Meet expanded demand for high bandwidth video services over existing delivery infrastructure

Operators are rolling out additional HD and niche video channels to provide the best video offer in the market place. These expanded services are stressing the capacity of the existing delivery system. The revolutionary ARRIS VIPr network video transcoder delivers state-of-the-art video and audio coding for dramatic gains in bandwidth efficiency and system reliability. The VIPr platform simplifies head-end complexity and improves reliability with an integrated platform that puts decoding, recoding, and closed-loop multiplexing on a single, state-of-the-art Intel processor. The powerful, programmable VIPr solution provides maximum flexibility with “best in class” MPEG-4 and MPEG-2 coding quality and efficiency, as well as HD to SD down conversion. With the VIPr solution, operators easily convert off-air HD broadcast “must carry” channels to SD format to support existing customers and do it very efficiently: down convert just one master copy to support both HD and SD tiers.

ARRIS VIPr dual-pass solutions are extremely flexible, supporting HD and SD transcoding or recoding, SD and HD multiplexing, high-density MPEG-2 intelligent recoding, MPEG-4 to MPEG-2 transcoding, CBR for switched video applications, and VBR for 4:1 HD. VIPr video coding efficiency and quality are exceptional. Advanced encoding algorithms utilize original MPEG compression data – a feature unique to the ARRIS family of solutions – to deliver unequaled quality during video transcoding or recoding. Operators can also identify new opportunities with applications like rate clamping and ad splicing with switched digital video. The ARRIS VIPr solution is a highly-efficient, cost-effective, reliable platform that can be reconfigured and repurposed to painlessly deliver better performance and new features through software upgrades as video encoding algorithms improve and MSOs’ requirements change.

Flexible solution
- CBR for Switched Digital Video (SDV) applications
- Local multiplex configuration management
- Supports HD transcoding or recoding
- VBR for up to 4:1 HD in a 256 QAM
- SD + HD multiplexing
- Program input redundancy
- High stream processing density and unsurpassed video quality

Ad Splicing
- Audio Normalization to minimize audio level differences between program audio and advertising audio
- Supports SCTE-35 and SCTE-30 messages
- Supports EBIF late bound splicing for advanced advertising applications
- Supports schedule-mode insertion initiated by the ad server
- Integrated decode-recode solves problems associated with high bit rate spots
- Supports up to 8 HD or up to 48 SD concurrent ads
- Seamless splicing

Manage all transcoding, recoding, and down conversion with a flexible, high-performance platform
- Improve bandwidth efficiency and system reliability with an integrated, high-performance Intel chipset
- Maximize video asset quality with advanced recoding that repurposes original MPEG data
- Preserve network capacity by transporting MPEG-4 across the network and transcoding close to the edge
VIPr™ VIDEO TRANSCODER 6200

MPEG-4 HD to MPEG-2 HD Transcoder/MPEG-2 to MPEG-2 Recoder/MPEG HD to SD Down Converter

The revolutionary ARRIS Network Video Transcoder delivers superior video quality over non-integrated decode/re-encode or rate-shaping solutions through our advanced technology that repurposes the original MPEG compression data to maximize video quality during the transcoding process. The ARRIS improvements in video and audio coding provide dramatic gains in bandwidth efficiency while the programmable VIPr platform allows for increased flexibility, stream processing density and system reliability.

MPEG-2 to MPEG-2; Intelligent Recoder
- 4:1 closed-loop efficiency, 4 HD channels in 1 QAM
- Parameter re-use, maintains original MPEG-2 data to maximize video quality
- Offers superior performance over requantization and non-integrated decode/re-encode solutions
- Advanced Preprocessing and Prefiltering

MPEG-4 to MPEG-2; Intelligent Transcoder
- 4:1 closed-loop efficiency, 4 HD channels in 1 QAM
- Integrated Transcoding & Statistical Multiplexing
- Highly flexible processing platform
- Decoupled from receiver, reuse standard satellite receivers
- Broadcast, SDV, PCTV and Mobility applications
- Integrated rate control enhances video quality
- Transport MPEG-4 throughout the plant and transcode closer to the edge

HD to SD; Intelligent Downconversion
- Convert off air HD broadcast “must carry” channels to SD to support existing customers
- Down convert from one master copy to support both HD & SD tiers
- Active Format Description

The choice is clear.
At ARRIS, encoder products are designed to deliver more channels in less space with superior picture quality. The VIPr™ transcoder is built on a flexible, programmable platform, designed to offer unparalleled quality and features in a compact form factor.

For additional information about the ARRIS VIPr6200 Video Transcoder, contact your ARRIS sales Representative.

Other related Documents:
- Technical Specifications (Pub Code: VIPr6200_TS )