IBM Refreshes Power Linux Systems

Written by Marco Attard
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IBM refreshes its Linux-based Power System server chips-- and promises tight processor-GPU integration ideal for High Performance Computing tasks such as big data, deep learning and artificial intelligence.

The flagship refreshed offering is the S822LC. It features 2 Prower8 processors complete with PowerAccel interconnects including NVLink, a proprietary connector for high-speed connection with Nvidia Tesla P100 Pascal GPUs. The NVLink is embedded at silicon level to enable data speeds up to 5x faster than on x86-based systems.
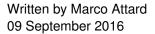
"The open and collaborative model of the OpenPower Foundation has propelled system innovation forward in a major way with the launch of the IBM Power System S822LC for HPC," Nvidia says. "Nvidia NVLink provides tight integration between the Power CPU and Nvidia Pascal GPUs and improved GPU-to-GPU link bandwidth to accelerate time to insight for many of today's most critical applications like advanced analytics, deep learning and AI."

PowerAccel also features the Coherent Accelerator Processor Interface (CAPI), a system for developers wanting to create custom processing engines.

Other features of the S822LC include up to 1TB memory, up to 4 integrated Nvidia Pascal GPUS and 3 CAPI-enabled PCIe slots. The S822LC is also available in a Big Data version with up to 2 Power8 processors without NVLink, 512GB RAM and 5 PCIe slots (4 of which are CAP-enabled) and up to 2 Nvidia K810 GPUs.

Another IBM launch is the S821LC-- a 1U system fitting 2 Power8 processors, 512GB RAM and

1 Nvidia K80 GPU.

All the above mentioned IBM Power8-based servers should ship by end September 2016.

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1 Nvidia K80 GPU.