



10 GIGABIT ETHERNET/HIGIG™ MULTILAYER SWITCH

BCM5673 FEATURES

- Single 10-Gbps IEEE802.3ae compliant Ethernet port
- Single 10-Gbps HiGig Uplink/Expansion port used for stacking applications
- Integrated 512 KB packet buffer memory on-chip
- Integrated Layer 2/Layer 3 tables on-chip
- Supports Line-rate switching for all packet sizes, including jumbo frames (64 - 9216 bytes)
- Supports wire-speed Layer 2 and Layer 3 switching
- Supports eight Classes of Service (CoS)
- Supports advanced packet flow control:
 - Head of Line Blocking prevention
 - Full-duplex flow control (802.3x compatible)
- ContentAware™ network processing per port:
 - Line rate deep packet classification
 - Supports IEEE802.1p, TOS/DiffServ, rate limiting, policing, priority tagging, and re-mapping
- Provides hardware support for IP multicasting and IP multicast replication
- Built-in Double Tagging Engine with loopback feature
- Scalable up to 32 StrataXGS™ modules
- Supports Port Trunking and mirroring across the stack
- Low power ~4 W

SUMMARY OF BENEFITS

- Enables system vendors to build scalable high-performance switches with 10 Gigabit Ethernet support
- Built-in Double Tagging Engine enables the StrataXGS family of switches to interface with the service provider VLAN
- Provides hardware support for a number of multicast applications, such as video and audio conferencing, web training
- Multiple CoSs enable the switch to prioritize latency-sensitive applications, such as VoIP and video applications
- Built-in 10 Gigabit Ethernet/XAUI SerDes in addition to integrated data and address memory reduces overall system cost and design complexity
- Broadcom Switch API compatibility enables software re-use and faster time to market
- Small package and low-power enables cost effective and high-performance system design

TARGET APPLICATIONS

High performance 10 Gigabit Ethernet Multi-layer switching applications targeting the following types of systems:

- Standalone systems
- Stackable systems
- Modular chassis systems
- High-end server blades