CLAIMS

What is Claimed:

1. A device for video decoding, the device comprising:

a processor configured to:

determine whether a template-based coding mode is enabled for a current block;

based on the determination of the template-based coding mode being enabled for the current block, identify a neighboring block;

obtain a value of a syntax element of the current block based on the identified neighboring block; and

decode the current block based on the value of the syntax element.

2. The device of claim 1, wherein the neighboring block is identified based on a plurality of template sample values of the current block and a plurality of template sample values of the neighboring block.

3. The device of claim 1, wherein the processor is further configured to:

register syntax element values of a plurality of neighboring blocks into a table; and

obtain, based on the table, a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block, wherein the value of the syntax element of the current block is obtained based on the syntax element value of the identified neighboring block.

4. The device of claim 3, wherein the processor is further configured to:

sort the syntax element values of the plurality of neighboring blocks into the table based on distances between respective template sample values of each of the plurality of neighboring blocks and the plurality of template sample values of the current block.

5. The device of claim 1, wherein the processor is further configured to:

obtain a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block; and

set the value of the syntax element of the current block to the syntax element value of the identified neighboring block.

6. The device of claim 1, wherein the templated-based coding mode is enabled for a class of syntax elements for the current block, and wherein the processor is further configured to:

based on the determination of the template-based coding mode being enabled for the class of syntax elements for the current block, obtain values of the class of syntax elements of the current block based on corresponding syntax element values of the identified neighboring block; and

reconstruct the current block using the values of the class of syntax elements of the current block.

7. A method for video decoding, the method comprising:

determining whether a template-based coding mode is enabled for a current block;

based on the determination of the template-based coding mode being enabled for the current block, identifying a neighboring block;

obtaining a value of a syntax element of the current block based on the identified neighboring block; and

decoding the current block based on the value of the syntax element.

8. The method of claim 7, wherein the neighboring block is identified based on a plurality of template sample values of the current block and a plurality of template sample values of the neighboring block.

9. The method of claim 7, further comprising:

registering syntax element values of a plurality of neighboring blocks into a table; and

obtaining, based on the table, a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block, wherein the value of the syntax element of the current block is obtained based on the syntax element value of the identified neighboring block.

10. The method of claim 9, further comprising:

sorting the syntax element values of the plurality of neighboring blocks into the table based on distances between respective template sample values of each of the plurality of neighboring blocks and the plurality of template sample values of the current block.

11. The method of claim 7, further comprising:

obtaining a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block; and

setting the value of the syntax element of the current block to the syntax element value of the identified neighboring block.

12. The method of claim 7, wherein the template-based coding mode is enabled for a class of syntax elements for the current block, further comprising:

based on the determination of the template-based coding mode being enabled for the class of syntax elements for the current block, obtaining values of the class of syntax elements of the current block based on corresponding syntax element values of the identified neighboring block; and

reconstructing the current block using the values of the class of syntax elements of the current block.

13. A device for video encoding, the device comprising:

a processor configured to:

determine whether a template-based coding mode is enabled for a current block;

based on the determination of the template-based coding mode being enabled for the current block, identify a neighboring block;

obtain a value of a syntax element of the current block based on the identified neighboring block; and

encode the current block based on the value of the syntax element.

14. The device of claim 13, wherein the neighboring block is identified based on a plurality of template sample values of the current block and a plurality of template sample values of the neighboring block.

15. The device of claim 13, wherein the processor is further configured to:

obtain a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block; and

set the value of the syntax element of the current block to the syntax element value of the identified neighboring block.

16. The device of claim 13, wherein the template-based coding mode is enabled for a class of syntax elements for the current block, and wherein the processor is further configured to:

based on the determination of the template-based coding mode being enabled for the class of syntax elements for the current block, obtain values of the class of syntax elements of the current block based on corresponding syntax element values of the identified neighboring block; and

encode the current block using the values of the class of syntax elements of the current block.

17. A method for video encoding, the method comprising: determining whether a template-based coding mode is enabled for a current block;

based on the determination of the template-based coding mode being enabled for the current block, identifying a neighboring block;

obtaining a value of a syntax element of the current block based on the identified neighboring block; and

encoding the current block based on the value of the syntax element.

18. The method of claim 17, wherein the neighboring block is identified based on a plurality of template sample values of the current block and a plurality of template sample values of the neighboring block.

19. The method of claim 17, further comprising:

obtaining a syntax element value of the identified neighboring block that corresponds to the syntax element of the current block; and

setting the value of the syntax element of the current block to the syntax element value of the identified neighboring block.

20. The method of claim 17, wherein the template-based coding mode is enabled for a class of syntax elements for the current block, further comprising:

based on the determination of the template-based coding mode being enabled for the class of syntax elements for the current block, obtaining values of the class of syntax elements of the current block based on corresponding syntax element values of the identified neighboring block; and

encoding the current block using the values of the class of syntax elements of the current block.