CLAIMS

What is claimed is:

1. A method of video coding, wherein the method comprises:
- inter-prediction processing of a first block, wherein the inter-prediction processing comprises subpixel interpolation filtering of samples of a reference block;
- intra-prediction processing of a second block, wherein the intra-prediction processing comprises subpixel interpolation filtering of reference samples;
wherein the method further comprises
-selecting interpolation filter coefficients for the subpixel interpolation filtering based on a subpixel offset between integer reference sample positions and fractional reference samples' positions, wherein for the same subpixel offsets the same interpolation filter coefficients are selected for intra-prediction processing and inter-prediction processing.

2. The method of claim 1, wherein the (same) selected filter coefficients are used for the subpixel interpolation filtering of chroma samples for inter-prediction processing and of luma samples for intra-predicion processing.

3. The method of any of previous claims, wherein the inter-prediction processing is an intra block copy processing.

4. The method of any of the previous claims, wherein the interpolation filtering coefficients used in inter-prediction processing and intra-prediction processing are fetched from a look-up table.

5. The method of any one of the previous claims, wherein a 4 tap filter is used for the subpixel interpolation filtering.

6. The method of any one of the previous claims, wherein the selecting the interpolation filter coefficients comprises selecting the interpolation filter coefficients based on the below association between subpixel offsets and interpolation filter coefficients:

Subpixel offset	c_0	c_1	c_2	c_3
0 (integer)	0	64	0	0

1	-1	63	2	0
2	-2	62	4	0
3	-2	60	7	-1
4	-2	58	10	-2
5	-3	57	12	-2
6	-4	56	14	-2
7	-4	55	15	-2
8	-4	54	16	-2
9	-5	53	18	-2
10	-6	52	20	-2
11	-6	49	24	-3
12	-6	46	28	-4
13	-5	44	29	-4
14	-4	42	30	-4
15	-4	39	33	-4
16 (half-pel)	-4	36	36	-4
17	-4	33	39	-4
18	-4	30	42	-4
19	-4	29	44	-5
20	-4	28	46	-6
21	-3	24	49	-6
22	-2	20	52	-6
23	-2	18	53	-5
24	-2	16	54	-4
25	-2	15	55	-4
26	-2	14	56	-4

27	-2	12	57	-3
28	-2	10	58	-2
29	-1	7	60	-2
30	0	4	62	-2
31	0	2	63	-1

wherein the subpixel offsets are defined in 1/32 subpixel resolution and c_0 to c_3 represent the interpolation filter coefficients.

7. The method of any one of the previous claims, wherein the selecting the interpolation filter coefficients comprises selecting the interpolation filter coefficients for fractional positions based on the below association between subpixel offsets and interpolation filter coefficients:

Subpixel offset	c_0	c_1	c_2	c_3
1	-1	63	2	0
2	-2	62	4	0
3	-2	60	7	-1
4	-2	58	10	-2
5	-3	57	12	-2
6	-4	56	14	-2
7	-4	55	15	-2
8	-4	54	16	-2
9	-5	53	18	-2
10	-6	52	20	-2
11	-6	49	24	-3
12	-6	46	28	-4
13	-5	44	29	-4
14	-4	42	30	-4
15	-4	39	33	-4

16 (half-pel)	-4	36	36	-4
17	-4	33	39	-4
18	-4	30	42	-4
19	-4	29	44	-5
20	-4	28	46	-6
21	-3	24	49	-6
22	-2	20	52	-6
23	-2	18	53	-5
24	-2	16	54	-4
25	-2	15	55	-4
26	-2	14	56	-4
27	-2	12	57	-3
28	-2	10	58	-2
29	-1	7	60	-2
30	0	4	62	-2
31	0	2	63	-1

wherein the subpixel offsets are defined in 1/32 subpixel resolution and c_0 to c_3 represent the interpolation filter coefficients.

8. An encoder comprising processing circuitry for carrying out the method according to any one of claims 1 to 7.

9. A decoder comprising processing circuitry for carrying out the method according to any one of claims 1 to 7.

10. A computer program product comprising a program code for performing the method according to any one of claims 1 to 7.

11. A decoder, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the decoder to carry out the method according to any one of claims 1 to 7.

12. An encoder, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the encoder to carry out the method according to any one of claims 1 to 7.

CLAIMS

1. A method of video coding, wherein the method comprises:

- inter-prediction processing of a first block, wherein the inter-prediction processing comprises subpixel interpolation filtering of samples of a reference block;

- intra-prediction processing of a second block, wherein the intra-prediction processing comprises subpixel interpolation filtering of reference samples;

wherein the method further comprises

-selecting interpolation filter coefficients for the subpixel interpolation filtering based on a subpixel offset between integer reference sample positions and fractional reference samples' positions, wherein for the same subpixel offsets the same interpolation filter coefficients are selected for intra-prediction processing and inter-prediction processing.

2. The method of claim 1, wherein the (same) selected filter coefficients are used for the subpixel interpolation filtering of chroma samples for inter-prediction processing and of luma samples for intra-prediction processing.

3. The method of any of previous claims, wherein the inter-prediction processing is an intra block copy processing.

4. The method of any of the previous claims, wherein the interpolation filtering coefficients used in inter-prediction processing and intra-prediction processing are fetched from a look-up table.

5. The method of any one of the previous claims, wherein a 4 tap filter is used for the subpixel interpolation filtering.

6. The method of any one of the previous claims, wherein the selecting the interpolation filter coefficients comprises selecting the interpolation filter coefficients based on the below association between subpixel offsets and interpolation filter coefficients:

Subpixel offset	c_0	c_1	c_2	c_3
0 (integer)	0	64	0	0

1	-1	63	2	0
2	-2	62	4	0
3	-2	60	7	-1
4	-2	58	10	-2
5	-3	57	12	-2
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7	-4	55	15	-2
8	-4	54	16	-2
9	-5	53	18	-2
10	-6	52	20	-2
11	-6	49	24	-3
12	-6	46	28	-4
13	-5	44	29	-4
14	-4	42	30	-4
15	-4	39	33	-4
16 (half-pel)	-4	36	36	-4
17	-4	33	39	-4
18	-4	30	42	-4
19	-4	29	44	-5
20	-4	28	46	-6
21	-3	24	49	-6

22	-2	20	52	-6
23	-2	18	53	-5
24	-2	16	54	-4
25	-2	15	55	-4
26	-2	14	56	-4
27	-2	12	57	-3
28	-2	10	58	-2
29	-1	7	60	-2
30	0	4	62	-2
31	0	2	63	-1

wherein the subpixel offsets are defined in 1/32 subpixel resolution and c_0 to c_3 represent the interpolation filter coefficients.

7. The method of any one of the previous claims, wherein the selecting the interpolation filter coefficients comprises selecting the interpolation filter coefficients for fractional positions based on the below association between subpixel offsets and interpolation filter coefficients:

Subpixel offset	***c0***	***c1***	***c2***	***c3***
1	-1	63	2	0
2	-2	62	4	0
3	-2	60	7	-1
4	-2	58	10	-2
5	-3	57	12	-2

6	-4	56	14	-2
7	-4	55	15	-2
8	-4	54	16	-2
9	-5	53	18	-2
10	-6	52	20	-2
11	-6	49	24	-3
12	-6	46	28	-4
13	-5	44	29	-4
14	-4	42	30	-4
15	-4	39	33	-4
16 (half-pel)	-4	36	36	-4
17	-4	33	39	-4
18	-4	30	42	-4
19	-4	29	44	-5
20	-4	28	46	-6
21	-3	24	49	-6
22	-2	20	52	-6
23	-2	18	53	-5
24	-2	16	54	-4
25	-2	15	55	-4
26	-2	14	56	-4

27	-2	12	57	-3
28	-2	10	58	-2
29	-1	7	60	-2
30	0	4	62	-2
31	0	2	63	-1

wherein the subpixel offsets are defined in 1/32 subpixel resolution and c_0 to c_3 represent the interpolation filter coefficients.

8. An encoder comprising processing circuitry for carrying out the method according to any one of claims 1 to 7.

9. A decoder comprising processing circuitry for carrying out the method according to any one of claims 1 to 7.

10. A computer program product comprising a program code for performing the method according to any one of claims 1 to 7.

11. A decoder, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the decoder to carry out the method according to any one of claims 1 to 7.

12. An encoder, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the encoder to carry out the method according to any one of claims 1 to 7.