

JVET-Q0712: Extension of error limit table in JVET-Q0503 to high QP

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Summary

- In JVET-Q0503, a new error limit table for K-means clustering is proposed

`g_paletteQuant[52] = { 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 4, 4, 5, 5, 6, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 20, 23, 26, 29, 33, 36, 41, 46, 51, 58, 65, 73, 82, 92, 102, 115, 131, 146}`

- In this proposal, the proposed table in JVET-Q0503 is extended to high QP

- Same formula used in JVET-Q0503

`g_paletteQuant[57] = { 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 4, 4, 5, 5, 6, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 20, 23, 26, 29, 33, 36, 41, 46, 51, 58, 65, 73, 82, 92, 102, 115, 131, 146, 164, 184, 205, 230, 261}`

Results (QP = 42, 47, 52, 57)

- Anchor: palette mode disabled in VTM7.0 (--DualITree=0)

	All Intra Main10				
	Over VTM7.0 PLT=1 DT=0				
	Y	U	V	EncT	DecT
TGM 1080p	-1.19%	-4.80%	-4.80%	101%	98%
TGM 720p	-0.22%	-1.42%	-2.41%	99%	100%
Animation	0.16%	0.11%	-0.03%	100%	100%
Mixed content	-0.57%	-3.32%	-3.22%	99%	98%
Camera-Captured content	0.06%	0.08%	0.02%	100%	101%
Overall	-0.42%	-2.15%	-2.41%	100%	99%





	Random access Main10				
	Over VTM7.0 PLT=1 DT=0				
	Y	U	V	EncT	DecT
TGM 1080p	-2.16%	-9.44%	-8.78%	101%	99%
TGM 720p	-0.37%	-3.00%	-5.30%	100%	100%
Animation	0.34%	-0.24%	-0.44%	101%	100%
Mixed content	-0.58%	-5.03%	-5.42%	101%	101%
Camera-Captured content	0.04%	-0.09%	0.48%	100%	101%
Overall	-0.68%	-4.11%	-4.56%	101%	100%

	Low delay B Main10				
	Over VTM7.0 PLT=1 DT=0				
	Y	U	V	EncT	DecT
TGM 1080p	-1.00%	-8.47%	-6.30%	101%	101%
TGM 720p	-0.82%	-3.07%	-8.32%	101%	100%
Animation	0.25%	0.76%	0.39%	99%	96%
Mixed content	-1.35%	-4.17%	-3.41%	99%	99%
Camera-Captured content	-0.13%	1.77%	-0.72%	99%	101%
Overall	-0.68%	-3.30%	-4.31%	100%	99%

We thank LGE for the crosschecking !!



Thank you

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