Abstract

This paper provides an advancement in earlier low and high efficient entropy encoder architecture for H. 264/AVC which contains all three entropy encoding methods available in the H. 264/AVC standard, by replacing simple CAVLC encoder used by high-throughput CAVLC encoder and CABAC encoder by real-time multi-bin CABAC encoder in order to further increase overall throughput of the system. The high-throughput CAVLC encoder that uses a dual-coefficient scanning phase which determines all the required data for encoding phase which helps in improving the speed of the encoding phase. And real-time multi-bin CABAC encoder implements the parallelism among the steps of CABAC encoding operation and thus achieves the increased throughput. The proposed architecture is expected to achieve higher throughput as compared to the present architecture but at the cost of increased complexity.
References

- INTERNATIONAL TELECOMMUNICATION UNION. ITU-T Recommendation H.264(03/10); Advanced Video Coding for Generic Audiovisual Services, 2010.

Index Terms

Computer Science
Circuits And Systems

Keywords
H. 264/avc Video Compression  Cabac  Cavlc  Syntax Elements  Etc