

BCM56620 SERIES





100-GBPS MULTILAYER ETHERNET SWITCH WITH TABLE EXPANSION

FEATURES

- Sixth generation of Broadcom's Switch Technology, supporting switching and routing at L2, L3, and L4
- 48 Ethernet ports, 10/100/1000 Mbit operation
- Non-blocking architecture, line rate for all packet sizes
- Purpose-built for IPv6 networks
- External TCAM allowing L2, L3, and ACL expansion
- Metro ready: comprehensive MPLS tunneling engine (support for L2/3 VPNs)
- Carrier-class 802.1ad support, with expanded support for multitag transformations
- Support for large L2 VPNs and L3 VPNs
- Enhanced on-chip packet buffer optimized for burst absorption and multicast at low latency
- Multistage classification engine for per-flow or user group security and QoS
- Broadcom's exclusive microflow-based policing
- Weighted random early detection congestion avoidance
- Intelligent scheduling (SP, WRR, DFQ)
- Flow Control: Link pause, per CoS priority, and Service Aware Flow control mechanisms
- Seamless connection to XGS Switch Fabric and SBX Metro/Core Switch Fabric solutions
- PCI Express[®], SGMII, and PCI options for host processor interconnect

BENEFITS

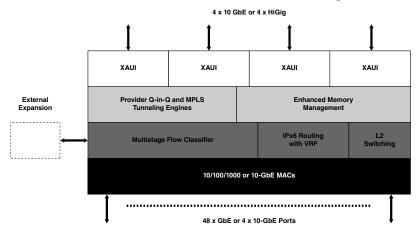
- Highest density solution for Enterprise Chassis, Core Stackable, and Metro Edge Applications.
- Unprecedented scalability provided with XGS economics.
- Highly advanced line-rate packet buffering, delivering voice, video, and multiclass data service guarantees.
- Advanced Q-in-Q and MPLS tunneling to support the latest carrier services.
- Support for next-generation IPv6 networks using full 128-bit address space.

Table Expansion Capacity		
Service	Entries	
L2	>256 K	
L3	>512 K	
Flow/ACL	>128 K	

Wide Range of Flexible Port Configurations

Part Number	10/100/1000 ports	XAUI / HiGig [™] ports
BCM56624	48 x GbE	4 x HiGig2 [™] (any can be 10 GbE)
BCM56626	24 x GbE	6 x HiGig2 (any can be 10 GbE)
BCM56628		8 x HiGig2 (any can be 10 GbE)

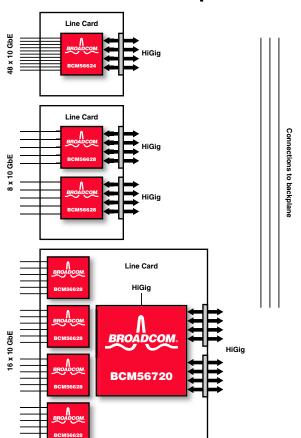
BCM56620 Reference Design

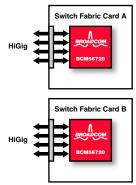




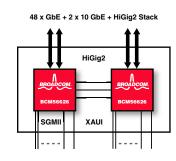
TECHNICAL SPECIFICATIONS

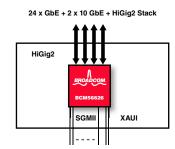
Enterprise Chassis





1RU Core Enterprise Stackable





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