

# 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 100GE ports with a switching capacity of up to 2.4Tbs.

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, 32x100GE ports with 4 x 25G breakout ports
- 2.4 Tbps switching capacity
- 4GB Deep buffer
- Intel Skylake 8 Core, 1.9GHz CPU
- Supports full SyncE and IEEE 1588v2
- Rich timing interfaces (1PPS, 10MHz, TOD)
- Integrated Stratum 3E OCXO
- Class C timing accuracy
- Integrated GNSS receiver with passive or active antenna support
- Redundant and hot swappable power and fan modules
- Designed for quick and easy installation onto 19" server racks

# SPECIFICATIONS

## PHYSICAL

- ◆ 32 x 40GE/100GE QSFP28 ports
- ◆ 4 x 1GE/10GE/25GE 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 1000Base-T Ethernet port for OOB management
- ◆ 1 x USB 3.0 Type-A general purpose port

Processor Intel Skylake-D D-2145NT 8 Core, 1.9GHz

Memory 32GB DDR4 with ECC (64GB optional)

Storage 128GB SSD (256GB optional)

ASIC Broadcom BCM88820 (Q2C)

BMC Aspeed AST2400

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

Hardware ITU-T Synchronous Ethernet (SyncE)  
Timing IEEE 1588v2 (Default, G.8265.1, G.8275.1, G.8275.2,  
Capabilities T-TC, T-BC/OC, T-GM)

Chassis  
(WxDxH) 2RU, 436 x 762 x 87.8 mm  
or 17.17" x 30" x 3.46"  
Net weight: 18.9 Kg. or 41.67 lbs.

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

## ENVIRONMENTAL

Power Supply AC input: 100 ~ 240V,  
DC input: -40 ~ -75V,  
Typical power: 329 Watts (no transceiver)

Max. Operating Specs. Operating temperature: 0°C to 45°C (32°F to 113°F)  
Operating humidity: 15% to 93% (RH), noncondensing

Max. Non-Operating Specs. Storage temperature: -40°C to 70°C (-40°F to 158°F)  
Storage humidity: 5% to 95% (RH), non-condensing

## PERFORMANCE

Switching Capacity 2.4Tbps

Deep Buffer 4GB

## REGULATORY COMPLIANCE

Safety	UL 62368-1	EMC	FCC Part 15, Subpart B,
	IEC 60950-1		Class A
	IEC/EN 62368-1		EN55032, Class A
			EN300 386
			EN55024
			EN55035
			EN301489

Specifications are subject to change without notice.

# S9600-32X

Telecom  
Networking  
Solutions

S9600-32X Front and Back Views



## SUPPORTED ACCESSORIES

### Transceivers

100GE QSFP28 SR4, 100GE QSFP28 LR4, 100GE QSFP28 ER4, 25GE SFP28 SR, 25GE SFP28 LR, 25GE SFP28 ER

### Cable Types

100GE QSFP28 DAC (Direct Attach Cable)  
100GE QSFP28 ACC (Active Copper Cable)  
100GE QSFP28 AOC (Active Optical Cable)

### Power Supply Types

PSU-162-DESR, 1600W DC, exhaust air, slim type, colored latch  
PSU-162-AESR, 1600W AC, exhaust air, slim type, colored latch

### Fan Types

FAN-803816-HC, exhaust air flow

### Rack mounting kit

R19-970000-2630 adjustable mounting rail for 19" rack supporting depth from 26" to 30"

