

# US Stock Express

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**Largest Companies by Marketcap**  
Companies: 10,663    total market cap: \$132,244 T    📄 🗑️ 📌

Rank by Market Cap Earnings Revenue Employees P/E ratio Dividend % Market Cap gain More +

Rank	↑	Name	📈 Market Cap	📈 Price	📈 Today	📈 Price (30 days)	Country		
☆	1	<b>NVIDIA</b> <small>NVDA</small>	\$4.169 T	\$171.56	↓ 6.02%		🇺🇸 USA		
☆	2	<b>Apple</b> <small>AAPL</small>	\$4.144 T	\$279.25	↑ 1.21%		🇺🇸 USA		
☆	3	<b>Alphabet (Google)</b> <small>GOOG</small>	\$3.927 T	\$325.34	↑ 2.16%		🇺🇸 USA		
☆	4	<b>Microsoft</b> <small>MSFT</small>	\$3.485 T	\$468.90	↓ 1.08%		🇺🇸 USA		
☆	5	<b>Amazon</b> <small>AMZN</small>	\$2.422 T	\$226.60	↑ 0.14%		🇺🇸 USA		
☆	↕ 1	6	☆	<b>Broadcom</b> <small>AVGO</small>	\$1.780 T	\$376.99	↓ 0.26%		🇺🇸 USA
☆	↘ 1	7	☆	<b>Saudi Aramco</b> <small>2222.SR</small>	\$1.584 T	\$6.55	↓ 2.65%		🇸🇦 S. Arabia
☆	8	<b>Meta Platforms (Facebook)</b> <small>META</small>	\$1.579 T	\$626.81	↑ 2.24%		🇺🇸 USA		
☆	9	<b>TSMC</b> <small>TSM</small>	\$1.439 T	\$277.59	↓ 2.48%		🇹🇼 Taiwan		
☆	10	<b>Tesla</b> <small>TSLA</small>	\$1.359 T	\$408.82	↓ 2.14%		🇺🇸 USA		
☆	11	<b>Berkshire Hathaway</b> <small>BRK-B</small>	\$1.096 T	\$508.20	↑ 0.08%		🇺🇸 USA		
☆	12	<b>Eli Lilly</b> <small>LLY</small>	\$978.86 B	\$1,092	↑ 2.03%		🇺🇸 USA		
☆	13	<b>Walmart</b> <small>WMT</small>	\$846.65 B	\$106.09	↑ 1.95%		🇺🇸 USA		
☆	14	<b>JPMorgan Chase</b> <small>JPM</small>	\$825.28 B	\$300.13	↑ 0.71%		🇺🇸 USA		
☆	15	<b>Tencent</b> <small>TCEHY</small>	\$725.36 B	\$80.11	↓ 0.89%		🇨🇳 China		

*GOOG even still in third place, but quite near the top.*

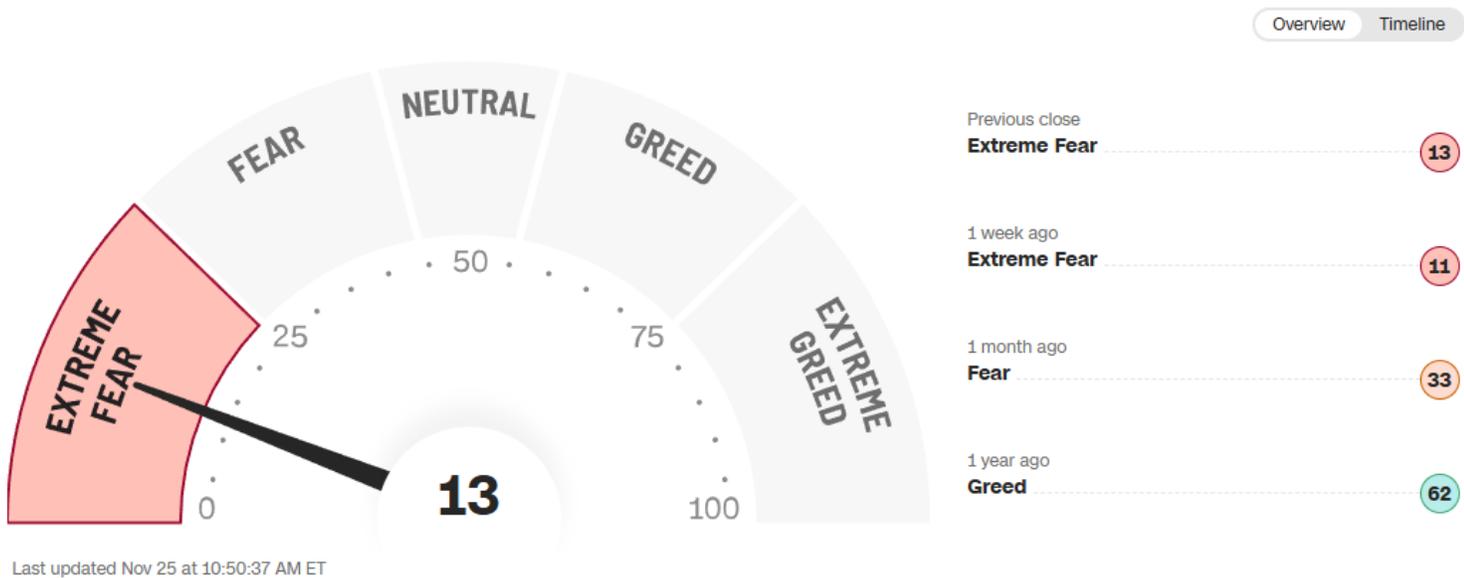
Market Holiday: Nov 27<sup>th</sup> (Thu) is Thanksgiving Day, and The Express will take a rest, Will resume normal on Friday. We apologize for any inconvenience caused.

*Risk disclosure: Price can go up and down at any moment, use free money to trade and bear the risk according to your own capital;  
 Never trade with money that has a deadline for withdrawal.  
 All suggestions are for reference only, even AI cannot be 100% reliable, final decision still lies upon investors.  
 Copy trading cannot replicate another trader's background or psychological state.*

# Fear & Greed Index

What emotion is driving the market now?

[Learn more about the index](#)



## North East West South is NEWS

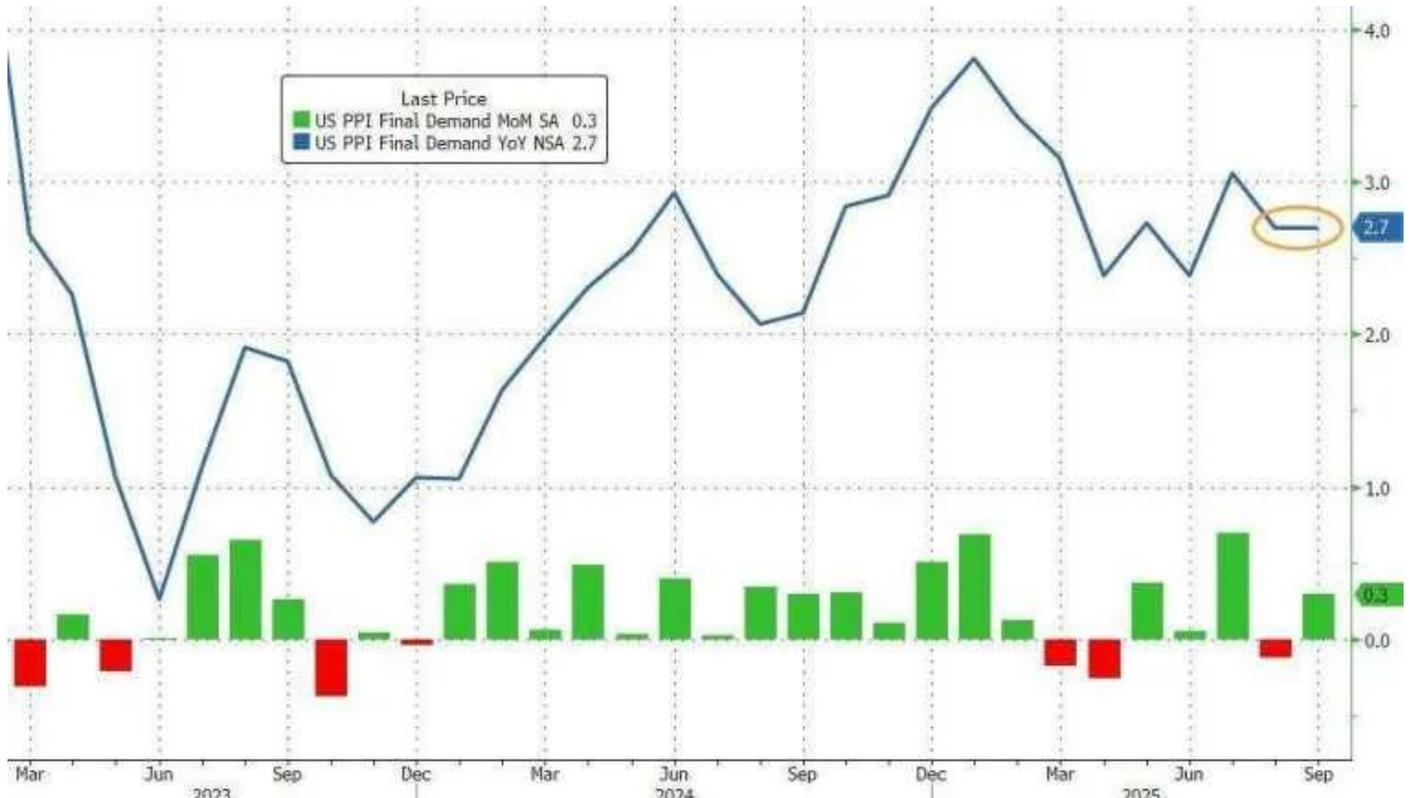
US President Trump signed an executive order launching the "Genesis Mission," a national program aimed at accelerating scientific breakthroughs using artificial intelligence (AI). The Genesis Mission aims to help major technology companies surpass China in AI and solidify US dominance in this rapidly expanding field.

European Central Bank (ECB) economists warned today that the market must be "closely monitored" as stablecoins and other cryptocurrencies pegged to traditional assets and used to maintain value stability rapidly expand.

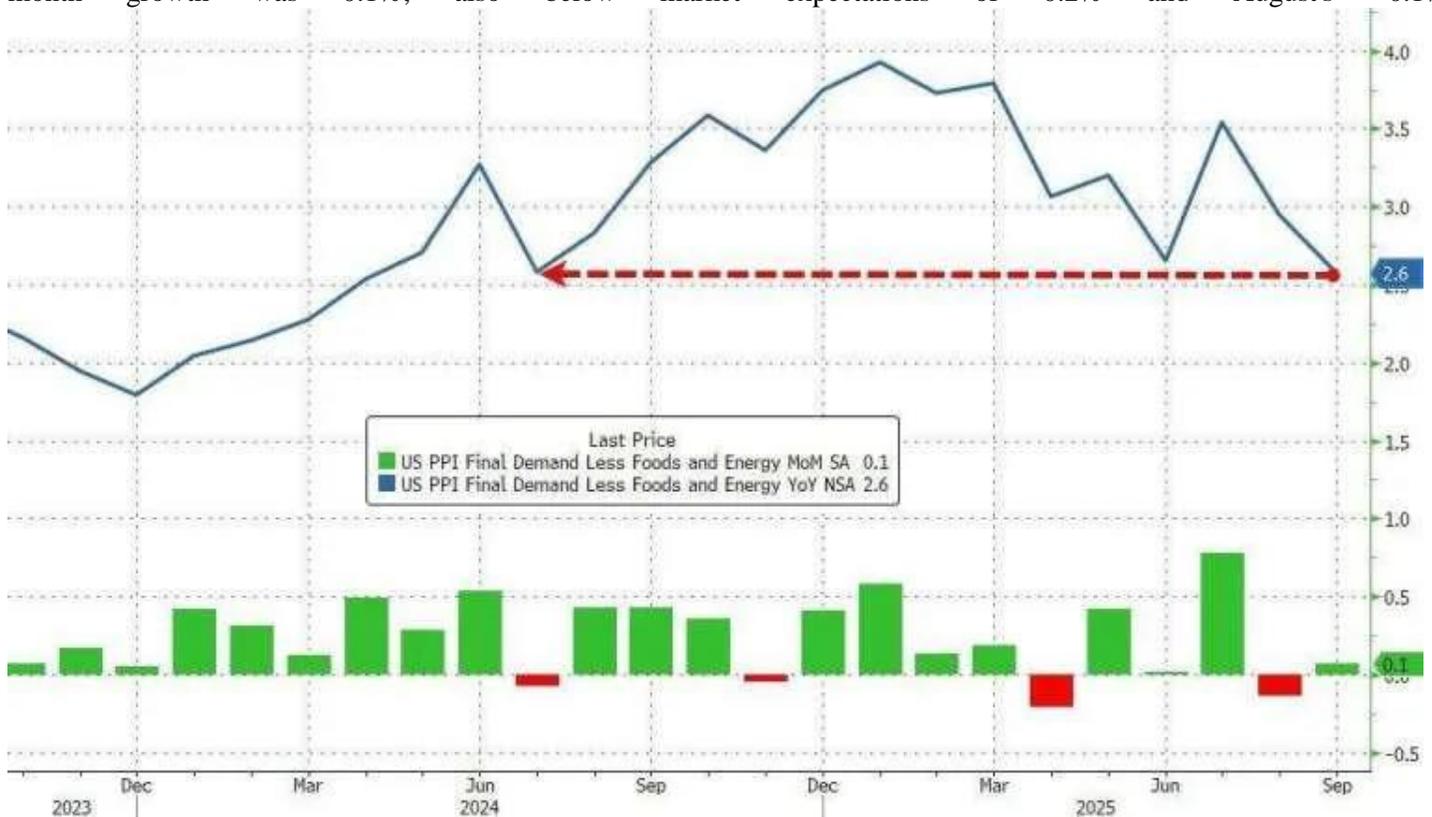
As the US Navy builds a large military presence in the Caribbean Sea near Venezuela, the US Embassy in Trinidad and Tobago announced that Chairman of the Joint Chiefs of Staff Dan Caine will visit Trinidad and Tobago tomorrow. The visit will focus on strengthening regional stability and enhancing regional unity on important issues such as combating illicit trafficking and transnational crime.

Chinese President Xi Jinping and US President Trump spoke by phone, and their subsequent statements differed significantly, resembling two separate dialogues. Trump immediately called Japanese Prime Minister Sanae Takaichi to express his unlimited support.

According to Japan's Yomiuri Shimbun, Prime Minister Sanae Takaichi's approval rating has reached 72%. Japan has surpassed the United Kingdom to become the United States' most important ally.



September's core PPI (excluding food and energy) rose 2.6% year-on-year, slightly below market expectations of 2.7% and lower than August's 2.8% increase, marking the most modest core year-on-year growth in nearly 15 months. Month-on-month growth was 0.1%, also below market expectations of 0.2% and August's -0.1%.



# Alibaba Has Fared Better in AI Selloff Than US Hyperscalers

The Taobao operator is spending dramatically less than its American rivals



Source: Bloomberg

Data is normalized with percentage appreciation as of September 1, 2025.

Bloomberg

Last 319.210 Change +0.740 (0.232%)

Updated: 2025/11/25 11:05 EST

Alphabet Inc. (GOOG.US)

6 months (daily)

SMA(10):293.451 SMA(20):288.385 SMA(50):265.675 SMA(100):235.292 SMA(250):199.77

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25/11/2025 O:326.8 H:328.67 L:319.2 C:319.33

# GOOG





## World Observation

Day 1372  
Russia/Ukraine Conflict

# Tesla Terra Fab

Tesla is going to develop their Cybercab in April 2026, an autonomous electric vehicle with no pedals or steering wheel, and also their Optimus 3 humanoid robot will have mass production in 2026. There will be a great demand in chips. Can TSM fully supply them? Workers in Arizona plant are not as diligent as those in Taiwan. The worker union aims at “work life balance”, not as in Taiwan where they are running for 24 hours in 3 shifts. Workers need to develop their own recreation, which means re-create, when they go for entertainment, it is not just for enjoyment, but re-create more energy for working. This is the major difference between Asians and Americans.

Say it other words, TSLA is facing a shortage in supply of chips, but not immediate threat, anyway better prepare well for future. The whole AI industry is also facing a shortage of supply of electricity, but we believe Donald Trump will have another project soon, that is to co-operate with other to increase the electricity supply of US. Will talk about later.

TSLA is now in contract with TSM and Samsung, but they want to develop their “Tesla Ferra Fab”, which is more important than Giga factory, will be 10 times of volume of TSM. Is it possible for this superman Elon Musk? Anther superman Jensen Huang said it is very hard. Actually, Musk is developing AI-5 and AI-6, which will be 10 times of the previous years. So, what we can know now is that there will be really a shortage when AI develops, not only for TSLA, but also the Magnificent Seven needs extra chips for development. Even though the shortage may not come in 2026, but should prepare well before it is too late.

The idea of Tesla Terra Fab is necessary, anyway similar project must be launch out now. Even Taiwan and Korea are friendly partners and not rivals, but depending too much on others are not so clever, must have their own independence to some extent.

Thus, we know that why the Japanese Prime Minister Sanae Takaichi stood out to say she would protect Taiwan when being attacked, and we know why Donald Trump at once shown his support to her after the phone call with China. No need to say that when TSMC is occupied by others, even a delay in supply or hindrance in production is a disaster to most IT giants. Say it simple, no need to worry World War III, but if there is a chance of Liberation War of Taiwan by China, before that any embargo, or any threat of production will affect the production of TSMC. When the supply is hindered, a lot of IT giants will be out of action in several weeks, and their factory production will be stopped or hindered at once before the starting of a war. That's why western countries are trying their best to stop the breaking out of a war.

At the current stage, the threat of shortage in supply of semiconductor is just a long-term worry, not immediate outcome, but must prepare well for it. If this project is too hard, still have time and room to try for other projects, but should speed up. Anyway, should hurry up and investors should put an eye on it.



## Tesla's AI5 vs AI6, foundry choices, "Terra fab," and chip supply outcomes

You're looking at the intersection of silicon cadence, foundry geopolitics, and execution risk. Let's break it down cleanly.



GPT-5 is here - OpenAI

### Chip roadmap comparison

Attribute	AI5	AI6
<b>Status</b>	Nearing tape-out/design completion	Early design work started
<b>Target cadence</b>	New design into volume production roughly every 12 months	Follows AI5 with annual refresh ambition
<b>Manufacturing</b>	Dual-sourced: Samsung and TSMC (U.S. fabs)	Same dual-foundry plan; Samsung Taylor and TSMC Arizona mentioned
<b>Focus</b>	Next-gen inference/training for FSD and Optimus; replaces AI4	Expected 2× class uplift vs AI5; broader data center/robotics scale
<b>Volume intent</b>	Claims of ultimately higher volume than all other AI chips combined	Continuation of aggressive scale posture

Sources: [1](#) [2](#) [3](#) [4](#)

### What's the difference between AI5 and AI6?

- **Development stage:** AI5 is "close to taping out," while AI6 has just begun design; expect AI6 to iterate on AI5's architecture with a performance-class leap (Musk has framed AI6 as aiming to be "the best AI chip by far"). [1](#) [5](#)
- **Manufacturing approach:** Both are planned as dual-sourced designs across Samsung and TSMC U.S. fabs, with potential physical variants but a unified software stack to enable interchangeability and mitigate supply risk. [3](#) [4](#)
- **Performance and timeline signals:** Public chatter points to AI6 targeting around a 2× improvement over AI5 with mass production later than AI5; think AI5 for the near-term step-up from AI4, then AI6 as the follow-on scalability release. [4](#)



## Why mention Intel if contract chip makers are TSMC and Samsung?

- **Capacity hedge and geopolitics:** Intel gives Tesla a third U.S.-centric lever for wafer capacity and government-aligned incentives, creating bargaining power and redundancy if TSMC/Samsung timelines slip. Musk has indicated talks with Intel could be “worthwhile” amid concerns that current suppliers may not meet Tesla’s demand curve. [6](#) [7](#)
- **Foundry resurgence angle:** A Tesla-Intel engagement would help Intel’s foundry ambitions and offer Tesla more localized control—especially valuable if it moves towards deeper vertical integration with “Terra fab.” [8](#)

## Impact on TSMC and Samsung

- **Dual-sourcing strengthens both but shifts power dynamics:** Tesla’s confirmation of dual-fab production for AI5/AI6 spreads volume and reduces single-supplier dependency. Samsung benefits from the high-profile win (reportedly a multiyear, large contract), boosting its foundry narrative versus TSMC; TSMC still remains a critical partner and likely gets Arizona-based variants. [3](#) [9](#)
- **Execution risk for Samsung:** Samsung’s advanced GAA nodes face scale-up risk; delays could jeopardize timelines, while success would materially improve Samsung’s competitive standing against TSMC. [9](#)
- **TSMC competition intensifies, but share not binary:** Even with competition, Tesla’s demand is so large that both foundries benefit if execution holds; the risk is timeline pressure and margin negotiation rather than outright displacement. [9](#) [10](#)

## Is “Tesla Terra fab” beneficial to TSLA? Will it happen?

- **Strategic upside:** A Tesla-run fab (the “Terra fab”) would secure long-term capacity, reduce reliance on external nodes, and improve cost control for massive inference/training deployments across FSD, Optimus, and data-center AI. It also aligns with Tesla’s pattern of vertical integration where the supply chain is a competitive advantage. [7](#) [11](#) [12](#)
- **Feasibility and difficulty:** Building a “gigantic” fab that rivals or exceeds TSMC-scale output is extraordinarily hard—capital intensity, yield learning, ecosystem/IP, equipment procurement (EUV), and process engineering are multi-year undertakings. Even Jensen Huang has cautioned that doing what TSMC does is “extremely hard,” signaling sober execution risk. [7](#)
- **Base case:** Expect incremental moves first—dual-sourcing, potential Intel capacity, and U.S.-based alignment—before a full internal fab commitment. A Tesla fab could be staged, specialized, or collaborative rather than immediately 10× TSMC’s scale. [7](#)



## What if Tesla cannot get enough chips?

- **Near-term impacts:**
  - **Product rollouts:** FSD training pace and robotaxis slip; Optimus deployments slow; data-center AI expansions bottleneck.
  - **Revenue/margins:** Software and services ramp (FSD subscriptions, AI services) constrained; hardware unit costs rise; gross margin pressure.
  - **Operational facts:** Tesla has historically reworked firmware, swapped components, and flexed supply chains to keep lines running during shortages; expect prioritization of highest-ROI compute and staged rollouts if constrained. [13](#) [14](#)
- **Mitigation playbook:**
  - **Dual-foundry execution:** Maintain Samsung/TSMC concurrency with interchangeable SKUs to smooth bottlenecks. [3](#) [4](#)
  - **Additional partners:** Explore Intel capacity to triangulate U.S. supply and incentives. [6](#) [8](#)
  - **Architecture efficiency:** Aggressive compiler/ASIC optimization to extract more perf/W and utilization from available silicon; staged deployment in vehicles vs data centers.
  - **Scaling alternatives:** Rent external training capacity where feasible; prioritize inference over training where business impact is highest.

## Direct answers

- **AI5 vs AI6:** AI5 is near tape-out and targets the next step beyond AI4; AI6 is the following design aiming for a significant performance uplift, with both dual-sourced at Samsung and TSMC U.S. fabs. [1](#) [3](#) [4](#)
- **Intel involvement:** It's a capacity and geopolitical hedge. Tesla is exploring Intel to ensure supply resilience beyond TSMC/Samsung if demand outstrips their near-term capability. [6](#) [7](#)
- **Effect on TSMC/Samsung:** Both remain core; Samsung gains share and credibility if its advanced node executes, while TSMC's U.S. fab presence keeps it central. Dual-sourcing increases pressure on timelines and pricing but spreads risk. [3](#) [9](#)
- **"Terra fab" benefit and likelihood:** Strategically beneficial for control and scale, but extremely hard to execute. Expect staged moves and partnerships before a fully self-operated mega-fab; feasibility hinges on multi-year capital, process, and equipment realities. [7](#) [11](#) [12](#)
- **If Tesla can't get enough chips:** Expect delays to AI-driven products/services and margin pressure; Tesla will triage deployments, leverage multiple foundries, and optimize software/hardware to stretch available compute. Prior episodes show Tesla can bend without breaking, but at the cost of timing and scope. [13](#) [14](#)

If you want, I can sketch scenario timelines (optimistic/base/downside) for AI5/AI6 tape-out, first silicon, and volume ramps, plus implications for TSLA multiple and foundry share shift.



**Grok - xAI** The  
World's Most Powerful AI

## Differences Between Tesla's AI5 and AI6 Chips

Tesla's AI5 and AI6 are successive generations of custom AI inference chips (also referred to as HW5 and HW6 in some contexts) designed in-house for powering Full Self-Driving (FSD) autonomy, Optimus robots, and data center workloads. They build on the current AI4 (HW4) chip used in Tesla vehicles, with a focus on inference efficiency, low power consumption, and optimization for Tesla's vision-based AI software. AI5 emphasizes cost and power reductions compared to Nvidia alternatives, while AI6 scales performance further for broader applications.

Here's a comparison based on Elon Musk's statements and Tesla's roadmap:

Aspect	AI5	AI6
<b>Performance</b>	~40x faster than AI4 in real-world FSD tasks; 8x compute, 9x memory, 5x bandwidth; ~3x more efficient per watt than Nvidia equivalents.	~2x performance over AI5 (potentially 10x over AI5 in some estimates); designed as a "converged architecture" for both inference and training, enabling Dojo-like supercomputing via clustered chips.
<b>Power Consumption</b>	~250W (optimized for vehicles/robots); 1/3 the power of current top-tier chips.	~800W; higher for data center scalability but still efficient for Tesla workloads.
<b>Cost</b>	~1/10th the inference cost of Nvidia's Blackwell GPUs; single-chip design (vs. dual in AI4).	Even lower per-inference cost; leverages AI5 fabs for faster iteration.
<b>Production Timeline</b>	Tape-out nearing (final design complete soon); samples/small units in 2026; high-volume in mid-2027.	Volume production mid-2028; fast follow to AI5 (every ~12 months new design goal).
<b>Manufacturing</b>	Dual-sourced: TSMC (Taiwan/Arizona) and Samsung (Texas); slight variations but identical software compatibility.	Same fabs as AI5 initially; Samsung's Texas plant dedicated under \$16.5B deal (through 2033).
<b>Key Use Cases</b>	Primarily in-vehicle inference for FSD; secondary training support; powers Cybercab and Optimus v1.	Unified for vehicles, robots, and Dojo 3 superclusters (multiple chips per board for training); "best AI chip by far" per Musk.
<b>Other Notes</b>	"Beautiful chip" per Musk; code paths reduced to ~5 for efficiency.	More "adventurous" design; may require new fabs for AI7 successor.

These chips shift Tesla from dual-chip boards (AI3/AI4) to single-chip architectures, reducing complexity. AI5 is a massive leap for immediate deployment, while AI6 integrates training capabilities to replace elements of the discontinued Dojo supercomputer.

## Why Tesla Wants to Work with Intel Despite TSMC and Samsung Contracts

Tesla's primary contract manufacturers are indeed TSMC and Samsung, which handle AI5 and AI6 production via a dual-foundry strategy for redundancy and scale. TSMC fabs AI5 in Taiwan and Arizona while Samsung's \$16.5B deal covers AI6 (and now AI5) at its Taylor, Texas facility—Musk has praised the site's advanced equipment. This setup ensures U.S.-based production to mitigate geopolitical risks (e.g., Taiwan tensions) and leverages CHIPS Act subsidies.

However, Musk has publicly "mused" about partnering with Intel (INTC) as a third option, citing supply shortages even under "best-case" scenarios from TSMC/Samsung. Reasons include:

- **Capacity Constraints:** Tesla projects needing 100-200 billion AI chips annually by the late 2020s for millions of vehicles, Optimus bots (aiming for 1B+ units), and data centers. TSMC's 2024 capacity was ~17M wafers/year (~1.42M/month), and Samsung trails; neither can ramp to Tesla's "terafab" scale (1M wafer starts/month) fast enough—Musk calls their 5-year fab build timelines "an eternity."
- **Diversification:** Intel's U.S. fabs (e.g., Chandler, AZ) align with Tesla's domestic push. Intel is pivoting to foundry services (Intel Foundry) and needs big clients to compete with TSMC; a Tesla deal could revive it, per analysts.
- **Strategic Hedge:** Musk respects TSMC/Samsung but wants "lightning" speed. Intel could offload overflow or provide specialized nodes (e.g., for AI7). No formal deal is confirmed—it's exploratory, floated at Tesla's 2025 shareholder meeting.

This isn't abandoning TSMC/Samsung but augmenting them, similar to how Tesla uses Nvidia GPUs short-term while building in-house silicon.

## Effects on TSMC and Samsung

Tesla's strategy has mixed implications for its key suppliers:

- **Positive (Short-Term Revenue Boost):** The dual-foundry for AI5/AI6 locks in billions—e.g., Samsung's \$16.5B deal through 2033 secures dedicated Texas capacity. TSMC benefits from Arizona Fab 21 expansion. Both gain from Tesla's vertical integration push, validating their 3nm nodes and U.S. investments.
- **Negative (Long-Term Pressure):** Musk's terafab plan (initial 100K wafers/month, scaling to 1M—~70% of TSMC's current output) signals dissatisfaction with their ramp speed. If realized, it could divert Tesla's volume in-house, eroding market share. TSMC/Samsung face "infinite delays" criticism, potentially hurting investor confidence amid AI demand surges from Nvidia/Apple. Samsung, already loss-making on the deal, sees it as a "blessing in disguise" for tech validation but risks over-reliance on Tesla.

Overall, effects are neutral-positive now (secured contracts) but competitive longer-term if Tesla fabs succeed. Stock reactions: TSMC/SSNLF dipped ~2-3% post-Musk's comments; monitor for Intel partnership news.



## Is the "Tesla Terafab" Project Beneficial to TSLA? Will It Come True?

**Beneficial? Yes, strategically—but high-risk/high-reward.**

A "gigantic" terafab (Musk's term: "like giga but way bigger") would vertically integrate Tesla's supply chain, slashing costs (AI5 already 10x cheaper than Nvidia per inference) and ensuring 100–200B chips/year for explosive growth in FSD/robotaxis (projected \$10T market) and Optimus (Musk eyes 20M/year production). It positions TSLA as an AI hardware leader, beyond EVs, potentially multiplying economy impact "10–100x." Benefits include:

- **Supply Security:** Ends shortages throttling robotaxi/Optimus rollout.
- **Cost/Margin Gains:** In-house fabs could drop chip costs further, boosting gross margins (currently ~18%).
- **Valuation Upside:** Analysts see +20–30% TSLA uplift if executed, per Baron Capital ties.

Drawbacks: \$15–200B+ cost (Intel fabs run \$20B each; TSMC's AZ ballooned 13x), 5+ year build (Musk's "eternity"), and talent drain (e.g., Dojo pivot). Still, Musk's track record (Gigafactories) suggests net positive if phased.

**Will It Come True? Likely partial rollout by 2030.** Musk's ambitions often manifest (e.g., AI5 tape-out soon), but full 1M wafers/month is ambitious—even TSMC struggles at scale. Expect a pilot fab (100K wafers) by 2028, funded by \$1T pay package, with Intel co-investment. Jensen Huang's warning ("extremely hard... engineering, science, artistry") underscores risks, but Tesla's \$1T+ cash flow enables it. Probability: 60–70% for scaled version.

## What Happens If TSLA Cannot Get Enough Chips?

Shortages would be a "limiting factor," per Musk, stalling Tesla's AI pivot:

- **Delayed Rollouts:** FSD v13+ unsupervised driving and Optimus mass production (target: 2027) postponed 1–2 years; robotaxi event (Oct 2025) hype unmet, eroding trust.
- **Revenue Hit:** \$10–20B annual loss from throttled vehicle/robot sales; margins squeezed by Nvidia premiums (Tesla buys \$10B+ B200s short-term).
- **Market Share Erosion:** Competitors (Waymo, Cruise) gain in autonomy; TSLA stock dips 10–20% on execution fears.
- **Mitigations:** Musk's playbook—pressure suppliers (TSMC/Samsung "moving like lightning"), hybrid Nvidia use, or terafab acceleration. Worst case: Caps Optimus at <1M/year, shifting focus to software/services. But given dual-foundry + Intel talks, full crisis unlikely; it's a catalyst for in-house push.