

H.264 Real-time Encoder Software Designed for 4K High Resolution Video

PRELIMINARY

KDDI Labs' technology realizes a real-time 4K encoding on a commercial PC platform only at the bit-rate of 25Mbps!

Features

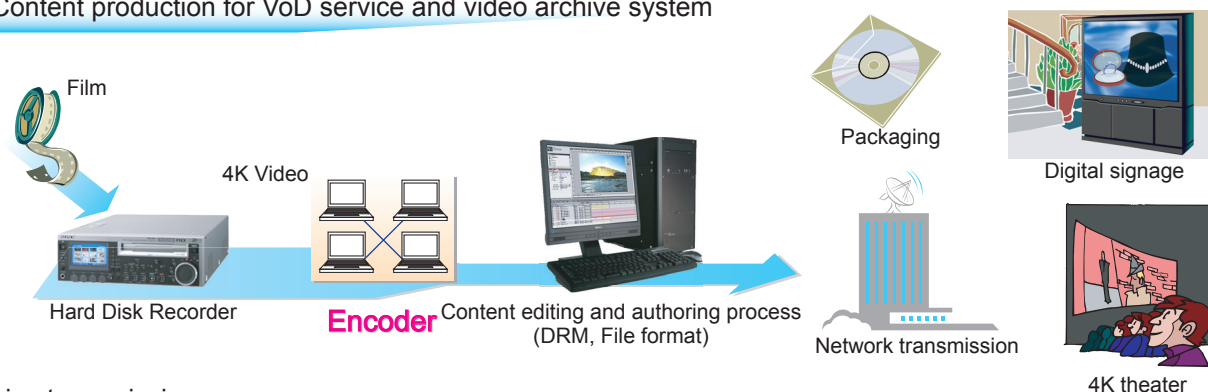
- Real-time encoding of 4K high resolution video is realized by PC software
 - KDDI Labs' H.264 encoder engine achieves both high speed and high coding efficiency.
 - Parallel processing architecture optimized for video coding process is newly introduced to handle the super high resolution video by PC software.
 - System upgrade such as supporting new coding standard as well as encoder optimization is just completed by application download.
- Parallel encoding architecture
 - Close collaboration functionality is newly introduced among encoder engines. Therefore, overall coding efficiency is not degraded while parallel encoder process is applied for spatially segmented video.
 - Implementation scalability is also supported. The same software can be used for mobile application as well as 4K high resolution video by upgrading PC platform.

System outline

- Video signal
 - 4,096 pixel x 2,160 line / 24Hz Progressive
 - HD-SDI x 4
- Coding syntax
 - MPEG-4 AVC/H.264 High Profile
 - Coding bit-rate: 20~50Mbps
 - Video ES format: Single stream
- Network IF
 - RTP streaming based on UDP/IP
 - Giga-bit Ethernet (1000Base-T)
- PC platform
 - CPU architecture: Opteron™ 2.4GHz (AMD Inc.)
 - Interconnect IF: Rappidarray™ (Cray Inc.)

Application

Content production for VoD service and video archive system



Live transmission

