CLAIMS

1. A method of visual media processing, comprising:

determining, for a conversion of a current video block of a video and a bitstream of the video, that a first coding mode is applied on the current video block, wherein the current video block is a luma block;

deriving a first block vector for the current video block;

generating prediction samples for the current video block based on the first block vector and a luma buffer, wherein reconstructed samples of previous video blocks without being applied a filtering operation are stored in the luma buffer, and wherein in the first coding mode, the prediction samples are derived from a same picture including the current video block; and

performing the conversion based on the prediction samples;

wherein a size and a shape of the luma buffer are same for the current video block and other luma blocks located in a same video region with the current video block,

wherein for a chroma block corresponding to the current video block, a size of a chroma buffer is derived based on the size of the luma buffer and a color format of the chroma block and the current video block,

wherein the filtering operation includes a deblocking filtering, a sample adaptive offset filtering, or an adaptive loop filtering, and

wherein the video region is a coding tree block or a slice.

2. The method of claim 1, wherein the luma buffer is a rectangular region.

3. The method of claim 1 or 2, wherein the size of the buffer is indicated based on a field included in the bitstream.

4. The method of claim 3, wherein the field is included in a sequence parameter set.

5. The method of claim 3, wherein the field is included in a video parameter set, a picture parameter set, a slice parameter set, or a tile parameter set.

6. The method of claim 1, wherein in response to the color format is 4:2:0, a width of the chroma buffer is equal to half a width of the luma buffer, and a height of the chroma buffer is equal to half a height of the luma buffer.

7. The method of claim 5, wherein in response to the color format is 4:4:4, a width of the chroma buffer is equal to a width of the luma buffer, and a height of the chroma buffer is equal to a height of the luma buffer.

8. The method of claim 5, wherein in response to the color format is 4:2:2, a width of the chroma buffer is equal to half a width of the luma buffer, and a height of the chroma buffer is equal to a height of the luma buffer.

9. The method of any one of claims 1-8, wherein the chroma buffer includes a Cb channel and a Cr channel.

10. The method of any one of claims 1-9, wherein parts of the previous video blocks are located in a coding tree block different from a current coding tree block including the current video block.

11. The method of any one of claims 1-10, wherein the conversion includes encoding the current video block into the bitstream.

12. The method of any one of claims 1-10, wherein the conversion includes decoding the current video block from the bitstream.

13. 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, for a conversion of a current video block of a video and a bitstream of the video, that a first coding mode is applied on the current video block, wherein the current video block is a luma block;

derive a first block vector for the current video block;

generate prediction samples for the current video block based on the first block vector and a luma buffer, wherein reconstructed samples of previous video blocks without being applied a filtering operation are stored in the luma buffer, and wherein in the first coding mode, prediction samples are derived from a same picture including the current video block; and

perform the conversion based on the prediction samples;

wherein a size and a shape of the luma buffer are same for the current video block and other luma blocks located in a same video region with the current video block,

wherein for a chroma block corresponding to the current video block, a size of a chroma buffer is derived based on the size of the luma buffer and a color format of the chroma block and the current video block,

wherein the filtering operation includes a deblocking filtering, a sample adaptive offset filtering, or an adaptive loop filtering, and

wherein the video region is a coding tree block or a slice.

14. The apparatus of claim 13, wherein the luma buffer is a rectangular region.

15. The apparatus of claim 13 or 14, wherein the size of the buffer is indicated based on a field included in the bitstream representation.

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

determine, for a conversion of a current video block of a video and a bitstream of the video, that a first coding mode is applied on the current video block, wherein the current video block is a luma block;

derive a first block vector for the current video block;

generate prediction samples for the current video block based on the first block vector and a luma buffer, wherein reconstructed samples of previous video blocks without being applied a filtering operation are stored in the luma buffer, and wherein in the first coding mode, prediction samples are derived from a same picture including the current video block; and

perform the conversion based on the prediction samples;

wherein a size and a shape of the luma buffer are same for the current video block and other luma blocks located in a same video region with the current video block,

wherein for a chroma block corresponding to the current video block, a size of a chroma buffer is derived based on the size of the luma buffer and a color format of the chroma block and the current video block,

wherein the filtering operation includes a deblocking filtering, a sample adaptive offset filtering, or an adaptive loop filtering, and

wherein the video region is a coding tree block or a slice.

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

determining a first coding mode is applied on a current video block of the video, wherein the current video block is a luma block;

deriving a first block vector for the current video block;

generating prediction samples for the current video block based on the first block vector and a luma buffer, wherein reconstructed samples of previous video blocks without being applied a filtering operation are stored in the luma buffer, and wherein in the first coding mode, prediction samples are derived from a same picture including the current video block; and

generating the bitstream based on the prediction samples;

wherein a size and a shape of the luma buffer are same for the current video block and other luma blocks located in a same video region with the current video block,

wherein for a chroma block corresponding to the current video block, a size of a chroma buffer is derived based on the size of the luma buffer and a color format of the chroma block and the current video block,

wherein the filtering operation includes a deblocking filtering, a sample adaptive offset filtering, or an adaptive loop filtering, and

wherein the video region is a coding tree block or a slice.