

Honeywell unveils plan for 'most powerful' quantum computer

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Honeywell said it is developing the world's most powerful quantum computer which may help solve problems in materials, transportation and financial transactions

US manufacturing and technology group Honeywell said Tuesday it will

bring to market "the world's most powerful quantum computer" aimed at tackling complex scientific and business challenges.

The company said it had achieved a breakthrough in quantum computing, which uses [subatomic particles](#) to speed up processing, and would launch the new computers within three months. It released a [scientific paper](#) describing the accelerated quantum capability.

Honeywell said it had entered into partnerships with two quantum software and algorithm providers, Cambridge Quantum Computing and Zapata Computing to accelerate its efforts and find new ways to deploy quantum computing.

"Quantum computing will enable us to tackle complex scientific and business challenges, driving step-change improvements in [computational power](#), operating costs and speed," Honeywell chief executive Darius Adamczyk said.

"Materials companies will explore new molecular structures. Transportation companies will optimize logistics. Financial institutions will need faster and more precise software applications. Pharmaceutical companies will accelerate the discovery of new drugs. Honeywell is striving to influence how quantum computing evolves and to create opportunities for our customers to benefit from this powerful new technology."

Quantum computing is based on the use of quantum bits or qubits, which can perform trillions of calculations per second and in some cases outperform the fastest traditional supercomputers.

Honeywell said it was collaborating with JPMorgan Chase on financial applications for the technology.

It is also working with Microsoft to allow enterprise users to access Honeywell's quantum [computer](#) through the Microsoft Azure cloud platform.

The company said it hopes to address computing challenges that have been impractical to tackle with traditional computers.

"There are a number of industries that will be profoundly impacted by the advancement and ultimate application of at-scale quantum computing," said Tony Uttley, president of Honeywell Quantum Solutions.

Honeywell worked in stealth mode with partners before revealing its quantum plans, according to chief executive Ilyas Khan of Cambridge Quantum Computing.

Khan said Honey became an investor in the British-based firm "after a period of very close working cooperation," and added: "It may well be one of the technology world's best kept secrets for over a generation."

The announcement comes after Google claimed last year to have achieved "quantum supremacy" by developing a machine outperforming the world fastest supercomputers.

Google said its Sycamore solved a computing problem within 200 seconds which would have taken 10,000 years on a traditional computer.

IBM, which runs its own [quantum computing](#) program, said the boasts of the Sycamore computer's feats were exaggerated.

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