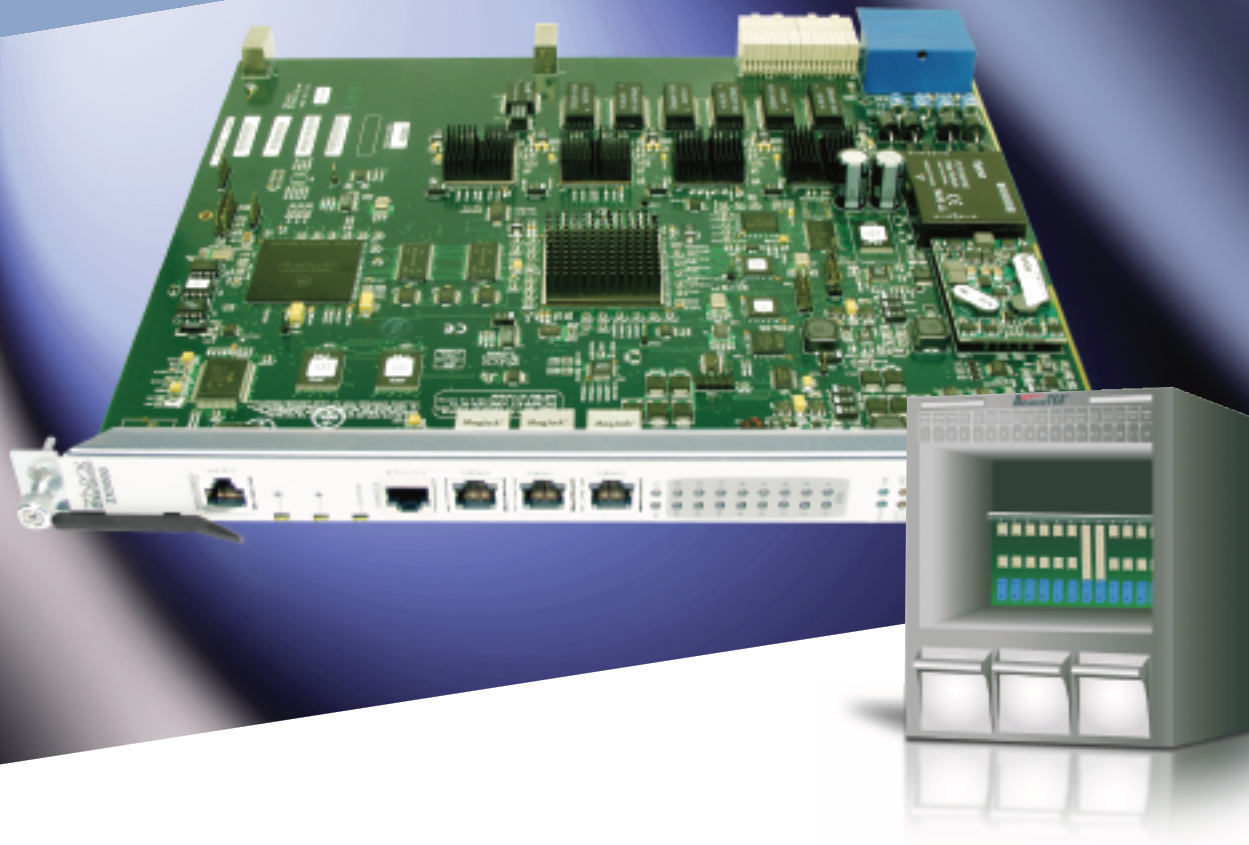


ZX5000

AdvancedTCA® Base Fabric Switch

16 port
10/100/1000 Mbps
AdvancedTCA® Base Fabric



Features at a glance

- ▶ Intel IXE5416 GigE Switch Fabric provides a single-chip, non blocking fabric capable of switching up to 24 million packets per second
- ▶ 10/100/1000 Mbps Ethernet for up to 12 payload slots, 3 egress ports, and a dedicated link to the redundant fabric slot
- ▶ High Performance onboard Motorola MPC8255 PowerPC Processor provides 380 MIPS for Layer 4-7 packet classification
- ▶ OpenArchitect/IXE 3.0 provides a complete Ethernet Networking Environment that helps facilitate application development
- ▶ AdvancedTCA™ HotSwap compliance ensures that Field Replaceable Units may be swapped out with a minimum Mean Time to Repair
- ▶ Full support for the IPMI specification ensures compatibility with all PICMG 3.0 compliant chassis management modules

Overview

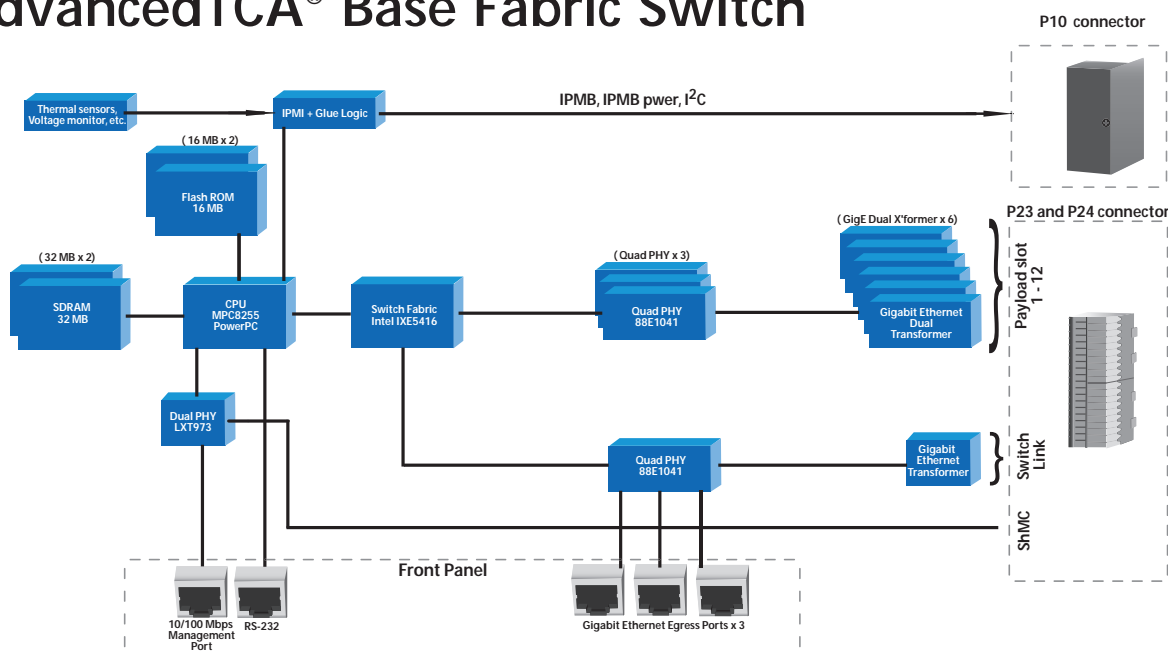
The ZX5000 is a 16-port AdvancedTCA® Base Fabric switch based on the Intel IXE5416® switch silicon. Providing Gigabit Ethernet service for up to 12 payload slots, the ZX5000 uses the ZNYX Networks OpenArchitect 3 running on its embedded MPC8255 to provide complete and flexible switch management. Three switch egress ports are provided, and one port is dedicated to the switch-to-switch connection in redundant configurations. For additional management connections, two out-of-band 10/100 Ethernet management ports and one RS-232 port are provided to the front panel. The ZX5000 provides fully PICMG 3.0 compliant chassis management with its on-board IPMI controller.

Fault Tolerant Backplanes

Two ZX5000 AdvancedTCA® switches can be used on a standard ATCA backplane to implement a fully redundant dual-star network architecture over the base-fabric interface. Each payload slot has two base-fabric connections, one to each switch. With the OpenArchitect High Availability (HA) software suite, the chassis can respond and automatically correct any single point of failure.

ZX5000

AdvancedTCA® Base Fabric Switch



ZX5000 Software

Extensible Switch Management

OpenArchitect 3/IXE provides a complete Layer 2/3 switch management platform, customized for embedded Ethernet networks such as AdvancedTCA® chassis. OA provides enhanced switch functionality such as VLANs, QOS/COS, Spanning Tree, and Network Address Translation (NAT). Additionally, OA/Core provides an extensive package of Management Information Bases (MIBs) and full support for SNMP to provide a greater degree of control over switch management.

Features

- ◆ Dynamic and Static Layer 2 switching
- ◆ Dynamic and Static Layer 3 routing

- ◆ Layer 4 - 7 packet classification
- ◆ Linux 2.4.2 Kernel optimized for PowerPC
- ◆ Enhanced Protocol Stack (contact ZNYX for details)
- ◆ FTP, TFTP, Telnet - (Server/Client)
- ◆ DHCP Server/Client/Relay
- ◆ Network File Server / Web Server
- ◆ Network Address Translation (RFC1631)
- ◆ 802.1Q VLAN with GARP, GMRP, GVRP
- ◆ 802.1D Spanning Tree with 802.1w
- ◆ Rapid Spanning Tree Algorithm (RSTP)
- ◆ Virtual Router Redundancy Protocol (RFC2338)
- ◆ IP Multicast Support
- ◆ IGMP Snooping, IGMPv1, IGMPv2, DVMRP
- ◆ IEEE802.1p Traffic Class/Priority Queues
- ◆ Differentiated Services for QOS
- ◆ SNMPv1, SNMPv2, SNMPv3
- ◆ MIB-II (RFC1213) (RFC2013)
- ◆ VLAN Extension MIB (RFC2674)
- ◆ 802.1D Spanning Tree MIB
- ◆ RMON and RMONv2 MIB
- ◆ Commercial Open Policy Service (COPS)
- ◆ COPS-PR (Provisioning)

Connections

Backplane: 12 10/100/1000 Mbps Ethernet
Front Egress: 3 10/100/1000 Mbps Ethernet
InterSwitch Link: 1 10/100/1000 Mbps Ethernet

Compliance

PICMG 3.0 - AdvancedTCA® Specification
PICMG 2.9 - IPMI Specification
PICMG 2.1 - Full Hot Swap Compliance

Packet Switch Rate

24 million packets per second

Firmware

OpenArchitect™ 3.0/IXE Switch Management

Power

43.2 W @ Full Switching

MTBF

Calculated MTBF > 210,000 Hours (MIL Standard)

Regulatory

AS/NZS 3548, EN 300 386-2:1997, EN 55022:1998, CISPR 22.
VCCI V-3, Bellcore GR-1089, CFR 47 Part 15 Subpart B, EN 300 386-2:1997,
EN 55024, EN 61000-4-2, EN61000-4-3, ENV 50204, EN 61000-4-4,
EN 61000-4-6, Bellcore GR-1089, FCC Class A

Dimensions

322.25mm x 280mm

Manufacture

Designed and manufactured in the USA

ZNYX Networks, Inc.

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Fremont, CA 94538 USA

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Web: www.znyx.com

Specifications Subject to Change

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