I.7.3.8.5.1 Intra mode extension syntax

|  |  |
| --- | --- |
| intra\_mode\_ext( x0 , y0 , log2PbSize ) { | **Descriptor** |
| if( log2PbSize < 6 ) |  |
| **dim\_not\_present\_flag**[ x0 ][ y0 ] | ae(v) |
| if ( !dim\_not\_present\_flag[ x0 ][ y0 ]  ) |  |
| **depth\_intra\_mode\_flag**[ x0 ][ y0 ] | ae(v) |
| if( DepthIntraMode[ x0 ][ y0 ] = = INTRA\_DEP\_DMM\_WFULL ) |  |
| { |  |
| **wedge\_diff\_tab\_idx**[ x0  ][ y0 ] | ae(v) |
| if (IsDMM1SignBitExist[ x0  ][ y0 ]) |  |
| **wedge\_diff\_tab\_idx\_sign**[ x0  ][ y0 ] | ae(v) |
| } |  |
| } |  |

I.7.4.9.5.1 Intra mode extension semantics

**wedge\_diff\_tab\_idx**[ x0 ][ y0 ]specifies the index of the differential wedgelet pattern in the corresponding pattern list when DepthIntraMode[ x0 ][ y0 ] is equal to INTRA\_DEP\_DMM\_WFULL. The variables DMM1InitValue is derived from the value of log2PbSize as defined in Table I-x..

Table I-x DMM1InitValue

|  |  |
| --- | --- |
| log2PbSize | value |
| 2 | 23 |
| 3 | 255 |
| 4 | 327 |
| 5 | 480 |

**wedge\_diff\_tab\_idx\_sign**[ x0 ][ y0 ] specifies the sign of the differential wedgelet pattern in the corresponding pattern list when DepthIntraMode[ x0 ][ y0 ] is equal to INTRA\_DEP\_DMM\_WFULL.

The variable **IsDMM1SignBitExist**[ x0 ][ y0 ] is derived as specified in the following:

**IsDMM1SignBitExist**[ x0 ][ y0 ] = (**wedge\_diff\_tab\_idx**[ x0 ][ y0 ] > DMM1InitValue) ? 0 : 1 (I-xx1)

The variable WedegeFullTabIdx[ x0 ][ y0 ] is derived as specified in the following:

WedegeFullTabIdx[ x0 ][ y0 ] = DMM1InitValue + (1 - 2\***wedge\_diff\_tab\_idx\_sign**[ x0 ][ y0 ])\* **wedge\_diff\_tab\_idx**[ x0 ][ y0 ] (I-xx2)

I.8.4.4.2.7 Specification of intra prediction mode INTRA\_DMM\_WFULL

The values of the prediction samples predSamples[ x ][ y ], with x, y = 0..nTbS − 1, are derived as specified by the following ordered steps:

* 1. The variable wedgePattern[ x ][ y ] with x, y =0..nTbS − 1, specifying a binary partition pattern is derived as.
     + 1. wedgePattern = WedgePatternTable[ Log2( nTbS ) ][ WedegeFullTabIdx [ xTb ][ yTb ] ] (I‑63)

I.8.4.4.3 Segmental depth intra coding process

Depending on predModeIntra the array wedgePattern[ x ][ y ] with x, y =0..nTbS − 1 specifying the binary segmentation pattern is derived as follows:

* If predModeIntra is equal to INTRA\_DMM\_WFULL, the following applies:
  + 1. wedgePattern = WedgePatternTable[ Log2( nTbS ) ][ WedegeFullTabIdx[ xTb ][ yTb ] ]

Table I‑12 – Association of ctxIdx and syntax elements for each initializationType in the initialization process

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Syntax structure** | **Syntax element** | **ctxTable** | **initType** | | |
| **0** | **1** | **2** |
| cu\_extension( ) intra\_mode\_ext( ) | depth\_intra\_mode\_flag |  | 0 | 1 | 2 |
| wedge\_diff\_tab\_idx |  | 0 | 1 | 2 |
| depth\_dc\_flag |  | 0 | 1 | 2 |
| depth\_dc\_abs |  | 0 | 1 | 2 |
| iv\_res\_pred\_weight\_idx |  |  | 0..2 | 3..5 |
| ic\_flag |  |  | 0 | 1 |
| dbbp\_flag |  | 0 | 1 | 2 |
| sdc\_flag |  | 0 | 1 | 2 |
| dim\_not\_present\_flag |  | 0..2 | 3..5 | 6..8 |

Table I‑13 – Values of initValue for wedge\_diff\_tab\_idx ctxIdx

|  |  |  |  |
| --- | --- | --- | --- |
| **Initialization variable** | **ctxIdx of wedge\_diff\_tab\_idx** | | |
| **0** | **1** | **2** |
| **initValue** | 154 | 154 | 154 |

Table I‑22 – Syntax elements and associated binarizations

| **Syntax structure** | **Syntax element** | **Binarization** | |
| --- | --- | --- | --- |
| **Process** | **Input parameters** |
| cu\_extension( ) | iv\_res\_pred\_weight\_idx | TR | cMax = 2, cRiceParam = 0 |
| ic\_flag | FL | cMax = 1 |
| dbbp\_flag | FL | cMax = 1 |
| sdc\_flag | FL | cMax = 1 |
| intra\_mode\_ext( ) | dim\_not\_present\_flag | FL | cMax = 1 |
| depth\_intra\_mode\_flag | FL | cMax = 1 |
| wedge\_diff\_tab\_idx | FL | cMax = wedgeDiffTabIdxBits[ log2PbSize ] (defined in ) |
| depth\_dc\_flag | FL | cMax = 1 |
| depth\_dc\_abs | UEG0 | [Ed. (GT) To be specified] |
| depth\_dc\_sign\_flag | FL | cMax = 1 |

Table I‑23 –Values of wedgeDiffTabIdxBits[ log2PUSize ]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Initialization variable** | wedgeDiffTabIdxBits | | | | |
| **log2PbSize** | 2 | 3 | 4 | 5 |  |
| **Value** | 6 | 9 | 10 | 10 |  |

Table I‑24 –Assignment of ctxInc to syntax elements with context coded bins

| **Syntax element** | **binIdx** | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **0** | **1** | **2** | **3** | **4** | **>=5** |
| wedge\_diff\_tab\_idx | 0 | 0 | 0 | 0 | 0 | 0 |
| depth\_dc\_flag | 0 | na | na | na | na | na |
| depth\_dc\_abs | 0 | 0 | 0 | 0 | 0 | 0 |
| depth\_dc\_sign\_flag | bypass | 0 | 0 | 0 | 0 | 0 |
| iv\_res\_pred\_weight\_idx | 0, 1 | 2 | na | na | na | na |
| ic\_flag | 0 | na | na | na | na | na |
| dbbp\_flag | 0 | na | na | na | na | na |
| depth\_intra\_mode\_flag | 0 | na | na | na | na | na |
| sdc\_flag | 0 | na | na | na | na | na |
| dim\_not\_present\_flag | 0, 1,2 | na | na | na | na | na |