

USA – Key Technology Trends

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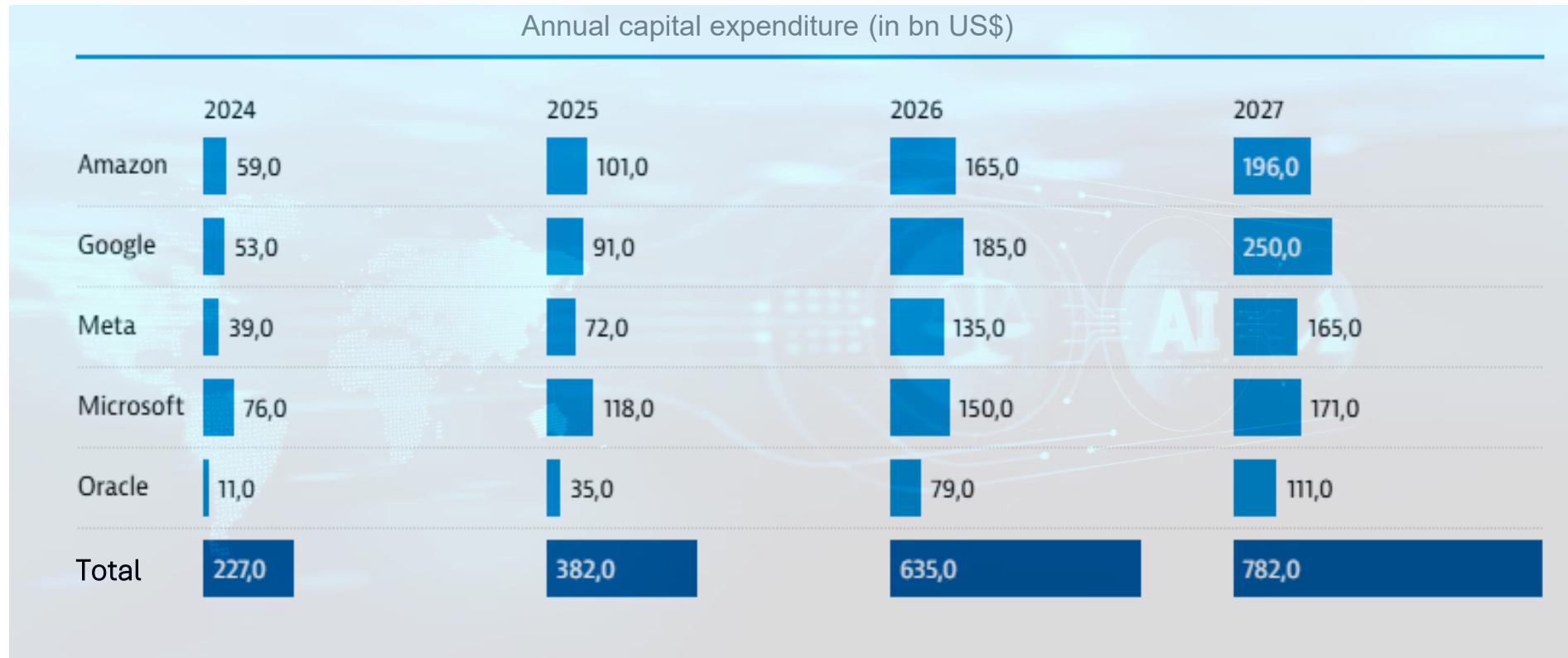
U.S. Venture Capital Investment Trends

AI drives US start-up funding boom, capturing 65% of deal value in 2025



U.S. Big Tech is driving an investment push

Fueled by AI, capital expenditure is set to almost double by 2027

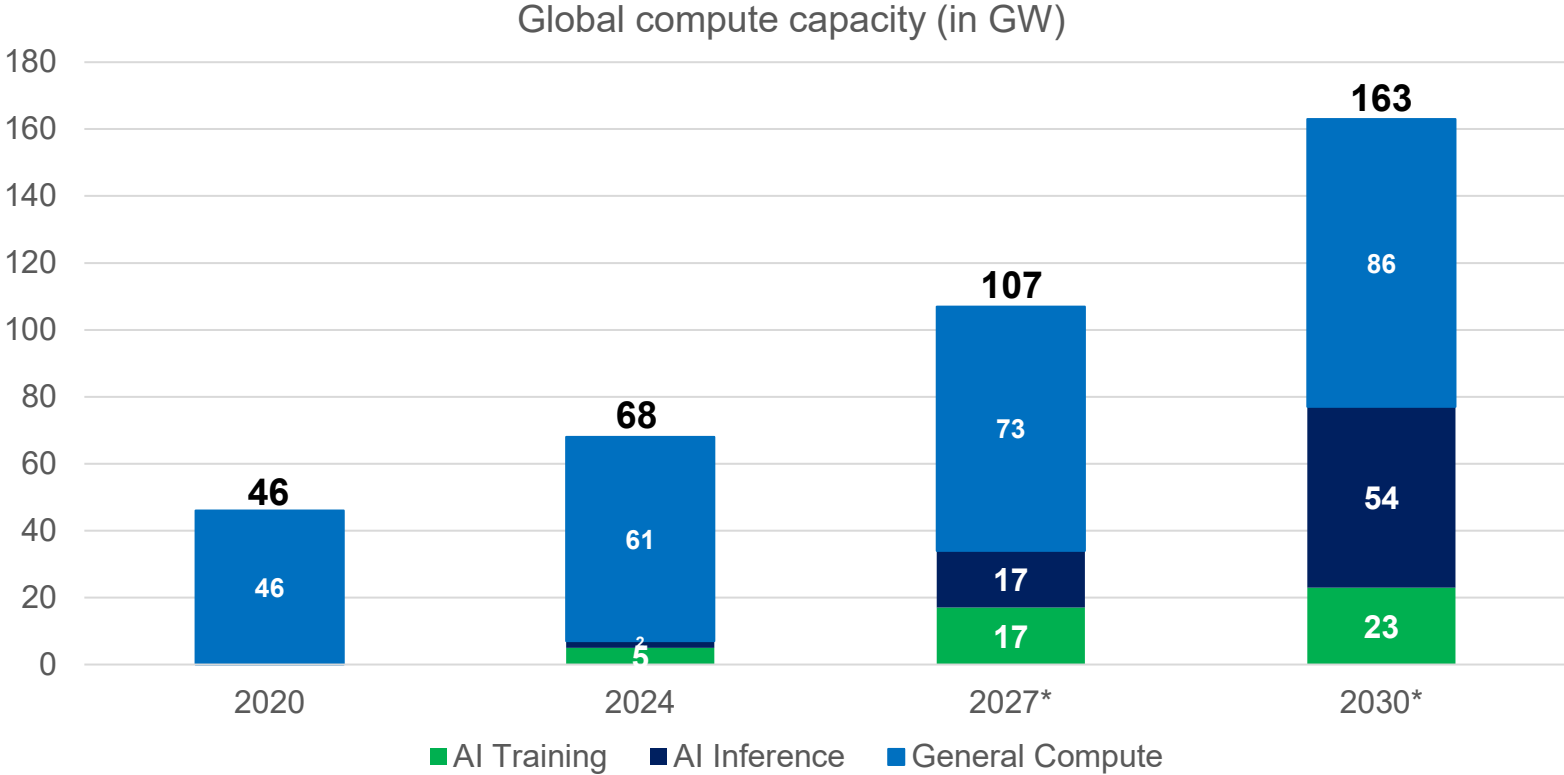


Remark: Projections

Source: Morgan Stanley Research 2026, data provided by the respective companies; ©Alexander Sikov – gettyimages.com

AI reaches inference infliction point

AI inference workloads emerge as dominant driver of compute demand through 2030



* Forecast according to the base-case scenario; figures are rounded.
Source: Bain Data Center Model 2025; ©GettyImages/Erik Isakson



AI chip market is being reshaped

NVIDIA faces growing competition for AI chips

Trend 1: Custom made chips (ASICs) are gaining ground

- Big Tech develops in-house chips to reduce reliance on general-purpose GPUs.
- Specialized inference chips are emerging from firms like Cerebras, D-Matrix or Groque.

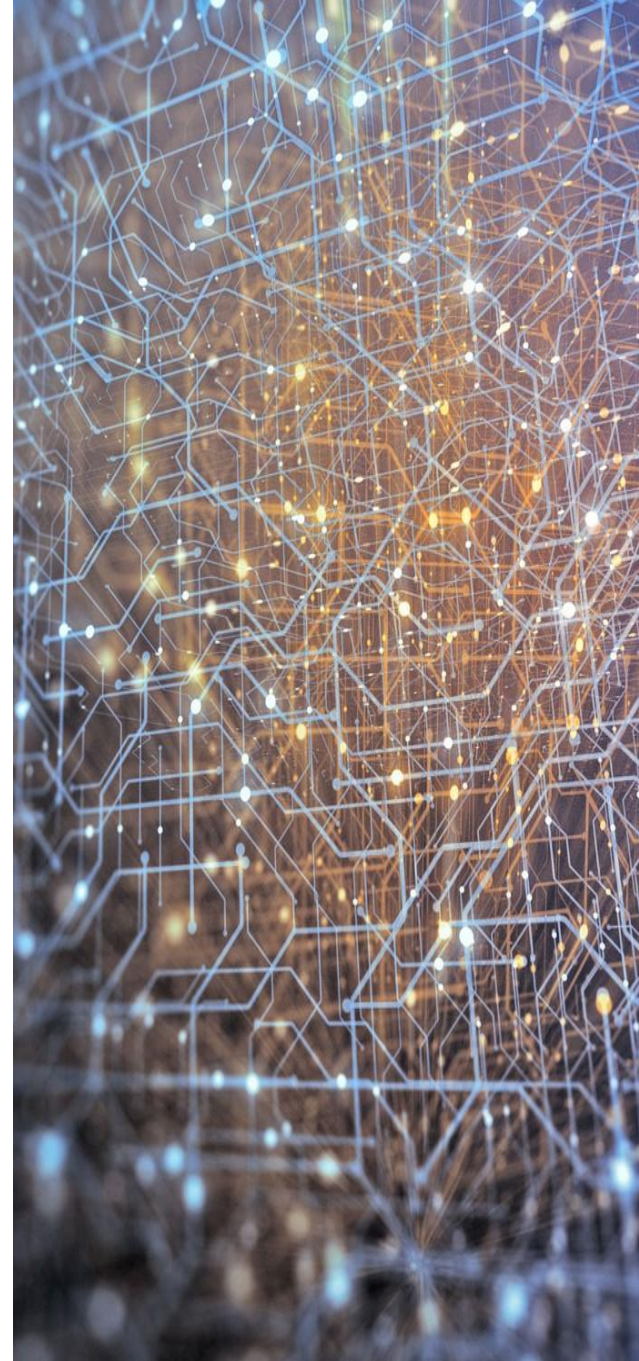
Trend 2: Physical AI needs more specialized chips

Physical AI applications like autonomous vehicles and humanoid robots require specialized edge chips for energy-efficient, low-latency and real-time processing.

The result: AI chips market becomes more diversified

AI chip market is set to diversify, with NVIDIA's dominant position likely to erode as competitors gain market share.

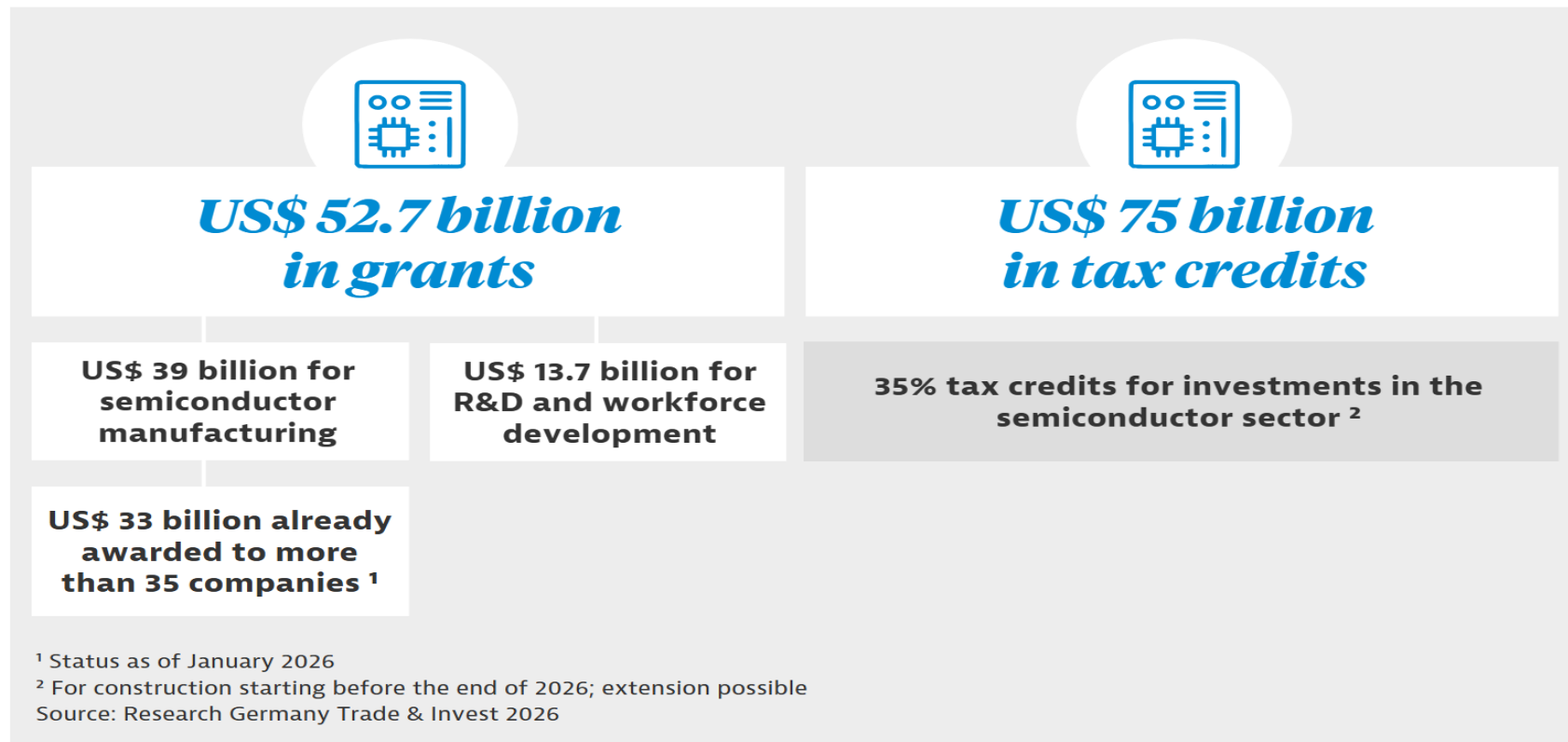
For German suppliers: significant opportunities across the value chain – particularly in advanced packaging, precision measurement and high-purity materials



U.S. chipmaking capacity to tripple by 2032

More than 640 billion US\$ are flowing into the semiconductor value chain

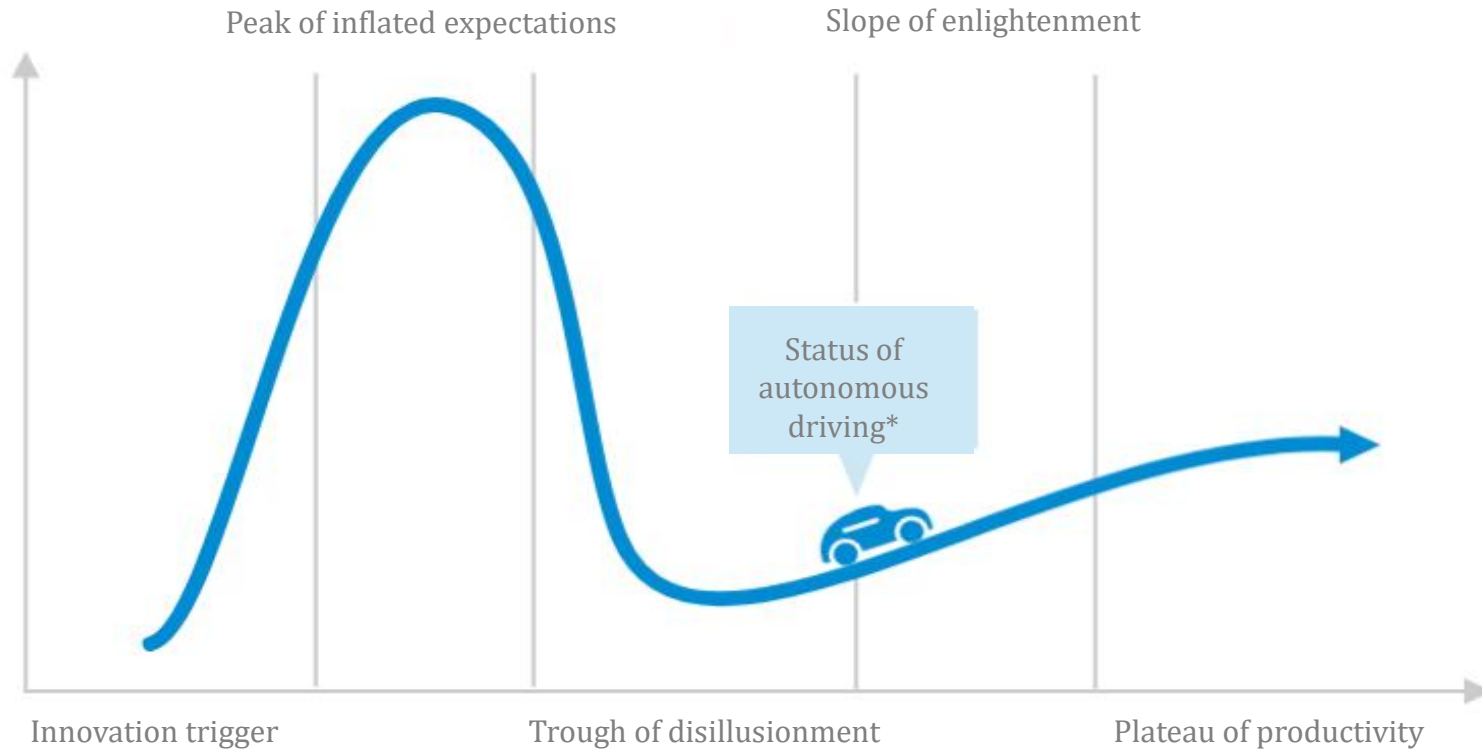
Funding under the CHIPS and Science Act



Autonomous Driving

Robotaxi operations span 10 U.S. cities as fleets continue to grow

Hype-Cycle for autonomous driving



Remarks: Refers to fully autonomous driving levels 4 and 5

Source: Gartner 2023; © Gorodenkoff Productions OU - stock.adobe.com



Autonomous Driving

The U.S. is building meaningful capacity for autonomous vehicle production

German players are active across multiple segments of the ecosystem:

- VW, through MOIA, is deploying autonomous ID.Buzz vehicles on the Uber platform in Los Angeles
- Holon, subsidiary of Benteler, is producing autonomous shuttles in Jacksonville, Florida; targeting integration with Lyft
- Continental is partnering with Aurora Innovation to mass-produce of hardware systems for autonomous trucks
- Bosch is partnering with Kodiak Robotics to supply a full hardware stack for autonomous trucks, e.g. actuation, sensors or compute systems
- Daimler is advancing autonomous trucks through its U.S.- based subsidiary Torc Robotics

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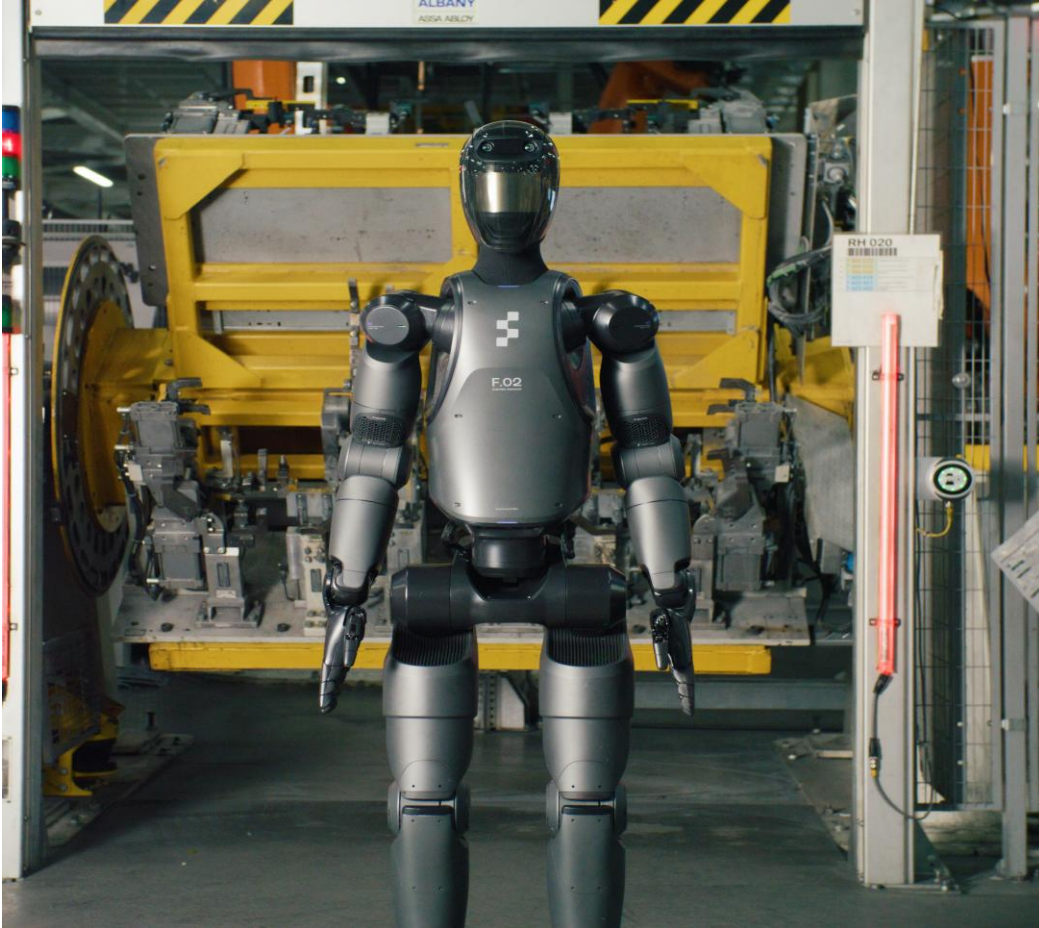
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Humanoid Robots become reality

The automotive industry is a key early adopter of humanoid robots



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