Low-Speed USB (standard setup)

+3.3V

R1
1k5

+5V

VBUS

HOST

D+
R2
50

D−
R3
50

R4
15k

R5
15k

D+

D−

DEVICE
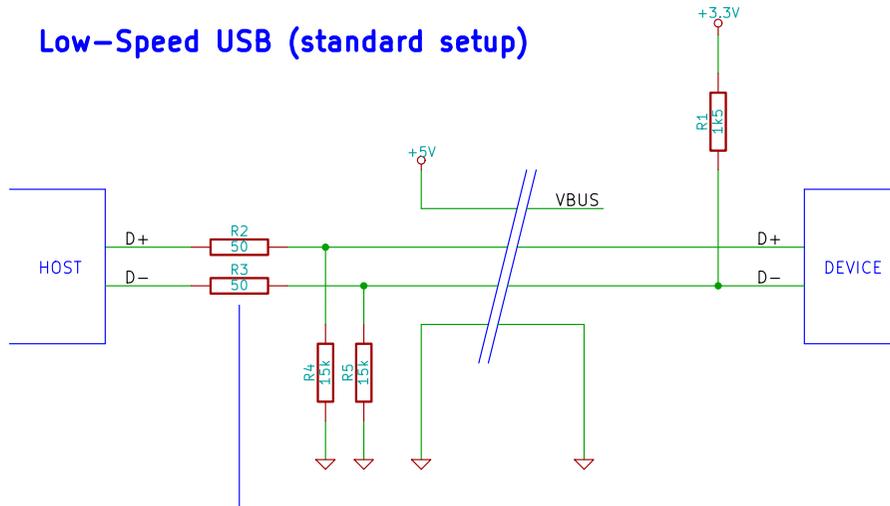
See USB Specification Revision 2.0, page 125

UBB−USB hack

Any of DAT0/1/2/3 or CMD

CON1

USB_A

5	SHELL1	VBUS	1
		D−	2
		D+	3
6	SHELL2	GND	4

R10
15k

P1

8:10−CARD

DAT2
DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1

UBB−USB

UBB

+3.3V

R23 10k
R24 10k
R27 10k
R28 10k
R29 10k

CONN_8
P2

1		SDD2
2		SDD3
3		SDCMD
4		
5		SDCLK
6		
7		SDD0
8		SDD1
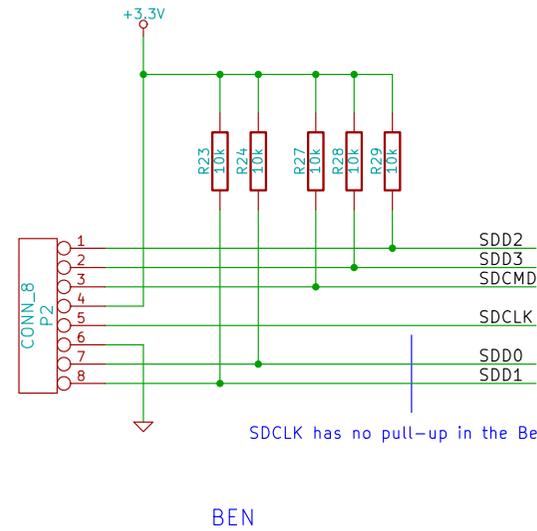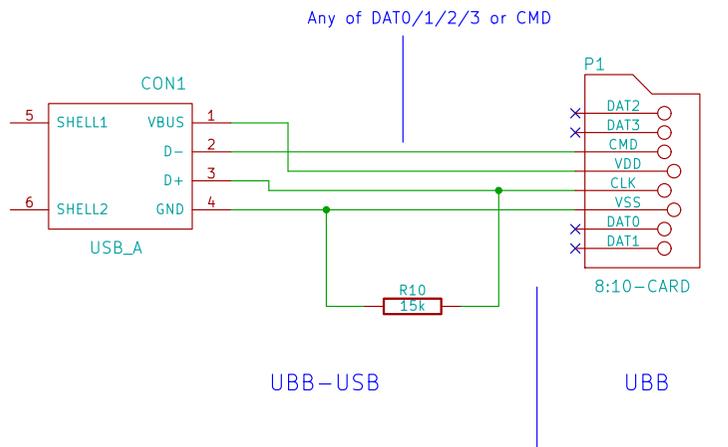
SDCLK has no pull−up in the Ben and is thus suitable for pull−down

BEN