CLAIMS

What is claimed is:

1. A method for video decoding, comprising:

determining, by a decoder, a value of a coding bit depth;

determining, by the decoder, a value of a first Sequence Parameter Set (SPS) flag; and

determining, by the decoder, a second SPS flag based on at least one of the values of the first SPS flag and the coding bit depth.

2. The method for video decoding of claim 1, wherein determining the second SPS flag based on at least one of the values of the first SPS flag and the coding bit depth comprises at least one of:

determining a presence of the second SPS flag based on the value of the first SPS flag; or

determining a value of the second SPS flag based on the value of the coding bit depth.

3. The method for video decoding of claim 1, wherein determining the second SPS flag based on at least one of the values of the first SPS flag and the coding bit depth comprises:

determining a presence of the second SPS flag based on the values of the first SPS flag and the coding bit depth.

4. The method for video decoding of claim 1, wherein determining the second SPS flag based on at least one of the values of the first SPS flag and the coding bit depth comprises:

determining a value of the second SPS flag based on the values of the first SPS flag and the coding bit depth.

5. The method for video decoding of claim 4, wherein determining a value of the second SPS flag based on the values of the first SPS flag and the coding bit depth comprises:

in response to determining that the value of the first SPS flag equals to 0 and the value of the coding bit depth is greater than 10, determining that the value of the second SPS flag equals to 0.

6. The method for video decoding of claim 1, further comprising:

in response to determining that a value of the second SPS flag equals to 1, determining that information of an SH transform skip residual coding rice index is possible to be present in slice header (SH) syntax structures referring to the SPS.

7. The method for video decoding of claim 1, further comprising:

in response to determining that the value of the coding bit depth is less than or equal to 10, determining that a value of the second SPS flag equals to 0.

8. The method for video decoding of claim 3, wherein determining a presence of the second SPS flag based on the values of the first SPS flag and the coding bit depth comprises:

in response to determining that the value of the first SPS flag equals to 1 and the value of the coding bit depth is greater than 10, determining that the second SPS flag is present.

9. The method for video decoding of claim 1, further comprising:

determining a value of the second SPS flag based on the value of the coding bit depth being less than or equal to 10, regardless of the value of the first SPS flag.

10. An apparatus for video decoding, comprising:

one or more processors; and

a memory configured to store instructions executable by the one or more processors; wherein the one or more processors, upon execution of the instructions, are configured to perform the method in any of claims 1-9 and to store a bitstream to be decoded by the method in any of claims 1-9 in the memory.

11. A non-transitory computer-readable storage medium for video decoding storing computer-executable instructions that, when executed by one or more computer processors, cause the one or more computer processors to perform the method in any of claims 1-9 and to store a bitstream to be decoded by the method in any of claims 1-9 in the non-transitory computer-readable storage medium.

12. A computer program product comprising a plurality of programs for execution by a computing device having one or more processors, wherein the plurality of programs, when executed by the one or more processors, cause the computing device to perform the method in any of claims 1-9.

13. A computer readable storage medium storing a bitstream to be decoded by the method in any of claims 1-9.