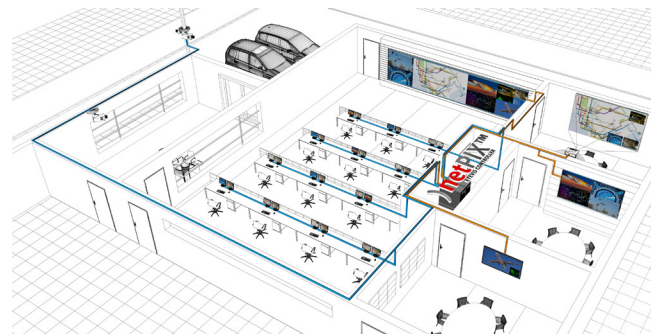
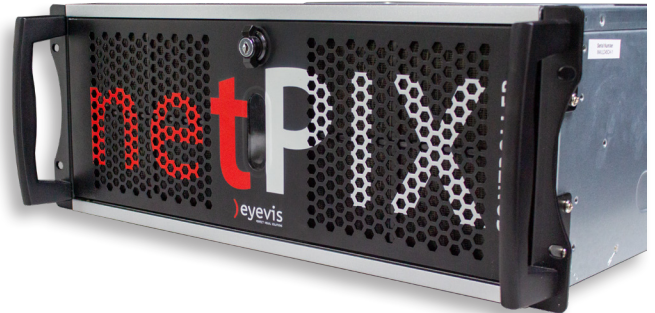


High-End Graphics Controller For Visual Display Systems

The eyevis™ netPIX-core™ Video Wall Controller is a network-based graphic controller for the management of video wall systems, single displays or projectors. Through its multi-screen capabilities, any display surfaces can be realized. The eyevis netPIX-core Video Wall Controller creates a large joined desktop for network applications, video and graphic sources.

At the heart of eyevis netPIX-core is the powerful SBC, in combination with latest generation backplanes with Switch Fabric. The new eyevis netPIX-core offers an ultra-high performance bus, cost-effective INTEL CPUs, 64Bit technology and high bandwidth through a Switch Fabric bus. These latest technologies guarantee the revolutionary and powerful performance of the next-generation of the eyevis™ netPIX Series in any control room application.

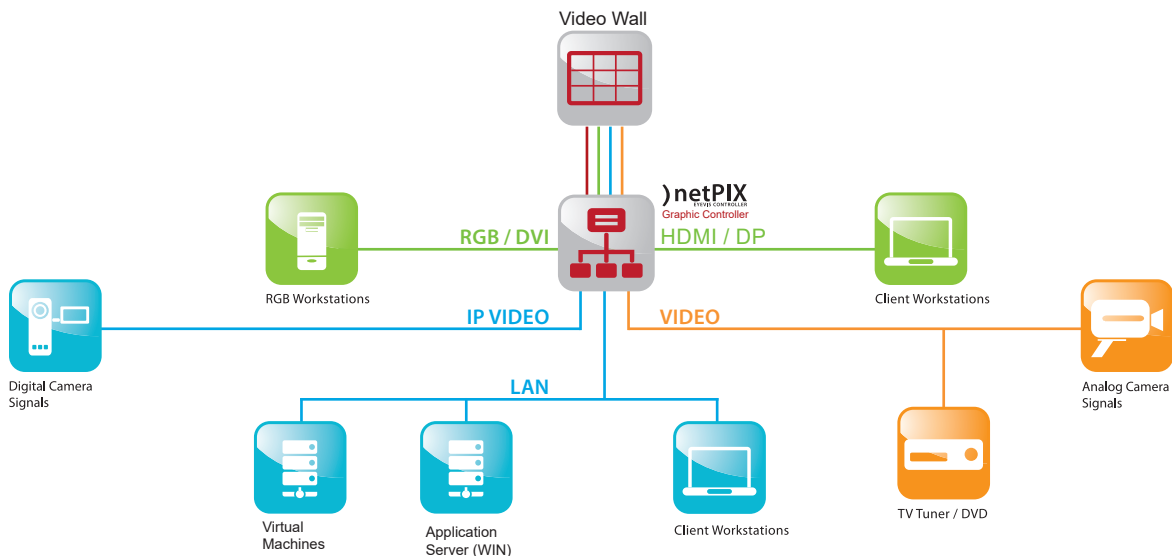
The eyevis netPIX-core Controller provides multiple analog, digital video and graphic connectivity with input cards. With the latest Switch Fabric architecture, video and graphic sources can be displayed simultaneously on a video wall in full frame rates. All analog and digital Video-/RGB-/ DVI- and IP Streaming data is transmitted with up to 192 GB/s without any dependencies on the system.



eyevis netPIX-core Advantages

- Highly flexible Video Wall Controller solution
- Wide range of input connections, large volume of outputs
- Simple system architecture
- Expandable for future system upgrades
- High performance

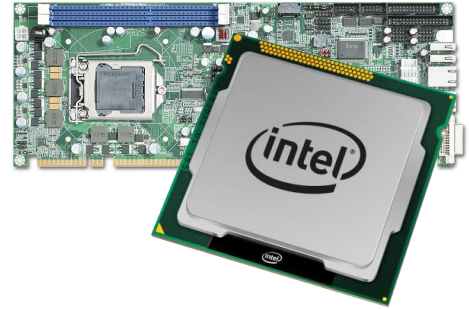
SYSTEM OVERVIEW



SYSTEM ARCHITECTURE

The eyevis netPIX-core relies on latest SBC (Single Board Computer) technology. This technology uses Intel® technology based on one Intel® Core® i7 processor, which guarantees a high-quality presentation of applications.

- High-end components for highest availability
- 32GB DDR4 ECC RAM
- DUAL Gigabit Ethernet
- Multimedia bracket (Line Out, Line In, Mic, USB)



SYSTEM AVAILABILITY

- Redundant power supply units, hot swappable
- Redundant SATA Solid State Disk with RAID1 or RAID5
- eyevis Factory Image Recovery (EYE-FIR) supplied on a USB stick to restore Controller within minutes to delivery status or to a self-generated image
- Built in compliance with ISO 9001 Certification standards to meet the specific requirements of each customer
- An ideal solution for control rooms with high availability



DESKTOP MANAGEMENT & OPERATING SYSTEM

- Thanks to its multi-screen-ability, any data and application can be displayed simultaneously; they can also be freely positioned and scaled on the entire video wall. The operator has a big desktop with a very high resolution at his disposal, which will be multiplied by the size of the wall.
- Supports Windows 10 64-Bit IoT Enterprise LTSC 2016
- Up to 32GB RAM inside the systems for memory intensive applications.
- Huge Windows desktops with up to 16000×16000 pixels with Windows 10, depending on the size of the system
- Windows-based applications can be displayed simultaneously with any other input signals like video, IP-video and RGB/DVI/HDMI/DisplayPort



BUS SYSTEM

The core of the system is the ultra-fast PCIe Switch Fabric with PCIe Generation 3.0 slots and a total bandwidth of 192GB/s for transmitting Windows information, network data, video, digital streams and graphic signals to each output card. This guarantees a very high bandwidth without decreasing frame rates when numerous inputs are displayed simultaneously.

INPUT SIGNAL PROCESSING

The eyevis netPIX-core can be equipped with various input cards for video, RGB/DVI/ HDMI/DP and IP signals. All input signal windows can be moved, scaled and placed freely on the video wall.

- The input cards provide state-of-the-art video processing resulting in superb quality
- Huge number of cards per system possible
- Easy to upgrade for future system expansion

Analog Video Input Card

- Up to 128 video signals in one system
- Up to 32 video windows can be displayed with every display output
- Composite BNC or S-Video (Y/C)



IP Decoder Input Card

- Dual 1000 Base-T Ethernet Ports
- Simultaneous decoding of up to 50 channels in D1 quality
- Simultaneous decoding of up to 12 channels in Full HD quality (30fps)
- Simultaneous decoding of up to 6 channels in Full HD quality (60fps)
- Simultaneous decoding of up to 3 channels in UHD/4K resolution (30fps)
- Supports MPEG2, MPEG4, H.264, MJPEG



RGB / DVI Input Card

- Display of the source in freely moveable, scalable and placeable windows on the video wall
- Up to 40 RGB/DVI input sources
- Input Signals: - Up to 3840x2160 @ 30Hz with DVI-/HDMI input card
 - DVI Single Link up to 1920x1200 @ 60Hz
 - Analog up to 2048x1536 @ 60Hz

HDMI / DisplayPort Inputs

- Display of the source in freely moveable, scalable and placeable windows on the video wall
- Up to 40 HDMI / DisplayPort inputs
- Input Signals: - Up to 4096x 2160@60Hz with DisplayPort input card
 - Up to 4096x 2160@60Hz with HDMI 2.0 input card

OUTPUT GRAPHICS PROCESSING

The eyevis netPIX-core's new GPU with 128MB GDDR5 per output channel achieves a never seen graphic performance with:

- Digital outputs up to 3840x2160 pixels and Full HD format
- Configurations up to 48 output channels (max. number of outputs depends on product version)
- Multiple resolution modes for different output resolutions at the same time, for rectangle or non-rectangle display configurations*
- Live preview support for each source connected with eyevis™ eyeUNIFY Video Wall Management Software
- Under-lapping mode for narrow bezel displays*
- Over-lapping mode for edge overlapping projections*
- Pivot mode for landscape and portrait display*
- Supports custom resolutions

**Non-standard modes, available upon request*



VIDEO WALL MANAGEMENT SOFTWARE

For the easy management of large display systems or video walls, it is recommend to combine eyeUNIFY Video Wall Management Software with the eyevis netPIX Controller. With this software, the user has nearly unlimited possibilities for the management and operation of the video wall or display system.



eyevis netPIX-core Specifications

Controller Units

Processor	Intel® Core Processor i7-7700 with up to 4.20 GHz
Chipset	Intel® C236
RAM	32GB DDR4 ECC RAM
Expansion Slots	11× PCIeexpress x8 Gen. 3
Storage	RAID1 240GB, optionally up to RAID5 960GB
BUS	Switch Fabric with a maximum bandwidth of 192GB/s
Ethernet	2× 10/100/1000 Mbps RJ45 ports standard integrated
Dimensions (W×H×D)	431 × 177 × 568 mm / 16.9 × 6.9 × 22.4 inch
Rack Space	5U
Weight	24.0 kg / 52.9 lbs
Operating Conditions	Temperature: 0°C - 40°C (32°F - 104°F) / Humidity: 10 - 90% not condensing / Altitude: up to 3,048 m (10,000 ft)
Power Supply	100-240 V, 50-60Hz, redundant, HotSwap 860 Watt
Operating System	Windows 10 64-Bit IoT Enterprise LTSC 2016
Accessories (optional)	104-key keyboard, 2-key-wheel/button-mouse (optional with extension cable up to 50 metres), signal-cable for eyevis Cubes/ Displays (fibre optic)

Expansion Units

Expansion Slots	11× PCIeexpress x8 Gen. 3
BUS	Switch Fabric with a maximum bandwidth of 192 GB/s
Dimensions (W×H×D)	431 × 177 × 568 mm / 16.9 × 6.9 × 22.4 inch
Rack Space	5U
Weight	24.0 kg / 52.9 lbs

Output Card

	GRAPHIC BOARD NPX-4900-OUT4-DP-1
Graphic Memory	512MB per card
Video Wall Configuration	Any rectangular or non-rectangular array up to 48 display modules
Resolutions	640×480 up to 3840×2160 (max. 359 Mpixels/s)
Color Depth	32 Bit

Input Cards

	VIDEO INPUT CARD NPX-4900-IN8-VID-1				
Inputs	8 × Composite or S-Video BNC connectors				
Input Format	NTSC, PAL, SECAM				
Decoding/SDI Bitrate	High-quality video decoder with de-interlacing				
Scaling & Display	Display multiple video sources in any size and position on the video wall. Control of colour, brightness, contrast.				
	DVI INPUT CARD NPX-4900-IN2-DVI-1	DVI INPUT CARD netPIX-coreIN-4-DVI-SC-1	HDMI INPUT CARD netPIX-coreIN-4-HDMI- SC-1	HDMI 2.0 INPUT CARD netPIX-coreIN-2-HDMI- SC-1	DP INPUT CARD NPX-4900-IN2-DP-1
Inputs	2× DVI-I	4× DVI-D	4× HDMI with digital audio capture	2× HDMI	2× DisplayPort
Signal Processing	RGB/DVI with full refresh; integrated scaler	Dual-Link DVI-D	HDMI 1.4/DVI	HDMI 2.0 (HDCP 2.2)	DisplayPort 1.2
Resolutions	Up to 1920×1200 pixels	Up to 3840×2160 @ 60Hz	Up to 3840×2160 @ 60Hz	Up to 4096×2160 @ 60Hz per input	Up to 4096×2160 @ 60Hz per input
Pixel Format	16Bit/32Bit, YUV422, RGB 8:8:8				
Scaling & Display	Display multiple sources of any size, anywhere on the video wall				

IP Decoder Card

	netPIX-coreIN-12-IP-SQ-1
Inputs	2× RJ45
LAN	Dual 1000 Base-T Ethernet Ports (DHCP or Static-IP, IPv4 & IPv6)
Format	H264, MPEG2, MPEG4, MJPEG
Resolutions	50× D1 @ 30 fps or 12× 1920×1080p @ 30 fps or 6× 1920×1080p @ 60fps or 3× 4096×2160p @ 30fps
Frame Rate	30/60 frames per channel