

BCM88680

High-Density 100 Gigabit Ethernet StrataDNX® Jericho+ Ethernet Switch Series

OVERVIEW



Broadcom's BCM88680 Series, also known as the StrataDNX® Jericho+ switch series, can help build highly scalable, feature-rich, modular chassis or aggregation switches to enable cloud-scale networking and Carrier network applications. The BCM88680 device processes up to 900 Gbps traffic, supporting up to nine 100G full-duplex ports at Layer 2 through Layer 4 with integrated deep-buffer traffic management capabilities, and a fabric interface.

The BCM88680 series is the seventh generation of the Dune scalable switching product line. Together with the BCM88770 fabric element (FE) device, it is used to build a variety of network switch solutions:

- Over 100 Tbps core/edge switch with singlestage fabric for data center, packet transport, or carrier network applications
- Multiple interconnected chassis of different capacities that use BCM88680 and BCM88770 fabric to create a scalable core platform, delivering up to 9,000 ports of 100GbE or their 40GbE/10GbE equivalents

Features

High performance:

- 900 Gbps full-duplex switching

• Fabric interface:

- SerDes interface to Dune's Fabric Element (BCM88770)
- Fabricless (without the fabric element) configurations of up to three devices

• Flexible network interface:

- 10GbE, 25GbE, 40GbE, 50GbE, 100GbE interfaces

- Support for a mix of OTN (ODU) and ETH ports on the same device – 400GbE ready
 - Traffic manager:
 - Deep buffering, GDDR5/DDR4 DRAM-based
 - Large on-chip buffers
 - Hierarchical QoS
 - Programmable, hierarchical scheduling
 - Flexible and microcode-programmable packet processor:
 - Bridging, routing, MPLS, VPLS, L2VPNs, L3VPNs, OAM
 - Data Center Tunneling Encapsulations including VXLAN and NV-GRE
 - Built-in support for data center, carrier and metro Ethernet, and transport applications
 - Large on-chip tables with off-chip expandability
 - OAM accelerator engine
 - OTN and TDM support:
 - Dedicated low delay pipe for TDM/OTN traffic
 - Fixed and predictable latency data path for TDM systems
 - Unified fabric for OTN and packet
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Lifecycle Status

Active

SPECIFICATIONS

Specification	Value
Lifecycle	Active
Distrib. Inventory	No

DOCUMENTATION
