



PE316IS2LBCLB Server Adapter

LBG-x Crypto / Compression Accelerator PCIe 3.0 Intel® Based

Product Description

Silicom's Dual LBG-x NS Crypto / Compression server adapters are 3rd generation of Silicom adapters which are based Intel 3rd generation chipset to integrate Intel® QuickAssist Technology.

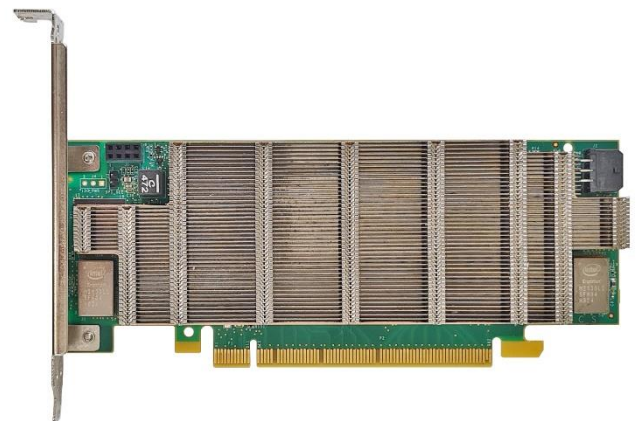
Silicom's PE316IS2LBCLB Server Adapter Dual LBG-x NS Crypto / Compression is optimized to Intel® Architecture provide Data Centers and Cloud applications benefit greatly from the high-performance security and compression capabilities, enabling more efficient network and storage architectures. Simplest and highly mature architecture leading to highest reliability.



Silicom's PE316IS2LBCLB Server Adapter integrates 100Gbps accelerator. Servers with Intel® QuickAssist technology create a new compute paradigm in cloud services. Virtualized machines with virtualized acceleration services allow for network function virtualization as standard practice. Network elements share the same common standard hardware implementation. True software defines network elements run on standard server.

Silicom's Dual LBG-x NS Crypto / Compression server adapters uses Intel solution and drivers: Seamless integration with the customer's OS and application.

Silicom's Dual LBG-x NS Crypto / Compression server adapters offers simple integration into any PCI Express 2X8.



Key Features

- Intel® QuickAssist Technology for Crypto and Compression
 - Bulk: AES, 3DES, (A) RC4
 - Hash: MD5, SHA-1/2 SHA-3 HMAC
 - Wireless: KASUMI , ZUC, SNOW 3G
 - Public Key – DH, RSA, DSA, EDSA, ECDH
 - Compression/Decompression-Deflate
 - RDMA (iWARP) support per link
- Host Interface:
 - PCI Express 2X8 lane
 - Support PCI Express Base Specification Revision 3.0, 8GT/s, 5GT/s or 2.5GT/s

System Acceleration Throughput per a single controller:

INTEL® C629 CHIPSET	INTEL® C628 CHIPSET/ INTEL® C627 CHIPSET	INTEL® C626 CHIPSET	INTEL® C625 CHIPSET	
SSL/IPSec	100Gbps	100Gbps	40Gbps	20Gbps
Compression Deflate		100Gbps	40Gbps	20Gbps
Decompression Deflate		100Gbps	100Gbps	100Gbps
RSA Decrypt 1k-bit		550K Ops/sec	550K Ops/sec	550K Ops/sec
RSA Decrypt 2k-bit	25K Ops/Sec	100 Ops/Sec	40 Ops/Sec	20 Ops/Sec
TLS Handshakes ECDH_RSA2K		44K Ops/sec		
TLS Handshakes EDHE+ECDSA		51K Ops/sec		
SSL/IPSec + Compression + PKE		Total 120 Gbps + 100K Ops/sec		

Technical Specifications

General Technical Specifications:	
Interface Standard:	PCI-Express Base Specification Revision 3.0 (8 GTs)
Board Size:	Low profile short add-in card: 167.64 mm X 64.389mm (6.60"X 2.535")
PCI Express Card Type:	2x X8 Lane
PCI Express Voltage	+12V ± 8% from external 3×2 connector. +12V ± 8% from PCIe Edge Connector. +3.3V AUX ± 9%
PCI Connector:	Gold Finger: X16 Lane (2x x8)
Controllers:	Intel® C629 Chipset Intel® C628 Chipset Intel® C627 Chipset Intel® C626 Chipset Intel® C625 Chipset
Holder:	Metal Bracket: Full Height and Low Height
Operating Humidity:	0%–90%, non-condensing
Operating Temperature:	0°C – 40°C (32°F – 104°F)
Cooling	Passive Heatsink. Optional Heatsink with Integrated Fan. (Stretch-Goal of Fanless Operation, which will require modeling)
Storage:	-40°C–65°C (-40°F–149°F)
Regulation:	Card shall meet CE, FCC Class B, ROHS requirements
Operating Systems Support:	
Operating system support:	Linux

Order Information

P/N	Description	Notes
PE316IS2LBCLB	Dual Crypto / Compression LBG PCIe Server Adapter	Based on Intel® C629 Chipset 2x8 Gen 3
PE316IS2LBLLB	Dual Crypto / Compression LBG PCIe Server Adapter	Based on Intel® C628 Chipset 2x8 Gen 3
PE316IS2LBTLB	Dual Crypto / Compression LBG PCIe Server Adapter	Based on Intel® C627 Chipset, 2x8 Gen 3
PE316IS2LBELB	Dual Crypto / Compression LBG PCIe Server Adapter	Based on Intel® C625 Chipset, 2x8 Gen 3
PE316IS2LBMLB	Dual Crypto / Compression LBG PCIe Server Adapter	Based on Intel® C626 Chipset, 2x8 Gen 3

Model P/N -LP

1V3