

JVET-O0206

CE8-related : Unified condition between BDPCM and transform skip

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Summary

- Problem statement
 - Maximum BDPCM size and TS size are not aligned from each other

- Solution
 - The maximum size of BDPCM is aligned with that of TS
 - Proposed spec text and software patch are provided and confirmed by crosschecker

- Thanks to Fraunhofer HHI for crosschecking (JVET-0689) ☺

Proposed method

- BDPCM is applied on only the transform-skipped residual blocks
 - TS maximum size can be less than 32, but the BDPCM maximum size kept 32 even TS maximum size is smaller
- Let BDPCM maximum size restricted by TS size

Proposed spec

■ Proposed spec

7.3.7.5 Coding unit syntax

coding_unit(x0, y0, cbWidth, cbHeight, treeType) {	Descriptor
(...)	
if(CuPredMode[x0][y0] == MODE_INTRA) {	
if(sps_pcm_enabled_flag && cbWidth >= MinIpcmCbSizeY && cbWidth <= MaxIpcmCbSizeY && cbHeight >= MinIpcmCbSizeY && cbHeight <= MaxIpcmCbSizeY)	
pcm_flag [x0][y0]	ae(v)
if(pcm_flag[x0][y0]) {	
while(!byte_aligned())	
pcm_alignment_zero_bit	f(1)
pcm_sample(cbWidth, cbHeight, treeType)	
} else {	
if(treeType == SINGLE_TREE treeType == DUAL_TREE_LUMA) {	
if(<u>transform_skip_enabled_flag</u> && -cbWidth <= <u>MaxTsSize</u> ~~32~~ && cbHeight <= <u>MaxTsSize</u> ~~32~~)	
intra_bdpcm_flag [x0][y0]	ae(v)
if(intra_bdpcm_flag[x0][y0])	
intra_bdpcm_dir_flag [x0][y0]	ae(v)
(...)	

Thank you