



### PE3IS2CO3X8

Dual HW Accelerator sku3 Crypto Compression PCI E G3 Server Adapter SKU3 / SKU2 Intel® Based

#### Product Description

Silicom's HW Accelerator Crypto Compression PCI Express Server adapters are based on-chip HW accelerator Intel® communication controller.

Silicom's Dual HW Accelerator PCI Express Server adapters support Intel QuickAssist Technology for Hardware Crypto and Compression accelerator engines. The Silicom's PE3IS2CO3X8 PCI Express Server adapter is optimized to Intel Architecture (IA) support.

The Silicom's Coletto Creek PCI Express Server adapters are based on Intel production process that provides the best industry performance, power and cost.

#### Key Features

- Intel® QuickAssist Accelerator
- Symmetric Cryptographic Functions
- Cipher Operations
- Hash/Authenticate Operation
- Cipher-Hash Combined Operation
- Key Derivation Operation
- Random Number Generation
- Public Key Functions
- RSA Operation
- Diffie-Helman Operation
- Digital Signature Standard Operation
- Key Derivation Operation
- Elliptic Curve Cryptography: ECDSA\* and ECDH\*
- Random Number Generation and Prime Number Testing
- Compression/Decompression
- Deflate (Lempel-Ziv 77-Stac)
- Support for 32 SR-IOV Virtual functions

**Common Key features:**

- PCI Express X8 lanes
- Support PCI Express Base Specification 3.0 (8 GTs)
- High performance, reliability, and low power use in Intel (sku2) DH8950CL / (sku3) DH8955CL PCH controller

**Technical Specifications**

<b>SKU2 / SKU3 performance per a single controller:</b>		
<b>Intel® chip</b>	<b>Sku2</b>	<b>Sku3</b>
<b>Intel® Quick Assist Technology Capability</b>	50Gbps	*50Gbps
<b>IPSec</b>	43Gbps	*43Gbps
<b>SSL</b>	50Gbps	*50Gbps
<b>Compression</b>	20G	*23G
<b>Kasumi/ Snow3G</b>	30Gbps	*30Gbps
<b>RSA Decrypt 1k-bit</b>	165K (ops/sec)	190K (ops/sec)
<b>RSA Decrypt 2k-bit</b>	35K (ops/sec)	40K (ops/sec)

\*x8/ Gen3 card level will limit the IO performance to 54Gbps

<b>Operating Systems Support</b>	
<b>Operating system support:</b>	Linux
<b>General Technical Specifications</b>	
<b>Interface Standard:</b>	PCI-Express Base Specification Revision 3.0 (8 GTs)
<b>Board Size:</b>	Low profile long add-in card: 311.99mm X 68.91mm (12.283"X 2.713")
<b>PCI Express Card Type:</b>	X8 Lane
<b>PCI Express Voltage:</b>	+12V +- 8% and external 3x2 connector
<b>PCI Connector:</b>	Gold Finger: X8

<b>Controller:</b>	Sku2: Intel DH8950CL Sku3: Intel DH8955CL
<b>Holder:</b>	Metal Bracket: Full Height and Low Height
<b>Operating Humidity:</b>	0%–90%, non-condensing
<b>Operating Temperature:</b>	0°C – 45°C (32°F – 113°F) Air flow requirement for this adapter is 200 LFM
<b>Storage:</b>	-40°C–65°C (-40°F–149°F)
<b>EMC Certifications:</b>	<p>FCC Part 15, Subpart B Class A</p> <p>Conducted Emissions</p> <p>Radiated Emissions</p> <p>CE EN 55022: 1998 Class A Amendments A1: 2000; A2: 2003</p> <p>Conducted Emissions</p> <p>Radiated Emissions</p> <p>CE EN 55024: 1998 Amendments A1: 2000; A2: 2003</p> <p>Immunity for ITE Amendment A1: 2001</p> <p>CE EN 61000-3-2 2000, Class A</p> <p>Harmonic Current Emissions</p> <p>CE EN 61000 3-3 1995, Amendment A1: 2001</p> <p>Voltage Fluctuations and Flicker</p> <p>CE IEC 6100-4-2: 1995</p> <p>ESD Air Discharge 8kV. Contact Discharge 4kV.</p> <p>CE IEC 6100-4-3:1995</p> <p>Radiated Immunity (80-1000Mhz), 3V/m 80% A.M. by 1kHz</p> <p>CE IEC 6100-4-4:1995</p> <p>EFT/B: Immunity to electrical fast transients 1kV Power Leads, 0.5Kv Signals Leads</p> <p>CE IEC 6100-4-5:1995</p> <p>Immunity to conductive surges COM Mode; 2kV, Dif. Mode 1kV</p> <p>CE IEC 6100-4-6:1996</p> <p>Conducted immunity (0.15-80 MHz) 3VRMS 80% A.M. By 1kHz</p> <p>CE IEC 6100-4-11:1994</p> <p>Voltage Dips and Short Interruptions</p> <p>V reduc &gt;95%, 30% &gt;95% Duration 0.5per, 25per, 250per</p>

## Order Information

P/N	Description	Notes
<b>PE3IS2CO3X8</b>	Dual HW Accelerator sku3 Crypto Compression PCI E G3 ServerAdapter	Gen 3.0 X8, Based on Intel® SKU3 DH8955CL, Low-Profile, RoHS compliant
<b>PE3IS2CO2X8</b>	Dual HW Accelerator sku2 Crypto Compression PCI E G3 ServerAdapter	Gen 3.0 X8, Based on Intel® SKU2 DH8950CL, Low-Profile, RoHS compliant

Model P/N -LP

**1V0**