

# 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 25GE and 100GE service ports and 400GE 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 integrated 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, S9701-82DC cluster can scale from 2.8Tbps 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 (2.8Tbps up to 134Tbps)
- Interoperable with S9700-53DX, S9700-23D and S9705-48D
- 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)
- 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

- ◆ 64 x 25GE SFP28 service ports
- ◆ 12 x 100GE QSFP28 service ports
- ◆ 6 x 400GE QSFP-DD fabric ports
- ◆ 1 x RJ45 + Micro USB serial console port
- ◆ 1x USB 3.0 Type-A general purpose port
- ◆ 2 x 10GBase-X SFP+ management ports
- ◆ 1 x 10/100/1000M RJ45 management port

Processor Intel Skylake-D 8 Core @ 1.9GHz

Memory 64GB DDR4 R-DIMM with ECC

Storage 128GB SSD

ASIC Broadcom Jericho2c BCM88802  
Broadcom OP2 BCM16K (Optional)

BMC Aspeed AST2400

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

Hardware Stratum 3E OCXO  
Timing ITU-T Synchronous Ethernet (SyncE)  
Capabilities IEEE 1588v2 (Default, G.8265.1 G8275.1, G.8275.2),  
T-TC, T-BC/OC, T-GM

Chassis 2RU, 436 x 609.6 x 87.7 mm  
(WxDxH) 17.17 x 24 x 3.45 in.  
Weight: 15.4 kg (34.03lbs)

Redundancy Hot swappable, 1+1 redundant PSU  
Hot swappable, 3+1 redundant fans

## ENVIRONMENTAL

Power Specs. AC input: 200 ~ 240V, 7.5A  
DC input: -40 ~ -75V, 40A  
Typical Power: 332.9 Watts (no transceiver)

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

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 2.4 Tbps

Packet Buffer 4GB

## REGULATORY COMPLIANCE

Safety UL 62368-1  
IEC 60950-1  
IEC/EN 62368-1

EMC FCC Part 15, Subpart B, Class A  
ICES-003  
EN 55032, Class A  
EN 300 386  
EN 55024  
EN 55035  
EN 61000-3-2  
EN 61000-3-3

Specifications are subject to change without notice.

# S9701-82DC

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## S9701-82DC Front and Rear Views



## SUPPORTED ACCESSORIES

### Transceivers

100GBASE QSFP28 SR4, 100GBASE QSFP28 LR4, 100GBASE QSFP28 ER4, 100GBASE QSFP28 ZR4,  
25GBASE SFP28 SR, 25GBASE SFP28 LR, 25GBASE SFP28 ER, 25GBASE SFP28 ZR, 10GBASE SFP+ SR,  
10GBASE SFP+ LR, 10GBASE SFP+ ER, 1GBASE SFP SX, 1GBASE SFP LX, 1GBASE SFP EX, 1GBASE SFP  
SX, 1GBASE SFP LX, 1GBASE SFP EX

### Cable Types (Fabric port)

400GE QSFP-DD DAC(Direct Attach Cable), 400GE QSFP-DD AOC(Active Optical Cable),  
400GE QSFP-DD AEC(Active Electric Cable)

### Power Supply Types

1300W DC, exhaust, slim type, red colored latch  
1300W AC, exhaust, slim type, red colored latch

### Fan Types

Front to back airflow, red colored latch

### Rack mounting kit

Adjustable slide rail kit for systems on 19 in. width racks, support depth from  
21 in. to 35 in.

