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Connecting **everything**®
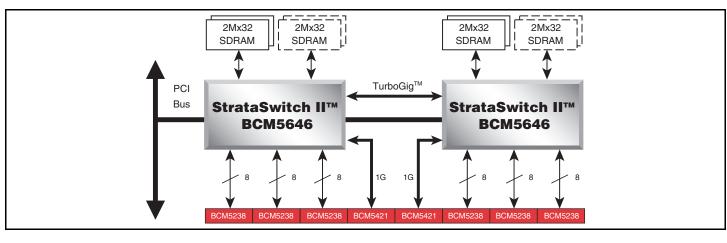
BCM5646
PRODUCT Brief

STRATASWITCH II™ BCM5646 INTEGRATED MULTI-LAYER SWITCH

FEATURES

- 24 10/100 Mb and 2 10/100/1000 Mb Ethernet ports
- High-speed 2.5-Gbps TurboGig™ stacking link
- 8.9 Mpps (line rate) switching
- 1-4 Classes of Service (COS); map to 802.1p priority
- IGMP snooping
- Integrated (8k) L2 table with auto learning
- Integrated (2k) L3 table
- Integrated (256 KB) data packet memory
- 64- or 128-bit-wide SDRAM support
- Spanning Tree support per VLAN
- DiffServ compliant
- Stacking architecture compatible with StrataSwitch I™
- IEEE 802.1Q.D support
- Fast Filter Processor (FFP)
  - Examines up to the 80th byte of a packet
  - Supports TOS and DiffServ field modification
  - Bandwith regulation and monitoring per network flow
  - Network data flow tracking granular to 1 Mbps

SUMMARY OF BENEFITS

- 2.5-Gbps TurboGig™ stacking link defines the next generation of performance for 48-port switching devices
- Optimized for 48FE+2GE and 24+2GE switches
- New service offerings for ISPs
  - Pay for bandwidth consumption
  - Voice over IP
  - Police over-consumption of network resources
  - Line rate switching on all ports
- Greater insight to network resource utilization through the advanced FFP features
- More efficient deployment of existing network resources through insight provided by StrataSwitch II™ feature set
- Line rate switching on all ports for:
  - Layer 2 switching
  - All FFP actions — steering, forwarding, reclassifying
- Low device power, 3W (<120 mW/ FE port), enables low-cost power supplies
- High level of integration minimizes PCB layer count and routing issues
- Flexible (128- or 64-bit) SDRAM interface supports low system cost of memory

BCM5646 Application Diagram

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