



**MEET THE WORLD'S MOST FLEXIBLE VIDEO, AUDIO, AND DATA INTERFACE CARDS**



*SMPTE 2110/2022 IP  
SDI FIBRE*

*Interchangeable Interfaces  
SMPTE 2110/2022  
SDI COAX/FIBRE  
HDMI*

*3G SDI HDBNC  
Bypass Relays  
Reference and SPG*

**4K  
SDI  
COAX**

**4K  
SDI  
FIBRE**

**2K  
SMPTE  
2110/2022**

**2K  
HDMI**

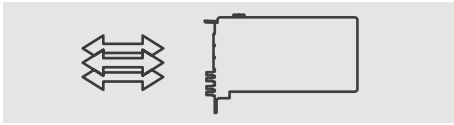


**INTEGRATE BLUEFISH444 INTO THE FOLLOWING VERTICAL MARKETS**

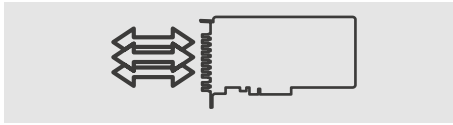


**RANGE BROCHURE**

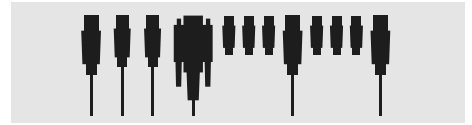
# THE KRONOS RANGE HAS THE FOLLOWING FEATURES



**Flexible IO Interfaces** for unrivalled workflow flexibility with two dedicated 3G SDI HDBNC, and three Dual Channel SFP+ Cages on Optikos3G models.



**Bi-directional I/O's for unrivalled flexibility** with eight HD-BNC video connectors, each allowing 3G/HD/SD-SDI input or output on K8 models.



**Maximum Connectivity** with reference and LTC I/O as standard, and options for RS-422, AES digital audio, or stereo analogue audio I/O.



**SMPTE 2110 or 2022 IP Interfaces** available as SFP+ modules allowing input and output of SMPTE 2110-20/30/40 or SMPTE 2022-6 IP Streams on Optikos3G models.



**3G SDI Coaxial Interfaces** available as SFP+ modules allowing input and output of relocked 3G SDI signals via Coaxial and HDBNC on Optikos3G models.



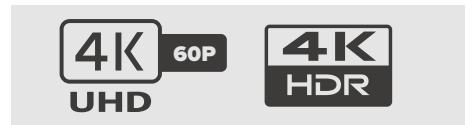
**3G SDI Fibre Interfaces** available as SFP+ modules allowing Input and output of 3G SDI over Single Mode Fibre LC for extended distances on Optikos3G models.



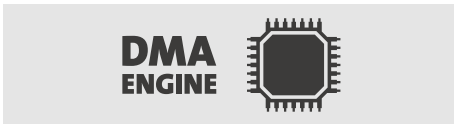
**HD/2K HDMI** supporting high frame rates available as SFP+ modules enabling Capture and Playout of multiple HDMI signals on Optikos3G models.



**High-quality 3G/HD/SD Bypass Relays,** hardware and software watchdog timer for disaster recovery during live broadcasts on K8 models.



**4K/UHD 60p plus HDR/SDR Support** for capture and playout of 4K/UHD, HD high frame-rate, and High Dynamic Range content.



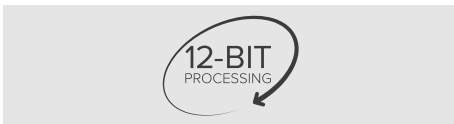
**Full-duplex asynchronous DMA** to independently transfer video, audio and ancillary data.



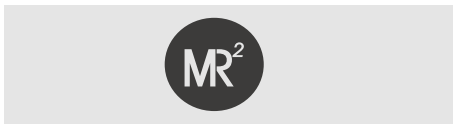
**Low-latency AutoCapture, and full card control** supporting frame, field and AutoCapture allowing access to the video at sub-frame latency.



**Low-latency HD/UHD hardware keyers** allowing video layers to be combined in hardware with microseconds of delay.



**Maintaining a 12-bit processing pipeline** means maximum quality, and is 4 times the colour precision of traditional 10-bit processing!



**MR² Routing Resources** enables a user to flexibly configure main and preview outputs to suit individual workflows.



**SPG Output** allowing a Pseudo Sync signal to be generated and sent to other video equipment requiring synchronisation.



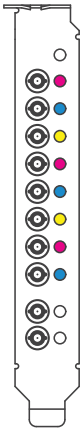
**Popular 3rd-party API support** for DirectShow, V4L2, Medialooks, CUDA and more, supporting accessible video, audio and ancillary I/O.



**VR/AR/Stereoscopic workflows** synchronise multiple SDI inputs into various formats for VR/AR/3D imaging.



**Reference and LTC IO** dedicated HDBNC I/O that can be used for Reference In/Out or LTC In/Out signals.

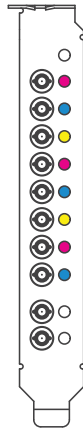


**K4001**

**USD\$4,495**

- 4 x 3G/HD/SD-SDI I/O
- 8 x 1.5G/HD/SD-SDI I/O
- 1 x 4K/UHD I/O
- Full-height, 2/3rd-length PCIe
- Reference In / LTC I/O / SPG Out

8x 1.5G 4x 3G 1x 4K UHD



**K4002**

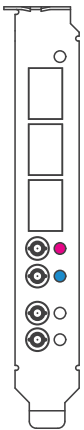
**USD\$5,495**

- 8 x 3G/HD/SD-SDI I/O
- Multi-channel 4K/UHD I/O
- Full-height, 2/3rd-length PCIe
- Reference In / LTC I/O / SPG Out

8x 1.5G 8x 3G MULTI CHANNEL 4K UHD



Upgrade any **KRONOS K8** SKU to **8x3G** for **multi-channel 4K** via a licence.

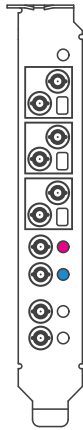


**K4102**

**USD\$5,395**

- 3 x SFP+ Cages for customised IO
- 2 x 3G/HD/SD-SDI I/O
- Full-height, 2/3rd-length PCIe
- Reference In / LTC I/O / SPG Out

2x 3G 3x SFP+



**K4202**

**USD\$6,745**

- 8 x 3G/HD/SD-SDI I/O
- 2 x 4K/UHD I/O
- Full-height, 2/3rd-length PCIe
- Reference In / LTC I/O / SPG Out

8x 3G MULTI CHANNEL 4K UHD 3x SFP+



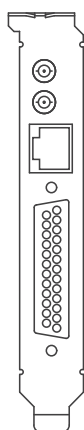
**K4502**

**USD\$13,120**

- 6 x SMPTE IP (2022 or 2110)
- 2 x 3G/HD/SD-SDI I/O
- Full-height, 2/3rd-length PCIe
- Reference In / LTC I/O / SPG Out

2x 3G 6x IP 3x SFP+

**EX-1**



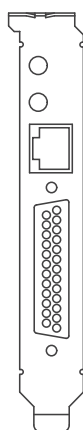
**EX1**

**USD\$TBC**

- LTC I/O
- RS422 CONTROL
- AES 16CH

LTC IN/OUT RS422 CONTROL AES 16 CH

**EX-2**



**EX2**

**USD\$TBC**

- Analogue Audio 2CH I/O
- RS422 Control
- AES 16CH

STEREO ANALOGUE SOUND RS422 CONTROL AES 16 CH

**EX-3**



**EX3**

**USD\$149**

- LTC I/O

LTC IN/OUT

**OPTIKOS3G ONLINE CONFIGURATOR**

[WWW.BLUEFISH444.COM/KRONOS-OPTIKOS3G-SFP-CONFIGURATOR.HTML](http://WWW.BLUEFISH444.COM/KRONOS-OPTIKOS3G-SFP-CONFIGURATOR.HTML)

# KRONOS SFP & LICENSING OPTIONS

**SFP IP 1C**  
Part No.  
1C-IP-SFP

\$1,575



**SFP IP 2C**  
Part No.  
2C-IP-SFP

\$2,575



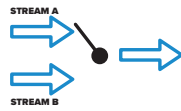
**SFP SDI COAX**  
Part No.  
CX-SFP

\$450



**Clean Switch**  
Part No.  
1P-CS

\$445



**Frame Sync**  
Part No.  
IP-FS

\$445



**SFP SDI FIBRE**  
Part No.  
FBR-SFP

\$290



**IP 1 Channel**  
Part No.  
1C-IP

\$715

**1C SMPTE**  
2110/2022

**IP 2 Channel**  
Part No.  
2C-IP

\$1,385

**2C SMPTE**  
2110/2022

**SFP HDMI**  
Part No.  
HDMI-SFP

\$1,035



FEATURE	KRONOS K8R / K8		Optikos3G	Optikos3G CX SDI	Optikos3G ST IP
Part Number	K4001	K4002	K4102	K4202	K4502
MSRP (USD)	\$4,495	\$5,495	\$5,395	\$6,745	\$13,120
Bi-directional SDI (HD-BNC)	8		2	2	2
Dual Channel SFP+ Cages	NONE		3	3	3
1.5G HD/SD SDI COAX	8		2	8	2
3G SDI COAX (Level A + B)	4	8	2	8	2
High Quality 3G Bypass Relays	4		1	1	1
SMPTE 2022/2110 Streams	NONE		NONE (add up to 6)*	NONE(add up to 6)*	6
Dual Link 1.5/3G SDI	YES		YES	YES	YES
Quad Link 1.5/3G SDI	YES		NO*	YES	NO*
Reference In / SPG Out	YES		YES	YES	YES
LTC I/O	YES		YES	YES	YES
Optional Add on Ex cards for LTC, RS422, AES digital, and Analogue audio IO	YES		YES	YES	YES

\*Interchangeable SMPTE IP/SDI/HDMI I/O available via the purchase of additional SFP+ modules. See SFP & Licensing options above.

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



For a comprehensive and up-to-date list of supported software, visit [bluefish444.com/software](http://bluefish444.com/software)

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For worldwide reseller and distributor contact information, please go to [bluefish444.com/contacts](http://bluefish444.com/contacts)