CLAIMS

1. A method of video encoding, executable by a processor, the method comprising:

receiving (402) video data having a luma coding tree unit size;

determining whether the luma coding tree unit size is greater than or equal to 64×64 samples;

when the luma coding tree unit size for video data is determined to be greater than or equal to 64×64 samples;

signaling a maximum transform size in luma samples of the video data by setting a first flag, wherein the first flag equal to 1 specifies that the maximum transform size in luma samples is equal to 64, and the first flag equal to 0 specifies that the maximum transform size in luma samples equal to 32; and

coding (406) the video data into a bitstream based on the first flag.

2. The method of claim 1, further comprising:

signalling two or more flags among a 32-pixel coding tree unit size flag, a 64-pixel coding tree unit size flag, and a 128-pixel coding tree unit size flag, wherein the video data is coded into the bitstream further based on the two or more flags.

3. The method of claim 2, wherein the 32-pixel coding tree unit size flag is signaled first, and wherein the 64-pixel coding tree unit size flag is signaled based on the 32-pixel coding tree unit size flag being not equal to 1.

4. The method of claim 2, wherein the 64-pixel coding tree unit size flag is signaled first, and wherein the 32-pixel coding tree unit size flag is signaled based on the 64-pixel coding tree unit size flag being not equal to 1.

5. The method of claim 2, wherein the 32-pixel coding tree unit size flag is signaled first, and wherein the 128-pixel coding tree unit size flag is signaled based on the 32-pixel coding tree unit size flag being not equal to 1.

6. The method of claim 2, wherein the 128-pixel coding tree unit size flag is signaled first, and wherein the 32-pixel coding tree unit size flag is signaled based on the 128-pixel

coding tree unit size flag being not equal to 1.

7. The method of claim 2, wherein the 64-pixel coding tree unit size flag is signaled first, and wherein the 128-pixel coding tree unit size flag is signaled based on the 64-pixel coding tree unit size flag being not equal to 1.

8. The method of claim 2, wherein the 128-pixel coding tree unit size flag is signaled first , and wherein the 64-pixel coding tree unit size flag is signaled based on the 128-pixel coding tree unit size flag being not equal to 1.

9. The method of claim 2, wherein a 64-pixel max luma transform size flag is signaled based on the coding tree unit size associated with the video data being greater than or equal to 64 pixels by 64 pixels.

10. The method of claim 9, wherein based on the 32-pixel coding tree unit size flag being signaled first and being equal to 1, the 64-pixel max luma transform size flag is not signaled.

11. The method of claim 9, wherein based on the 64-pixel coding tree unit size flag being signaled first and being equal to 0, the 32-pixel coding tree unit size flag is signaled and set equal to 1, and the 64-pixel max luma transform size flag is not signaled.

12. The method of claim 9, wherein based on the 128-pixel coding tree unit size flag being signaled first and being equal to 0, the 32-pixel coding tree unit size flag is signaled and set equal to 1, and the 64-pixel max luma transform size flag is not signaled.

13. The method of any one of claims 1 to 12, wherein the first flag is sps_max_luma_transform_size_64_flag.

14. The method of any one of claims 1 to 14, further comprising:

when the luma coding tree unit size is determined to be smaller than 64×64 samples, determining that the first flag is not signalled in the bit stream, and transmitting a bitstream without the first flag.

15. A method of video decoding, the method comprising:

receiving a bitstream generated by an encoder;

obtaining a first flag for signalling a maximum transform size in luma samples from the bitstream, when a luma coding tree unit size associated with video data is signalled to be greater than or equal to 64×64 samples based on the bitstream;

determining that the maximum transform size in luma samples is equal to 64, when the first flag is equal to 1;

determining that the maximum transform size in luma samples equal to 32, when the first flag is equal to 0; and

decoding the bitstream based on the maximum transform size.

16. The method of claim 15, wherein the first flag is sps_max_luma_transform_size_64_flag.

17. The method of claim 15 or 16, further comprising:

inferring that the first flag is equal to 0, when the first flag is not present in the bitstream.

18. A computer system for coding video data, the computer system comprising:

one or more computer-readable non-transitory storage media configured to store computer program code; and

one or more computer processors configured to access said computer program code and operate as instructed by said computer program code, said computer program code including performing the method according to any one of claims 1 to 17.

19. A non-transitory computer readable medium having stored thereon a computer program for coding video data, the computer program configured to cause one or more computer processors to perform the method according to any one of claims 1 to 17.

20. A method for processing video data, comprising:

generating a bitstream through the method of any one of claims 1 to 14; and

storing the generated bitstream into a computer-readable storage medium, or transmitting the generated bitstream to a video decoder.