# DATAPATH
## EXCELLENCE BY DESIGN

**SQX**
Streaming Technology
By
**DATAPATH**
EXCELLENCE BY DESIGN

# DEDICATED DECODING CARD
## Advanced Video Compression Technology

## + 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.

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 denition 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.

## + SPECIFICATIONS

| | |
|---|---|
| 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 |
| Streaming Protocols | HTTP, RTSP & MPEG2-TS support Multicast & Unicast support |
| Codec Support | H.264 (Mpeg4 Part 10 AVC), VC-1 (WMV) & MPEG2 Part 2 and MJPEG |
| Decode Density | Up to 3 x 4096x2160p @ 30fps or 6 x 1920x1080p @ 60fps / 12 @ 30fps 50+ D1 @ 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 |
| 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 |
| OS Support | Windows 7 64 bit / Server 2012 |
| Power requirements | Max current at +3.3 - 1.9A. Max current at +12V-1.9A Average power ≈ 14W |
| Operating Temp | 0 to 35 deg C/ 32 to 95 deg F |
| Storage Temp | -20 to 70 deg C (-4 to 158 deg F) |
| Relative Humidity | 5% to 90% non-condensing |
| Warranty | 3 years |

## + 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.*

*We are continuously developing the technology used within our product ranges delivering outstanding innovative solutions, therefore the specification may change from time to time.*