

JCTVC-I0377: CE1 Test 5.1/5.2

Modified EO offset operation and coding of offsets

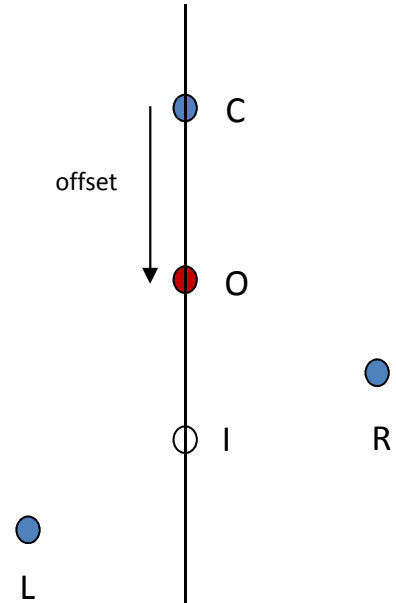
K. Minoo, D. Baylon

Motorola Mobility

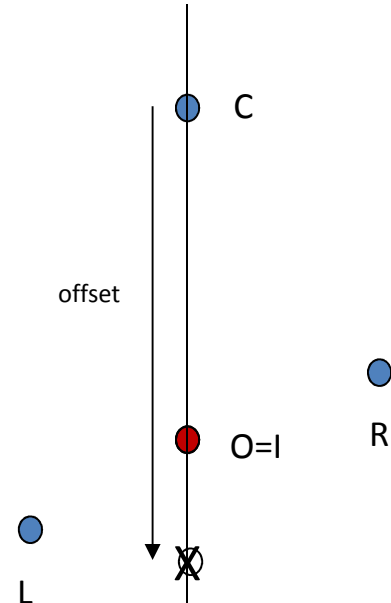
E. Alshina, A. Alshin, J-H. Park

Samsung Electronics Co., Ltd

Modified EO offset operation



Offset does not pass I,
SAO output = $C + \text{offset}$
(current HM)



Offset passes I,
SAO output = bilinear
interpolation (I)
(modified HM)

Computational Overhead

HM6.0	CE1 Test5.1 JCTVC-I0377
$R1 = (C - L)$ $R2 = (C - R)$ $Type = \text{sign}(R1) + \text{sign}(R2) + 2$ $O = C + \text{offset}(Type)$ $O = \text{clip}(O, \text{Max_Value})$ $O = \text{clip}(O, \text{Min_Value})$	$R1 = (C - L)$ $R2 = (C - R)$ $Type = \text{sign}(R1) + \text{sign}(R2) + 2$ $\text{Max_offset} = (R1 + R2) \ll 1$ $\text{Offset} = \text{clip}(\text{offset}(Type), \text{Max_offset})$ $O = C + \text{Offset}$

Modification in the coding of edge offsets

- For 2 or more offsets: swap 0/1 offset codeword for EO classes 1 and 4
- For 1 offset: offset codeword 0 is for non-zero offset value