PCIE-3021

Dual Intel® DH 8955 QuickAssist Acceleration Card

Features

- Dual Intel® QuickAssist Accelerator based on the Intel® Communications Chipset 8955 codenamed "Coleto Creek"
- Support for SR-IOV
- Up to 100Gbps 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 offload (LZS, Deflate) per card
- PCIe gen. 3 x16 host interface
- Standard low profile PCIe and custom small form factor options

RoHS COMPLIANT 2002/95/EC CE FCC

Introduction

Advantech's PCIE-3021 is a PCI-Express based adapter supporting hardware acceleration for Intel® QuickAssist Technology. It is offered in a standard PCI Express add-in card form factor as well as a small form factor footprint for density optimized platforms such as Advantech's FWA-5020. The adapter supports two Intel® Communications Chipset 8955 devices behind a PCIe gen.3 switch to leverage the full acceleration capabilities of the devices.

Offering acceleration for common security and crypto offloads such as AES, 3DES, Kasumi and SNOW, the PCIE-3021 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 100Gbps bulk crypto throughput and more than 300k RSA decrypt operations, the PCIE-3021 offers best-in-class performance per watt at an outstanding price-performance ratio.

Complemented with 100Gbps compression and decompression offload (LZS, Deflate), the PCIE-3021 can also be of great benefit in storage applications.

Ultimately, the PCIE-3021 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.
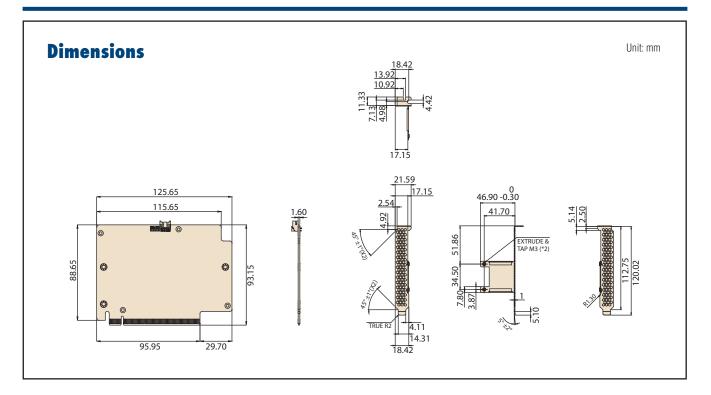
Fully supported by Intel® QuickAssist Libraries and the Intel® Data Plane Development Kit (DPDK), customers can use application software without modifications across Intel® platforms with and without Intel® QuickAssist hardware acceleration minimizing time-to-market, total cost of ownership and resource investment.

Contact your Advantech representative to learn more about Advantech's standard PCIe adapters, networking platforms or professional customization services.

Specifications

Chipset		Dual 8955 w/ Passive heatsink
Form type		Low profile and small form factor PCIe card
PCIe		PCIe gen3. x16
Software Support		Intel® QuickAssist library and DPDK
Virtualization Support		SR-IOV with 32 virtual functions per 8955 device
HeatSink		Passive
Power	Voltage	+12V ± 15%
	consumption	52W
Environment	Operating Temperature (air flow 0.7 m/sec)	0°C ~ 40°C (32°F~131°F)
	Storage Temperature	-40°C ~ 70°C (-40°F~158°F)
	Storage Humidity	95 % @ 40° C (140° F) non condensing
	Vibration Resistance	0.5Grms (operating); 2.16 Grms (Non- operating), 5-500Hz
	Shock Protection	4G each axis (Operating); 20G each axis (Non-operating)
Mechanical	Dimensions (W x H x D)	86 x 15 x 125 mm (PCB size)
	Weight	0.35kg
Compliance	Safety and Regulatory	CE/FCC compliant

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All product specifications are subject to change without notice.   Last updated: 4-Aug-2017

Dimensions

Unit: mm

Ordering Information

Model Number	Configuration
PCIe-3021-00E	PCIE-3021-00E Dual Intel® QuickAssist Acceleration Adapter with Intel® DH8955 and passive heatsink

Packing List

Part Number	Description
1960077983N001	Standard PCIE Bracket for PCIE-3021