

IBM Claims Its BlueGene Supercomputer Is the Fastest

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[IBM Corp.](#) on Wednesday said it has developed the **world's fastest computer** – a 16,000-processor version of its BlueGene/L supercomputer. BlueGene was able to achieve a sustained performance of 36.01 TFLOPS, overtaking the Earth Simulator, built by NEC, that had set a computing speed record in 2002. On the June Top500 list, NEC's Earth Simulator was benchmarked at 35.86 TFLOPS.

Unlike the Earth Simulator, which was built using custom components and considerably more expensive, BlueGene comprises a huge number of smaller custom units. The new IBM's supercomputer is also much more compact in size than the Earth Simulator, occupying just one hundredth of the space.

Lawrence Livermore National Laboratory plans to install the Blue Gene/L system next year with 130,000 processors and 64 racks.

While IBM's speed sets a new benchmark, the official list of the world's fastest supercomputers will not be released until November.

About IBM's Blue Gene Supercomputer Project

Blue Gene is an IBM supercomputing project dedicated to building a new family of supercomputers optimized for bandwidth, scalability and the ability to handle large amounts of data while consuming a fraction of the power and floor space required by today's fastest systems. The full Blue Gene/L machine is being built for the Lawrence Livermore National Laboratory in California, and will have a peak speed of 360 teraflops. When completed in 2005, IBM expects Blue Gene/L to lead the Top500 supercomputer list. A second Blue Gene/L machine is planned for ASTRON, a leading astronomy organization in the Netherlands. IBM and its partners are currently exploring a growing list of applications including hydrodynamics, quantum chemistry, molecular dynamics, climate modeling and financial modeling.

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