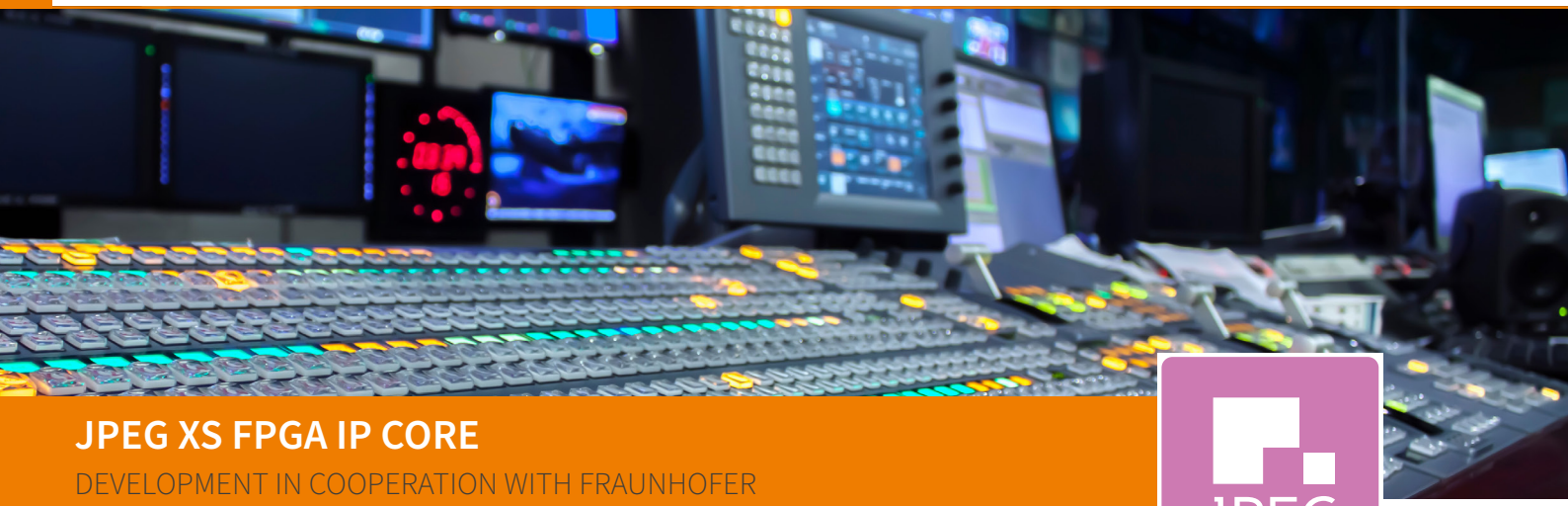

JPEG XS FPGA IP CORE

DEVELOPMENT IN COOPERATION WITH FRAUNHOFER

JPEG XS

JPEG XS is an image compression standard based on a visually lossless, low-latency, and lightweight image encoding system.

Unlike other codecs such as JPEG 2000, JPEG XL, AV1, AVC/H.264, and HEVC/H.265, JPEG XS focuses on visually lossless quality with low latency and low complexity.

Another key feature of JPEG XS is its ability to seamlessly replace uncompressed raw data in a visually lossless manner, reducing bandwidth and energy requirements.

FEATURES

- Low latency
- Compression ratio up to 16:1
- Multiple vendor support
- Processor free implementation
- Up to 10K resolution
- Up to 480 FPS
- Subsampling 4:4:4, 4:2:2
- Color space RGB, YCbCr
- Up to 16 bit per color
- Easy to use interface
- Written in VHDL
- Future support of Bayer pattern

RESOURCES

Examples for 4K@60
Profile: High 444.12
Level: 4k-2
Sublevel: 12 bpp

- Intel Cyclone 10 GX

	ALMs	DSPs	M20Ks
Encoder	23000	82	380
Decoder	16000	144	318

- Xilinx Ultrascale+

	LUTs	DSPs	BRAM	URAM
Encoder	42000	96	104	19

Development in cooperation with Fraunhofer IIS

ABOUT US

IHSE is a leading developer and manufacturer of advanced Keyboard-Video-Mouse (KVM) devices.

IHSE products have been awarded for outstanding manufacturing quality, operability, resilience and enormous transfer speeds.

As the world's leading experts in KVM technology, video coding and transmission is one of our main tasks. That is why we have used our years of experience as users of codec systems in the development of the JPEG XS Core.

CONTACT

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