KS8728 – Octal 10/100 PHY

Introduction

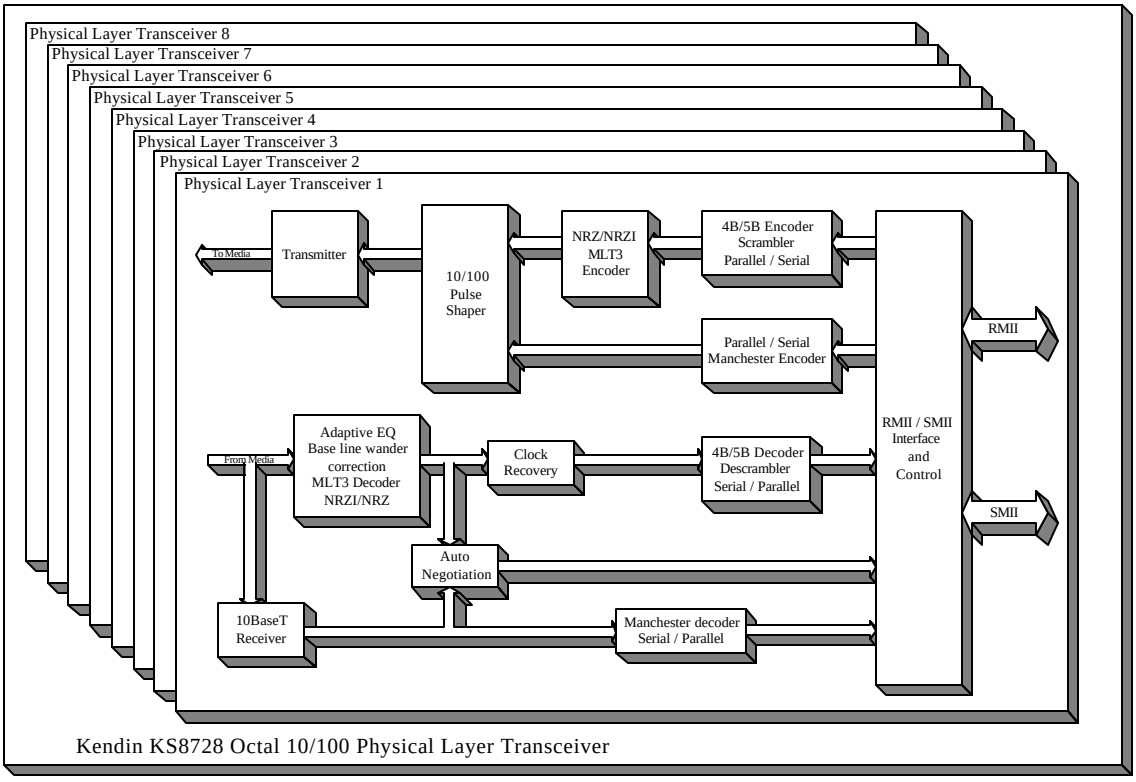
The KS8728 contains 8 independent 10/100 Fast Ethernet physical layer transceivers. The KS8728 is designed to reside in an unmanaged design not requiring processor intervention. This is achieved through I/O strapping at system reset time. If desired, a processor interface is provided for more flexible configurations.

On the media side, the KS8728 supports 10BaseT, 100BaseTX and 100BaseFX as specified by the IEEE 802.3 committee. On the media access side the KS8728 supports both the RMII (reduced media independent interface) and the SMII (serial media independent interface).

Physical signal transmission and reception are achieved through use of analog circuitry that makes the design more efficient and allows for lower power consumption and smaller chip die size.

Highlights

- 8 port 10/100 Physical Layer Transceivers
- 10BaseT, 100BaseTX and 100BaseFX modes of operation
- Supports RMII (Reduced Media Independent Interface) and SMII (Serial Media Independent Interface)
- Superior analog technology for reduced power and die size
- 2.5 V power supply
- 480 mA (1.2 W) excluding physical transmit drivers' current
- 208 pin PQFP package
- Support for UTP or fiber installations
- Indicators for link, activity, full / half duplex and speed
- Unmanaged operation via strapping at system reset time
- Managed operation via MII management interface
- IEEE 1149.1 (JTAG) scan for board level testing



Kendin KS8728 Octal 10/100 Physical Layer Transceiver

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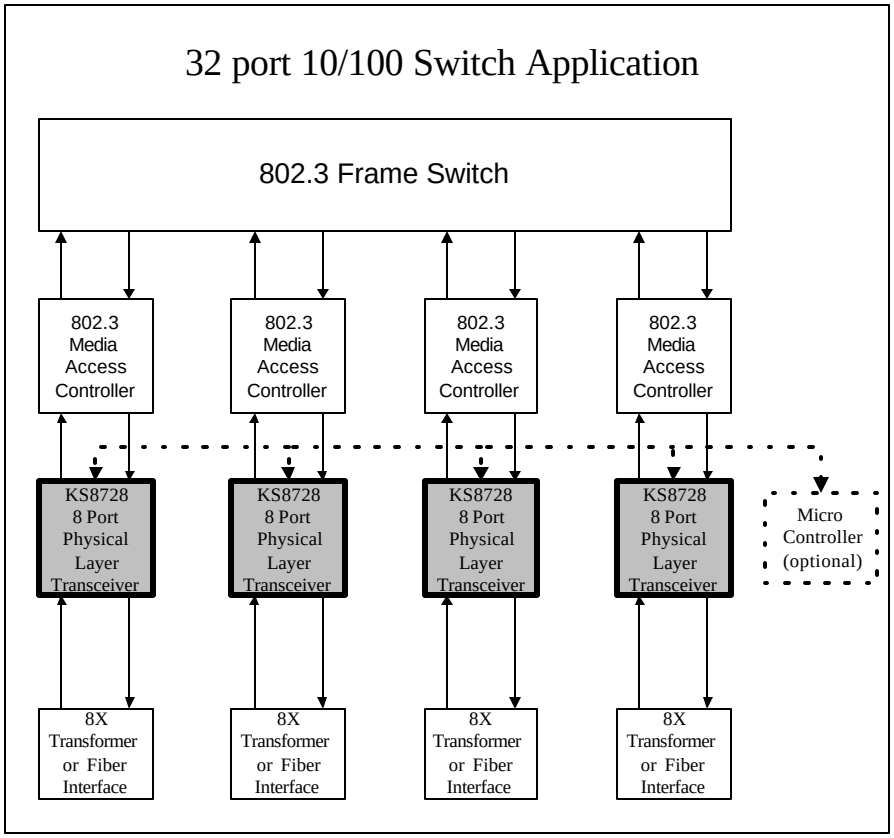
System Level Applications

The KS8728 is designed to fit into switch and hub designs needing lower power requirements and fewer components. The KS8728 can easily displace larger and lower density components used in the past. This space and power savings can be used to provide additional ports or features in the same or reduced form factor. One example of how the KS8728 can be used is depicted below.



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