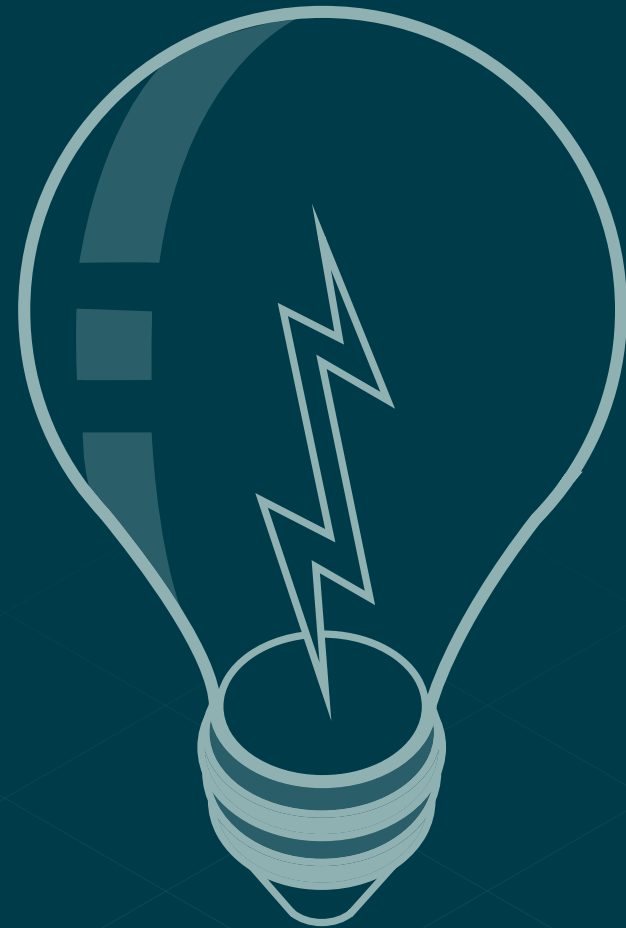


The Next Big Theme

GLOBAL X ETFs INSIGHTS

30 November 2025

Global X Investment Strategy Team



GLOBAL X
by Mirae Asset

Marketing Communication. Capital at Risk. For Professional Investors only.
Please read fund legal documentation before making any final investment decisions.



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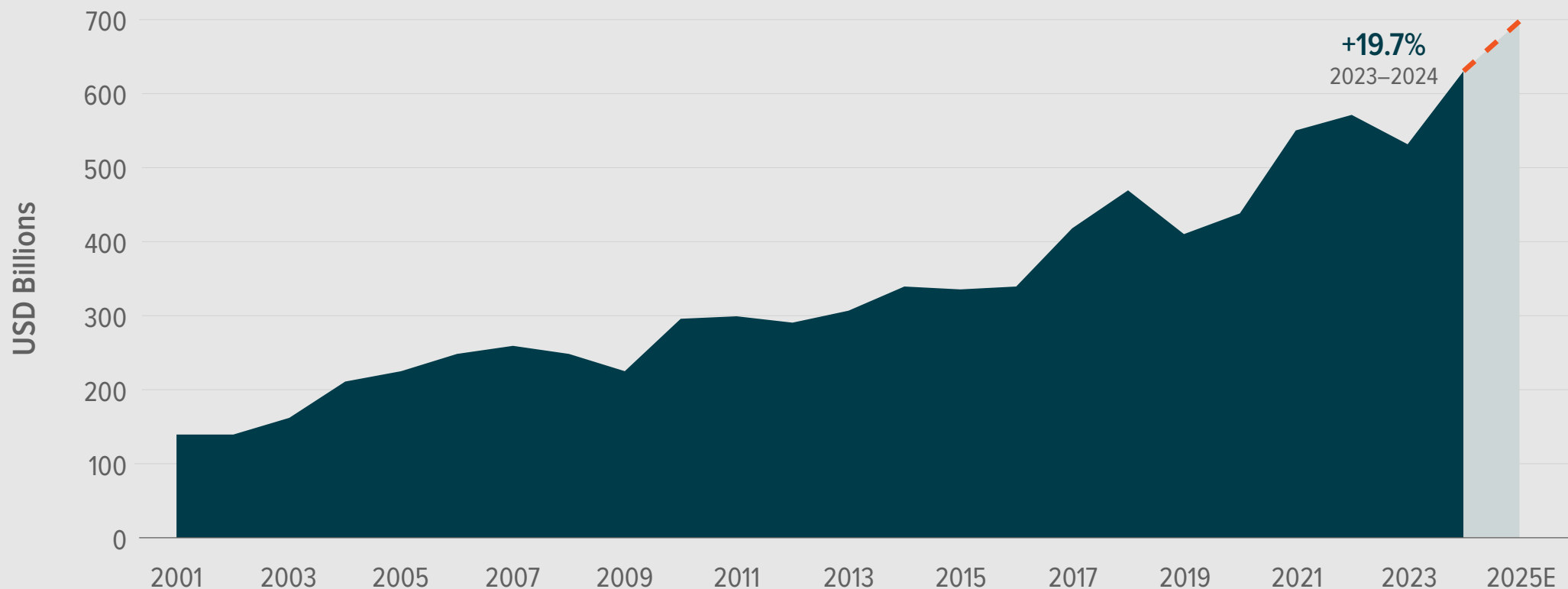
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MONTHLY CHART SPOTLIGHT

IS THE BOOM IN GLOBAL SEMICONDUCTOR SALES JUST GETTING STARTED?

Source: Semiconductor Industry Association (07/10/2025), State of the U.S. Semiconductor Industry.



There is no guarantee that any trends observed in this material will continue. Any views and opinions are based on current market conditions and are subject to change.

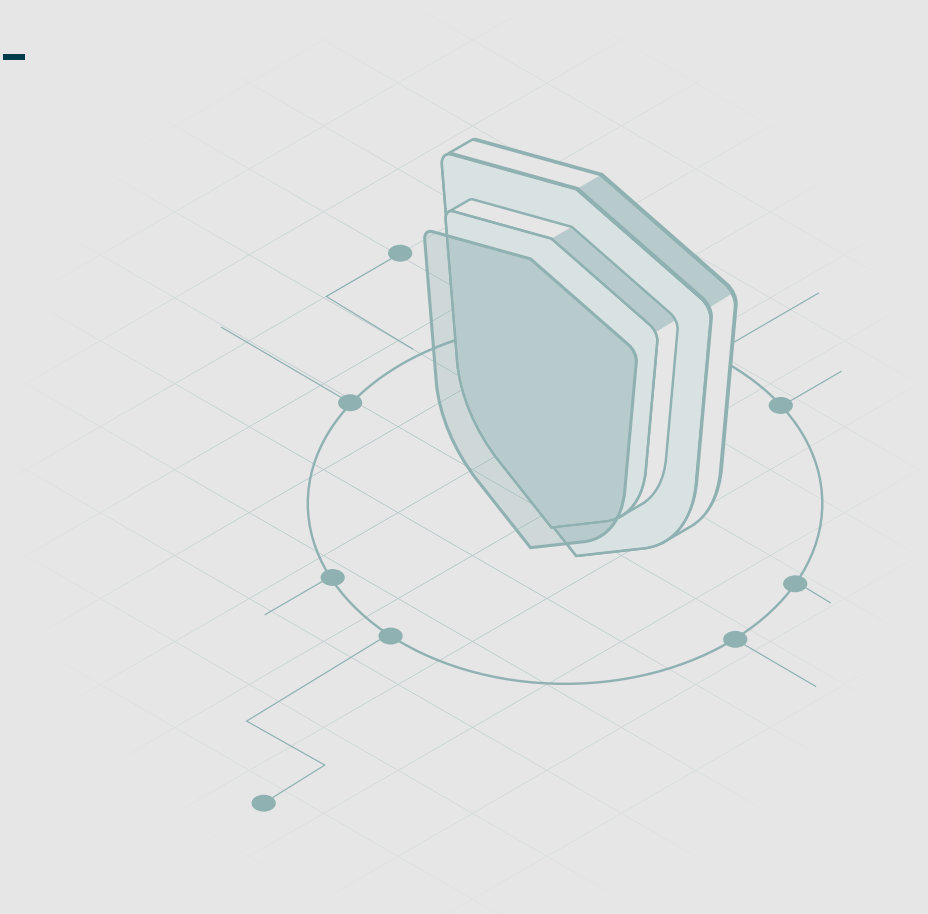


DEFENCE TECH



Europe Accelerates Ammunition Production with New Romania-Germany Partnership¹

Romania has signed an agreement with German defence firm Rheinmetall to build a new gunpowder factory in central Romania, marking another step in Europe's drive to rebuild its munitions capacity.² The move follows Rheinmetall's recent €1 billion joint venture in Bulgaria to produce artillery shells, which appears to underscore the continent's urgency to strengthen defence supply chains amid rising geopolitical tensions.³





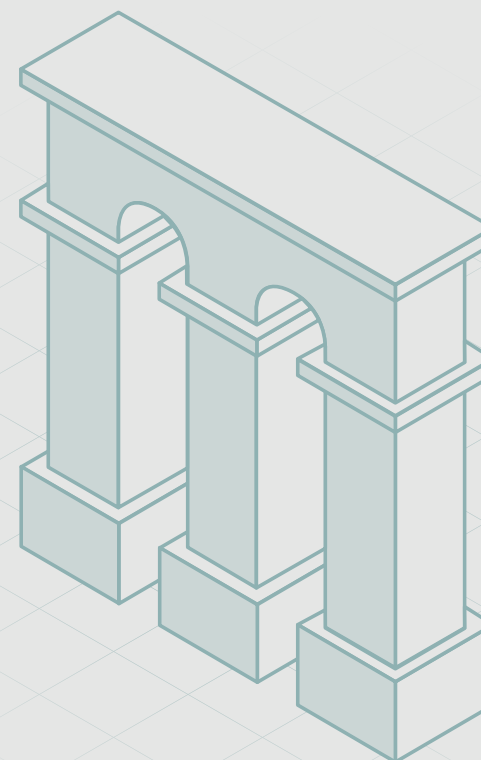
EUROPEAN INFRASTRUCTURE

€100 Billion Plus: The EU's 2030 Roadmap to Military Mobility & Readiness⁴

The European Commission and the European External Action Service have published the Defence Readiness Roadmap 2030, which for the first time quantifies Europe's defence-infrastructure investment needs at around €100 billion.⁵ One key priority highlighted was military mobility, the ability to move troops, equipment and materiel rapidly across borders.⁶ Under the next EU multi-annual budget (2028-34) the mobility budget is slated to rise more than ten-fold: from about €1.74 billion currently to roughly €17.7 billion.⁷ The roadmap also lays out clear milestones to be achieved by the end of 2027, including issuing a formal "Military Mobility Package" by end-2025.⁸ While the earlier White Paper for European Defence - Readiness 2030 set broad goals, the Roadmap now provides a much sharper timeline and budget framework.⁹

~€100_{bn}

Europe's defence-infrastructure investment needs

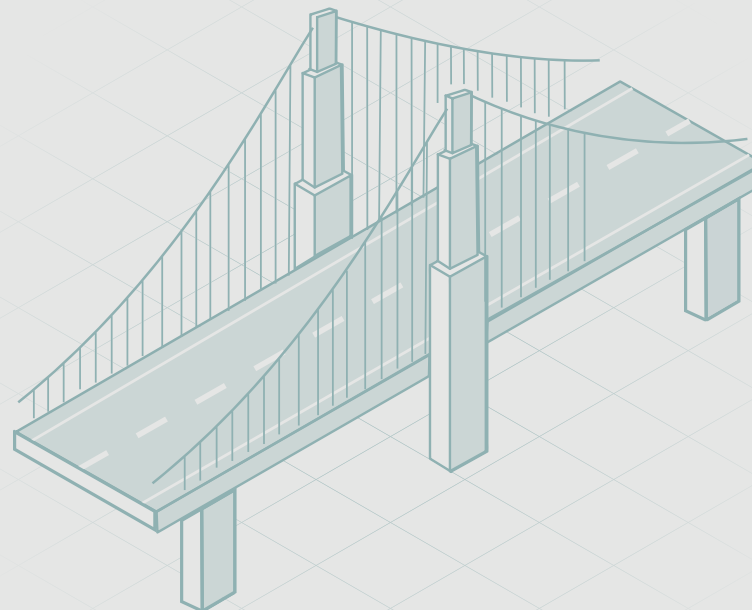




U.S. INFRASTRUCTURE

\$100 Billion Gigafab Gets the Green Light: Infrastructure Boost for U.S. Semiconductor Surge¹⁰

Micron Technology's planned \$100 billion semiconductor megafab in New York has cleared a major infrastructure hurdle: the New York State Public Service Commission has approved a new underground 345-kilovolt, two-mile transmission line linking the existing Clay substation to the site in Onondaga County.¹¹ This approval marks the largest private investment in New York State's history and accelerates readiness for the facility.¹² The project is expected to potentially generate about 9,000 direct jobs at Micron, thousands of construction jobs, and more than 50,000 permanent regional jobs over the coming decades, with a regional economic impact reported to top \$16 billion by 2041.¹³ More broadly, the development seemingly highlights how major infrastructure upgrades - especially in power delivery and utility systems - appear to be becoming critical enablers of advanced manufacturing growth in the U.S.¹⁴



\$16_{bn}

Gigafab project's regional economic impact by 2041

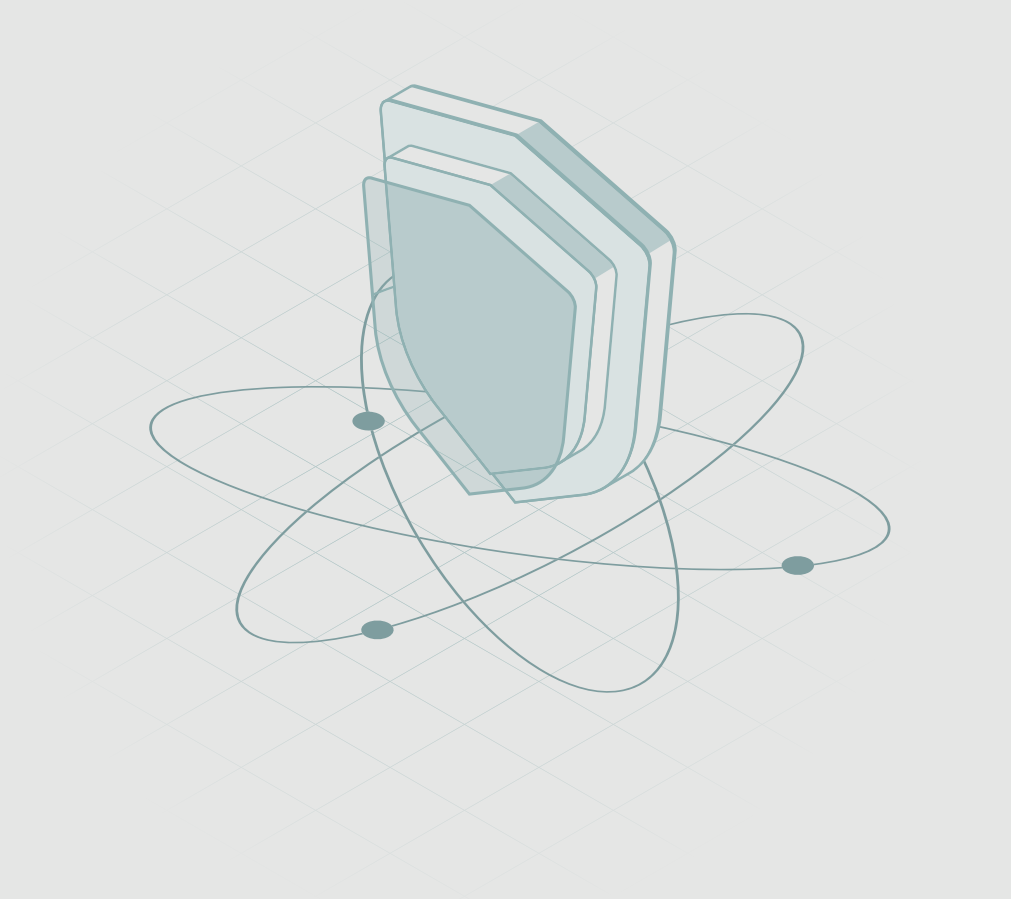


QUANTUM COMPUTING & DEFENCE TECH



Quantum computing upstart lands major Pentagon deal¹⁵

Quantum-computing company IonQ has secured a major contract under the Defense Advanced Research Projects Agency (DARPA) Quantum Benchmarking Initiative, which appears to be a significant nod from the U.S. Pentagon into the quantum hardware space.¹⁶ This development could signal growing defence demand for quantum-technology infrastructure, opening new avenues for investment in quantum-hardware firms and their supply chain.¹⁷



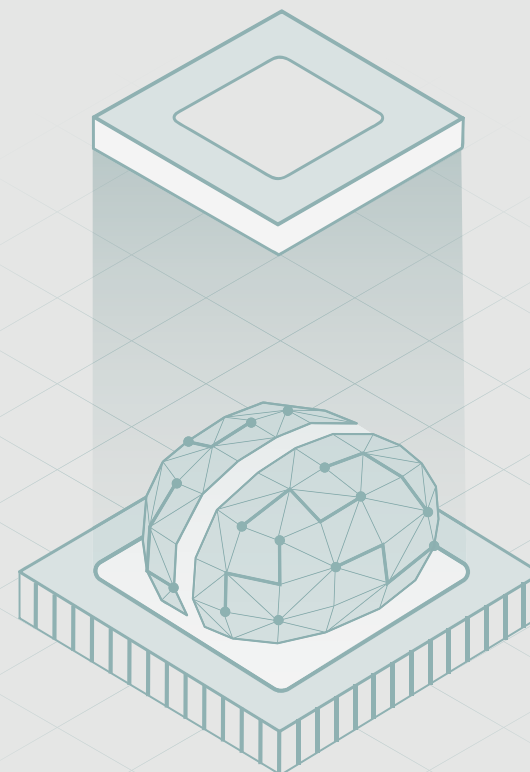


ARTIFICIAL INTELLIGENCE



OpenAI launches Atlas web browser¹⁸

OpenAI has launched a new browser called Atlas, which could rival Perplexity's Comet browser and stalwart Google Chrome, integrating ChatGPT directly into the browsing experience to make web navigation conversational.¹⁹ The move aims to expand OpenAI's reach beyond the 800 million people who already use ChatGPT weekly, while opening new avenues to monetise its free user base.²⁰ Several tech giants are pursuing similar strategies, with Google adding its Gemini chatbot to Chrome, Perplexity releasing its Comet AI browser, and Microsoft introducing an AI Copilot Mode in Edge.²¹





SEMICONDUCTORS

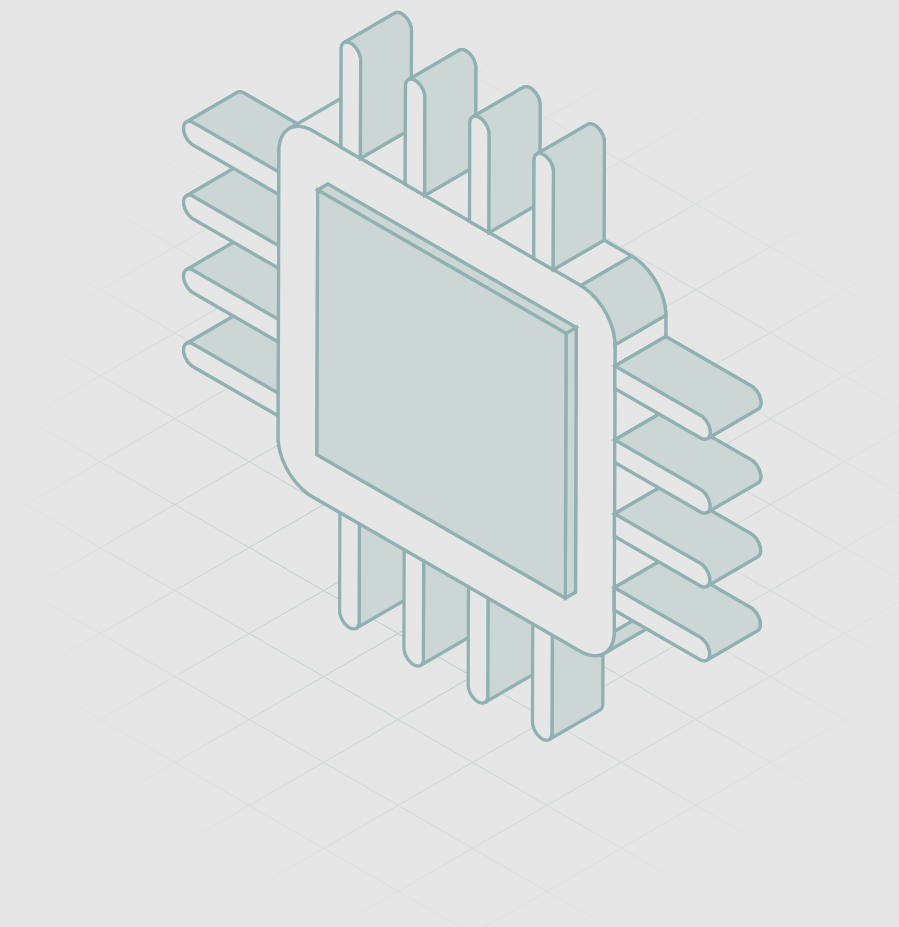


Google's Ironwood Chip Enters the AI Race¹⁷

Google has unveiled its seventh-generation Ironwood TPU, designed to rival Nvidia in AI inference workloads.²² The chip can scale into pods of over 9,000 units, enabling massive cloud-based AI applications.²³ Ironwood delivers nearly 10 times the throughput of TPU v5p and 4 times the performance of last year's model, making it perhaps Google's most powerful and efficient AI chip yet.²⁴ Ironwood TPU is engineered to handle the heaviest AI workloads, from large-scale model training to rapid-fire inference, with a leap in speed and efficiency that could redefine its silicon line.²⁵

x10

Ironwood's throughput of TPU v5p





FOOTNOTES

- 1 AP News (03/11/2025).
NATO member Romania signs agreement with Germany's Rheinmetall to build a gunpowder plant
- 2 IBID
- 3 Rheinmetall Press Release (27/10/2025).
Rheinmetall and VMZ establish joint venture in Bulgaria
- 4 Prosper Network (20/10/2025).
The EU's 2030 Roadmap for Military Readiness
- 5 IBID
- 6 IBID
- 7 United World (30/10/2025).
9 Takeaways from the EU's "Defense Readiness Roadmap 2030
- 8 IBID
- 9 European Commission (12/03/2025).
Introducing the White Paper for European Defence and the ReArm Europe Plan: Readiness 2030
- 10 Reuters (17/10/2025).
New York approves power line for Micron's \$100 billion semiconductor plant
- 11 IBID
- 12 IBID
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- 15 The Street (10/11/2025).
Quantum computing upstart lands major Pentagon nod
- 16 IBID
- 17 Forbes (04/08/2025).
Micron Emerges As A Critical Supplier For Advanced AI
- 18 FT.com (21/10/2025).
OpenAI launches Atlas web browser
- 19 IBID
- 20 IBID
- 21 IBID
- 22 Tech Republic (7/11/2025).
Google Unveils Ironwood, Its 'Most Powerful' and 'Energy-Efficient' AI Chip to Date
- 23 IBID
- 24 IBID
- 25 IBID



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