

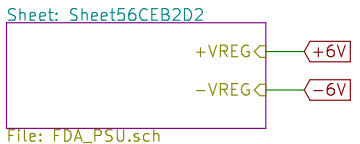
PCB for SMA or BNC R/A thru-hole connectors

+20 dBm input is 6.324Vpp or 100mW  
0805-sized resistor should be OK to 125 mW

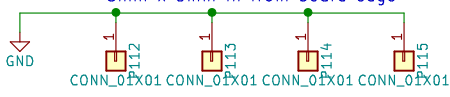
input-stage: LMH6702,  
output-stage: LMH6609,

8x OUTPUT

Power supply filtering &  
Voltage regulation



Mounting-holes in corners of board  
3mm diameter  
5mm x 5mm in from board edge



Suggestions for next version:

- the long transmission line from U101 to output "rings". solved with 100pF cap, but is there a better way?
- DONE move voltage regulators far away from op-amps
- DONE provide LEDs indicating +/-6V rails are ok
- matched-pair resistors where applicable?

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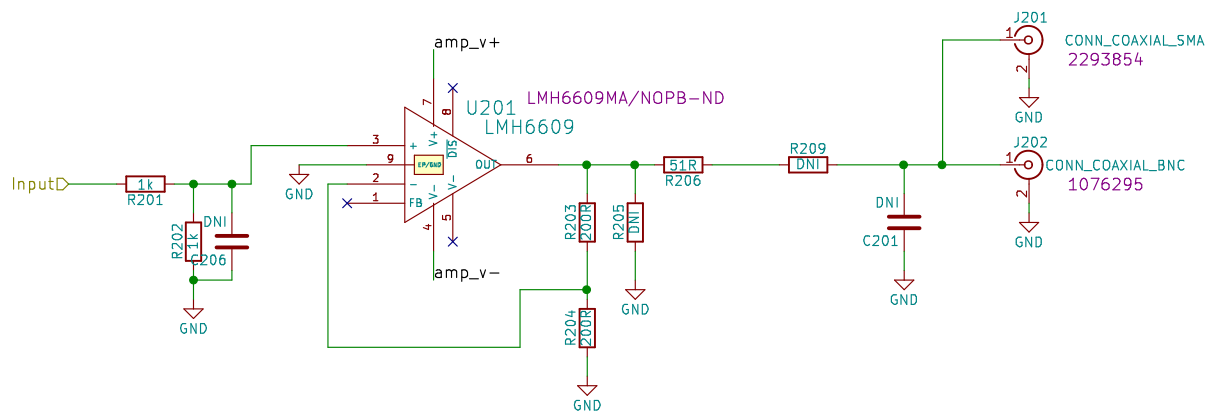
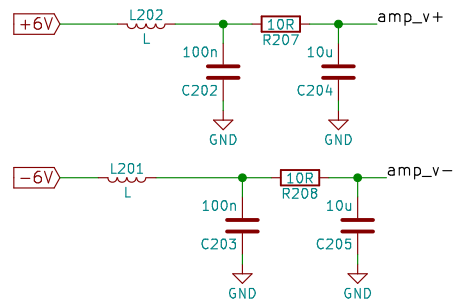
1dB compression @ 14.8 dBm, IP3 @ 31 dBm (10 MHz)  
reverse isolation 120 dB, channel-to-channel isolation 80dB  
measured <-162 dBc/Hz phase-noise at 10 MHz  
2017.01 design, 4pcs prototype-boards Jan 2017

**Anders Wallin (anders.e.e.wallin "at" gmail.com)**

Sheet: /  
File: fda\_2017.03.sch

**Title: Anders' Frequency Distribution Amplifier 2017.03**

Size: A4	Date: 2017-01-28	Rev: 2017.03
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 1/10

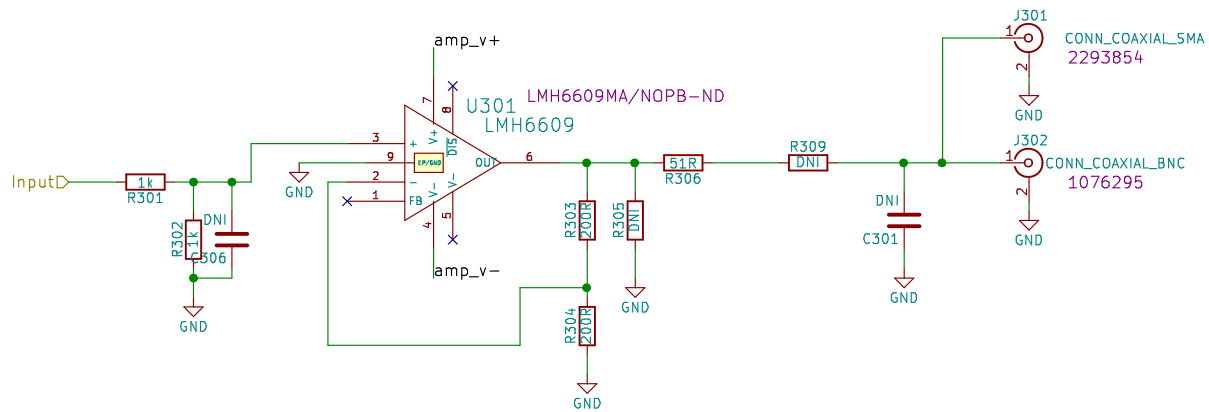
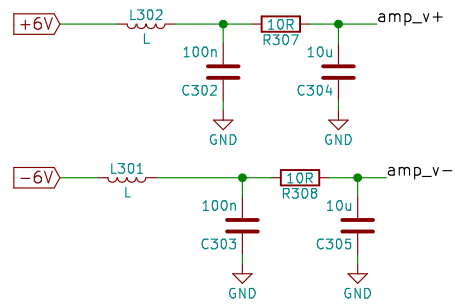


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gain-peaking inceases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out1/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 2/10

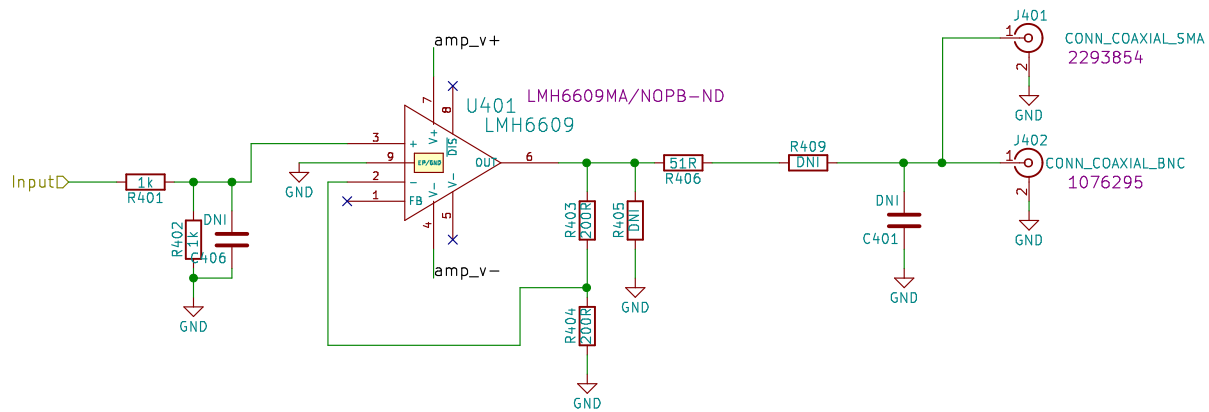
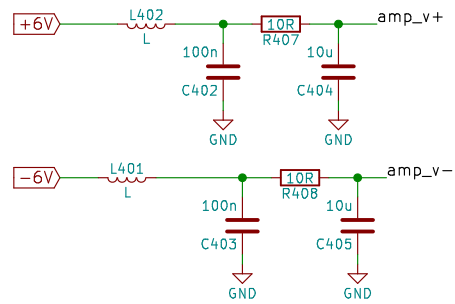


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gain-peaking inceases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out2/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 3/10

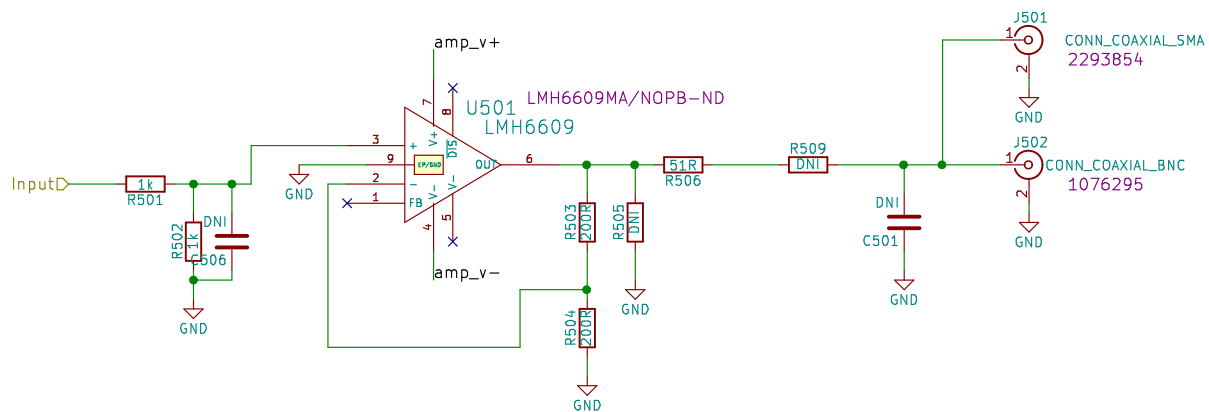
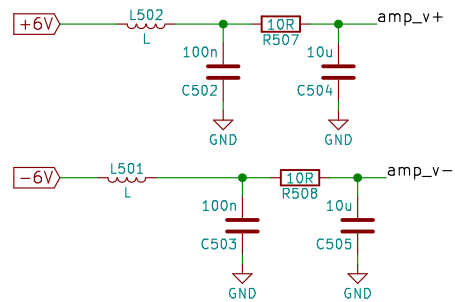


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gain-peaking increases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out3/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
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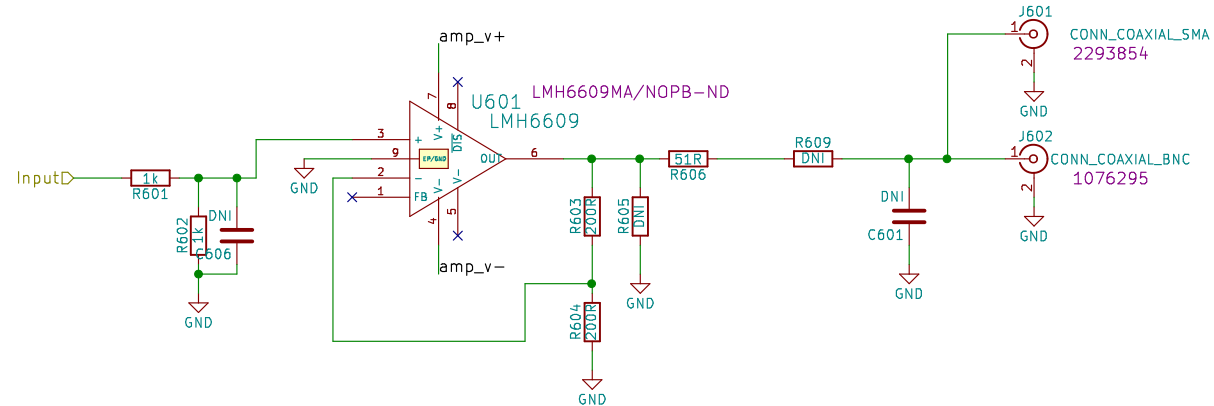
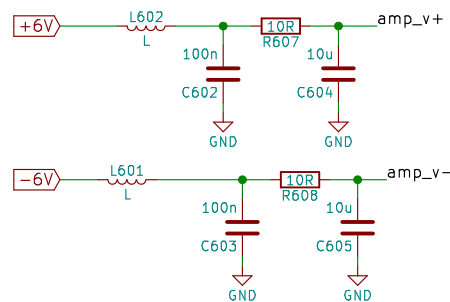


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gain-peaking increases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out4/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 5/10

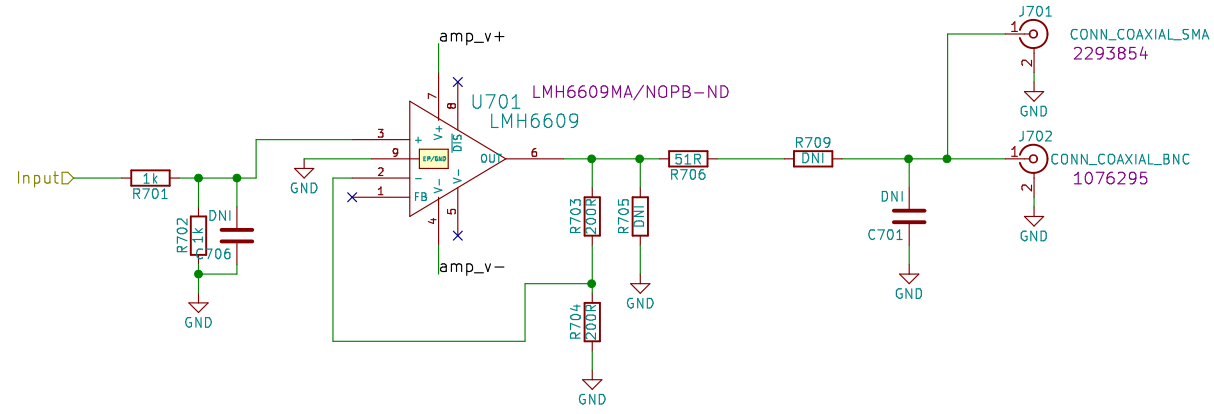
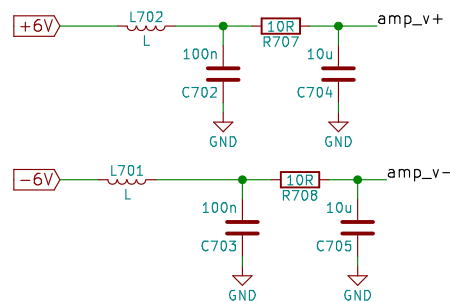


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gain-peaking increases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out5/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 6/10

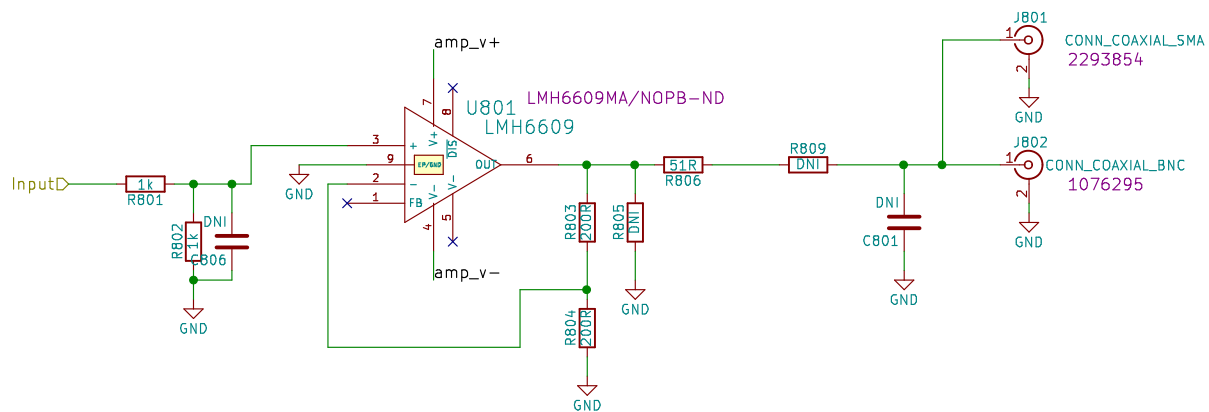
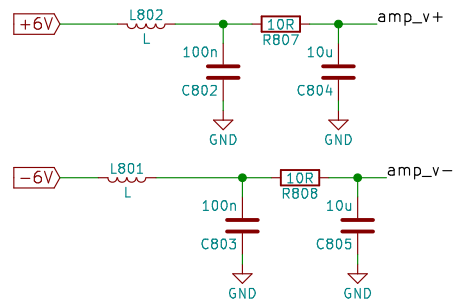


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gain-peaking increases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out6/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
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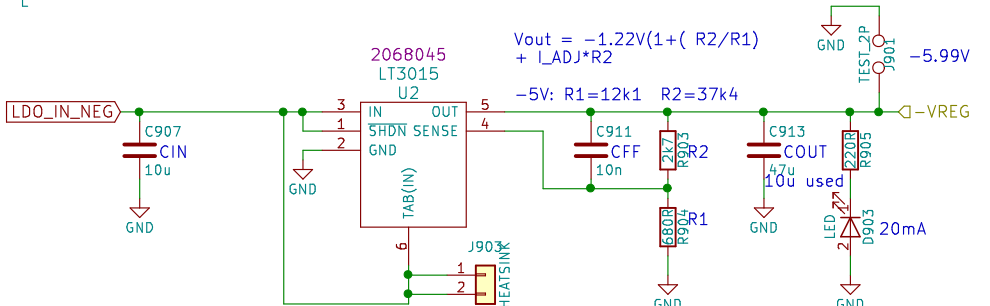
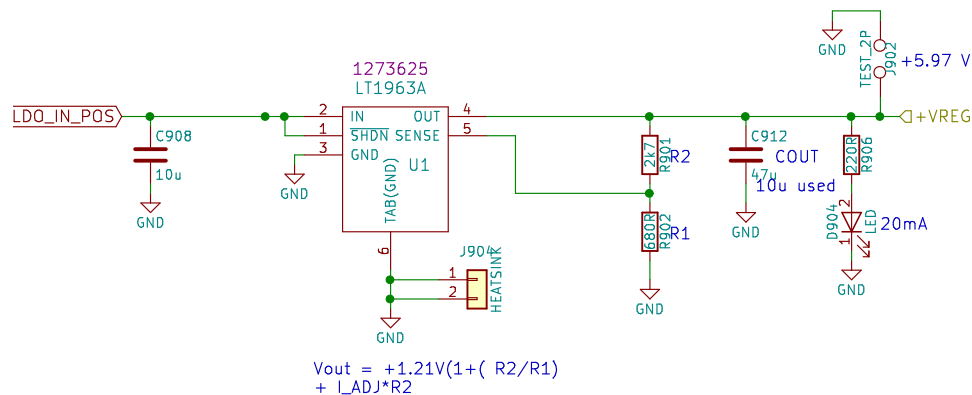
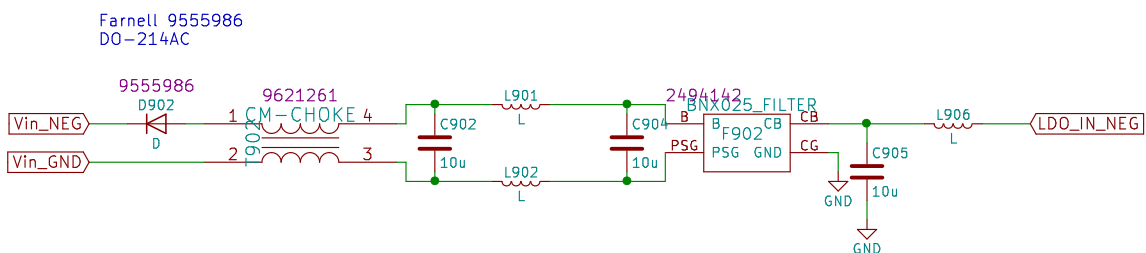
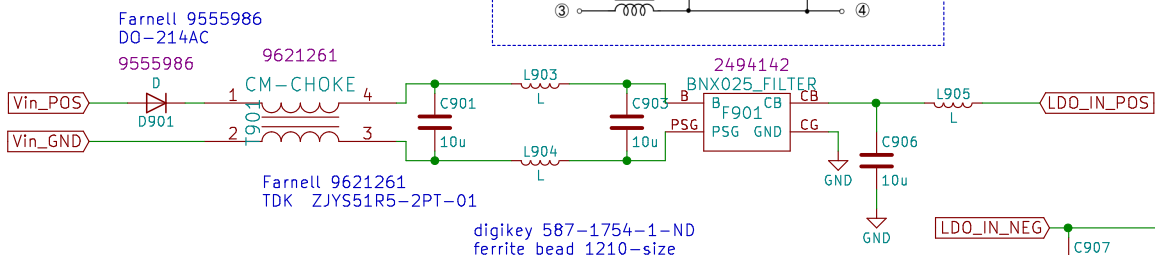
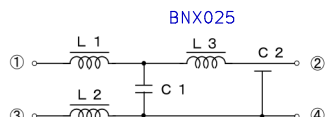
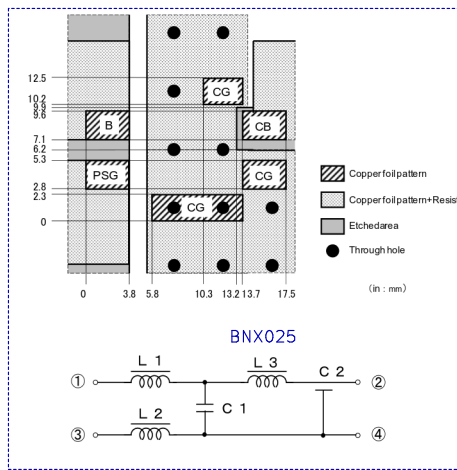
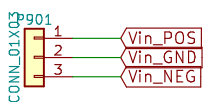
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gain-peaking increases from ch1 -> ch8		
Anders Wallin (anders.e.e.wallin "at" gmail.com)		
Sheet: /out7/		
File: output_stage.sch		
<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 8/10



DC INPUT



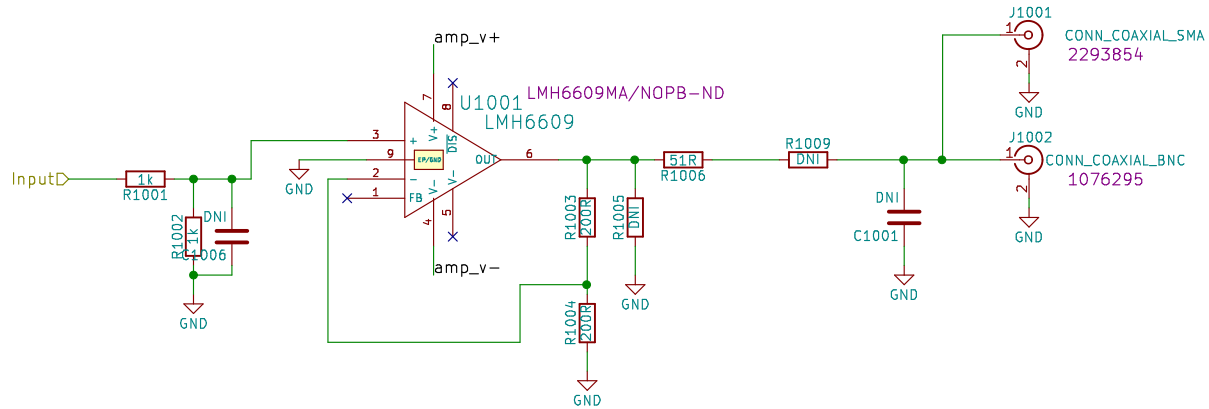
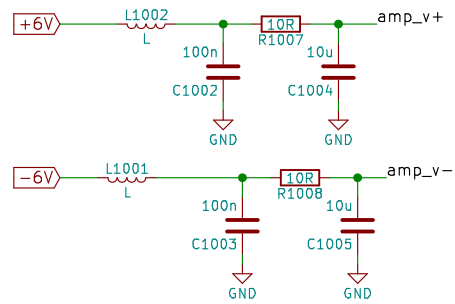
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vregs get quite hot – improve cooling or deruce heating in next version  
 FB: 1210–size FERRITE 2kOhm @ 100MHz  
 not installed. C901, C902, C903, C904  
**Anders Wallin (anders.e.e.wallin "at" gmail.com)**  
 Sheet: /Sheet56CEB2D2/  
 File: FDA\_PSU.sch

<b>Title: Anders' Frequency Distribution Amplifier 2017.03</b>		
Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 9/10



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gain-peaking increases from ch1 -> ch8  
**Anders Wallin (anders.e.e.wallin "at" gmail.com)**

Sheet: /out8/  
 File: output\_stage.sch

**Title: Anders' Frequency Distribution Amplifier 2017.03**

Size: A4	Date: 2017-01-28	Rev: 2017.01
KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1		Id: 10/10