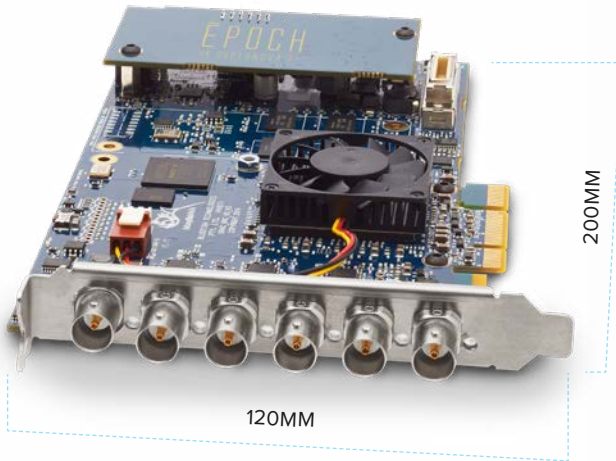


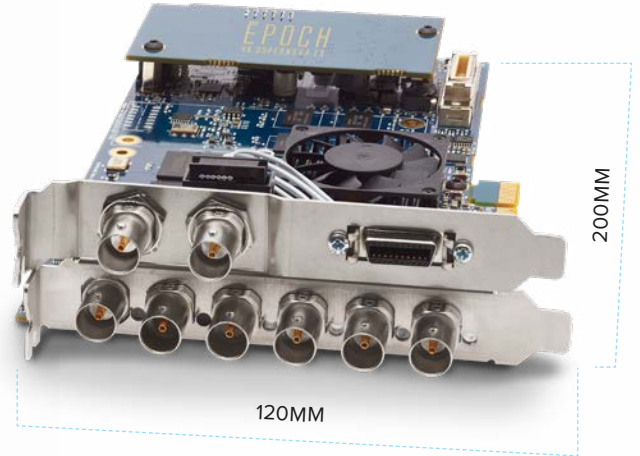


DEVELOPER DATA SHEET

ÈPOCH 4K SUPERNOVA S+



ÈPOCH 4K SUPERNOVA S+



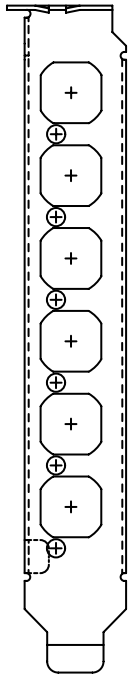
ÈPOCH 4K SUPERNOVA S+ EX

MAJOR FEATURES FOR EPOCH | 4K SUPERNOVA S+

SD-SDI	YES	Multi-card Support	YES
1.5G HD-SDI	YES	5th BNC SDI Copy/BF Lock	YES
3G-SDI (Level A+B)	YES	16-bit Half Float Pixel Format	YES
Dual Link 1.5G (4:2:2:4/4:4:4:4)	YES	Interlocking Genlock	YES
Dual Link 3G (Level A+B)	YES	Bypass Relays	YES
Quad Link 1.5G	YES	Full Duplex DMA	YES
Quad Link 3G (Level A+B)	YES	VBI, HANC & VANC	YES
Dedicated Genlock	YES	Embedded Audio	YES
Low-latency Hardware Keyer	YES	NVIDIA GPU Direct	YES
Colour Space Converter	YES	AMD Direct GMA	YES
Customisable Pixel Formats	YES	Range of Firmware Options	YES

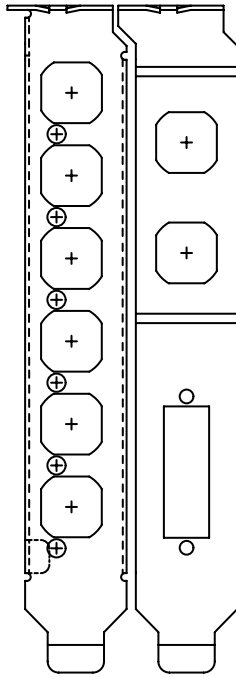
ACHIEVE MULTIPLE WORKFLOWS WITH THE FLEXIBILITY
OF EPOCH | 4K SUPERNOVA S+





EPOCH
4K SUPERNOVA S+

Part No. EB3005M



EPOCH
4K SUPERNOVA S+ EX

Part No. EB3005MRL

SDI COPY/
BF LOCK



BNC1

3G/HD/SD



BNC2

3G/HD/SD



BNC3

3G/HD/SD



BNC4

3G/HD/SD



BNC5

GENLOCK



BNC6

PART NUMBER	PRODUCT	DESCRIPTION
EB3005M	Epoch 4K Supernova S+	Full-height with 4 BNC, 5th BNC Copy / BF Lock and Genlock BNC
EB3005MRL	Epoch 4K Supernova S+ EX	Standard Card + External Audio/RS-422/LTC I/O

ADDITIONAL SHIELD ADDS			
	EPOCH 4K SUPERNOVA S+	EPOCH 4K SUPERNOVA S+ EX	EPOCH 4K SUPERNOVA S+ X2
AES/EBU Audio Input 8CH (BNC)	NO	YES	YES
AES/EBU Audio Output 8CH (BNC)	NO	YES	YES
Analogue Audio Output 2CH (RCA)	NO	YES	YES
RS-422 Machine Control	NO	YES	YES
LTC IN/OUT (BNC)	NO	YES	YES

SPECIFICATIONS	EPOCH 4K SUPERNOVA S+	EPOCH 4K SUPERNOVA S+ EX
Width	120MM	120MM
Length	200MM	200MM
Internal Clearance (L)	184MM	184MM
Height	1 PCIE SLOT	2 PCIE SLOTS
Weight	280G	300G

VIDEO I/O		
SDI VIDEO		
SD SMPTE 295M		4
HD 1.5G SMPTE 292M		4
3G (Level A+B) SMPTE 424M		4*
Dual Link 1.5G SMPTE 372M		YES
Dual Link 3G		YES
Quad Link 1.5G SMPTE 2036-1		YES
Quad Link 3G SMPTE 2036-1		YES
Maximum Video Channels		4
12/10/8-bit 4:4:4 SDI		YES
12/10/8-bit 4:2:2 SDI		YES
5th BNC monitor output		YES
GENLOCK		
Bi-Level/Tri-Level Genlock (Dedicated BNC)		YES
BF Lock Output		YES

ANCILLARY		
HANC		
RP-188 Timecode		YES
16 Channels of Embedded Audio per SDI		YES
Video Payload ID		YES
Custom Packets		YES
VANC		
Closed Captioning		YES
3 Line VITC		YES
Custom Packets		YES

AUDIO I/O		
AUDIO SIGNALS		
16 channels of Embedded Audio Input per SDI		YES
8 Channels of AES ID3 Input(unbalanced, BNC)		YES^
16 channels of Embedded Audio Output per SDI		YES
8 Channels of AES ID3 Output(unbalanced, BNC)		YES^
2 channels -10DBU Analogue Output(unbalanced, RCA)		YES^
Dolby Digital Pass-through SDI		YES

HARDWARE	
MAJOR HARDWARE FEATURES	
High Performance, 3G Bypass Relays	YES
Fully Programmable 4 x 4 x 33-bit Colour Matrix	YES
12-bit video signal path throughout	YES
Automatic Cross-Locking and intelligent output phasing across formats	YES
Audio sample-rate converters	YES
(MR ²) Master Routing Resource	YES
ISIM (Input Stream Integrity Management)	YES
4-lane PCI-Express (8 and 16 lane compatible)	YES
Full Duplex DMA data transfer bandwidth 1.1GB/s	YES
256MB on board memory	YES
Hardware keyer	YES
LTC I/O BNC	YES^
RS-422 Serial Port (Via Breakout Cable)	YES^

VIDEO FORMATS	
SUPPORTED YUV SDI VIDEO MODES	
(2K) 2048 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
(2K) 2048 x 1080P/PsF @ 48, 50, 59.94, 60FPS	YES
(HD) 1920 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
(HD) 1920 x 1080p/PsF @ 48, 50, 59.94, 60FPS	YES
(HD) 1920 x 1080i @ 25, 29.97, 30FPS	YES
(HD) 1280 x 720p @ 23.976, 24, 25, 29.97, 30, 50, 59.94, 60FPS	YES
(SD) 720 x 576i @ 25FPS PAL	YES
(SD) 720 x 486i @ 29.97FPS NTSC	YES
SUPPORTED RGB SDI VIDEO MODES	
(2K) 2048 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
(HD) 1920 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
(HD) 1920 x 1080i @ 25, 29.97, 30FPS	YES
(SD) 720 x 576i @ 25FPS PAL	YES
(SD) 720 x 486i @ 29.97FPS NTSC	YES
SUPPORTED HSDL SDI VIDEO MODES	
(2K) 2048 x 1556PsF @ 14.98, 15FPS	YES
SUPPORTED 4K YUV SDI VIDEO MODES	
(4K) 4096 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	YES
(4K) 4096 x 2160p @ 48, 50, 59.94, 60FPS	NO
(UHD) 3840 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	YES
(UHD) 3840 x 2160p @ 48, 50, 59.94, 60FPS	NO
SUPPORTED 4K RGB SDI VIDEO MODES	
(4K) 4096 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	YES*
(UHD) 3840 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	YES*
SUPPORTED PIXEL FORMATS	
2VUY, YUVS, BV8, V210, AYUV _ 4224, AYUV _ 4444, YV12, I420	YES
ARGB, BGRA, RGB24, Cineon, DPX, RGB48	YES
Custom using flexible hardware pixel format engine	YES

*Dependent on available PCIe bandwidth. ^Available on Epoch | 4K Supernova S+ EX only.

BUNDLED SOFTWARE



Bluefish444 Symmetry is a proprietary integrated DI acquisition, review and play out software for Windows and is bundled FREE with all Bluefish444 video I/O cards.

BUNDLED
FREE



Bluefish444 IngeStore is a multi-channel ingest tool capable of up to four independent streams of SD or HD video from separate SDI sources. Bundled FREE with all Bluefish444 video I/O cards.

BUNDLED
FREE



Bluefish444 SDK is designed for developers who wish to integrate Bluefish444 video products into their own solutions, across Windows, macOS and Linux systems.

BUNDLED
FREE

CROSS-PLATFORM SUPPORT WITH INDUSTRY-LEADING 3RD PARTY SOFTWARE



For a comprehensive and up-to-date list of supported software, visit bluefish444.com/software

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For worldwide reseller and distributor contact information, please go to bluefish444.com/contacts