CLAIMS

1. A video processing method, comprising:

performing a conversion between a first block of a video and a bitstream of the video according to a rule,

wherein the conversion is based on an adaptive motion vector resolution (AMVR) tool,

wherein the rule specifies that selection of a context increment (ctxInc) for a first bin within a bin string of a first syntax element that specifies a resolution of motion vector difference associated with an AMVR shift is derived based on usage of a coding mode for the first block, and

wherein the coding mode for the first block is one of an affine inter mode, an intra block copy (IBC) mode, or a normal inter mode which is a non-affine inter mode;

wherein a first context increment is assigned for the first bin in case that the first block is coded using the IBC mode, a second context increment is assigned for the first bin in case that the first block is coded using the affine inter mode, and a third context increment is assigned for the first bin in case that the first block is coded using the normal inter mode, and

the first context increment is equal to 1, the second context increment is equal to 2, and the third context increment is equal to 0.

2. The method of claim 1, wherein the first block is a coding unit.

3. The method of claim 1 or 2, wherein three different context increments corresponding to the three different coding modes are utilized for the first bin, and a single context increment corresponds to one coding mode.

4. The method of any one of claims 1-3, wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a second bin of the bin string of the first syntax element for a second block which is coded using the normal inter mode.

5. The method of any one of claims 1-3, wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded

using the IBC mode and a bin of a second syntax element for a third block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the third block is coded using the affine inter mode.

6. The method of any one of claims 1-3, wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the normal inter mode and a bin of a second syntax element for a fourth block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the fourth block is not coded using the affine inter mode.

7. The method of any one of claims 1-6, wherein in an initialization process, a value of a context index for the first syntax element is in a range from 0 to 2 in case that a context initialization type is a first type, the value of the context index for the first syntax element is in a range from 3 to 5 in case that the context initialization type is a second type, and the value of the context index for the first syntax element is in a range from 6 to 8 in case that the context initialization type is a third type.

8. The method of any one of claims 1-7, wherein the conversion comprises encoding the video into the bitstream.

9. The method of any one of claims 1-7, wherein the conversion comprises decoding the video from the bitstream.

10. An apparatus for processing video data comprising a processor and a non-transitory memory with instructions thereon, wherein the instructions upon execution by the processor, cause the processor to:

perform a conversion between a first block of a video and a bitstream of the video according to a rule,

wherein the conversion is based on an adaptive motion vector resolution (AMVR) tool,

wherein the rule specifies that selection of a context increment (ctxInc) for a first bin within a bin string of a first syntax element that specifies a resolution of motion vector difference associated with an AMVR shift is derived based on usage of a coding mode for the first block, and

wherein the coding mode for the first block is one of an affine inter mode, an intra block copy (IBC) mode, or a normal inter mode which is a non-affine inter mode;

wherein a first context increment is assigned for the first bin in case that the first block is coded using the IBC mode, a second context increment is assigned for the first bin in case that the first block is coded using the affine inter mode, and a third context increment is assigned for the first bin in case that the first block is coded using the normal inter mode, and

the first context increment is equal to 1, the second context increment is equal to 2, and the third context increment is equal to 0.

11. The apparatus of claim 10, wherein the first block is a coding unit.

12. The apparatus of claim 10 or 11, wherein three different context increments corresponding to the three different coding modes are utilized for the first bin, and a single context increment corresponds to one coding mode.

13. The apparatus of any one of claims 10-12, wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a second bin of the bin string of the first syntax element for a second block which is coded using the normal inter mode;

wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a bin of a second syntax element for a third block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the third block is coded using the affine inter mode; or

wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the normal inter mode and a bin of a second syntax element for a fourth block that specifies whether the resolution of the motion

vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the fourth block is not coded using the affine inter mode.

14. The apparatus of any one of claims 10-13, wherein in an initialization process, a value of a context index for the first syntax element is in a range from 0 to 2 in case that a context initialization type is a first type, the value of the context index for the first syntax element is in a range from 3 to 5 in case that the context initialization type is a second type, and the value of the context index for the first syntax element is in a range from 6 to 8 in case that the context initialization type is a third type.

15. A non-transitory computer-readable storage medium storing instructions that cause a processor to:

perform a conversion between a first block of a video and a bitstream of the video according to a rule,

wherein the conversion is based on an adaptive motion vector resolution (AMVR) tool,

wherein the rule specifies that selection of a context increment(ctxInc) for a first bin within a bin string of a first syntax element that specifies a resolution of motion vector difference associated with an AMVR shift is derived based on usage of a coding mode for the first block, and

wherein the coding mode for the first block is one of an affine inter mode, an intra block copy (IBC) mode, or a normal inter mode which is a non-affine inter mode;

wherein a first context increment is assigned for the first bin in case that the first block is coded using the IBC mode, a second context increment is assigned for the first bin in case that the first block is coded using the affine inter mode, and a third context increment is assigned for the first bin in case that the first block is coded using the normal inter mode, and

the first context increment is equal to 1, the second context increment is equal to 2, and the third context increment is equal to 0.

16. The non-transitory computer-readable storage medium of claim 15, wherein the first block is a coding unit;

wherein three different context increments corresponding to the three different coding modes are utilized for the first bin, and a single context increment corresponds to one coding mode;

wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a second bin of the bin string of the first syntax element for a second block which is coded using the normal inter mode; a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a bin of a second syntax element for a third block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the third block is coded using the affine inter mode; or a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the normal inter mode and a bin of a second syntax element for a fourth block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the fourth block is not coded using the affine inter mode; and

wherein in an initialization process, a value of a context index for the first syntax element is in a range from 0 to 2 in case that a context initialization type is a first type, the value of the context index for the first syntax element is in a range from 3 to 5 in case that the context initialization type is a second type, and the value of the context index for the first syntax element is in a range from 6 to 8 in case that the context initialization type is a third type.

17. A non-transitory computer-readable recording medium storing a bitstream of a video which is generated by a method performed by a video processing apparatus, wherein the method comprises:

generating the bitstream of a first block of a video according to a rule,

wherein the generating is based on an adaptive motion vector resolution (AMVR) tool,

wherein the rule specifies that selection of a context increment(ctxInc) for a first bin within a bin string of a first syntax element that specifies a resolution of motion vector difference associated with an AMVR shift is derived based on usage of a coding mode for the first block, and

wherein the coding mode for the first block is one of an affine inter mode, an intra block copy (IBC) mode, or a normal inter mode which is a non-affine inter mode;

wherein a first context increment is assigned for the first bin in case that the first block is coded using the IBC mode, a second context increment is assigned for the first bin in case that the first block is coded using the affine inter mode, and a third context increment is assigned for the first bin in case that the first block is coded using the normal inter mode, and

the first context increment is equal to 1, the second context increment is equal to 2, and the third context increment is equal to 0.

18. The non-transitory computer-readable recording medium of claim 17, wherein the first block is a coding unit;

wherein three different context increments corresponding to the three different coding modes are utilized for the first bin, and a single context increment corresponds to one coding mode;

wherein a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a second bin of the bin string of the first syntax element for a second block which is coded using the normal inter mode; a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the IBC mode and a bin of a second syntax element for a third block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the third block is coded using the affine inter mode; or a same context increment is used for the first bin of the bin string of the first syntax element for the first block in case that the first block is coded using the normal inter mode and a bin of a second syntax element for a fourth block that specifies whether the resolution of the motion vector difference is 1/4 of a luma sample or is specified by the first syntax element, and wherein the fourth block is not coded using the affine inter mode; and

wherein in an initialization process, a value of a context index for the first syntax element is in a range from 0 to 2 in case that a context initialization type is a first type, the value of the context index for the first syntax element is in a range from 3 to 5 in case that the context initialization type is a second type, and the value of the context index for the first syntax element is in a range from 6 to 8 in case that the context initialization type is a third type.