CLAIMS

1. A method of processing video data, comprising:

determining, for a conversion between a current video block in a video region of a video data and a bitstream of the video data, whether to use a transform skip mode for the current video block, wherein in response to using the transform skip mode, a transform is skipped on a prediction residual between the current video block and a reference video block;

selecting, in response to using the transform skip mode, a context of a sign flag for a current coefficient of the current video block according to one or more sign flags of one or more neighboring coefficients in the current video block;

determining whether to enable or disable a cross-component linear model prediction mode on the current video block based on whether the current video block is in a dual tree structure in which a luma component and at least one chroma component have separate partition tree structures, wherein in response to the cross-component linear model prediction mode enabled for the current video block, chroma samples of the current video block are predicted based on reconstructed luma samples of the video region by using a linear model; and

performing the conversion based on the selecting and the determining.

2. The method of claim 1, wherein the one or more neighboring coefficients in the current video block include at least one of a left neighbor coefficient or an above neighbor coefficient.

3. The method of claim 1 or claim 2, wherein the one or more neighboring coefficients in the current video block include: a left neighbor coefficient and an above neighbor coefficient.

4. The method of any one of claims 1-3, wherein the context of the sign flag for the current coefficient is based on the one or more sign flags of the one or more neighboring coefficients in accordance with a following rule:

if sign flags of a pair of the one or more neighboring coefficients are both negative, the rule specifies selecting a first context.

5. The method of any one of claims 1-3, wherein the context of the sign flag for the current coefficient is based on the one or more sign flags of the one or more neighboring coefficients in accordance with a following rule:

if one sign flag of a pair of the one or more neighboring coefficients is negative and another sign flag of a pair of the one or more neighboring coefficients is positive, the rule specifies selecting a second context.

6. The method of any one of claims 1-3, wherein the context of the sign flag for the current coefficient is based on the one or more sign flags of the one or more neighboring coefficients in accordance with a following rule:

if sign flags of a pair of the one or more neighboring coefficients are both positive, the rule specifies selecting a third context.

7. The method of any one of claims 1-6, wherein a relationship between the context of the sign flag of the current coefficient and one or more sign flags of the one or more neighboring coefficients is expressed as:

C= (L + A), where C is a context identifier of the context of the sign flag of the current coefficient, L is a sign flag of a left neighbor coefficient of the current coefficient, and A is a sign flag of an above neighbor coefficient of the current coefficient.

8. The method of any one of claims 1-7, wherein the context of the sign flag for the current coefficient is further based on the position of the current coefficient.

9. The method of any one of claims 1-8, wherein a first syntax element indicating whether the transform skip mode is applied to the current video block is conditionally included in the bitstream.

10. The method of claim 9, wherein whether the first syntax element is included in the bitstream is based on a block dimension of the current video block.

11. The method of claim 9, wherein whether the first syntax element is included in the bitstream is based on a coding tree structure of the current video block.

12. The method of claim 11, wherein the first syntax element is included in the bitstream under conditions including a condition that the current video block is in a single tree structure.

13. The method of claim 11, wherein the first syntax element is included in the bitstream under conditions including a condition that the current video block is in a dual tree luma structure.

14. The method of claim 11, wherein the first syntax element is included in the bitstream under conditions including a condition that the current video block is not in a dual tree chroma structure.

15. The method of any one of claims 1-14, wherein a second syntax element indicating a maximum allowed block size used for the transform skip mode is included in the bitstream.

16. The method of any one of claims 1-15, wherein the conversion includes encoding the current video block into the bitstream.

17. The method of any one of claims 1-15, wherein the conversion includes decoding the current video block from the bitstream.

18. 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 between a current video block in a video region of a video data and a bitstream of the video data, whether to use a transform skip mode for the current video block, wherein in response to using the transform skip mode, a transform is skipped on a prediction residual between the current video block and a reference video block;

select, in response to using the transform skip mode, a context of a sign flag for a current coefficient of the current video block according to one or more sign flags of one or more neighboring coefficients in the current video block;

determine whether to enable or disable a cross-component linear model prediction mode on the current video block based on whether the current video block is in a dual tree structure in which a luma component and at least one chroma component have separate partition tree structures, wherein in response to the cross-component linear model prediction mode enabled for the current video block, chroma samples of the current video block are predicted based on reconstructed luma samples of the video region by using a linear model; and

perform the conversion based on the selecting and the determining.

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

determine, for a conversion between a current video block in a video region of a video data and a bitstream of the video data, whether to use a transform skip mode for the current video block, wherein in response to using the transform skip mode, a transform is skipped on a prediction residual between the current video block and a reference video block;

select, in response to using the transform skip mode, a context of a sign flag for a current coefficient of the current video block according to one or more sign flags of one or more neighboring coefficients in the current video block;

determine whether to enable or disable a cross-component linear model prediction mode on the current video block based on whether the current video block is in a dual tree structure in which a luma component and at least one chroma component have separate partition tree structures, wherein in response to the cross-component linear model prediction mode enabled for the current video block, chroma samples of the current video block are predicted based on reconstructed luma samples of the video region by using a linear model; and

perform the conversion based on the selecting and the determining.

20. 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 whether to use a transform skip mode for a current video block in a video region of a video data, wherein in response to using the transform skip mode, a transform is skipped on a prediction residual between the current video block and a reference video block;

selecting, in response to using the transform skip mode, a context of a sign flag for a current coefficient of the current video block according to one or more sign flags of one or more neighboring coefficients in the current video block;

determining whether to enable or disable a cross-component linear model prediction mode on the current video block based on whether the current video block is in a dual tree structure in which a luma component and at least one chroma component have separate partition tree structures, wherein in response to the cross-component linear model prediction mode enabled for the current video block, chroma samples of the current video block are predicted based on reconstructed luma samples of the video region by using a linear model; and

generating the bitstream of the video data based on the selecting and the determining.