

SCHALTPLAN

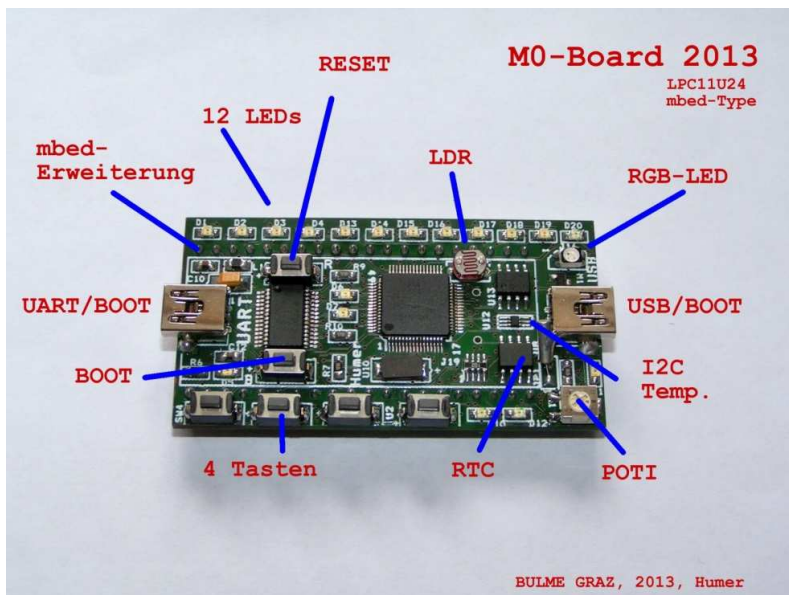
zum

HIMBED

Dem MO – Board der BULME

Diese Dokumentation dient zur:

- Hilfe bei der Erstellung von PROJEKTEN mit dem MO Board
- zur Reparatur des MO Boardes
- Als Grundlage zu Messübungen am MO Board



Diese DOKU liegt im pdf vsd und ppt Format vor !

Die jeweils letzte Version dieser Doku befindet sich auf dem Rechner [http:// 172.16.18.200](http://172.16.18.200) unter Lehrstoff – Elektronik HIMBED Hausintern in der jeweils aktuellsten Form auf [\\172.16.18.200\Lehrstoff_ELEKTRONIK_HIMBED](http://172.16.18.200/Lehrstoff_ELEKTRONIK_HIMBED) User: nwt PW: nwt

Doku by Enenkel

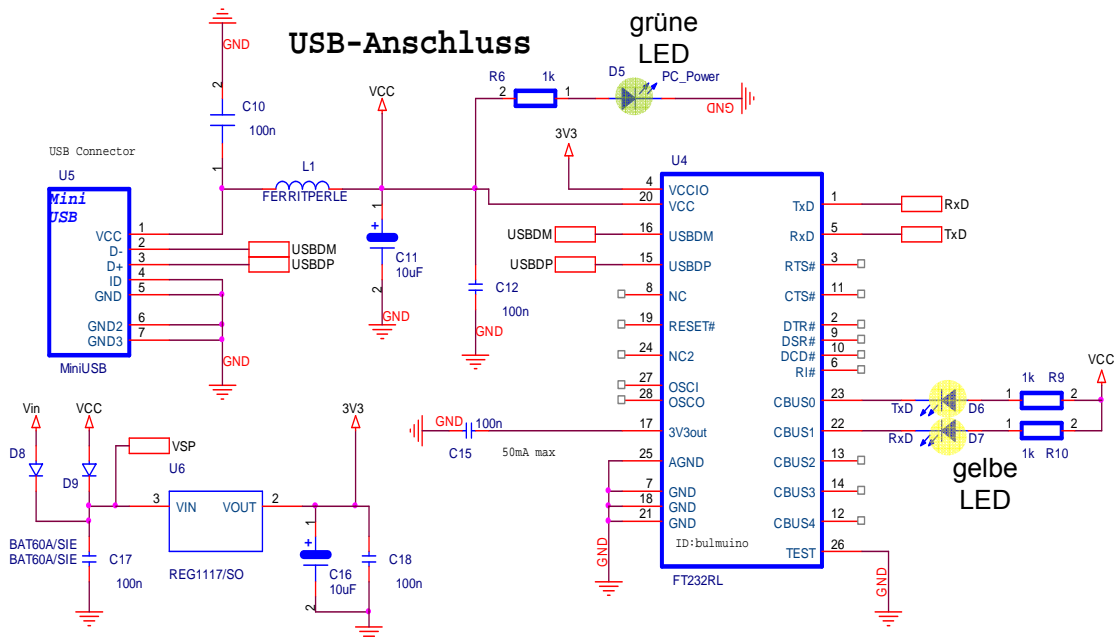
HTL- BULME Graz	Proj: BERTL15
INTRO	
1	
Datum: 02.10.2015	Seite: 1 / 7
File: Schaltplan_HIMBED.VSD	Blatt : Intro1

Nr.	Anz	Benennung	Bezeichnung	Wert	Bauform	Positionsnummer	Bestellnummer
1		Prozessor	Cortex-M0	LPC11U24	LQFP-64	U9	RS 755-9931
1		USB Driver	FT232RL		SSOP-28	U4	RS 406-580P
1		Uhren IC	PCF8563	I2C	SOIC-8	U8	RS 436-8300P
1		Temp. Sensor	LM75BIM	I2C	SOIC-8	U14	RS 504-5632
1		U-Regler	LT1117-3.3	3,3V 800mA	SOT-223	U6	RS 620-0852
1		32k EEPROM	24LC256	I2C 256kbit	SOIC-8	U13	RS 454-331
1		Spule	Ferritperle	200mA	0805	L1	RS 724-1517
1		RGB LED	3,2x2,8mm	gem. Anode	PLCC-4	J16	RS 496-6544
12		LED rot	LTST-C171KRKT	54mcd 130°	0805	D1,D2,D3,D4,D13,D14,D15, D16,D17,D18,D19,D20	RS 692-0941
1		LED grün	LTST-C171KGKT	35mcd 130°	0805	D5	RS 692-0947
4		LED gelb	LTST-C171KSKT	50mcd 130°	0805	D6,D7,D10,D11	RS 692-0950
1		MOS-FET P-	BSS84LT1G	50V 130mA	SOT23	M1	RS 463-329
2		Schottky-Diode	LL103B-GS08	30V 200mA	MiniMELF	D8,D9	RS 700-0858
1		Quarz	7A-12.000	12MHz	5x3,2mm	U10	RS 753-7045
1		Quarz	Uhrenquarz	32,768kHz	Ø 2x6mm	JP1	Neuhold E2715
1		Potentiometer	0,25W	10kOhm	5x6,4mm	R31	RS 486-7526
1		Wid. Array	3,2x1,6mm	4x470Ohm	CAY16	J17	RS 522-5737
4		Wid. Array	3,2x1,6mm	4x1kOhm	CAY16	J1,J18,J20,J19	RS 740-8763
2		Widerstand		33Ohm	0805	R15,R16	RS 697-9952
10		Widerstand		1kOhm	0805	R6,R7,R8,R9,R10,R14, R19,R29,R32,R33	RS 698-0075
2		Widerstand		2,7kOhm	0805	RC1,RD1	RS 698-0107
2		Widerstand		10kOhm	0805	R23,R28	RS 698-0154
1		LDR	500O-5MO	Ø 5mm		R30	Neuhold N1920
5		Kondensator	Keramik	18pF	0805	C28,C29,C20,C21,C22	RS 766-5809
16		Kondensator		100nF	0805	C6,C7,C8,C9,C10,C12, C13,C14,C15,C17,C18, C23,C24,C25,C26,C27	RS 766-6177
3		Kondensator	Tantal	10µF/16V	3216-18	C5,C11,C16	RS 684-3890
6		Taster	SMD	12V 50mA	6x3,7mm	T1,T2,SW1,SW2,SW3,SW4	Neuhold N4390
2		USB Buchse	A-USB B-M5-C	5-polig DIP	90°gewinkelt	U5,U11	RS 674-1350
1		Batterie	BR1220	3,3V		BT1	RS 745-0926

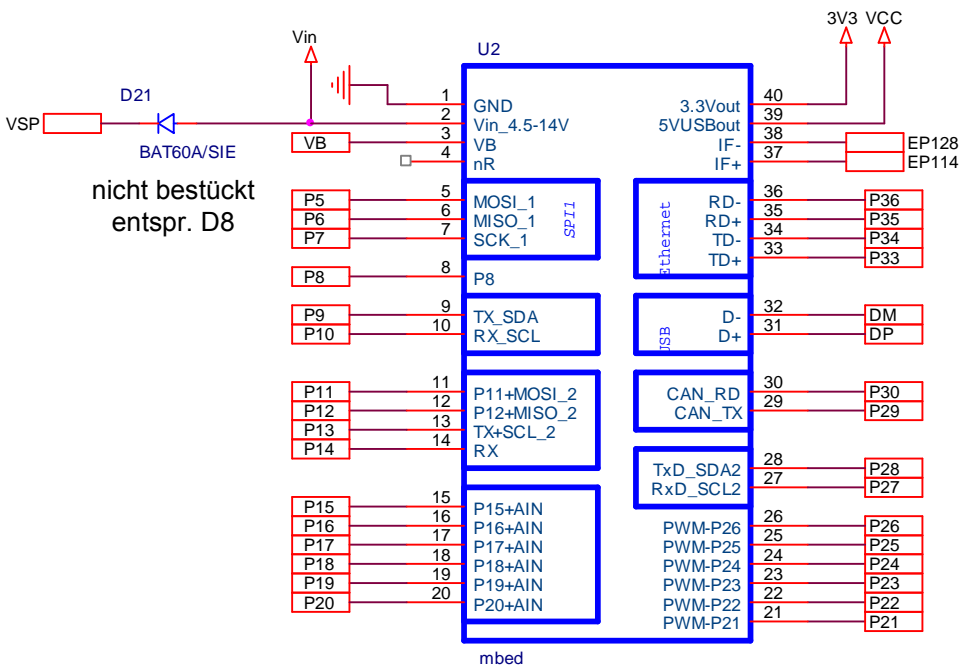
Doku by Enenkel

HTL- BULME Graz	Proj: HIMBED_V1
STÜCKLISTE	
2	
Datum: 02.10.2015	Seite: 2 / 7
File: Schaltplan_HIMBED.VSD	Blatt : Stückliste

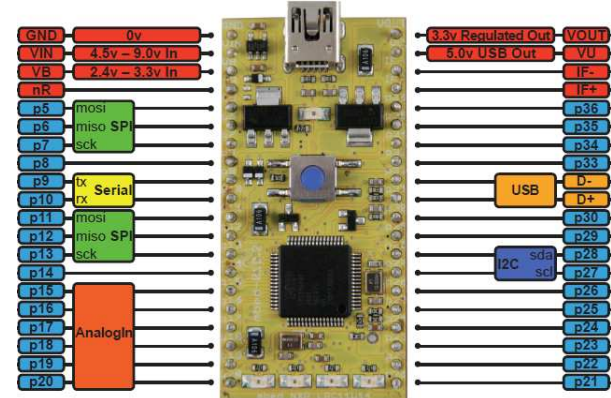
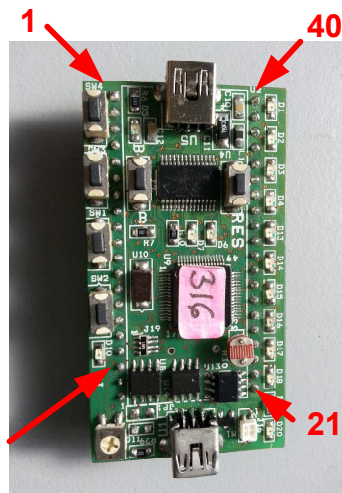
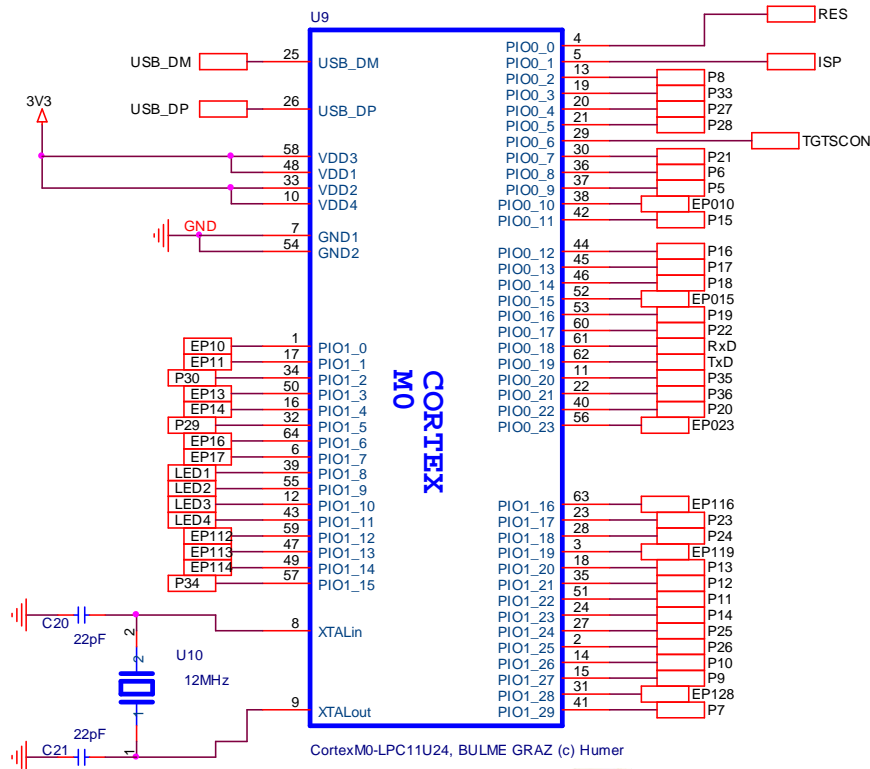
DETAIL SCHALTPLÄNE



STECKERANSCHLÜSSE



PROZESSOR Microcontroller Cortex M0 LPC11U24



Doku by Enenkel

HTL- BULME Graz Proj: **HIMBED_V1**

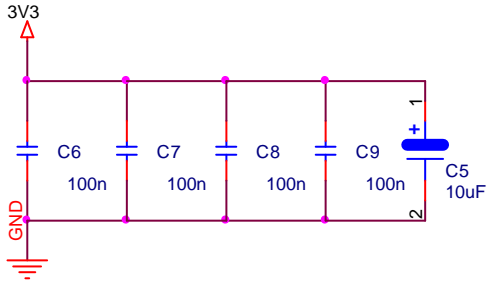
**SCHALTPLAN
GRUNDLAGEN**

Datum: 02.10.2015 Seite: 3 / 7
File: Schaltplan_HIMBED.VSD Blatt : Schaltplan1

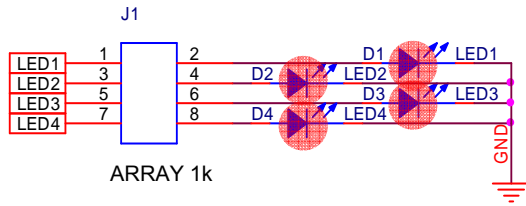
3

OUTPUT

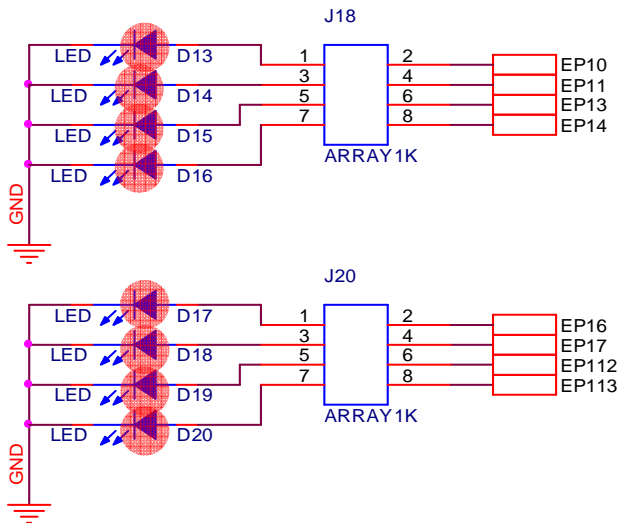
STÜTZKONDENSATOREN



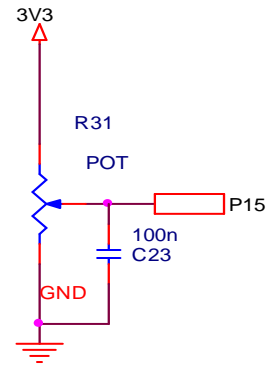
4 LED rot



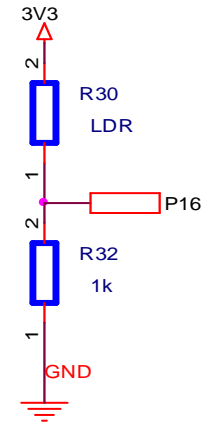
8 LED rot



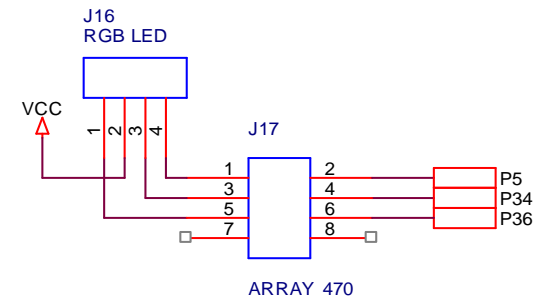
POTENTIOMETER



LDR



RGB - LED

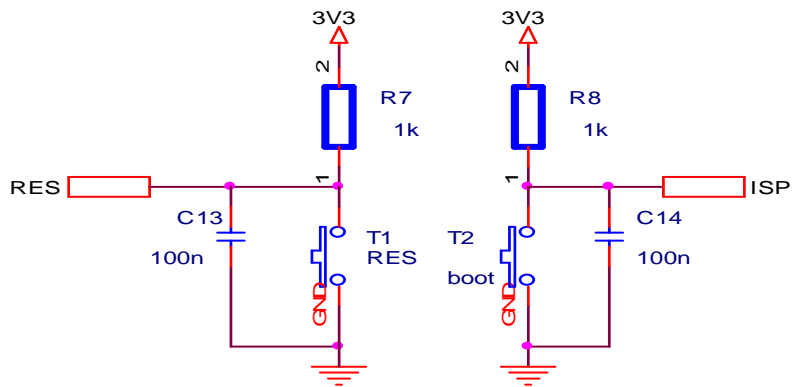


Doku by Enenkel

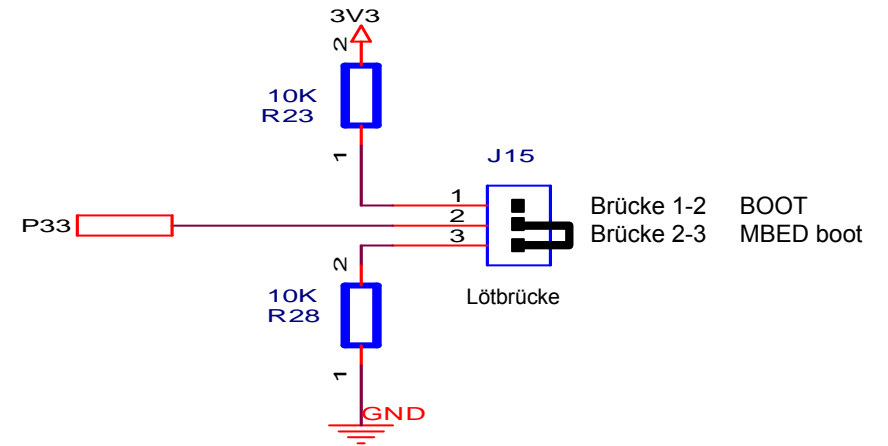
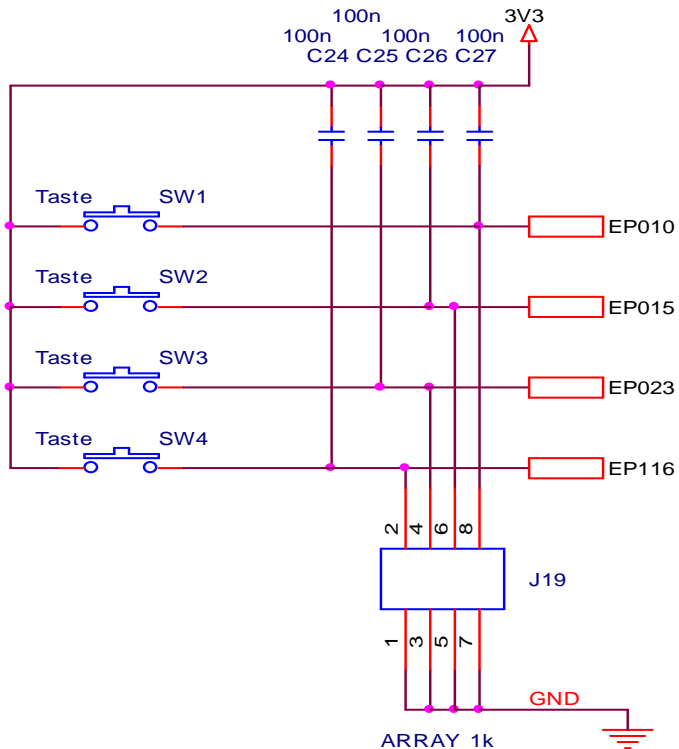
HTL- BULME Graz	Proj: HIMBED
SCHALTPLAN OUTPUTS	
4	
Datum: 02.10.2015	Seite: 4 / 7
File: Schaltplan_HIMBED.VSD	Blatt : Schaltplan2

INPUT

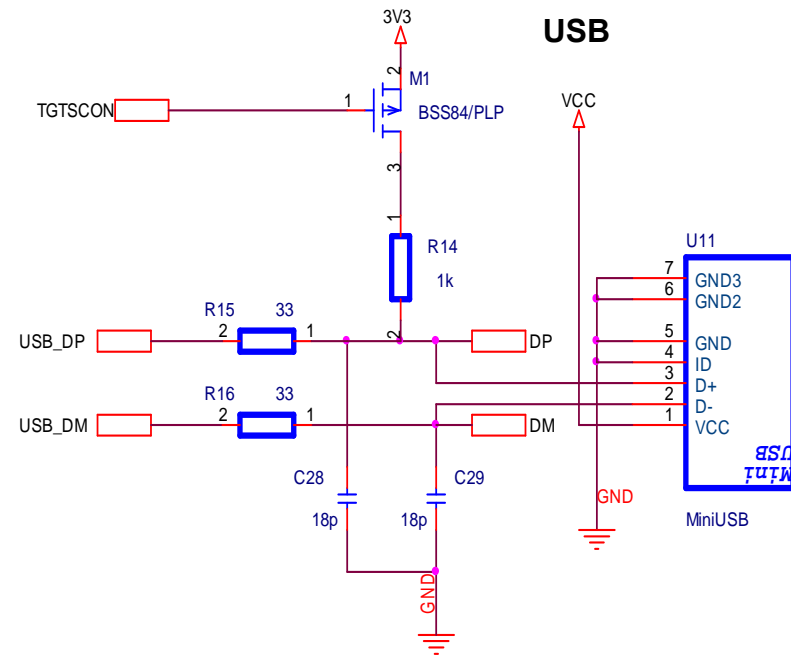
RESET / BOOT



TASTER



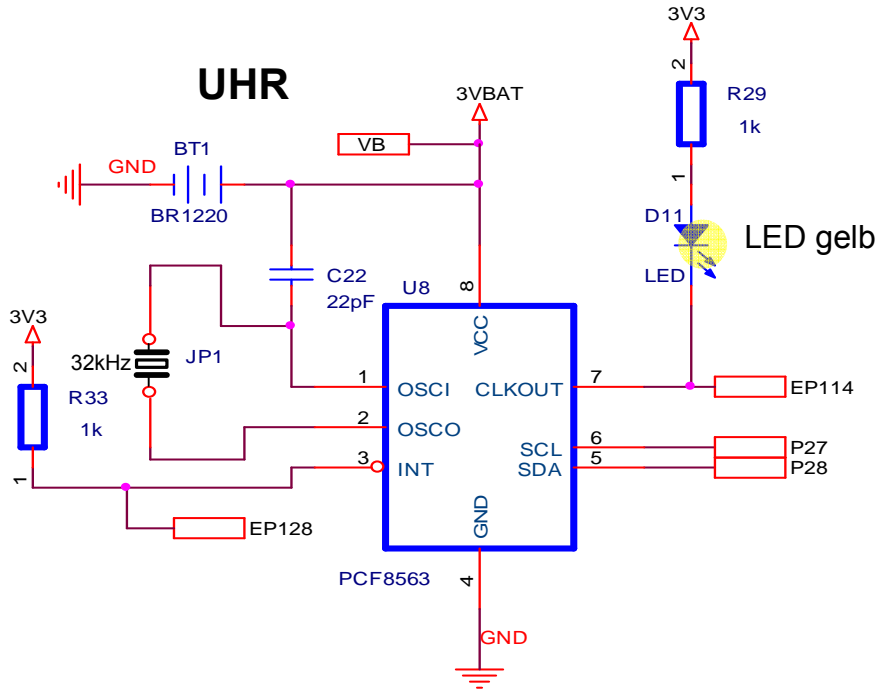
USB



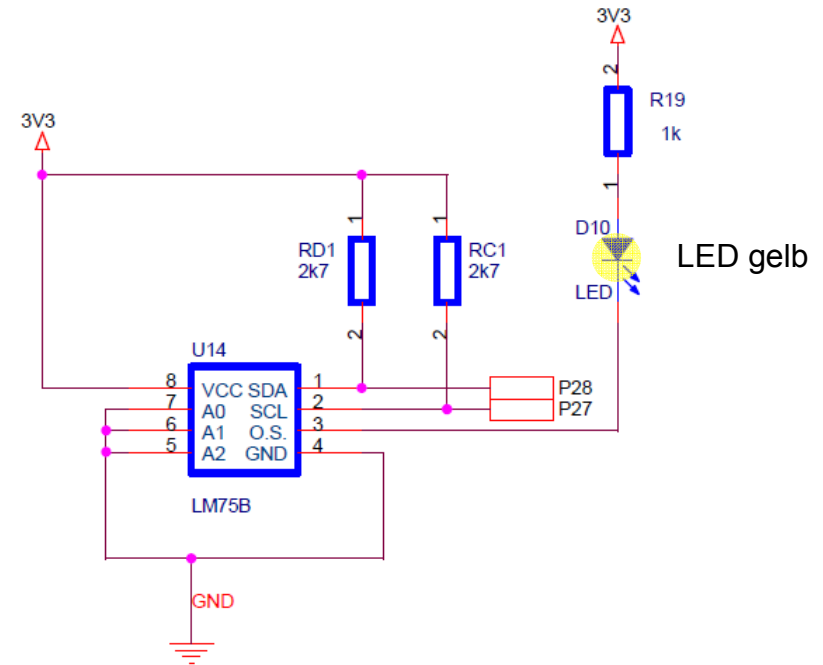
Doku by Enenkel

HTL- BULME Graz	Proj: HIMBED_V1
SCHALTPLAN INPUTS	
5	
Datum: 02.10.2015	Seite: 5 / 7
File: Schaltplan_HIMBED.VSD	Blatt : Schaltplan3

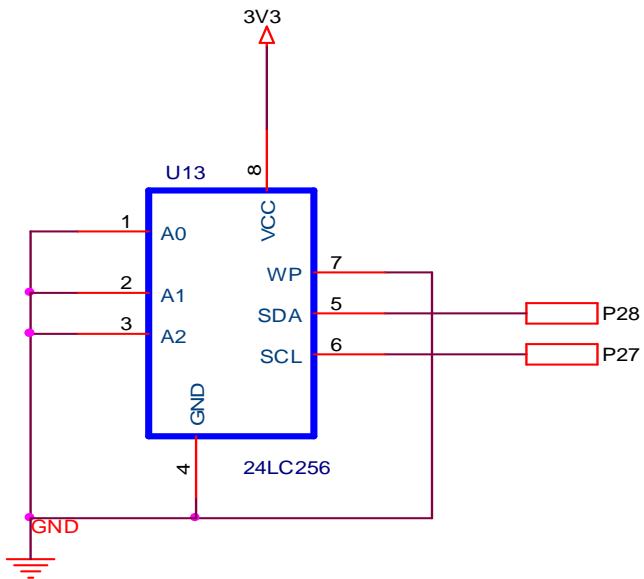
UHR



Temperatursensor (digital)



32 KB EEPROM



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HTL- BULME Graz	Proj: HIMBED_V1
SCHALTPLAN Bemerkungen	7
Datum: 02.10.2015 File: Schaltplan_HIMBED.VSD	Seite: 7 / 7 Blatt: Bemerkungen