

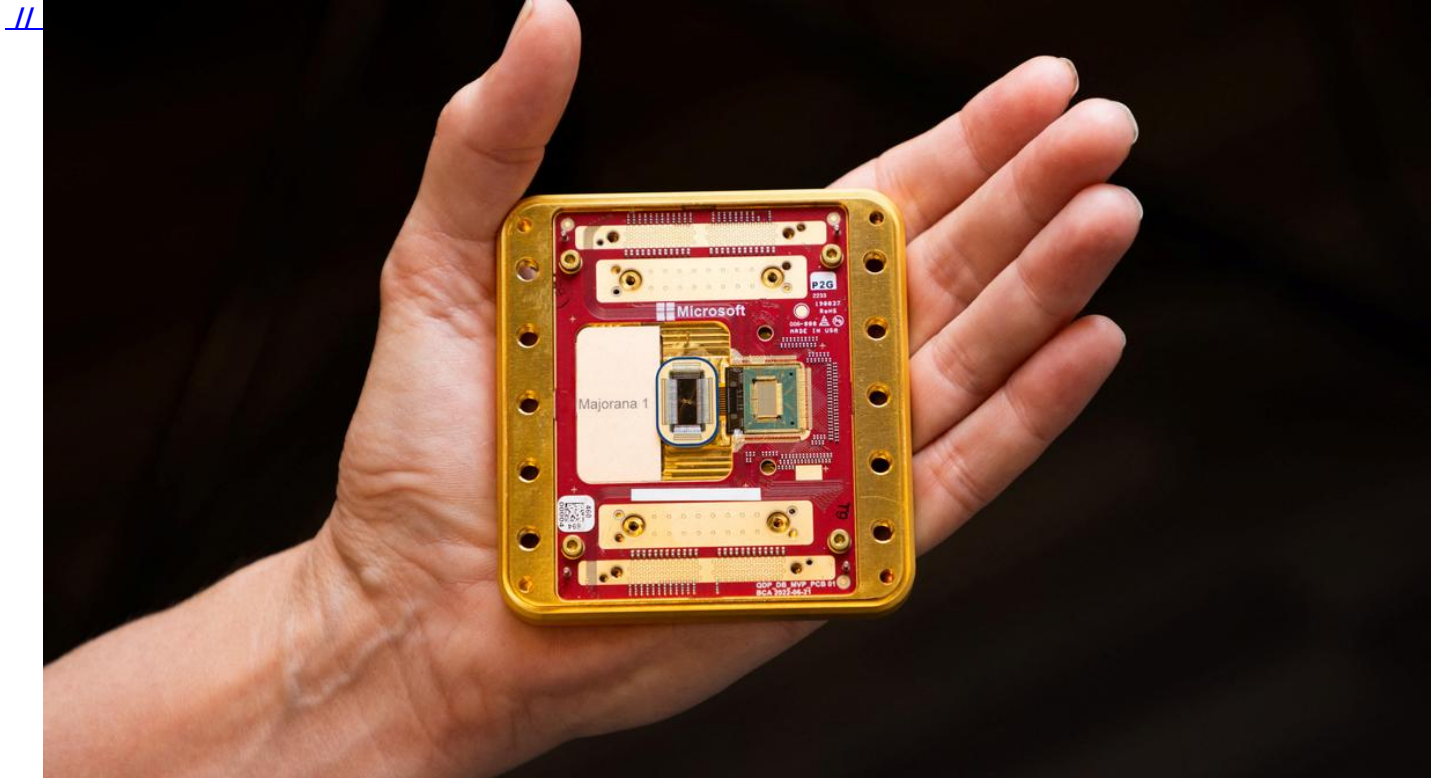


Majorana 1

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Microsoft has introduced **Majorana 1**, the world's first quantum chip powered by a **Topological Core architecture**, which aims to revolutionize [quantum computing](#).

- **Key Facts About Majorana 1:** It is the first quantum chip to utilize a **Topoconductor (Topological Superconductor)**, creating a new state of matter beyond solids, liquids, or gases, but a **topological state**.
 - It is composed of **indium arsenide (a semiconductor)** and **aluminum (a superconductor)**, enabling enhanced quantum stability and performance.
 - The chip relies on **Majorana fermions** that act as their **own antiparticles**.
 - It features **eight qubits**, but its **Topological Core architecture** enables error-resistant scaling to **one million qubits**, ensuring stable quantum computations.
 - Unlike classical computers using **binary bits (0s and 1s)**, quantum computers use **qubits**, which exist in multiple states simultaneously, enabling exponentially faster computations.
 - **Applications:** Could help in **breaking down microplastics, creating self-healing materials, improving healthcare solutions, and solving complex chemistry and materials science problems**.



Read more: [Quantum Technology](#)

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