## U.S. Semiconductors and Semiconductor Capital Equipment

# U.S. Semiconductors and Semicap Equipment - Can you put the AI genie back in the bottle?



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**Can you put the AI genie back in the bottle?** Semi sentiment had been improving in recent weeks, with the group (while still down ~19% from June peaks) up ~13% from the July trough and up 67% YTD as optimism around AI spending had begun to overpower sustainability concerns. However, we have a feeling those latter concerns are going to move back to the forefront on Monday with Anthropic CEO Dario Amodei penning an essay over the weekend proposing a plan to "pace the frontier" and slow the pace at which the industry improves the capabilities of AI models, following the public resignations of safety and alignment personnel at some the large foundational labs who were apparently unsatisfied with the efforts currently in place (and admission from the labs themselves that they see a non-zero chance that AI could, indeed, kill us all?). Dario's comments were echoed on Twitter/X by Sam Altman, Elon Musk, Satya Nadella, and other industry luminaries as well, and we would expect this to have potential to further depress sentiment on the group.

**Dario proposes a three-step "pacing framework"** including 1) Embedded independent third-party evaluators equipped to verify and report adherence to practices and commitments (Anthropic is committing to this step now); 2) "Democratic coordination," in other words US regulation that targets all US AI companies, whether they want it or not and 3) Global pacing, i.e. working out some form of cooperation/coordination with China.

**We could see a number of possibilities here (from best to worst):** This could be an attempt to redirect increasing ill-will that has been building toward AI and datacenter buildouts. It could be an effort to crack down on and limit Chinese distillation efforts. It could be an acknowledgment that they simply cannot obtain all the compute they need to continue model improvements at the prior pace. It could be an attempt to force a slowdown in competing ecosystems (such as open source). It could be a realization that the return on training new models is falling, hence an excuse to slow down (in other words, an off ramp). And of course (though we hope not) we suppose it is possible that the labs have really seen something they are afraid of, for example recursive self-improvement ("RSI") where models improve themselves at an increasing pace, out of control of humans (i.e. "Skynet?").

**But does a "pacing slowdown" necessarily imply a spending slowdown? We don't think so...**Dario does talk about considering pacing based on *"limiting the ingredients that go into frontier models such as training compute, the nature of training runs, or internal use of AI to improve AI."* As such, (putting Skynet aside) investors might worry that "pacing" will impact overall spending. We are not so sure. Clearly Dario is not talking about stopping training (he suggests slowing from "extremely fast" to "only somewhat fast," probably still plenty in our opinion given the current rate of scaling). Increasingly though AI semi demand is being driven by inference especially as agentic use cases arise, and at the moment there is already not nearly enough compute to satisfy demand for even the current models, let alone new ones that might be coming down the pipeline. And this is not even the first call for AI standards and oversight (Demis Hassabis, the head of Google DeepMind, proposed something similar in July). Hence we suspect recent AI revenue targets from our companies should already be representative of spending plans, and we would be very surprised to see those plans changing materially. (*Continued on next page*)

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**How much of this is actually about China?** Dario notes (correctly) that US restrictions must not come at the expense of allowing China to pull ahead, and proposes steps to maintain the gap to China including continuing bans on selling advanced AI chips or semicap equipment to them, as well as (importantly in our opinion) cracking down on unauthorized distillation and preventing model weight thefts (we note recent newsflow for example suggesting Chinese labs secretly using unauthorized Claude distillation to train their models). Dario even reiterated these comments in an interview on CBS Face the Nation over the weekend. Hence, while the proposal uses fears of RSI and safety/alignment as its hammer, we wonder if China concerns are a large part of the driving force here.

**At the end of the day a safer AI is an easier to adopt AI...** While we aren't enormous believers in the "Skynet" scenario, neither do we want it to come to pass, and having a plan to incorporate AI safeguards is probably good for long term industry adoption, helping to assuage political and societal angst toward the topic (as well as reducing the chances for doomsday, small as they might be). And for now most of what seems to be called for here is mostly 3rd party evaluators which seems to be a good idea to us. We suspect it is far too late to put the AI genie back in the bottle anyway, so we might as well find safer ways to let it out.

**We remain positive on the prospects for (hopefully safer?) AI buildouts from here.** NVDA, AVGO, and semicap remain our preferred plays in the space.

## BERNSTEIN TICKER TABLE

| Ticker | Rating | Cur | 11 Sep 2026 Closing Price | Price Target | TTM Rel. Perf. | Cur | Adjusted EPS 2025A | Adjusted EPS 2026E | Adjusted EPS 2027E | Adjusted P/E (x) 2025A | Adjusted P/E (x) 2026E | Adjusted P/E (x) 2027E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMD (Advanced Micro) | O | USD | 516.13 | 650.00 | 215.3% | USD | 4.17 | 7.55 | 15.56 | 123.7 | 68.4 | 33.2 |
| ADI (Analog Devices) | O | USD | 378.78 | 465.00 | 36.3% | USD | 7.79 | 12.85 | 16.77 | 48.6 | 29.5 | 22.6 |
| AVGO (Broadcom) | O | USD | 361.99 | 575.00 | (15.6)% | USD | 6.82 | 11.64 | 18.63 | 53.1 | 31.1 | 19.4 |
| INTC (Intel) | M | USD | 102.94 | 110.00 | 302.0% | USD | 0.43 | 1.55 | 1.81 | 241.5 | 66.5 | 56.8 |
| NVDA (NVIDIA) | O | USD | 218.29 | 400.00 | 7.0% | USD | 4.77 | 9.20 | 15.80 | 45.7 | 23.7 | 13.8 |
| NXPI (NXP Semiconductors) | M | USD | 236.62 | 290.00 | (10.2)% | USD | 11.81 | 15.02 | 16.85 | 20.0 | 15.8 | 14.0 |
| PDFS (PDF Solutions) | O | USD | 47.77 | 65.00 | 123.0% | USD | 0.94 | 1.35 | 1.75 | 50.7 | 35.4 | 27.3 |
| QCOM (Qualcomm ) | M | USD | 181.97 | 165.00 | (3.6)% | USD | 12.03 | 10.51 | 9.57 | 15.1 | 17.3 | 19.0 |
| TXN (Texas Instruments) | M | USD | 268.70 | 290.00 | 29.5% | USD | 5.45 | 8.33 | 9.16 | 49.3 | 32.3 | 29.3 |
| AMAT (Applied Materials) | O | USD | 456.49 | 700.00 | 152.1% | USD | 9.42 | 12.76 | 18.30 | 48.5 | 35.8 | 24.9 |
| KLAC | O | USD | 180.64 | 250.00 | 72.1% | USD | 3.76 | 5.47 | 7.05 | 48.0 | 33.0 | 25.6 |
| LRCX (Lam Research) | O | USD | 298.22 | 385.00 | 141.8% | USD | 5.82 | 9.22 | 10.97 | 51.3 | 32.3 | 27.2 |
| SPX | | | 7,656.98 | | | | | | | | | |

O - Outperform, M - Market-Perform, U - Underperform, NR - Not Rated, CS - Coverage Suspended

TXN estimate is Reported EPS; TXN valuation is Reported P/E (x); NVDA, KLAC, LRCX base year is 2026;

Source: Bloomberg, Bernstein estimates and analysis.

## INVESTMENT IMPLICATIONS

**ADI (**Outperform, **$465.00**): ADI is executing well with both cyclical and idiosyncratic drivers, and valuation now suggesting better risk-reward.

**AMD (**Outperform, **$650.00**): Expectations remain high, but exposure to AI demand driving both a CPU and GPU story can provide substantial growth.

**AVGO (**Outperform, **$575.00**): A strong 2026 AI trajectory seems set to markedly accelerate into 2027 and 2028.

**INTC (**Market-Perform, **$110.00**): Server strength is helping the company get back on their feet, and narrative/headlines may fuel the vibe for now

**NVDA (**Outperform, **$400.00**): The datacenter opportunity is enormous..

**NXPI (**Market-Perform, **$290.00**):The pace and makeup of recovery remains open for debate, though company execution is solid and valuation is increasingly inexpensive.

**QCOM (**Market-Perform, **$165.00**): The diversification story is real but a number of near-term headwinds (smartphone memory dynamics, margins, AAPL etc) need to be navigated first.

**TXN (**Market-Perform, **$290.00**): TXN shares feel fully valued in the current environment.

**PDFS (Outperform**, **$65.00**) A transition to analytics provides for growth and margin expansion amid numerous structural drivers, with eProbe tools representing a new meaningful business opportunity.

**AMAT (**Outperform, **$700.00**): Exposure to key inflections is strong & valuation vs peers is attractive

**LRCX (**Outperform, **$385.00**): The company is benefiting from key inflections (GAA, packaging, HBM, NAND upgrades) and CY26/CY27 commentary seems supportive.

**KLAC (**Outperform, **$250.00**): Amid positive WFE trends KLAC possess structural growth drivers, a strong and competitive position, lower China replacement risk, and disciplined capital allocation, warranting premium valua

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