The changes of CD text are highlighted in yellow. The base text is JCTVC-H1003[1].

Table 9‑29 – Values of variable initValue for significant\_coeff\_flag ctxIdx

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Initialisation variable** | **significant\_coeff\_flag ctxIdx** | | | | | | | | | | | | | | | |
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| **initValue** | 141 | 110 | 110 | 94 | 124 | 108 | 124 | 125 | 168 | 124 | 63 | 123 | 92 | 107 | 141 | 107 |
|  | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **30** | **31** |
| **initValue** | 125 | 141 | 179 | 153 | 125 | 140 | 139 | 182 | 47 | 123 | 47 | 153 | 182 | 224 | 149 | 192 |
|  | **32** | **33** | **34** | **35** | **36** | **37** | **38** | **39** | **40** | **41** | **42** | **43** | **44** | **45** | **46** | **47** |
| **initValue** | 136 | 74 | 31 | 141 | 136 | 139 | 111 | 170 | 153 | 139 | 123 | 123 | 63 | 153 | 168 | 152 |
|  | **48** | **49** | **50** | **51** | **52** | **53** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **61** | **62** | **63** |
| **initValue** | 152 | 92 | 92 | 61 | 122 | 185 | 166 | 183 | 140 | 136 | 153 | 154 | 155 | 153 | 123 | 61 |
|  | **64** | **65** | **66** | **67** | **68** | **69** | **70** | **71** | **72** | **73** | **74** | **75** | **76** | **77** | **78** | **79** |
| **initValue** | 63 | 61 | 167 | 153 | 136 | 136 | 149 | 91 | 149 | 122 | 185 | 151 | 183 | 140 | 170 | 153 |
|  | **80** | **81** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** | **90** | **91** | **92** | **93** | **94** | **95** |
| **initValue** | 139 | 123 | 123 | 63 | 124 | 139 | 152 | 152 | 92 | 92 | 61 | 137 | 185 | 166 | 183 | 140 |
|  | **96** | **97** | **98** | **99** | **100** | **101** | **102** | **103** | **104** | **105** | **106** | **107** | **108** | **109** | **110** | **111** |
| **initValue** | 136 | 153 | 154 | 155 | 153 | 138 | 61 | 107 | 61 | 167 | 153 | 136 | 136 | 121 | 91 | 149 |
|  | **112** | **113** | **114** | **115** | **116** |  |  |  |  |  |  |  |  |  |  |  |
| **initValue** | 122 | 170 | 151 | 183 | 140 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **initValue** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## 9.2.3.1.1.4 Derivation process of ctxIdxInc for the syntax element significant\_coeff\_flag”

Inputs to this process are the colour component index cIdx, the current coefficient scan position ( xC , yC ), the transform block width log2TrafoWidth and the transform block height log2TrafoHeight.

Output of this process is ctxIdxInc.

The variable sigCtx depends on the current position ( xC, yC ), the colour component index cIdx, the transform block size and previsously decoded bins of the syntax element significant\_coeff\_flag. For the derivation of sigCtx, the following applies.

* If log2TrafoWidth is equal to log2TrafoHeight and log2TrafoWidth is less than or equal to 3, sigCtx is derived using ctxIdxMap [ ] specified in as follows..

Index = log2TrafoWidth==2 ? (yC<<2) + xC: ( ( yC>>1) <<2) + (xC>>1)

sigCtxOffset = log2TrafoWidth==2 ? 0 : 7

sigCtx = sigCtxOffset + ctxIdxMap [Index] (9‑17)

* Otherwise if xC + yC is equal to 0, sigCtx is derived as follows.

sigCtx = 14 (9‑20)

* Otherwise, if (xC>>2) + (yC>>2) is less than (3 << (max(log2TrafoWidth, log2TrafoHeight) − 4)), sigCtx is derived using previously decoded bins of the syntax element significant\_coeff\_flag as follows.
* The variable sigCtx is initialized as follows.

sigCtx = 0 (9‑21)

* When xC is less than ( 1 << log2TrafoWidth ) − 1, the following applies.

sigCtx = sigCtx + significant\_coeff\_flag[ xC + 1 ][ yC ] (9‑22)

* When xC is less than ( 1 << log2TrafoWidth ) − 1 and yC is less than ( 1 << log2TrafoHeight ) − 1, the following applies.

sigCtx = sigCtx + significant\_coeff\_flag[ xC + 1 ][ yC + 1 ] (9‑23)

* When xC is less than ( 1 << log2Width ) − 2, the following applies.

sigCtx = sigCtx + significant\_coeff\_flag[ xC + 2 ][ yC ] (9‑24)

* When all of the following conditions are true,
  + yC is less than ( 1 << log2TrafoHeight ) − 1,
  + xC % 4 is not equal to 0 or yC % 4 is not equal to 0,
  + xC % 4 is not equal to 3 or yC % 4 is not equal to 2,

the following applies.

sigCtx = sigCtx + significant\_coeff\_flag[ xC ][ yC + 1 ] (9‑25)

* When yC is less than ( 1 << log2TrafoHeight ) − 2 and sigCtx is less than 4, the following applies.

sigCtx = sigCtx + significant\_coeff\_flag[ xC ][ yC + 2 ] (9‑26)

* The variable sigCtx is modified as follows.
  + If cIdx is equal to 0 and (xC>>2) + (yC>>2) are greater than 0, the following applies.

sigCtx = ( (sigCtx + 1) >> 1 ) + 18 (9‑27)

* + Otherwise, the following applies.

sigCtx = ( (sigCtx + 1) >> 1 ) + 15 (9‑28)

* Otherwise( (xC>>2) + (yC>>2) is equal to or greater than (3 << (max(log2TrafoWidth, log2TrafoHeight) − 4)) ), sigCtx is derived as follows.

sigCtx = ( cIdx > 0) ? 15: 18

The context index increment ctxIdxInc is derived using the colour component index cIdx and sigCtx as follows.

* If cIdx is equal to 0, ctxIdxInc is derived as follows.

ctxIdxInc = sigCtx (9‑29)

* Otherwise (cIdx is greater than 0), ctxIdxInc is derived as follows.

ctxIdxInc = 21 + sigCtx (9‑30)

Table 9‑40 – Specifcation of ctxIdxMap[ i ]

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| **ctxIdxMap [ i ]** | 0 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 4 | 4 | 6 | 6 | 5 | 5 | 6 | 6 |