### Traverse scan order array initialization process

Input to this process is a block size blkSize.

Output of this process is the array travScan[ sPos ][ sComp ]. The array index sPos specifies the scan position ranging from 0 to ( blkSize \* blkSize ) − 1, inclusive. The array index sComp equal to 0 specifies the horizontal component and the array index sComp equal to 1 specifies the vertical component. Depending on the value of blkSize, the array travScan is derived as follows:

– If blkSize is smaller than 64, the array travScan is derived as follows:i = 0  
for( y = 0; y < blkSize; y++ )  
 if( y % 2 = = 0 )  
 for( x = 0; x < blkSize; x++ ) {  
 travScan[ i ][ 0 ] = x  
 travScan[ i ][ 1 ] = y  
 i++  
 }  
 else (6‑14)  
 for( x = blkSize − 1; x >= 0; x− − ) {  
 travScan[ i ][ 0 ] = x  
 travScan[ i ][ 1 ] = y  
 i++  
 }

– Otherwise (if blkSize is equal to 64), the array travScan is derived as follows:

i = 0

for(blkIdx = 0; blkIdx < 4; blkIdx++){  
 x\_offset = (blkIdx/2)\*32  
 y\_offset = (blkIdx%2)\*32  
 for( y = 0; y < 32; y++ )  
 if( y % 2 = = 0 )  
 for( x = 0; x < 32; x++ ) {  
 travScan[ i ][ 0 ] = x + x\_offset  
 travScan[ i ][ 1 ] = y + y\_offset  
 i++  
 }  
 else (6‑xx)  
 for( x = 31; x >= 0; x− − ) {  
 travScan[ i ][ 0 ] = x+ x\_offset  
 travScan[ i ][ 1 ] = y+ y\_offset  
 i++  
 }

}

#### Palette mode semantics

**palette\_run\_type\_flag**[ xC ][ yC ]equal to COPY\_ABOVE\_MODE specifies that the palette index is equal to the palette index at the same location in the row above. palette\_run\_type\_flag[ xC ][ yC ] equal to COPY\_INDEX\_MODE specifies that an indication of the palette index of the sample is coded in the bitstream. The array indices xC, yC specify the location ( xC , yC ) of the sample relative to the top-left luma sample of the picture.

When palette\_run\_type\_flag is not present, it is inferred to be equal to COPY\_INDEX\_MODE.

The variable adjustedIndexMax is derived as follows:

adjustedIndexMax = indexMax  
if( scanPos > 0 && ( yC >= nCbS || palette\_run\_type\_flag[xcPrev][ycPrev] == COPY\_INDEX\_MODE ) )   
 adjustedIndexMax − = 1

**palette\_index\_idc** is an indication of an index to the array represented by currentPaletteEntries. The value of palette\_index\_idc shall be in the range of 0 to adjustedIndexMax, inclusive.

When palette\_index\_idc is not present, it is inferred to be equal to 0.

The variable PaletteIndexMap[ xC ][ yC ] specifes a palette index, which is an index to the array represented by CurrentPaletteEntries. The array indices xC, yC specify the location ( xC , yC ) of the sample relative to the top-left luma sample of the picture. The value of PaletteIndexMap[ xC ][ yC ] shall be in the range of 0 to indexMax, inclusive.

The variable adjustedRefIndexMax is derived as follows:

adjustedRefIndex = indexMax + 1  
if( scanPos > 0 && ( yC >= nCbS || palette\_run\_type\_flag[xcPrev][ycPrev] == COPY\_INDEX\_MODE ) ) {   
 if( palette\_run\_type\_flag[xcPrev][ycPrev] != COPY\_ABOVE\_MODE )   
 adjustedRefIndex = PaletteIndexMap[xcPrev][ycPrev] (7‑79)  
 else  
 adjustedRefIndex = PaletteIndexMap[xC][yC − 1]

When palette\_run\_type\_flag[ xC ][ yC ] is equal to COPY\_INDEX\_MODE, the variable paletteIndex is derived as follows:

paletteIndex = palette\_index\_idc   
if( palette\_index\_idc >= adjustedRefIndex )   
 paletteIndex = palette\_index\_idc + 1

The variable PaletteSampleMode[ xC ][ yC ] specifies whether the palette index is copied from the palette index in the row above or explicitly coded in the bitstream. The array indices xC, yC specify the location ( xC , yC ) of the sample relative to the top-left luma sample of the picture. The value of PaletteSampleMode[ xC ][ yC ] shall be one of COPY\_ABOVE\_MODE, COPY\_INDEX\_MODE, and ESCAPE\_MODE.

If palette\_run\_type\_flag is equal to COPY\_INDEX\_MODE and paletteIndexMap[ xC ][ yC ] is equal to indexMax, the sample is coded in escape mode and paletteSampleMode[ xC ][ yC ] is set equal to ESCAPE\_MODE.

The variable paletteRun specifies the number of consecutive locations minus 1 with the same palette index as the position in the above row when palette\_run\_type\_flag is equal to COPY\_ABOVE\_MODE or specifies the number of consecutive locations minus 1 with the same palette index when palette\_run\_type\_flag is equal to COPY\_INDEX\_MODE.