Silicom

Connectivity Solutions

PE410G6I81 Server Adapter

Six port SFP+ 10 Gigabit Ethernet PCIe Gen 4.0 Server Adapter Intel® based

Product Description

Silicom's PE410G6I81 10 Gigabit Ethernet PCI Express server adapter is designed for Servers and high-end appliances.

The PE410G6I81 10 Gigabit Ethernet PCI Express Server adapters offer simple integration into any PCI Express X16 to 10Gigabit Networks. The performance is optimized so that system I/O is not the bottleneck in high-performance networking applications.

The Silicom PE410G6I81 10 Gigabit Ethernet PCI Express server adapter is based on Intel E810-CAM2 Ethernet controller with fully integrated 6x, 10G Ethernet Ports, enhanced programmable packet processing pipeline, virtualization (Enhanced SR-IOV) support with up to 256 VFs, backward compatibility VF driver support.

Key Features

LAN and Virtualization Features:

- 6x10Gbps throughput (each of Tx and Rx)
- Parses up to 504B from packet header
- 768 switch ports (VSIs)
- Programmable forwarding rules
- Virtualization
- Host virtualization via VMQ and SR-IOV
- 256 SR-IOV Virtual Functions
- Stateless offloads for tunneled packets (network virtualization support)

Host Interface:

- PCIe x16 lanes from/to host via gold fingers of edge card
- Support PCI Express Base Specification Revision 4.0, 16GT/s, 8GT/s, 5GT/s or 2.5GT/s

Technical Specifications

 SFP+ 10Gigabit Ethernet Technical Specifications Adapters: 				
SFP+ (Small Form-factor Pluggable) supports:	Fiber 10Gigabit Ethernet, 10GBASE-SR (850nm LAN PHY) 10.3125GBd MMF Multi-Mode fiber			
– SR: Fiber 10GBASE-SR Ethernet Technical Specifications:				
IEEE Standard / Network topology:	Fiber 10Gigabit Ethernet, 100GBase-SR (850nM)			

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Data Transfer Rate:	103.125GBd		
Cables and Operating distance: Up to:	Multimode fiber: 62.5um, (OM4) 100m		
Optical Output Power:	Typical: -1.55 dBm Minimum: -8.4 dB *As defined by IEEE 802.3bm		
Optical Receive Sensitivity:	Typical: -8.94 dBm Maximum: -5.2 dBm *As defined by IEEE 802.3bm		
– LR: Fiber 10GBASE-LR Etherr	net Technical Specifications:		
IEEE Standard / Network topology:	Fiber 10Gigabit Ethernet, 10GBASE-LR (1310nM)		
Data Transfer Rate:	103.125GBd		
Cables and Operating distance: Up to:	Single Mode: 10km		
Optical Output Power:	Minimum: -4.3 dBm		
Optical Receive Sensitivity:	Maximum: -10.6 dBm		
Operating Systems Support			
Operating system support:	Windows Linux FreeBSD VMware		
General Technical Specifications			
Interface Standard:	PCI-Express Base Specification Revision 4.0 (16 GTs)		
Board Size:	Full height, short add-in card 167.64mm X 111.15mm (6.60" X 4.376")		
PCI Express Card Type:	x16 Lane		
PCI Express Voltage:	+12V ± 8%		
PCI Connector:	Gold Finger: x16 Lane		
Controller:	Intel® E810-CAM2		
Holder:	Metal Bracket		
Operating Humidity:	0%–90%, non-condensing		
Operating Temperature:	0°C – 45°C (32°F – 113°F)		
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Storage:	-40°C–65°C (-40°F–149°F)	
Regulation:	Card shall meet CE, FCC Class B, ROHS requirements.	
LEDs		
LEDs:	Link: Physical link Speed: Green stay on – physical link on with 10G Speed (Max speed) Off – physical link off. ACT: Logic Link/Activity, Green Green stay on – logic link up, no activity Green blinking – logic link up, activity Off – logic link off	
LEDs location:	LEDs are located on the PCB, visible by light guide in the metal bracket.	

Order Information

P/N	Description	Notes
PE410G6l81-XR	Six port (SFP+) 10 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16, based on Intel E810-CAM2
PE410G6l81-SR	Six port Fiber (SR) 10 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16, based on Intel E810-CAM2
PE410G6l81-LR	Six port Fiber (LR) 10 Gigabit Ethernet PCI Express Gen 4.0 Server Adapter	RoHS Compliant, Gen4 x 16, based on Intel® E810-CAM2

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