








Arista Networks is the leader in building scalable high-performance and ultra-low latency networks for today's data center and cloud computing environments. Purpose-built hardware and Arista EOS™, the world's most advanced network operating system, provide single-binary system images across all platforms, maximum system uptime, stateful fault repair, Zero Touch Provisioning, Latency Analysis, and a fully accessible Linux shell. Arista Ethernet switches are the perfect network solution for your most demanding workloads. With native support for VMware Virtualization and hundreds of Linux applications integrated into hardware platforms designed to meet the stringent power and cooling requirements of today's most demanding data centers, Arista delivers the most energy efficient and best performing 10Gb Ethernet platforms.

EOS PRODUCT DIFFERENTIATION

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Details	MLAG	LANZ	ZTP	VM Tracer	Cloud Vision	AEM
Problem Trying to Solve	<ul style="list-style-type: none"> Eliminate spanning tree loops Virtual machine mobility 	Track latency, congestion, and packet loss	Reduce mean-time-to-deployment and mean-time-to-restoration	VM visibility, provisioning, and multi tenancy	<ul style="list-style-type: none"> Manage at scale Simplify daily network operations 	Automated reaction to events in the network
Current Solutions	<ul style="list-style-type: none"> Spanning tree Flex connect VPC VSS 	<ul style="list-style-type: none"> SNMP SPAN monitoring Expensive sniffers 	Manual processes	None	None	Manual reaction to events
Limitations of Current Solutions	<ul style="list-style-type: none"> STP: redundant link is in standby mode to prevent loops, wasting bandwidth Complex to operate and troubleshoot 	<ul style="list-style-type: none"> Low granularity Expensive Slow and reactive 	<ul style="list-style-type: none"> Expensive Time consuming Error prone 	<ul style="list-style-type: none"> No network visibility into VMs No network provisioning based on vMotion 	<ul style="list-style-type: none"> Proprietary fabrics lock customers into one vendor High operational costs 	<ul style="list-style-type: none"> Reactive notification <i>after</i> event occurs Tiered escalation in data center
Arista Solution (Product Differentiation)	<ul style="list-style-type: none"> Doubles effective bandwidth Fast convergence Simplifies design Enables in-service software upgrades 	<ul style="list-style-type: none"> Identify network latency BEFORE drops occur Proactive notification Real-time queue depth analysis and streaming 	<ul style="list-style-type: none"> Automated switch provisioning Full customization with open tools Automated zero touch replacement 	<ul style="list-style-type: none"> Detailed visibility to vSwitch, ESX host, VMs Auto provision VLANs based on best practice Support for multiple vCenter domains 	<ul style="list-style-type: none"> Open standards Global port profiles Single CLI for multiple functions and devices Virtual EOS emulation 	Automate actions based on events: <ul style="list-style-type: none"> Event Handler Event Monitor CLI Scheduler Linux Tools
Impact to End User	<ul style="list-style-type: none"> ▲ Network scalability ▲ Network resiliency Zero downtime for network changes	▲ Visibility into network congestion and app 'slowness'	<ul style="list-style-type: none"> ▼ Network deployment time ▼ Human error ▼ Maintenance window duration 	<ul style="list-style-type: none"> ▼ Complexity for server/network configuration Smarter provisioning and easier troubleshooting	<ul style="list-style-type: none"> ▼ Network touch points ▼ Complexity of multi-device operations 	<ul style="list-style-type: none"> ▲ Predictive fault management ▲ Network availability
Financial Impact	<ul style="list-style-type: none"> ▲ Port utilization ▲ Application performance ▼ Network cost with fewer uplinks 	▲ Improving service delivery in ITIL model	<ul style="list-style-type: none"> ▼ Cost of deployment ▲ Time to market for new service 	<ul style="list-style-type: none"> ▼ Operational costs – time and manpower ▼ Capital costs – choice of VM switch 	<ul style="list-style-type: none"> ▼ Operational costs to run cloud scale infrastructure ▼ Capital costs integrates with existing systems 	▼ Operational costs to run infrastructure

ARISTA	Application Switch	GbE Switch	10Gb and 40Gb Data Center			10GBASE-T			Ultra Low Latency Switches			Modular Spine Switches		
Product Line Overview														
Chassis	7124FX	7048	7050S-52	7050S-64	7050Q-16	7050T-36	7050T-52	7050T-64	7150S-24	7150S-52	7150S-64	7504	7508	
Height	1RU	1RU	1RU			1RU			1RU			7RU	11RU	
Line Card Slots	-	-	-			-			-			4	8	
Backplane Capacity (Gbps)	-	-	-			-			-			5,000 Gbps	10,000 Gbps	
Switching Capacity (Gbps)	480 Gbps	176 Gbps	1,040 Gbps	1,280 Gbps	1,280 Gbps	720 Gbps	1,040 Gbps	1,280 Gbps	480 Gbps	1,040 Gbps	1,280 Gbps	3,840 Gbps	7,680 Gbps	
Per Slot Capacity	-	-	-			-			-	-	-	648 Gbps In / 648 Gbps Out		
Forwarding Capacity (Mpps)	360 Mpps	132 Mpps	780 Mpps	960 Mpps	960 Mpps	540 Mpps	780 Mpps	960 Mpps	360 Mpps	780 Mpps	960 Mpps	2,880 Mpps	5,760 Mpps	
40GbE/100GbE Ready	-	-	-	40GbE	40GbE	-	-	40GbE	40GbE			40GbE / 100GbE		
Ports														
100/1000 BASE-T	-	48	-			-			-			-		
100Mb/1Gb/10Gb BASE-T	-	-	-			32	48	48	-			-		
1/10GbE (SFP+)	24	4	52	48	8	4	4	-	24	52	48	192	384	
10/40GbE (QSFP)	-	-	-	16/4	64/16	-	-	16/4	-	-	16/4	-		
SFP+ Options	CR, SRL, SR, LR, ER, ZR, DWDM, 100/1000TX											CR, SRL, SR, LR, ER, ZR, DWDM, 1000TX		
Port-Port Latency	sub-500 ns	4.5 – 14.0 usec	800 ns – 1.35 usec		800 ns – 1.15 usec		3.3 usec			350 ns	380 ns	380 ns	4.5 – 14.0 usec	
Forwarding Technology	Cut-Through	Store and Forward	Cut-Through			Cut-Through			Cut-Through			Store and Forward		
Buffer Size	2MB - Dynamic Allocation	768MB - Dynamic Allocation	9MB - Dynamic Allocation			9MB - Dynamic Allocation			9.5MB - Dynamic Allocation			9GB - Dynamic Allocation	18GB - Dynamic Allocation	
Environmental														
AC + AC Power Redundancy	Yes	Yes	Yes			Yes			Yes			Yes		
DC Power	Yes	No	Yes			Yes			Yes			No		
N+1 Hot Swappable Fans	Yes	Yes	Yes			Yes			Yes			Yes		
Average/Max Power Draw	150W / 210W	174W / 300W	103W / 185W	125W / 220W	192W / 303W	244W / 289W	347W / 405W	372W / 430W	191W / 334W	191W / 450W	224W / 455W	2100W / 5100W	3800W / 5100W	
Front-to-Rear/Rear-to-Front Air	Yes / Yes	Yes / Yes	Yes / Yes			Yes / Yes			Yes / Yes			Yes / No		
Features														
EOS Single Binary Image	Yes	Yes	Yes			Yes			Yes			Yes		
Programmable Data Plane	Yes	No	No			No			No			No		
Latency Analyzer (LANZ)	Yes	No	No			No			Yes			No		
VM Tracer	Yes	Yes	Yes			Yes			Yes			Yes		
Zero Touch Provisioning	Yes	Yes	Yes			Yes			Yes			Yes		
Max VLANs	4096	4096	4096			4096			4096			4096		
Max MAC Entries	16,000	16,000	128,000			128,000			64,000			16,000		
Multi Chassis LAG	Yes - 32 Link	Yes - 32 Link	Yes - 32 Link			Yes - 32 Link			Yes - 32 Link			Yes - 32 Link		
Jumbo Frames (Bytes)	9,216 Bytes	9,216 Bytes	9,216 Bytes			9,216 Bytes			9,216 Bytes			9,216 Bytes		
Max ARP Entries	16,000	16,000	16,000			16,000			64,000			16,000		
Max Routes (IPv4 / IPv6)	16,000 / 4,000	8,000	16,000 / 8,000			16,000 / 8,000			84,000 / 21,000			16,000 / 4,000		
BGP/OSPF	Yes	Yes	Yes			Yes			Yes			Yes		
Multicast Routing	PIM-SM	PIM-SM	PIM-SM			PIM-SM			PIM-SM			PIM-SM		
Multicast Groups	4500	2048	8000			8000			23,000			2048		
Linecard Options														
48-Port 1/10GbE SFP+	-	-	-			-			-			4	8	