

The VNX+ Switch module is a rugged and compact Ethernet switch module that can be used in a variety of applications, including Onboard avionics and Onboard aerospace, defense, industrial automation, CubeSat, etc. The module is based on the EPSM-10GX4 switch module from Diamond Systems, which provides 8 10/100/1000 Mbps copper ports and 3 QSGMII for expansion, thus with an expansion board it can support up to 24 ports. It also comes with 2 10 Gbps SFI ports.

## FEATURES

- Ethernet Switch Layer 2+ Software Support Includes
  - 8K MAC addresses and 4K VLANs (IEEE 802.1Q)
  - 8K IPv4 and IPv6 multicast group support
  - Jumbo frame support at all speeds
  - Flexible link aggregation support based on Layer-2 through Layer-4 inform Multicast and broadcast storm control, as well as flooding control
  - Rapid Spanning Tree protocol (RSTP) and MSTP
  - Multi-protocol support: IEEE 802.1d, IEEE 802.1w, IEEE 802.1s and IEEE 802.1x
  - 8 priorities and 8 QoS queues per port with scheduling
- Ethernet Switch Layer 3+ Software Support Includes
  - Hardware and Software based IPv6 L3 static routing
  - RFC 2328 OSPFv2 dynamic routing
  - IEEE 1588 precision time protocol (PTP) (Build Option)



## Technical Specifications

### Switch Specifications

- All the I/O's & Power are routed on 400Pin Searay Connector as per VITA90.3 Standard.
- 8x GigE Ports (MDIO) on VNX Switch Module
- 3x QSGMII Ports for 8 or 12-Port Expansion via optional expansion module (to be ordered separately)
- 2x 10GbE Ports
  - 2x SFI Drive with 400-Pin with Zero-Aperture
  - 2x MT Optical Interfaces with 320-Pin and Half-Aperture
- 1 x RS232 Console
- Ethernet Indication signals
- **Dimensions:** 89mm(W)x19mm(H)x78mm(D)
- Currently runs on 3.3V and 5V Power
- **Power:** 10 Watts typ.
- **Operating Temperature:** -40°C to +71°C

## VNX+ 19mm Switch Module

