

SYNOPSIS

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Number and Title of the Indian Standard: ISO/IEC TR 14496-7 : 2004 'Information technology — Coding of audio-visual objects — Part 7: Optimized reference software for coding of audio-visual objects'

a) Scope:

This part of ISO/IEC 14496 specifies the encoding tools that enhance both the execution and quality for the coding of visual objects as defined in ISO/IEC 14496-2. The tool set is not limited to visual objects but at this point all the recommended tools are visual encoding tools. There are four tools that have been described in this technical report.

- Fast Motion Estimation
- Fast Global Motion Estimation
- Fast and Robust Sprite Generation
- Fast Variable Length Decoder Using Hierarchical Table Lookup

These tools have been demonstrated as robust tools with source codes for both MoMusys and Microsoft implementations. In the current implementations, there is single software that includes all tools existed in the ISO/IEC 14496-2. This is obviously inefficient in terms of code size and execution speed. To address this issue, the optimized reference software has compilation switches such that only selected tools as defined by the profiles and levels are included. Such level of optimization is performed at high level programming language. The platform specific optimization is currently not addressed by this part.

b) Salient features of content:

This part of ISO/IEC 14496 was developed in response to the growing need for optimized reference software that provides both improved visual quality and faster execution while compliance is preserved. The goal is to provide non-normative tools that are essential for implementations of the normative parts of the ISO/IEC 14496 specifications

c) Types/grades/classes, if any covered in the standard: NA

d) Disclaimer (to be automatically provided by the program/software): NA