

## intoPIX delivers new JPEG2000 RAW FPGA IP-cores to compress Camera Bayer pattern-images

*JPEG2000 RAW brings incredible advantages over uncompressed RAW*

**Amsterdam, RAI, 16 September 2013** – At IBC, **intoPIX (10.D31)**, the leading expert of JPEG 2000 compression, officially introduces a new range of JPEG2000-RAW IP-cores for FPGA that manage HD, 4K or 8K Bayer image sensor output from 10 to 16-bit with an efficient raw Visually lossless compression at various frame rates.

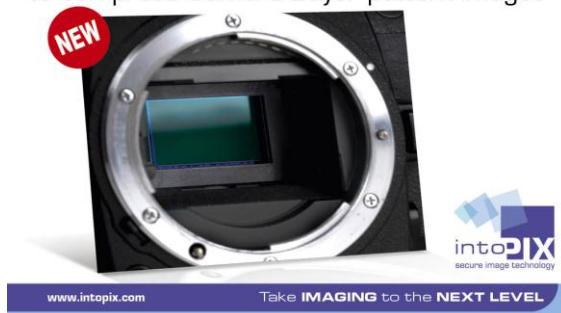
“Cameras continue to feature larger image sensors, higher resolutions, and a variety of schemes for improving color fidelity and image noise reduction. The continued use of uncompressed or RAW files means that the ultimate image quality can't be maintained without creating monster-size files”, said Jean-Baptiste Lorent, Product & Marketing manager at intoPIX.

Today, a simple raw Bayer-pattern image at 16 bits, at a resolution of 4256 by 2848, represents about 23MB (at 60 fps, this implies that 1,4 GB per second has to be stored) . Here intoPIX enters into the picture: A JPEG2000 compressed RAW file drastically reduces the file size while preserving pristine image quality. The JPEG2000-RAW compression format is highly advisable for the vast majority of usage scenarios ranging from 4:1 to 20:1.

Since there is no difference with the uncompressed RAW image quality, there are only good reasons to shoot in compressed JPEG2000 RAW. First: you can manage higher image quality within the constraints of the recording medium compared to other formats at the same file size. Second: the wavelet scalability of JPEG2000 enables to encode image features at different formats separately. As a result, low-resolution preview can be decoded, without processing the entire high-resolution file. It makes it easier to directly view and edit large video files on desktop computers. Last but not least: the royalty-free JPEG2000 standard is already widely adopted by the Cinema and Broadcast industries and recognized for its high quality in production and post-production workflows.

The new intoPIX JPEG2000-RAW IP-cores generate fully standard JPEG2000 files (ISO 15444-1) from a camera's digital sensor in such way that it maximizes Cinema and TV production and post-production capabilities. It achieves this by storing each of the sensor's color channels separately, prior to conversion into a full color image with an optimized and flexible rate allocation. Similar to the RAW files advantages, it preserves the access to any demosaicing algorithms, the control over white balance, exposure and color grading in post-production.

### The JPEG2000 RAW FPGA IP-cores to compress Camera Bayer pattern-images



**About intoPIX**

intoPIX is a leading supplier of video and image compression technology to audiovisual equipment manufacturers. We are passionate about offering people a higher quality image experience and have developed FPGA IP-cores and solutions that enable leading-edge video and image compression, security and hardware enforcement. More information on our company, customers and products can be found on [www.intopix.com](http://www.intopix.com).

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