

## 12 X 10-GbE + 8 X HG[16] + 4 X 1-GbE MULTILAYER ETHERNET SWITCH

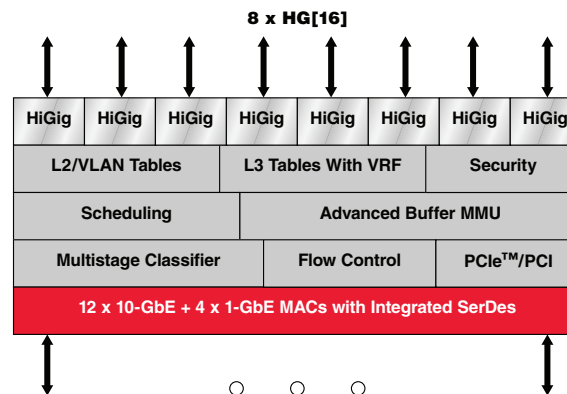
### FEATURES

- Provides 12 10-Gigabit Ethernet (10-GbE) ports + 8 HG[16] ports + four 1-GbE ports; each of the HG/10-GbE ports can also support 1 GbE, 2.5 GbE, or 10 GbE, as well as HiGig™/HiGig2™ protocols.
- Line rate full-duplex switching for 252+ Gbps.
- Built-in Layer 2 (L2), VLAN, and Layer 3 (L3) tables with 10 Quality of Service (QoS) queues per port.
- Multistage ingress and egress ContentAware™ Engine for deep packet inspection and classification provides flexible ingress and egress Access Control Lists (ACL), IPv4/v6 µflow, proprietary headers, and multi-tuple lookups, all at line rate.
- IPv4 and IPv6 Virtual Routing with full support for L2/L3 tunnels (Generic Routing Encapsulation [GRE], IPv4 over IPv6, IPv6 over IPv4, Queue in Queue [QinQ], 802.1ah)
- Intelligent scheduler supports Strict Priority (SP), Weighted Round Robin (WRR), and Deficit Round Robin (DRR) with built-in Weighted Random Early Discard (WRED) and Explicit Congestion Notification (ECN) for congestion avoidance.
- IEEE 802.3™ Link Pause and Service Aware Flow Control™ (SAFC) mechanism allows in-band backpressure per Class of Service (CoS).
- Full support for tricolor marking and metering with policing on ingress and egress separately (RFC-2698 and MEF).

### SUMMARY OF BENEFITS

- High level of integration and low power consumption enable high-performance, high-port density 10-GbE in the same form factor as 1-GbE solutions.
- Intelligent Traffic Management with SAFC supports storage, HPC, video, voice, and data over unified 10-GbE fabric enabling convergence in the data center.
- Low power, superior Enterprise class features, and industry-leading 10-GbE port density empower next-generation Enterprise aggregation and data center applications.
- Advanced load balancing, fast hardware failover and recovery (< 10 µs), and ultralow latency (< 1 µs) provide high performance, scalable, and reliable solutions for High Performance Computing (HPC) environments.
- Robust integrated SerDes, on-chip packet buffer memory, and PLLs accelerate system design and drastically reduce cost and conserve board space.
- Sixth-generation HiGig/HiGig2 stacking technology facilitates full-speed upgrade while maintaining compatibility with existing deployed switches.
- Fully compatible Broadcom software API and Software Development Kit (SDK) enable software reuse from existing deployed systems and faster time-to-market.

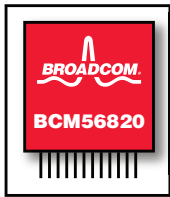
### Multiport Multilayer Ethernet Switching



# OVERVIEW

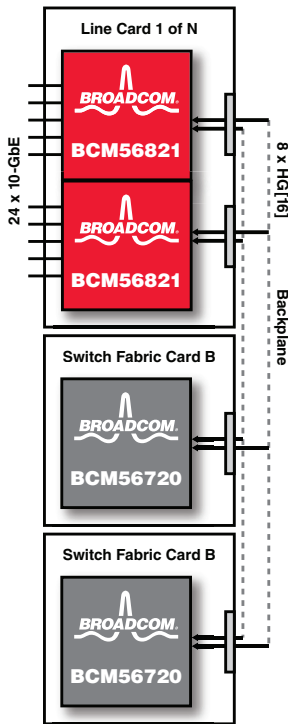
## Enterprise/Data Center Fixed/Stackable Applications

Line Rate 24 x 10-GbE +  
4 x 1-GbE Fixes/Stackable

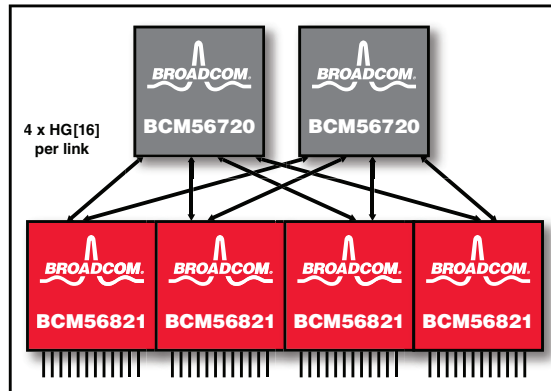


24 x 10-GbE + 4 x 1-GbE

Enterprise/Data Center  
Modular Applications

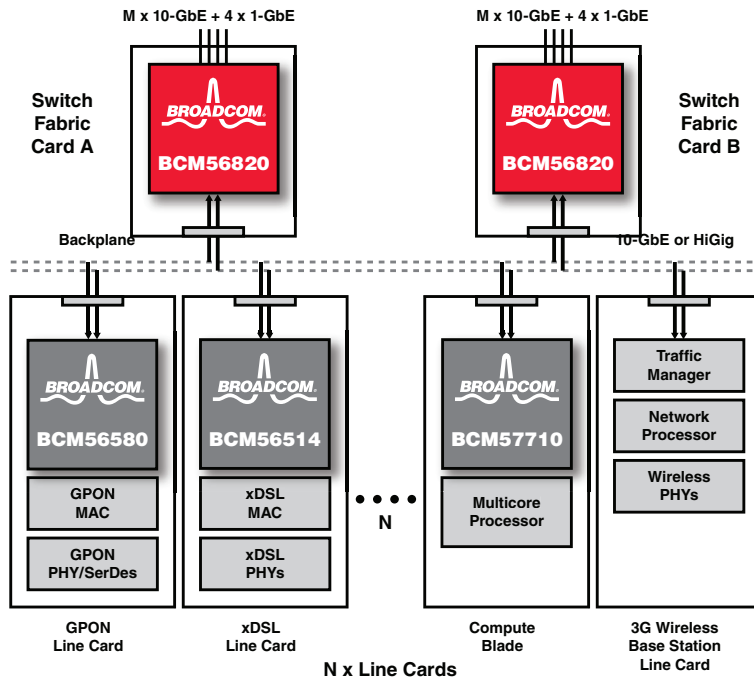


Line Rate 48 x 10-GbE + 16 x 1-GbE Fixed/Stackable



48 x 10-GbE + 16 x 1-GbE

Access, ATCA, and Embedded Applications



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