





Feature	Benefit
Full Capture and Display in HD	<ul style="list-style-type: none"> <li>• Our PPX family of products can deliver the crisp clarity of high resolution to a control room.</li> <li>• Capturing at up to 1920x1200@60Hz, the PPX-INDV14 is the premier display wall RGB/DVI capture board in the industry.</li> <li>• The PPX-OUT4 graphics display controller board can drive resolutions up to 1920x1200, including 1080p on a display wall.</li> </ul>
SDK with API	<ul style="list-style-type: none"> <li>• The Matrox SDK provides access to our drivers, documentation, Display Wall API and sample applications with their source code.</li> <li>• A reliable and feature rich API allows for the development of a Display Wall Management software suite suitable for any project, from smaller AV installations or mission-critical control room environments.</li> </ul>
Edge-Overlap and Edge-Underlap	<ul style="list-style-type: none"> <li>• Manage the edges of the displayed image on your wall; account for the size of your displays' bezels or make an image displayed by multiple projectors appear seamless.</li> </ul>
Non-Square Layouts	<ul style="list-style-type: none"> <li>• Design innovative display configurations. Our display wall controller output boards support non-square display layouts, allowing you to mix monitors of different resolutions and sizes, building a layout that falls outside of a traditional rectangular desktop.</li> </ul>
Hardware Downscale and Decimation	<ul style="list-style-type: none"> <li>• Balance the bandwidth load across your display wall to maximize performance.</li> </ul>
Over-the-Top Bus	<ul style="list-style-type: none"> <li>• The PPX and VPX series of Matrox Display Wall products use an alternate, proprietary bus to transfer data between boards, offloading traffic from the host system.</li> </ul>
Scalable	<ul style="list-style-type: none"> <li>• Matrox products feature scalable architecture. When display wall data traffic is offloaded from the system bus, it becomes very easy to build a system with only one or two boards—or up to sixteen.</li> </ul>
Microsoft Windows Environment	<ul style="list-style-type: none"> <li>• Our Display Wall products are validated to work in either a 32-bit or 64-bit Windows XP environment. An integrator would have no problem stretching a single desktop to run a SCADA application, for instance, across 64 displays.</li> </ul>
PCI-X	<ul style="list-style-type: none"> <li>• All Matrox Display Wall products are PCI-X compatible. As display wall integrators look to build large display wall systems with many boards, PCI-X becomes a requirement.</li> </ul>
Hardware Accelerated in IP Video Decoding	<ul style="list-style-type: none"> <li>• The Matrox Streaming Media Decoder (SMD) supports the decoding and display of numerous video streams at full resolution and performance.</li> <li>• Supports many network video devices and codecs, with the flexibility to quickly add more per project requirements.</li> </ul> <p><b>See SMD datasheet for more info.</b></p>

## SMD Series

Adds hardware decoding capabilities for compressed video over IP and supports real-time display on a grid of display devices.



### Streaming Media Decoder

Many inputs. Many outputs. Faster video streaming.



### Matrox IP Link

SMD Interface card

# Inputs and Outputs

## Capture

- Real-time streaming through the system
- Best-in-class capture quality
  - S-Video (NTSC, PAL or SECAM)
  - RGB and DVI Capture (up to 1920x1200)
  - Compressed Network Video
  - IP Cameras and encoders

## Display Options

- Cubes
- Plasmas
- LCDs
- Projectors
- Resolutions (up to 1920x1200 with certain boards)

## Product Lineup – Quick Reference Guide

	Product Lines	
Display Boards	PPX	VPX
Max. number of Boards	No Limit	2
Max. number of Channels	64	16
Edge Overlap Support	Yes	No
Max. Output Resolution	1920x1200	1400x1050
Inter-board Communication	Linkport	Linkport
SMD Support	Yes	Yes
Capture Boards	PPX	VPX
Max. number of Boards	No Limit	2
Max. number of S-Video/ Composite Channels	No Limit	16
Max. Number of DVI Channels	No Limit	N/A
Max. Number of RGB Channels	No Limit	8
Max. Capture Resolution	1920x1200@60 Hz*	1280x1024@30Hz

\* Reduced timings

Family	Product	Model Number	Board Type	Max Res.	Description
PPX	PPX-OUT8	DWPPXOUT8-0F	Display	1600x1200	8 Channel (RGB/DVI)
	PPX-OUT4	DWPPXOUT4-0F	Display	1920x1200	4 Channel (RGB/DVI)
	PPX-INVID16	DWPPXINVID16-0F	Capture	NTSC/PAL	16 Channel S-Video/Composite
	PPX-INDVI4	DWPPXINDVI4-0F	Capture	1920x1200	4 Channel RGB/DVI
VPX	VPX-OUT8	DWVPXOUT8-0F	Display	1400x1050	8 Channel (RGB/DVI)
	VPX-OUT4	DWVPXOUT4-0F	Display	1400x1050	4 Channel (RGB/DVI)
	VPX-INVID8	DWVPXINVID8-0F	Capture	NTSC/PAL	8 Channel S-Video/Composite
	VPX-INRGB4	DWVPXINRGB4-0F	Capture	1280x1024	4 Channel RGB
	VPX-IN/HYB	DWVPXINHYB-0F	Capture	NTSC/PAL; 1280x1024	8 Channel S-Video/Composite 4 Channel RGB
SMD	SMD	DW-IPSMD-0F	Decode	Mega Pixel	Decoding 16 Channels @ D1 resolution of compressed video
	IP Link	DW-PCL-0F	Capture	Support 2 X SMD	Distribute network video into the DWC

## Contact Matrox

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