AMD



NVIDIA

AMD vs Nvidia
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Executive Summary

Advanced Micro Devices (AMD) and Nvidia are the two biggest semiconductor companies in the world, and they frequently battle it out on the world stage in the fight over sheer computer performance. As the biggest and best producers of Graphics Processing Units (GPUs) there are a lot of differences between making a choice in the companies, but as a general overview of the typical differences seen between the two company's products are that Nvidia typically has the best computing performance and leads the world in raytracing, while being more expensive and marginally more difficult to obtain than AMD, while AMD typically has greater frame-rate performance and a better cost-to-performance ratio than Nvidia while not having the massive peaks in performance that Nvidia graphics cards see.

The two companies share a lot of similarities as semiconductor companies, though their differences are very noticeable and both have strong defenders and loyal customers due to their continuously improving reputations. And as AI comes to the forefront of the world's attention, both companies look to be turning their attention to some new horizons.

AMD Company Overview Profile

AMD is a semiconductor company that manufactures chips like GPUs and CPUs, competing with Nvidia and Intel on each respective front. AMD has been dominating the CPU market in competition with Intel, but is considered a bit behind in the GPU market compared to Nvidia. AMD also makes parts for data centers and gaming consoles like playstation and xbox.

The CEO of AMD is Dr. Lisa Su. She has been their CEO since 2014 and she has taken the company to new heights going from a \$3 billion dollar company to a \$200 billion dollar company. Under her, AMD has taken a hold of a 33% of the distribution of CPU's worldwide. Her board of directors includes Lead Independent Director Nora M. Denzel, advisor for Micron Mark Durcan, and COO of Sempra Energy Joseph Householder.

Nvidia Company Overview Profile

Nvidia is a world leader in chip manufacturing and has become famous inside of computer building circles for pushing the boundaries of GPUs and doing it frequently. Recently, as AI has gotten to be more of a focus on the global scale, Nvidia has become one of the world leaders in AI and machine learning systems as well.

Nvidia's CEO is Jensen Huang, he has been the CEO of Nvidia since its inception in 1993 and has seen all of the growth of the company and is regarded highly as a philanthropist and strong leader. Strong players in the board of executives in Nvidia include former chief marketing officer of the NFL Dawn Hudson, former Taco Bell president Melissa Lora, chairman emeritus Stephen Neal, and senior vice president Aarti Shah.

AMD Financial Statistics

Trailing P/E	128.39 in December 2023
Forward P/E	38.37 in December 2023
Beta	1.70 in 2023
52 Week High	227.30 in 2023
52 Week Low	93.12 in 2023
1 Year Moving Average	162.92 in 2023
50 Day Moving Average	154.63 in 2023

Revenue	\$22.68 Billion (annual 2023)
Net Profit	\$854 million (annual 2023)
Trading Price	\$146 (December 2023)
Average Volume	1,279,987,600 million
	according to Yahoo Finance
Shares Outstanding	1.625 Billion in 2023
Float	1.61 Billion in 2023
Market Cap	238.14 Billion in 2023
EPS	\$0.12 in 2023
	-86.52% lower than 2022

Nvidia Financial Statistics

Trailing P/E Ratio	116.96 for Fiscal Year 2023
Forward P/E	57.60 as of October 3rd, 2024
Beta	1.7385 (Jan - Dec 2023), FY is different
Annual Dividend	\$10 billion
Annual Dividend Yield	\$10.44 billion
52 Week High	122.43 in FY 2023
52 Week Low	98.91 in FY 2023
1 Year Target Estimate	152.44 in FY 2023 according to NASDAQ
50 Day Moving Average	115.775 for the current year 2024

Revenue	\$27 billion(26.97 to be exact) in 2023
Net Profit/Loss	\$27 billion/\$4 billion in 2023
Trading Price	\$36.56 average of 2023
Average Volume	240,983,647 according to WSJ below
Shares Outstanding	\$24.87 billion for Fiscal Year 2023
Float	23.49 billion shares (as of 10/10/24)
Market Cap	\$1.223 trillion in FY 2023
EP8	BASIC: 1.76 million, DILUTED: 1.74 million
	And this is based on an average BASIC share amount of 2,487(Diluted is 2,507)
	This is down 55% from 2022(3.85 million)

AMD Social Media Presence

AMD too has great social media presence, having an officially sponsored account with youtube, tiktok, x (formerly known as twitter), facebook, and instagram. They post videos to their platforms nearly every day and engage with people on each respective platform with solid consistency, though their posts on each of their social media pages are the same. Their facebook posts, twitter posts, and instagram posts are all the same exact videos in the same order. On tik tok they have rehashes and cuts of their videos on the other platforms, and on their youtube they post the same videos as they do on the other platforms, with an additional long form video or two in the form of a podcast or talk.

AMD does focus a lot of time into promotional and collaborative content, which is a good thing for appealing to a niche audience, but in the modern day having a social media presence is the greatest way to spread your company influence to the most people the most efficiently.

<u>AMD Social Media Improvements</u>

AMD is more focused on promotions and collaborations with other companies or individuals, rather than creating an interactive social media platform or trying to connect with their followers. For the reputation which AMD holds, their social media page seems quite dull and there does not seem to be many likes or comments for the amount of posts which they are sending out. AMD needs to try and connect more with their followers by implementing surveys or giveaways that can make a follower feel a part of the community.

AMD is mostly suitable to younger audiences which means it needs to utilize entertaining tiktoks or reels that are able to provide a good outlook for the brand.

Statistically, AMD only has 1.9 million followers on Instagram and 1.2 million followers on X while NVIDIA stands ahead at 2.1 and 2.2 followers on Instagram and X respectively.

AMD Social Media Investment

The investments which AMD could take towards a more powerful social media outlook would be putting more money towards their social media content. For example, showing high-quality technical explanation videos or some behind the scenes footage would be quite useful. Even using targeted pop-up ads on social media platforms like X, Facebook, or Instagram can boost their social media relevancy. These investments would definitely take a solid year or two but slow progress can make instant boosts for a company like AMD.

There is not too high of a skillset which AMD's social media management would have to worry about, just a basic experience in marketing and advertising would provide a handful in terms of social media growth and engagement. According to BLS.gov, social media managers in 2023 made a median pay of \$156,580 per year. And according to MediaRadar, AMD spent less than 100 million on its social media marketing in 2023, which is small for a company of their size.

Nvidia Social Media Presence

Nvidia has developed a robust social media presence that aligns with its global influence in gaming, AI, and tech industries. The company utilizes multiple platforms like Twitter, Facebook, Instagram, YouTube, and TikTok to engage a wide audience. Through these channels, Nvidia shares product updates, game previews, and technological advancements, particularly in areas like AI, data centers, and gaming. For example, its TikTok videos highlight innovations like NVIDIA's, enhancing gaming experiences, while its Twitter accounts provide updates on AI developments.

Community engagement is a strong focus for Nvidia, seen through interactive campaigns like online contests and Q&A sessions that encourage users to participate. These activities not only boost user interaction but also help build a loyal fan base. The company is also known for promoting conversations around AI research and software development, allowing users to follow Nvidia's innovation journey

Nvidia Social Media Improvements

While Nvidia excels in keeping its audience informed, some critics suggest the company could benefit from diversifying its content across platforms, as many of its posts are repeated across different channels. Improving storytelling and incorporating more user success stories could further deepen its connection with its audience.

- 1. Enhanced Storytelling: Nvidia could further develop its storytelling by sharing more user-generated content, such as customer testimonials and real-world applications of their technology.
- 2. Content Diversification Nvidia tends to post similar content across multiple platforms, which can limit the unique value each social media platform brings. Creating platform-specific content could better target audiences on each channel.
- 3. Improved User Engagement: Although Nvidia already runs interactive campaigns, the company could increase direct engagement with its audience by hosting more live events like webinars, tutorials, and AMAs (Ask Me Anything) sessions.
- 4. Localization and Targeted Marketing: Nvidia could benefit from creating more localized content to cater to different regions and languages, particularly as it operates in over 40 countries.

Nvidia Social Media Investment

Due to US regulations, NVIDIA can only sell slower chips to China, and this is one of the reasons why China has urged companies to stray away from purchasing NVIDIA chips in favor of faster domestic options. Which could be dangerous considering the majority of NVIDIA's supply chain is based in the Asia-Pacific region. Taiwanese-based semiconductor company TSMC manufactures most of their chips, and this is an issue because their supply chain can be easily disrupted by political unrest or even natural disasters in extreme cases.

NVIDIA faces fierce competition from the likes of Intel and AMD, two key players in the semiconductor industry who are also developing their own AI chips. Additionally, Apple has begun to enter the fray, and, with a market value even greater than that of NVIDIA, they are pouring more and more money into the development of their own silicon and AI technology. Apple realizes the importance of being at the forefront of AI technology, and, although they began later, they're able to invest heavily in order to reduce the competitive advantage that NVIDIA currently holds.

<u>Risks of Investment – AMD</u>

The risks associated with investing into a company like AMD in the stock market could be potentially risky as any other stock. However, AMD has had a solid run in the stock market and ranks as 11th in Yahoo Finance's list of best tech stocks to buy. While a buyer should not consider buying AMD's stock a particular "risk" due to their financial data and prior history and consistent trend, they must be wary that the company is fighting its own share of battles. AMD's second quarter over-year revenue growth was only a mere 9%, while Nvidia had nearly triple that number at the time. Despite this, investors remain positive the rewards outweigh the risk, and with AMD's investment in AI and taking a piece of Nvidia's market share that they will be a stock to look into.

<u>Risk of Investment – Nvidia</u>

One must plan accordingly when deciding to invest in NVDA stock, as it is highly volatile, and due to certain analysts claiming that there is a recession going on/about to go on, the value may decrease and go against the market.

- China recently told companies not to buy NVIDIA chips and to invest their money in Chinese chip manufacturers instead. This has caused NVIDIA's stock to go down.
- The company is subject to stringent and evolving data regulation laws.
- Costly to adequately protect the company IP rights.
- Irresponsible usage of AI technologies in accordance with NVIDIA tech could create problems.

Conclusions: Xander

As a preface, I've used both AMD and Nvidia products (Nvidia GPU and AMD CPUs and GPUs) and I have a slight preference for the affordable and high frame-rate performance for AMD's GPUs and CPUs. Having learned a lot about both companies though I find myself extremely interested in the future of Nvidia and interested in their apparently reliable stocks and future. Something I find interesting is both companies are headquartered in the same city of Santa Clara California, which is practically the modern equivalent of housing two opposing armies in the same village.

Ultimately, price will always be king in my house and maximizing price to performance ratio is the determining factor in almost all my decisions financially, so AMD will be my product of choice for the future. But when I get more heavily into investing I will for sure be investing in Nvidia due to their comparative ease of investment and higher revenue and safety in investment.

Conclusions: Suvil

AMD and Nyidia are two of the leading companies when it comes to computer processing parts, but there continues to be debate over which brand will thrive more. The two companies seem to share a similar standing when it comes to their social media outlook, but the real battle lies between their financial standings. As of now, Nvidia does stand higher financially and is ahead of AMD when it comes to product quality and AI investment. However, I believe that AMD still has a bright future ahead and has done well to compete with Nvidia, and if they make the right investment decisions, they can eclipse ahead of Nvidia. While AMD is still a bit behind Nvidia, they have now gotten ahead of their long time competitor Intel, which means this company has the firepower to also go ahead of Nvidia. Using both my research on AMD and my team members research on Nvidia, I would have to go with investing in Nvidia due their higher level of success in the production and stock market area, along with a better development of AI technology. With this being said, things can change for both companies in the next few years and AMD does have the resources and potential to climb ahead of Nvidia.

Conclusions: Nisith

In the semiconductor market there are two leading companies which are AMD and Nvidia. AMD and Nvidia have very different financial aspects of their companies. Nvidia has a significant lead with their finances and their outlook into the future, investing in AI helps them stay ahead of competition. AMD is a bit behind on their financial aspect of this comparison but they are still a strong company with a very good outlook on CPU processing units and their new X3D chipset that helps improve performances in gaming and content creation. Compared to Intel who right now is having many problems with their new chipsets and is falling behind more and more each year to AMD. On the social media aspect of both of these companies they are very similar, they both need improvements on social media engagement and targeted marketing. If I was investing in one company it would have to be Nvidia, as a person who had the chance to invest when the stock prices were much lower than what it is now I would like not make the same mistake as I have before. Nvidia also has a better outlook in the future with their GPU's getting better and better and their investments in AI improving their DLSS technology.

<u>Conclusions</u>: <u>Ecem</u>

NVIDIA's innovations, especially in AI and financial trajectory position, is a stronger option compared to AMD's offerings in cost-efficiency and reliability. In conclusion, NVIDIA is an advantageous choice for investors looking for long-term growth potential in the technology industry.

Conclusions: Syed

NVIDIA is a key player in the semiconductor industry, and, with its ever-increasing investment in AI, has made it clear that it is here to stay. It shouldn't be ignored that the company was able to increase its year-over-year market cap 186% to 3.45 trillion, putting it right behind Apple's 3.56 trillion. Some stock market analysts are happy, however, the company is not without its fair share of drawbacks. With a supply chain heavily-dependent on the Asia-Pacific region, poor diversification of products, and a social media presence with clear improvement capabilities, it is clear that there are some areas that NVIDIA should focus on if they wish to continue their upward trend of dominance in the market. Based on our group's research, I believe that a major reason for NVIDIA's lead over AMD is due to its popularity and constant mention in major stock market publications. In the next 5 to 10 years however, I believe that the more successful company of the two will be the one that branches out in order to leverage other markets(such as mobile devices and wearables), and begins to manufacture domestically to be less reliant on the tense Asia-Pacific region.



Thank you very much for your attention!

We hope you learned a lot about the two biggest semiconductor companies;

AMD and Nvidia!

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