



Arista 7368X4 Series

Arista 7368X4 Series Introduction

The Arista 7368X4 Series are the benchmark for performance, scale and power efficiency in data center switches. The expansion of next generation applications for machine learning and artificial intelligence to support a broad spectrum of cloud applications and intelligent services is driving the evolution of scale-out networks. The growth in demand for increased datacenter performance is leading to the widespread adoption of 25G, 50G and 100G servers and accelerating the need for dense 400G and 100G networking solutions that accommodate a broad range of interface speeds with high performance and scale. The Arista 7368X4 Series extends Arista's industry leading 7000 Series with the highest performance, increased scalability, system density and innovative features optimized for software driven cloud networking.

High Performance

- Single 12.8Tbps Packet Processor
- Up to 25.6 Tbps system capacity
- Up to 8 billion packets per second
- Class leading latency as low as 700ns
- Ultra efficient system with 128x100G or 32x 400G in 4U
- Choice of 400G and 100G modules
- 64MB shared packet buffer with burst absorption
- Under 10W per 100G port

Feature Rich

- Architected for cloud operations
- Forward and reverse airflow
- Rich L2 and L3 features
- Large Scale 128-Way ECMP
- Zero Touch Provisioning
- Flow aware traffic scheduling
- Smart System Upgrade
- Hitless MLAG ISSU

High Scalability

- Wirespeed L2 and L3 forwarding
- Up to 128 x 100G
- Scalable Leaf-Spine and Spline designs
- Flexible L2 and L3 resources allocation
- Over 480K IPv4 Routes
- Over 300K IPv6 Routes

Advanced Monitoring

- CloudVision
- LANZ microburst detection
- AEM proactive management
- IEEE 1588 precision timing
- sFlow for network visibility
- VM Tracer integration

7368X4 Deployment Flexibility

The Arista 7368X4 data center switches deliver a rich choice of interface speeds allowing leaf and spine networks to seamlessly migrate to 100G and 200G/400G in a 4U compact system. The 7368X4 powered by Arista EOS, the worlds most advanced network operating system, are available with a range of modules:

- **7368-16C** - QSFP based with support for 40G and 100G speeds on all 16 ports and 200G on alternate ports
- **7368-4D** - 400G with QSFP-DD and support for 4x100G and 2x200G modes
- **7368-4P** - 400G with OSFP and support for 4x100G and 2x200G modes

Support for mix and match combinations of the modules allows up to 128 x 100G or 32 x 400G in just 4RU, with a pay as you grow flexibility for right sizing deployments and the ability to expand over time.

The 7368X4 offers high performance, simple maintenance, rich features and advanced provisioning and monitoring tools that provide flexibility in building large scale leaf and spine designs. The system density and flexibility combined with a consistent architecture offered by the 7060X and 7260X series reduces the total number of network devices, lowering cost and power. The 7368X are suitable for a wide variety of deployment scenarios, the following are a selection of typical use cases:

- **Hyper-scale cloud** — for large scale multi-tier networks
- **Dense top of rack** — for server racks with 100G systems and 100G/400G network connections
- **High performance storage** — NFS and NVMe high performance systems
- **Grid / HPC** — requiring cost effective and power efficient systems to enable AI and ML solutions with non-blocking or minimal over-subscription for servers
- **Leaf-Spine** — open standards based L2 and L3 with monitoring and visibility features — VM Tracer, LANZ, sFlow and Tracers
- **400G and 100G Scale Out Designs** — Small to medium locations requiring power efficiency and high density compact systems
- **ECMP designs up to 128-way** — cost-effective multi-pathing using open protocols and high density single packet processor switches
- **Low Latency** — consistent low latency with higher speed servers results in lower end to end latency

Arista EOS

Arista EOS is a modular switch operating system with a unique state sharing architecture that cleanly separates switch state from protocol processing and application logic. Built on top of a standard Linux kernel, all EOS processes run in their own protected memory space and exchange state through an in-memory database. This multi-process state sharing architecture provides the foundation for in-service-software updates and self-healing resiliency.

7368X4 Series Systems

The 7368X4 supports easy replacement of all active components including supervisor, switch card and I/O modules, power supplies, and fans. The Arista 7368X4 support hot-swappable power supplies and N+1 fan redundancy, EOS high availability and live software patching, a choice of L2 and L3 multi-pathing designs and powerful EOS innovations for visibility, application level performance monitoring, traffic management and virtualization.

Feature	Description
CloudVision	Network-wide workflow automation and workload orchestration as a turnkey solution for Cloud Networking
IEEE 1588 PTP	Build and scale accurate timing solutions with sub-microsecond accuracy
Smart System Upgrade	Optimized SW upgrades to reduce the impact of software upgrades and avoid network convergence
Hitless Speed Changes	Eliminate downtime when configuring different speeds and bringing up new links
128-way ECMP and 64-way MLAG	Improve network scalability and balance traffic across large-scale leaf-spine designs or server load balancers
Latency Analyzer	A solution to improve monitoring and visibility for congestion from persistent or microbursts.
Flow aware management of traffic	Enhanced load distribution for optimal traffic distribution and link utilization for intensive datacenter workloads
Elephant Flow Detector	Automatically detect large flows and redirect to lower priority queues in real-time
High Performance Shared Buffer Memory	Integrated packet buffer that is dynamically shared across ports to maximize the per port buffer for bursty applications and advanced congestion control for lossless traffic requirements in low latency networks

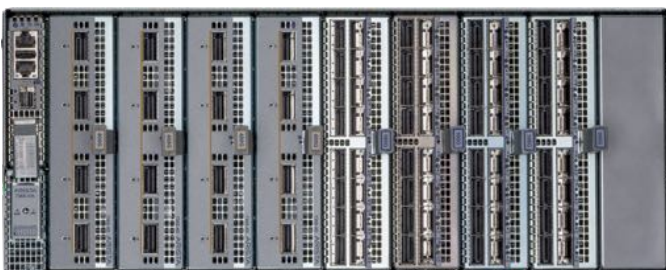
16 x 100G Module:

- QSFP100 ports
- Flexible 100G with 200G mode
- Compatible with 40G QSFP+
- Hotswap with no power off



4 x 400G Module:

- Either QSFP-DD or OSFP
- Flexible 400G or 4x 100G mode
- Compatible with 100G QSFP
- Hotswap with no power off



Arista 7368X4 Series Front



Arista 7368X4 Series Rear

* Not currently supported in EOS