## AJA KONA 4 4K/2K/3G/Dual Link/HD/SD I/O 10-bit PCIe Card with HDMI output/HFR

**Video Output Digital**

- 3G-SDI, SMPTE-259/292/296/424
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- Dual Link HD 4:4:4, (2 x BNC)
- 2K HSDL (High Speed Data Link) 4:4:4, (2 x BNC)
- 4K/UltraHD 4:2:2 and 4:4:4
- HDMI v2.0b, 30/36 bits/pixel, RGB or YUV, 2.25Gbps, SD, HD and UHD with HFR support up to 60p 4:2:0

**Video Input Digital**

- 3G/SD/HD SDI, SMPTE-259/292/296/424, 8- or 10-bits
- Single Link 4:2:2 or 4:4:4 (1 x BNC)
- Dual Link HD 4:4:4 (2 x BNC)
- 2K HSDL (High Speed Data Link) 4:4:4, (2 x BNC)
- 4K/UltraHD
- 1D LUT Support

**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

**Downstream Keyer**

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

**Audio Input Digital**

- 16-channel, 24-bit SDI embedded audio, 48kHz sample rate, Synchronous
- 8-channel, 24-bit AES/EBU audio, 48kHz sample rate, Synchronous or Non-synchronous, Internal sample rate conversion (via 4 x BNC on breakout cable)
- 16-channel, 24-bit AES/EBU audio, 48 kHz sample rate, Synchronous (via 8 x BNC on optional K3G-Box)

**Audio Output Digital**

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

**SD to SD Aspect Ration 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)

**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 Collection |
| 6 | GND |
| 7 | RX+ |
| 8 | TX- |
| 9 | GND |
| Shell | GND |

**Reference Input**

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Looping
- 75 ohm on optional K3G-Box, terminated on supplied breakout cable