

# Intel® QuickAssist Adapter 8950

Intel® QuickAssist Adapter supporting Intel® QuickAssist Technology provides Crypto-Acceleration and Compression Acceleration



## Key Features

- Intel® QuickAssist Technology Services supporting IPsec, SSL Acceleration and Compression services
- Intel® DH8955 controller for scalable performance
- Support for SR-IOV
- Low profile, PCIe compliant card
- PCI Express\* Gen 3 (8GT/s)

## Product Overview

The Intel® QuickAssist Adapter 8950 provides customers with a scalable, flexible and extendable way to offer QuickAssist crypto acceleration and Compression capabilities to their existing product lines. The Intel 8950 features the Intel® Communication Chipset 8955 controller supporting Intel QuickAssist Technology for improved cryptographic and compression performance. Intel® QuickAssist Technology provides hardware acceleration to assist with the performance demands of securing and routing Internet traffic and other workloads such as compression and wireless 3G/4G LTE algorithm offload, thereby reserving processor cycles for application and control processing.

The Intel® QuickAssist Adapter 8950 provides up to 50 Gbps for virtual private networks (VPNs) and helps storage and network optimization applications better handle compression and decompression tasks. Kasumi and Snow 3G functions within Intel QuickAssist Technology help with 3G and 4G LTE mobile gateway and infrastructure workloads.

The Intel® QuickAssist Adapter 8950 provides flexible performance based on the requirements of the platform—up to 50 Gbps of crypto acceleration or up to 24 Gbps of compression in a PCIe compliant, low-profile form factor.

## Intel® QuickAssist Adapter 8950

### Features

#### Intel® QuickAssist Technology

- Provides hardware acceleration services for efficient cryptographic and compression performance.
- Symmetric cryptography functions include: Cipher operations (AES, DES, 3DES, ARC4); Wireless (Kasumi, Snow 3G); Hash/Authenticate operations (SHA-1, MD5, SHA-2 [SHA-224, SHA-256, SHA-384, SHA-512]; Authentication (HMAC, AES-XCBC, AES-CCM); Random number generation.
- Public Key functions include: RSA operation; Diffie-Hellman operation; Digital signature standard operation; Key derivation operation; Elliptic curve cryptography (ECDSA and ECDH) Random number generation and prime number testing.
- Compression/Decompression include: DEFLATE (Lempel-Ziv 77); LZS (Lempel-Ziv-Stac).

#### Intel® QuickAssist Technology software support

- Provides support for multiple operating systems: Linux\*, KVM, open source framework patches, Yocto Project\* BSP's and WindRiver\* Linux BSPs

#### PCI-SI SR-IOV Implementation (32 virtual functions) for Intel® QuickAssist Technology services

- Implementation of I/O Virtualization. The physical configuration of each device is divided into multiple virtual devices. Each virtual device is assigned to an individual virtual machine directly bypassing the virtual switch in the Hypervisor, resulting in near-native performance.

#### Compatible with x8 standard and low-profile PCI Express\* slots

- Enables Intel® QuickAssist Technology in standard and low-profile systems without the need for proprietary form-factor solutions

#### RoHS

- Complies with the European Union directive 2002/95/EC to reduce the use of hazardous materials

### Product Data

#### Intel® QuickAssist Adapter

#### Product Code

8950-SCCP

#### Order Code

IQA89501G1P5

#### Bulk Crypto

50 Gbps

#### RSA 1024

190K OPS (Operations per Second)

#### RSA 2048

35K (Operations per Second)

#### Compression

24 Gbps

#### Maximum Simultaneous Throughput

50 Gbps

#### SR-IOV Virtual Functions

1 Physical/32 Virtual

#### Connection

Low Profile PCIe Gen 3 X8

#### Operating Temperature (Ambient)

0° to 55° C (32° F to 131°F)

#### Storage Temperature (Ambient)

-40° to 70° C (-40°F to 158° F)

#### Power (Maximum)

~40W

#### Airflow

375 LFM

#### Storage Humidity

90% non-condensing relative humidity at 35° C

#### Dimensions (H x L)

2.7" x 6.6"

#### RoHS Compliant

Yes

#### Safety and Regulatory

FCC A, UL, CE, VCCI, BSMI, CTICK, KCC, CSA

#### Intel Backing

Limited Lifetime Warranty, 90-day, money-back guarantee (U.S. and Canada)

### Environmental

#### Operating temperature

0°C to 50°C (32°F to 131°F)

### Operating System (OS) Software Support

- Fedora 16 Linux (Linux Porting Guide Available)\*
- KVM\*
- Yocto Project\*
- WindRiver\* Linux

## Companion Products

Consider these Intel® products in your server and network planning:

- Intel® Ethernet Server Adapter X520 Series
  - 10 GbE SFP+ PCIe v2.0 (5 GT/s) performance
  - Copper or fiber-optic network connectivity; up to two ports per card
- Intel® Xeon® Processors
- Intel® Server Boards

## Intel Backing

- Limited lifetime warranty
- 90-day, money-back guarantee (U.S. and Canada)

## For Product Information

To see the full line of Intel Network Adapters for PCI Express\*, visit [www.intel.com/go/ethernet](http://www.intel.com/go/ethernet).

To speak to a customer service representative regarding Intel products, please call 1-800-538-3373 (U.S. and Canada) or visit [support.intel.com/support/go/network/contact.htm](http://support.intel.com/support/go/network/contact.htm) for the telephone number in your area.

## Customer Support

Intel® Customer Support Services offers a broad selection of programs including phone support and warranty service. For more information, contact us at [support.intel.com/support/go/network/adapter/home.htm](http://support.intel.com/support/go/network/adapter/home.htm). Service and availability may vary by country.

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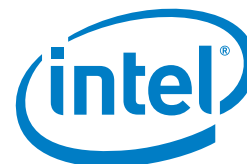
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