CLAIMS

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

receiving a lossless coding syntax element for a current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from a quantization parameter (QP) value;

determining that the current block of video data is a current quantization block based on a size of the current block of video data;

assigning a delta quantization parameter (dQP) value of zero for the current quantization block, wherein the dQP value is a difference between the QP value and a value of a QP Predictor;

determining the QP value for the current quantization block based on the assigned dQP value and the QP Predictor; and

decoding the current quantization block according to the lossless coding mode and the determined QP value.

2. The method of claim 1, wherein the current block of video data is a coding unit (CU) of video data, the method further comprising:

determining a quantization group (QG) size; and

determining that the CU has the size greater than or equal to the QG size.

3. The method of claim 1, the method further comprising:

determining the QP value by adding the assigned dQP value to a value of the QP Predictor, wherein the QP

Predictor is an average of a QP value for an above quantization block and a left quantization block, wherein the above quantization block is located above the current quantization block and wherein the left quantization block is located to the left of the current quantization block.

4. The method of claim **1**, further comprising:

performing QP prediction for another block of video data using the determined QP value.

5. A method of encoding video data, the method comprising:

determining that a current block of video data is to be encoded using a lossless coding mode;

determining that the current block of video data is a current quantization block based on a size of the current block of video data;

determining a quantization parameter (QP) value for the current quantization block of video data based on a zero value for a delta quantization parameter (dQP) for the current quantization block and a value of a QP predictor, wherein the dQP value is a difference between the QP value and the value of the QP Predictor;

generating a lossless coding syntax element for the current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from the QP value; and

encoding the current quantization block according to the lossless coding mode and the determined QP value.

6. The method of claim **5**, wherein the current block of video data is a coding unit (CU) of video data, the method further comprising:

determining a quantization group (QG) size; and

determining that the CU has the size greater than or equal to the QG size.

7. The method of claim **5**, the method further comprising:

determining the QP value by adding the assigned dQP value to a value of the QP Predictor, wherein the QP Predictor is an average of a QP value for an above quantization block and a left quantization block, wherein the above quantization block is located above the current quantization block and wherein the left quantization block is located to the left of the current quantization block.

8. The method of claim **5**, further comprising:

performing QP prediction for another block of video data using the determined QP value.

9. An apparatus configured to decode video data, the apparatus comprising:

a memory configured to store the video data; and

a video decoder configured to:

receive a lossless coding syntax element for a current block of the video data, the lossless coding syntax element indicating that the current block of the video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from a quantization parameter (QP) value;

determine that the current block of the video data is a current quantization block based on a size of the current block of the video data;

assign a delta quantization parameter (dQP) value of zero for the current quantization block, wherein the dQP value is a difference between the QP value and a value of a QP Predictor;

determine the QP value for the current quantization block based on the assigned dQP value and a QP

Predictor; and

decode the current quantization block according to the lossless coding mode and the determined QP value.

10. The apparatus of claim **9**, wherein the current block of the video data is a coding unit (CU) of the video data, and wherein the video decoder is further configured to:

determine a quantization group (QG) size; and

determine that the CU has the size greater than or equal to the QG size.

11. The apparatus of claim **9**, wherein the vide decoder is further configured to:

determine the QP value by adding the assigned dQP value to a value of the QP Predictor, wherein the QP Predictor is an average of a QP value for an above quantization block and a left quantization block, wherein the above quantization block is located above the current quantization block and wherein the left quantization block is located to the left of the current quantization block.

12. The apparatus of claim **9**, wherein the video decoder is further configured to:

perform QP prediction for another block of video data using the determined QP value.

13. An apparatus configured to encode video data, the apparatus comprising:

a memory configured to store the video data; and

a video encoder configured to:

determine that a current block of the video data is to be encoded using a lossless coding mode;

determine that the current block of the video data is a current quantization block based on a size of the current block of the video data;

determine a quantization parameter (QP) value for the current quantization block of the video data based on

a zero value for a delta quantization parameter (dQP) for the current quantization block and a value of a QP predictor, wherein the dQP value is a difference between the QP value and the value of the QP Predictor;

generate a lossless coding syntax element for the current block of the video data, the lossless coding syntax element indicating that the current block of the video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from the QP value; and

encode the current quantization block according to the lossless coding mode and the determined QP value.

14. The apparatus of claim **13**, wherein the current block of video data is a coding unit (CU) of the video data, and wherein the video encoder is further configured to:

determine a quantization group (QG) size; and

determine that the CU has the size greater than or equal to the QG size.

15. The apparatus of claim **13**, wherein the video encoder is further configured to:

determine the QP value by adding the assigned dQP value to a value of the QP Predictor, wherein the QP Predictor is an average of a QP value for an above quantization block and a left quantization block, wherein the above quantization block is located above the current quantization block and wherein the left quantization block is located to the left of the current quantization block.

16. The apparatus of claim **13**, wherein the video encoder is further configured to:

perform QP prediction for another block of video data using the determined QP value.

17. An apparatus configured to decode video data, the apparatus comprising:

means for receiving a lossless coding syntax element for a current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from a quantization parameter (QP) value;

means for determining that the current block of video data is a current quantization block based on a size of the current block of video data;

means for assigning a delta quantization parameter (dQP) value of zero for the current quantization block, wherein the dQP value is a difference between the QP value and a value of a QP Predictor;

means for determining the QP value for the current quantization block based on the assigned dQP value and a QP Predictor; and

means for decoding the current quantization block according to the lossless coding mode and the determined QP value.

18. An apparatus configured to encode video data, the apparatus comprising:

means for determining that a current block of video data is to be encoded using a lossless coding mode;

means for determining that the current block of video data is a current quantization block based on a size of the current block of video data;

means for determining a quantization parameter (QP) value for the current quantization block of video data based on a zero value for a delta quantization parameter (dQP) for the current quantization block and a value of a QP predictor, wherein the dQP value is a difference between the QP value and the value of the QP Predictor;

means for generating a lossless coding syntax element for the current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from the QP value; and

means for encoding the current quantization block according to the lossless coding mode and the determined QP value.

19. A non-transitory computer-readable storage medium storing instructions that, when executed, cause one or more processors of a device configured to decode video data to:

receive a lossless coding syntax element for a current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from a quantization parameter (QP) value;

determine that the current block of video data is a current quantization block based on a size of the current block of video data;

assign a delta quantization parameter (dQP) value of zero for the current quantization block, wherein the dQP value is a difference between the QP value and a value of a QP Predictor;

determine the QP value for the current quantization block based on the assigned dQP value and a QP Predictor; and

decode the current quantization block according to the lossless coding mode and the determined QP value.

20. A non-transitory computer-readable storage medium storing instructions that, when executed, cause one or more processors of a device configured to encode video data to:

determine that a current block of video data is to be encoded using a lossless coding mode;

determine that the current block of video data is a current quantization block based on a size of the current block of video data;

determine a quantization parameter (QP) value for the current quantization block of video data based on a zero value for a delta quantization parameter (dQP) for the current quantization block and a value of a QP predictor, wherein the dQP value is a difference between the QP value and the value of the QP Predictor;

generate a lossless coding syntax element for the current block of video data, the lossless coding syntax element indicating that the current block of video data is encoded using a lossless coding mode, the lossless coding syntax element being separate from the QP value; and

encode the current quantization block according to the lossless coding mode and the determined QP value.