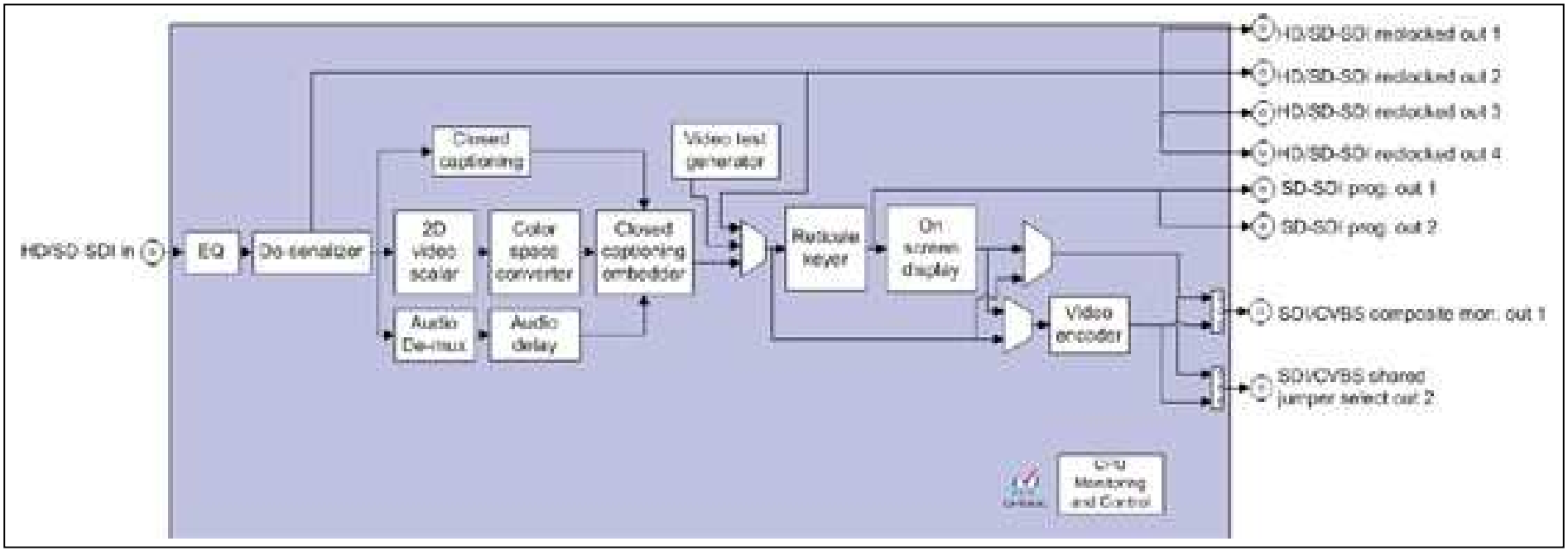
HDC6800+AD

HDTV Utility Downconverter, Q-SEE™-Compliant

- **Features**
-
- Auto-sensing HD-SDI or SD-SDI input capability
- Supports HDTV signals for 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, 1080/23.98PsF
- Four equalized and reclocked outputs of the HD or SD input
- Two SD-SDI Program outputs
- Provides variable ARC with five user presets
- SDI output can add on screen display of graticules and safe area markers overlaid on the video. Markers are generated in the output domain
- CEA708 to CEA608 transcoding for closed captioning
- HD to SD color space conversion
- 1080PsF/23.98 to 525/59.94 downconversion with 3:2 pulldown
- CCS™-enabled
- Passes two groups of embedded audio from HD-SDI to SD-SDI
- Two of the outputs can be configured for SD-SDI Program or composite video output with on-screen display


HD/SD-SDI in
EQ
De-serializer
2D video scaler
Color space converter
Closed captioning embedder
Closed captioning
Video test generator
Reticule layer
On screen display
Video encoder
Audio De-mux
Audio delay
HD/SD-SDI reclocked out 1
HD/SD-SDI reclocked out 2
HD/SD-SDI reclocked out 3
HD/SD-SDI reclocked out 4
SD-SDI prog. out 1
SD-SDI prog. out 2
SDI/CVBS composite mon. out 1
SDI/CVBS shared jumper select out 2
CPU Monitoring and Control

Specifications

Video Input

Number of Inputs	1
Standard	SMPTE 259M-C (270 Mb/s, 525/625 component video) and SMPTE 292M (1.485, 1.485/1.001 Gb/s)
Connector	BNC (IEC 169-8)
Impedance	75 ohms
Return Loss	>15 dB to 1485
Equalization	885 ft (270 m) Belden 8281 cable at 270 Mb/s; adaptive cable equalization for up to 377 ft (115 m) (typical) of Belden 1694A at 1.485 Gb/s

SDI Re-clocked Outputs

Number of Outputs	4
Standard	SMPTE 259M-C (270 Mb/s, 525/625 component video) and SMPTE 292M (1.485, 1.485/1.001 Gb/s)
Connector	BNC (IEC 169-8)
Impedance	75 ohms
Return Loss	>15 dB to 1.485 GHz
Signal Level	800 mV ±10%
DC Offset	0 V ±0.5 V
Rise and Fall Time	<270 ps at 1.485 GHz; 400 to 1500 ps (20 to 80%) at 270 MHz
Overshoot	<10% of amplitude (all outputs terminated)
Jitter	<1 UI at 1.485 GHz <0.2 UI at 270 MHz

SDI Program Outputs

Number of Outputs	2 + 2
Standard	SMPTE 259M-C (270 Mb/s, 525/625 component video)
Connector	BNC (IEC 169-8)
Impedance	75 ohms

Return Loss	>18 dB 5 to 270 MHz
Signal Level	800 mV ±10%
DC Offset	0 V ±0.5 V
Rise and Fall Time	<0.75 to 1.5 ns (20 to 80%) at 270 MHz
Overshoot	<10% of amplitude (all outputs terminated)
Jitter	<0.2 UI at 270 MHz

Composite Analog Outputs

Number of Outputs	Up to 2
Standards	NTSC, PAL-B, PAL-M
Connector	BNC (IEC 169-8)
Impedance	75 ohms
Return Loss	>40 dB to 5.75 MHz
Quantization	10 bits (encoding inputs 8 bits)
Frequency Response	±0.5 dB to 5 MHz
Differential Gain	<1.5%
Differential Phase	<1.2°
DC Offset	0 V ±14 mV
Signal to Noise	>54 dB RMS to 5 MHz