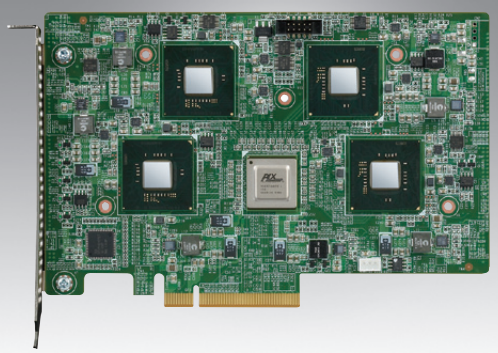
PCIE-3214

Quad Intel® QuickAssist Acceleration Card

Preliminary



Features

- Four Intel® QuickAssist Accelerators based on the Intel® Communications Chipset 8910
- Compression, Crypto, Security Offload and Acceleration
- IPSEC and SSL Acceleration with Security and Crypto offload including AES, 3DES, Kasumi and SNOW
- Four devices provide over 100k RSA decrypt ops per card
- Compression/Decompression with 28Gbps Compression offload (LZS, Deflate) per card
- PCIe x8 gen.3 host interface
- On board gen.3 PCIe switch
- Full height, half length PCIe card

RoHS COMPLIANT 2002/95/EC CE FCC

Introduction

Advantech's PCIE-3214 is a full height, half length PCI Express supporting hardware acceleration for Intel® QuickAssist technology. Four Intel® Communications Chipset 8910 onboard accelerator devices are complemented by a PCIexpress gen.3 switch to fully utilize the bandwidth offered by the latest Intel® Xeon® E5 processor family. Packaged in a standard full height, half length PCIe form factor, the PCIE-3214 is a perfect fit for hardware acceleration and offloading in high performance, high I/O throughput servers and appliances.

Offering acceleration for common security and crypto offloads such as AES, 3DES, Kasumi and SNOW, the PCIE-3214 can supplement the CPU throughput for the termination of standard security protocols such as IPSEC and SSL, freeing up valuable cores and CPU cycles for application processing. With 20Gbps bulk crypto throughput and 28k RSA decrypt ops per accelerator device, the PCIE-3214 -with more than 100k RSA decrypt ops- offers best in class performance per watt at an outstanding price-performance ratio. Complemented with 7Gbps compression offload (LZS, Deflate) and even higher decompression offload per accelerator device, the PCIE-3214 can be of great benefit in storage applications as well.

Ultimately, the PCIE-3214 supports simultaneous crypto and compression offloading, making it an ideal choice for demanding applications such as WAN and traffic optimization, Secure Storage and Secure Web Servers.

Fully supported by Intel® QuickAssist Libraries and the Intel® Data Plane Development Kit (DPDK), customers can use application software without modifications across Intel® platforms with and without Intel® QuickAssist hardware acceleration minimizing time to market, total cost of ownership and resource investment.

Complementing Advantech's offering of standard blades, servers and appliances with built in and scalable QuickAssist offload, the PCIE-3214 rounds up the portfolio by bringing Intel® QuickAssist offload to whitebox servers and proprietary platforms. Through Advantech's Customized COTS framework and services, the PCIE-3214 can be easily tailored to meet customer requirements, both in terms of standard PCIe form factor cards with different accelerator configuration or integration with NIC silicon as well as in terms of proprietary form factor cards. Contact your Advantech representative to learn more about Advantech's standard blades and appliances or professional customization services.

Specifications

Accelerator	Chipset	4 x Intel Communications Chipset 8910	
PCIexpress	Host interface	PCIe x8 gen.3 (8Gbps/lane)	
	Onboard switch	PLX PEX8747	
Software	Intel DPDK	Version 1.0 or higher	
Power Requirement	Configuration	4 x Intel Communication Chipset 8910	
	Consumption	50W (typical)	
Physical Characteristics	PCB Dimensions	Full height, half length PCIe	
	Weight	0.37 kg	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 131° F)	- 40 ~ 70° C (-40 ~ 158° F)
	Humidity	5 to 93% @ 40° C (non condensing)	95% @ 40° C (non-condensing)
	Shock	4 G each axis	20 G each axis
	Vibration (5 ~ 500 Hz)	0.5 Grms	2.16 Grms, 30 mins each axis
Compliance	Environment	ETSI EN300019-2-1 Class1.2, EN300019-2-2 Class 2.3, ETSI EN300019-2-3 Class 3.1E	
	PCI SIG	PCI Express CEM Specification Rev. 2.0	
	EMC	FCC47 CFR Part15, Class A, CE Mark (EN55022/EN55024/EN300386)	

Ordering Information

Model number	Configuration
PCIE-3214-00E	PCIE-3214 with passive heatsink
PCIE-3214-10E	PCIE-3214 with active heatsink

Last updated : 22-Oct-2012