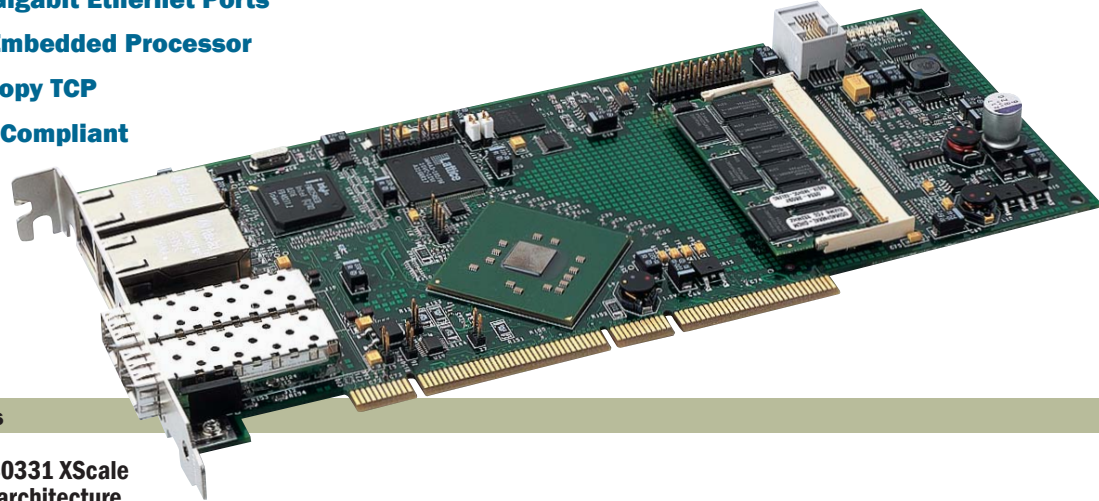


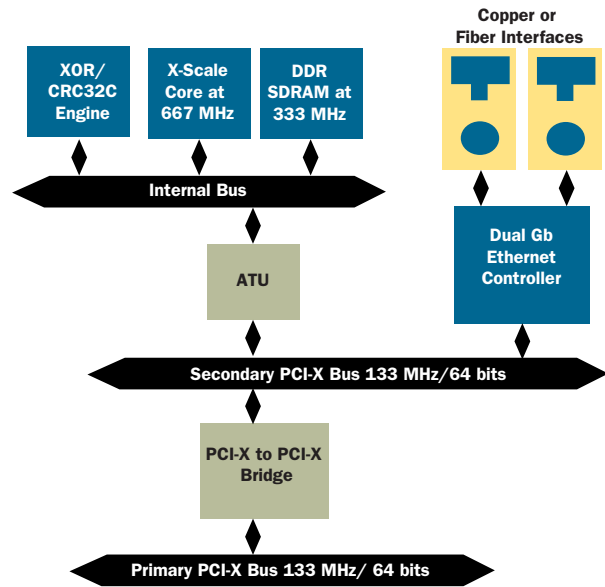
# PCI-X 740 Dual Gigabit Ethernet I/O Controller

- ◆ Dual Gigabit Ethernet Ports
- ◆ Fast Embedded Processor
- ◆ ZeroCopy TCP
- ◆ RoHS Compliant



## Features

- ◆ Intel 80331 XScale Microarchitecture
  - CPU Core speed of 667 MHz
  - Integrated 133 MHz PCI-X to PCI-X Bridge
  - Two Channel DMA Controllers with Scatter/Gather Support
  - RAID 5 XOR and CRC32C Engine
- ◆ DDR 333 SDRAM
  - Up to 1 Gbyte
  - Dual Ported to Processor and Internal PCI-X Bus
- ◆ Primary PCI-X Bus
  - Supports 133 MHz/64bit Operation
- ◆ Secondary PCI-X Bus
  - 133 MHz/64bit
- ◆ Dual Gigabit Ethernet Controller
  - Supports either two Copper (1000BaseT) or two Fiber Optic (1000BaseSx/1000Base Lx) Ports
- ◆ Up to Eight Mbytes of FLASH
- ◆ Serial Console Port
- ◆ Board Support Packages
  - Breeze Development Environment
  - VxWorks
  - ZeroCopy TCP
  - Linux
- ◆ Host Drivers for
  - Windows XP
  - Linnux



## Product Description

The PCI-740 is an Intelligent Dual Gigabit Ethernet I/O Controller that is applied in embedded systems for real-time protocol processing, security, and high throughput LAN applications. The PCI-740 supports Intel's highly integrated 80331 XScale Microarchitecture with a tightly coupled XScale Core, Memory Controller and PCI-X to PCI-X bridge. A Dual Gigabit Ethernet Controller supports either two copper or fiberoptic Ethernet interfaces.

Embedded/Real-time development is supported by the availability of the Breeze Development Environment, VxWorks, ZeroCopy TCP, and Linux.

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# PCI-X 740 Dual Gigabit Ethernet I/O Controller



## Technical Specifications

### Processor

<b>Microprocessor</b>	Intel XScale 80331 at 667 MHz
<b>On-chip Cache (I/D)</b>	32 Kbyte, 32 way, set associative

### Memory

<b>Memory Capacity</b>	256 Mbytes, 512 Mbytes, or 1 Gbyte
<b>Architecture</b>	Synchronous Double Data Rate (DDR SDRAM) with optional ECC
<b>Performance</b>	333 MHz
<b>Flash</b>	4 or 8 Mybtes

### PCI-X Interface

PCI 2.2 (Up to 64 bit, 133 MHz) +3V Signaling
--------------------------------------------------

### Ethernet Interface

<b>Controller</b>	82546GC Dual Gigabit Ethernet Controller with Integrated PHY
<b>Interface Speed</b>	1000Base-T/100Base-T/ 10Base-T Auto Negotiable

## Environmental

<b>Physical Dimensions</b>	PCI Mid-Length Card 9.4" wide and 4.2" high
<b>Operating Temperatures</b>	0 to 55 Degrees Celsius
<b>Relative Humidity</b>	0 - 95%

<b>Power Requirements</b>	
+3.3V	3.64 Watts Typical, 5.20 Watts Maximum
+5.5V	0.002 Watts Typical, 0.005 Watts Maximum
<b>Storage Temperatures</b>	- 55 to 125 Degree Celsius

## Ordering Information

### CM-740-ABB-CC-D

#### A - Flash ROM

- (1) 4 Mbytes
- (2) 8 Mbytes
- (3) 16 Mbytes

#### BB - Fiber Transceivers

- (F0) No Transceivers Populated
- (F1) 850 nm
- (F2) 1310 nm
- (C0) Copper Only - No SFP

#### CC - Memory Capacity

- (1G) 1 Gbyte
- (5M) 512 Mbytes
- (2M) 256 Mbytes

#### D - Firmware/Operating System

- (B) - Breeze Only
- (V) - VxWorks 5.4
- (Z) - ZeroCopy Stack
- (L) - Linux

#### Commonly Stocked Configuration

CM740-1F0-2M-B

#### 800-0740

PCI-740 User's Manual