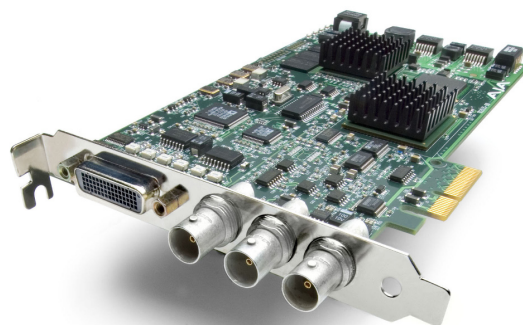# OEM-LH

PCI and PCIe Card
for 8/10-bit Uncompressed
Analog and Digital SD, HD I/O

## PRECISION 10-BIT QUALITY, UNMATCHED FEATURES

The OEM-LH is AJA's award winning platform for analog and digital uncompressed audio and video I/O. OEM-LH is compatible with Windows Vista, XP, and Linux via our robust and proven SDK environments for each of these platforms. Like all of our products, OEM-LH is built to the highest specifications offering true broadcast-level performance within your systems and applications.

The OEM-LH is the world's only PCI card that includes both analog and digital SD/HD input and output. OEM-LH is a true dual-rate SD/HD card, via it's hardware-based 10-bit SD to HD down-converter, that is available on any and all inputs or outputs. Available now in two configurations; the OEM-LH for PCI and PCI-X compatible systems, and the OEM-LHE for PCIe systems.

Major Features

- 8/10-bit Uncompressed SD/HD PCI I/O Card
- Available in PCI-66/64 (OEM-LH model)
- Available in PCI-e 4-Lane (OEM-LHE model)
- 12-bit HD Analog Component I/O
- 12-bit SD Analog Component/Composite/S-Video I/O
- 10-bit Hardware HD to SD Downconversion
- SDI or HD-SDI Input, 2 Independent SDI/HD-SDI Outputs
- 2-ch Balanced XLR AES  Digital Audio I/O, 24-bit 48khz
- 2-ch Balanced XLR Analog Audio I/O, 24-bit 48khz
- 8-ch SDI Embedded Audio I/O, 20-bit 48khz
- HD/SD Genlock
- RS-422 9-pin Port for Machine Control
- Cables Standard, KL-Box Breakout Optional
- 3-year warranty

## MULTIPLE OS SUPPORT, COMMON API, ROBUST SDK

OEM-LH is compatible with Windows Vista, XP, and Linux via our SDK (Software Development Kit), sharing one unified API (Application Programming Interface). This common API means less time developing if you are developing on multiple platforms and even multiple AJA cards. Our SDK's are feature rich and proven through the years.

Our SDK supports multiple OS's, including:
- Windows Vista 32-bit
- Windows Vista 64-bit
- Windows XP 32-bit
- Windows XP 64-bit
- Linux 32-bit
- Linux 64-bit

A more in-depth overview of our SDK can be found on our website, as well as in our OEM Overview whitepaper. Please contact us for more information, as well as additional information on our entire line OEM cards.

Please continue for technical information on the OEM-LH.

www.aja.com
530.274.2048
800.251.4224 US

# SPECIFICATIONS

## OEM-LH
PCI and PCI-X compatible

## OEM-LHe
PCIe 4-lane compatible

### Video Input
Digital:
HD-SDI/SDI, SMPTE-259/292/296
Analog:
SD and HD Input, BNC
HD:   YPbPr, RGB
SD:   YPbPr, RGB  (component mode)
   Composite/YC (composite mode)
12-bit A/D

### Video Output
SD and HD Output, BNC
      YPbPr, RGB
SD:   YPbPr, RGB  (component mode)
   omposite/YC (composite mode)
12-bit D/A

## Video Formats

SD:
525i 29.97
625i 25

HD:
720p 50
720p 59.94
720p 60
1080i 25
1080i 29.97
1080i 30
1080p 23.976
1080psf 23.976
1080p 24
1080psf 24
1080p 25
1080psf 25
1080p 29.97
1080psf 29.97
1080p 30
1080psf 30

## Audio Input

2-channel 16/24/32-bit AES/EB
   ple rate
      ynchronous or Non-synchronous
         nal sample rate conversion)
16/24/32-bit SMPTE-259 SDI embedded
   audio, 8-Ch, 48kHz synchronous
Analog:
2-channel balanced input
+24dbu Full Scale Digital
16/24/32-bit A/D, 48 KHz sample rate
+/- 0.2db  20 to 20 KHz Frequency Response

## Audio Output
Digital:
2-channel 16/24/32-bit AES/EBU, 48KHz
   sample rate
16/24/32-bit AES/EBU, 48 KHz sample rate
16/24/32-bit SMPTE-259 SDI embedded
   audio, 8-Ch, 48 KHz synchronous
Analog:
2-channel balanced output
+24dbu Full Scale Digital
16/24/32-bit D/A, 48 KHz sample rate
+/- 0.2db 20 to 20 KHz Frequency Response

## Down-Conversion
Hardware 10-bit output, 16/24/32-bit internal
   processing
Anamorphic: full-screen
Letterbox: image is reduced with black top
   and bottom added to image area with the
   aspect ratio preserved
Crop: image is cropped horizontally

## Machine Control
RS-422, Sony 9-pin protocol Connector pro-
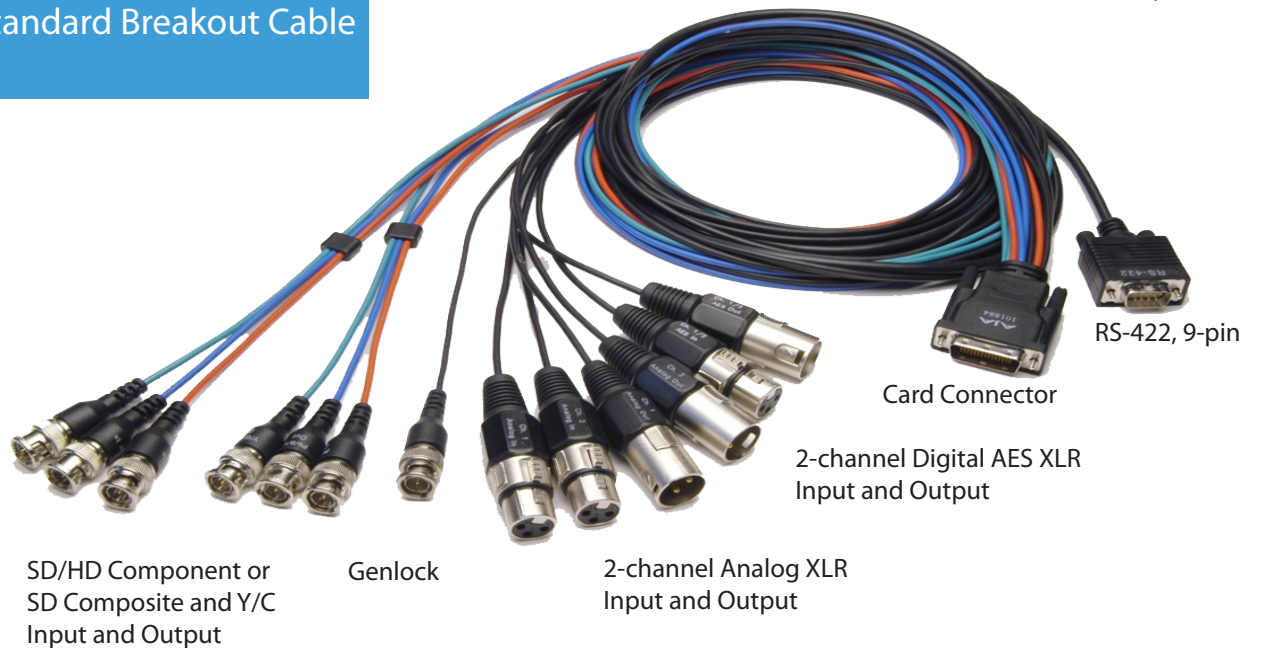   vided on OEM-LH/LHe breakout cable and
   on optional KL-Box.

## Reference
 Analog Color or HD Tri-level
 1 BNC on standard breakout cable (75 ohm
   terminating)
 KL-Box (optional): 2 BNCs, passive loop

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## Standard Breakout Cable

SDI and HD-SDI connectors directly on card



RS-422, 9-pin

Card Connector

2-channel Digital AES XLR
Input and Output

SD/HD Component or
SD Composite and Y/C
Input and Output

Genlock

2-channel Analog XLR
Input and Output

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## optional KL-BOX breakout box



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AJA™

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