Quad GMAC (nPC1140)

Quad Gigabit Ethernet Media Access Controller

General Description

The nPC1140 Quad Gigabit Media Access Controller (QuadGMAC) gluelessly interfaces to an AMCC network processor - the nP7250 OC -48 Network Processor, the nP7120 Multi-Gigabit Network Processor, or the nP7110 Gigabit Network Processor - and to four Gigabit Ethernet transceiver devices, or GMII-based PHY devices, to provide four full-duplex 1 Gbps Media Access Controllers. The nPC1140 incorporates the system interface, transmit and receive buffers, and Gigabit Ethernet control functions in a single device. The nPC1140 features RMON statistics collection on each of its ports. In addition, the nPC1140 has the ability to send flow control status information so that the switch fabric can stop transmission to the port receiving a pause frame indication from the link partner.

Features

- Interfaces to nP7250, nP7120, nP7110
- Compliant with the IEEE 802.3z Gigabit Ethernet standard
- IEEE 802.3x Flow Control
- ANSI X3T11 1.25 Gbps full -duplex transceiver I/F
- Supports Ten Bit Interface (TBI), GMII Interface and 4 -bit MII Interface (for 10/100 Mbps)
- 16 -bit Reduced Generic Gigabit Interface (RGGI)
- Supports padding of short packets on transmit; can receive packet bursts
- RMON statistics exceeding the MIB standard
- JTAG Test support
- Synchronous 50/52 MHz operation
- Supports multiple GMAC port connection to the system with different configurations
- 0.18u CMOS technology

Applications

- MPLS Switch Routers
- Core Routers
- Subscriber Services
- Voice Gateways
- Edge Router
- Optical Access
- Multi Service Switches
- Remote Access Servers
- Content/Web Switches, Load Balancers

Documents & Related Products

Documents*

There are no related documents at this time

* Additional related documentation is availabl to approved registered users. You may apply for a **Login Account** to request access.

Products

Framer/Mapper

nPC1140

nPC1110

Network Processor

nP3700

nP3450

nP3454

nPC2110

nP3404

nP3400

Traffic Manager

nPX5700

Switch Fabric

nPX8005

nPX5700

nPX5500

nPX5418

nPX5412

Storage Silicon

nPX8005

nP7510

nP7250

nP7120

nP7020