CLAIMS

1. A method of coding video data, the method comprising:

coding, via a coded video bitstream, a first syntax element specifying whether a coding unit (CU) of video data is split using intra sub-partition (ISP);

coding, via the coded video bitstream and where the first syntax element specifies that the CU is split using ISP, a second syntax element specifying a split type for the CU; and

responsive to the split type being vertical split or horizontal split:

performing splitting of the CU of video data to form a set of prediction blocks, the prediction blocks including at least a first prediction block and a second prediction block;

grouping a plurality of prediction blocks from the set of prediction blocks into a first prediction block group (PBG); and

reconstructing samples of prediction blocks included in the first PBG independently of samples of other prediction blocks included in the first PBG.

2. The method of claim 1, wherein grouping the plurality of the set of prediction blocks into the first PBG comprises grouping a first plurality of the set of prediction blocks into the first PBG, the method further comprising:

grouping a second plurality of the set of prediction blocks into a second PBG, the second plurality of the set of prediction blocks and the first plurality of the set of prediction blocks including a non-overlapping set of prediction blocks; and

reconstructing samples of prediction blocks included in the second PBG independently of samples of other prediction blocks included in the second PBG.

3. The method of claim 2, wherein reconstructing samples of prediction blocks included in the second PBG comprises reconstructing samples of prediction blocks included in the second PBG based on samples of the prediction blocks included in the first PBG.

4. The method of claim 1, wherein the first PBG comprises a sample size width of at least four.

5. The method of claim 1, wherein a first transform block associated with the first PBG has a size equal to the size of the first prediction block.

6. The method of claim 1, wherein reconstructing samples of prediction blocks comprises:

generating a prediction sample array having a width equal to an aggregated width of at least the first prediction block and the second prediction block.

7. The method of claim 1, wherein the first prediction block comprises a sample width of less than or equal to two.

8. The method of claim 7, wherein the first prediction block and the second prediction block are of a same width.

9. The method of claim 1, further comprising:

determining a quantity of prediction block groups based on a width of the coding unit and a width of the first prediction block;

coding the CU in accordance with the quantity of prediction block groups such that the CU comprises the quantity of prediction block groups.

10. The method of claim 1, wherein the method is performed by one or more processors.

11. The method of claim 1, further comprising:

encoding, in the coded video bitstream, one or more syntax elements that represent prediction information for the CU of video data and one or more syntax elements that represent residual data for the CU of video data.

12. The method of claim 1, further comprising:

decoding, from the coded video bitstream, one or more syntax elements that represent prediction information for the CU of video data and one or more syntax elements that represent residual data for the CU of video data.

13. A device for coding video data, the device comprising:

a memory configured to store video data; and

one or more processors implemented in circuitry and configured to:

code, via a coded video bitstream, a first syntax element specifying whether a coding unit (CU) of video data is split using intra sub-partition (ISP);

code, via the coded video bitstream and where the first syntax element specifies that the CU is split using ISP, a second syntax element specifying a split type for the CU; and

responsive to the split type being vertical split or horizontal split:

perform splitting of the CU of video data to form a set of prediction blocks, the prediction blocks including at least a first prediction block and a second prediction block;

group a plurality of prediction blocks from the set of prediction blocks into a first prediction block group (PBG); and

reconstruct samples of prediction blocks included in the first PBG independently of samples of other prediction blocks included in the first PBG.

14. The device of claim 13, wherein to group the plurality of the set of prediction blocks into the first PBG, the one or more processors are configured to group a first plurality of the set of prediction blocks into the first PBG, and wherein the one or more processors are further configured to:

group a second plurality of the set of prediction blocks into a second PBG, the second plurality of the set of prediction blocks and the first plurality of the set of prediction blocks including a non-overlapping set of prediction blocks; and

reconstruct samples of prediction blocks included in the second PBG independently of samples of other prediction blocks included in the second PBG.

15. The device of claim 14, wherein to reconstruct samples of prediction blocks included in the second PBG, the one or more processors are configured to reconstruct samples of prediction blocks included in the second PBG based on samples of the prediction blocks included in the first PBG.

16. The device of claim 13, wherein the first PBG comprises a sample size width of at least four.

17. The device of claim 13, wherein a first transform block associated with the first PBG has a size equal to the size of the first prediction block.

18. The device of claim 13, wherein to reconstruct the samples of prediction blocks, the one or more processors are configured to:

generate a prediction sample array having a width equal to an aggregated width of at least the first prediction block and the second prediction block.

19. The device of claim 13, wherein the first prediction block comprises a sample width of less than or equal to two.

20. The device of claim 19, wherein the first prediction block and the second prediction block are of a same width.

21. The device of claim 13, wherein the one or more processors are further configured to:

determine a quantity of prediction block groups based on a width of the coding unit and a width of the first prediction block; and

code the CU in accordance with the quantity of prediction block groups such that the CU comprises the quantity of prediction block groups.

22. The device of claim 13, wherein the one or more processors are included in a video encoder.

23. The device of claim 13, wherein the one or more processors are included in a video decoder.

24. A non-transitory computer-readable storage medium having stored thereon instructions that, when executed, cause one or more processors to:

code, via a coded video bitstream, a first syntax element specifying whether a coding unit (CU) of video data is split using intra sub-partition (ISP);

code, via the coded video bitstream and where the first syntax element specifies that the CU is split using ISP, a second syntax element specifying a split type for the CU; and

responsive to the split type being vertical split or horizontal split:

perform splitting of the CU of video data to form a set of prediction blocks, the prediction blocks including at least a first prediction block and a second prediction block;

group a plurality of prediction blocks from the set of prediction blocks into a first prediction block group (PBG); and

reconstruct samples of prediction blocks included in the first PBG independently of samples of other prediction blocks included in the first PBG.

25. An apparatus for coding video data, the apparatus including:

means for coding, via a coded video bitstream, a first syntax element specifying whether a coding unit (CU) of video data is split using intra sub-partition (ISP);

means for coding, via the coded video bitstream and where the first syntax element specifies that the CU is split using ISP, a second syntax element specifying a split type for the CU;

means for performing, responsive to the split type being vertical split or horizontal split, splitting of the CU to form a set of prediction blocks, the prediction blocks including at least a first prediction block and a second prediction block;

means for grouping, responsive to the split type being vertical or horizontal split, a plurality of prediction blocks from the set of prediction blocks into a first prediction block group (PBG); and

means for reconstructing, responsive to the split type being vertical or horizontal split, samples of prediction blocks included in the first PBG independently of samples of other prediction blocks included in the first PBG.

26. The method of claim 1, wherein the split type is one of: no split, vertical split, and horizontal split.

27. The method of claim 1, wherein the first syntax element comprises a intra_subpartitions_mode_flag syntax element, and wherein the second syntax element comprises a intra_subpartitions_split_flag syntax element.

28. The method of claim 1, wherein splitting the CU comprises: splitting a transform block of the CU into the set of prediction blocks.