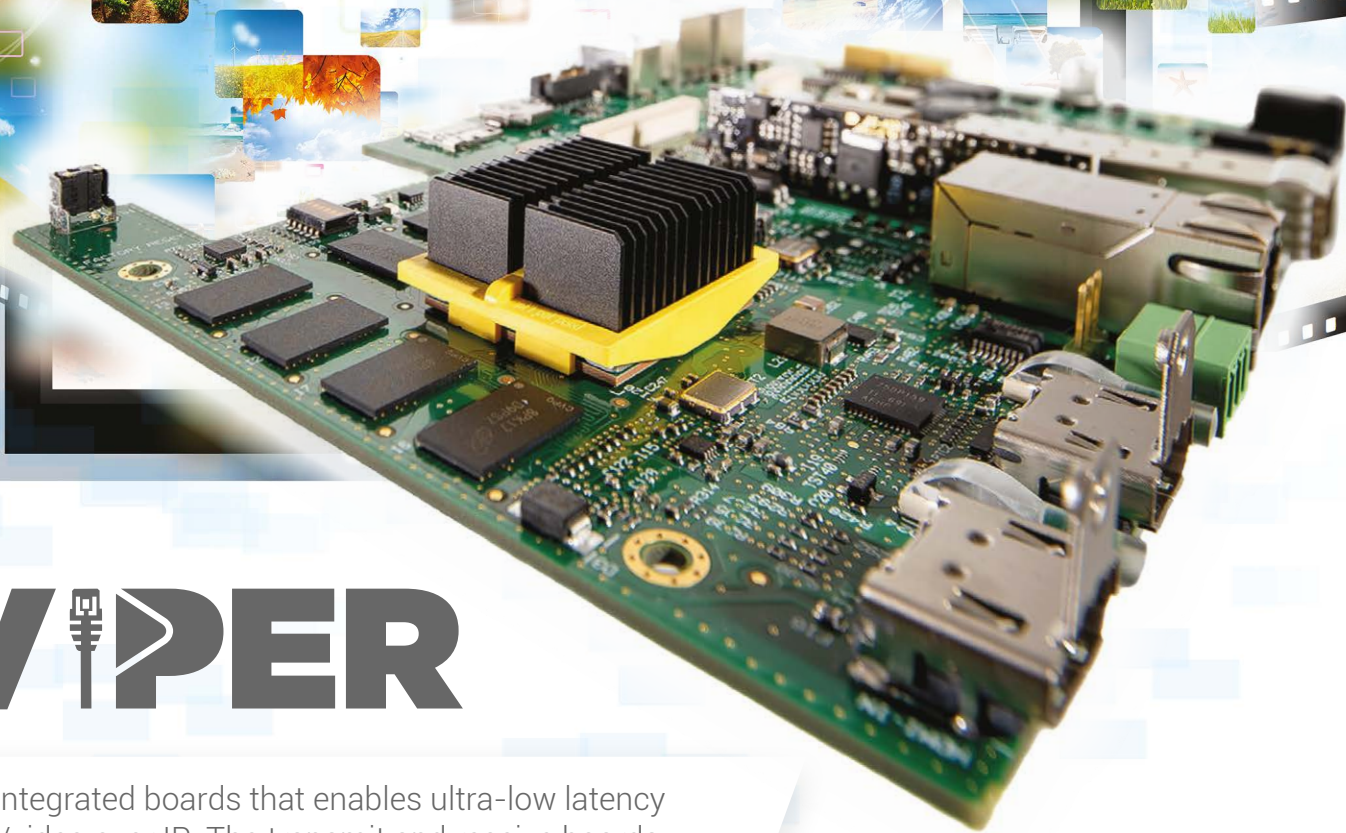




CUSTOM OEM BOARD

FOR 4K HDMI AV OVER IP

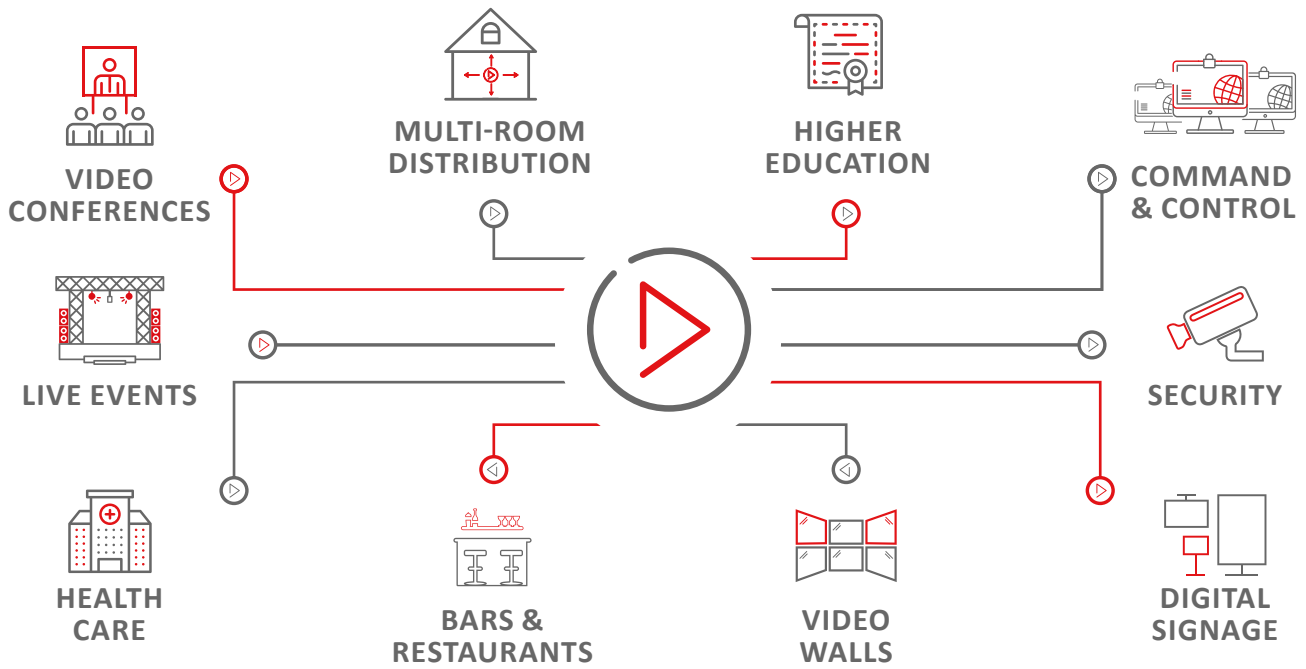


VIPER

Fully integrated boards that enables ultra-low latency audio/video over IP. The transmit and receive boards features up to 4K/UHD over 1GbE, 2.5GbE and 10GbE Ethernet cable with compression using the VC-2 HQ, JPEG 2000 or another codec.

www.silexinsight.com

WIDE VARIETY OF APPLICATIONS



ALL THE FEATURES YOU NEED



Zero Latency

- Invisible ultra-low latency (less than 3ms)



Field Upgradable

- Over-the-air updates for already installed units



Supports Various Video Codec

- In-house development of own video codec IP (JPEG 2000, VC-2)
- Our platform is built for integration with other codec



Any Resolution

- Choose the screen resolution for your needs
- Scale to fit different aspect ratios



Low power with PoE or PoE+ support

- Ease of Installation and use of PoE built-in safety features
- Reliability even in the face of a power loss



Ultra-fast Switching

- Create powerful visual experience, with the ability to switch seamlessly between video sources



Secure & Reliable Transmission

- AES 256 Encryption for maximum security
- HDCP compliant
- Enterprise grade 802.1x Authentication
- Scalable forward error correction to support poor IT Infrastructure



Advanced Digital & Analog Audio Transmission

- Supports all HDMI2.0 Multichannel Digital Audio standards including Dolby® TrueHD, Dolby Atmos®, DTS HD®, DTS:X®, and uncompressed linear PCM
- Audio downmixing from Multichannel Digital Audio to Analog Stereo



Maximum Compatibility Using Standard AV Transport

- SMPTE 2110 open standard AV Transport
- Uncompressed audio through AES67 protocol



USB Device Connection

- Full passthrough support of USB HID and Mass Storage classes



HDR Support

- Supports passthrough for popular HDR standards such as Dolby Vision, HDR, HDR+, HLG

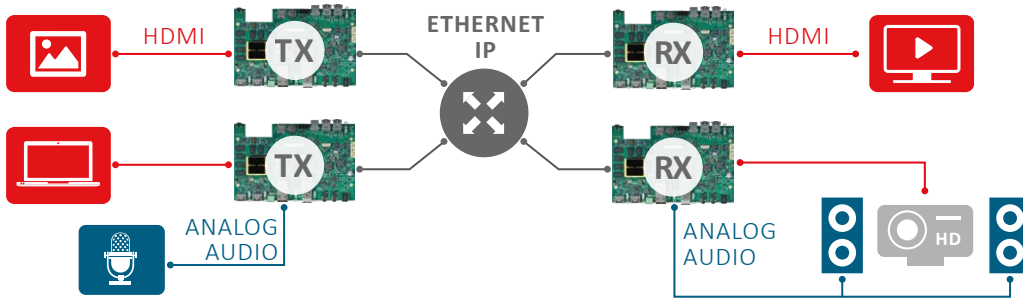


Easy Setup

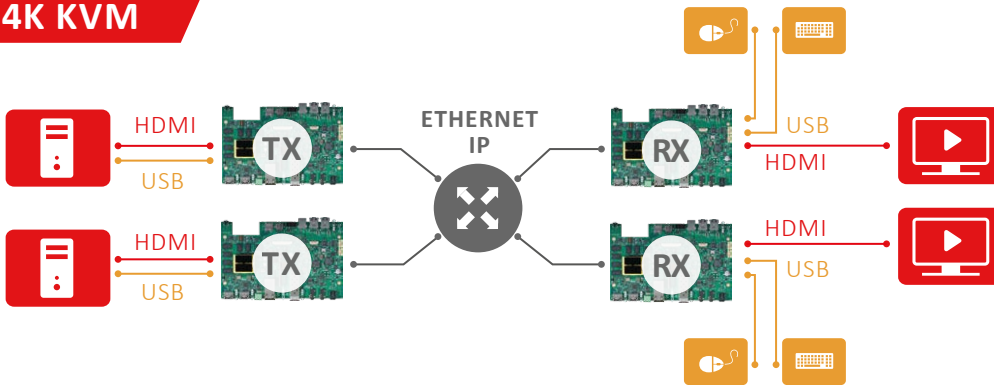
- Integrate to your control system using our robust API
- Customizable Web UI interface

VIPER - TYPICAL USE CASES

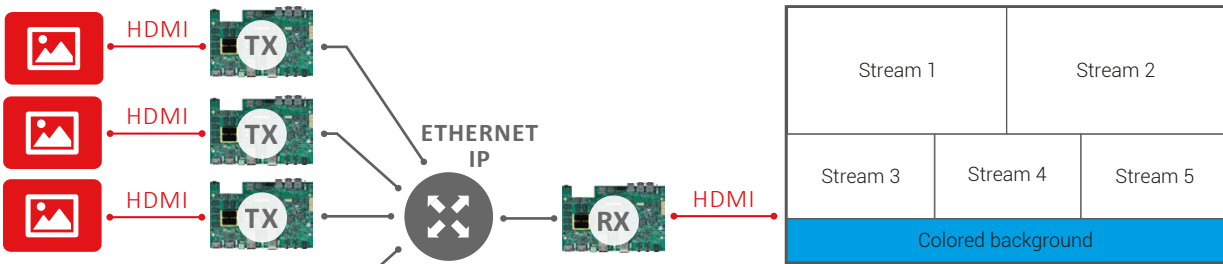
FLEXIBLE NETWORKING FOR 4K VIDEO AND AUDIO



4K KVM

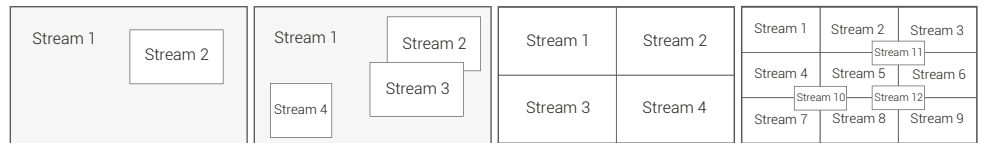


TRUE 4K MULTIVIEW

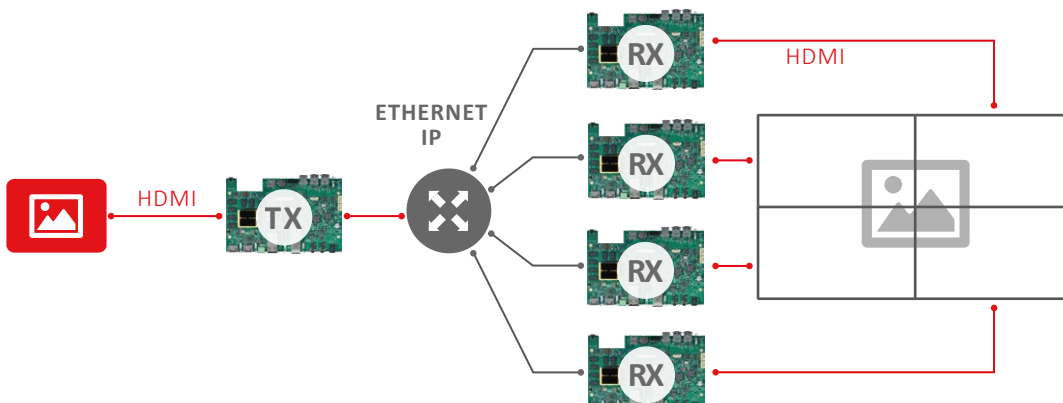


100% Flexible Layouts (examples)

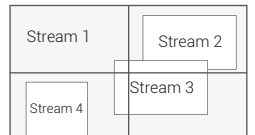
Up to 12 UHD sources



4K VIDEO WALL WITH IMAGE SPLIT OVER MANY DISPLAYS

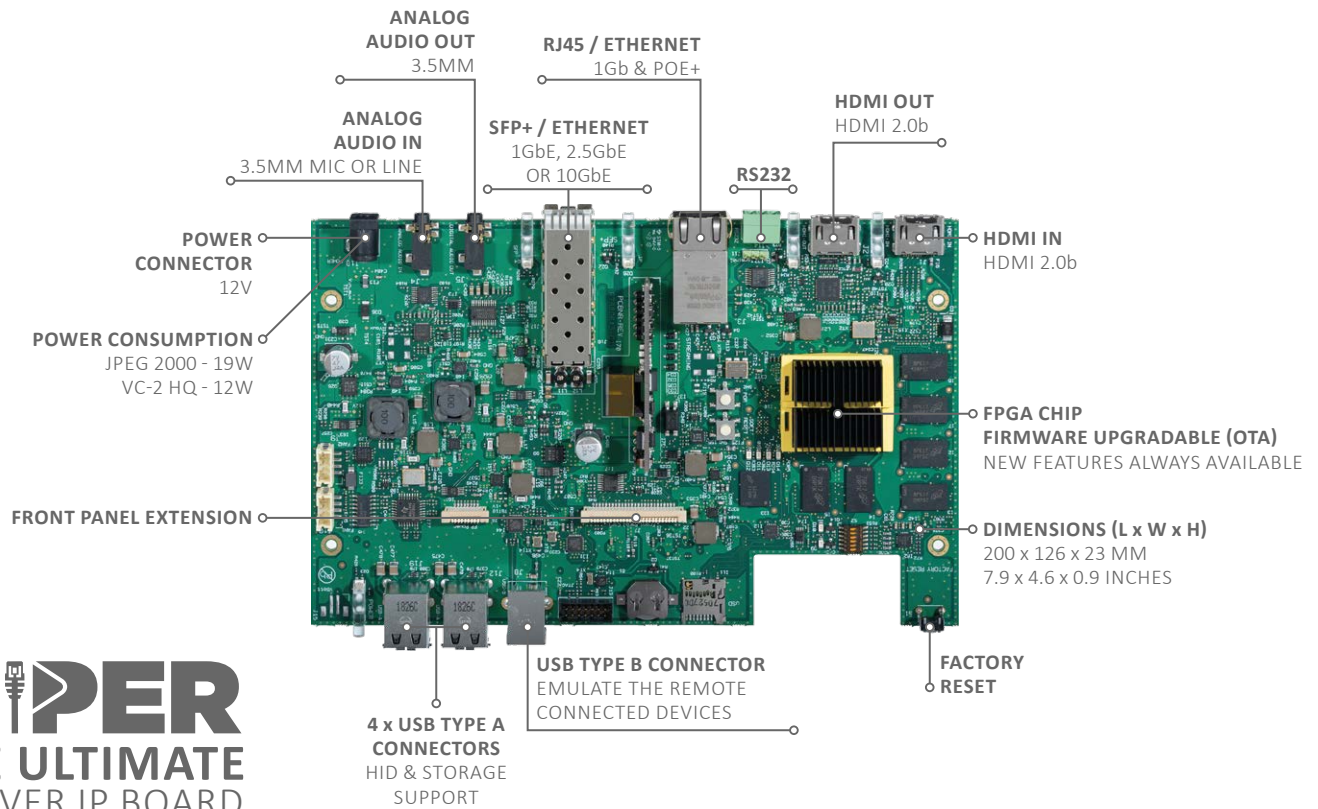


Can also be combined with True 4K Multiview



4K HDMI 60fps 4:4:4

HDMI TO IP TRANSMITTER/RECEIVER



VIPER
THE ULTIMATE
AV OVER IP BOARD

Specifications	JPEG 2000 version	VC-2 HQ version
Audio/Video/Networking		
AV connectivity	HDMI 2.0b with HDCP 1.4/2.2	
Video format	All resolutions and frame rates up to 4096x2160 at 60fps 8-bit, 10-bit and 12-bit, 4:4:4, 4:2:2 and 4:2:0 Dolby Vision, HDR10 and HLG	
Video processing	Upscaler/downscaler, cropping, padding, edge compensation and rotation at receiver side Logo and text insertion at transmitter and receiver side	
Audio	Up to 8 channels, all sampling rates including High Bit-Rate Audio (HBR) LPCM, DTS, and Dolby formats (incl. Atmos) External analog audio embedding/de-embedding AES67	
Latency	15ms end-to-end (encoder + decoder)	3ms end-to-end (encoder + decoder)
Security	AES encryption, HDCP 1.4/2.2, 802.1x authentication	
Reliability	Forward Error Correction (FEC) and Quality of Service (QoS)	
Clock Synchronization	Precision Time Protocol (PTP) IEEE 1588-2008, slave/master	
AV transport protocols	IP (unicast/multicast), UDP, RTP, RTCP, SAP/SDP, SMPTE ST 2110	
Network protocols	DHCP, mDNS, IGMP, TCP/IP, ARP, VLAN	
Configuration		
Network-based	Web-based configuration manager (GUI) JSON API over WebSocket, Secure remote system console	
COM port	Command line interface	
Upgrade	Firmware field upgradable (Over-the-air)	
Product Code	HV4K2-TX Transmitter HV4K2-RX Receiver	HJ4K2-TX Transmitter HJ4K2-RX Receiver

For additional information, please contact your local sales representative or visit our website www.silexinsight.com