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PRODUCTS

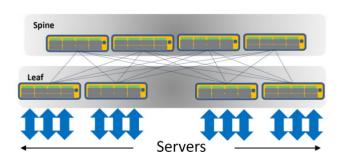
Aurora 630

- ✓ Broadcom Tomahawk
- **✓•** 16 × 100G + 48 × 25G
- ✓ Intel Atom C2558 CPU
- ONIE Pre-loaded
- ONL ready

Description

Specification







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Datasheet (http://netbergtw.com/wp-content/uploads/Files/leaflet-nba720-630-620.pdf).

The Aurora 630 is a 25GbE switch suited for Top-of-Rack/Spine Datacenter, Enterprise, and Cloud Service Provider network deployments, where line-rate L2/L3 (3.2 Tbps) switching performance of StrataXGS Tomahawk is paired with low-latency of true PHY-less design (https://bm-switch.com/index.php/blog/edc-phy-and-phyless-switch-design-difference/) in a compact 1RU form factor.

It has a unique port combination of 48 x 25GbE SFP28 and 16 x 100GbE QSFP28 interfaces, which is optimal for the top of rack switch with non-blocking throughput between rack and aggregation layer, and four additional 100G ports are available for the high-performance connectivity.

With 25/100G bi-directional performance on each port, sub-500ns port-to-port latency, support for high-performance storage/RDMA protocols, comprehensive overlay and tunneling support including VXLAN, VXLAN routing, NVGRE, MPLS, SPB, the Aurora 630 is ideal for small high performance computing clusters and high-frequency trading applications as well as highly virtualized cloud environments and network provider companies.

Performance is backed by quad-core Intel Atom processor, up to 16GB DDR3 memory and 64GB SSD drive for application deployment. RAS features include a redundant hot-swappable power supply (1+1) and fans (N+1). x86-based control plane provides access to an ecosystem of the same Linux applications that are deployed on servers.

Available in Back to Front (BtoF) and Front to Back (FtoB) airflow configurations.

This cost-effective design replaces outdated 10/40G switch technology.

Leaf-Spine architecture

- ✓ With new networking paradigm in modern DC, Aurora 630 is great for ToR/Leaf tier; you can achieve number of advantages over traditional Core/Aggregation/Access approach:
- ✓ Two-tier fabric with undersubscription ratio
- ✓ Easy scale to hundreds of nodes
- ✓ Energy Efficient
- ✓ Lower latency

Simplified deployment

✓ With full Open Network Install Environment (ONIE) support, network operators can install the target Network Operating Systems (NOS) as part of data center provisioning, in the fashion that servers are provisioned.

Network monitoring

✓ The StrataXGS Tomahawk switch series includes BroadView[™] instrumentation, which provides operators the telemetry to troubleshoot large-scale networks, apply controls for optimal performance, respond to potential problems before they happen, and drive down OPEX. This includes extensive application flow and debug statistics, link health and utilization monitors, streaming network congestion detection and packet tracing capabilities.

Performance

✓ 48 x 10/25GbE SFP28 ports
16 x 100/40GbE OSFP28

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- ✓ 3.2 Tbps Broadcom Tomahawk BCM56960
- ✓ 4400 million packets per second
- ✓ Intel Atom 2558 quad core processor for application deployment
- ✓ Up to 16GB of DDR3 memory (8GB default)
- ✓ Configurable pipeline latency enabling sub-400 ns port-to-port operation
- ✓ Supports high-performance storage/RDMA protocols including RoCE and RoCEv2

Reliable hardware platform

- ✓ Redundant 650W 1+1 power
- ✓ Redundant N+1 cooling

Network OS (NOS) options

- ✓ Broadcom ICOS Web-scale NOS with traditional L2/L3 functions and management, with an API structure for third-party apps and integration with provisioning and orchestration systems.
 - Latest ICOS release runs in OS-as-a-service mode and supports the use of Linux shell tools for management, provisioning, application deployment and orchestration enabling customer a seamless path to network modernization for network virtualization, SDN, SDDC, and NFV.
- ✓ Open Network Linux is a Linux distribution for "bare metal" switches, that is, network forwarding devices built from commodity components. ONL uses ONIE to install onto on-board flash memory. Open Network Linux is a part of the Open Compute Project and is a component in a growing collection of open source and commercial projects.
 - OpenNSL and OF-DPA 3.0 are available on request.
- OpenSwitch an open source, Linux-based network operating system (NOS) designed to power enterprise-grade switches from multiple hardware vendors that will enable organizations to rapidly build data center networks that are customized for unique business needs.
 - Now integrated with OF-DPA 3.0 and OVS for a seamless OpenFlow support.
- ✓ Microsoft SONiC a collection of networking software components required to have a fully functional L3 device. It is designed to meet the requirements of a cloud data center. It is fully open-sourced at OCP.



(http://netbergtw.com)

Address: 2F-1 No.36, Park St., Nangang District, Taipei, 11560 Taiwan R.O.C.

Tel: +886-2-26537088

Email: sales@netbergtw.com (mailto:sales@netbergtw.com)