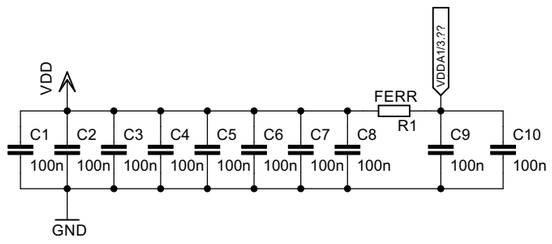
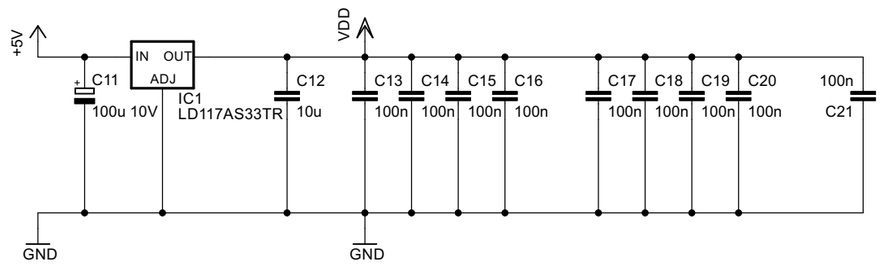
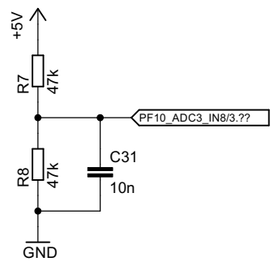
Axoloti Core 1.2 Schematics

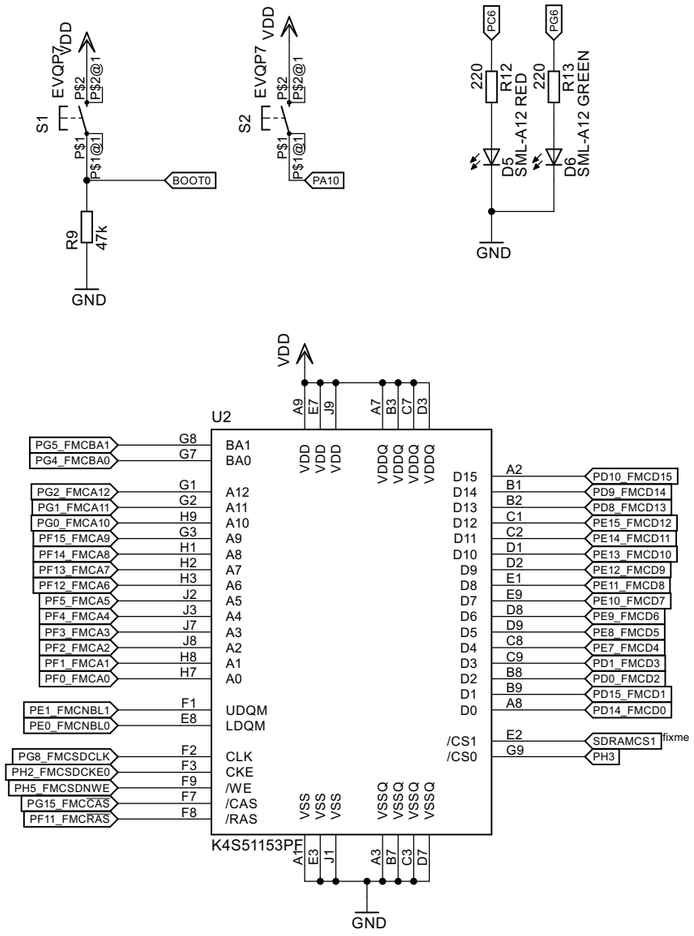
by Johannes Taelman



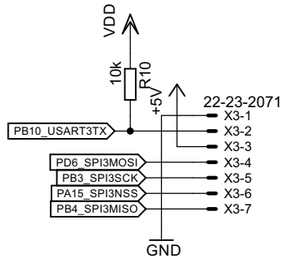


5V voltage supervisor

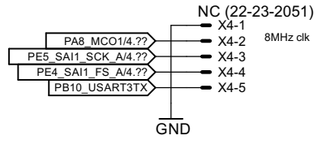


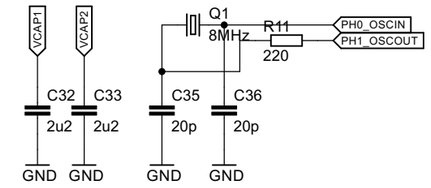


Multiprocessor stream

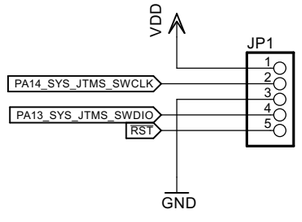


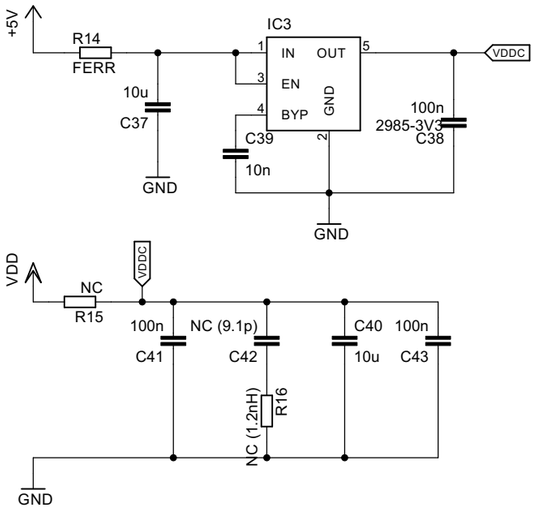
Multiprocessor sync

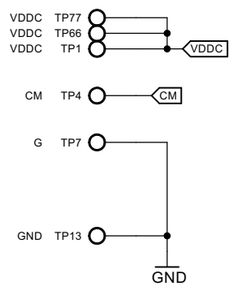


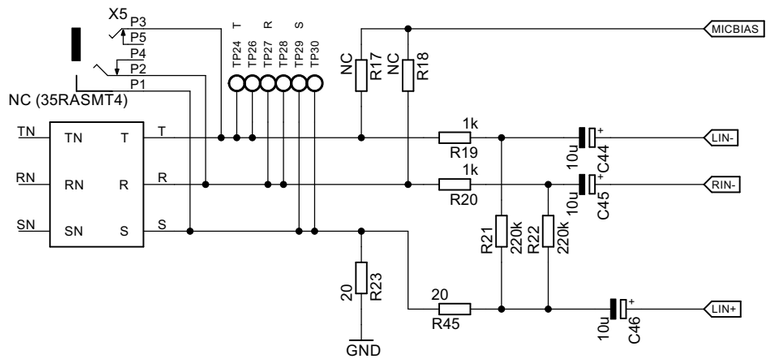


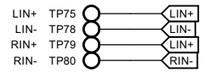
SWD

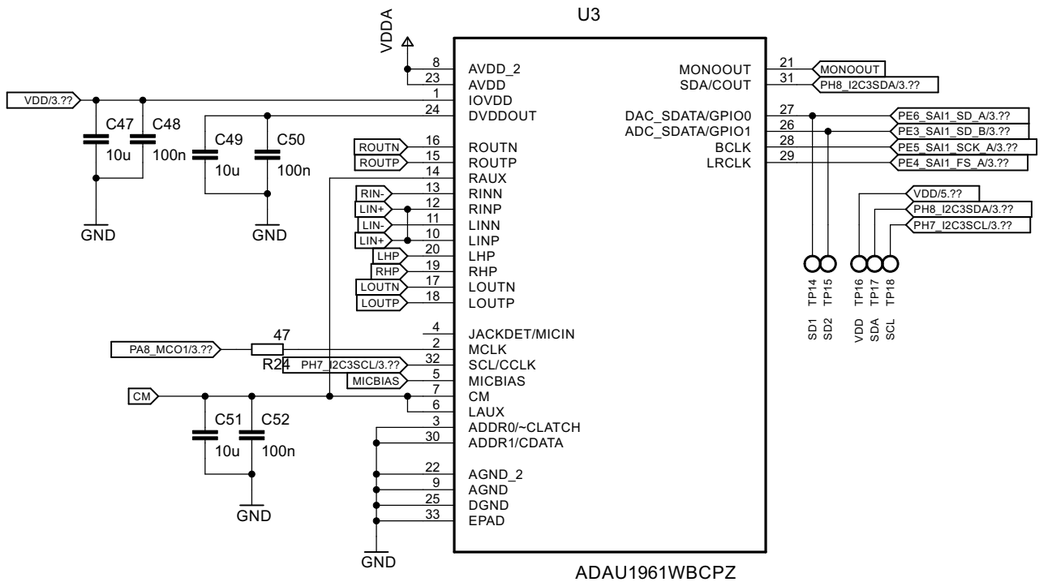


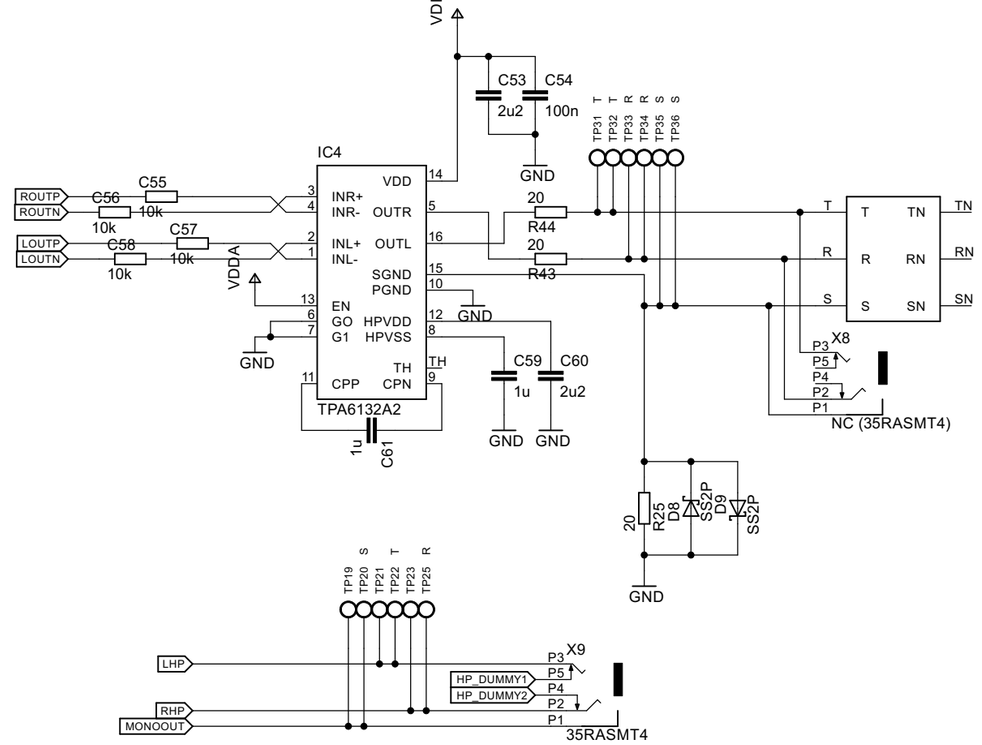

+5V
R14
FERR
IC3
IN
OUT
EN
BYP
GND
VDDC
10u
C37
C39
10n
100n
2985-3V3
C38
GND
GND
VDD
NC
R15
VDDC
100n
C41
NC (9.1p)
C42
C40
10u
100n
C43
NC (1.2nH)
R16
GND

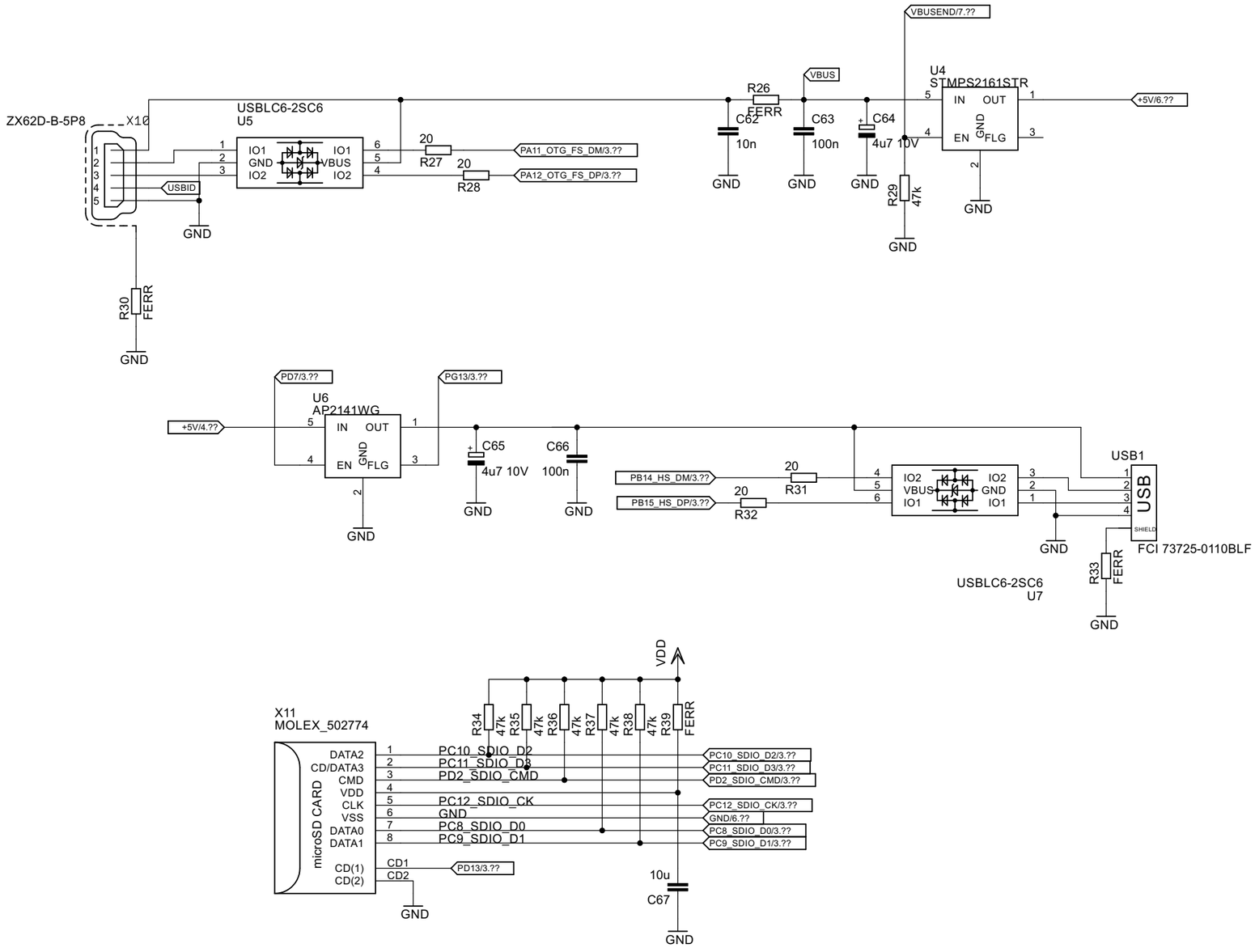

VDDC TP77
VDDC TP66
VDDC TP1
VDDC
CM TP4
CM
G TP7
GND TP13
GND

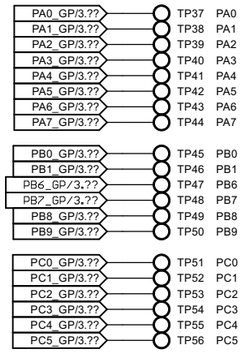

X5
P3
P5
P4
P2
P1
NC (35RASMT4)
TP24 T
TP26
TP27 R
TP28
TP29 S
TP30
NC
R17
NC
R18
MICBIAS
TN
RN
SN
TN T
RN R
SN S
1k
R19
1k
R20
LIN-
RIN-
10u
C44
10u
C45
R21
220k
R22
220k
20
R23
20
R45
LIN+
10u
C46
GND


LIN+ TP75
LIN- TP78
RIN+ TP79
RIN- TP80
LIN+
LIN-
LIN+
RIN-

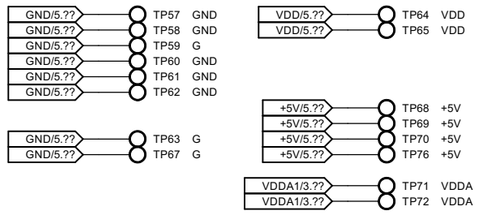

U3
VDDA
AVDD_2
AVDD
IOVDD
DVDDOUT
ROUTN
ROUTP
RAUX
RINN
RINP
LINN
LINP
LHP
RHP
LOUTN
LOUTP
JACKDET/MICIN
MCLK
SCL/CCLK
MICBIAS
CM
LAUX
ADDR0/~CLATCH
ADDR1/CDATA
AGND_2
AGND
DGND
EPAD
MONOOUT
SDA/COUT
DAC_SDATA/GPIO0
ADC_SDATA/GPIO1
BCLK
LRCLK
SD1
SD2
VDD
SDA
SCL
ADAU1961WBCPZ
VDD/3.??
C47
10u
C48
100n
C49
10u
C50
100n
GND
GND
ROUTN
ROUTP
RIN-
LIN+
LIN-
LIN+
LHP
RHP
LOUTN
LOUTP
PA8_MCO1/3.??
47
R24
PH7_I2C3SCL/3.??
MICBIAS
CM
C51
10u
C52
100n
GND
GND
MONOOUT
PH8_I2C3SDA/3.??
PE6_SAI1_SD_A/3.??
PE3_SAI1_SD_B/3.??
PE5_SAI1_SCK_A/3.??
PE4_SAI1_FS_A/3.??
VDD/5.??
PH8_I2C3SDA/3.??
PH7_I2C3SCL/3.??
TP14
TP15
TP16
TP17
TP18

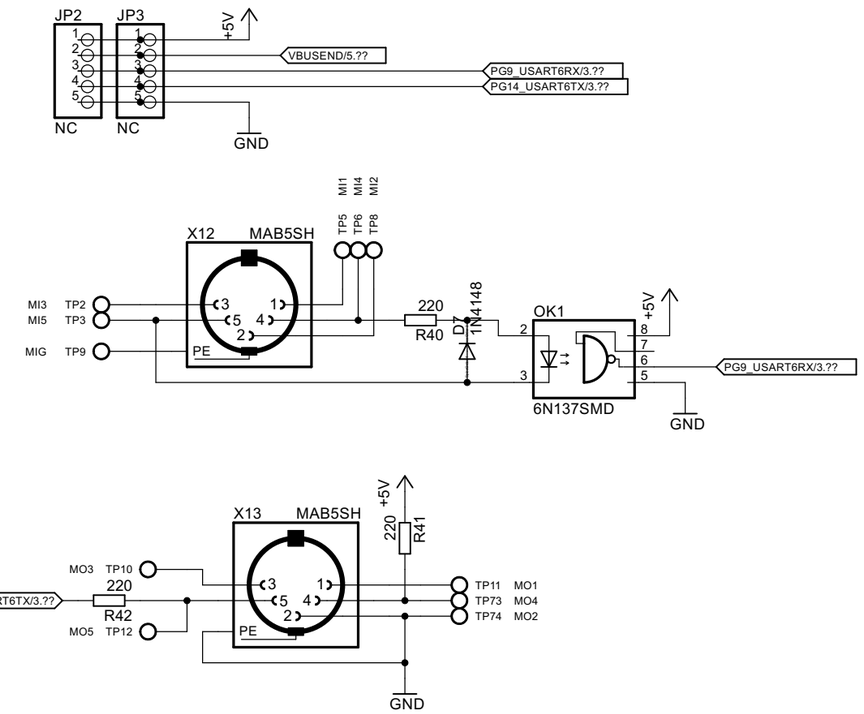

VDD
C53
2u2
C54
100n
GND
TP31 T
TP32 T
TP33 R
TP34 R
TP35 S
TP36 S
IC4
VDD
INR+
INR-
OUTR
INL+
INL-
OUTL
SGND
PGND
EN
GO
G1
HPVDD
HPVSS
TH
CPP
CPN
TPA6132A2
ROUTP
ROUTN
C55
10k
C56
10k
C57
10k
C58
10k
LOUTP
LOUTN
VDDA
GND
GND
20
R44
20
R43
C59
1u
C60
2u2
GND
GND
1u
C61
T
R
S
T TN
R RN
S SN
TN
RN
SN
P3
P5
P4
P2
P1
X8
NC (35RASMT4)
20
R25
D8
SS2P
D9
SS2P
GND
TP19 S
TP20
TP21 T
TP22
TP23 R
TP25
LHP
RHP
MONOOUT
P3
P5
P4
P2
P1
X9
HP_DUMMY1
HP_DUMMY2
35RASMT4

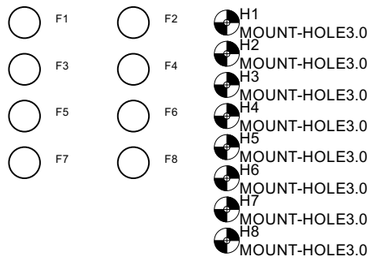

ZX62D-B-5P8
X10
USBID
GND
R30
FERR
USBLC6-2SC6
U5
IO1
GND
IO2
VBUS
20
R27
20
R28
PA11_OTG_FS_DM/3.??
PA12_OTG_FS_DP/3.??
R26
FERR
C62
10n
C63
100n
C64
4u7 10V
VBUS
VBUSEND/7.??
U4
STMPS2161STR
IN
OUT
EN
FLG
+5V/6.??
R29
47k
PD7/3.??
PG13/3.??
U6
AP2141WG
+5V/4.??
C65
4u7 10V
C66
100n
PB14_HS_DM/3.??
PB15_HS_DP/3.??
R31
R32
USB1
USB
SHIELD
FCI 73725-0110BLF
USBLC6-2SC6
U7
R33
FERR
VDD
X11
MOLEX_502774
microSD CARD
DATA2
CD/DATA3
CMD
VDD
CLK
VSS
DATA0
DATA1
CD(1)
CD(2)
PC10_SDIO_D2
PC11_SDIO_D3
PD2_SDIO_CMD
PC12_SDIO_CK
GND
PC8_SDIO_D0
PC9_SDIO_D1
CD1
CD2
PD13/3.??
R34
R35
R36
R37
R38
R39
47k
FERR
10u
C67

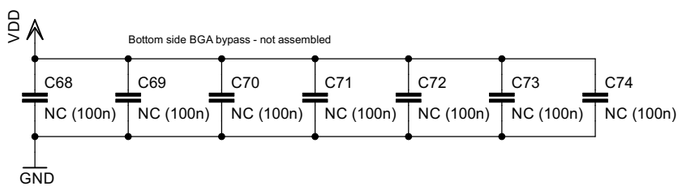


	ADC	DAC	SPI	I2C	UART
PA0	ADC1_IN0				
PA1	ADC1_IN1				
PA2	ADC1_IN2				TX
PA3	ADC1_IN3				RX
PA4	ADC1_IN4	DAC_OUT1	NSS		
PA5	ADC1_IN5	DAC_OUT2	SCK		
PA6	ADC1_IN6		MISO		
PA7	ADC1_IN7		MOSI		
PB0	ADC1_IN8				
PB1	ADC1_IN9				
PB6					
PB7					
PB8				I2C1_SCL	
PB9				I2C1_SDA	
PC0	ADC1_IN10				
PC1	ADC1_IN11				
PC2	ADC1_IN12				
PC3	ADC1_IN13				
PC4	ADC1_IN14				
PC5	ADC1_IN15				




JP2
JP3
1
2
3
4
5
NC
NC
+5V
VBUSEND/5.??
PG9_USART6RX/3.??
PG14_USART6TX/3.??
GND
MI1
MI4
MI2
TP5
TP6
TP8
X12
MAB5SH
MI3
TP2
MI5
TP3
MIG
TP9
3
1
5
4
2
PE
220
R40
D7
1N4148
OK1
2
3
+5V
8
7
6
5
PG9_USART6RX/3.??
6N137SMD
GND
X13
MAB5SH
220
R41
+5V
MO3
TP10
220
R42
MO5
TP12
PG14_USART6TX/3.??
TP11
MO1
TP73
MO4
TP74
MO2
PE
GND


F1
F2
H1
MOUNT-HOLE3.0
H2
MOUNT-HOLE3.0
F3
F4
H3
MOUNT-HOLE3.0
H4
MOUNT-HOLE3.0
F5
F6
H5
MOUNT-HOLE3.0
F7
F8
H6
MOUNT-HOLE3.0
H7
MOUNT-HOLE3.0
H8
MOUNT-HOLE3.0


VDD
Bottom side BGA bypass - not assembled
C68
C69
C70
C71
C72
C73
C74
NC (100n)
NC (100n)
NC (100n)
NC (100n)
NC (100n)
NC (100n)
NC (100n)
GND