CLAIMS

1. A method for processing video, comprising:

determining, during a conversion between a current video block, which is coded in a combined intra and inter prediction mode, of a video data and a bitstream, a weight pair comprising a first weight for a first prediction result of the current video block and a second weight for a second prediction result of the current video block, based on one or more neighboring video blocks to the current video block,

wherein the first prediction result is generated by an intra prediction mode, and the second prediction result is generated by an inter prediction mode; and

determining a prediction result of the current block based on a weighted sum of the first prediction result and the second prediction result; and

performing the conversion based on the prediction result,

wherein the weight pair is determined according to a prediction mode of the one or more neighboring video blocks of the current video block,

wherein when at least one neighboring video block of the one or more neighboring video blocks is coded with the combined intra and inter prediction mode, the at least one neighboring video block is treated as a video block coded with an inter prediction mode which is a non-intra prediction mode,

wherein the one or more neighboring video block comprises a video block covering a location (xCb-1, yCb-1+(cbHeight<< a)) and a video block covering a location (xCb-1+(cbWidth<< a), yCb-1), wherein (xCb, yCb) is a location of a top-left sample of the current video block, cbWidth and cbHeight are a width and a height of the current video block, respectively, and a is determined using a cIdx of the current block, and wherein cIdx is a variable specifying a color component index for the current block; wherein the color component index of the current block indicates the color component of the current block is a luma component.

2. The method of claim 1, wherein the prediction mode of the one or more neighboring video block indicates whether the one or more neighboring video block is coded with an intra prediction mode or a non-intra prediction mode.

3. The method of claim 1 or 2, wherein when the neighboring video block is coded with the combined intra and inter prediction mode, the neighboring video block is treated as a block coded with an inter prediction mode which is a non-intra prediction mode.

4. The method of any one of claims 1 to 3, wherein the weight pair is determined further according to a color component of the current video block.

5. The method of claim 4, wherein a location of the one or more neighboring video blocks is determined on the color component of the current block.

6. The method of any one of claims 1 to 5, wherein the one or more neighboring video blocks comprise at least one of a left neighboring video block or a top neighboring video block.

7. The method of any one of claims 1 to 6, wherein the weight pair is determined according to whether the one or more neighboring video block is available, and wherein a variable checkPredModeY specifying whether availability of the neighboring block depends on a prediction mode is set to false.

8. The method of any one of claims 1-7, wherein in response to the cIdx of the current block is equal to 0, the a is set to 0.

9. The method of any one of claims 1-7, wherein in response to the cIdx of the current block is not equal to 0, the a is set to 1.

10. The method of any one of claims 1 to 9, wherein the weight pair is determined based on two or more neighboring video blocks;

when all of the two or more neighboring video blocks are coded with the intra prediction mode, the weight pair is a first candidate weight pair,

when all of the two or more neighboring video blocks are non-intra prediction mode, the weight pair is a second candidate weight pair different from the first candidate weight pair,

otherwise, the weight pair is a third candidate weight pair different from the first and the second candidate weight pairs.

11. The method of claim 10, wherein the first candidate weight pair is (3, 1), the second candidate weight is (1, 3) and the third candidate weight pair is (2, 2), wherein for the (x, y), x is the first weight and y is the second weight.

12. The method of any one of claims 1 to 11, wherein the prediction result is obtained by applying the weight pair for the intra prediction result and the inter prediction result as:

$$P = (wInter * P_{inter} + wIntra * P_{intra} + offset) \gg N$$

and wherein P is the prediction result, P_{inter} is the first prediction result, P_{intra} is the second prediction result, $(wInter, wIntra)$ is the weight pair, *offset* is set to 2, and *N* is set to 2.

13. The method of any one of claims 1 to 12, wherein the conversion includes encoding the current video block into the bitstream.

14. The method of any one of claims 1 to 12, wherein the conversion includes decoding the current video block from the bitstream.

15. An apparatus for processing video data comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to:

determine, during a conversion between a current video block, which is coded in a combined intra and inter prediction mode, of a video data and a bitstream, a weight pair comprising a first weight for a first prediction result of the current video block and a second weight for a second prediction result of the current video block, based on one or more neighboring video blocks to the current video block,

wherein the first prediction result is generated by an intra prediction mode, and the second prediction result is generated by an inter prediction mode;

determine a prediction result of the current block based on a weighted sum of the first prediction result and the second prediction result; and

performing the conversion based on the prediction result,

wherein the weight pair is determined according to a prediction mode of the one or more neighboring video blocks of the current video block,

wherein when at least one neighboring video block of the one or more neighboring video blocks is coded with the combined intra and inter prediction mode, the at least one neighboring video block is treated as a video block coded with an inter prediction mode which is a non-intra prediction mode,

wherein the one or more neighboring video block comprises a video block covering a location (xCb-1, yCb-1+(cbHeight<< a)) and a video block covering a location (xCb-1+(cbWidth<< a), yCb-1), wherein (xCb, yCb) is a location of a top-left sample of the current video block, cbWidth and cbHeight are a width and a height of the current video block, respectively, and a is determined using a cIdx of the current block, and wherein cIdx is a variable specifying a color component index for the current block; wherein the color component index of the current block indicates the color component of the current block is a luma component.

16. A non-transitory computer-readable storage medium storing instructions that cause a processor to:

determine, during a conversion between a current video block, which is coded in a combined intra and inter prediction mode, of a video data and a bitstream, a weight pair comprising a first weight for a first prediction result of the current video block and a second weight for a second prediction result of the current video block, based on one or more neighboring video blocks to the current video block,

wherein the first prediction result is generated by an intra prediction mode, and the second prediction result is generated by an inter prediction mode; and

determine a prediction result of the current block based on a weighted sum of the first prediction result and the second prediction result; and

performing the conversion based on the prediction result,

wherein the weight pair is determined according to a prediction mode of the one or more neighboring video blocks of the current video block,

wherein when at least one neighboring video block of the one or more neighboring video blocks is coded with the combined intra and inter prediction mode, the at least one neighboring video block is treated as a video block coded with an inter prediction mode which is a non-intra prediction mode,

wherein the one or more neighboring video block comprises a video block covering a location (xCb-1, yCb-1+(cbHeight<< a)) and a video block covering a location (xCb-1+(cbWidth<< a), yCb-1), wherein (xCb, yCb) is a location of a top-left sample of the current video block, cbWidth and cbHeight are a width and a height of the current video block, respectively, and a is determined using a cIdx of the current block, and wherein cIdx is a variable specifying a color component index for the current block; wherein the color component index of the current block indicates the color component of the current block is a luma component.

17. A non-transitory computer-readable recording medium storing a bitstream of a video data which is generated by a method performed by a video processing apparatus, wherein the method comprises:

determining, for a current video block, which is coded in a combined intra and inter prediction mode, a weight pair comprising a first weight for a first prediction result of the current video block and a second weight for a second prediction result of the current video block, based on one or more neighboring video blocks to the current video block,

wherein the first prediction result is generated by an intra prediction mode, and the second prediction result is generated by an inter prediction mode; and

determining a prediction result of the current block based on a weighted sum of the first prediction result and the second prediction result; and

generating the bitstream based on the prediction result,

wherein the weight pair is determined according to a prediction mode of the one or more neighboring video blocks of the current video block,

wherein when at least one neighboring video block of the one or more neighboring video blocks is coded with the combined intra and inter prediction mode, the at least one neighboring video block is treated as a video block coded with an inter prediction mode which is a non-intra prediction mode,

wherein the one or more neighboring video block comprises a video block covering a location (xCb-1, yCb-1+(cbHeight<< a)) and a video block covering a location (xCb-1+(cbWidth<< a), yCb-1), wherein (xCb, yCb) is a location of a top-left sample of the current video block, cbWidth and cbHeight are a width and a height of the current video block, respectively, and a is determined using a cIdx of the current block, and wherein cIdx is a variable specifying a color component index for the current block; wherein the color component index of the current block indicates the color component of the current block is a luma component.