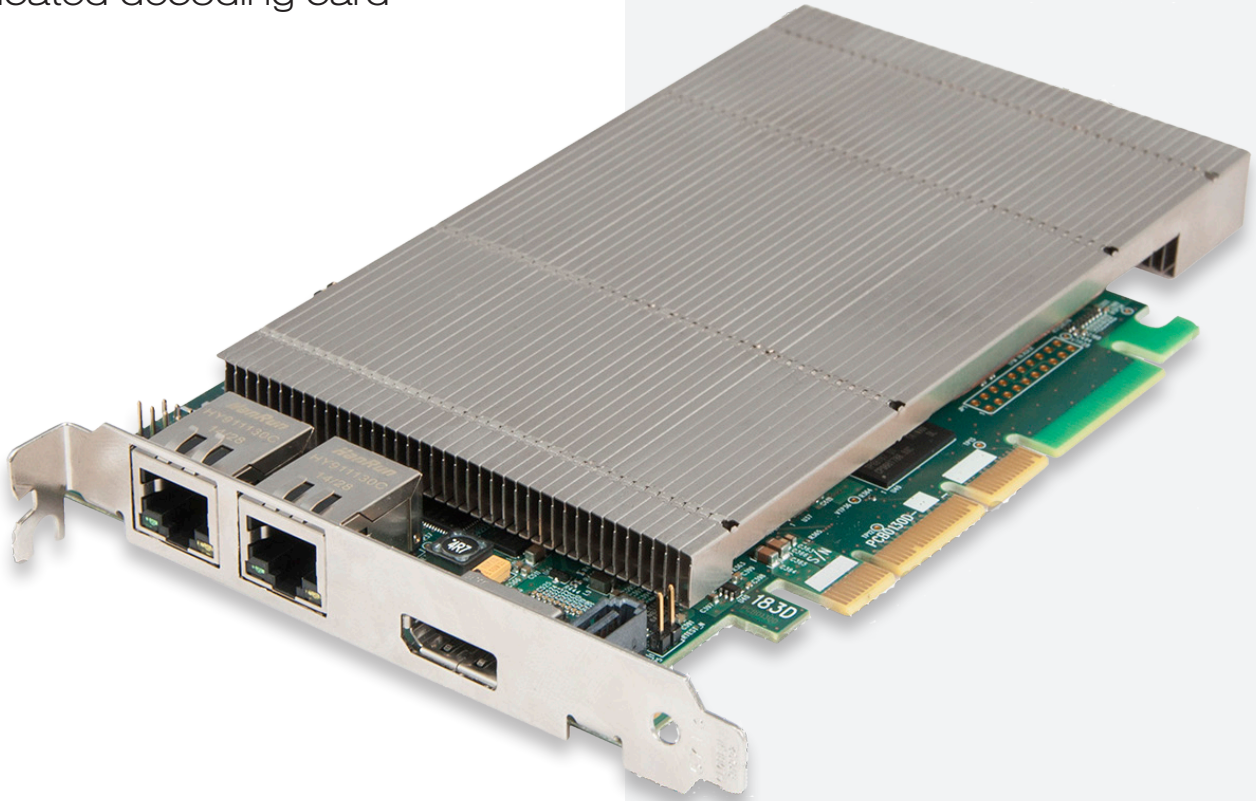


# ActiveSQX

Dedicated decoding card



## SCALABLE DECODING SOLUTION

Professional AV solutions require video to be received from a great many different sources and locations. The ability to receive and display video directly from online resources such as CCTV networks and remote desktop applications and combining them with local inputs has become an everyday part of a fully functional video wall display.

Datapath's ActiveSQX PCIe plug in card is a powerful addition to systems that require a scalable hardware based decoding solution under a single operation system platform, such as Windows®.

The ActiveSQX includes a dedicated processor capable of decoding several IP streams simultaneously via the on-board ethernet ports.

Fully PCIe compatible, multiple ActiveSQX cards can be used in a single system to provide project scalability, giving users more processing and more simultaneous decodes.

## DATAPATH SQX TECHNOLOGIES

Datapath's SQX technology is compatible with industry standards for video compression and streaming.

The ActiveSQX allows users to decode large numbers of High Definition 1080p 60fps streams and multiple ActiveSQX cards reside in a single system to provide even more decoding capabilities.

In addition, the ActiveSQX can be placed in systems alongside graphics cards and video capture cards, such as the Datapath Vision range, to provide a powerful addition to any control room environment.

Engineering the **world's best** visual solutions

  
**DATAPATH**  
EXCELLENCE BY DESIGN

# Advanced video compression technology

## COMPATIBILITY

The ActiveSQX is supported by the following operating systems: Windows 10 64 bit and Windows server 2012.

Datapath SDK is included for software developers.

## SPECIFICATION

### BOARD FORMAT

PCIe x4 gen 2 plug-in card half length, full height

### CONNECTORS

2 x RJ45 Ethernet ports, 1 x DisplayPort output connector (reserved for future use)

### ETHERNET

Dual 1000 Base-T Ethernet ports DHCP or Static IP support IPv4 & IPv6

### DMA ENGINE

Direct DMA to physical or virtual memory buffers with full scatter-gather support DMA bandwidth: up to 1.3GB/s

### SCALING

Hardware downscaling prior to DMA transfer. One to One (1:1) transfer for upscale after DMA

### CAROUSEL

IP Window carousel supported including the hardware based pre-buffering of IP decodes for smoother playback

### STREAMING METHODS

Multicast & Unicast support

### STREAMING CODECS

H.264 (Mpeg4 Part 10 AVC), VC-1, MPEG2 Part 2, MJPEG

### STREAMING CONTAINERS

MPEG4 part 1, MPEG2-TS, WMV, MOV

### STREAMING PROTOCOLS

HTTP, RTSP, RTP, UDP

### DECODE DENSITY\*

Up to:

1 x 4096 x 2160 at 60fps

3 x 4096 x 2160p at 30fps

6 x 1920 x 1080p at 60fps or 12 x 1080p at 30fps

or 10 x 1080i at 30fps/50 D1 at 30fps

### DE-INTERLACING

Supported

### STREAM AUTHENTICATION

Basic & Digest Stream Authentication

### VIDEO CAPTURE MEMORY

4GB

### H.264 PROFILES

Constrained Baseline Profile (CBP) / Main Profile (MP) / High Profile (HiP)

### H.264 LEVELS

Level 3 / 3.1 / 4 / 4.1 / 4.2 / 5 / 5.1 / 5.2

### COLOUR FORMAT

NV12 4:2:0(MP) / High Profile (HiP)

### POWER REQUIREMENTS

Max current at +3.3 - 1.9A

Max current at +12V-1.9A

Average power ≈ 14W

### OPERATING TEMPERATURE

0 to 35 °C / 32 to 96 °F

### STORAGE TEMPERATURE

-20 to 70 °C / -4 to 158 °F

### RELATIVE HUMIDITY

5% to 90% non-condensing

### WARRANTY

3 years

\* Decode density may be affected if either the encoded stream was originally encoded to a pixel format other than NV12 (eg. YV12) or if the encoded stream is interlaced and requires de-interlacing.

## MODELS AVAILABLE

Order Code: ActiveSQX

Dedicated decoding card

All products are shipped with the latest software available, unless stated otherwise. Special requirements may be organised by contacting our Sales team.

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