Fusion Catalyst™ 4500B
Display Wall Processor

Speed, Flexibility, Perfection

The Fusion Catalyst™ 4500B is the base model and standard bearer of the Fusion Catalyst 4500 line of display wall processors. Users and industry pundits around the world have called the award-winning Fusion Catalyst product line the best-in-class since its introduction in 2010.

The Fusion Catalyst 4500B features bandwidth that reaches 336 Gbps, delivering the high resolution, high frame rate performance that users have come to expect from Jupiter Systems. The system is built around a PCI Express 2.0 chassis with 7 powerful, high speed slots, providing faster graphics, real time HD/SD/DVI/RGB frame rates, and better overall system performance than anything in its class. Redundant power supplies maximize system uptime. Featuring the performance and quality for which Jupiter is known, this is the solution for projects both large and small.

Add up to 4 Fusion Catalyst 4500E Expansion Chassis to a Fusion Catalyst 4500B to handle up to 216 inputs and up to 96 outputs.

And with an Intel E5 Six Core Xeon and Windows 7 onboard, you can run even the most demanding applications directly on the video wall. An optional second Xeon CPU is available for even more compute power.

Other models in the Fusion Catalyst 4500 line include the FC4500H which supports the display of HDCP protected content and the FC4500C which supports Jupiter's Canvas collaborative visualization software.

Supports ControlPoint™

The Fusion Catalyst 4500B supports Jupiter's ControlPoint™ display wall management software. Deployed in over 10,000 of the most demanding installations around the world, ControlPoint is the most complete and powerful solution for managing the display wall and everything on it.

ControlPoint offers an intuitive, object-based GUI. Defined objects such as DVI, RGB, HD, and video inputs, streaming video inputs, web browser windows, image viewers, and local and remote application windows can be dragged and dropped onto the display mimic. Setting up complex combinations of graphical and real-time data is simple, quick and intuitive. Toolbar shortcuts to commonly used functionality are provided to make adjustments to windows even more convenient.

Fusion Catalyst™ 4500B In Action

The Fusion Catalyst 4500B is the ideal solution for display wall projects of any size in which HDCP is not a requirement.

Each 3RU rack-mountable CPU Chassis and Expansion Chassis has 7 PCI Express 2.0 slots. Adding up to 4 Expansion Chassis to a CPU Chassis enables very large configurations. Driving a large display wall? The Fusion Catalyst 4500B supports up to 96 HD outputs at 1080p with 4 Expansion Chassis.

With optional Quad HD Decoder Cards, Fusion Catalyst 4500B can support up to 108 video streams. Most popular IP cameras and encoders are supported, as are desktop PC streams with real-time updates.

With optional Dual-Link DVI-I Input Cards, Fusion Catalyst 4500B can support up to 54 DVI-I, progressive scan component HD, or analog RGB inputs.

Up to 216 video inputs can be accommodated using optional Octal SD Video Input Cards.

Jupiter
by InFocus

Fusion Catalyst™ 4500B Specifications

CPU Chassis

System Architecture

Chassis

PCI Express 2.0 chassis with 7 high speed slots for input, output, or auxiliary cards

CPU Board

Processor

Intel E5 Six Core Xeon CPU
Optional 2nd Intel E5 Six Core Xeon CPU

System Memory

24GB RAM per CPU standard
Up to 96GB RAM per CPU optional

Storage

Drives

500GB hard disk drive standard, larger HDDs optional
Optional 256GB and 512GB solid state drives
Optional 2nd and 3rd drives
Optional RAID1 array with hot spare

Optical Storage

DVD-RW/CD-RW

Network Interface

Ethernet

Standard dual 100/1000 Mbps RJ45 ports

Input Devices (USB)

104-key keyboard and mouse

Expansion Chassis (optional)

FC4500E Expansion Chassis

Chassis

PCI Express 2.0 chassis with 7 slots for input or output cards

Graphics Inputs

Quad HD Decoder Input Card (Optional)

Inputs

Up to 108 inputs in 1 CPU Chassis + 4 Expansion Chassis
1 GigE connection, shared across 4 decoders
Supports real-time decoding of HD or SD streams
Supports most popular IP cameras and encoders

Dual DVI/RGB/HD Input Card (Optional)

Inputs

Up to 54 inputs in 1 CPU Chassis + 4 Expansion Chassis

Format

Dual-Link DVI up to 2560x1600, Single-Link DVI up to 2048x1200, progressive scan component HD (480p, 720p, 1080p), and analog RGB with any sync type (composite, separate, sync on green) up to 2048x1200

Pixel rate

Digital: Up to 270 MHz
Analog: Up to 210 MHz

Pixel format

32 bits per pixel

Windows

4 destination windows per card

Octal SD Video Input Card (Optional)

Inputs

Up to 216 inputs in 1 CPU Chassis + 4 Expansion Chassis

Input format

NTSC, PAL

Windows

16 destination windows per card

Octal Video Connection Module

Dual BNC-F connectors support S-Video or Composite on 1RU 19" rackmount panel with 2 BNC sub-panels
Each sub-panel has 16 BNC connectors for 8 Composite or 8 S-Video signals

Graphics Outputs

Fusion Catalyst 4500 Output Card

Outputs

Up to 96 outputs in 1 CPU Chassis + 4 Expansion Chassis

Resolution

Digital: 640x480 to 1920x1080 pixels per output

Color Depth

32 bits per pixel

Output Signal

DVI-D single-link connector or HDMI connector, depending on configuration

Other

Rackmount CPU Chassis & Expansion Chassis

Dimensions

5.25" H x 19" W x 25.5" D
(13.3 cm x 48.3 cm x 64.8 cm)

Weight

53 lbs. (24.1 kg.)

Shipping weight

75 lbs. (34.1 kg.)

Operating Range

Temperature

Operating: 32°F – 104°F (0°C – 40°C)
Non-operating: 14°F – 150°F (-10°C – 66°C)

Humidity

10-90% non-condensing

Altitude

Up to 10,000 feet (3,048.0 m)

Electrical

Redundant power supplies

High efficiency (94%) with PMBus and I2C

Input voltage

100-240 VAC, auto-ranging power supply

Line frequency

50-60 Hz

Power consumption

500 Watts nominal per chassis

Regulatory

United States

UL 60950 listed, FCC Class A

Canada

cUL CSA C22.2, No. 60950

International

CE Mark, CB Certificate, IEC 60950, CCC, VCCI

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