**iir\_lpf coefficient**

A[0] = 0.01336978300344553300

32'b00111100010110110000110011101111 -> 32'h3c5b0cef

0.013369782827794551849365234375 (Vaule actually stored)

A[1] = 0.02673956600689106700

32'b 00111100110110110000110011101111 -> 32'h 3cdb0cef

0.02673956565558910369873046875 (Vaule actually stored)

A[2] = 0.01336978300344553300

32'b00111100010110110000110011101111 -> 32'h3c5b0cef

0.013369782827794551849365234375 (Vaule actually stored)

A[3] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

A[4] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

A[5] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

B[0] = 1.00000000000000000000

32'b 00111111100000000000000000000000 -> 32'h 3f800000

1 (Vaule actually stored)

for using adder

-B[0] = -1.00000000000000000000

32'b 10111111100000000000000000000000 -> 32'h bf800000

-1.0 (Vaule actually stored)

B[1] = -1.64745998107697660000

32'b 10111111110100101101111111111000 -> 32'h bfd2dff8

-1.64745998382568359375 (Vaule actually stored)

for using adder

-B[1] = 1.64745998107697660000

32'b 00111111110100101101111111111000 -> 32'h 3fd2dff8

-1.64745998382568359375 (Vaule actually stored)

B[2] = 0.70089678118840248000

32'b 00111111001100110110110111111001 -> 32'h 3f336df9

0.700896799564361572265625 (Vaule actually stored)

for using adder

-B[2] = -0.70089678118840248000

32'b 10111111001100110110110111111001 -> 32'h bf336df9

-0.700896799564361572265625 (Vaule actually stored)

B[3] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

B[4] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

B[5] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

**iir\_notch coefficient**

A[0] = 0.90058301430561660000

32'b 00111111011001101000110010011100 -> 32'h 3f668c9c

0.9005830287933349609375 (Vaule actually stored)

A[1] = -0.22683676727047436000

32'b 10111110011010000100011111100110 -> 32'h be6847e6

-0.2268367707729339599609375 (Vaule actually stored)

A[2] = 1.81544980872044200000

32'b 00111111111010000110000010101001 -> 32'h 3fe860a9

1.81544983386993408203125 (Vaule actually stored)

A[3] = -0.22683676727047436000

32'b 10111110011010000100011111100110 -> 32'h be6847e6

-0.2268367707729339599609375 (Vaule actually stored)

A[4] = 0.90058301430561660000

32'b 00111111011001101000110010011100 -> 32'h 3f668c9c

0.9005830287933349609375 (Vaule actually stored)

A[5] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

B[0] = 1.00000000000000000000

32'b 00111111100000000000000000000000 -> 32'h 3f800000

1 (Vaule actually stored)

for using adder

-B[0] = -1.00000000000000000000

32'b 10111111100000000000000000000000 -> 32'h bf800000

-1.0 (Vaule actually stored)

B[1] = -0.23849243624947844000

32'b 10111110011101000011011101011100 -> 32'h be74375c

-0.238492429256439208984375 (Vaule actually stored)

for using adder

-B[1] = 0.23849243624947844000

32'b 00111110011101000011011101011100 -> 32'h 3e74375c

0.238492429256439208984375 (Vaule actually stored)

B[2] = 1.80168874042915350000

32'b 00111111111001101001110110111101 -> 32'h 3fe69dbd

1.80168879032135009765625 (Vaule actually stored)

for using adder

-B[2] = -1.80168874042915350000

32'b 10111111111001101001110110111101 -> 32'h bfe69dbd

-1.80168879032135009765625 (Vaule actually stored)

B[3] = -0.21430582988195795000

32'b10111110010110110111001011111101 -> 32'hbe5b72fd

-0.21430583298206329345703125 (Vaule actually stored)

for using adder

-B[3] = 0.21430582988195795000

32'b00111110010110110111001011111101 -> 32'h3e5b72fd

0.21430583298206329345703125 (Vaule actually stored)

B[4] = 0.80794959133320132000

32'b 00111111010011101101010111001001 -> 32'h 3f4ed5c9

0.807949602603912353515625 (Vaule actually stored)

for using adder

-B[4] = -0.80794959133320132000

32'b 10111111010011101101010111001001 -> 32'h bf4ed5c9

-0.807949602603912353515625 (Vaule actually stored)

B[5] = 0.0

32'b000000000000000000000000000000000 -> 32'h00000000

0.0 (Vaule actually stored)

**iir\_hpf coefficient**

w = 0.888365

32'b00111111011000110110101111100011 -> 32'h3f636be3

0.888364970684051513671875 (Vaule actually stored)