



## Research Brief

# QLogic Make the Most Sense for HP's Customers

On February 18th, QLogic announced a broader OEM relationship with Hewlett-Packard that now includes QLogic's 5800V and 5802V series 8GB stackable Fibre Channel (FC) switches re-branded as the HP StorageWorks SN6000. It is but the latest in a series of major OEM design wins that, in Data Mobility Group's opinion, elevate QLogic's position in the broader networking space and specifically the FC switching market.

At a time when QLogic's competitors in this space, namely Cisco and Brocade, have shifted focus *away* from FC edge switching investments, this is great news for HP's customers. Brocade's focus is on its director-class products where it should be, and Cisco is busy "boiling the ocean" with its Unified Computing and Unified Communications initiatives.

Meanwhile, QLogic's razor sharp focus on its product roadmaps and OEM partnerships has provided major vendors such as HP with the data center switching technologies required to build ultrafast, scalable, reliable, soup-to-nuts FC SAN solutions in support of both physical and virtualized environments.

Many people don't know that QLogic is the original HP Virtual Connect Fibre Channel switch partner and has shipped thousands of embedded Virtual Connect switches over the past 3 years, far more than Brocade, which is a relatively new entrant in this space.

HP is currently shipping the third generation QLogic Virtual Connect Fibre Channel Module and, to the best of our knowledge, it is the company's preferred BladeSystem-to-SAN interconnect.

In many ways, the recent announcement is a logical extension of existing HP-QLogic OEM agreements.

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## Under the Covers of HP's New SN6000

Each HP SN6000 Stackable 8Gb FC Switch has twenty 8Gb Fibre Channel ports, plus four dedicated inter-switch links (ISLs). Up to six switches can be stacked together, yielding a maximum of 120 user-available FC ports and 24 ISLs per stack, and stacks can be combined to create larger SANs (for example, five stacks could be clustered together for a SAN with 540 useable ports). The ISLs can run at either 10Gb or 20Gb; they run at 10Gb by default, but it only requires activating a license to non-disruptively upgrade the bandwidth to 20Gb, and ISLs running at different bandwidths (i.e., 10Gb and 20Gb) are interoperable.<sup>1</sup> The combined available bandwidth of those 8Gb ports and 20Gb ISLs provides enterprises with plenty of headroom to grow as new data-intensive applications and densely virtualized servers drive more and more traffic.

Not surprisingly, the SN6000 works particularly well in conjunction with HP's StorageWorks' Modular Smart Array (MSA) and Enterprise Virtual Array (EVA) storage systems. We believe that the benefits and value of using a QLogic-enabled, integrated HP stack are compelling. Enterprises should find that deploying and managing a SAN using SN6000 stackable switches and HP storage is significantly easier and, in terms of total cost of ownership (TCO), less expensive than alternatives from Brocade. Much of the ease-of-use and TCO savings is due to the benefits of stackable switches, but there is an additional piece: simplified, unified management software.

HP's Simple SAN Connection Manager (SSCM) is an integrated suite of tools that enables IT to configure and manage all parts of an HP SAN from a single user interface. Typically, managing and configuring a Fibre Channel SAN involves using at least three different applications, one for the switches, another for the server HBAs, and a third for the storage arrays.

Using SCCM provides a much better user experience. Administrators can configure and use a SAN in just three steps and less than 35 minutes—with no special FC expertise or SAN experience—and manage all of the various components from one unified interface. SCCM improves productivity and reduces the need for specialized FC and SAN expertise, saving both time and money.

<sup>1</sup> Each stacking port yields the equivalent of 3 times the bandwidth of an FC port. For example, a 10GB stacking port yields the bandwidth of three 4GB FC ports while a 20GB stacking port yields the bandwidth of three 8GB FC ports.



## Powered by QLogic

We believe HP made the best possible choice for its customers when it chose to expand its OEM relationship with QLogic. Clearly, QLogic has repeatedly demonstrated that it is serious about supporting Fibre Channel users and its stackable FC edge switch is an innovation that comes at a time when the competition is asleep at the switch. Cisco's stackable edge switches lack 8GB FC, and Brocade's 8GB FC switches are non-stackable.

QLogic's stackable FC design uses dedicated ISL ports – a major architectural and cost advantage (over non-stackable designs) that only gets better as network configurations grow. Adding another switch does not require repurposing usable ports as ISLs. This reduces downtime and gives IT administrators the flexibility to non-disruptively scale their SAN configurations. Cabling and topologies are also considerably simpler with QLogic's stackable design than they are with other edge switches.

QLogic's innovations mean that its stackable switches:

- do not waste ports for ISLs, yielding 25% more useable ports than traditional edge switches
- require significantly fewer cables and optics
- sport higher bandwidth than the competition—8Gb ports and 20Gb ISLs
- interoperate with existing Fibre Channel networks
- allow enterprises to easily scale a SAN in small increments
- reduce disruptions and downtime caused by reconfiguring SANs

We should also note that QLogic's stackable switches leverage the N\_Port ID Virtualization standard (NPIV), a must-have for heavily virtualized Fibre Channel networks. Using NPIV enables transparent routing of FC traffic through QLogic switches, ensuring seamless interoperability with other switches, directors, and devices. It also ties in nicely with HP's Virtual Connect technology.



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## Summing Up

Success in networking is a matter of executing well on product roadmaps and building solid channel and OEM relationships. In that context, QLogic has consistently delivered, and that's a good thing for its partners and their customers. The company's recently announced expansion of its HP OEM relationship is just another in a string of design wins that strengthen its leadership role in the FC market, particularly in heavily virtualized environments and at the edge.

At Data Mobility Group, we place our bets and our reputation on companies that consistently deliver. QLogic has yet to disappoint us. Anyone building or buying FC switching gear cannot afford to ignore QLogic-enabled products. 