



## MULTILAYER 12-PORT GIGABIT ETHERNET SWITCH

### FEATURES

- 12 10/100/1000-Mbps Ethernet ports with copper or fibre connectivity
- All address tables and buffer memory fully integrated on-chip
- Support for jumbo frames of up to 9 KB in size
- Advanced full-duplex end-to-end flow and congestion control with head-of-line blocking prevention
- ContentAware™ packet filtering and classification per-port
  - Wirespeed operation
  - Support for 802.1p, TOS/DiffServ, policing, shaping, marking, and remarking
  - Rate control of broadcast, unknown multicast and unicast packets
  - Eight queues per port
- Support for double 802.1q VLAN tagging and VLAN translation
- Hardware-based IP multicast routing and forwarding
  - Support for replication
- Equal and weighted cost multipath routing for load balancing
- Advanced diagnostic features including JTAG boundary scan and BIST functionality
- Low power consumption of 4.65W in a 480-pin PBGA package
- Pin-to-pin compatible with the BCM5691

### SUMMARY OF BENEFITS

- Enables modular, high-performance GbE switch designs
- Facilitates seamless integration of voice, video, and data traffic through low-latency and advanced QoS
- Enables lower system design cost and board space utilization through superior integration and compact form factor
- Offers quicker time-to-market and software reuse through backward compatibility with Broadcom switch software API

### TARGET APPLICATIONS

- High-performance standalone GbE switch solutions for distribution and wiring closet of enterprise networks and remote branches
- Embedded GbE switch solutions for blade server applications within space-constrained data centers
- Highly reliable GbE switch solutions for telecom applications in central offices

### 12-port Multilayer Gigabit Ethernet Switch

