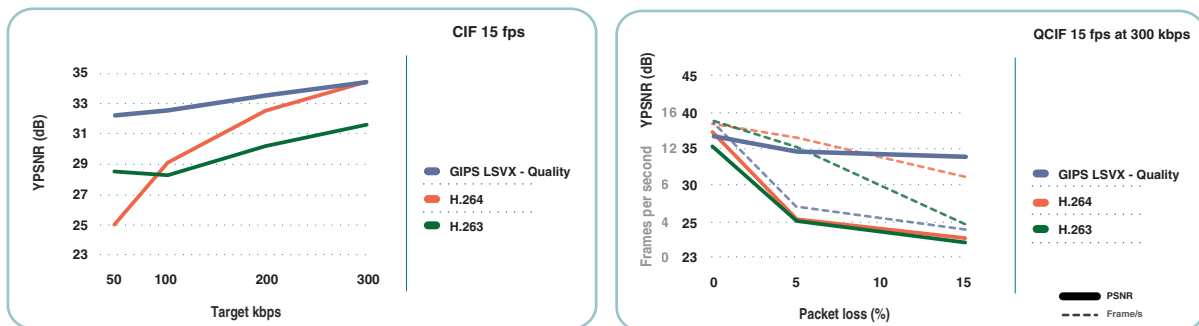![GIPS — GLOBAL IP SOLUTIONS]

GIPS LSVX

Driving real-time multimedia IP communication

Quality has always been the driving force behind wide-spread adoption of IP communications. And whereas the first generation of IP communications focused mainly on high-quality voice, video has rapidly become a critical and essential component of leading edge IP products.

Application developers and service providers today need to guarantee that their multimedia offerings are not just meeting but exceeding customers' expectations – expectations that are rising on a near daily basis. Video users are increasingly requiring better speed, visual quality, reliability and consistency. Developers are challenged with adding more in the way of feature sets while providing more efficient CPU usage. To meet these demanding market requirements a solution specifically designed for IP networks is needed. Even more important is a solution that will keep pace with the ever-demanding and increasing requirements of the market.

GIPS LSVX, part of the GIPS MediaWare™ media processing suite, is a high quality video codec specifically designed for video communications over IP networks. GIPS LSVX not only exceeds today's standard video codecs in terms of basic quality, but also provides superior robustness against packet loss and the better visual quality mandated for real-time IP communications.

Comparisons of GIPS LSVX codec against the popular standard implementations of H.263 and H.264 show that GIPS LSVX codec provides superior visual quality and performance at lower bit rates as well as providing the most efficient CPU usage.

The GIPS LSVX codec meets end user and developer requirements by providing color balanced and sharp output. In addition, GIPS LSVX adheres to bandwidth allocation and provides superior bandwidth control. GIPS LSVX is also less resource intensive than other standard video codecs, minimizing the RAM and CPU required to deliver a high quality media solutions. GIPS LSVX is available today in all GIPS multimedia engines.

GIPS LSVX

Key Benefits
- Rapid time-to-market -- fully integrated into all GIPS multimedia engines
- Better visual quality than standard video codecs
- Greater color range and crisper details
- Superior quality at lower bit rates
- More efficient CPU usage
- Robust against packet loss using GIPS Traffic Shaping
- No third-party license requirements

Technical Advantages
- Decomposition performed on entire image, avoiding blockiness
- Wavelet-based transform
- Sub-bands allow better resource allocation
- Simplified hardware representation
- Exact inverse transform
- Faster computation
- Dynamic key frame insertion
- GIPS LSVX inserts key frames at scene changes and after high motion sequences
- Higher quality key frames provide improved results for interframes