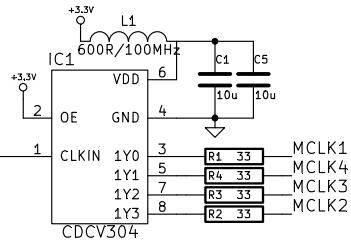
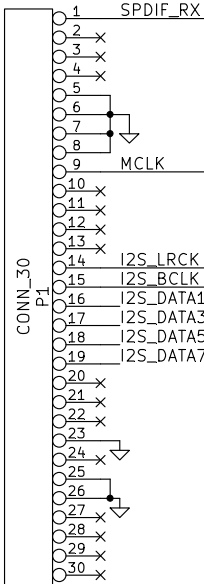
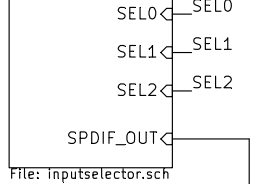
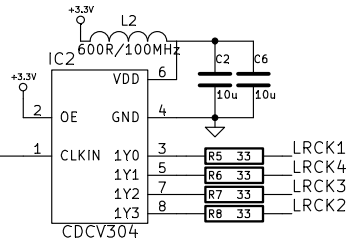
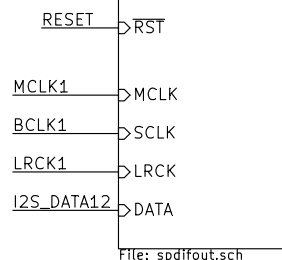


This is the highest hierarchy sheet. Schematics of black boxes are in the following sheets.

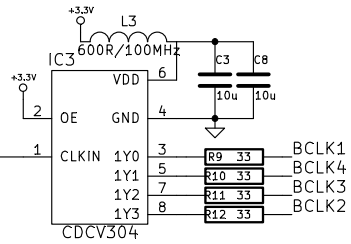
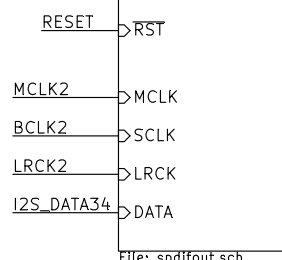
Sheet: Input Selector



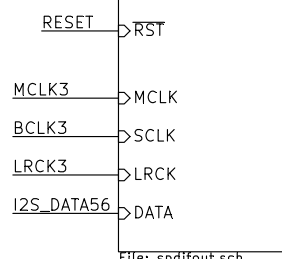
Sheet: SPDIF Output Ch1&2



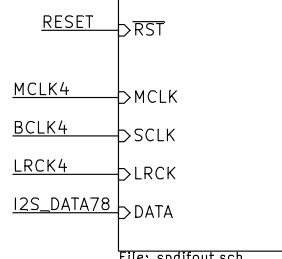
Sheet: SPDIF Output Ch3&4



Sheet: SPDIF Output Ch5&6



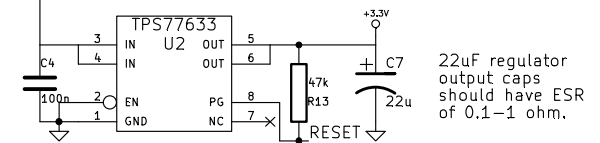
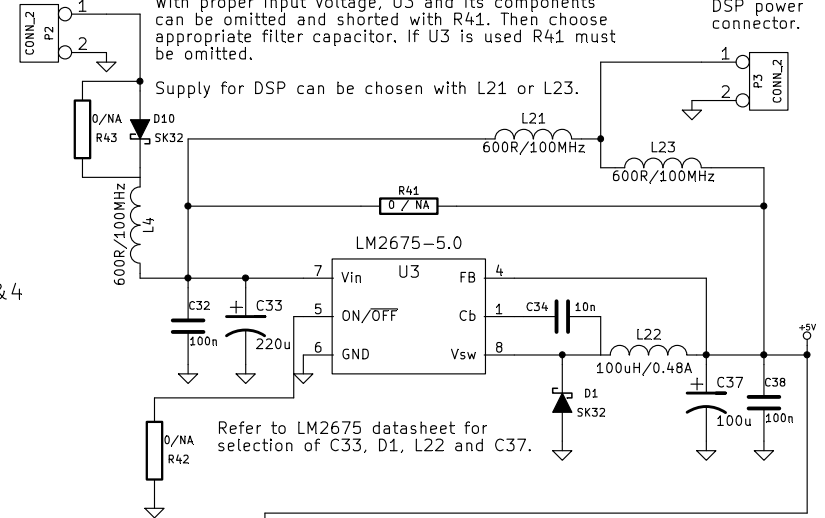
Sheet: SPDIF Output Ch7&8



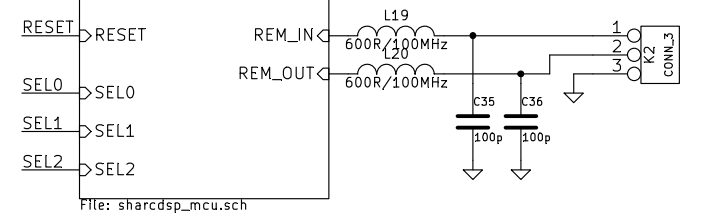
PSU components are assembled based on needs.

With proper input voltage, U3 and its components can be omitted and shorted with R41. Then choose appropriate filter capacitor. If U3 is used R41 must be omitted.

Supply for DSP can be chosen with L21 or L23.



Sheet: MCU



Schematics contains numerous ferrite beads. Despite their filtering feature they are also used as bridges and can be replaced by 0-ohm resistors.

Tomi Nihtilä

File: sharcdsp.sch

Sheet: /

Title: 8ch Sharc DSP

Size: A4

Date: 24 sep 2014

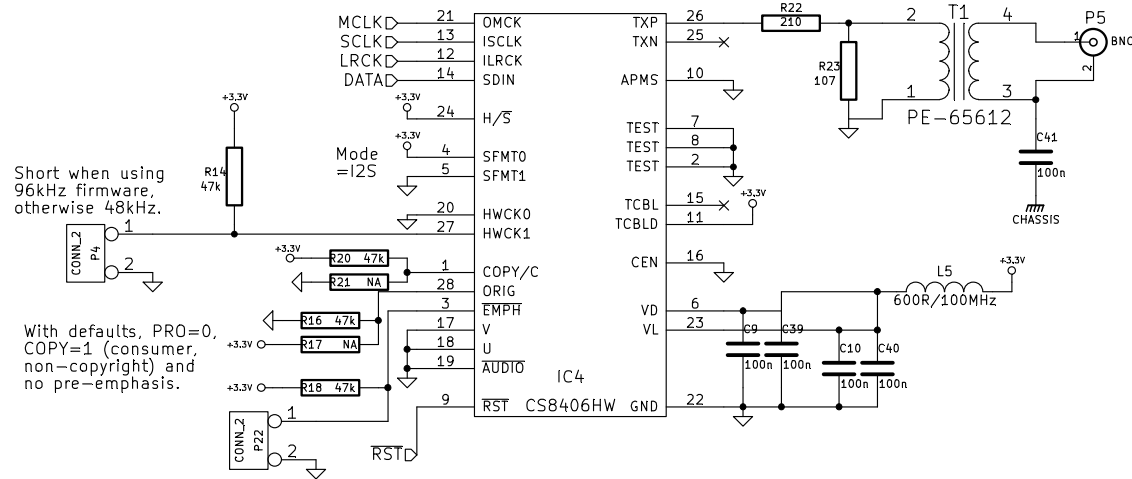
KiCad E.D.A. eschema (2013-07-07 BZR 4022)-stable

Rev: Rev 1

Id: 1/7

SPDIF output

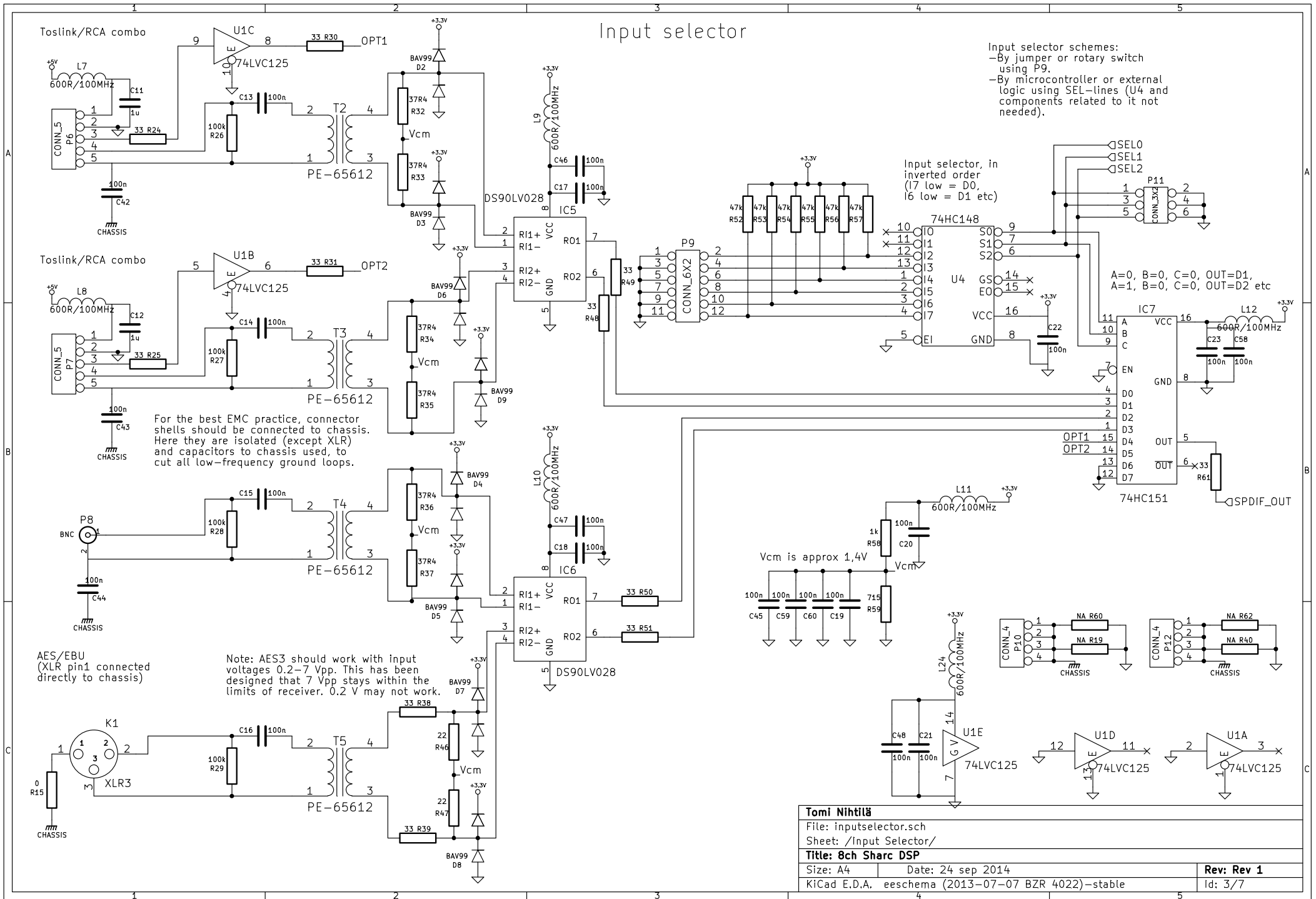
Note: There is no indication of non-audio or invalid data in SPDIF-signal since DSP doesn't give any signalling about errors etc.



Short when using 96kHz firmware, otherwise 48kHz.

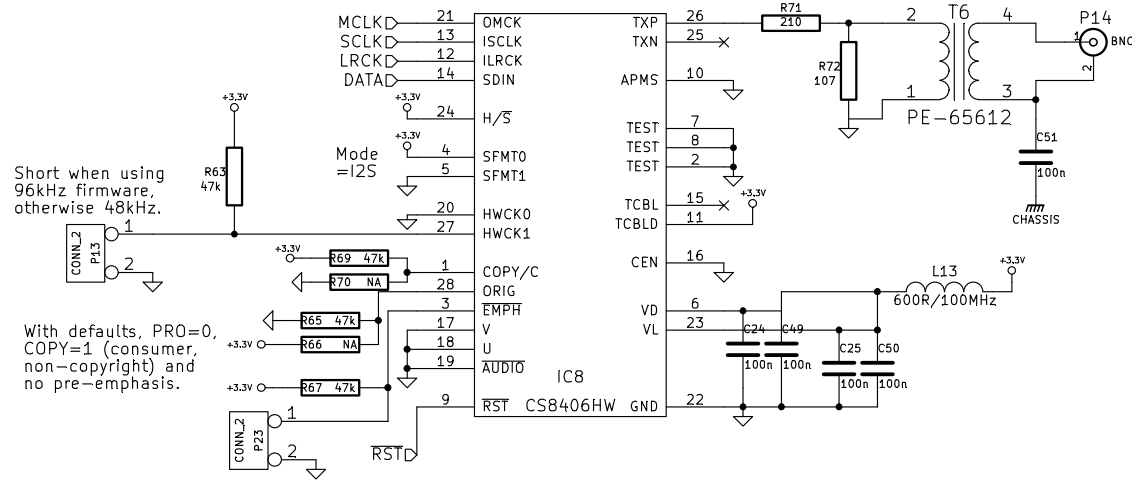
With defaults, PRO=0, COPY=1 (consumer, non-copyright) and no pre-emphasis.

Tomi Nihtilä		
File: spdifout.sch		
Sheet: /SPDIF Output Ch1&2/		
Title: 8ch Sharc DSP		
Size: A4	Date: 24 sep 2014	Rev: Rev 1
KiCad E.D.A. eeschema (2013-07-07 BZR 4022)-stable		Id: 2/7



SPDIF output

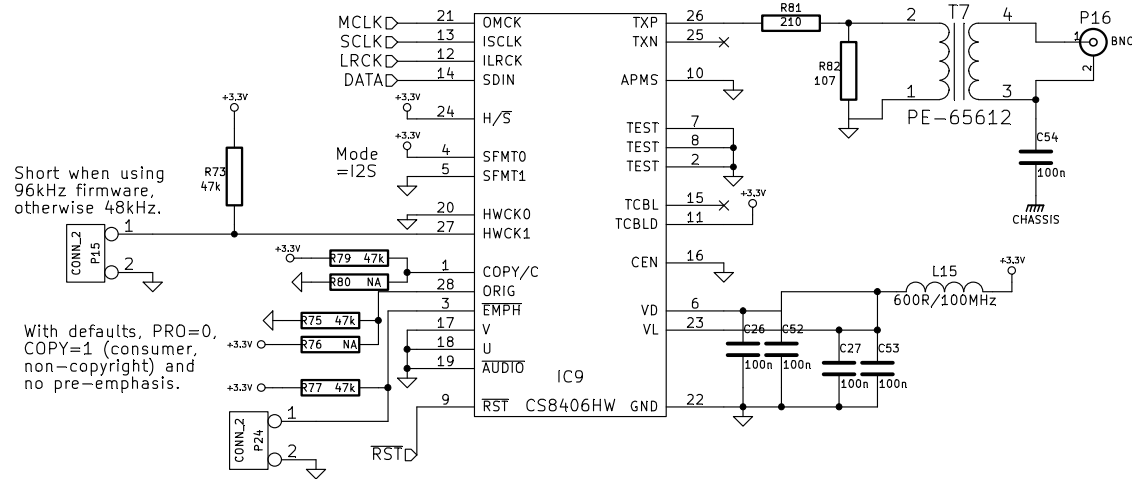
Note: There is no indication of non-audio or invalid data in SPDIF-signal since DSP doesn't give any signalling about errors etc.



Tomi Nihtilä		
File: spdifout.sch		
Sheet: /SPDIF Output Ch3&4/		
Title: 8ch Sharc DSP		
Size: A4	Date: 24 sep 2014	Rev: Rev 1
KiCad E.D.A. eeschema (2013-07-07 BZR 4022)-stable		Id: 4/7

SPDIF output

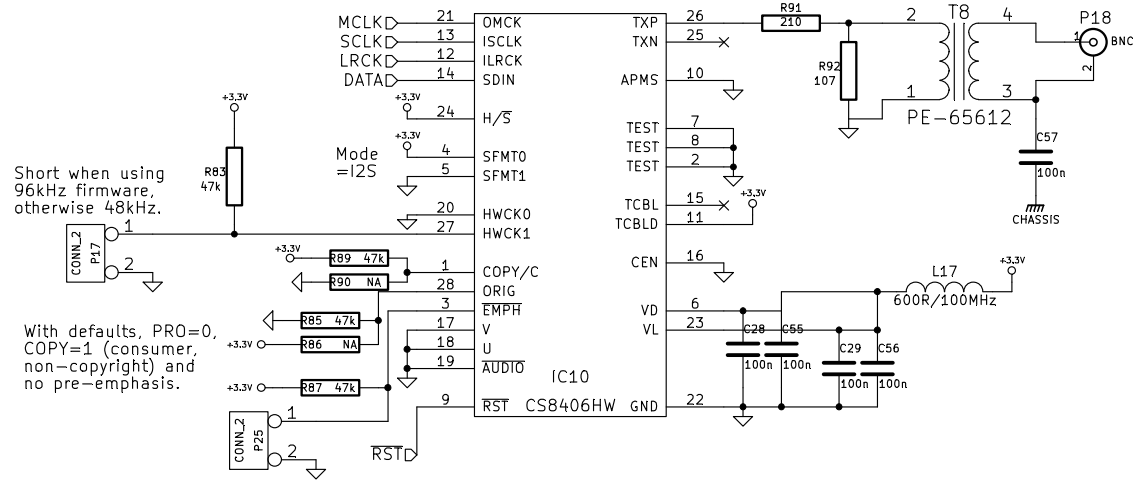
Note: There is no indication of non-audio or invalid data in SPDIF-signal since DSP doesn't give any signalling about errors etc.



Tomi Nihtilä		
File: spdifout.sch		
Sheet: /SPDIF Output Ch5&6/		
Title: 8ch Sharc DSP		
Size: A4	Date: 24 sep 2014	Rev: Rev 1
KiCad E.D.A. eeschema (2013-07-07 BZR 4022)-stable		Id: 5/7

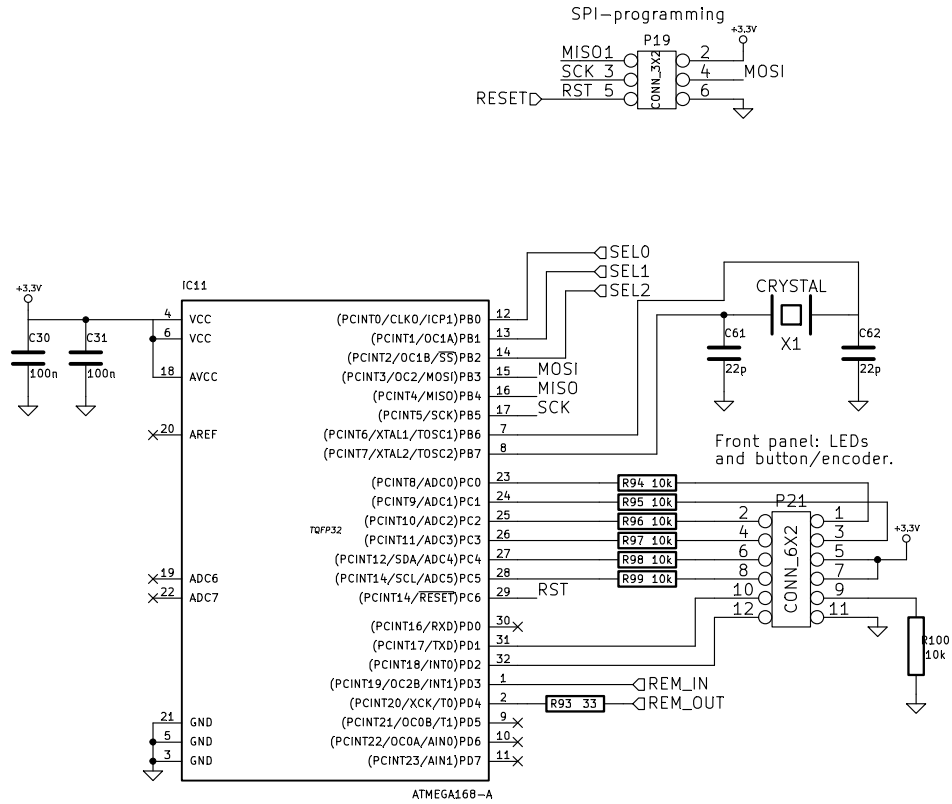
SPDIF output

Note: There is no indication of non-audio or invalid data in SPDIF-signal since DSP doesn't give any signalling about errors etc.



Tomi Nihtilä		
File: spdifout.sch		
Sheet: /SPDIF Output Ch7&8/		
Title: 8ch Sharc DSP		
Size: A4	Date: 24 sep 2014	Rev: Rev 1
KiCad E.D.A. eeschema (2013-07-07 BZR 4022)-stable		Id: 6/7

MCU



Tomi Nihtilä		
File: sharcdsp_mcu.sch		
Sheet: /MCU/		
Title: 8ch Sharc DSP		
Size: A4	Date: 24 sep 2014	Rev: Rev 1
KiCad E.D.A. eschema (2013-07-07 BZR 4022)-stable		Id: 7/7