NETernity SWE450S

OpenWare™ Managed 3U VPX 25/100G Ethernet Switch, Aligned with SOSA™ Standard

The NETernity SWE450S is a fully managed (Layer 2/3) rugged 3U VPX Ethernet Switch with 25/100G Ethernet. The SWE450S runs Abaco's in-house developed and supported OpenWare switch management software, providing a powerful, secure, and easy to use environment for configuring this and any NETernity switch.

The SWE450S aligns with two SOSA switch profiles while also offering up to 2x 100G-SR4 rugged front panel fiber ports with MPO connectors. All copper and fiber quad ports (fat pipes) can be reconfigured to run as four discrete ports (thin pipes), allowing for greater network flexibility. Each copper channel supports speed downgrading from 25/100G to 10/40G, making it simple to connect and switch between higher and lower speed end points. The optional 1x or 2x 100GBASE-SR4 rugged front panel fiber modules with MPO connectors provide flexibility for connecting across greater distances. One rear in-band 1000BASE-T is also available with the 6F8U profile.

The SWE450S uses a leading edge 2.0Tbps high-performance switch fabric to provide

full wire-speed switching and data center grade protocols. The high-performance switch fabric is combined with a highly-efficient dual core ARM based processor to run OpenWare. OpenWare has be tailored to maximize the performance and power efficiency of the switch fabric, helping to offer 2.5 times the bandwidth for around 2 times the power of a similar 10/40G 3U VPX SOSA-aligned switch.

OpenWare™ can be modified to meet customer requirements and provides a number of ways to manage the switch via serial console, SNMP, Telnet, SSH or web interface. The sanitization capability allows a user to overwrite non-volatile storage as required.

The SWE450S is proven to work with other Abaco Systems HPEC products such as the SBC3511, VP831, and SBC3612D. For 6U applications, the NETernity SWE550S provides the same switching functionality with a greater port count.

FEATURES:

- 3U VPX form factor
- SOSA profile aligned for:
  - SLT3-SWH-6F1U7U-16.4.15
  - SLT3-SWH-6F8U-16.4.16
- Supports connectivity and performance options for:
  - 100GBASE-KR4, 25GBASE-KR
  - 100GBASE-SR4, 25GBASE-SR
  - 40GBASE-KR4, 10GBASE-KR
  - 1000BASE-T
- OpenWare switch management software, with enhanced support for:
  - Data Center Bridging (DCB) including PFC & ECN
- Precision Time Protocol IEEE 1588v2 Transparent Clock support
- Air and conduction cooled options
- Rugged levels 1, C, E available
- IPMI

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Specifications

Switching and Management
- Next generation 2.0Tbps switch fabric
- High efficiency dual-core ARM-based CPU
- Abaco OpenWare switch management software as standard

SOSA Profiles
- SLT3-SWH-6F1U7U-16.4.15
- SLT3-SWH-6F8U-16.4.16 (all ports Ethernet)

Front Panel Interface
- Optional 1x or 2x 100GBASE-SR4 with MPO
- USB-C (OOB and COM)

Rear Interface
- 31x or 32x 25GBASE-KR (7x or 8x 100GBASE-KR4)
- 100/1000BASE-T In-band / OOB
- LVCMOS / RS232 COM

Form Factor and Mechanical
- SOSA-Aligned 3U VPX
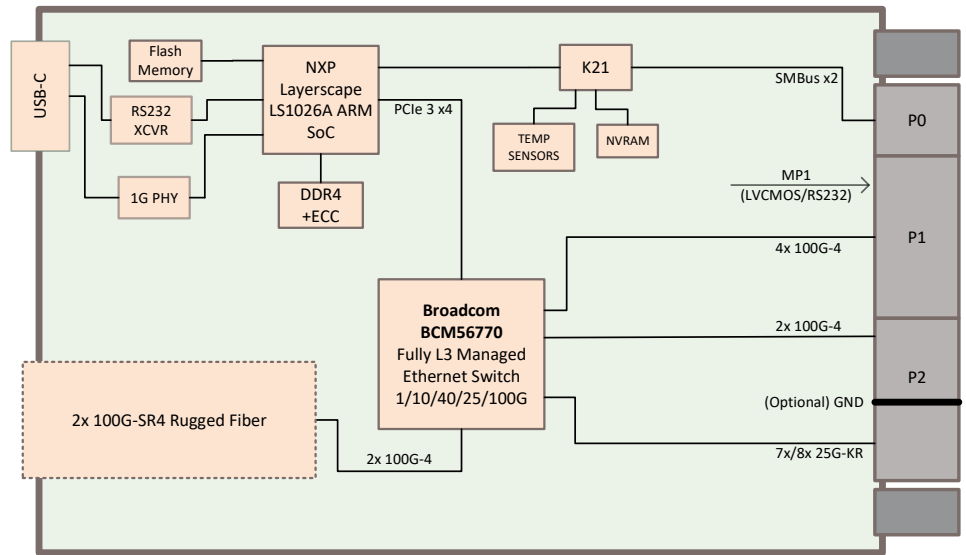- Air and conduction cooled options
- Rugged levels 1, C, E

Power Requirements
- Estimated power of 90-110W depending on IO and network configuration

MTBF
- TBD

Block diagram

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