

S9600-32X Open Aggregation Router

The S9600-32X open aggregation router is a multi-function, disaggregated white box aggregation routing platform. It is equipped with a Broadcom Qumran2c merchant silicon chip and an Intel Skylake processor featuring 32 high speed 100G ports with a switching capacity of up to 2.4Tbps.

The S9600-32X can be deployed at C-RAN hubs to provide 5G fronthaul transport aggregation or be positioned at the backhaul for aggregating BBU pooling. It can also be programmed to be a Broadband Network Gateway (BNG) to enable the next generation broadband network. Equipped with high port density, Class C timing and fully supporting SyncE and IEEE 1588v2, our S9600-32X is capable of fulfilling the role of any type of network aggregation.

Specializing in 5G Time Sensitive Networking applications, the S9600-32X complies to the IEEE 802.1CM and addressing the demand of a high precision and low latency fronthaul transport. Our open aggregation router is compatible with high accuracy fronthaul synchronization and timing requirements (802.1CM-2018 category A, ITU-T G.8273.2 T-BC, Class C) to ensure error free operation of 5G and cooperative radio techniques.



KEY BENEFITS

- Enable Time Sensitive Networking (TSN) and Class C timing for 5G services
- Ultra-low forwarding latency, high precision frequency and phase timing synchronization supporting the evolving requirements of 5G
- Integrated traffic manager and packet processor
- Simplify inventory and reduce opex using the same model across multiple applications throughout the network
- Open NOS applications for highly reliable composable networks

KEY FEATURES

- High density, 32x100G ports with 4 x 25G breakout ports
- 2.4Tbps switching capacity
- 4GB Deep buffer
- Intel Skylake 8-Core, 1.9GHz CPU
- Supports full SyncE and IEEE 1588v2
- Rich timing interfaces: GNSS, 1PPS, 10MHz, TOD
- Integrated Stratum 3E OCXO
- Class C timing accuracy
- Internal GNSS receiver for master clock implementations
- Redundant and hot swappable power and fan modules
- Designed for quick and easy installation onto 19" server racks

SPECIFICATIONS

PHYSICAL

- ◆ 32 x 40/100G QSFP28 ports
- ◆ 4 x 1/10/25G SFP28 ports
(In-band port share with 100GE Port 0)
- ◆ 1 x RJ45 serial console port
- ◆ 1 x Micro USB serial console port
- ◆ 1 x 100/1000M RJ45 management port
- ◆ 1 x USB 3.0 Type-A port

Processor Intel Skylake-D 8-Core @ 1.9GHz

Memory 32GB DDR4

Storage 128GB SSD

ASIC Broadcom Qumran2c BCM88820

BMC AST2400

Timing Interfaces
1 x GNSS input SMA
1 x 1PPS input/output SMB
1 x 10MHz input/output SMB
1 x ToD input/output RJ45

Timing Support
Stratum 3E OCXO
ITU-T Synchronous Ethernet (SyncE)
IEEE 1588v2 (Default, G.8265.1, G.8275.1, G.8275.2),
T-TC, T-BC/OC, T-GM
Time Sensitive Networking (TSN)

Chassis (WxDxH)
2RU, 436 x 762 x 87.7 mm
or 17.17" x 30" x 3.45"
Weight: 17.73kg or 39.09lb

Redundancy
Hot swappable, 1+1 redundant PSUs
Hot swappable, 3+1 redundant Fans

ENVIRONMENTAL

Power Specs. AC input: 100 to 240V, 13A
DC input: -40 to -72V, 50A
Typical power: 442 Watts (no transceiver)

Max. Operating Specs. Operating temperature: 0°C to 45°C (32°F to 113°F)
Operating humidity: 5% to 85% (RH), non-condensing

Max. Non-Operating Specs. Storage temperature: -40°C to 70°C (-40°F to 158°F)
Storage humidity: 5% to 93% (RH), non-condensing

PERFORMANCE

Switching Capacity 2.4Tbps

Deep Buffer 4GB

REGULATORY COMPLIANCE

Safety	UL 62368-1	EMC	FCC Part 15, Subpart B, Class A
	IEC 62368-1		ICES-003, Class A
Environment	BSMI	EN 55032, Class A	
	WEEE	EN 55024	
	RoHS	EN 55035	
	ETSI 300 019	EN 62479	
	ETSI 300 132-2	EN 50663	
		EN 300 386	
	EN 301 489		
	EN 303 413		
	BSMI	VCCI CISPR 32, Class A	

Specifications are subject to change without notice.

S9600-32X

Telecom
Networking
Solutions

S9600-32X Front and Back Views



ACCESSORIES

Compatible Transceiver Types

100G QSFP28 SR4, 100G QSFP28 LR4, 100G QSFP28 ER4, 100G QSFP28 ZR4, 25G SFP28 SR, 25G SFP28 LR, 25G SFP28 ER, 10G SFP+ SR, 10G SFP+ LR, 10G SFP+ ER

Compatible Timing Cable Types

50 ohms SMA coaxial cable with 1/4-36UNS-2B connector for GNSS
50 ohms SMB coaxial cable with 10-32UNF-2A connector for 1PPS and 10MHz
Shield cable with RJ45 for ToD

Available to Order

Power Supply Types

PSU-162-DESR, 1600W DC, exhaust air flow
PSU-162-AESR, 1600W AC, exhaust air flow

Fan Types

FAN-803816-HI, exhaust air flow

