

# S9701-82DC

## DISAGGREGATED CORE/EDGE ROUTER

The S9701-82DC is the best of breed robust, flexible and carrier-grade disaggregated IP/MPLS router that can be deployed in the core or edge to transport services over a scalable next-gen service provider network. Equipped with 25G and 100G service ports and 400G fabric ports, S9701-82DC enables fault and performance monitoring, non-stop routing support for control and data plane, and comprehensive high-availability networks.

As a standalone router, the S9701-82DC can be deployed at the edge network to enable transport services over a scalable next generation telecom network. It provides 4GB deep buffering with 1000Mpps packet throughput and 2.4Tbps switching capacity. In addition, the S9701-82DC comes with rich timing interfaces (GNSS, 10MHz, 1PPS, and ToD) for modern network applications.

When coupled with the UfiSpace fabric switch (S9705-48D), the S9701-82DC becomes a building block for a distributed disaggregated chassis (DDC). The DDC allows network service providers to implement a pay-as-you-grow model when scaling core network capacities with a S9701-82DC cluster scaling up to 134Tbps.



## KEY BENEFITS

- Flexible capacity growth using horizontal scaling, pay-as-you-grow model
- Accelerated table lookup, packet buffering, and control memory with low latency high bandwidth memory
- Flexible and programmable packets processor
- High density ports with low power consumption
- Enable more highly scalable and flexible Core, Edge, and Central Office infrastructure
- Upstream connectivity management supported by flexibly configured fabric pipes
- Dynamic distribution and routing through automatic fault detection and recovery

## KEY FEATURES

- Function as standalone or a cluster (2.4Tbps up to 134Tbps)
- Interoperable with other S9700 Series using S9705-48D as fabric
- 4GB deep buffering and Intel Skylake-D 8-Core at 1.9GHz
- Hardware supports full SyncE and IEEE1588v2 (T-GM, T-TC, T-BC/OC)
- Rich timing interfaces: GNSS, 1PPS, 10MHz, ToD
- Individual BMC allowing automatic and remote operations for monitoring and managing platform health status
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 3+1 redundancy support

# SPECIFICATIONS

## PHYSICAL

	♦ 12 x 40/100G QSFP28 service ports
	♦ 64 x 1/10/25G SFP28 service ports
	♦ 6 x 400G QSFP-DD fabric ports
	♦ 1 x RJ45 & Micro USB serial console ports
	♦ 2 x 10GBase-X SFP+ management ports
	♦ 1 x 100/1000M RJ45 management port
	♦ 1x USB 3.0 Type-A port
Processor	Intel Skylake-D 8-Core @ 1.9GHz
Memory	64GB DDR4
Storage	128GB SSD
ASIC	Broadcom Jericho2c BCM88802 Broadcom OP2 BCM16K
BMC	AST2400
Timing Interfaces	1 x GNSS input SMA 1 x 10MHz input/ output SMB 1 x 1PPS input/ output SMB 1 x ToD input RJ45
Timing Support	Stratum 3E OCXO ITU-T Synchronous Ethernet (SyncE) IEEE 1588v2 (Default, G.8265.1 G8275.1, G.8275.2), T-TC, T-BC/OC, T-GM
Chassis (WxDxH)	2RU, 436 x 609.6 x 87.7 mm or 17.17" x 24" x 3.45" Weight: 16.64kg or 36.68lb
Redundancy	Hot swappable, 1+1 redundant PSU Hot swappable, 3+1 redundant Fans

## ENVIRONMENTAL

Power Specs.	AC input: 100 to 240V, 12A DC input: -40 to -75V, 40A Typical Power: 311 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
Packet Buffer	4GB

## REGULATORY COMPLIANCE

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

Specifications are subject to change without notice.

S9701-82DC

Telecom  
Networking  
Solutions

S9701-82DC Front and Rear Views



## ACCESSORIES

- Compatible Transceiver Types  
100GBASE QSFP28 ZR, 100GBASE QSFP28 ER, 100GBASE QSFP28 LR, 100GBASE QSFP28 SR,  
25GBASE SFP28 ZR, 25GBASE SFP28 ER, 25GBASE SFP28 LR, 25GBASE SFP28 SR,  
10GBASE SFP+ ER, 10GBASE SFP+ LR, 10GBASE SFP+ SR, 1GBASE SFP EX, 1GBASE SFP LX, 1GBASE SFP SX
- Compatible Fabric Cable Types  
400GE QSFP-DD DAC (Direct Attach Cable), 400GE QSFP-DD AOC (Active Optical Cable),  
400GE QSFP-DD AEC (Active Electric Cable)
- Compatible Timing Cable Types  
SMA coaxial cable with 1/4-36UNS-2B connector for GNSS  
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-132-DESR, 1300W DC, exhaust air flow  
PSU-132-AESR, 1300W AC, exhaust air flow  
  
Fan Types  
FAN-803816-HI, exhaust air flow

