

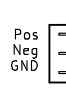
ADC AK5572 v1.1A

Root sheet

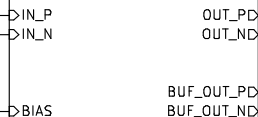
Sheet: Power Supply

File: ADC_AK5572_PSU.sch

Input 1



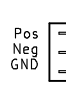
Sheet: Input1



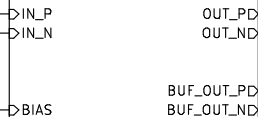
File: ADC_AK5572_input.sch

Mono mode:
Populate these Rs and unpopulate
Input2 until differential opamp.

Input 2

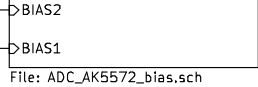


Sheet: Input2



File: ADC_AK5572_input.sch

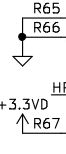
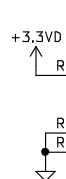
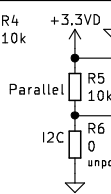
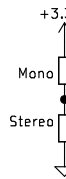
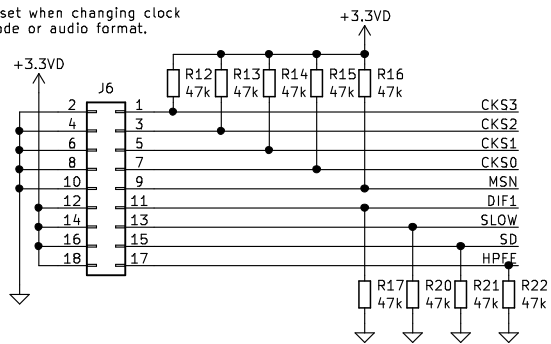
Sheet: Bias



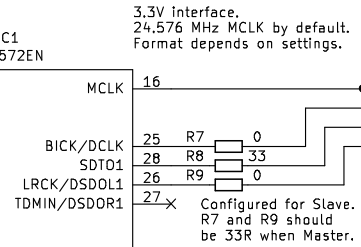
File: ADC_AK5572_bias.sch

Reset when changing clock
mode or audio format.

I2C mode: Close for:
AD1 CKS3=L
SCL CKS2=L
AD0 CKS1=L
SDA CKS0=L
I2S slave
32-bit I2S
Slow Filter
Short Delay
HPF enable

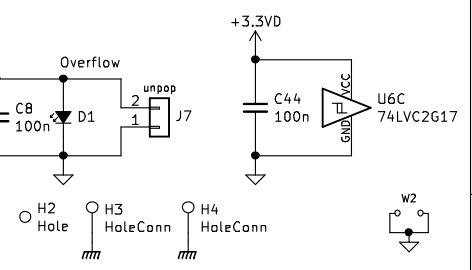
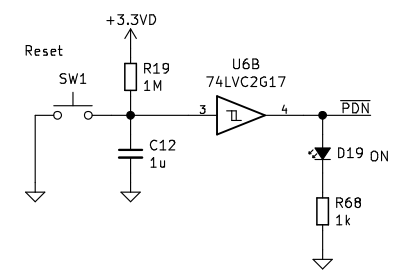
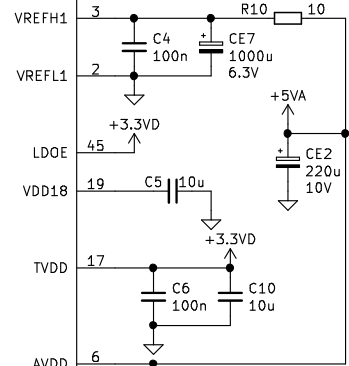


IC1
AK5572EN



3.3V Interface.
24.576 MHz MCLK by default.
Format depends on settings.

Configured for Slave.
R7 and R9 should
be 33R when Master.



Tomi Nihtilä (nihtila.com)

ADC AK5572

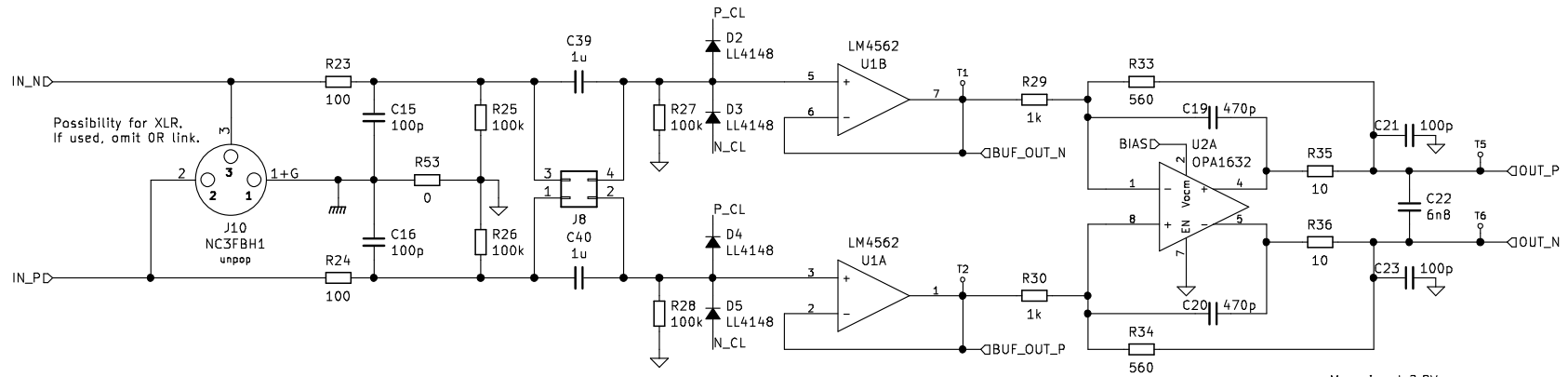
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File: ADC_AK5572.sch

Size: A4	Date: 2019-11-20	Rev: v1.1A
KiCad E.D.A.	kiCad (5.1.4)-1	Id: 1/5

- FID1 Fiducial
- FID2 Fiducial
- FID3 Fiducial

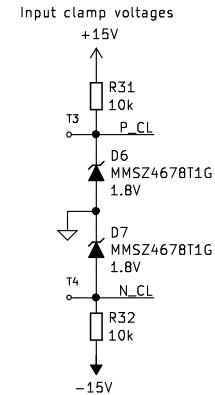
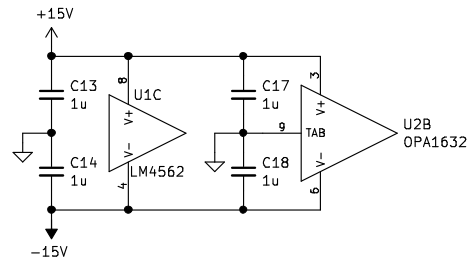
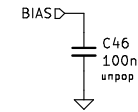
ADC AK5572 v1.1A

Input



Max signal 2.8Vpp.
2.5V DC level.
Absolute maximum is -0.3V to 5.3V.

Notes on input protection:
 -Set clamp levels so that max voltage at ADC input never exceeds 5.3V and -0.3V.
 -Consider opamp gain when setting the levels.
 -Clamping level limits max CM level in DC mode.
 -Small 100ohm resistor and LL414Bs cannot withstand significant over-voltage for long time. For extra robustness consider light bulb protection and/or disconnecting input on prolonged over-voltage.



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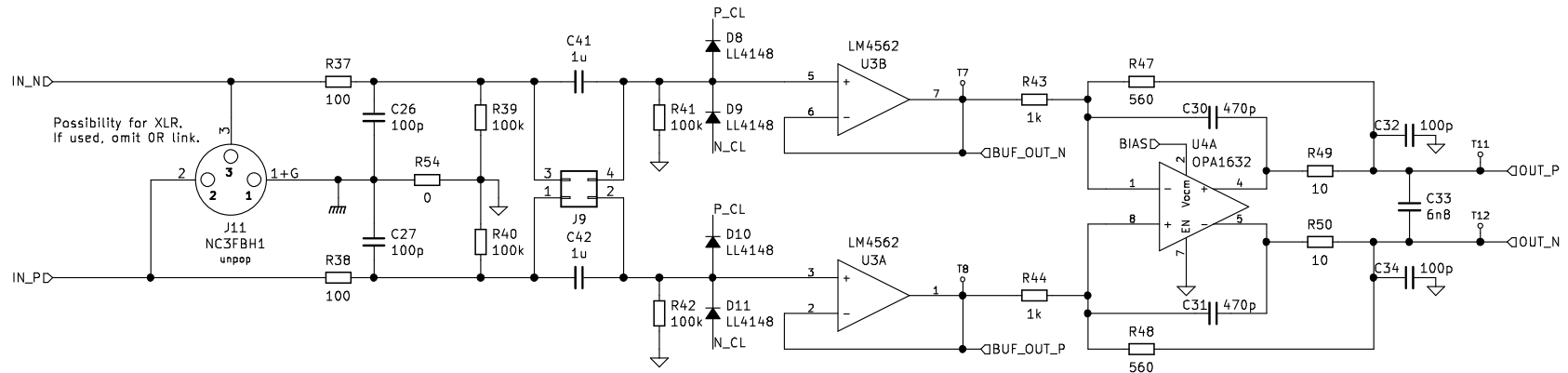
ADC AK5572

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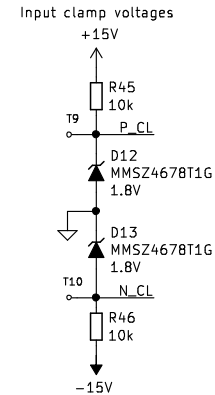
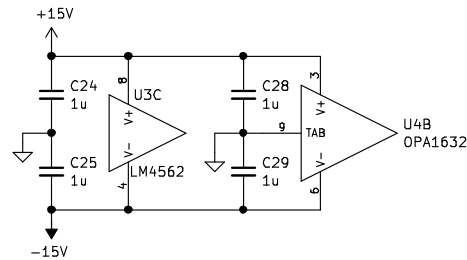
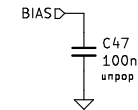
ADC AK5572 v1.1A

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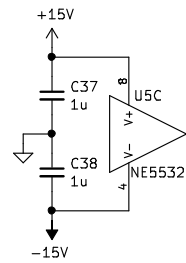
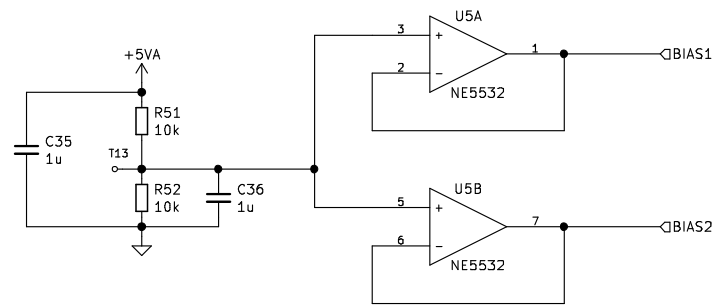
ADC AK5572

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KiCad E.D.A.	kiCad (5.1.4)-1	Id: 3/5

ADC AK5572 v1.1A

Bias



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ADC AK5572

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File: ADC_AK5572_bias.sch

Size: A4

Date: 2018-12-09

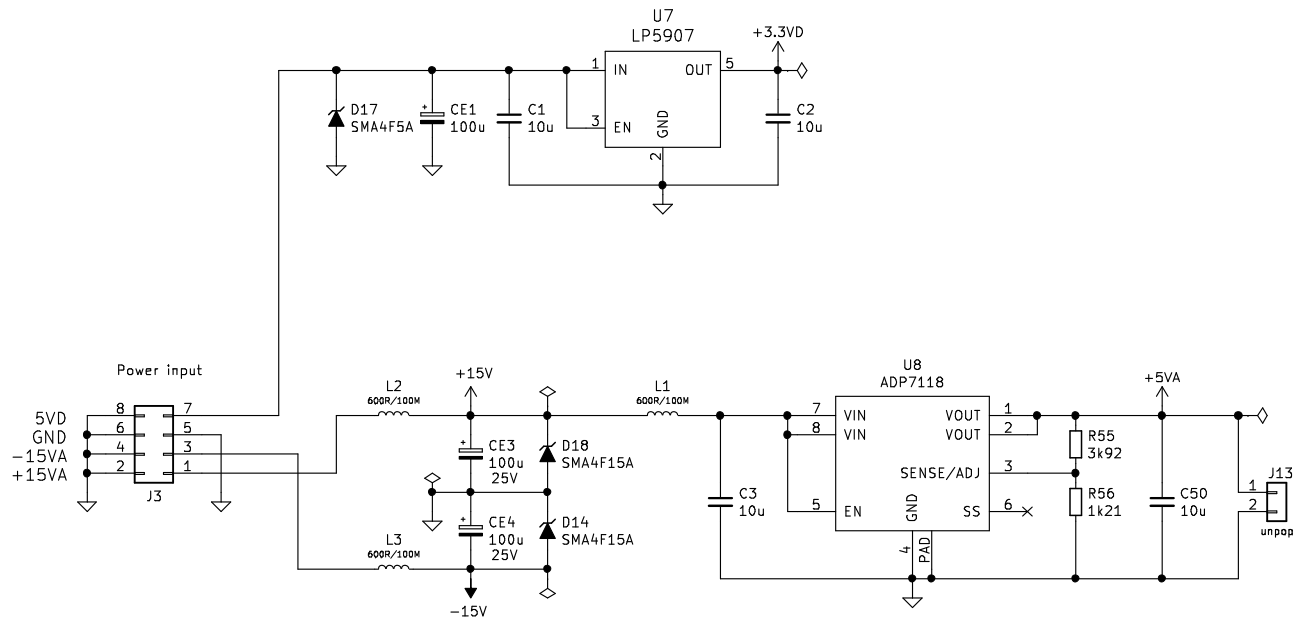
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Id: 4/5

ADC AK5572 v1.1A

Power Supply



Sheet: /Power Supply/		
File: ADC_AK5572_PSU.sch		
Size: A4	Date:	Rev:
KiCad E.D.A.	kiCad (5.1.4)-1	Id: 5/5