

ADM6993

Fiber-to-Fast Ethernet Converters



The ADM6993 consists of Fiber to Fast Ethernet converters on a single chip, integrating two 10/100 Mbps MDIX TX/FX transceivers with a two-port 10/100M Ethernet L2 switch controller. Features include an OAM engine for the TS1000 protocol and a converter mode to meet demanding applications, such as Fiber-to-Ethernet media converters.

The ADM6993 supports 16 entries of packet classification and marking or filtering for TCP/UDP port numbering, IP protocol ID and Ethernet Type. These can be configured either using the EEPROM or on-the-fly using a small, low-cost micro controller.

On the media side, the ADM6993's 0 and 1 ports support auto-MDIX 10Base-T/100Base-TX and 100Base-FX as specified by the IEEE 802.3 committee through use of digital circuitry and high speed A/D. With three different packages, the Ninja K, F and C, it can be adapted into a range of applications for the Central Office (CO) and in the Customer Premises (CPE).

Applications

- Fiber-to-Ethernet Converter
- TS1000 Converter

Features

- 2-port 10/100M switch integrated with a 2-port PHY (10/100Tx and 100Fx)
- Provides Tx<->FX Converter modes with Link Pass Through (LPT)
- Built-in data buffer 6Kx64bit SRAM
- MAC addresses with a 4-way associative hashing table
- MAC address learning table with aging function
- 802.3x flow control for full duplex and back-pressure for half duplex
- Supports Auto-Negotiation and Auto Cross-Over
- Packet lengths up to 9216 bytes
- 16 entries of packet classification and marking or filtering for TCP/UDP Port Numbering, IP Protocol ID and Ethernet
- Serial Management Interface for low end CPUs

- Hardware bandwidth control support for both ingress and egress traffic
- Port status for remote agent monitoring
- Smart counters for port statistics reporting

ADM6993 Packages

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Physical Characteristics

- CSM CMOS, 0.18micro 1P5M Process
- 1.8/3.3 V Variable Voltage

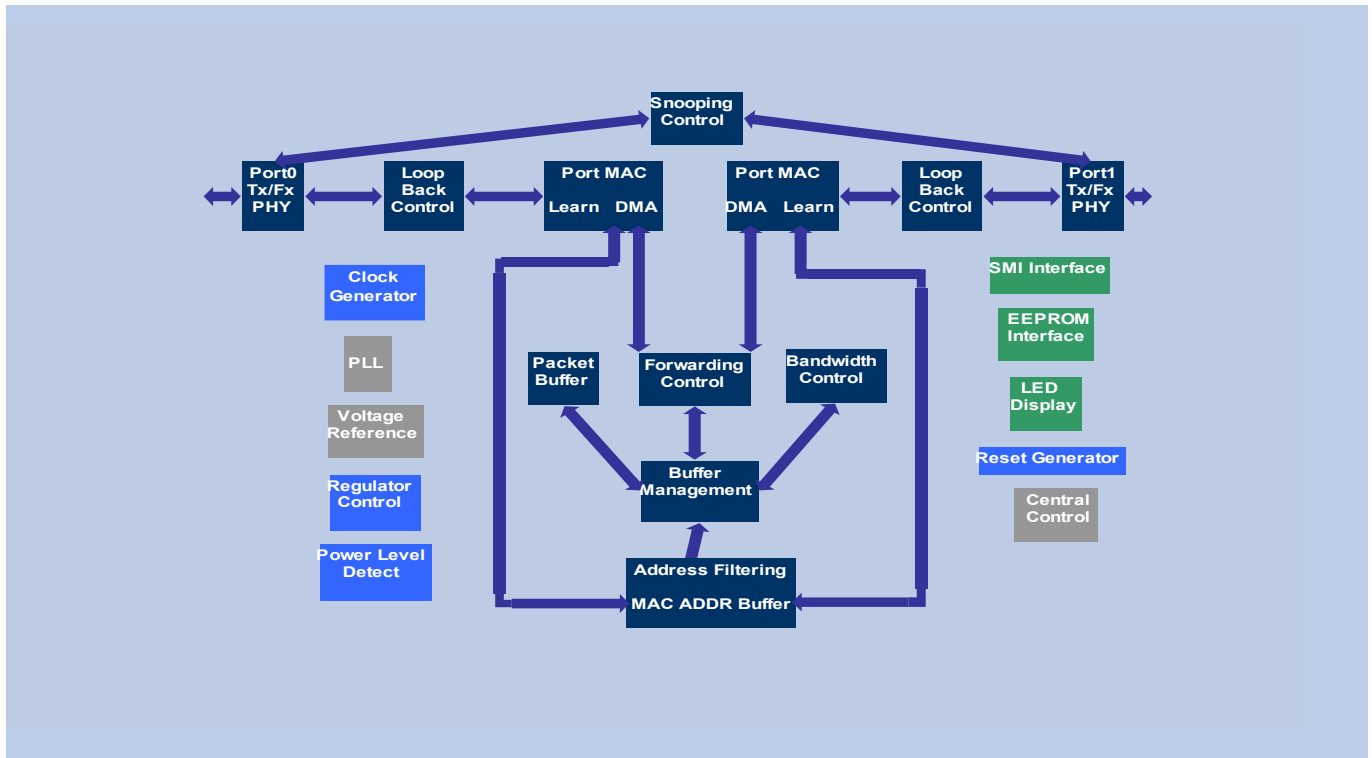
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Communications



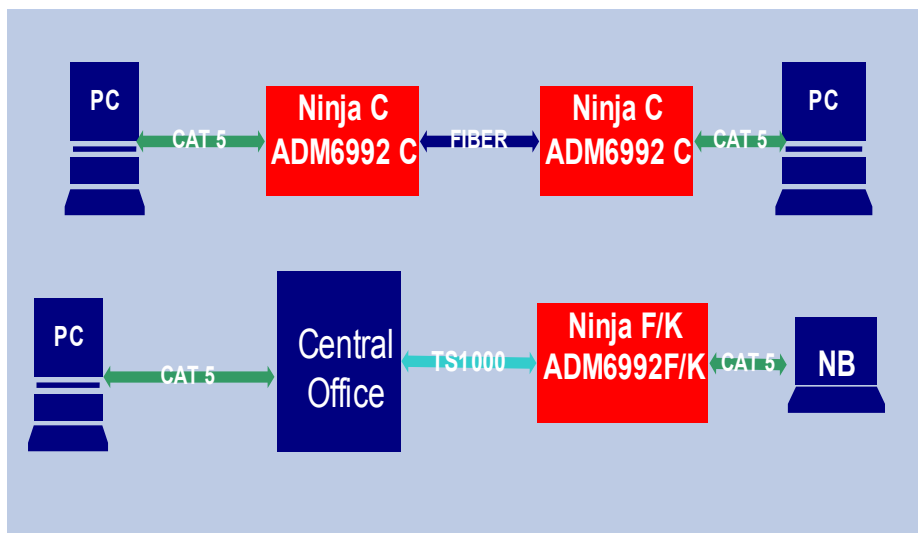
Never stop thinking

ADM6993 Block Diagram



ADM6993 Product Summary

Product	Sales Code	Description	Package
ADM6993	ADM6993	Fiber to Fast Ethernet Converter	



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Application Example

How to reach us:

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