

**Joint Video Experts Team (JVET)
of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC
29/WG 11**

18th Meeting: Teleconference, April 2020

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Purpose: Proposal

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Source: Xidian Univ., NPU, OPPO

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Abstract

In VVC8, a variable is derived to indicate the partitioning line shift direction (horizontal or vertical) in each CU using geometric partitioning mode (GPM). Given some GPM modes with specific angle being utilized for CUs with specific height/width ratio, the shift intervals between candidate partitioning lines are too narrow to be identified from each other. However, the interval can be increased by simply adjusting the shift direction in these cases. In this contribution, a quite simple modification is proposed in calculation method, with which the selected shift direction always lead to wider intervals between the partitioning lines.

The experimental results are as below:

For RA configuration: -0.04%, -0.04%, and -0.07%;

For LDB configuration: -0.04 %, -0.04%, and -0.01%.

Introduction

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LINKS

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JVET-R0367

<http://vexpertise.stbit.ru/documents/JVET-R0367>

JVET Search

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Adjustment of shiftHor calculation in GPM

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ABSTRACT

MEETING NOTES



SOURCE

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Document Information

Submitted by: Jorma Paavola Oksa

Title: Adjustment of shiftHor calculation in GPM

Authors: V. Sengul

Document: JVET-R0367 updated document

Associated Resources

Comments



ARCHIVE

archive v2

https://jvet-experts.org/doc_end_user/documents/18_Alpbach/wg11/JVET-R0367-v2.zip

DOC JVET-Q2001-vE_R0367.docx

DOC JVET-R0367-v1.docx

XLS JVET-R0367 vs VTM8.0.xlsm

PPT JVET-R0367.pptx

XLS JVET-R0367_vs_VTM8.0.xlsm



MEETING NOTES

external meeting notes

https://www.itu.int/wftp3/av-arch/jvet-site/2020_04_R_Alpbach/JVET-R_Notes_dH.docx

Joint Video Experts Team (JVET) of ITU-T SG21 WP3/21 and ISO/IEC JTC 1/SC 29 18th Meeting: Teleconference, April 2020

Document: JVET-R0367

Title: Meeting Report of the 41st Meeting of the Joint Video Experts Team

Status: Report document from the chair of JVET

Purpose: Report

1 Summary



MEETING NOTES

[JVET-R0367](#) Adjustment of shiftHor calculation in GPM [Y.-Z. Ma, Q.-H. Ran, R.-P. Qiu, M.-L. Zhang, J.-Y. Huo, F.-Z. Yang (Xidian Univ), S. Wan (NPU), Y.-F. Yu, Y. Liu (OPPO)]

In VVC8, a variable is derived to indicate the partitioning line shift direction (horizontal or vertical) in each CU using geometric partitioning mode (GPM). Given some GPM modes with specific angle being utilized for CUs with specific height/width ratio, the shift intervals between candidate partitioning lines are too narrow to be identified from each other. However, the interval can be increased by simply adjusting the shift direction in these cases. In this contribution, a quite simple modification is proposed in calculation method, with which the selected shift direction always lead to wider intervals between the partitioning lines.

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It is claimed that the proposed method would be more consistent. However, there is nothing broken, and the benefit in compression is marginal. Stability of the design is more important at this moment.

No action was taken on this.

CITATION

Y.-Z. Ma, Q.-H. Ran, R.-P. Qiu, M.-L. Zhang, J.-Y. Huo, F.-Z. Yang, S. Wan, Y.-F. Yu, Y. Liu, "Adjustment of shiftHor calculation in GPM", JVET-R0367, 18th Meeting: Teleconference, April 2020.

REFERENCES

1. [F. Bossen, J. Boyce, X. Li, V. Seregin, K. Sühning, "JVET common test conditions and software reference configurations for SDR video", JVET-N1010, 14th Meeting: Geneva, March 2019.](#)
2. [B. Bross, J. Chen, S. Liu, Y.-K. Wang, "Versatile Video Coding \(Draft 8\)", JVET-Q2001, 17th Meeting: Brussels, January 2020.](#)