



(DDC). The DDC allows network service providers to implement a pay-as-you-grow model when scaling core network capacities with a S9710-76D cluster scaling up to 691.2Tbps.

The S9710-76D disaggregated core router uses the Broadcom J2C+ chipset, which provides 16GB deep buffering and 14.4Tbps switching capacity. It includes a knowledge-based processor (or TCAM) to perform up to 16 parallel searches to reach decision speeds of multiple billion decisions per second, which makes it ideal for provider edge applications. As a core router, the S9710-76D enables fault and performance monitoring, non-stop routing support for control and data plane, and comprehensive high-availability networks.



# **KEY BENEFITS**

- Accelerated table lookup, packet buffering, and control memory with low latency high bandwidth memory
- Flexible and programmable packets processor
- Individual BMC for monitoring and managing health status
- High density ports with low power consumption
- Transparent networking, interoperability with S9705-48D, S9700-53DX, S9700-23D, and S9710-82DC
- Upstream connectivity management supported by flexibly configured fabric
- Dynamic distribution and routing through automatic fault detection and recovery

## **KEY FEATURES**

- Dense, high capacity 400G service ports
- Fabric ports allow for horizontal scaling of network capacity
- Service Ports support 4x100G break-out
- Pay as you grow model for capacity increase
- 16GB deep buffering and Intel Skylake-D 8-Core @ 1.9GHz
- 64GB DDR4 R-DIMM with ECC
- Hardware supports full SyncE and IEEE1588v2 (T-TC, T-BC/OC)
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 3+1 redundancy support

## SPECIFICATIONS

#### **PHYSICAL**

36 x 40/100/400G QSFP-DD service ports supporting 400ZR and OpenZR+

• 40 x 400G QSFP-DD fabric ports

• 1 x RJ45 & Micro USB serial console ports

• 2 x 10GBase SFP+ management ports

1 x 100/1000M RJ45 management port

• 1 x USB 3.0 Type-A port

Processor Intel Skylake-D 8-Core @ 1.9GHz

Memory 64GB DDR4

Storage 256GB SSD

ASIC\* Broadcom Jericho2c+ BCM88850

Broadcom OP2 BCM16K (Premium)

**BMC** AST2400

**Timing** 1 x 10MHz input/output SMB Interfaces 1 x 1PPS input/output SMB

Timing Stratum 3E OCXO

Support ITU-T Synchronous Ethernet (SyncE)

IEEE 1588v2 (Default Profile,

G.8265.1 G8275.1, G.8275.2 profiles) T-TC, T-BC/OC

Chassis 2 RU, 436 x 762 x 87.7 mm or 17.17" x 30" x 3.45" (WxDxH)

Weight: 26.95kg or 59.41lb

Redundancy Hot-swappable, 1+1 Redundant PSU

Hot-swappable, 3+1 Redundant fans

#### **ENVIRONMENTAL**

AC input: 200 to 240V, 16A Power Specs.

DC input: -40 to -72V, 80A

Typical power: 667 Watts (no transceiver)

Max. Operating Operating temperature: 0°C to 45°C (32°F to 113°F)

Specs. Operating humidity: 5% to 85% (RH), non-condensing

Storage temperature: -40°C to 70°C (-40°F to 158°F) Max. Non-Operating

Storage humidity: 5% to 93% (RH), non-condensing Specs.

#### PERFORMANCE

Switching Capacity 14.4Tbps

Deep Buffer 16GB

#### REGULATORY COMPLIANCE

Safety	UL 62368-1 IEC 62368-1 BSMI CNS 15598-1	EMC	FCC Part 15B, Subpart B, Class A ICES-003, Class A EN 55032, Class A EN 55024 EN 55035 EN 62479
Environment	WEEE RoHS		EN 50663 EN 300 386 EN 301 489 EN 303 413 BSMI CNS 15598-1 VCCI CISPR 32, Class A

Specifications are subject to change without notice.

# S9710-76D

#### S9710-76D Front and Rear Views





## **ACCESSORIES**

Compatible Transceiver Types

400GE QSFP-DD OpenZR+, 400GE QSFP-DD ZR, 400GE QSFP-DD ER4, 400GE QSFP-DD LR4, 400GE QSFP-DD SR8, 400GE QSFP-DD DR4+, 400GE QSFP-DD DR4+, 400GE QSFP-DD PLR4, 200GE QSFP-S6 SR4, 200GE QSFP-S6 FR4, 100GE QSFP-S8 ZR4, 100GE Q 100GE QSFP28 SR4, 100GE QSFP28 LR4

Compatible Fabric Cable Types

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

Compatible Timing Cable Types

SMB coaxial cable with 10-32UNF-2A connector for 1PPS and 10MHz

#### **Available to Order**

Power Supply Types PSU-302-DESR, 3000W DC, exhaust air flow PSU-302-AESR, 3000W AC, exhaust air flow

Fan Types

FAN-808812-HC, exhaust air flow



**Networking** Solutions

Telecom

<sup>\*</sup>OP2 available for premium SKU only