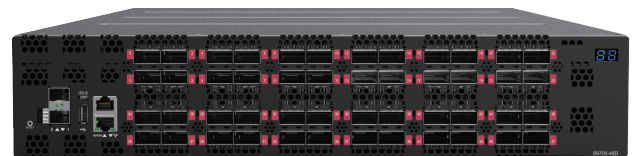# S9705-48D
DISAGGREGATED
Fabric Router

The S9705-48D is the best of breed, robust and carrier-grade Distributed Disaggregated Chassis (DDC) white box fabric router. With the disruptive innovation that disaggregates a traditional chassis, the S9705-48D plays a crucial role as a backplane switch fabric for UfiSpace's disaggregated open core/edge routers, providing non-blocking interconnect inside the cluster that enables a scalable next-gen. service provider network.

Powered by Broadcom Ramon switching ASIC, the S9705-48D is equipped with 400GE fabric ports and capable of performing 8 billion cell switches per second. The cell-based switching eliminates the Ethernet overhead and can effectively load balance all fabric links to build an efficient and high-availability DDC cluster.

The S9705-48D fabric couples with the S9700 Series routers in small, medium and large clusters enabling up to 192Tb switching capacity, per cluster, in a pay-as-you-grow model. It scales out not only economically but rapidly which brings down the total cost of ownership.

KEY BENEFITS

- Flexible capacity growth using horizontal scaling, pay-as-you-grow model

- High density ports with low power consumption

- Transparent networking, interoperability with S9700 series core and edge routers

- Enables routing clusters up to 192Tb

- Upstream connectivity management supported by three flexibly configured fabric pipes

- Dynamic distribution and routing through automatic fault detection and recovery

- Utilizes cell switching to effectively load balance all fabric links for maximum utilization

KEY FEATURES

- 48 x 400GE QSFP-DD fabric ports

- Support for 8 billion cells per second

- Internal data cells memory

- Individual BMC operation

- Intel Broadwell-DE 8 core at 2 GHz

- 64GB memory DDR4 RDIMM with ECC

- Supports up to 4 x DDR4 RDIMM with ECC

- 1 + 1 hot swappable PSU FRU

- 3 + 1 hot swappable FAN FRU

SPECIFICATIONS

PHYSICAL

- 48 x 400GE QSFP-DD fabric ports
- 1 x RJ45 + Micro USB serial console ports
- 1 x 1GBase-T Ethernet port for Out-of-Band management
- 1 x USB 2.0 Type-A general purpose port
- 2 x 10GBase-X SFP+ management ports

Processor	Intel Broadwell-DE 8 core @ 2.0 GHZ
Memory	2 x 32GB DDR4 RDIMM with ECC support
Storage	2 x M.2 SATA SSD 128GB
ASIC	Broadcom Ramon BCM88790
LED	Power status Fan status System status Per port link status Beacon Per fan status Per PSU status
Chassis (WxDxH)	2RU, 436 x 762 x 87.6 mm 17.17 x 30 x 3.45 in. Weight: 24.9 kg (54.9 lbs)
Redundancy	Hot swappable, 1+1 redundant PSU Hot swappable, 3+1 redundant fans

ENVIRONMENTAL

Power Supply	AC input: 200 ~ 240V, 12.5A, 50 ~ 60Hz DC input: -40 ~ -72V, 60 ~ 33A Typical power: 980 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 ltitude: 1,829 m (6,000 ft.)
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	4.8 Tbps
Packet Throughput	8 billion cells

REGULATORY COMPLIANCE

Safety		EMC	
	NEBS Level 3 UL 62368-1 IEC/EN 60950-1 IEC/EN 62368-1 BSMI CNS 14336-1		NEBS Level 3 FCC Part 15, Subpart B, Class A EN 55032, Class A EN 300 386 EN 55024 EN 55035 BSMI (CNS 13438), Class A VCCI-CISPR 32:2016, Class A VCCI 32-1:2016, Class A

Specifications are subject to change without notice.

S9705-48D

Telecom Networking Solutions

S9705-48D Front and Back Views

SUPPORTED ACCESSORIES

Transceivers
400GE QSFP-DD SR8, 400GE QSFP-DD LR8, 400GE QSFP-DD DR4, 400GE QSFP-DD FR4

Cable Types
400GE QSFP-DD DAC (Direct Attach Cable)   400GE QSFP-DD ACC (Active Copper Cable)
400GE QSFP-DD AOC (Active Optical Cable)

Power Supply Types
PSU-202-DESR 2000W DC PSU, exhaust air flow
PSU-202-AESR 2000W AC PSU, exhaust air flow

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"