

Matrox DSX LE3

Multi-Channel 3G, HD, and SD Digital I/O Card

The Matrox DSX LE3 hardware platform is supported by the Matrox DSX Software Development Kit. Please refer to the Matrox DSX Developer Products datasheet for information on file I/O, software codecs, and CPU effects. Contact your Matrox Sales Engineer for configuration and ordering details.



Key features

- ¾ length PCIe x 8 board
- Standard BNCs on bracket
- Up to four 3G/HD/SD SDI inputs
- Up to four 3G/HD/SD SDI outputs
- Hanc and Vanc support
- Live video mixers

System bus interface

- ¾ length PCIe x8 card

Digital video inputs and outputs

- YUV 4:2:2 8- and 10-bit
- Serial digital component 4:2:2 video at 270 Mbps in accordance with SMPTE 259M (SD)
 - 480i (NTSC) at 29.97 fps
 - 576i (PAL) at 25 fps
- Serial digital component 4:2:2 video at 1.48 Gbps in accordance with SMPTE 292M (HD)
 - 1080i at 25, 29.97, and 30 fps
 - 720p at 50, 59.94, and 60 fps
 - 1080p/PsF at 23.98, 24, 25, 29.97, and 30 fps
- 3G SDI in accordance with SMPTE 424M and SMPTE 425M
 - 1080p at 50, 59.94, and 60 fps
- Inputs/outputs can be combined as video and key
- Full Vanc support
- Hanc support
 - Timecode (SMPTE 12M-2)
 - Payload identification (SMPTE 352)

Master/genlockable video time base

- Analog blackburst reference (tri-level or bi-level) or SDI input as reference
- Optional termination of genlock (mechanical switch)
- Pixel adjustment with respect to genlock

AES/EBU audio inputs and outputs

- 8-in/16-out unbalanced AES/EBU audio channels
- Sampling rate at 48 kHz

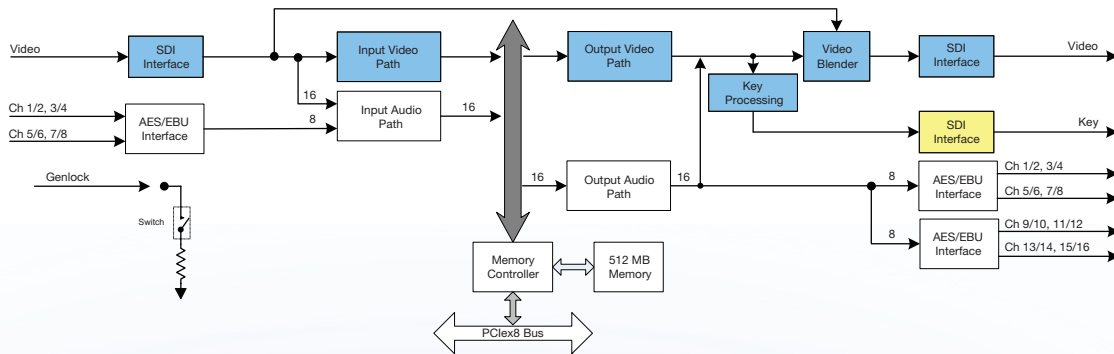
Embedded audio inputs and outputs

- Supports up to 16 channels of embedded audio per SDI video stream in accordance with SMPTE 272M A,B, and C (SD) and SMPTE 299M (HD)
- Sampling rate at 48 kHz
- 16-, 20-, and 24-bit audio streams are supported

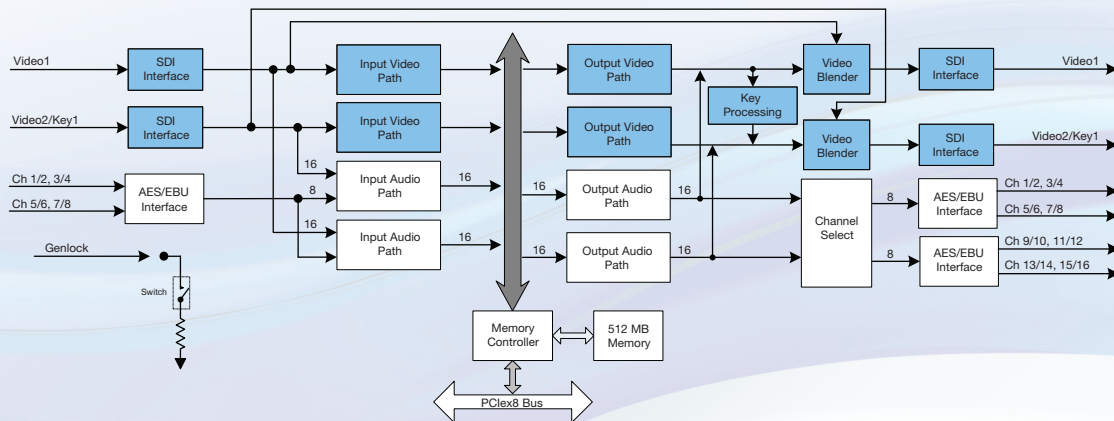
Additional hardware features

- Up to 2 live video mixers on outputs
- RGBA to YUVA color space conversion on output path
- Key can be expanded or inverted at input and output
- Proc Amps at inputs

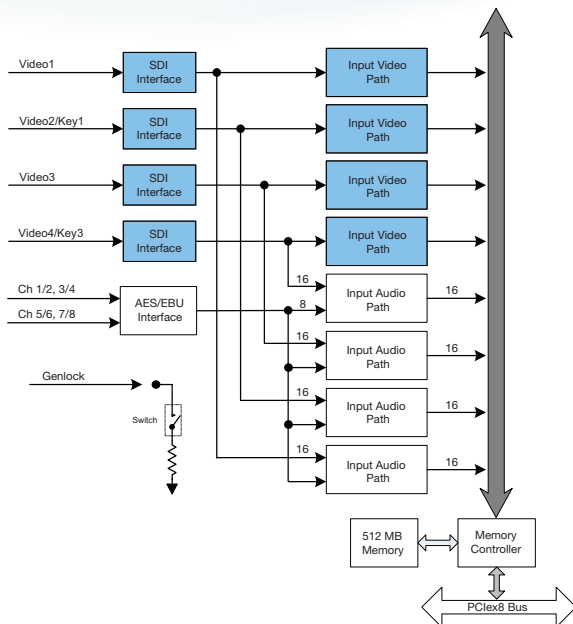
Matrox DSXLE3/12 Block Diagram



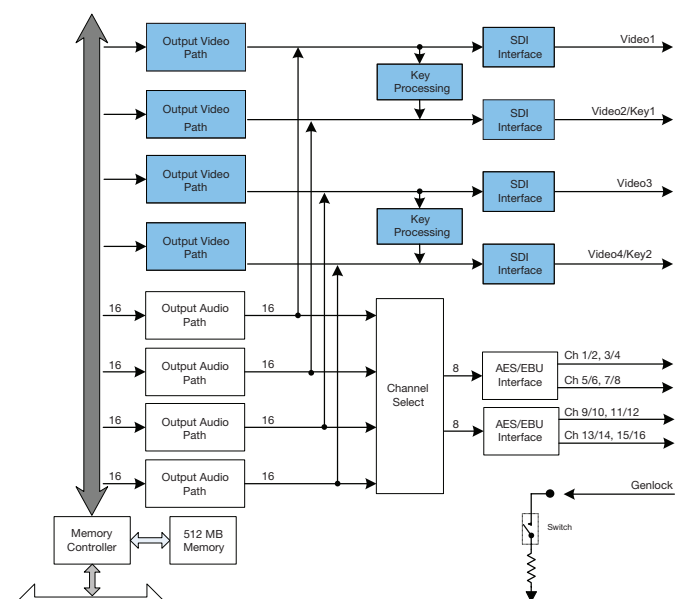
Matrox DSXLE3/22 Block Diagram



Matrox DSXLE3/40 Block Diagram



Matrox DSXLE3/04 Block Diagram



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