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| *Title:* | **Cross-check on Non-SCE3: Quantized GRP (JCTVC-M0143)** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Information | | |
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# Abstract

This contribution reports cross-check results of the proposal JCTVC-M0143 on Non-SCE3: Quantized GRP. It is proposed to quantize residue from 9-bit to 8-bit in order to reduce the required buffer size for residual prediction. The simulation results exactly matched those provided by the proponents.

# Verification

In JCTVC-M0143 [1], it is proposed to quantize residue from 9-bit to 8-bit in order to reduce the required buffer size for residual prediction. We inspected the source code provided by the proponents, implemented on SCE3.6 [2], to verify that the proposed method was implemented as described in [1].

The verification was carried under the common test conditions [3] by setting following macro in the provided code:

#define QUANT\_GRP 1

# Experimental results

The evaluation was done based on the common test condition described in [3]. Table 1 shows the coding performance of [1] compared to SHM1.0. It is confirmed that the results exactly matched those provided by the proponents.

Table 1: Coding performance of JCTVC-M0143 (ref. SHM1.0)



# Conclusion

This contribution reports cross-check results of the proposal JCTVC-M0143 on Non-SCE3: Quantized GRP. It is proposed to quantize residue from 9-bit to 8-bit in order to reduce the required buffer size for residual prediction. The simulation results exactly matched those provided by the proponents. It is recommended to further study on the proposed method under CE.

# Reference

1. K. Sato, “Non-SCE3: Quantized GRP”, JCTVC-M0143, Incheon, KR, 18–26 Apr. 2013.
2. T. Tsukuba, et.al, “SCE3: Results of test 3.6 on Generalized Residual Prediction with shorter-tap MC filter”, JCTVC-M0073, Incheon, KR, 18–26 Apr. 2013.
3. X. Li, et.al, “Common Test Conditions and Software Reference Configurations for the Scalable Test Model,” JCTVC-L1009, Geneva, CH, Jan. 2013.