MIC-3666

Dual 10 Gigabit Ethernet XMC

Features

- Intel® 82599 Dual Port 10 Gigabit Ethernet Controller
- PCIe x8 Gen.2 host interface
- Dual SFP+ connectors
- Compliant with VITA 42.0-2005, 42.3-2006 XMC specifications

RoHS COMPLIANT 2002/95/EC

Introduction

The MIC-3666 is a low power, dual-port 10 GbE XMC, with SFP+ pluggable modules for multi-mode and single-mode fiber media and is based on the Intel® 82599ES 10 Gigabit Ethernet controller. The XMC provides a high performance PCIe x8 interface at 5 Gb/s per lane at an outstanding low power dissipation of less than 10W. Support for Intel®'s offloading and platform enhancement features yields maximum network throughput while preserving valuable CPU cycles for application processing.
The MIC-3666 features an Intel® 82599 which provides Intel® Virtualization Technology for Connectivity (VT-c) including Virtual Machine Device Queues (VMDq) and PCI_SIG compliant Single Root I/O Virtualization (SR-IOV), helping to reduce I/O bottlenecks, boost throughput, and reduce latency. Where virtualization is required, VMDqs improve performance by offloading the data-sorting burden from the virtual machine manager (VMM) to the network controller. The MIC-3666's specialized features include Layer 2 & 3 security with IPSec & LinkSec; Intel® I/OAT Acceleration Technology v3.0; VLAN tagging, stripping and packet filtering; and TCP, iSCSI, and Fiber Channel over Ethernet (FCoE) offload.

Specifications

XMC Connectivity	Connector	P15 assembled,	
	Host interface	PCIe x8 gen.2 @ 5Gbps/lane	
Controller	Controller	Intel® 82599ES dual 10GbE MAC/PHY	
	Virtualization Technologies	VMDq, VMD, SR-IOV	
	IP	IPv4, IPv6	
	Queues	128RX, 128TX per port	
	Offloading	TCP, UDP, SCTP, FCoE	
	Security Acceleration	Linksec IEEE802.1ae (AES-128 Authorization./Encryption) IPSec (AES-128, 1024 SA's)	
I/O	SFP+	2 sites with support for presence detect, status and ID EEPROM	
	LEDs	Network Link, Activity	
Software	Linux	X86 Kernel 2.6.x	
	Windows	Server2008	
	Boot	PXE, iSCSI	
Power	Power Consumption	+3.3V	VPWR (+5V)
	Does not include FOT Transceivers	0.25A max	1.5A max
Environment		Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 80° C (-40 ~ 176° F)
	Humidity	95 % @ 40° C, non-condensing	95 %@ 60° C, non-condensing
Physical Characteristics	Dimensions (W x D)	74 x 149 mm (2.9" x 5.78")	
	Weight	0.104 kg (0.23 lbs)	
Compliance	IEEE Std 1386.1-2001 PMC specification		
	VITA 42.0-2005, 42.3-2006 XMC specifications		

Recommended Configurations

XMC Extension Board	CPU Board
MIC-3312-A1E	MIC-3393B-M2E, MIC-3395, MIC-3396

MIC-3666-AE

Ordering Information

Part Number	Description
MIC-3666-AE	XMC with dual SFP+ 10GbE interfaces