

IBM prepares to tackle the big data landscape with an update on the POWER server lineup-- one with technical specifications making part of its open development alliance, the [OpenPOWER Foundation](#).



The out-scale Power Systems server are the result of a \$2.4 billion investment by Big Blue, one featuring the new POWER8 processor. According to the company Power Systems servers analyse data up to 50x faster than the "latest" x86-based systems, with silicon carrying over 4 billion transistors and over 11 miles of copper wiring.

"This is the first truly disruptive advancement in high-end server technology in decades, with radical technology changes and the full support of an open server ecosystem that will seamlessly lead our clients into this world of massive data volumes and complexity," IBM says. "With our membership in the OpenPOWER Foundation, IBM's POWER8 processor will become a catalyst for emerging applications and an open innovation platform."

In other words, the OpenPOWER Foundation and its 26-strong members-- including founders Google, Nvidia, Mellanox, Tyan and IBM-- are ready to take on a hyperscale server business dominated by the likes of Google, Amazon and Microsoft.

The first POWER8-based systems are 5 Power Systems S-Class servers for scale-out applications. Two systems (S812L and S822L) run exclusively on Linux, while the rest (S814, S822 and S824) run on Linux, AIX and IBM i. All are available in 1 and 2 socket and 2U and 4U configurations.

IBM Intros OpenPOWER Hardware

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The other foundation members are also working on OpenPOWER projects. Google is developing code and development tools for the tech, Nvidia implemented CUDA acceleration on POWER, Xilinx and Altera have FPGA accelerators attachable to OpenPOWER designs and Micron, Samsung and SK Hynix are developing technologies.

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