

- ONIE Pre-loaded
- Barefoot Tofino
- A unique development platform
- P4 programming language
- ONL-ready
- SDN-ready
- X86 Linux apps

The Aurora 710 is the first product based on Barefoot Tofino switching silicon. It has 2x 10G SFP+ ports and 32 x 100GbE QSFP28 interfaces, which can be configured up to 128 x 25G with break-out cables for high-density scenarios.

It is a unique network development platform, designed to bring the twin pillars – performance and programmability – together for the first time in the history of networking. The combination of the Tofino programmable switch chip, the P4 programming language, and the Capilano toolset are revolutionary.

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 working on servers.

A ready-to-use NOS, SONiC - a collection of networking software components required to have a fully functional L3 device, is available for data center applications.

Support of the Stratum project combines next-generation SDN capability with the flexibility of Barefoot Tofino Match-Action Unit pipelines.

## About us

Netberg is a provider of advanced hardware solutions for data centers and enterprises worldwide. With vast expertise in hardware and software, we aim to provide the best solutions for servers, Ethernet switches and routers, telecom solutions, and custom HW/SW products. More information about Netberg available at [www.netbergtw.com](http://www.netbergtw.com)



## Key features:

- Interfaces: 32x 100G QSFP28 Ports, 2x 10G SFP+ ports, Management (1000Base-T), mini-USB Console Port, and USB2.0 (Type A)
- Intel Xeon D-1527 CPU
- 8GB DRAM, 128GB m.2 SSD
- Barefoot Tofino DFN-T10-032D
- Switching Capacity: 3.2Tbps, 22MB Packet Buffer
- Jumbo Packet: 12K bytes
- 550W 1+1 RPSU, 100V~240V AC / 50~60Hz
- 4 N+1 redundant fans, Front-to-Back/Back-to-Front Airflow
- Fan LED, System status LED, PSU1 status LED, PSU2 status LED, Reset button
- Operating temperature: 0~45°C
- Operating humidity: 20-95% maximum relative humidity (non-condensing)
- FCC, CE, RoHS6



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.

- ECMP
- LAG, MC-LAG (L2)
- LLDP. LLDP extended MIB: lldpremtable, lldploporttable, lldpremanaddrttable, lldploctmanaddrttable, lldploctporttable, lldpLocalSystemData
- QoS - ECN, QoS - RDMA
- Priority Flow Control
- WRED
- COS
- SNMP
- Syslog, Sysdump
- NTP
- COPP
- DHCP Relay Agent
- SONiC to SONiC upgrade
- One Image
- VLAN, VLAN trunk
- ACL permit/deny
- IPv6
- Tunnel Decap
- Mirroring
- Post Speed Setting
- BGP Graceful restart helper
- BGP MP
- Fast Reload
- PFC WD
- RADIUS AAA, TACACS+
- LACP Fallback
- MTU Setting
- IPv6 ACL
- BGP
  - BGP/Neighbor-down fib-accelerate
  - BGP-EVPN support(type 5) (related HLD Fpmsyncd, Vxlanmgr,template)
- Port breakout
- Dynamic ACL Upgrade
- SWSS Unit Test Framework (best effort)
- ConfigDB Framework
- Critical Resource Monitoring
- MAC Aging
- IPv6 ACL
- BGP/Neighbor-down fib-accelerate
- PFC WD
- gRPC
- Dtel support
- Sensor transceiver monitoring
- Debian Kernel 4.9
- Warm Reboot
- Incremental Config (IP, LAG, Port shut/unshut)
- Asymmetric PFC
- PFC Watermark
- Routing Stack Graceful Restart
- Basic VRF and L3 VXLAN
- FRR as default routing stack
- Everflow enhancement
- Egress ACL bug fix and ACL CLI enhancement
- L3 RIF counter support
- PMon Refactoring
- MACSec



The Stratum project broadens the scope of SDN to include full lifecycle control, configuration and operations interfaces.

Envisioned as a key software component of SDN solutions of the future, Stratum implements the latest SDN-centric northbound interfaces, including P4, P4Runtime, gNMI/OpenConfig, and gNOI. It does not embed control protocols, but instead is designed to support either an external Network OS or to work with NOS functions running on the same embedded switch.