CLAIMS

What is claimed is:

Claim 1. A method for video decoding, comprising:

in response to determining that transform skip is disabled, not receiving, by a decoder, a control flag for indicating whether a syntax element to be used for determining a rice parameter for transform skip residual coding is present or not.

Claim 2. The method for video decoding of claim 1, further comprising:

adopting a flag of transform skip, sps_transform_skip_enabled_flag, to condition a presence of the control flag, sps_ts_residual_coding_rice_present_in_sh_flag.

Claim 3. The method for video decoding of claim 2, further comprising:

in response to determining that the flag, sps_transform_skip_enabled_flag, is equal to 0 indicating that the transform skip is disabled, inferring the control flag, sps_ts_residual_coding_rice_present_in_sh_flag, to be 0 and not signaled.

Claim 4. The method for video decoding of claim 2, further comprising:

in response to determining that the flag, sps_transform_skip_enabled_flag, is equal to 1 indicating that the transform skip is not disabled, receiving the control flag, sps_ts_residual_coding_rice_present_in_sh_flag.

Claim 5. The method for video decoding of claim 1, further comprising:

in response to determining that a flag of transform skip, sps_transform_skip_enabled_flag, is signaled as enabled, receiving the control flag, in a sequence parameter set or in a sequence parameter set range extension syntax.

Claim 6. The method for video decoding of claim 5, further comprising:

in response to determining that the control flag is equal to 1, receiving one syntax element for a slice to determine the rice parameter for transform skip residual coding.

Claim 7. The method for video decoding of claim 5, further comprising:

in response to determining that the control flag is equal to 0, adopting a default rice parameter for a slice, and no further syntax element is signaled to indicate the rice parameter for transform skip residual coding.

Claim 8. The method for video decoding of claim 2, further comprising:

in response to determining that the control flag, sps_ts_residual_coding_rice_present_in_sh_flag, is equal to 1, determining that the syntax

element, sh_ts_residual_coding_rice_idx_minus1, is present in slice header (SH) syntax structures referring to Sequence Parameter Set (SPS).

Claim 9. The method for video decoding of claim 2, further comprising:

in response to determining that the control flag, sps_ts_residual_coding_rice_present_in_sh_flag, is equal to 0, determining that the syntax element, sh_ts_residual_coding_rice_idx_minus1, is not present in slice header (SH) syntax structures referring to Sequence Parameter Set (SPS).

Claim 10. The method for video decoding of claim 2, further comprising:

in response to determining that the control flag, sps_ts_residual_coding_rice_present_in_sh_flag, is not present, inferring a value of the control flag, sps_ts_residual_coding_rice_present_in_sh_flag, to be 0.

Claim 11. The method for video decoding of claim 1, wherein a chroma format of a coding unit (CU) is 4:2:2 or 4:4:4.

Claim 12. The method for video decoding of claim 1, wherein a bit-depth of video data is greater than or equal to 10.

Claim 13. 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 1-12.

Claim 14. 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 1-12 to decode a bitstream and to store the decoded bitstream in the non-transitory computer-readable storage medium.

Claim 15. A non-transitory computer-readable storage medium storing a video bitstream to be decoded with the method in any of claims 1-10.

Claim 16. The non-transitory computer-readable storage medium of claim 15, wherein a chroma format of a coding unit (CU) is 4:2:2 or 4:4:4.

Claim 17. The non-transitory computer-readable storage medium of claim 15, wherein a bit-depth of video data is greater than or equal to 10.