CLAIMS

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

determining one or more initial deblocking control parameters based on a stored parameter and a bit depth of samples of a current block of the video data;

determining an adjustment value by which to adjust the one or more initial deblocking control parameters based on the bit depth of the samples of the current block;

determining a variance of pixels proximate a segment at a boundary of or within the current block;

determining one or more deblocking control parameters based on the adjustment value, in response to the variance of pixels being less than a threshold value, and the one or more initial deblock control parameters; and

deblock filtering one or more samples of the current block based on the determined one or more deblocking control parameters.

2. The method of claim 1, wherein determining the one or more deblocking control parameters comprises determining a clipping parameter that controls a maximum change of a sample from the deblock filtering.

3. The method of claim 2, wherein determining the one or more initial deblocking control parameters comprises determining an initial clipping parameter based on the stored parameter and the bit depth of samples of the current block.

4. The method of claim 1, wherein determining a variance of pixels proximate the segment comprises:

determining a first difference value between two samples in a line that are located in a first direction of the segment for the deblock filtering;

determining a second difference value between two samples in the line that are located in a second direction of the segment for the deblock filtering,

wherein determining one or more deblocking control parameters based on the adjustment value, in response to the variance of pixels being less than a threshold value, and the one or more initial deblock control parameters comprises:

based on the first difference value being less than the threshold value, adding the adjustment value to the one or more initial deblock control parameters; and

based on the second difference value being less than the threshold value, adding the adjustment value to the one or more initial deblock control parameters.

5. The method of claim 4, further comprising:

determining the threshold value based on quantization parameters of a first block in the first direction of the segment and a second block in the second direction of the segment.

6. The method of claim 1, further comprising:

determining the stored parameter based on one or more quantization parameters and a boundary strength value.

7. The method of claim 1, wherein the bit depth is 10 bits or greater than 10 bits.

8. The method of claim 1, further comprising:

outputting the current block with the deblock filtered samples for display.

9. The method of claim 1, wherein deblock filtering comprises deblock filtering as part of a decoding loop to generate the current block used for inter-predicting subsequent blocks.

10. A device for processing video data, the device comprising:

a memory configured to store a parameter used for deblock filtering; and

processing circuitry configured to:

determine one or more initial deblocking control parameters based on the stored parameter and a bit depth of samples of a current block of the video data;

determine an adjustment value by which to adjust the one or more initial deblocking control parameters based on the bit depth of the samples of the current block;

determine a variance of pixels proximate a segment at a boundary of or within the current block;

determine one or more deblocking control parameters based on the adjustment

value, in response to the variance of pixels being less than a threshold value, and the one or more initial deblock control parameters; and

deblock filter one or more samples of the current block based on the determined one or more deblocking control parameters.

11. The device of claim 10, wherein to determine the one or more deblocking control parameters, the processing circuitry is configured to determine a clipping parameter that controls a maximum change of a sample from the deblock filtering.

12. The device of claim 11, wherein to determine the one or more initial deblocking control parameters, the processing circuitry is configured to determine an initial clipping parameter based on the stored parameter and the bit depth of samples of the current block.

13. The device of claim 10, wherein to determine a variance of pixels proximate the segment, the processing circuitry is configured to:

determine a first difference value between two samples in a line that are located in a first direction of the segment for the deblock filtering;

determine a second difference value between two samples in the line that are located in a second direction of the segment for the deblock filtering,

wherein to determine one or more deblocking control parameters based on the adjustment value, in response to the variance of pixels being less than a threshold value, and the one or more initial deblock control parameters, the processing circuitry is configured to:

based on the first difference value being less than the threshold value, add the adjustment value to the one or more initial deblock control parameters; and

based on the second difference value being less than the threshold value, add the adjustment value to the one or more initial deblock control parameters.

14. The device of claim 13, wherein the processing circuitry is configured to:

determine the threshold value based on quantization parameters of a first block in the first direction of the segment and a second block in the second direction of the segment.

15. The device of claim 10, wherein the processing circuitry is configured to:

determine the stored parameter based on one or more quantization parameters and a boundary strength value.

16. The device of claim 10, wherein the bit depth is 10 bits or greater than 10 bits.

17. The device of claim 10, wherein the processing circuitry is configured to:

output the current block with the deblock filtered samples for display.

18. The device of claim 10, wherein to deblock filter, the processing circuitry is configured to deblock filter as part of a decoding loop to generate the current block used for inter-predicting subsequent blocks.

19. The device of claim 10, further comprising one or more of a display configured to display the current block with the deblock filtered samples, a camera, a computer, a mobile device, a broadcast receiver device, or a set-top box.

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

determine one or more initial deblocking control parameters based on a stored parameter and a bit depth of samples of a current block of the video data;

determine an adjustment value by which to adjust the one or more initial deblocking control parameters based on the bit depth of the samples of the current block;

determine a variance of pixels proximate a segment at a boundary of or within the current block;

determine one or more deblocking control parameters based on the adjustment value, in response to the variance of pixels being less than a threshold value, and the one or more initial deblock control parameters; and

deblock filter one or more samples of the current block based on the determined one or more deblocking control parameters.