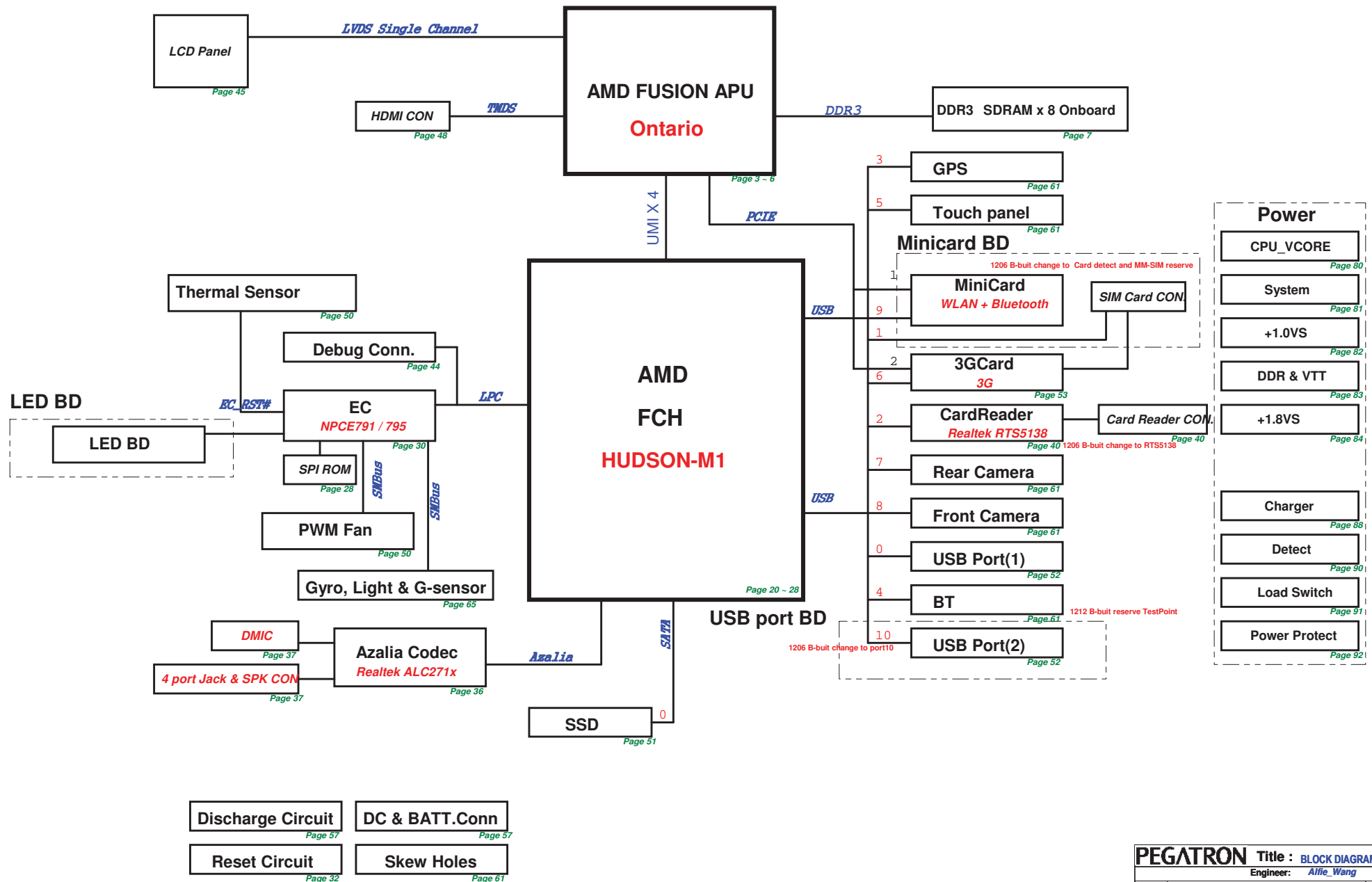


Armani EAB00 AMD Brazos Platform Rev. 2.0

BLOCK DIAGRAM



| FCH Hudson M1 | Use As | Signal Name | INT/EXT Pull-up/down | Power |
|---------------------------------|--------|-----------------------|-------------------------|--------|
| General Events | | | | |
| GA20IN/GEVENT0# | GPI | A20GATE | INT PU 8.2K | +3VS |
| KBRST#/GEVENT1# | GPI | EC_KB_RST# | INT PU 8.2K | +3VS |
| THRMTRIP#/GEVENT2# | GPI | CPU_THERMTRIP# | INT PU 10K | +3VSUS |
| LPC_PME#/GEVENT3# | GPI | EXT_SCI# @ | | +3VSUS |
| PCI_PME#/GEVENT4# | GPI | EXT_SMI# @ | | +3VSUS |
| SPI_CS3#/GBE_STAT1/GEVENT21# | GPI | EXT_SCI# | INT PU 10K | +3VSUS |
| RI#/GEVENT22# | GPI | EXT_SMI# | INT PU 10K | +3VSUS |
| GEVENT5# | GPI | USB30_EXT_SMI# | INT PU 10K | +3VSUS |
| WAKE#/GEVENT8# | GPI | PCIE_WAKE# | INT PU 10K | +3VSUS |
| USB_OC3#/ACPres/TDO/GEVENT15# | | SATA_ODD_PRSENT# | INT PU 10K | +3VSUS |
| USB_OC4#/IR_RX0/GEVENT16# | | SATA_ODD_DA# | INT PU 10K | +3VSUS |
| SLP_S3# | GPO | PM_SUSB# | EXT PD 100K | +3VSUS |
| SLP_S5# | GPO | PM_SUSC# | EXT PD 100K | +3VSUS |
| PWR_BTN# | GPI | PM_PWRBTN# | | +3VSUS |
| PWR_GOOD | GPI | PM_PWROK | | +3VSUS |
| RSMRST# | GPI | PM_RSMRST# | EXT PD 10K | +3VSUS |
| NB_PWRGD | | NB_PWRGD | EXT PU 4.7K | +3VSUS |
| | | | | |
| GPIO | | | | |
| INTH#/GPIO35 | | VGA_PWRON | EXT PU 8.2K | +3VS |
| SCL0/GPIO43 | | SMB_CLK_S | EXT PU 2.2K | +3VS |
| SDA0/GPIO47 | | SMB_DAT_S | EXT PU 2.2K | +3VS |
| SERIRQ/GPIO48 | | INT_SERIRQ | INT PU 8.2K | +3VS |
| FANOUT0/GPIO53 | GPO | WLAN_ON | INT PU 8.2K | +3VS |
| SATA_IS4#/FANOUT3/GPIO55 | Native | SATA_ODD_PWRGT | INT PU 8.2K | +3VS |
| CLK_REQ1#/FANOUT4/GPIO61 | Native | CLKREQ_MINICARD_WLAN# | EXT PD 10K @ | +3VS |
| CLK_REQ2#/FANIN4/GPIO62 | Native | CLKREQ2_LAN# | EXT PD 10K @ | +3VS |
| CLKREQ3#/SATA_IS1#/GPIO63 | Native | CLKREQ_PCIE_USB30# | EXT PD 10K @ | +3VS |
| CLK_REQ4#/SATA_ISO#/GPIO64 | Native | CLK_REQ4#_DP | EXT PD 10K | +3VS |
| CLK_REQG#/GPIO65/OSCIN/IDLEEXT# | Native | ATI_CLKREQ# | INT PU 8.2K | +3VS |
| SPKR/GPIO66 | | SB_SPKR | - | +3VS |
| SATA_ACT#/GPIO67 | | SATA_LED# | EXT PU 10K | +3VS |
| SPI_CLK/GPIO162 | | SPI_CLK | INT PD 10K | +3VSUS |
| SPI_DO/GPIO163 | | SPI_DO | INT PD 10K | +3VSUS |
| SPI_DI/GPIO164 | | SPI_DI | INT PD 10K | +3VSUS |
| SPI_CS1#/GPIO165 | | SPI_CS1# | INT PD 10K | +3VSUS |
| AZ_SDIN0/GPIO167 | | ACZ_SDIN0 | EXT PD 10K @ | +3VSUS |
| AZ_SDIN0/GPIO168 | | ACZ_SDIN1 | EXT PD 10K @ | |
| AZ_SDIN0/GPIO169 | | ACZ_SDIN2 | EXT PD 10K @ | |
| | | | | |
| TEMPIN0/GPIO171 | | | EXT PD 10K | +3VSUS |
| TEMPIN1/GPIO172 | | | EXT PD 10K | +3VSUS |
| TEMPIN2/GPIO173 | | | EXT PD 10K | +3VSUS |
| TEMPIN3/TELERT#/GPIO174 | | APU_ALERT# | | +3VSUS |
| VIN0/GPIO175 | | | EXT PD 10K | +3VSUS |
| VIN1/GPIO176 | | | EXT PD 10K | +3VSUS |
| VIN2/GPIO177 | | | EXT PD 10K | +3VSUS |
| VIN3/GPIO178 | | | EXT PD 10K | +3VSUS |
| VIN4/GPIO179 | | | EXT PD 10K | +3VSUS |
| VIN5/GPIO180 | | | EXT PD 10K | +3VSUS |
| VIN6/GBE_STAT3/GPIO181 | | | EXT PD 10K | +3VSUS |
| VIN7/GBE_LED3/GPIO182 | | | EXT PD 10K | +3VSUS |
| USB_FSD0P/GPIO185 | | USB_CB0 | INT PD 15K | +3VSUS |
| USB_FSD0P/GPIO186 | | USB_CB1 | INT PD 15K | +3VSUS |
| PS2_DAT/SDA4/GPIO187 | | WLAN_LED | INT PU 10K | +3VSUS |
| SCL2/GPIO193 | | | EXT PD 10K | |
| SDA2/GPIO194 | | | EXT PD 10K | |
| SCL3_LV/GPIO195 | | | EXT PD 10K | |
| SDA3_LV/GPIO196 | | | EXT PD 10K | |
| EC_PWM2/EC_TIMER2/GPIO199 | | EC_PWM2 | EXT PU 10K | |
| EC_PWM3/EC_TIMER3/GPIO200 | | EC_PWM3 | EXT PD 2.2K @ | |
| KSI_0/GPIO209 | | USB_SEL (DOS:1/WIN:0) | INT PU 10K | +3VSUS |
| KSO_1/GPIO210 | | BT_ON | INT PU 10K | +3VSUS |
| SCL1/GPIO227 | | | EXT PD 10K | +3VSUS |
| SDA1/GPIO228 | | | EXT PD 10K | +3VSUS |

| EC GPIO | Use As | Signal Name |
|---------|--------|------------------|
| GPIO0 | | RTCCCLK |
| GPIO1 | | FAN0_TACH |
| GPIO2 | | - |
| GPIO3 | | PWR_SW# |
| GPIO4 | | BAT1_IN_OC# |
| GPIO5 | | AC_IN_OC |
| GPIO6 | | DC_IN_LED# |
| GPIO7 | | - |
| GPIO8 | | - |
| GPIO9 | | - |
| GPIO10 | | SUSB_EC# |
| GPIO11 | | PM_CLKRUN# |
| GPIO12 | | - |
| GPIO13 | | PM_PWROK |
| GPIO14 | | USB_OC2#_EC |
| GPIO15 | | PWR_GREEN_LED# |
| GPIO16 | | - |
| GPIO17 | | SMB0_CLK |
| GPIO18 | | - |
| GPIO19 | | - |
| GPIO20 | | USB_OC1#_EC |
| GPIO21 | | PWR_AMBER_LED# |
| GPIO22 | | SMB0_DAT |
| GPIO23 | | PLT_ID0 |
| GPIO24 | | - |
| GPIO25 | | - |
| GPIO26 | | TP_CLK |
| GPIO27 | | TP_DAT |
| GPIO28 | | - |
| GPIO29 | | - |
| GPIO30 | | VSUS_ON |
| GPIO31 | | EC_LPCRST_GATE |
| GPIO32 | | LCD_BL_PWM |
| GPIO33 | | - |
| GPIO34 | | - |
| GPIO35 | | - |
| GPIO36 | | NUM_LED# |
| GPIO37 | | - |
| GPIO38 | | - |
| GPIO39 | | - |
| GPIO40 | | BAT_WHITE_LED# |
| GPIO41 | | TP_ON_OFF# |
| GPIO42 | | PM_PWRBTN# |
| GPIO43 | | PM_RSMRST# |
| GPIO44 | | ALL_SYSTEM_PWRGD |
| GPIO45 | | BAT_ORG_LED# |
| GPIO46 | | - |
| GPIO47 | | PM_SUSC# |
| GPIO48 | | - |
| GPIO49 | | - |
| GPIO50 | | LCD_BACKOFF# |
| GPIO51 | | CAP_LED# |
| GPIO52 | | THRO_CPU |
| GPIO53 | | SUS_PWRGD |
| GPIO54 | | EXT_SCI# |
| GPIO55 | | - |
| GPIO56 | | PLT_ID1 |
| GPIO57 | | KSO17 |
| GPIO58 | | - |
| GPIO59 | | - |
| GPIO60 | | KSO16 |
| GPIO61 | | KSO15 |
| GPIO62 | | KSO14 |
| GPIO63 | | KSO13 |
| GPIO64 | | KSO12 |
| GPIO65 | | EXT_SMI# |
| GPIO66 | | FAN_PWM |

| EC GPIO | Use As | Signal Name |
|---------|--------|-------------|
| GPIO67 | | SUSC_EC# |
| GPIO68 | | - |
| GPIO69 | | - |
| GPIO70 | | OP_SD# |
| GPIO71 | | PM_SUSB# |
| GPIO72 | | LID_SW# |
| GPIO73 | | SMB1_CLK |
| GPIO74 | | SMB1_DAT |
| GPIO75 | | - |
| GPIO76 | | SHBM |
| GPIO77 | | - |
| GPIO78 | | - |
| GPIO79 | | - |
| GPIO80 | | - |
| GPIO81 | | CPU_VRON |
| GPIO82 | | USBSLP_EN# |
| GPIO83 | | - |
| GPIO84 | | USBP01_EN# |
| GPIO85 | | A20GATE |
| GPIO86 | | RCIN# |
| GPIO87 | | - |
| GPIO88 | | - |
| GPIO89 | | - |
| GPIO90 | | AD_IINP |
| GPIO91 | | - |
| GPIO92 | | - |
| GPIO93 | | - |
| GPIO94 | | - |
| GPIO95 | | - |
| GPIO96 | | CTL_FAN |
| GPIO97 | | VRM_PWRGD |

SM_BUS ADDRESS :

| SM-Bus Device | SM-Bus Address |
|------------------------|------------------|
| SO-DIMM 0 | 1010000x (A0h) |
| SO-DIMM 1 | 1010001x (A4h) |
| CPU Thermal IC(G780) | 1001100x (98h) |
| VGA Thermal IC(G781-1) | 1001100x (9Ah) |
| | |
| | |
| | |

| APU | DP0 | LVDS | USB 0 | USB Port (1) |
|-----|------|------------|--------|--------------|
| | DP1 | HDMI | USB 1 | USB Port (2) |
| FCH | GPP0 | N/A | USB 2 | USB Port (3) |
| | GPP1 | WLAN | USB 3 | USB Port (4) |
| | GPP2 | LAN | USB 4 | N/A |
| | GPP3 | USB3.0_NEC | USB 5 | N/A |
| | GPP4 | N/A | USB 6 | N/A |
| | GPP5 | N/A | USB 7 | Card Reader |
| | | | USB 8 | CMOS Camera |
| | | | USB 9 | Bluetooth |
| | | | USB 10 | N/A |
| | | | USB 11 | N/A |
| | | | USB 12 | N/A |
| | | | USB 13 | N/A |

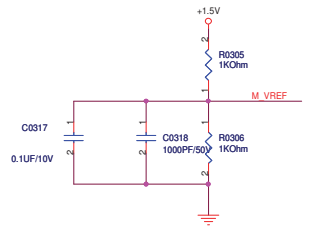
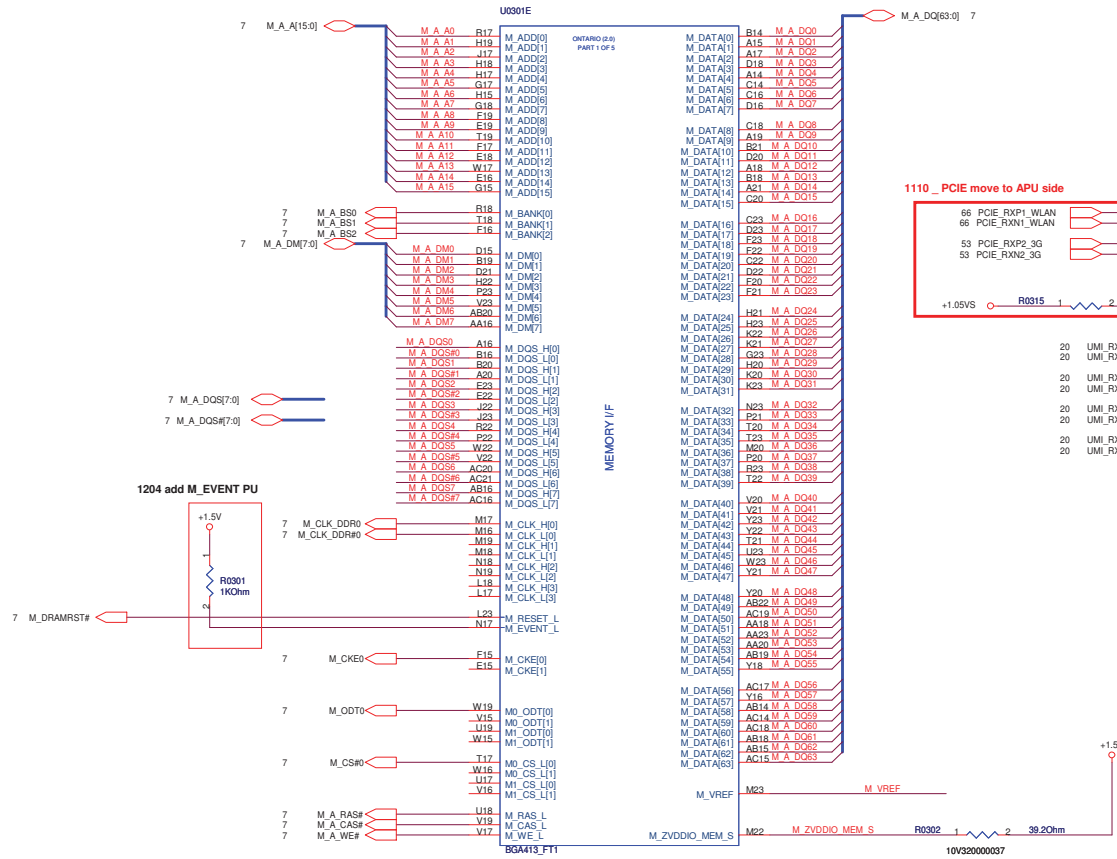
| | |
|-------|----------|
| SATA0 | SATA HDD |
| SATA1 | N/A |
| SATA2 | N/A |
| SATA3 | N/A |
| SATA4 | N/A |
| SATA5 | N/A |

PEGATRON Title : System Setting

Engineer: Alie Wang

Size C Project Name EAB00 Rev 2.0

Date: Tuesday, January 25, 2011 Sheet 2 of 95



place within 1000mils with APU

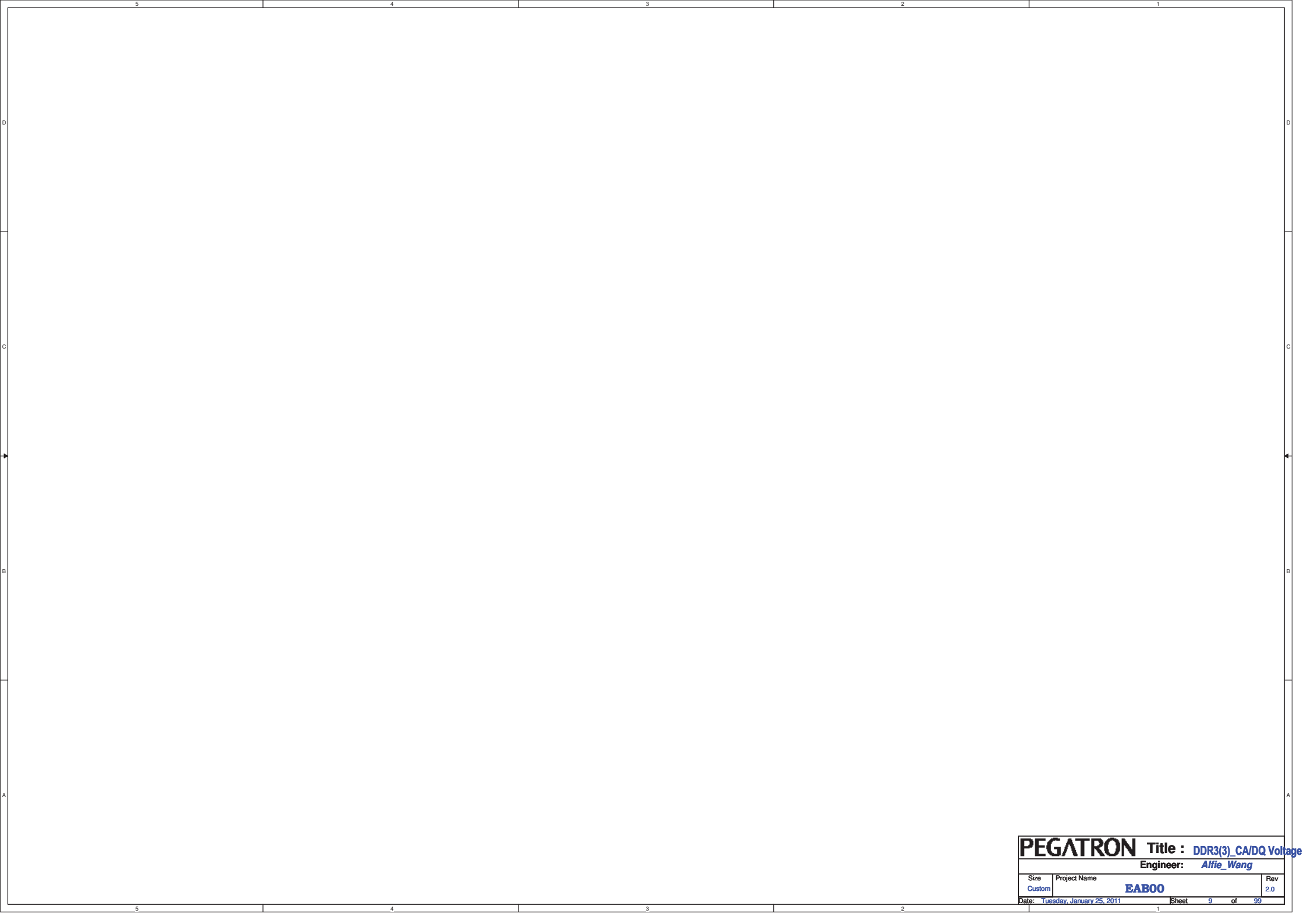


| | | | |
|---------------------------------|--------------|-----------------------------|---------|
| PEGATRON | | Title : CPU(4)_PWR | |
| | | Engineer: Alfie_Wang | |
| Size | Project Name | | |
| Custom | EABOO | Rev | 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 6 of 99 |

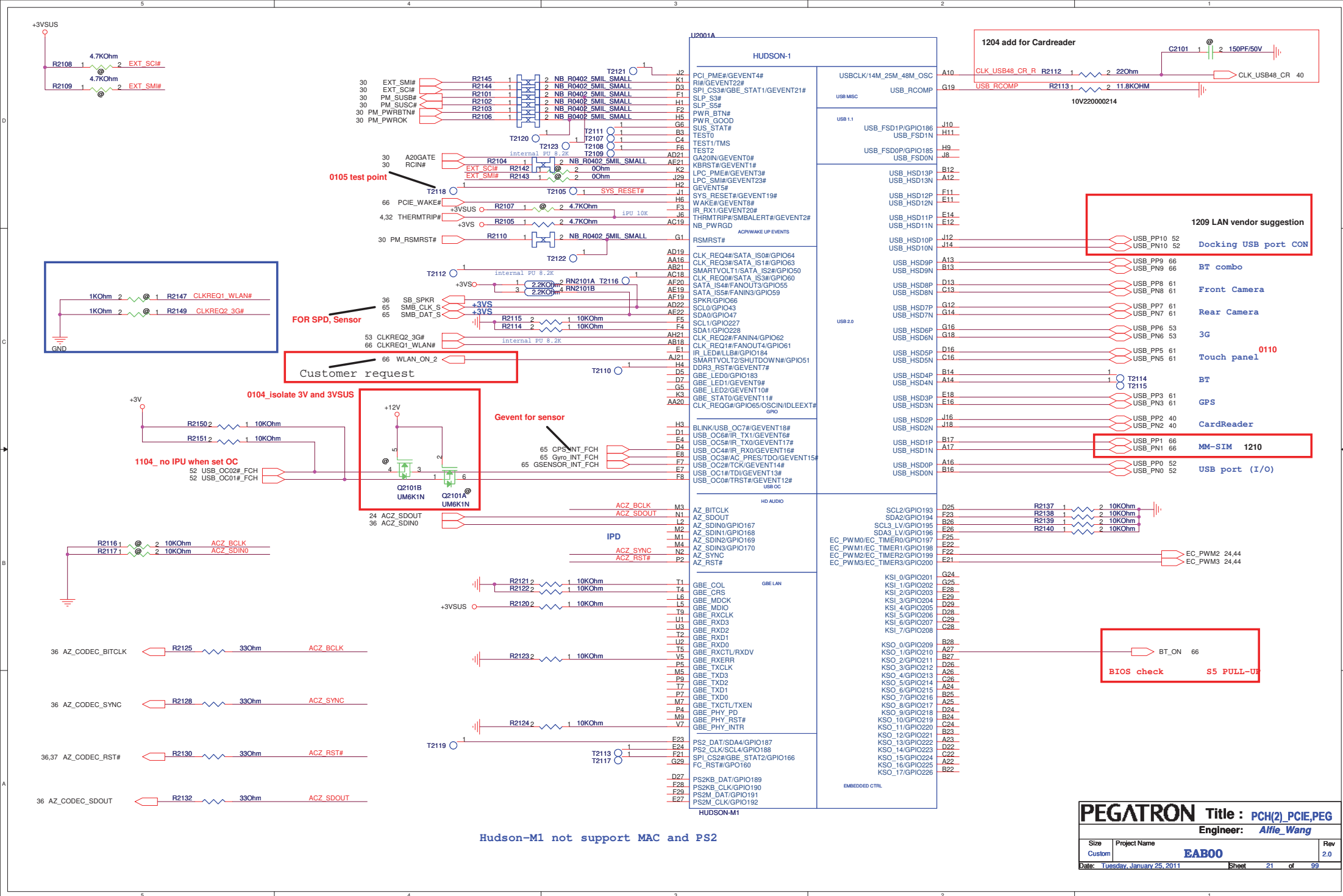


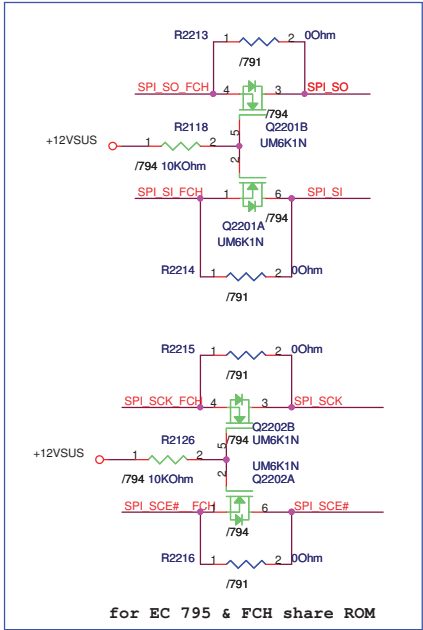


| | | | |
|---------------------------------|-----------------------|--------------------------|------------|
| PEGATRON | | Title : DDR3(2)_SO-DIMM1 | |
| | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 6 | of 99 |



| | | | |
|---------------------------------|------------------------------|--------------------------------------|---------|
| PEGATRON | | Title : DDR3(3)_CA/DQ Voltage | |
| | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | Rev 2.0 | |
| Date: Tuesday, January 25, 2011 | | Sheet | 9 of 99 |



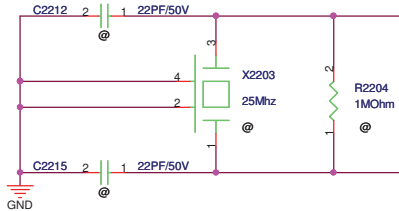


SSD

51 SATA_TXP0
51 SATA_TXN0
51 SATA_RXN0
51 SATA_RXP0

+AVDD_SATA

For external clock mode used



28.44 SPI_SO
28.44 SPI_SI
28.44 SPI_SCK
28.44 SPI_SCE#

U2001B

HUDSON-1

51 SATA_TXP0
51 SATA_TXN0
51 SATA_RXN0
51 SATA_RXP0
AH9
AJ9
AH8
AJ8
AH10
AJ10
AG10
AF10
AH12
AJ12
AH12
AJ12
AH14
AJ14
AG14
AF14
AG17
AF17
AJ17
AH17
AJ18
AH18
AH19
AJ19

AB14
AA14
AD11
AD16
AC16

HUDSON-M1

FC_CLK
FC_FBCLKOUT
FC_FBCLKIN
FC_QE#/GPIO145
FC_AV0#/GPIO146
FC_WE#/GPIO148
FC_CE1#/GPIO149
FC_CE2#/GPIO150
FC_INT1/GPIO144
gpioFC_INT2/GPIO147
FC_AD00/GPIO128
FC_AD01/GPIO129
FC_AD02/GPIO130
FC_AD03/GPIO131
FC_AD04/GPIO132
FC_AD05/GPIO133
FC_AD06/GPIO134
FC_AD07/GPIO135
FC_AD08/GPIO136
FC_AD09/GPIO137
FC_AD10/GPIO138
FC_AD11/GPIO139
FC_AD12/GPIO140
FC_AD13/GPIO141
FC_AD14/GPIO142
FC_AD15/GPIO143

FANOUT0/GPIO52
FANOUT1/GPIO53
FANOUT2/GPIO54
FANIN0/GPIO56
FANIN1/GPIO57
FANIN2/GPIO58

TEMPIN0/GPIO171
TEMPIN1/GPIO172
TEMPIN2/GPIO173
TEMPIN3/TALERT#/GPIO174
HW MONITOR
TEMP_COMM

VIN0/GPIO175
VIN1/GPIO176
VIN2/GPIO177
VIN3/GPIO178
VIN4/GPIO179
VIN5/GPIO180
VIN6/GBE_STAT3/GPIO181
VIN7/GBE_LED3/GPIO182

NC1
NC2

Hudson-M1 not support flash memory

WLAN_ON
R2209 2 1 10KOhm

3G_ON_2 53
WLAN_ON 66

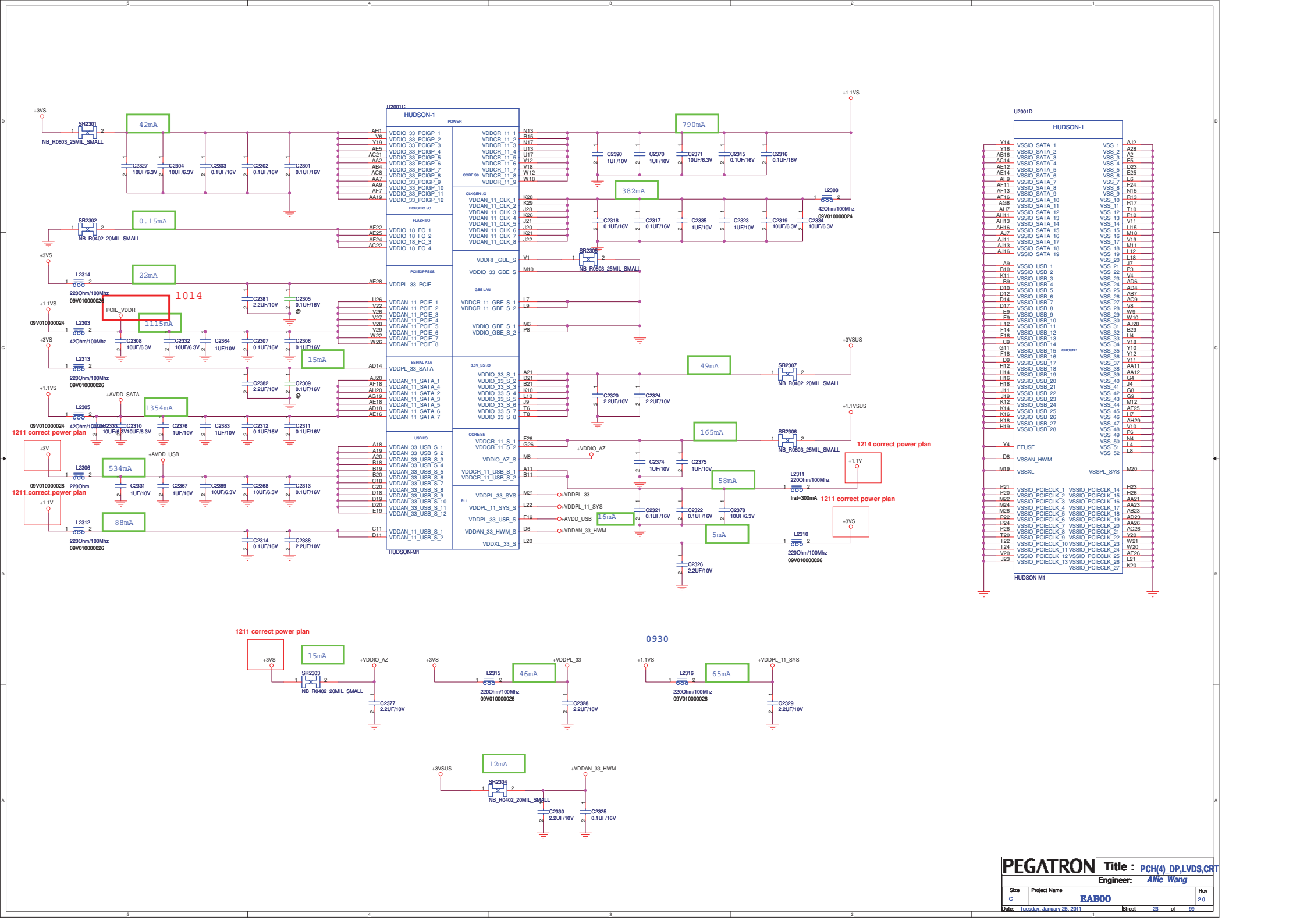
TEMP_COMM
R2202 1 2 NB_R0402_SMLI_SMLL

A3
B4
A4
C5
A7
B7
B8
A8

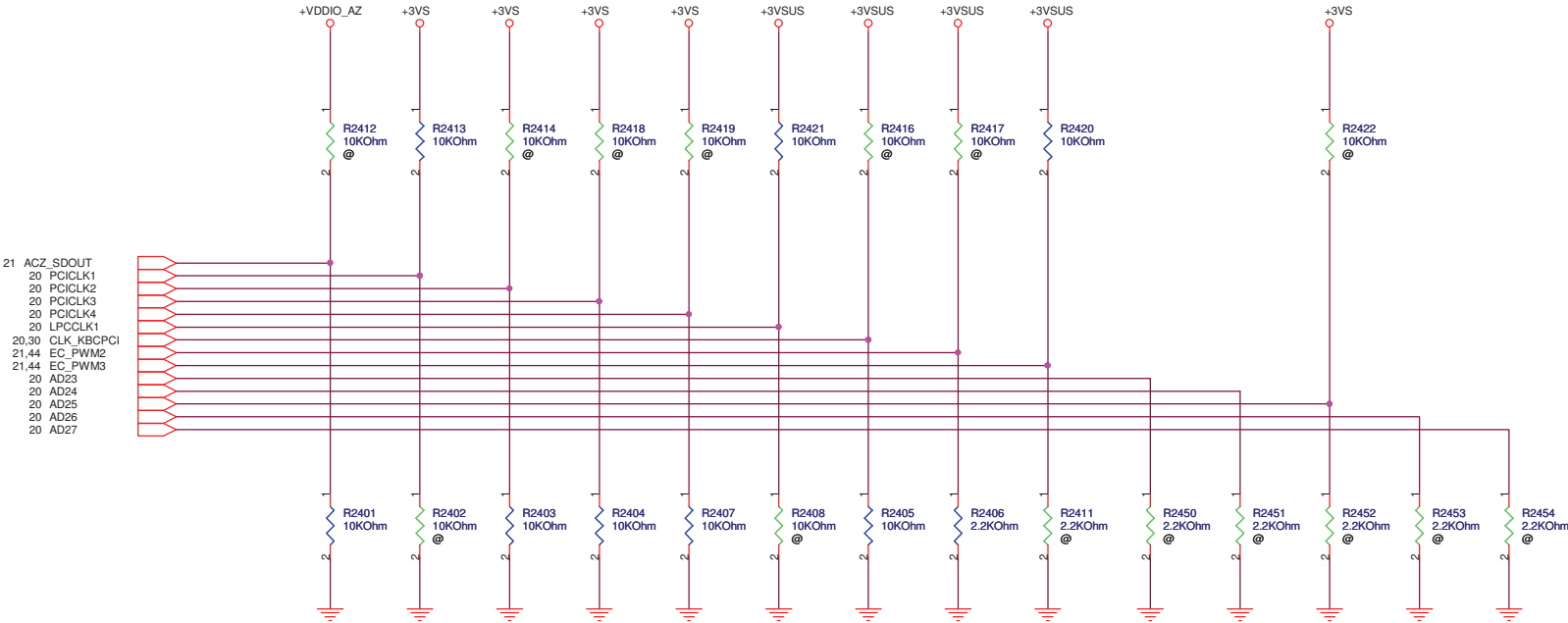
APU_ALERT# 4

PEGATRON Title : PCH(3)_FDI,DMI
Engineer: Alfie_Wang

Size Custom Project Name EAB00 Rev 2.0
Date: Tuesday, January 25, 2011 Sheet 22 of 99



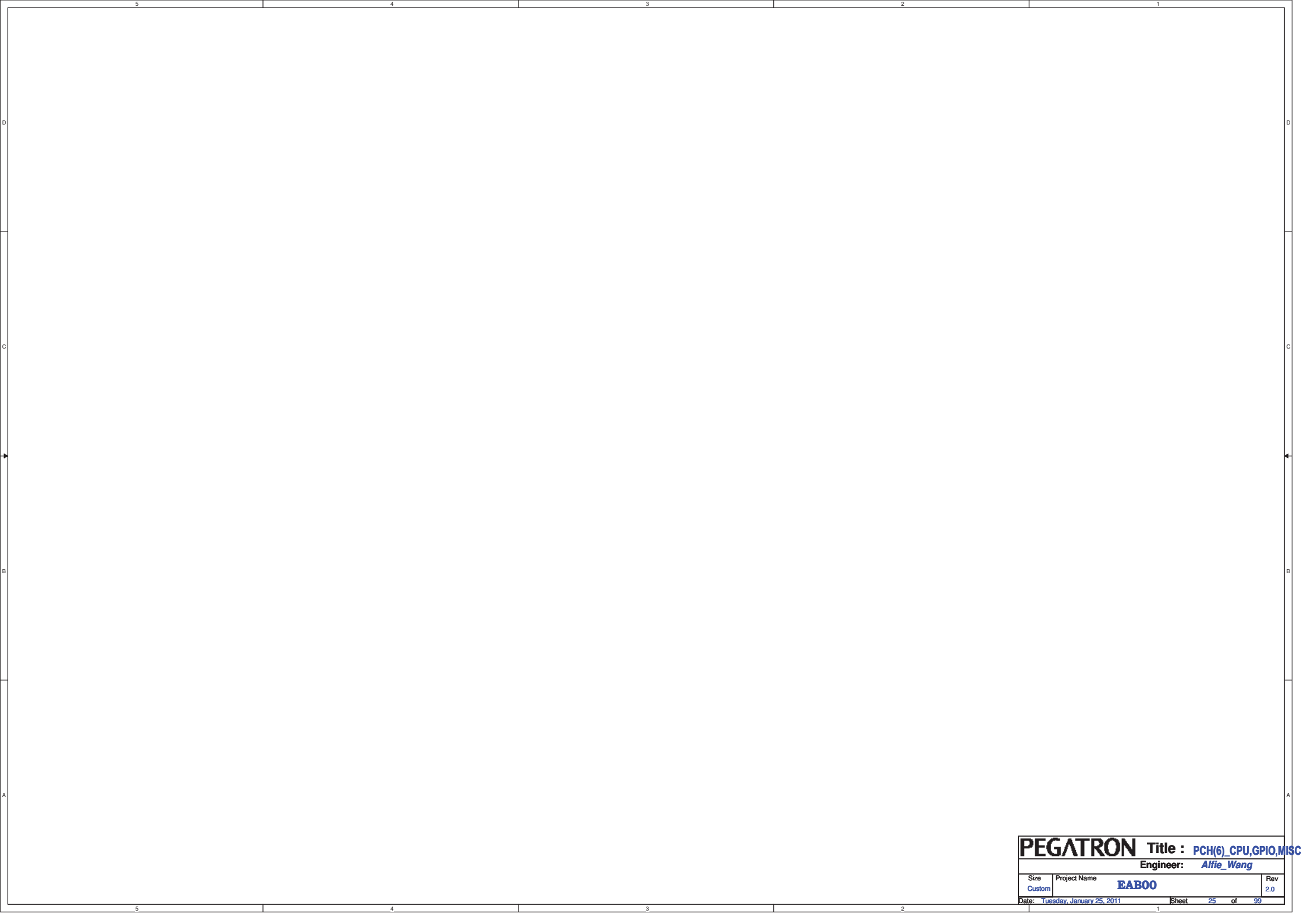
Strap Pins



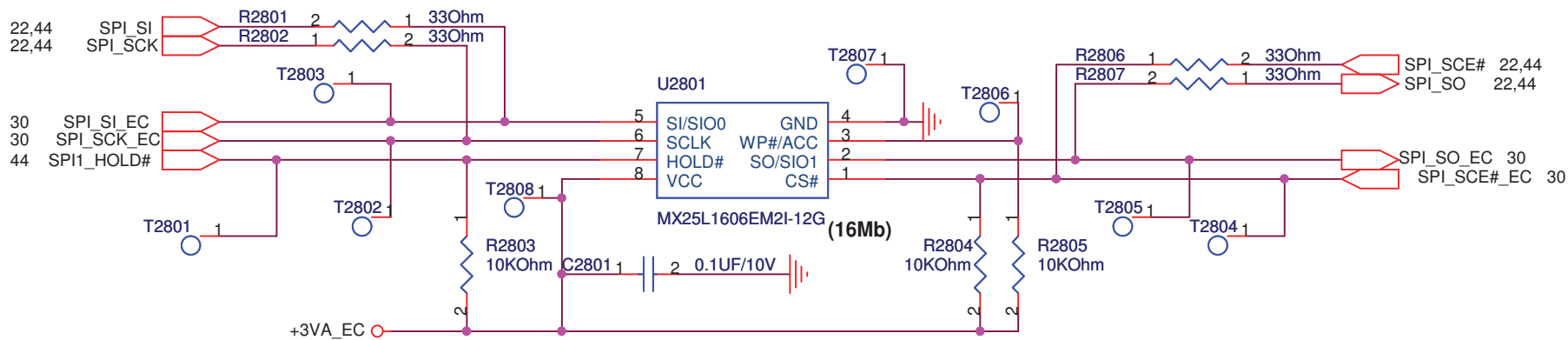
| | ACZ_SDOUT_AUD | PCICLK1 | PCICLK2 | PCICLK3 | PCICLK4 | LPCCCLK0 CLK_KBCPCI | LPCCCLK1 | EC_PWM2 | EC_PWM3 | |
|------|------------------|-----------|------------------------|--------------|----------------------|------------------------|--------------------|---------|---------|---------|
| High | low power mode | PCIE Gen2 | watchdog timer enable | debug | no-Fusion clock mode | EC enable | clock gen. enable | H | L | LPC ROM |
| Low | performance mode | PCIE Gen1 | watchdog timer disable | ignore debug | Fusion clock mode | EC disable | clock gen. disable | L | H | SPI ROM |

Debug Straps

| | AD23 | AD24 | AD25 | AD26 | AD27 |
|------|----------------------|---------------------|---------------|---------------------|-----------------|
| High | disable PCI mem boot | default PCIE straps | use FC PLL | disable ILA autorun | use PCI PLL |
| Low | enable PCI mem boot | EEPROM PCIE straps | bypass FC PLL | enable ILA autorun | by pass PCI PLL |



| | | | |
|---------------------------------|------------------------------|-------------------------------------|------------|
| PEGATRON | | Title : PCH(6)_CPU,GPIO,MISC | |
| | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 25 of 99 | |



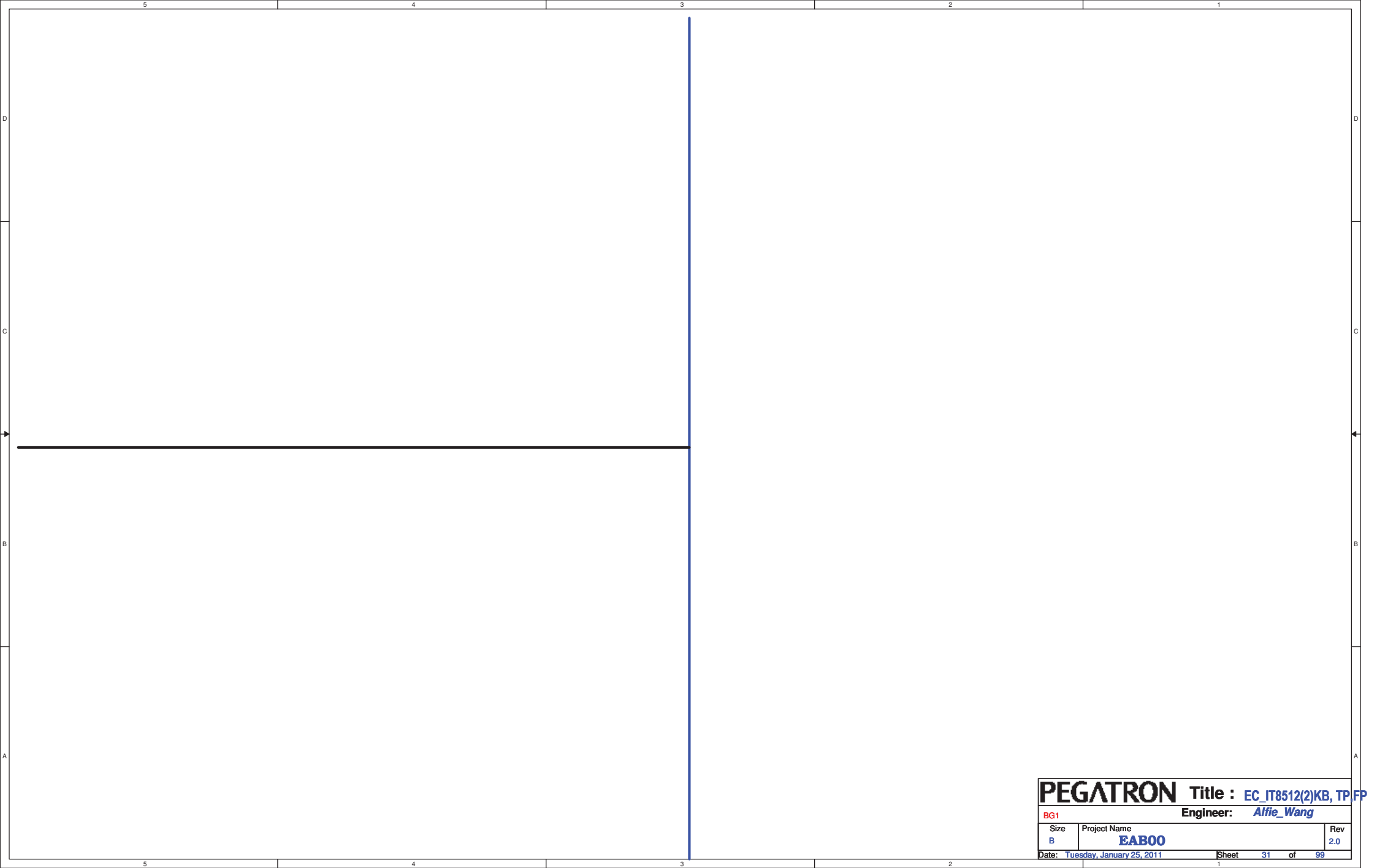
WINBOND: 0500-00P4000
MXIC: 0500-00TY000

reserved for BIOS testing

| | | |
|---------|---------------------------|---------------|
| Title | | |
| SPI_ROM | | |
| Size | Document Number | Rev |
| A | EAB00 | 2.0 |
| Date: | Tuesday, January 25, 2011 | Sheet 28 of 1 |



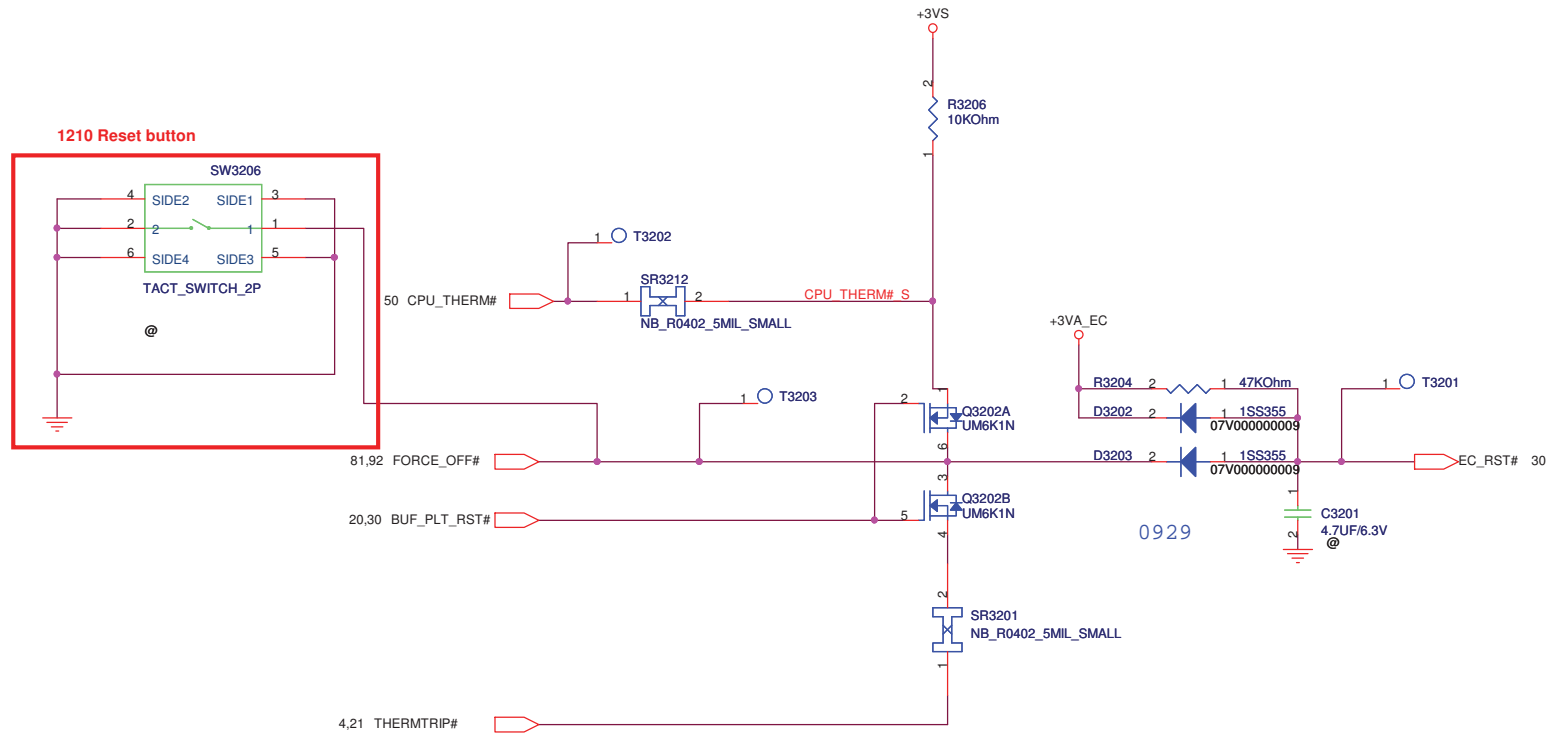
| | | | |
|---------------------------------|------------------------------|--------------------------|------------|
| PEGATRON | | Title : CLK_SLG8SP585VTR | |
| | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 29 | of 99 |



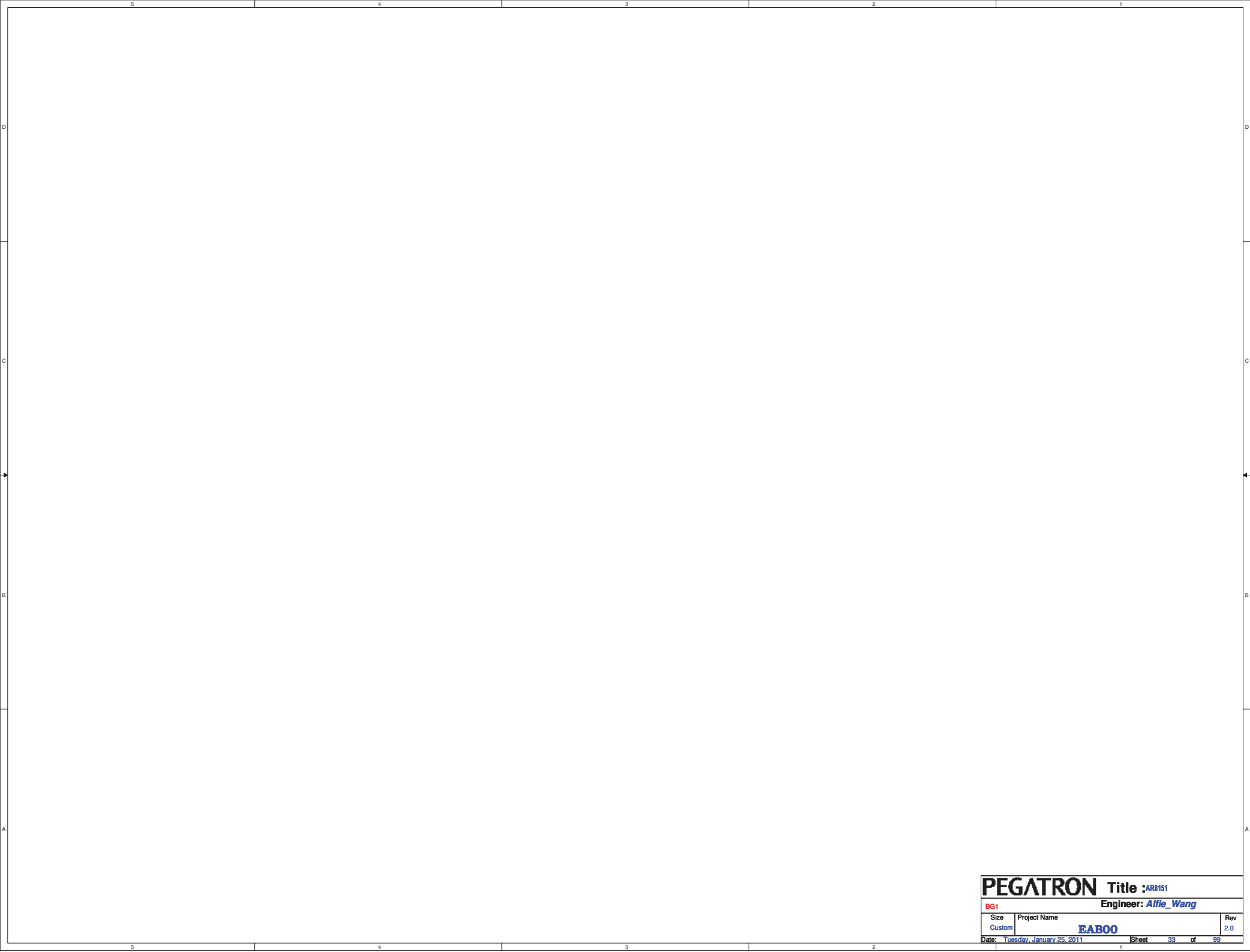
| | | | |
|--|------------------------------|-------------------------------------|-------------------|
| PEGATRON | | Title : EC_IT8512(2)KB, TPFP | |
| BG1 | | Engineer: Alfie_Wang | |
| Size B | Project Name EABOO | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 31 of 99 | |

Thermal Policy

NPCE795 has internal power-on reset circuit
Use 47k ohm to make sure that raising time of POR is less than 10us



| | | | |
|--|------------------------------|----------------------------------|-------------------|
| PEGATRON | | Title : RST_Reset Circuit | |
| | | Engineer: Alfie_Wang | |
| Size B | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 32 of 99 | |



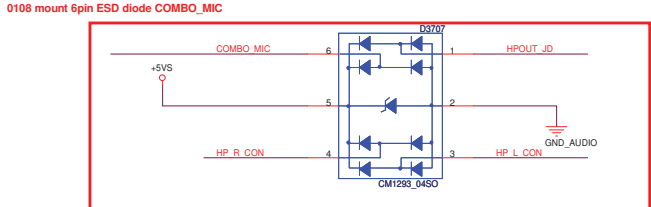
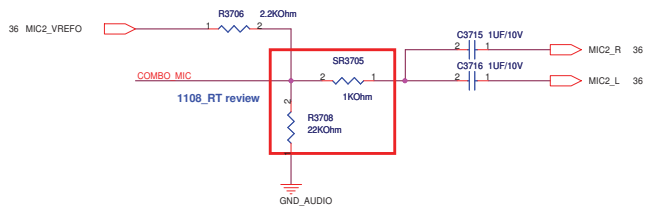
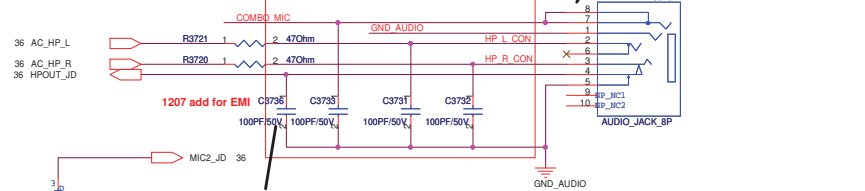
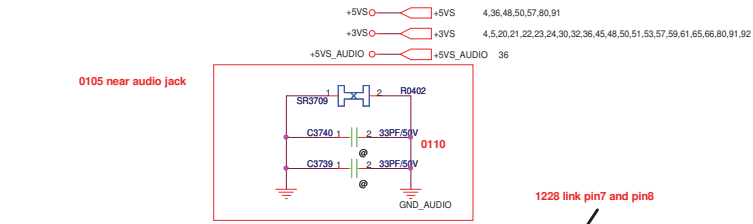
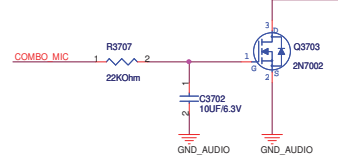
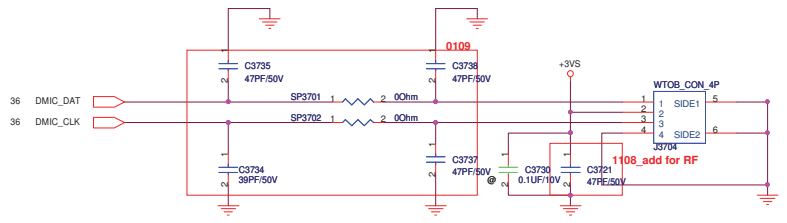
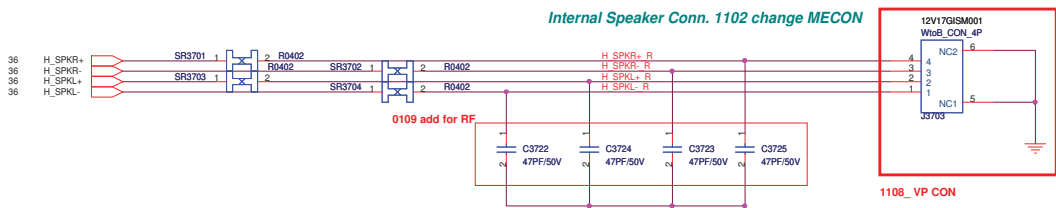
| | | | |
|---------------------------------|--------------|----------------------|----------|
| PEGATRON | | Title :AR8151 | |
| BG1 | | Engineer: Alfie_Wang | |
| Size | Project Name | | Rev |
| Custom | EABOO | | 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 33 of 99 |



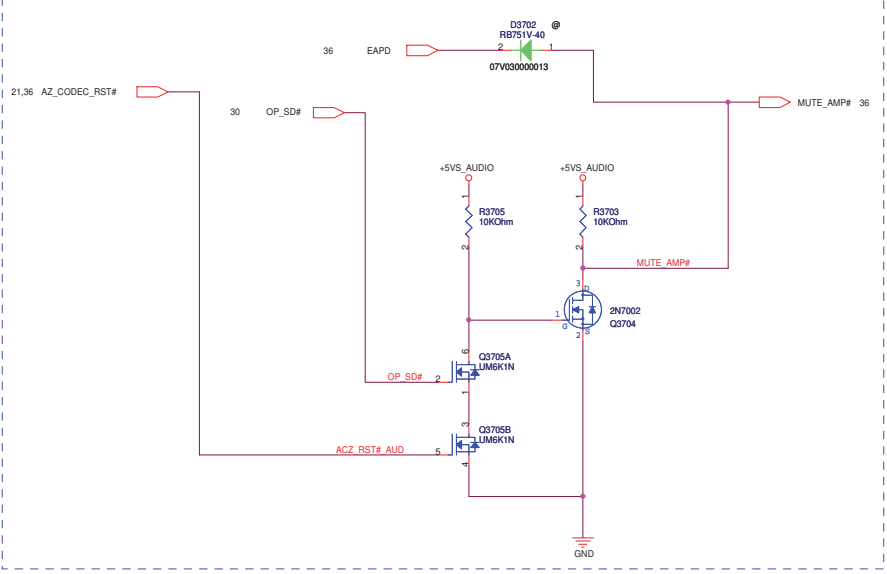
| | | | |
|---------------------------------|------------------------------|----------------------|------------|
| PEGATRON | | Title : RJ45 | |
| BG1 | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 34 of 99 |



| | | | |
|--|--------------|-----------------------------|----------|
| PEGATRON | | Title : MDC CONN | |
| BG1 | | Engineer: Alfie_Wang | |
| Size | Project Name | | Rev |
| C | EAB00 | | 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 35 of 99 |



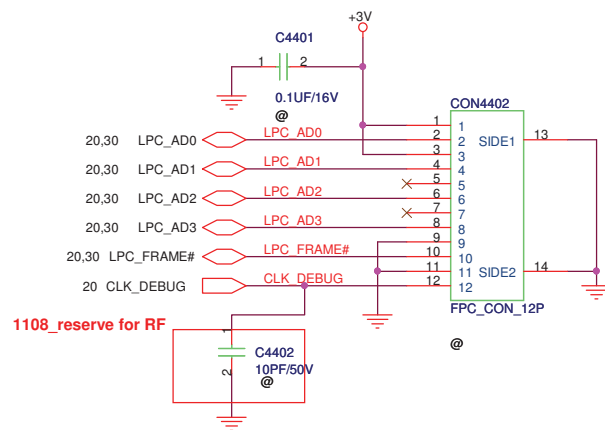
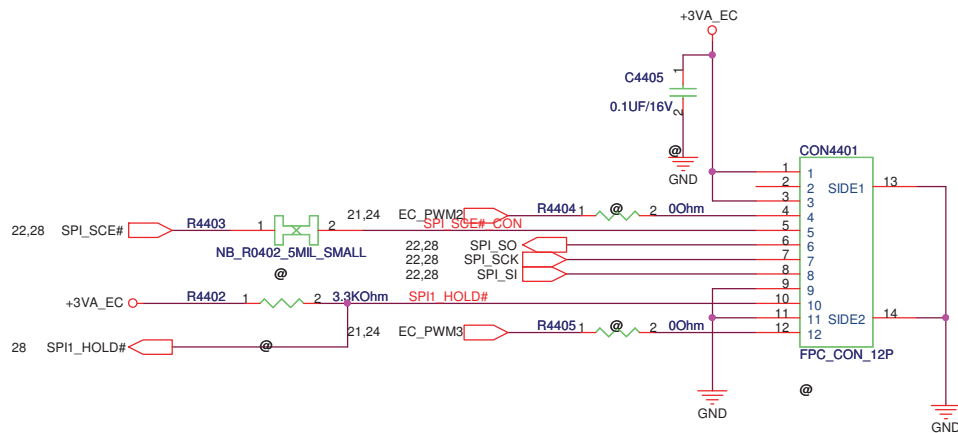
R1.1 Modify Mute AMP circuit for ALC269Q-VB5-GR

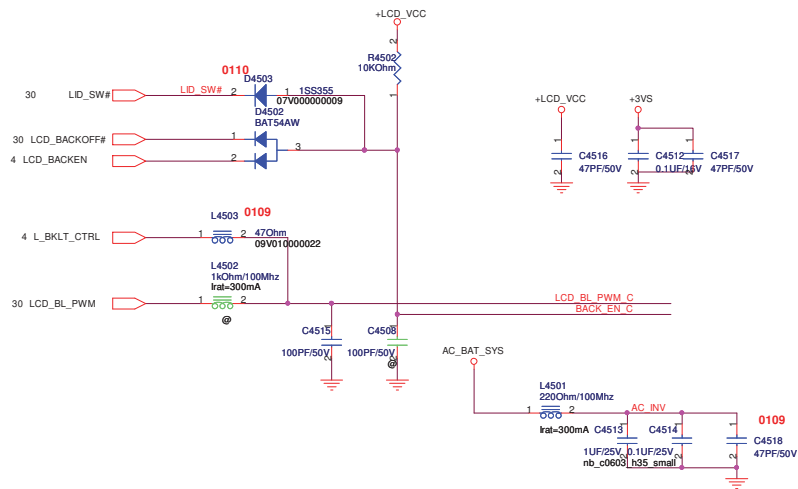


| | | | | | |
|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| D | | | | | |
| C | | | | | |
| B | | | | | |
| A | | | | | |

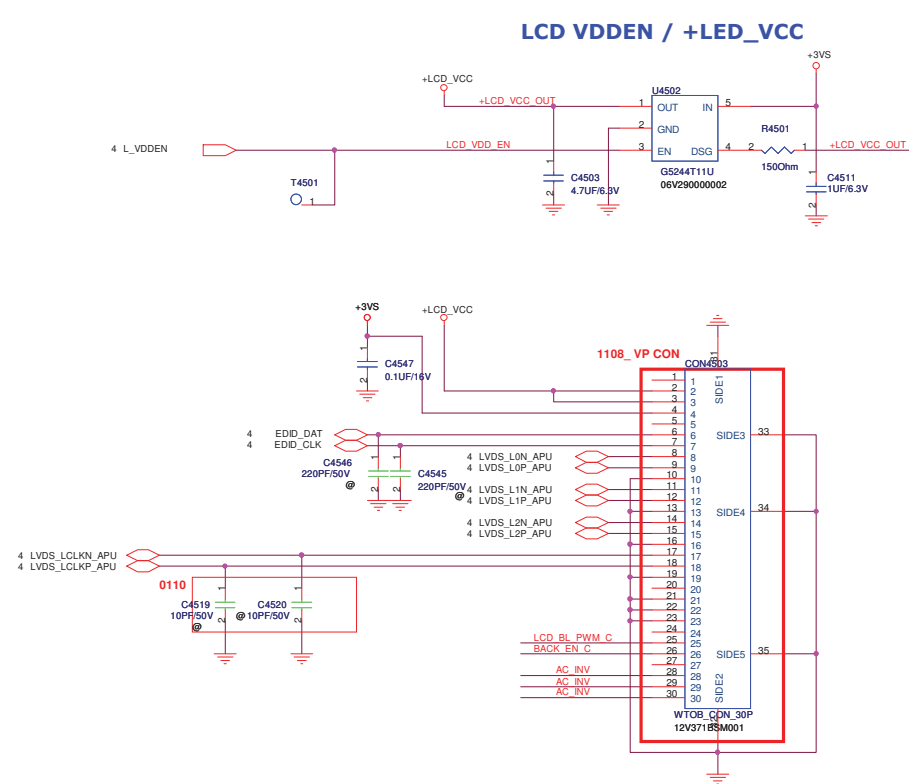
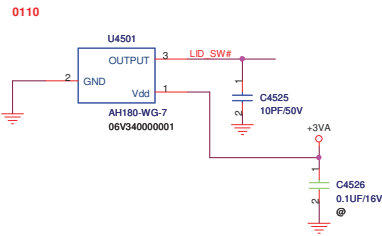
| | | | |
|---------------------------------|------------------------------|------------------------------------|------------|
| PEGATRON | | Title : AUDIO CODEC-CX20671 | |
| BG1 | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 38 of 99 |



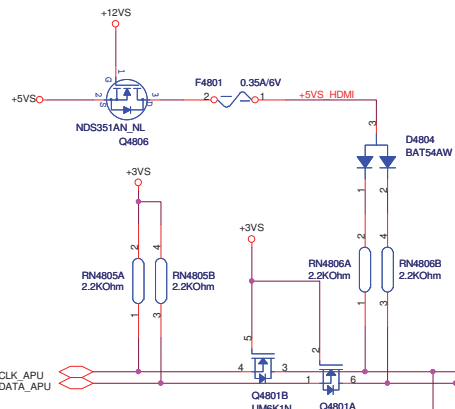
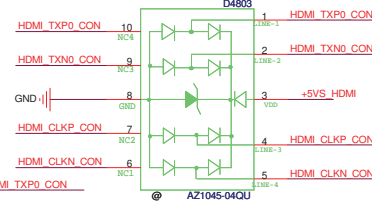
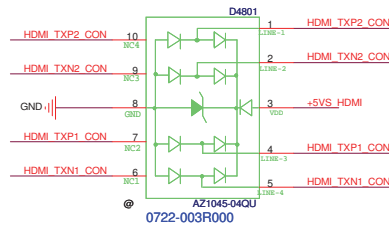
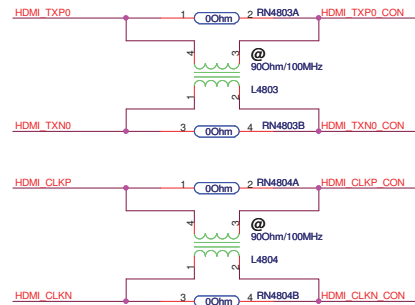
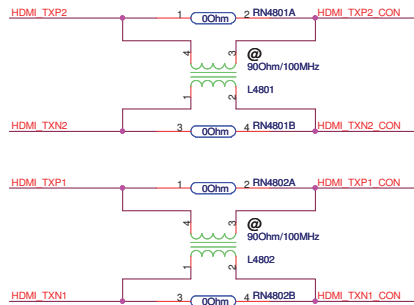
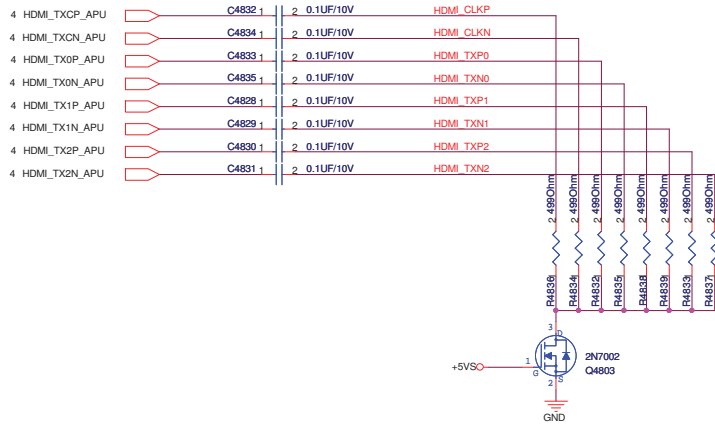




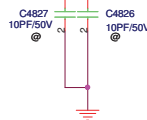
Hall Sensor



| | | | |
|--|--------------|-----------------------------|----------|
| PEGATRON | | Title : LVDS OUT | |
| BG1 | | Engineer: Alfie Wang | |
| Size | Project Name | | Rev |
| Custom | EAB00 | | |
| Date: Tuesday, January 25, 2011 | | Sheet | 45 of 99 |
| | | | 2.0 |



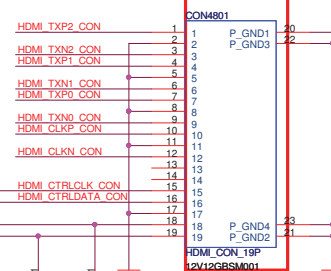
HDMI_SCL & HDMI_SDA : no via , trace length should be as short as possible



1123_correct ESD DIODE



1210 change HDMI CON



U5001 Close to CPU

temp setting : 97 degree

U5001
G709T1UUF
06V220000007

VCC SET
GND OT#

5 4 1 2 3

+3VS

C5004
0.1UF/10V

THERM SET R5001 1 2 17.4KOhm
10V2200000138

CPU THERM# CPU_THERM# 32

U5001 Close to CPU

temp setting : 97 degree

U5001
G709T1UUF
06V220000007

VCC SET
GND OT#

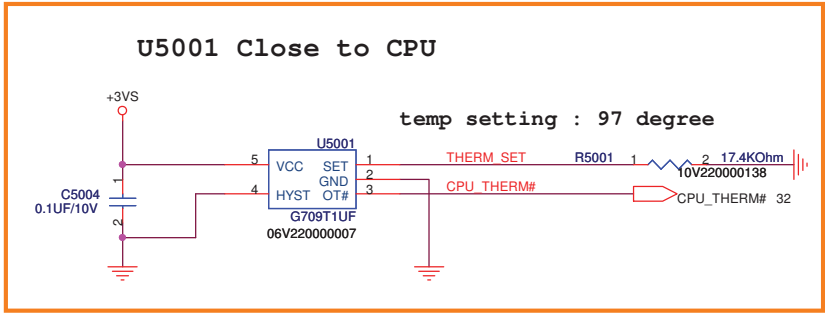
5 4 1 2 3

+3VS

C5004
0.1UF/10V

THERM SET R5001 1 2 17.4KOhm
10V2200000138

CPU THERM# CPU_THERM# 32

[illegible]

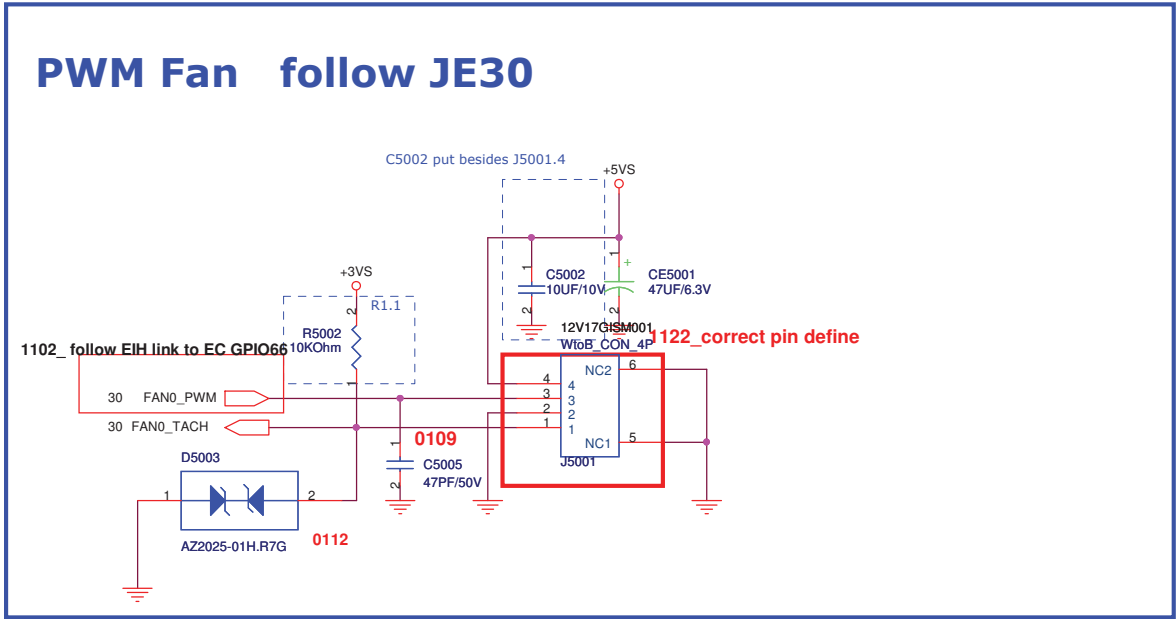
PWM Fan follow JE30

The schematic diagram illustrates a PWM fan control circuit. Key components include:

- Fan Motor:** AZ2025-01H.R7G, represented by a diode symbol.
- Control IC:** J5001 (12V17GISM001), a 4-pin component with pins labeled NC2, 6, 4, 3, 2, 1, NC1, and 5.
- Power Supply:** +3VS and +5VS rails.
- Resistors:** R5002 (10KOhm) and R1.1.
- Capacitors:** C5002 (10UF/10V), CE5001 (47UF/6.3V), and C5005 (47PF/50V).
- Diodes:** D5003 (AZ2025-01H.R7G) and 0112.

Connections and Notes:

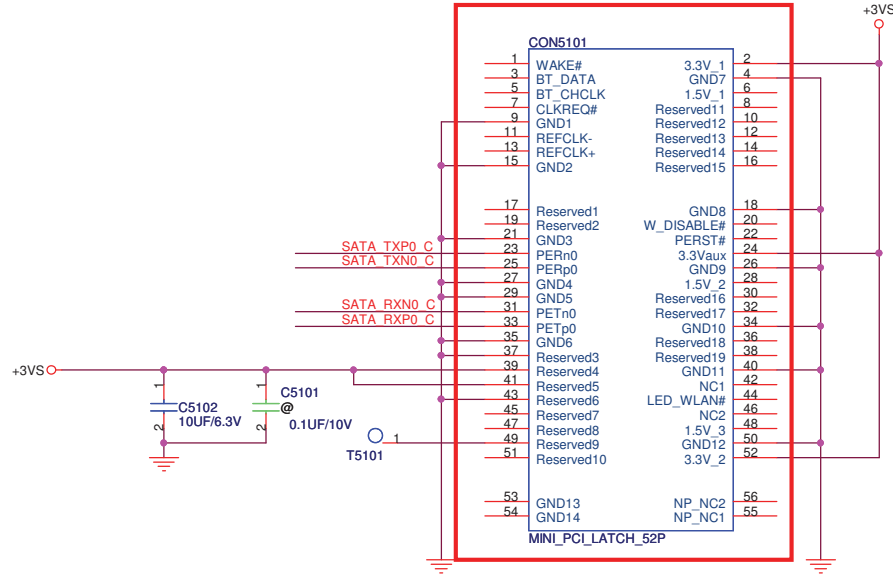
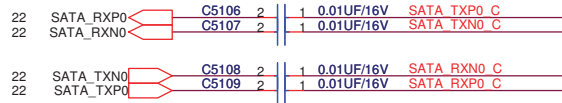
- The +3VS rail is connected to the fan motor's positive terminal (pin 1) and the negative terminal (pin 2) through a diode (D5003).
- The +5VS rail is connected to the positive terminal (pin 1) and the negative terminal (pin 2) through a diode (D5003).
- The control IC (J5001) is connected to the +3VS rail via its pin 1 (NC1) and to ground via its pin 2 (NC2).
- The control IC is also connected to the +5VS rail via its pin 3 (NC2) and to ground via its pin 4 (NC1).
- The control IC is connected to the fan motor's positive terminal (pin 1) via its pin 5 (NC1).
- The control IC is connected to the fan motor's negative terminal (pin 2) via its pin 6 (NC2).
- A note "C5002 put besides J5001.4" indicates the placement of capacitor C5002 near the control IC.
- A red box highlights the control IC and its connections, with a label "122_correct pin define".
- Other labels include "1102_follow EIH link to EC GPIO66" and "0109".

[illegible]

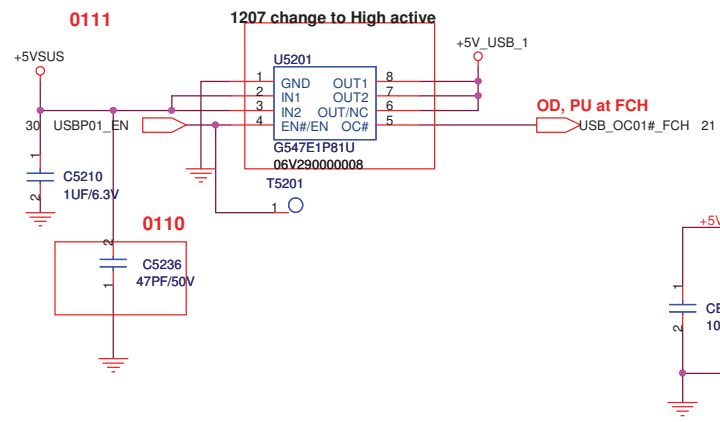
| | | | |
|--|------------------------------|--------------------------------------|----------|
| PEGATRON | | Title : <i>FAN_Fan,Sensor</i> | |
| | | Engineer: <i>Alfie_Wang</i> | |
| Size B | Project Name EABOO | Rev 2.0 | |
| Date: <i>Tuesday, January 25, 2011</i> | | Sheet | 50 of 99 |

SSD

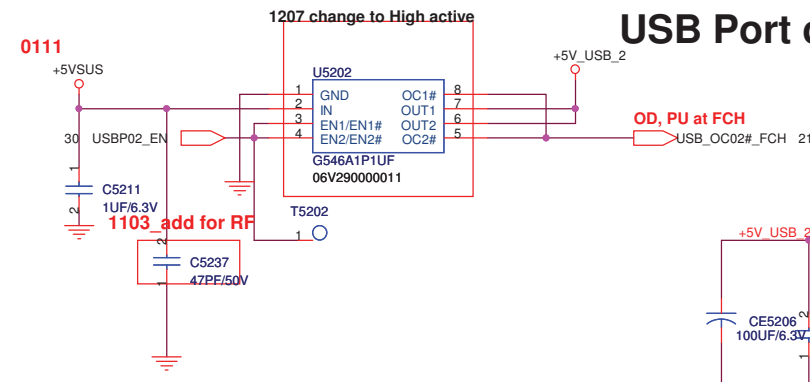
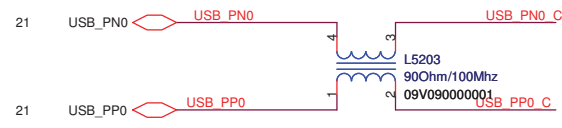
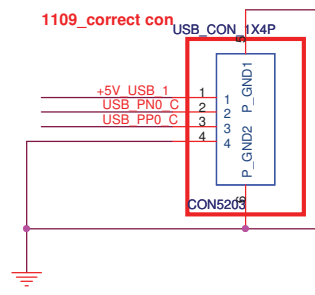
1106 pin define for SSD check OK, change ME correct CON.



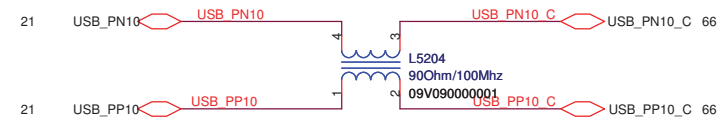
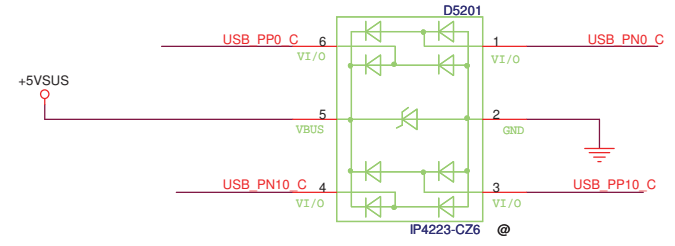
| | | | |
|----------------|-----------------------|---------------------------------|------------|
| PEGATRON | | Title : SSD(mSATA) | |
| BG1 | | Engineer: Alfie Wang | |
| Size B | Project Name EAB00 | Date: Tuesday, January 25, 2011 | Rev 2.0 |
| Sheet 51 of 99 | | | |



USB 2.0 (1213-00JP000)



USB Port current limit

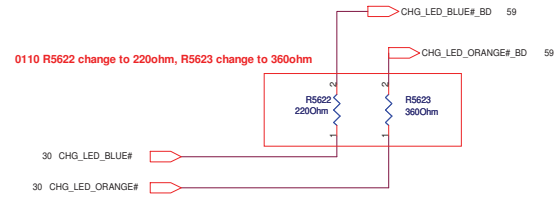


| | | | |
|---------------------------------|--------------------|----------------------|---------|
| PEGATRON | | Title : USB JACK | |
| BG1 | | Engineer: Alfie_Wang | |
| Size B | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 52 of 99 | |



| | | | |
|---------------------------------|------------------------------|----------------------|------------|
| PEGATRON | | Title : SSD to SATA | |
| BG1 | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 54 of 99 |

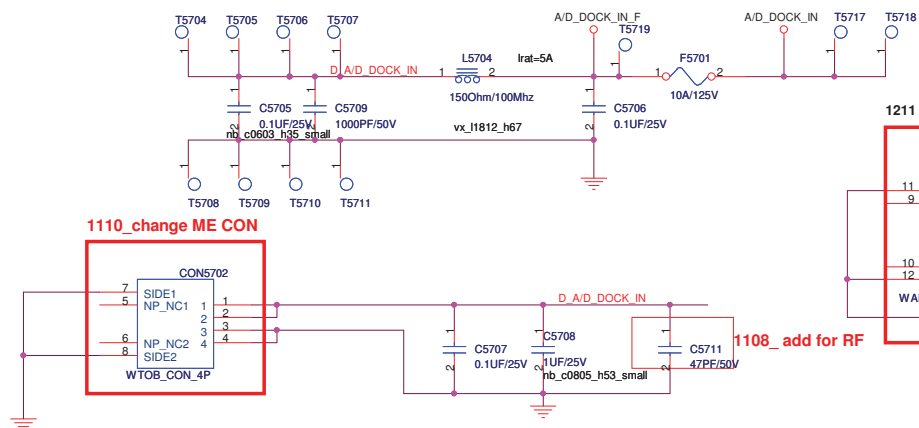
Charger LED



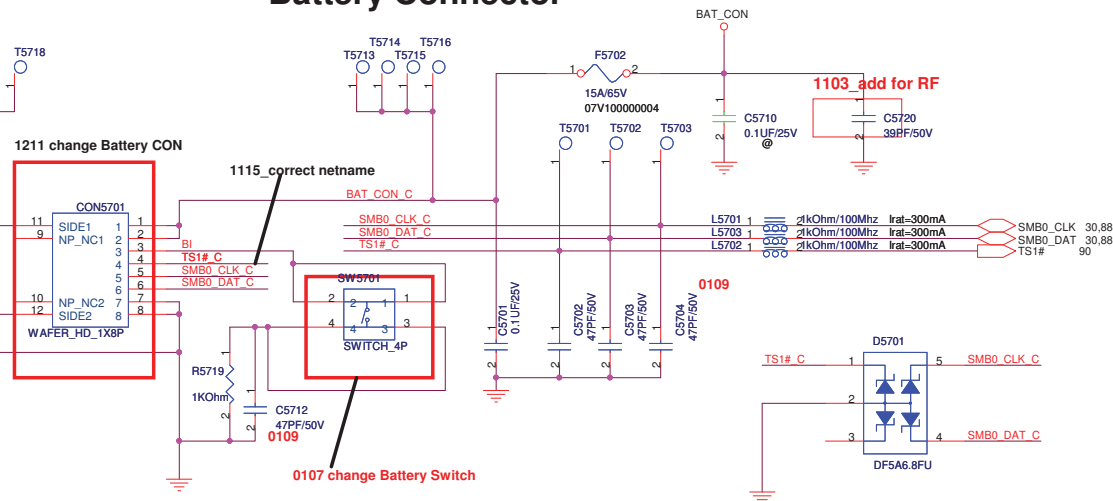
Dual Color

| | | | |
|---------------------------------|--------------|----------------------|----------|
| PEGATRON | | Title : LED | |
| BG1 | | Engineer: Alfie Wang | |
| Size | Project Name | Rev | |
| C | EAB00 | 2.0 | |
| Date: Tuesday, January 25, 2011 | | Sheet | 56 of 99 |

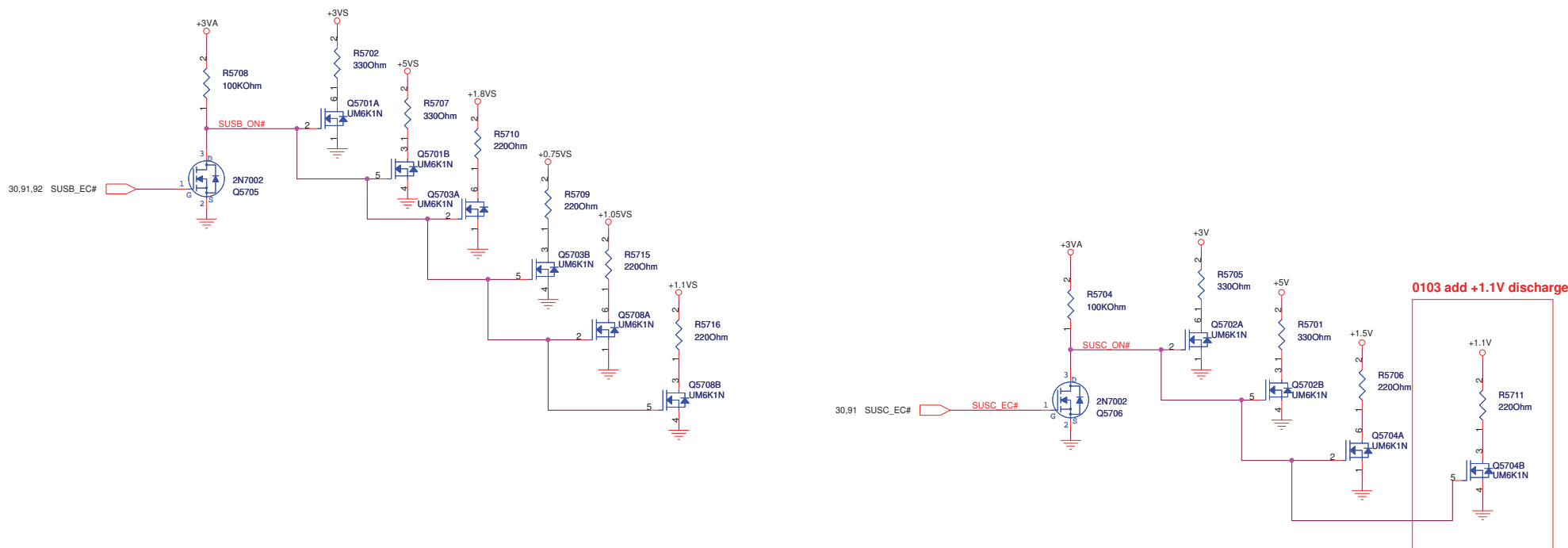
DC IN



Battery Connector



Discharge Circuit



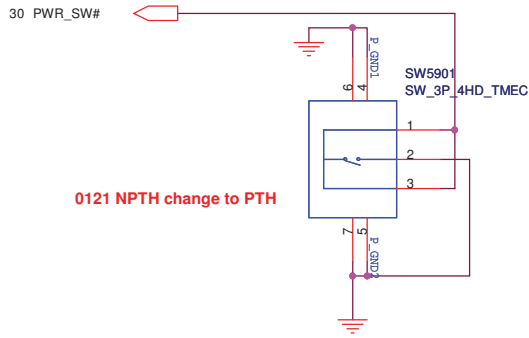
PEGATRON Title : DISCHARGE KKT

Engineer: Alfie Wang

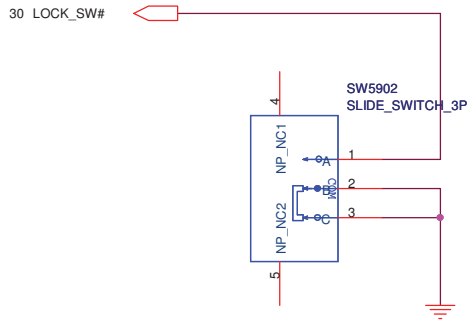
Size Project Name
Custom EAB00 Rev 2.0

Date: Tuesday, January 25, 2011 Sheet 57 of 99

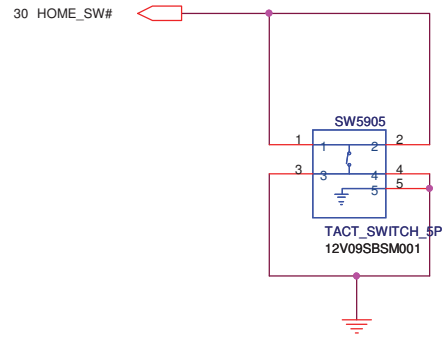
POWER SW



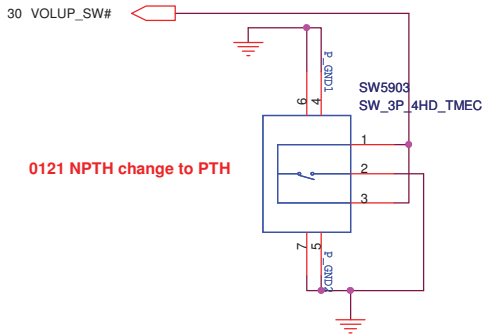
LOCK SLIDE SWITCH



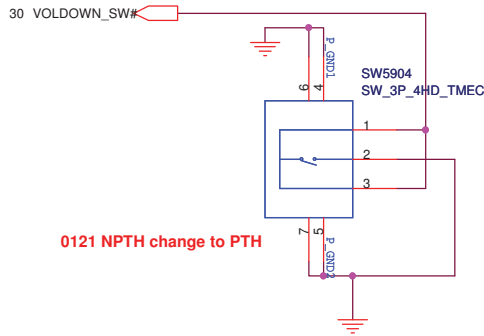
HOME BTN



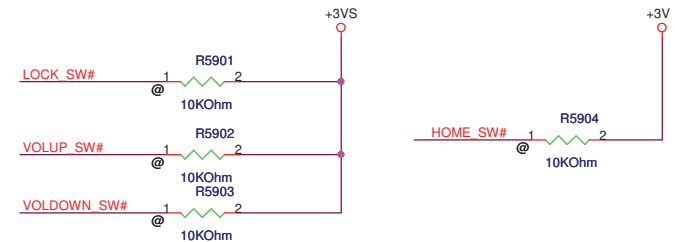
Volume UP



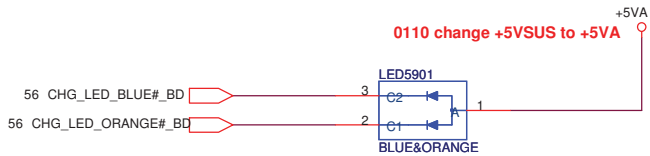
Volume DOWN



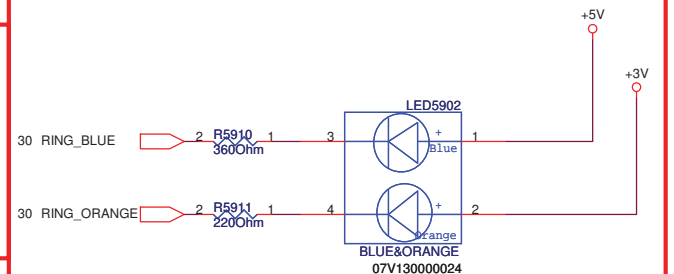
1207 PU for Switch



1213 Power SW LED

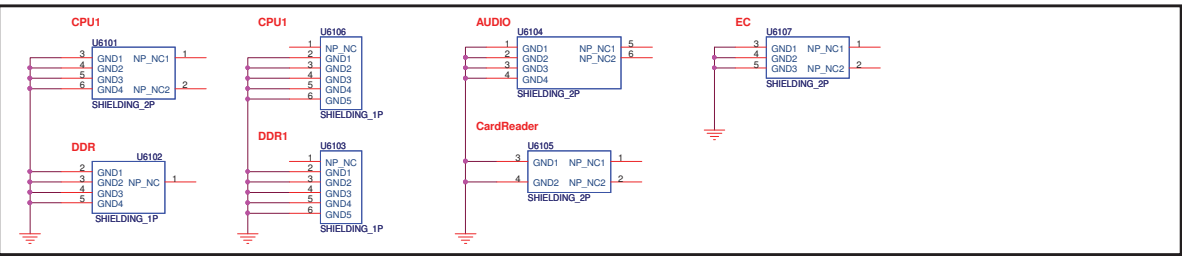


1213 HOME SW LED

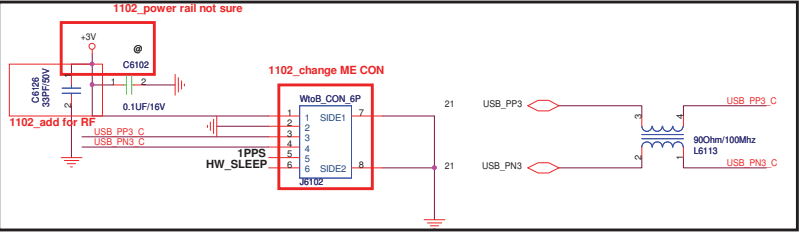


| PEGATRON | | | Title :SW & BTN |
|---------------------------------|-----------------------|------------|----------------------|
| BG1 | | | Engineer: Alfie_Wang |
| Size B | Project Name EAB00 | Rev 2.0 | |
| Date: Tuesday, January 25, 2011 | | Sheet | 59 of 99 |

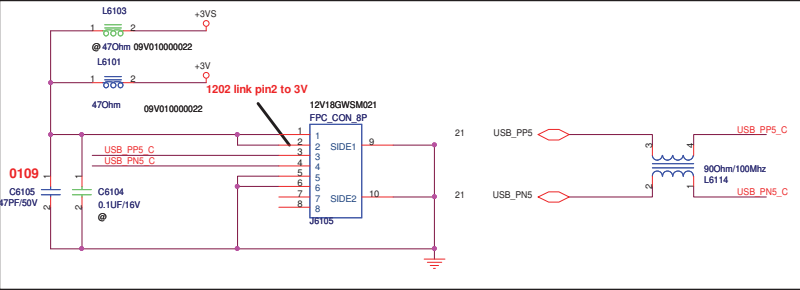
Shielding Case



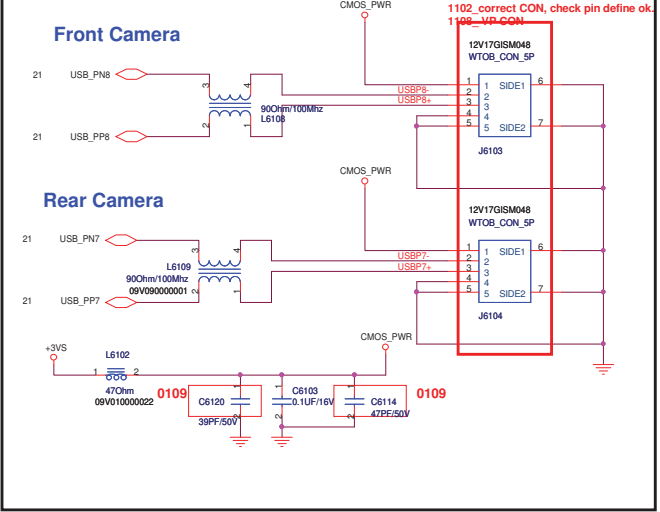
GPS



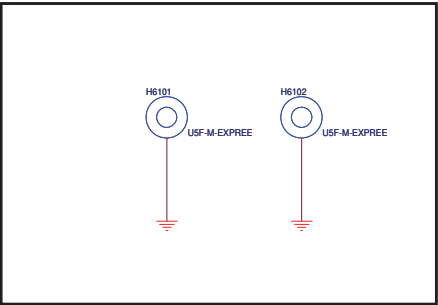
TouchPanel (8pin)



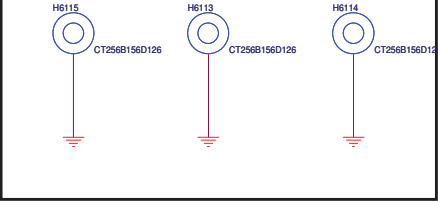
CMOS



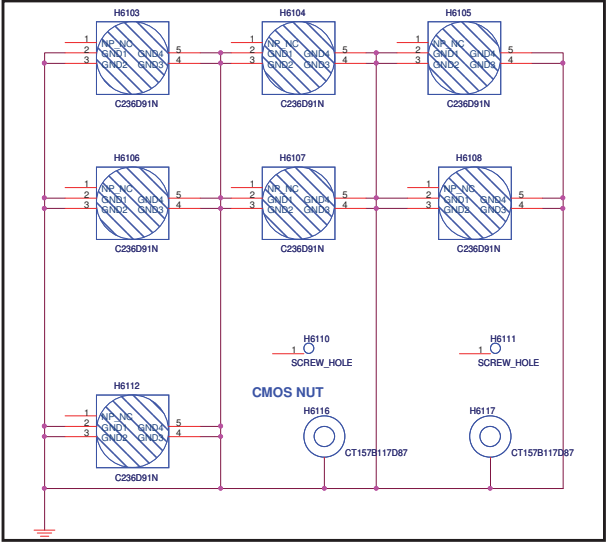
SSD,3G NUT



CPU NUT

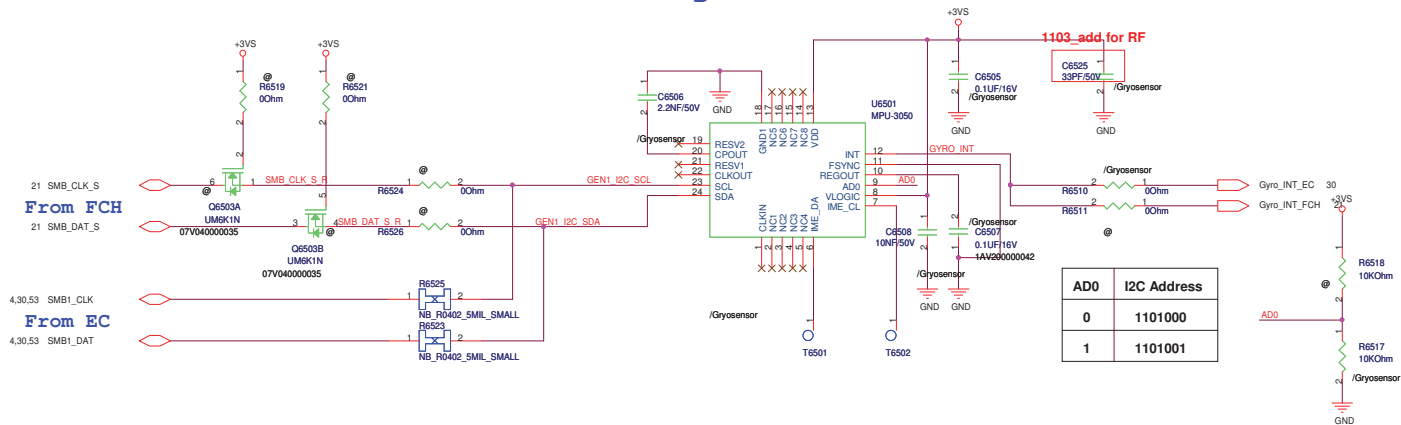


Screw hole

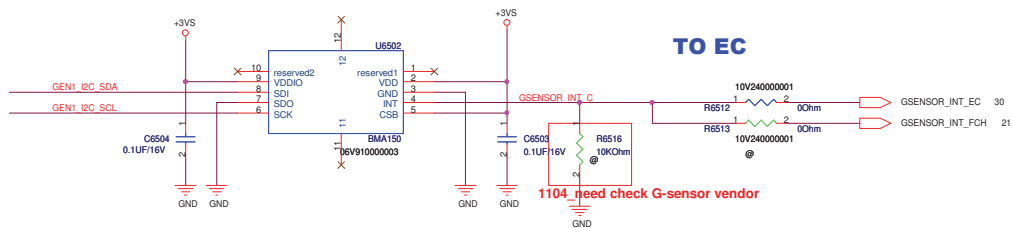


(ER remove)

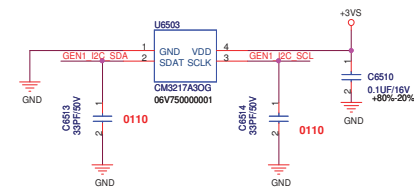
Gyro-sensor



G-sensor

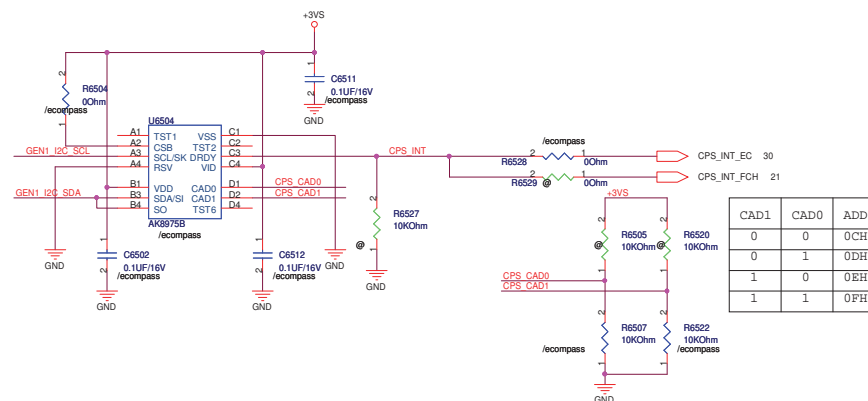


Light-sensor



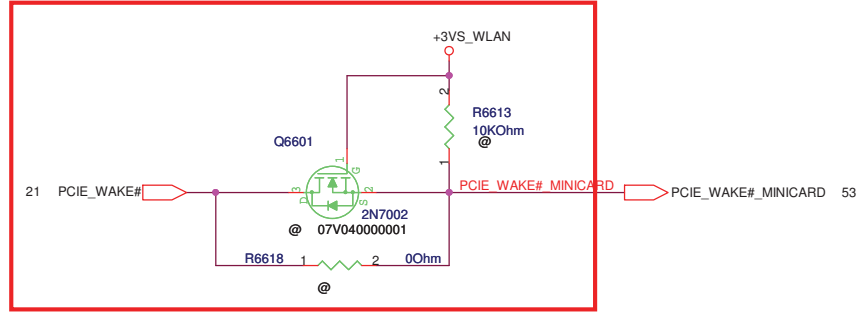
(ER remove)

e-Compass



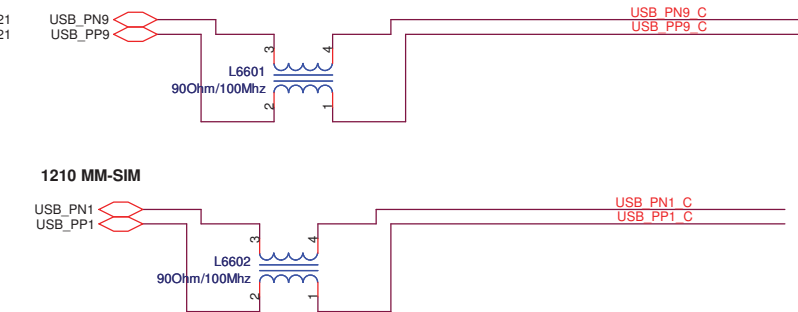
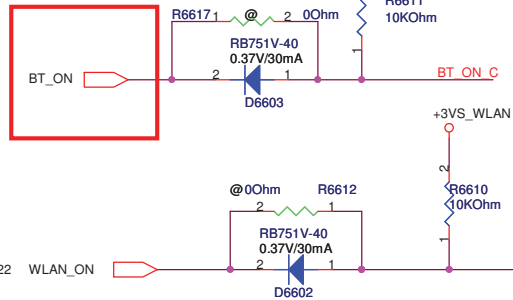
Minicard CON 30pins

1027_WB214E pin1 is NC



0930

1027_change to BT_ON# for WB214E



1210 MM-SIM

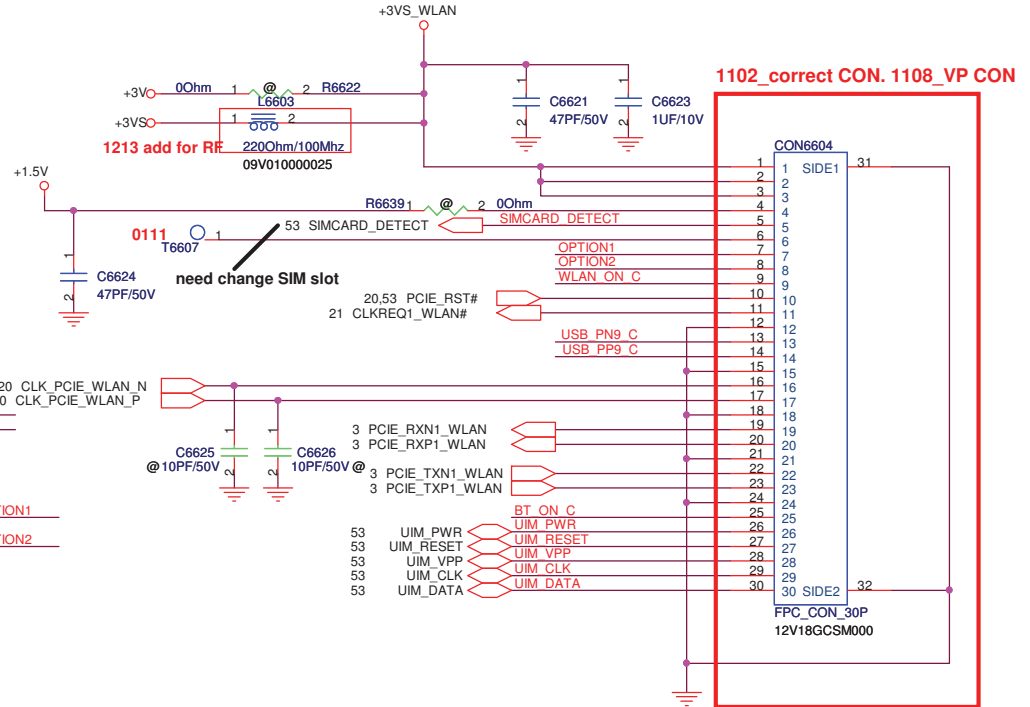
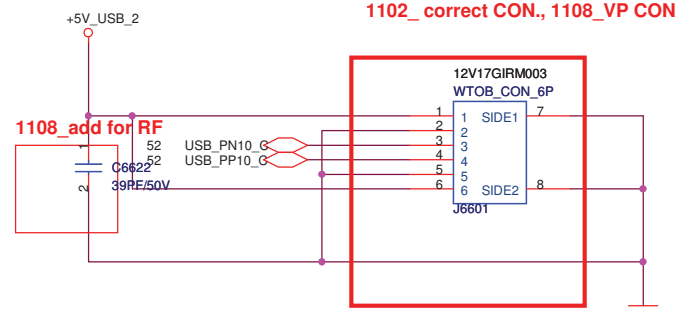
Customer request



1027_W_DISABLE_L:Active low

WLAN_ON_C

USB Port CON 6pins



| | | | |
|--|------------------------------------|------------------------------------|--------------------|
| PEGATRON | | Title :WTB CON | |
| BG1 | | Engineer: <i>Alfie_Wang</i> | |
| Size B | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 66 | of 99 |

USB 2.0 for Docking Port

1108_VP CON

12V17GIRM003
WTOB_CON_6P

SIDE1 1 2 3 4 5 6
SIDE2 7 8

CON7001

USB PN10_PB
USB PP10_PB

+5V_USB_PB

C7002 47PF/50V

0109

0110

C7001 33PF/50V

1108_reserve for RF

GND_PB

1109_correct CON

CON7002

1 P_GND4 8
2 P_GND2 6
3
4 P_GND1 5
P_GND3 7
USB_CON_1X4P

GND_PB

H7023

H7021

C217D91

C197D87

H7022

C197D87

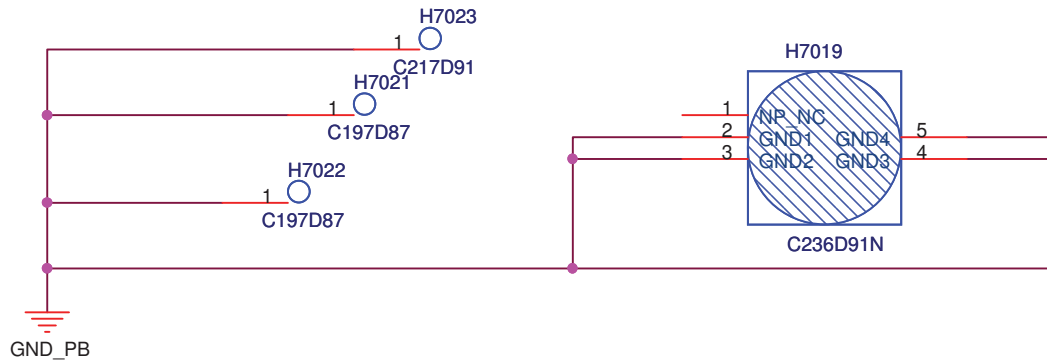
GND_PB

H7019

NP NC
GND1 GND4
GND2 GND3

C236D91N

| | | | |
|---------------------------------|------------------------------|--------------------------|------------|
| PEGATRON | | Title : USB Docking Port | |
| BG1 | | Engineer: Alfie_Wang | |
| Size A | Project Name EAB00 | | Rev 2.0 |
| Date: Tuesday, January 25, 2011 | | Sheet | 70 of 99 |

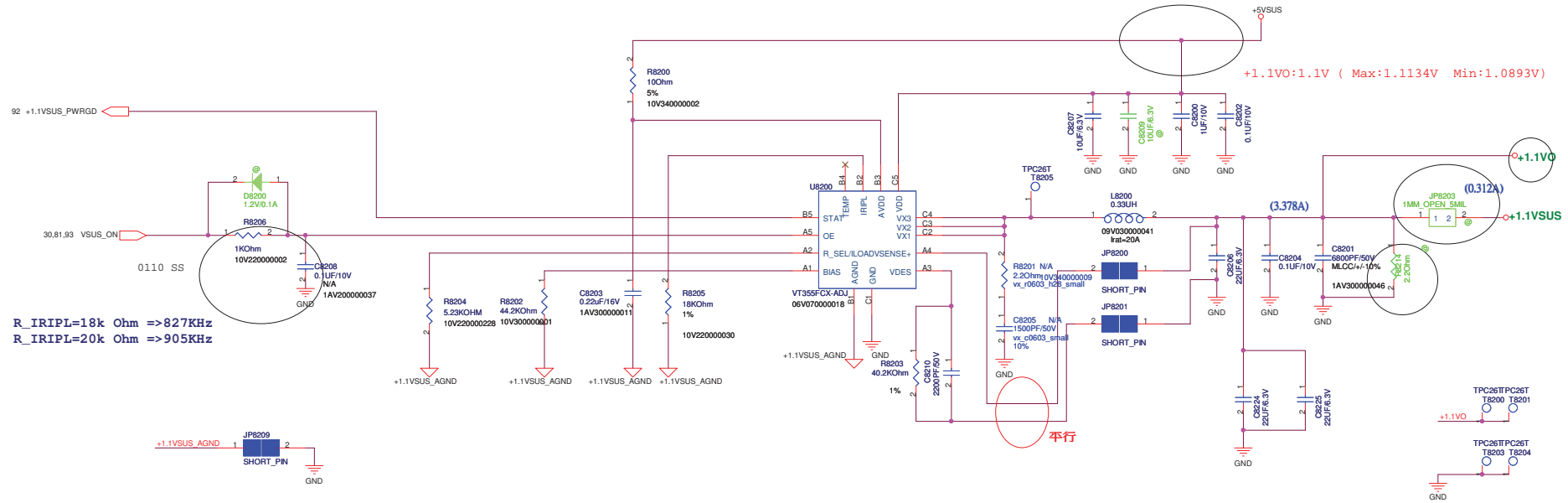




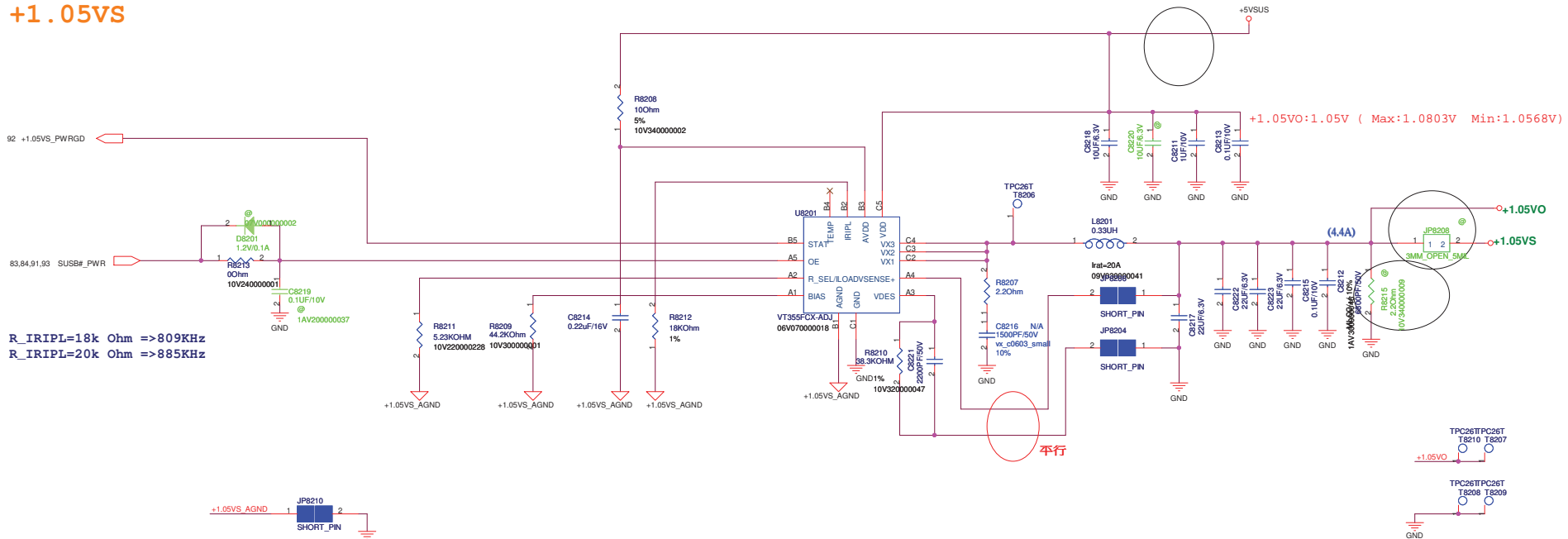


+1.1VSUS

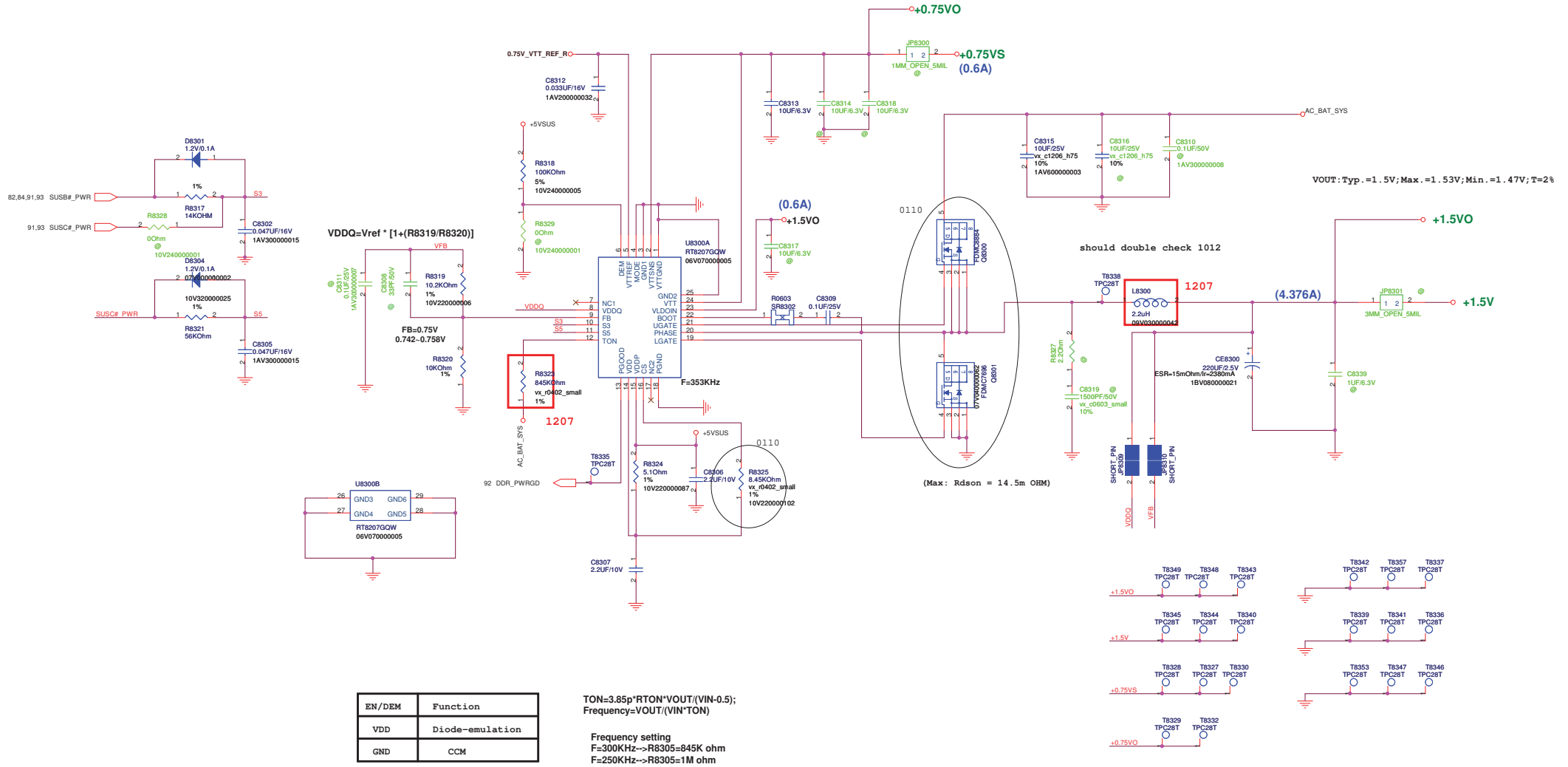
+1.1V & +1.05VS POWER SUPPLY



+1.05V



+1.5VO & +0.75VS POWER SUPPLY

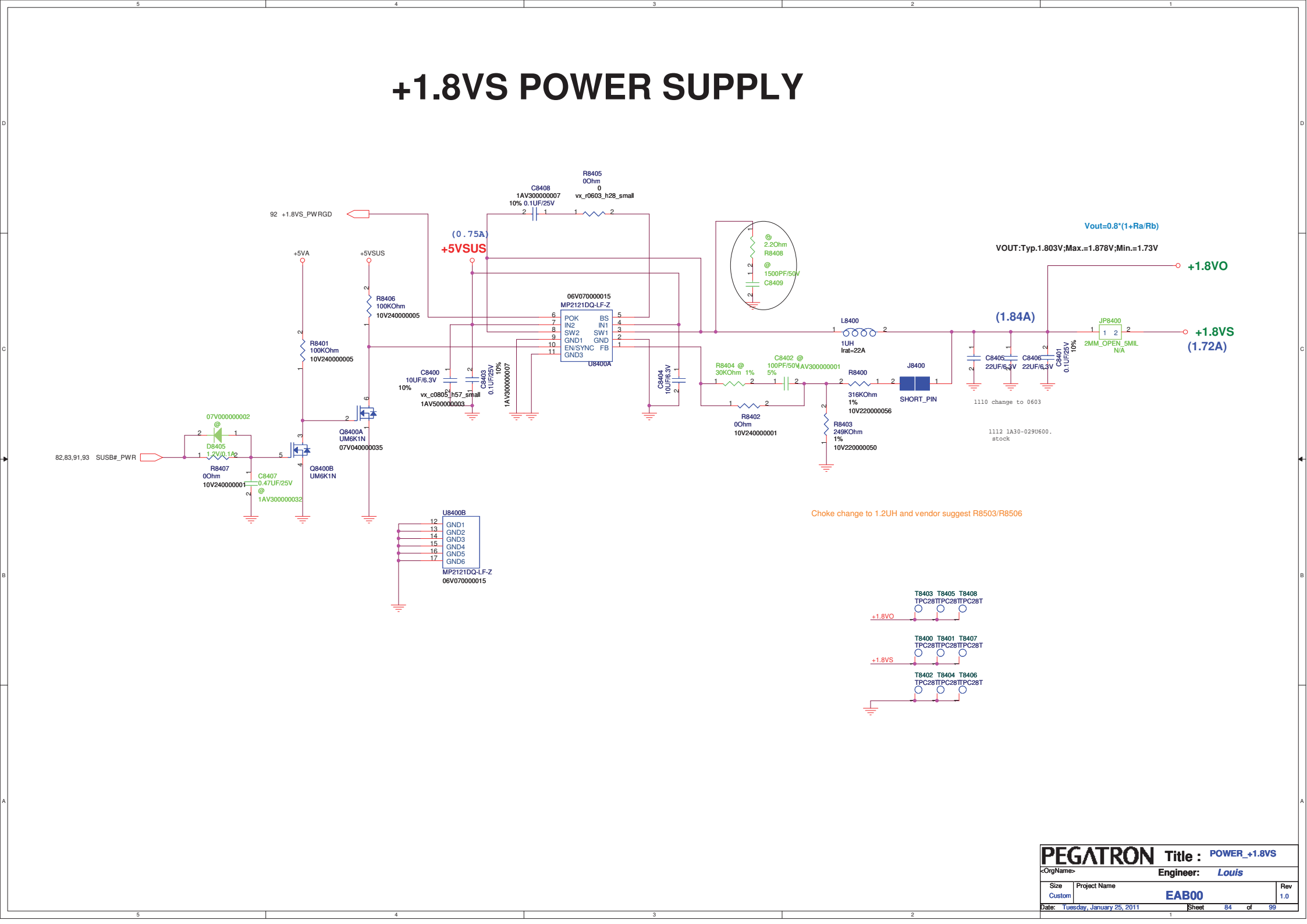


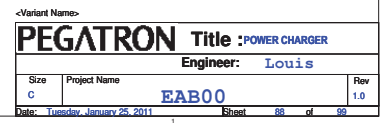
| | |
|--------|-----------------|
| EN/DEM | Function |
| VDD | Diode-emulation |
| GND | CCM |

$$\text{TON} = 3.85p \cdot \text{RTON} \cdot \text{VOUT} / (\text{VIN} - 0.5);$$
$$\text{Frequency} = \text{VOUT} / (\text{VIN} \cdot \text{TON})$$

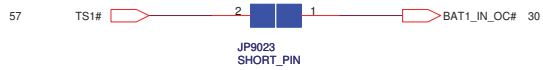
Frequency setting
F=300KHz-->R8305=845K ohm
F=250KHz-->R8305=1M ohm

+1.8VS POWER SUPPLY



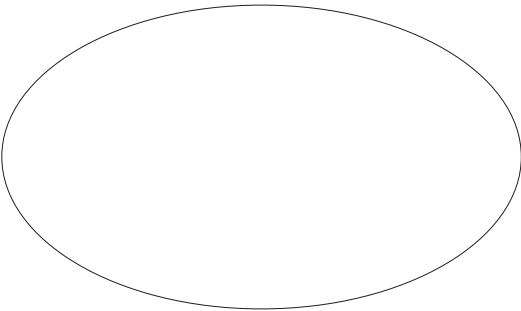


BATTERY IN DETECT

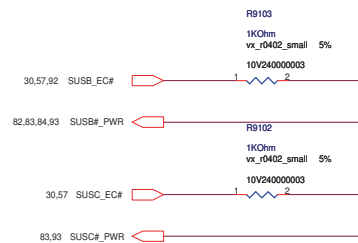
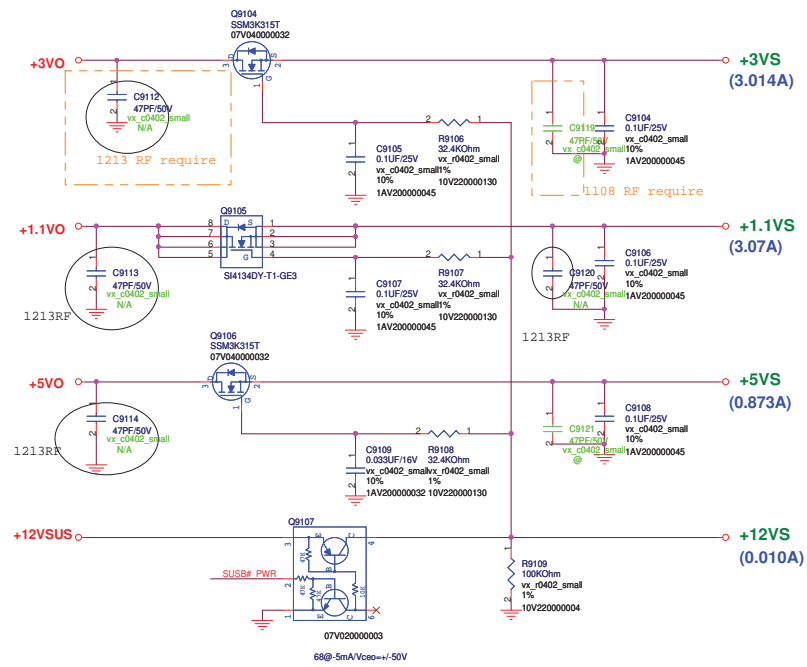


POWER LIMIT CIRCUIT

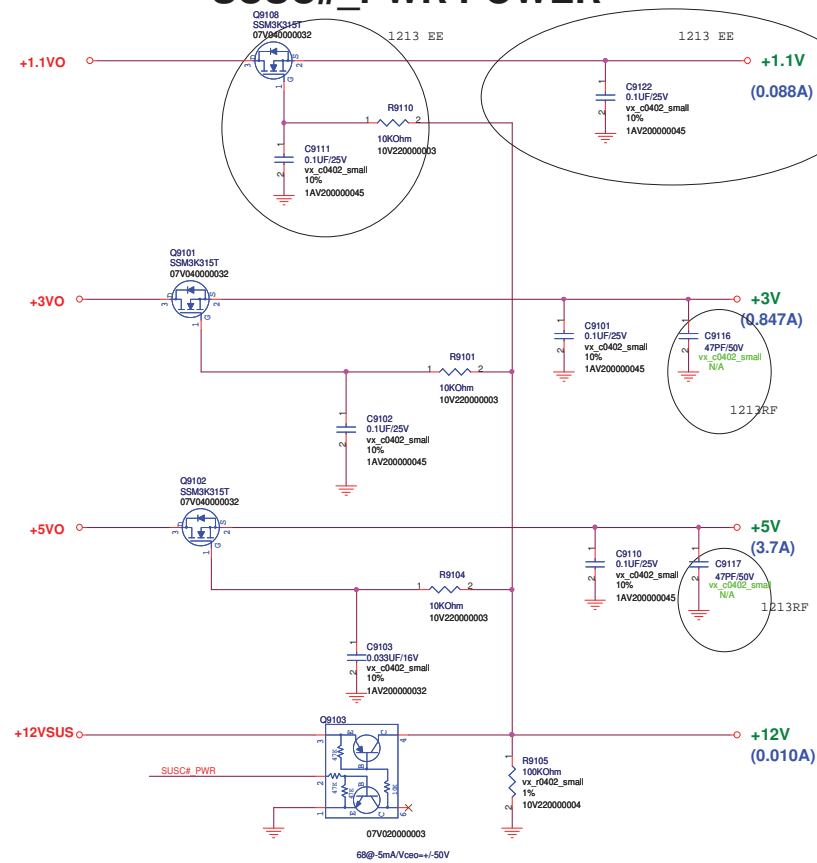
+2.5Vref delete



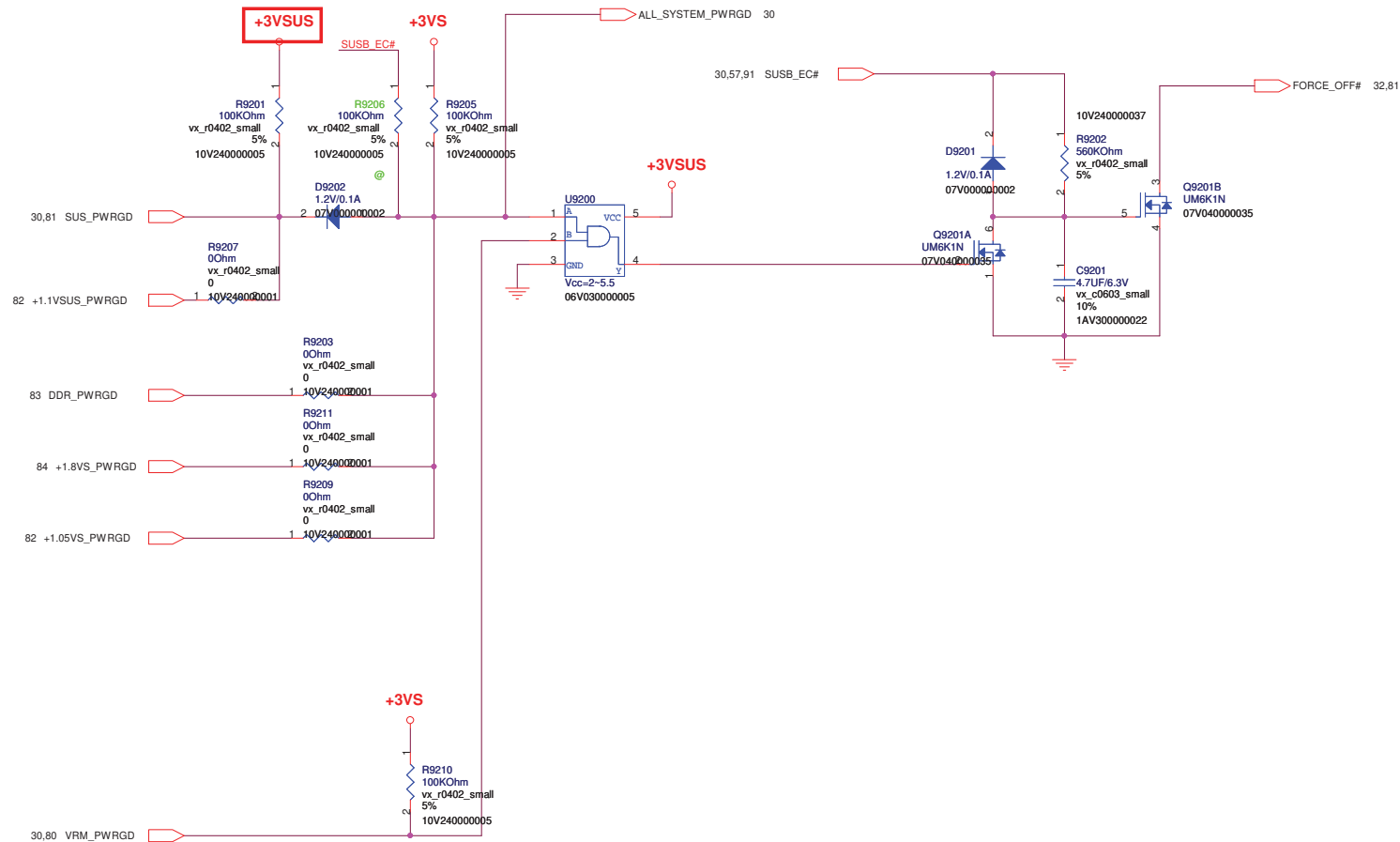
SUSB#_PWR POWER

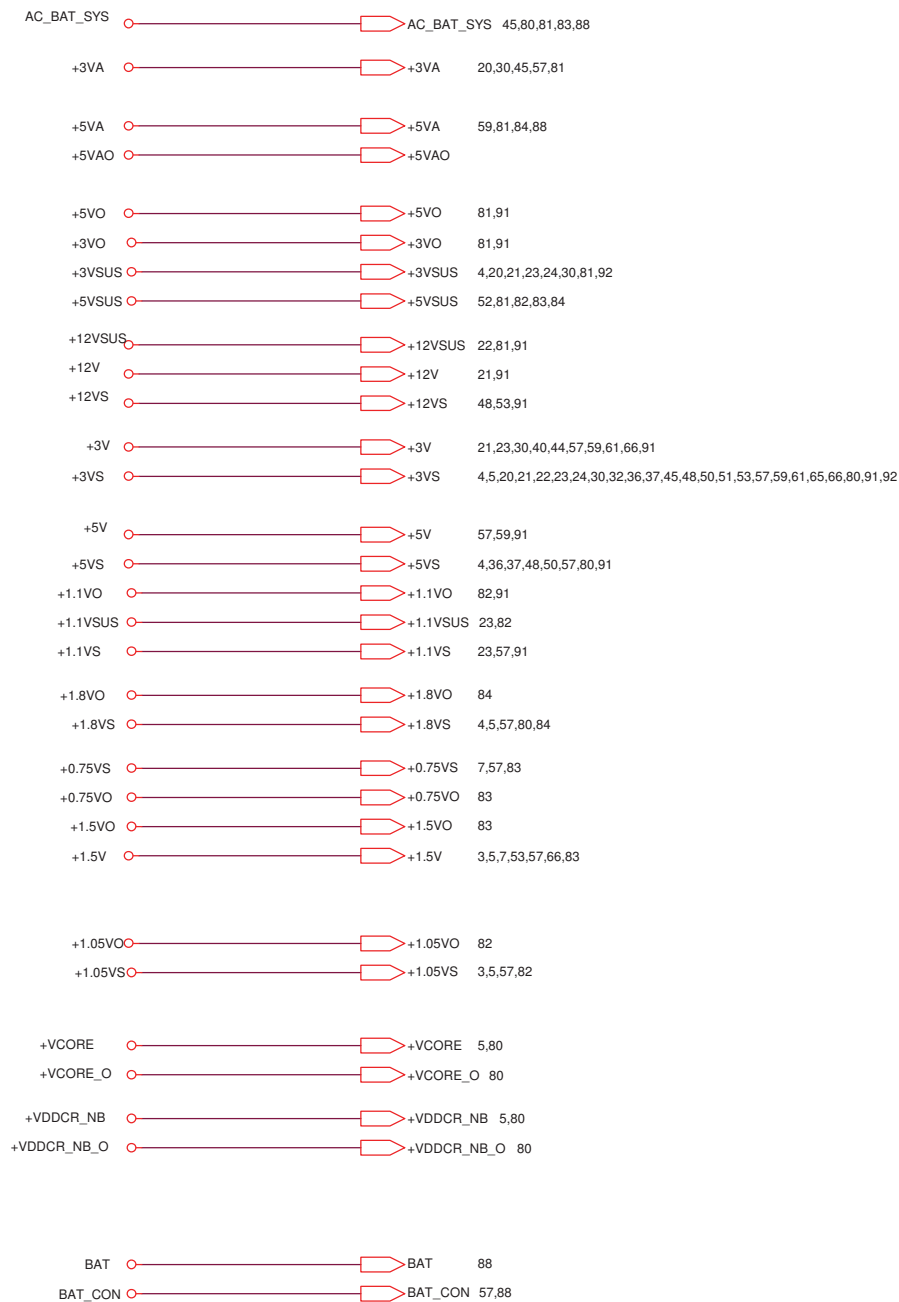


SUSC#_PWR POWER

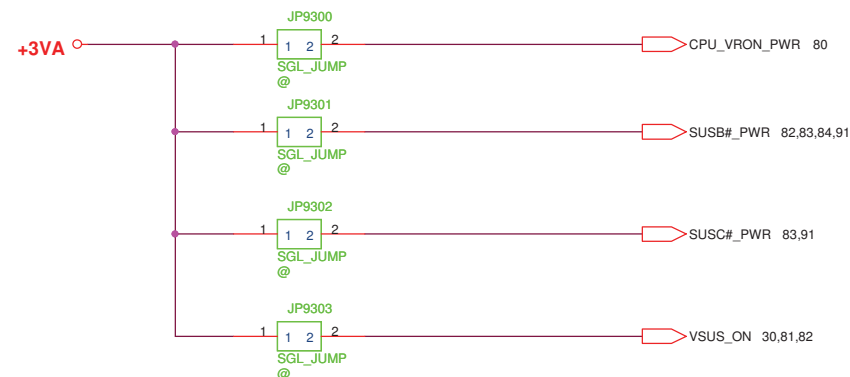


POWER GOOD DETECTOR





FOR POWER TEST



<Variant Name>

| | | | |
|--|------------------------------|------------------------------|------------|
| PEGATRON | | Title : POWER_SIGNAL | |
| | | Engineer: Louis | |
| Size B | Project Name EAB00 | | Rev 1.0 |
| Date: Tuesday, January 25, 2011 | | Sheet 93 of 99 | |

follow U21N
System: UL21F
Charger: Ray M17
Red circle is modify by Scott

by Mohoo @9/29

by Scott @9/29

Change Snubber Resistor to 1206 size by Scott @10/01
modify page93 signal info. by Scott @10/01
Add +5VAO signal in Page81 by Scott @10/01

| | | | |
|--|------------------------------|------------------------------|----------|
| PEGATRON | | Title : Power History | |
| BG1 | | Engineer: Alfie_Wang | |
| Size Custom | Project Name EAB00 | Rev 1.2 | |
| Date: Tuesday, January 25, 2011 | | Sheet | 95 of 99 |

Power On Sequence Diagram

