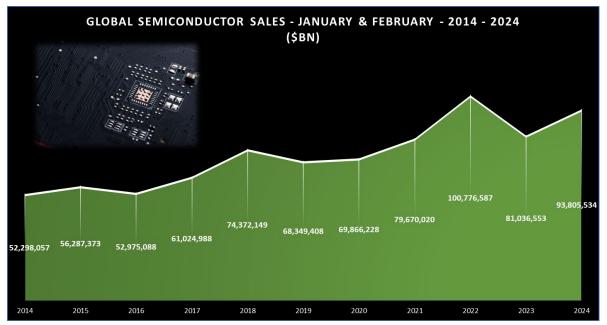
## The Resurgence and Expected Growth of Semiconductors

Semiconductors have endured a bumpy ride over the past few years. After a surge in demand during and immediately after the Covid 19 pandemic, some of the major producers of semiconductors suffered as demand for the all-important silicon chip returned to pre pandemic levels. Along with this, geopolitical tensions between the USA and China over the production and sale of chips has not made things any easier for companies operating in this space. However, the industry is seeing an overall resurgence, with Year over Year sales increasing by 16% in February 2024, totalling \$46.16bn worldwide. China, despite all the geopolitical issues, has witnessed the biggest increase in sales year over year, up 28%, with \$14.13 billion in reported sales throughout the month. While Europe and Japan saw declines in sales from the same period last year, total sales between the two markets for semiconductors still totalled \$7.8bn.



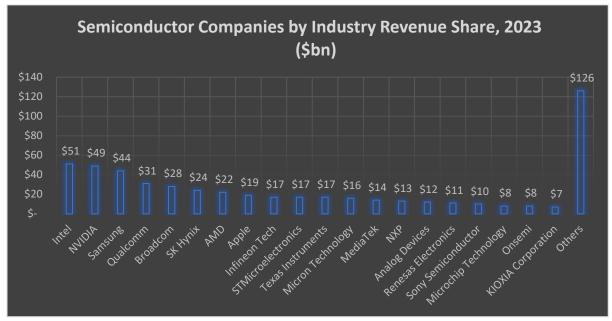
Source – Seaspray Private (data sourced from World Semiconductor Trade Statistics & Semiconductor Industry Association, 2024)

If we take just the first two months of 2024, we can see that it has recorded the second highest sales figure of the past 10 years, with \$93bn in semiconductor sales reported worldwide between January and February this year. Only 2022 tops this, and we must remember that this was at the height of the Covid inflicted supply chain constraints, which caused demand for chips to skyrocket. Since 2014, Global Semiconductor Sales for January and February have increased by an average annual growth rate of 7%. With this impressive start to 2024, and the importance of chips and graphics processing units (GPUs) for the development of large language Artificial Intelligence (AI) models, mobile phones and telecommunication devices, we should expect these sales figures to only increase going forward.



Source – Seaspray Private (data sourced from World Semiconductor Trade Statistics & Semiconductor Industry Association, 2024)

Having looked at global sales, we now highlight the largest companies in this space in our below chart, and the revenues that they have generated throughout 2023. Surprisingly, despite its stock market surge of over 200% in 2023, NVIDIA was behind Intel when it came to overall revenue from semiconductors. Intel generated \$51bn in revenue, while NVIDIA generated \$49bn. However, it is important to note that in 2023 NVIDIA doubled its revenues from semiconductors, up from \$21bn in 2022 to \$49bn last year. Samsung, the company best known for its phones and smart devices, generated \$44bn in revenue from semiconductors and was the third largest company by revenue. Looking ahead, it is possible NVIDIA could overtake Intel in 2024, due to the power and popularity of its H100 chip, which is the go-to chip in the creation and training of large language models. Microsoft used 20,000 of these chips to create a supercomputer to help in the development of OpenAI. A single H100 chip can cost around \$57,000.



Source – Seaspray Private (data sourced from World Semiconductor Trade Statistics & Semiconductor Industry Association, 2024)