#### 9.3.2.9 Binarization process for last\_significant\_coefficient\_x and last\_significant\_coefficient\_y

Input to this process is a request for a binarization for the syntax element last\_significant\_coefficient\_pos with pos being x or y and log2TrafoSize.

Output of this process is the binarization of the syntax element.

Table 9‑49 – Specifcation of baseValue [ i ] and flen [i]

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| i | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| baseValue[i] | 4 | 6 | 8 | 12 | 16 | 24 | 32 |
| flen [i] | 1 | 1 | 2 | 2 | 3 | 3 | - |

The variable halfTrafoSize is set equal to 1 << ( log2TrafoSize – 1 ). The vector baseValue[ i ] and flen[i] are specified in Table 9‑53.

* If the value of the syntax element last\_significant\_coeff\_position is smaller than 4, the TU binarization process as specified in subclause 9.3.2.2 is invoked with the value of the syntax element last\_significant\_coeff\_position and cMax =  (  log2TrafoSize <<1 ) -1 as input and the bin string as output.
* Otherwise, the bin string of the syntax element consists of a prefix bin string and suffix bin string as follows.
  + The symbol value of last\_significant\_coefficient is the range of baseValue [i] and baseValue [i+1] , the value of groupIdx is equal to i.
  + The prefix bin string is derived by the TU binarization process as specified in subclause 9.3.2.2 with the value of groupIdx and cMax =  (  log2TrafoSize <<1 ) -1 as input and the bin string as output.
  + The suffix bin string is derived by the FL binarization process as specified in subclause 9.3.2.5 with the symbol value of last\_significant\_coefficient\_pos-baseValue[groupIdx] and cMax  = (flen[groupIdx]<<1)-1 as input and the bin string as output.

###### 9.3.3.1.1.3 Derivation process of ctxIdxInc for the syntax elements last\_significant\_coeff\_x and last\_significant\_coeff\_y

Inputs to this process are the binIdx, the color component index cIdx and the transform block size log2TrafoSize.

Output of this process is ctxIdxInc.

Table 9‑53 – Specifcation of lastCtx[ i ]

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **i** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| **lastCtx** | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 |

The vector lastCtx[ i ] is specified in Table 9‑53. For the derivation of ctxIdxInc, the following applies.

– If log2TrafoSize is less than or equal to 2, ctxIdxInc is derived as follows.

ctxIdxInc = lastCtx[ binIdx ] (9‑52)

– Otherwise (log2TrafoSize is greater than 2), ctxIdxInc is derived as follows.

ctxIdxInc = lastCtx[binIdx ] + (  log2TrafoSize <<1 ) -2 (9‑53)

When cIdx is greater than 0, ctxIdxInc is modified as follows.

ctxIdxInc = ctxIdxInc + 18 (9‑54)