

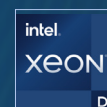
## ESN904

### NetSec Accelerator Powered by Intel® Xeon® D Processor

#### Features

EnGenius SmartNIC ESN904 is based on Intel® Xeon D® processor to offload x86 applications with zero changes. ESN904 enables these applications without additional infrastructure footprint.

- SD-WAN/SD-LAN
- Next-Gen Firewall (NGFW)
- Unified Threat Management (UTM)
- Zero-Trust Network Access (ZTNA)



ESN904 supports the Intel® Platform Firmware Resilience (Intel® PFR), BMC and TPM2.0.

#### Key Features

- Intel® Xeon® D-1700 Series Processor
- Intel® Ethernet Controller E810 for 50GE PCIe Connection to Host CPU
- Dual 25G SFP28
- Dual DDR4 Memory Channels
- TPM2.0 Support for Secure Boot
- OpenBMC, Intel® Platform Firmware Resilience (Intel® PFR)
- Single Slot Passive Cooling
- MCIO Connectors for Function Expansion

#### Physical

- Form Factor: FH3/4L+ (266mm)
- Dimensions: W266 x H98.4 x D20.4 mm
- Weight: < 2.3kg

#### Power

Power delivered through an 8-pin PCIe AUX Power Connector (+12VDC) or through PCIe Edge Connector

#### I/O Configuration

- 2 x SFP28
- 1 x Mini USB Console
- 1 x USB3.0 Type-C
- 1 x RJ45 1GE Management

#### Key Components

- Intel® Xeon® D-1700 Series
- Intel® Ethernet Controller E810
- Aspeed AST2600/ AST1060

#### Environmental

- Operating Temperature: 0°C to 50°C Storage
- Temperature: -40°C to 70°C Operating
- Humidity: up to 85% Non-condensing

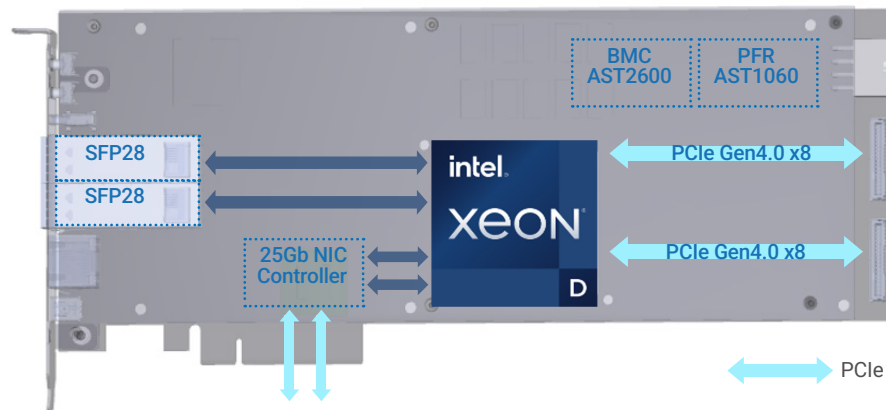
#### Operation System

- Ubuntu 22.04 (Pre-installed)
- Ubuntu 24.04
- RHEL 9.4 (Certified)

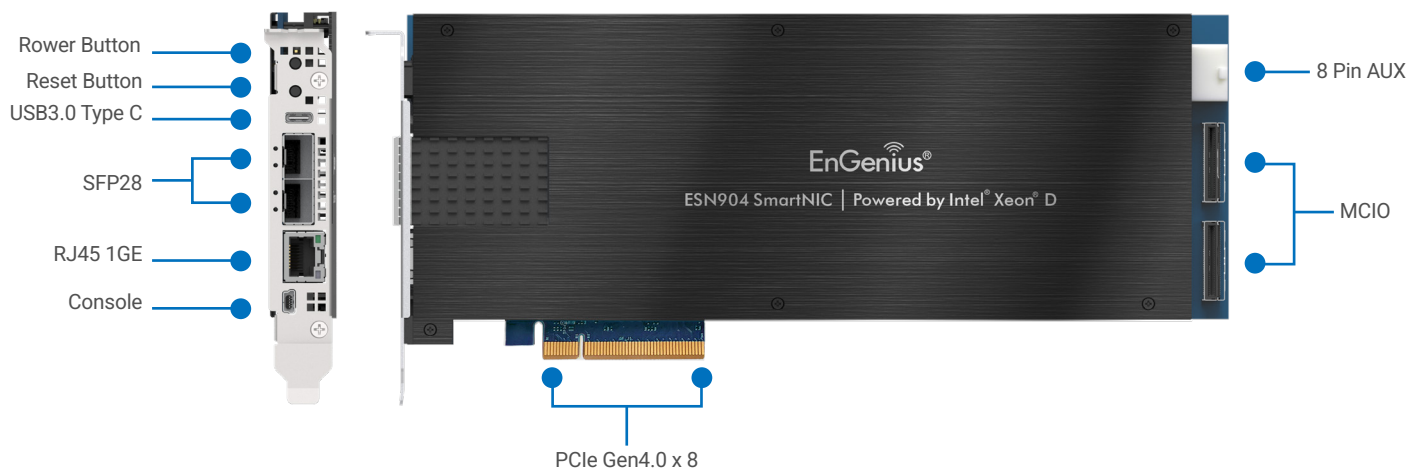
| Processor       | CPU Cores | Power Consumption | Networking    | Host Interface | Memory Support                         | Storage Capacity | BMC/PFR                                        |
|-----------------|-----------|-------------------|---------------|----------------|----------------------------------------|------------------|------------------------------------------------|
| Xeon® D-1747NTE | 10C       | 110W              | 2x25GbE SFP28 | PCIe Gen4 x8   | Up to 32GB, Dual-channel DDR4-2933 ECC | Up to 128GB eMMC | AST1060 (Intel® PFR)<br>AST2600 (OpenBMC/BIOS) |

## EnGenius SmartNIC Architecture and Interface

The following figure shows the major components connection within ESN904



## ESN904 I/O Interfaces



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