

A decorative geometric shape, resembling a stylized star or a series of overlapping triangles, is located on the left side of the slide. It is light gray and has a subtle, semi-transparent appearance. The shape is composed of several triangular facets that create a sense of depth and movement. It is positioned to the left of the main title, adding a modern and abstract touch to the slide's design. The shape is a key element of the slide's branding and identity, complementing the Hikvision logo and the overall aesthetic of the presentation. The shape is a well-placed and effective branding element that helps to establish the slide's credibility and authority. The shape is a key part of the slide's visual identity and is an important element of its design. The shape is a clear and effective way to communicate the slide's affiliation with Hikvision.

Non-CE6: JVET-O0382

Unification between implicit MTS and ISP

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Outline

- Introduction
- Proposed method
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Introduction

- Implicit MTS&ISP in VTM-5.0
 - transform is selected as in following table1:

t_H	t_V
$W \geq 4 \ \&\& \ W \leq 16?$ DST7:DCT2	$H \geq 4 \ \&\& \ H \leq 16?$ DST7:DCT2

Proposed unifying implicit MTS&ISP **HIKVISION**

- unified implicit MTS and ISP with original ISP transform

selection:

- If $w=1$ or $h=1$, only vertical or horizontal transform
- If $w=2$ or $w \geq 32$, $t_H = \text{DCT2}$
- If $h=2$ or $h \geq 32$, $t_V = \text{DCT2}$

Intra mode	t_H	t_V
Planar Ang. 31,32,34,36,37	DST7	DST7
DC Ang. 33, 35	DCT2	DCT2
Ang. 2, 4, 6...28,30 Ang. 39,41,43...63,65	DST7	DCT2
Ang. 3,5,7...27,29 Ang. 38,40,42...64,66	DCT2	DST7

Experimental Results for unification

■ Unified implicit MTS and ISP with original ISP scheme

Test number	platform	Test condition
Test 1	VTM5.0	MTSImplicit=0,MTS=0
Test 2	VTM5.0	MTSImplicit=1,MTS=0
Test 3	VTM5.0+Method1	MTSImplicit=1,MTS=0
Test 4	VTM5.0	CTC
Test 5	VTM5.0+Method1	CTC

Test results		AI	RA	LB
Test2 VS Test1	Y	0.18%	0.05%	-0.11%
	Cb	-0.85%	-0.40%	0.01%
	Cr	-0.92%	-0.27%	-0.65%

Test results		AI	RA	LB
Test3 VS Test2	Y	-0.63%	-0.27%	-0.04%
	Cb	0.15%	0.06%	0.04%
	Cr	0.17%	0.10%	0.20%

Test results		AI	RA	LB
Test5 VS Test4	Y	-0.01%	-0.01%	0.00%
	Cb	-0.01%	-0.01%	0.19%
	Cr	0.03%	-0.09%	0.39%

Conclusion

- Experimental results for unified implicit MTS and ISP transform:
 - -0.63%, -0.27% and -0.04% for AI, RA and LB.

- It is recommendable to be adopt in the VTM.
- Thanks MediaTek for the crosscheck.

Thank you !

A decorative horizontal bar at the bottom of the slide, consisting of a red segment on the left and a grey segment on the right.