EPOCH
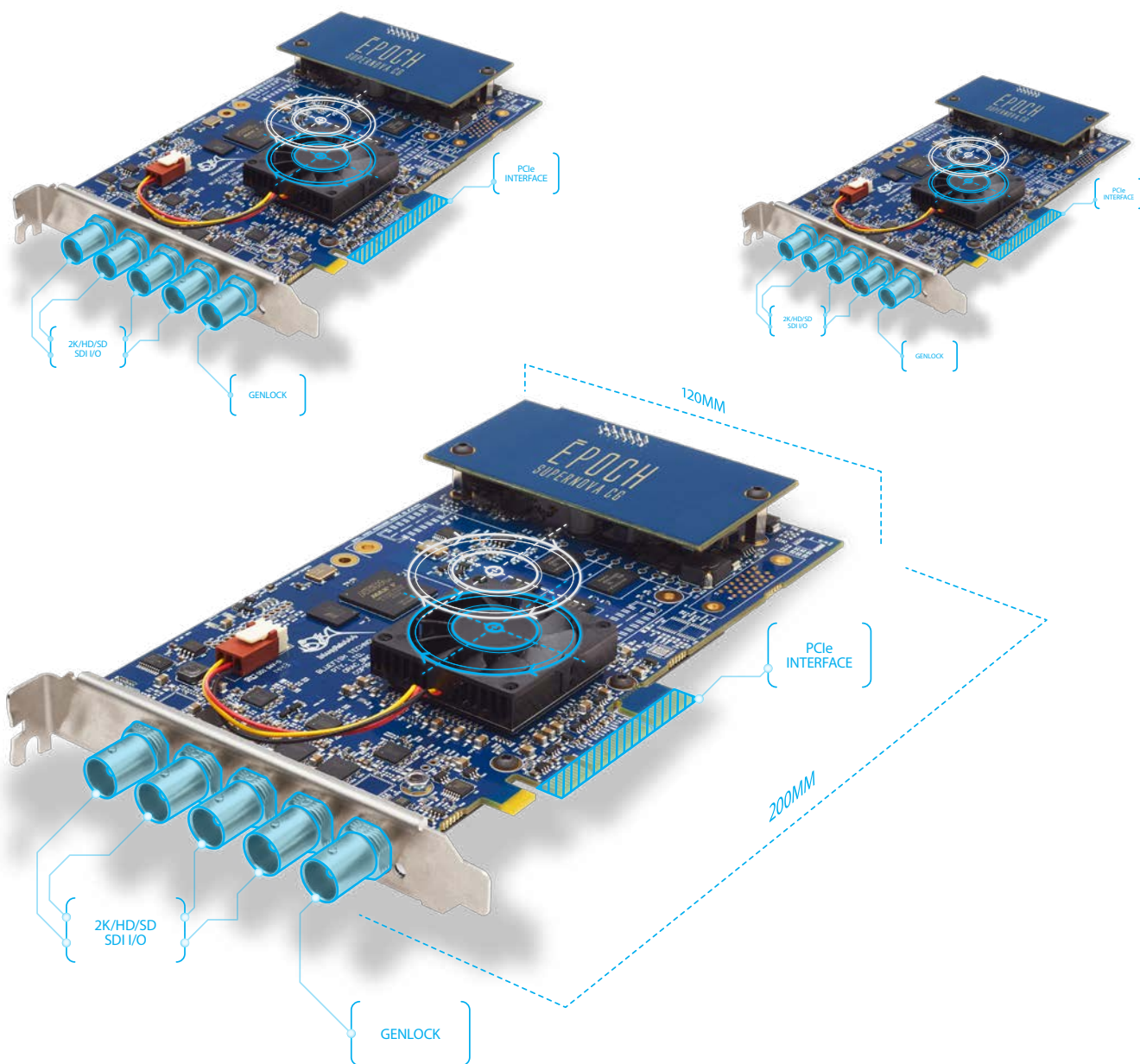SUPERNOVA CG

PCIe INTERFACE

2K/HD/SD SDI I/O

GENLOCK

120MM

200MM

EPOCH | SUPERNOVA CG OFFERS 1.5G PROFESSIONALS COMPLETE FLEXIBILITY TO CHOOSE BETWEEN BNC CONNECTORS FOR HD/SD-SDI I/O WORKFLOWS
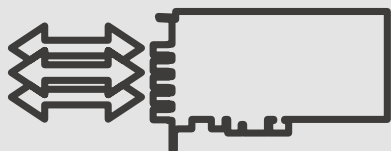
2K

12-BIT PROCESSING

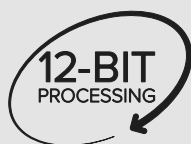**THUNDERBOLT.**

SDI 12/10/8-BIT

THE BLUEFISH444 EPOCH | SUPERNOVA CG VIDEO CARD COMES WITH THE FOLLOWING FEATURES:

Bi-directional I/O's provide unrivalled flexibility with industry standard BNC video connectors each allowing HD/SD-SDI inputs or outputs.
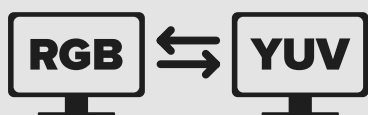

Thunderbolt Expansion Chassis Compatibility with popular manufacturers.

Maintaining a 12-bit processing pipeline means that 4096 discrete values of red, green & blue are maintained per pixel; that's 4 times the colour precision of traditional 10-bit processing!

Low Latency Video Keyer allowing video layers to be combined in hardware with just microseconds of delay.

Maintaining the highest quality RGB <=> YUV includes a fully programmable 4 x 4 x 33-bit colour matrix colour space conversion.

Primary Hardware Colour Corrector using the Bluefish444 programmable matrix combined with the on-board 1D LUTs.

EPOCH SUPERNOVA CG

EB3005CGF

$2,145

- 2K/HD/SD-SDI
- Up to 4 simultaneous and independant channels
- 2K up to 60FPS
- Full Height, 2/3rd Length PCIe

HD/SD	⟺	BNC1
HD/SD	⟺	BNC2
HD/SD	⟺	BNC3
HD/SD	⟺	BNC4
GENLOCK	⟹	BNC5

2K | **12-BIT PROCESSING** | **THUNDERBOLT.** | **SDI 12/10/8-BIT** | (Windows) | (Apple) | **SDK**

BLUEFISH444 EPOCH | SUPERNOVA CG COMPARISON

FEATURE	EPOCH | SUPERNOVA CG	EPOCH | 4K SUPERNOVA S+	EPOCH | 4K SUPERNOVA S+ EX	EPOCH | 4K SUPERNOVA S+ TURBO
Max number of Bi-directional SDI I/Os	4	4	4	8
SD-SDI/1.5G HD-SDI/Dual Link 1.5G (4:2:2:4/4:4:4:4)	YES	YES	YES	YES
3G-SDI (Level A+B)/Dual Link 3G (Level A+B)	NO	YES	YES	YES
Quad Link 1.5/Quad Link 3G (Level A+B)	NO	YES*	YES*	YES
Full-height, 2/3rd-length PCIe	YES	YES	YES	YES
Genlock BNC	YES	YES	YES	YES
SDI Monitor BNC	NO	YES	YES	YES
Breakout Cable *8 x AES Audio I/O, 2 x Analogue Audio OUT, RS-422, Auxiliary Genlock*	NO	NO	NO	YES
Part Number	EB3005CGF	EB3005M	EB3005MRL	EB3005MB
MSRP (USD)	$2,145	$3,995	$4,270	$5,590

*Not able to support 4 independent video channels at 3G.

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.

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

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

ingeSTore **ADDITIONAL CODEC OPTIONS**

AVID DNxHD

Capture directly to Avid MXF Op-Atom files, ready to use within Avid Media Composer and other compatible applications.

USD$800

blue CODEC PACK

Capture directly to widely used compressed file formats ready for use within your video production or post-production workflow. Supports Edit-While-Record.

USD$1,495

SPECIFICATIONS

Card Size	L=200MM X W=120MM
Internal Clearance (L)	184MM
Height	1 PCIE SLOT
Weight	260G

VIDEO I/O

SDI VIDEO

SD-SDI SMPTE 295M	4
1.5G HD-SDI SMPTE 292M	4
3G-SDI (A+B) SMPTE 424M	NO
Dual Link 1.5G SMPTE 372M	YES
Dual Link 3G (A+B)	NO
Quad Link 1.5G SMPTE 2036-1	NO
Quad Link 3G (A+B) SMPTE 2036-1	NO
5th BNC monitor output	NO
Maximum Video Channels	4
12/10/8-bit 4:4:4:4 SDI	YES
12/10/8-bit 4:2:2:4 SDI	YES

GENLOCK

Bi-Level (sync only, no burst)/Tri-Level Genlock	YES
BF Lock Output	NO

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 IO

AUDIO SIGNALS

16 channels of Embedded Audio Input per SDI	YES
8 Channels of AES ID3 Input (Unbalanced, BNC)	NO
16 channels of Embedded Audio Output per SDI	YES
8 Channels of AES ID3 Output (Unbalanced, BNC)	NO
2 channels -10DBU Output (Unbalanced, RCA)	NO
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
LTC I/O	NO
Audio sample rate converters	YES
(MR^2) Master Routing Resource	YES
ISIM (Input Stream Integrity Management)	YES
RS-422 Serial Port	NO
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 Downstream Keyer	YES

VIDEO FORMATS

SUPPORTED YUV SDI VIDEO MODES

720 x 486i @ 29.97FPS NTSC	YES
720 x 576i @ 25FPS PAL	YES
1280 x 720p @ 23.976, 24, 25, 29.97, 30, 50, 59.94, 60FPS	YES
1920 x 1080i @ 25, 29.97, 30FPS	YES
1920 x 1080P/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
1920 x 1080p/PsF @ 48, 50, 59.94, 60FPS	YES
1920 x 1080P/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
2048 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
2048 x 1080P/PsF @ 48, 50, 59.94, 60FPS	YES

SUPPORTED RGB SDI VIDEO MODES

720 x 486i @ 29.97FPS NTSC	YES
720 x 576i @ 25FPS PAL	YES
1920 x 1080i @ 25, 29.97, 30FPS	YES
1920 x 1080P/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES
2048 x 1080p/PsF @ 23.976, 24, 25, 29.97, 30FPS	YES

SUPPORTED HSDL SDI VIDEO MODES

2048 x 1556PsF @ 14.98, 15FPS	NO

SUPPORTED 4K YUV SDI VIDEO MODES

3840 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	NO
3840 x 2160p @ 48, 50, 59.94, 60FPS	NO
4096 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	NO
4096 x 2160p @ 48, 50, 59.94, 60FPS	NO

SUPPORTED 4K RGB SDI VIDEO MODES

3840 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	NO
4096 x 2160p @ 23.976, 24, 25, 29.97, 30FPS	NO

SUPPORTED PIXEL FORMATS

2VUY, YUVS, BV8, V210, AYUV _ 4224, AYUV _ 4444, YV12, I420	YES
ARGB, BGRA, RGB24, Cineon, DPX, RGB48	YES

CROSS PLATFORM SUPPORT WITH INDUSTRY LEADING 3RD PARTY SOFTWARE

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

BLUEFISH444.COM