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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11**  12th Meeting: Geneva, CH, 14–23 Jan. 2013 | Document: JCTVC-L0424 |

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| *Title:* | **Cross-check for JCTVC-L0150** | | |
| *Status:* | Input Document | | |
| *Purpose:* | Report | | |
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| *Source:* | BBC Research & Development | | |

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**Abstract**

This contribution reports the results of the evaluation of JCTVC-L0150, a proposal introducing deblocking between the boundaries of the two chroma square blocks for 4:2:2 content, part of CE1 Test 3. The simulations have not fully completed yet but the results for the Intra-only test points are a perfect match with the proponents'. The proponents’ source code has been analysed and found to match the description of the proposed technique.

# Description

CE1 Test 3 deals with the evaluation of square transform blocks for chroma components for 4:2:2 chroma format. When square transform blocks are used a new transform block boundary which is not deblocked is introduced. JCTVC-L0150 proposes to apply deblocking to this boundary between chroma square transform blocks. Deblocking is applied to chroma transform blocks of size 16x16 and 8x8. The conditions under which chroma deblocking occurs are not changed by L0150.

## Evaluation of the implementation

The proponents’ software is based on top of CE1 Test 3 software, introducing square transform blocks for chroma components for 4:2:2 chroma format. The implementation reflects the intention described in JCTVC-L0150, i.e., the additional application of deblocking to the horizontal boundary between chroma square transform blocks for 4:2:2 chroma format.

## Test conditions

The simulations were run on 4:2:2 test material only according to the common test conditions for HM range extensions [1]. A cluster of Linux computer running Debian 3.2.0 and GCC 4.7.0 were used for the simulations.

## Test Results

The simulations have not fully completed yet. All Intra-only test points are a perfect match for the proponents’ results.

# References

1. D. Flynn, “Common Test Conditions and software reference configurations for HEVC range extensions”, JCTVC-K1006, 11th meeting, Shanghai, CN, October 2012.