

High Efficiency Video Coding (HEVC) is the next generation video compression standard. It aims at increasing by 50% the data compression ratio compared to the H.264 standard.

KALRAY MPPA® massively parallel processors bring an unprecedented hardware and software solution to deliver very low power and high quality HEVC encoders with a very short time to market.

MPPA® is a cost effective and low power solution for video live encoding from the camera to the multi-screen client via the internet or the content distribution network (CDN).

## HEVC Encoding solutions on the MPPA® MANYCORE

For live encoding from a source camera to the content distribution network, Kalray offers an extremely low power Video system. An optimized HEVC coding engine is available on the MPPA®-256. Customizable pre-analysis steps (including rate control and pre-filtering) are executed on a host processor. The EMB01 video system can take native SDI, or HDMI inputs.

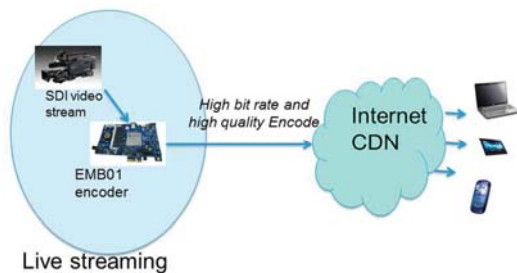


Figure 1- Live streaming in the OTT (over the Top) market

## Applications

- ▶ Live Streaming on Multi-screens
- ▶ Video Conversion / Transcoding
- ▶ Video conferencing

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## Benefits Summary

- ▶ Software programmable solution for flexibility
- ▶ Customizable encoder: add your own software IP
- ▶ Tunable encoder parameters
- ▶ Scalable from SD to UHD and beyond
- ▶ 50% less power consumption compared to CPU
- ▶ Comprehensive cost effective solution: H/W and S/W
- ▶ Embedded solution



Figure 2 – Low power video system MPPA®-256 processor

Low Power Video System description	
Video Input	Ethernet 1Gbe, 3G-SDI, HDMI : support HD 30fps
Audio	Embedded in video
Power	40W
Host CPU	Intel I7 (Dual Core) 1.8Ghz
HOST DDR	8GB
MPPA DDR	8GB
Encoding Density	1 channel HD 30fps, 2 channels 720p 30fps 6 channels SD 30fps
Dimensions	15cm x 15cm x 10cm

Table 1- KALRAY Video System for live HD HEVC encode/decode or UHD HEVC decode