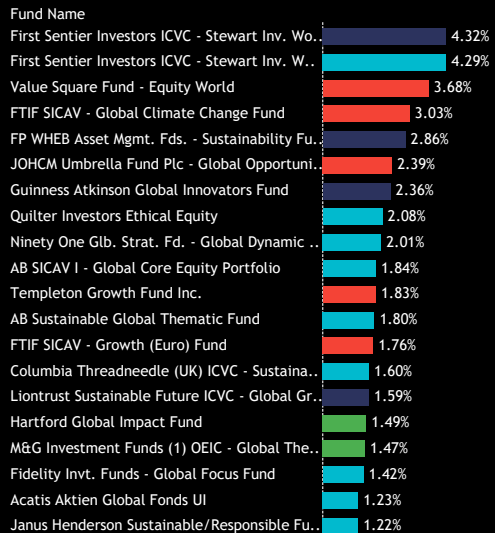
# Funds Selling

**36**

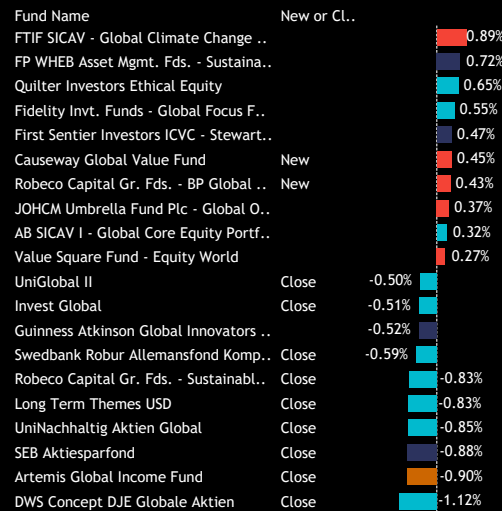
Estimated Net Fund Flows, \$

**(\$165.7M)**

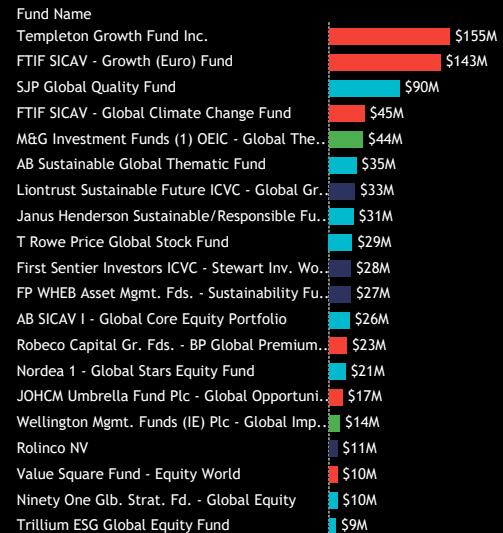
10. Largest Fund Weights



11. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



12. Largest Fund AUM, \$



13. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



Source: Factset, Copley Fund Research

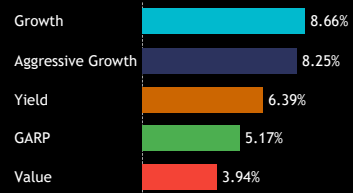
A microscopic view of a semiconductor chip, likely a microprocessor, with a fine probe tip touching its surface. The image is overlaid with a blue gradient. The text is positioned in the upper right quadrant.

Section 4  
Semiconductors  
Style Positioning Overview

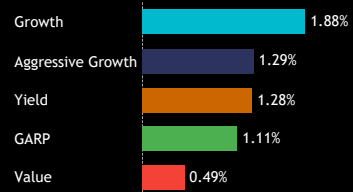
# Semiconductors: Active Fund Ownership Report

## Ownership by Fund Style

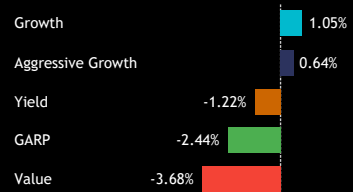
1. Average Weight by Style  
As of 2/29/2024



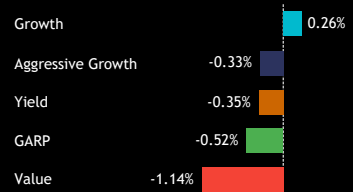
2. Average Weight Change by Style  
Between 8/31/2023 and 2/29/2024



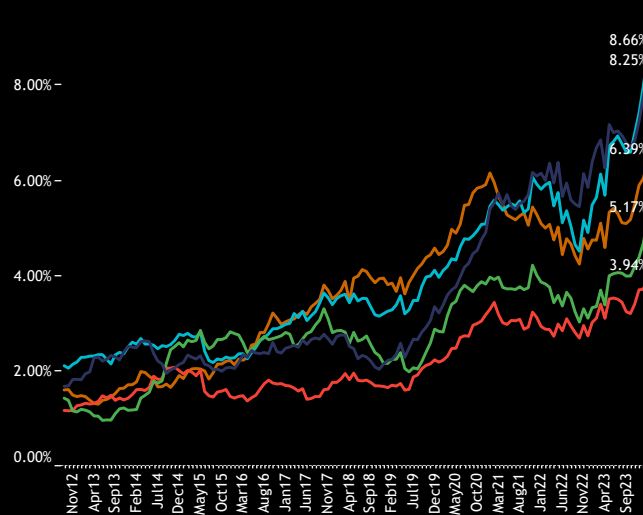
4. Average Weight vs ACWI by Style  
As of 2/29/2024



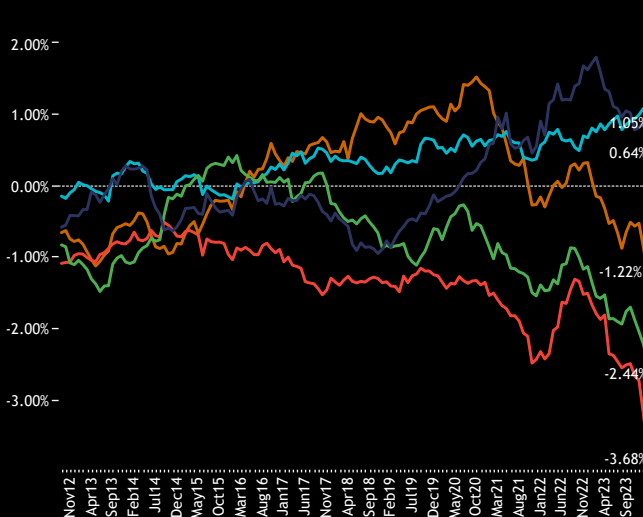
5. Average Weight vs ACWI Change by Style  
Between 8/31/2023 and 2/29/2024



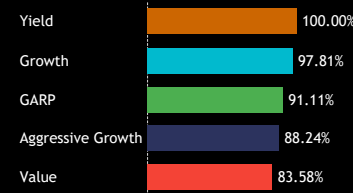
3. Semiconductors - Average Weight by Style



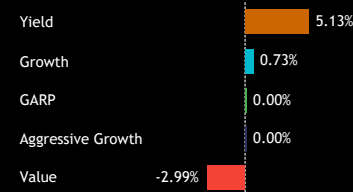
6. Semiconductors - Average Weight vs ACWI by Style



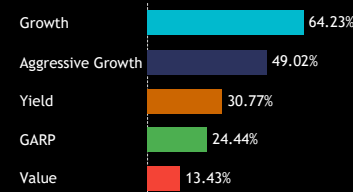
7. Funds Invested % by Style  
As Of 2/29/2024



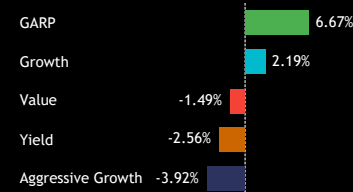
8. Funds Invested % Change by Style  
Between 8/31/2023 and 2/29/2024



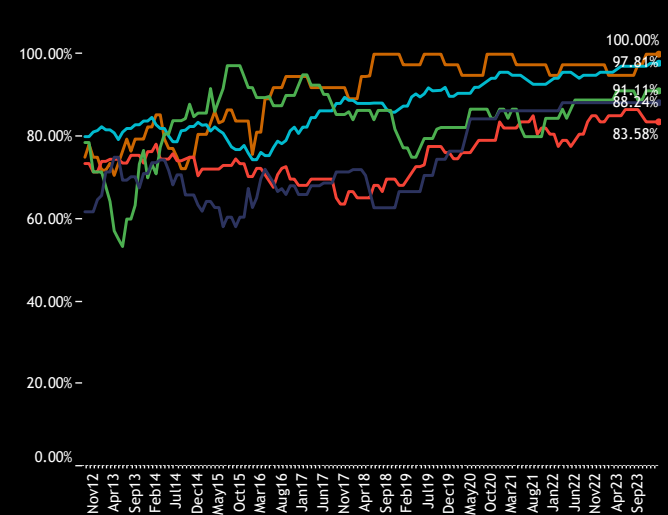
10. Funds Overweight % by Style  
As Of 2/29/2024



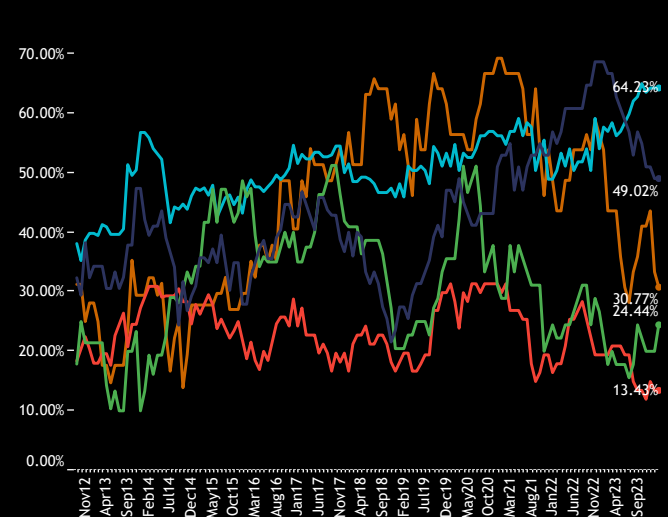
11. Funds Overweight % Change by Style  
Between 8/31/2023 and 2/29/2024



9. Semiconductors - Funds Invested % by Style



12. Semiconductors - Funds Overweight by Style





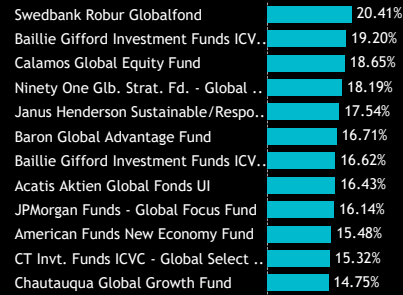
# Semiconductors: Active Fund Ownership Report

## Style Ownership Breakdown

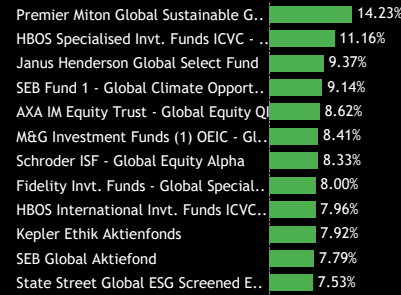
1. Aggressive Growth: Largest Fund Holdings  
As of 2/29/2024



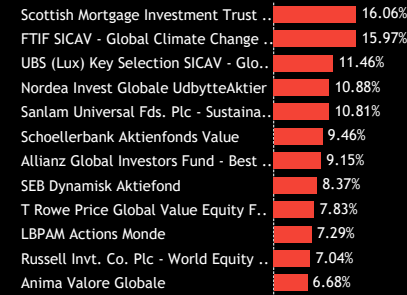
2. Growth: Largest Fund Holdings  
As of 2/29/2024



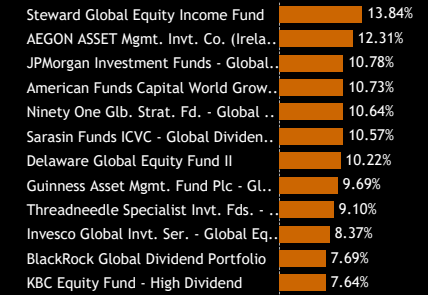
3. GARP: Largest Fund Holdings  
As of 2/29/2024



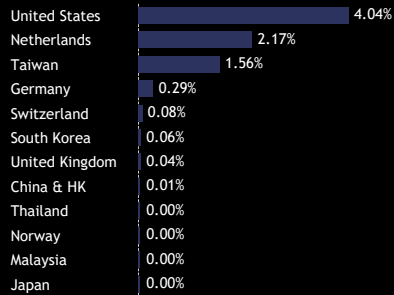
4. Value: Largest Fund Holdings  
As of 2/29/2024



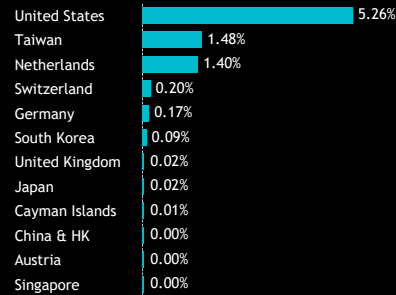
5. Yield: Largest Fund Holdings  
As of 2/29/2024



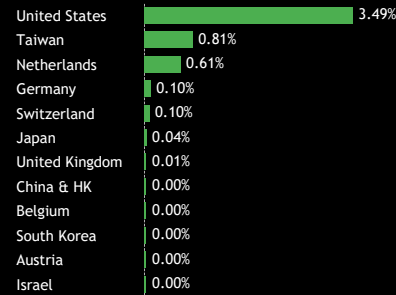
6. Aggressive Growth: Average Country Weights  
As of 2/29/2024



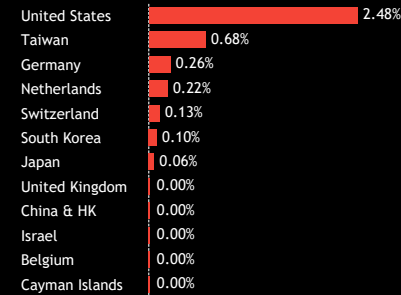
7. Growth: Average Country Weights  
As of 2/29/2024



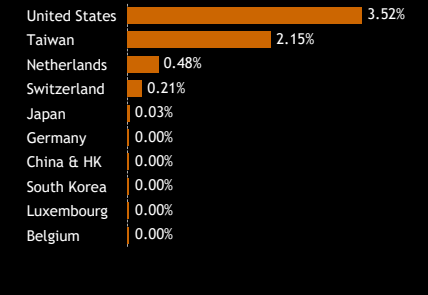
8. GARP: Average Country Weights  
As of 2/29/2024



9. Value: Average Country Weights  
As of 2/29/2024



10. Yield: Average Country Weights  
As of 2/29/2024



11. Aggressive Growth: Stock Holdings  
As of 2/29/2024

| Funds Invested %             | Average Weight % |
|------------------------------|------------------|
| ASML Holding NV              | 2.06%            |
| Taiwan Semiconductor Manuf.. | 1.49%            |
| NVIDIA Corporation           | 1.63%            |
| Texas Instruments Corporat.. | 0.35%            |
| Infineon Technologies AG     | 0.29%            |
| Broadcom Inc.                | 0.27%            |
| Marvell Technology, Inc.     | 0.20%            |
| Lam Research Corporation     | 0.26%            |
| Analog Devices, Inc.         | 0.25%            |
| Advanced Micro Devices, Inc. | 0.29%            |

12. Growth: Stock Holdings  
As of 2/29/2024

| Funds Invested %             | Average Weight % |
|------------------------------|------------------|
| NVIDIA Corporation           | 2.66%            |
| ASML Holding NV              | 1.27%            |
| Taiwan Semiconductor Manuf.. | 1.41%            |
| Broadcom Inc.                | 0.66%            |
| Advanced Micro Devices, Inc. | 0.39%            |
| Texas Instruments Corporat.. | 0.17%            |
| Lam Research Corporation     | 0.19%            |
| Analog Devices, Inc.         | 0.19%            |
| NXP Semiconductors NV        | 0.13%            |
| KLA Corporation              | 0.14%            |

13. GARP: Stock Holdings  
As of 2/29/2024

| Funds Invested %               | Average Weight % |
|--------------------------------|------------------|
| NVIDIA Corporation             | 1.80%            |
| ASML Holding NV                | 0.56%            |
| Taiwan Semiconductor Manuf..   | 0.68%            |
| Lam Research Corporation       | 0.20%            |
| Texas Instruments Corporat..   | 0.17%            |
| KLA Corporation                | 0.20%            |
| Broadcom Inc.                  | 0.22%            |
| STMicroelectronics NV          | 0.08%            |
| QUALCOMM Incorporated          | 0.14%            |
| Microchip Technology Incorpo.. | 0.05%            |

14. Value: Stock Holdings  
As of 2/29/2024

| Funds Invested %               | Average Weight % |
|--------------------------------|------------------|
| Taiwan Semiconductor Manuf..   | 0.59%            |
| Broadcom Inc.                  | 0.27%            |
| Intel Corporation              | 0.28%            |
| Skyworks Solutions, Inc.       | 0.05%            |
| QUALCOMM Incorporated          | 0.19%            |
| NVIDIA Corporation             | 0.48%            |
| Lam Research Corporation       | 0.16%            |
| Infineon Technologies AG       | 0.22%            |
| Micron Technology, Inc.        | 0.21%            |
| Microchip Technology Incorpo.. | 0.07%            |

15. Yield: Stock Holdings  
As of 2/29/2024

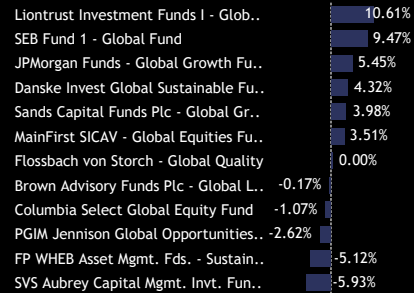
| Funds Invested %             | Average Weight % |
|------------------------------|------------------|
| Taiwan Semiconductor Manuf.. | 1.59%            |
| Texas Instruments Corporat.. | 0.90%            |
| Broadcom Inc.                | 1.33%            |
| Analog Devices, Inc.         | 0.33%            |
| MediaTek Inc                 | 0.38%            |
| QUALCOMM Incorporated        | 0.23%            |
| TE Connectivity Ltd.         | 0.21%            |
| ASML Holding NV              | 0.37%            |
| NVIDIA Corporation           | 0.26%            |
| Intel Corporation            | 0.15%            |



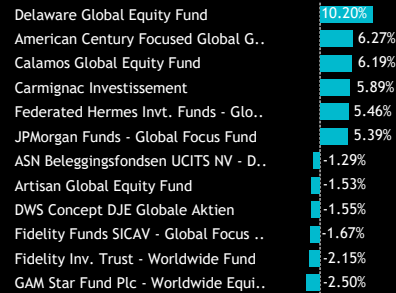
# Semiconductors: Active Fund Ownership Report

## Style Ownership Activity

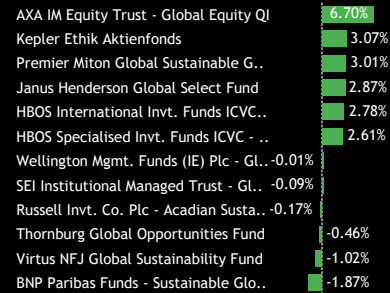
1. Aggressive Growth: Largest Fund Weight Δ  
Between 8/31/2023 and 2/29/2024



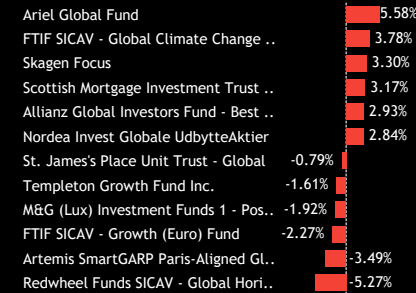
2. Growth: Largest Fund Weight Δ  
Between 8/31/2023 and 2/29/2024



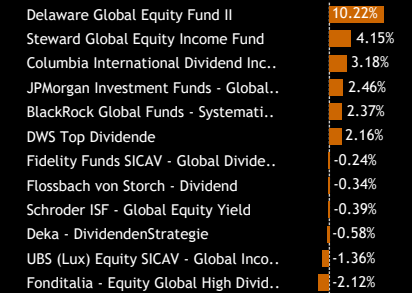
3. GARP: Largest Fund Weight Δ  
Between 8/31/2023 and 2/29/2024



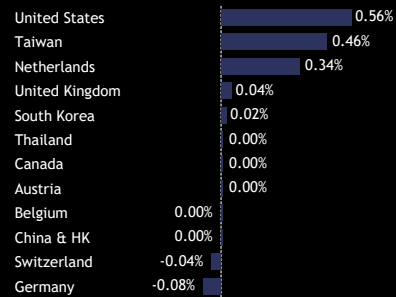
4. Value: Largest Fund Weight Δ  
Between 8/31/2023 and 2/29/2024



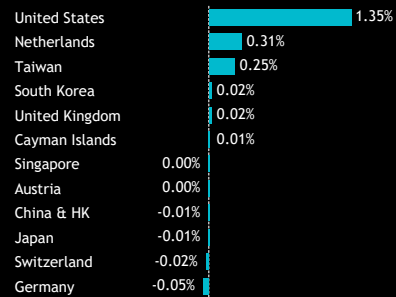
5. Yield: Largest Fund Weight Δ  
Between 8/31/2023 and 2/29/2024



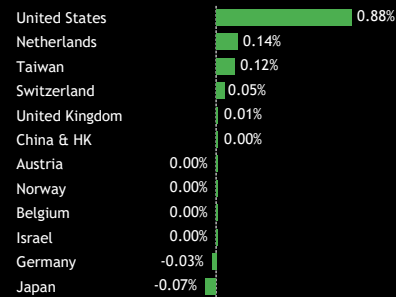
6. Aggressive Growth: Average Country Weight Δ  
Between 8/31/2023 and 2/29/2024



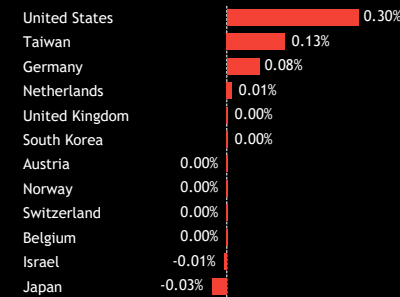
7. Growth: Average Country Weight Δ  
Between 8/31/2023 and 2/29/2024



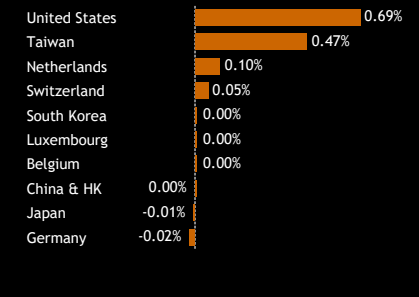
8. GARP: Average Country Weight Δ  
Between 8/31/2023 and 2/29/2024



9. Value: Average Country Weight Δ  
Between 8/31/2023 and 2/29/2024



10. Yield: Average Country Weight Δ  
Between 8/31/2023 and 2/29/2024



11. Aggressive Growth: Stock Holding Δ  
Between 8/31/2023 and 2/29/2024

| Fund                         | Funds Invested Δ | Average Weight Δ |
|------------------------------|------------------|------------------|
| Taiwan Semiconductor Manuf.. | 3.9%             | 0.42%            |
| SK hynix Inc.                | 2.0%             | 0.02%            |
| MediaTek Inc                 | 2.0%             | 0.04%            |
| Broadcom Inc.                | 2.0%             | 0.07%            |
| ARM Holdings PLC ADR         | 2.0%             | 0.04%            |
| Cohu, Inc.                   | -2.0%            | 0.00%            |
| Allegro MicroSystems, Inc.   | -2.0%            | 0.00%            |
| ASML Holding NV              | -2.0%            | 0.33%            |
| Infineon Technologies AG     | -3.9%            | -0.02%           |
| Enphase Energy, Inc.         | -3.9%            | -0.03%           |

12. Growth: Stock Holding Δ  
Between 8/31/2023 and 2/29/2024

| Fund                         | Funds Invested Δ | Average Weight Δ |
|------------------------------|------------------|------------------|
| Broadcom Inc.                | 10.2%            | 0.30%            |
| NVIDIA Corporation           | 9.5%             | 0.95%            |
| Lam Research Corporation     | 2.9%             | 0.04%            |
| ARM Holdings PLC ADR         | 2.9%             | 0.02%            |
| KLA Corporation              | 2.9%             | 0.04%            |
| First Solar, Inc.            | -1.5%            | -0.01%           |
| Micron Technology, Inc.      | -3.6%            | 0.03%            |
| QUALCOMM Incorporated        | -5.1%            | -0.02%           |
| Advanced Micro Devices, Inc. | -5.1%            | 0.10%            |
| Infineon Technologies AG     | -7.3%            | -0.05%           |

13. GARP: Stock Holding Δ  
Between 8/31/2023 and 2/29/2024

| Fund                            | Funds Invested Δ | Average Weight Δ |
|---------------------------------|------------------|------------------|
| NVIDIA Corporation              | 8.9%             | 0.83%            |
| STMicroelectronics NV           | 6.7%             | 0.04%            |
| ARM Holdings PLC ADR            | 4.4%             | 0.01%            |
| Skyworks Solutions, Inc.        | 4.4%             | 0.01%            |
| TE Connectivity Ltd.            | 2.2%             | 0.01%            |
| QUALCOMM Incorporated           | -4.4%            | 0.02%            |
| Infineon Technologies AG        | -4.4%            | -0.02%           |
| Power Integrations, Inc.        | -4.4%            | -0.01%           |
| Renesas Electronics Corporati.. | -4.4%            | -0.07%           |
| Enphase Energy, Inc.            | -6.7%            | -0.06%           |

14. Value: Stock Holding Δ  
Between 8/31/2023 and 2/29/2024

| Fund                           | Funds Invested Δ | Average Weight Δ |
|--------------------------------|------------------|------------------|
| Broadcom Inc.                  | 4.5%             | 0.06%            |
| Skyworks Solutions, Inc.       | 3.0%             | 0.00%            |
| Intel Corporation              | 3.0%             | 0.07%            |
| Siltronic AG                   | 3.0%             | 0.04%            |
| MediaTek Inc                   | 3.0%             | 0.01%            |
| Qorvo, Inc.                    | -3.0%            | -0.01%           |
| Micron Technology, Inc.        | -3.0%            | -0.03%           |
| Marvell Technology, Inc.       | -3.0%            | 0.00%            |
| Microchip Technology Incorpo.. | -4.5%            | -0.06%           |
| United Microelectronics Corp.  | -4.5%            | 0.00%            |

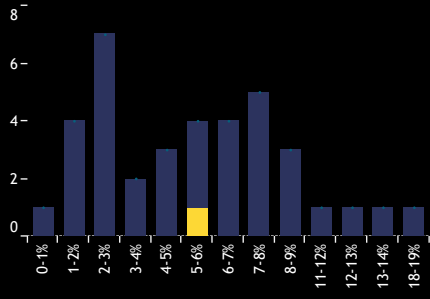
15. Yield: Stock Holding Δ  
Between 8/31/2023 and 2/29/2024

| Fund                          | Funds Invested Δ | Average Weight Δ |
|-------------------------------|------------------|------------------|
| QUALCOMM Incorporated         | 7.7%             | 0.11%            |
| NVIDIA Corporation            | 7.7%             | 0.14%            |
| Analog Devices, Inc.          | 7.7%             | 0.09%            |
| Texas Instruments Informati.. | 5.1%             | 0.06%            |
| Skyworks Solutions, Inc.      | 5.1%             | 0.10%            |
| SG Micro Corp. Class A        | -2.6%            | 0.00%            |
| Jinko Solar Co., Ltd. Class A | -2.6%            | 0.00%            |
| Infineon Technologies AG      | -2.6%            | -0.02%           |
| Rohm Co., Ltd.                | -2.6%            | -0.01%           |
| Broadcom Inc.                 | -7.7%            | 0.07%            |

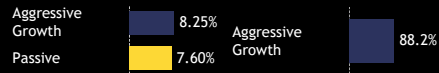
# Semiconductors: Active Fund Ownership Report

## Aggressive Growth Funds Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



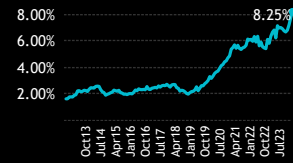
4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Liontrust Investment Funds I - Global Innovat... | 23.71% |
| MainFirst SICAV - Global Equities Fund           | 19.54% |
| Guinness Atkinson Global Innovators Fund         | 19.22% |
| Sands Capital Funds Plc - Global Growth Fund     | 18.55% |
| JPMorgan Funds - Global Growth Fund              | 17.46% |
| ERSTE Stock Global                               | 13.58% |
| PGIM Jennison Global Opportunities Fund          | 13.44% |
| Danske Invest Global Sustainable Future - Ak...  | 13.44% |
| SEB Fund 1 - Global Fund                         | 12.78% |
| SEB Aktiesparfond                                | 12.64% |

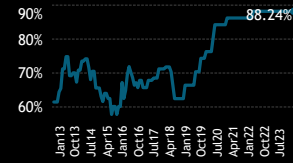
5. Largest Stock Level Fund Weights

| Fund Name                      | Stock Name              | Weight |
|--------------------------------|-------------------------|--------|
| Ninety One Gib. Strat. Fd. ... | ASML Holding NV         | 8.93%  |
| PGIM Jennison Global Oppo...   | NVIDIA Corporation      | 8.55%  |
| Allianz Global Investors Fu... | ASML Holding NV         | 7.37%  |
| MainFirst SICAV - Global Eq... | NVIDIA Corporation      | 7.14%  |
| Liontrust Investment Funds...  | NVIDIA Corporation      | 6.63%  |
| JPMorgan Funds - Global G...   | NVIDIA Corporation      | 6.49%  |
| Artisan Global Opportuniti...  | Advanced Micro Devic... | 6.47%  |
| Sands Capital Funds Plc - G... | NVIDIA Corporation      | 5.97%  |
| Sands Capital Funds Plc - G... | ASML Holding NV         | 5.85%  |
| Comgest Monde                  | ASML Holding NV         | 5.67%  |

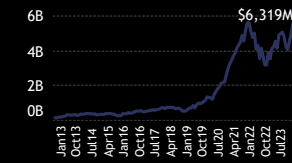
6. Average Fund Weight



7. Funds Invested %



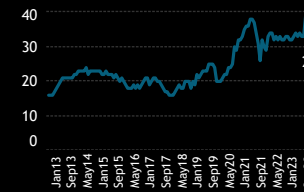
8. Combined Fund AUM, \$



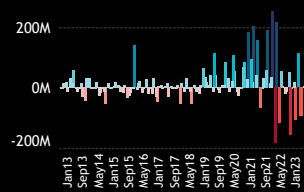
9. ACWI Weight



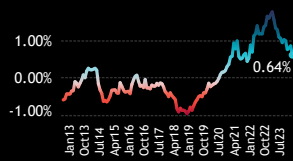
10. # of Companies Invested



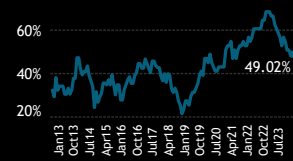
11. Monthly Fund Flows, \$



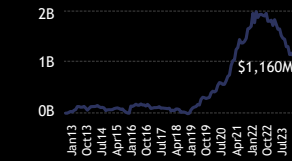
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                          | Change |
|------------------------------------|--------|
| Liontrust Investment Funds I - ... | 10.61% |
| SEB Fund 1 - Global Fund           | 9.47%  |
| JPMorgan Funds - Global Grow...    | 5.45%  |
| Danske Invest Global Sustaina...   | 4.32%  |
| Columbia Select Global Equity...   | -1.07% |
| PGIM Jennison Global Opportu...    | -2.62% |
| FP WHEB Asset Mgmt. Fds. - S...    | -5.12% |
| SVS Aubrey Capital Mgmt. Inv...    | -5.93% |

17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                      | Stock Name               | Change |
|--------------------------------|--------------------------|--------|
| SEB Fund 1 - Global Fund       | Taiwan Semiconducto...   | 4.18%  |
| Liontrust Investment Funds...  | Taiwan Semiconducto...   | 3.49%  |
| Sands Capital Funds Plc - G... | NVIDIA Corporation       | 3.33%  |
| Liontrust Investment Funds...  | Advanced Micro Devic...  | 3.03%  |
| PGIM Jennison Global Oppo...   | NVIDIA Corporation       | -1.27% |
| FP WHEB Asset Mgmt. Fds. ...   | Power Integrations, Inc. | -1.47% |
| FP WHEB Asset Mgmt. Fds. ...   | First Solar, Inc.        | -1.56% |
| FP WHEB Asset Mgmt. Fds. ...   | TE Connectivity Ltd.     | -1.65% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                          | Flow     |
|------------------------------------|----------|
| SEB Fund 1 - Global Fund           | \$65M    |
| Sands Capital Funds Plc - Glob...  | \$43M    |
| DPAM B - Equities World Susta...   | \$17M    |
| Liontrust Investment Funds I - ... | \$13M    |
| Columbia Select Global Equity...   | (\$21M)  |
| FP WHEB Asset Mgmt. Fds. - S...    | (\$48M)  |
| Brown Advisory Funds Plc - GL...   | (\$49M)  |
| PGIM Jennison Global Opportu...    | (\$292M) |

18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                      | Stock Name               | Flow     |
|--------------------------------|--------------------------|----------|
| Sands Capital Funds Plc - G... | NVIDIA Corporation       | \$71M    |
| SEB Fund 1 - Global Fund       | Taiwan Semiconducto...   | \$32M    |
| SEB Fund 1 - Global Fund       | Broadcom Inc.            | \$21M    |
| Impax Global Environment...    | Texas Instruments Inc... | \$14M    |
| PGIM Jennison Global Oppo...   | ASML Holding NV          | (\$33M)  |
| Brown Advisory Funds Plc ...   | ASML Holding NV          | (\$47M)  |
| PGIM Jennison Global Oppo...   | Broadcom Inc.            | (\$80M)  |
| PGIM Jennison Global Oppo...   | NVIDIA Corporation       | (\$179M) |

19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                      | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|---------------------------------|------------------|------------------|---------------------|-------------|
| ASML-NL | ASML Holding NV                 | 60.78%           | 2.06%            | 1.51%               | \$2,237M    |
| 2330-TW | Taiwan Semiconductor Manuf...   | 49.02%           | 1.49%            | 0.73%               | \$751M      |
| NVDA-US | NVIDIA Corporation              | 35.29%           | 1.63%            | -1.15%              | \$1,465M    |
| TXN-US  | Texas Instruments Incorporat... | 17.65%           | 0.35%            | 0.13%               | \$185M      |
| IFX-DE  | Infineon Technologies AG        | 15.69%           | 0.29%            | 0.22%               | \$116M      |
| AVGO-US | Broadcom Inc.                   | 11.76%           | 0.27%            | -0.54%              | \$219M      |
| MRVL-US | Marvell Technology, Inc.        | 9.80%            | 0.20%            | 0.12%               | \$129M      |
| LRCX-US | Lam Research Corporation        | 9.80%            | 0.26%            | 0.09%               | \$210M      |
| AMD-US  | Advanced Micro Devices, Inc.    | 9.80%            | 0.29%            | -0.15%              | \$282M      |
| ADI-US  | Analog Devices, Inc.            | 9.80%            | 0.25%            | 0.13%               | \$103M      |
| NXPI-US | NXP Semiconductors NV           | 7.84%            | 0.12%            | 0.03%               | \$13M       |
| KLAC-US | KLA Corporation                 | 5.88%            | 0.15%            | 0.02%               | \$24M       |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                      | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|-----------|---------------------------------|------------------|-------------|----------------|
| 2330-TW   | Taiwan Semiconductor Manuf...   | 3.92%            | 0.42%       | \$46M          |
| AVGO-US   | Broadcom Inc.                   | 1.96%            | 0.07%       | (\$62M)        |
| AMD-US    | Advanced Micro Devices, Inc.    | 1.96%            | 0.14%       | \$6M           |
| 2454-TW   | MediaTek Inc                    | 1.96%            | 0.04%       | (\$6M)         |
| 000660-KR | SK hynix Inc.                   | 1.96%            | 0.02%       | \$3M           |
| XLNX-US   | Xilinx, Inc.                    | 0.00%            | 0.00%       | \$0M           |
| 002151-CN | Beijing BDStar Navigation Co... | 0.00%            | 0.00%       | \$0M           |
| 000990-KR | DB HiTek Co. LTD                | 0.00%            | 0.00%       | \$0M           |
| STMPA-FR  | STMicroelectronics NV           | -1.96%           | -0.01%      | (\$6M)         |
| ASML-NL   | ASML Holding NV                 | -1.96%           | 0.33%       | (\$74M)        |
| IFX-DE    | Infineon Technologies AG        | -3.92%           | -0.02%      | (\$8M)         |
| ENPH-US   | Enphase Energy, Inc.            | -3.92%           | -0.03%      | (\$10M)        |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                          | Flow     |
|-----------|-------------------------------------|----------|
| 2330-TW   | Taiwan Semiconductor Manufacturi... | \$46M    |
| TXN-US    | Texas Instruments Incorporated      | \$26M    |
| AMD-US    | Advanced Micro Devices, Inc.        | \$6M     |
| 000660-KR | SK hynix Inc.                       | \$3M     |
| MCHP-US   | Microchip Technology Incorporated   | \$2M     |
| ARM-US    | ARM Holdings PLC ADR                | \$1M     |
| FSLR-US   | First Solar, Inc.                   | (\$12M)  |
| TEL-US    | TE Connectivity Ltd.                | (\$13M)  |
| LRCX-US   | Lam Research Corporation            | (\$22M)  |
| AVGO-US   | Broadcom Inc.                       | (\$62M)  |
| ASML-NL   | ASML Holding NV                     | (\$74M)  |
| NVDA-US   | NVIDIA Corporation                  | (\$130M) |

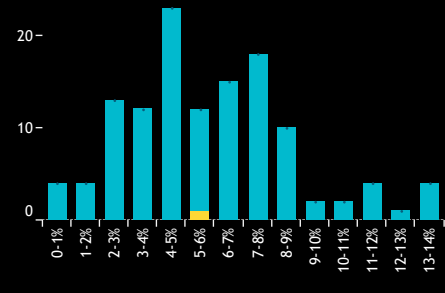
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Growth Funds

### Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



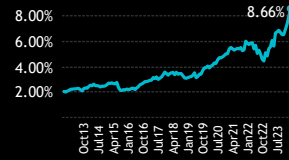
4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Swedbank Robur Globalfond                        | 20.41% |
| Baillie Gifford Investment Funds ICVC - Long ..  | 19.20% |
| Calamos Global Equity Fund                       | 18.65% |
| Ninety One Glob. Strat. Fd. - Global Dynamic ..  | 18.19% |
| Janus Henderson Sustainable/Responsible Fu..     | 17.54% |
| Baron Global Advantage Fund                      | 16.71% |
| Baillie Gifford Investment Funds ICVC - Positi.. | 16.62% |
| Acatis Aktien Global Fonds UI                    | 16.43% |
| JPMorgan Funds - Global Focus Fund               | 16.14% |
| American Funds New Economy Fund                  | 15.48% |

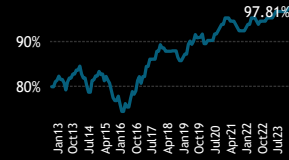
5. Largest Stock Level Fund Weights

| Fund Name                      | Stock Name            | Weight |
|--------------------------------|-----------------------|--------|
| Baron Global Advantage Fu..    | NVIDIA Corporation    | 13.29% |
| Baillie Gifford Investment ..  | NVIDIA Corporation    | 9.24%  |
| Baillie Gifford Investment ..  | ASML Holding NV       | 9.07%  |
| Ninety One Glob. Strat. Fd. .. | NVIDIA Corporation    | 8.95%  |
| Calamos Global Equity Fund     | NVIDIA Corporation    | 8.83%  |
| Ninety One Glob. Strat. Fd. .. | ASML Holding NV       | 8.29%  |
| Swedbank Robur Globalfond      | Taiwan Semiconducto.. | 7.83%  |
| Baillie Gifford Investment ..  | Taiwan Semiconducto.. | 7.56%  |
| Acatis Aktien Global Fonds ..  | NVIDIA Corporation    | 7.35%  |
| Ninety One Glob. Strat. Fd. .. | NVIDIA Corporation    | 7.19%  |

6. Average Fund Weight



7. Funds Invested %



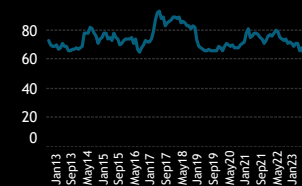
8. Combined Fund AUM, \$



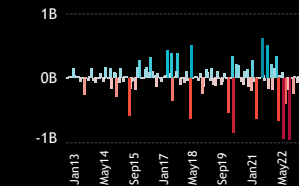
9. ACWI Weight



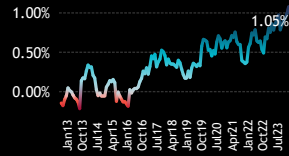
10. # of Companies Invested



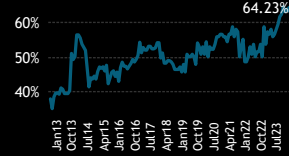
11. Monthly Fund Flows, \$



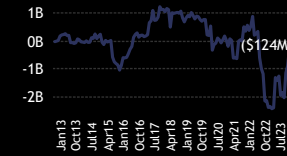
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | Change |
|-----------------------------------|--------|
| Delaware Global Equity Fund       | 10.20% |
| American Century Focused Gl..     | 6.27%  |
| Calamos Global Equity Fund        | 6.19%  |
| Carmignac Investissement          | 5.89%  |
| DWS Concept DJE Globale Akti..    | -1.55% |
| Fidelity Funds SICAV - Global ..  | -1.67% |
| Fidelity Inv. Trust - Worldwide.. | -2.15% |
| GAM Star Fund Plc - Worldwid..    | -2.50% |

17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                      | Stock Name             | Change |
|--------------------------------|------------------------|--------|
| American Century Focused ..    | NVIDIA Corporation     | 6.41%  |
| Carmignac Investissement       | NVIDIA Corporation     | 4.43%  |
| Baron Global Advantage Fu..    | NVIDIA Corporation     | 3.55%  |
| Fidelity Funds SICAV - First.. | NVIDIA Corporation     | 3.49%  |
| DWS Concept DJE Globale ..     | ASML Holding NV        | -1.27% |
| Artisan Global Discovery Fu..  | ON Semiconductor Cor.. | -1.44% |
| GAM Star Fund Plc - World..    | NVIDIA Corporation     | -1.59% |
| AIM Fds. Grp. (IFG) - Invesc.. | Analog Devices, Inc.   | -1.98% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | Flow    |
|-----------------------------------|---------|
| American Funds New Perspect..     | \$964M  |
| JPMorgan Funds - Global Focu..    | \$206M  |
| JPMorgan Investment Funds - ..    | \$204M  |
| Swedbank Robur Globalfond         | \$105M  |
| ASN Beleggingsfondsen UCITS ..    | (\$53M) |
| UniNachhaltig Aktien Global       | (\$54M) |
| Folksams LO Varlden               | (\$59M) |
| Fidelity Inv. Trust - Worldwide.. | (\$75M) |

18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                  | Stock Name              | Flow     |
|----------------------------|-------------------------|----------|
| American Funds New Persp.. | NVIDIA Corporation      | \$737M   |
| American Funds New Persp.. | Broadcom Inc.           | \$324M   |
| UniGlobal                  | Broadcom Inc.           | \$223M   |
| American Funds New Econo.. | Taiwan Semiconducto..   | \$183M   |
| American Funds New Econo.. | TE Connectivity Ltd.    | (\$111M) |
| American Funds New Econo.. | Micron Technology, Inc. | (\$149M) |
| American Funds New Persp.. | STMicroelectronics NV   | (\$154M) |
| American Funds New Econo.. | ASML Holding NV         | (\$178M) |

19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|--------------------------------|------------------|------------------|---------------------|-------------|
| NVDA-US | NVIDIA Corporation             | 65.69%           | 2.66%            | -0.11%              | \$12,047M   |
| ASML-NL | ASML Holding NV                | 61.31%           | 1.27%            | 0.72%               | \$8,341M    |
| 2330-TW | Taiwan Semiconductor Manuf..   | 60.58%           | 1.41%            | 0.65%               | \$8,265M    |
| AVGO-US | Broadcom Inc.                  | 32.85%           | 0.66%            | -0.15%              | \$9,679M    |
| AMD-US  | Advanced Micro Devices, Inc.   | 26.28%           | 0.39%            | -0.05%              | \$1,313M    |
| TXN-US  | Texas Instruments Incorporat.. | 20.44%           | 0.17%            | -0.05%              | \$409M      |
| LRCX-US | Lam Research Corporation       | 19.71%           | 0.19%            | 0.02%               | \$513M      |
| ADI-US  | Analog Devices, Inc.           | 18.98%           | 0.19%            | 0.06%               | \$921M      |
| NXPI-US | NXP Semiconductors NV          | 18.25%           | 0.13%            | 0.04%               | \$358M      |
| KLAC-US | KLA Corporation                | 16.06%           | 0.14%            | 0.01%               | \$598M      |
| QCOM-US | QUALCOMM Incorporated          | 15.33%           | 0.12%            | -0.14%              | \$221M      |
| IFX-DE  | Infineon Technologies AG       | 15.33%           | 0.17%            | 0.10%               | \$307M      |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                   | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|---------|------------------------------|------------------|-------------|----------------|
| AVGO-US | Broadcom Inc.                | 10.22%           | 0.30%       | \$1,291M       |
| NVDA-US | NVIDIA Corporation           | 9.49%            | 0.95%       | \$1,180M       |
| LRCX-US | Lam Research Corporation     | 2.92%            | 0.04%       | (\$32M)        |
| KLAC-US | KLA Corporation              | 2.92%            | 0.04%       | (\$5M)         |
| TEL-US  | TE Connectivity Ltd.         | 2.19%            | 0.00%       | (\$85M)        |
| ON-US   | ON Semiconductor Corporation | 2.19%            | -0.02%      | \$195M         |
| 968-HK  | Xinyi Solar Holdings Ltd.    | -1.46%           | 0.00%       | (\$16M)        |
| FSLR-US | First Solar, Inc.            | -1.46%           | -0.01%      | \$2M           |
| MU-US   | Micron Technology, Inc.      | -3.65%           | 0.03%       | (\$115M)       |
| QCOM-US | QUALCOMM Incorporated        | -5.11%           | -0.02%      | (\$184M)       |
| AMD-US  | Advanced Micro Devices, Inc. | -5.11%           | 0.10%       | (\$311M)       |
| IFX-DE  | Infineon Technologies AG     | -7.30%           | -0.05%      | (\$205M)       |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                         | Flow     |
|-----------|------------------------------------|----------|
| AVGO-US   | Broadcom Inc.                      | \$1,291M |
| NVDA-US   | NVIDIA Corporation                 | \$1,180M |
| 2330-TW   | Taiwan Semiconductor Manufacturi.. | \$264M   |
| ON-US     | ON Semiconductor Corporation       | \$195M   |
| 000660-KR | SK hynix Inc.                      | \$95M    |
| ADI-US    | Analog Devices, Inc.               | \$87M    |
| MU-US     | Micron Technology, Inc.            | (\$115M) |
| ASML-NL   | ASML Holding NV                    | (\$120M) |
| STMPA-FR  | STMicroelectronics NV              | (\$169M) |
| QCOM-US   | QUALCOMM Incorporated              | (\$184M) |
| IFX-DE    | Infineon Technologies AG           | (\$205M) |
| AMD-US    | Advanced Micro Devices, Inc.       | (\$311M) |

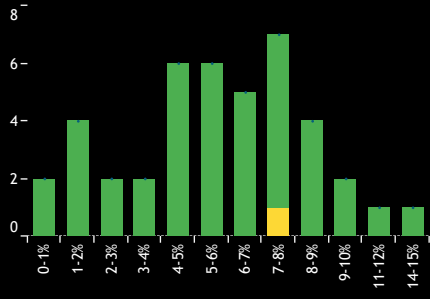
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## GARP Funds

### Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



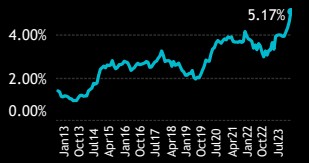
4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Premier Miton Global Sustainable Growth Fund       | 14.23% |
| HBO5 Specialised Invnt. Funds ICVC - Ethical F..   | 11.16% |
| Janus Henderson Global Select Fund                 | 9.37%  |
| SEB Fund 1 - Global Climate Opportunity Fund       | 9.14%  |
| AXA IM Equity Trust - Global Equity QJ             | 8.62%  |
| M&G Investment Funds (1) OEIC - Global The..       | 8.41%  |
| Schroder ISF - Global Equity Alpha                 | 8.33%  |
| Fidelity Invnt. Funds - Global Special Situation.. | 8.00%  |
| HBO5 International Invnt. Funds ICVC - Intern..    | 7.96%  |
| Kepler Ethik Aktienfonds                           | 7.92%  |

5. Largest Stock Level Fund Weights

| Fund Name                     | Stock Name            | Weight |
|-------------------------------|-----------------------|--------|
| Janus Henderson Global Se..   | Taiwan Semiconducto.. | 4.91%  |
| Kepler Ethik Aktienfonds      | NVIDIA Corporation    | 4.85%  |
| SEB Global Aktiefond          | NVIDIA Corporation    | 4.78%  |
| Schroder ISF - Global Equit.. | NVIDIA Corporation    | 4.51%  |
| Premier Miton Global Susta..  | NVIDIA Corporation    | 4.04%  |
| HBO5 Specialised Invnt. Fun.. | NVIDIA Corporation    | 3.93%  |
| Royal London Equity Funds ..  | NVIDIA Corporation    | 3.84%  |
| LF Liontrust Investment Fu..  | Taiwan Semiconducto.. | 3.82%  |
| LF Liontrust Investment Fu..  | NVIDIA Corporation    | 3.70%  |
| AXA IM Equity Trust - Glob..  | NVIDIA Corporation    | 3.66%  |

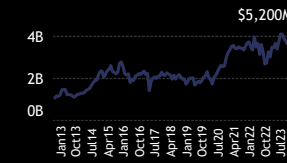
6. Average Fund Weight



7. Funds Invested %



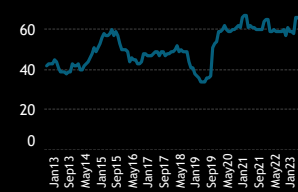
8. Combined Fund AUM, \$



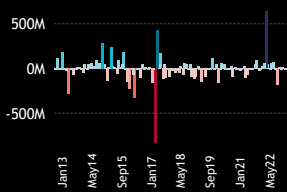
9. ACWI Weight



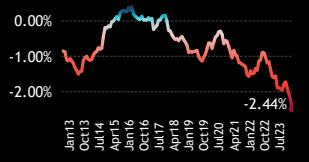
10. # of Companies Invested



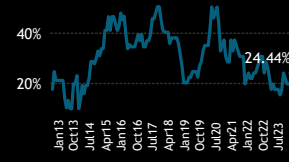
11. Monthly Fund Flows, \$



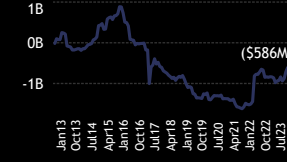
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                           | Change |
|-------------------------------------|--------|
| AXA IM Equity Trust - Global E..    | 6.70%  |
| Kepler Ethik Aktienfonds            | 3.07%  |
| Premier Miton Global Sustaina..     | 3.01%  |
| Janus Henderson Global Selec..      | 2.87%  |
| SEI Institutional Managed Trus..    | -0.09% |
| Russell Invnt. Co. Plc - Acadian .. | -0.17% |
| Thornburg Global Opportuniti..      | -0.46% |
| Virtus NFJ Global Sustainabil..     | -1.02% |

17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                    | Stock Name              | Change |
|------------------------------|-------------------------|--------|
| SEB Global Aktiefond         | NVIDIA Corporation      | 4.78%  |
| AXA IM Equity Trust - Glob.. | NVIDIA Corporation      | 3.66%  |
| Kepler Ethik Aktienfonds     | NVIDIA Corporation      | 3.45%  |
| Victory Capital Growth Fund  | NVIDIA Corporation      | 1.95%  |
| SEB Fund 1 - Global Climat.. | Enphase Energy, Inc.    | -0.39% |
| Kepler Ethik Aktienfonds     | Texas Instruments Inc.. | -0.48% |
| Thornburg Global Opportu..   | Qorvo, Inc.             | -1.15% |
| SEB Fund 1 - Global Climat.. | First Solar, Inc.       | -1.56% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | Flow    |
|-----------------------------------|---------|
| First Eagle Global Fund           | \$111M  |
| St. James's Place Internationa..  | \$81M   |
| Janus Henderson Global Selec..    | \$35M   |
| AXA IM Equity Trust - Global E..  | \$26M   |
| DNB Global                        | (\$8M)  |
| Swisscanto (CH) IPF I - Equity .. | (\$8M)  |
| Thornburg Global Opportuniti..    | (\$10M) |
| M&G Investment Funds (1) OEI..    | (\$11M) |

18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                     | Stock Name              | Flow    |
|-------------------------------|-------------------------|---------|
| St. James's Place Internati.. | NVIDIA Corporation      | \$131M  |
| First Eagle Global Fund       | Texas Instruments Inc.. | \$74M   |
| SEB Global Aktiefond          | NVIDIA Corporation      | \$38M   |
| First Eagle Global Fund       | Analog Devices, Inc.    | \$37M   |
| DNB Global                    | NVIDIA Corporation      | (\$8M)  |
| Thornburg Global Opportu..    | Qorvo, Inc.             | (\$11M) |
| M&G Investment Funds (1) ..   | Intel Corporation       | (\$14M) |
| St. James's Place Internati.. | Taiwan Semiconducto..   | (\$50M) |

19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker   | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|----------|--------------------------------|------------------|------------------|---------------------|-------------|
| NVDA-US  | NVIDIA Corporation             | 60.00%           | 1.80%            | -0.97%              | \$1,139M    |
| ASML-NL  | ASML Holding NV                | 44.44%           | 0.56%            | 0.01%               | \$300M      |
| 2330-TW  | Taiwan Semiconductor Manuf..   | 35.56%           | 0.68%            | -0.08%              | \$1,199M    |
| LRCX-US  | Lam Research Corporation       | 28.89%           | 0.20%            | 0.03%               | \$110M      |
| TXN-US   | Texas Instruments Incorporat.. | 26.67%           | 0.17%            | -0.06%              | \$511M      |
| KLAC-US  | KLA Corporation                | 24.44%           | 0.20%            | 0.07%               | \$60M       |
| AVGO-US  | Broadcom Inc.                  | 22.22%           | 0.22%            | -0.59%              | \$153M      |
| STMPA-FR | STMicroelectronics NV          | 20.00%           | 0.08%            | 0.03%               | \$11M       |
| QCOM-US  | QUALCOMM Incorporated          | 20.00%           | 0.14%            | -0.12%              | \$152M      |
| MCHP-US  | Microchip Technology Incorpo.. | 20.00%           | 0.05%            | -0.01%              | \$42M       |
| INTC-US  | Intel Corporation              | 20.00%           | 0.19%            | -0.06%              | \$223M      |
| IFX-DE   | Infineon Technologies AG       | 17.78%           | 0.10%            | 0.04%               | \$66M       |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker   | Stock Name                      | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|----------|---------------------------------|------------------|-------------|----------------|
| NVDA-US  | NVIDIA Corporation              | 8.89%            | 0.83%       | \$217M         |
| STMPA-FR | STMicroelectronics NV           | 6.67%            | 0.04%       | \$5M           |
| SWKS-US  | Skyworks Solutions, Inc.        | 4.44%            | 0.01%       | \$7M           |
| TEL-US   | TE Connectivity Ltd.            | 2.22%            | 0.01%       | \$1M           |
| KLAC-US  | KLA Corporation                 | 2.22%            | 0.09%       | \$21M          |
| ADI-US   | Analog Devices, Inc.            | 2.22%            | 0.05%       | \$39M          |
| NXPI-US  | NXP Semiconductors NV           | -2.22%           | 0.00%       | (\$1M)         |
| AMD-US   | Advanced Micro Devices, Inc.    | -2.22%           | 0.03%       | (\$1M)         |
| QCOM-US  | QUALCOMM Incorporated           | -4.44%           | 0.02%       | \$8M           |
| IFX-DE   | Infineon Technologies AG        | -4.44%           | -0.02%      | (\$9M)         |
| 6723-JP  | Renesas Electronics Corporati.. | -4.44%           | -0.07%      | (\$28M)        |
| ENPH-US  | Enphase Energy, Inc.            | -6.67%           | -0.06%      | (\$10M)        |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                         | Flow    |
|---------|------------------------------------|---------|
| NVDA-US | NVIDIA Corporation                 | \$217M  |
| TXN-US  | Texas Instruments Incorporated     | \$53M   |
| ADI-US  | Analog Devices, Inc.               | \$39M   |
| LRCX-US | Lam Research Corporation           | \$22M   |
| KLAC-US | KLA Corporation                    | \$21M   |
| QCOM-US | QUALCOMM Incorporated              | \$8M    |
| INTC-US | Intel Corporation                  | (\$7M)  |
| IFX-DE  | Infineon Technologies AG           | (\$9M)  |
| ENPH-US | Enphase Energy, Inc.               | (\$10M) |
| QRVO-US | Qorvo, Inc.                        | (\$12M) |
| 6723-JP | Renesas Electronics Corporation    | (\$28M) |
| 2330-TW | Taiwan Semiconductor Manufacturi.. | (\$32M) |

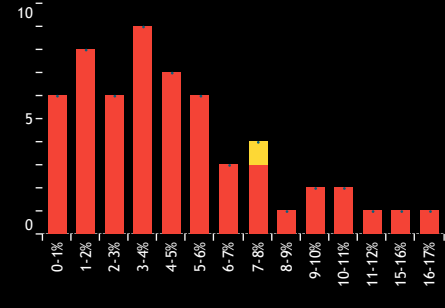
Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Value Funds

### Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



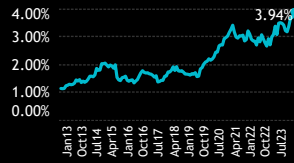
4. Largest Fund Weights

| Fund Name  | Weight |
|--|--------|
| Scottish Mortgage Investment Trust Plc           | 16.06% |
| FTIF SICAV - Global Climate Change Fund          | 15.97% |
| UBS (Lux) Key Selection SICAV - Global Equiti..  | 11.46% |
| Nordea Invest Globale UdbytteAktier              | 10.88% |
| Sanlam Universal Fds. Plc - Sustainable Glob..   | 10.81% |
| Schoellerbank Aktienfonds Value                  | 9.46%  |
| Allianz Global Investors Fund - Best Styles Gl.. | 9.15%  |
| SEB Dynamisk Aktiefond                           | 8.37%  |
| T Rowe Price Global Value Equity Fund            | 7.83%  |
| LBPAM Actions Monde                              | 7.29%  |

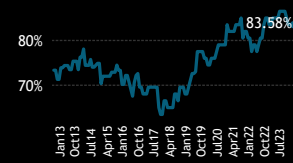
5. Largest Stock Level Fund Weights

| Fund Name                     | Stock Name             | Weight |
|-------------------------------|------------------------|--------|
| Scottish Mortgage Investm..   | ASML Holding NV        | 8.17%  |
| Scottish Mortgage Investm..   | NVIDIA Corporation     | 7.89%  |
| Schoellerbank Aktienfonds ..  | QUALCOMM Incorporated  | 5.06%  |
| M&G (Lux) Investment Fun..    | ON Semiconductor Cor.  | 4.99%  |
| Pioneer Global Sustainable..  | Advanced Micro Devic.. | 4.70%  |
| FTIF SICAV - Global Climat..  | Taiwan Semiconducto..  | 4.56%  |
| Touchstone Strategic Trust..  | Taiwan Semiconducto..  | 4.51%  |
| Schoellerbank Aktienfonds ..  | Intel Corporation      | 4.40%  |
| SEB Dynamisk Aktiefond        | NVIDIA Corporation     | 4.00%  |
| nlnety One Glb. Strat. Fd. .. | Qorvo, Inc.            | 3.98%  |

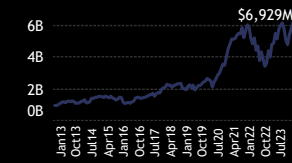
6. Average Fund Weight



7. Funds Invested %



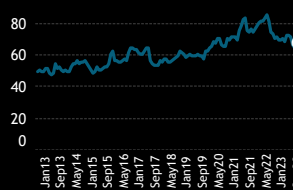
8. Combined Fund AUM, \$



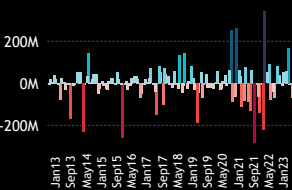
9. ACWI Weight



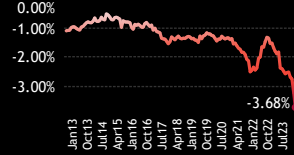
10. # of Companies Invested



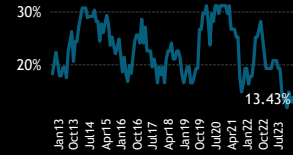
11. Monthly Fund Flows, \$



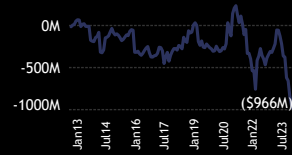
12. Average Weight vs ACWI



13. Funds Overweight %



14. Cumulative Fund Flows, \$



15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                       | Change |
|---------------------------------|--------|
| Ariel Global Fund               | 5.58%  |
| FTIF SICAV - Global Climate C.. | 3.78%  |
| Skagen Focus                    | 3.30%  |
| Scottish Mortgage Investment .. | 3.17%  |
| Templeton Growth Fund Inc.      | -1.61% |
| M&G (Lux) Investment Funds 1..  | -1.92% |
| FTIF SICAV - Growth (Euro) Fu.. | -2.27% |
| Artemis SmartGARP Paris-Alig..  | -3.49% |

17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024

| Fund Name                    | Stock Name              | Change |
|------------------------------|-------------------------|--------|
| SEB Dynamisk Aktiefond       | NVIDIA Corporation      | 3.62%  |
| Ariel Global Fund            | Intel Corporation       | 3.26%  |
| Scottish Mortgage Investm..  | NVIDIA Corporation      | 2.60%  |
| Ariel Global Fund            | Taiwan Semiconducto..   | 2.32%  |
| Artemis SmartGARP Paris-A..  | Broadcom Inc.           | -0.93% |
| Pioneer Global Sustainable.. | Microchip Technology .. | -0.95% |
| SEB Dynamisk Aktiefond       | Renesas Electronics C.. | -1.19% |
| M&G (Lux) Investment Fun..   | ON Semiconductor Cor..  | -1.51% |

16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                         | Flow     |
|-----------------------------------|----------|
| FTIF SICAV - Global Climate C..   | \$56M    |
| Dodge & Cox Global Stock Fund     | \$20M    |
| Skagen Focus                      | \$12M    |
| UniValueFonds: Global             | \$11M    |
| St. James's Place Unit Trust - .. | (\$44M)  |
| Schoellerbank Aktienfonds ..      | (\$184M) |
| FTIF SICAV - Growth (Euro) Fu..   | (\$191M) |
| Scottish Mortgage Investment ..   | (\$239M) |

18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024

| Fund Name                     | Stock Name               | Flow     |
|-------------------------------|--------------------------|----------|
| Dodge & Cox Global Stock ..   | Taiwan Semiconducto..    | \$55M    |
| SEB Dynamisk Aktiefond        | NVIDIA Corporation       | \$48M    |
| FTIF SICAV - Global Climat..  | First Solar, Inc.        | \$27M    |
| Robeco Capital Gr. Fds. - B.. | Infineon Technologies .. | \$23M    |
| Robeco Capital Gr. Fds. - B.. | STMicroelectronics NV    | (\$32M)  |
| Dodge & Cox Global Stock ..   | Microchip Technology ..  | (\$34M)  |
| St. James's Place Unit Trus.. | Lam Research Corpora..   | (\$40M)  |
| Scottish Mortgage Investm..   | ASML Holding NV          | (\$239M) |

19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker   | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|----------|--------------------------------|------------------|------------------|---------------------|-------------|
| 2330-TW  | Taiwan Semiconductor Manuf..   | 31.34%           | 0.59%            | -0.17%              | \$1,041M    |
| AVGO-US  | Broadcom Inc.                  | 29.85%           | 0.27%            | -0.54%              | \$113M      |
| INTC-US  | Intel Corporation              | 23.88%           | 0.28%            | 0.02%               | \$129M      |
| SWKS-US  | Skyworks Solutions, Inc.       | 17.91%           | 0.05%            | 0.02%               | \$39M       |
| QCOM-US  | QUALCOMM Incorporated          | 17.91%           | 0.19%            | -0.06%              | \$84M       |
| NVDA-US  | NVIDIA Corporation             | 17.91%           | 0.48%            | -2.29%              | \$1,730M    |
| LRCX-US  | Lam Research Corporation       | 17.91%           | 0.16%            | -0.02%              | \$345M      |
| IFX-DE   | Infineon Technologies AG       | 17.91%           | 0.22%            | 0.15%               | \$412M      |
| MU-US    | Micron Technology, Inc.        | 16.42%           | 0.21%            | 0.07%               | \$351M      |
| MCHP-US  | Microchip Technology Incorpo.. | 16.42%           | 0.07%            | 0.00%               | \$92M       |
| STMPA-FR | STMicroelectronics NV          | 14.93%           | 0.08%            | 0.03%               | \$61M       |
| NXPI-US  | NXP Semiconductors NV          | 14.93%           | 0.06%            | -0.03%              | \$47M       |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker  | Stock Name                     | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|---------|--------------------------------|------------------|-------------|----------------|
| AVGO-US | Broadcom Inc.                  | 4.48%            | 0.06%       | \$0M           |
| SWKS-US | Skyworks Solutions, Inc.       | 2.99%            | 0.00%       | \$3M           |
| INTC-US | Intel Corporation              | 2.99%            | 0.07%       | (\$6M)         |
| 6890-JP | Ferrotec Holdings Corporation  | 2.99%            | 0.00%       | \$1M           |
| 2454-TW | MediaTek Inc                   | 2.99%            | 0.01%       | (\$1M)         |
| 2330-TW | Taiwan Semiconductor Manuf..   | 1.49%            | 0.12%       | \$64M          |
| 3034-TW | Novatek Microelectronics Corp. | -2.99%           | -0.01%      | (\$1M)         |
| QRVO-US | Qorvo, Inc.                    | -2.99%           | -0.01%      | \$0M           |
| MU-US   | Micron Technology, Inc.        | -2.99%           | -0.03%      | (\$329M)       |
| MRVL-US | Marvell Technology, Inc.       | -2.99%           | 0.00%       | (\$4M)         |
| MCHP-US | Microchip Technology Incorpo.. | -4.48%           | -0.06%      | (\$61M)        |
| 2303-TW | United Microelectronics Corp.  | -4.48%           | 0.00%       | (\$2M)         |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker   | Stock Name                           | Flow     |
|----------|--------------------------------------|----------|
| IFX-DE   | Infineon Technologies AG             | \$69M    |
| NVDA-US  | NVIDIA Corporation                   | \$65M    |
| 2330-TW  | Taiwan Semiconductor Manufacturi..   | \$64M    |
| KLAC-US  | KLA Corporation                      | \$19M    |
| FSLR-US  | First Solar, Inc.                    | \$17M    |
| SHLS-US  | Shoals Technologies Group, Inc. Cl.. | \$10M    |
| STMPA-FR | STMicroelectronics NV                | (\$31M)  |
| LRCX-US  | Lam Research Corporation             | (\$37M)  |
| MCHP-US  | Microchip Technology Incorporated    | (\$61M)  |
| NXPI-US  | NXP Semiconductors NV                | (\$100M) |
| ASML-NL  | ASML Holding NV                      | (\$239M) |
| MU-US    | Micron Technology, Inc.              | (\$329M) |

Source: Factset, Copley Fund Research

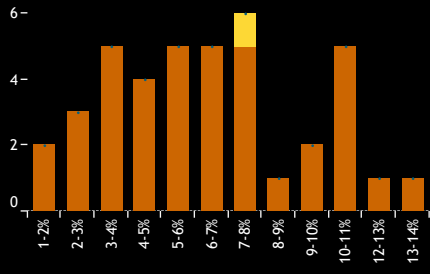


# Semiconductors: Active Fund Ownership Report

## Yield Funds

### Fund Ownership Profile

1. Histogram of Fund Weights  
As of 2/29/2024



2. Ave Wgt by Style



3. Funds Invested by Style



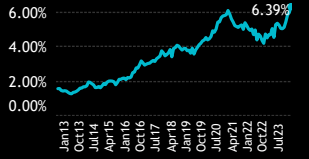
4. Largest Fund Weights



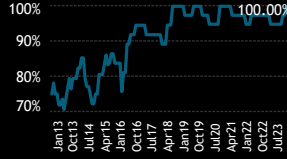
5. Largest Stock Level Fund Weights



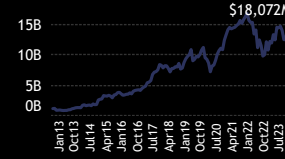
6. Average Fund Weight



7. Funds Invested %



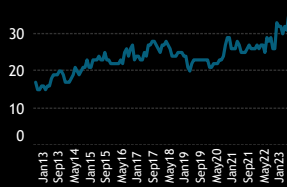
8. Combined Fund AUM, \$



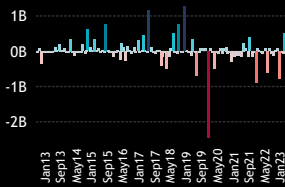
9. ACWI Weight



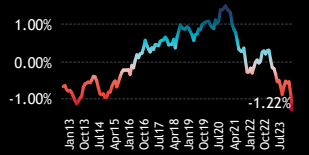
10. # of Companies Invested



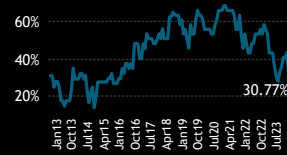
11. Monthly Fund Flows, \$



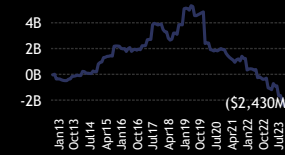
12. Average Weight vs ACWI



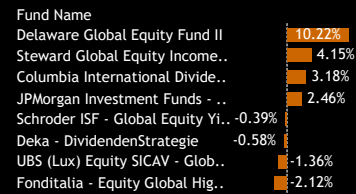
13. Funds Overweight %



14. Cumulative Fund Flows, \$



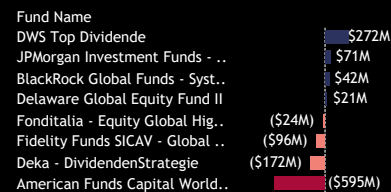
15. Largest Changes in Fund Weight  
Between 8/31/2023 and 2/29/2024



17. Largest Changes in Stock Weight  
Between 8/31/2023 and 2/29/2024



16. Largest Estimated Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



18. Largest Estimated Stock Fund Flows, \$  
Between 8/31/2023 and 2/29/2024



19. Aggregate Stock Ownership Stats, Ranked by Most Widely Held

| Ticker  | Stock Name                     | Funds Invested % | Average Weight % | Average Weight vs.. | Fund AUM \$ |
|---------|--------------------------------|------------------|------------------|---------------------|-------------|
| 2330-TW | Taiwan Semiconductor Manuf..   | 64.10%           | 1.59%            | 0.83%               | \$4,447M    |
| TXN-US  | Texas Instruments Incorporat.. | 61.54%           | 0.90%            | 0.68%               | \$1,290M    |
| AVGO-US | Broadcom Inc.                  | 41.03%           | 1.33%            | 0.52%               | \$6,536M    |
| ADI-US  | Analog Devices, Inc.           | 28.21%           | 0.33%            | 0.21%               | \$166M      |
| 2454-TW | MediaTek Inc                   | 25.64%           | 0.38%            | 0.31%               | \$428M      |
| QCOM-US | QUALCOMM Incorporated          | 23.08%           | 0.23%            | -0.03%              | \$203M      |
| TEL-US  | TE Connectivity Ltd.           | 20.51%           | 0.21%            | 0.14%               | \$596M      |
| ASML-NL | ASML Holding NV                | 20.51%           | 0.37%            | -0.17%              | \$2,431M    |
| NVDA-US | NVIDIA Corporation             | 15.38%           | 0.26%            | -2.52%              | \$967M      |
| INTC-US | Intel Corporation              | 15.38%           | 0.15%            | -0.10%              | \$450M      |
| SWKS-US | Skyworks Solutions, Inc.       | 7.69%            | 0.10%            | 0.07%               | \$46M       |
| KLAC-US | KLA Corporation                | 7.69%            | 0.06%            | -0.07%              | \$52M       |

20. Aggregate Stock Ownership Changes, Ranked by Change in Funds Invested.  
Between 8/31/2023 and 2/29/2024

| Ticker    | Stock Name                     | Funds Invested.. | Ave Wgt % Δ | Fund Flows, \$ |
|-----------|--------------------------------|------------------|-------------|----------------|
| QCOM-US   | QUALCOMM Incorporated          | 7.69%            | 0.11%       | \$155M         |
| NVDA-US   | NVIDIA Corporation             | 7.69%            | 0.14%       | (\$46M)        |
| ADI-US    | Analog Devices, Inc.           | 7.69%            | 0.09%       | (\$7M)         |
| TXN-US    | Texas Instruments Incorporat.. | 5.13%            | 0.06%       | \$489M         |
| SWKS-US   | Skyworks Solutions, Inc.       | 5.13%            | 0.10%       | \$9M           |
| KLAC-US   | KLA Corporation                | 5.13%            | 0.05%       | \$6M           |
| STMPA-FR  | STMicroelectronics NV          | -2.56%           | -0.01%      | (\$84M)        |
| IFX-DE    | Infineon Technologies AG       | -2.56%           | -0.02%      | (\$12M)        |
| 688223-CN | Jinko Solar Co., Ltd. Class A  | -2.56%           | 0.00%       | (\$1M)         |
| 300661-CN | SG Micro Corp. Class A         | -2.56%           | 0.00%       | (\$2M)         |
| 6963-JP   | Rohm Co., Ltd.                 | -2.56%           | -0.01%      | \$0M           |
| AVGO-US   | Broadcom Inc.                  | -7.69%           | 0.07%       | (\$358M)       |

21. Largest Stock Level Estimated Fund Flows  
Between 8/31/2023 and 2/29/2024

| Ticker   | Stock Name                         | Flow     |
|----------|------------------------------------|----------|
| TXN-US   | Texas Instruments Incorporated     | \$489M   |
| QCOM-US  | QUALCOMM Incorporated              | \$155M   |
| 2454-TW  | MediaTek Inc                       | \$30M    |
| NXPI-US  | NXP Semiconductors NV              | \$19M    |
| TEL-US   | TE Connectivity Ltd.               | \$13M    |
| SWKS-US  | Skyworks Solutions, Inc.           | \$9M     |
| NVDA-US  | NVIDIA Corporation                 | (\$46M)  |
| 2330-TW  | Taiwan Semiconductor Manufacturi.. | (\$75M)  |
| STMPA-FR | STMicroelectronics NV              | (\$84M)  |
| ASML-NL  | ASML Holding NV                    | (\$245M) |
| MU-US    | Micron Technology, Inc.            | (\$347M) |
| AVGO-US  | Broadcom Inc.                      | (\$358M) |

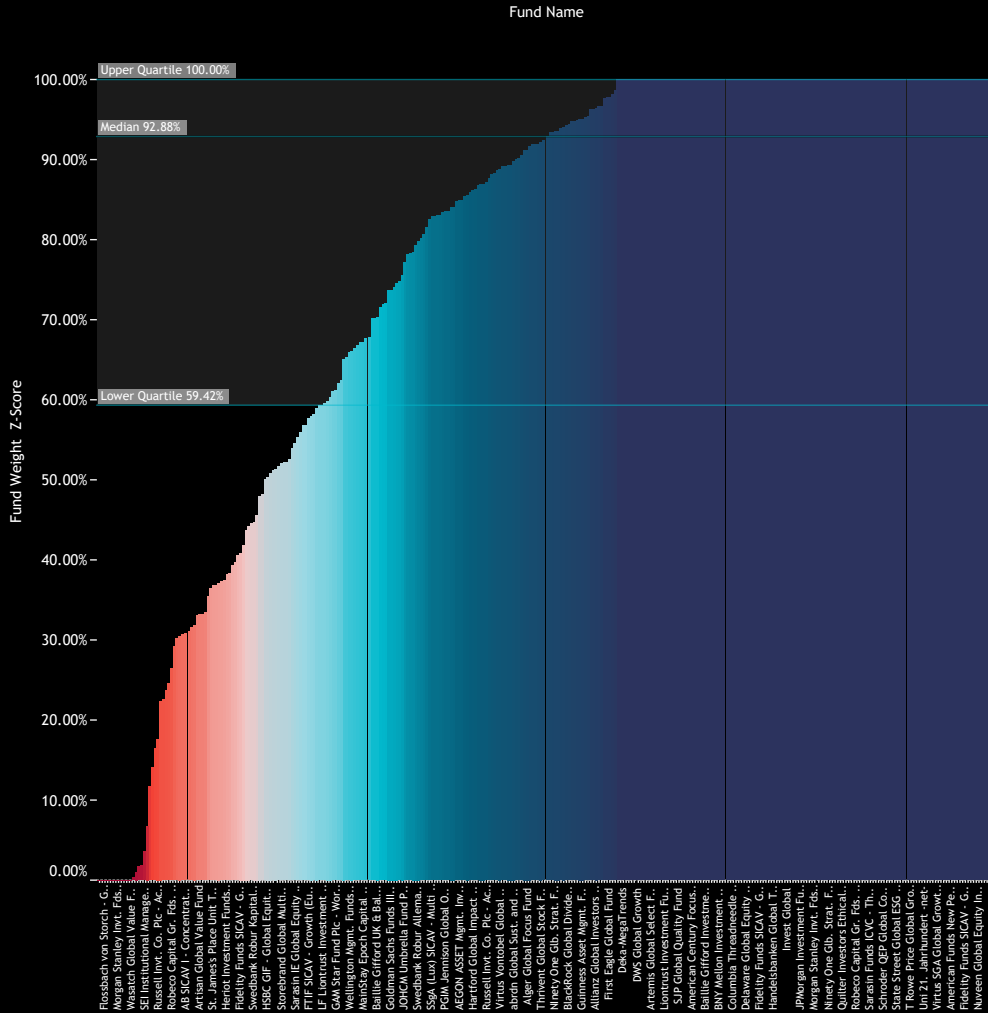
Source: Factset, Copley Fund Research

Section 5  
Semiconductors  
Gap Analysis & Investor Targeting

# Semiconductors: Active Fund Ownership Report

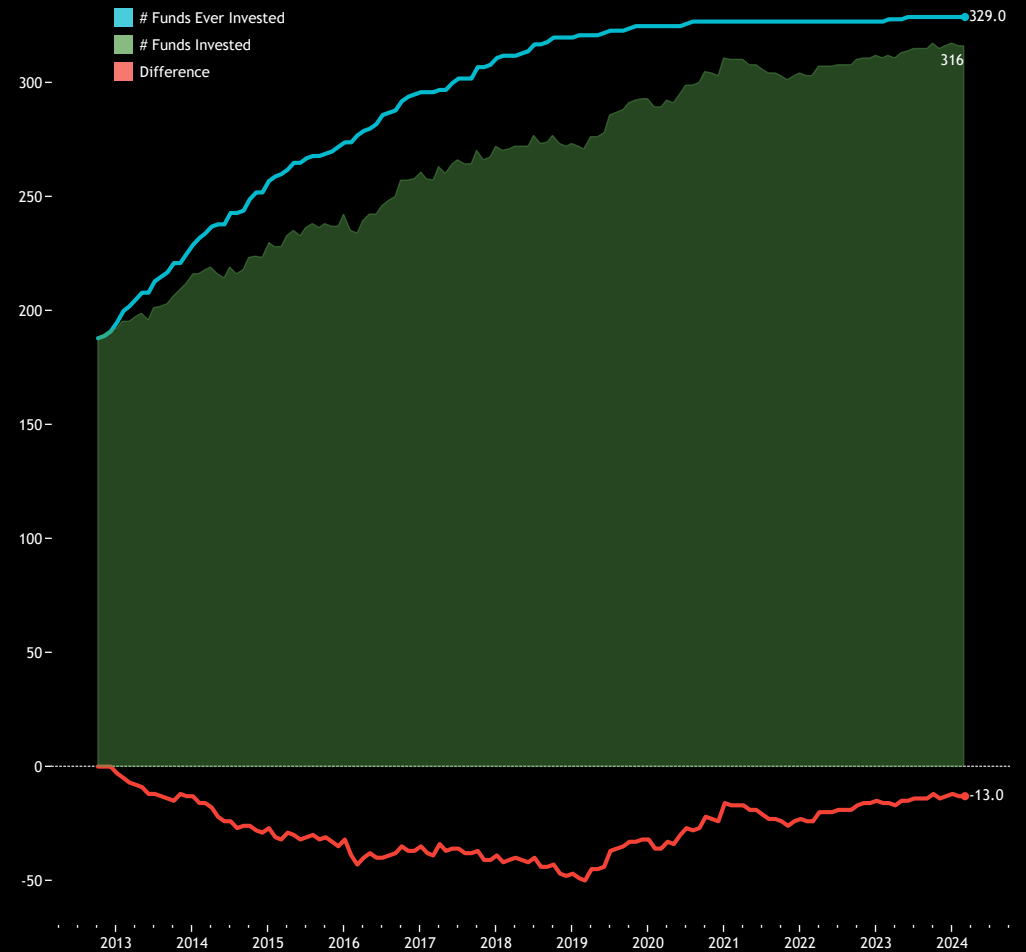
## Historical Gap Analysis

1: Semiconductors - Portfolio Weight Z-Score



The Z-Score of current weights versus history for all current and previous holders of Semiconductors stocks. A value of 100% means today's weight is the highest on record for that fund, zero the lowest.

2. Semiconductors - Current Number of Funds Invested, Total Number of Funds Ever Invested, Difference



The blue line shows the total number of funds (out of 339) who have ever owned Semiconductors stocks. The green area shows the number of funds invested at any one time and the red line the difference. A downward sloping red line means existing investors are closing out positions, a rising red line means previous investors are buying back in.

# Semiconductors: Active Fund Ownership Report

## Fund Level Historical Exposure Analysis

### 1: Semiconductors - Highest Fund Level Z-Score

| Fund Name   | Fund Z-Score | Fund Weight, % | Max Fund Weight, % |
|---|--------------|----------------|--------------------|
| Wellington Mgmt. Fds. (LU) - Global Research Equity Fund      | 100.0%       | 5.42%          | 5.42%              |
| William Blair Global Leaders Fund                             | 100.0%       | 7.06%          | 7.06%              |
| Wellington Mgmt. Fds. (LU) - Global Opportunities Equity ..   | 100.0%       | 7.89%          | 7.89%              |
| Swedbank Robur Globalfond                                     | 100.0%       | 20.41%         | 20.41%             |
| Schroder ISF - QEP Global Quality                             | 100.0%       | 7.07%          | 7.07%              |
| Russell Investment Co. - Global Equity Fund                   | 100.0%       | 6.11%          | 6.11%              |
| Rolinco NV  | 100.0%       | 11.39%         | 11.39%             |
| Old Westbury Large Cap Strategies Fund                        | 100.0%       | 10.87%         | 10.87%             |
| Mirova Global Sustainable Equity Fund                         | 100.0%       | 11.62%         | 11.62%             |
| MassMutual Premier Global Fund                                | 100.0%       | 9.94%          | 9.94%              |
| Franklin Global Equity Fund                                   | 100.0%       | 6.08%          | 6.08%              |
| Fidelity Funds SICAV - Global Thematic Opportunities Fund     | 100.0%       | 12.39%         | 12.39%             |
| ERSTE Stock Global  | 100.0%       | 13.58%         | 13.58%             |
| Baillie Gifford UK & Bal. Fds. - Global Alpha Growth          | 100.0%       | 6.72%          | 6.72%              |
| American Funds Capital World Growth & Income Fund             | 100.0%       | 10.73%         | 10.73%             |
| Waverton Invnt. Fds. Plc - Global Equity Fund                 | 100.0%       | 8.63%          | 8.63%              |
| Virtus SGA Global Growth Fund                                 | 100.0%       | 3.20%          | 3.20%              |
| UniNachhaltig Aktien Global                                   | 100.0%       | 9.90%          | 9.90%              |
| UniGlobal II  | 100.0%       | 10.13%         | 10.13%             |
| UniGlobal - net -   | 100.0%       | 10.19%         | 10.19%             |
| UniGlobal   | 100.0%       | 10.22%         | 10.22%             |
| UniFavorit: Aktien  | 100.0%       | 9.57%          | 9.57%              |
| Uni 21. Jahrhundert -net-                                     | 100.0%       | 9.29%          | 9.29%              |
| UBS (Lux) Key Selection SICAV - Global Equities (USD)         | 100.0%       | 11.46%         | 11.46%             |
| Treligga PLC - Ardevora Global Long-only Equity SRI Fund      | 100.0%       | 9.26%          | 9.26%              |
| Treligga PLC - Ardevora Global Long-only Equity Fund          | 100.0%       | 9.09%          | 9.09%              |
| Threadneedle Specialist Invnt. Fds. - Global Equity Income .. | 100.0%       | 9.10%          | 9.10%              |
| T Rowe Price Global Stock Fund                                | 100.0%       | 13.14%         | 13.14%             |
| T Rowe Price Global Growth Stock Fund                         | 100.0%       | 6.86%          | 6.86%              |
| Swisscanto (CH) IPF I - Equity Fund World Enhanced            | 100.0%       | 6.69%          | 6.69%              |
| Swiss Life Funds (CH) Equity Global Protect Enhanced (CH..    | 100.0%       | 2.26%          | 2.26%              |
| SWIP Overseas Growth ICVC - Global Growth Fund                | 100.0%       | 7.17%          | 7.17%              |
| Swedbank Robur Aktiefond Pension                              | 100.0%       | 6.54%          | 6.54%              |
| SPDR MSCI ACWI UCITS ETF                                      | 100.0%       | 7.60%          | 7.60%              |
| Skagen Global   | 100.0%       | 3.80%          | 3.80%              |
| SJP Global Quality Fund                                       | 100.0%       | 6.00%          | 6.00%              |
| SEB Fund 1 - Global Fund                                      | 100.0%       | 12.78%         | 12.78%             |
| SEB Dynamisk Aktiefond  | 100.0%       | 8.37%          | 8.37%              |
| SEB Aktiesparfond   | 100.0%       | 12.64%         | 12.64%             |
| Scottish Mortgage Investment Trust Plc                        | 100.0%       | 16.06%         | 16.06%             |

Source: Factset, Copley Fund Research

### 2: Semiconductors - Lowest Fund Level Z-Score

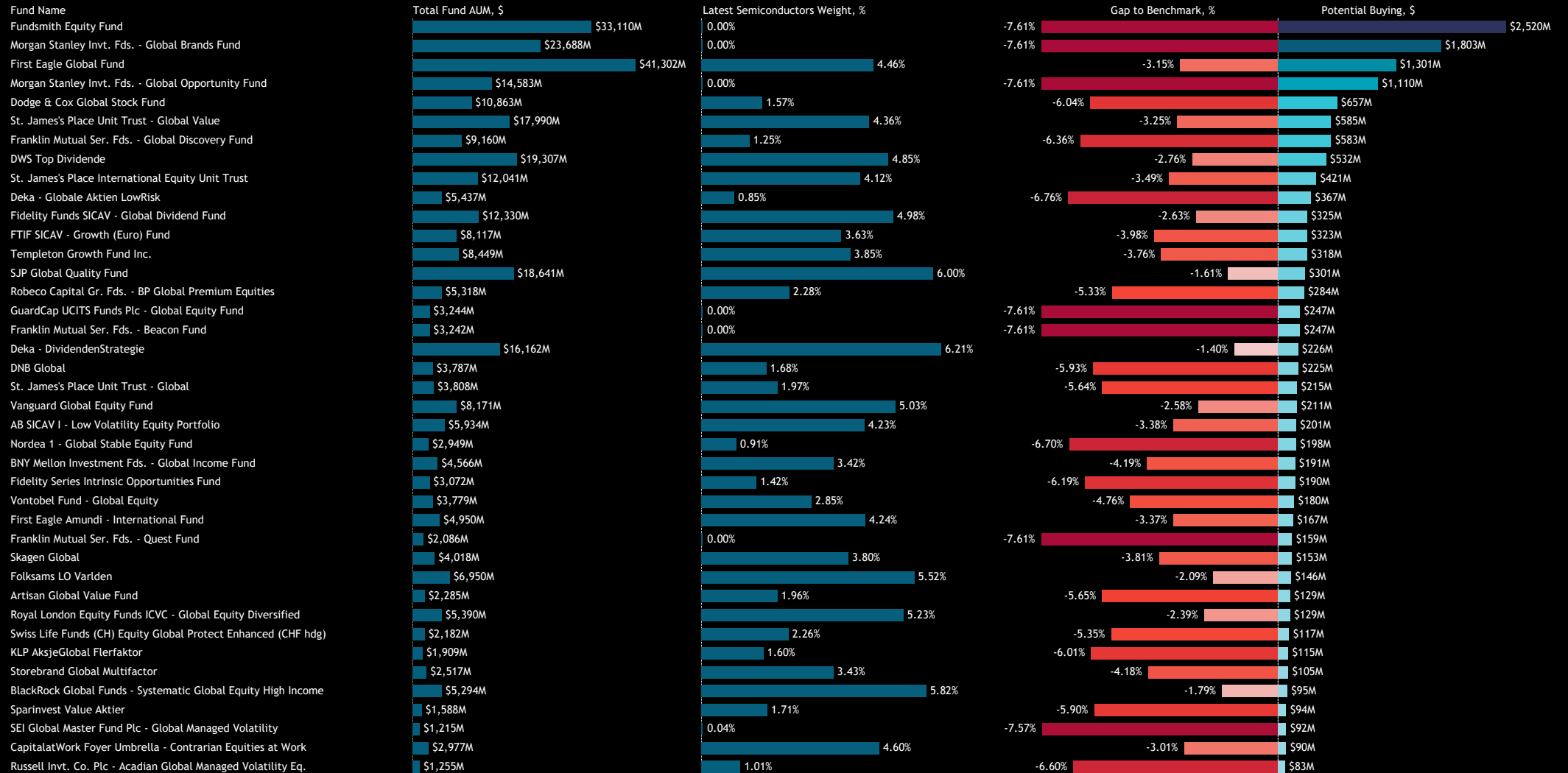
| Fund Name  | Fund Z-Score | Fund Weight, % | Max Fund Weight, % |
|--|--------------|----------------|--------------------|
| BNP Paribas Funds - Sustainable Global Low Vol Equity          | 0.0%         | 0.00%          | 3.54%              |
| Davis Global Fund  | 0.0%         | 0.00%          | 3.16%              |
| Flossbach von Storch - Global Quality                          | 0.0%         | 0.00%          | 3.31%              |
| Franklin Mutual Ser. Fds. - Beacon Fund                        | 0.0%         | 0.00%          | 1.34%              |
| Franklin Mutual Ser. Fds. - Quest Fund                         | 0.0%         | 0.00%          | 5.60%              |
| FTIF SICAV - Franklin Global Growth Fund                       | 0.0%         | 0.00%          | 5.53%              |
| Manulife Global Fund - Global Equity Fund                      | 0.0%         | 0.00%          | 2.24%              |
| Morgan Stanley Invnt. Fds. - Global Opportunity Fund           | 0.0%         | 0.00%          | 2.98%              |
| Polen Global Growth Fund                                       | 0.0%         | 0.00%          | 4.77%              |
| Ranmore Global Equity Fund Plc                                 | 0.0%         | 0.00%          | 11.71%             |
| Redwheel Funds SICAV - Global Horizon Fund                     | 0.0%         | 0.00%          | 6.48%              |
| Robeco Capital Gr. Fds. - QJ Global Conservative Equities      | 0.0%         | 0.00%          | 2.88%              |
| Wasatch Global Value Fund                                      | 0.0%         | 0.00%          | 3.10%              |
| SEI Global Master Fund Plc - Global Managed Volatility         | 0.3%         | 0.04%          | 1.59%              |
| LSV Global Managed Volatility Fund                             | 1.0%         | 0.98%          | 2.98%              |
| Artemis SmartGARP Paris-Aligned Global Equity Fund             | 1.8%         | 0.27%          | 6.51%              |
| Artemis SmartGARP Global Equity Fund                           | 1.9%         | 0.41%          | 6.62%              |
| SEI Institutional Managed Trust - Global Managed Vol. Fund     | 3.6%         | 0.03%          | 0.84%              |
| Lazard Investment Funds - Global Equity Income Fund            | 6.9%         | 2.69%          | 8.85%              |
| UNI-GLOBAL - Equities World                                    | 11.6%        | 0.52%          | 4.49%              |
| Russell Invnt. Co. Plc - Acadian Sustainable Glb. Equity UCL.. | 14.0%        | 0.94%          | 6.72%              |
| UBS (D) Equity Fund - Global Opportunity                       | 16.5%        | 0.96%          | 5.84%              |
| Russell Invnt. Co. Plc - Acadian Global Equity Fund            | 17.6%        | 1.12%          | 6.21%              |
| Natixis AM Funds - Seeyond Global MinVol                       | 22.4%        | 0.61%          | 1.62%              |
| MFS Low Volatility Global Equity Fund                          | 22.6%        | 1.73%          | 5.31%              |
| Voya Global High Dividend Low Volatility Fund                  | 23.7%        | 1.85%          | 6.32%              |
| Invesco Global Invnt. Ser. - Global Focus Fund (UK)            | 24.6%        | 4.64%          | 15.43%             |
| Robeco Capital Gr. Fds. - QJ Global Momentum Equities          | 26.4%        | 2.85%          | 8.56%              |
| Deka - Globale Aktien LowRisk                                  | 29.3%        | 0.85%          | 2.92%              |
| Robeco Umbrella Fund I NV - QJ Glb. Multi-Factor Equities      | 30.1%        | 2.71%          | 5.98%              |
| Touchstone Strategic Trust - Non-US ESG Equity Fund            | 30.5%        | 4.51%          | 14.77%             |
| Food SICAV - Global Equity Fund LU                             | 30.7%        | 2.44%          | 6.24%              |
| AB SICAV I - Concentrated Global Equity Portfolio              | 30.8%        | 3.73%          | 7.36%              |
| DNB Global   | 31.0%        | 1.68%          | 5.41%              |
| KLP AksjeGlobal Flerfaktor                                     | 31.6%        | 1.60%          | 3.26%              |
| Franklin Mutual Ser. Fds. - Global Discovery Fund              | 31.8%        | 1.25%          | 3.92%              |
| Dodge & Cox Global Stock Fund                                  | 33.0%        | 1.57%          | 3.66%              |
| Artisan Global Value Fund                                      | 33.2%        | 1.96%          | 5.90%              |
| Artisan Global Equity Fund                                     | 33.3%        | 0.90%          | 2.70%              |
| ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfon..        | 33.5%        | 6.51%          | 16.63%             |

Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Buying Potential

1: **Semiconductors** - Potential Buying if Fund Matches SPDR MSCI ACWI UCITS ETF Weight of 7.61%



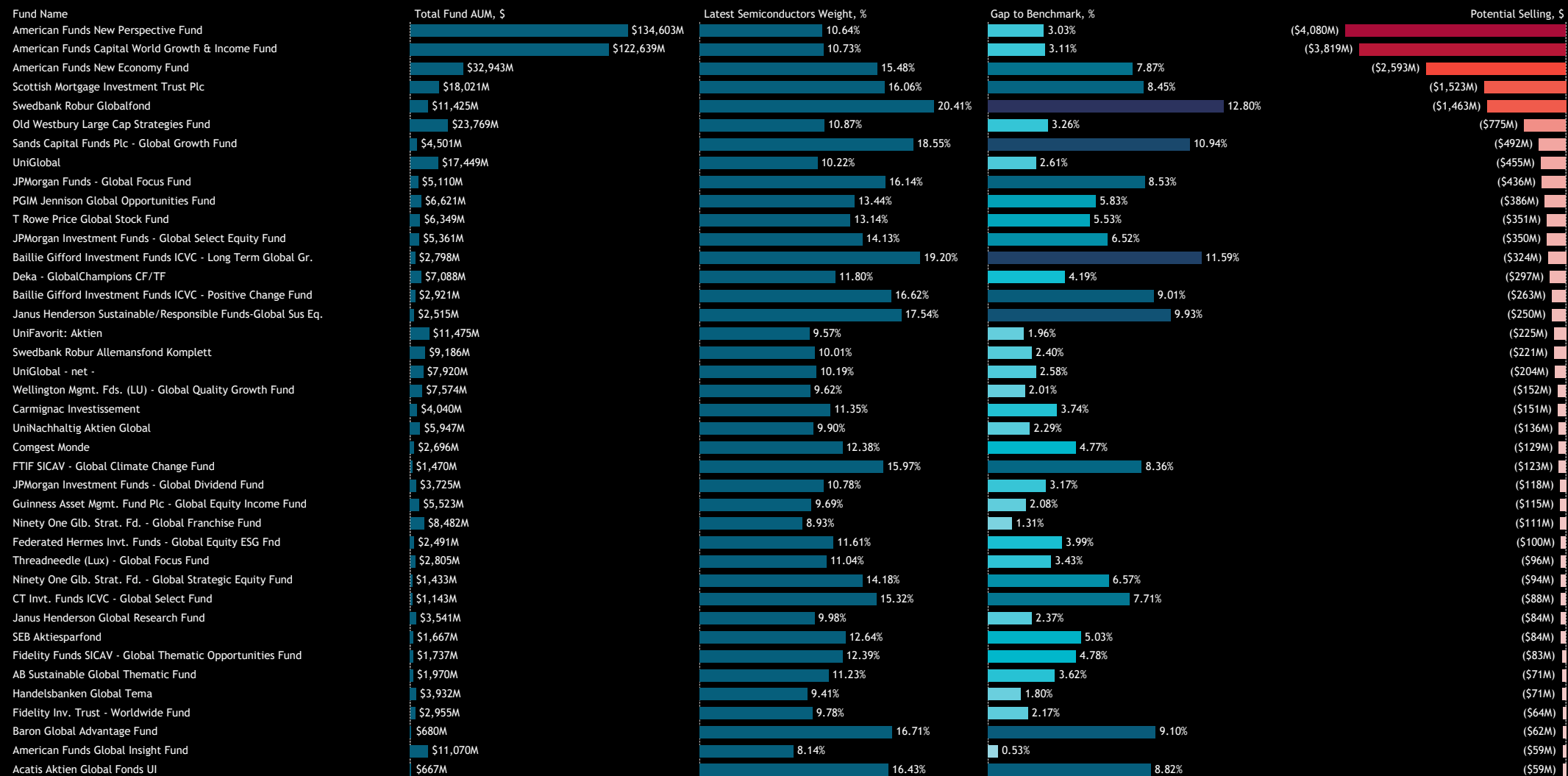
Source: Factset, Copley Fund Research



# Semiconductors: Active Fund Ownership Report

## Selling Potential

1: Semiconductors - Potential Selling if Fund Matches SPDR MSCI ACWI UCITS ETF Weight



Source: Factset, Copley Fund Research

# Semiconductors: Active Fund Ownership Report

## Falls in Stock Ownership

1: Semiconductors - Largest Decreases in Stock Ownership From Maximum Ever to Today

| Ticker    | Stock Name                                | Funds Invested % | Max Funds Invested, % | Gap to Max Funds Invested, % | Latest Fund AUM, \$ | Max Fund AUM, \$ | Gap to Max AUM, \$ |
|-----------|---|------------------|-----------------------|------------------------------|---------------------|------------------|--------------------|
| INTC-US   | Intel Corporation                         | 12.98%           | 28.32%                | -15.34%                      | \$1,009M            | \$2,920M         | (\$1,911M)         |
| QCOM-US   | QUALCOMM Incorporated                     | 15.63%           | 27.61%                | -11.98%                      | \$663M              | \$1,654M         | (\$990M)           |
| TXN-US    | Texas Instruments Incorporated            | 23.01%           | 30.97%                | -7.96%                       | \$2,453M            | \$2,878M         | (\$425M)           |
| AMS-CH    | ams-OSRAM AG                              | 0.88%            | 7.49%                 | -6.60%                       | \$1M                | \$160M           | (\$159M)           |
| MU-US     | Micron Technology, Inc.                   | 11.50%           | 17.70%                | -6.19%                       | \$1,491M            | \$2,261M         | (\$770M)           |
| WAF-DE    | Siltronic AG                              | 0.59%            | 5.67%                 | -5.08%                       | \$8M                | \$60M            | (\$52M)            |
| IFX-DE    | Infineon Technologies AG                  | 14.75%           | 19.47%                | -4.72%                       | \$901M              | \$1,411M         | (\$510M)           |
| 968-HK    | Xinyi Solar Holdings Ltd.                 | 0.00%            | 4.42%                 | -4.42%                       | \$0M                | \$166M           | (\$166M)           |
| 2454-TW   | MediaTek Inc                              | 7.96%            | 12.09%                | -4.13%                       | \$907M              | \$1,562M         | (\$655M)           |
| IPGP-US   | IPG Photonics Corporation                 | 2.36%            | 6.49%                 | -4.13%                       | \$335M              | \$594M           | (\$258M)           |
| QRVO-US   | Qorvo, Inc.                               | 2.95%            | 7.08%                 | -4.13%                       | \$40M               | \$417M           | (\$378M)           |
| 4185-JP   | JSR Corp.                                 | 0.29%            | 3.93%                 | -3.63%                       | \$0M                | \$26M            | (\$25M)            |
| ENPH-US   | Enphase Energy, Inc.                      | 5.01%            | 8.55%                 | -3.54%                       | \$251M              | \$266M           | (\$15M)            |
| 000660-KR | SK hynix Inc.                             | 5.60%            | 8.98%                 | -3.38%                       | \$731M              | \$1,423M         | (\$692M)           |
| 2379-TW   | Realtek Semiconductor Corp                | 1.77%            | 5.01%                 | -3.24%                       | \$13M               | \$26M            | (\$12M)            |
| 3034-TW   | Novatek Microelectronics Corp.            | 1.77%            | 5.01%                 | -3.24%                       | \$23M               | \$149M           | (\$126M)           |
| AMD-US    | Advanced Micro Devices, Inc.              | 16.22%           | 19.17%                | -2.95%                       | \$1,695M            | \$2,467M         | (\$772M)           |
| NXPI-US   | NXP Semiconductors NV                     | 13.86%           | 16.81%                | -2.95%                       | \$559M              | \$1,480M         | (\$922M)           |
| ADEA-US   | Adeia Inc.                                | 0.29%            | 3.13%                 | -2.83%                       | \$0M                | \$29M            | (\$29M)            |
| 6770-JP   | Alps Alpine Co., Ltd.                     | 0.88%            | 3.65%                 | -2.77%                       | \$2M                | \$77M            | (\$75M)            |
| CRUS-US   | Cirrus Logic, Inc.                        | 1.18%            | 3.32%                 | -2.14%                       | \$1M                | \$30M            | (\$29M)            |
| 6963-JP   | Rohm Co., Ltd.                            | 3.24%            | 5.31%                 | -2.07%                       | \$22M               | \$96M            | (\$74M)            |
| 6239-TW   | Powertech Technology Inc.                 | 0.88%            | 2.95%                 | -2.06%                       | \$1M                | \$36M            | (\$35M)            |
| MRVL-US   | Marvell Technology, Inc.                  | 8.85%            | 10.91%                | -2.06%                       | \$791M              | \$794M           | (\$3M)             |
| MXL-US    | MaxLinear, Inc.                           | 0.29%            | 2.36%                 | -2.06%                       | \$1M                | \$5M             | (\$4M)             |
| LRCX-US   | Lam Research Corporation                  | 17.40%           | 19.47%                | -2.06%                       | \$1,182M            | \$1,259M         | (\$76M)            |
| MELE-BE   | Melexis NV                                | 0.59%            | 2.61%                 | -2.02%                       | \$2M                | \$29M            | (\$28M)            |
| 3711-TW   | ASE Technology Holding Co., Ltd.          | 0.88%            | 2.88%                 | -1.99%                       | \$11M               | \$32M            | (\$21M)            |
| SMTC-US   | Semtech Corporation                       | 0.59%            | 2.48%                 | -1.89%                       | \$1M                | \$10M            | (\$9M)             |
| 5347-TW   | Vanguard International Semiconductor Corp | 0.00%            | 1.85%                 | -1.85%                       | \$0M                | \$13M            | (\$13M)            |
| 4966-TW   | Parade Technologies, Ltd.                 | 0.29%            | 2.06%                 | -1.77%                       | \$33M               | \$122M           | (\$89M)            |
| TEL-US    | TE Connectivity Ltd.                      | 12.68%           | 14.45%                | -1.77%                       | \$2,000M            | \$2,093M         | (\$92M)            |
| SWKS-US   | Skyworks Solutions, Inc.                  | 7.37%            | 9.12%                 | -1.74%                       | \$132M              | \$466M           | (\$334M)           |
| 2408-TW   | Nanya Technology Corporation              | 0.00%            | 1.49%                 | -1.49%                       | \$0M                | \$66M            | (\$66M)            |
| 009150-KR | Samsung Electro-Mechanics Co., Ltd        | 0.29%            | 1.77%                 | -1.47%                       | \$1M                | \$33M            | (\$32M)            |
| 009830-KR | HANWHA SOLUTIONS CORPORATION              | 0.00%            | 1.47%                 | -1.47%                       | \$0M                | \$7M             | (\$7M)             |
| 2303-TW   | United Microelectronics Corp.             | 1.18%            | 2.65%                 | -1.47%                       | \$14M               | \$272M           | (\$257M)           |
| 6723-JP   | Renesas Electronics Corporation           | 5.31%            | 6.78%                 | -1.47%                       | \$283M              | \$408M           | (\$124M)           |
| MCHP-US   | Microchip Technology Incorporated         | 9.73%            | 11.21%                | -1.47%                       | \$263M              | \$486M           | (\$224M)           |
| MPWR-US   | Monolithic Power Systems, Inc.            | 2.65%            | 4.13%                 | -1.47%                       | \$25M               | \$42M            | (\$17M)            |

Source: Factset, Copley Fund Research

## Methodology

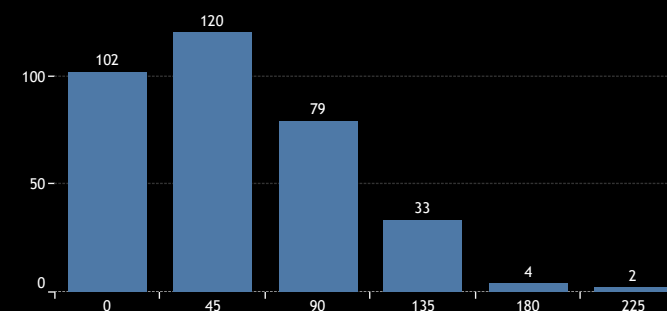
Copley Fund Research retrieves fund holdings data for 339 actively managed Global funds from our data provider, Factset Research Systems. Our history goes back to 9/30/2012, or when the fund was opened if after that.

Fund filings vary in their regularity, being usually either monthly, quarterly or semi-annually in frequency. Copley uses the very latest filings for each fund and adjusts portfolio weights based on the prices at the end of the previous month. This way we always have the most recent data for each of the funds in our analysis.

Copley utilise a number of filters and screens to ensure data accuracy, with any errors in the data referred back to our data provider to be amended at source.

All of the funds in our analysis are long-only actively managed equity funds, with multi-year holding periods. We do not include Hedge Funds in our analysis.

Days Delay from Last Update. # Funds



# Calculations

Copley uses 6 key measures of fund ownership throughout our analysis. Our chart packs presents these metrics in formats such as time series, snapshots at specific points, or comparisons between two time periods.

**Average Weight:** The sum of all fund weights in any dimension (region, country, sector, industry, stock) divided by the total number of funds (339) in the analysis.

**Funds O/W:** The total number of funds with a larger weight in any dimension than the SPDR MSCI ACWI UCITS ETF, divided by the total number of funds (339) in the analysis.

**Average Weight vs ACWI:** The average weight minus the weight in the SPDR MSCI ACWI UCITS ETF (cash removed and weights adjusted).

**AUM, \$:** The combined AUM allocated to a particular dimension across the 339 active Global funds in our analysis, in US Dollars

**Funds Invested %:** The total number of funds with any exposure to a dimension divided by the total number of funds (339) in the analysis.

**Estimate Fund Flows, \$:** The difference in share quantity between 2 periods for each stock in a fund multiplied by the price. These figures are rolled up to provide aggregate fund flows across countries, sectors and stocks.

## Style Classifications

Each fund is split into a Style category based on the P/E and P/B ratios of their portfolio compared to the benchmark

**Aggressive Growth:** At least 70% of the portfolio in stocks with a higher P/E than the SPDR MSCI ACWI UCITS ETF average, and at least 70% with a higher P/B ratio.

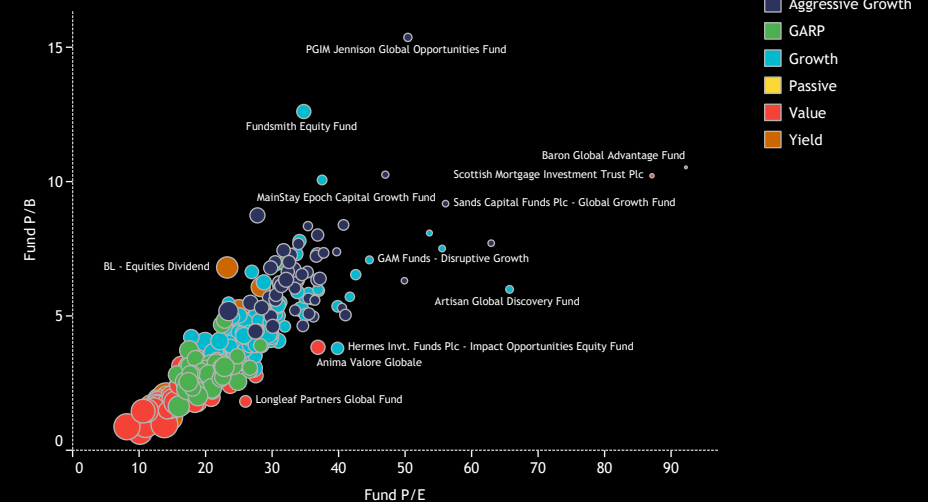
**Growth:** At least 50% of the portfolio in stocks with a higher P/E than the SPDR MSCI ACWI UCITS ETF average, and at least 50% with a higher P/B ratio.

**Value:** Either by the fund description, or at least 50% of the portfolio in stocks with a lower P/E ratio than the SPDR MSCI ACWI UCITS ETF average, and at least 50% with a lower P/B ratio.

**Yield:** As per the fund description only (i.e Yield, Dividend, Income funds).

**GARP:** All other iterations that do not fit under the above classifications.

Fund P/E vs P/B  
Size of Bubble = Dividend Yield





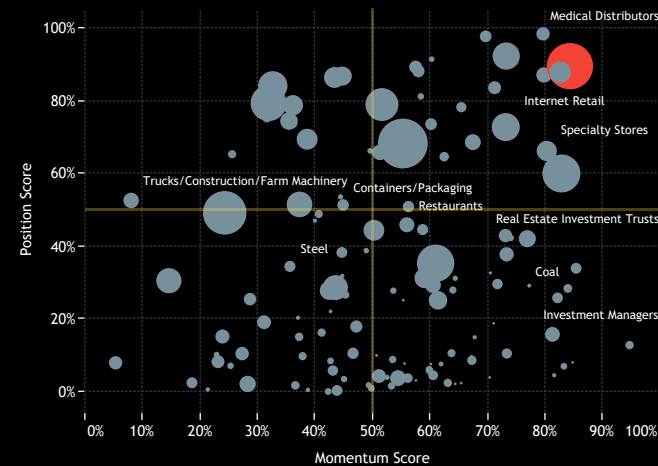
## Sentiment Grid

We use the Sentiment Grid in our analysis as a way of combining long-term positioning with shorter dated manager activity across all dimensions (country, sector, stock). Here we outline the metrics that go in to the Sentiment Grid calculation.

The Y-Axis measures where today's ownership levels in each dimension sit relative to the long-term range. We calculate the Z-Score of today's average weight, funds invested % and funds o/w % relative to all monthly observations in our fund history (going back to 9/30/2012). A figure close to 100% would indicate today's positioning is close to its maximum ever level, a figure close to zero, the lowest.

The X-axis provides a measure of short-term fund activity, or 'Momentum', by looking at the changes in average weight, funds invested %, funds o/w % and the net buyers vs sellers between 8/31/2023 and 2/29/2024, relative to each dimension. A figure above 50% means a dimension has seen relative increases in ownership, a figure below 50% indicates a relative decrease in positioning. The size of the bubble represents the average weight of each dimension

Country Sentiment Grid  
Momentum Measure Between 8/31/2023 - 2/29/2024



# Disclaimer

This report is published by, and remains the copyright of, Copley Fund Research Limited. Unless otherwise agreed with Copley Fund Research Limited, this report may only be used by the permitted recipients and shall not be provided to any third parties. Receipt of this report should not be taken as permission to reproduce, copy or use any of the charts or data in internal or external presentations. To do so requires separate permission from Copley Fund Research Limited.

Copley Fund Research Limited uses reasonable efforts to obtain information from reliable sources, but all Publications are provided on an "as is" basis without representation or warranty of any kind (neither express nor implied) and Copley Fund Research disclaims liability for any Publication not being complete, accurate, suitable and relevant for the recipient.

The comments in this publication are for general information purposes only and do not constitute personalised financial advice. No consideration has been taken of your personal financial situation or investment goals in preparing this publication and the distribution of this publication is not a personalised service under the Financial Advisers Act 2008. If you wish to receive personalised financial advice, please contact your Investment Advisor.

Further, nothing in this report shall constitute or be deemed to constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument. Should you undertake any such activity based on information contained in this report, you do so entirely at your own risk and Copley Fund Research shall have no liability whatsoever for any loss, damage, costs or expenses incurred or suffered by you as a result.

For US Investors this report is solely for Institutional use - not for public distribution.

For Canadian investors this report is solely for use by accredited investors.