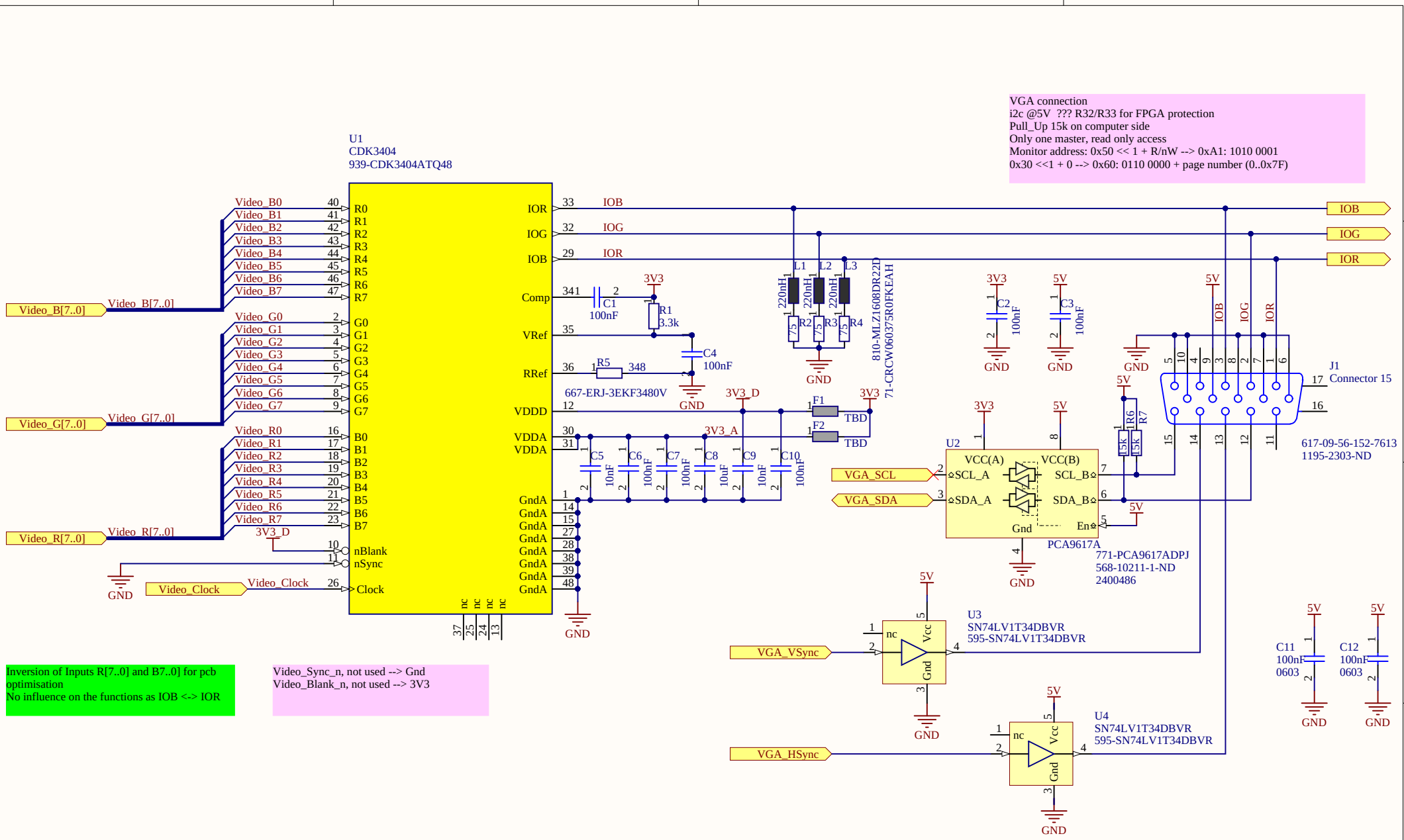
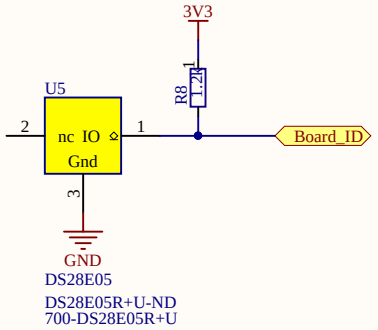
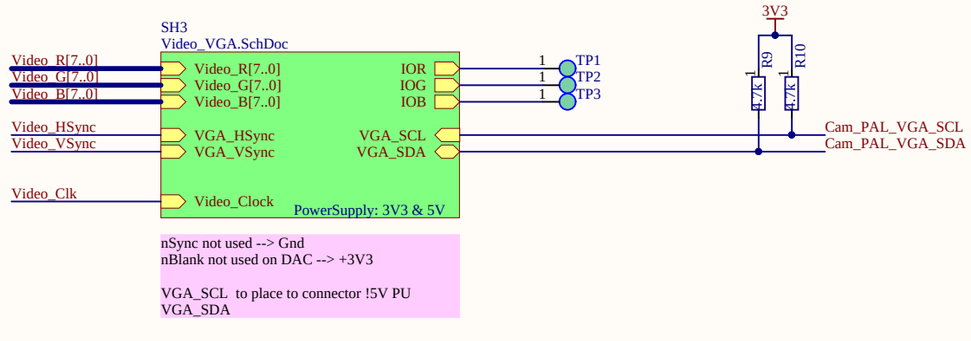
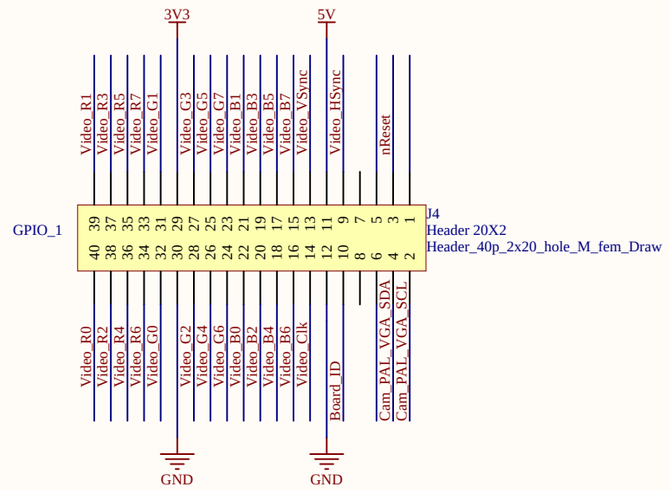

VGA connection
i2c @5V ??? R32/R33 for FPGA protection
Pull_Up 15k on computer side
Only one master, read only access
Monitor address: 0x50 << 1 + R/nW --> 0xA1: 1010 0001
0x30 <<1 + 0 --> 0x60: 0110 0000 + page number (0..0x7F)
U1
CDK3404
939-CDK3404ATQ48
R0
R1
R2
R3
R4
R5
R6
R7
G0
G1
G2
G3
G4
G5
G6
G7
B0
B1
B2
B3
B4
B5
B6
B7
nBlank
nSync
Clock
IOR
IOG
IOB
Comp
VRef
RRef
VDDD
VDDA
VDDA
GndA
Video_B0
Video_B1
Video_B2
Video_B3
Video_B4
Video_B5
Video_B6
Video_B7
Video_B[7..0]
Video_G0
Video_G1
Video_G2
Video_G3
Video_G4
Video_G5
Video_G6
Video_G7
Video_G[7..0]
Video_R0
Video_R1
Video_R2
Video_R3
Video_R4
Video_R5
Video_R6
Video_R7
Video_R[7..0]
3V3_D
Video_Clock
GND
C1
100nF
R1
3.3k
R5
348
667-ERJ-3EKF3480V
C4
100nF
C5
10nF
C6
100nF
C7
100nF
C8
10uF
C9
10nF
C10
100nF
3V3
3V3_D
3V3_A
F1
F2
TBD
L1
L2
L3
220nH
R2
R3
R4
75
810-MLZ1608DR22D
71-CRCW060375R0FKEAH
C2
C3
100nF
5V
J1
Connector 15
617-09-56-152-7613
1195-2303-ND
R6
R7
15k
U2
VCC(A)
VCC(B)
SCL_A
SDA_A
SCL_B
SDA_B
Gnd
En
VGA_SCL
VGA_SDA
PCA9617A
771-PCA9617ADPJ
568-10211-1-ND
2400486
U3
SN74LV1T34DBVR
595-SN74LV1T34DBVR
VGA_VSync
U4
SN74LV1T34DBVR
595-SN74LV1T34DBVR
VGA_HSync
C11
100nF
0603
C12
100nF
0603
Inversion of Inputs R[7..0] and B7..0] for pcb optimisation
No influence on the functions as IOB <-> IOR
Video_Sync_n, not used --> Gnd
Video_Blank_n, not used --> 3V3
Title Video_VGA
Size: A4
Number:*
Revision:*
Date: 29.09.2016
Time: 15:37:04
Sheet* of *
File: C:\Users\beuchatr\Dropbox\Developpements\PCB_Video_VGA\Video_VGA.SchDoc
Video_VGA
EPFL/LAP
R.Beuchat



Title	***Video_VGA_ID_OneWire***		
Size: A4	Number:*	Revision:*	
Date: 29.09.2016	Time: 15:37:04	Sheet * of *	
File: C:\Users\beuchatr\Dropbox\Developpements\PCB_Video_VGA\Video_VGA_ID_OneWire.SchDoc			

*
Video_VGA_ID_OneWire
R.Beuchat
LAP/EPFL
*



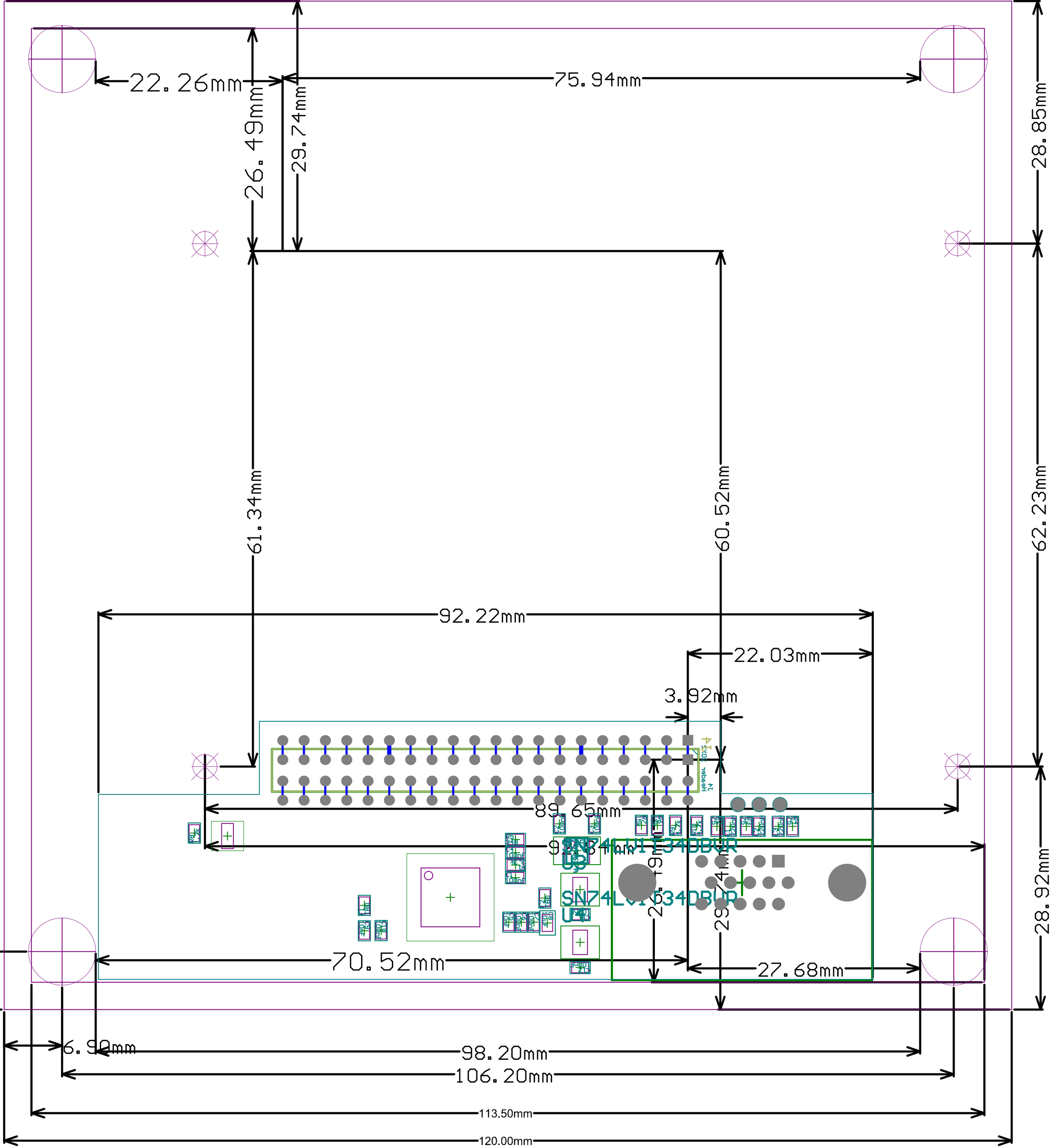


L6
hepia
LOGO_hepia

B1
DE0-nano-SOC

Title	***Video_VGA_TOP***		* *Video_VGA_TOP* *R.Beuchat* *EPFL/LAP* *
Size: A3	Number:*	Revision:*	
Date: 29.09.2016	Time: 15:37:04	Sheet * of *	
File: C:\Users\beuchatr\Dropbox\Developpements\PCB_Video_VGA\Video_VGA_TOP.SchDoc			

22.26mm
75.94mm
26.49mm
29.74mm
28.85mm
61.34mm
60.52mm
62.23mm
92.22mm
22.03mm
3.92mm
89.65mm
70.52mm
27.68mm
6.90mm
98.20mm
106.20mm
113.50mm
120.00mm
Video_VGA
RB 2016/06/24
V1.0
hepia/LSN
_hepia


22.26mm
75.94mm
26.49mm
29.74mm
28.85mm
61.34mm
60.52mm
62.23mm
92.22mm
22.03mm
3.92mm
89.65mm
92.84mm
SN74LV1T34DBVR
SN74LV1T34DBVR
26.91mm
29.74mm
6.90mm
70.52mm
27.68mm
6.90mm
98.20mm
106.20mm
113.50mm
120.00mm