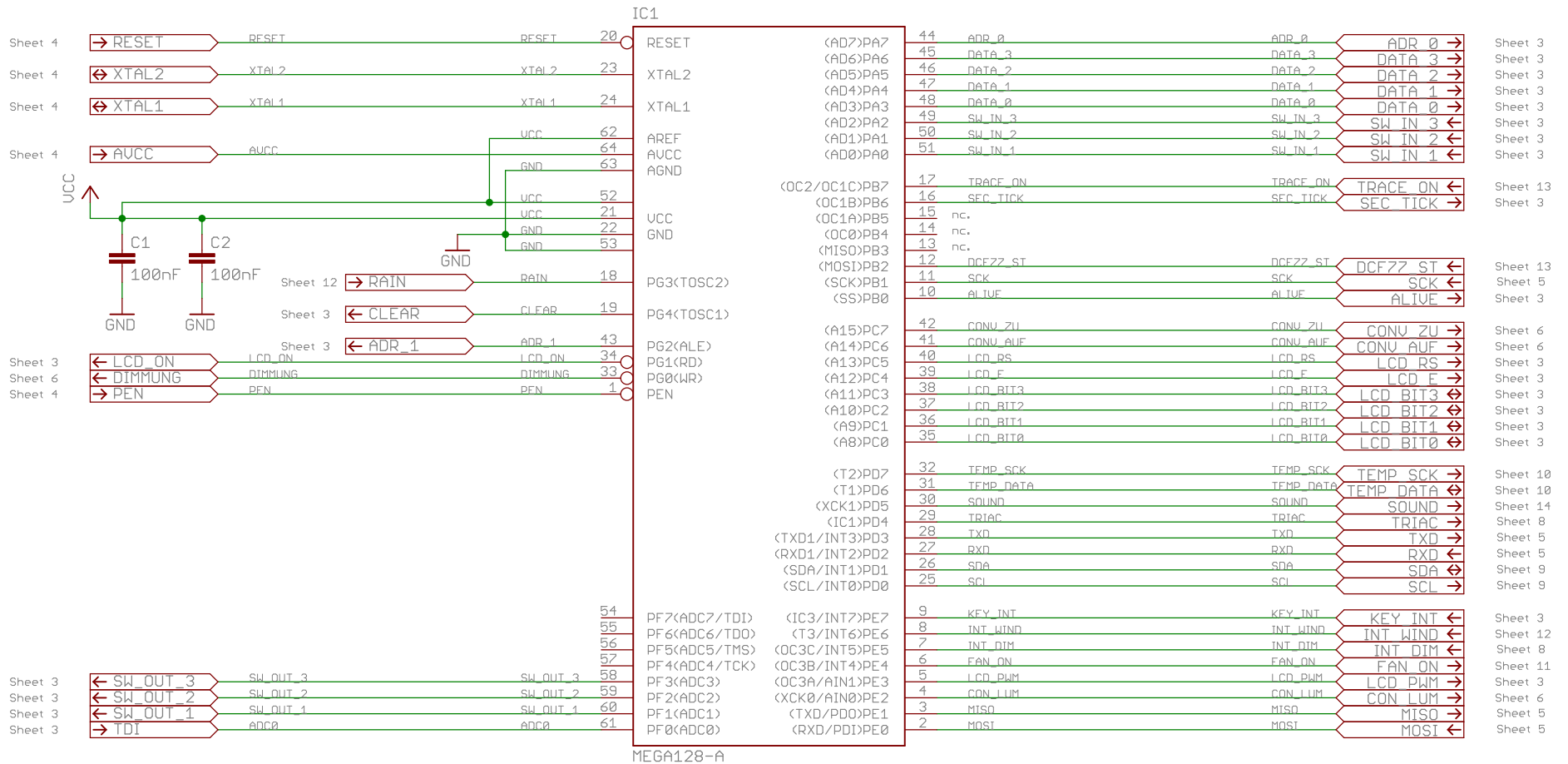


ConvCtrl Steuerung (Controller-Board)	
TITLE: PCB1_Controller-Board_V4	
Document Number: PCB1: Blockschaltbild	REV: 1.0
Date: 09.08.2008 14:19:08	Sheet: 1/14

Mikrocontroller:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

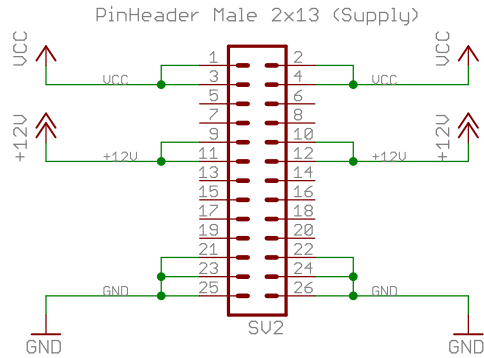
Document Number:
PCB1: Mikrocontroller ATmega128

REV:
1.0

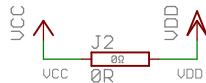
Date: 09.08.2008 14:19:08

Sheet: 2/14

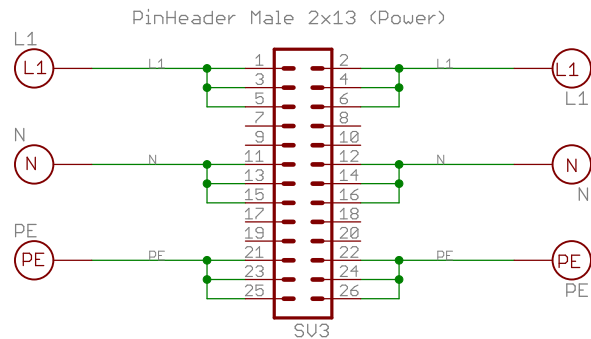
26-poliger PIN-Header (2x13) Niederspannung:



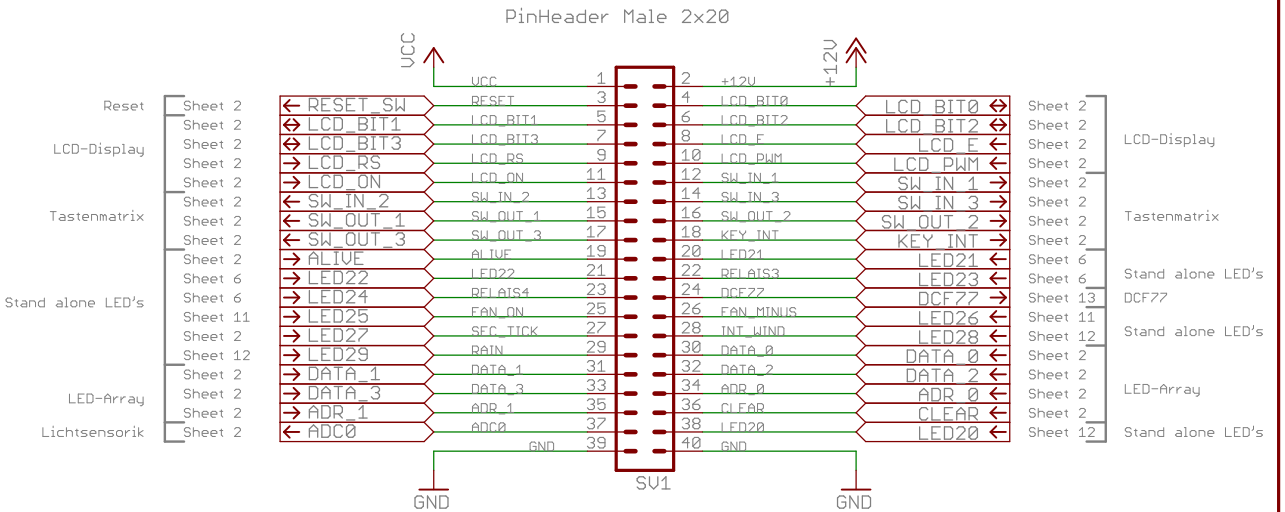
Generierung von UDD aus UCC



26-poliger PIN-Header (2x13) Hochspannung (L1, N, PE):



40-poliger PIN-Header (2x20) PCB1<->PCB2



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

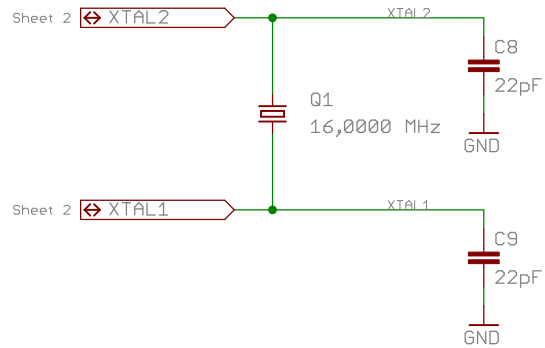
Document Number:
PCB1: Connectoren

REV:
1.0

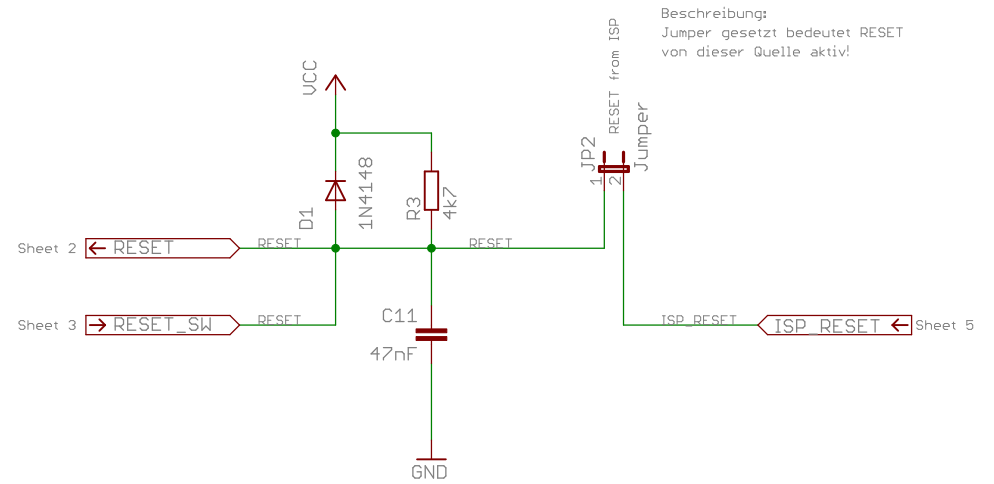
Date: 09.08.2008 14:19:08

Sheet: 3/14

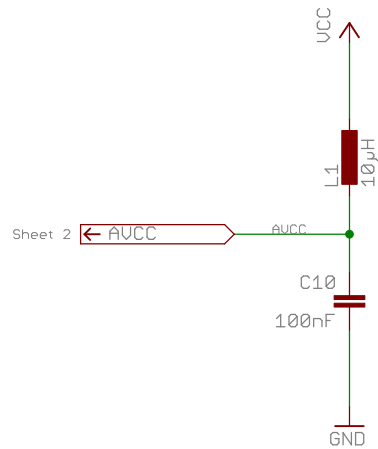
Externe Quarzbeschlaltung:



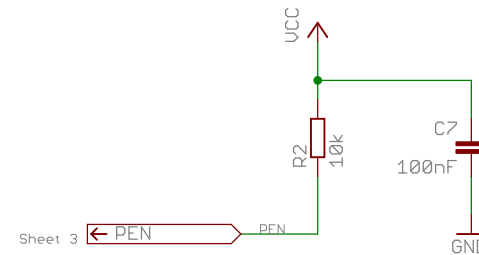
Reset-Logik:



Geräuschreduktion ADC:



Beschaltung PEN:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

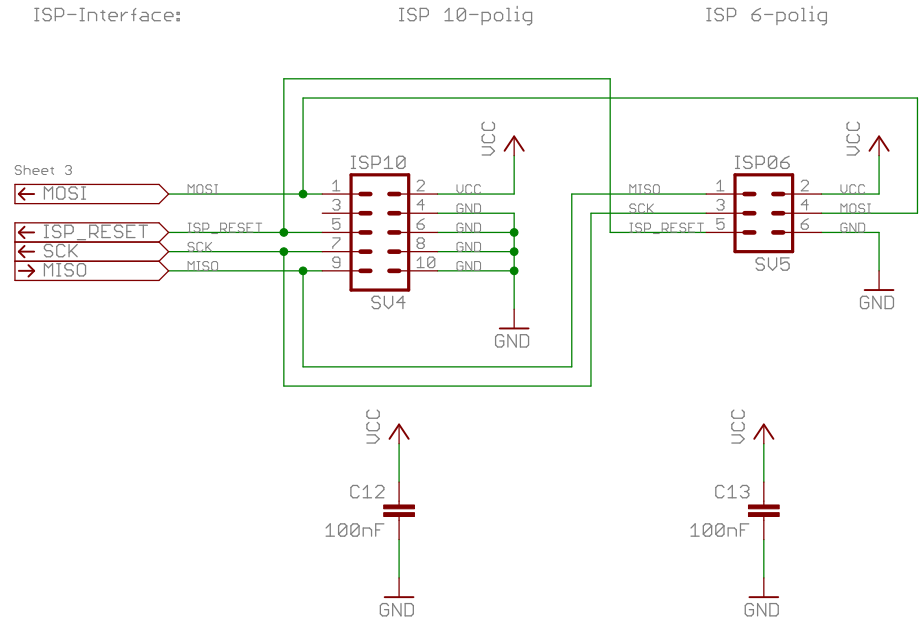
Document Number:
PCB1: ATmega Grundbeschlaltung

REV:
1.0

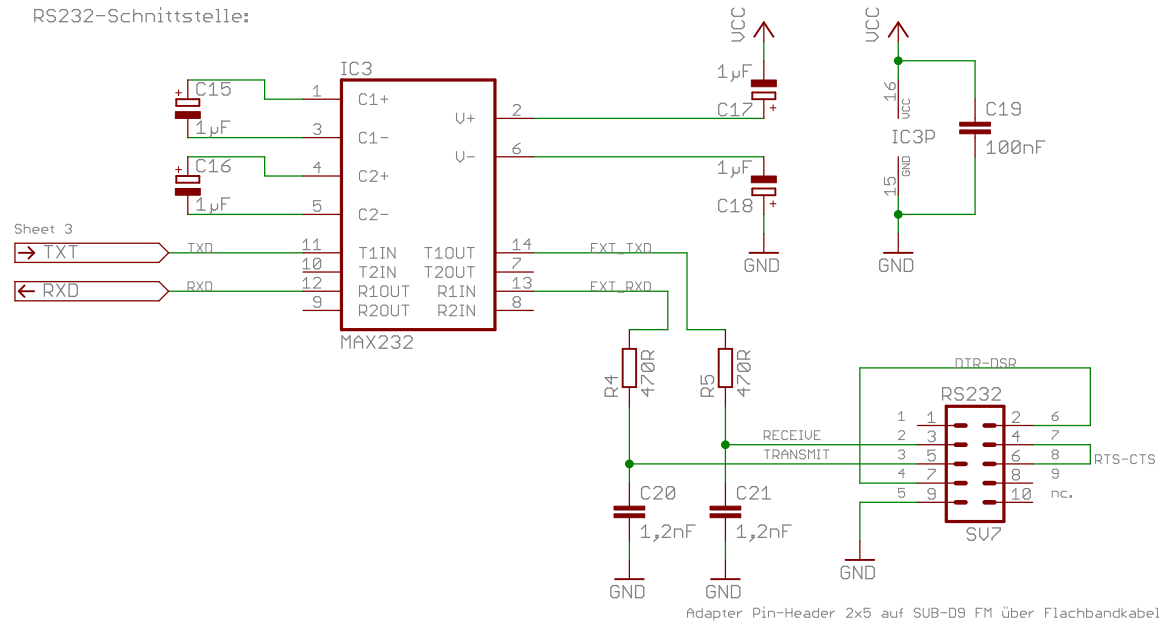
Date: 09.08.2008 14:19:08

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ISP-Interface:

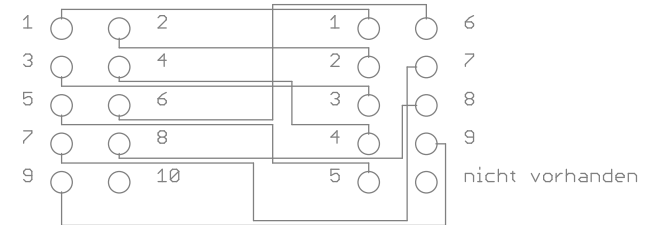


RS232-Schnittstelle:



Achtung:

PinHeader-Belegung passt nicht zu SUB-D9 Female-Belegung!
Hier ist Mapping notwendig!



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

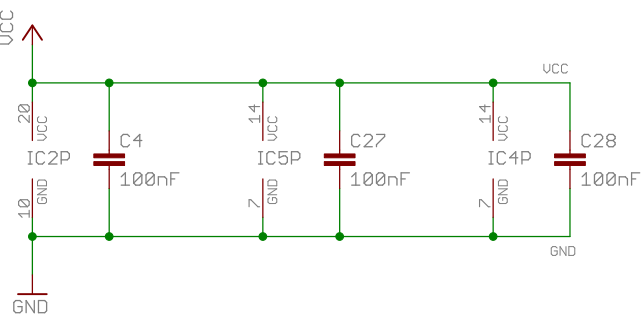
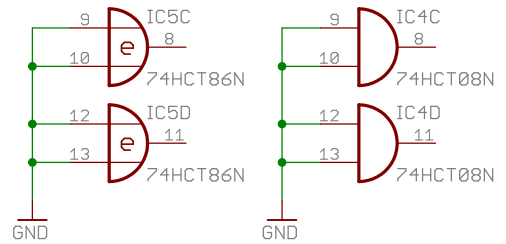
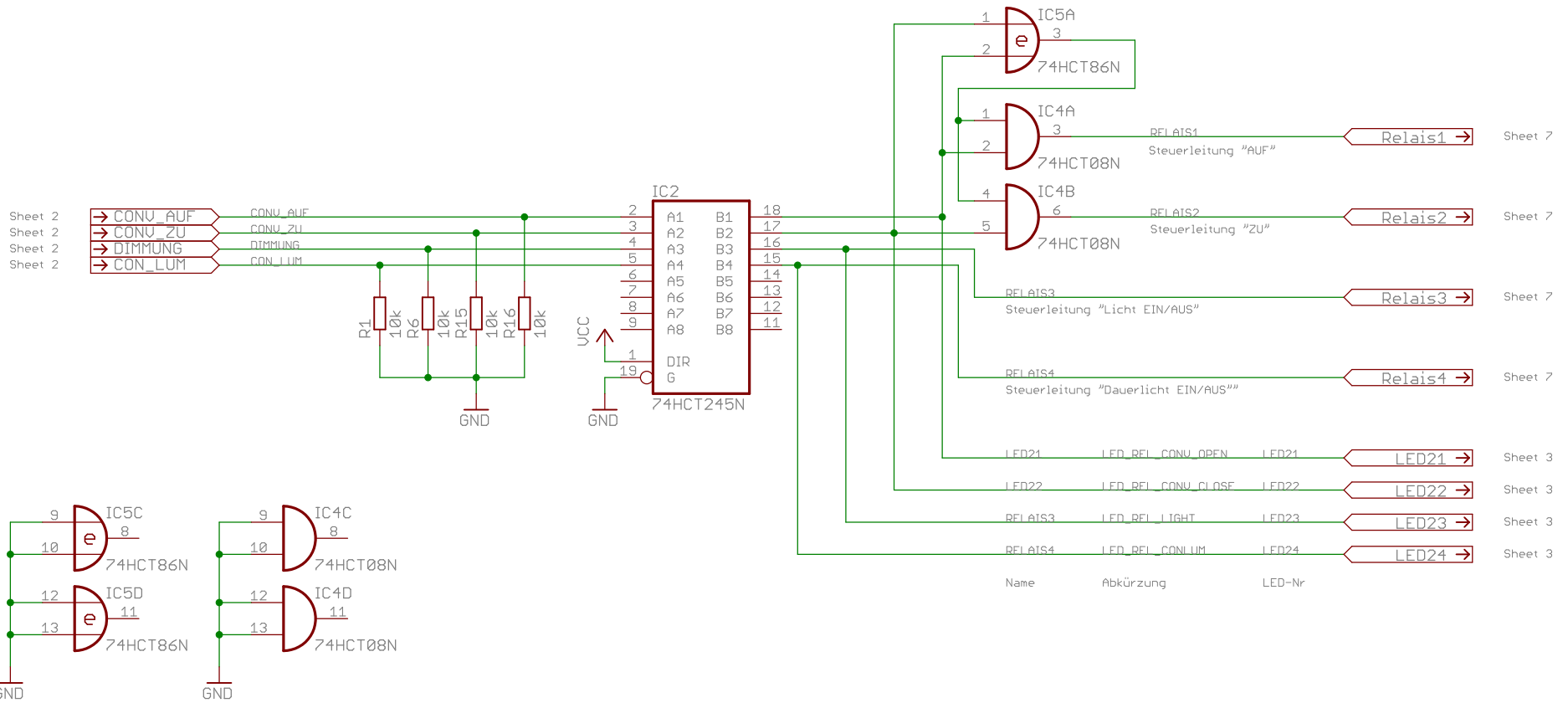
Document Number:
PCB1: Interface-Schnittstellen

REU:
1.0

Date: 09.08.2008 14:19:08

Sheet: 5/14

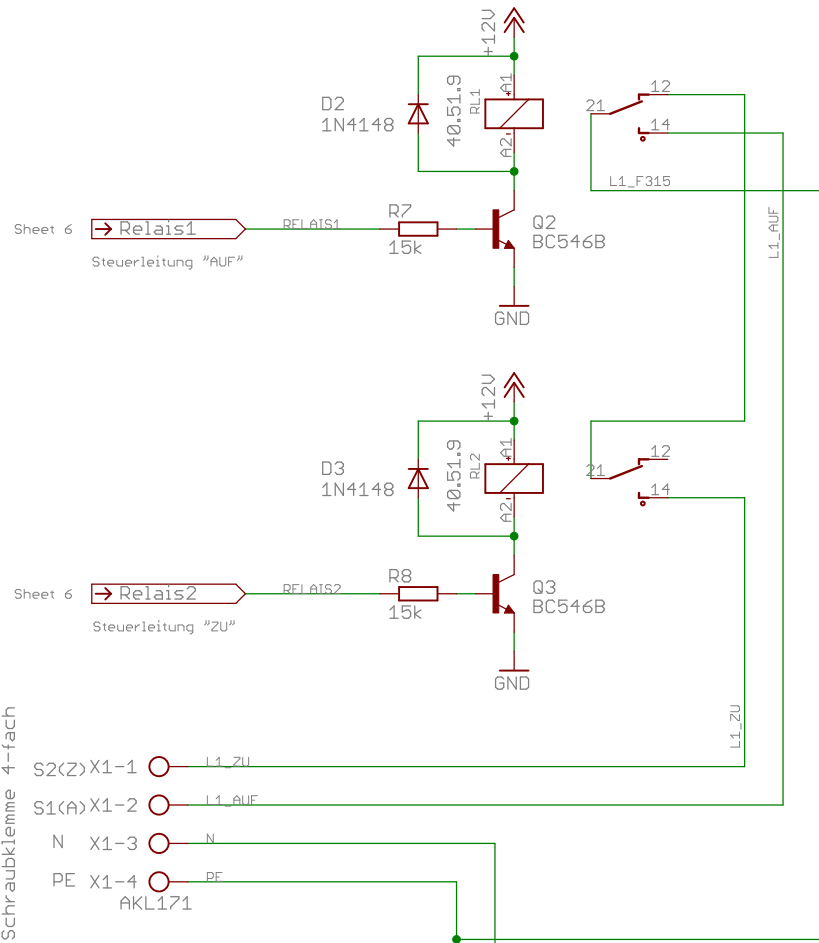
Relaisansteuerung Digitalteil:



Name	Abkürzung	LED-Nr
LED21	LED_REL_CONU_OPEN	LED21
LED22	LED_REL_CONU_CLOSE	LED22
LED23	LED_REL_LIGHT	LED23
LED24	LED_REL_CONLUM	LED24

ConvCtrl Steuerung (Controller-Board)	
TITLE: PCB1_Controller-Board_V4	
Document Number: PCB1: Relaisansteuerung Digitalteil	REV: 1.0
Date: 09.08.2008 14:19:08	Sheet: 6/14

Relais "Beschattung AUF/ZU"



Schraubklemme 4-fach

- S2(Z) X1-1 ○ L1_ZU
- S1(A) X1-2 ○ L1_AUF
- N X1-3 ○ N
- PE X1-4 ○ PE AKL171

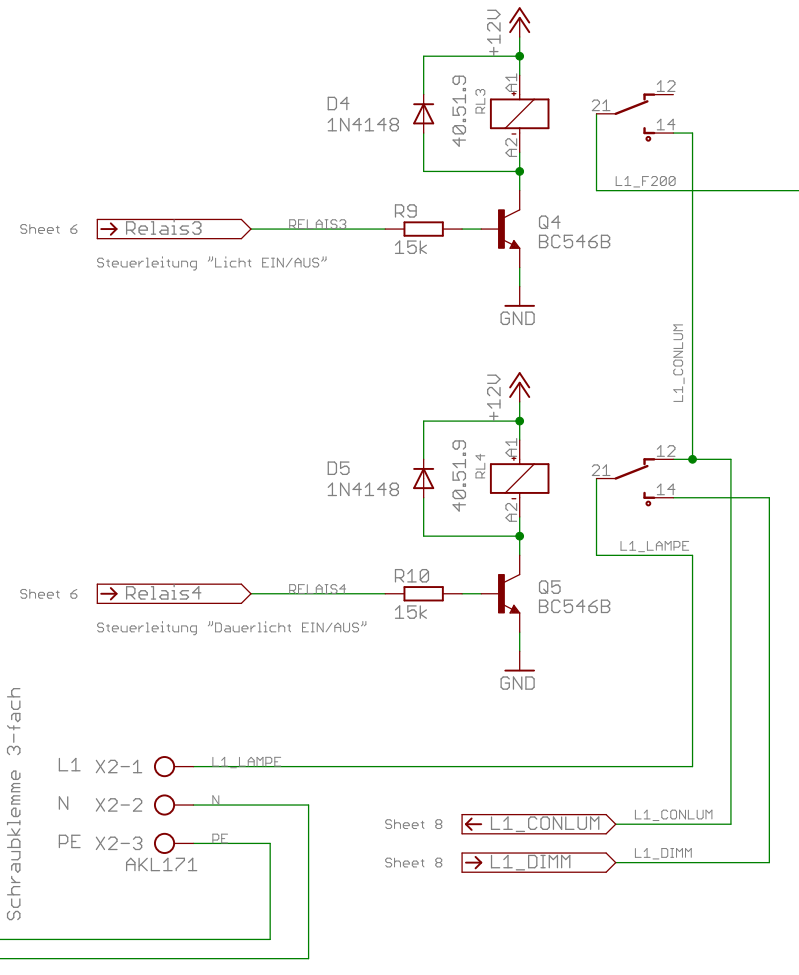
Spannungsversorgung 230V~



F1
3,15A träge

F2
2,00 A träge

Relais "Licht AN/AUS/DAUERLICHT"



Schraubklemme 3-fach

- L1 X2-1 ○ L1_LAMPE
- N X2-2 ○ N
- PE X2-3 ○ PE AKL171

- Sheet 8 ← L1_CONLUM L1_CONLUM
- Sheet 8 → L1_DIMM L1_DIMM

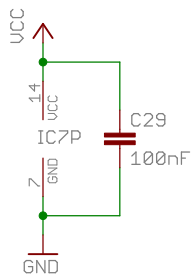
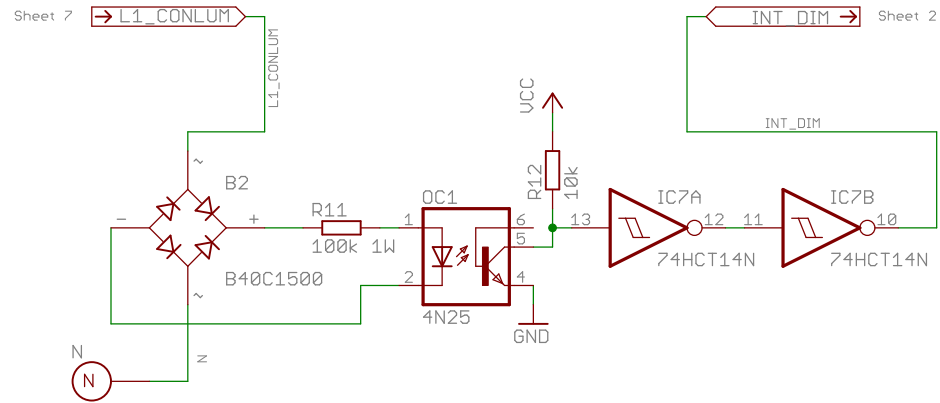
ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

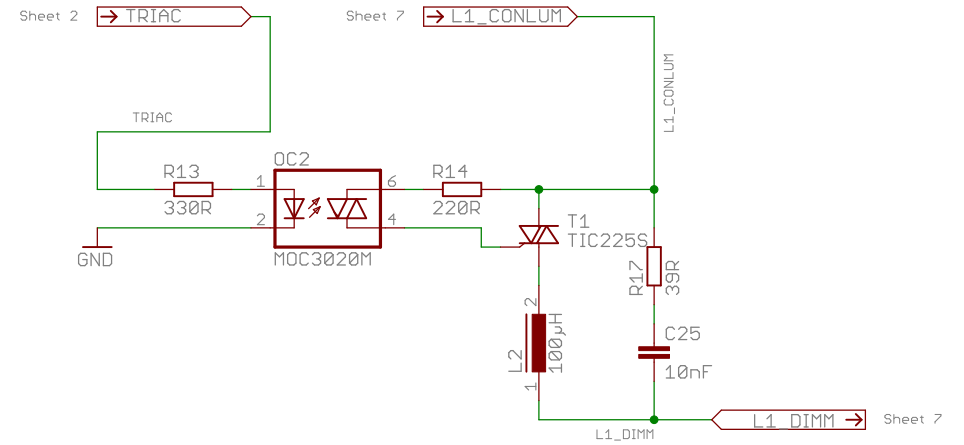
Document Number: PCB1: Relaisansteuerung Leistungsteil REU: 1.0

Date: 09.08.2008 14:19:08 Sheet: 7/14

Dimmer: Nulldurchganserkennung



Dimmer: TRIAC-Zündstufe



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

Document Number:
PCB1: Dimmer

REV:
1.0

Date: 09.08.2008 14:19:08

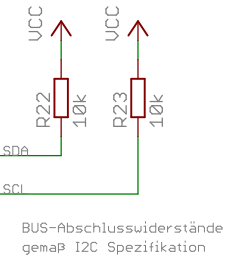
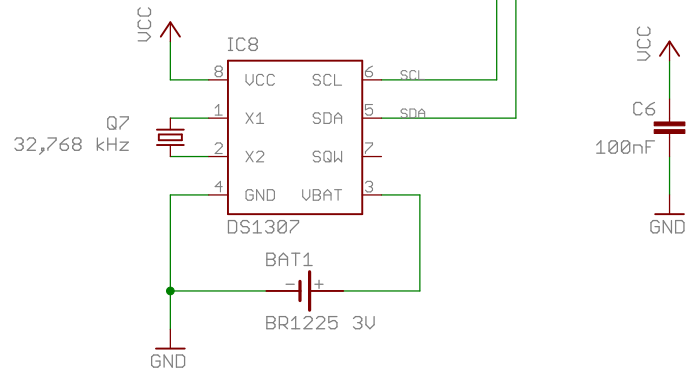
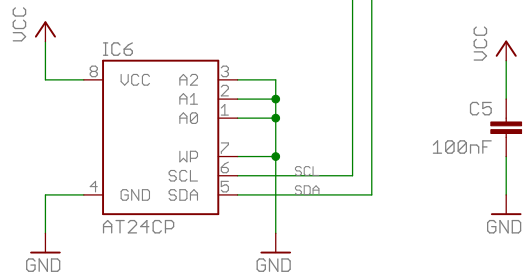
Sheet: 8/14

EEPROM AT24C512:

RTC DS1307:

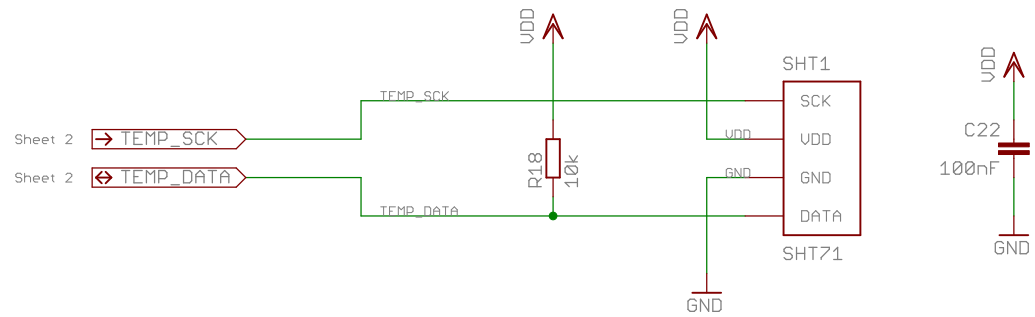
Sheet 2 ← SDA

Sheet 2 → SCL



ConvCtrl Steuerung (Controller-Board)	
TITLE: PCB1_Controller-Board_V4	
Document Number: PCB1: I2C Komponenten	REV: 1.0
Date: 09.08.2008 14:19:08	Sheet: 9/14

Temperatur- und Luftfeuchtigkeitssensor SHT71:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

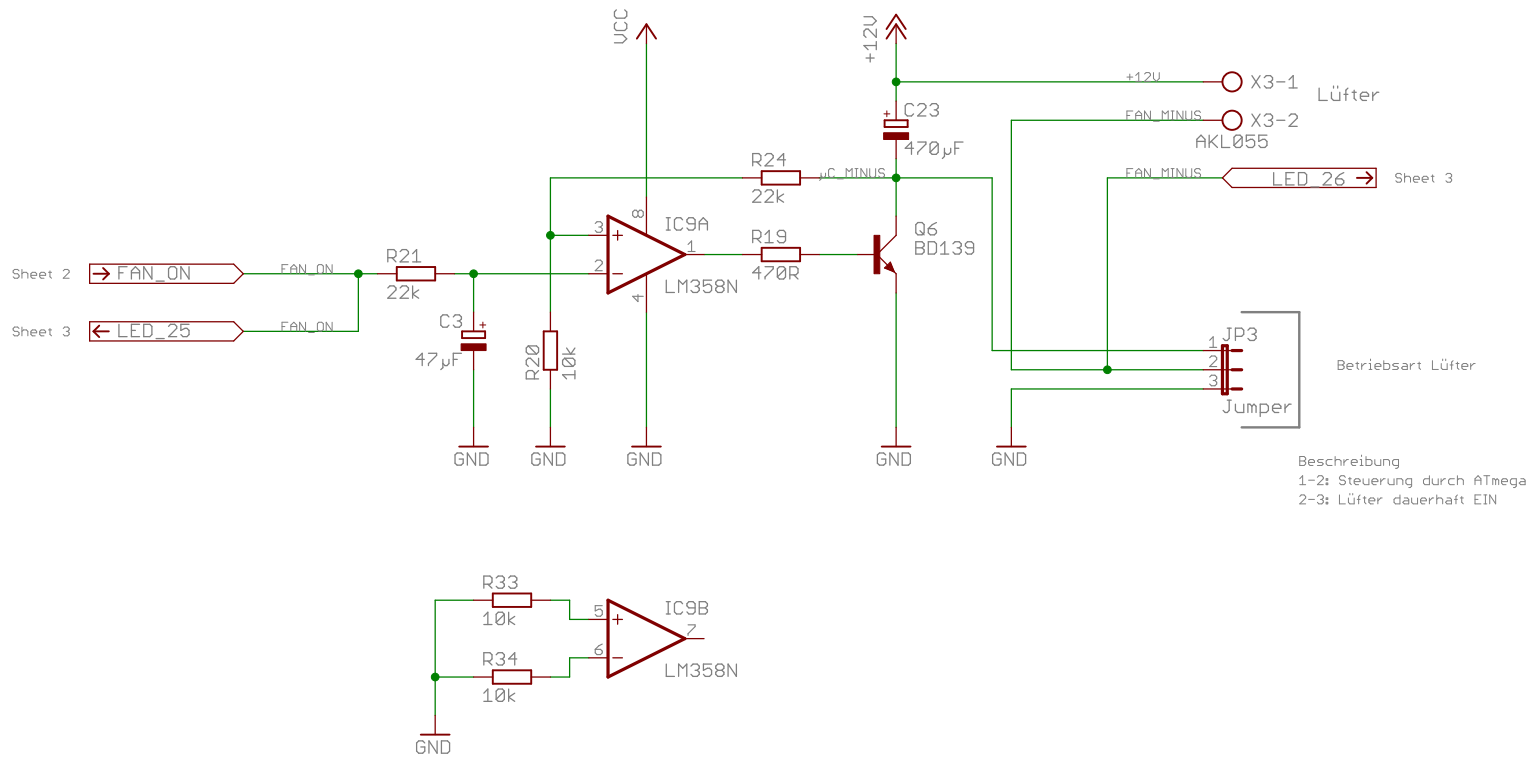
Document Number:
PCB1: Luftfeuchtigkeit und Temperatur

REV:
1.0

Date: 09.08.2008 14:19:08

Sheet: 10/14

Lüftersteuerung:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

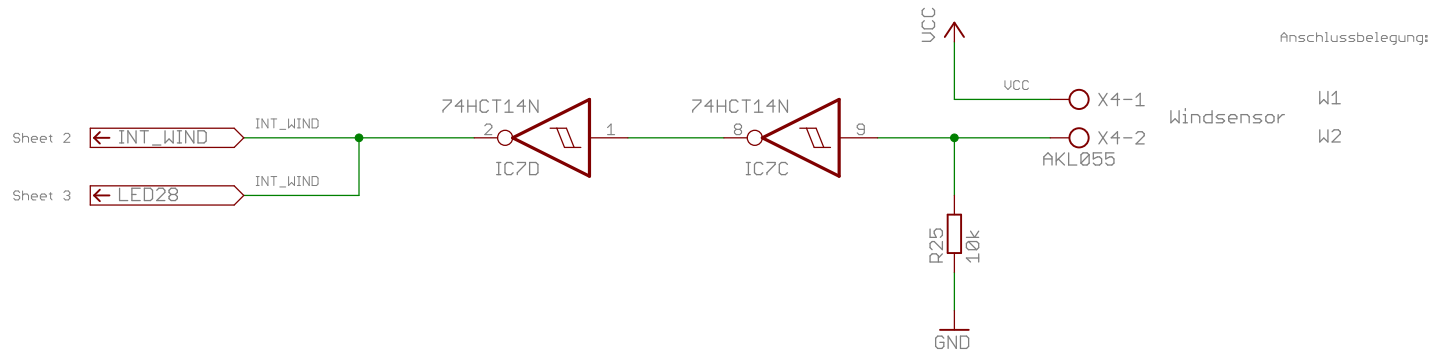
Document Number:
PCB1: Lüftersteuerung

REV:
1.0

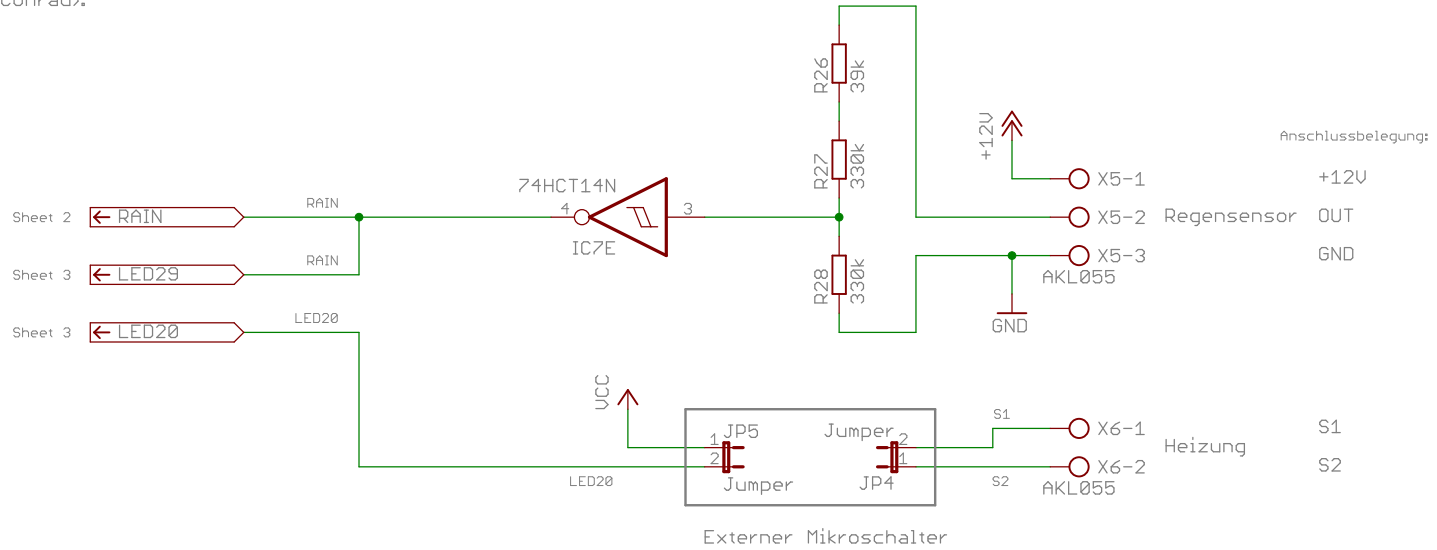
Date: 09.08.2008 14:19:08

Sheet: 11/14

Beschaltung Windsensor (Schalenkreuzanemometer):



Beschaltung Regensensor (Conrad):



Beschreibung:
 JP5 - Steuerung für LED20
 JP4 - Steuerung für Heizung in Regensensor

ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

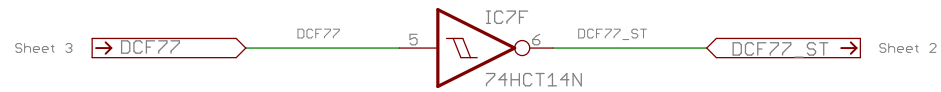
Document Number:
 PCB1: Beschaltung Aussensensorik

REV:
 1.0

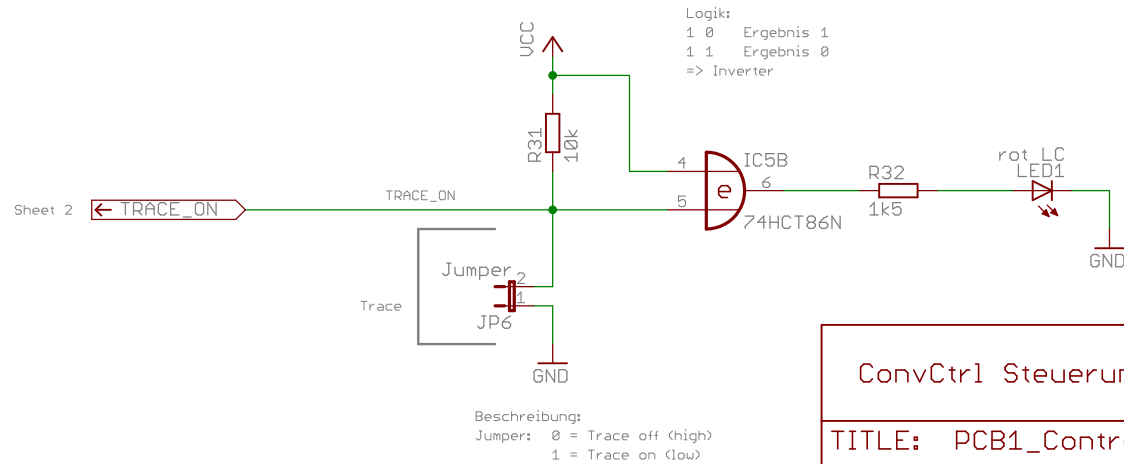
Date: 09.08.2008 14:19:08

Sheet: 12/14

Beschaltung DCF77 Funkuhrempfänger:



Jumper für Trace-Aktivierung:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

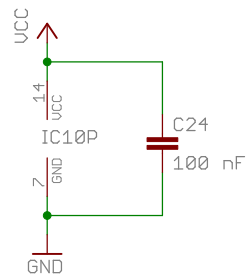
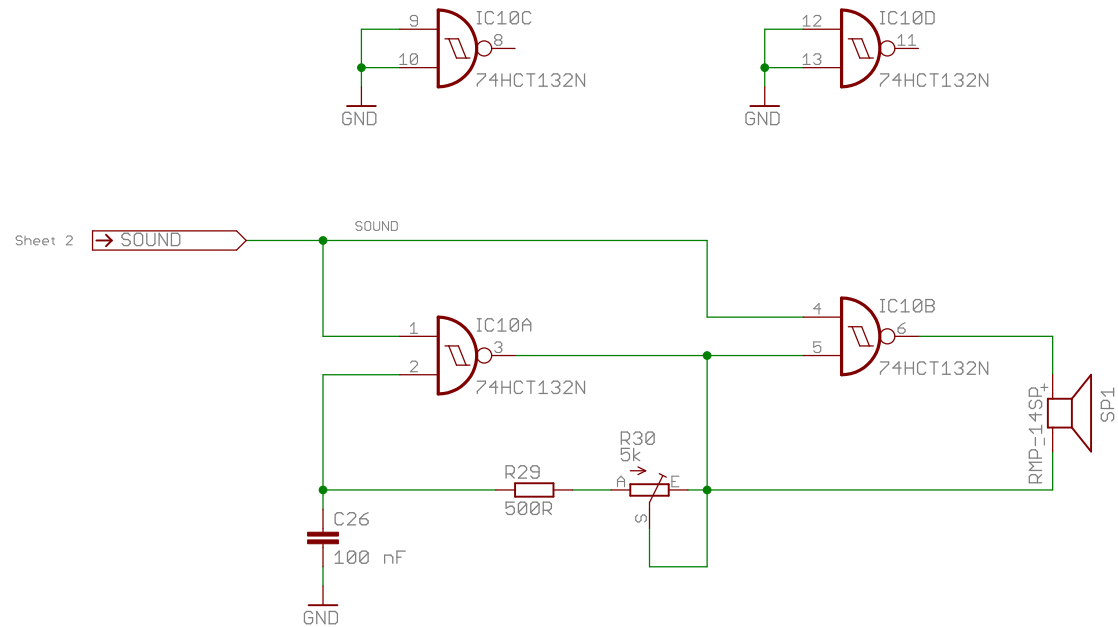
Document Number:
 PCB1: DCF77 Empfänger und Trace

REV:
 1.0

Date: 09.08.2008 14:19:08

Sheet: 13/14

Piezo Sound-Schwingkreis:



ConvCtrl Steuerung (Controller-Board)

TITLE: PCB1_Controller-Board_V4

Document Number:
PCB1: Piezo Sound-Schwingkreis

REV:
1.0

Date: 09.08.2008 14:19:08

Sheet: 14/14