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AI Stocks: Tech Giants, Cloud Titans, Chipmakers Battle For An Edge



REINHARDT KRAUSE | 08:07 AM ET 05/01/2024

As investor interest in artificial intelligence surges, many companies suddenly tout AI product roadmaps. But finding legit AI stocks that already garner revenue from generative AI, like **Microsoft (MSFT)** and **Nvidia (NVDA)**, is a challenging endeavor for investors. For many companies — such as Google parent **Alphabet (GOOGL)** — the rise of generative AI poses both risk and opportunity.



Amid the emergence of **generative AI** — which can generate text, images, sounds and video — it's a good time to be cautious amid the hype.

In general, look for AI stocks that use artificial intelligence to improve products or gain a strategic edge.

Nvidia A Bellwether For AI Stocks

Capital spending is surging at Facebook-parent **Meta Platforms (META)** and cloud computing giants. Meta's stock took a hit amid a weaker-than-expected revenue outlook. Meanwhile, cloud computing giants **Amazon.com (AMZN)**, Microsoft and Google sell AI services to business customers.

Further, Microsoft is the biggest investor in startup OpenAI, the leader in generative AI training models.

The top artificial intelligence stocks to buy span chipmakers, software companies, cloud computing service providers and technology giants that utilize AI tools in many applications.

A bellwether for AI stocks, chipmaker Nvidia's shares have jumped 74% in 2024 after surging 239% last year. Nvidia faces growing competition from **Advanced Micro Devices (AMD)**.

However, AMD stock fell on the chipmaker's Q1 earnings report and outlook. AMD's guidance for sales of MI300 accelerator chips came in below rosy expectations. Analysts are focused on the rate of growth in MI300 bookings into 2025.

Meanwhile, **Broadcom (AVGO)** and **Marvell Technologies (MRVL)** are other AI chipmakers to watch.

Data Center Infrastructure

Arista Networks (ANET) has dropped out of the **IBD 50 roster of growth companies**. While not direct competitors, **Nvidia and Arista** are squaring off in part of the data center market.

Shares in **Astera Labs (ALAB)**, a maker of data center networking chips and software, popped on its initial public offering on March 20. Astera was recently featured in the **New America** section of IBD.

Super Micro Computer (SMCI) had been one of the hottest AI stocks. But **SMCI stock** plunged on April 19.

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Meanwhile, the Nasdaq jumped 43% in 2023, boosted by buzz around AI stocks.

AI Stocks: Cloud Computing Giants

Further, most enterprise software makers will not monetize gen AI, or "conversational AI," in a material way until late 2024 or 2025, analysts say.

Salesforce (CRM) has released its Einstein 1 Studio, a set of low-code AI tools for customizing Einstein Copilot and embedding AI into Salesforce apps.

Many other software firms are still testing how to monetize AI products. They include **ServiceNow (NOW)**, **Adobe (ADBE)** and **Workday (WDAY)**.

So far, the biggest demand for AI chips has come from cloud computing giants and internet companies.

But analysts expect a market for "edge AI" — on-device processing of AI apps to emerge. While "training" AI models is now the biggest market for chipmakers like Nvidia, the market will shift to "inferencing," or running AI applications, in the long run.

Qualcomm (QCOM) aims to build Snapdragon AI chips for Android smartphones and the "internet of things." **ARM Holdings (ARM)** is another AI chip maker.

AI Stocks: How Will Apple Fire Back?

Meanwhile, **Apple (AAPL)** topped the \$3 trillion market valuation mark in 2023 despite having no immediate answer to ChatGPT. That could **change in 2024**.

Apple reportedly is in talks with Google over **licensing its "Gemini" artificial intelligence training model for use in iPhones**.

Also, AI technology uses computer algorithms. The software programs aim to mimic the human ability to learn, interpret patterns and make predictions.

Until recently, machine learning was largely limited to models that processed data to make predictions. The AI models focused on pattern recognition from existing data. Corporate spending on AI projects was modest as companies mulled return on investment.

Now many companies are scrambling to launch generative AI pilot programs. But investors want AI stocks to show progress in boosting revenue as exploratory projects translate into tangible demand.

AI Stocks To Watch By Industry Group

Company	Symbol	Comp Rating	Industry name	AI angle
Nvidia	(NVDA)	99	Elec-Semiconductor Fabless	Cloud computing giants buying more chips to train AI models or run AI workloads. Big lead over rival Advanced Micro Devices (AMD) .
CrowdStrike	(CRWD)	96	Computer Software-Security	AI chatbots expected to automate more functions in security-operations centers and reduce the time to detect computer hacking.
Arista Networks	(ANET)	94	Computer-Networking	Sells computer network switches that speed up communications among racks of computer servers packed into "hyperscale" data centers. With AI growth, internet data centers will need more network bandwidth.
Microsoft		79	Computer Software-Desktop	Biggest investor in generative AI startup Open AI, whose ChatGPT users require Azure cloud services. Microsoft's business AI assistant, Office 365 Copilot, will have general availability on Nov. 1.
Salesforce	(CRM)	83	Computer Software-Enterprise	Integrating conversational AI assistants within the user interfaces of all Salesforce apps. Expected to use a mix of subscription and consumption-based pricing.
Amazon.com	(AMZN)	95	Retail-Internet	Alexa smart assistant lags in chatbot technology. Cloud computing unit working with OpenAI rivals Anthropic, Hugging Face and Falcon 40B.

New generative AI models process "prompts," such as internet search queries, that describe what a user wants to get. Generative AI technologies create text, images, video and computer programming code on their own.

Companies will aim to boost productivity by developing customized AI for specific industries. Proprietary company data will be used to train AI models.

AI systems require massive computing power to find patterns and make inferences from large quantities of data. So the race is on to build AI chips for data centers, self-driving cars, robotics, smartphones, drones and other devices.

Foundation Models Boost Artificial Intelligence

One key question for investors is whether tech industry incumbents will be the big generative AI winners. Or, will a new wave of AI startups eventually dominate?

Large language models provide the building blocks to develop applications. LLMs help AI systems understand the way that humans write and speak. Also, LLMs require training data for specific tasks. Companies with access to troves of data hold an edge.

OpenAI is part of a wave of LLM startups that includes AI21 Labs, Anthropic and Cohere. Anthropic introduced Claude 3, the newest version of its chatbot, and claimed its performance is better than OpenAI's GPT-4.

However, OpenAI's dominance faces a **challenge from open-source LLMs**. Musk's xAI announced it will open source its Grok LLM, and released the source code for public use.

Meta Platforms and **IBM (IBM)** on Dec. 5 joined with 40 other companies and organizations to **form the AI Alliance** – an industry group that will support open-source AI models versus proprietary systems from OpenAI, Google and others. Members of the AI Alliance include **Intel (INTC)**, AMD and **Oracle (ORCL)**.

For example, Hugging Face is an open-source community that offers tools to enable users to build LLMs. Hugging Face recently raised \$235 million in a Series D funding round. Investors included Google, Amazon, Nvidia, Intel, Qualcomm, IBM and Salesforce.

Amazon in September said it would invest up to \$4 billion in Anthropic, a rival of OpenAI. Amazon owns a minority stake in Anthropic, which will use Amazon's cloud-computing services.

How Will Software Firms Monetize AI?

Enterprises will spend more than \$40 billion worldwide on gen AI solutions in 2024, up 106% from the previous year, forecasts International Data Corp. The forecast includes software, hardware and business/IT services.

Meanwhile, IDC forecasts that the market will hit \$151 billion by 2027, growing at an average rate of 86% annually.

Analysts expect Microsoft's business AI assistant, Office 365 Copilot, to boost revenue in 2024. Microsoft introduced higher-than-expected pricing, at \$30 monthly per user, for its Copilot AI software tools.

In addition, Adobe last year announced the commercial availability of its Firefly generative AI tools. Price hikes related to integrating Firefly tools into cloud products took effect Nov. 1.

At its Dreamforce customer conference, Salesforce touted new generative AI initiatives. But the company didn't hold an analyst day to discuss financial goals at the event. UBS models only a 1% revenue boost for CRM stock from generative AI in fiscal 2025, which starts in February.

Meanwhile, cybersecurity firm **CrowdStrike Holding (CRWD)** announced pricing for its "Charlotte" generative AI upgrade. It will cost \$20 annually per endpoint — either a laptop or smartphone user.

Artificial Intelligence Stocks

Venture capitalist Marc Andreessen once observed how "software is eating the world" by remaking industries through automation. In the same way, artificial intelligence is expected to transform software.

For many companies, gaining an edge with AI requires ongoing investments in computing, networking and data-center infrastructure.

At its GTC conference on March 18, Nvidia unveiled its new Blackwell family of processors to succeed the company's current Hopper model, which has been in short supply. The new Blackwell processors are due out later this year.

Broadcom hosted its "Enabling AI Infrastructure" event in San Jose, Calif. on March 20. It announced a new customer, "a hyperscaler in consumer AI."

Cybersecurity firms also are among AI stocks to watch. They include **Palo Alto Networks (PANW)** and CrowdStrike and **Cloudflare (NET)**.

As software companies integrate generative AI tools into products, their customers will spend more on software, analysts say. For example, TD Cowen recently estimated in a note to clients that generative AI software spending will boom from \$1 billion in 2022 to \$81 billion in 2027, representing a 190%, five-year compound annual growth rate.

Artificial Intelligence Venture Funding

Further, venture capital is flowing to AI startups.

Inflection AI recently raised \$1.3 billion in a round led by Microsoft and Nvidia. The funding round values Inflection AI at \$4 billion. The company's flagship LLM application is Pi, a personal assistant.

Meanwhile, Anthropic last year announced it has raised \$450 million in a funding round led by Spark Capital. Google, **Salesforce (CRM)**, Sound Ventures and **Zoom Video Communications (ZM)** took part in the funding.

Also, Andreessen Horowitz led a \$150 million funding round for Character. AI, which now has a valuation of over \$1 billion.

Meanwhile, AI startup Adept recently raised \$350 million and is also at a valuation of over \$1 billion. Adept has studied how humans use computers — from browsing the internet to navigating a complex enterprise software tool — to build an AI model that can turn a text command into sets of actions.

Further, venture capital money also is flowing to many AI chip startups.

Also, Nvidia faces more competition from AI chip startups Cerebras, Sambanova and Graphcore. AI chip startups also include Groq, Hailo Technologies, Kinera, Luminous, Ateris IP and Mythic.

Tech Giants Among Best AI Stocks

AI usage is exploding in facial and voice recognition technology, medical diagnostics, algorithmic trading, and automated customer-service bots. Meanwhile, tech giants are expanding AI initiatives.

In e-commerce, Amazon plans to add ChatGPT-style search to its online store.

Amazon for years has used AI to customize online retail offerings and recommend products to website visitors. The e-commerce behemoth also uses robotics and AI at its fulfillment centers.

Meanwhile, at the Google I/O 2023 developers event last year, Alphabet showcased how generative AI will be integrated into search, maps, Workspace, photos, cloud computing and Android devices. Also, Google unveiled more of its ad strategy amid the emergence of generative AI at Google Marketing Live on May 23.

Further, AI tools are playing a big role in Facebook-parent Meta's legacy business and new initiatives. As it moves into the metaverse, Meta said it has built a new artificial intelligence supercomputer. Called the AI Research Supercluster, the Meta computer uses chips from Nvidia.

Also, Meta last year hosted an "AI infrastructure" event. Meta disclosed plans to build custom AI chips to be used in its data centers. The new Meta Training and Inference Accelerator, or MTIA, is due out in 2025.

Top AI Stocks: Software Market Upside

Meanwhile, generative AI wars are heating up.

Software maker **Atlassian (TEAM)** announced "Atlassian Intelligence" at a recent user conference. It embeds OpenAI and LLM technology as a foundational element across all the company's cloud products.

Snowflake (SNOW) and startups such as Databricks aim to shake up the vector database market with lightning-fast analysis of "unstructured data" gathered from sensors. For example, one app would be streaming video analysis.

Further, artificial intelligence stocks to watch include information-technology services firms such as IBM, **Accenture (ACN)**, and **Epam Systems (EPAM)**. Also, Accenture has been gobbling up AI startups.

Meanwhile, IBM continues to acquire artificial intelligence companies, including Databand.ai, Turbonomic, ReaQta, MyInvenio and WDG Automation.

"We continue to believe the near-term gen AI revenue opportunity for IT Services vendors may be modest," said Bank of America analyst Jason Kupferberg in a report. "We expect a meaningful ramp in the next few years as enterprises move beyond data readiness and proof-of-concept initiatives to implement more ambitious gen AI solutions."

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