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| *Title:* | **SCE3: Crosscheck of test 3.4.2 on simplified cross-color inter-layer prediction (JCTVC-N0152)** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Proposal | | |
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# Abstract

This contribution reports the crosschecking results of JCTVC-N0152 on simplified cross-color inter-layer prediction in SHVC. The simulation results reportedly matched those provided by the proponents.

# Introduction

In JCTVC-N0152, Inter-layer cross-color filtering was proposed to improve chroma quality of inter-layer reference picture. High-frequency information is extracted from reconstructed base layer luma component and is used to enhance up-sampled chroma components.

# Experimental results

We received the source code from the proponents, implemented in SHM-2.0, and did a quick code study to verify that the proposed method was implemented as described. We used the common conditions [1] in our experiments and ran simulations for the cases of AI, RA, LD-B and LD-P.

The results matched what was provided by the proponents and are summarized as follows

## RD performance



## Memory access assessment based on [2]

### PU level



### Picture level



# Conclusion

In this contribution, we have presented the results of our cross-check of JCTVC-N0152. The implemented algorithm is in line with the proponent’s description, and the simulation results also match those provided by the proponents.

# References

1. [X. Li](mailto:lxiang@qti.qualcomm.com), [J. Boyce](mailto:jill@vidyo.com), [P. Onno](mailto:patrice.onno@crf.canon.fr), [Y. Ye](mailto:yan.ye@interdigital.com), “Common SHM test conditions and software reference configurations”, JCTVC-M1009, Incheon, Korean, 18–26 Apr. 2013.
2. E. Alshina, E. François, “BoG Report on SHVC complexity assessment,” JCTVC-M0455, Incheon, South Korea, April 2013.