

# High-End

## Video Wall Controller



### ACVM 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.

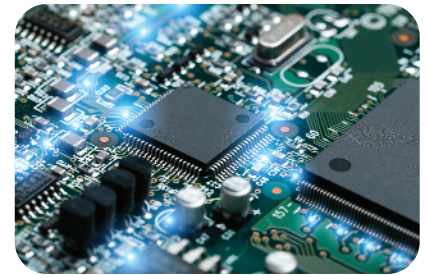


## FPGA Dedicated Chipset

Dedicated Field Programmable Gate Array (FPGA - Tritium™ 2<sup>nd</sup>gen - 2280 Gbps) chipset is a combination of processing unit that dedicated in video signal.

This eliminated the limitation of a CPU or a GPU from conventional Software or PC controller. The unit supports 24/7 working time with over 60,000 hours MTBF.

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.

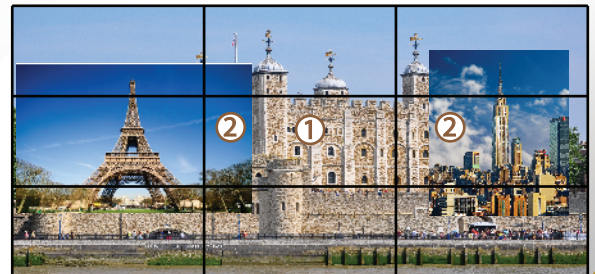


## Module design with Hot Swap

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

Client can now combine HDMI - DVI in one total solution, maximizing system integration for IT rack (19").

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 2 up to \*4 Layers MPiP™ - Cross Screen**  
Support 2 Layers MPiP™, up to \*4 Layers-Matrix Picture in Picture (MPiP™) 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.
- **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
- **WEB GUI control (Opt)**  
Control the video wall controller directly from TCP/IP without the need of installing any software

## VIDEO WALL CONTROLLER - ACV2 08 x 12 Cross Screens Video Wall

### FEATURES

- Pure Hardware Structure - FPGA
- Modular Design - Hot swap
- Seamless Switching - Auto EDID - 5ms
- Bezel Compensation with Scaler
- Multiple users / rights management
- Character Superimposition, Scrolling Text (opt)
- Multiple video wall management - up to 4
- Signal preview - WEB GUI control (opt)
- Support Redundant Power Supply (opt)
- Control Room Mode with over IP KVM system extension
- High-end 2 Layer up to \*4 Layers MPiP™



### SPECIFICATION

|                                           |                                                                      |
|-------------------------------------------|----------------------------------------------------------------------|
| Start up time                             | 10s                                                                  |
| Switching time                            | 5ms                                                                  |
| Chassis size (mm)                         | 1.5U                                                                 |
| Max Data Rate                             | 15.2 Gbps (3.8Gbps per Lane)                                         |
| Input Interface Port                      | 8                                                                    |
| Output Interface Port                     | 12                                                                   |
| Interface Support<br>(Input / Output)     | HDMI                                                                 |
| Total number of<br>Input / Output channel | 256 channel 4K / 512 channel 1080p<br>with Smart Management Grouping |

|                                                 |                                                                |
|-------------------------------------------------|----------------------------------------------------------------|
| Control                                         | Over IP / RS-232 / WEB GUI (OPT)                               |
| HDMI version                                    | 1.3 - Support 3D , Deep Color                                  |
| HDCP version                                    | 1.4 / 2.0 / 2.2                                                |
| Distant support                                 | 18-300m with AOC cables / Extenders                            |
| Resolution Input / Output<br>(8 Bit RGBA color) | 1280 x 720 @ 120Hz<br>1920 x 1080 @ 60Hz<br>1920 x 1200 @ 60Hz |

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| Processing chipset | FPGA - Tritium™ 2 <sup>nd</sup> gen                               |
| Screen layer       | 2 Layers - *Up to 4 Layers MPiP™                                  |
| Hot-swap   EDID    | Support   Auto EDID                                               |
| Power supply       | Main - Support Redundant (OPT)                                    |
| Interface link     | Analog - Digital - IP Stream                                      |
| Output restriction | Support all type of display<br>(Screens / Projectors / DLP / LED) |
| Mobile Control     | Support iOS & Android                                             |
| One click ON/OFF   | Support                                                           |

|                                 |                                    |
|---------------------------------|------------------------------------|
| Pixel Clock                     | 225 Mhz                            |
| HDMI impedance                  | 100 Ω - ESD Protection             |
| Power Rating                    | 100-240 VAC; 50/60Hz               |
| Power Consumption               | 100 - 450 W                        |
| Fan Airflow                     | 55 - 65 cfm (12VDC)                |
| Operating Temperature           | -20 ~ 70°C                         |
| Storage Temperature             | 10 ~ 90°C                          |
| Storage / Operating<br>Humidity | 5~95% RH<br>(without condensation) |

\*4 Layers MPiP™ configuration will allocate double output video bandwidth on each port, the total number of output operational ports will be reduced in half.

# VIDEO WALL CONTROLLER - ACV2

## 08 x 12 Cross Screens Video Wall

