Is Qualcomm, Microsoft collaboration a sign of less Intel dominance to come?

9 March 2017, by Nancy Owano

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Judging from technology-watching sites, Intel has something to worry about and it involves a rather well known place on the technology map called Redmond, Washington. Look for the sign that says Microsoft. There.

"Intel's dominance could be further eroded as Microsoft looks to alternative chip makers for its cloud hardware," said *MIT Technology Review*.

In brief, said Bloomberg, "Microsoft has developed a version of its Windows operating system for servers using ARM processors."

Microsoft Corp. is committing to use chips based on ARM Holdings technology in the machines that run its cloud services. Microsoft has entered a partnership with Qualcomm. The latter's ARM processors will run on the Windows Server operating system.

On Wednesday at the Open Compute Project (OCP) summit, Qualcomm announced the Microsoft collaboration, to accelerate cloud services on its 10 nanometer Qualcomm Centriq

2400 platform.

Qualcomm described the result being "a variety of cloud workloads" running on the Microsoft Azure cloud platform powered by Qualcomm Centriq 2400 server solutions.

Basically, wrote Chris Williams in *The Register*, "Windows Server on Qualcomm-designed Centriq CPUs is coming to Microsoft's cloud."

(*The Register* noted the Centriq as "a 64-bit ARM-compatible server-grade system-on-chip.")

Hot Hardware said Microsoft has built "a version of Windows Server that offers native support for ARM chips, and it is using this branch of the operating system for its own internal purposes."

In other words, the build has been for internal use only at Redmond. Williams pointed out the significance regarding the demo at Microsoft's OCP summit booth.

"For some time, Microsoft engineers have configured their toolchains to emit 64-bit ARMv8 builds of Windows Server, as well as the usual x86 builds, for internal testing and evaluation," wrote Williams. "What's happened now is that the necessary drivers and kernel support for the Centriq hardware have been completed to the point where the stack can be demonstrated in public at Microsoft's OCP Summit booth."

As Wlliams remarked, "there is absolutely no point showing off the software port if it's just going to be shelved and forgotten."

Qualcomm's release on Wednesday said the collaboration is to span "multiple future generations of hardware, software and systems."

When will Windows Server for ARM be available to the public? Or, more to the point, as *Hot Hardware*

asked, "when can we expect to see the Redmond, Washington-based company offer its software for [enterprise](#) customers?"

Quoted in an interview with Bloomberg, Jason Zander, vice president of Microsoft's Azure cloud division, said, "It's not deployed into production yet, but that is the next logical step."

What's in it for Microsoft? Dina Bass and Ian King, reporting in Bloomberg, said "The software maker seeks to cut costs in its Azure cloud business by developing new hardware."

Condliffe in *MIT Technology Review* said, "Microsoft hopes that the move could save it money, as the chips use less power and are built by multiple manufacturers, keeping pricing [competitive](#)."

Hmm. Food for Intel thought. Microsoft might not be the only big name contemplating costs. Intel is said to hold most of the data center market space. "Currently, Intel controls almost the entire server chip market," said Jamie Condliffe in *MIT Technology Review*.

Chris Williams in *The Register*, commenting on porting its Windows Server [operating system](#) to the Qualcomm Centriq, said this could "pile further pressure on Intel."

With most of the data center compute market, Intel may be looking at a situation where, said Williams in *The Register*, cloud giants and other enterprises want to try rival processor architectures and [accelerators](#) – "anything to push prices down and open up second sources."

The Qualcomm press release quoted Ram Peddibhotla, vice president, product management, Qualcomm Datacenter Technologies: "In collaborating with Microsoft and other industry leading partners, we are democratizing system design and enabling a broad-based ARM server ecosystem."

The company said its Qualcomm Centriq 2400 Open Compute Motherboard was planned for display at Microsoft's booth at the OCP event in Santa Clara, on Wednesday and Thursday.

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