Chapter 1

Overview

1-1   Overview

Congratulations on purchasing your add-on card from an acknowledged leader in the industry. Supermicro products are designed with the utmost attention to detail to provide you with the highest standards in quality and performance. For product support and updates, please refer to our website at http://www.supermicro.com/products/nfo/networking.cfm#adapter.

1-2   Key Features

The key features of this add-on card include the following:

- Dual SFP28 connectors

- Low-profile, short length standard form factor

- PCI Express 3.0 x8 Interface

- Intel® XXV710 25GbE controller

- Asset Management features with thermal sensor

- Network virtualization offloads

- Ethernet flow director

- RoHS compliant 6/6

1-3   Specifications

General

- Intel® XXV710 25GbE controller

- Half-length, low-profile standard form factor

- PCI-E 3.0 x8 interface

- Dual SFP28 connectors

- Intel® PROSet Utility for Windows Device Manager

I/O Features

- Intel® flow director

- MSI-X support

- Multiple queues: 1,536 Tx and Rx queues per port

- Tx/Rx IP, SCTP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities

Virtualization Features

- Next-Generation VMDq with up to 256 VMDq VMs supported

- SR-IOV with up to 128 virtual ports

- Virtual Machine Load Balancing (VMLB)

- Advanced packet filtering

- VLAN support for up to 4096 VLAN tags

- VXLAN and NVGRE support

Storage Interface Features

- Preboot eXecution Environment (PXE) support

- iSCSI remote boot

Management Features

- Asset Management features with thermal sensor

- NC-SI for IPMI support

Advanced Software Features

* Teaming support

* IEEE 802.3ad (link aggregation control protocol)

* IEEE 802.1Q VLANs

* IEEE 802.3 2005 flow control support

* IEEE 802.1p

* TCP segmentation/large send offload

* Interrupt moderation

OS Support

* Windows Server 2008 R2 x64

* Windows server 2012

* Windows server 2012 R2

* Windows server 2016

* Linux: RHEL 6.9

* Linux: RHEL 7.3

* Linux: SLES 11 SP4

* Linux: SLES 12 SP1

* Linux stable kernel version 2.6/4.x

* VMware vSphere 5.1

* VMware vSphere 5.5

* VMware vSphere 2015 (ESXi 6.0)

* VMware vSphere 2016 (ESXi 6.5)

- Solaris

- FreeBSD 10.3/11

- UEFI 2.1/2.3/2.4

Power Consumption

- 7.2W

Operating Conditions

- Operating temperature: 0°C to 55°C (32°F to 131°F)

- Storage temperature: -40°C to 70°C (-40°F to 158°F)

- Storage humidity: 90% non-condensing relative humidity at 35°C

Physical Dimensions

- Card PCB dimensions: 15.49cm (6.1") x 6.86cm (2.7")

- Height of end brackets: standard – 12cm (4.725in),

- low-profile – 7.94cm (3.13in)

Weight

- 127.69g (0.28lb)

Operating Conditions

- Motherboards with minimum PCI-E 3.0 x8 expansion slot

- Server systems with low-profile or full-height PCI-E 3.0 x8 expansion slot

- NC-SI feature is only supported by Supermicro motherboards with corresponding NC-SI connectors.