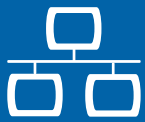
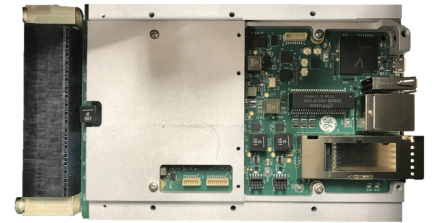


Versatile Network Switching



VNetS-3150 Versatile Network Fiber Optic Switch Card

Our next generation, state-of-the-art avionics fiber optic Ethernet switch card designed to an open standard form factor resulting in reduced sustainment costs.



Flexible Network Configurations

- Switching core fabric provides a superset of switch functionality to support the widest possible range of customer applications
- Deterministic or non-deterministic network protocols
- Ethernet ports configurable to bandwidth needs
- Ruggedized for Commercial or Military aircraft usage



Designed to Open Standards

- Hardware Open System Technology (HOST) slot profiles
- IEEE 802.1 Time Sensitive Network (TSN)
- SAE AS-6675 TSN Aerospace Profile
- IEEE 802.3 Standard for Ethernet
- ANSI/VITA 65.0 Open VPX System
- ANSI/VITA 46.11 System Management



Critical Network Functionality Inherent to Design

- Extensive traffic policing, segregation and priority mechanisms
- Supports in-line encryption and includes root-of-trust
- Two quad fiber optic ports can be used as an external interface, mirror port, flight test interface, or a variety of other functions
- Grand Master Clock functionality is able to sync to an external 1PPS GPS input or simulate a 1PPS output



Configuration Simplified

- Extensive toolset for configuration of the switch
- Delivered in pre-configured state <or> user configured during integration
- Configuration options include TSN, ARINC 653 partitioning, and programmable Remote Data Concentrators



Photo: USAF



Performance specifications

Baseline Configuration

- 6x 1000Base-KX <or> 6x 10GBase-KR Ethernet
- 1x 10/100/1000Base-T
- 8x Fiber Optic Ports with each port configurable to:
 - 1000Base-SX <or>
 - 10GBase-SR <or>
 - 40Base-KR4
- 6x Open/Ground Position Inputs
- 1x Open/Ground Parity Input
- 1x NVM Write Protect
- 1x 1PPS in/out
- Controller Interface
- VITA 46.11 Type 1, IPMC

Features

- Deterministic Ethernet
 - IEEE 802.1 Time Sensitive Networking (TSN)
 - SAE AS-6675 TSN Aerospace Profile
- Hardware Open Systems Technologies (HOST) Base Models
 - MOD3-SWH-6F6U-16.4.1-11
- Ethernet Port Configurations
 - 6x 1000Base-KX <or> 6x 10GBase-KR capable
 - 1x 1000Base-T

- Fiber Optic Port Configurations
 - 8x 1000Base-SX <or> 10GBase-SR
 - 2x 40GBase-SR4
 - 4x 1000Base-SX <or> 10GBase-SR and 1x 40GBase-SR4
- High accuracy gPTP Grand Master Clock
- VITA 46.11 System Management Bus
- RS-232-C Test Interface

Tools

- ARINC 664 and TSN network configuration tools suite

Also Available

VNetS-1000 Development Unit

- Break out signals to industry standard interfaces
- Expandable to fiber optic physical interfaces



Feature	Attribute
Size	OpenVPX, VITA 65, 3U
Temperature	-40°C to +70°C
Altitude	TBD
Relative Humidity	> 95%
Cooling	Conduction or Convection

