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| *Title:* | **Cross-check results on Samsung’s proposal (JCT3V-C0035)** | | |
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# Abstract

This contribution reports cross-check results on MB skip flag coding in 3D-ATM optimized for 3D video compression [1]. The R-D performance almost matched with the data provided by Samsung. We found no problem in compiling, building, encoding and decoding. Common test conditions specified in JCT3V-B1100 [2] is used for the evaluation. In the simulation, the anchor is 3DV-ATM v6.1r1. Bit rates and PSNR results were compared: our experiment results were matched with those provided by Samsung.

Table 1. Simulation result

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Texture Coding | | Depth Coding | | Total (Coded PSNR) | | Total (Synthesed PSNR) | | Complexity estimate  (ratio to anchor) | | |
|  | dBR, % | dPSNR,dB | dBR, % | dPSNR,dB | dBR, % | dPSNR,dB | dBR, % | dPSNR,dB | Encoder Time, % | Decoder Time, % | Rendering Time, % |
| S01 | -2.60 | 0.08 | -8.45 | 0.45 | -3.37 | 0.10 | -3.37 | 0.11 | 100% | 101% | 100% |
| S02 | -1.56 | 0.05 | -5.28 | 0.23 | -1.96 | 0.06 | -1.98 | 0.06 | 96% | 101% | 100% |
| S03 | -0.29 | 0.01 | -1.81 | 0.14 | -0.44 | 0.01 | -0.48 | 0.01 | 98% | 99% | 100% |
| S04 | -0.25 | 0.01 | -2.98 | 0.15 | -0.55 | 0.02 | -0.53 | 0.02 | 96% | 100% | 100% |
| S05 | -0.22 | 0.01 | 1.85 | -0.09 | -0.37 | 0.02 | -0.33 | 0.01 | 101% | 103% | 100% |
| S06 | -0.70 | 0.03 | -0.41 | 0.02 | -0.92 | 0.04 | -0.98 | 0.04 | 98% | 100% | 100% |
| S08 | -0.77 | 0.03 | -0.45 | 0.02 | -0.86 | 0.04 | -0.92 | 0.03 | 101% | 100% | 100% |
| Average | -0.91 | 0.03 | -2.51 | 0.13 | -1.21 | 0.04 | -1.23 | 0.04 | 99% | 100% | 100% |

# References

[1] I. Kovliga, A. Fartukov, M. Mishurovskiy and J. Lee (Samsung), “MB skip flag coding in 3D-ATM optimized for 3D video compression”, 3rd JCT3V Meeting, JCT3V-C0035, Geneva, CH, Jan. 2013.

[2] D. Rusanovskyy, K. Müller and A. Vetro, “Common Test Conditions of 3DV Core Experiments”, 2st JCT3V Meeting, JCT3V-B1100, Shanghai, CN, Oct. 2012.