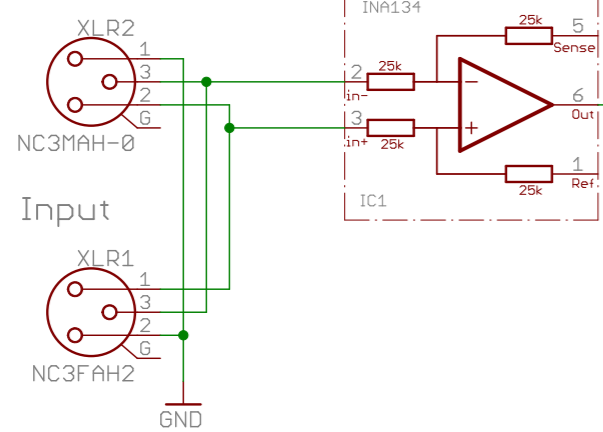


Pass Through



Component Sockets 20pins 20-600-10 RA, RB, RC each hold 10 resistors
Metal film resistors 100mΩ or 1/8W / 1% or better
The 10 positions sockets allow using 2 resistors in series in each position to arrive at much better precision, using combinations of 1% or better resistors. Better than 0.05% precision can easily be attained
Footprint for C is multi-pitched to use many types of capacitors, including the larger (PS) Polystyrene types (axial or radial)
Picked values for C for each 3 xover frequencies of 1nF, 10nF and 100nF
Then calculate the resistors using $R=1/(2\pi f C)$ (use spreadsheet)
The values used here are for xover frequencies of 120/1k5/8k

Pinout & positions on all 3 component sockets RA, RB, RC
RA1, RB1, RC1 -> Pins 1-20
RA2, RB2, RC2 -> Pins 2-19
RA3, RB3, RC3 -> Pins 3-18
RA4, RB4, RC4 -> Pins 4-17
RA5, RB5, RC5 -> Pins 5-16
RA6, RB6, RC6 -> Pins 6-15
RA7, RB7, RC7 -> Pins 7-14
RA8, RB8, RC8 -> Pins 8-13
RA9, RB9, RC9 -> Pins 9-12
RA10, RB10, RC10 -> Pins 10-11

Calculated High xover Freq 8kHz values (with fixed C of 1nF): R=14067.442
Using single 1% (E48-E96) or better, use 14k for each position for RA1-RA10

14k	14k
14k	14k
14k	14k
14k	14k
14k	14k
14k	14k
14k	14k
14k	14k
14k	14k
14k	14k

or 14k for RA1, RA4, RA7-RA10 and 28k for RA2 & RA5 with straps for RA3 & RA6

14k	28k
14k	28k
14k	28k
14k	28k
14k	28k
14k	28k
14k	28k
14k	28k
14k	28k
14k	28k

Using dual 1% (E48-E96) or better res, uses
14k + 68 for RA1, RA4, RA7-RA10
28k for RA2, RA5 and 133 for RA3, RA6

14k + 68	28k
14k + 68	133
14k + 68	28k
14k + 68	133
14k + 68	28k
14k + 68	133
14k + 68	28k
14k + 68	133
14k + 68	28k
14k + 68	133

Xover Freq 1k5 values (with fixed C of 10nF): R=7592.626
There is no need for dual resistance arrangement with this frequency
Using single 1% or better res can suffice in all positions in RB1-RB10
Use 7k5 for a precision of ~0.035% from nominal (if using 1% res)

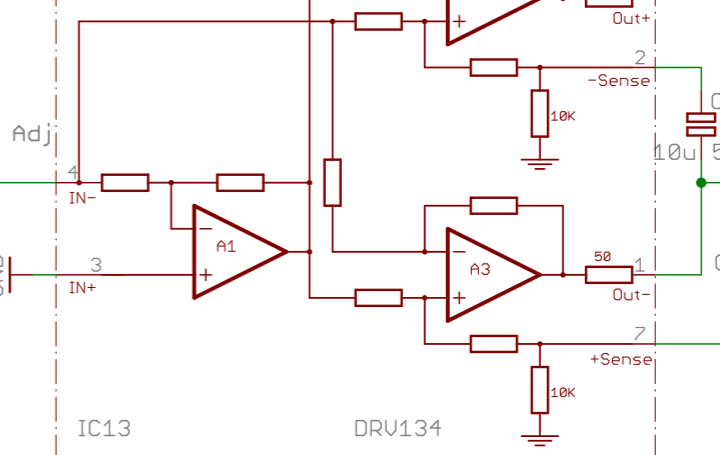
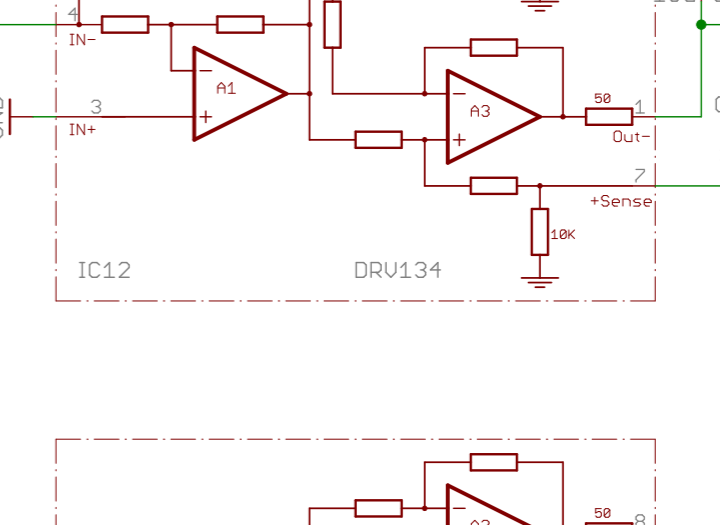
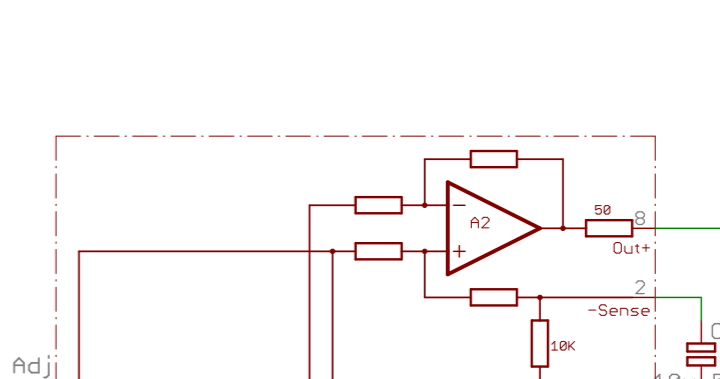
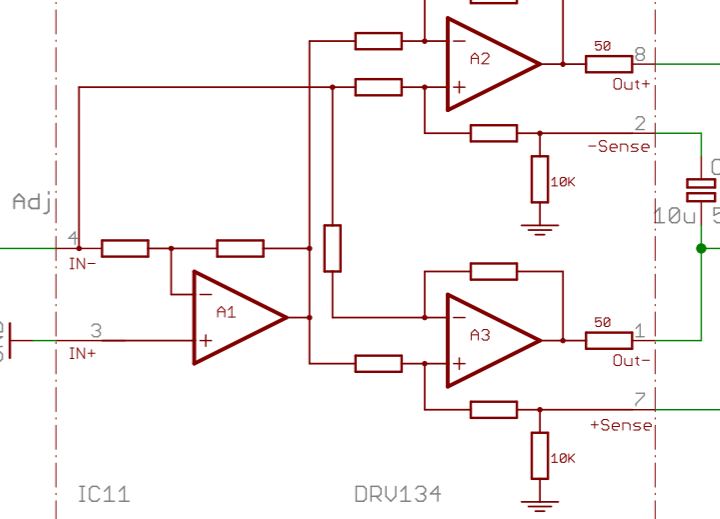
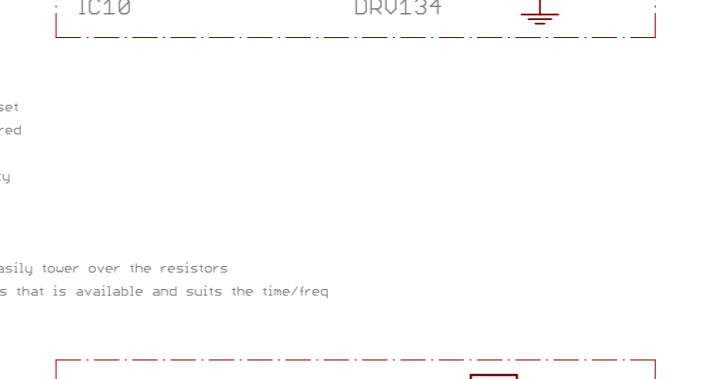
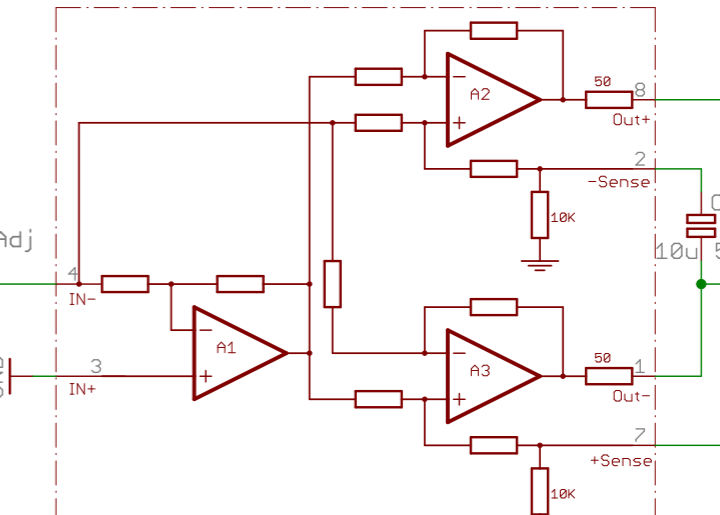
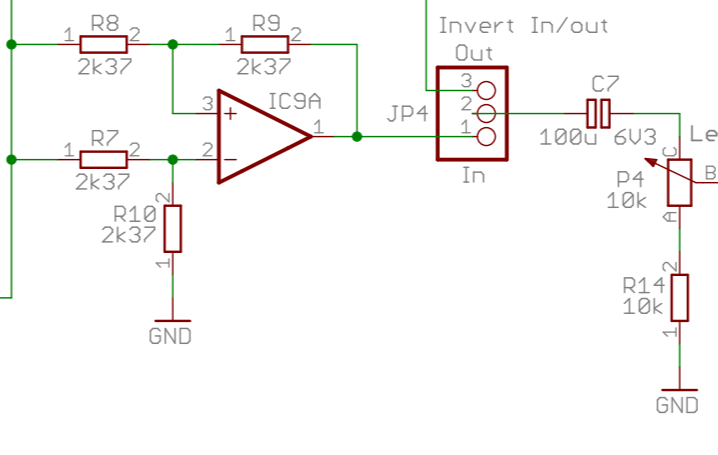
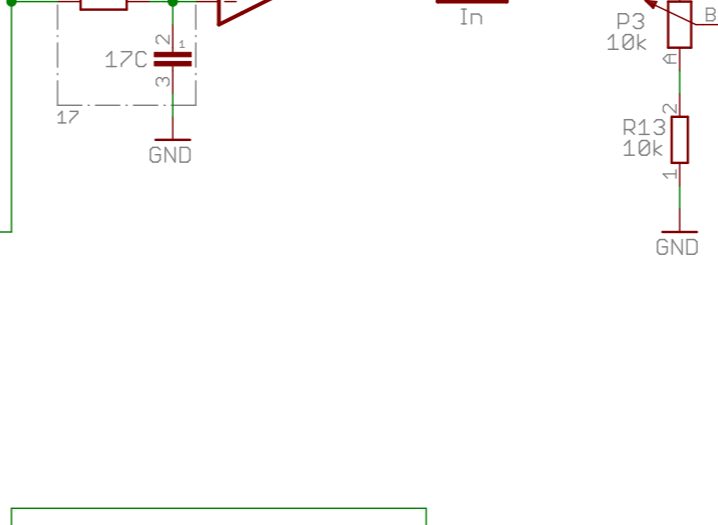
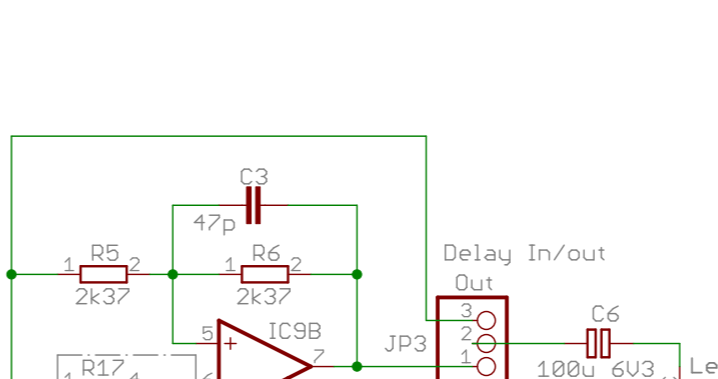
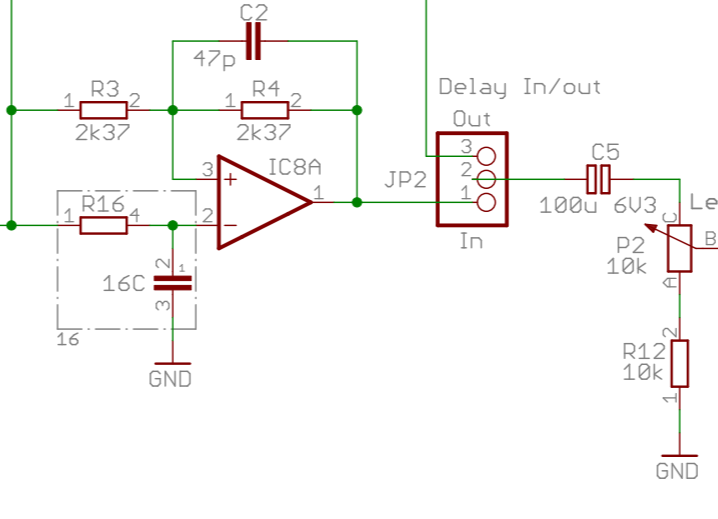
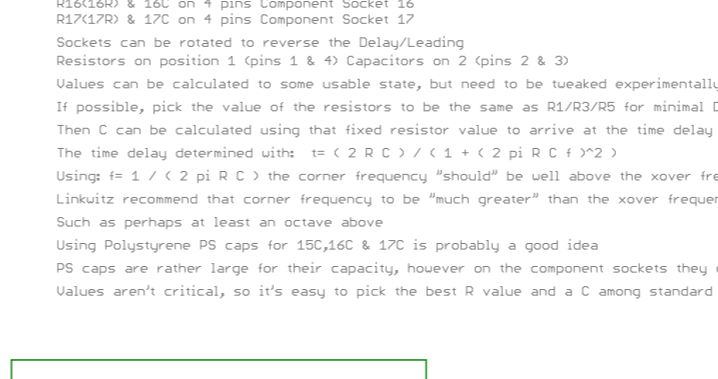
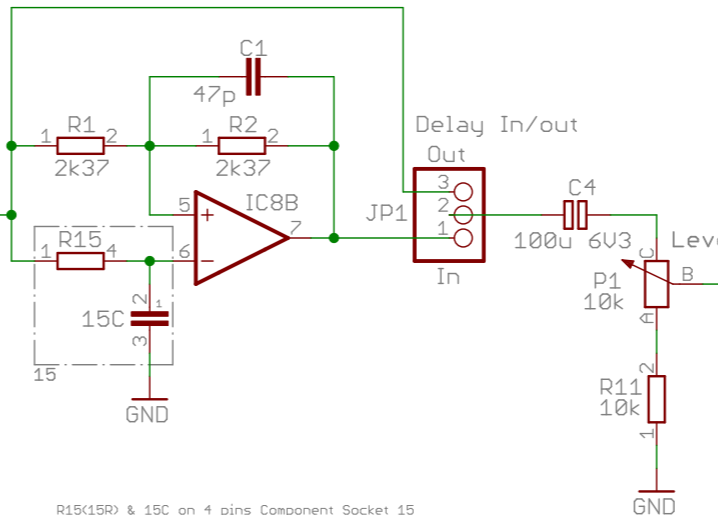
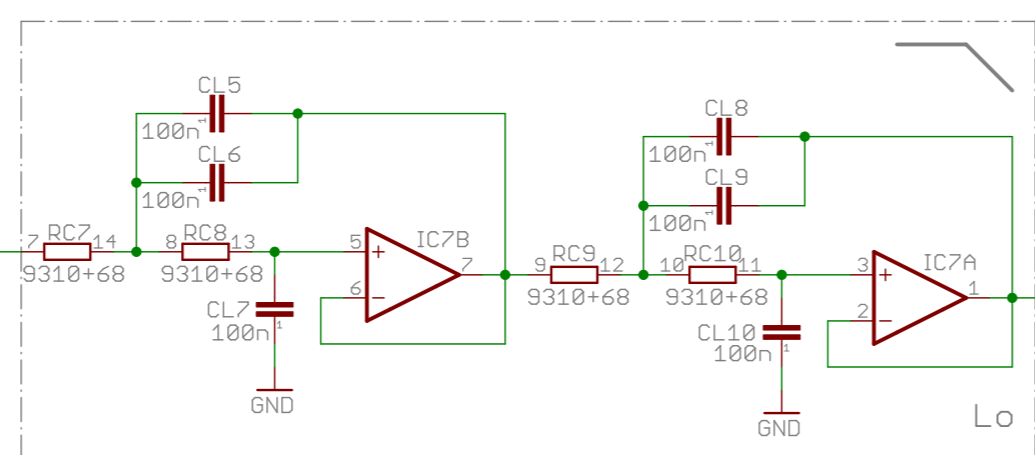
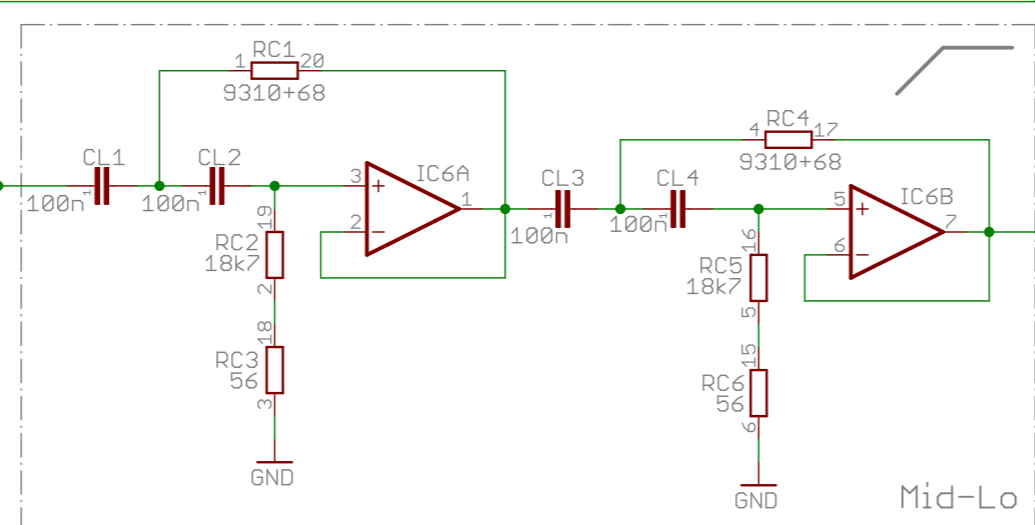
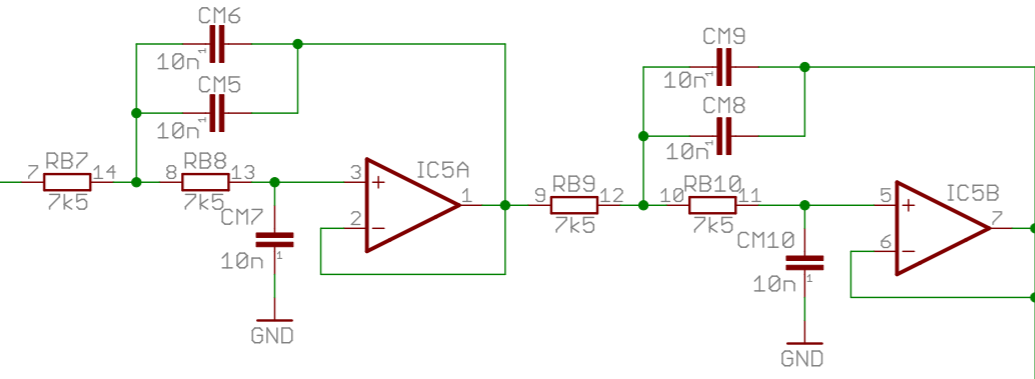
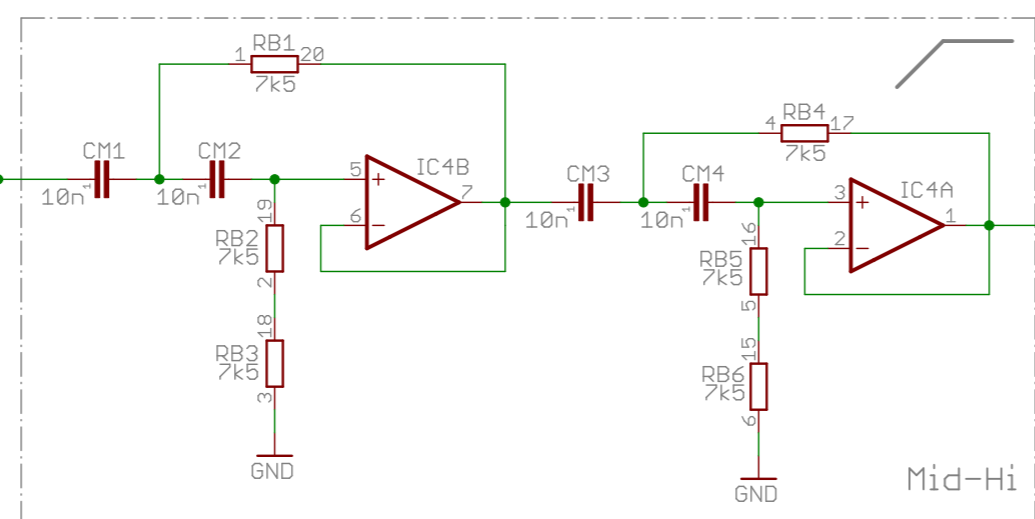
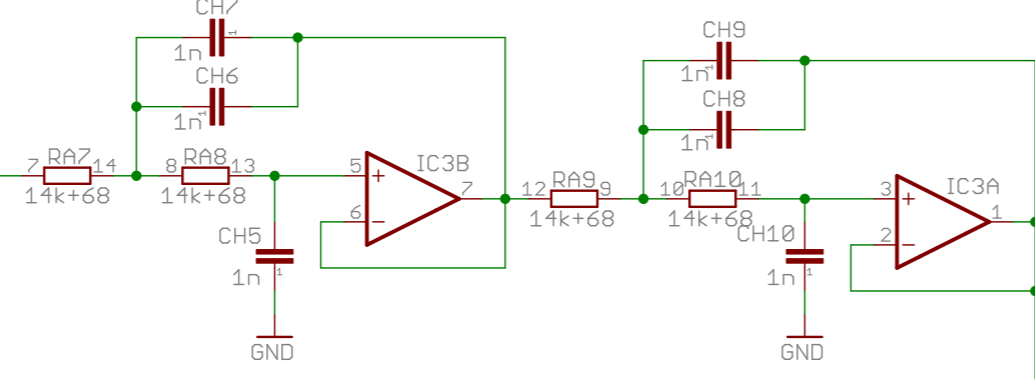
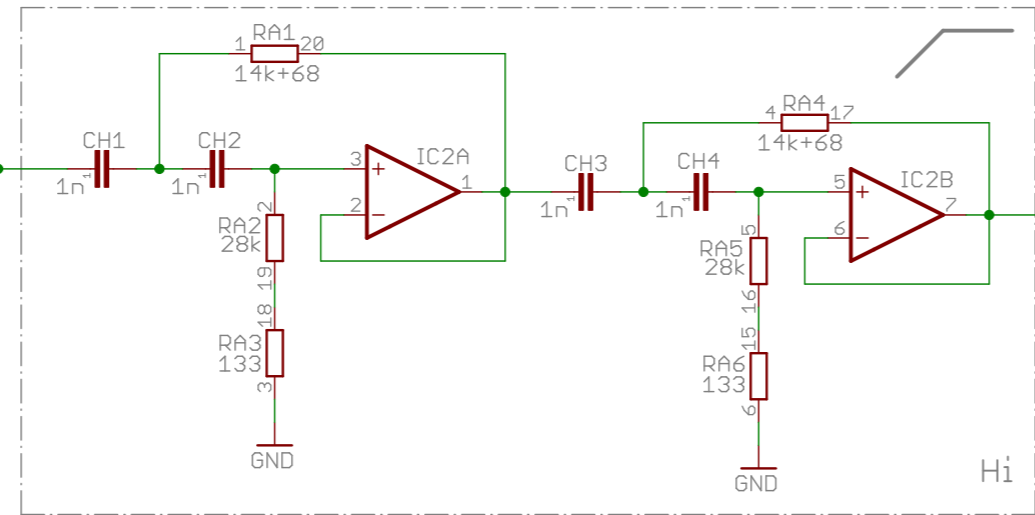
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5
7k5	7k5

Xover Freq 120 values (with fixed C of 100nF): R=9378.29
If using single res (E48-E96) 1% or better, put straps in RC3 & RC6
Use 9310ohms (E96) for RC1, RC4, RC7-RC10
Use 18k7 (E48-E96) for RC2 & RC5

9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7
9310	18k7

Using dual (E48-E96) 1% or better res, uses
9310 + 68 for RC1, RC4, RC7-RC10
18k7 (E48) for RC2, RC5 and 56 for RC3, RC6

9310 + 68	18k7
9310 + 68	56
9310 + 68	18k7
9310 + 68	56
9310 + 68	18k7
9310 + 68	56
9310 + 68	18k7
9310 + 68	56
9310 + 68	18k7
9310 + 68	56



Hi Out

Mid-Hi Out

Mid-Lo Out

Lo Out