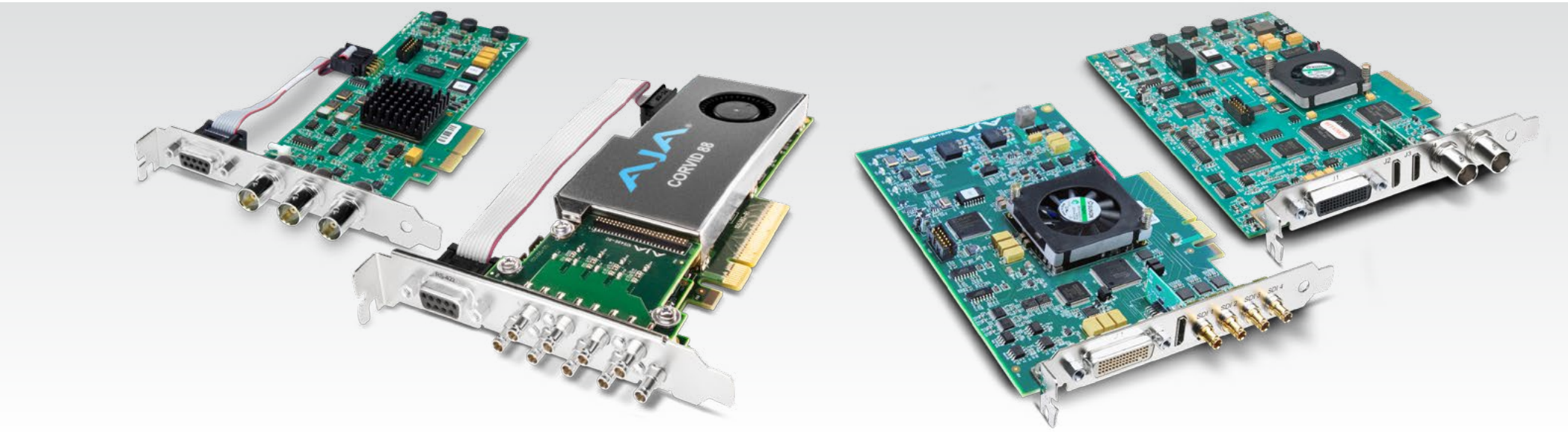
AJA Developer Program

AJA
VIDEO SYSTEMS

AJA Developer Program



Working Together

AJA's Developer program allows partner companies to incorporate AJA products into their systems. By utilizing existing, proven video I/O devices, partners leverage AJA's expertise to develop and support these technologies, saving money and getting their integrated products to market more quickly.

AJA technology is at the core of many great products. Superior quality and a straightforward development kit make AJA's Developer products easy to integrate into any Windows®, macOS® or Linux® environment.

AJA has a long history of building high quality, reliable video devices for the video industry. The AJA Developer Program provides you with access to that pedigree for integration into your own products.

Many of AJA's retail products are available for developer use. Whether you need to incorporate conversion technology into a prebuilt package using one of our full range of Mini-Converters, or integrate a KONA video I/O card into a custom setup, you have access to all the power and quality of AJA.

For more specific applications, the Corvid family of products uses the same technology as the retail cards but provides alternate form factors that allow you to further customize your configuration.

With capabilities starting from single channel I/O to multiple, simultaneous I/O streams, direct optical fiber integration, high bandwidth applications and Broadcast IP with KONA IP, there's a Developer product to fit every need and every price range.

AJA's comprehensive SDK and development tools will help you integrate into any environment with support for Windows®, macOS® and Linux. As a developer partner, you will have direct access to AJA's technical support team, which is known throughout the industry for fast and effective response.

AJA Developer Program

Products at a Glance

Corvid 88

8-lane PCIe 2.0 card for 8/10-bit YCbCr or 12-bit RGB with simultaneous 4K in and out or 8 independent mixed channel I/O

Corvid 88 models available:
- *Corvid 88 Low Profile or Standard*
- *Corvid 88 Fanless*

Corvid 44 & 44 BNC

8-lane PCIe 2.0 for 8/10-bit YCbCr or 12-bit RGB with 4 independent mixed channel I/O or single 4K in/out

Corvid 44 models available:
- *Corvid 44 Low Profile or Standard*
- *Corvid 44 Fanless*
- *Corvid 44 BNC Standard only*

Corvid 24

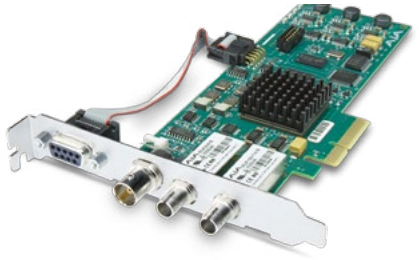
4-lane PCIe 2.0 8/10-bit with a single 4K or 4 independent channels I/O digital 3G-SDI I/O. Bypass relays for continuation of SDI input signal to SDI output in event of power failure

Corvid 22

4-lane PCIe 2.0 for 8/10-bit uncompressed with 2 independent channels I/O digital 3G-SDI I/O

Corvid 3G Fiber

4-lane PCIe 2.0 for 8/10-bit uncompressed digital 3G-SDI over Fiber I/O



Corvid 3G

4-lane PCIe 2.0 for 8/10-bit uncompressed digital 3G, HD, SD I/O

Corvid 3G models available:
- *Standard or Low Profile*
- *PCIe Bracket Available*

Corvid

4-lane PCIe 2.0 for 8/10-bit uncompressed digital SD, HD I/O

Corvid models available:
- *Standard or Low Profile*
- *PCIe Bracket Available*

Corvid HB-R

HDBaseT integration of video up to 4K/60p, 8-Channel embedded audio, power and RS-232 control plus HDMI output on a 4-lane PCIe 2.0 card

AJA Developer Program

Products at a Glance

KONA® IP

8-lane PCIe 2.0 I/O pipeline for IP workflows to 10 GigE supporting uncompressed video up to 1080p 50/60 fps with support for SMPTE 2022-6/7 and VSF TR-01 JPEG 2000. HDR workflows supported via HDR 10, HLG and Dolby Vision tunneling and signaling.

KONA 4

Powerful High Frame Rate capabilities up to 4K 50/60p and software integration for editorial, graphics and live streaming. HDR workflows supported via HDR 10, HLG and Dolby Vision tunneling and signaling.

KONA LHi

Multi-format analog and digital I/O with 3G-SDI, HDMI and up, down, cross-conversion for HD/SD workflows

KONA LHe Plus

HD and SD analog and digital I/O with HD to SD down conversion

Corvid HEVC

4K and multi-channel, 8-lane PCIe 2.0 HEVC encoding card supporting up to 4K 60p video input as well as file to file encoding

Io® 4K

Powerful High Frame Rate capabilities up to 4K 50/60p and software integration for editorial, graphics, live streaming across Thunderbolt™ 2. HDR workflows supported via HDR 10, HLG and Dolby Vision tunneling and signaling.

Io XT

Professional 3G-SDI and HDMI I/O for HD/SD workflows across Thunderbolt

Corvid 88

High Density Multi-Stream, Multi-Format PCIe 2.0 I/O Card

Features at a Glance

- Up to eight independent* channels 3G, HD, 3G-SDI I/O
- All 4K/UltraHD/2K/HD/S video formats
- 3G-SDI input/output for High Frame Rate (HFR) support
- 8- or 10-bit YCbCr and 12-bit RGB frame buffer formats
- 4 independent Mixer/Keyer widgets.
- 4 independent 16-Ch 48 kHz SDI embedded audio I/O engines
- 8-lane PCIe 2.0
- Analog Color Black or HD Tri-Level Sync
- Three year warranty

** Channels must use the same master clock. Eg, 29.97 and 59.94.*

Processing

- 8 – Frame stores (In or Out)
- 8 – Color space converters
- 4 – Mixer/Keyer widgets
- 8 – 1D LUTs
- 8 – Dual Link in
- 8 – Dual Link out
- 8 – 16-Channel embedded audio engines

Corvid 88

Corvid 88 is designed for Development Partner applications that require multiple simultaneous input and output streams. Corvid 44 provides four independent BNC connections while Corvid 88 expands that to a total of eight BNC connections on a single card. Each BNC connection can be set programmatically as either an input or output and each can support a different video format, provided all formats use the same clock timing. This allows for maximum flexibility in applications where high density I/O is required, such as playout or ingest servers. Connections can also be linked together to support Dual Link or 4K/UltraHD formats.

$2,795 US MSRP*

Find a Reseller

Corvid 88 Low Profile

Corvid 88 Fanless

Corvid 88 Fanless Low Profile

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 88 Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 720p 50, 50.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- 8 x 3G-SDI BNC

Video Output Digital

- 8 x 3G-SDI BNC

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Size (w x d x h)

- .875" x 7.25" x 4.875" (22.23mm × 184.15mm × 123.83mm)

Weight

- 0.4 lb (0.2 kg)

Power

- 21W typical, 23W maximum

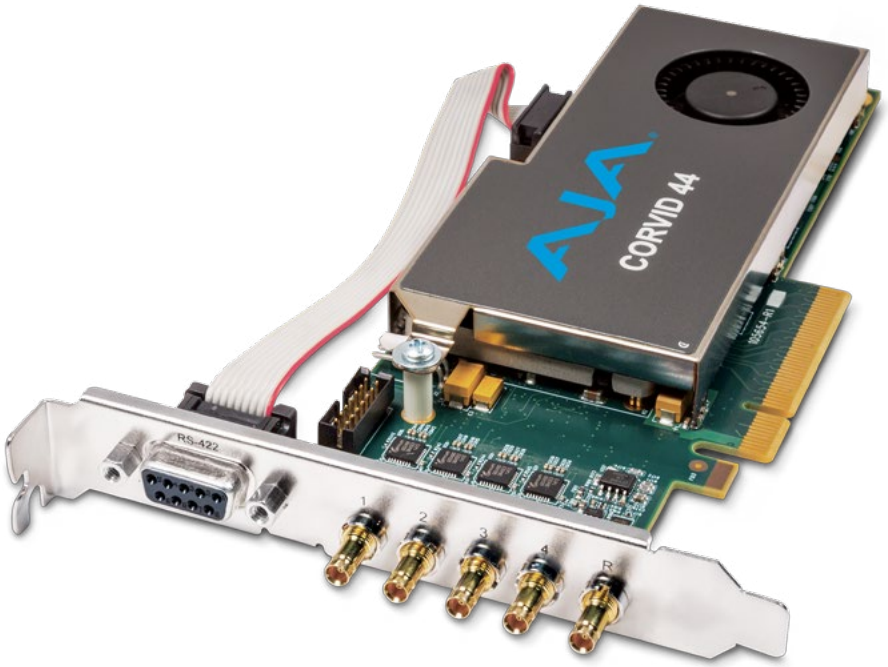
Environment

- Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Operating Relative Humidity: 10-90% non-condensing
- Safe Storage Temperature (Power OFF): -40 to 70 degrees C (-40 to 158 degrees F)
- Operating Altitude: <3,000 meters (<10,000 feet)
- Airflow across the board for fanless models
  - 100LFM @25deg C or lower, computer chassis must have vented opening to exterior, immediately adjacent to PCIe shield (heatsink side), to permit 100LFM across heatsink

Click here For full product specifications visit www.aja.com/en/products/developer/corvid-88#techspecs

Corvid 44

Flexible Multi-Format I/O



Corvid 44

Increase your video and audio I/O capacity with Corvid 44. Configure each SDI connection individually as input or output and mix formats for up to 4 HD or SD channels on a single card. As demand rises for higher resolutions, combine SDI connections into a single 4K/UltraHD channel, allowing incredible flexibility and futureproofing.

$1,895 US MSRP*

Find a Reseller

Features at a Glance

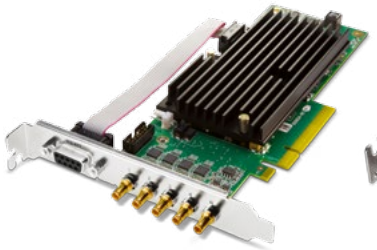
- Up to four independent* bidirectional channels
- 3G-SDI input/output for High Frame Rate (HFR) support
- All 4K/UltraHD/2K/HD/S video formats
- 8 or 10-bit YCbCr and 12- bit RGB frame buffer formats
- 2 independent Mixer/Keyer widgets
- 4 independent 16-Ch 48 kHz SDI embedded audio I/O engines
- Switchable LTC/Reference input connection
- Analog Color Black or HD Tri-level Sync
- 8-lane PCI 2.0 interface
- Full height and half height models
- RS-422 on internal header or bracket (on full height model)
- LTC input on internal header
- Three Year warranty

** Channels must use the same master clock. Eg, 29.97 and 59.94*

Processing

- 4 – Frame stores (In or Out)
- 4 – Color space converters
- 2 – Mixer/Keyer widgets
- 4 – 1D LUTs
- 4 – Dual Link in
- 4 – Dual Link out
- 4 – 16-Channel embedded audio engines

Corvid 44 Low Profile



Corvid 44 Fanless

Corvid 44 Fanless Low Profile

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 44 Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 720p 50, 50.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- 4 x 3G-SDI BNC

Video Output Digital

- 4 x 3G-SDI BNC

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Size (w x d x h)

- .875" x 7.25" x 4.875" (22.23mm × 184.15mm × 123.83mm)

Weight

- 0.4 lb (0.2 kg)

Power

- 17W typical, 19W maximum

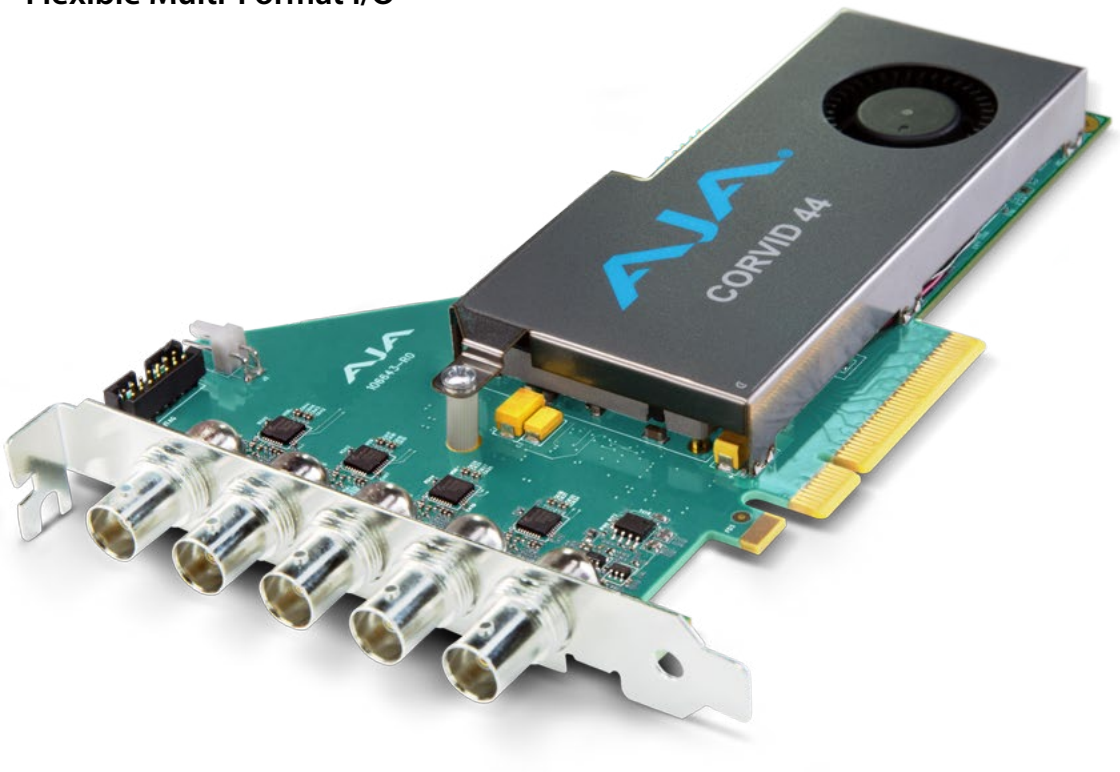
Environment

- Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Operating Relative Humidity: 10-90% non-condensing
- Safe Storage Temperature (Power OFF): -40 to 70 degrees C (-40 to 158 degrees F)
- Operating Altitude: <3,000 meters (<10,000 feet)
- Airflow across the board for fanless models
  - 100LFM @25deg C or lower, computer chassis must have vented opening to exterior, immediately adjacent to PCIe shield (heatsink side), to permit 100LFM across heatsink

Click here For full product specifications www.aja.com/en/products/developer/corvid-44#techspecs

Corvid 44 BNC

Flexible Multi-Format I/O



Corvid 44 BNC

Increase your video and audio I/O capacity with Corvid 44 BNC, now available with full size BNC connections. Configure each SDI connection individually as input or output and mix formats for up to 4 HD or SD channels on a single card. As demand rises for higher resolutions, combine SDI connections into a single 4K/UltraHD channel, allowing incredible flexibility and futureproofing.

$1,895 US MSRP*

Find a Reseller

Features at a Glance

- 4 x 3G-SDI full size BNC connectors
- Up to four independent* bidirectional channels
- 3G-SDI input/output for High Frame Rate (HFR) support
- All 4K/UltraHD/2K/HD/S video formats
- 8 or 10-bit YCbCr and 12-bit RGB frame buffer formats
- 2 independent Mixer/Keyer widgets.
- 4 independent 16-Ch 48 kHz SDI embedded audio I/O engines
- Switchable LTC/Reference input connection
- Analog Color Black or HD Tri-level Sync
- 8-lane PCI 2.0 interface
- RS-422 on internal header or bracket (on full height model)
- LTC input on internal header
- Three year warranty

** Channels must use the same master clock. Eg, 29.97 and 59.94*

Processing

- 4 – Frame stores (In or Out)
- 4 – Color space converters
- 2 – Mixer/Keyer widgets
- 4 – 1D LUTs
- 4 – Dual Link-in
- 4 – Dual Link-out
- 4 – 16-Channel embedded audio engines

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 44 BNC Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 25, 29.97, 30
- (HD) 720p 50, 50.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input and or Output Digital

- 4 x 3G-SDI BNC

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Size (w x d x h)

- 0.727" × 6.6" × 2.713" (18.47mm × 167.65mm × 68.90mm)

Weight

- 0.4 lb (0.2 kg)

Power

- 17 watts typical, 19 watts max

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)
- Airflow across the board for fanless models
  - 100LFM @25deg C or lower, computer chassis must have vented opening to exterior, immediately adjacent to PCIe shield (heatsink side), to permit 100LFM across heatsink

Click here For full product specifications www.aja.com/en/products/developer/corvid-44-bnc#techspecs

Corvid 24

4-lane PCIe 2.0 Card for 8 or 10-bit with a Single 4K or 4 Independent Channels I/O Digital 3G-SDI I/O

Corvid 24

Take the next step in multi-channel video and audio I/O with Corvid 24. Corvid 24 is the intermediate solution for high density I/O, supporting up to 4 independent* channels of capture or output, with separate LTC, embedded 24-bit audio, and metadata for each channel. Or all four connections can be used to support full 4K; the choice is yours. And with multiple operating system support, Corvid 24 will work in almost any environment.

** Channels must all have the same frame rate, video standard and frame geometry.*

$1,895 US MSRP*

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Features at a Glance

- Bypass Relay for continuation of SDI input signal to SDI output in event of power failure
- 4-lane PCIe 2.0 card
- 4 independent* channels 3G-SDI I/O
- All 4K/UltraHD/2K/HD/S video formats
- 3G-SDI Input/Output for 1080p50/60 and Video/Key (Dual Link not supported)
- 8 or 10-bit YCbCr and RGB frame buffer formats
- Failover bypass relays with Watchdog timers (2in/2out mode only)
- 2 Mixer/Keyer widgets. This allows output of two simultaneous video/key pairs over 3G-SDI. It also allows for up to two simultaneous downstream keyers.
- 4 independent 16-Ch 48 kHz SDI embedded audio I/O engines
- Analog Color Black or HD Tri-level Sync
- Three year warranty

** Channels must use the same master clock. Eg, 29.97 and 59.94*

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 24 Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25
- (UltraHD) 3840 x 2160p 23.98, 24, 25
- (UltraHD) 3820 x 2160PsF 23.98, 24, 25
- (2K) 2048 x 1080p 23.98, 24, 25
- (2K) 2048 x 1080PsF 23.98, 24, 25
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 525i 29.97
- (SD) 625i 25

Video Input Digital

- 3G-SDI
- SMPTE-259/292/296/424

Video Output Digital

- 3G-SDI
- SMPTE-259/292/296/424

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Reference

- Analog Color Black or HD Tri-level sync

Size (w x d x h)

- .708" x 6.57" x 3.86" (18mm x 167mm x 98mm)

Power

- 12w typical, 15w maximum

Environment

- Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Operating Relative Humidity: 10-90% non-condensing
- Safe Storage Temperature (Power OFF): -40 to 70 degrees C (-40 to 158 degrees F)
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid24#techspecs

Corvid 22

4-lane PCIe 2.0 Card for 8 or 10-bit Uncompressed w/2 Independent Channels I/O Digital 3G-SDI I/O

Corvid 22

Get multiple I/O Channels without taking up a lot of space. Corvid 22 provides high performance, dual channel video and embedded 24-bit audio I/O in a single PCIe card. Two completely independent channels* handle resolutions up to 2K and high frame rate 1080p as well. With separate LTC and RS-422 machine control per channel and support for multiple operating systems, Corvid 22 gives you all the performance and capabilities you need.

** Channels must all have the same frame rate, video standard and frame geometry.*

$1,395 US MSRP*

Find a Reseller

Features at a Glance

- 4-lane PCIe 2.0 Card
- 2-Channels 3G-SDI Input, 2-Channels 3G-SDI Output
- All 2K/HD/SD Video Formats
- 3G-SDI Input/Output for 1080p50/60 and Video/Key (Dual Link not supported)
- 8 or 10-bit YCbCr and RGB frame buffer formats
- 2 Mixer/Keyer widgets. This allows output of two simultaneous video/key pairs over 3G-SDI. It also allows for up to two simultaneous downstream keyers.
- 2 Independent 16-Ch 48 kHz SDI embedded audio I/O engines
- Analog Color Black or HD Tri-level Sync
- Three year warranty

** Channels must use the same master clock. Eg, 29.97 and 59.94*

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 22 Tech Specs

Video Formats

- (2K) 2048 x 1080p 23.98, 24, 25
- (2K) 2048 x 1080PsF 23.98, 24, 25
- (HD) 1080i 25, 29.97, 30
- (HD) 1080psF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- 3G-SDI, SMPTE-259/292/296/424

Video Output Digital

- 3G-SDI, SMPTE-259/292/296/424

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Reference

- Analog Color Black or HD tri-level sync

Output Sitter (timing / alignment)

- (3G) .45 UI/.17 UI
- (HD) .21 UI/.08 UI
- (SD) .2 UI/.2 UI

Timecode

- Independent LTC In/Out

Machine Code

- Independent RS-422

Size (w x d x h)

- .708" x 6.57" x 3.86" (18mm x 167mm x 98mm)

Power

- 12w typical, 15w maximum

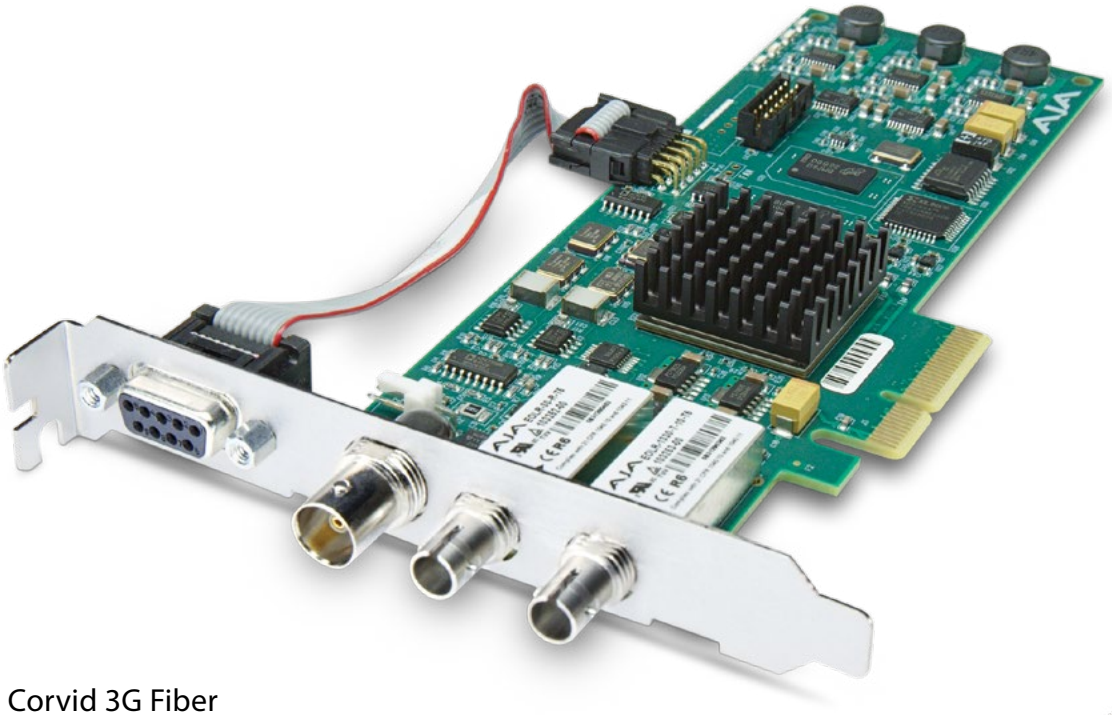
Environment

- Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Operating Relative Humidity: 10-90% non-condensing
- Safe Storage Temperature (Power OFF): -40 to 70 degrees C (-40 to 158 degrees F)
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid22#techspecs

Corvid 3G Fiber

4-lane PCIe 2.0 Card for 8 or 10-bit Uncompressed Digital 3G-SDI over Fiber I/O.



Features at a Glance

- 4-lane PCIe 2.0 Card
- 1-Channel 3G-SDI input and output over Fiber ST connectors
- 8 or 10-bit YCbCr and RGB framebuffer formats
- 1 Mixer/Keyer
- Available in standard PCIe (Corvid 3G Fiber) or PCIe Low Profile (Corvid 3G Fiber LP)
- 16-Ch SDI embedded audio I/O, 24-bit 48 kHz
- HD/SD Genlock, Reference Video or LTC Input (selectable)
- Three Year warranty

Corvid 3G Fiber

For installations where long cable runs are needed, fiber optic is the ideal solution and AJA's Corvid 3G Fiber allows direct input and output connections to your fiber infrastructure without the need to convert between SDI. Available in a standard sized PCIe card or "Low Profile" for when space is of the essence and support for multiple operating systems, Corvid 3G Fiber is the solution for the long haul.

$1,195 US MSRP*

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Corvid 3G Fiber Low Profile

* Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.

Corvid 3G Fiber Tech Specs

Video Formats

- (2K) 2048 x 1080p 23.97, 24, 25
- (2K) 2048 x 1080PsF 23.97, 24, 26
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 26, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- 3G-SDI, SMPTE-259/292/296/424 over ST Fiber connector

Video Output Digital

- 3G-SDI, SMPTE-259/292/296/424 over ST Fiber connector

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Reference

- Analog Color Black or HD Tri-level sync

Size (w x d x h)

- .55" x 6.61" x 2.16" (14mm x 168mm x 55mm)

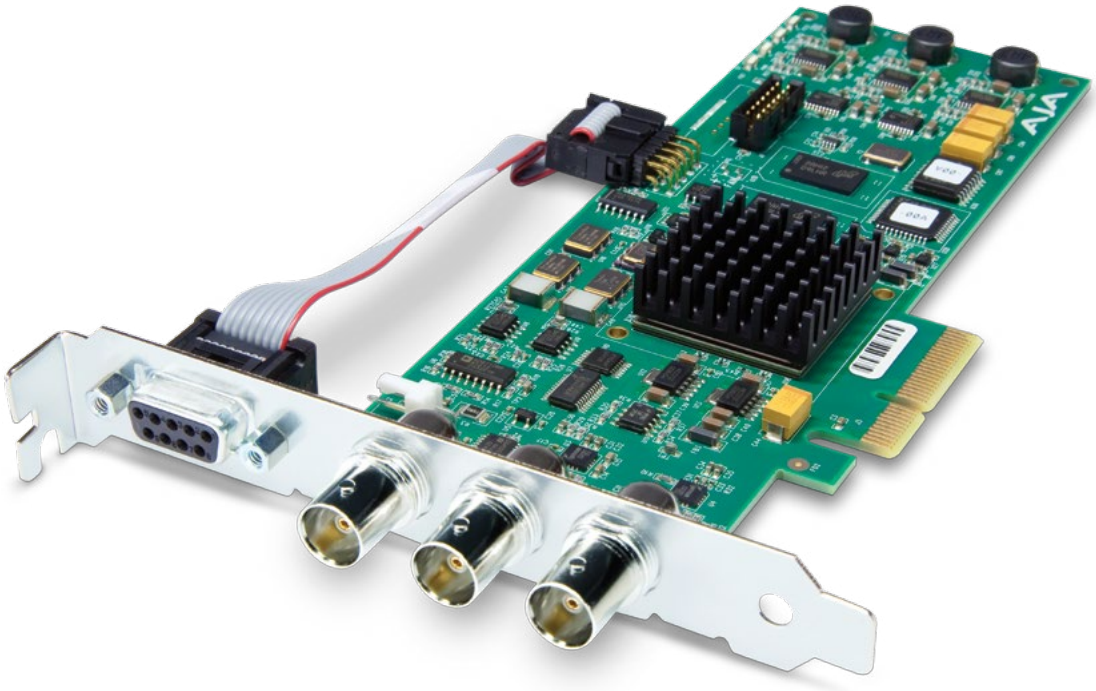
Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid-3g-fiber#techspecs

Corvid 3G

4-lane PCIe 2.0 Card for 8 or 10-bit Uncompressed Digital 3G-SDI I/O



Corvid 3G

Corvid 3G expands on the capabilities of the original Corvid with support for 3G-SDI signals and extra horsepower for more demanding applications and workflows. Available in a standard sized PCIe card or "Low Profile" for when space is of the essence.

$795 US MSRP*

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Corvid 3G Low Profile

Features at a Glance

- 4-lane PCIe 2.0 Card
- 1-Channel 3G-SDI input, 1-Channel 3G-SDI output
- 8 or 10-bit YCbCr and RGB framebuffer formats
- 1 Mixer/Keyer
- Available in standard PCIe (Corvid 3G) or PCIe Low Profile (Corvid 3G LP)
- 16-Channel SDI embedded audio I/O, 24-bit 48 kHz
- HD/SD Genlock, Reference Video or LTC Input (selectable)
- Three Year warranty

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid 3G Tech Specs

Video Formats

- (2K) 2048 x 1080p 23.98, 24, 25
- (2K) 2048 x 1080PsF 23.98, 24, 25
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- 3G-SDI, SMPTE-259/292/296/424

Video Output Digital

- 3G-SDI, SMPTE-259/292/296/424

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Reference

- Analog Color Black or HD Tri-level sync

Size (w x d x h)

- .55" x 6.61" x 2.16" (14mm x 168mm x 55mm)

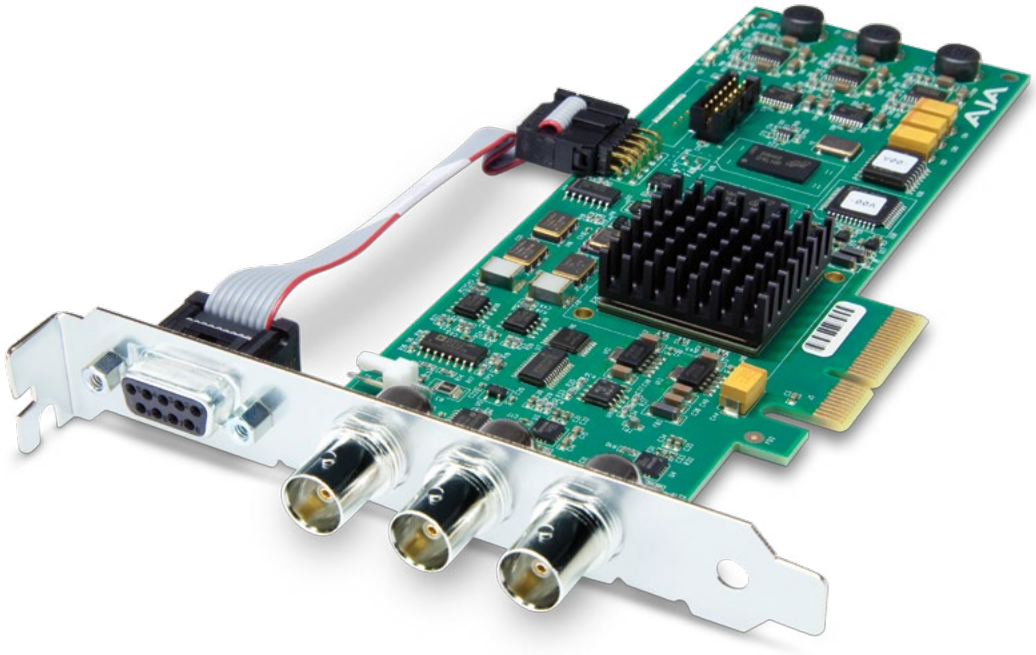
Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid3g#techspecs

Corvid

4-lane PCIe 2.0 Card for 8 or 10-bit Uncompressed Digital SD, HD I/O



Features at a Glance

- 4-lane PCIe 2.0 Card
- 1-Channel 3G-SDI Input, 1-Channel 3G-SDI Output
- 8 or 10-bit YCbCr and RGB framebuffer formats
- 1 Mixer/Keyer
- Available in standard PCIe (Corvid) or PCIe Low Profile (Corvid LP)
- 16-Ch SDI Embedded Audio I/O, 24-bit 48 kHz
- HD/SD Genlock, Reference Video or LTC Input (selectable)
- Three Year warranty

Corvid

Ensure you are getting the highest quality signal in and out of your application with AJA's Corvid card. Corvid is the proven platform for digital uncompressed video and audio I/O, with support for SD and HD as well as 16-Channels of embedded 24-bit audio. Available in a standard sized PCIe card or "Low Profile" for when space is of the essence, Corvid uses AJA's common API which is supported across multiple operating systems.

$595 US MSRP*

Find a Reseller

Corvid Low Profile

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid Tech Specs

Video Formats

- (HD) 1080i 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- HD-SDI/SDI, SMPTE-259/292/296

Video Output Digital

- HD-SDI/SDI, SMPTE-259/292/296

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Timecode

- Independent LTC In/Out

Machine Code

- Independent RS-422

Reference

- Analog Color Black or HD Tri-Level sync

Size (w x d x h)

- .55" x 6.61" x 2.16" (14mm x 168mm x 55mm)

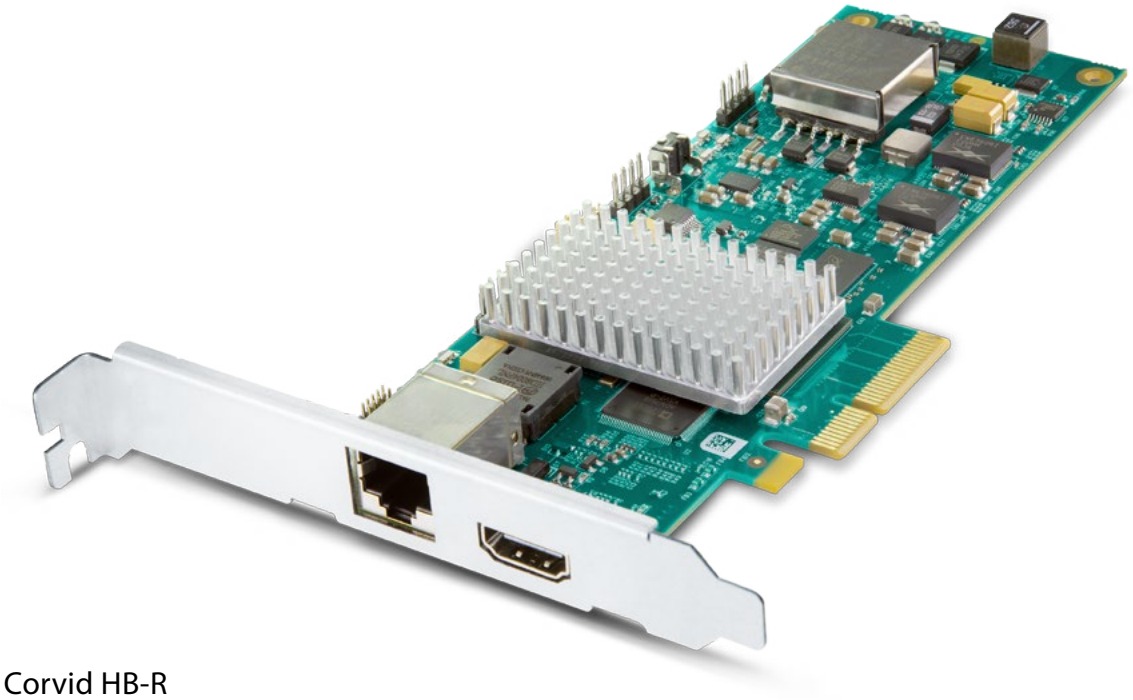
Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid#techspecs

Corvid HB-R

4-lane PCIe 2.0 Card for HDBaseT Integration of 4K/UltraHD/HD/SD Video, Audio, Power, and RS-232 Control



Corvid HB-R

Expand your application's reach with HDBaseT and the Corvid HB-R. Using a single Cat 5e/6 cable as input, the Corvid HB-R receives up to 4K/60p video (8-bit 4:2:0) and 8-Channel embedded audio.

It also delivers bidirectional VISCA/RS-232 control plus power up to 10W, and Corvid HB-R provides full time looped HDMI 1.4b output of the signal received via the HDBaseT input.

These features also make the Corvid HB-R the perfect desktop and server companion to AJA's RovoCam, the UltraHD HDBaseT camera.

$995 US MSRP* Find a Reseller

Features at a glance

- HDBaseT receiver
- Video, audio, RS-232, and power over a single Cat 5e/6 cable
- Supports up to 4K/60p 8-bit 4:2:0 video
- 8-Channel HDMI embedded audio I/O
- HDMI 1.4b full time looped output
- Supports 2-Channel discrete mic audio when used with RovoCam
- Bidirectional VISCA/RS-232 control over HDBaseT
- Up to 10W power and video with a single cable over HDBaseT
- 4-lane PCIe 2.0 Low Profile card
- Supports Linux V4L2 drivers
- Three Year warranty

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

Corvid HB-R Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30
- (4K) 4096 x 2160p 50, 59.94, 60 (8-bit 4:2:0)
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160p 50, 59.94, 60 (8-bit 4:2:0)
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080p 50, 59.94, 60
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30
- (HD) 1080p 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 525i 29.97
- (SD) 625i 25

Video Input Digital

- HDMI v1.4b over HDBaseT
- Video over HDBaseT
  - 24/30/36 bits/pixel, RGB or YUV
  - 300 MHz pixel clock maximum
  - 3.4 Gb TMDS data rate maximum per lane providing an aggregate 10.2Gbps total bandwidth
  - UltraHD/2K/HD/SD
  - No support for HDCP encrypted video

Video Output Digital

- HDMI v1.4b Output
- Active looped output of HDMI received on HDBaseT input
- No EDID interface
- No support for HDCP encrypted video
- Video out electronic copy of video negotiated at CORVID-HB-R HDMI receiver input

Audio Input Digital

- Audio over HDBaseT
  - 8-Channels embedded audio
  - 2-Channels discrete RovoCam microphone audio

Audio Output Digital

- 8-Channel HDMI embedded 48 kHz 24-bit

Power Support

- Power over HDBaseT
  - Support for up to 10W output maximum via IEEE 802.3AF interface

RS-232

- Serial port over HDBaseT
  - 115200 Baud interface intended for VISCA camera control

USB

- USB over HDBaseT
  - USB Host intended for camera firmware updates

Interface

- 4-lane PCIe 2.0

Size (w x d x h)

- Conforms to PCIe Card Electromechanical Specification Rev 1.0A Low Profile Add-in Card
- Without bracket: 6.7" x 2.7" x 0.7" (170mm x 69mm x 18mm), bracket is standard full height PCIe card size

Power

- 10-20V, 10W typical for card only, 16W typical when powering RovoCam, 18W max

Environment

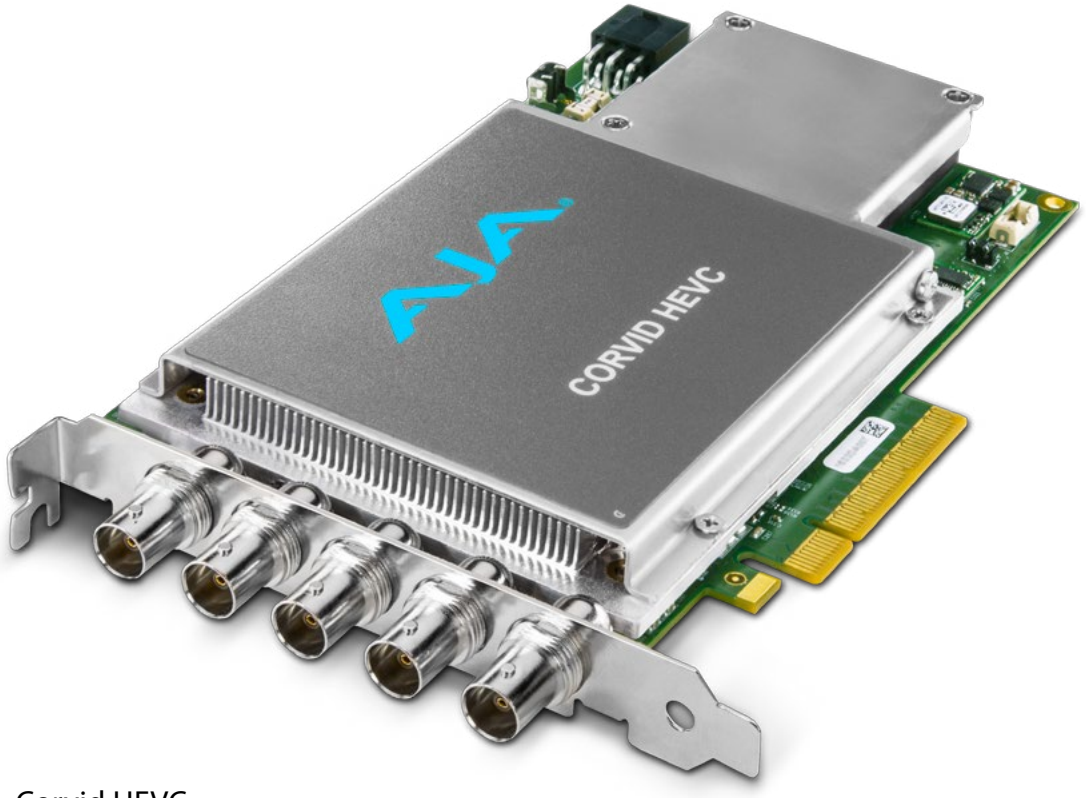
- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid-hb-r#techspecs

AJA Developer Program

Corvid HEVC

4K and Multi-Channel HEVC Encoding



Corvid HEVC

Corvid HEVC is an 8-lane PCIe 2.0 video encoder card providing realtime, low latency HEVC encoding at 4K, 1080p HD and lower resolutions. Development partners can use AJA's powerful SDK to integrate Corvid HEVC directly into their Windows and Linux applications using a flexible API for a variety of use cases.

$4,995 US MSRP* Find a Reseller

Workflows

- 4K/UltraHD Encoding
- Multi-Channel Independent Encoding
- File to File Encoding

Features at a Glance

- Realtime 4K/UltraHD/HD/SD HEVC hardware based encoding
- 8-lane PCIe 2.0 full height card
- Low power consumption
- Supports HEVC Main and Main10 profiles
- Supports 4:2:0 and 4:2:2 at 8- or 10-bits
- Supports bit rates for streaming and contribution quality
- Supported HEVC streams:
  - Single 4K/UltraHD stream up to 60 fps
  - As many as 4 streams at 1080p HD up to 60 fps
- 4 x 3G-SDI inputs
- 1 x LTC input
- 16-Channel embedded audio support per stream
- ANC data support
- Supports file to file encoding
- Built on AJA's powerful cross-platform NTV2 SDK for Windows and Linux
- AJA's extensive Developer Program partner support

Corvid HEVC Tech Specs

Video Formats

4K (Quadrant or Sample Interleave)
- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B

2K (Cropped to 1920 before encoder)
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30

HD
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 25, 29.97, 30
- (HD) 720p 50, 50.94, 60

SD
- (SD) 625i 25
- (SD) 525i 29.97

NOTE: These formats are recognized by the SDI inputs of Corvid HEVC

File Formats

In addition to the Video Formats, these formats are supported for file based encoding but are not recognized as SDI inputs
- (HD) 720p 24, 25, 29.97
- (SD) 625p 50
- (SD) 525i 30
- (SD) 525p 59.94, 60

Video Input Digital

- 4 x 3G-SDI BNC

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Compression

- Type
  - HEVC
- HEVC Profile
  - Main/Main 10
- HEVC Tier
  - Main/High
- HEVC Level
  - 1.0/2.0/2.1/3.0/3.1/4.0/4.1/5.0/5.1
- Bitrate 4K Format
  - 3 Mbps - 128 Mbps
- Bit Depth
  - 8 or 10-bit
- Chroma Sampling
  - 4:2:2/4:2:0

Bit Rate Control

- CBR/VBR

Size (w x d x h)

- .875" x 7.5" x 5" (22.23mm x 190.5mm x 127mm)

Weight

- 0.9 lb (0.4 kg)

Power

- Requires either PCIe bus power via graphics slot or ATX 6-pin from computer power supply

Environment

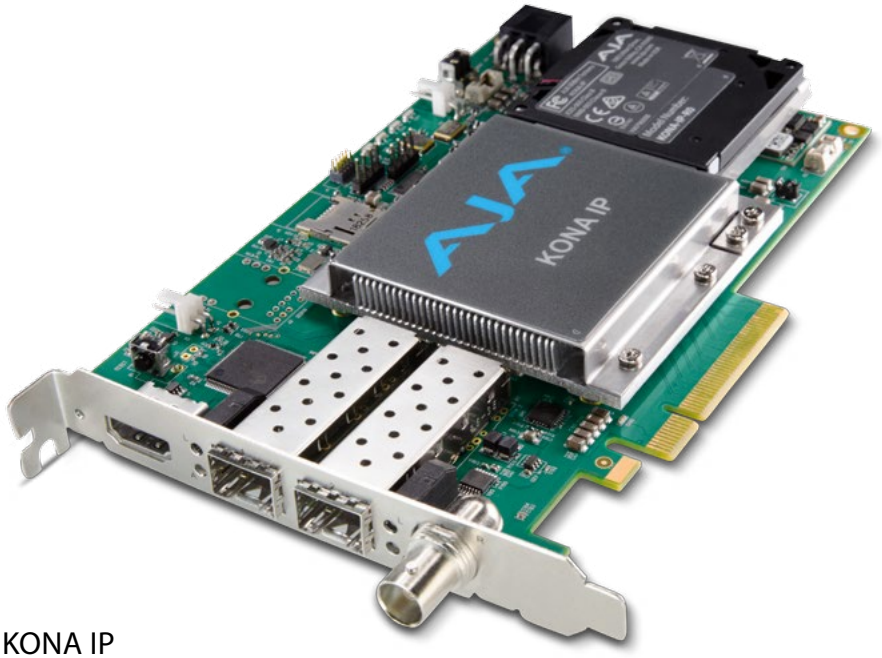
- Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Safe Storage Temperature (Power OFF): -40 to 70 degrees C (-40 to 158 degrees F)
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/developer/corvid-hevc#techspecs

AJA Developer Program

KONA IP

Simple, Compatible Multi-Channel I/O for IP Pipelines to 10 GigE

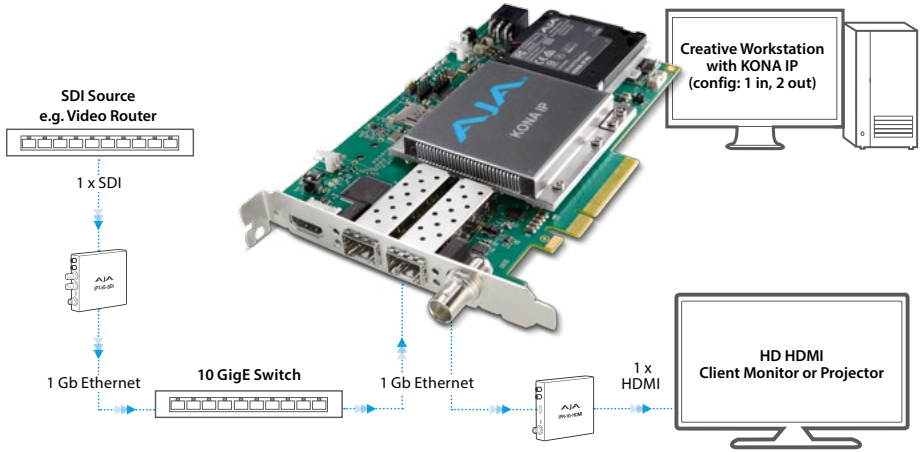


KONA IP

KONA IP offers users a single, powerful 8-lane PCIe 2.0 video and audio desktop I/O card with flexible IP connectivity. Two SFP cages provide multi-channel 3G-SDI HD support for easy routing of video over IP networks up to and including 10 GigE. KONA IP is designed as a flexible platform that supports today's SMPTE 2022-6 IP encapsulated uncompressed 3G-SDI, HD-SDI and SD-SDI video, audio and VANC data as well as offering 2022-7 support for redundant signal support crucial for broadcast needs. KONA IP also supports VSF TR-01 compliant JPEG 2000 workflows for HD video. Future support will add more compressed codecs, and advanced IP protocols such as TR-03, TR-04 and SMPTE 2110.

Features at a glance

- Supports HD ingest and output at frame rates up to 50/60 fps
- 2 x 10 GigE SFP connections for Multi-Channel input and/or output
- HDMI 1.4 output for local monitoring with 8-Channel audio
- HDR 10 Support - HDR Infoframe metadata along HDMI
- HLG Support - in accordance with HDMI 2.0b/CTA-861-G
- 16-Channel 48kHz 16- and 24-bit embedded audio
- Mac®, Windows® and Linux® support via AJA's Developer SDK
- 8-lane PCIe 2.0 video and audio desktop I/O card
- Supports 4:4:4 and 4:2:2 workflows
- Reference/LTC Input
- Software support within AJA Control Room™ and Control Panel



$2,495 US MSRP*

Find a Reseller

HDR

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

AJA Developer Program

KONA IP Tech Specs

Video Formats

- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 25, 29.97
- (HD) 720P 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Media Transport Interfaces

- SMPTE 2022-6, 2022-7
  - 2 x SFP+ Cages - SFPs not included
  - Recommended SFP modules: Finisar's FTLX1471D3BCL and Avago AFBR-709SMZ
- TR-01 compliant JPEG 2000 workflows*
  - 1 x SFP+ Cage - SFP not included
  - Recommended SFP module: Fiberstore SFP-GB-GE-T

**Optional Purchase*

Video Input

- SMPTE 2022-6, 2022-7
  - Up to 4-Channels input
- TR-01 compliant JPEG 2000* encoded within an MPEG-2 transport stream
  - HD video over 1Gb Ethernet
  - Up to 2-Channels input

**Optional Purchase*

Video Output Digital

- SMPTE 2022-6, 2022-7
  - Up to 4-Channels output
- TR-01 compliant JPEG 2000* encoded within an MPEG-2 transport stream
  - HD video over 1Gb Ethernet
  - Up to 2-Channels output
- HDMI v1.4
  - 30/36 bits/pixel, RGB or YUV, 2.25 Gbps
  - 2K/HD/SD
  - HDR 10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
  - HLG Support - in accordance with HDMI 2.0b/CTA-861-G**

**Optional Purchase*

***HLG support is application dependent. Check with your software manufacturer for compatibility.*

Audio Input Digital

- 16-Channel SDI embedded audio, 16- and 24-bit per channel, 48 kHz synchronous

Audio Output Digital

- 16-Channel SDI embedded audio, 16- and 24-bit per channel, 48 kHz sample rate, synchronous
- 8-Channel HDMI embedded audio, 48 kHz sample rate, synchronous

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

Reference and LTC I/O

- 1 x BNC assignable to reference video or LTC input

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Nonterminating

Electrical Interface

- 8-lane PCIe 2.0

Size (w x d x h)

- .75" x 8.25" x 5.0" (19.05mm x 209.55mm x 127mm)

Weight

- 0.7 lb (0.4 kg)

Power

- 25W typical, 27W maximum

Environment

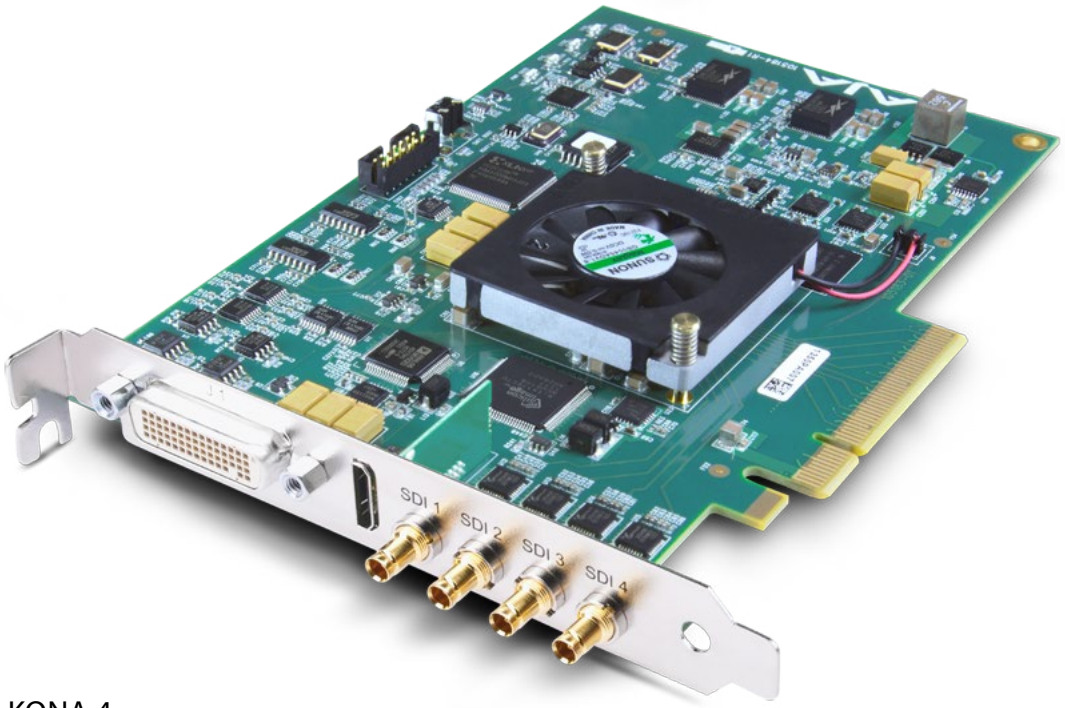
- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/kona-ip/#techspecs

AJA Developer Program

KONA 4

Powerful High Frame Rate Capabilities up to 4K 50/60p and Software Integration for Editorial, Graphics and Live Streaming



KONA 4

KONA 4 offers users a single, powerful 8-lane PCIe 2.0 video and audio desktop I/O card with unparalleled features for handling everything from SD to HD, 2K and 4K with full 10-bit 4:2:2 and 4:4:4 color spaces for fantastic image clarity, including HDR support for HDR 10, HLG and Dolby Vision tunneling and signaling. The futureproof architecture means you can easily work with HD and 2K now and switch to working at 4K resolution when the need arises, even at frame rates up to 50/60 fps, without the requirement for new hardware. KONA 4 has the power for the work you do today and into the future.

$1,995 US MSRP* Find a Reseller

Features at a Glance

- Supports 4K and UltraHD ingest and output at frame rates up to 50/60 fps
- Supports AJA Raw capture at 4K up to 120 fps via AJA Control Room
- Realtime up, down, cross-conversion with pristine 10-bit quality
- macOS, Windows and Linux support via AJA's Developer SDK
- 10-bit 4K/UltraHD and 2K/Dual Link/HD/SD input and output
- 12-bit color support (supported by some software vendors)
- HDMI 1.4b (UltraHD 50/60p 8-bit 4:2:0)
- HDR 10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
- HLG Support - in accordance with HDMI 2.0b/CTA-861-G
- Dolby Vision tunneling and signaling
- 8-Ch AES/EBU, 8-Ch embedded HDMI, and 16-Ch embedded SDI digital audio I/O
- Supports 444 and 422 workflows
- Extend external connectivity with K3G-BOX breakout box option

HDR

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

AJA Developer Program

KONA 4 Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 50, 59.94, 60
- (4K) 4096 x 2160PsF 23.98, 24, 25
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 50, 59.94, 60
- (UltraHD) 3840 x 2160PsF 23.98, 24, 25
- (2K) 2048 x 1556p 15, 14.98
- (2K) 2048 x 1556PsF 15, 23.98, 24
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048 x 1080PsF 23.98, 24, 25
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 23.98*, 24*, 25*, 29.97*, 30*, 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 23.98*, 29.97

**These formats are dependent on specific software functionality and are not normal over the wire formats.*

Video Input Digital

- 3G-SDI, SMPTE-259/292/296/424/425, 8-bit, 10-bit and 12-bit*
- 4K/UltraHD 4:2:2 and 4:4:4 up to 50/60 fps
- 2K HSDL (High Speed Data Link) 4:4:4, (2 x BNC)
- Dual Link HD 4:4:4 (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- 1D LUT support

**Bit depth support is application dependent. Check with your software manufacturer for compatibility.*

Video Output Digital

- 3G-SDI, SMPTE-259/292/296/424, 8-bit, 10-bit and 12-bit*
- 4K/UltraHD 4:2:2 and 4:4:4 up to 50/60 fps
- 2K HSDL (High Speed Data Link) 4:4:4, (2 x BNC)
- Dual Link HD 4:4:4, (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- HDMI v1.4b
  - 30/36 bits/pixel, RGB or YUV, 2.25 Gbps
  - 2K, HD, and SD, UltraHD with HFR support up to 60p 4:2:0
  - HDR 10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
  - HLG Support - in accordance with HDMI 2.0b/ CTA-861-G**

**Bit depth support is application dependent. Check with your software manufacturer for compatibility.*
***HLG support is application dependent. Check with your software manufacturer for compatibility.*

Video Output Analog

- Composite/S-Video (Y/C) (1 x BNC/2 x BNC+adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8x oversampling
- +/- .2 dB to 5.0 MHz Y frequency response
- +/- .2 dB to 1 MHz C frequency response
- 5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1% ns Y/C delay inequity

Audio Input Digital

- 16-Channel, 16- and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous
- 16-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous (via 8 x BNC on optional K3G-Box)
- 8-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 4 x BNC on breakout cable)

Audio Output Digital

- 16-Channel, 16- and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous
- 16-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous (via 8 x BNC on optional K3G-Box)
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 4 x BNC on breakout cable)

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

SD to SD Aspect Ratio Conversion

- Letterbox: This transforms SD anamorphic material to a letterboxed image
- H Crop: Will produce a horizontally stretched effect on the image; transforms anamorphic SD to full frame
- SD Pillarbox: Will produce an image in the center of the screen with black borders on the left and right sides and an anamorphized image in the center
- V Crop: Will transform SD letterbox material to an anamorphic image

Timecode

- LTC timecode input and output (via 1 x BNC each)
- Reference Input
- Analog color black (1V) or composite sync (2 or 4V)
- Looping
- 75 ohms on optional K3G-Box, terminated on supplied breakout cable

Electrical Interface

- 8-lane PCIe 2.0

Machine Control

- RS-422, Sony 9-pin protocol (via breakout cable or optional K3G-Box)
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND

7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- .75" x 8.25" x 5.0" (19.05mm x 209.55mm x 127mm)

Weight

- 0.7 lb (0.4 kg)

Power

- 22W typical, 24W maximum

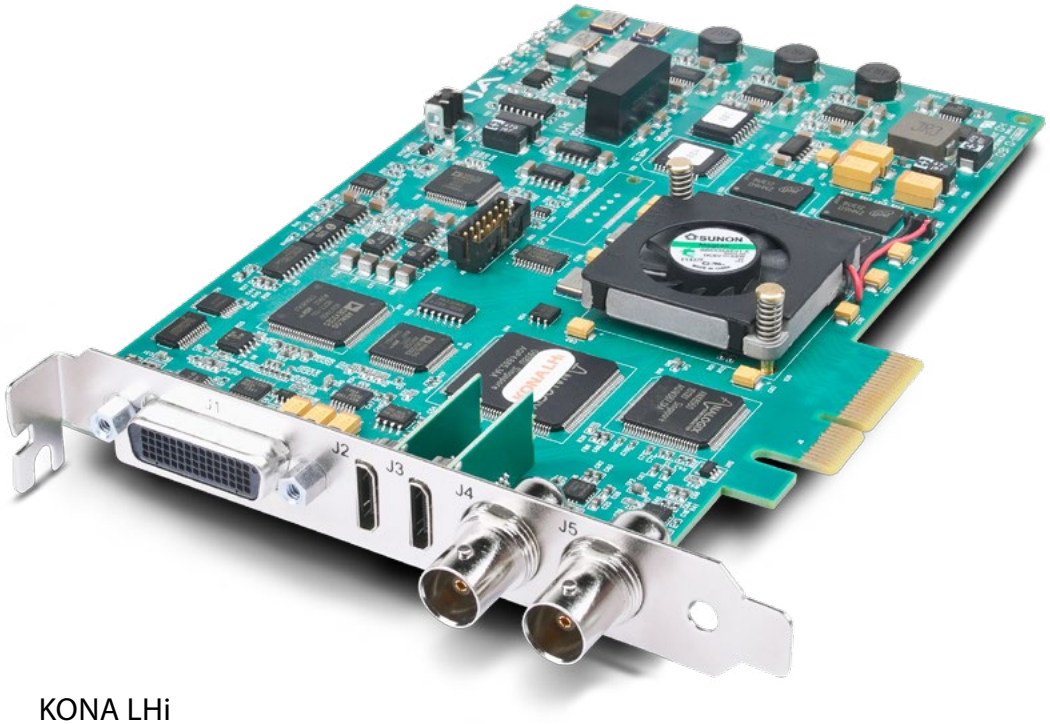
Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/en/products/kona-4/#techspecs

KONA LHi

Multi-Format Analog and Digital I/O Providing Maximum Compatibility for Diverse Workflows



Features at a Glance

- Supports 2K and HD ingest and output at frame rates up to 50/60 fps
- Realtime up, down and cross-conversion for HD and SD with pristine 10-bit quality
- Mac and Windows support via AJA's Developer SDK
- 3G/SD/HD/2K, 8 or 10-bits I/O
- HDMI 1.3 (30 bits/pixel, RGB or YUV) I/O
- Analog composite or S-video or SD/HD component video I/O
- 2-Ch AES/EBU, 8-Ch embedded HDMI, and 8-Ch embedded SDI digital audio I/O
- Supports 444 and 422 workflows
- Extend external connectivity with KLHi-BOX breakout box option

KONA LHi

Connecting to everything from an HDMI enabled camera to an HD-SDI VTR, KONA LHi offers a full host of no compromise features, including 10-bit or 8-bit uncompressed video, 2-Channel AES digital audio and 8-Channel SDI embedded digital audio, analog composite or S-video or SD/HD component video I/O, 2-Channel balanced analog audio I/O, and broadcast quality hardware based up, down, cross-conversion for flexible SD and HD post production. KONA LHi supports a full HDMI workflow with 10-bit deep color output for the best image quality possible. HDMI signals can also be converted to SDI for use in more professional environments.

KLHI-BOX Breakout Box *(optional)*

Utilize the KLHi-BOX Breakout Box to easily integrate KONA LHi into rackmount environments.

$1,495 US MSRP* Find a Reseller

HDR

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

AJA Developer Program

KONA LHi Tech Specs

Video Formats

- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080PsF 23.98, 24
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Software Dependent Formats

- 720p 23.98
- 525i 23.98

NOTE: These formats are dependent on specific software functionality and are not normal over the wire formats.

Video Input Digital

- 3G/SD/HD SDI, SMPTE-259/292/296/424, 8 or 10-bits
- Single Link 4:2:2 (1 x BNC)
- HDMI v1.3 30 bits/pixel, RGB or YUV, 2.25 Gbps, SD, HD, 1080p 50/60 (1 x mini-HDMI)

Video Input Analog

- Composite/S-Video (Y/C) (1 x BNC/2x BNC+Adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8x oversampling
- +/- .2 dB to 5.0 MHz Y Frequency Response
- +/- .2 dB to 1 MHz C Frequency Response
- .5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1 ns Y/C delay inequity

Video Output Digital

- 3G/SD/HD SDI, SMPTE-259/292/296/424
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- HDMI v1.3 30 bits/pixel, RGB or YUV, 2.25 Gbps, SD, HD, 1080p 50/60 (1 x mini-HDMI)

Video Output Analog

- Composite/S-Video (Y/C) (1 x BNC/2x BNC+Adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8x oversampling
- +/- .2 dB to 5.0 MHz Y frequency response
- +/- .2 dB to 1 MHz C frequency response
- .5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1 ns Y/C delay inequity

Audio Input Digital

- 8-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 2-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 1 x XLR on breakout cable or optional KLHi-Box)

Audio Input Analog

- 2-Channel, 16- and 24-bit A/D analog audio, 48 kHz sample rate, balanced (via 2 x XLR on DB-25 breakout cable or optional KLHi-Box)
- +24 dBu full scale digital
- +/- 0.2 dB 20 Hz to 20 kHz frequency response

Audio Output Digital

- 8-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 2-Channel, 16- and 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 1 x XLR on breakout cable or optional KLHi-Box)

Audio Output Analog

- 2-Channel, 16- and 24-bit D/A analog audio, 48 kHz sample rate, balanced (via 2 x XLR on DB-25 breakout cable or optional KLHi-Box)
- +24 dBu full scale digital (0 dBFS)
- +/- 0.2 dB 20 Hz to 20 kHz frequency response
- 2-Channel unbalanced output (via 2 x RCA jacks on optional KLHi-Box)
-

Up-Conversion

- Hardware 10-bit
- Anamorphic: fullscreen
- Pillarbox 4:3: results in a 4:3 image in center of screen with black sidebars
- Zoom 14:9: results in a 4:3 image zoomed slightly to fill a 14:9 image with black side bars
- Zoom Letterbox: results in image zoomed to fill fullscreen
- Zoom Wide: results in a combination of zoom and horizontal stretch to fill a 16:9 screen; this setting can introduce a small aspect ratio change

Down-Conversion

- Hardware 10-bit
- Anamorphic: fullscreen
- Letterbox: image is reduced with black top and bottom added to image area with the aspect ratio preserved
- Crop: image is cropped to fit new screen size

Cross-Conversion

- Hardware 10-bit
- 1080i to 720p
- 720p to 1080i
- 720p to 1080PsF

SD to SD aspect ratio conversion

- Letterbox: This transforms SD anamorphic material to a letterboxed image
- H Crop: Will produce a horizontally stretched effect on the image; transforms anamorphic SD to full frame
- SD Pillarbox: Will produce an image in the center of the screen with black borders on the left and right sides and an anamorphized image in the center
- V Crop: Will transform SD letterbox material to an anamorphic image

Reference Input

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Looping
- 75 ohm on optional KLHi-Box, terminated on supplied breakout cable

Electrical Interface

- 4-lane PCIe 1.0

Click here For full product specifications visit www.aja.com/en/products/kona-lhi#techspecs

HDR

KONA LHi Tech Specs *(continued)*

Machine Control

- RS-422, Sony 9-pin protocol (via DB-25 breakout cable or optional KLHi-Box)
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND

7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- .75" x 8.25" x 5.0" (19.05mm x 209.55mm x 127mm)

Weight

- 0.7 lb (0.4 kg)

Power

- 13W typical, 15W maximum

Environment

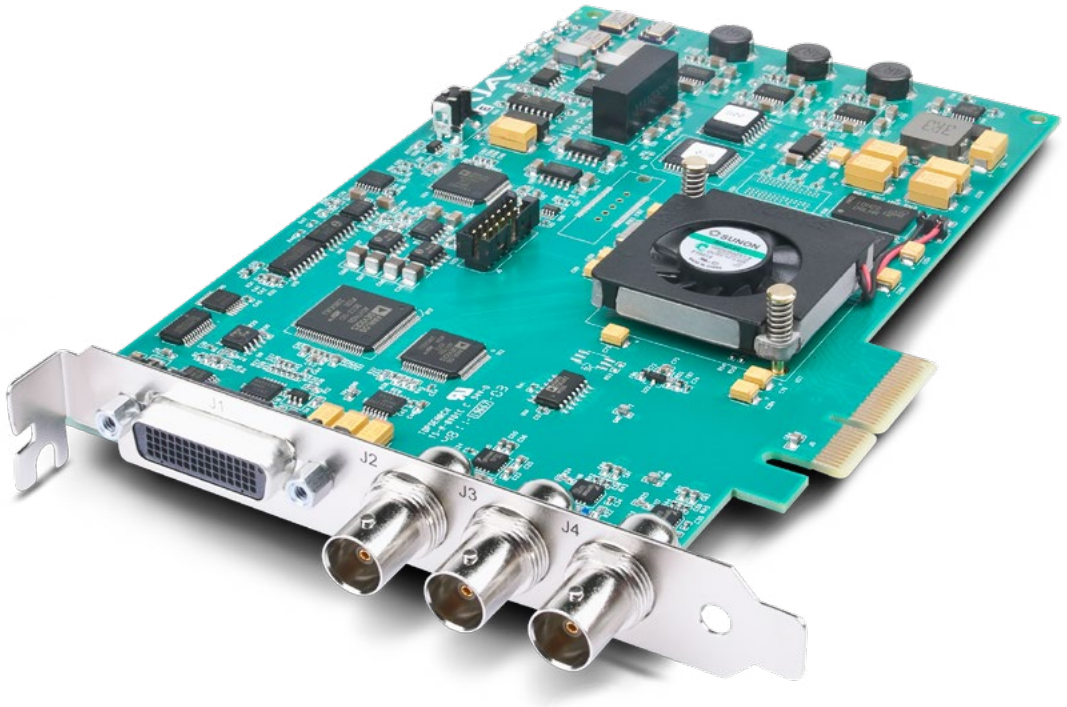
- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/products/kona-lhi#techspecs

AJA Developer Program

KONA LHe Plus

High Quality HD/SD Analog and Digital Capture and Output, That Fits Within Any Budget



Features at a Glance

- Supports HD-SDI and SD-SDI ingest and output at frame rates up to 50/60 fps
- Real time down-conversion with pristine 10-bit quality
- Mac and Windows support via AJA's Developer SDK
- SD/HD, 422, 8 or 10-bits I/O
- Analog composite or S-video or SD/HD component video I/O
- 2-Ch AES/EBU, 8-Ch embedded SDI digital, 2-Ch analog audio I/O
- Extend external connectivity with KL-BOX-LH breakout box option

KONA LHe Plus

KONA LHe Plus supports both HD/SD analog and digital I/O for video and audio, providing maximum capability in a single card, simplifying integrating analog and digital signals into a single workflow and provides multiple output options to ensure you can deliver whatever formats are required.

KL-BOX-LH Breakout Box *(optional)*

Utilize the KL-BOX-LH Breakout Box to easily integrate KONA LHi into rackmount environments.

$995 US MSRP*

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HDR

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AJA Developer Program

KONA LHe Plus Tech Specs

Video Formats

- (HD) 1080i 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Video Input Digital

- SD/HD SDI, SMPTE-259/292/296, 8 or 10-bits
- Single Link 4:2:2 (1 x BNC)

Video Input Analog

- Composite/S-Video (Y/C) (1 x BNC/2 x BNC+Adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit A/D, 8x oversampling
- +/- .2 dB to 5.0 MHz Y Frequency Response
- +/- .2 dB to 1 MHz C Frequency Response
- .5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1 ns Y/C delay inequity

Video Output Digital

- HD SDI, SMPTE-292/296, 10-bit
- SD SDI, SMPTE-259M, 10-bit

Video Output Analog

- Composite/S-Video (Y/C) (1 x BNC/2x BNC+Adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8x oversampling
- +/- .2 dB to 5.0 MHz Y Frequency Response
- +/- .2 dB to 1 MHz C Frequency Response
- .5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1 ns Y/C delay inequity

Audio Input Digital

- 8-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 2-Channel, 16- and 24-bit AES/EBU audio, 48 kHz or 96 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 1 x XLR on breakout cable or optional KL-Box)

Audio Input Analog

- 2-Channel, 16- and 24-bit A/D analog audio, 48 kHz sample rate, balanced (via 2 x XLR on breakout cable or optional KL-Box)
- +24 dBu Full Scale Digital
- +/- 0.2 dB 20 Hz to 20 kHz frequency response

Audio Output Digital

- 8-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 2-Channel, 16- and 24-bit AES/EBU audio, 48 kHz or 96 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (via 1 x XLR on breakout cable or optional KL-Box)

Audio Output Analog

- 2-Channel, 16- and 24-bit D/A analog audio, 48 kHz sample rate, balanced (via 2 x XLR on breakout cable or optional KL-Box)
- +24 dBu Full Scale Digital (0dBFS)
- +/- 0.2 dB 20 Hz to 20 kHz Frequency Response
- 2-Channel unbalanced output (via 2 x RCA jacks on optional KL-Box)

Down-conversion

- Hardware 10-bit
- Anamorphic: fullscreen
- Letterbox: image is reduced with black top and bottom added to image area with the aspect ratio preserved
- Crop: image is cropped to fit new screen size

Reference Input

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Looping
- 75 ohms on optional KL-Box, terminated on supplied breakout cable

Electrical Interface

- 4-lane PCIe 1.0

Machine Control

- RS-422, Sony 9-pin protocol (via breakout cable or optional KL-BOX)
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND

7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- .75" x 8.25" x 5.0" (19.05mm x 209.55mm x 127mm)

Weight

- 0.7 lb (0.4 kg)

Power

- 13W typical, 15W maximum

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For full product specifications visit www.aja.com/products/kona-lhe-plus#techspecs

AJA Developer Program

Io® 4K

Harness Thunderbolt™ 2 Power in 4K, HD and SD

Io 4K

Io 4K is the next evolution of capture and output hardware offering a full set of professional video and audio connectivity with support for the latest 4K and UltraHD devices. The power of Thunderbolt 2 enables Io 4K to handle a wide range of formats from SD to HD, UltraHD and full 4K over both 3G-SDI and HDMI with High Frame Rate (HFR) support up to 60p and HDR 10 support for emerging HDR workflows.

The dual Thunderbolt™ 2 ports on Io 4K allow you to daisy chain additional peripherals such as high resolution displays and high capacity storage with plenty of flexibility.

Io 4K's elegant, aluminum construction is strong enough to survive the rigors of life in the field, while looking beautiful in your edit suite. Io 4K seamlessly integrates with leading postproduction and delivery tools from Apple®, Adobe®, Avid®, Autodesk®, Telestream® and many more.

Features at a Glance

- 4 x bidirectional 3G-SDI
- 4K/UltraHD HDMI I/O
- HDR 10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
- Simultaneous SDI and HDMI outputs
- Realtime 4K to HD down-conversion for HD-SDI and HDMI monitoring
- 10-bit high quality 4:2:2, 4:4:4 and High Frame Rate workflow support
- Two Thunderbolt 2 ports with loop through
- Use with any Thunderbolt 2 system for up to 4K at 10-bit quality and up to 50/60 fps
- Backwards compatible with existing Thunderbolt hosts
- 16-Channel embedded audio on SDI
- 8-Channel embedded audio on HDMI
- DB-25 analog audio output connector (Tascam DA-88 pinout) not included.
- XLR 12V power for battery or AC use
- RS-422 VTR control, Reference, LTC Input
- Headphone jack and level control for mobile environments

$1,995 US MSRP* Find a Reseller

HDR

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

AJA Developer Program

Io 4K Tech Specs

Video Formats

- (4K) 4096 x 2160P 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (4K) 4096 x 2160PsF 23.98, 24, 25
- (UltraHD) 3840 x 2160P 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (UltraHD) 3840 x 2160PsF 23.98, 24, 25
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Note: High Frame Rate support is dependent on Thunderbolt speed. Not all systems will support all frame rates.

Video Inputs

- 3G-SDI, SMPTE-259/292/296/424/425, 8-bit, 10-bit and 12-bit*
- 4K/UltraHD 4:4:4 (4 x BNC)
- 2K HSDL (High Speed Data Link) 4:4:4 (2 x BNC)
- Dual Link HD 4:4:4 (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- HDMI v1.4
  - 30/36 bits/pixel, RGB or YUV, 2.25 Gbps.
  - UltraHD, 2K, HD and SD

** Bit depth support is application dependent. Check with your software manufacturer for compatibility.*

Video Outputs

- 3G-SDI, SMPTE-259/292/296/424, 8-bit, 10-bit and 12-bit*
- 4K/UltraHD 4:4:4 (4 x BNC)
- 2K HSDL (High Speed Data Link) 4:4:4 (2 x BNC)
- Dual Link HD 4:4:4 (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- HDMI v1.4b
  - 30/36 bits/pixel, RGB or YUV, 2.25 Gbps
  - 2K, HD, and SD, UltraHD with HFR support up to 60p 4:2:0
  - HDR10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
  - HLG Support - in accordance with HDMI 2.0b/CTA-861-G**

** Bit depth support is application dependent. Check with your software manufacturer for compatibility.*

*** HLG support is application dependent. Check with your software manufacturer for compatibility.*

Audio Inputs Digital

- 16-Channel, 16- and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

Audio Outputs Digital

- 16-Channel, 16- and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

Audio Outputs Analog

- 8-Channel, 16- and 24-bit D/A analog audio, 48 kHz sample rate, balanced, using industry standard 8 x XLR on DB-25 breakout cable (Breakout cable not include)
- +24 dBu full scale digital (0dbFS)
- +/- 0.2 dB 20 to 20 kHz frequency response

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

Down-Conversion

- 4K/UltraHD
  - Realtime, dedicated 4K down-conversion output (1 x BNC)
  - 4K to 2K down-conversion
  - UltraHD to HD down-conversion

Reference and LTC I/O

- 1 x BNC LTC output
- 1 x BNC assignable to Reference video or LTC input

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Nonterminating

Electrical Interface

- Thunderbolt 2 (2 x)

Machine Control

- RS-422, Sony 9-pin protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND
7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- 8.74" x 7.09" x 1.65" (222mm x 180mm x 42mm)

Weight

- 3.1 lbs (1.5 kg)

Power

- 10-20V, 23W typical, 28W max

Environment

- Safe Operating Temperature Range: 0 to 35C (32F to 95F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For the most recent product specifications visit www.aja.com/en/products/io-4k/#techspecs

Io XT

Thunderbolt™ Power for Professional I/O

THUNDERBOLT™

Io XT

Io XT is the ideal portable companion for lightning fast video capture and playback for professional post production and on set applications.

Compact, portable and powerful, Io XT is loaded with high-end features including 3G-SDI, Component Analog, and HDMI connectivity, to bring true desktop level power to any Thunderbolt enabled system with full uncompressed HD and SD 4:2:2 and 4:4:4 capable video and audio connectivity.

Io XT connects with a single Thunderbolt cable and provides a second Thunderbolt connector for daisy chaining other Thunderbolt devices, such as storage, making it ideal for use on-set or in the edit suite.

Designed for today's workflows, Io XT provides a seamless link for your application to the newest codecs, video formats, stereoscopic 3D workflows, and more.

$1,495 US MSRP* Find a Reseller

Features at a Glance

- 2 x 3G-SDI inputs
- 2 x 3G-SDI outputs
- Simultaneous SDI and HDMI outputs
- Component analog video output
- 10-bit high quality 4:2:2, 4:4:4 workflow support
- Two Thunderbolt™ ports with loop-through
- 16-Channel embedded audio on SDI
- 8-Channel embedded audio on HDMI
- DB-25 analog audio output connector (Tascam DA-88 pinout) not included.
- XLR 12V power for battery or AC use
- RS-422 VTR control, Reference, LTC Input
- Headphone jack and level control for mobile environments

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

AJA Developer Program

Io XT Tech Specs

Video Formats

- (2K) 1080p 23.98, 24, 25
- (2K) 1080PsF 23.98, 24, 25
- (HD) 1080i 25, 29.97, 30
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 23.98*, 24*, 25*, 29.97*, 30*, 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 23.98*, 29.97

** These formats are dependent on specific software functionality and are not normal over the wire formats*

Video Input Digital

- 3G-SDI, SMPTE-259/292/296/424, 10-bits
- Dual Link HD 4:4:4, (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x 3G BNC)
- HDMI v1.3
- 1D LUT Support (Mac and PC)

Video Output Digital

- 3G-SDI, SMPTE-259/292/296/424
- Dual Link HD 4:4:4, (2 x BNC)
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- HDMI v1.4, 30/36 bits/pixel, RGB or YUV, 2.25 Gbps

Video Output Analog

- Composite/S-Video (Y/C) (1 x BNC/2 x BNC+adapter)
- NTSC, NTSCJ, PAL
- Component (3 x BNC)
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8x oversampling
- +/- .2 dB to 5.0 MHz Y Frequency Response
- +/- .2 dB to 1 MHz C Frequency Response
- .5% 2T pulse response
- <1% Diff Phase
- <1% Diff Gain
- <1 ns Y/C delay inequity

Audio Input Digital

- 16-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16- and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

Audio Output Digital

- 16-Channel, 16- and 24-bit SMPTE-259 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 16 and 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

Audio Output Analog

- 8-Channel, 16 and 24-bit D/A analog audio, 48 kHz sample rate, balanced, using industry standard 8 x XLR on DB-25 breakout cable (Breakout cable NOT included)
- +24dbu Full Scale Digital (0dbFS)
- +/- 0.2db 20 to 20 kHz frequency response

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

Up-conversion

- Hardware 10-bit
- Anamorphic: fullscreen
- Pillarbox 4:3: results in a 4:3 image in center of screen with black sidebars
- Zoom 14:9: results in a 4:3 image zoomed slightly to fill a 14:9 image with black side bars
- Zoom Letterbox: results in image zoomed to fill full screen
- Zoom Wide: results in a combination of zoom and horizontal stretch to fill a 16:9 screen; this setting can introduce a small aspect ratio change

Down-conversion

- Hardware 10-bit
- Anamorphic: fullscreen
- Letterbox: image is reduced with black top and bottom added to image area with the aspect ratio preserved
- Crop: image is cropped to fit new screen size

Cross-conversion

- Hardware 10-bit
- 1080i to 720p
- 720p to 1080i
- 720p to 1080PsF

SD to SD aspect ratio conversion

- Letterbox: This transforms SD anamorphic material to a letterboxed image
- H Crop: Will produce a horizontally stretched effect on the image; transforms anamorphic SD to full frame
- SD Pillarbox: Will produce an image in the center of the screen with black borders on the left and right sides and an anamorphized image in the center
- V Crop: Will transform SD letterbox material to an anamorphic image

Reference Input or LTC Input

- 1 x BNC assignable to Reference video or LTC input

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Nonterminating

Electrical Interface

- Thunderbolt 1 (2 x)

Machine Control

- RS-422, Sony 9-pin protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND
7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- 8.74" x 7.09" x 1.65" (222mm x 180mm x 42mm)

Weight

- 1.75 lbs (0.9 kg)

Power

- 10-20V, 18W typical, 22W max

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

Click here For the most recent product specifications visit www.aja.com/en/products/io-xt#techspecs

Three Year Warranty

AJA Video warrants that Developer products will be free from defects in materials and workmanship for a period of three years from the date of purchase.

About AJA Video Systems, Inc.

Since 1993, AJA Video has been a leading manufacturer of video interface and conversion solutions, bringing high quality, cost effective digital video products to the professional, broadcast and postproduction markets. AJA products are designed and manufactured at our facilities in Grass Valley, California, and sold through an extensive sales channel of resellers and systems integrators around the world. For further information, please see our website at **www.aja.com**

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AJA® VIDEO SYSTEMS