

Annika Block Diagram

01

PCB STACK UP

6L

LAYER 1 : TOP
LAYER 2 : SGND
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : BOT

10.1" LCD Panel
Page 16

CRT
Page 12

Intel Pineview-M
Micro-FCBGA8
22 x 22 mm
TDP~5.5W
Page 3~5

DDR2 667MT/s
Single Channel

DDR2 SO-DIMM
2GB Max.
Page 11

XDP
Page 31

CLOCK GEN
9LRS3165
Page 2

SATA

2.5"HDD/SSD
Page 19

Intel Tigerpoint
17 x 17 mm
MMAP 360 Balls
TDP~1.5W
Page 6~10

USB 2.0

0, 1, 2
USB2.0 Port x3
Page 21

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Card Reader
Page 13
Card Reader Socket
Page 13

5
Bluetooth/WLAN
Page 20

6
Touch Screen
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7
WWAN
Page 20
SIM Card Socket
Page 20

8
Webcam
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PCI-Express

X1
WWAN
Page 20
SIM Card
Page 20

X1
LAN
Realtek
RTL8103EL-VB
10/100
Page 15
RJ 45
Page 15

X1
WLAN
Page 20

X1
HD Decoder
Page 18
DDR II
64MByte
Page 18

SYSTEM POWER
+3VPCU/+5VPCU(RT8206)
PAGE 24

DDR II SMDDR_VTERM
+0.9VSMVREF/+1.8VSUS(RT8207)
PAGE 25

CPU CORE RT8152D
PAGE 26

SYSTEM CHARGER ISL6251AHAZ-T
PAGE 27

GFX CORE(RT9025)
+1.2V(RT9025)
+1.5V(RT9025)
PAGE 28
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PAGE 30

VCCP 1.05V(RT8209A)
PAGE 29

Touch Pad
Keyboard
Page 22

Power SW
Page 14

ENC KBC
KB3926D2
Page 23

BIOS
SPI Flash
Page 23

FAN
G991
Page 22

AUDIO CODEC
92HD80BX
Page 17

Int SPK
Page 17

Digital MIC
Page 17

HP/MIC
COMBO JACK
Page 17

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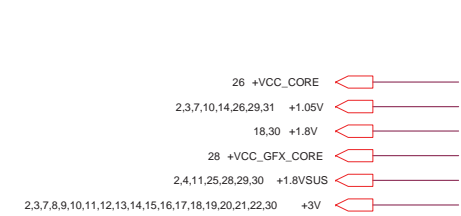
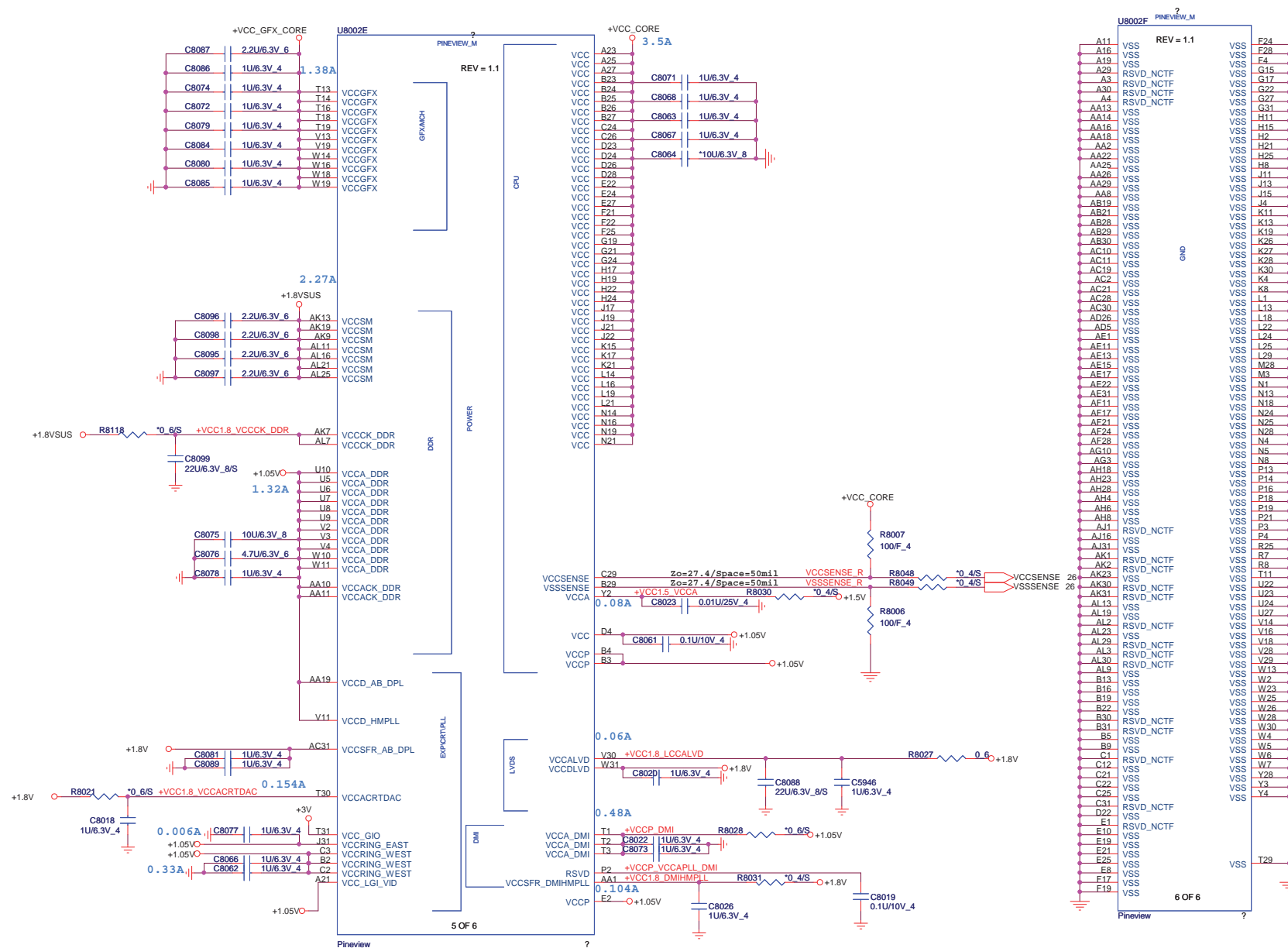
Quanta Computer Inc.

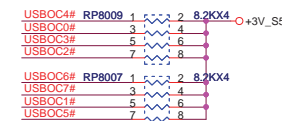
PROJECT : Annika

Size Document Number
BLOCK DIAGRAM
Date: Friday, October 30, 2009 Sheet 1 of 32 Rev. 1A

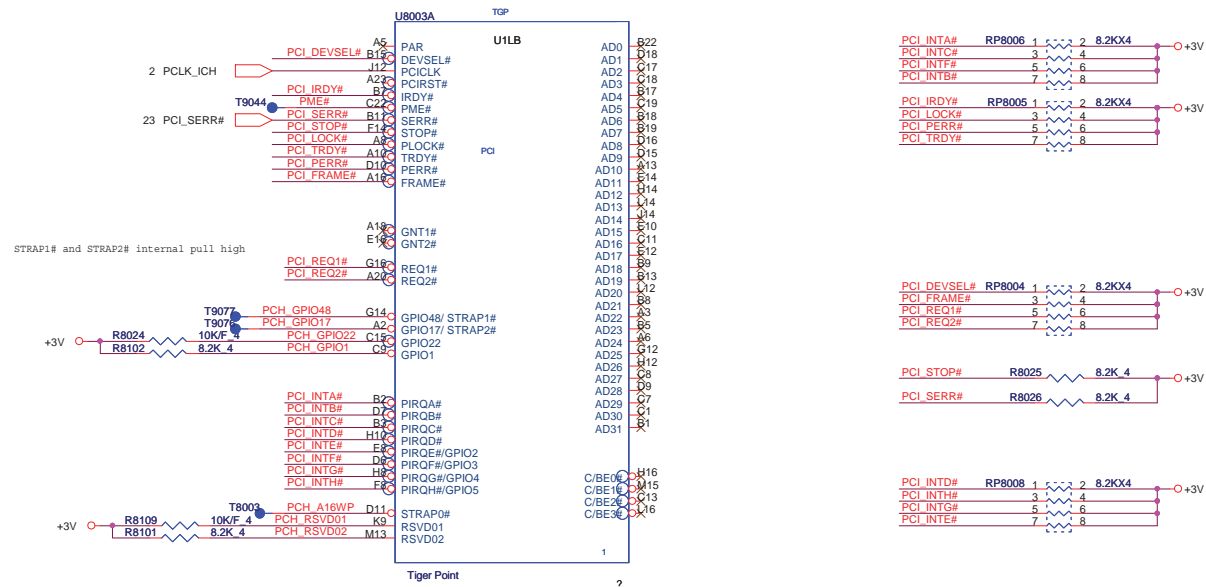








| | | |
|-------|---|---------------|
| Size | Document Number TigerPoint Sata/Host(2/6) | Rev 1A |
| Date: | Thursday, October 29, 2009 | Sheet 7 of 32 |



ICH Boot BIOS select

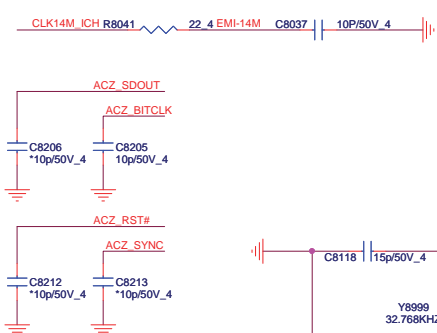
| PCH_GPIO17 (INT PU) | PCH_GPIO48 (INT PU) | Boot BIOS Location |
|------------------------|------------------------|--------------------|
| 0 | 1 | SPI |
| 1 | 0 | PCI |
| 1 | 1 | LPC (Default) |

A16 SWAP Override strap

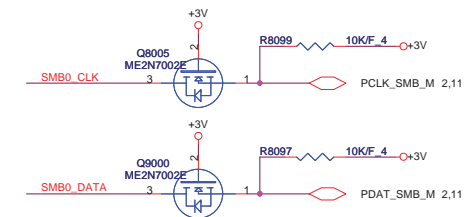
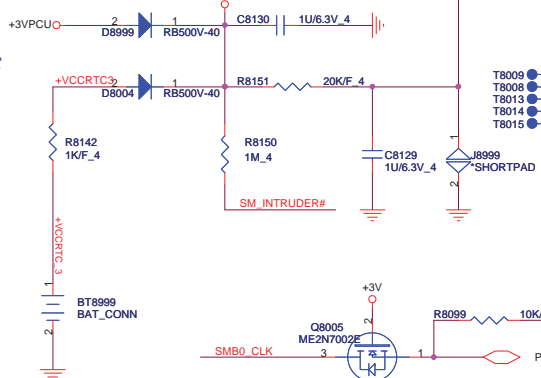
| PCH_A16WP (INT PU) | Low = A16 swap override enabled High = Default |
|-----------------------|---|
|-----------------------|---|

| IRQ | Description |
|-----------|--|
| PIRQA | USB UHCI Controller #1, #4 |
| PIRQB | AC'97 Codec; Option for SMBUS |
| PIRQC | USB UHCI Controller #3; SATA/IDE Native Mode |
| PIRQD | USB UHCI Controller #2 |
| PIRQE | Internal LAN; Option for SCI, TCO, HPET#0,1,2 |
| PIRQF | Option for SCI, TCO, HPET#0,1,2 |
| PIRQG | Option for SCI, TCO, HPET#0,1,2 |
| PIRQH | USB EHCI Controller; Option for SCI, TCO, HPET#0,1,2 |
| PCI_GNT#2 | Internal PU Should not be PD |

EMI



RTC



GPIO25 This signal has a weak internal pull-up. If the signal is sampled high, the DMI interface is strapped to operate in DC coupled mode (No coupling capacitors are required on DMI differential pairs). If the signal is sampled low, the DMI interface is strapped to operate in AC coupled mode (Coupling capacitors are required on DMI differential pairs). NOTE: Board designer must ensure that DMI implementation matches the strap selection.

DMI_AC_ENABLE R8108 1K/F_4

+3V0 R8223 8.2K_4 BOARD ID0 R8224 8.2K_4 BOARD ID1 R8226 8.2K_4

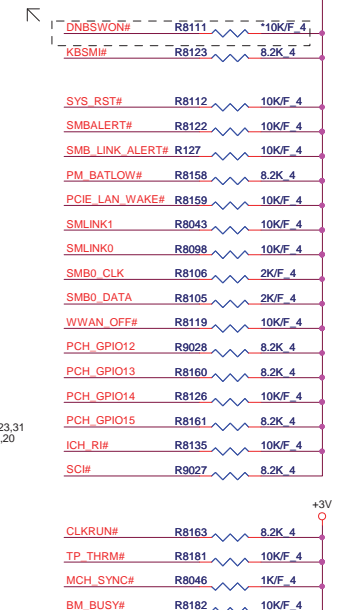
| Board ID | ID1 | ID0 |
|-------------------|-----|-----|
| WO decoder WO SIM | 0 | 0 |
| WO decoder W/ SIM | 0 | 1 |
| W/ decoder WO SIM | 1 | 0 |
| W/ decoder W/ SIM | 1 | 1 |

| ACZ_SDOUT (INT PD) | ACZ_SYNC (INT PD) | Description |
|--------------------|-------------------|------------------------|
| 0 | 0 | * 4 x 1s |
| 1 | 0 | Reserved |
| 0 | 1 | Reserved |
| 1 | 1 | 1 x 4s(1 port/4 lanes) |

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14,16,20,21,22,23,24,26,27,30 +3VPCU
2,3,5,7,8,10,11,12,13,14,15,16,17,18,19,20,21,22,30 +3V
6,10,30 +3V_S5

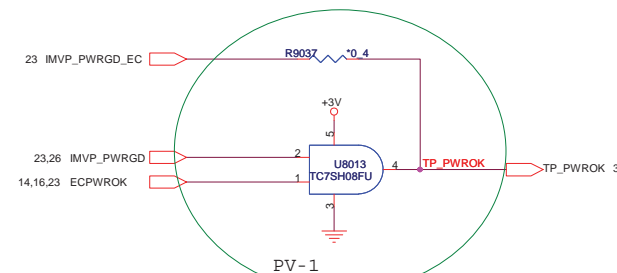
integrated pull-up of 18 k - 42 k .check list 0.7



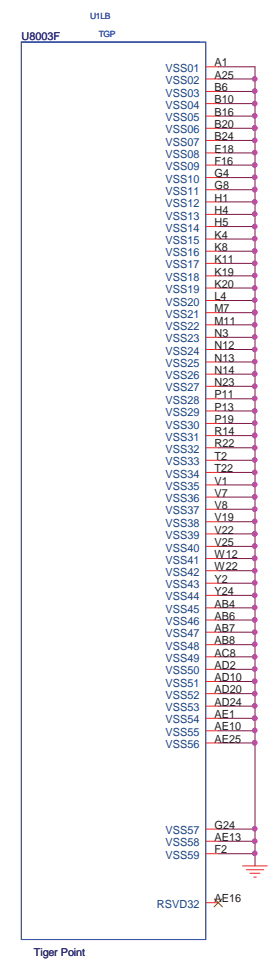
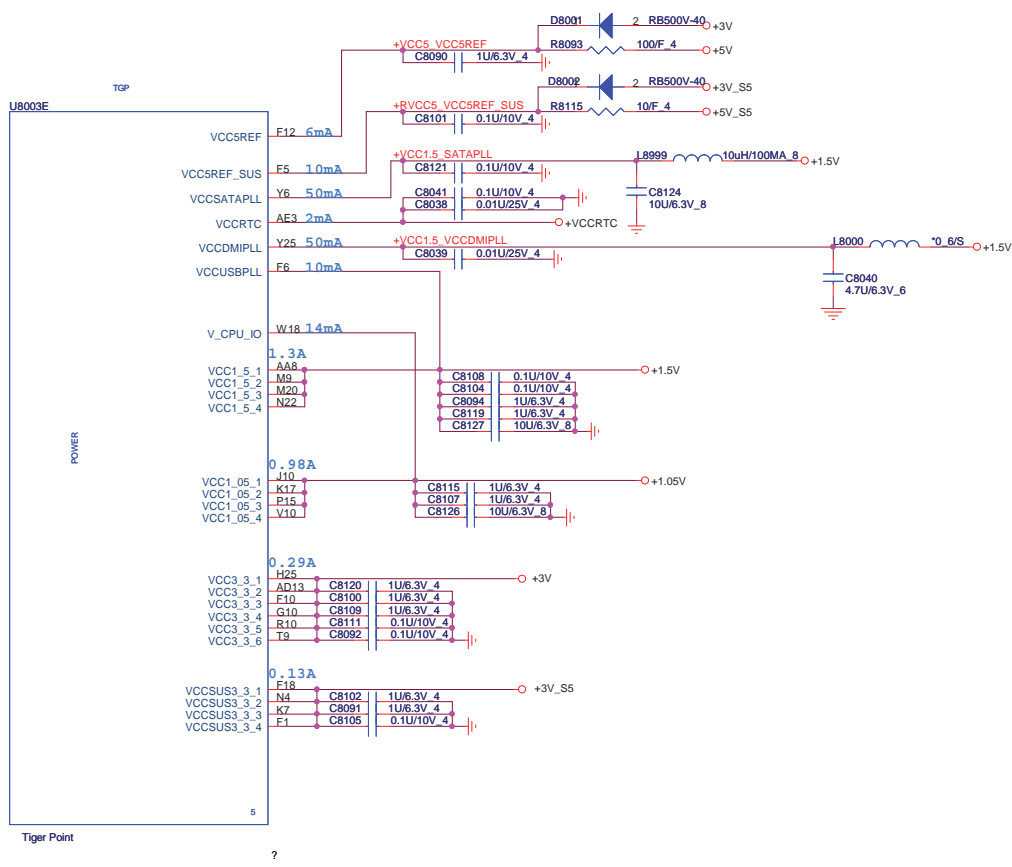
10-K pull-down to GND check list 0.7

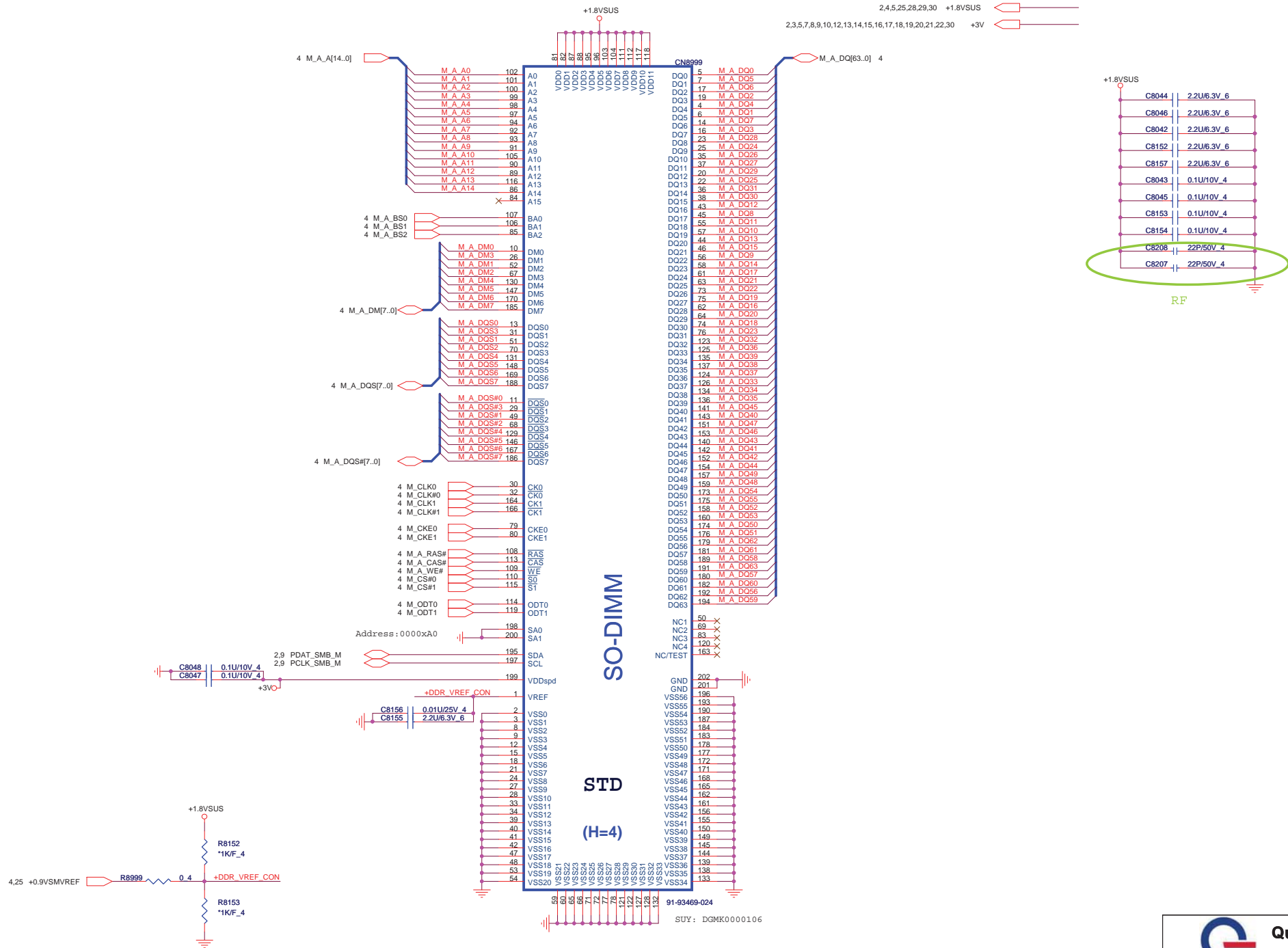
| | INTVRMEN |
|------------------|----------|
| Enable (default) | 1 |
| Disable | 0 |

ICH_INTVRMEN R8042 332K/F_4 +VCCRTC



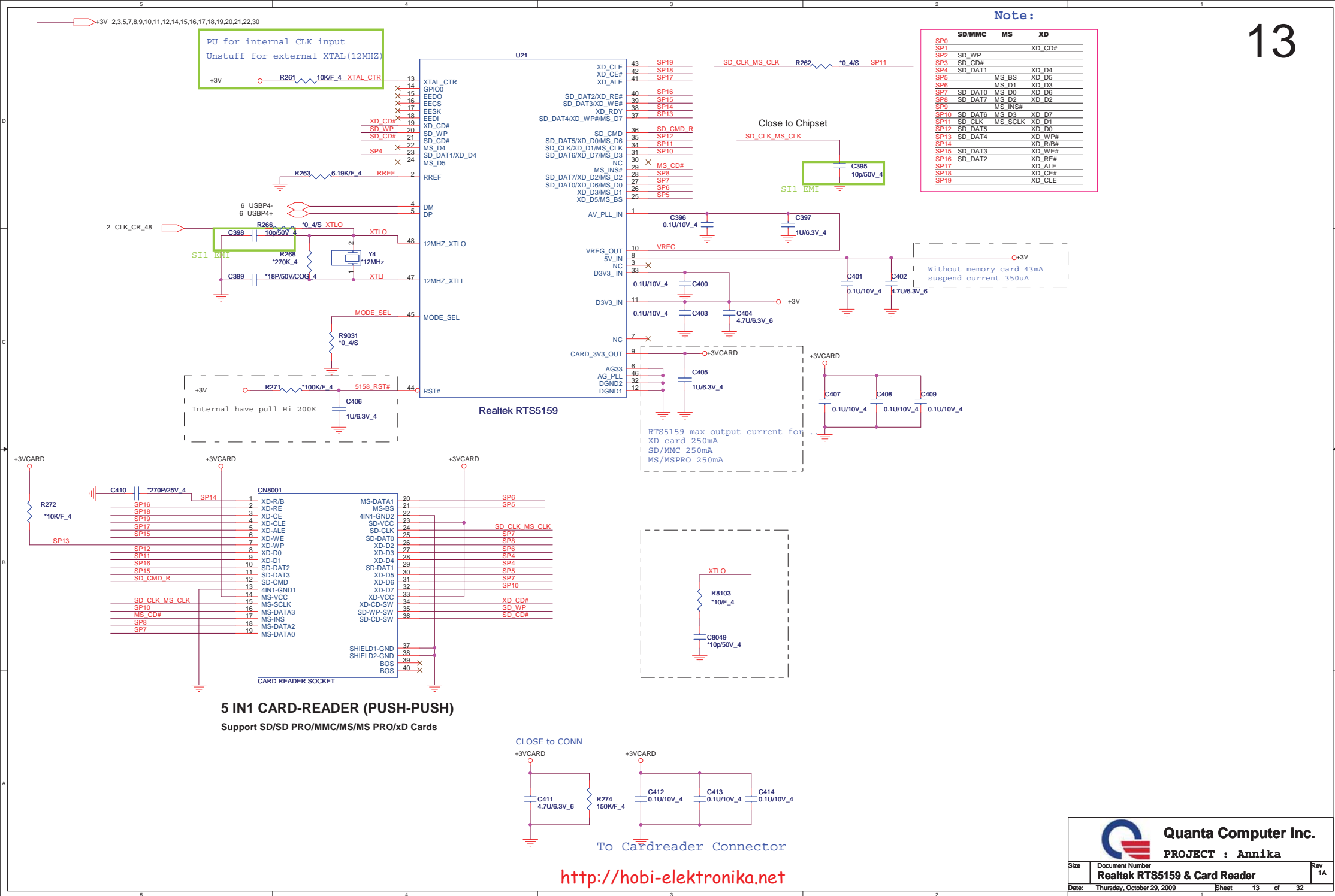
| | | |
|--|--------|--|
| 2,3,5,7,8,9,11,12,13,14,15,16,17,18,19,20,21,22,30 | +3V | |
| 12,16,17,19,20,22,30 | +5V | |
| 5,6,20,30 | +1.5V | |
| 2,3,5,7,14,26,29,31 | +1.05V | |
| 6,9,30 | +3V_S5 | |
| 30 | +5V_S5 | |



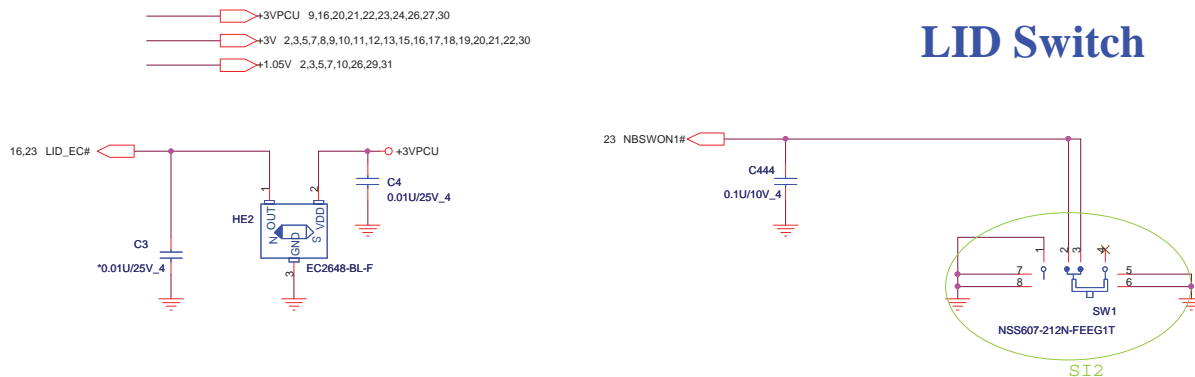


<http://hobi-elektronika.net>

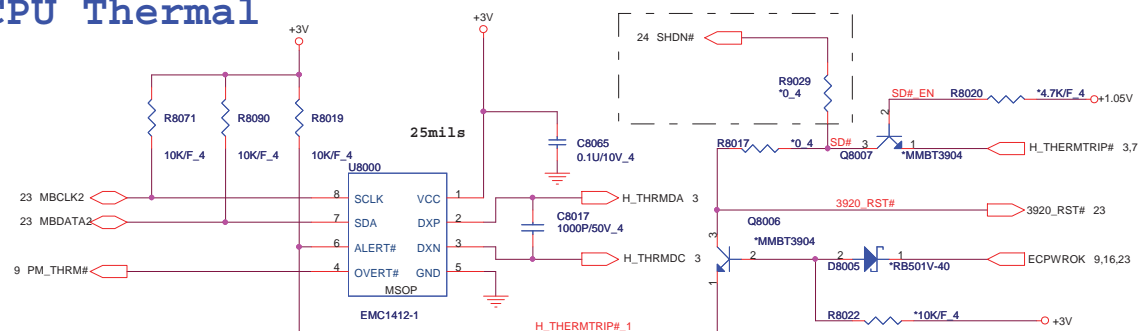




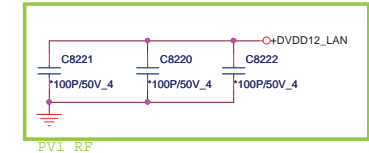
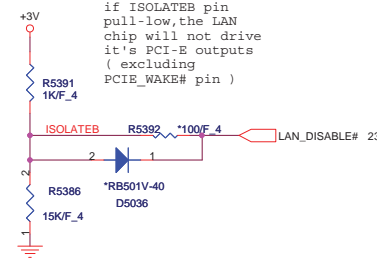
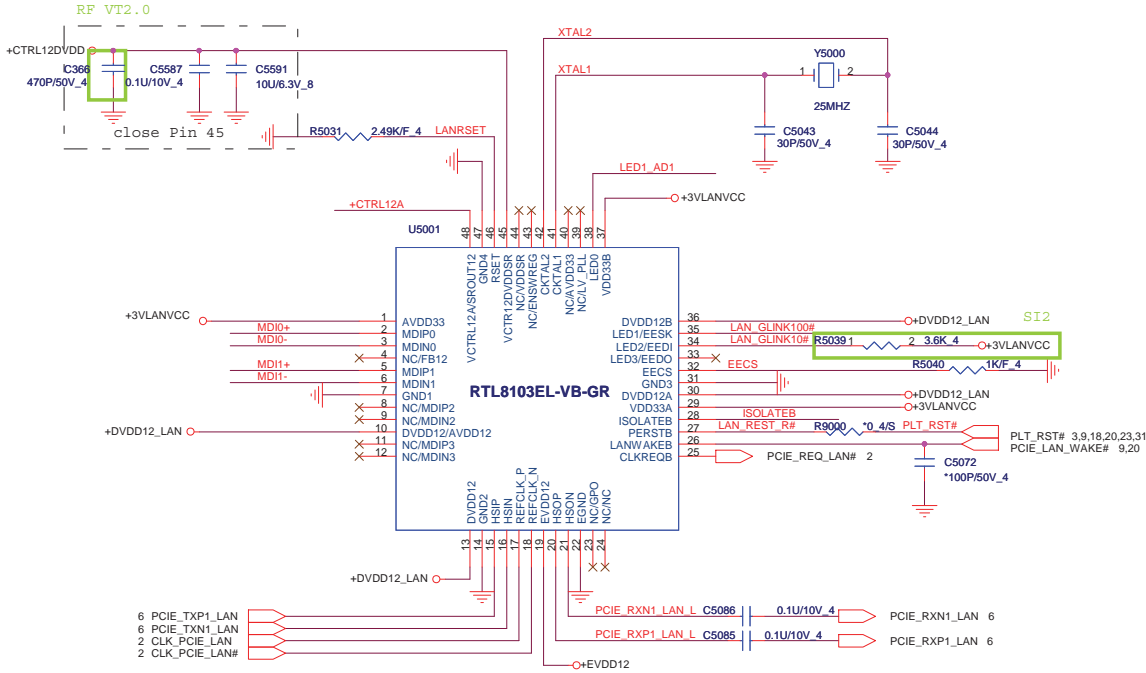
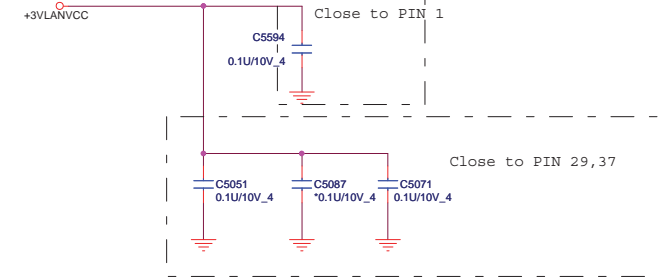
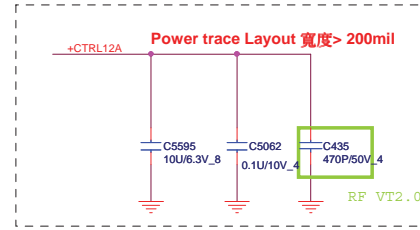
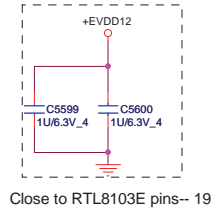
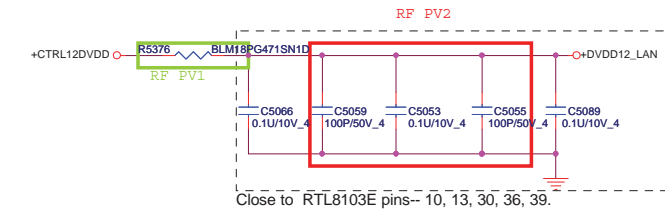
LID Switch



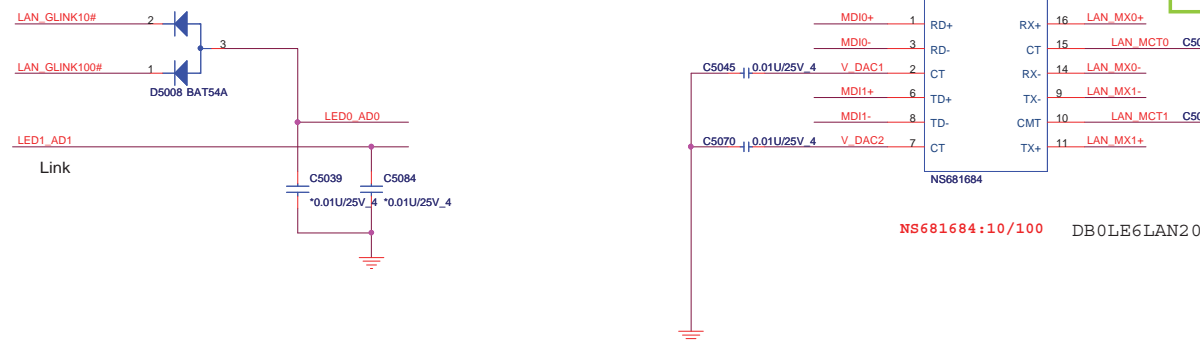
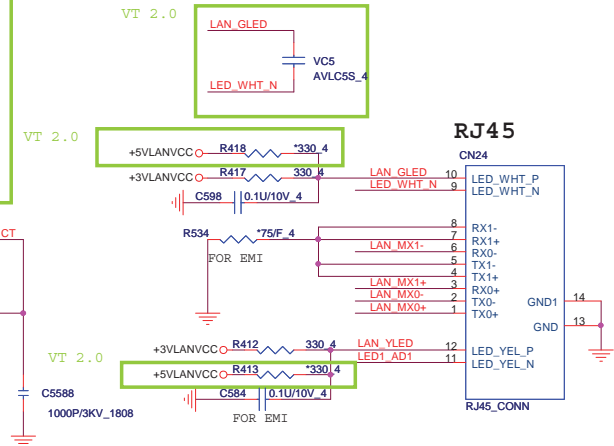
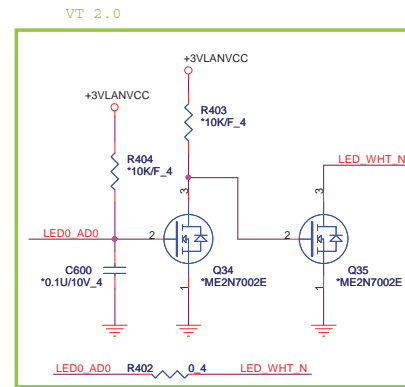
CPU Thermal



2. Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.



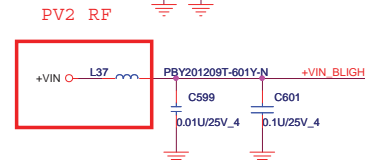
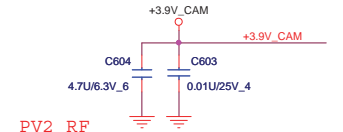
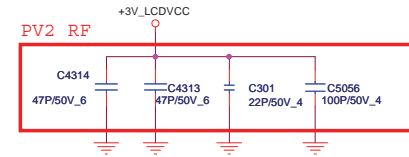
| Symbol | Type | Pin No (64-Pin) | Pin No (48-Pin) | Description |
|--------|------|-----------------|-----------------|---------------------------------|
| LED0 | O | 57 | 38 | LED0: 00 01 10 11 |
| LED1 | O | 56 | 35 | LED1: Tx/Rx Tx/Rx Tx Tx |
| LED2 | O | 55 | 34 | LED2: LINK100 LINK LINK LINK100 |
| LED3 | O | 54 | 33 | LED3: LINK10 FULL Rx LINK10 |



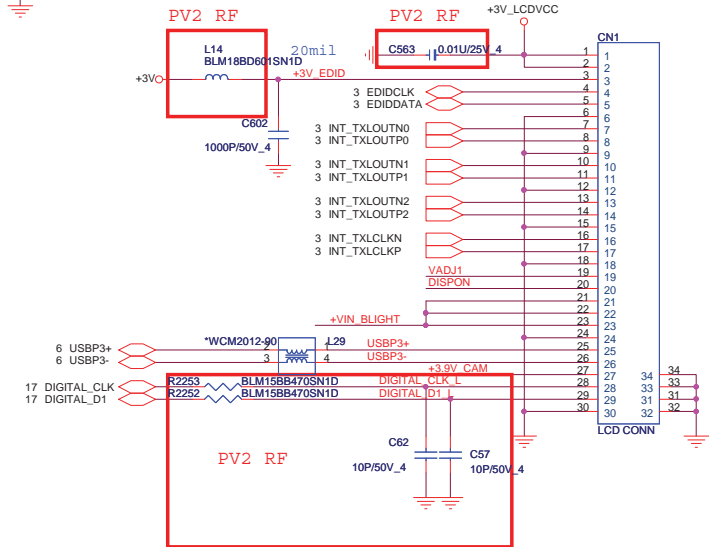
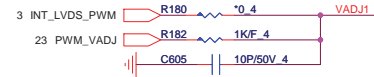
| | |
|--|--------|
| 2,3,5,7,8,9,10,11,12,13,14,15,17,18,19,20,21,22,30 | +3V |
| 9,14,20,21,22,23,24,26,27,30 | +3VPCU |
| 10,12,17,19,20,22,30 | +5V |
| 24,25,26,27,28,29,30 | +VIN |

LED Panel(LDS)

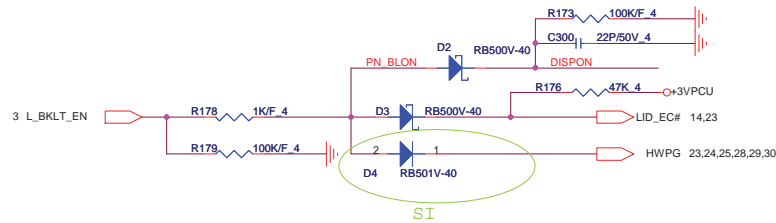
Request by HP RF(47P/50V_6)



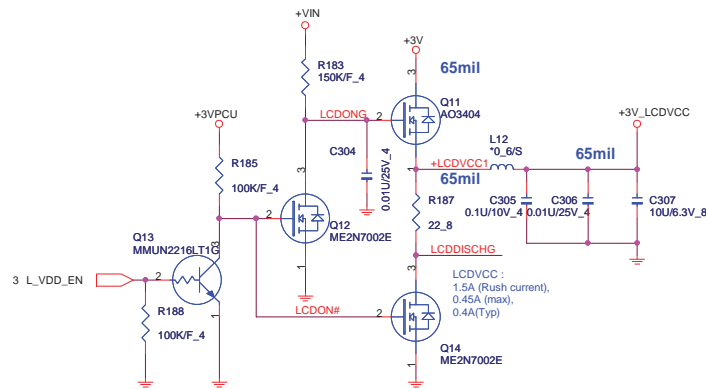
Close to LCD Connector



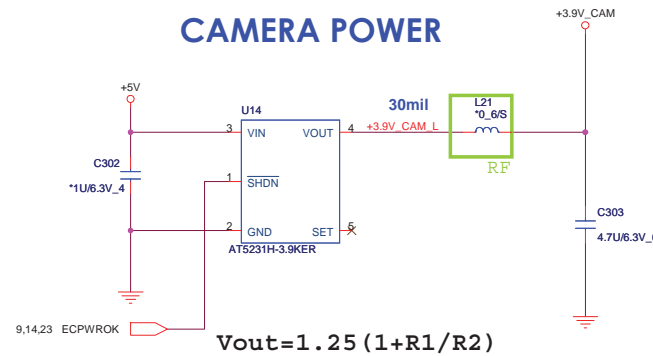
Backlight Control(LDS)



LCD POWER SWITCH



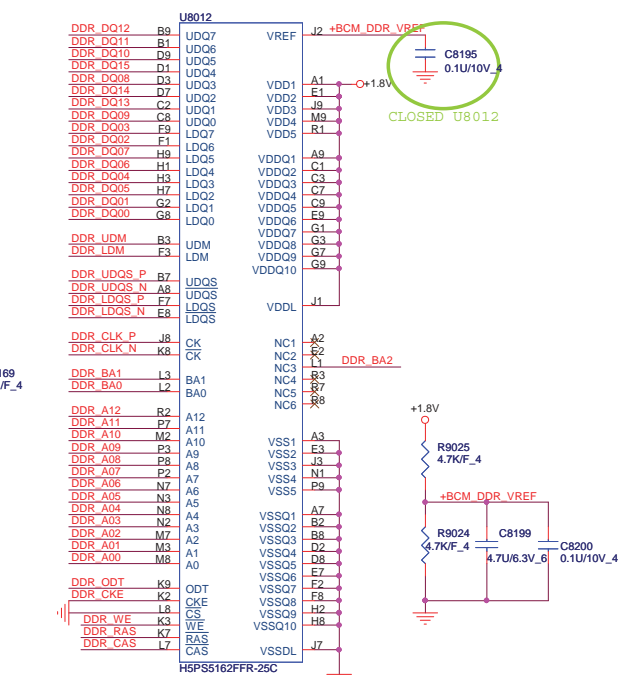
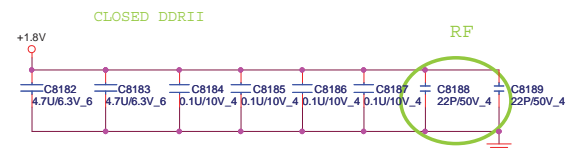
CAMERA POWER




$$V_{out} = 1.25 (1 + R1/R2)$$

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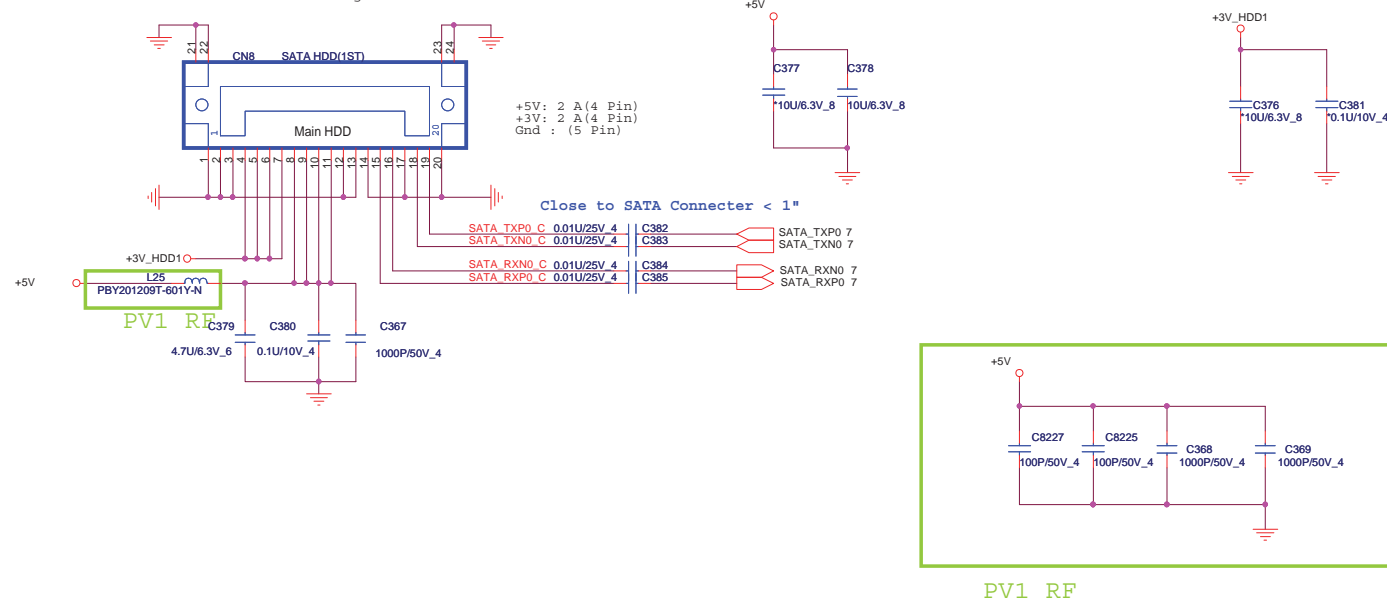
| DESCRIPTION | | Vendor | Vendor P/N | QCI P/N |
|---------------------|--------------|---------|-----------------|-------------|
| DDR2 32Mx16, 128bit | 400MHZ (-25) | HYNIX | H5PS5162FFR-25C | AKD5FG-TW03 |
| DDR2 32Mx16, 128bit | 400MHZ (-25) | SAMSUNG | K4N51163QG-HC25 | AKD5FG-T501 |

| | | |
|--|---|------------------|
|  Quanta Computer Inc. PROJECT : Annika | | |
| Size | Document Number BROADCOM BCM70015 | Rev 1A |
| Date: | Thursday, October 29, 2009 | Sheet 18 of 32 |

2.5" SATA HDD OR SSD(TOSHIBA)

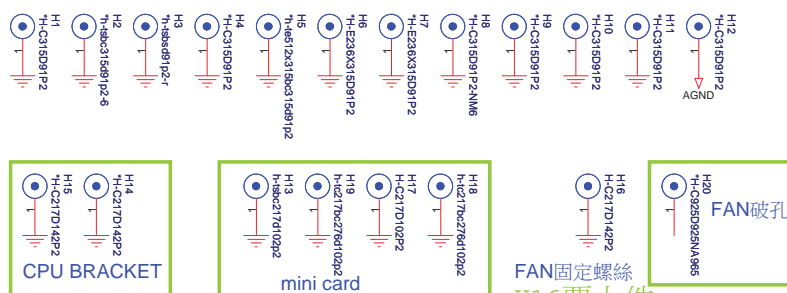
DFHD20MR008

DC Current rating: 0.5 A



PV1 RF

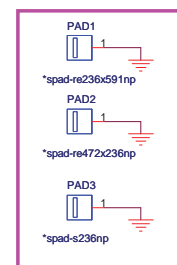
M/B Screw Hole



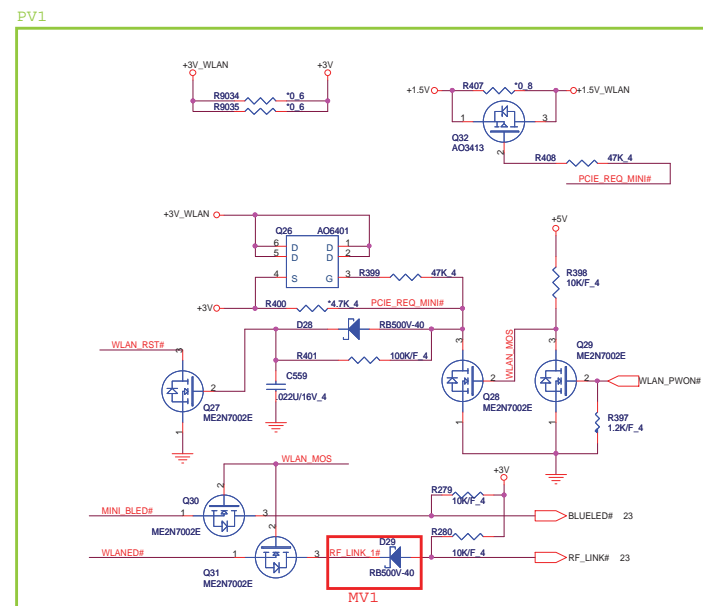
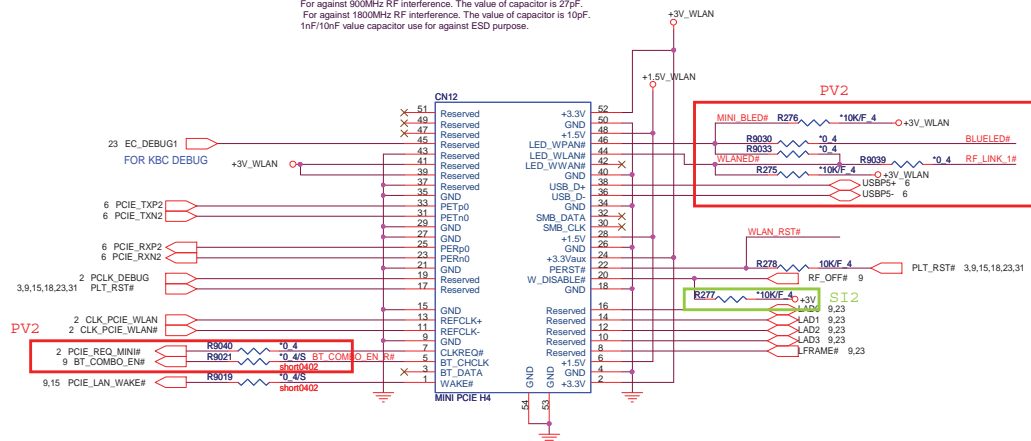
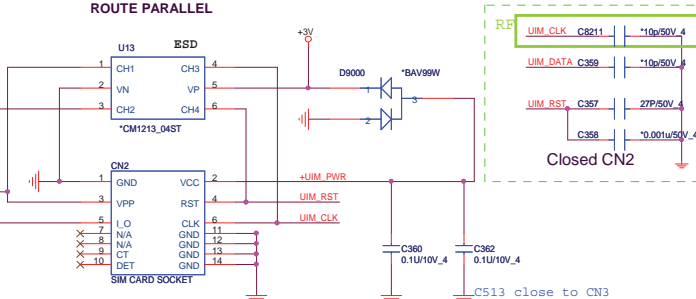
H13/17/18/19 要上件

FAN固定螺絲
H16要上件

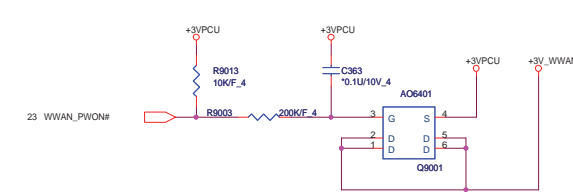
EMI spring



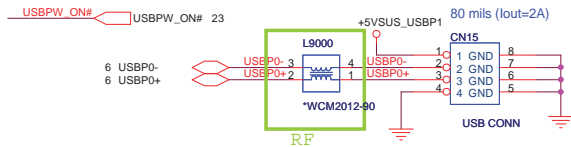
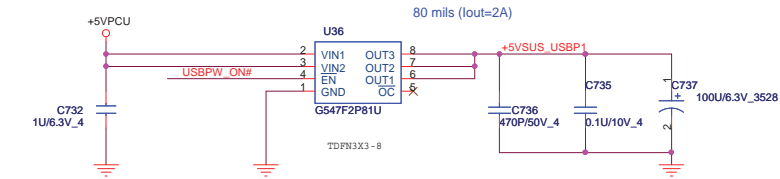
The value of the capacitor is suggest by Siemens HQ expert.
For against 900MHz RF interference. The value of capacitor is 27pF.
For against 1800MHz RF interference. The value of capacitor is 10pF
1nF/10nF value capacitor use for against ESD purpose.

[illegible]

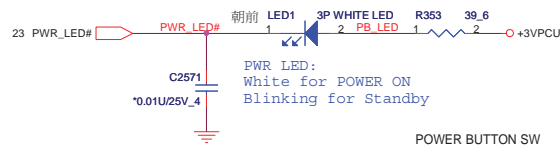
SIM CARD



1x Left side USB port supports Keyed USB.

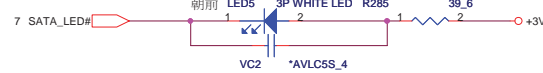


PWR Button/LED

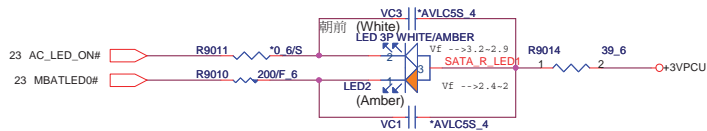


POWER BUTTON SW

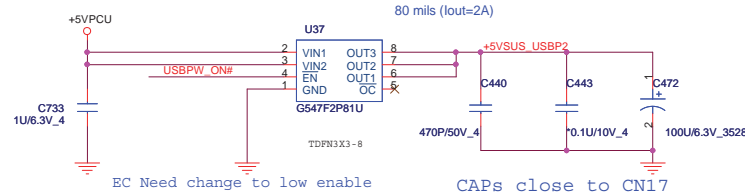
SATA/LED



Charging & Discharging/LED

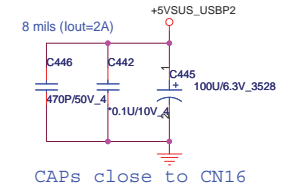


For Right 2xUSB Ports PWR

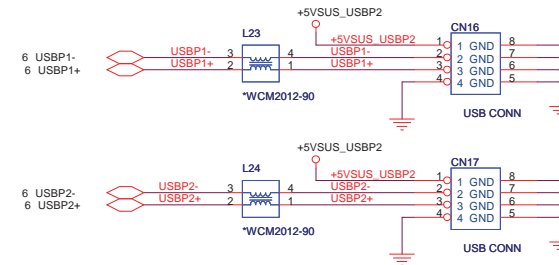


EC Need change to low enable

CAPS close to CN17



CAPS close to CN16

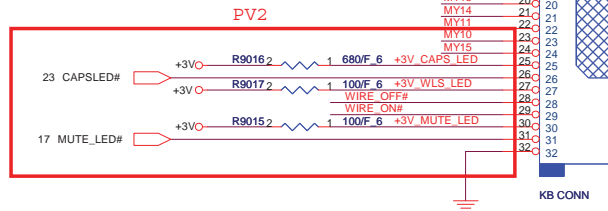
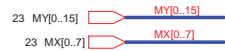
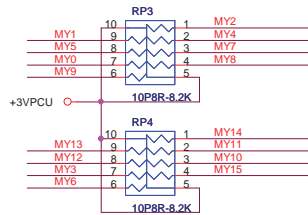


Keyboard (KBC)

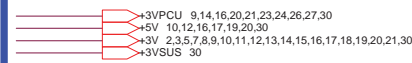
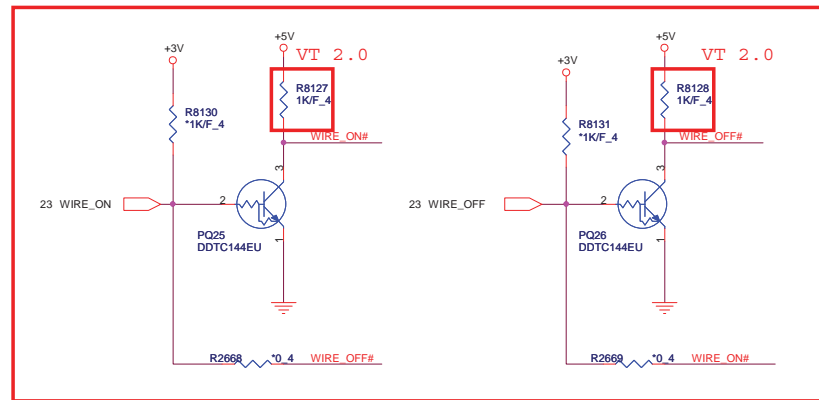


Modify CN2 footprint from bl137-32r1-tand-32p-1 to 196033-32041-32p-1

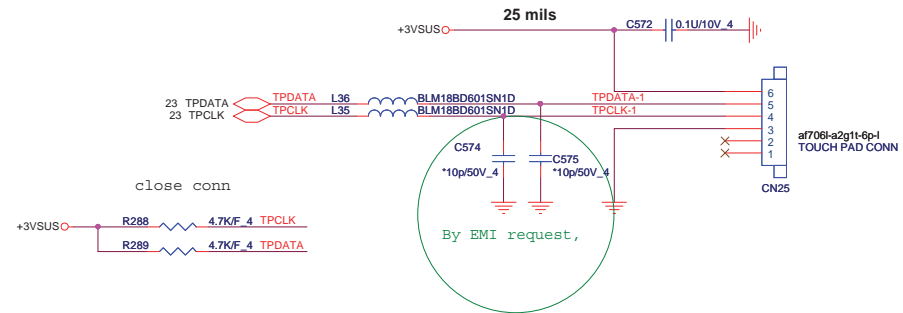
KEYBOARD PULL-UP



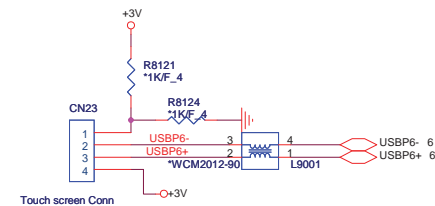
PV2



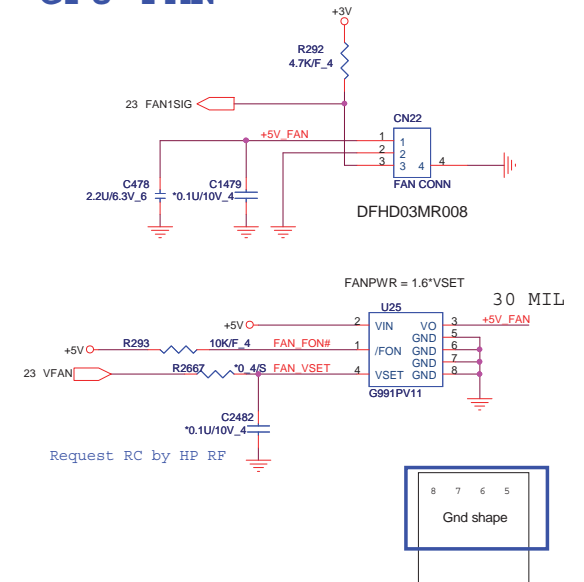
TOUCH PAD CONNECTOR



TOUCH SCREEN



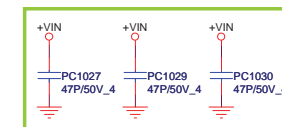
CPU FAN



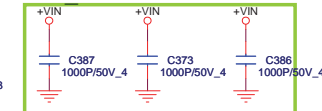
<http://hobi-elektronika.net>



SI2_RF

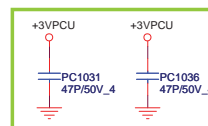


PV1_RF



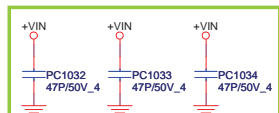
+3VPCU Volt +/- 5%
 Countinue current:4A
 Peak current:5.5A
 OCP minimum 6A

SI2_RF

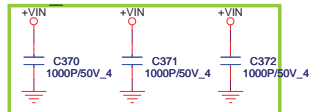


DC/DC +3V_ALW/+5V_ALW/+5V_ALW2 /+15V_ALW

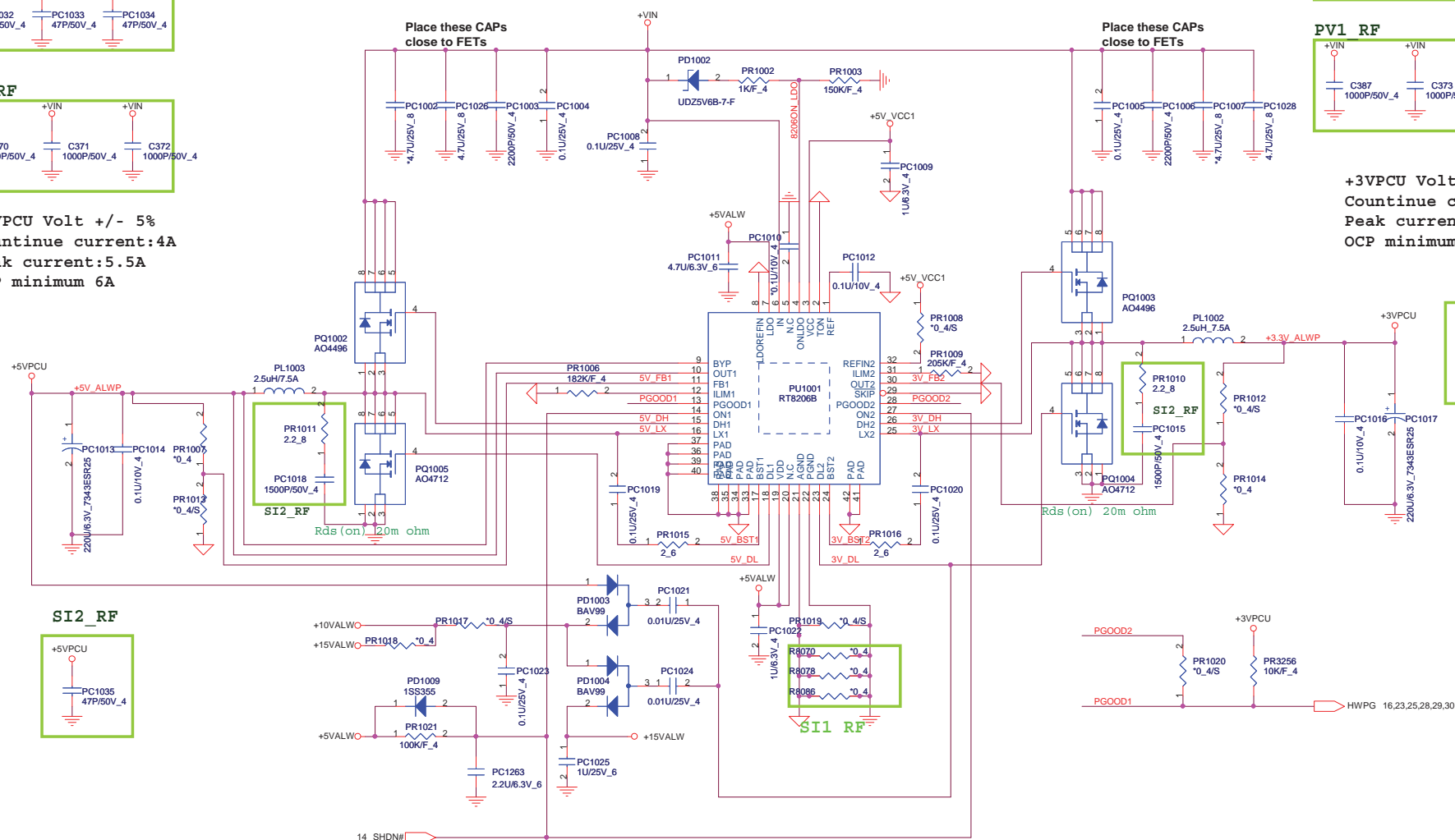
SI2_RF



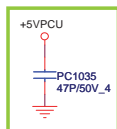
PV1_RF



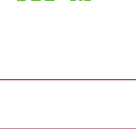
+5VPCU Volt +/- 5%
 Countinue current:4A
 Peak current:5.5A
 OCP minimum 6A

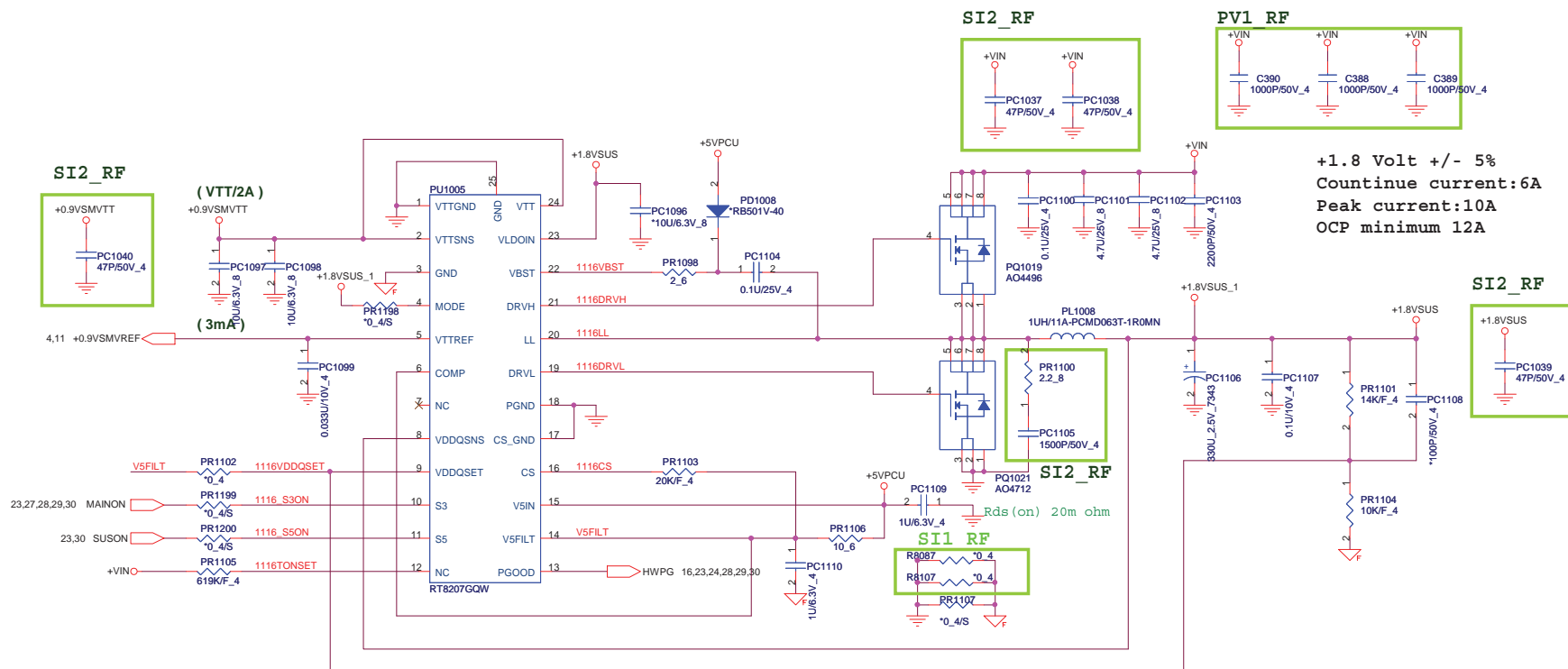


SI2_RF

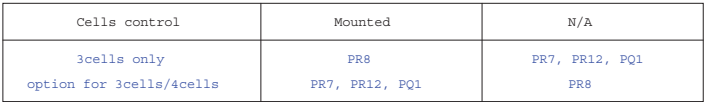


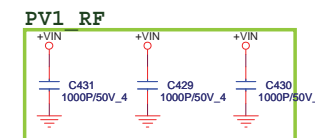
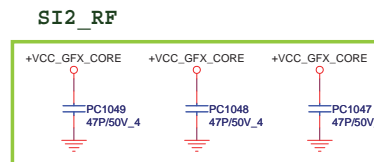
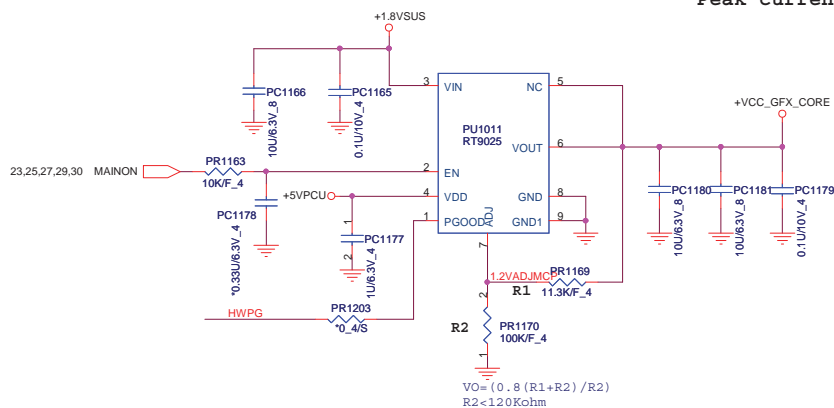
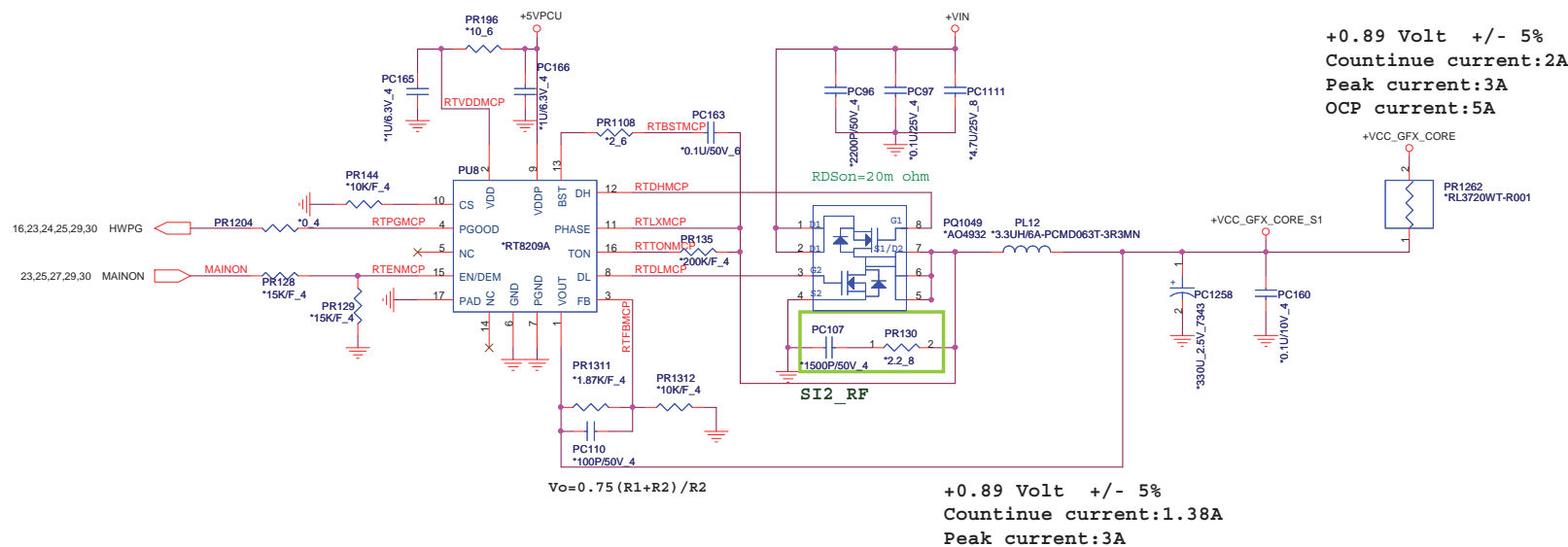
SI1_RF

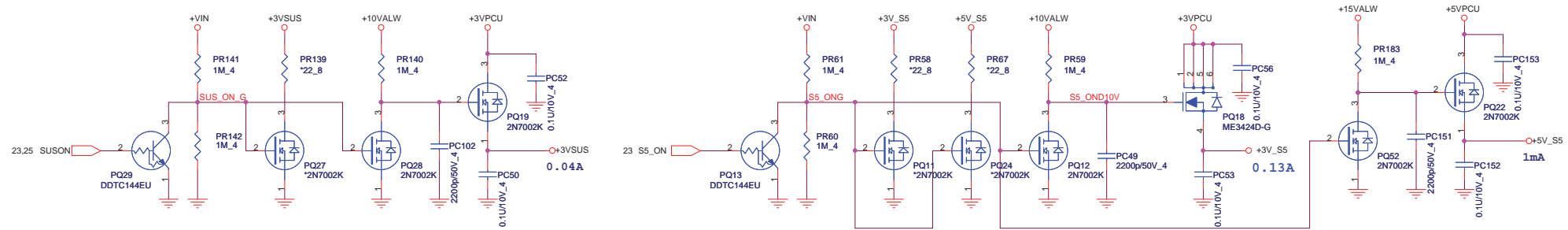
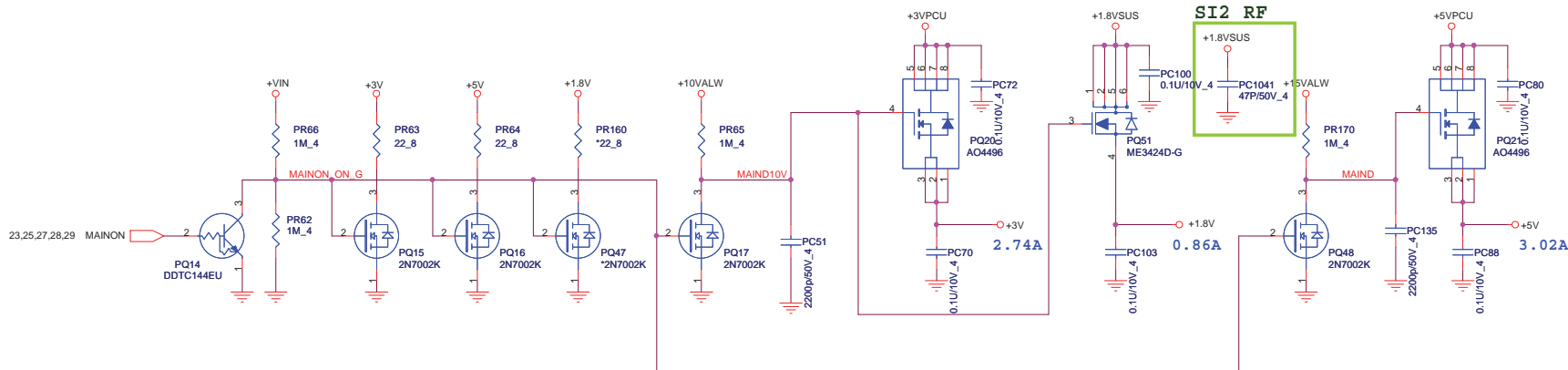




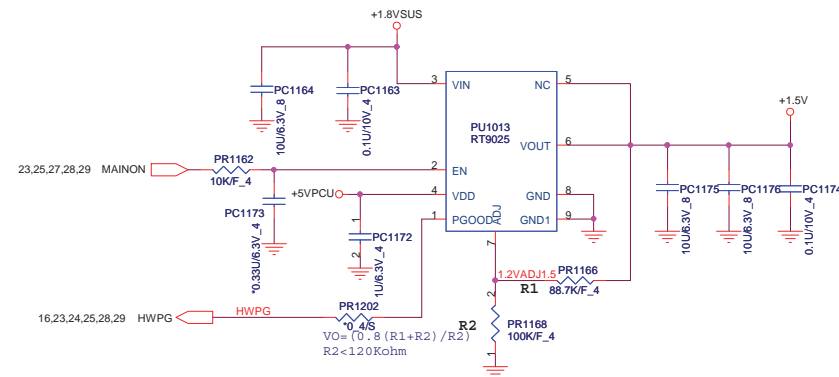
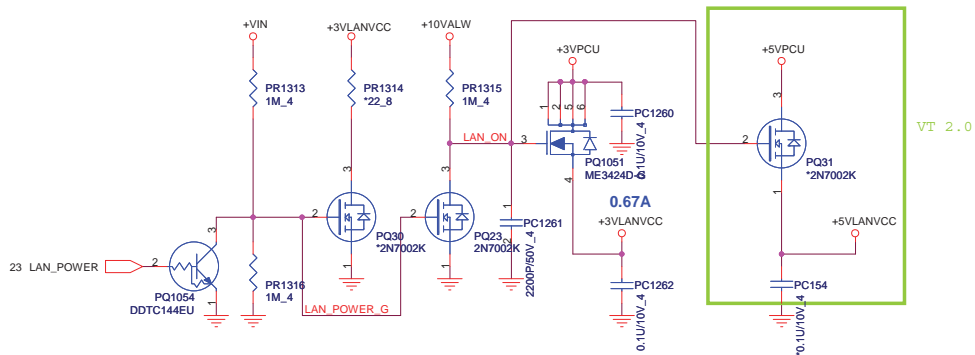




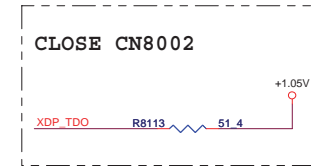
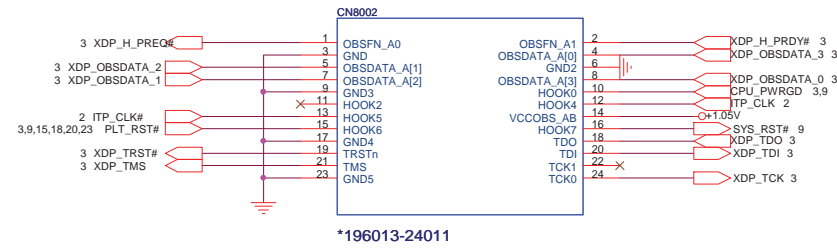




+1.5 Volt +/- 5%
Continue current: 2A
Peak current: 3A



CPU XDP



Power up sequence

