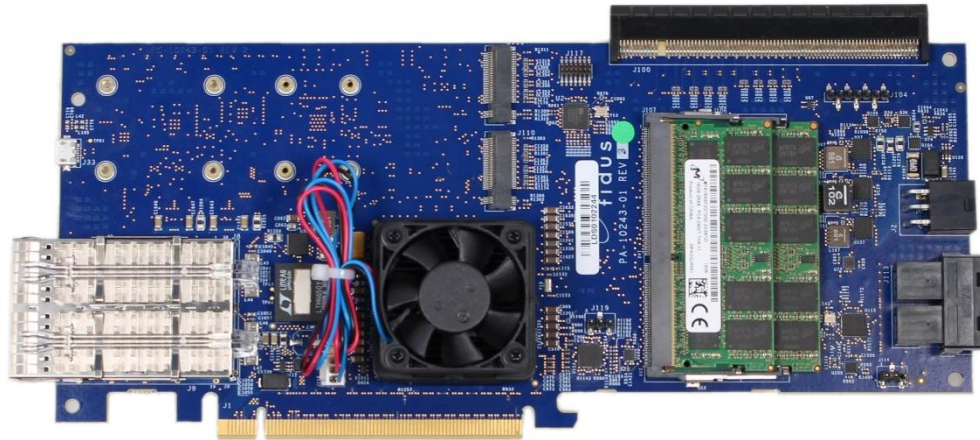


Sidewinder-100 NVMe Storage Controller

Target Sample Availability: Q1 2017
Datasheet Rev: 1.2



Key Features

Technical

- 1 x PCIe Gen3x16 or Gen4x8 System Interface
- 1 x PCIe (x8 electrical, x16 mechanical) Host Interface
- 2 x PCIe Gen3/4 x4 NVMe (8643) interfaces
- 2 x PCIe Gen3/4 x4 NVMe (M.2) interfaces
- Support for SDSoC and SDAccel development
- 2 x 16GB SoDIMM's (72 bit with ECC @ 2400MT/s)

Physical

¾ Length x Full Height

Applications

Data Center

- NVM Express over Fabrics
- Storage Acceleration
- Network Acceleration
- Dis-aggregated Storage
- Big Data Analytics

HPC

- National Research Labs
- Peta-scale and Exa-scale Computing
- Mobile Edge Computing (MEC)
- Genomics
- Graph Processing

IP Development and PoC

- Storage providers
- IP providers
- SSD testing and benchmarking

Overview

The Fidus NVMe Over Fabrics Network Controller is a pure PCIe-based solution that allows data center architects to extend PCIe access of Solid State Drive (SSD) solutions over the network without the need for SCSI and SAS protocol translations.

By eliminating translation to and from legacy storage device protocols, the Sidewinder-100 allows datacenters to leverage the true low latency times that SSD's have to offer.

For storage vendors and IP developers, the Sidewinder-100 provides the lowest risk path to technology and market validation and demonstration.

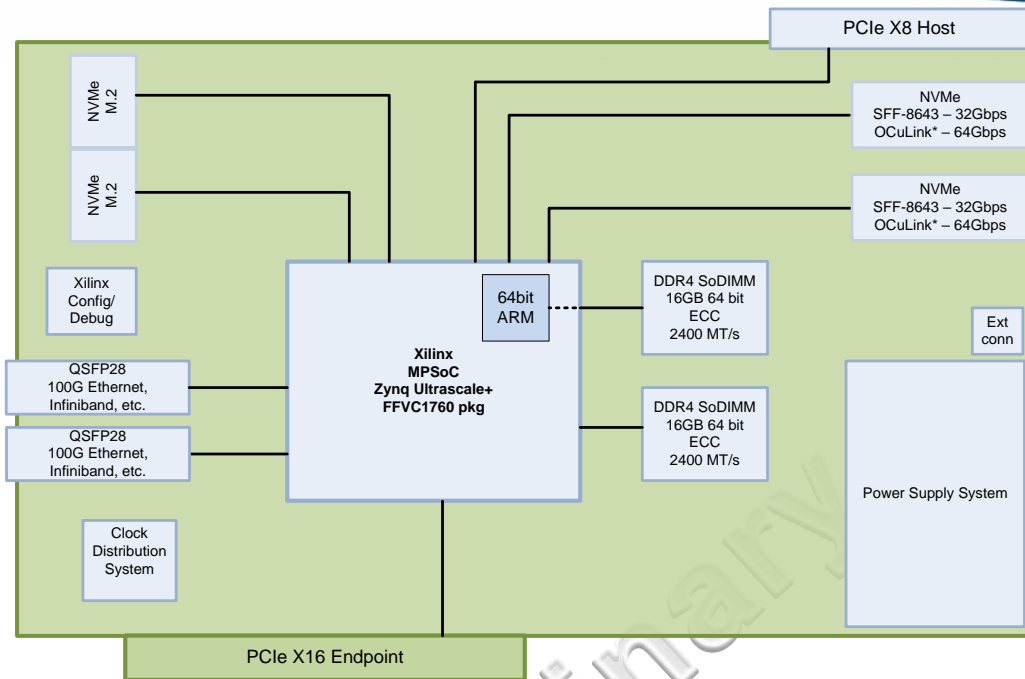
Connectors and I/O

- 1 x PCIe (x16) backplane connector
- 1 x PCIe Female (x8 electrical, x16 mechanical) female connector
- 1 x GigE RJ45 management interface (connected to PS)
- 2 x PCIe (x4) NVMe (8643) connectors
- 2 x M.2 NVMe connectors
- 2 x local MPSoC debug UARTs
- 2 x QSFP28 (200Gbps aggregate)
- 1 x Micro SD Slot

Ordering Information

Part Number : 10243-01-SW100-001

For more info contact: mazen.matar@fidus.com



* NVMe x4 lanes support up to 16Gbps
 Due to connector limitations, samples will ship with SFF-8643 in PCIe Gen3 x4 configuration (32Gbps max)

Environment

Operating/Storage Temp: 0 to 40°C/-20°C to +45°C
 Airflow: 500LFM minimum
 Humidity: 10% to 90% non-condensing
 Power Consumption: TBD
 RoHS Compliant / CE Certified (targets)

Standards

NVM Express Over Fabrics via ROCEV2/iWARP
 PCIe Gen3, Gen4
 CAPI Compatible

Power Specifications

PCIe slot powered <75 W at Power Up, 148W Max

ATX Auxiliary Power Connector is required.

Dimensions

- Dimensions: (L: 254mm x W: 111.15mm)
- Weight: TBD

Package Contains

QTY 1: Sidewinder 100

NOTES:

QSFP Modules and M.2 drives are **not** included.
 2 x DDR4 SODIMM are included.

Warranty

Limited

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