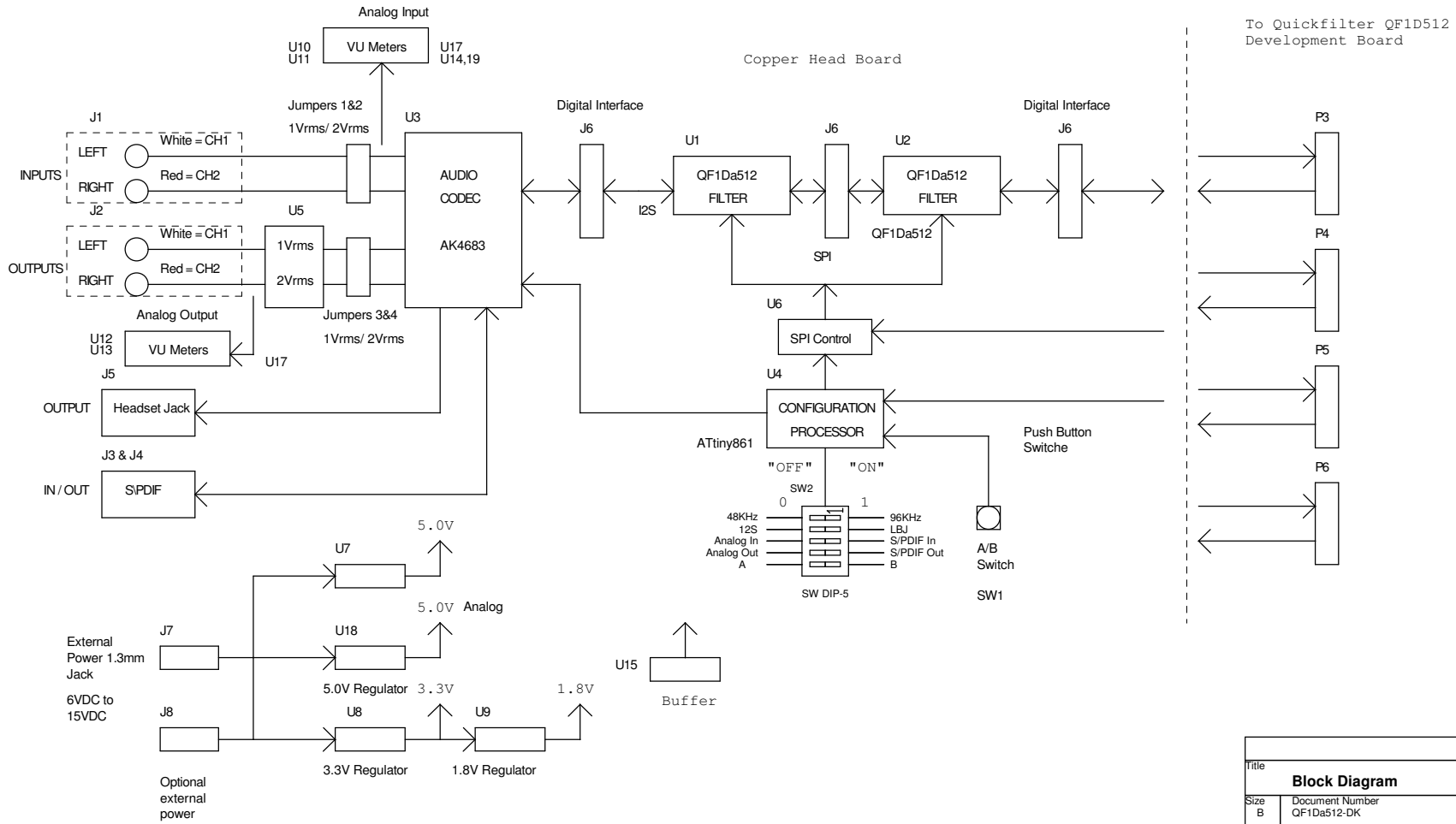


QF1Da512-DK

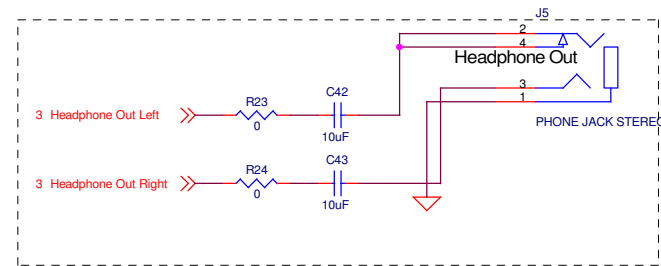
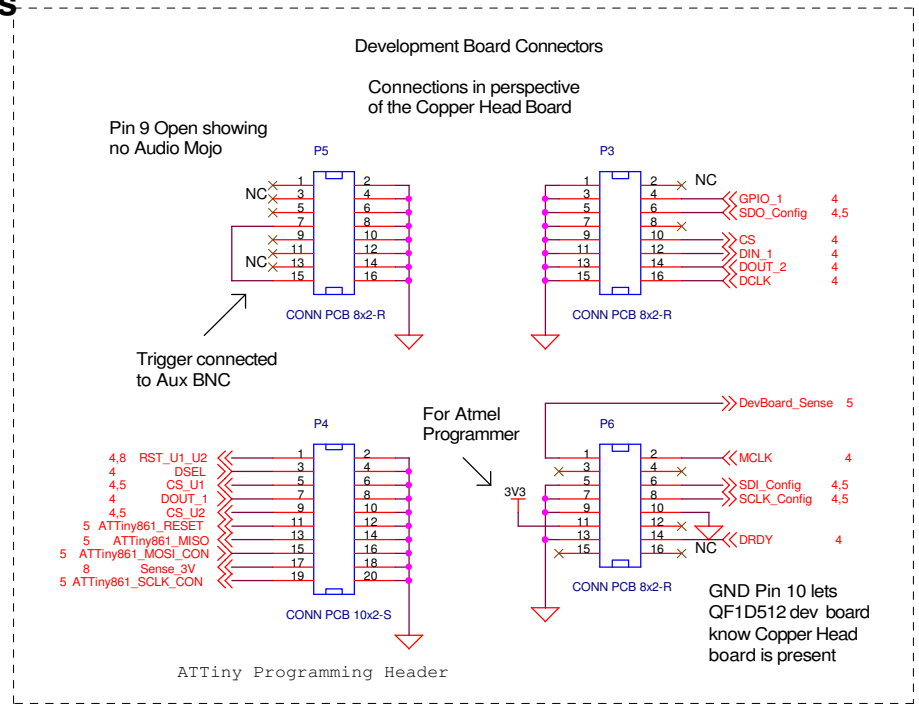
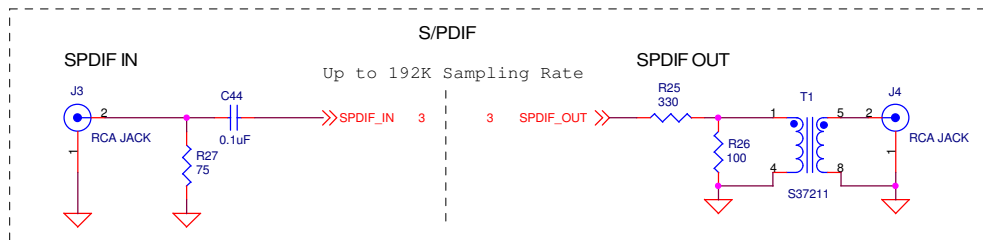
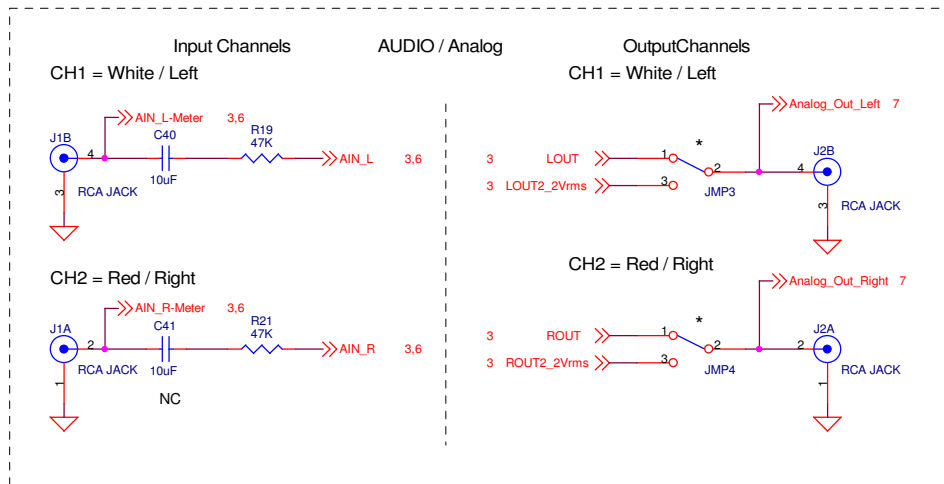
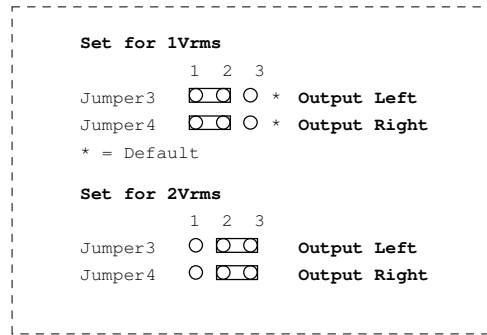
Block Diagram



| | | |
|--------------------------------------|--------------------------------|------------|
| Title | | |
| Block Diagram | | |
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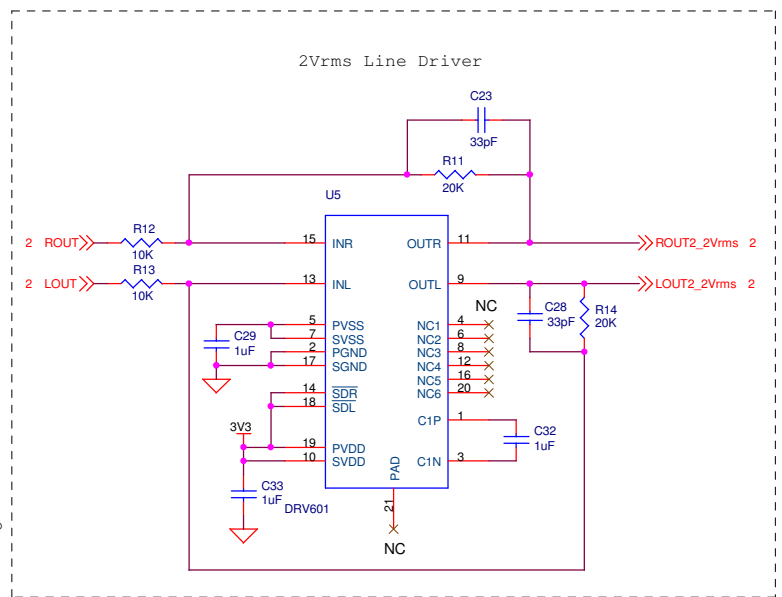
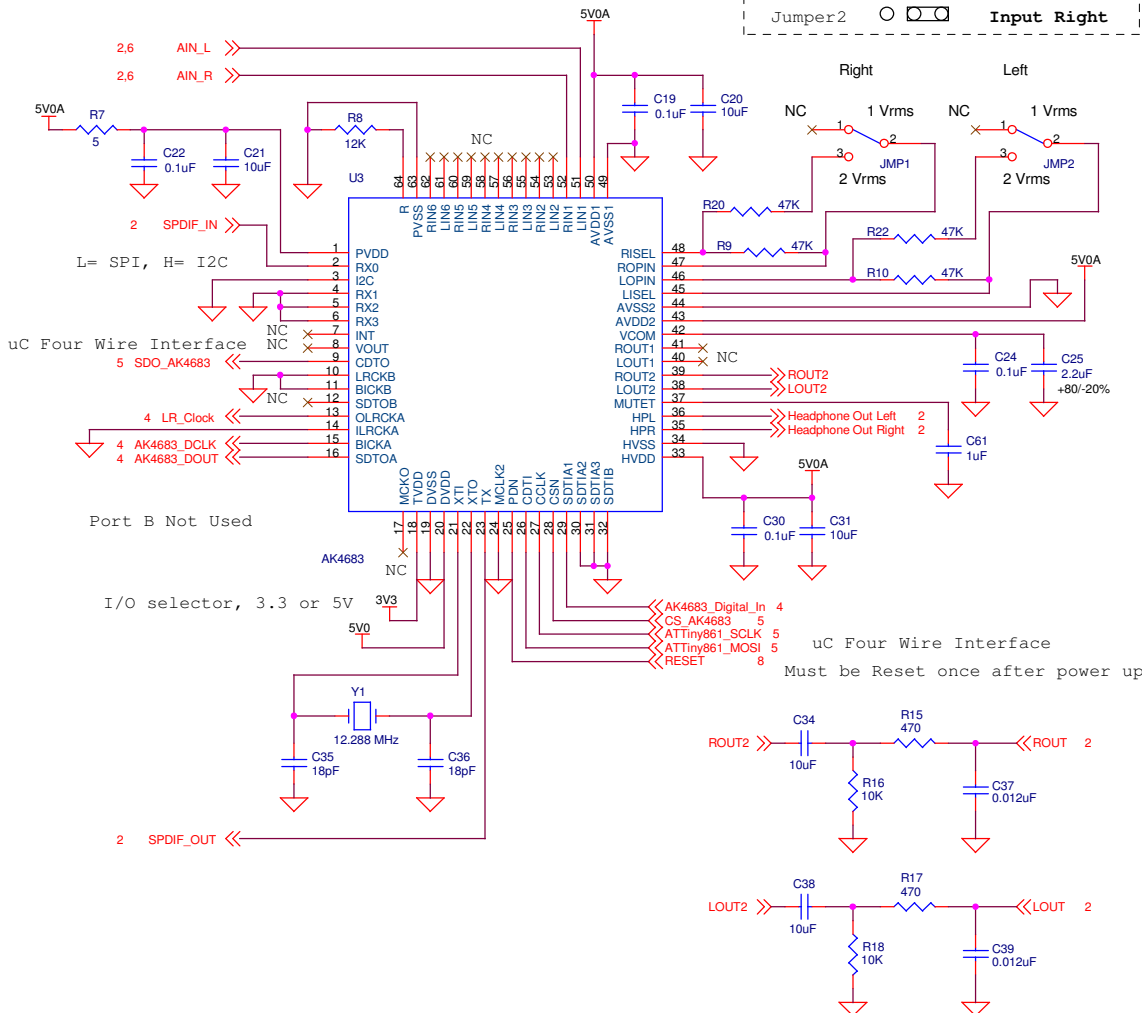
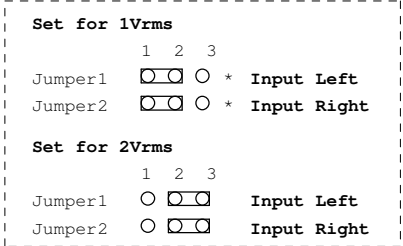
Board Interfaces



| | | |
|-----------------------------------|-----------------------------|---------|
| Title | | |
| Board Interfaces | | |
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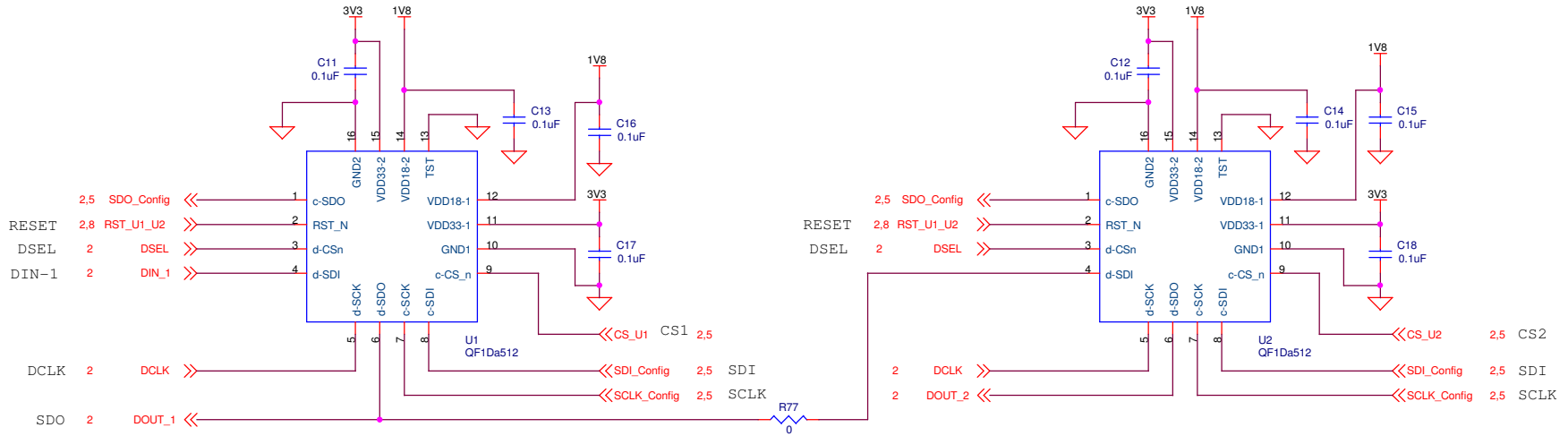
AKM AK4683 CoDec



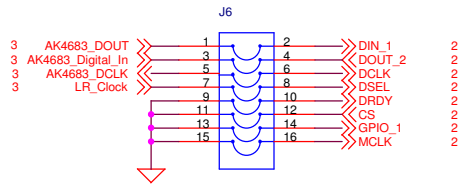
| | | |
|-------------------------|-----------------------------|--------------|
| Title | | |
| AKM AK4683 CoDec | | |
| Size | Document Number | Rev |
| B | QF1Da512-DK | 2.6 |
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QF1Da512-DK

QF1Da512 Audio Filters



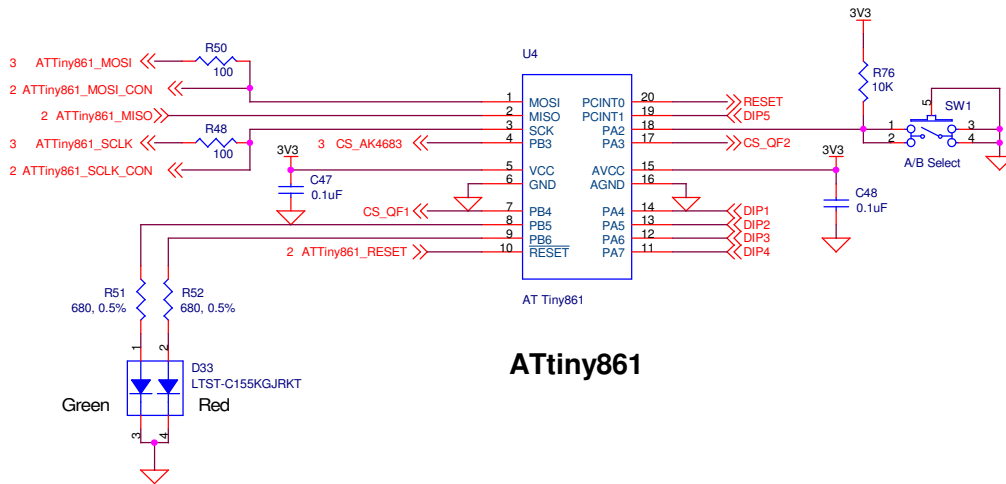
Note: D=Data, C=Configure
 Note: SDO Configure is tri-stated when CS is high



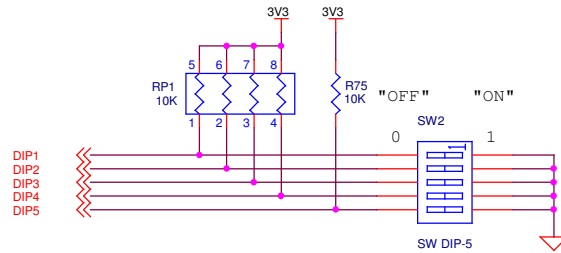
| | | |
|-----------------|--------------------------------|--------------|
| Title | | |
| QF1Da512 | | |
| Size B | Document Number QF1Da512-DK | Rev 2.6 |
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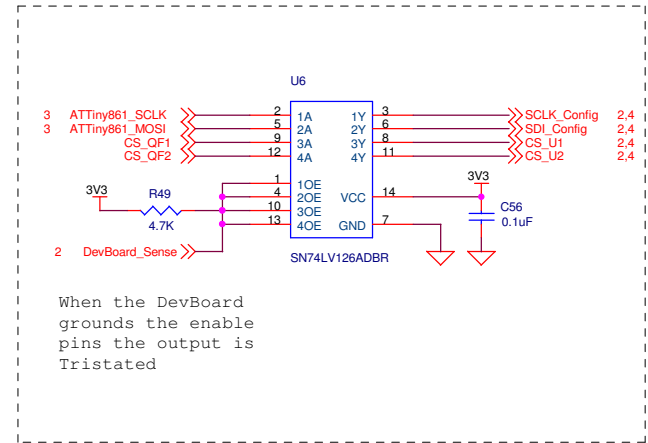
ATtiny861 uC



ATtiny861



Note: Headset
Volume Controlled
through DAC2



When the DevBoard grounds the enable pins the output is Tristated

Switch Configurations

Switch 1
*0 = 48 kHz
1 = 96 kHz

Switch 2, I2S or Left Justify
*0 = I2S digital format
1 = Left Justified

Switch 3
* 0 = Analog IN
1 = S/PDIF IN

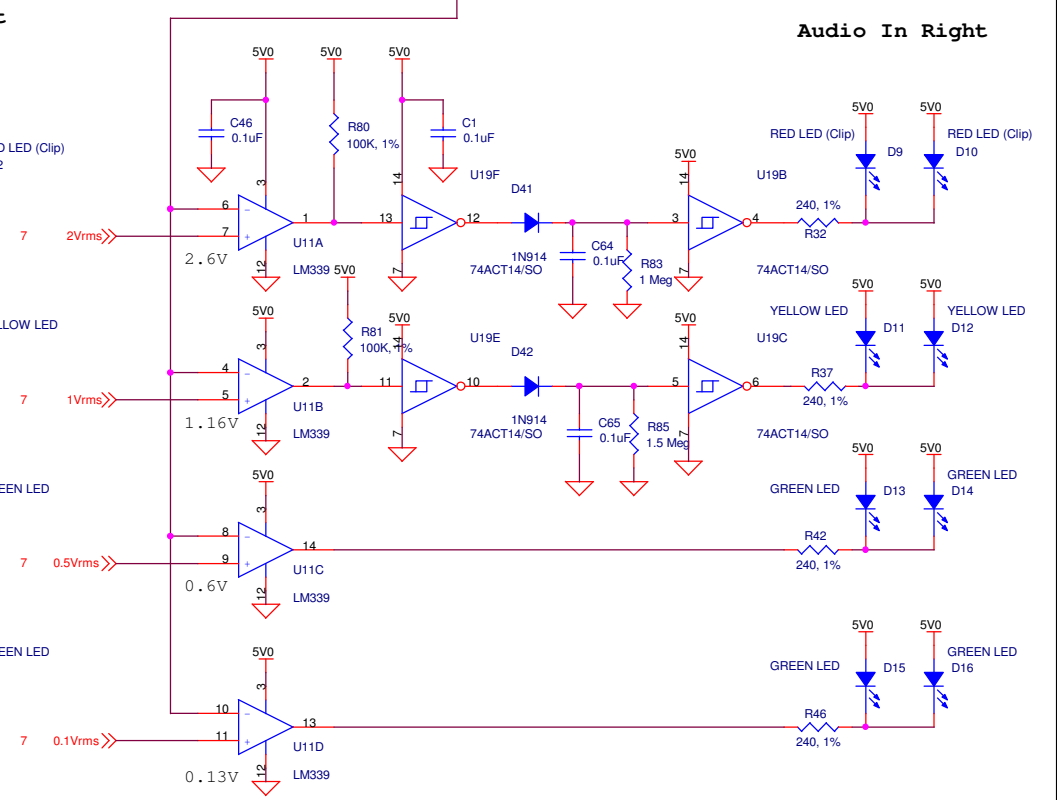
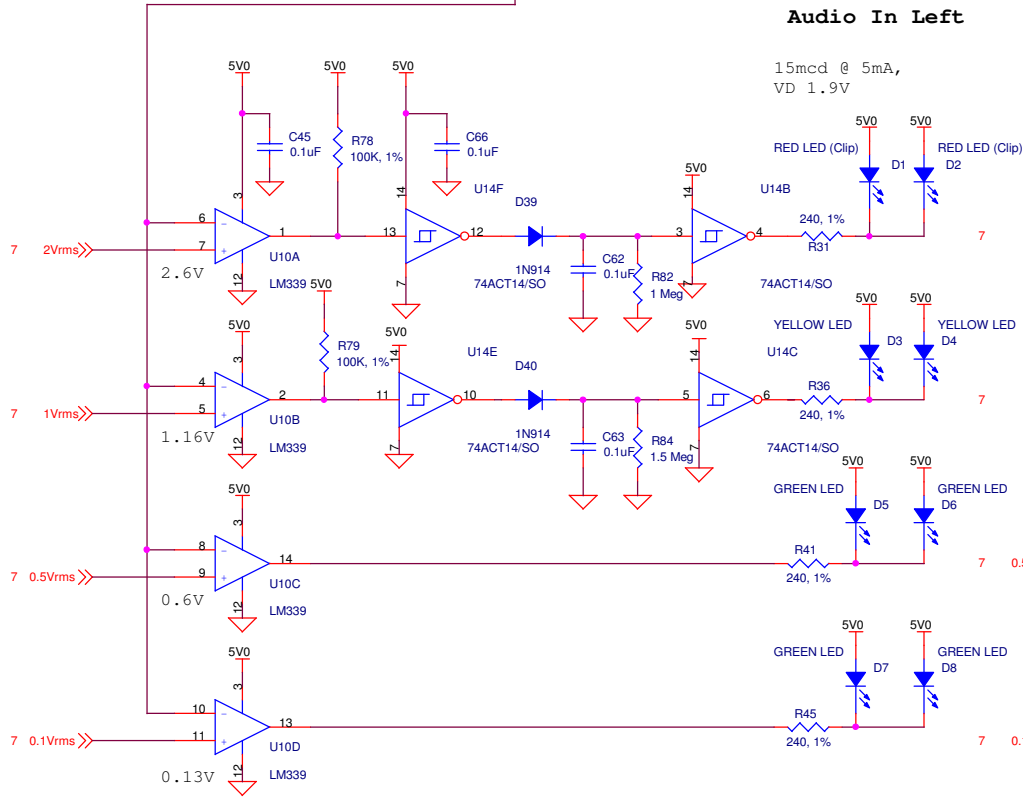
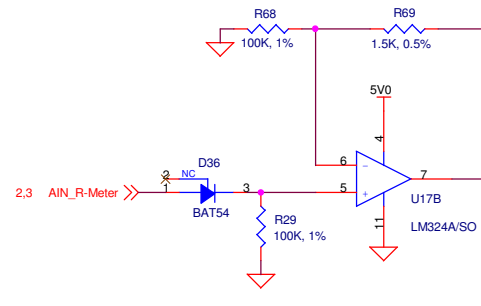
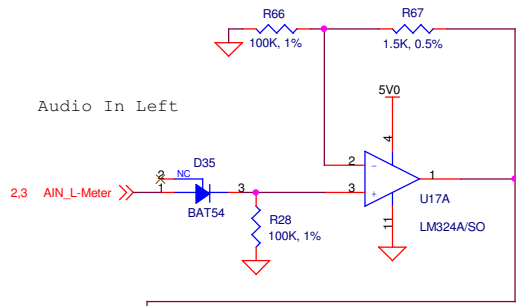
Switch 4
* 0 = Analog OUT
1 = S/PDIF OUT

* = Shipped Default

| | | |
|-----------------------------------|-----------------------------|---------|
| Title | | |
| Microcontroller | | |
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QF1Da512-DK

Input VU Meter / Clip Indicator

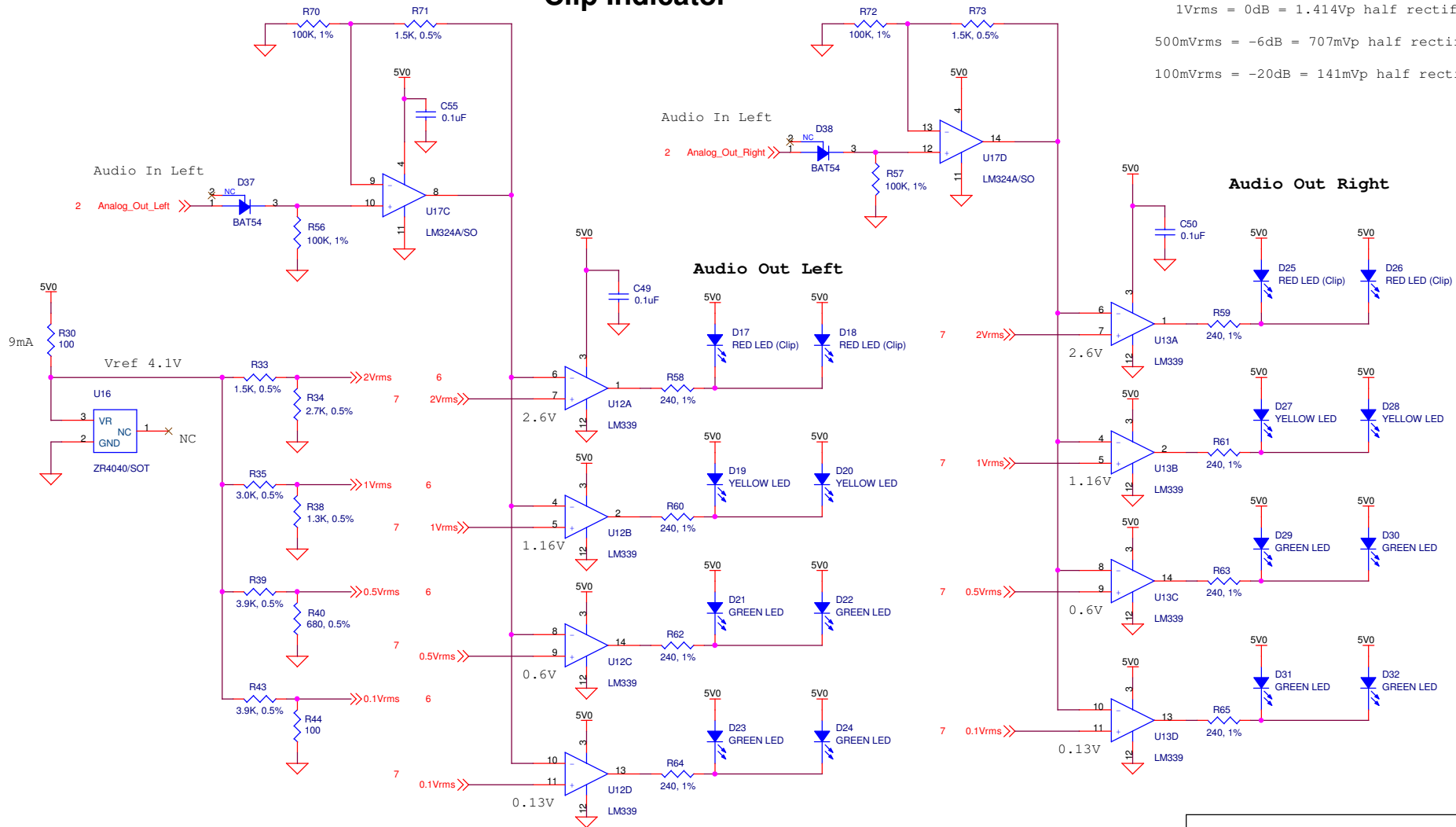


| | | |
|---------------------------------|-----------------------------|--------------|
| Title | | |
| Input VU Meter / Clip Indicator | | |
| Size | Document Number | Rev |
| B | QF1Da512-DK | 2.4 |
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Output VU Meter / Clip Indicator

$2V_{rms} = +6dB = 2.82V$ half rectified
 $1V_{rms} = 0dB = 1.414V_p$ half rectified
 $500mV_{rms} = -6dB = 707mV_p$ half rectified
 $100mV_{rms} = -20dB = 141mV_p$ half rectified



| | | |
|---|-----------------------------|--------------|
| Title | | |
| Output VU Meter / Clip Indicator | | |
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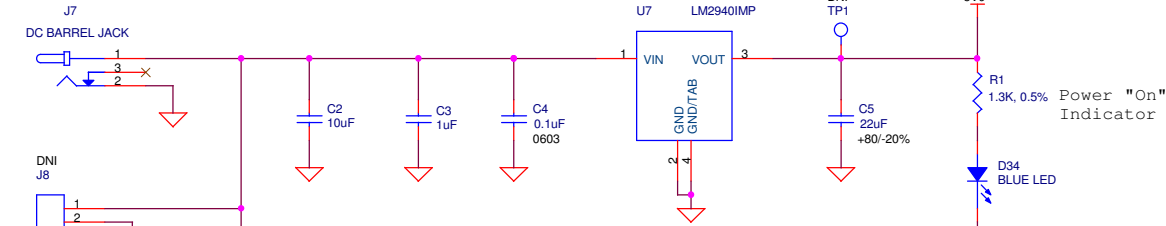
Power / Oscillator / Reset

DC 5V, 1000mA

5V REGULATOR

CUI,
EPS120050-P7P

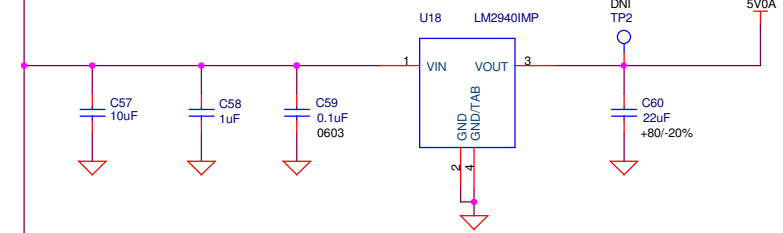
6VDC to 15VDC,
500mA 1.3mm



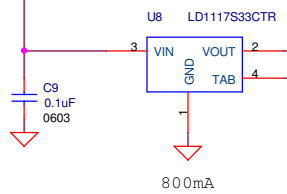
DC 5V, 1000mA

5V REGULATOR

0.1" Header Not
Stuffed

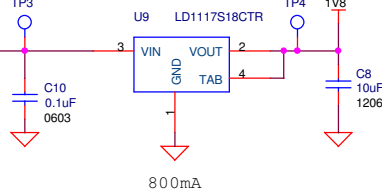


3.3V REGULATOR



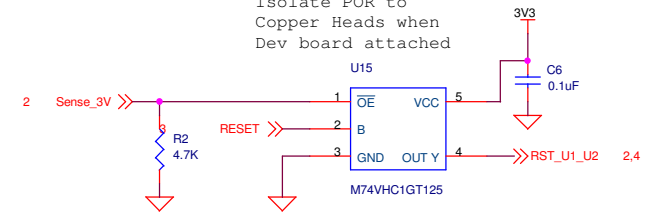
800mA

1.8V REGULATOR



800mA

Isolate POR to
Copper Heads when
Dev board attached



| | | |
|---------------------|--------------------------------|--------------|
| Title | | |
| Power - Copper Head | | |
| Size B | Document Number QF1Da512-DK | Rev 2.6 |
| Date: | Wednesday, January 28, 2009 | Sheet 8 of 8 |