

# High-End

## Video Wall Controller



### MULTIPLE LAYERS FPGA VIDEOWALL CONTROLLER



### Hardware Based Design

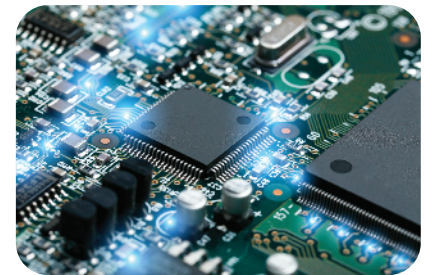
High performance video processing equipment with hardware architecture design.

- ★ 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 - 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 - VGA - HDBaseT - IP Streaming 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 4 up to \*8 Layers MPiP™ - Cross Screen**  
Support 4 Layers MPiP™, up to 8 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.
- **Front Panel Touch Screen**  
Control scene mode, save / recall profile (up to 32), 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
- **WEB GUI control (Opt)**  
Control the video wall controller directly from TCP/IP without the need of installing any software



## VIDEO WALL CONTROLLER

### 36 x 36 / 48 x 24 Cross Screens Video Wall

#### FEATURES

- Pure Hardware Structure - FPGA
- Modular Design - Hot swap - Hybrid I/O
- Seamless Switching - Auto EDID - 5ms
- Bezel Compensation with Scaler
- Multiple users / rights management
- Character Superimposition, Scrolling Text (opt)
- Ultra HD Background Image (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 4 Layer up to \*8 Layers MPiP™



\*All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement. ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

#### SPECIFICATION

Start up time	10s
Switching time	5ms
Chassis size (mm)	6.5U   440 x 400 x 290
Max Data Rate	15.2 Gbps (3.8Gbps per Lane)
Input Interface Port	4 - 48
Output Interface Port	4 - 36
Interface Support (Input / Output)	VGA / CVBS / YPbPr / SDI / IP HDBaseT/DVI/DP/HDMI/Fiber
Total number of Input / Output channel	256 channel 4K / 512 channel 1080p with Smart Management Grouping

Control	Over IP / RS-232 / Touchscreen RS-232 out / 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 (8 Bit RGBA color)	1280 x 720 @ 120Hz 1920 x 1080 @ 60Hz 1920 x 1200 @ 60Hz 4092 x 2160 @ 30Hz

Software Language English / Chinese / Vietnamese  
other language available on request

Processing chipset	FPGA - Tritium™ 2 <sup>nd</sup> gen
Screen layer	4 Layers - *Up to 8 Layers MPiP™
Hot-swap   EDID	Support   Auto EDID
Power supply	Main - Support Redundant (OPT)
Preview signal	Support Preview card- (OPT)
Interface link	Analog - Digital - IP Stream
Output restriction	Support all type of display (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	-15 ~ 65°C
Storage Temperature	-30~75°C
Storage / Operating Humidity	10 ~ 90RH (without condensation)

\*8 Layers MPiP™ configuration will allocate double output video bandwidth on each port, the total number of output operational ports will be reduced in half.

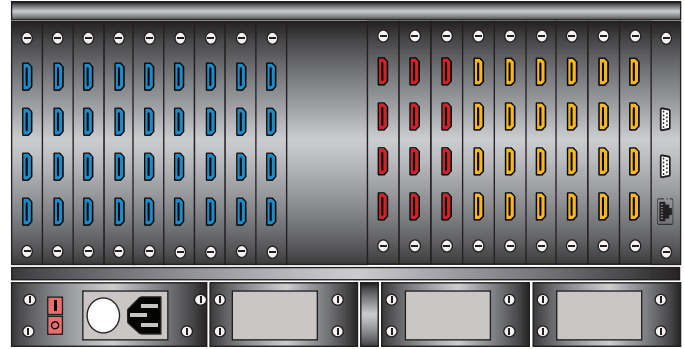
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### HYBRID I/O SLOT

Advance FPGA chip allow Angustos Video Wall Controller chassis to set up flexible input / output slot. Hybrid I/O Slot can be both Input or Output slot

-  INPUT PORT
-  OUTPUT PORT
-  HYBRID I/O PORT
-  POWER MODULE
-  ETHERNET PORT (Over IP Control)
-  RS-232 PORT



ACVW4-4824ST : 6.5U chassis

ACVW4-4824ST	MAX INPUT	MAX OUTPUT
INPUT PORT	48	36
OUTPUT PORT	24	36

### INPUT

### CONNECTION DIAGRAM

### OUTPUT

