

IBC 2017 STAND 7.J07

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BLUEFISH444 DEMONSTRATES KRONOS RANGE OF VIDEO, AUDIO, DATA I/O CARDS

Multi-Channel 4K 60p, High Dynamic Range, High Frame Rate SDI and SMPTE 2022 support for Video over IP workflows in Broadcast, Production and Post-production

North Melbourne, Australia, September 4, 2017 – [Bluefish444](http://bluefish444.com), manufacturer of the industry's highest-quality uncompressed 4K SDI, ASI, Video Over IP & HDMI I/O cards, and mini converters, for the professional video industry, will be demonstrating the [KRONOS range of video and audio I/O cards](#) at [IBC Show 2017](#).

The KRONOS range expands the feature set of Bluefish444's Epoch video cards, which support up to 4K 60p workflows. KRONOS is developed for additional workflows requiring Ultra HD up to 8K, high frame rates up to 120fps, high dynamic range and Video Over IP.

With these capabilities, Bluefish444 cards are developed to support all areas of TV and feature film production, post-production, display and restoration, virtual reality and augmented reality. For use in theme parks, music concerts, sporting and outdoor events, the KRONOS range is also recommended for single and multi-card support enabling 8K/4K/2K imagery presented across one or more screens or projectors.

KRONOS adds video processing technologies including resolution scaling, video interlace and de-interlace; hardware codec support, SDI to IP and IP to SDI conversion, and continues to offer the 12-bit colour space conversion and low-latency capabilities currently available in the Epoch family of video cards.

Real-time graphics systems will benefit from the KRONOS range's ability to achieve the highest level of quality, reliability and low latency, whilst adding multiple streams of 4K Ultra HD and high frame rate video I/O demanded by sports and live event coverage.

KRONOS feature highlights include:

- SD SMPTE 295M
- HD 1.5G SMPTE 292M
- 3G (Level A+B) SMPTE 424M
- ASI
- 4:2:2:4 / 4:4:4:4 SDI
- Single Link / Dual Link / Quad Link interfaces
- 12/10-bit SDI
- Full 4K frame buffer
- 3G Bypass Relays
- 12-bit video processing pipeline
- 4x4x33-bit Colour Matrix
- MR² Master Routing Resources
- Hardware Keyer (2K/HD)

- Customisable and flexible pixel formats
- AES Audio I/O
- LTC I/O
- RS-422
- Bi/Tri-level Genlock Input & Cross-locking
- Genlock loop through
- VANC complete access
- HANC Embedded Audio/Payload ID/Custom Packets/RP 188
- MSA and Non-MSA compatible SFP+
- SMPTE 2022-6

“Bluefish444 are pleased to be running technology demonstrations of KRONOS at IBC Show 2017,” states Tom Lithgow, Product Manager at Bluefish444. “The KRONOS video card range has been eagerly awaited by Bluefish444 Developer and Professional customers, looking to achieve multi-channel 4K workflows and Video Over IP connectivity. IBC Show will give visitors an opportunity to see KRONOS prototypes used in some of these workflows.”

HDMI 2.0 I/O, Hardware Acceleration, additional SMPTE 2022 IP standards and emerging IP standards are earmarked for future support via firmware updates.

KRONOS will offer the choice of SDI I/O connectivity with the KRONOS elektronik featuring eight high density BNC connectors capable of SD/HD/3G SDI. Each HD BNC connector is fully bi-directional enabling numerous configuration options including eight input, eight output, or a mixture of SDI input and output connections.

The KRONOS elektronik offers future proofing connectivity with three SFP+ cages in addition to two HD BNC connectors for SD/HD/3G SDI I/O. The SFP+ cages on KRONOS elektronik provide limitless connectivity options with potential for greater than 3G SDI, IP connectivity across 10Gb Ethernet, and flexibility to choose from numerous physical interfaces.

All KRONOS cards will have an 8 lane Gen 3 PCIe interface to achieve the fastest full duplex DMA. KRONOS will provide access to high bandwidth UHD, high frame rate and high dynamic range video I/O and processing, across traditional SDI, IP SMPTE 2022 standards and emerging IP standards.

Supported by Bluefish444’s cross platform unified driver and API, the KRONOS range is set to become the highest quality, most reliable solution for high bandwidth multi-channel video, audio and data I/O solution available in the industry.

Bluefish444 will be showing the [KRONOS range](#) on stand [7.J07](#) at [IBC Show 2017](#). For further information regarding KRONOS, visit www.bluefish444.com

About Bluefish444:

Bluefish444 is the manufacturer of the industry’s highest-quality uncompressed 4K SDI, ASI, Video Over IP & HDMI I/O cards for the Windows, macOS and Linux operating systems. Its video cards are used not only in traditional broadcast and post-production, but also in emerging workflows such as live events, immersive graphics, augmented reality and Video Over IP. Bluefish444 has a growing presence in industries adopting professional video such as the medical, automotive, defence and mining industries.

Bluefish444 cards have been used on award-winning feature films, commercials, music videos and sports events worldwide. Bluefish444’s range of video cards are incorporated in video servers, encoders,

decoders and character generator solutions by numerous 3rd party OEM manufacturers, in addition to other niche & mainstream applications.

Founded in 1998, Bluefish444 is a division and brand name of Bluefish Technologies Pty Ltd., which is based in North Melbourne, Australia. Its products are distributed via an extensive sales channel of OEMs, dealers, and system integrators globally. For further information, visit bluefish444.com

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