Arctica 3200c - 100Gb Top-of-Rack / Spine Switch

OPEN SOLUTIONS

COMPUTE

STORAGE

▶ **NETWORK**

CLOUD

Penguin Arctica switches are cost-effective Layer-2/Layer-3 capable top-of-rack switches, with models suited for aggregation and access layer roles. The latest Arctica 3200c model is based on 'merchant silicon' platform – The Broadcom Tomahawk, capable of 100Gb, 50Gb, 40Gb, 25Gb and 10Gb link speeds.

Penguin Arctica 3200c can be deployed in a top-of-rack role to support any mix of 10, 25, 40, 50 and 100 GbE host and spine interconnections. An open selection of copper and optical transceivers are available, allowing user to customize the switch's application. In an aggregation layer role, Arctica 3200c are capable of L2 and L3 routing protocols.

Penguin Computing offers the following software stacks: Cumulus Linux and Canonical Ubuntu with Broadcom ICOS (Integrated Clouding Operating System). Cumulus Linux is the industry's first true Linux network operating system with network-optimized kernel that supports Layer-2 and Layer-3 architectures. Canonical Ubuntu with Broadcom ICOS is a CLI-oriented network OS with the full Layer-2 and Layer-3 feature set of the Broadcom data plane. Arctica switches are available with Cumulus Linux or Broadcom ICOS preloaded, backed by hardware and software support options.

Penguin Computing specializes in delivering turnkey High Performance Computing clusters and Data Center systems that include software solutions for cluster and workload management, high performance interconnects, storage systems and a power delivery infrastructure. All components are integrated in rack enclosures, configured for optimal performance by Penguin's HPC experts and ready to use.

Penguin systems are tested for compatibility with all major commercial and freely available Linux distributions and are available with Red Hat Enterprise Linux, SuSE Linux Enterprise Server or CentOS pre-installed.

FOR INFORMATION, PLEASE CONTACT:

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Key Features

- Software defined high-performance data center switch
- Ease, economics and flexibility of Linux in the data center
- Latest broadcom Tomahawk packet engine with 100Gb link capability
- RAS - Reliability, Availability, Serviceability features
- Global hardware and software support services

Chassis

- Fixed configuration, Top-of-Rack form factor, 1RU
- Dimensions: 1.73" x 17.3" x 21.6" (HxWxD)
- Ports: 32x QSFP28 with each port supporting 1x40/100 GbE, 2x 50GbE, 4x 10/25 GbE using breakout cables
- Power Supplies: 2x 800W Redundant Power Supplies, sized to support transceivers in all ports
- Choice of front-to-back and back-to-front airflow
- 1x RJ-45 serial console
- 1x RJ-45 100/1000 Base-T Management
- 1x USB Type A storage

Hardware- Data Plane

- Broadcom BCM56854 "Tomahawk"
- Cut-through operation, store and forward mode available for speed conversions
- Forwarding capacity: 3.2Tbps (full bidirectional line rate on all ports

Hardware- Control Plane

- Management Processor: Intel 1.7GHz, 4 cores, 64-bit
- 2GB RAM

Network OS Options

All switches are loaded with Open Network Install Environment (ONIE) allowing software compatibility with Cumulus Linux and Broadcom ICOS.

Layer 2

- 802.1d Bridging
- 802.1w RSTP
- 802.1s MSTP
- 802.1ad (Q-inQ) VLAN Double Tagging
- 802.3ad Link Aggregation/LACP
- 802.1q VLAN 4096
- IGMP/MLD Snooping

Layer3

- IPv4/v6 Routing Protocols:
- OSFP
- BGP
- VRF
- ECMP/WCMP
- VRRP
- IP Multicast:
- PIM-SM
- PIM-DM
- VXLAN

CUMULUS

ubuntu

OTHER NETWORKING OPTIONS:

Arctica 4804iq

Arctica 4804ip

Arctica 3200xlp

Arctica 4806xp

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