



### M1E2iSCO2

#### HW Accelerator Coletto sku2 Crypto Compression Express Module Server Adapter

##### Product Description

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

Silicom's Coletto Creek Express Module Server adapters support Intel QuickAssist Technology for Hardware Crypto and Compression accelerator engines.

The Silicom's Coletto Creek Express Module Server adapters are optimized to Intel Architecture (IA) support.

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

##### Key Features

Performance Features:

- Intel® QuickAssist Accelerator2
- 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-Stack)
- Support for 32 SR-IOV Virtual Functions
- Support Express Module Base Specification 2.0 (5 GTs)
- High performance, reliability, and low power use in Intel Coletto Creek (sku2) DH8950CL controller

Coletto Creek performance	Sku2
Intel® Quick Assist Technology Capability	50Gbps*
IPSec	43Gbps*
SSK	49Gbps*
Compression	20G
Kasumi/ Snow3G	30Gbps
RSA Decrypt 1k-bit	165K (ops/sec)
RSA Decrypt 2k-bit	35K (ops/sec)

\*PCI Ex8/ Gen2 will limit the IO performance to 27 Gbps

## Technical Specifications

Operating Systems Support	
Operating system support:	Linux
General Technical Specifications	
Interface Standard:	Express Module Specification revision 1.0 Silicom SETAC PCI-Express Base Specification Revision 2.0 ( 5 GTs)
Board Size:	168.2mm x 98mm (6.62"X3.858")
Express Module Card Type:	X8 Lane
Express Module Voltage	+12V +- 8%
PCI Connector:	Gold Finger: X8
Controller:	Intel DH8950CL
Holder:	Metal Bracket: Full Height and Low Height

<b>Operating Humidity:</b>	0%–90%, non-condensing
<b>Operating Temperature:</b>	0°C – 40°C (32°F – 104°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>
<b>MTBF:</b>	<p>284 Years.</p> <p>*According to Telcordia SR-332 Issue 1</p> <p>Environmental condition – GB (Ground, Fixed, Controlled). Ambient temperature – 25°C.</p> <p>Temperature rise of 15°C above the system ambient temperature was assumed for the cards components</p>

## Order Information

P/N	Description	Notes
M1E2ISCO2	HW Accelerator Coletto Creek Crypto Compression Express Module Server Adapter	X8, Based on Intel ColettoCreek SKU2 DH8950CL , Express Module, RoHS compliant

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