

Title: Cross-check of JCTVC-J0199: Comments on DPB size
Status: Input Document to JCT-VC
Purpose: Cross-check
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Source: BBC R&D

Abstract

This cross-check reviews the proposal JCTVC-J0199[1].

Summary

The proposal requests to permit a greater number of reference pictures for practical applications, such as accommodating loss management policies in systems with long round-trip-times.

Two alternatives are proposed, both with text. Either —

- a) increase the maximum DPB size to 16 for all levels, or
- b) permit AVC-style picture size dependent DPB occupancy limits to a maximum of 16 pictures.

Comments

Both proposals permit a maximum of 16 pictures to be used¹, although the memory requirements of (a) might be deemed excessive.

Option (b) takes into account the desire of [2] to reduce the DPB size. The effective size for each level is five times the corresponding MaxLumaFS (which includes the current picture). While one may increase the level to counter this, the availability of four reference pictures may be quite limiting.

References

- [1] T. Davies and A. Fuldseth, “AHG 9: Comments on DPB Size.” document JCTVC-J0199, July 2012.
- [2] S. Lu and T. Suzuki, “AHG9: On DPBsize reduction.” document JCTVC-J0163, July 2012.

¹Modified text was provided in version 2 that enforces the intended limit of 16 pictures for option (b)