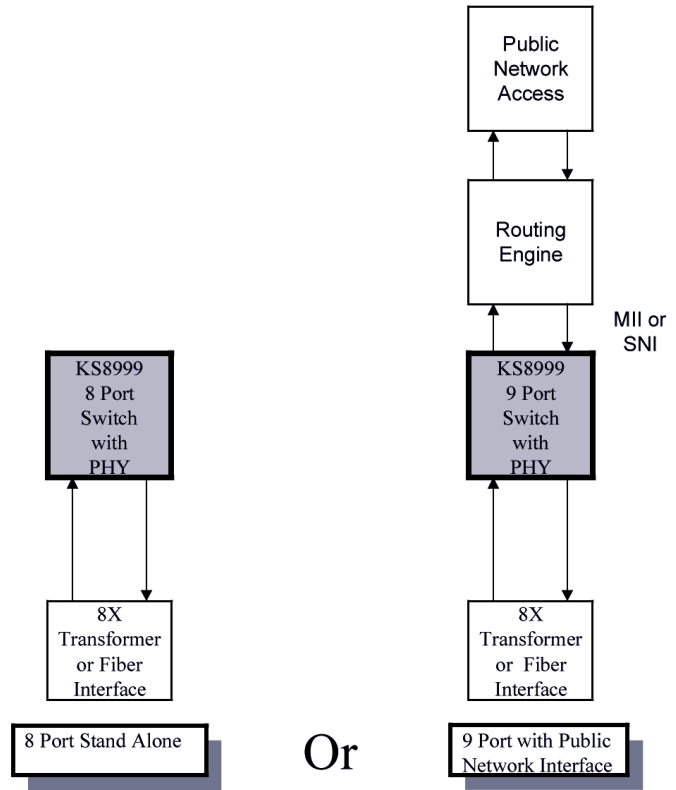


Features

- 9-port 10/100 integrated switch with 8 physical layer transceivers
- SRAM on chip for frame buffering
- 2.0Gbps high performance memory bandwidth
- 10BaseT, 100BaseTX and 100BaseFX modes of operation
- Superior analog technology for reduced power and die size
- Single 2.0V power supply with options for 2.5V and 3.3V I/O
- 900mA (1.80W) including physical transmit drivers
- Supports port based VLAN
- Supports DiffServ priority, 802.1p-based priority or port-based priority
- Support for UTP or fiber installations
- Indicators for link, activity, full/half duplex and speed
- Unmanaged operation via strapping or EEPROM at system reset time
- Hardware-based 10/100, full/half, flow control and auto negotiation
- Individual port-forced modes (full duplex, 100BaseTX) when auto-negotiation is disabled
- Wire speed reception and transmission
- Integrated address look-up engine, supports 1K absolute MAC addresses
- Automatic address learning, address aging and address migration
- Broadcast storm protection
- Full duplex IEEE 802.3x flow control
- Half duplex back pressure flow control
- Comprehensive LED support
- External MAC interface (MII or SNI) for router applications
- Supports MDI/MDI-X auto crossover
- Available 208-pin PQFP package

System Level Applications

The KS8999 can be configured to fit either in an eight port 10/100 application or as a nine port 10/100 network interface with an extra MII/SNI port. This MII/SNI port can be connected to an external processor and used for routing purposes or public network access. The major benefits of using the KS8999 are the lower power consumption, unmanaged operation, flexible configuration, built in frame buffering, VLAN abilities and traffic priority control. Two such applications are depicted below.



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