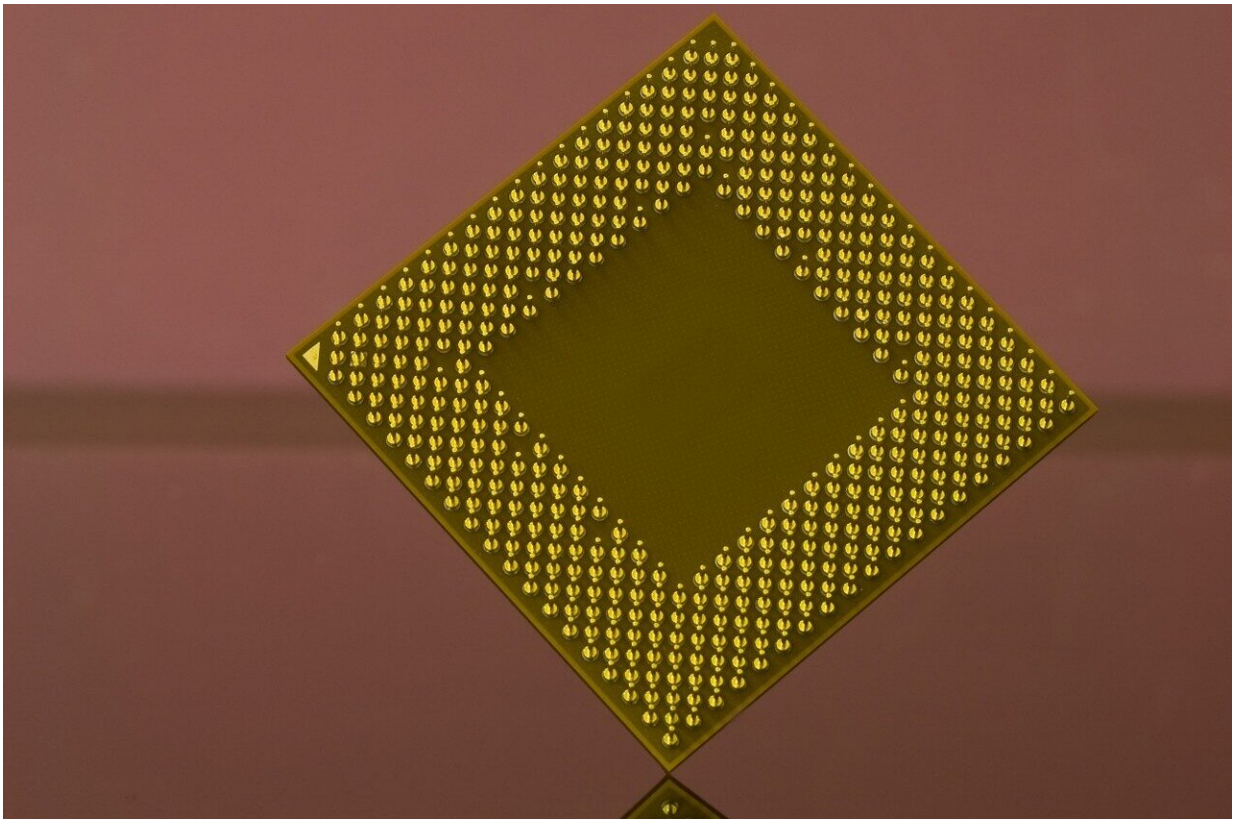


US, EU to use AI to seek alternate chemicals for making chips

April 4 2024, by Alberto Nardelli, Bloomberg News



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The European Union and the U.S. plan to enlist artificial intelligence in the search for replacements to so-called forever chemicals that are prevalent in semiconductor manufacturing, according to a draft

statement seen by Bloomberg.

The pledge forms part of the conclusions to this week's joint U.S.-EU Trade and Technology Council taking place in Leuven, Belgium.

"We plan to continue working to identify research cooperation opportunities on alternatives to the use of per- and polyfluorinated substances (PFAS) in chips," the statement says. "For example, we plan to explore the use of AI capacities and [digital twins](#) to accelerate the discovery of suitable materials to replace PFAS in [semiconductor manufacturing](#)," it says.

PFAS, sometimes known as forever chemicals, have been at the center of concerns over pollution in both the U.S. and Europe. They have a wide range of industrial applications but also show up in our bodies, in food and [water supplies](#), and—as their moniker suggests—they don't break down for a very long time.

Separately, the draft statement confirms earlier Bloomberg reporting of EU plans to join the U.S. in reviewing the security risk of so-called legacy chips in its supply chains.

Legacy semiconductors are mature or lower-end chips, and are essential throughout the global economy. China has poured investment into factories to increase their supply, and there are concerns on both sides of the Atlantic that this may distort the market or lead to critical dependencies.

"We intend to, as appropriate, continue to collect and share non-confidential information and market intelligence about non-market policies and practices, commit to consult each other on planned actions, and may develop joint or cooperative measures to address distortionary effects on the [global supply chain](#) for legacy semiconductors," the draft

statement says.

As part of the TTC, the EU and U.S. will aim to extend for a further three years their collaboration on an early-warning mechanism aimed at identifying supply-chain disruptions, as well as a mechanism for sharing information on public support provided to the semiconductor sector.

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