WHAT IS CLAIMED IS:

1. A method of video processing, comprising:

performing a conversion between a video comprising one or more pictures and a bitstream of the video,

wherein the bitstream conforms to a format rule,

wherein the format rule specifies that a derivation of a picture associated with a first flag and in a decoding process for a picture order count is based on a second flag,

wherein the picture associated with the first flag is a previous picture in a decoding order that has (i) a first identifier same as a slice or picture header referring to a reference picture list syntax structure, (ii) a second identifier and the second flag being equal to zero, and (iii) a picture type different from a random access skipped leading (RASL) picture and a random access decodable leading (RADL) picture,

wherein the first flag indicates whether a third flag is present in the bitstream,

wherein the second flag indicates whether a current picture is used as a reference picture, and

wherein the third flag is used to determine a value of one or more most significant bits of a picture order count value of a long-term reference picture.

2. The method of claim 1, wherein the first identifier is an identifier of a layer and the second identifier is a temporal identifier.

3. The method of claim 1, wherein the first identifier is a syntax element and the second identifier is a variable.

4. The method of any of claims 1 to 3, wherein the first flag is delta_poc_msb_cycle_present_flag, the second flag is ph_non_ref_pic_flag, and the third flag is delta_poc_msb_cycle_present_flag, and wherein the first identifier is nuh_layer_id and the second identifier is TemporalId.

5. A method of video processing, comprising:

performing a conversion between a video comprising one or more pictures and a bitstream of the video,

wherein the bitstream conforms to a format rule,

wherein the format rule specifies that a variable, which is used to determine a timing of a removal of a decoding unit (DU) or decoding the DU, is access unit (AU) specific and derived based on a flag that indicates whether a current picture is allowed to be used as a reference picture.

6. The method of claim 5, wherein the variable is prevNonDiscardableAu and the flag is ph_non_ref_pic_flag.

7. The method of claim 6, wherein ph_non_ref_pic_flag equaling one specifies that the current picture is never used as the reference picture.

8. The method of claim 6, wherein ph_non_ref_pic_flag equaling zero specifies that the current picture might or might not be used as the reference picture.

9. A method of video processing, comprising:

performing a conversion between a video comprising one or more pictures and a bitstream of the video,

wherein the bitstream conforms to a format rule,

wherein the format rule specifies that a buffering period supplemental enhancement information (SEI) message and a picture timing SEI message, when included in the bitstream, are access unit (AU) specific,

wherein a first variable associated with the buffering period SEI message and a second variable associated with the buffering period SEI message and the picture timing SEI message are derived based on a flag that indicates whether a current picture is allowed to be used as a reference picture,

wherein the first variable is indicative of an access unit comprising (i) an identifier that is equal to zero and (ii) a picture that is not a random access skipped leading (RASL) picture or a random access decodable leading (RADL) picture and for which the flag is equal to zero, and

wherein the second variable is indicative of a current AU not being a first AU in a decoding order and a previous AU in the decoding order comprising (i) the identifier that is equal

to zero and (ii) a picture that is not a random access skipped leading (RASL) picture or a random access decodable leading (RADL) picture and for which the flag is equal to zero.

10. The method of claim 9, wherein the identifier is a temporal identifier.

11. The method of claim 9, wherein the first variable is notDiscardableAu, the second variable is prevNonDiscardableAu, the flag is ph_non_ref_pic_flag, and the identifier is TemporalId.

12. A method of video processing, comprising:

performing a conversion between a video comprising one or more pictures and a bitstream of the video,

wherein the bitstream conforms to a format rule,

wherein the format rule specifies that a derivation of a first variable and a second variable associated with a first picture and a second picture is based on a flag,

wherein the first picture is a current picture and the second picture is a previous picture in a decoding order that (i) comprises a first identifier that is equal to zero, (ii) comprises a flag that is equal to zero, and (iii) is not a random access skipped leading (RASL) picture or a random access decodable leading (RADL) picture, and

wherein the first variable and the second variable are a maximum value and a minimum value, respectively, of a picture order count of each of the following pictures with a second identifier that is equal to that of the first picture: (i) the first picture, (ii) the second picture, (iii) one or more short-term reference pictures referred to by all entries in reference picture lists of the first picture, and (iv) each picture that has been output with a coded picture buffer (CPB) removal time less than the CPB removal time of the first picture and a decoded picture buffer (DPB) output time greater than or equal to the CPB removal time of the first picture.

13. The method of claim 12, wherein the first variable indicates the maximum value of the picture order count and the second variable indicates the minimum value of the picture order count.

14. The method of claim 12, wherein the flag indicates whether the current picture is allowed to be used as a reference picture.

15. The method of claim 12, wherein the first identifier is a temporal identifier and the second identifier is an identifier of a layer.

16. The method of any of claims 12 to 15, wherein the first variable is maxPicOrderCnt, the second variable is minPicOrderCnt, the first identifier is TemporalId, the second identifier is nuh_layer_id, and the flag is ph_non_ref_pic_flag.

17. The method of any of claims 1 to 16, wherein the conversion comprises decoding the video from the bitstream.

18. The method of any of claims 1 to 16, wherein the conversion comprises encoding the video into the bitstream.

19. A method of storing a bitstream representing a video to a computer-readable recording medium, comprising:

generating the bitstream from the video according to a method described in any one or more of claims 1 to 16; and

storing the bitstream in the computer-readable recording medium.

20. A video processing apparatus comprising a processor configured to implement a method recited in any one or more of claims 1 to 19.

21. A computer-readable medium having instructions stored thereon, the instructions, when executed, causing a processor to implement a method recited in one or more of claims 1 to 19.

22. A computer readable medium that stores the bitstream generated according to any one or more of claims 1 to 19.

23. A video processing apparatus for storing a bitstream, wherein the video processing apparatus is configured to implement a method recited in any one or more of claims 1 to 19.