100GBE COHERENT SWITCH
AS7716-24SC

The Cassini packet transponder enables network operators to easily extend and migrate existing metro and long-haul Dense Wavelength Division Multiplexing (DWDM) networks to add new 100G capacities and extend inter-datacenter and Layer3 services.

Cassini has a 1.5 RU form factor with a system throughput of 3.2 Tbps and is based on Broadcom StrataXGS™ Tomahawk™ Plus switch silicon. The Cassini design offers sixteen fixed 100 Gigabit Ethernet QSFP28 ports, plus eight linecard slots to incorporate a flexible mix of additional 200 GbE ports or DCO optical ports, which are based on coherent DSPs and optical transceivers from leading optical technology partners.

This open network switch is loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible Network Operating System (NOS) software, including the open source plus commercial NOS offerings.

Cassini supports Ethernet and optical line cards with MACsec security to enable secure encrypted connections on both client-side links and metro or wide area connections.
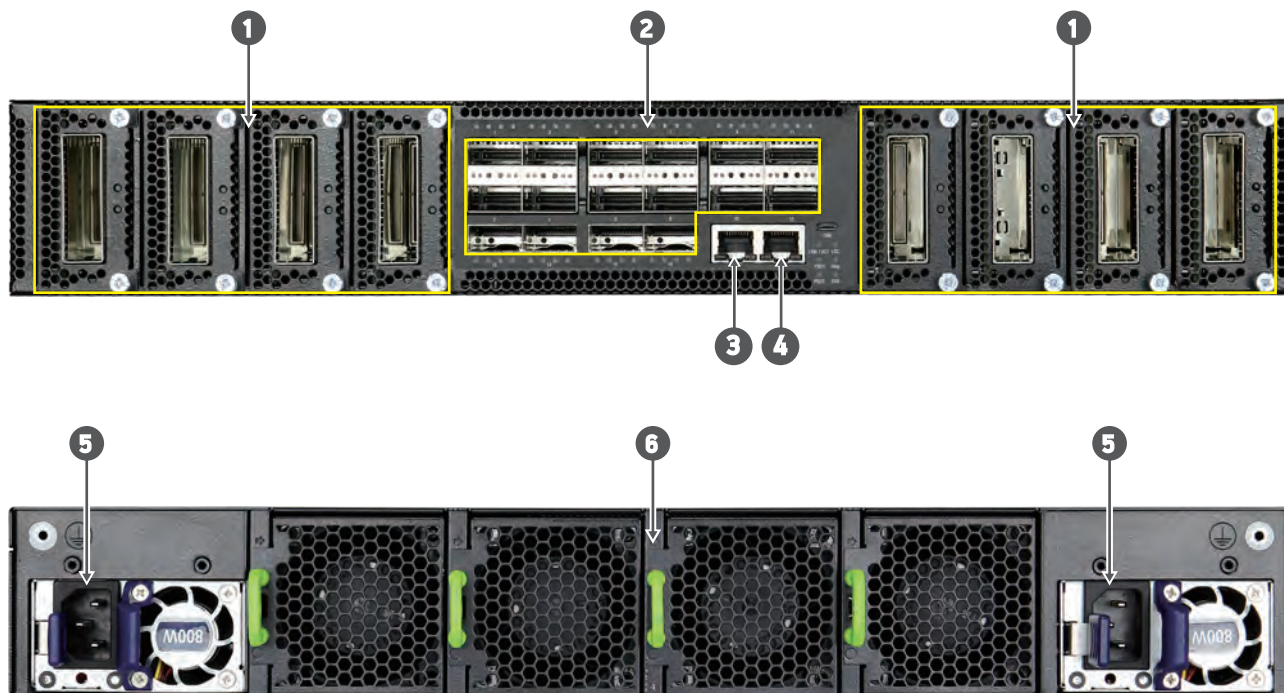
Key Features and Benefits

- High Capacity: Full 3.2 Tbps switching fabric.
- Metro Transmission: 200G 16QAM coherent plug-in card.
- Reduced Management Overhead: Combined switch and transport function in one box.
- Open and Flexible: Line-side plug-in (CFP2-DCO, 2 x QSFP28). Non-coherent/coherent subscription ratios of 1:1 to 15:1 (also grey fiber/color fiber subscription ratios), "plug-and-play" with automatic conditioning of the analogue line.
- Easier to Use: Transport library supports API functionalities; automated monitoring, failure report, etc. Abstracts complexity of L1 transmission.
- Long-Life Reliability: Redundant 60 mm fans (3+1 dual-rotor fan assemblies). Redundant power (1+1 PSU).
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible open source and commerical NOS offerings.

OPEN™ PLATINUM

OPEN™ Compute Project
SOLUTION PROVIDER

Freedom of choice

Greater control

Rapid innovation

Reduced CAPEX and OPEX

Free Software Included

onie

Interfaces

Description			
1.	8 x DCO cards	4.	Console port
2.	16 x QSFP28 100G Ethernet ports	5.	PSUs
3.	Management port	6.	Hot-swappable 3 + 1 redundant fans

Ports

- Switch Ports:
  16 x QSFP28 ports. Each port supports 1 x 40/100 GbE
  8 line-card slots for QSFP28, DCO modules
- Management Ports on Port Side:
  1 x RJ-45 serial console
  1 x RJ-45 100/1000BASE-T management
  1 x USB (storage)

Key Components

- Switch Silicon: Broadcom BCM56965 Tomahawk+
- CPU Modules:
  Intel® Xeon® D-1518 4-Core x86 Processor
  DDR4: SO-DIMM 8 GB x 2
  SPI Flash: 16MB
  m.2 SSD: 32 GB MLC

Performance

- Switching Capacity: 3.2 Tbps full duplex
- Jumbo frames support up to 9216 Bytes
- Subject to NOS:
  MAC Addresses: 8 K min./136 K max.
  VLAN IDs: 4 K
  IPv4: 8 K min./84 K max. host entries; 16 K LPM entries with
    TCAM-only mode
  IPv6: 4 K min /36 K max. host entries; IPv6/64= 8 K TCAM-only
    mode

Physical and Environmental

- Dimensions (WxDxH): 44.25 x 55.0 x 6.6 cm (17.42 x 21.65 x 2.6 in.)
- Operating Temperature: 0°C to 45°C (32°F to 113°F)
- Storage Temperature: -40° C to 70° C (-40° F to 158° F)
- Operating Humidity: 5% to 95% (non-condensing)

Weight	AS7716-24SC	DCO	QSFP28
Net Weight	11.6 kg	0.372 kg	0.322 kg

Software

- Switch is loaded with Open Network Install Environment (ONIE) software installer
- Compatible with the following NOS options: open source options, plus commercial NOS offerings.

LEDs

- QSFP28 Port LEDs: Link Status, Activity, Speed
- Ethernet Management Port LED: Link Status, Activity
- System LEDs: Diagnostic, Locator, PSU and Fan Status
- Modules LED: Link Status, Activity, Speed

Power

- PSUs: 1+1 redundant, load-sharing, hot-swappable
- Input Voltage: 100-240VAC at 50-60 Hz; -40 to -72 VDC
- PSU Efficiency: Up to 93% for AC PSUs

Full loading, the total power consumption is approximately 1100 W.
1. Under the operation of full loading, the system of AS7716-24SC can support 1 PSU operation if the VAC is set up at high line mode.
2. It's necessary to use 2 PSUs when the VAC is configured at low line mode.

Regulatory Compliance

- EMI
  CE Mark
  EN 55032 Class A
  EN 55024
  EN 61000-3-2
  EN 61000-3-3
- FCC Part 15 Subpart B Class A
- VCCI Class A
- Safety
  CB
  UL/CUL
- Environmental:
  Temperature: IEC 68-2-14
  Vibration: IEC 68-2-36, IEC 68-2-6
  Shock: IEC 68-2-29
  Drop: ISTA 2A
- RoHS 2.0 Compliant

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

Ordering Information

Base Model: AS7716-24SC; Intel®Xeon® D-1518 4-Core; 16x100GbE and 8 module slot; ONIE Software Installer.

Model Number	Part Number	PSU	Airflow	Region (Power Cord)
7716-24SC-O-AC-F-US	FP3ZZ7624401A	Dual AC PSUs	Front-to-Back Airflow	N. America
7716-24SC-O-AC-F-EU	FP3ZZ7624200A	Dual AC PSUs	Front-to-Back Airflow	EU
7716-24SC-O-AC-F-UK	FP3ZZ7624300A	Dual AC PSUs	Front-to-Back Airflow	UK
7716-24SC-O-AC-F-JP	FP3ZZ7624501A	Dual AC PSUs	Front-to-Back Airflow	JP
7716-24SC-O-48V-F	FP3EC7624001Z	Dual DC PSUs	Front-to-Back Airflow	

Model Number	Part Number	Description
AS7716-24SC (QSFP28)	F0SZZ7624000A	QSFP28 module for AS7716-24SC
AS7716-24SC (DCO)	F0SZZ7624001A	DCO module for AS7716-24SC
7716-24SC-SVC-RTF	REWECECWA036Z	AS7716-24SC, annual hardware service, return-to-factory after warranty. Three-year warranty already included with the product, maximum two additional years per product. Fans and PSUs are excluded.