

Milkymist One – Hierarchical Sheet

NOR_FLASH

NOR Flash

NORFlash.sch

MISC_CONTROL

MIDI/DMX/IR

MiscControl.sch

MISC

**Led Matrix, SW,
JTAG/Serial,
8:10 Card**

Misc.sch

USB_A/B

**External USB:
A/B**

USBExtPorts1.sch

VIDEO_IN

Video IN

VideoIn.sch

**Xilinx
Spartan – 6
XC6SLX45–2FGG484C**

FPGA_BANK0

0

FPGA_BANK0.sch

FPGA_BANK1

1

FPGA_BANK1.sch

FPGA_BANK2

2

FPGA_BANK2.sch

FPGA_BANK3

3

FPGA_BANK3.sch

USB_C/D

**External USB:
C/D**

USBExtPorts2.sch

ETHERNET

Ethernet

Ethernet.sch

EXPANSION_RESET

Expansion, Reset

EXPANSION_RESET.sch

DRAM

DRAM

Dram.sch

USB_E/F

**Internal USB:
E/F**

USBIntPorts.sch

FPGA_Dec

**FPGA
Decoupling Cap.**

FPGAdec.sch

POWER

Power Supply

Power.sch

DVI-I

**DVI-I
Output**

DVI-ISingle.sch

AUDIO

Audio IN/OUT

Audio.sch

File: m1.sch
Sheet: /

Title: Milkymist One – Hierarchical Sheet

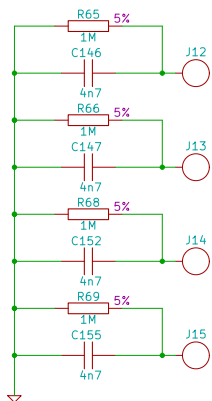
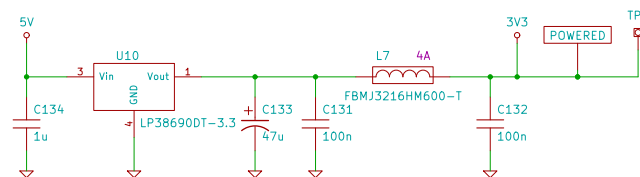
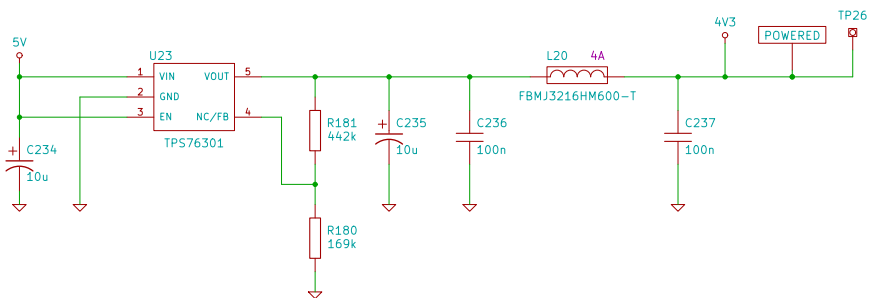
Size: A3

Date: 3 may 2012

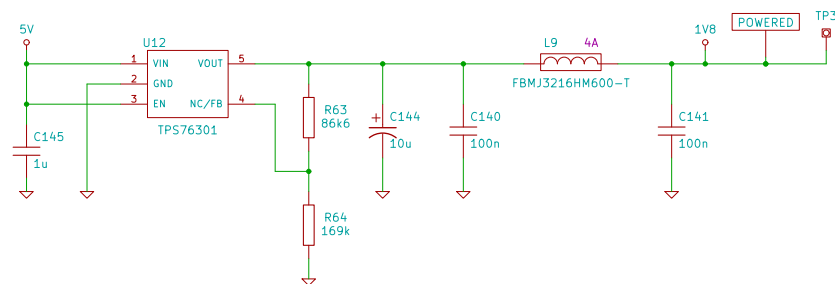
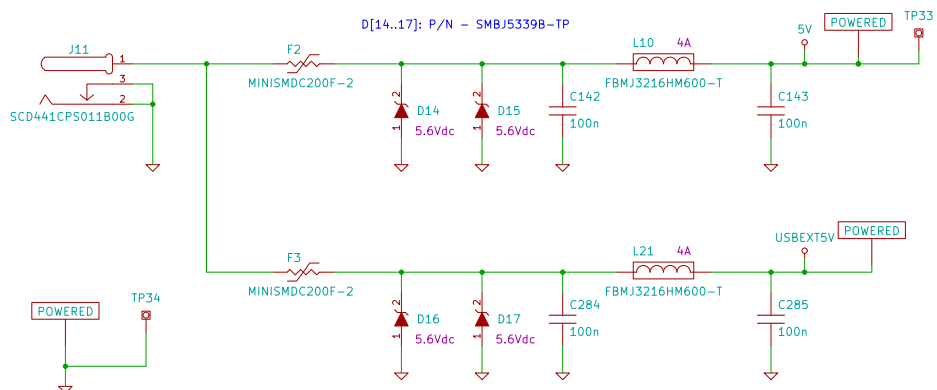
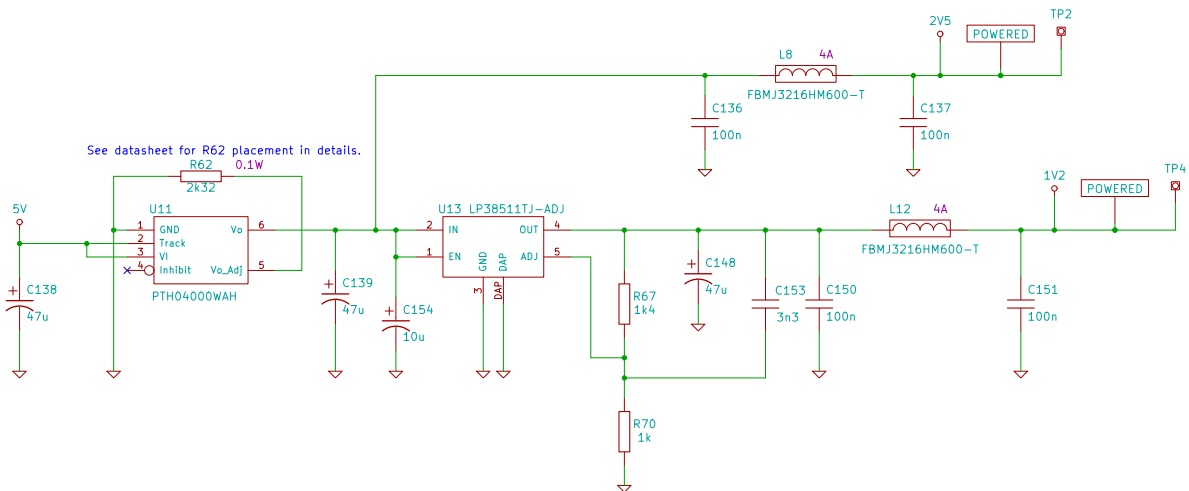
Rev: R4

KiCad E.D.A.

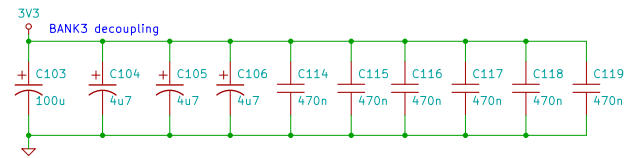
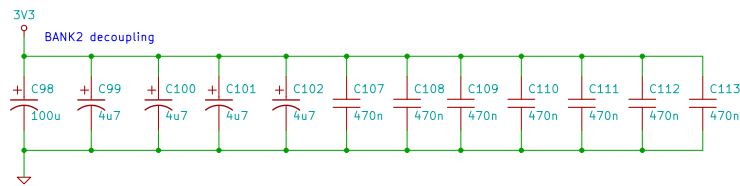
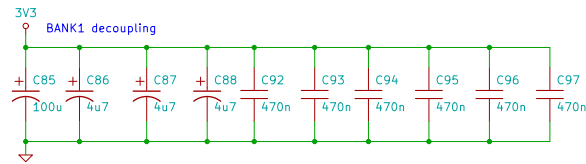
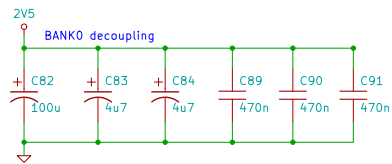
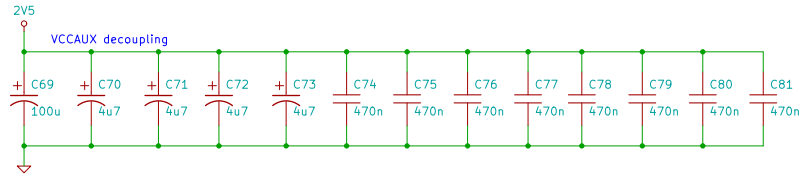
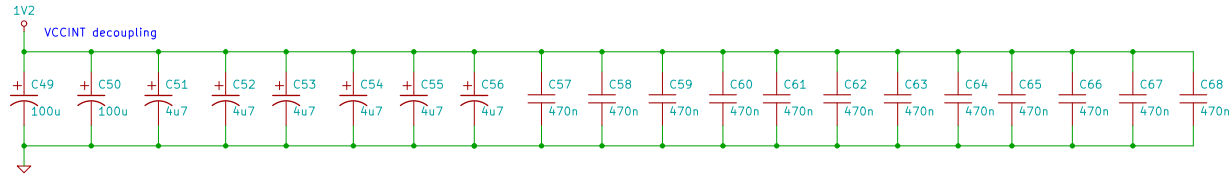
Id: 1/19

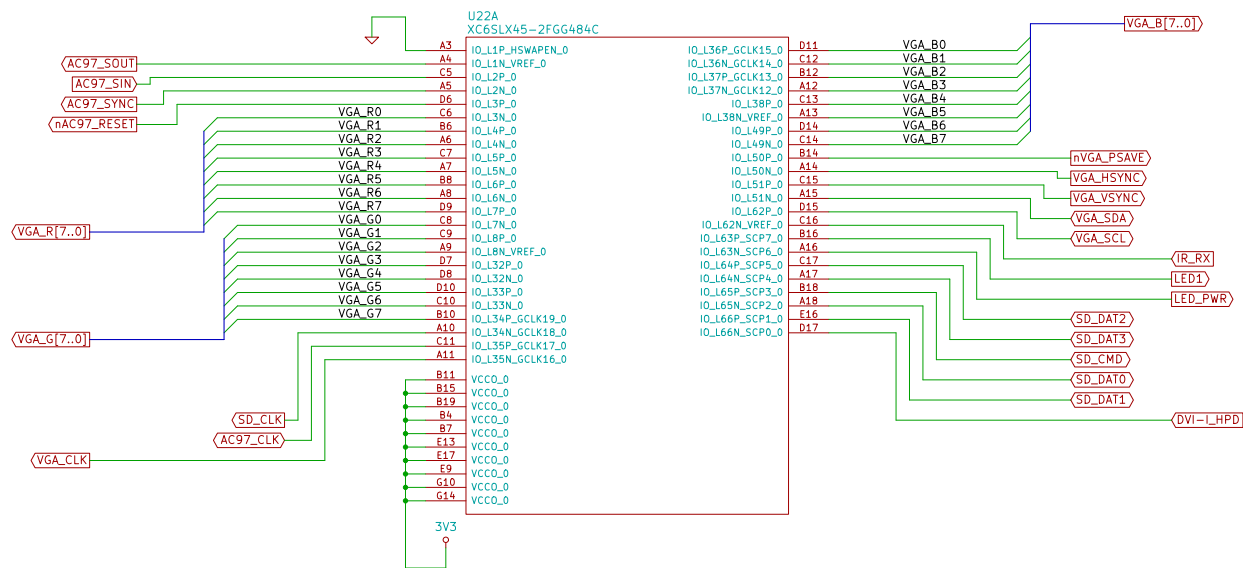
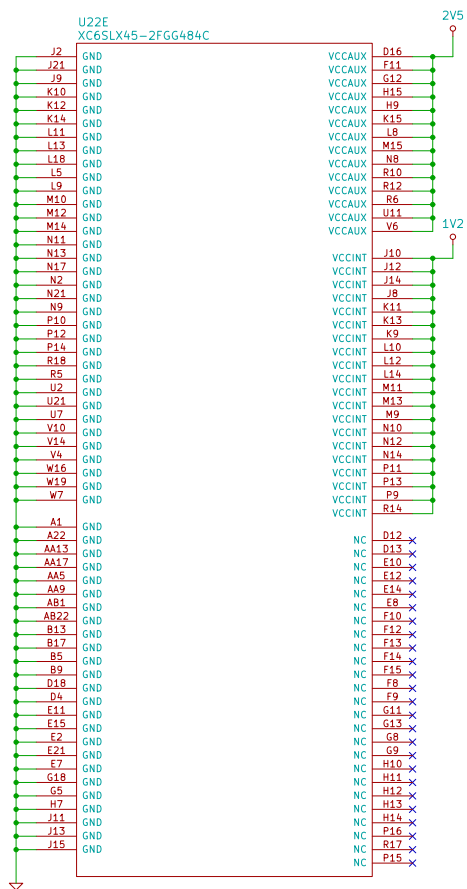


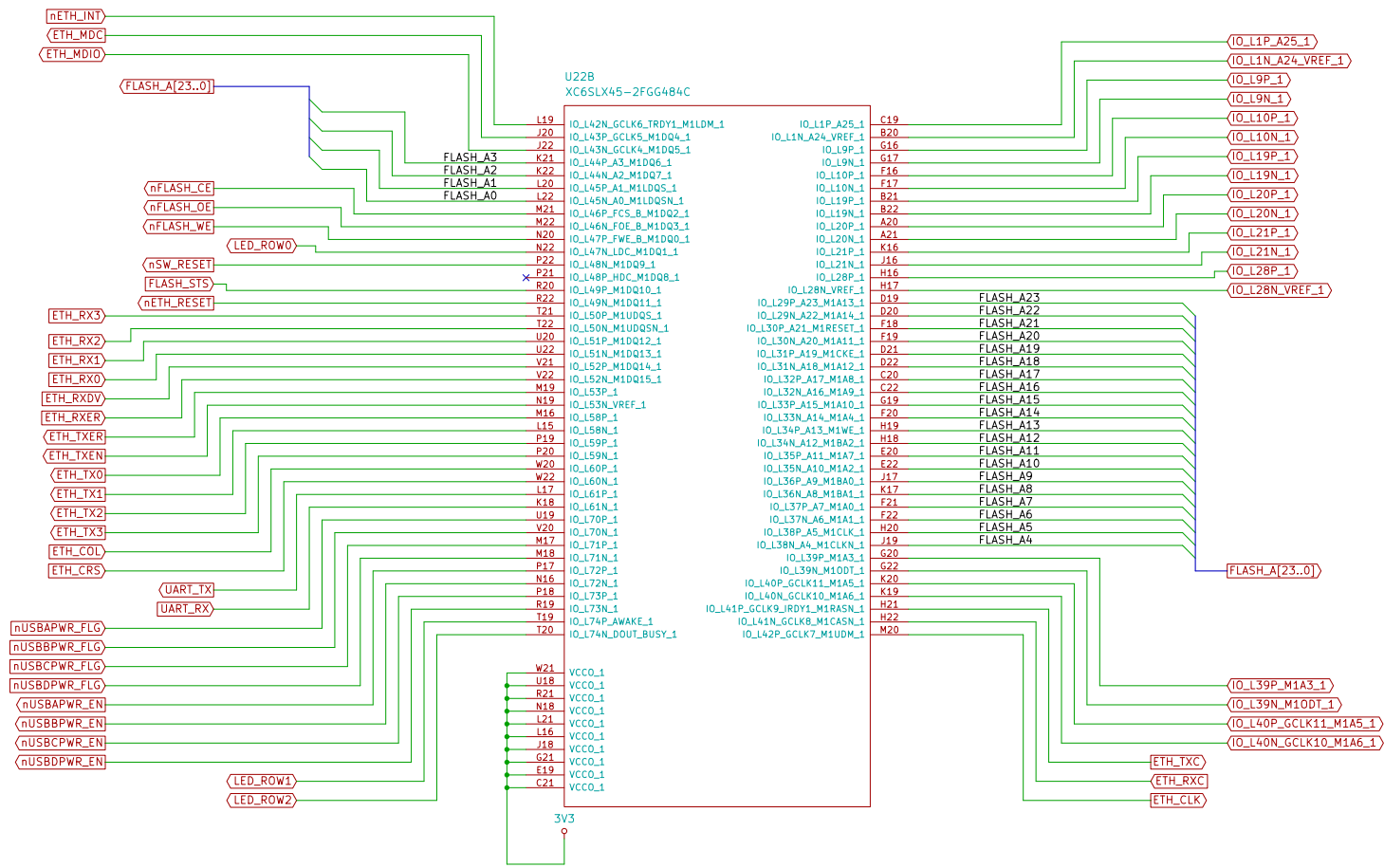
J[12:15] are the mechanical mounting holes at each corner of PCB.

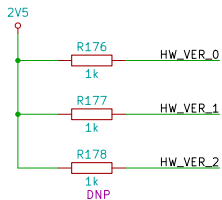
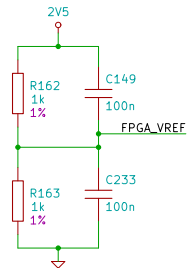


Notes:
1. Tolerance about resistors is 1% in default.





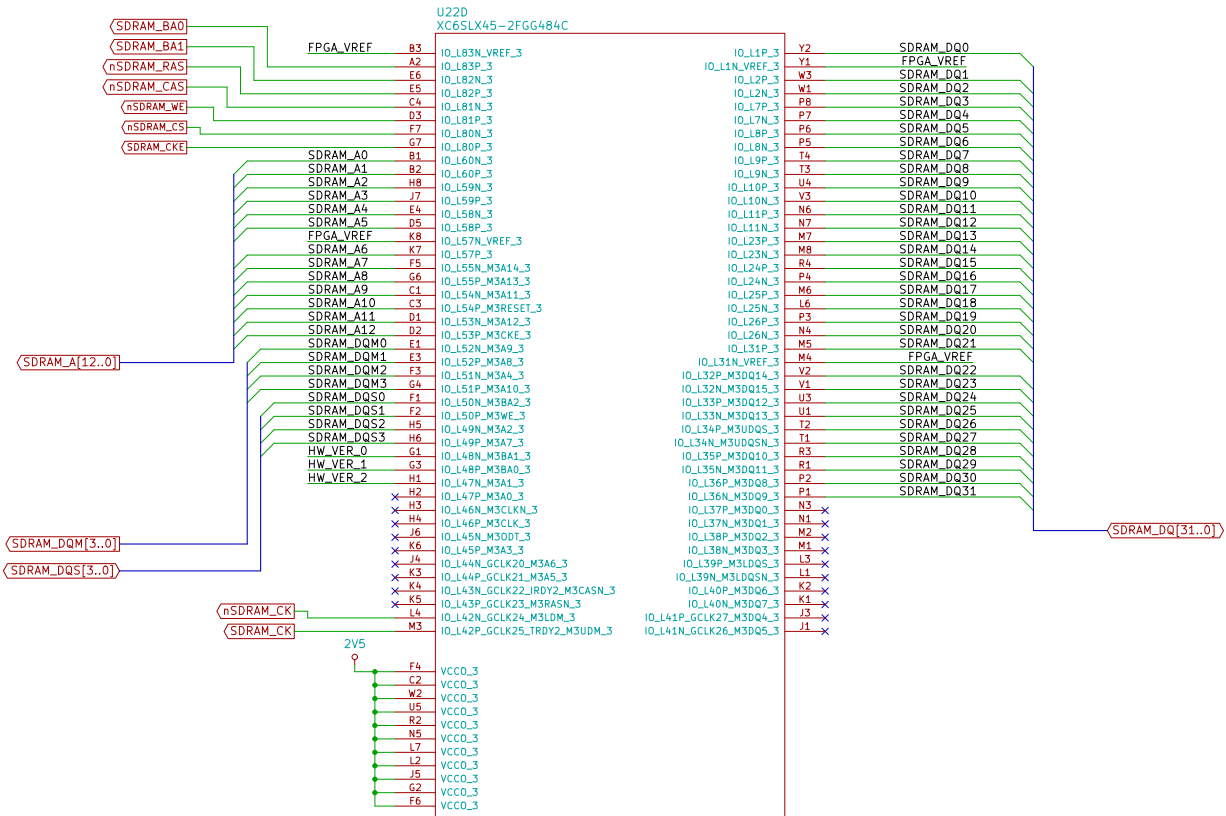




H/W Control: R4 Version

Board revision :

R179	R178	R177	R176	Revision
removed	DNP	1k	1k	R4
DNP	DNP	1k	DNP	rc3
DNP	DNP	DNP	1k	rc2
none	none	none	none	rc1



Notes:
1. Tolerance about resistors is 1% in default.

File: FPGA_BANK3.sch

Sheet: /FPGA_BANK3/

Title: Milkymist One - FPGA_BANK3 Sheet

Size: A3

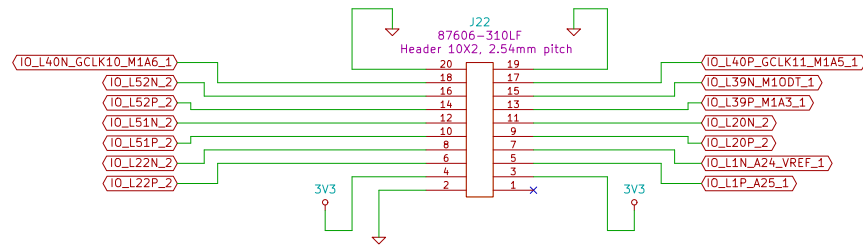
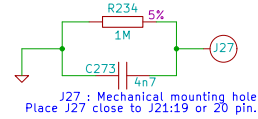
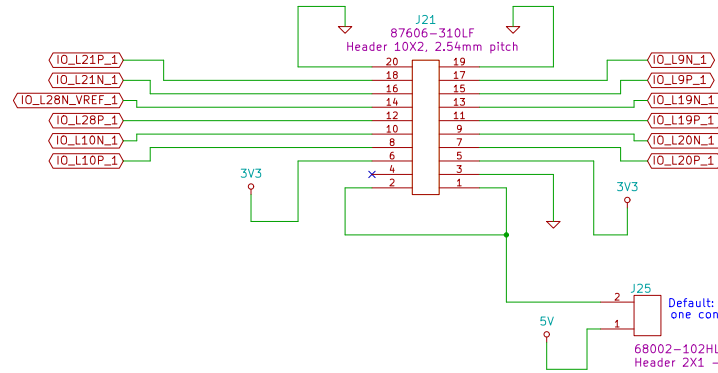
Date: 18 may 2012

Rev: R4

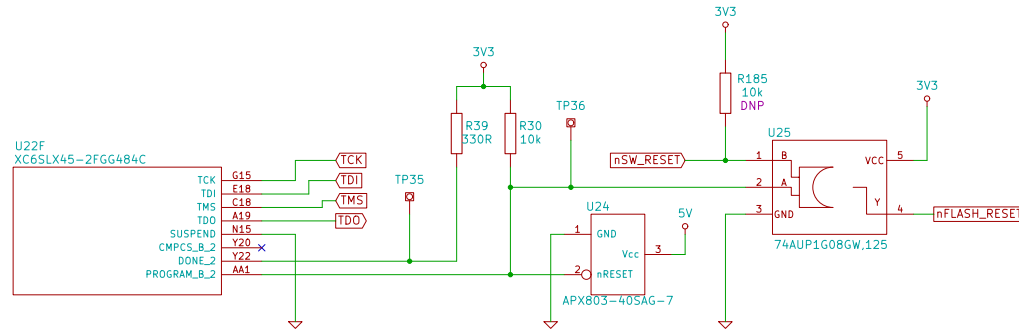
KiCad E.D.A.

Id: 18/19

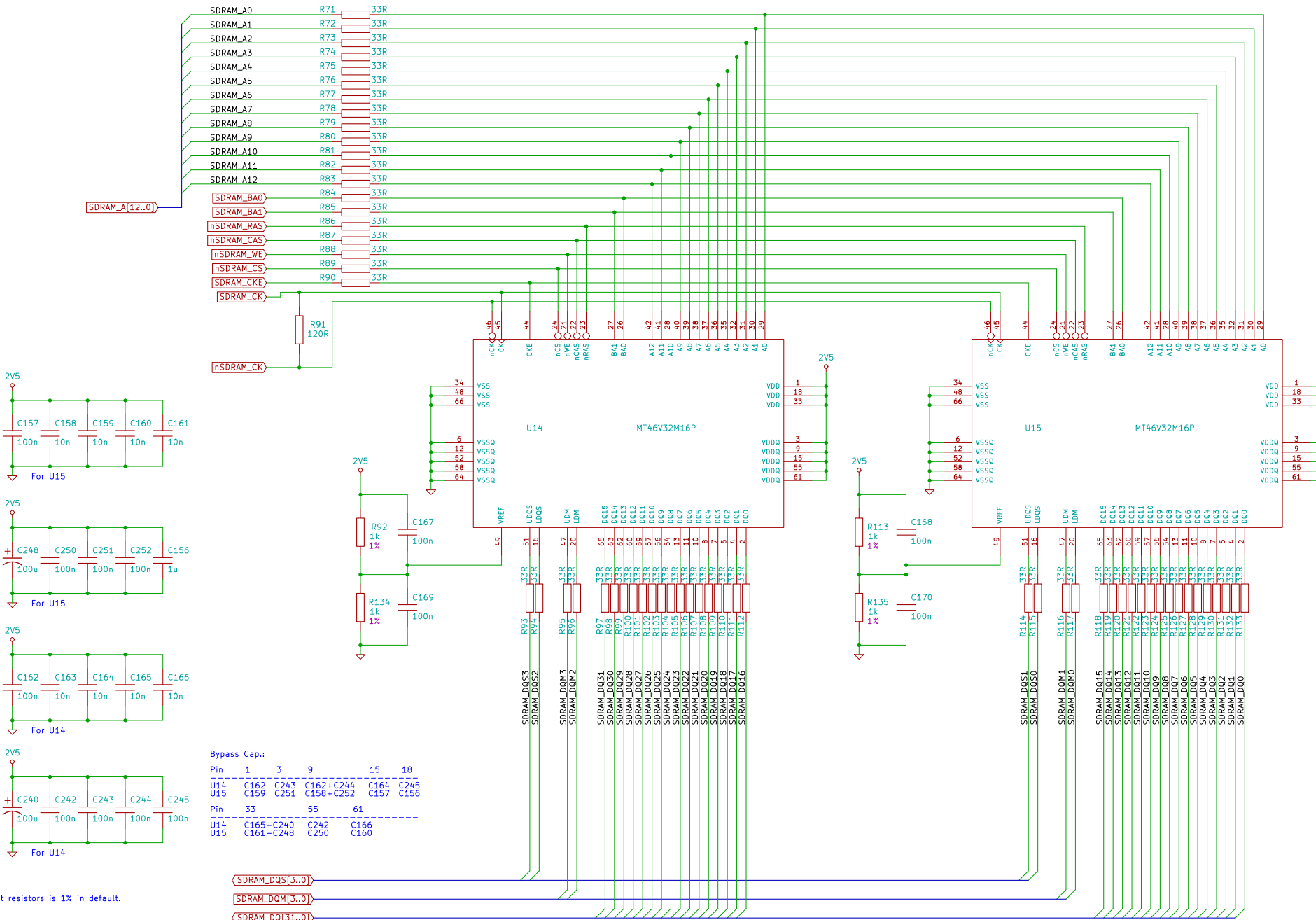
Note: Users can build their own extension board to connect these two J21 and J22 board-to-board female headers.



J21, 22 Harwin p/n : M20-7831046 or
FCI p/n : 87606-310LF



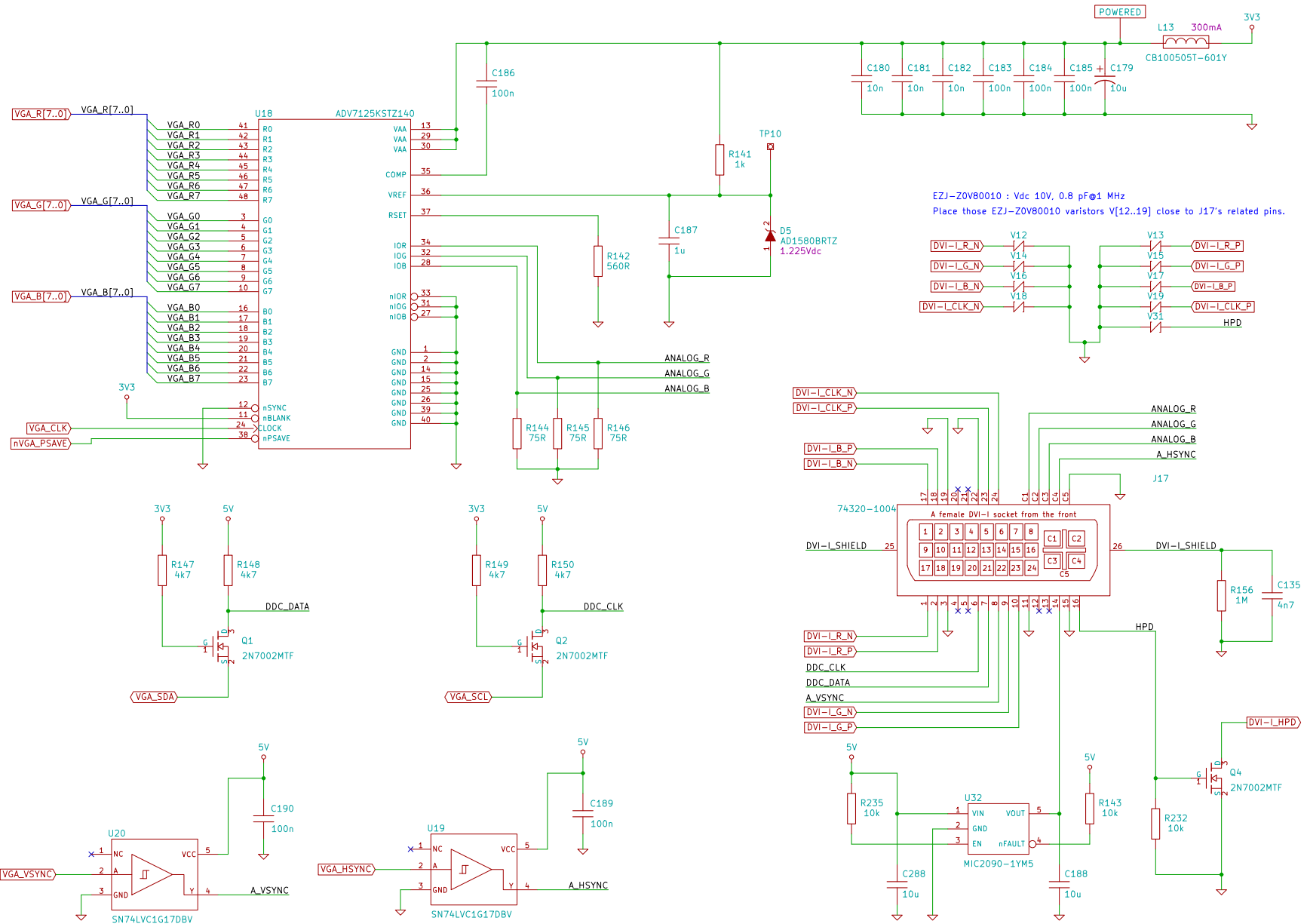
Notes:
1. Tolerance about resistors is 1% in default.



A
B
C
D
E

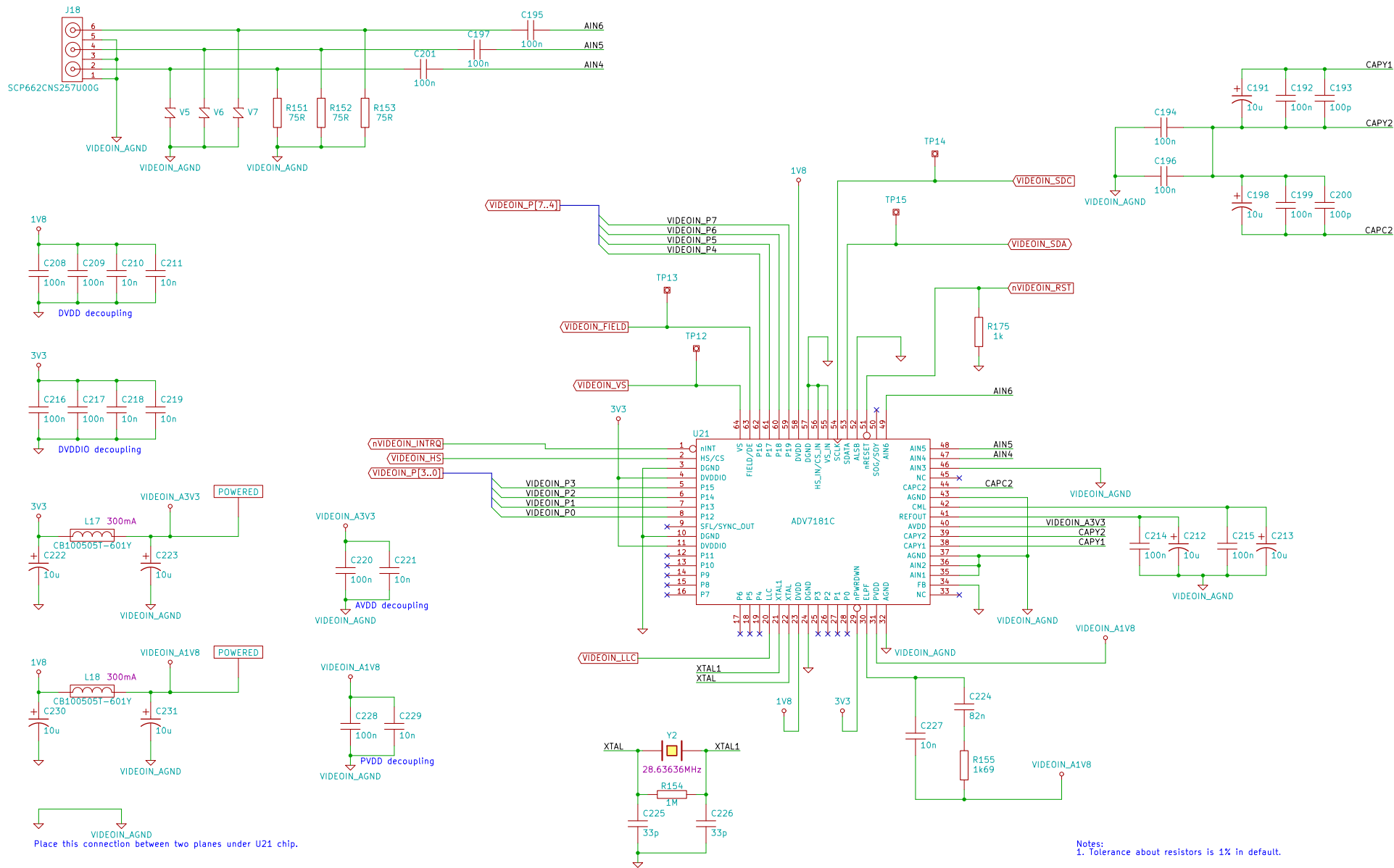


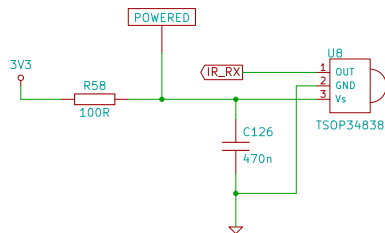
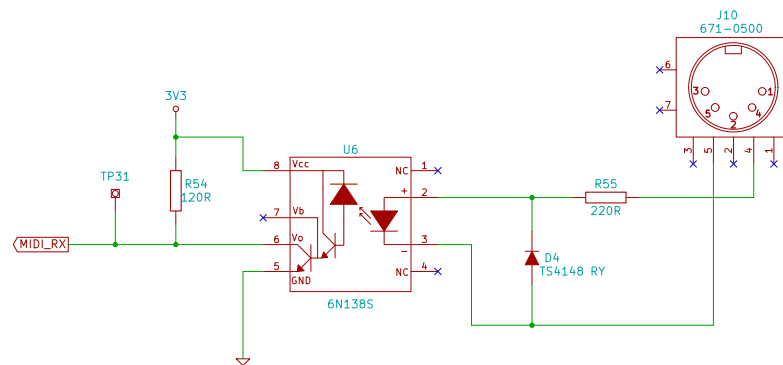
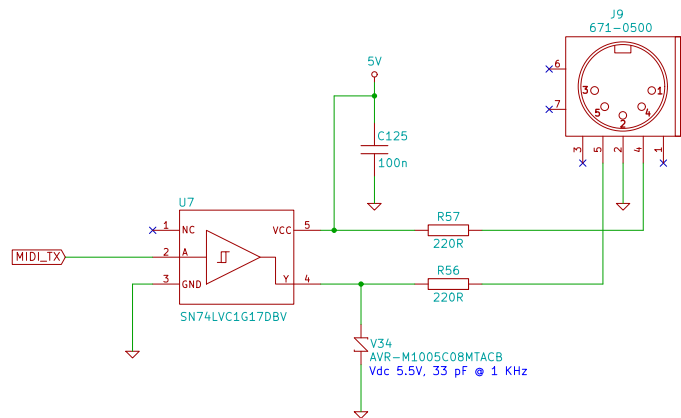
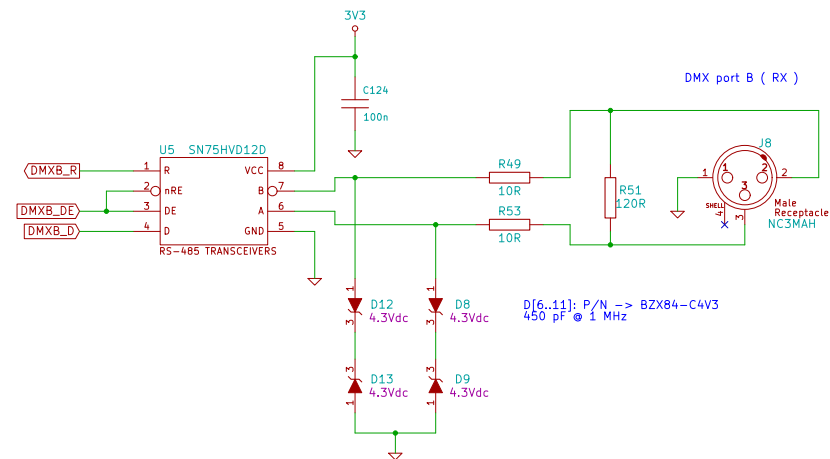
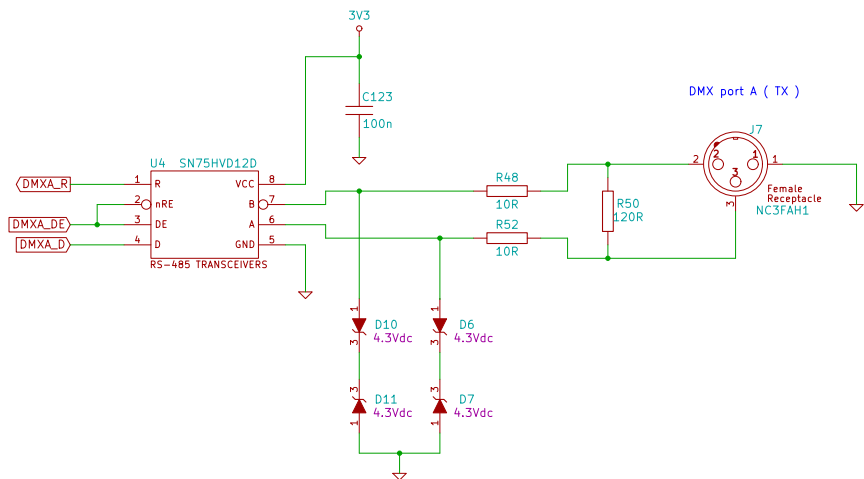
E



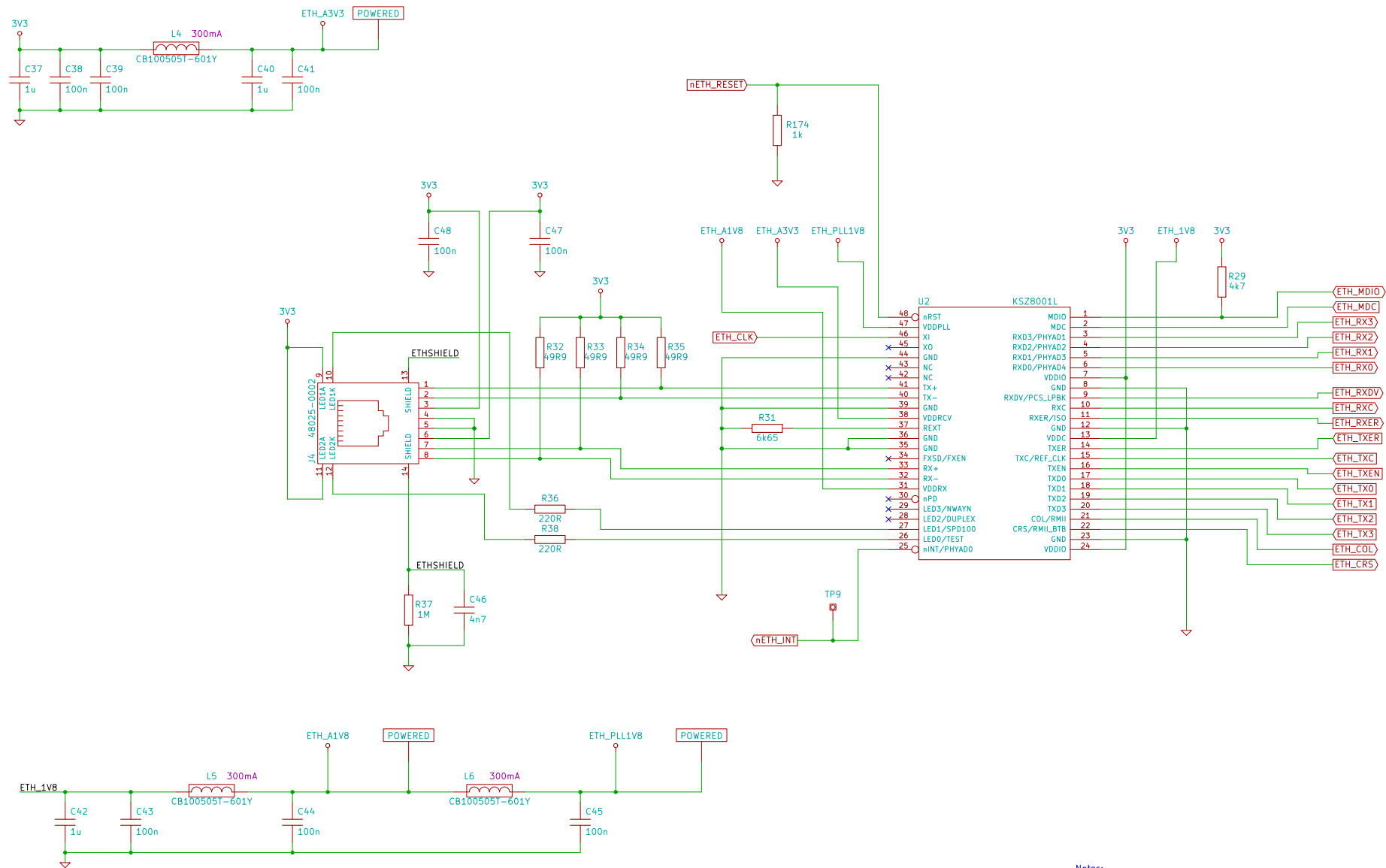
EZJ-Z0VB0010 : Vdc 10V, 0.8 pF@1 MHz
Place those EZJ-Z0VB0010 varistors V[12..19] close to J17's related pins.

Notes:
1. Tolerance about resistors is 1% in default.

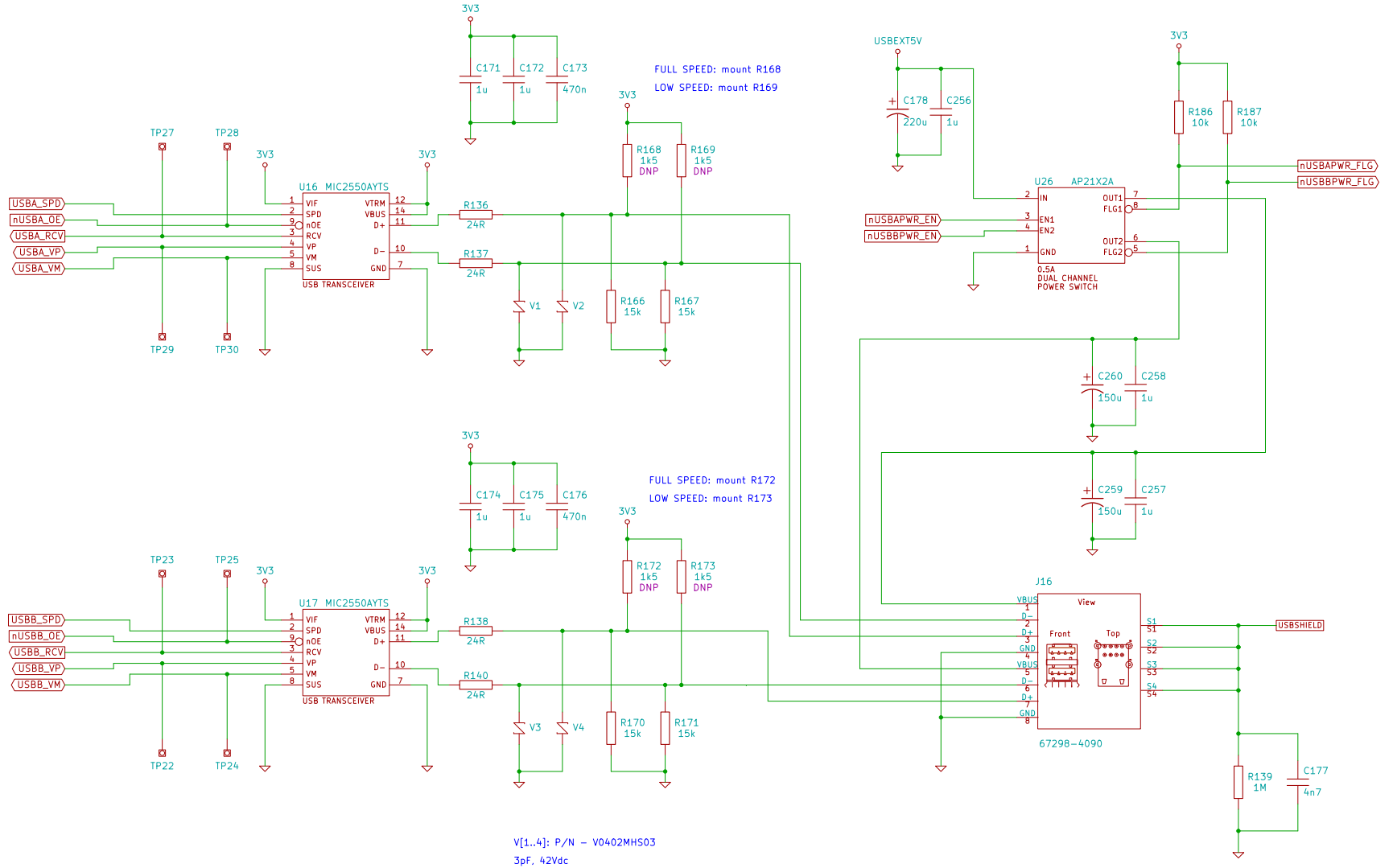


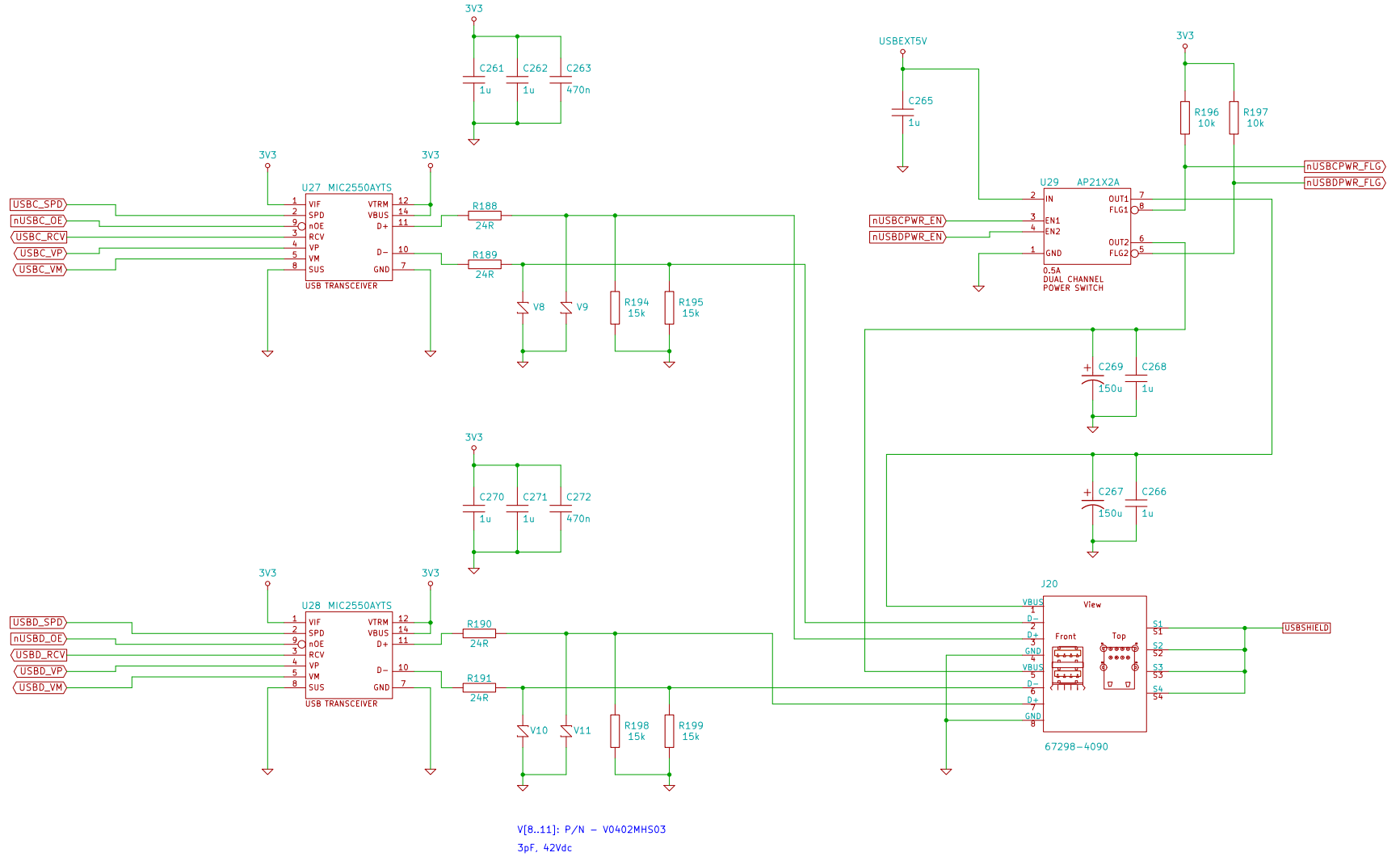


Notes:
1. Tolerance about resistors is 1% in default.

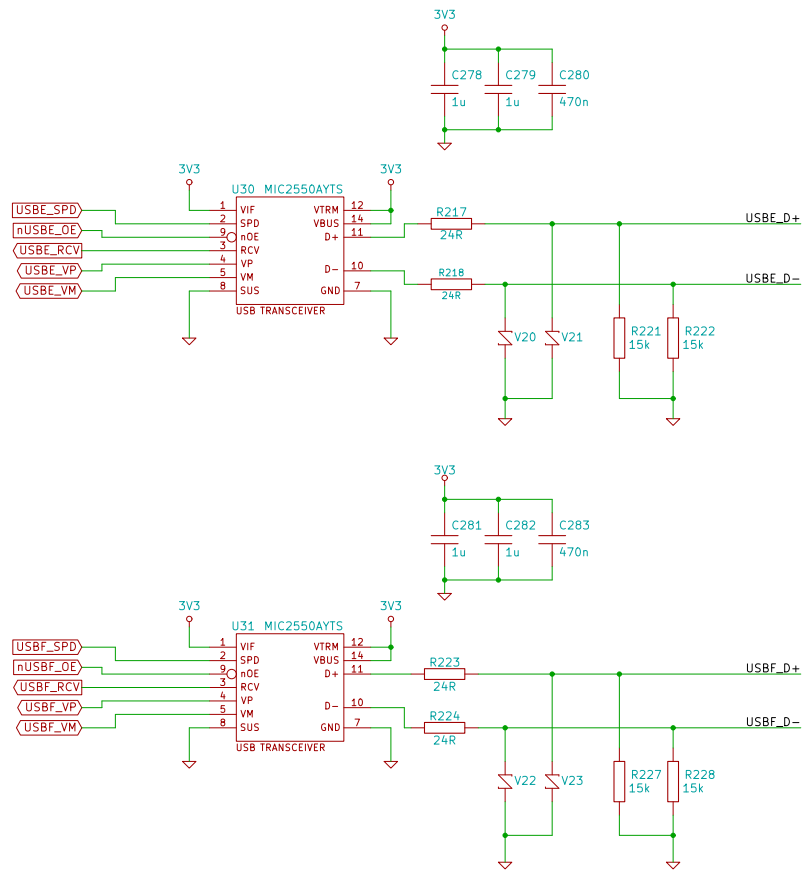


Notes:
1. Tolerance about resistors is 1% in default.

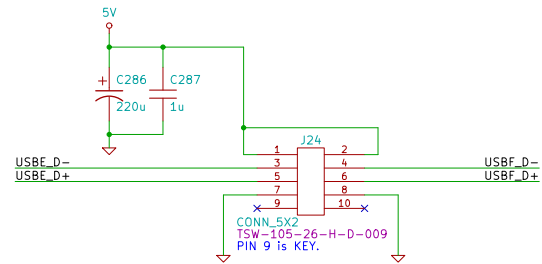




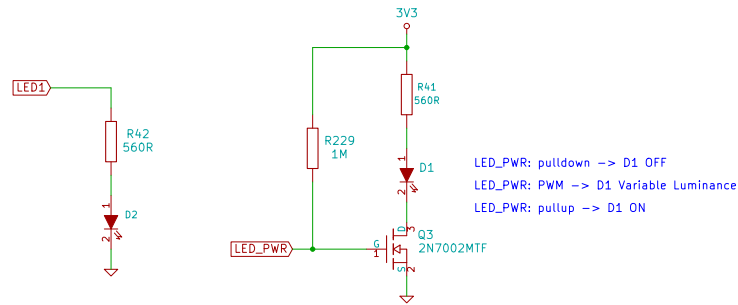
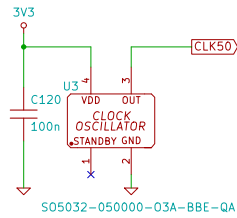
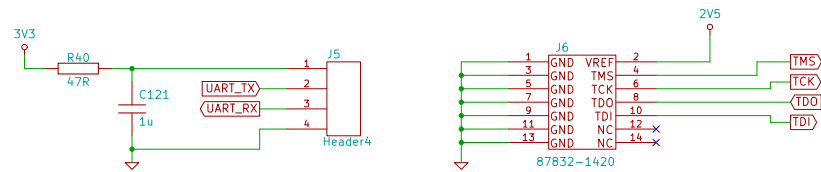
Notes:
1. Tolerance about resistors is 1% in default.



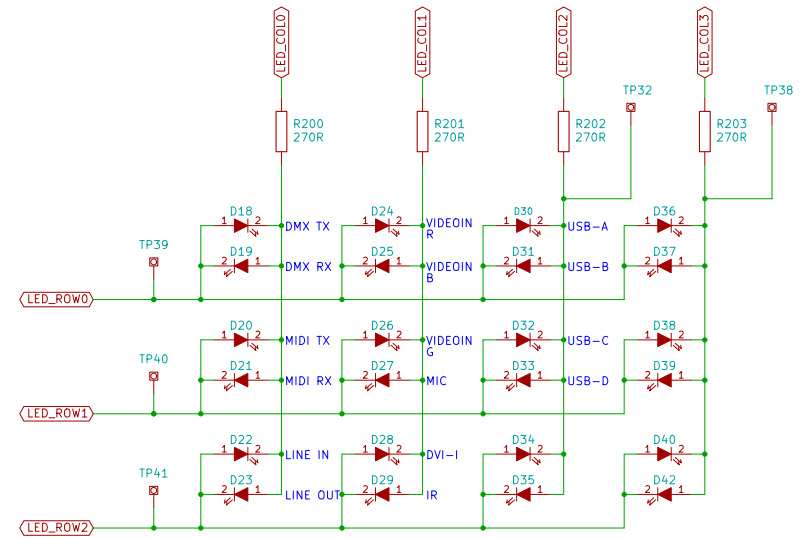
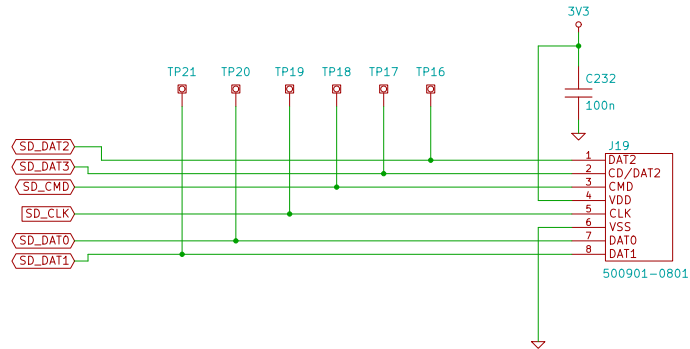
V[20..23]: P/N - V0402MHS03
3pF, 42Vdc



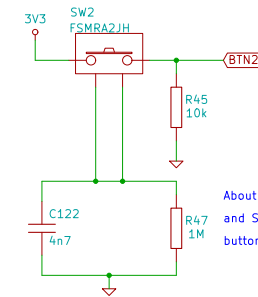
Notes:
1. Tolerance about resistors is 1% in default.



D1 and D2 are on pcb bottom side and in hyper red color of p/n: APA1606SURCK
And D2 is under SW2 button and D1 is under J11 DC Jack connector



1. D[18..41] is p/n: APA1606SURCK Hyper Red color
2. Placement LEDs above on bottom side of PCB and under corresponding connector.
3. D[34..41] are placed closely board edge bottom side under between SW2 and IR



About the numbering: there used to be also SW1 and SW3 (and BTN1/3), but we found that one button is all we need, and removed them.

Notes:
1. Tolerance about resistors is 1% in default.