Amphenol Aerospace

RUGGED 120 CHANNEL ETHERNET SWITCHBOX

HIGH SPEED SOLUTIONS

PDS - 308

DESCRIPTION

Amphenol's Rugged 120 Channel Ethernet Switch Box provides an unmatched level of flexibility to meet any system requirement. The switch box is a 120 port standalone Ethernet Switch box that is configurable for system connectivity, speeds, port types, and interoperation with various high-speed media converters and connectors for system interfacing.

Each port is capable of 10G Ethernet – some ports can either be configured as 10G-Base-T (also supporting 100-Base-T and 1G-Base-T) or 10G-Base-SR and 1G-Base-SX. The switching throughput is up to 1.2 Tbps when using all 120 ports on the switch box. In addition, the switch is non-blocking and low-latency for high-throughput architectures and applications. In Amphenol's state of the art Spirent communications testing center, the switch box is tested aggressively at line rates to RFC 2889 for switching and RFC 2544 for L2/L3 performance, latency, packet forwarding, and other key items.

The switch is manufactured using Amphenol's MIL Qualified MIL-DTL-38999 Series III connectors. These connectors contain standard AS39029 qualified Size 22D contacts, Octonet contacts and 48F MT Ferrule Fiber Optic contact assemblies.

Amphenol's Octonet Contacts are a proven design used in a variety of Military Programs. The Octonet is a Size 8 contact housing (4) differential pair contacts. It is a 100 Ohm impedance, capable of a data rate of 4 Gbps maximum per contact pair. The contact system has been tested and passed all the Qualification Requirements of AS39029 contact.

Our 48F MT Ferrule Fiber Optic Contacts are industry standard, very high density plastic ferrules available in either 12-fiber, 24-fiber versions, 48 pin, in multi-mode PC, single mode PC, or single mode APC configurations.

FEATURES & BENEFITS

- 96 ports of 10GBASE-SR (Can also be configured for 1GBase-SX)
- 24 ports of 100/1G/10GBase-T - auto negotiation
- Supports Ethernet multicast, IP multicast, IGMP, SNMP, & many other management options
- Host management processor
- Chassis with 38999 series III high performance & density connectors
- 10 LED indicators reporting all internal power supply voltage levels
- MIL-STD-704 28V DC power supply interface
- 50ms power holdup
- Embedded elapsed time indicator
- Circuit breaker for incoming power
- Self-encapsulated mounting screws

ENVIRONMENTAL

- -55 C to 85 C operating depending on altitude – perfect for military aerospace environments
- Conduction cooled for cold plate interface
- Vita 47 Shock and Vibration
- Plating & paint is configurable
- EMI/EMC per MIL-STD-461 E

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SOFTWARE FEATURES

Stacking
Stacking Ring Topology
Stacking Chain Topology
Stacking Members and Unit ID
Removing and Replacing Stacking Members
Exchanging Stacking Members
Switching the Stacking Master
Configuring System Time
Configuring Daylight Savings Time
Configuring SNTP
Polling for Unicast Time Information
Polling for Anycast Time Information
Broadcast Time Information
Defining SNTP Settings
Configuring Device Security
Configuring Management Security
Configuring Authentication Methods
Defining Access Profiles
Defining Profile Rules
Defining Authentication Profiles
Mapping Authentication Methods
Defining RADIUS Settings
Defining TACACS+ Authentication
Configuring Passwords
Defining Local Users
Defining Line Passwords
Defining Enable Passwords
Configuring Network Security
Network Security Overview
Port-Based Authentication
Advanced Port-Based Authentication
Defining Port Authentication Properties
Defining Port Authentication
Configuring Multiple Hosts
Defining Authentication Hosts
Viewing EAP Statistics
Defining Access Control Lists
Defining IP Based Access Control Lists
Defining MAC Based Access Control Lists
Binding Device Security ACLs
Managing Port Security
Enabling Storm Control
Configuring System Logs
Defining General Log Properties
Viewing Memory Logs
Viewing Flash Logs
Configuring Interfaces
Configuring Ports
Aggregating Ports
Configuring LACP
Configuring VLANs
Defining VLAN Properties
Defining VLAN Membership
Defining VLAN Interface Settings
Configuring GARP
Defining GARP
Defining GVRP
Viewing GVRP Statistics

Defining IP Addresses
Configuring IP Addressing
Defining IP Addresses
Defining ARP
Defining Domain Name Servers
Defining DNS Servers
Defining DNS Host Mapping
Defining the Forwarding Database
Defining Static Forwarding Database Entries
Defining Dynamic Forwarding Database Entries
Configuring Spanning Tree
Defining Classic Spanning Tree
Defining STP on Interfaces
Defining Rapid Spanning Tree
Defining Multiple Spanning Tree
Defining MSTP Instance Settings
Defining MSTP Interface Settings
Configuring SNMP
SNMP v1 and v2c
SNMP v3
Configuring SNMP Security
Defining SNMP Security
Defining SNMP View
Defining SNMP Group Profiles
Defining SNMP Group Members
Defining SNMP Communities
SNMP Communities Basic Table
SNMP Communities Advanced Table
Configuring SNMP Notifications
Defining SNMP Notification Global Parameters .
Defining SNMP Notification Filters
Defining SNMP Notification Recipients
SNMPv1,2c Notification Recipients
SNMPv3 Notification Recipients
Configuring Multicast Forwarding
Multicast Forwarding
Typical Multicast Setup
Multicast Operation
Multicast Registration
Multicast Address Properties
Defining Multicast Properties
Adding MAC Group Address
Adding IP Multicast Groups
Configuring IGMP Snooping
Configuring MLD Snooping
Viewing IGMP/MLD IP Multicast Groups
Defining Multicast Router Ports
Defining Forward All Multicast
Defining Unregistered Multicast Settings

Managing System Files
Downloading System Files
Firmware Download
Configuration Download
Uploading System Files
Upload Type
Software Image Upload
Configuration Upload
Copying Files
Restoring the Default Configuration File
Configuring Quality of Service
Quality of Service Overview
VPT Classification Information
CoS Services
Defining General QoS Settings
Configuring QoS General Settings
Restoring Factory Default QoS Interface Settings
Defining Queues
Defining Bandwidth Settings
Mapping CoS Values to Queues
Mapping DSCP Values to Queues
Defining QoS Basic Mode
Defining Basic Mode Settings
Rewriting Basic Mode DSCP Values
Defining QoS Advanced Mode
Setting Policy Binding
Managing Device Diagnostics
Configuring Port Mirroring
Viewing Statistics
Viewing Interface Statistics
Viewing Interface Statistics
Receive Statistics
Transmit Statistics
Viewing Etherlike Statistics
Managing RMON Statistics
Viewing RMON Statistics
Configuring RMON History
Defining RMON History Control
Viewing the RMON History Table
Configuring RMON Events
Defining RMON Events Control
Viewing the RMON Events Logs
Defining RMON Alarms

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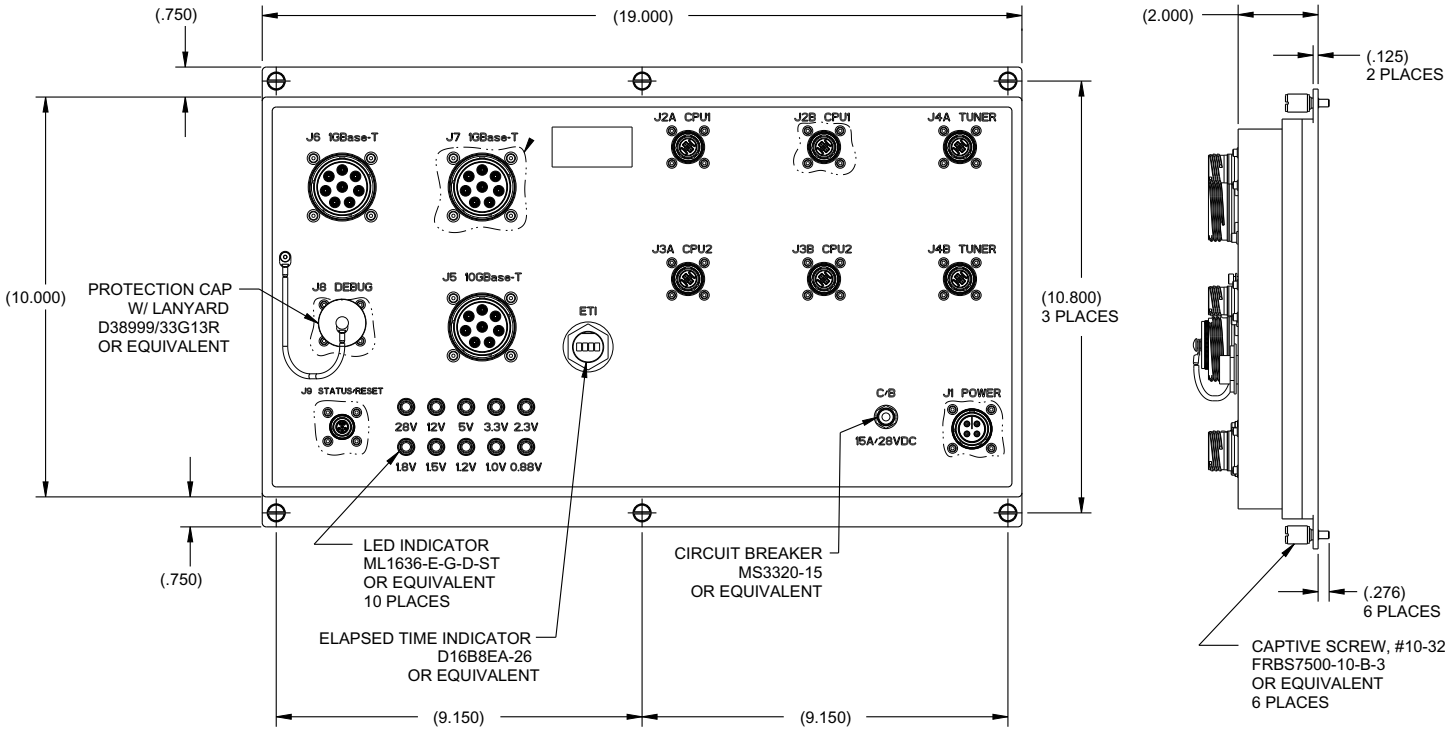
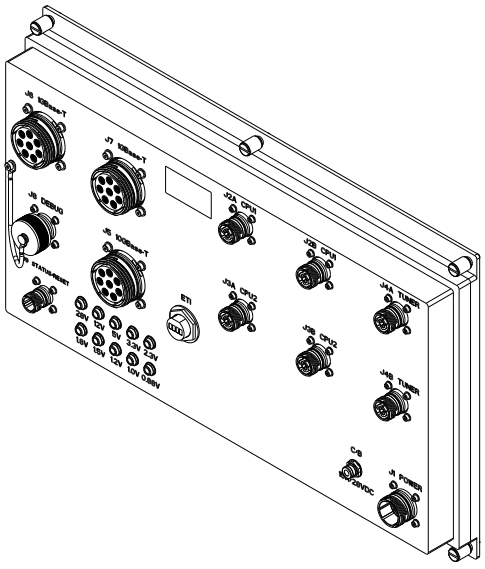
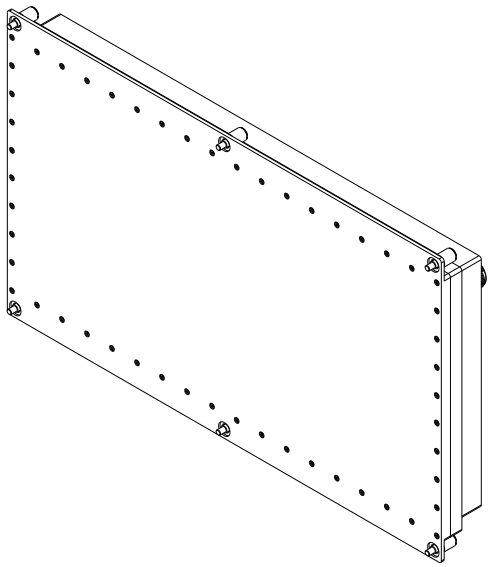
DRAWING





FRONT ISOMETRIC VIEW



REAR ISOMETRIC VIEW

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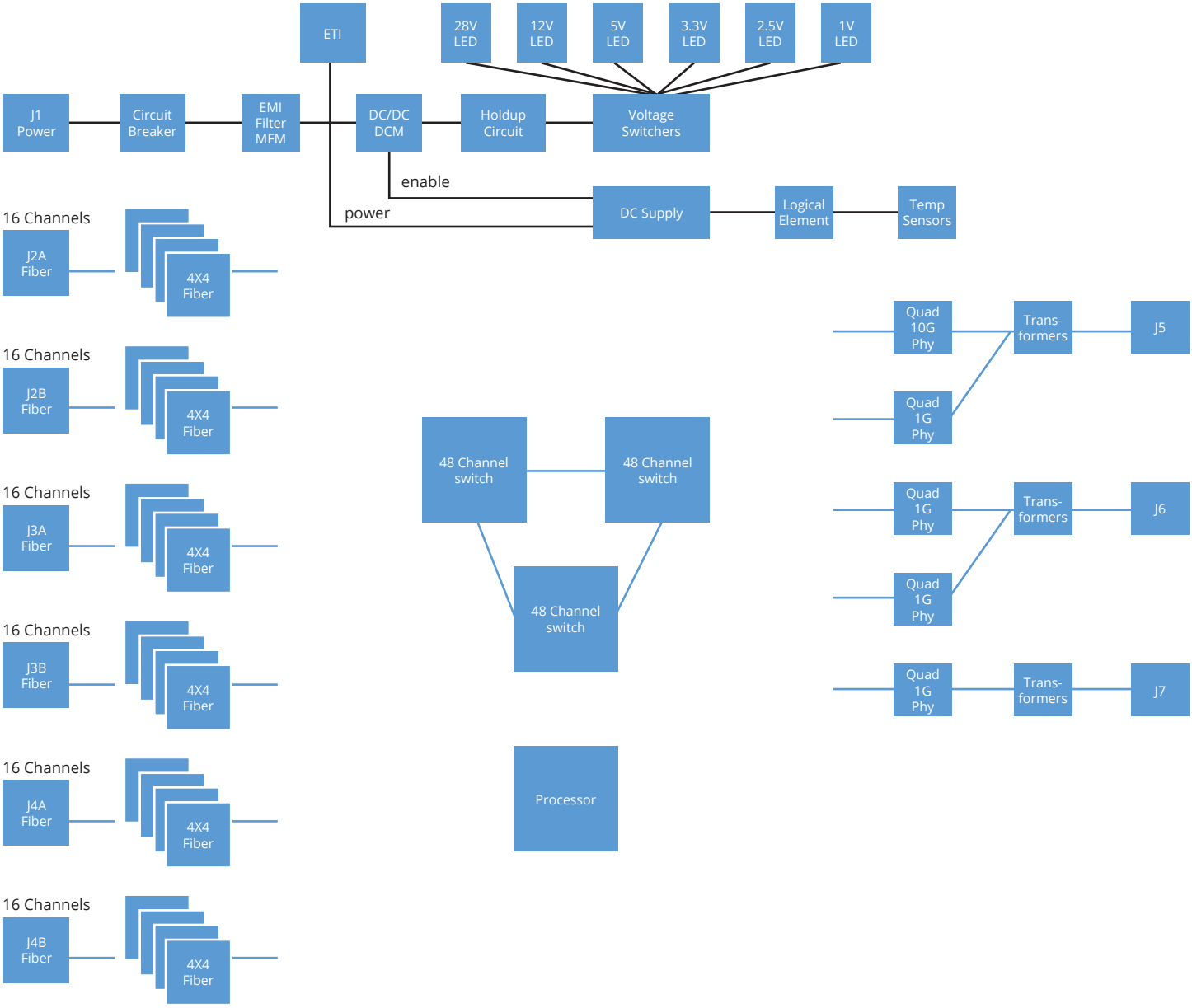
BLOCK DIAGRAM



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COMPANY PROFILE

ABOUT AMPHENOL AEROSPACE :

Amphenol Aerospace, a Division of Amphenol Corporation, is one of the largest manufacturers of interconnect products in the world for the Military, Commercial Aerospace and Industrial markets. Amphenol designs, manufactures and markets circular and rectangular, electronic, fiber optic, EMI/EMP filter, and a variety of special applications connectors and interconnect systems.

Our state-of-the-art facility is nestled at the foothills of the Catskill Mountains in Sidney, NY. The Amphenol complex houses many technologies including CNC machining, die-casting, molding, impact and extruding, plating, screw machining and process controls. Our fully equipped material evaluation lab and engineering organization utilize the latest in computer aided design software and analysis tools, allowing us to design, test, and qualify advanced interconnect systems. Amphenol's interconnect products are supplied to thousands of OEMs worldwide and are supported by our worldwide sales and engineering force, including the largest global network of electronic distributors.

The High Speed Solutions group is one of the fastest growing and most technologically advanced groups within Amphenol Aerospace. Every day, the High Speed Solutions team is developing custom connector and cable solutions for High Speed Copper, Fiber Optic, and Integrated applications. As a basic business philosophy, the team is dedicated to concentrating on those advanced and challenging market segments that demand an extraordinary level of supplier support and reaction. Our approach to implement this strategy is based on the following key principles:

CARE

Customer-Centric:
Our #1 priority is our customers who deserve quality product on time.

Accountable:
Clear owners, clear actions, clear results.

Reliable:
What we build matters and quality is imperative.

Enthusiastic:
Challenges create rewarding opportunities. Enthusiasm is contagious and we will spread it.

Quality Assurance:
Amphenol Aerospace has been awarded both AS9100 - Revision C and ISO9001:2008 Quality Assurance Certifications.

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