

MAC-16 port GigE switch



Product ID : MAC-16 port GigE switch
Version : 2.0

MAC-16 port GigE switch is the 16-port AdvancedTCA fabric layer 2+ switch card, based on Marvell Prestera MV98DX166 switch and Freescale MPC852T I/O processor. The ATCA GigE fabric switch card, features 16-port 10/100/1000BASE-T links, including 12 node slots, 1 front panel egress RJ45 port, 2 MCM ports, 1 inter-switch port and 1 control plane CPU access port and 2X1Gigabit Ethernet SFP up-link port . The 16-Port GigE Switch is Linux-based operating system runs on Freescale I/O Processor providing a complete development platform for the management of Layer 2+ packet switching plus sophisticated standards such as, IEEE 802.1d Spanning Tree Protocol (STP), IEEE 802.1p Quality-of-Service (QoS), IEEE 802.1Q 4096 VLANs and QinQ support, IEEE 802.3ad Link aggregation, Port Mirroring and DHCP services .

MCM(Chassis Management Port) :
This card supports Dual Chassis management access Ports and provides access through the Base Interface .An external Chassis manager can access all cards on the base interface for configurations,software updates,and status.

Key Benefits:

- 16 10/100/1000 Base-X ports configured in SerDes/SGMII and one 10/100/1000 MII port .
- Full-wire speed switching capacity of up to 25.3 million packets/second .
- SerDes can drive backplane directly and supports PICMG 3.1 standards .
- Manual or Auto-Negotiation support Link,Duplex and IEEE 802.3x Flow control setting.

16 port GigE switch Features:

- 16 ports Gigabit Ethernet Fabric interface switch .
- 12 Node ports .
- 1 Egress port .
- 2 MCM ports, PICMG 3.0 R2.0 ECN001 .
- 1 Inter-Switch port and 1 Control Plane port .
- 2X1-Gigabit Ethernet SFP Up-link ports .
- Line rate layer 2 switching engine ,IEEE802.1D/Q - Compliant Ethernet switch .
- Front panel GbE management port and serial console
- IEEE 802.1x service VLAN'S,Stacked VLAN.
- Network management using :
 - ◆ web GUI
 - ◆ CLI console
 - ◆ SNMPv2
 - ◆ Telnet
 - ◆ Port mirroring

ATCA-16 port GigE switch card view



Specification:

Control plane

- Freescale MPC852T 32 bit I/O Processor .
- Memory: 512Mbx2 SDRAM,8MB/16MB flash .
- 32 bit/66 MHz processor local bus.

Management

- Front panel 10/100 Base-T (RJ45) Debug port.
- Front panel 10/100 Base-T (RJ45) MCM access .
- Front panel RS232 serial console switch access.
- Front panel RS232 serial console MCM access .
- On board RS232 serial console IPMC access.

Data plane

- Switch fabric Marvell Prestera 98DX166 .
- Broadcom dual port PHY.

PICMG 3.0 Interfaces

- 12x10/100/1000 Base-T fabric interface channels for 14 slot system .
- 2x10/100 Base-TX MCM ports compliant to PICMG 3.0 R2.0 ECN001 .
- 1x10/100/1000 Base-T inter-switch link .

1+1 Gigabit Ethernet up-link

- 2x1 Gigabit Ethernet SFP optical transceiver.

Operating system

- Linux

Hardware Specification

- Form Factor: PICMG3.0 R2.0 ECN001 ATCA
- 10/100/1000 Base-T Redundancy Ethernet port

Applications:

- Next Generation Networks.
- Computation cluster Interconnects.
- Storage area networks.
- Building blocks for metro Ethernet networks.
- IPTV multi cast applications .

Operating Environment

- Operating Temperature Range – 5 deg C to 45 deg C (41 deg F to 113 deg F)
- Operating Humidity - 5% to 90% relative humidity non-condensing
- Storage Temperature Range - -40 deg C to +70 deg C (-40 deg F to +158 deg F).

Power consumption: 30W

Operating voltages:

-48V DC

(Derived Voltages: 1.2V, 1.8V ,2.5V and 3.3V)