7.3.8.8 Palette syntax

|  |  |
| --- | --- |
| palette\_coding( x0, y0, nCbS ) { | Descriptor |
| **...** |  |
| HalfStartPos = (nCbS \* nCbS) >> 1 |  |
| scanPos = 0 |  |
| while( scanPos < nCbS \* nCbS ) { |  |
| if(indexMax > 0 && (scanPos == 0 || scanPos == HalfStartPos)) |  |
| { |  |
| **palette\_single\_idx\_flag**[ xC ][ yC ] | ae(v) |
| } |  |
| xC = x0 + travScan[ scanPos ][ 0 ] |  |
| yC = y0 + travScan[ scanPos ][ 1 ] |  |
| if( scanPos > 0) { |  |
| xcPrev = x0 + travScan[ scanPos − 1 ][ 0 ] |  |
| ycPrev = y0 + travScan[ scanPos − 1 ][ 1 ] |  |
| } |  |
| if((scanPos == HalfStartPos) || (scanPos >= nCbS && palette\_run\_type\_flag[xcPrev][ycPrev] != COPY\_ABOVE\_MODE))  { |  |
| **palette\_run\_type\_flag**[ xC ][ yC ] | ae(v) |
| } |  |
| if( palette\_run\_type\_flag[ xC ][ yC ] = = COPY\_INDEX\_MODE &&   adjustedIndexMax > 0) |  |
| **palette\_index\_idc** | ae(v) |
| **if(**indexMax > 0 && **palette\_single\_idx\_flag) {** |  |
| paletteRun = HalfStartPos − 1 |  |
| **}** |  |
| **else** if( indexMax > 0 ) { |  |
| scanPosEnd = (scanPos < HalfStartPos) ? HalfStartPos : nCbS \* nCbS |  |
| maxPaletteRun = scanPosEnd – scanPos – 1 |  |
| if( maxPaletteRun > 0 ) { |  |
| **palette\_run\_msb\_id\_plus1** | ae(v) |
| if( palette\_run\_msb\_id\_plus1 > 1 ) |  |
| **palette\_run\_refinement\_bits** | ae(v) |
| } |  |
| } else |  |
| paletteRun = nCbS \* nCbS − 1 |  |
| runPos = 0 |  |
| while ( runPos < = paletteRun ) { |  |
| xR = x0 + travScan[ scanPos ][ 0 ] |  |
| yR = y0 + travScan[ scanPos ][ 1 ] |  |
| if( palette\_run\_type\_flag[ xC ][ yC ] = = COPY\_INDEX\_MODE &&   paletteIndex = = indexMax ) { |  |
| PaletteSampleMode[ xR ][ yR ] = ESCAPE\_MODE |  |
| PaletteIndexMap[ xR ][ yR ] = paletteIndex |  |
| for( cIdx = 0; cIdx < 3; cIdx++ ) { |  |
| **palette\_escape\_val** | ae(v) |
| PaletteEscapeVal[ cIdx ][ xR ][ yR ] = palette\_escape\_val |  |
| } |  |
| } else if(palette\_run\_type\_flag[ xC ][ yC ] = = COPY\_INDEX\_MODE ) { |  |
| PaletteSampleMode[ xR ][ yR ] = COPY\_INDEX\_MODE |  |
| PaletteIndexMap[ xR ][ yR ] = paletteIndex |  |
| } else { |  |
| PaletteSampleMode[ xR ][ yR ] = COPY\_ABOVE\_MODE |  |
| PaletteIndexMap[ xR ][ yR ] = PaletteIndexMap[ xR ][ yR − 1 ] |  |
| } |  |
| runPos++ |  |
| scanPos++ |  |
| } |  |
| } |  |
| } |  |

**palette\_single\_idx\_flag**[ xC ][ yC ] equal to 1 specifies the current sub-map is singl index case.