# ARISTA

## 7050X4 Series



#### **High Performance**

- Flexible 100G, 200G and 400G support
- Up to 32 ports of 400G with a choice of OSFP or QSFP-DD
- Up to 48 100G & 8 ports of 400G
- Up to 24 ports of 200G
- •48 100G & 8 400G ports with MACsec
- Wire speed L2 and L3 forwarding
- Up to 12.8 terabits per second and 5.3 billion packets per second
- Latency from 900ns

### **Feature Rich**

- High Availability
- VXLAN and EVPN
- INT and GREEN-T \*
- Smart System Upgrade \*
- 128-way ECMP for scale-out networks
- Up to 132MB integrated intelligent
- buffer with dynamic buffer allocation
- Flexible 10/25/40G/50G/100G/400G

#### Virtualization & Provisioning

- Extensible 64-bit EOS
- CloudVision
- LANZ for microburst detection \*
- Zero Touch Provisioning (ZTP)

### Arista 7050X4 Series Introduction

Quick Look

As enterprises continue to optimize data center facilities for modern cloud-native applications, collaboration tools, containerized services and emerging Al/ML technologies, the requirement for high capacity, low latency networking is driving a flattening of data center architectures and high bandwidth interconnectivity between facilities and the public cloud.

The Arista 7050X4 Series high performance flexible data center switches provide support for a wide range of interface speeds, low latency, rich L2 and L3 Enterprise features including EVPN/VXLAN and extensive automation and programmability with Arista's EOS for industry leading software driven cloud networking.

## 7050X4 400GbE, 200GbE and 100GbE Flexibility

The 7050X4 Series is available in a choice of seven models:

- The **7050DX4-32S** is a 1RU system with 32 400G QSFP-DD ports offering wire speed throughput of up to 12.8 Tbps bi-directional. Each QSFP-DD port supports a choice of 7 speeds with flexible configuration between 400GbE, 200GbE, 100GbE, 50GbE, 40GbE, 25GbE and 10GbE modes for up to 128 ports of 10GbE and 25GbE or 144 ports of 50GbE or 64 ports of 200GbE using breakouts.
- The **7050PX4-32S** is a 1RU system with 32 400G OSFP ports offering wire speed throughput of up to 12.8 Tbps bi-directional. Each OSFP 400G port supports a choice of 7 speeds with flexible configuration between 400GbE, 200GbE, 100GbE, 50GbE, 40GbE, 25GbE and 10GbE modes for up to 128 ports of 10GbE and 25GbE or 144 ports of 50GbE or 64 ports of 200GbE using breakouts.
- The **7050DX4M-32S** is a 1RU system with 32 400G QSFP-DD ports offering wire speed throughput of up to 12.8 Tbps bi-directional, while also supporting MACsec encryption on 16 ports. Each QSFP-DD port supports a choice of 7 speeds with flexible configuration between 400GbE, 200GbE, 100GbE, 50GbE, 40GbE, 25GbE and 10GbE modes for up to 128 ports of 10GbE and 25GbE or 144 ports of 50GbE or 64 ports of 200GbE using breakouts.
- The **7050SDX4-48D8** is a 1RU system with 48 100G SFP-DD and 8 400G QSFP-DD ports offering wire speed throughput of up to 8.0 Tbps bi-directional. Each 100G SFP-DD port supports a choice of speeds with flexible configuration between 100GbE, 50GbE, 25GbE and 10GbE modes and each QSFP-DD port supporting 400GbE, 200GbE, 100GbE and 40GbE modes.
- The **7050SPX4-48D8** is a 1RU system with 48 100G DSFP and 8 400G QSFP-DD ports offering wire speed throughput of up to 8.0 Tbps bi-directional. Each 100G DSFP port supports a choice of speeds with flexible configuration between 100GbE, 50GbE, 25GbE and 10GbE modes and each QSFP-DD port supporting 400GbE, 200GbE, 100GbE and 40GbE modes
- The **7050CX4-24D8** is a 1RU system with 24 100/200G QSFP-56 and 8 400G QSFP-DD ports offering wire speed throughput of up to 8.0 Tbps bi-directional. Each QSFP-56 200G port supports a choice of speeds with flexible configuration between 200GbE and and 100GbE modes and each QSFP-DD 400G port supporting 400GbE, 200GbE, 100GbE and 40GbE modes for up to 72 logical ports.
- The **7050CX4M-48D8** is a 2RU system with 48 100G QSFP-100 and 8 400G QSFP-DD ports, offering wire speed throughput of up to 8.0 Tbps bi-directional with MACsec support. Each 100G QSFP port supports a choice of speeds with flexible configuration between 100GbE, 50GbE, 25GbE and 10GbE modes and each QSFP-DD port supports 400GbE, 200GbE, 100GbE and 40GbE modes.

## ARISTA

#### 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.

#### 7050X4 Series Systems

Arista 7050X4 Series support hot-swappable power supplies and N+1 fan redundancy, EOS high availability, a choice of L2 and L3 multi-pathing designs and powerful EOS innovations for visibility, application level performance monitoring and virtualization.

Feature	Description
CloudVision	Network-wide workflow automation and workload orchestration as a turnkey solution for Cloud Networking
Wirespeed VXLAN Routing	Seamless integration between VXLAN and L2/L3 environments, physical and virtualized networks
Fully shared packet buffer	Advanced traffic manager with up to 132MB of packet buffer that is fully shared across all ports
128-way ECMP and MLAG	Improve network scalability and balance traffic across large-scale leaf-spine designs or server load balancers
Latency Analyzer *	Real time visibility of port latency and per port high watermarks to provide immediate feedback and precision monitoring
Dynamic Load Balancing *	Enhanced load distribution for optimal traffic distribution and link utilization for intensive data center workloads

	7050DX4- 32S	7050PX4- 32S	7050DX4M- 32S	7050SDX4- 48D8	7050SPX4- 48D8	7050CX4- 24D8	7050CX4M- 48D8
Description	32 400G QSFP- DD and 2 SFP+	32 400G OSFP and 2 SFP+	32 400G QSFP- DD and 2 SFP+ (16 ports with MACsec)	48 SFP-DD 100G and 8 QSFP-DD 400G	48 DSFP 100G and 8 QSFP-DD 400G	24 QSFP-56 200G and 8 QSFP-DD 400G	48 QSFP 100G and 8 QSFP-DD 400G
400G Ports	32	32	32	8	8	8	8
200G Ports	64	64	64	16	16	40	16
100G Ports	128	128	128	72	72	72	72
40G Ports	64	64	64	8	8	32	56
10G Ports	128 + 2	128 + 2	128 + 2	72	72	72	72
25G Ports	128	128 + 2	128	72	72	72	72
50G Ports	144	144	144	72	72	72	72
Maximum Throughput	12.8 Tbps	12.8 Tbps	12.8 Tbps	8.0 Tbps	8.0 Tbps	8.0 Tbps	8.0 Tbps
Maximum Forwarding Rate	5.3 Bpps	5.3 Bpps	5.3 Bpps	2.7 Bpps	2.7 Bpps	2.7 Bpps	2.7 Bpps
Latency	900 ns	900 ns	900 ns	900 ns	900 ns	900 ns	900 ns
Buffer	132 MB	132 MB	132 MB	82 MB	82 MB	82 MB	82 MB
Airflow	Front-Rear or Rear-Front	Front-Rear or Rear-Front	Front-Rear	Front-Rear or Rear-Front	Front-Rear or Rear-Front	Front-Rear or Rear-Front	Front-Rear or Rear-Front

\* Not currently supported in EOS

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#### Arista 7050X4: Next generation 400G switches with high capacity and advanced features