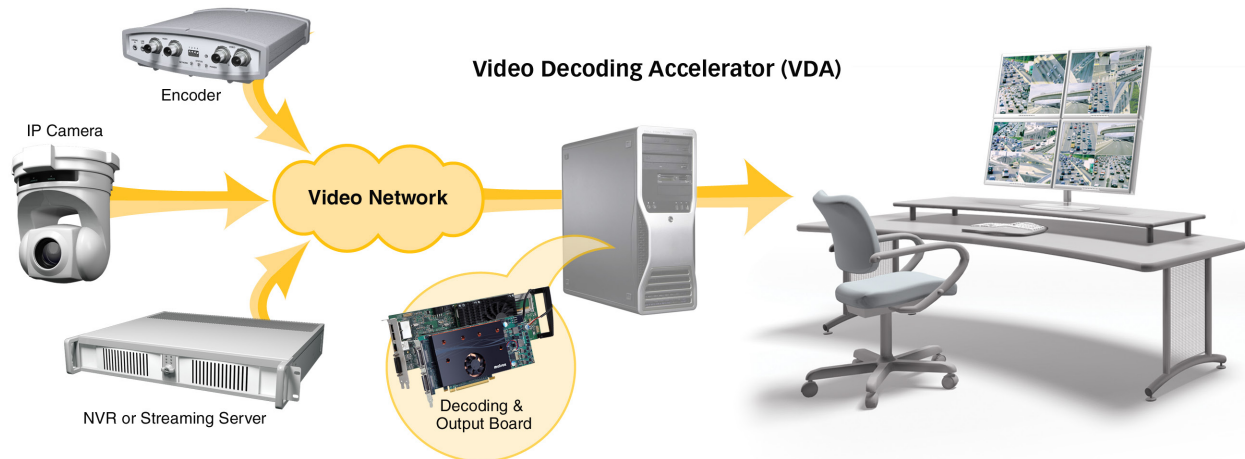# Matrox **Video Decoding Accelerator (VDA)**

Accelerate IP video decoding. Offload the CPU. Maximize system responsiveness.

Matrox VDA is a graphics board set designed specifically for operator workstations in high-risk, large scale surveillance installations where preventative live-monitoring of multiple IP streams at full frame-rates is required. Complex monitoring applications for transportation, city surveillance, casinos, and industrial automation are among the areas where the current IP decoding burden typically requires multiple workstations. With Matrox VDA installed, a single workstation can decode and simultaneously display up to 16 4CIF (or 16 D1) IP streams at full 30fps across four displays.

Video Decoding Accelerator (VDA)

Encoder

IP Camera

Video Network

Decoding & Output Board

NVR or Streaming Server

Matrox VDA-1164

The VDA-1164 consists of two boards: a full HD quad-output PCIe x16 board, and an IP video decoder PCI board
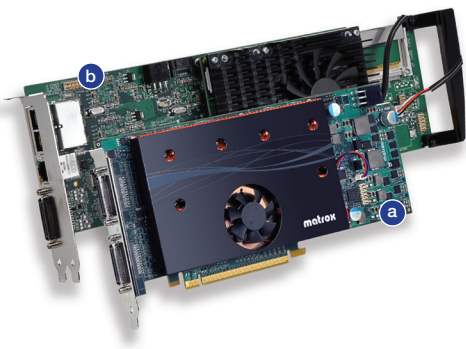
a. Quad Output Board Displays Multiple Streams at Full Frame Rate

Display multiple individual streams at full frame rate, in native resolution with 1:1 scaling on up to four high-definition (quad HD) displays—without compromising the quality of the imagery or dropping any frames.
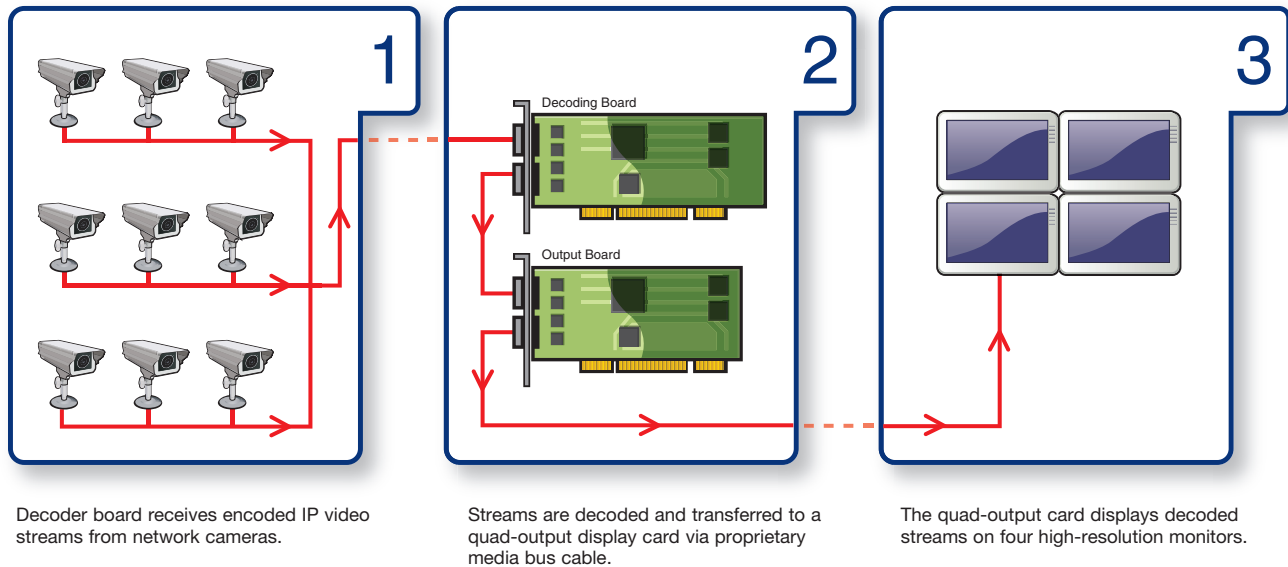
b. IP Video Decoder Board Offloads the Host Computer

Offload the video decoding burden from the host CPU and enable it to focus on other tasks such as access control, system configuration, and situation management. Use the CPU to decode additional video streams or free the CPU to maximize system response time to alarms and operator interactions.

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Fidelity and Performance Without Compromise

The VDA-1164 is capable of decoding and displaying at full frame rate up to 16 D1* streams with superior image quality and no dropped frames. This, along with support for IP cameras and encoders from many major manufactures, results in a unique solution with unparalleled performance and flexibility.

Performance dependent on codec and camera type.

Decoder board receives encoded IP video streams from network cameras.

Streams are decoded and transferred to a quad-output display card via proprietary media bus cable.

The quad-output card displays decoded streams on four high-resolution monitors.

A Flexible Solution for Security Software Vendors, Solution Integrators, and OEMs

The VDA-1164 has been engineered for quick integration of new network devices with different codecs to help respond to each project's unique requirements and to future-proof surveillance installations. An easy-to-use SDK is available to allow security software vendors to enable VDA support, providing even further flexibility for custom integration and the opportunity to offer additional competitive advantages within their software.

Specifications

Streaming Resolution Support	Codec Support	Native IP Cameras & Encoders Support*		VMS Support**
Mega-pixel	MJPEG	ACTi	Mavix	Milestone
D1	MPEG-1	ATEME	Mobotix	
4CIF	MPEG-2	Axis Communications	Teracue	
VGA	MPEG-4	Bosch	Truen	
CIF	H.264	Canon	VBrick	
Custom formats	WMV	Dallmeier	Vivotek	
	Custom formats	Indigovision		

* IP camera and encoder support is VMS independent. Support for new devices and other manufacturers added frequently.
   Visit www.matrox.com/graphics or contact us for an updated list.

** Extended IP Cameras and Encoders support through VMS partners.

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