Arista 7388X5 Series

High Performance

- 7388X5: 128 x 100G/200G or 64 x 400G
- High density 100G, 200G and 400G
- Flexible 10G, 25G, 100G, 200G and 400G support
- Up to 51.2 Tbps system capacity
- Up to 10.6 billion packets per second
- Wire speed L2 and L3 forwarding
- Latency from 825ns for 200G

Feature Rich

- Architected for cloud operations
- Forward and reverse airflow
- Rich L2 and L3 features
- Large Scale 256-Way ECMP
- Zero Touch Provisioning
- Flow aware traffic scheduling
- Smart System Upgrade
- Hitless MLAG ISSU
- Dynamic Load Balancing for advanced multi-pathing
- Advanced Congestion Management for NVMe and AI workloads
- Flow aware traffic scheduling

High Scalability

- Shared 114MB Buffer with burst absorption
- Up to 128K MAC addresses
- Over 800K IPv4 Routes
- Over 500K IPv6 Routes
- DirectFlow and eAPI

Advanced Monitoring

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

Arista 7388X5 Series Introduction

The Arista 7388X5 series is a compact modular system built on a single 25.6Tbps packet processor in an extremely compact 4RU form factor that enables flexible port configuration as well as simple maintenance with all elements being field replaceable.

With twice the capacity of the previous generation, the 7388X5 doubles the network radix for high density switching, reduces tiers and simplifies networks. Line rate performance with up to 128 ports of 200G or 64 ports of 400G provides significant improvements to both system density and power efficiency. Combined with proven layer 2 and 3 features the 7388X5 delivers advances in traffic awareness, congestion handling and instrumentation to enhance network wide visibility and monitoring.

7388X5 Deployment Flexibility

The Arista 7388X5 data center switches deliver a rich choice of interface speeds allowing leaf and spine networks to seamlessly migrate to 100G, 200G and 400G in a 4U compact system. The 7388X5 powered by Arista EOS, the worlds most advanced network operating system, are available with a range of modules:

- **7388-16CD -** QSFP56 based 200G on all 16 ports
- **7388-8D -** QSFP-DD based 400G on all 8 ports

Support for mix and match combinations of the modules allows up to 256 x 100G or 128 x 200G or 64 x 400G in just 4RU, with a pay as you grow flexibility for right sizing deployments and the ability to expand over time.

The 7388X5 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 7060X5 series reduces the total number of network devices, lowering cost and power. The 7388X5 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/200G systems and 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 200G 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
- **Enhanced Features —** Rich instrumentation, traffic management, high scale and large buffers

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.

7388X5 Series Systems

The 7388X5 supports easy replacement of all active components including supervisor, switch card and I/O modules, power supplies, and fans. The Arista 7388X5 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 200G Module:
- QSFP56 ports
- Flexible 100G and 200G mode
- Compatible with 40G QSFP+
- Hotswap with no power off

8 x 400G Module:
- QSFP-DD ports
- Flexible 400G or 4x 100G mode
- Compatible with 100G QSFP and 200G QSFP56
- Hotswap with no power off

Arista 7388X5 Series Front

Arista 7388X5 Series Rear

* Not currently supported in EOS

Arista 7388X5: Enterprise and Hyperscale cloud density, performance, features and efficiency