Extreme Networks Joins Broadcom’s Trident II Parade

Craig Matsumoto, November 13, 2013

Extreme Networks (http://www.sdncentral.com/listings/extreme-networks) is announcing a 40-Gb/s top-of-rack switch on Wednesday, making it the latest vendor to make use of the recently available Trident II chips from Broadcom (http://www.sdncentral.com/listings/broadcom).
The new Summit X770 sports 32 40-Gb/s ports that can be divided into 10-Gb/s ports (up to 104 of them). And of course, it includes features inherent to those chips, such as low latency and hardware support for VXLAN (http://www.sdncentral.com/sdn-technologies/) and NVGRE.

Broadcom refuses to name Trident II customers, although it’s pretty well understood that the switches recently announced by Arista (http://www.sdncentral.com/channel/arista-networks), Cisco (https://www.sdncentral.com/channel/cisco), and Juniper (https://www.sdncentral.com/channel/juniper) are all using the chip. Trident II reached volume shipments a few quarters late, which is one reason why all these switches are arriving almost simultaneously. Vendors have been itching to launch, “like salmon at the base of the river,” says Todd Acree, Extreme’s director of product line management.

Since they’re all using the same chips, it’s difficult to spin unique stories about the products. Extreme is couching the X770 in terms of big data applications, but the tactic is already part (http://www.aristanetworks.com/en/solutions/big-data) of the Arista strategy.

To further stand out, Extreme is pointing to some features that have been in the Summit family for a while but are still neat enough to mention. One is SummitStack, the ability to stack eight Summits that live on different racks, the effect being to create a single eight-rack network entity. Those switches don’t all have to be the same, either; different Summit models can be stacked together.

And not everybody has to use Trident II in the same way, which creates some wiggle room. For example, Extreme is using the chip’s native support for IEEE 1588 v2 (http://www.ieee1588.com), the standard for precision timing and synchronization that’s been so crucial in mobile backhaul networks. Cisco is using that feature, too, but most competitors probably won’t, Acree says.

More importantly, it’s not that easy to just pick up a Trident II and stuff it into a system.

“Extreme has been using Broadcom silicon longer than anyone else, I think,” Acree says. “Part of it is using the silicon, part of it is using the SDK [software development kit], and that’s very tricky. I think that’s a three-year effort.”

Acree thinks that expertise has helped Extreme’s E4G line win business from Huawei (http://www.sdncentral.com/listings/huawei-technologies-uk-co-ltd), for example.

The Summit X770 is due to ship in January, although Acree says its timetable is such that a few shipments might make it out before Extreme ends its fiscal quarter on Dec. 20.

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