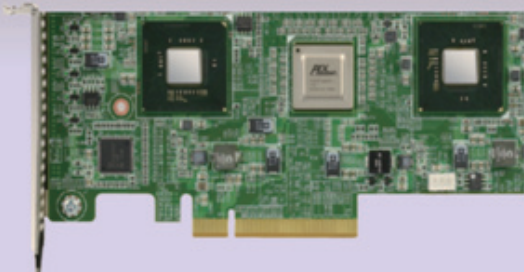


PCIE-3215

Dual Intel® QuickAssist Acceleration Card

Preliminary



Features

- 2 Intel® QuickAssist Accelerators based on the Intel® Communications Chipset 8950 previously codenamed “Coletto Creek”
- Compression, Crypto, Security Offload and Acceleration
- IPSEC and SSL Acceleration including AES, 3DES, Kasumi and SNOW
- Two devices provide over 300k RSA decrypt ops per card
- Compression/Decompression with 40Gbps Compression offload (LZS, Deflate) per card
- PCIe x8 Gen.3 host interface
- On board Gen.3 PCIe switch
- Half-height, half-length PCIe form factor



Introduction

Advantech's PCIE-3215 is a half-height, half-length PCI Express adapter supporting hardware acceleration for Intel® QuickAssist technology. Two Intel® Communications Chipset 8950 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 half-height, half-length PCIe form factor, the PCIE-3215 is a perfect fit for hardware acceleration and offloading in high performance, high density throughput servers and appliances. Offering acceleration for common security and crypto offloads such as AES, 3DES, Kasumi and SNOW, the PCIE-3215 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 50Gbps bulk crypto throughput and 165k RSA decrypt ops per accelerator device, the PCIE-3215 with more than 300k RSA decrypt ops offers best-in-class performance per watt at an outstanding price-performance ratio. Complemented with 20Gbps compression offload (LZS, Deflate) and even higher decompression offload per accelerator device, the PCIE-3215 can also be of great benefit in storage applications. Ultimately, the PCIE-3215 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 Intel® QuickAssist offload, the PCIE-3215 rounds up the portfolio by bringing Intel® QuickAssist offload to white-box servers and proprietary platforms. Through Advantech's Customized COTS framework and services, the PCIE-3215 can be easily tailored to meet customer requirements, both in terms of standard PCIe form factor cards with different accelerator configurations or integrated with Ethernet controller silicon on both standard and 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	2 x Intel Communications Chipset 8950	
PCIexpress	Host Interface	PCIe x8 gen.3 (8Gbps/lane)	
	Onboard switch	PLX PEX8747	
Software	Intel® Communications Chipset 8925 to 8955 Series Software package	Version 1.0.1 or higher	
Power Requirement	Configuration	2 x Intel Communications Chipset 8950	
	Consumption	50W (typical)	
Physical Characteristics	PCB Dimensions	Half height, half length PCIe	
	Weight	0.37 kg	
Environment	Temperature	Operating	Non-operating
		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 PCI Express CEM Specification Rev. 2.0	
	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-3215-00E	PCIE-3215 with passive heatsink
PCIE-3215-01E	PCIE-3215 with active heatsink