

**Joint Video Experts Team (JVET)
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Title: EE2-2.4: Combined test of Test 2.2 and Test 2.3 on BCW weights derivation

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Author(s) or [Zixiang Zhang](#) | zhangzixiang.zzx@alibaba-inc.com (Qualcomm)

Contact(s): [Han Huang](#) | ushanhuang@global.tencent.com (Qualcomm)

[CHUN-CHI CHEN](#) | chunchic@qti.qualcomm.com (Qualcomm)

[Vadim Seregin](#) | vseregin@qti.qualcomm.com (Qualcomm)

[Marta Karczewicz](#) | martak@qti.qualcomm.com (Qualcomm)

[Ru-Ling Liao](#) | ruling.lrl@alibaba-inc.com | submitter (Alibaba)

[Jie Chen](#) | jiechen.cj@alibaba-inc.com (Alibaba)

[Y. Ye](#) | yan.ye@alibaba-inc.com (Alibaba)

[Xinwei Li](#) | sid.lxw@alibaba-inc.com (Alibaba)

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Abstract

This contribution reports the simulation results of EE2 Test 2.4, which is a combined test of template matching based BCW index derivation for merge mode and POC based BCW weights derivation. It is reported that on top of ECM-6.0, the overall coding performance impact for {Y, U, V, EncT, DecT} are:

Test 2.4a: without negative bi-predicted weights: {-0.17%, -0.26%, -0.28%} for RA and {} for LDB.

Test 2.4b: with negative bi-predicted weights: {} for RA and {} for LDB.

Introduction

This contribution presents the simulation results of EE2 Test 2.4 [1] which studies the joint test of Test 2.2 and Test 2.3. In Test 2.2, the BCW index for merge coded CUs is derived based on template matching cost instead of inferring from neighboring blocks. Given a selected merge candidate, the TM cost values are calculated with different bi-predicted weights, and then, the bi-predicted weight with minimum TM cost value is used to predict the merge CU. In addition, the bi-predicted weights for merge mode are extended. In Test 2.3, an additional BCW weight is added and is derived according to POC difference. If both reference pictures are from the past or from the future relatively to the current picture, and the current picture is a non-low-delay picture, the weight pair (-2, 10) is added. Otherwise, the weight pair (2, 6) is added. The larger value from the weight pair is assigned to the closest POC reference picture or list 0 reference picture when the POC distance is the same.

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Marta Karczewicz

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Authors:

ABSTRACT

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