High-End

Video Wall Controller



MULTIPLE LAYERS FPGA VIDEOWALL CONTROLLER





Hardware Based Design

High performance video processing equipment with hardware architecture design.

- ★No more computer high-end specification.
- ★No more high-end Graphic Processing Unit (GPU Card).
- ★No more licenses.
- ★No more blue-screen OS crash.
- ★No more viruses and black screen.
- ★No more ransomwares, lost data.

FPGA Dedicated Chipset

Dedicated Field Programmable Gate Array (FPGA) chipset is a combination of processing unit that dedicated in video processing. This eliminated the limitation of a CPU or a GPU from conventional Software or PC controller.

Without the use of PCI – Express card, the unit can work flawlessly when adding or editing the total layout of the videowall set up. As each of the FPGA chip is working independently, user can replace or add new input / output card without turning off the whole chassis.





Module design with Hot Swap

Multiple form of connections for client to custom fit their system.

Client can now combine HDMI - DVI - VGA - HDBaseT - IP Streaming in one total solution, maximizing system integration.

Reduce the total cost of investment in both pre & post phase of expansion. Chassis also support control multiple videowalls, further simplify the complexity of connections and management.

Features

- High-end 4 Layers MPiP™ Cross Screen
 - Support up to 4 Layers Matrix Picture in Picture (MPiP $^{\mathbf{m}}$) in each screen
- Easy control with Drag & Drop
 - Customize complex layout with simple Click Drag Drop
- High-end Video Wall Control
 - Support Overlap, Roaming, Stretching, Zoom in / out.
- Front Panel Touch Screen
 - Control scene mode, save / recall profile, IP setting with just a touch
- IP Camera Direct Stream (iDirect Stream™)
 - IP input Card can support streaming video feed direct from IP CCTV Cameras.
- Background Image Scrolling Text Scheduling
 Support Static Background Image and Scrolling Text for Bank and Stock house Video Wall

Support scene mode Scheduling - Cycle for advertising - digital signage Video Wall







VIDEO WALL I/O CARD Multi Layers HDMI Input Card

Features

- ASIC video chipset
- Modular Design Hot swap
- Seamless Switching
- Bezel Compensation
- MPiPTM Multiple Layers
- 1920 x 1200 @ 60Hz
- Image Cropping
- Character Superimpose
- CE / FCC / RoHS Complied
- Auto Program EDID



SPECIFICATION

Protocol	HDMI 1.3 / 1.4
Input Card Interface	4 x HDMI Female
Resolution Support	1920 x 1200 @ 60Hz (Max)
Pixel Clock	165 / 340 MHz (Max)
Compliance	HDMI 3D - Deep Color - 4K - CEC
Control	Internal Bus with Chassis ASIC
Data Rate	10.2 Gbps (3.4Gbps per lane)
Clock Jitter	<0.15 Tbit
Rise time	<0.3Tbit (20%-80%)
Fall time	<0.3Tbit (20%-80%)
Max Delay	5 nano Second (nS) ±1nS
Signal Strenght	T.M.D.S. +/- 0.4Vpp
Singal Level	T.M.D.S. 2.9V min /3.3V max
Impedance	50 Ω
EDID	Default EDID - EDID Programming
Maximum DC bias	15mV
Signal Level	T.M.D.S 2.9V / 3.3V
HDCP	Support HDCP 1.3 / 1.4

Scaler	Built-in Scaler
Hot-swap	Support
Color Depth RGBA	8 bits per channel. Total 32bit/pixel
Multiple Layers	Support - 4 layers MPiP TM
Weight	About 500g
Power Consumption	About 15W

