#### 7.3.8.8 Palette syntax

|  |  |
| --- | --- |
| palette\_coding( x0, y0, nCbS ) { | Descriptor |
| **palette\_share\_flag**[ x0 ][ y0 ] | ae(v) |
| if( !palette\_share\_flag[ x0 ][ y0 ] ) { |  |
| … |  |
| } |  |
| if( currentPaletteSize != 0 ) |  |
| **{** |  |
| **palette\_escape\_transpose\_flag** | ae(v) |
| **}** |  |
| if( palette\_escape\_val\_present\_flag ) { |  |
| if( cu\_qp\_delta\_enabled\_flag && !IsCuQpDeltaCoded ) { |  |
| **cu\_qp\_delta\_palette\_abs** | ae(v) |
| if( cu\_qp\_delta\_palette\_abs ) |  |
| **cu\_qp\_delta\_palette\_sign\_flag** | ae(v) |
| } |  |
| if( cu\_chroma\_qp\_offset\_enabled\_flag && !IsCuChromaQpOffsetCoded ) { |  |
| **cu\_chroma\_qp\_palette\_offset\_flag** | ae(v) |
| if( cu\_chroma\_qp\_offset\_flag && chroma\_qp\_offset\_list\_len\_minus1 > 0 ) |  |
| **cu\_chroma\_qp\_palette\_offset\_idx** | ae(v) |
| } |  |
| } |  |
| … |  |
| } |  |

**palette\_escape\_transpose\_flag** equal to 0 specifies that palette\_escape\_val\_present\_flag = 0 and palette\_transpose\_flag = 0. If it equals to 1, it specifies that palette\_escape\_val\_present\_flag = 0 and palette\_transpose\_flag = 1. If it equals to 2, it specifies that palette\_escape\_val\_present\_flag = 1 and palette\_transpose\_flag = 0. If it equals to 3, it specifies that palette\_escape\_val\_present\_flag = 1 and palette\_transpose\_flag = 1.

| Table 9‑38 – Syntax elements and associated binarizations | | | |
| --- | --- | --- | --- |
| **Syntax structure** | **Syntax element** | **Binarization** | |
| **Process** | **Input parameters** |
| palette\_coding( ) | palette\_share\_flag | FL | cMax = 1 |
| palette\_predictor\_run | EG0 | - |
| palette\_num\_signalled\_entries | TR | cMax = 31, cRiceParam = 0 |
| palette\_entry | FL | cMax = cIdx = = 0 ? ( (1<<BitDepthY) − 1 ) : ( (1<<BitDepthC) − 1 ) |
| palette\_escape\_transpose \_flag | TR | cMax = 3 |
| cu\_qp\_delta\_abs | 9.3.3.11 | - |
| cu\_qp\_delta\_sign\_flag | FL | cMax = 1 |
| cu\_chroma\_qp\_offset\_flag | FL | cMax = 1 |
| cu\_chroma\_qp\_offset\_idx | TR | cMax = chroma\_qp\_offset\_list\_len\_minus1, cRiceParam = 0 |
| palette\_run\_type\_flag | FL | cMax = 1 |
| palette\_index\_idc | TB | cMax = adjustedIndexMax |
| palette\_run\_msb\_id\_plus1 | TR | cMax = Floor( Log2((MaxPaletteRun ) ) + 1, cRiceParam = 0 |
| palette\_run\_refinement\_bits | TB | cMax = ((1<< palette\_run \_msb\_id\_plus1) >= MaxPaletteRun)? MaxPaletteRun - (1 <<( palette\_run\_msb\_id\_plus1-1)) : (1<< (palette\_run \_msb\_id\_plus1 – 1)) – 1 |
| palette\_escape\_val | 9.3.3.12 | cIdx, qP |

| Table 9‑43 – Assignment of ctxInc to syntax elements with context coded bins | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Syntax element** | **binIdx** | | | | | |
| **0** | **1** | **2** | **3** | **4** | **>= 5** |
| … |  |  |  |  |  |  |
| pred\_mode\_flag | 0 | na | na | na | na | na |
| palette\_mode\_flag | 0 | na | na | na | na | na |
| palette\_share\_flag | 0 | na | na | na | na | na |
| palette\_predictor\_run | bypass | bypass | bypass | bypass | bypass | bypass |
| palette\_num\_signalled\_entries | bypass | bypass | bypass | bypass | bypass | bypass |
| palette\_entry | bypass | bypass | bypass | bypass | bypass | bypass |
| palette\_escape\_transpose \_flag | bypass | bypass | bypass | na | na | na |
| cu\_qp\_delta\_palette\_abs | 0 | 1 | 1 | 1 | 1 | bypass |
| … |  |  |  |  |  |  |

#### Binarization process for palette\_escape\_transpose\_flag

Input to this process is a request for a binarization for the syntax element palette\_escape\_transpose\_flag.

Output to this process is the binarization of palette\_escape\_transpose\_flag.

The binarization for the syntax element palette\_escape\_ transpose\_flag is specified in Table 9‑xx.

Table 9‑xx – Binarization for palette\_escape\_transpose\_flag

|  |  |  |
| --- | --- | --- |
| **Value of palette\_escape\_transpose\_flag** | **Bin string** | |
| currentPaletteSize = 1 | currentPaletteSize > 1 |
| 0 | 1 | 1 |
| 1 | 01 | 01 |
| 2 | n/a | 001 |
| 3 | 00 | 000 |