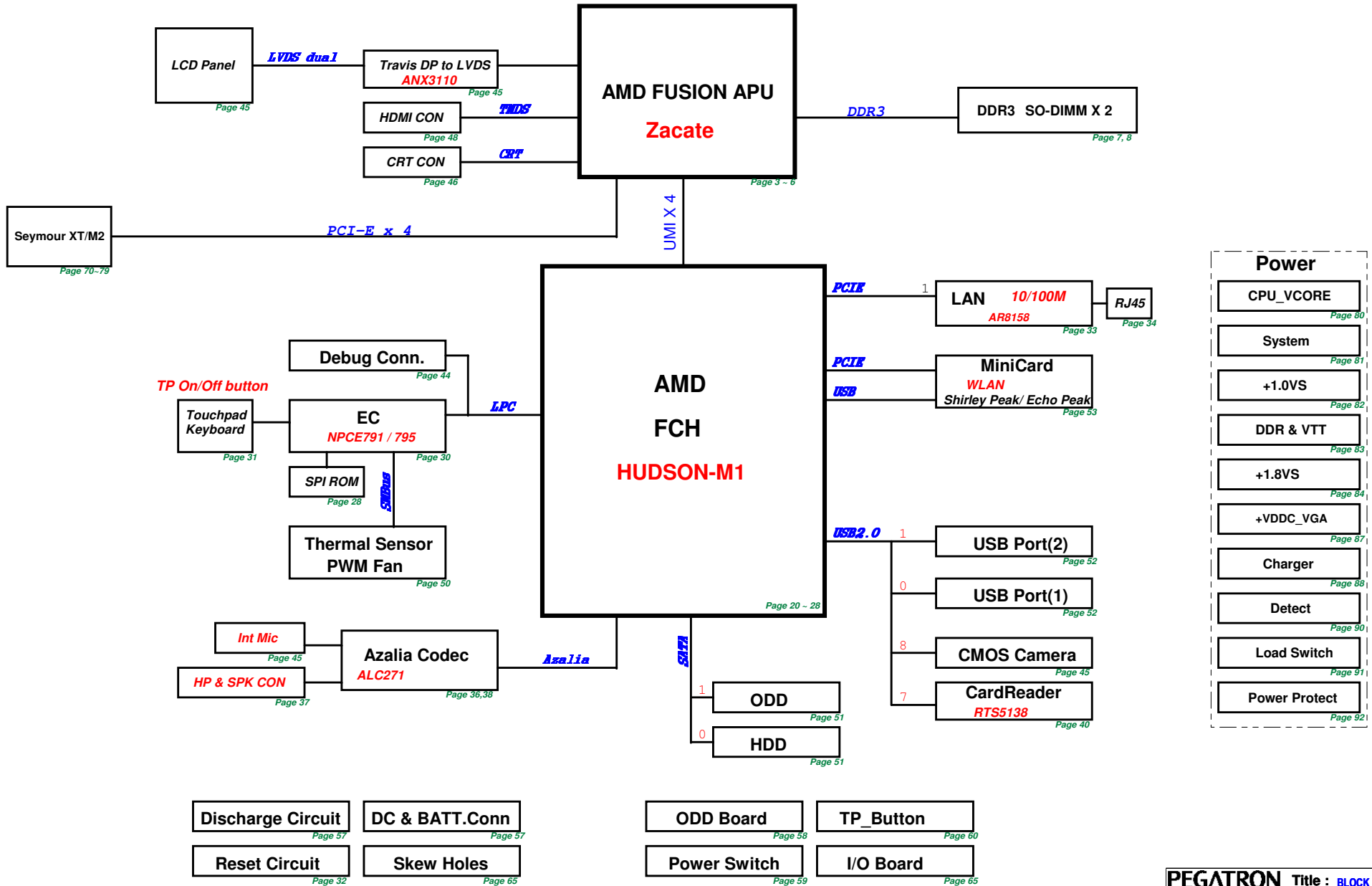


# AAB70 AMD Brazos Platform Rev. 2.0

## BLOCK DIAGRAM

R 1.1 /0301



5

4

3

2

1

D

D

C

C

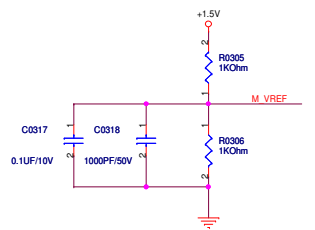
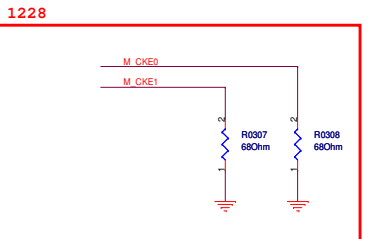
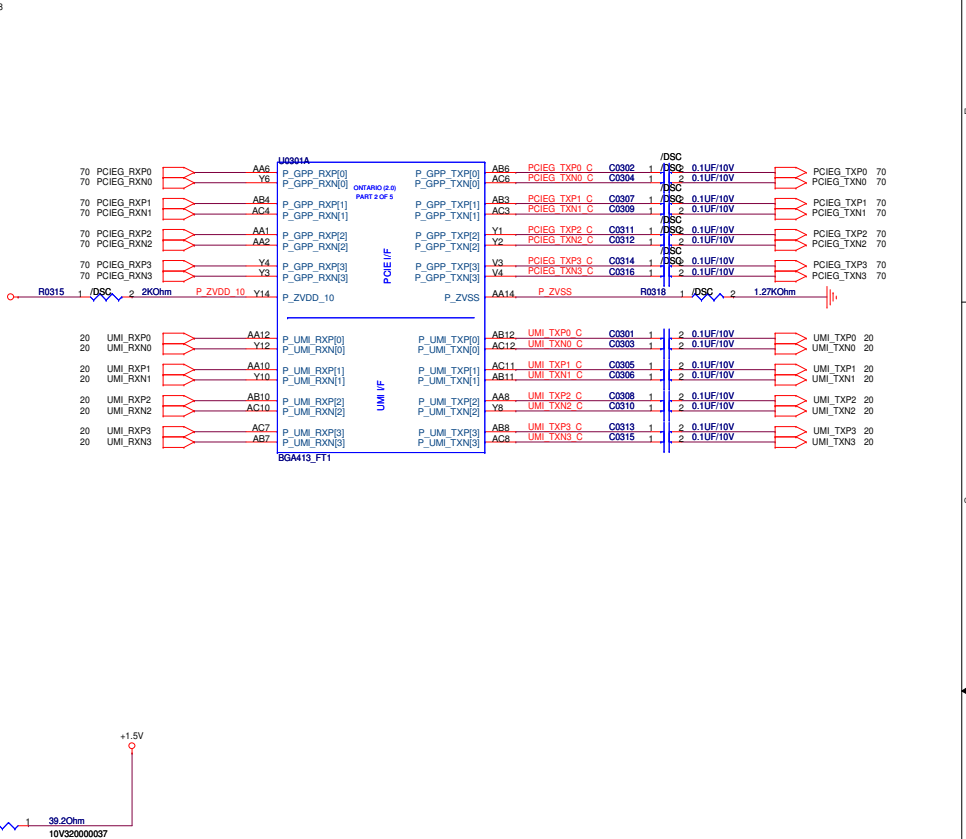
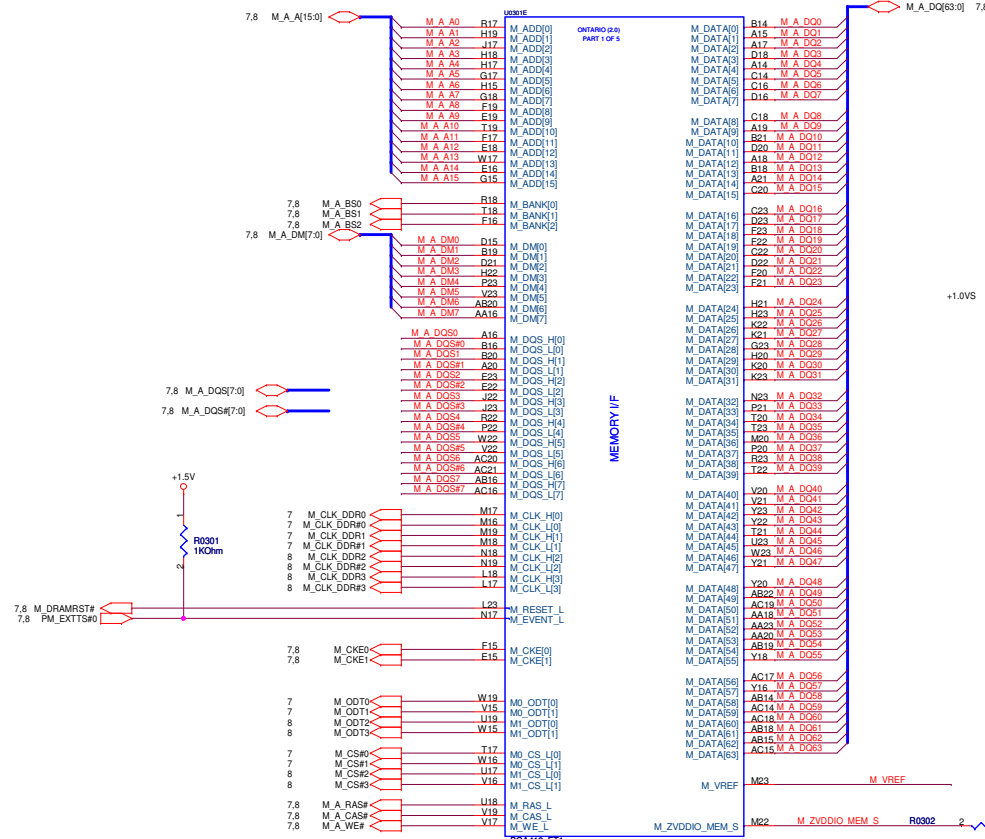
B

B

A

A

<b>PEGATRON</b>		Title : <b>System Setting</b>	
Engineer: <b>Allen_CD_Wu</b>			
Size <b>C</b>	Project Name <b>AAB70</b>	Rev <b>1.1</b>	
Date: <b>Monday, March 21, 2011</b>		Sheet <b>2</b> of <b>99</b>	



place with 1000mils with APU

0930

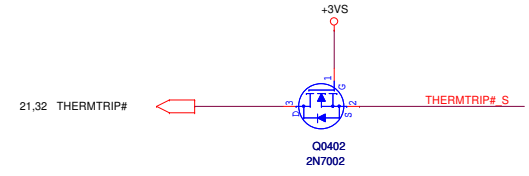
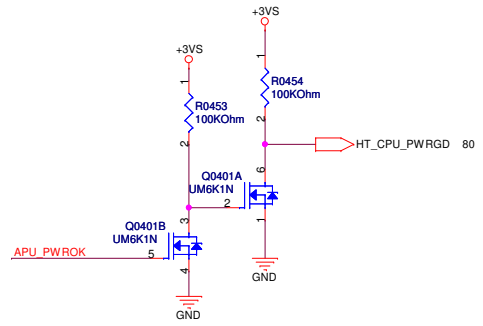
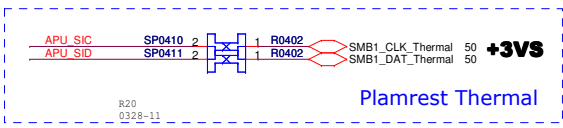
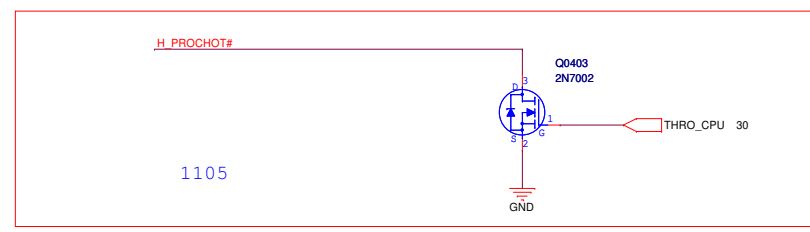
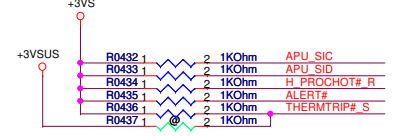
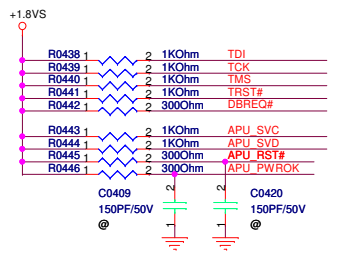
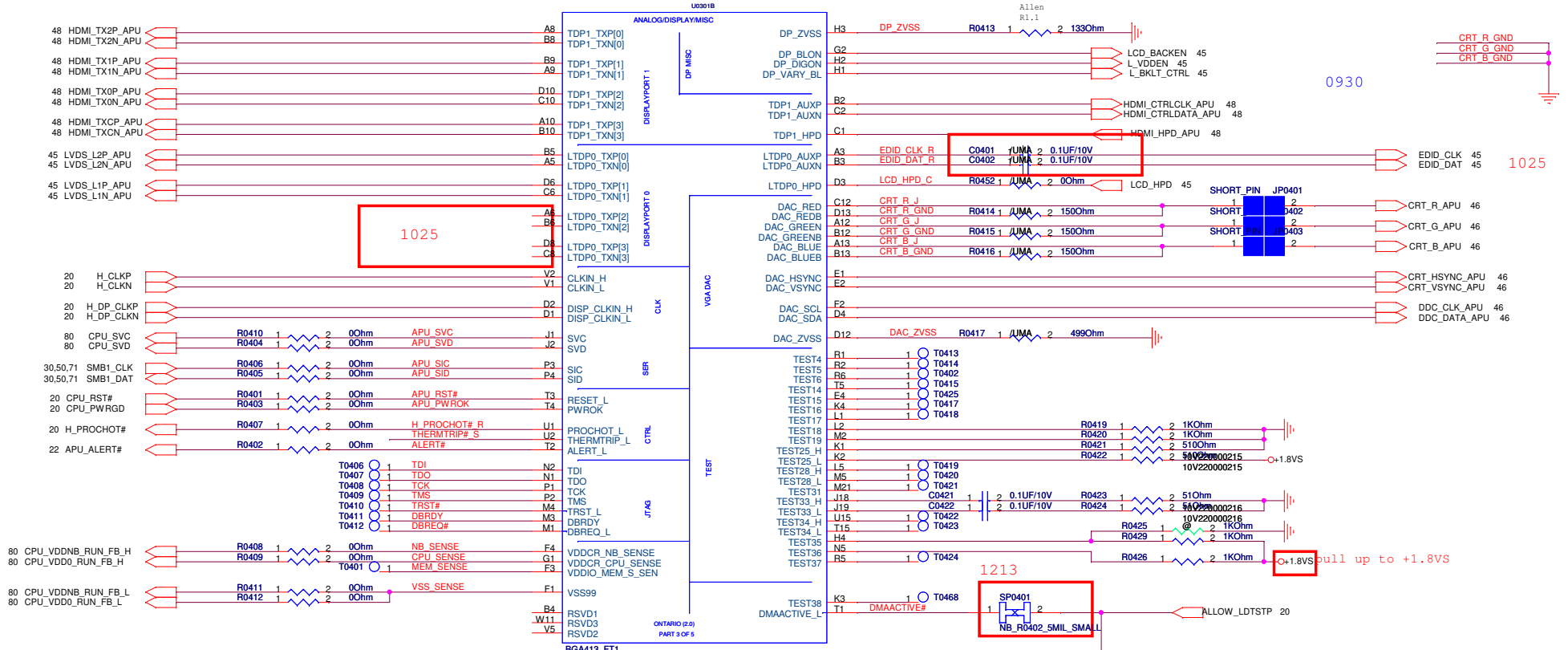
0930

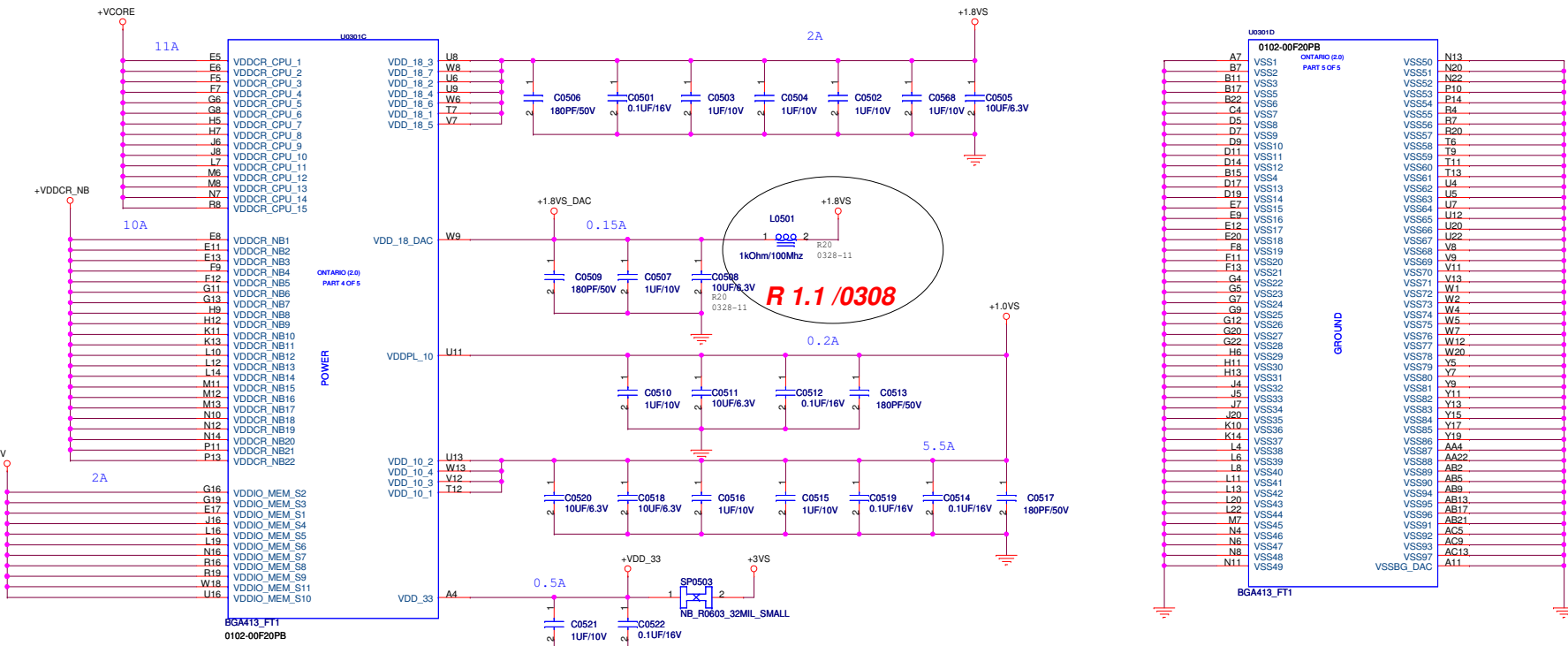
1025

1025

1213

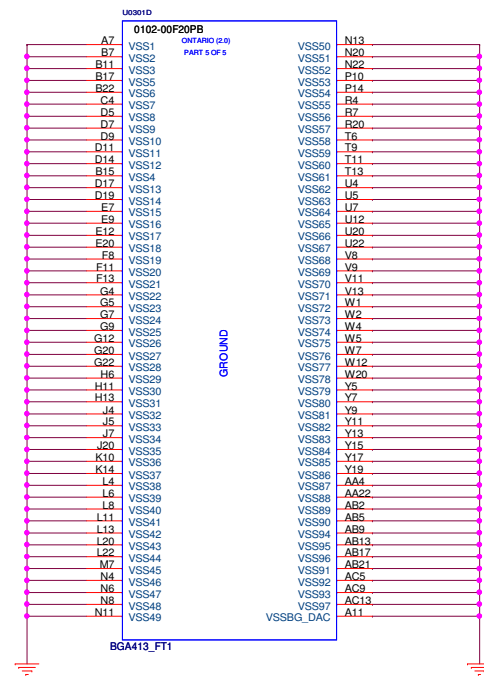
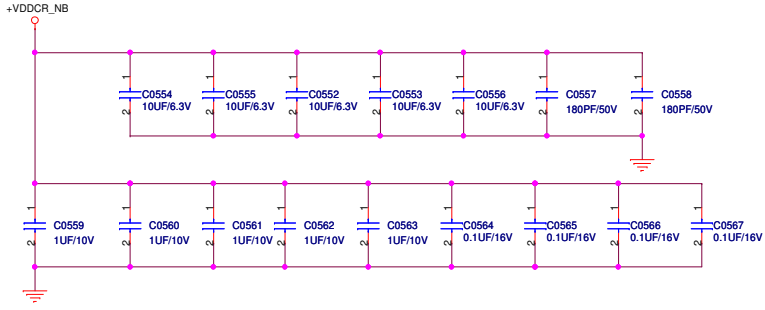
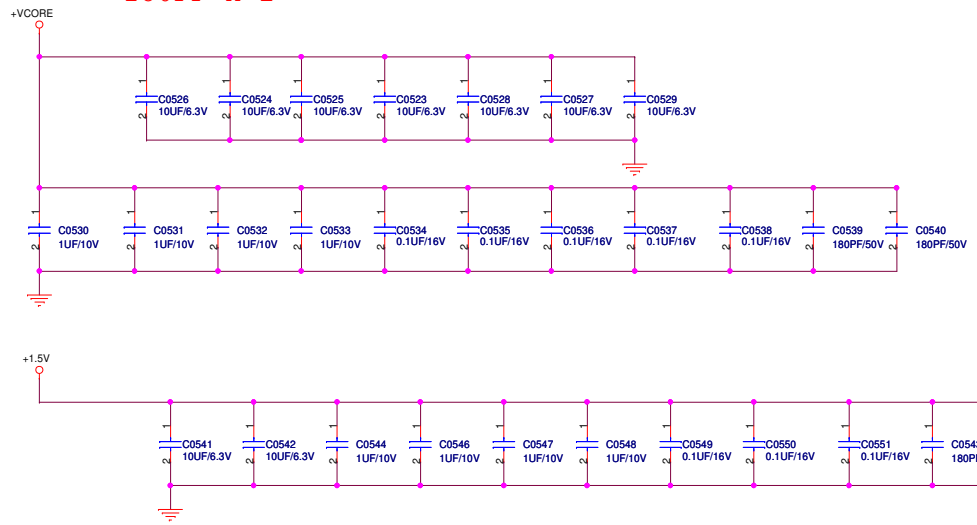
1105

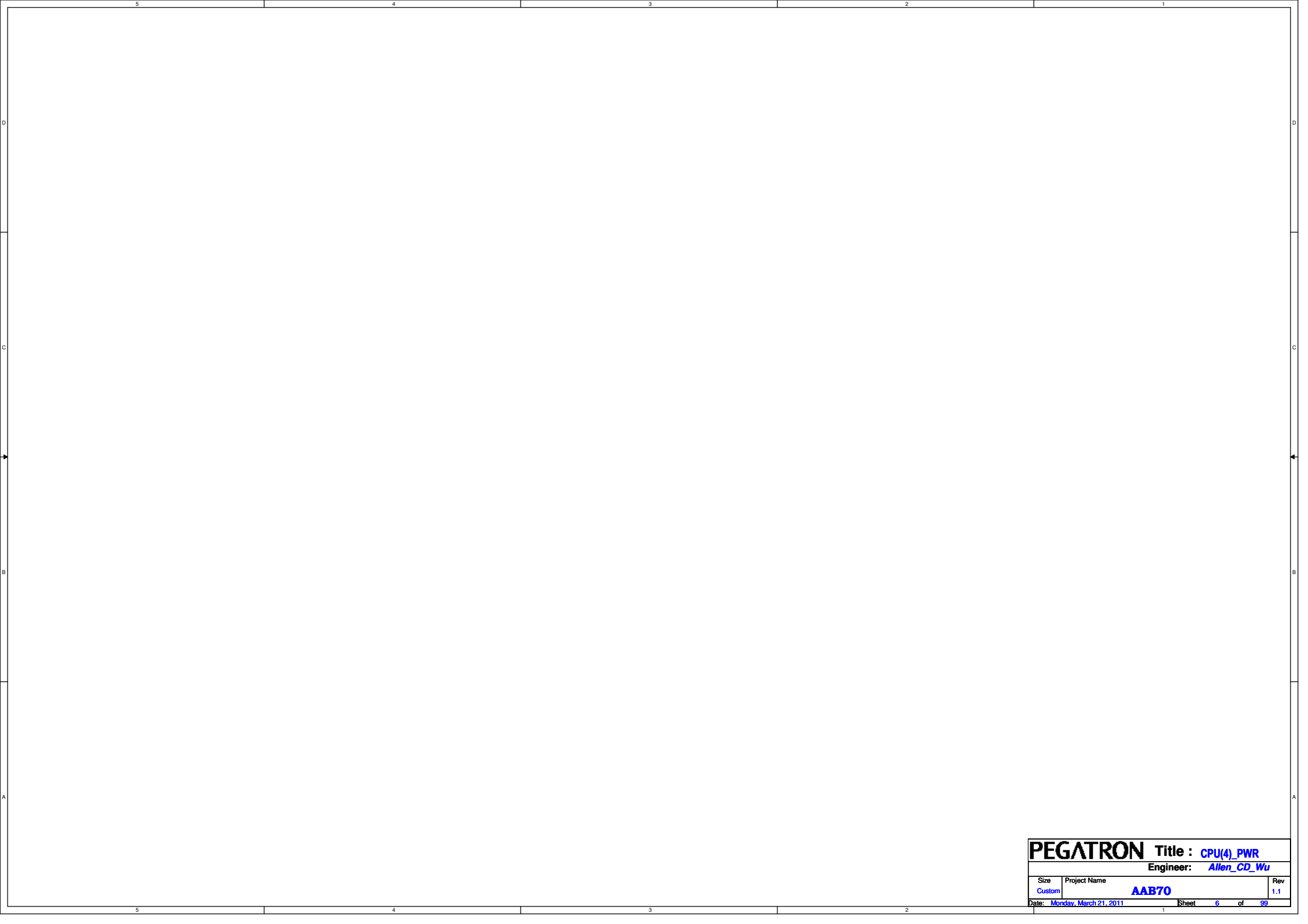




+VCORE  
 10UF x 7  
 1UF x 4  
 0.1UF x 5  
 180PF x 2

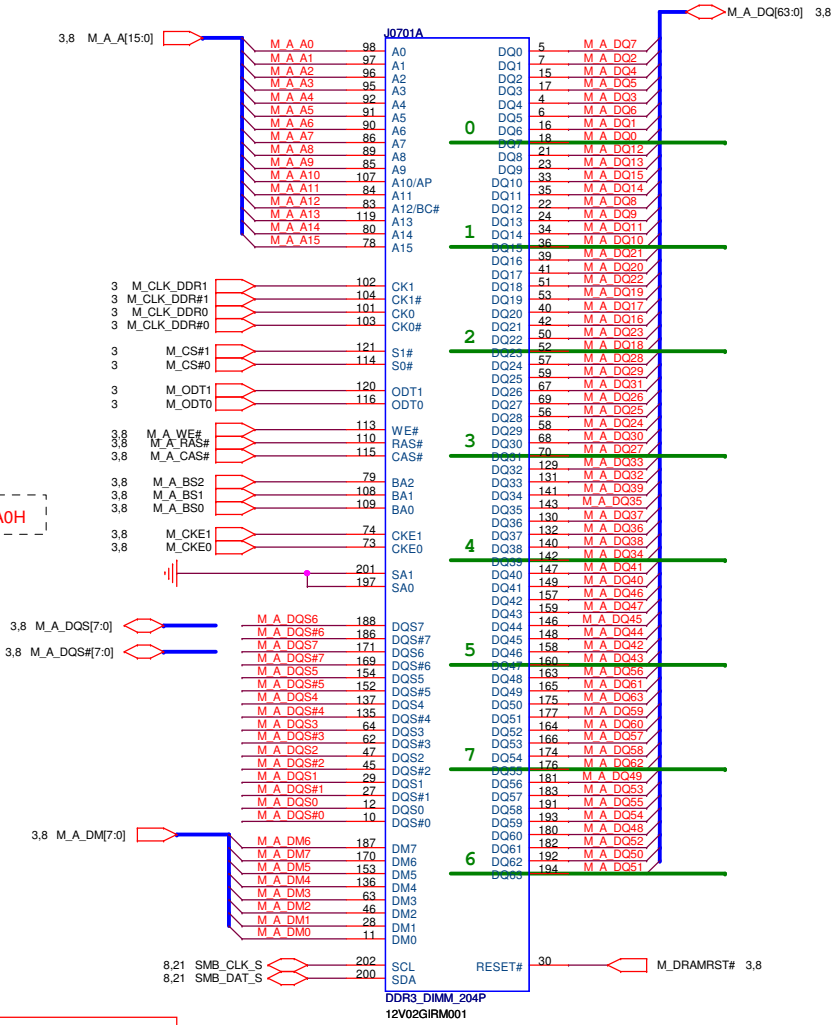
+VDDCR\_NB  
 10UF x 7  
 1UF x 4  
 0.1UF x 5  
 180PF x 2



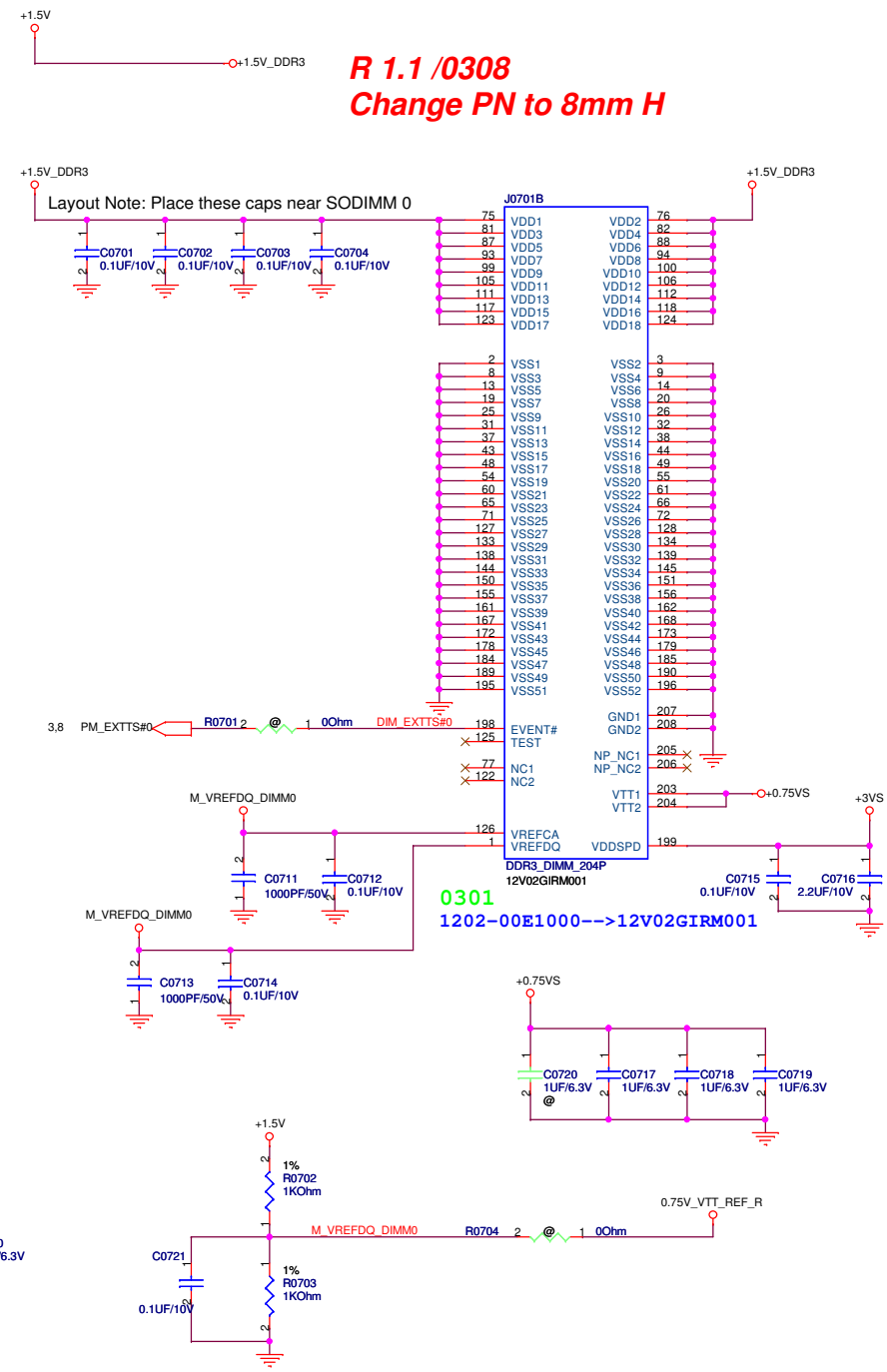


<b>PEGATRON</b>		<b>Title :</b> CPU(4)_PWR	
		<b>Engineer:</b> Allen_CD_Wu	
Size	Project Name		Rev
Custom	<b>AAB70</b>		1.1
Date: Monday, March 21, 2011		Sheet	6 of 99

H:4.0mm 1202-002H000

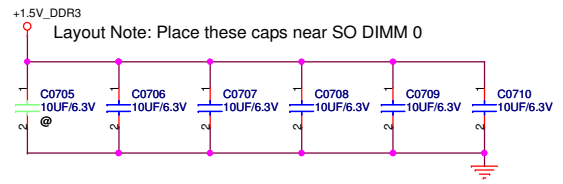
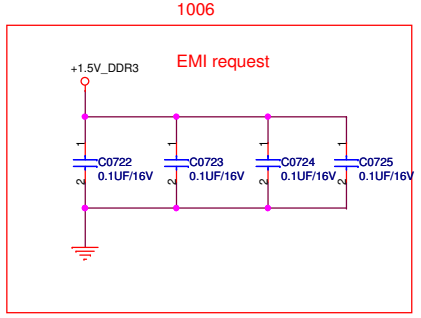


SMBus Slave Address: A0H



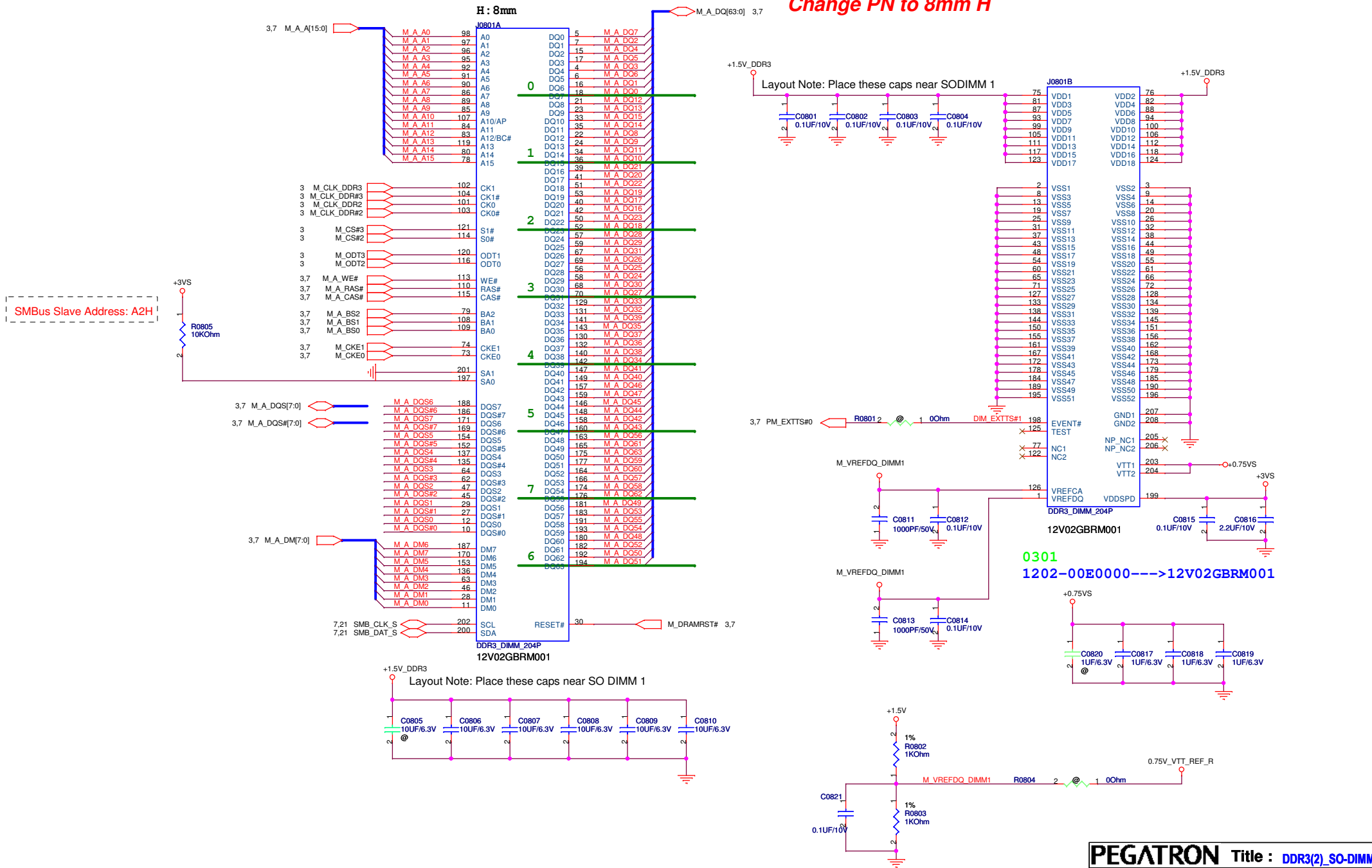
R 1.1 /0308  
Change PN to 8mm H

0301  
1202-00E1000-->12V02GIRM001



H:8.0mm 1202-000P00

R 1.1 /0308  
Change PN to 8mm H

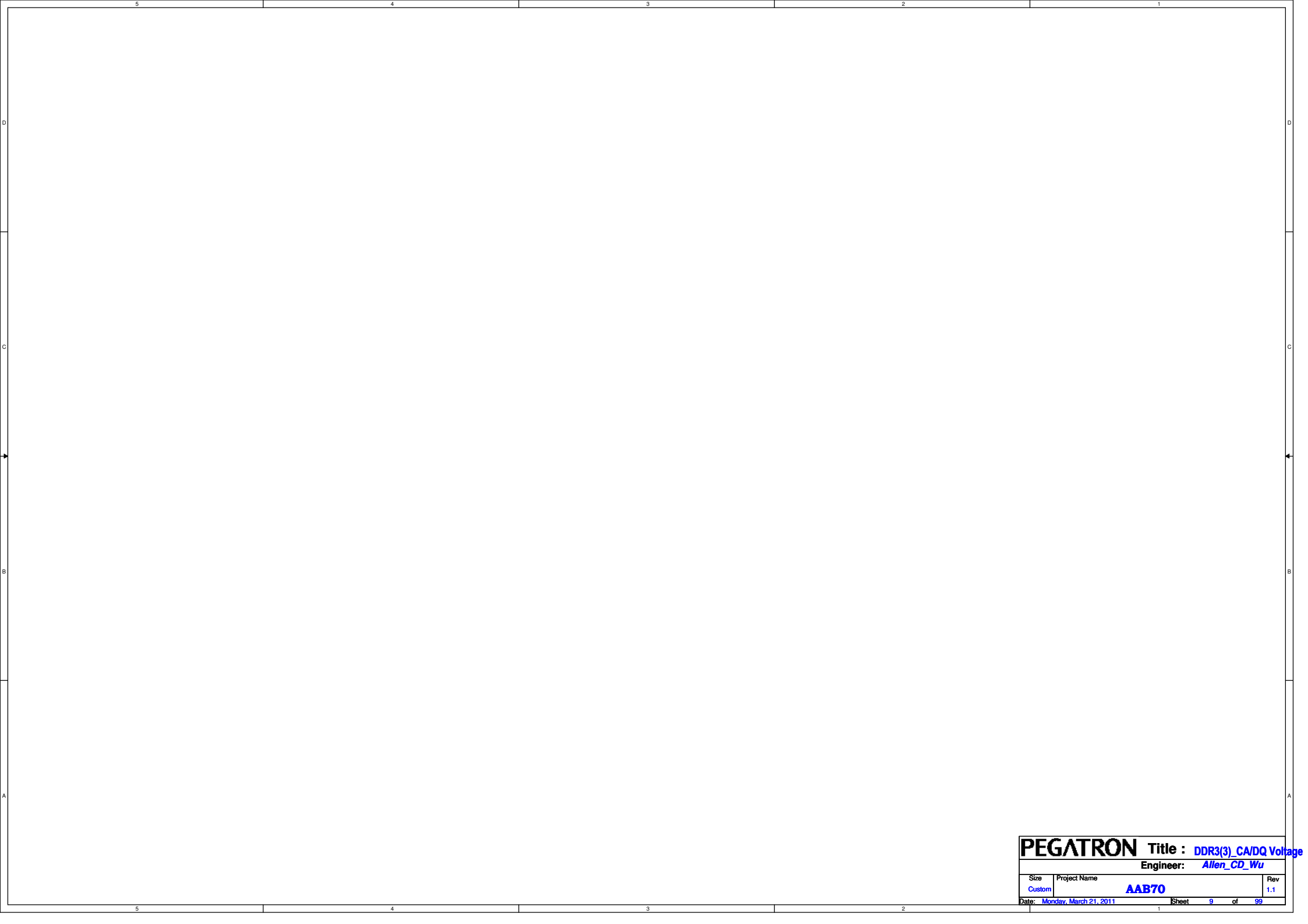


**PEGATRON** Title : **DDR3(2)\_SO-DIMM1**  
 Engineer: **Allen\_CD\_Wu**

Size	Project Name		Rev
Custom	<b>AAB70</b>		1.1

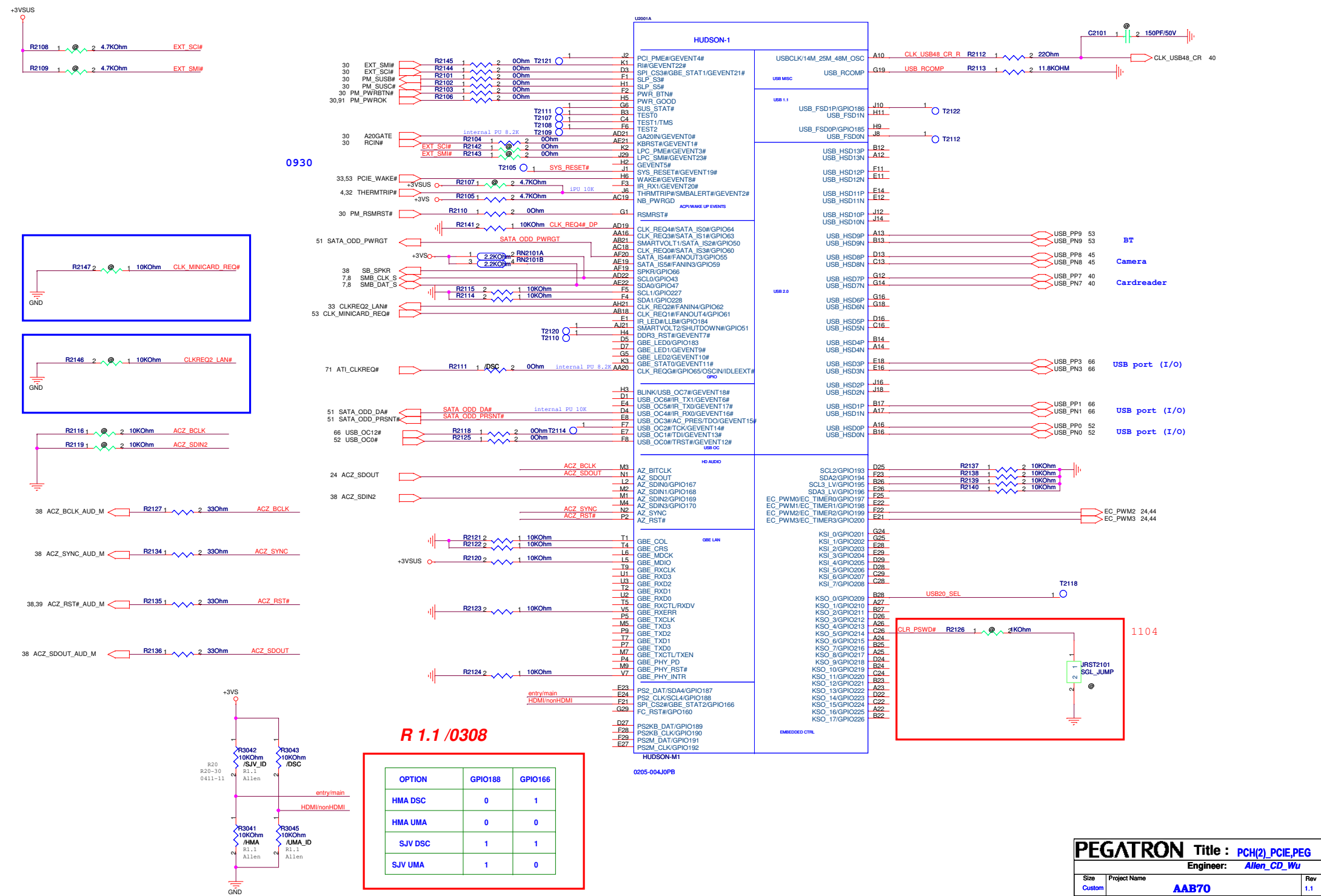
Date: Thursday, April 21, 2011 Sheet 8 of 99





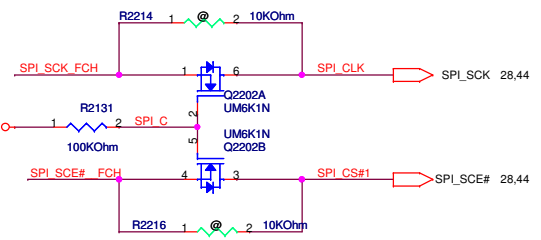
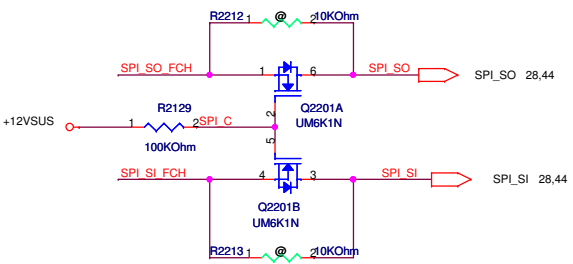
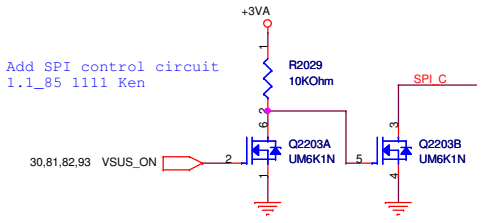
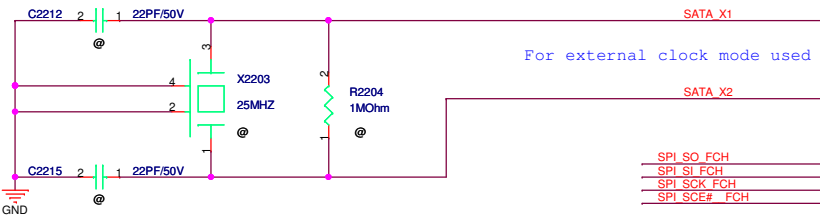
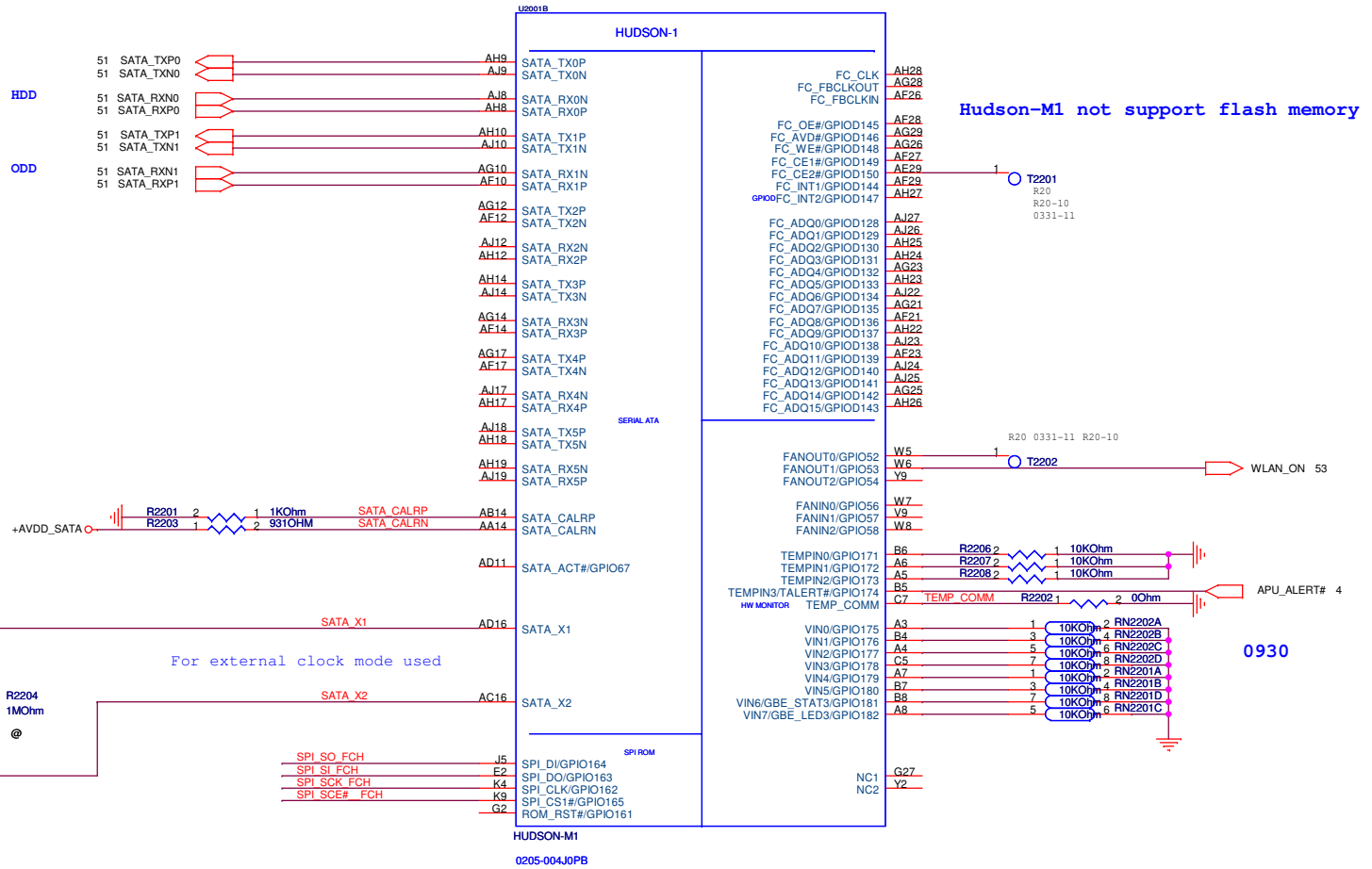
<b>PEGATRON</b>		Title : <b>DDR3(3)_CA/DQ Voltage</b>	
Engineer: <b>Allen_CD_Wu</b>			
Size Custom	Project Name <b>AAB70</b>	Rev 1.1	
Date: <b>Monday, March 21, 2011</b>		Sheet	9 of 99

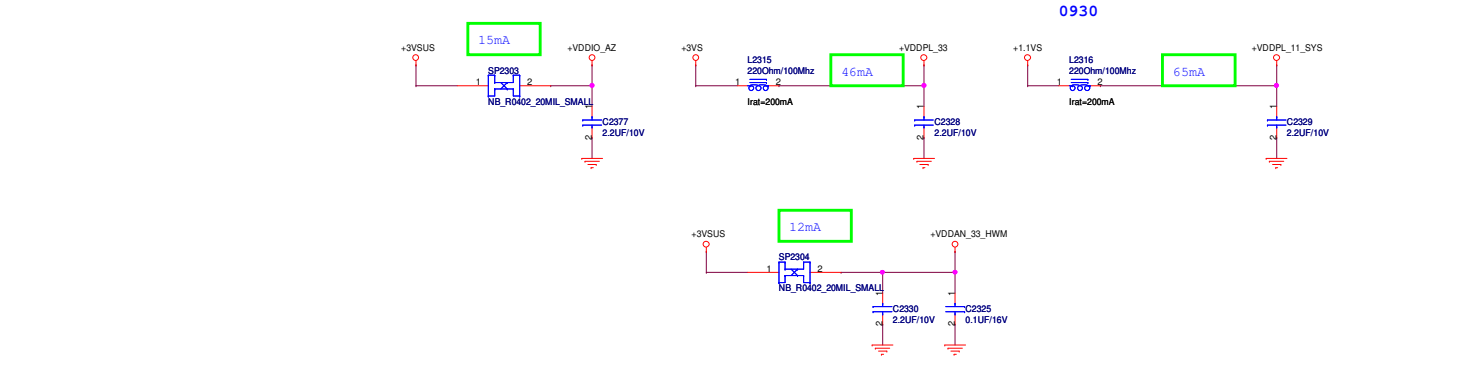
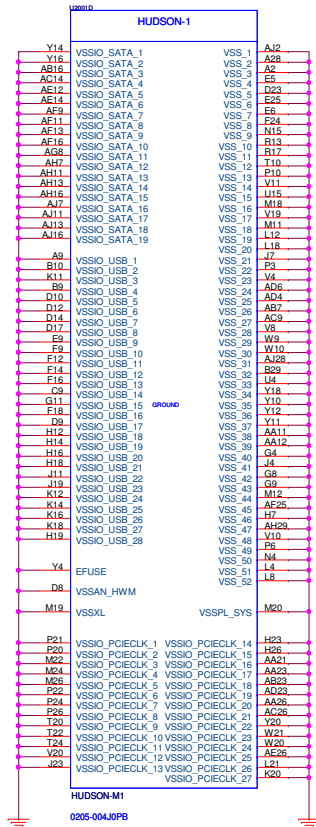
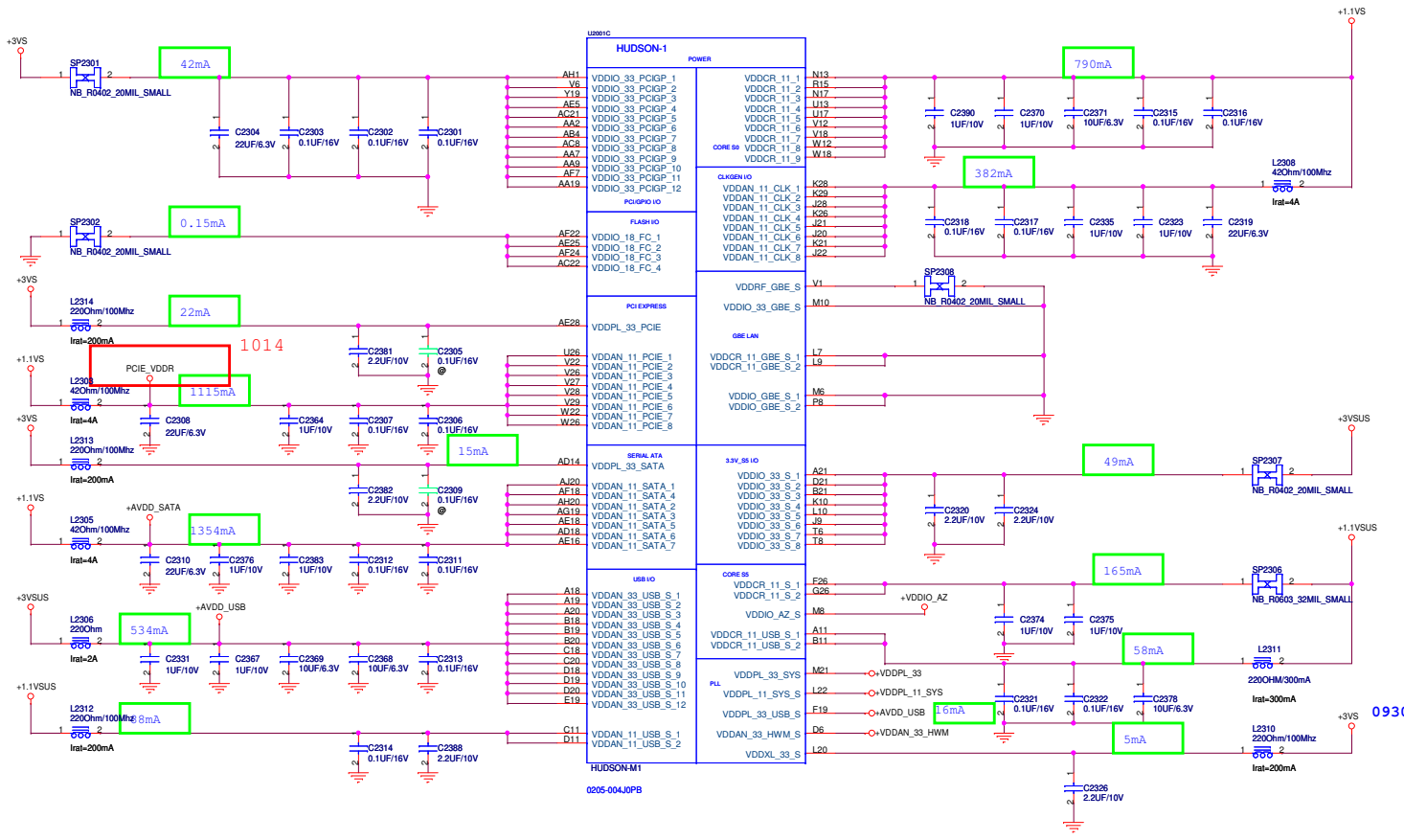




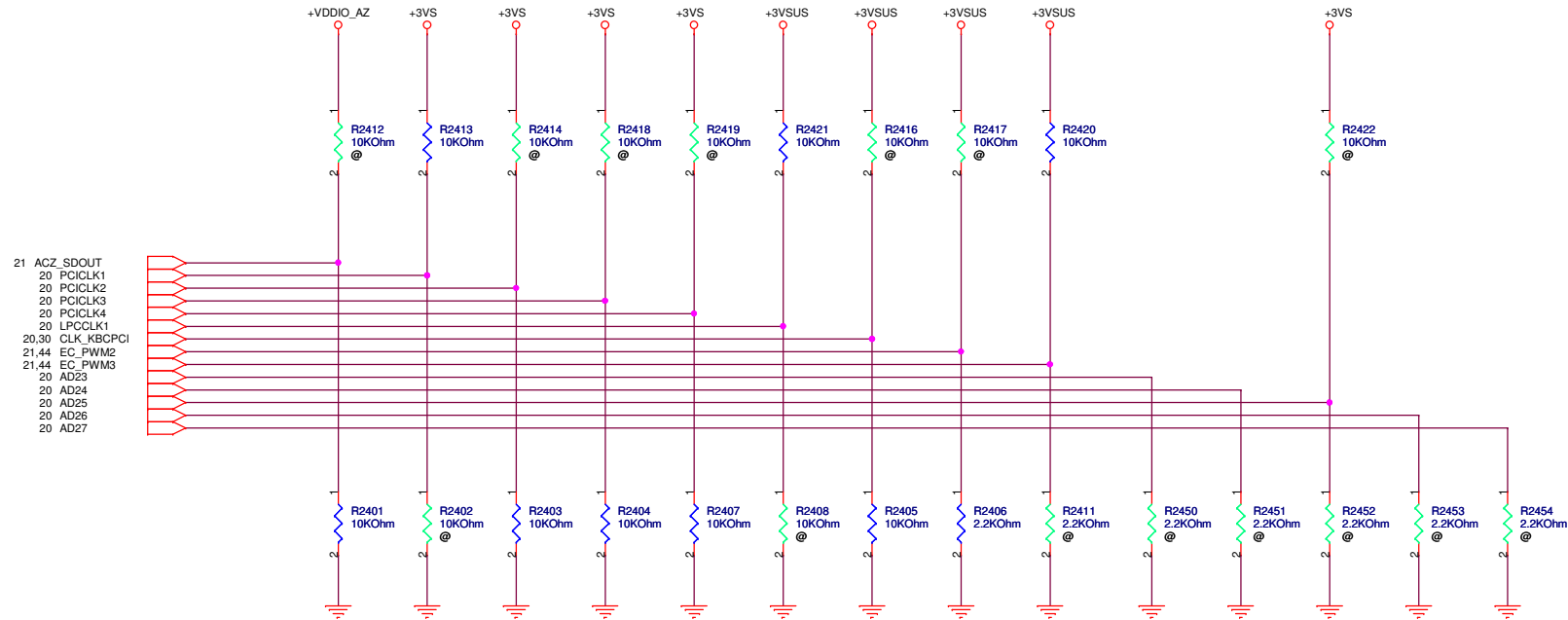
0930

1104





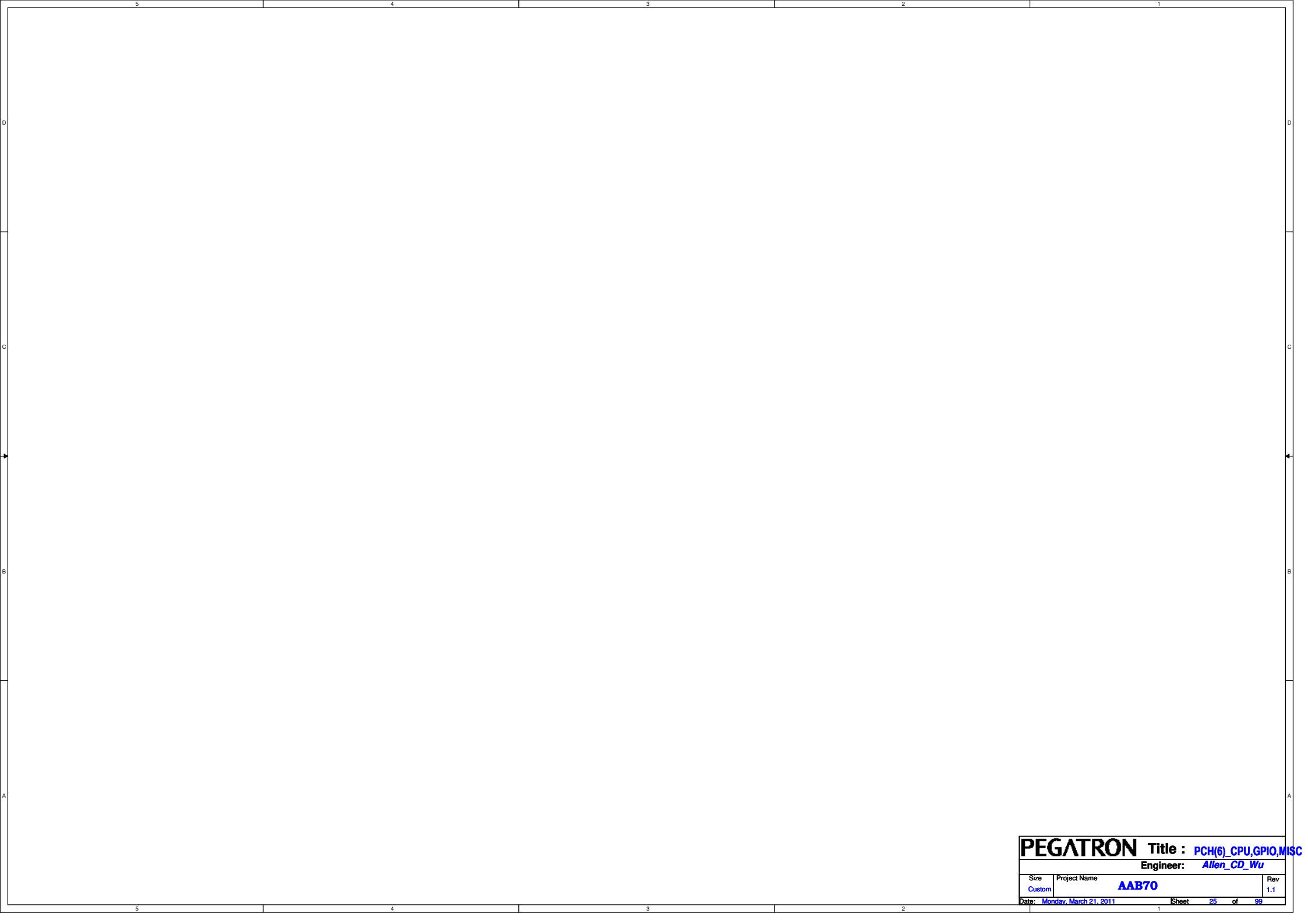
# Strap Pins



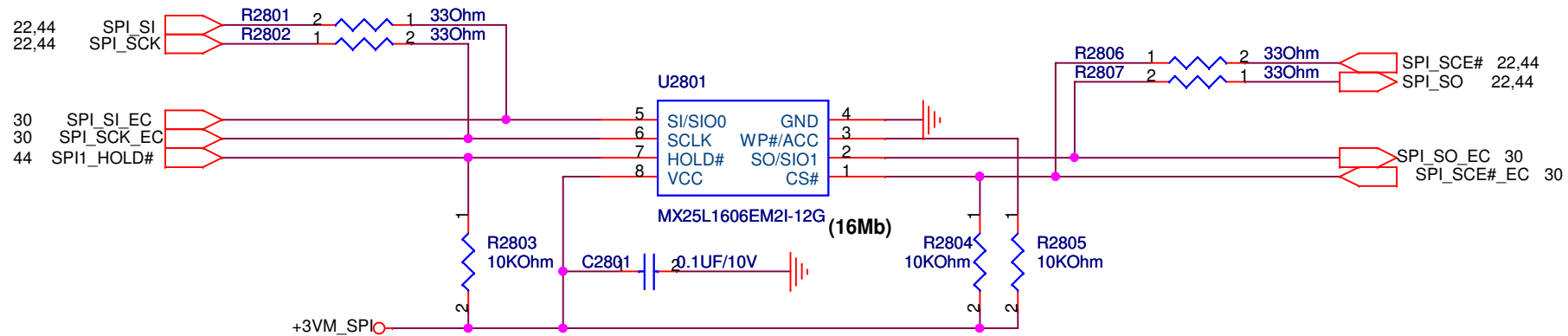
	ACZ_SDOUT_AUD	PCICLK1	PCICLK2	PCICLK3	PCICLK4	LPCCLK0 CLK_KBCPCI	LPCCLK1	EC_PWM2	EC_PWM3	
High	low power mode	<b>PCIE Gen2</b>	watchdog timer enable	debug	no-Fusion clock mode	EC enable	<b>clock gen. enable</b>	H	L	LPC ROM
Low	<b>performance mode</b>	PCIE Gen1	<b>watchdog timer disable</b>	<b>ignore debug</b>	<b>Fusion clock mode</b>	<b>EC disable</b>	clock gen. disable	L	H	SPI ROM

## Debug Straps

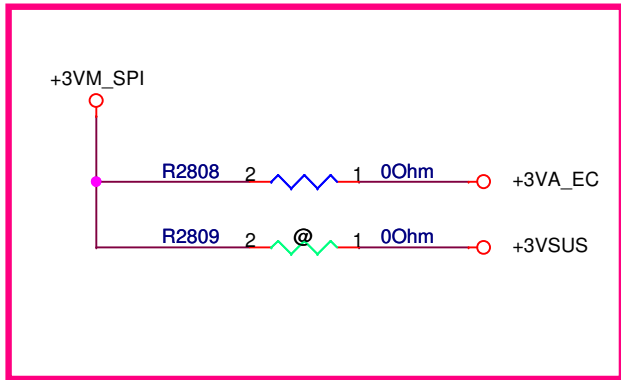
	AD23	AD24	AD25	AD26	AD27
High	<b>disable PCI mem boot</b>	<b>default PCIE straps</b>	<b>use FC PLL</b>	<b>disable ILA autorun</b>	<b>use PCI PLL</b>
Low	enable PCI mem boot	EEPROM PCIE straps	bypass FC PLL	enable ILA autorun	by pass PCI PLL



<b>PEGATRON</b>		Title : <b>PCH(6)_CPU,GPIO,MISC</b>	
		Engineer: <b>Allen_CD_Wu</b>	
Size	Project Name	Rev	
Custom	<b>AAB70</b>	1.1	
Date: <b>Monday, March 21, 2011</b>		Sheet	25 of 99



1110



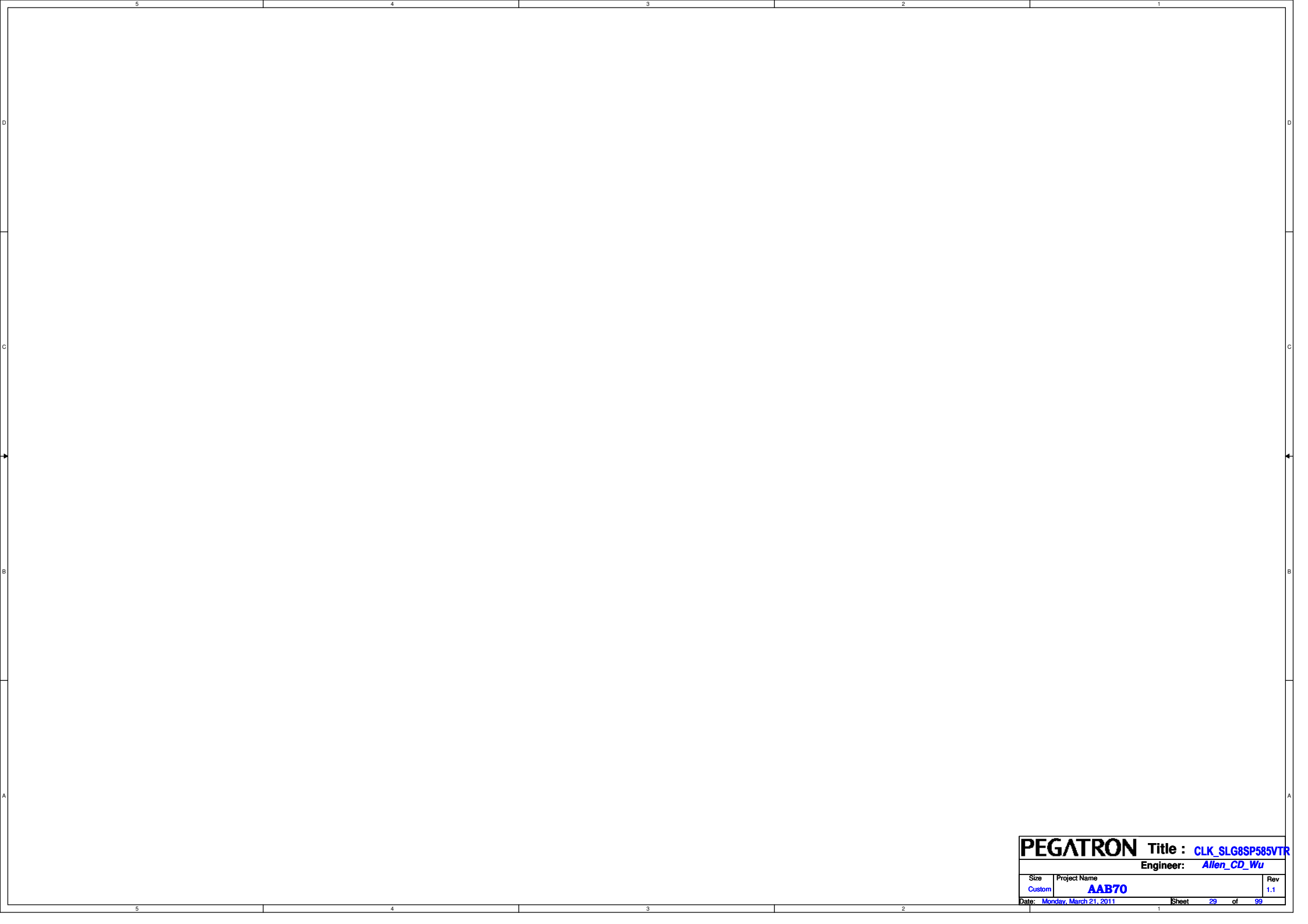
WINBOND: 0500-00P4000

MXIC: 0500-00TY000

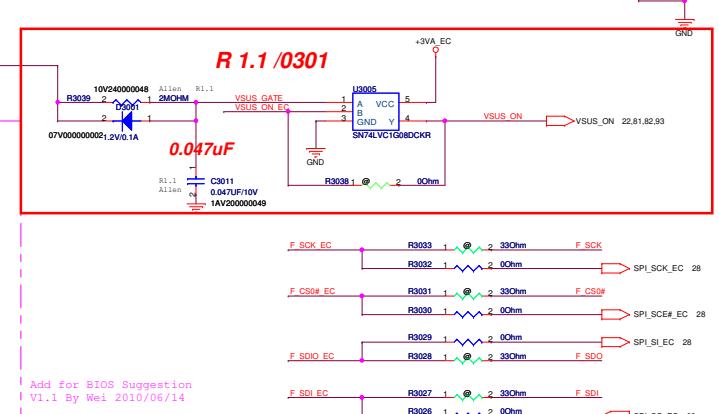
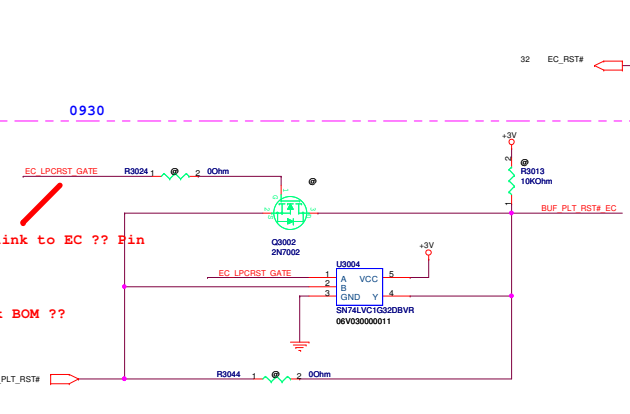
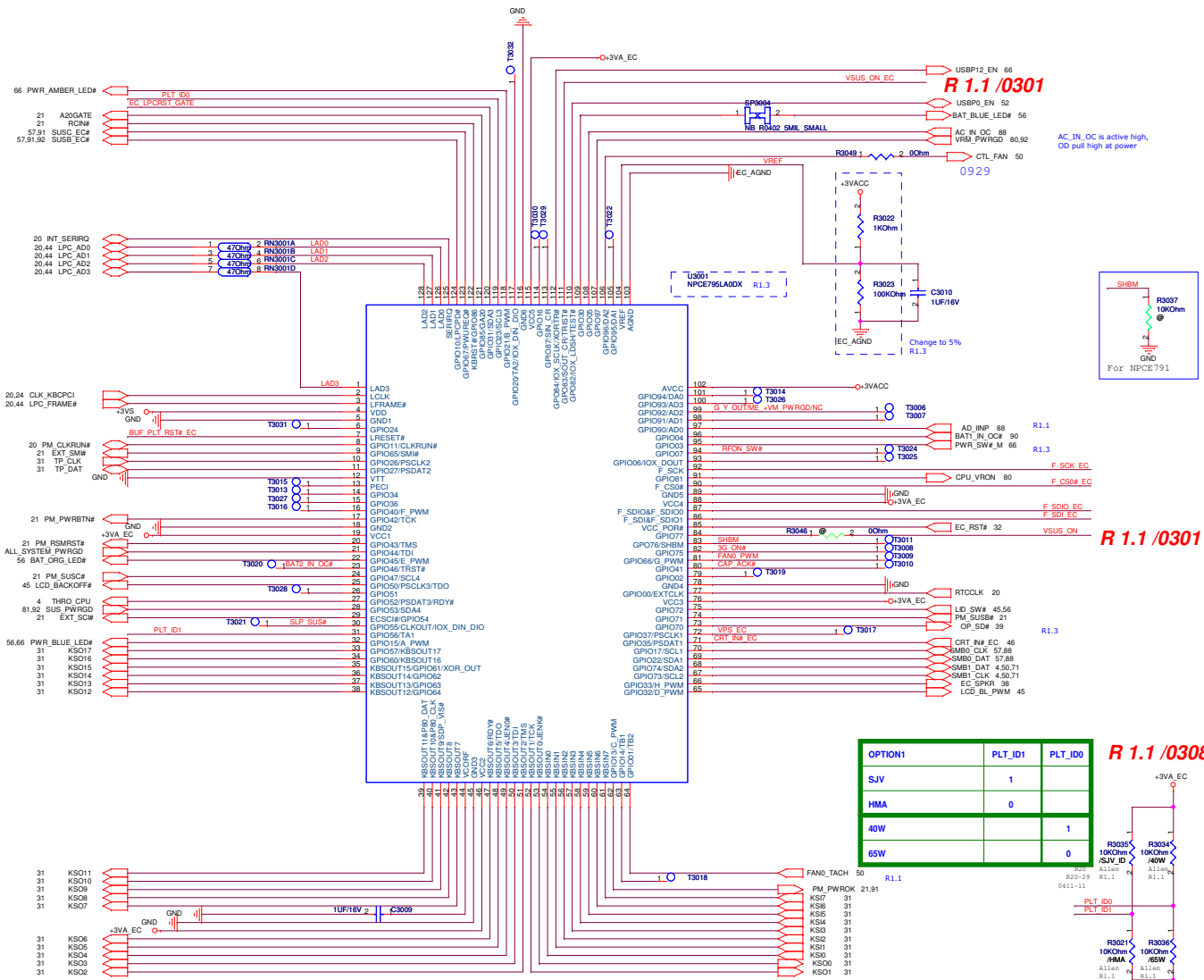
reserved for BIOS testing

<b>PEGATRON</b> Title : <b>SPI ROM</b>		
Engineer: <b>Allen_CD_Wu</b>		
Size A	Project Name <b>BS_AB</b>	Rev 1.1
Date: <b>Thursday, April 21, 2011</b>	Sheet <b>28</b> of <b>99</b>	

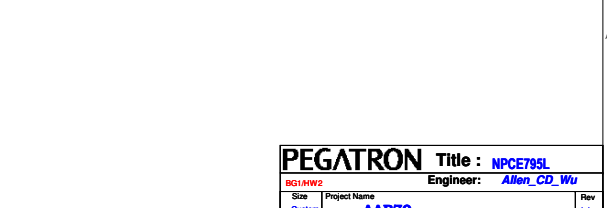
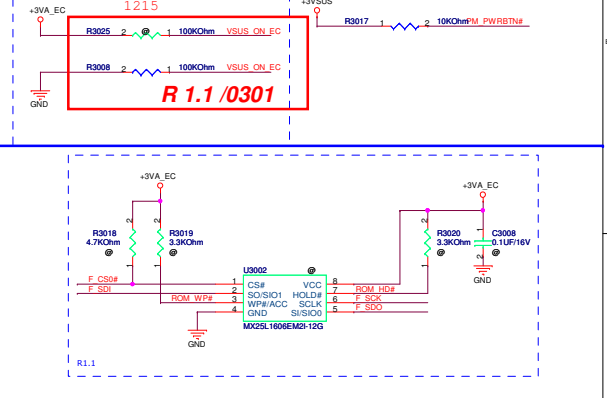
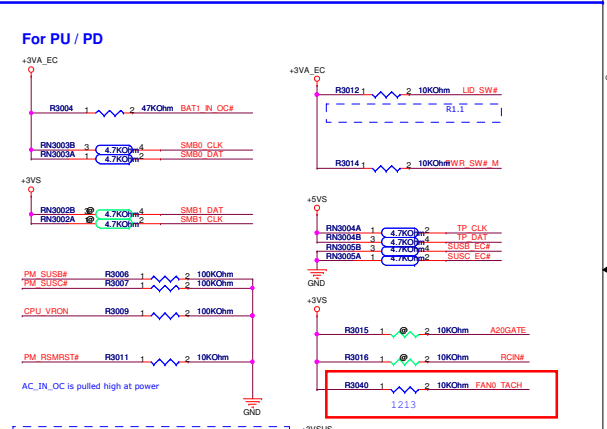
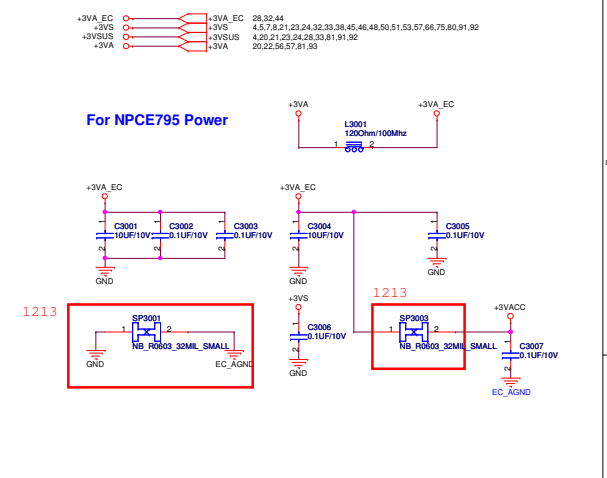




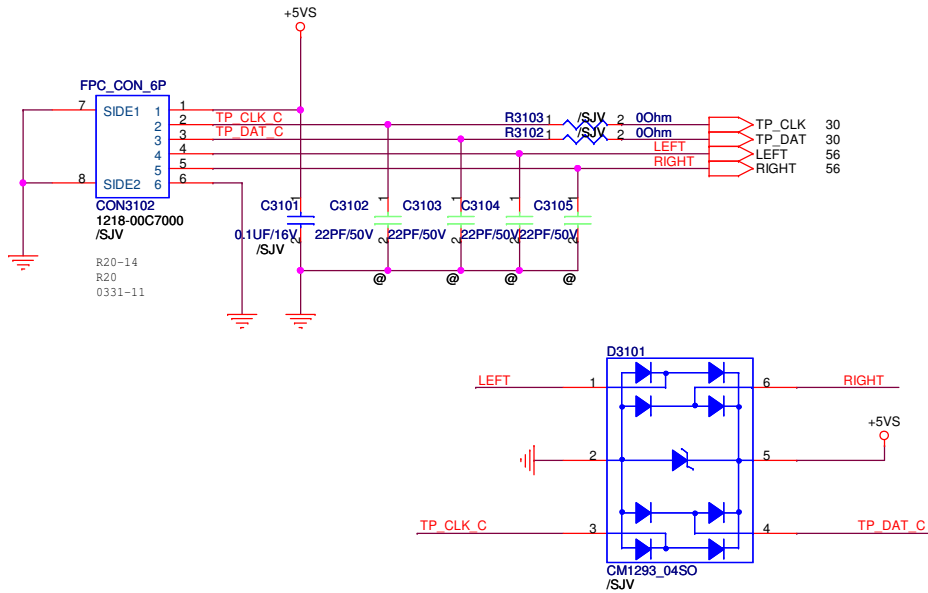
<b>PEGATRON</b> Title : <b>CLK_SLG8SP585VTR</b>		
Engineer: <b>Allen_CD_Wu</b>		
Size	Project Name	Rev
Custom	<b>AAB70</b>	1.1
Date: <b>Monday, March 21, 2011</b> Sheet <b>29</b> of <b>99</b>		



OPTION1	PLT_ID1	PLT_ID0
SJV	1	
HMA	0	
40W		1
65W		0

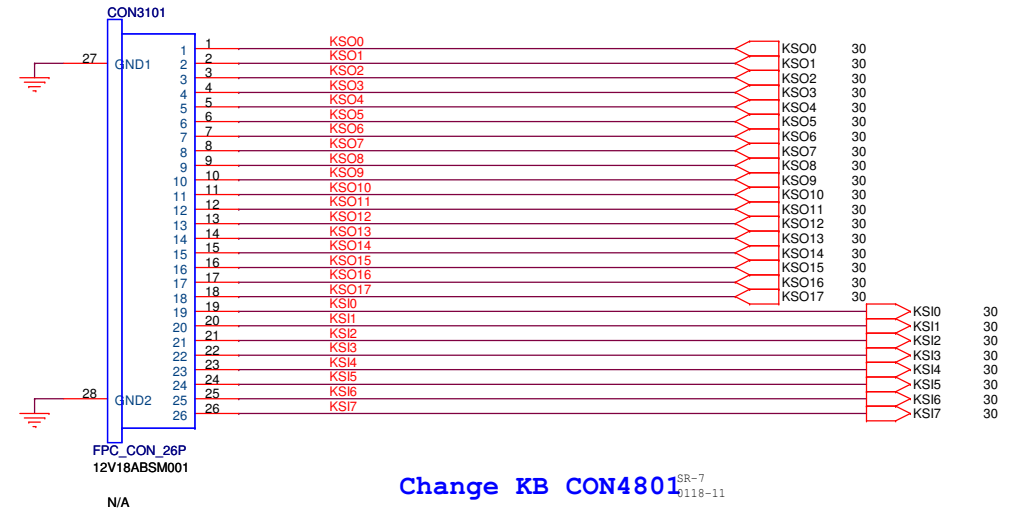


# Touch Pad for SJV

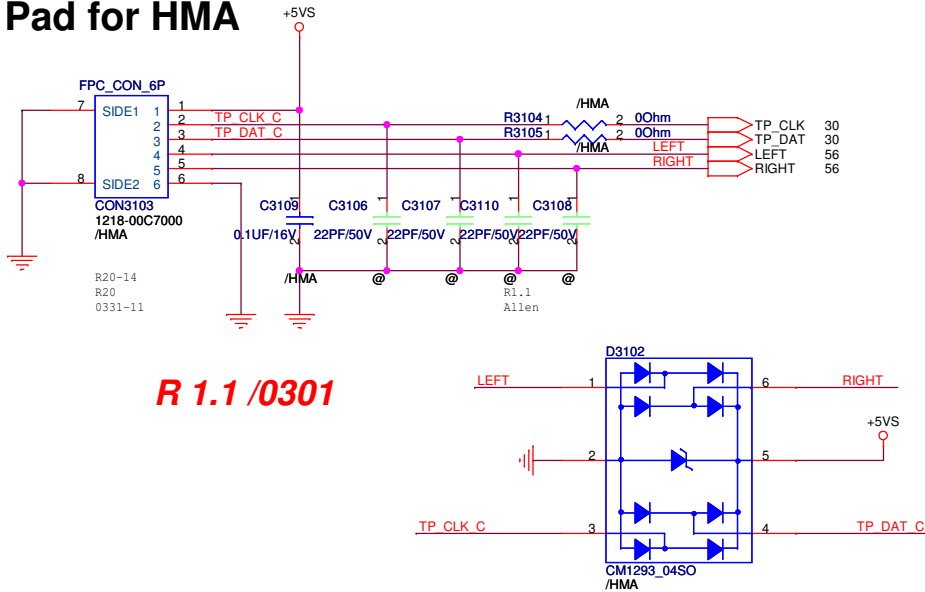


# Keyboard FOR 17"

AAB70 0124



# Touch Pad for HMA

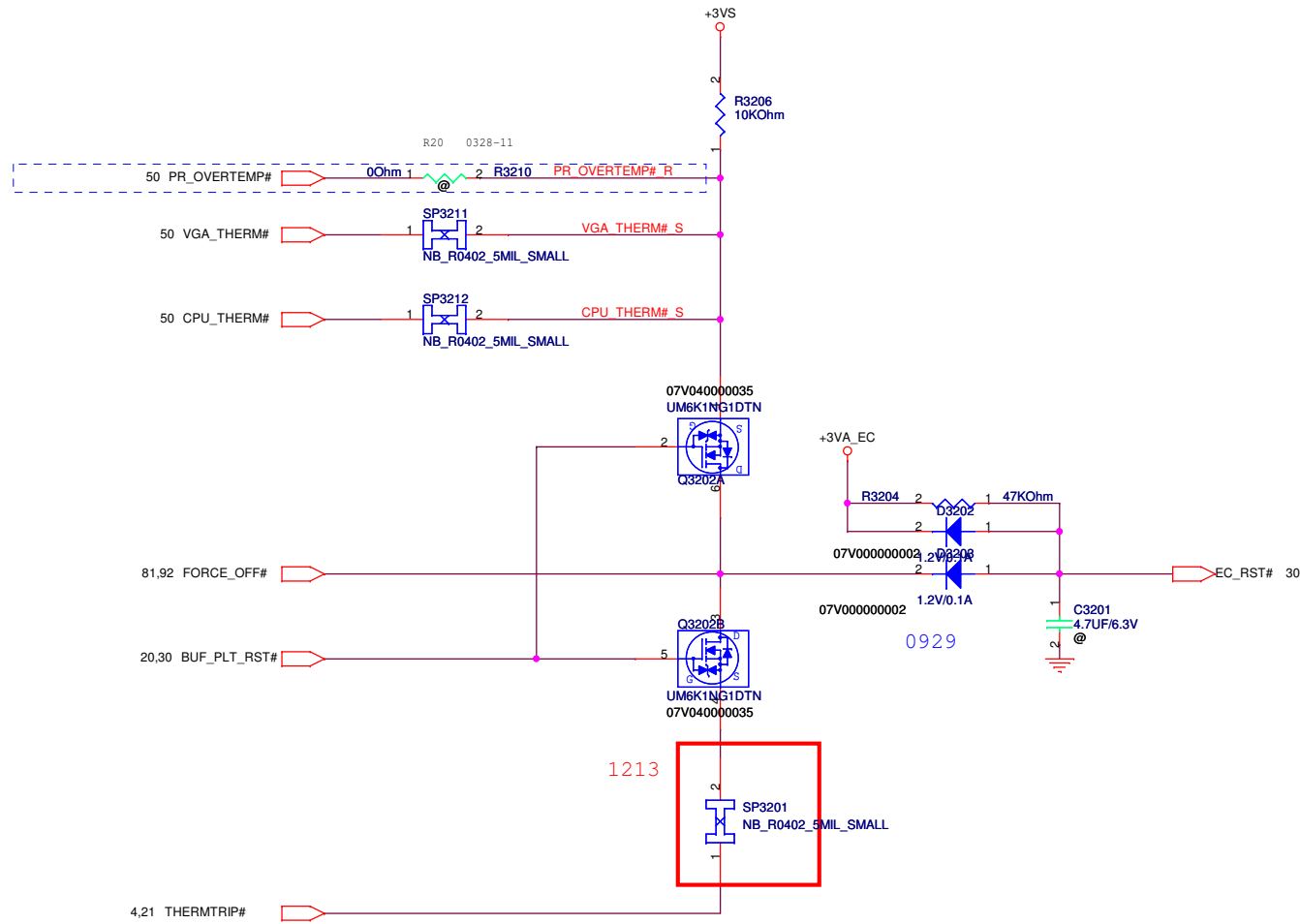


**R 1.1 /0301**

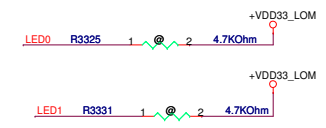
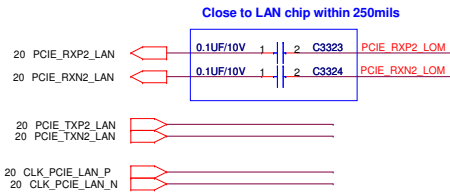
<b>PEGATRON</b> Title : EC_IT8512(2)KB, TP,FP		
BG1/HW2		Engineer: Allen_CD_Wu
Size B	Project Name AAB70	Rev 1.1
Date: Thursday, April 21, 2011		Sheet 31 of 99

# Thermal Policy

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



<b>PEGATRON</b>		Title : <b>RST_Reset Circuit</b>	
		Engineer: <b>Allen_CD_Wu</b>	
Size	Project Name		Rev
B	<b>AAB70</b>		1.1
Date: <b>Thursday, April 21, 2011</b>		Sheet	32 of 99

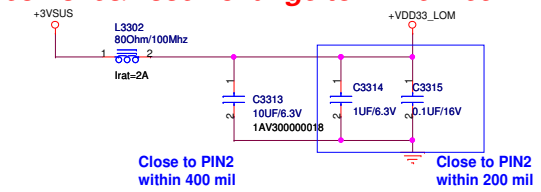


Modify H/W strap setting SR-41 0125-11

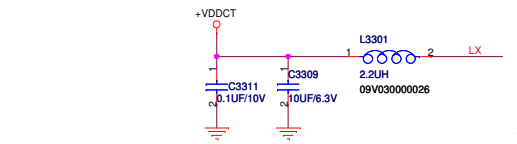
**Power-on strapping**  
 (1) LED[0]: enable overlocking  
 pull-high: overlocking (default)  
 stuff R3326, R3324; Remove R3317, R3325, R3327;  
 pull-low: un-overlocking  
 stuff R2, R3325, R3327; Remove R3326, R3324

(2) LED[1]: selection for AR8158's internal VDDCT (SWR/LDO)  
 pull-high: SWR mode  
 stuff R3330, R3332; Remove R3313, R3331, R3333;  
 pull-low: LDO mode  
 stuff R3313, R3331, R3333; Remove R3330, R3332

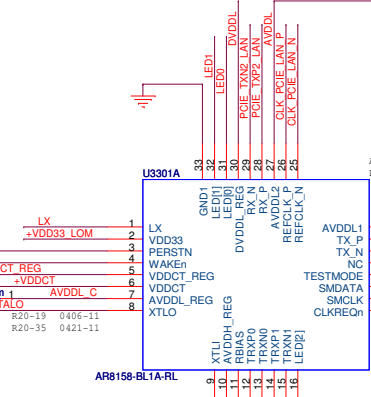
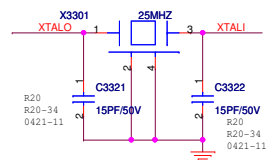
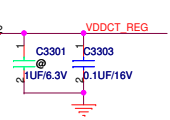
**R 1.1 /0308 L3403/L3302 change to PB201209T-152-N**



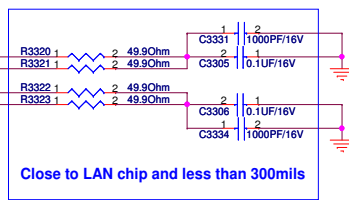
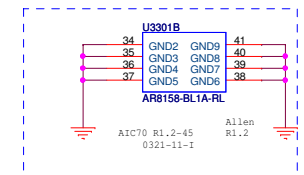
**AR8158 (SWR mode)**  
 Stuff L3301, C3311, C3309 : remove C3301, R3311  
**AR8158 (LDO mode)**  
 Stuff R3311, C3301, C3303 : Remove L3301, C3311, C3309



Modify R3311 as VP SR-31 0125-11



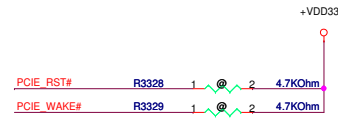
Remove LAN LED circuit SR-29 0125-11



Close to LAN chip and less than 300mils

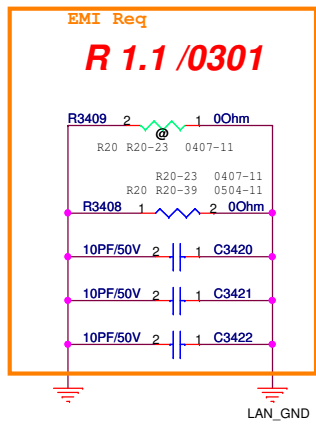
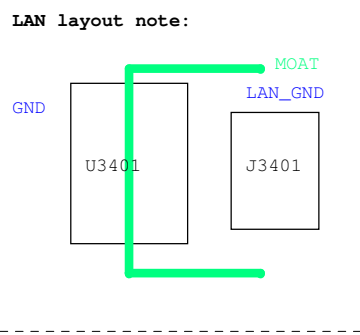
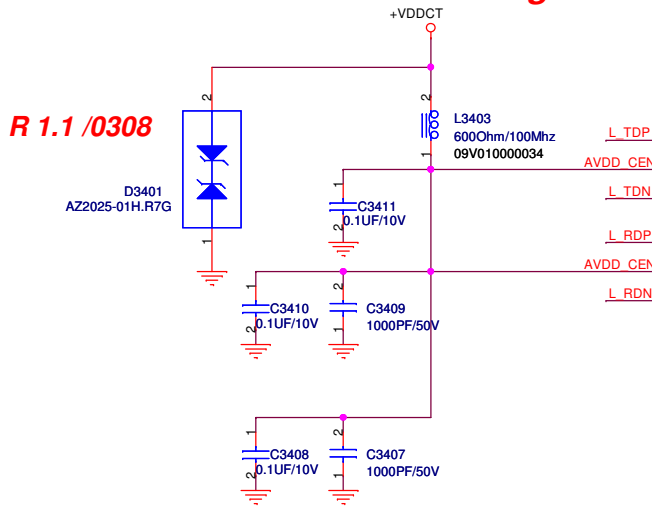
Modify LAN AR8158 circuit SR-12 0121-11

Change U3301 to AR8158 Part and remover SM BUS SR-32 0125-11

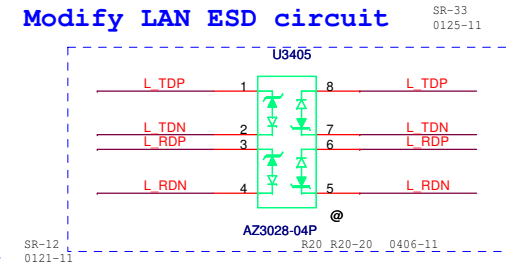
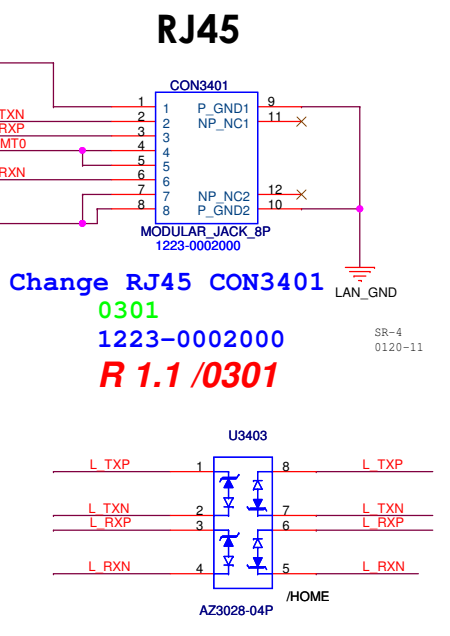


**R 1.1 /0308 L3403/L3302 change to PB201209T-152-N**

**R 1.1 /0308**



**Modify LAN AR8158 circuit**  
**Modify Transformer circuit**



<b>PEGATRON</b> Title :R.45		
BG1-HW RD Div.2-NB RD Dept.5		Engineer: <u>Allen_CD_Wu</u>
Size B	Project Name <b>AAB70</b>	Rev <b>1.1</b>
Date: <u>Wednesday, May 04, 2011</u>		Sheet <b>34</b> of <b>99</b>

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D

D

C

C

B

B

A

A

<b>PEGATRON</b>		<b>Title : MDC CONN</b>	
BG1-HW RD Dw:2-NB RD Dept.5		Engineer: <b>Allen_CD_Wu</b>	
Size	Project Name	Rev	
C	<b>AAB70</b>	1.1	
Date: Monday, March 21, 2011		Sheet	35 of 99

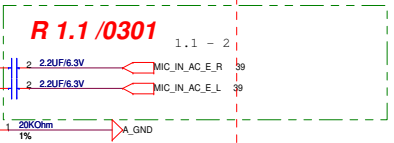
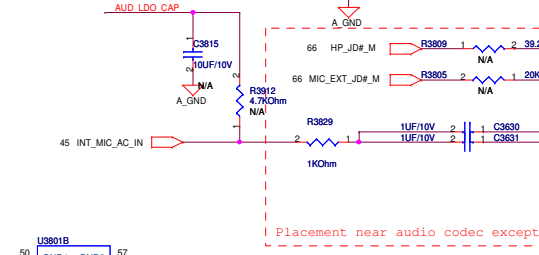
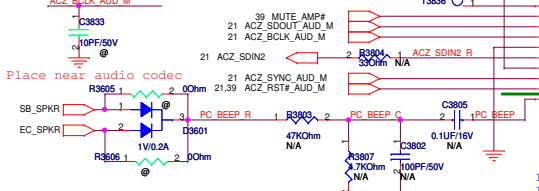
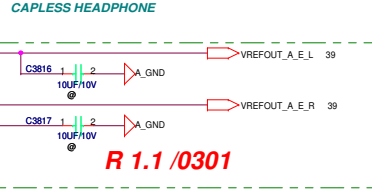
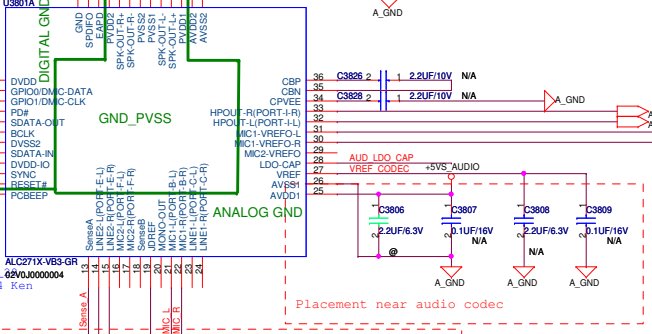
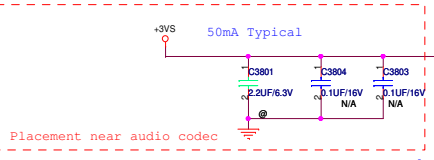
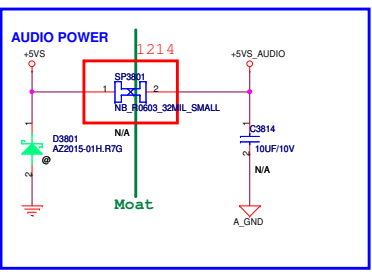
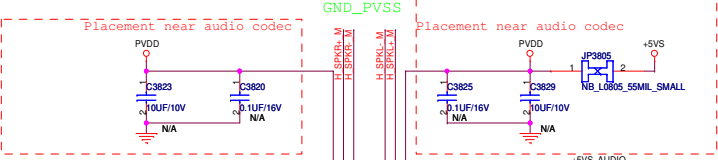
5

4

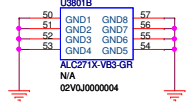
3

2

1



Placement near audio codec except C1923, C1924, and C1925



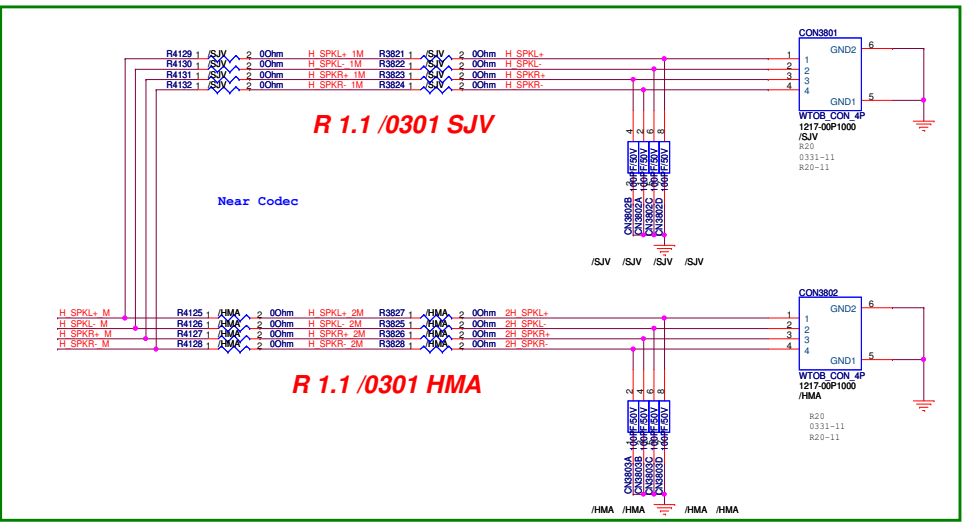
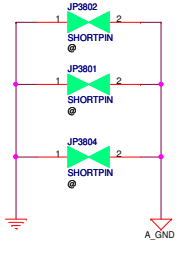
**Configuration for ALC271**

Internal Speaker: Port D

External Headphone: Port A

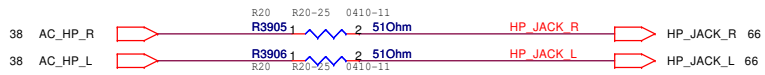
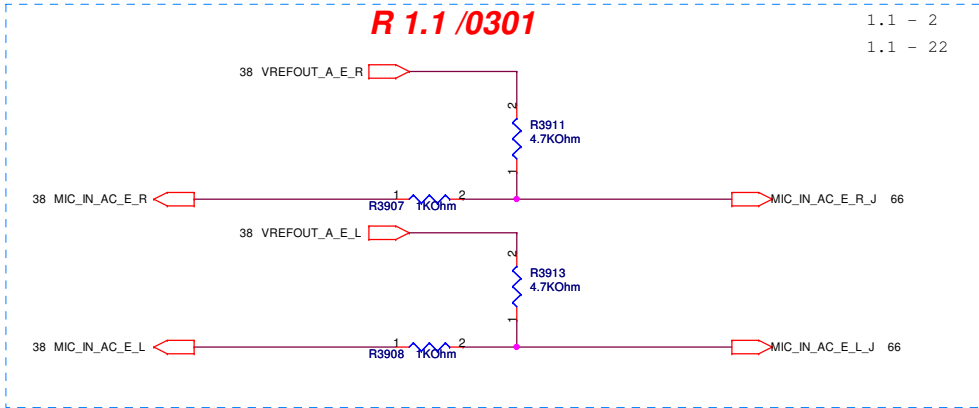
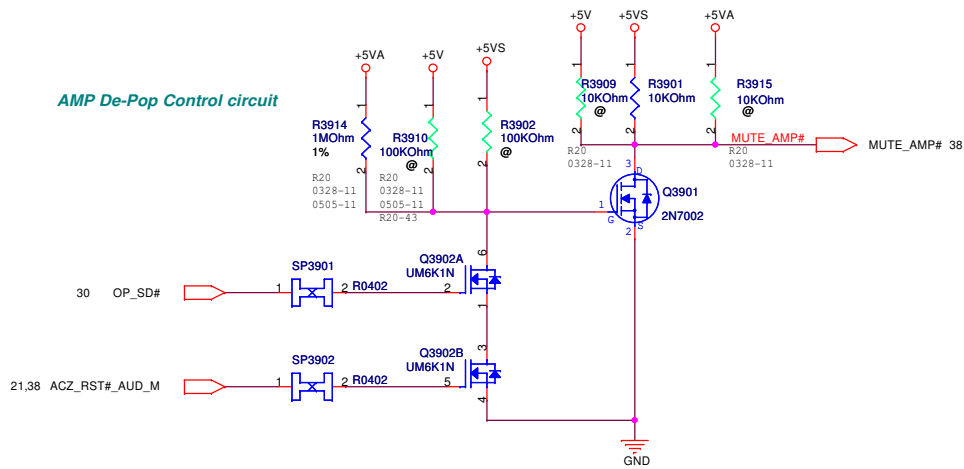
External Microphone: Port B (MIC1)

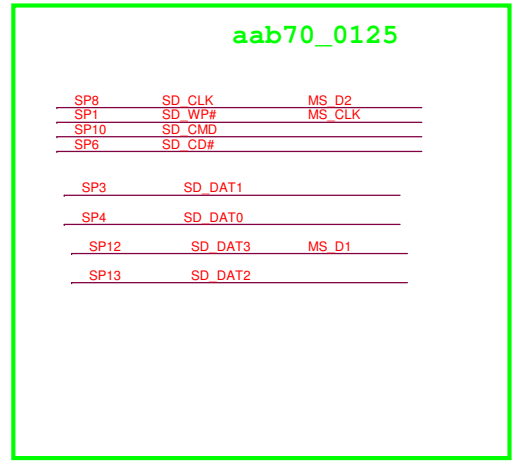
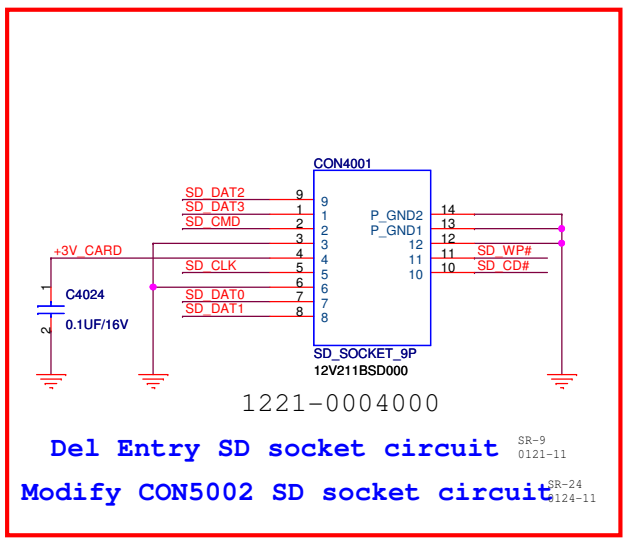
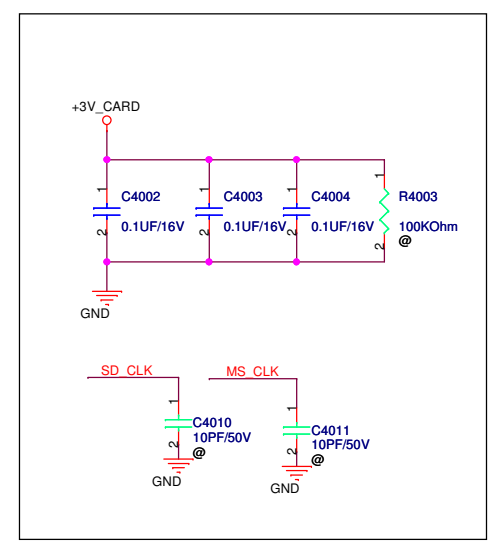
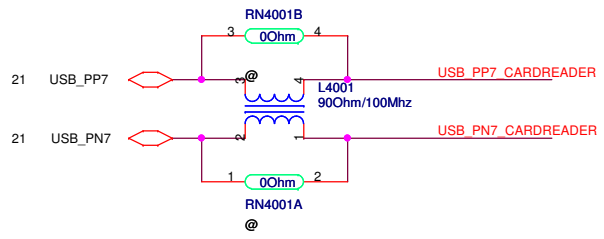
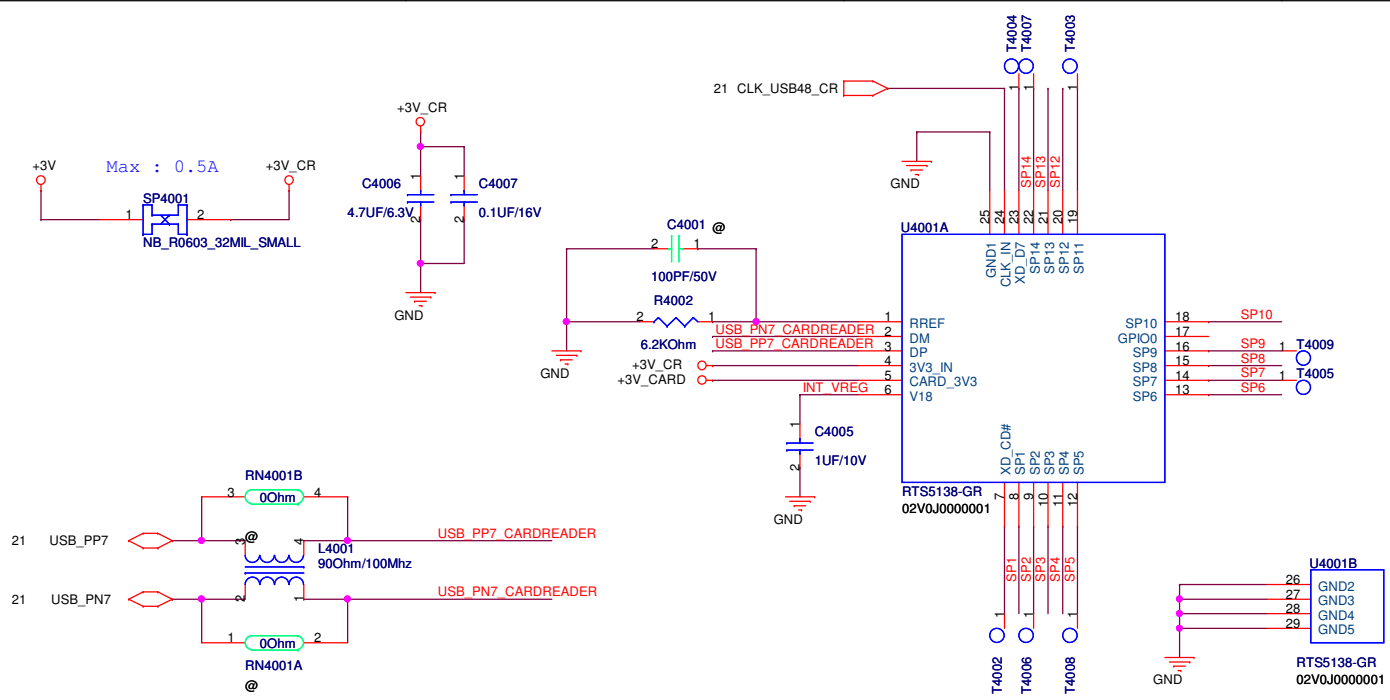
Internal Microphone: Port E (LINE2)



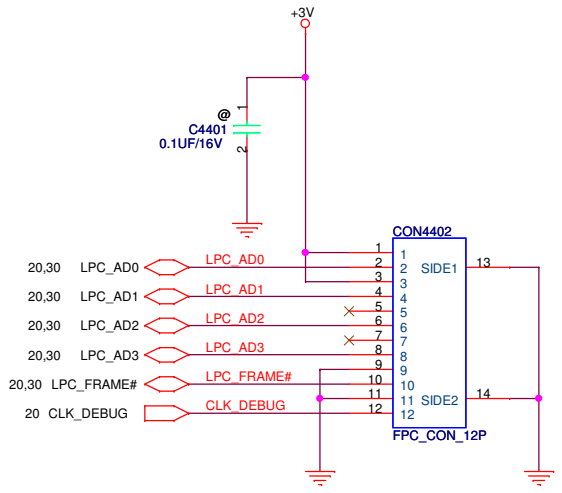
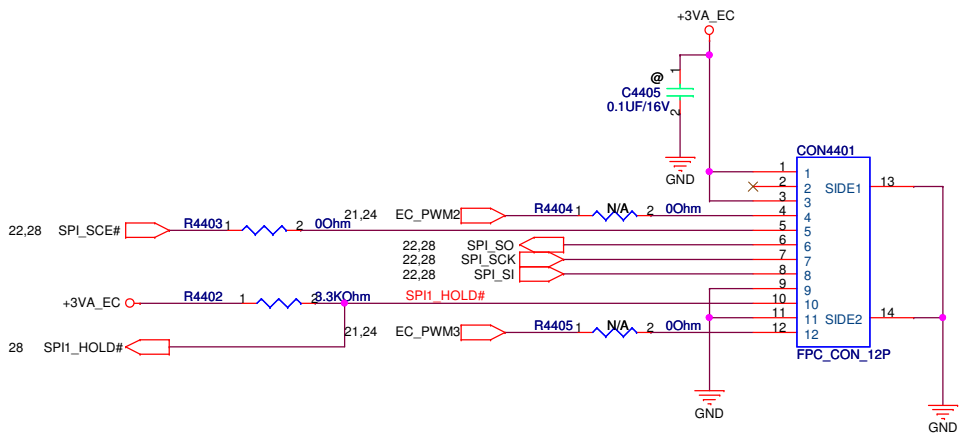


**AMP De-Pop Control circuit**

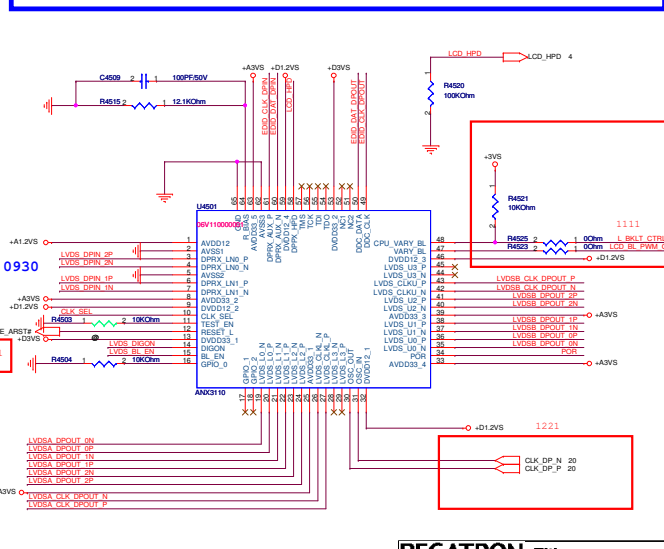
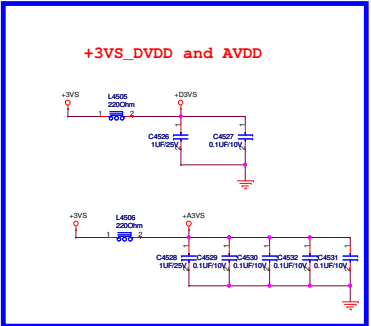
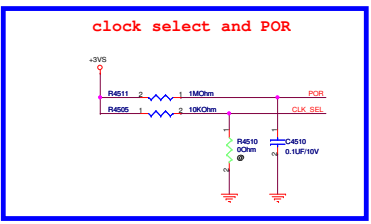
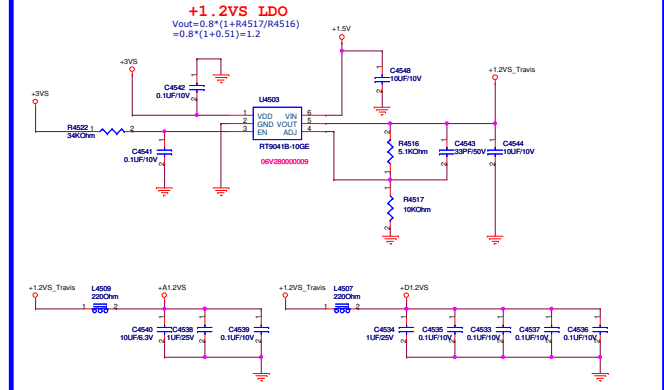
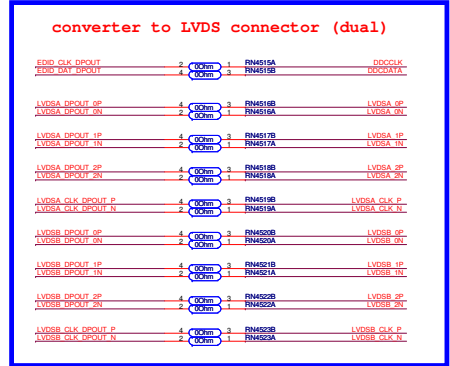
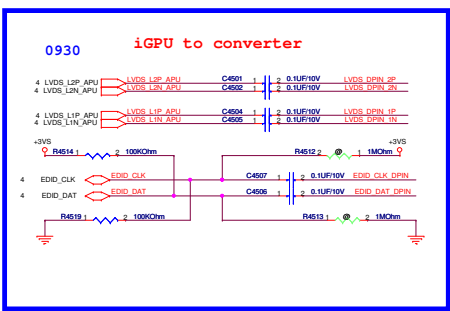
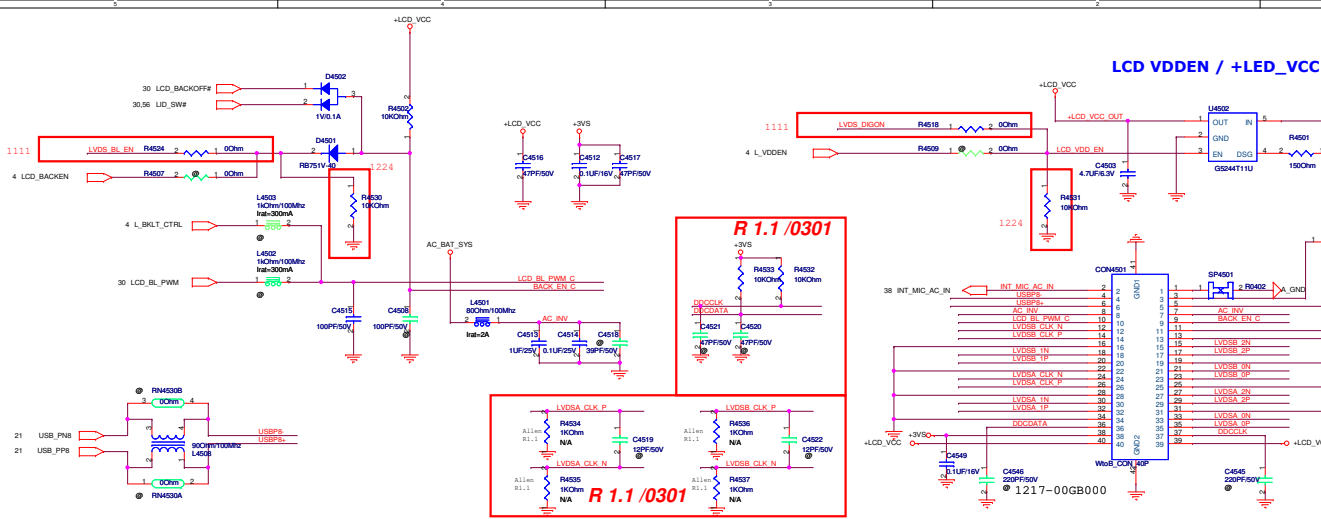


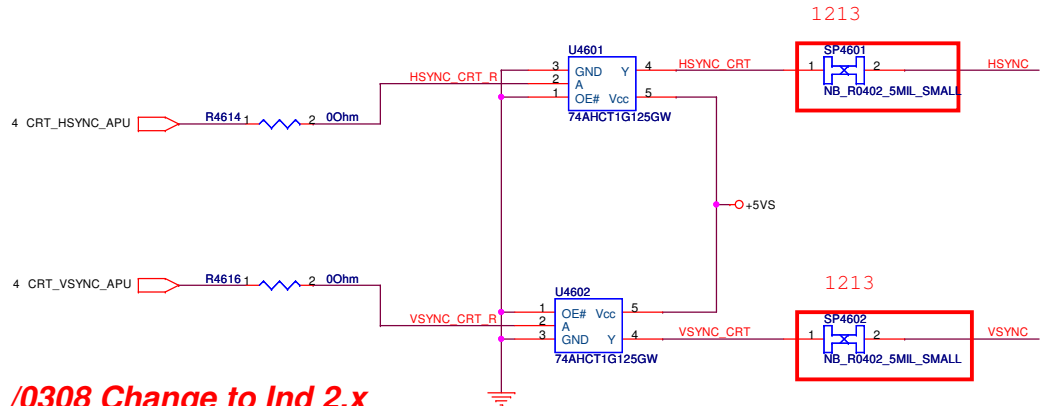
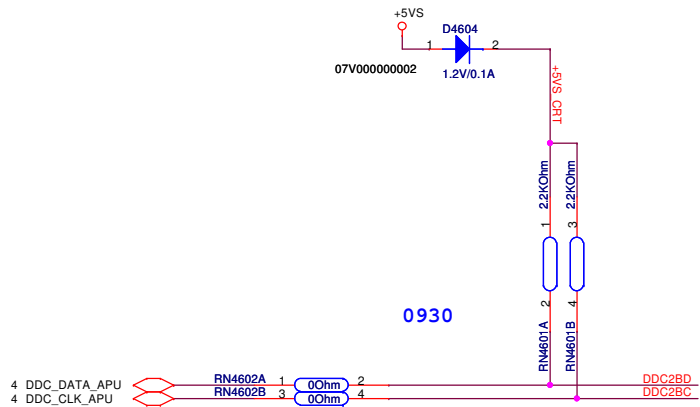


<b>PEGATRON</b> Title : <b>RTS 5138</b>		
PEGATRON CORPORATION		Engineer:
Size B	Project Name <b>AAB70</b>	Rev 1.1
Date: Thursday, April 21, 2011	Sheet 40 of 99	

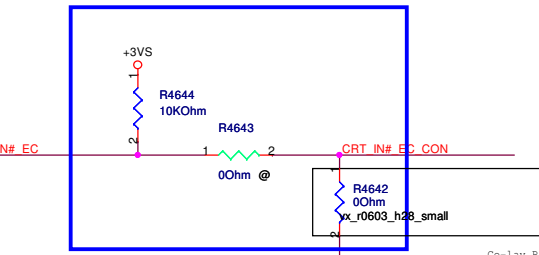
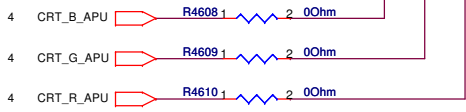
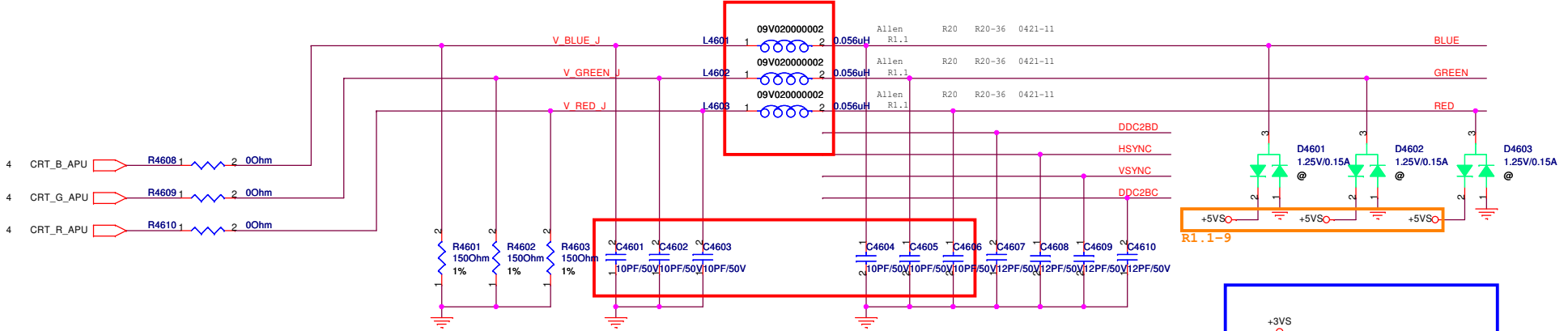


<b>PEGATRON</b>		Title : <b>DEBUG</b>	
BG1/HW2		Engineer: <b>Allen CD Wu</b>	
Size <b>B</b>	Project Name <b>AAB70</b>		Rev <b>1.1</b>
Date: <b>Thursday, April 21, 2011</b>		Sheet <b>44</b> of <b>99</b>	

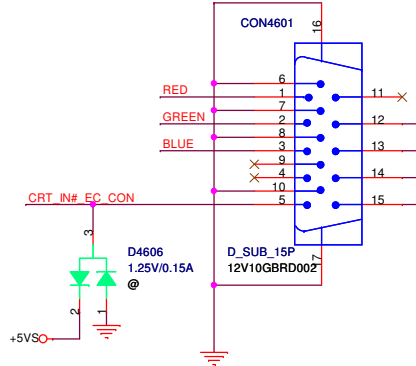
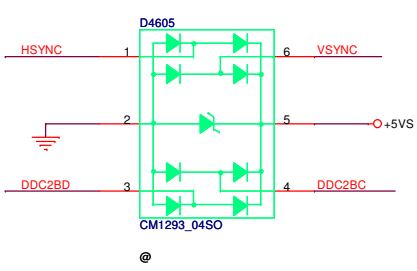




**R 1.1 /0308 Change to Ind 2.x**

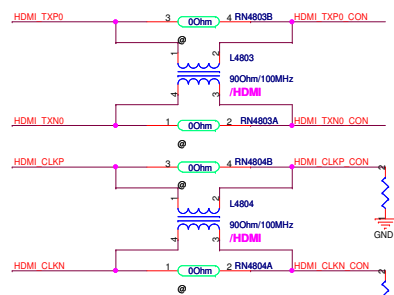
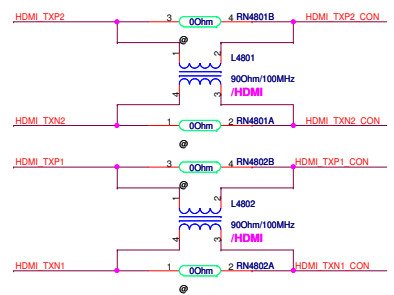
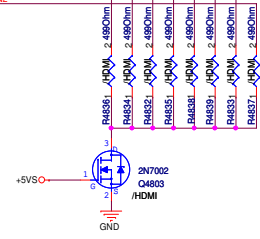
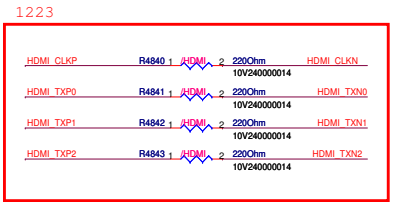
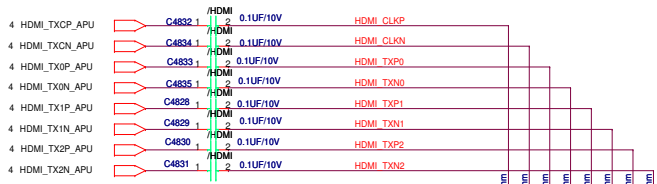


Vendor request

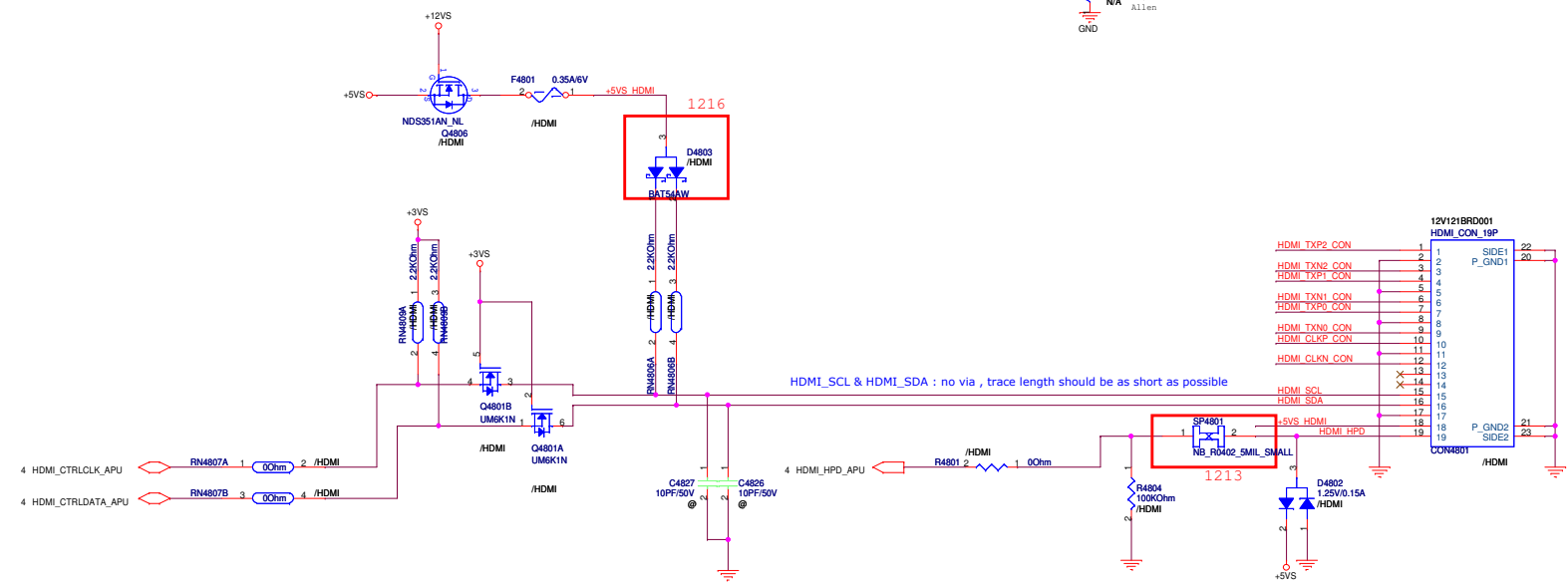


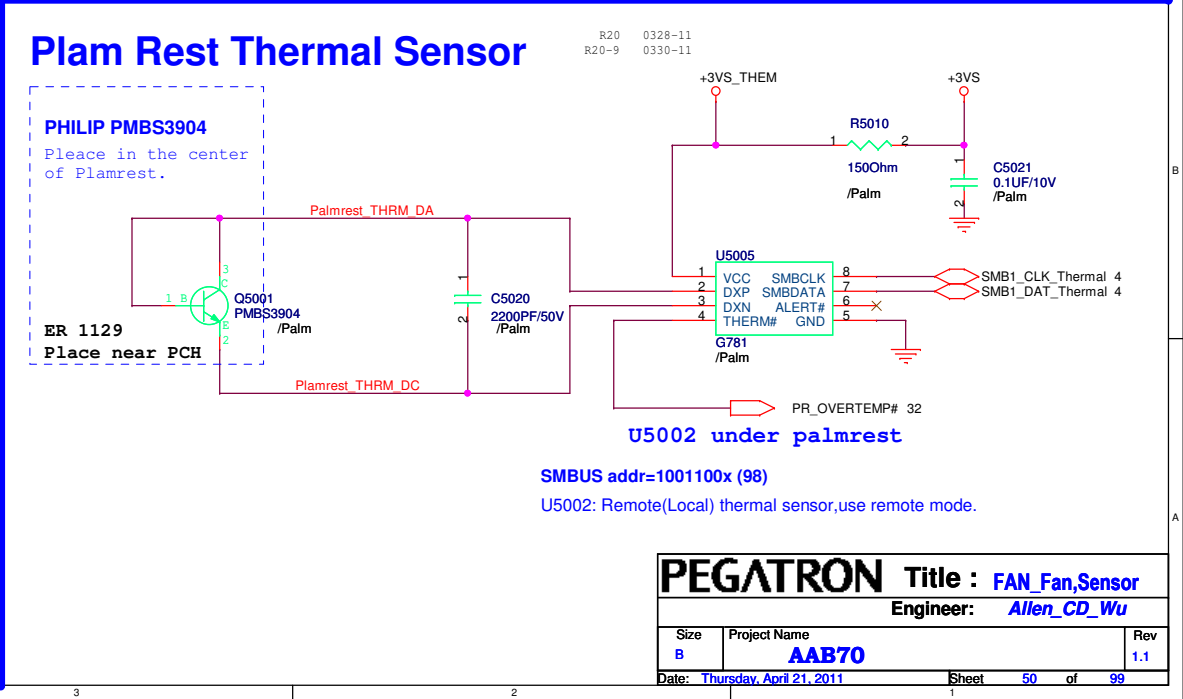
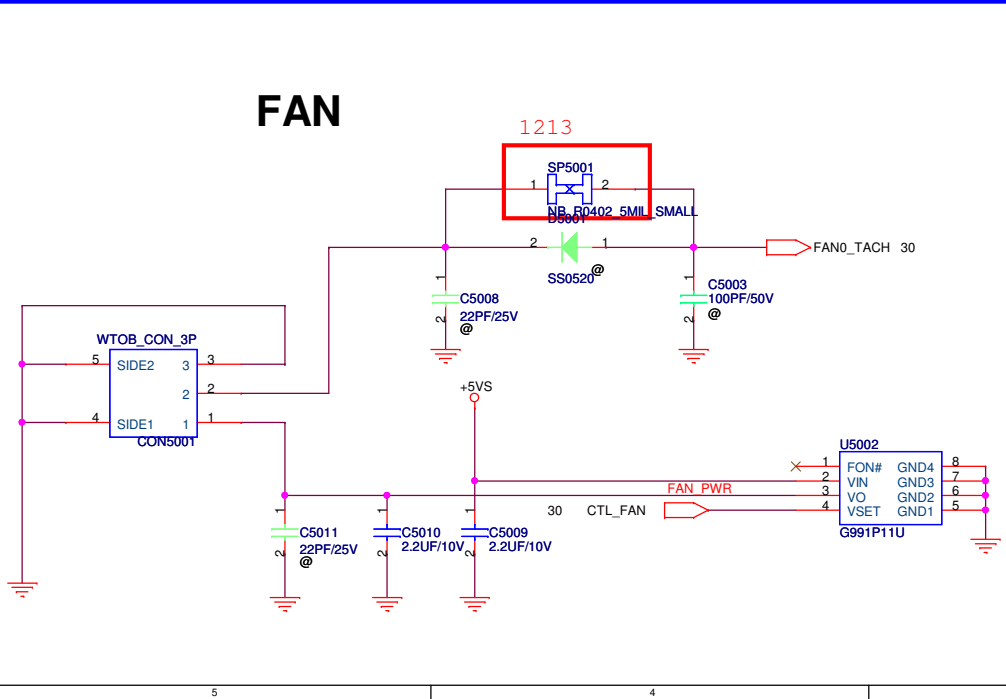
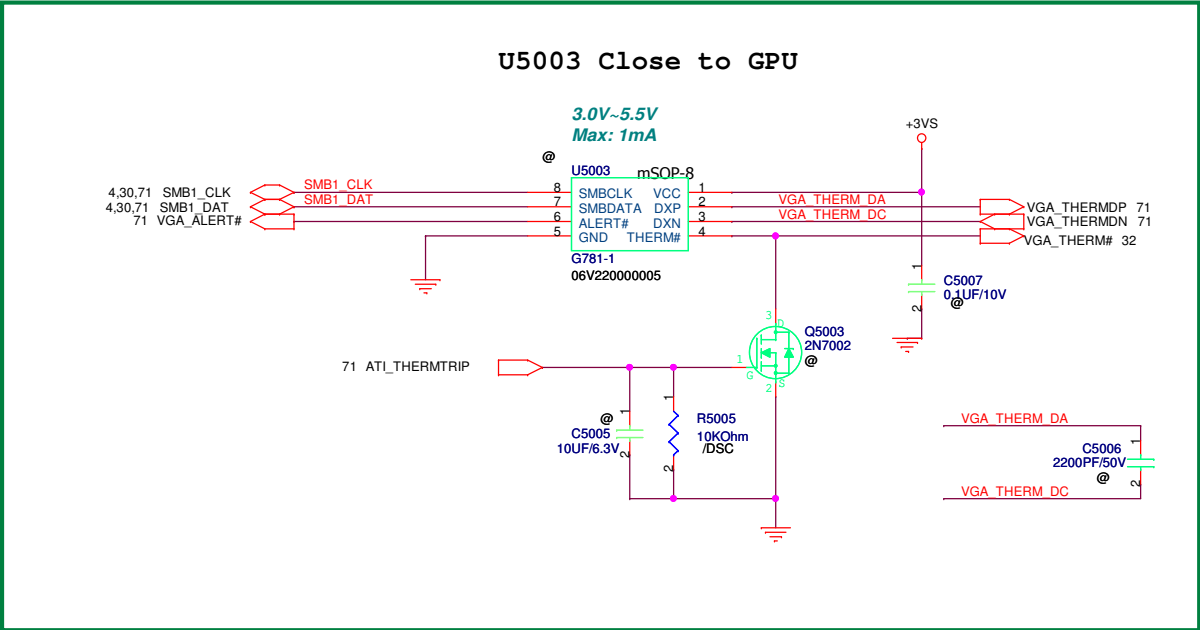
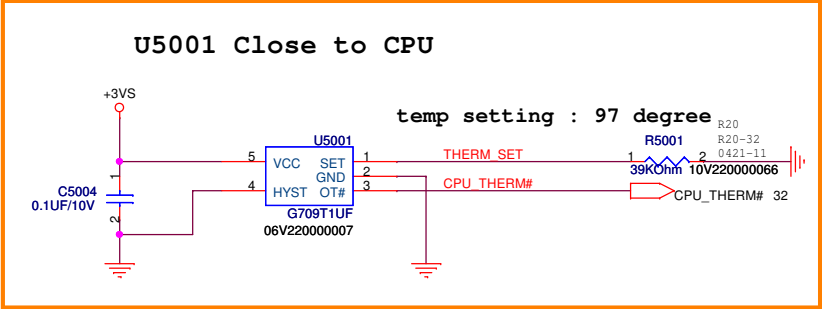
1210-00DY000

<b>PEGATRON</b>		Title : CRT	
BG1/HW2		Engineer: <b>Allen CD Wu</b>	
Size	Project Name	Rev	
Custom	<b>AAB70</b>	1.1	
Date:	Thursday, April 21, 2011	Sheet	46 of 99



R 1.1 /0301

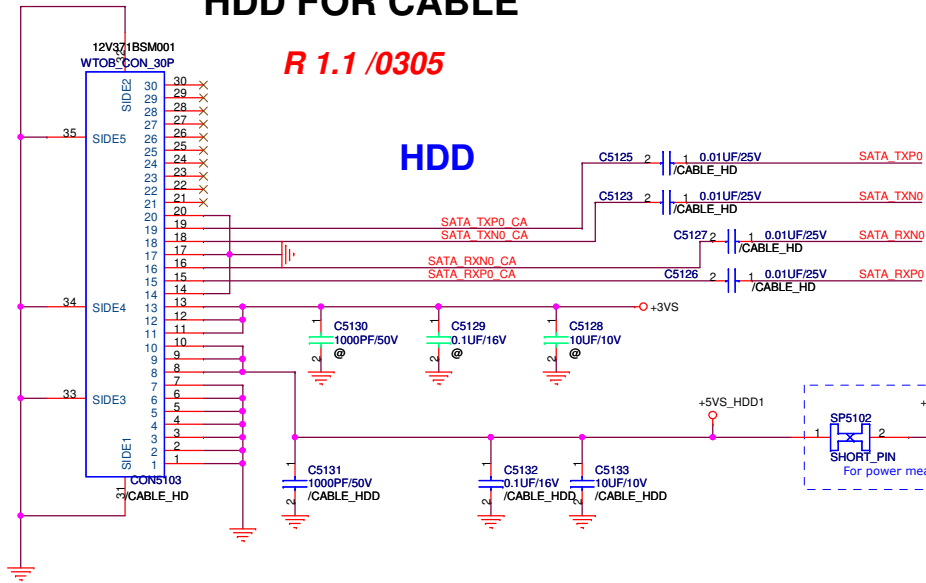




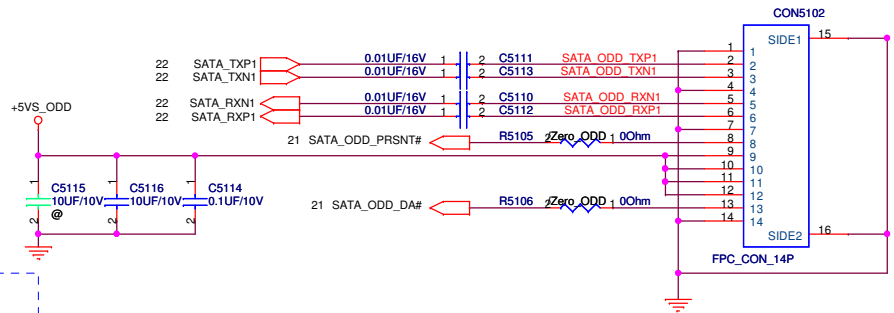
<b>PEGATRON</b> Title : <b>FAN_Fan,Sensor</b>		
Engineer: <b>Allen_CD_Wu</b>		
Size	Project Name	Rev
B	<b>AAB70</b>	1.1
Date: Thursday, April 21, 2011	Sheet 50 of 99	

# HDD FOR CABLE

R 1.1 /0305

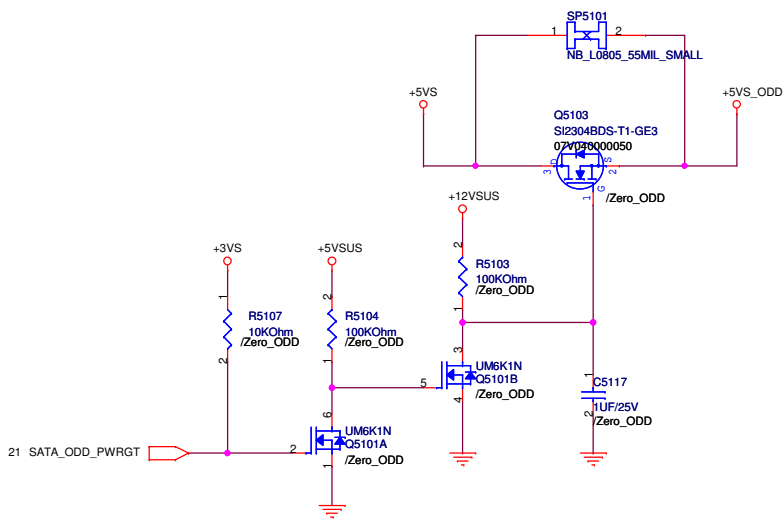


# ODD FOR 17"

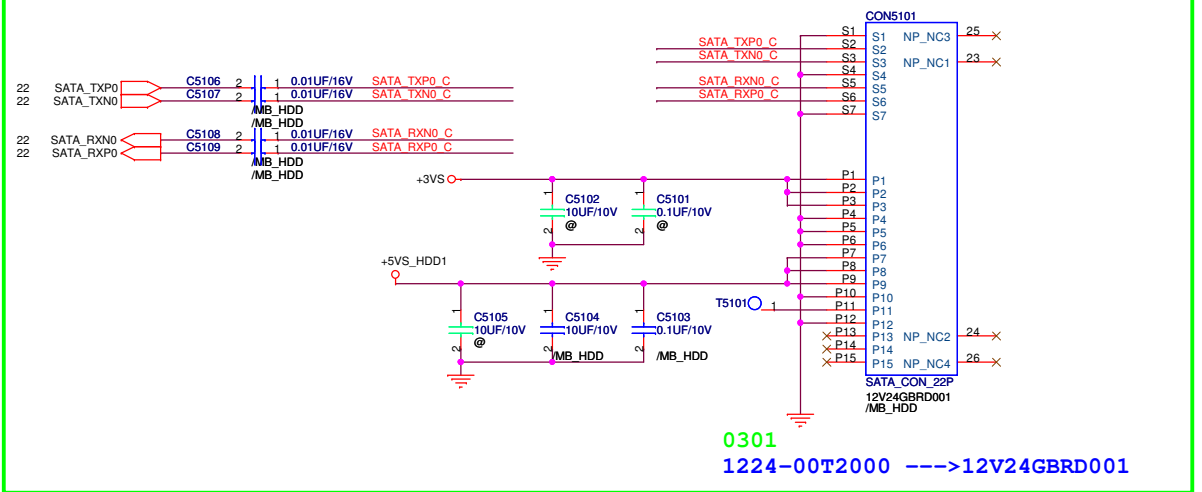


# ZERO POWER ODD SUPPORT

support Hokey turn off ODD power



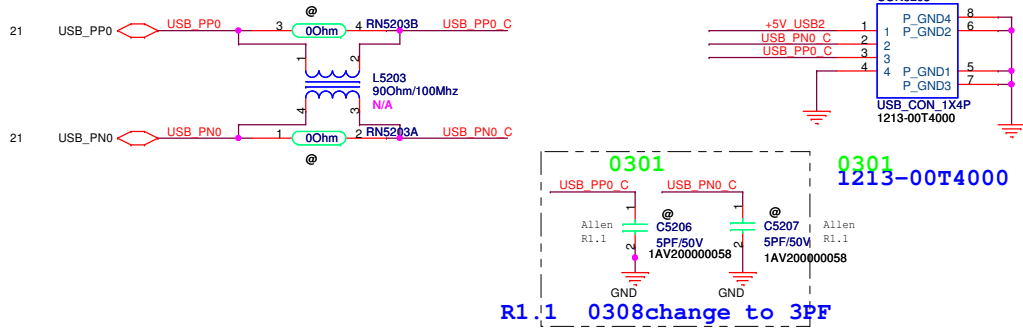
# HDD 0129



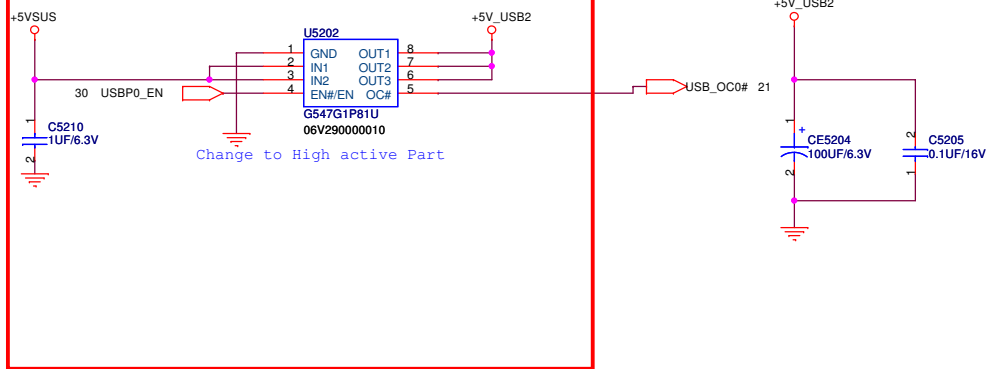
0301  
1224-00T2000 ---->12V24GBRD001



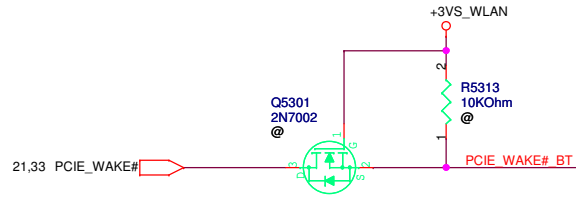
# USB 2.0



## AAB70



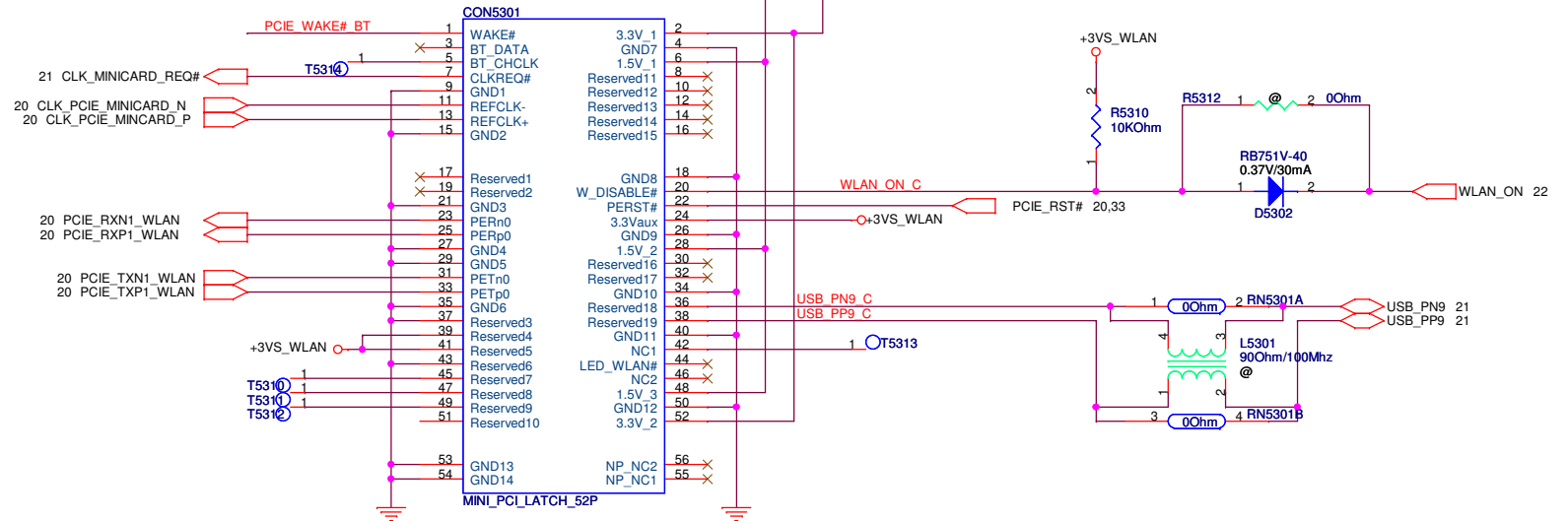
1001



# WLAN+BT/WiMax

## Rainbow Peak

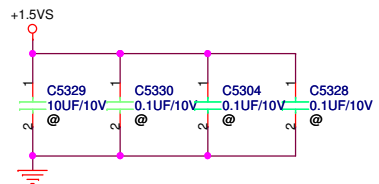
### 1244-00T000



## H = 6.5 mm

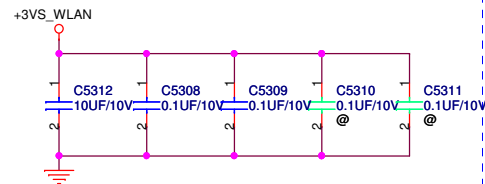
### WLAN +1.5VS bypass capacitor:

Place 0.1uF near pin 6,28,48.  
Place 10uF near +1.5VS source side.

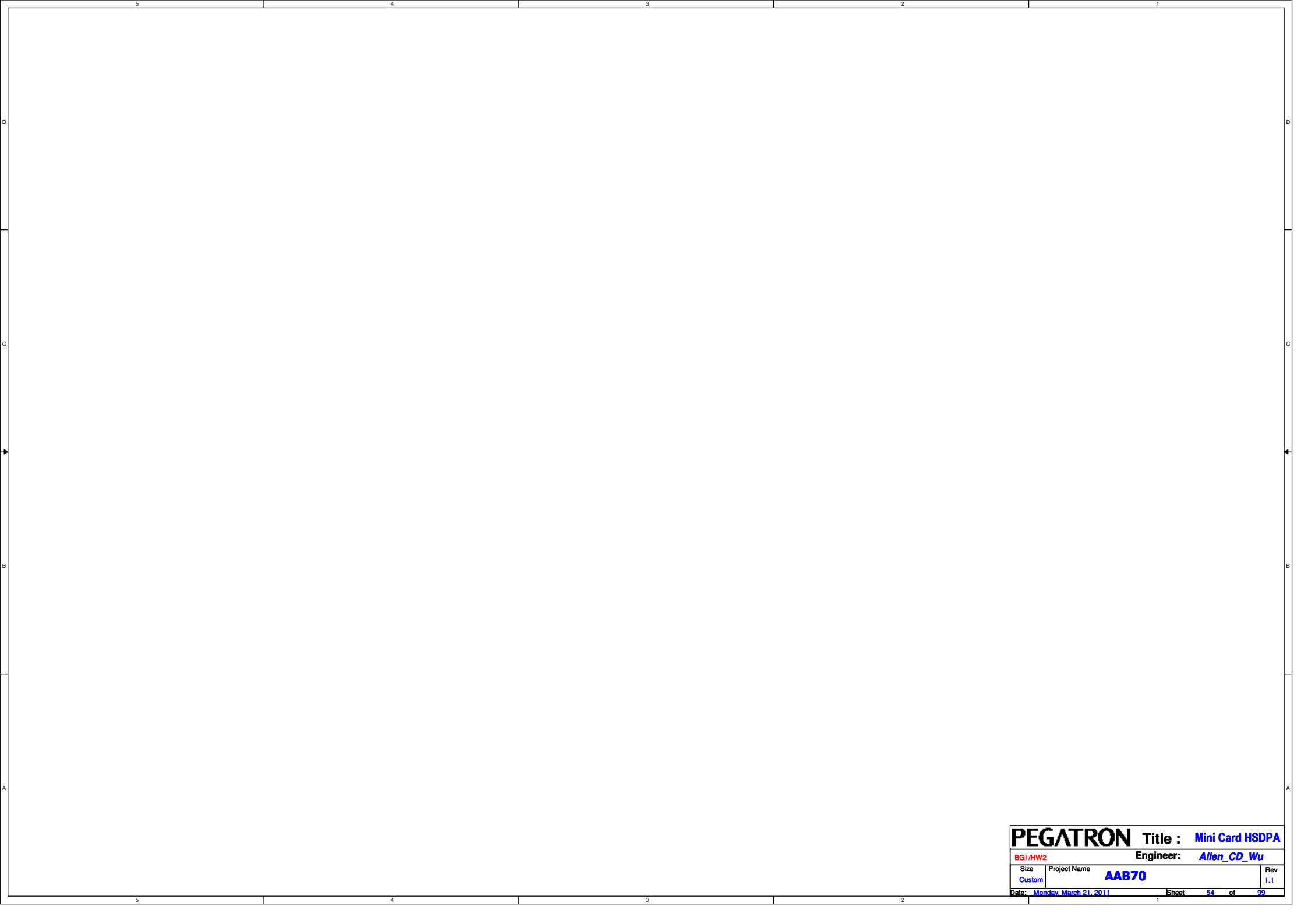


### WLAN +3VS bypass capacitor:

Place 0.1uF near pin 2,24,52,39 41.  
Place 10uF near +3VS\_WLAN source side.

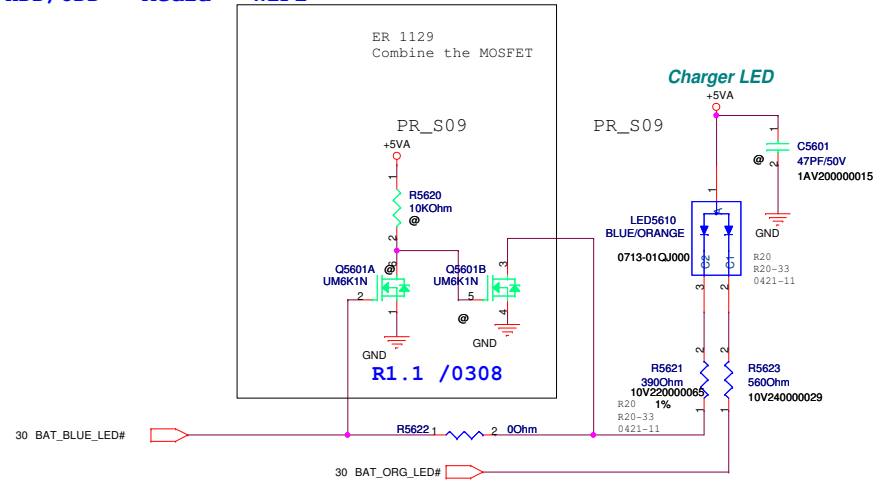


<b>PEGATRON</b> Title : <b>MINICARD Wireless</b>		
BG1/HW2		Engineer: <b>Allen CD Wu</b>
Size <b>B</b>	Project Name <b>AAB70</b>	Rev <b>1.1</b>
Date: <b>Thursday, April 21, 2011</b>		Sheet <b>53</b> of <b>99</b>

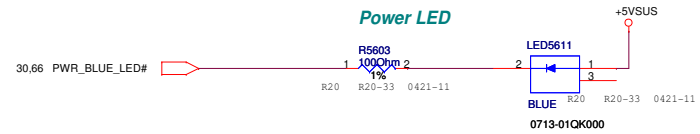


<b>PEGATRON</b>		<b>Title :</b> Mini Card HSDPA	
BG1/HW2		<b>Engineer:</b> Allen_CD_Wu	
Size	Project Name	Rev	
Custom	<b>AAB70</b>	1.1	
Date: Monday, March 21, 2011		Sheet	54 of 99

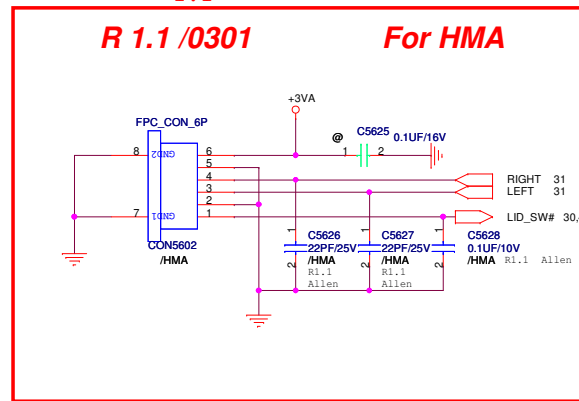
Order of Indicator LEDs  
 DC-IN Power Battery HDD/ODD Media **WiFi**



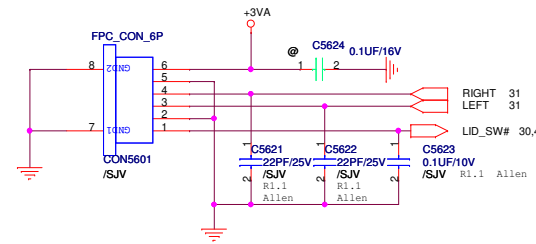
Dual Color



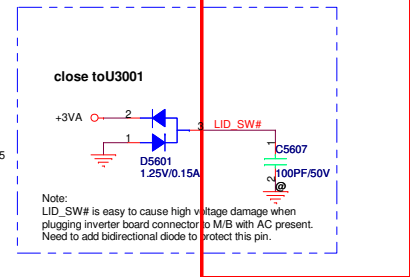
1.1



**For SJV**

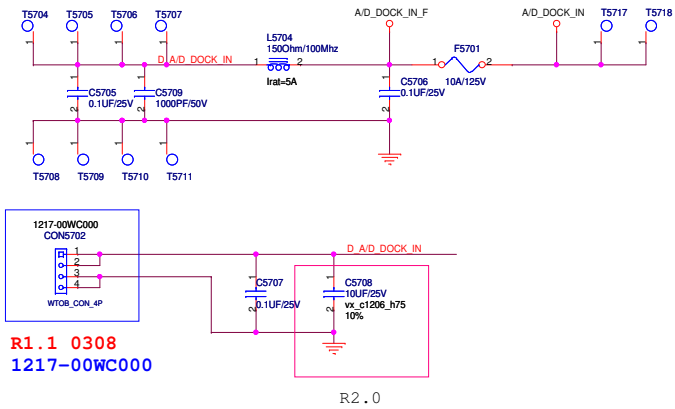


1028

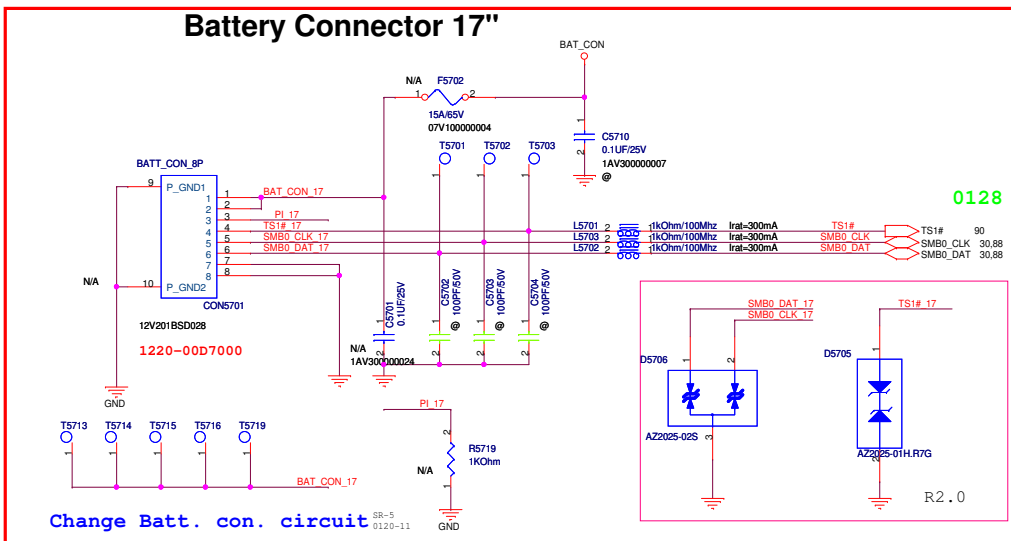


<b>PEGATRON</b>		Title : LED CIR FW SCREW
BG1-HW RD Div.2-NB RD Dept.5		Engineer: <i>Allen_CD_Wu</i>
Size	Project Name	Rev
Custom	<b>AAB70</b>	1.1
Date: Thursday, April 21, 2011	Sheet	56 of 99

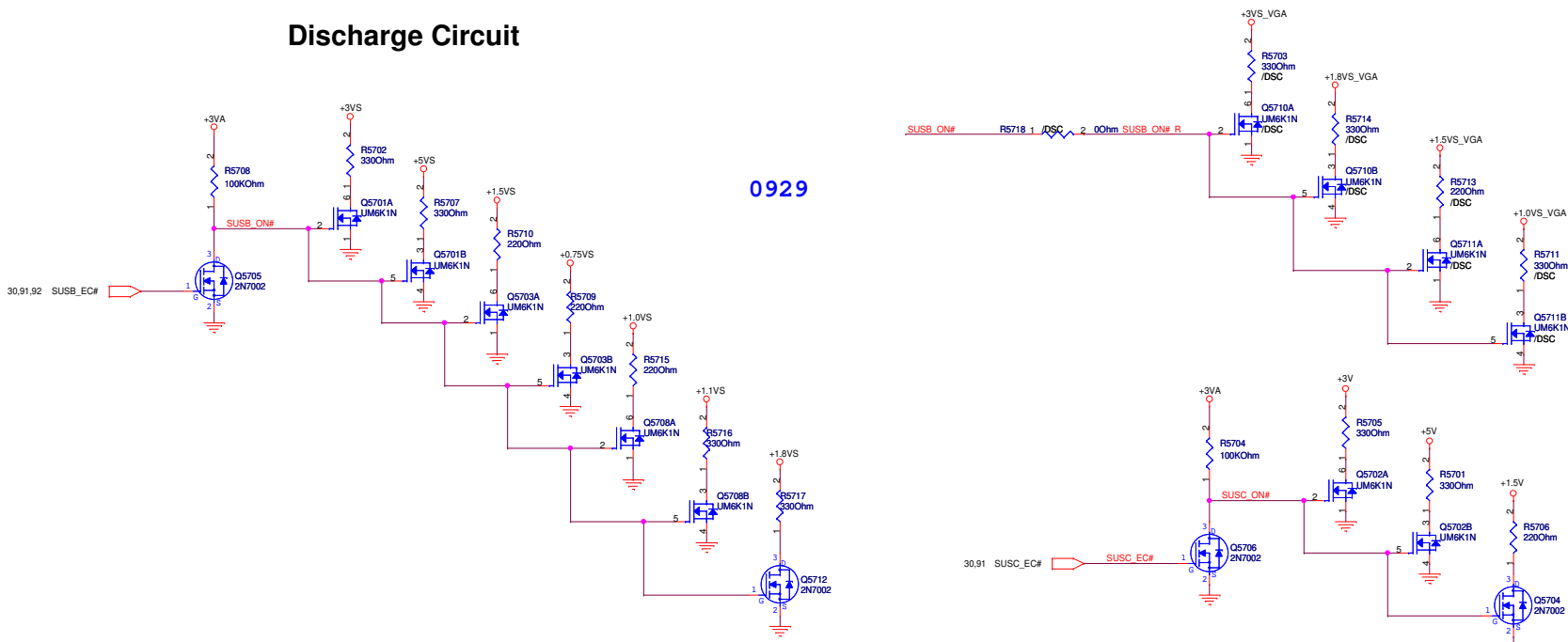
# DC IN

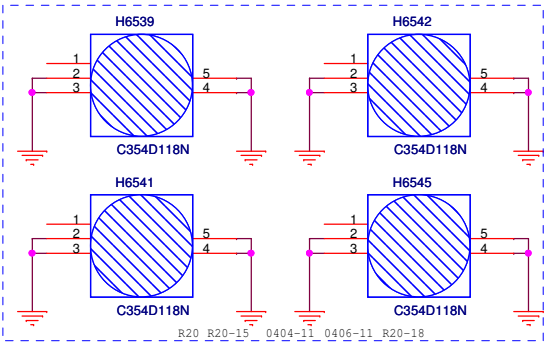
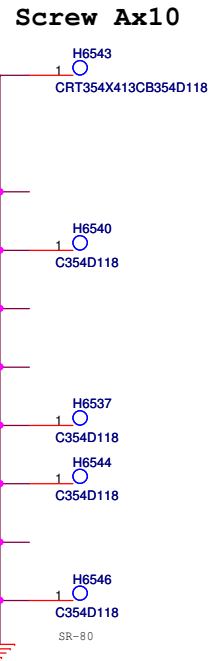
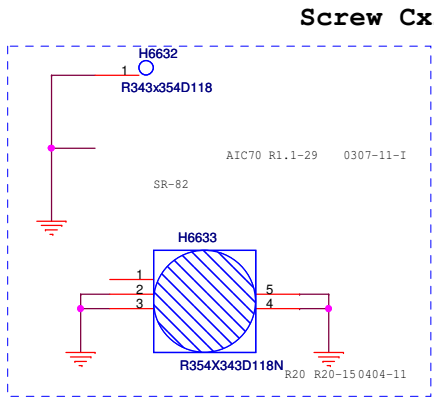
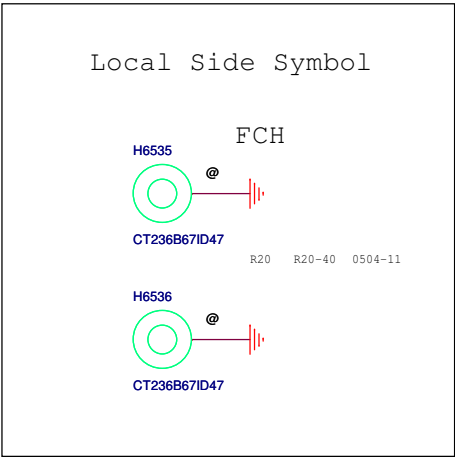
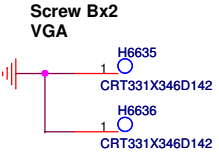
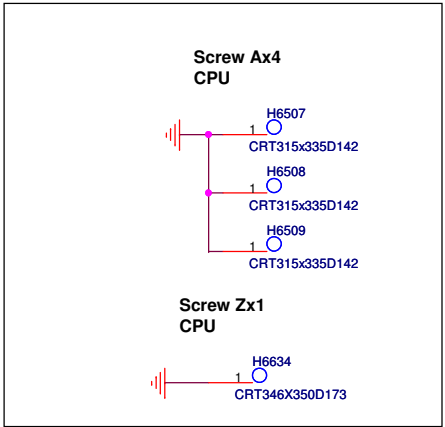
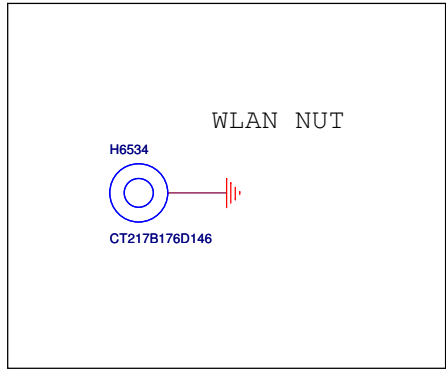


# Battery Connector 17"



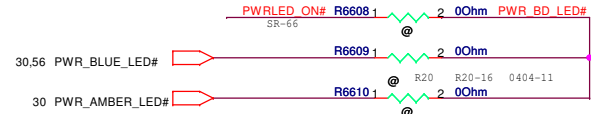
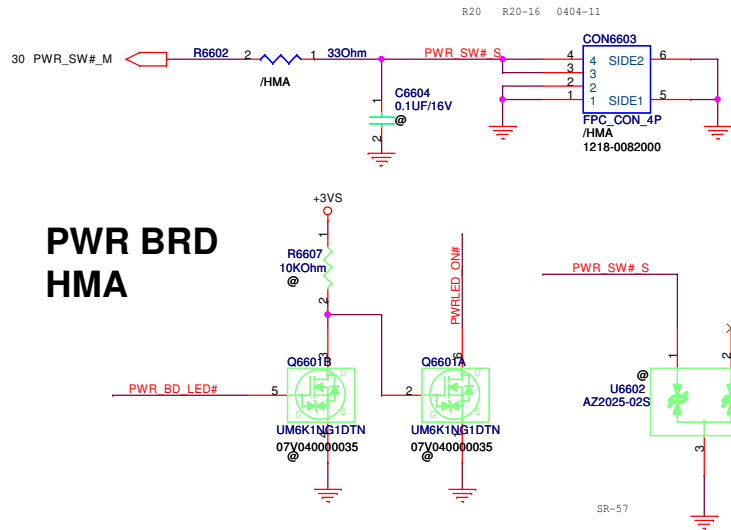
# Discharge Circuit





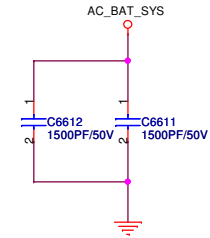
<b>PEGATRON</b> Title : <b>ME_CONN,Skew Hole</b>		
Engineer: <b>Allen_CD_Wu</b>		
Size B	Project Name <b>AAB70</b>	Rev 1.1
Date: <b>Wednesday, May 04, 2011</b>		Sheet <b>65</b> of <b>99</b>

# PWR BRD HMA

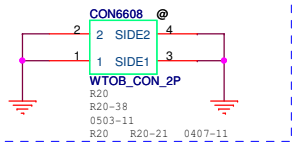


change PWR LED CON6603 circuit 0129

# EMI

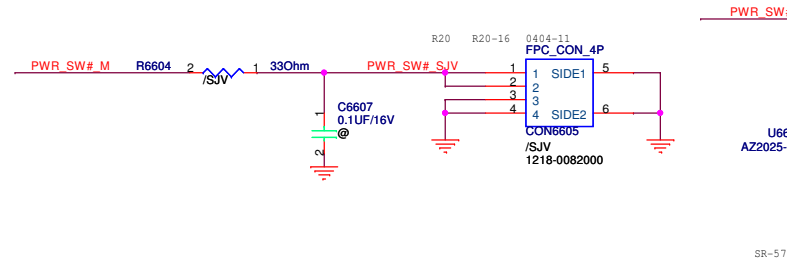


# ADAPTOR VOLTAGE DETECTOR.



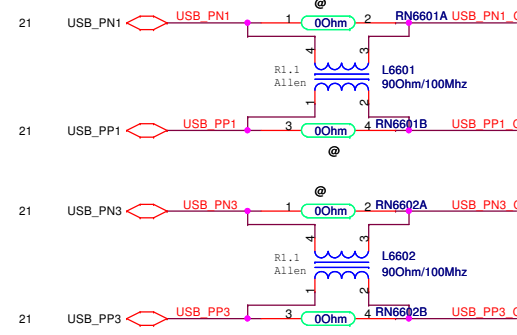
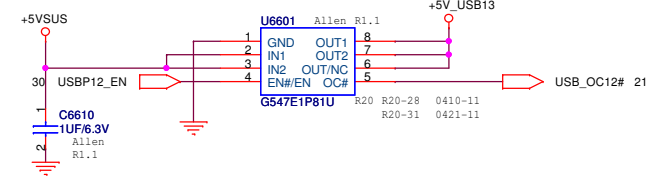
# PWR SJV

R 1.1 /0301

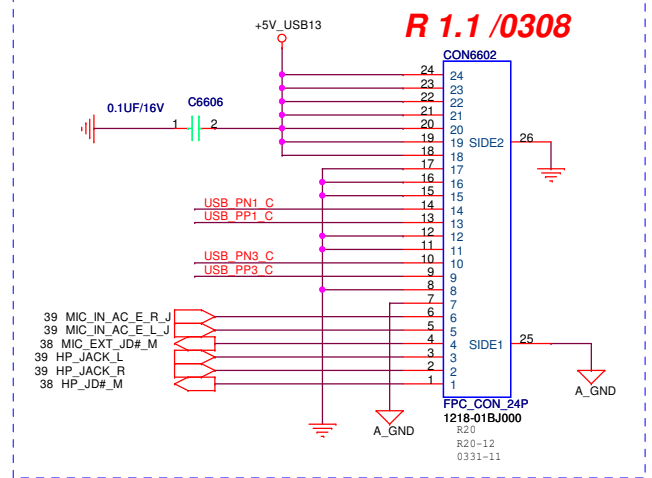


# AAB70

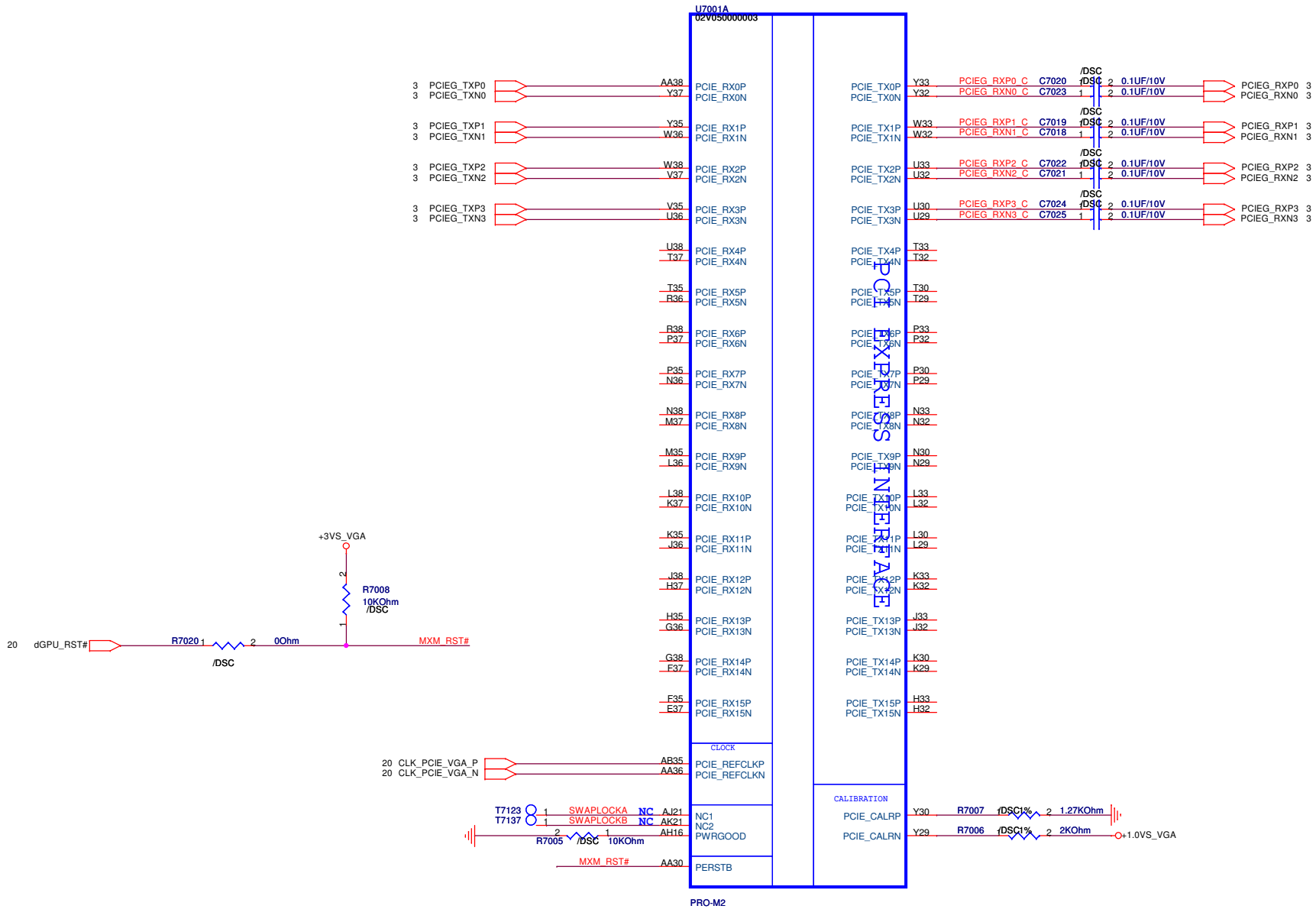
Change to High active Part



R 1.1 /0308



# R 1.1 /0301 Seymour XT/M2

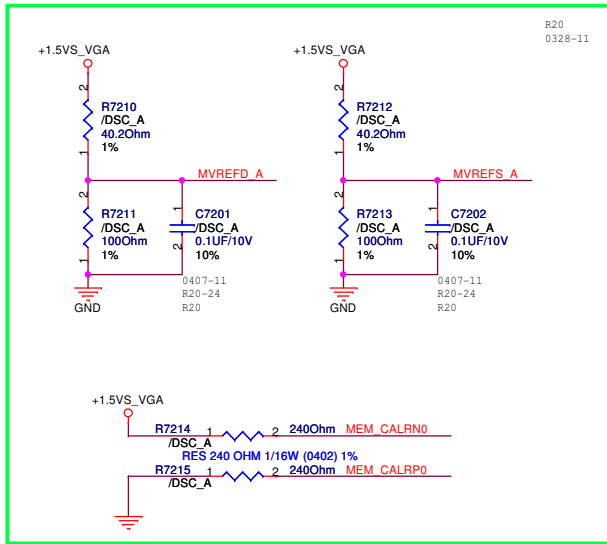




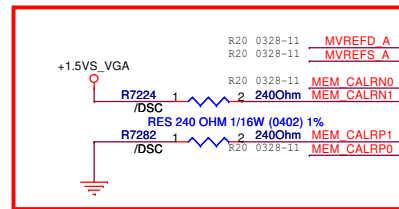


The all balls are NC except N12 /M12 for seymour

## Reserve, Unmount



The all balls are NC except N12 /M12 for seymour

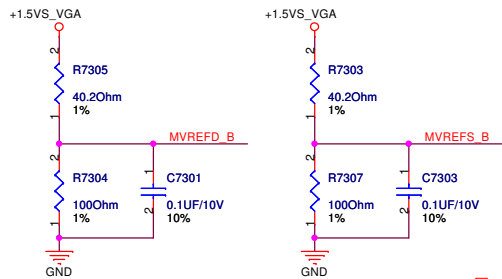


0301-change

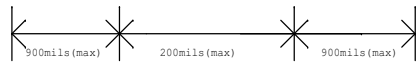
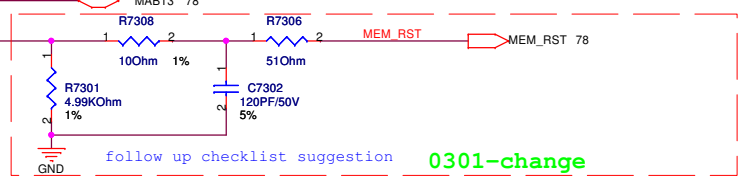
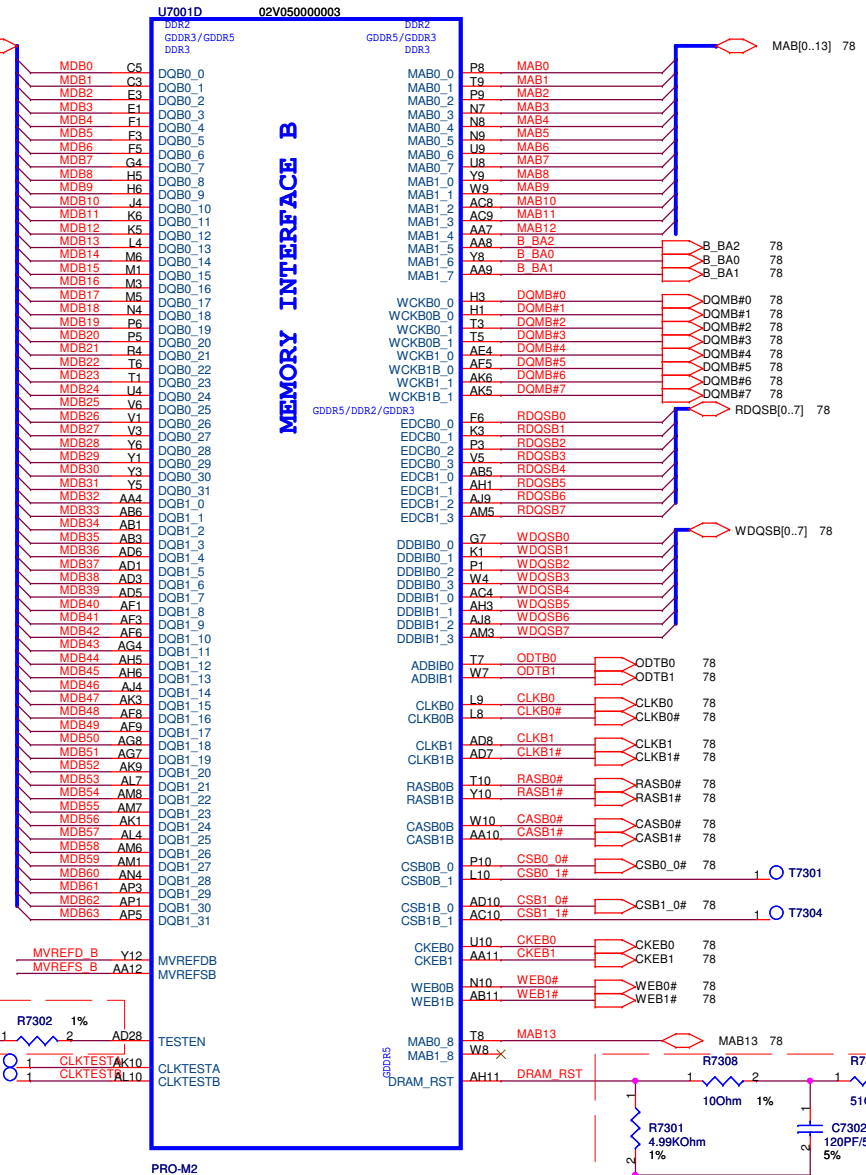
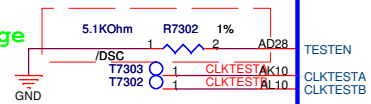
U7001C 02V05000003

DDR2 / GDDR3 / GDDR5		DDR3		GDDR5 / DDR2 / GDDR3	
C37	DQA0_0	MAA0_0	G24	WCKA0_0	A32
C35	DQA0_1	MAA0_1	J23	WCKA0B_0	C32
A35	DQA0_2	MAA0_2	H24	WCKA0_1	D23
E34	DQA0_3	MAA0_3	J24	WCKA0B_1	E22
G32	DQA0_4	MAA0_4	H26	WCKA1_0	C14
D33	DQA0_5	MAA0_5	J26	WCKA1B_0	A14
E32	DQA0_6	MAA0_6	H21	WCKA1_1	E10
E32	DQA0_7	MAA0_7	J21	WCKA1B_1	D9
D31	DQA0_8	MAA1_0	H19	EDCA0_0	C34
E30	DQA0_9	MAA1_1	H20	EDCA0_1	D25
C30	DQA0_10	MAA1_2	L13	EDCA0_2	E20
A30	DQA0_11	MAA1_3	G16	EDCA1_0	E16
F28	DQA0_12	MAA1_4	J16	EDCA1_1	E12
C28	DQA0_13	MAA1_5	H17	EDCA1_2	J10
A28	DQA0_14	MAA1_6	J17	EDCA1_3	D7
E28	DQA0_15	MAA1_7	H17	EDCA1_3	D7
D27	DQA0_16			EDCA1_3	D7
F26	DQA0_17			EDCA1_3	D7
C26	DQA0_18			EDCA1_3	D7
A26	DQA0_19			EDCA1_3	D7
F24	DQA0_20			EDCA1_3	D7
C24	DQA0_21			EDCA1_3	D7
A24	DQA0_22			EDCA1_3	D7
E24	DQA0_23			EDCA1_3	D7
C22	DQA0_24			EDCA1_3	D7
A22	DQA0_25			EDCA1_3	D7
F22	DQA0_26			EDCA1_3	D7
D21	DQA0_27			EDCA1_3	D7
A20	DQA0_28			EDCA1_3	D7
F20	DQA0_29			EDCA1_3	D7
D19	DQA0_30			EDCA1_3	D7
E18	DQA0_31			EDCA1_3	D7
C18	DQA1_0			EDCA1_3	D7
A18	DQA1_1			EDCA1_3	D7
F18	DQA1_2			EDCA1_3	D7
D17	DQA1_3			EDCA1_3	D7
A16	DQA1_4			EDCA1_3	D7
F16	DQA1_5			EDCA1_3	D7
D15	DQA1_6			EDCA1_3	D7
E14	DQA1_7			EDCA1_3	D7
F14	DQA1_8			EDCA1_3	D7
D13	DQA1_9			EDCA1_3	D7
F12	DQA1_10			EDCA1_3	D7
A12	DQA1_11			EDCA1_3	D7
D11	DQA1_12			EDCA1_3	D7
F10	DQA1_13			EDCA1_3	D7
A10	DQA1_14			EDCA1_3	D7
C10	DQA1_15			EDCA1_3	D7
G13	DQA1_16			EDCA1_3	D7
H13	DQA1_17			EDCA1_3	D7
J13	DQA1_18			EDCA1_3	D7
H11	DQA1_19			EDCA1_3	D7
G10	DQA1_20			EDCA1_3	D7
K9	DQA1_21			EDCA1_3	D7
K10	DQA1_22			EDCA1_3	D7
G9	DQA1_23			EDCA1_3	D7
A8	DQA1_24			EDCA1_3	D7
C8	DQA1_25			EDCA1_3	D7
E8	DQA1_26			EDCA1_3	D7
A6	DQA1_27			EDCA1_3	D7
C6	DQA1_28			EDCA1_3	D7
E6	DQA1_29			EDCA1_3	D7
A5	DQA1_30			EDCA1_3	D7
	DQA1_31			EDCA1_3	D7
L18	MVREFDA			EDCA1_3	D7
L20	MVREFSA			EDCA1_3	D7
L27	MEM_CALRNO			EDCA1_3	D7
N12	MEM_CALRN1			EDCA1_3	D7
AG12	MEM_CALRN2			EDCA1_3	D7
M12	MEM_CALRP1			EDCA1_3	D7
M27	MEM_CALRP0			EDCA1_3	D7
AH12	MEM_CALRP2			EDCA1_3	D7
				EDCA1_3	D7

PRO-M2

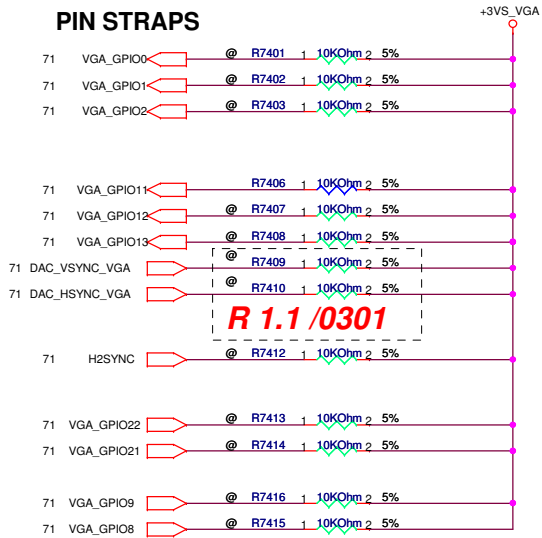


0301-change

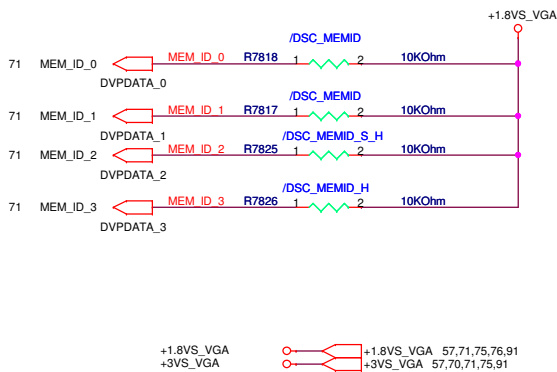


# GPIO21 MUST BE LOW DURING PERSTB WHEN BEING USED TO CONTROL MVDDQ

## PIN STRAPS



## VRAM size define by VBIOS



## Seymour Straps

STRAPS	PIN	DESCRIPTION	ASIC DEFAULT
TX_PWRS_ENB	GPIO0	Transmitter Power Savings Enable 0: 50% Tx output swing for mobile mode 1: full Tx output swing <b>This setting can only be used if the PCIE bus design meets the "Low Loss interconnect" requirements.</b>	0 (internal pull-down)
TX_DEEMPH_EN	GPIO1	Transmitter De-emphasis Enable 0: Tx de-emphasis disabled for mobile mode 1: Tx de-emphasis enabled <b>MXM and add-in boards</b>	0 (internal pull-down)
BIF_GEN2_EN_A	GPIO2	1 = Advertises the PCI-E device as 5.0 GT/s capable at power-on 0 = Advertises the PCI-E device as 2.5 GT/s capable at power-on	0
VGA_DIS	GPIO9	0 - VGA Controller capacity enabled 1 - The device will not be recognized as the system's VGA controller	0 (internal pull-down)
ROMIDCFG(2:0)	GPIO(13:11)	If BIOS_ROM_EN=1, then Config[2:0] defines the ROM type. If BIOS_ROM_EN=0, then Config[2:0] defines the primary memoru aperture size. 128MB---000    32MB---Not Support    2GB---Not Support <b>256MB---001    512MB---Not Support    4GB---Not Support</b> 64MB---010    1GB---Not Support	0000 (internal pull-down)
BIOS_ROM_EN	GPIO22_ROMCSB	Enable external BIOS ROM device 0-Disable external BIOS ROM device 1-Enable external BIOS ROM device	0 (internal pull-down)
AUD[1:0] AUD[0]	HSYNC VSYNC	<b>AUD[1:0]:</b> 00: No audio function; 01: Audio for DisplayPort and HDMI if adapter is detected; 10: Audio for DisplayPort only; 11: Audio for both DisplayPort and HDMI.	0 (internal pull-down)
Reserved	GENLK_CLK GPIO_21_BB_EN GPIO8	ATI internal use only . THIS PAD HAS AN INTERNAL PULL-DOWN AND MUST BE 0 V AT RESET.	0 (internal pull-down)

## Seymour XT:

### Memory ID Board Straps

Vendor	DVPDATA(3,2,1,0)	ID	DDR3 Memory Type	VRAM Vendor Part
Hynix	0000	0	54M*16*4 pcs(512MB)	H5TO1G63BFR-12 (1600Mbps)
	0001	1	54M*16*4 pcs(512MB)	H5TO1G63DFR-12C (1600Mbps)
	0010	2	128M*16*4 pcs(1GB)	H5TQ2G63BFR-12C (1600Mbps)
	0011	3	128M*16*4 pcs(1GB)	H5TQ2G63BFR-11C LF (1800Mbps)
	0100	4		
	0101	5		
	0110	6		
	0111	7		
Samsung	1000	8	54M*16*4 pcs(512MB)	K4W1G1646E-HC12 (1600Mbps)
	1001	9	54M*16*4 pcs(512MB)	K4W1G1646G-BC12 (1600Mbps)
	1010	10	128M*16*4 pcs(1GB)	K4W2G1646B-HC12 (1600Mbps)
	1011	11	128M*16*4 pcs(1GB)	K4W2G1646C-HC12 (1600Mbps)
	1100	12		
	1101	13		
	1110	14		
	1111	15		

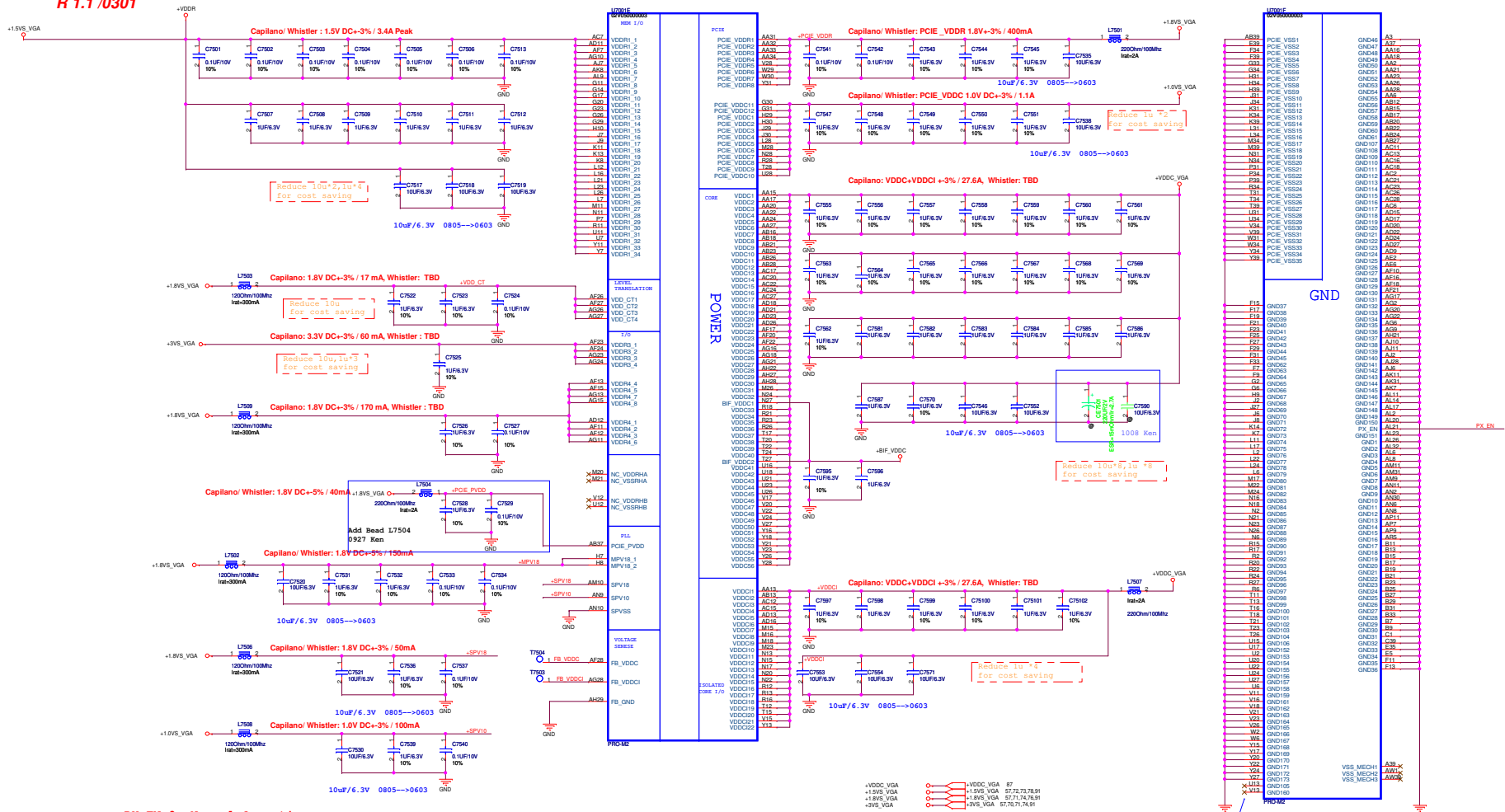
**PEGATRON** Title : GPU-STRAP\_MISC

BG1/BU1 Engineer: Allen\_CD\_Wu

Size	Project Name	Rev
Custom	AAB70	1.1

Date: Thursday, April 21, 2011 Sheet 74 of 99

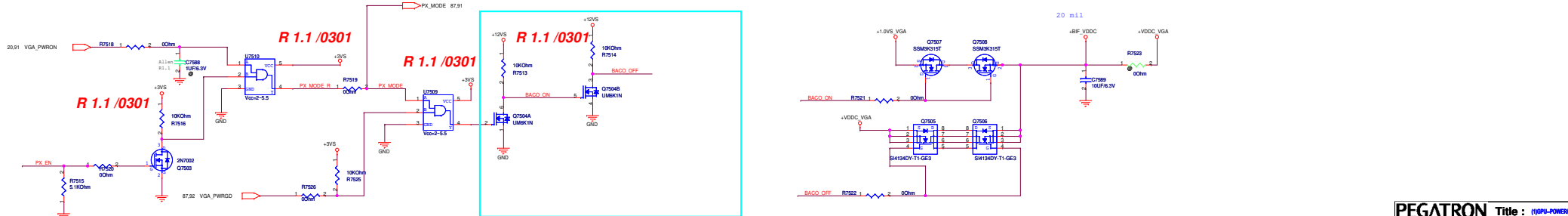
R 1.1 /0301



PX\_EN=0: Normal Operation  
 PX\_EN=1: BACO Mode

BIF short with +VDDC\_VGA if BACO is not support  
 BIF\_VDDC: I=55mA@BACO MODE (AN\_MGEN\_R5)

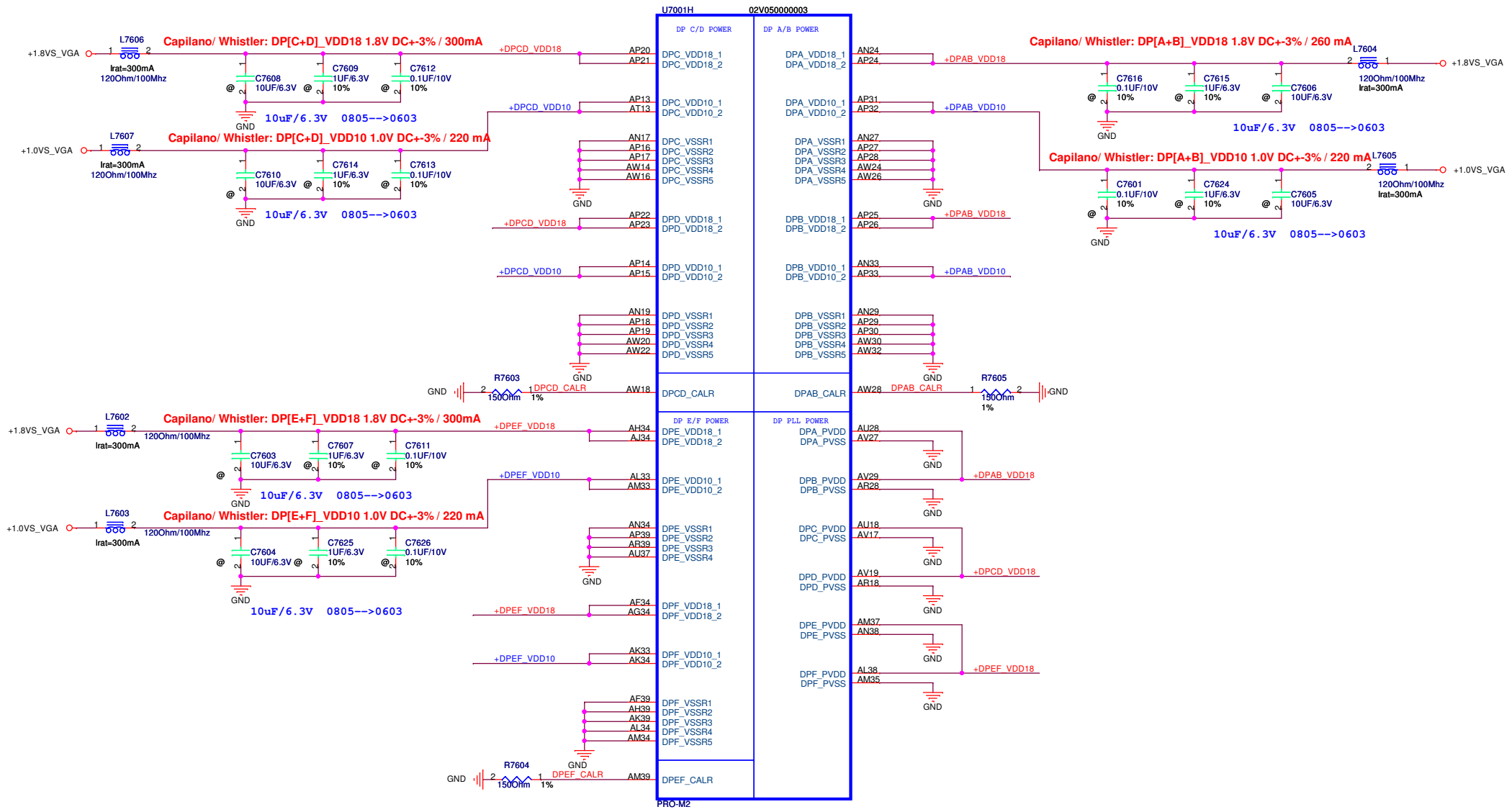
NC for seymour



R 1.1 /0301

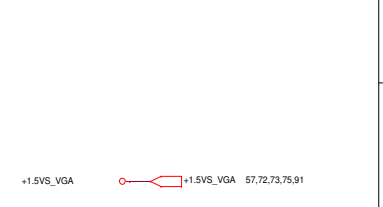
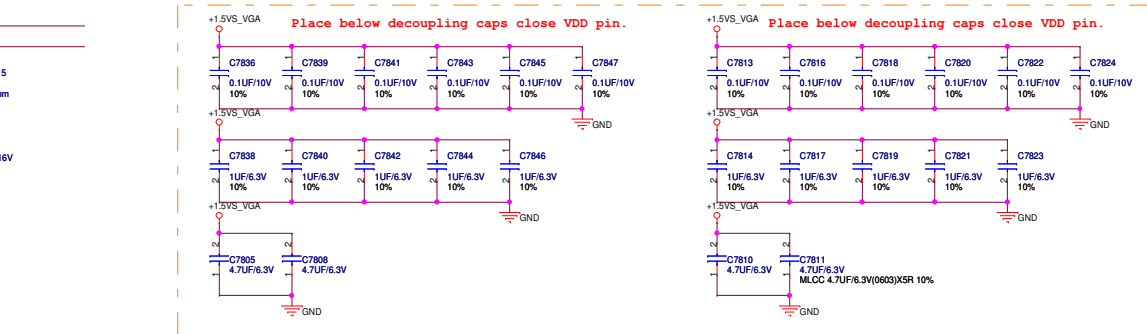
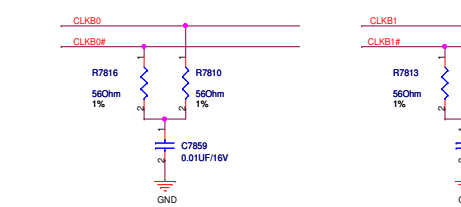
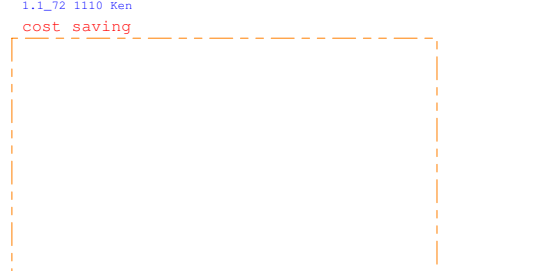
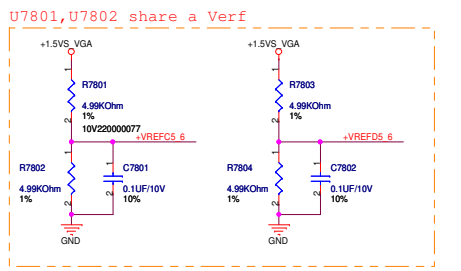
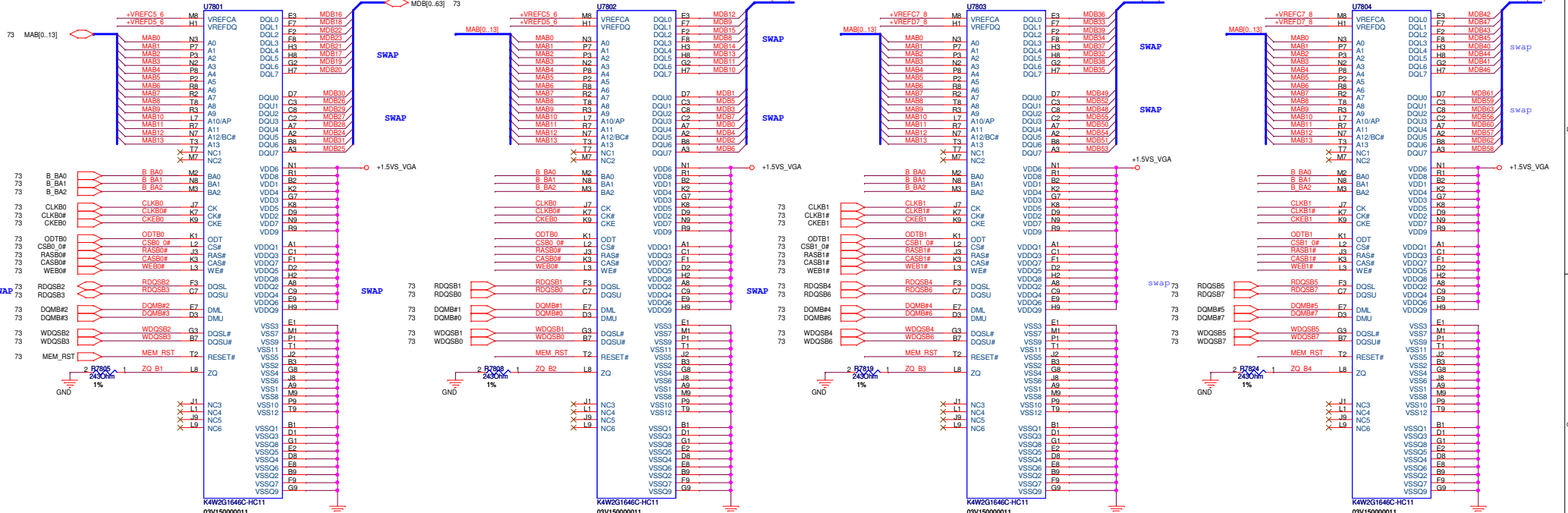
0301-change

PX with BACO mode all displays are always driven by APU  
 DPA&DPB share power ;DPC&DPD share power ;DPE&DPF share power



<b>PEGATRON</b>		Title : GPU-MEM CHA	
BG1/BU1		Engineer: Allen_CD_Wu	
Size	Project Name	Rev	
C	AAB70	1.1	
Date: Monday, March 21, 2011		Sheet	77 of 99

DDRIII1866 128M\*16-1.5V FBGA96



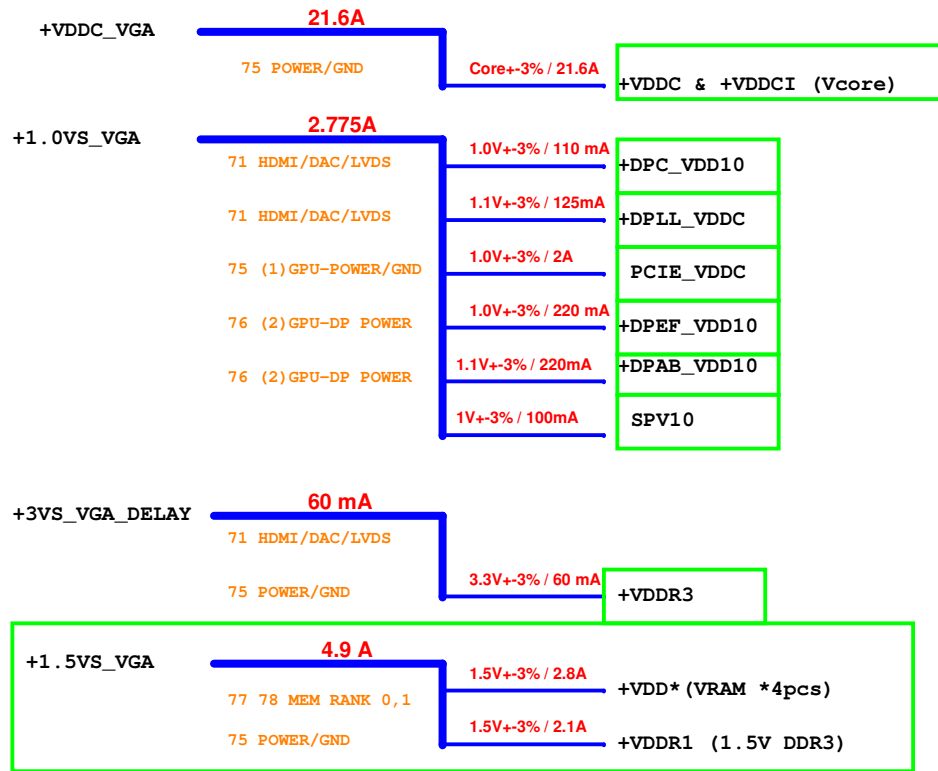
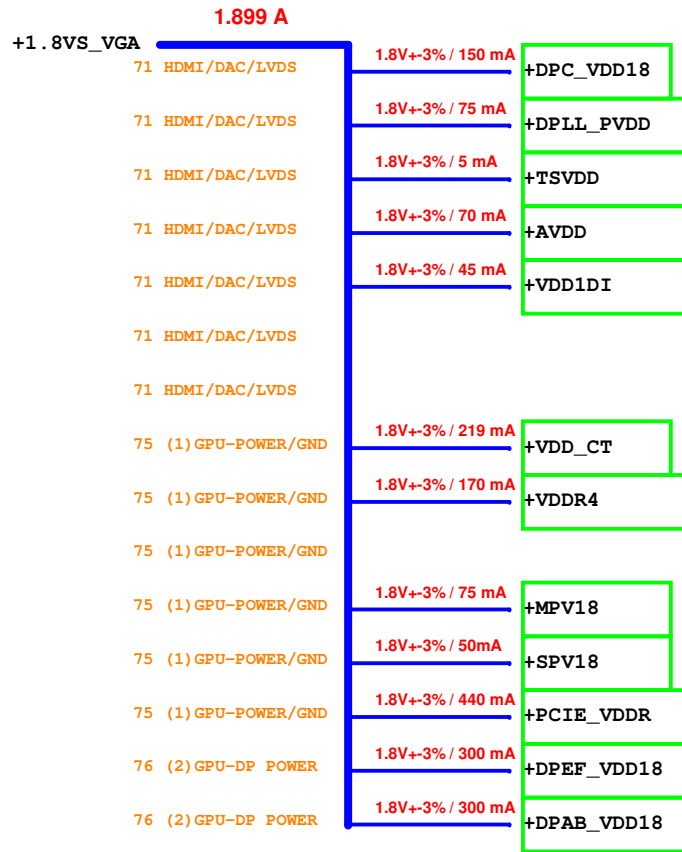
7.5uF per one VRAM

+1.5V\_VGA 57.72,73,75,91

VRAM change to colay symbol 1.1\_72 1110 Ken cost saving

cost saving



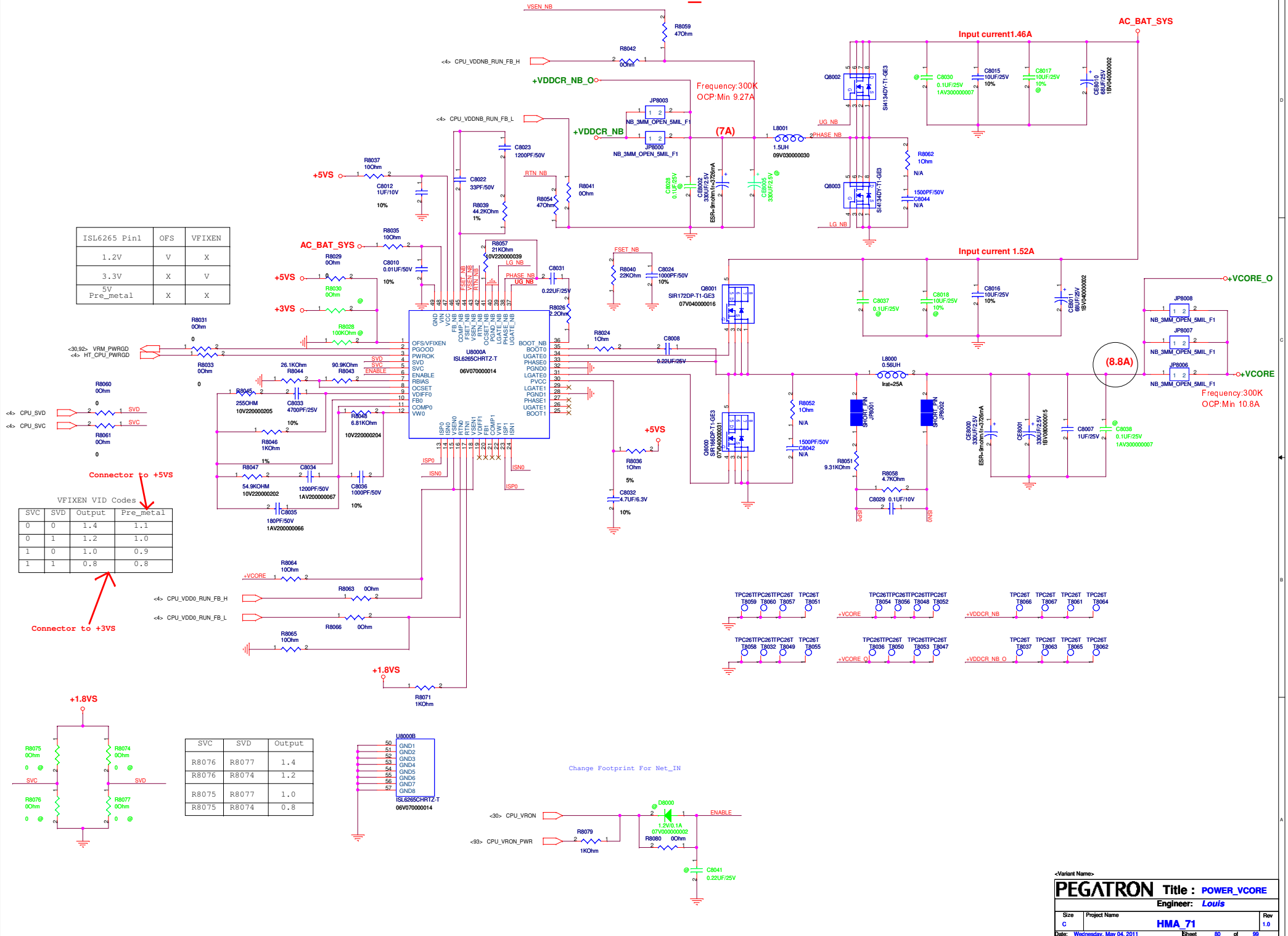


Total:15W (w/o VRAM)

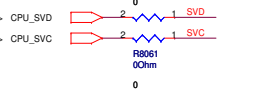
Power Up Sequence :  
 +VGA\_VCORE -> +1.05VS\_VGA -> +1.5VS\_VGA -> +1.8VS\_VGA -> +3VS\_VGA\_DELAY

Power Down Sequence :  
 +3VS\_VGA\_DELAY -> +1.8VS\_VGA -> +1.5VS\_VGA -> +1.05VS\_VGA -> +VGA\_VCORE

# HMA71\_AB DSC +VCORE POWER SUPPLY



ISL6265 Pin1	OFS	VFIXEN
1.2V	V	X
3.3V	X	V
5V Pre_metal	X	X

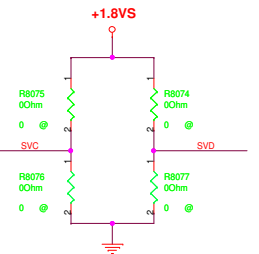


Connector to +5VS

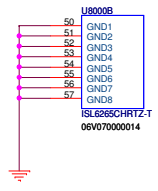
VFIXEN VID Codes

SVC	SVD	Output	Pre_metal
0	0	1.4	1.1
0	1	1.2	1.0
1	0	1.0	0.9
1	1	0.8	0.8

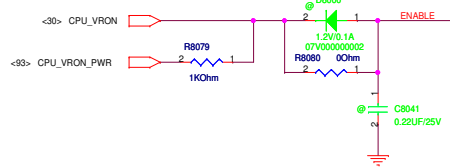
Connector to +3VS



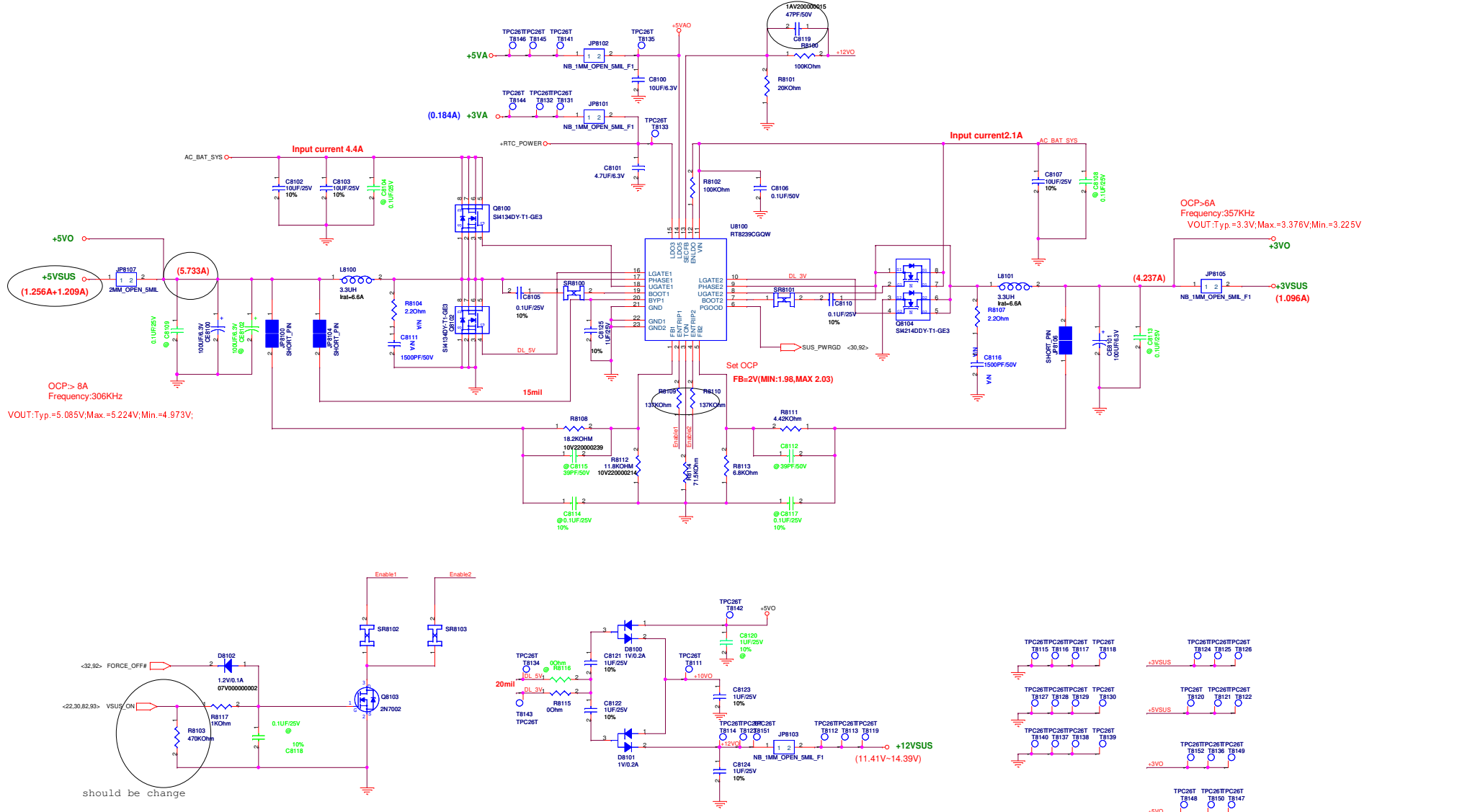
SVC	SVD	Output
R8076	R8077	1.4
R8076	R8074	1.2
R8075	R8077	1.0
R8075	R8074	0.8



Change Footprint For Net\_IN

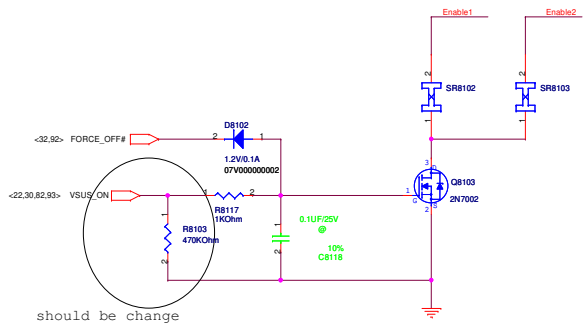


# HMA71 DSC +SYSTEM POWER SUPPLY



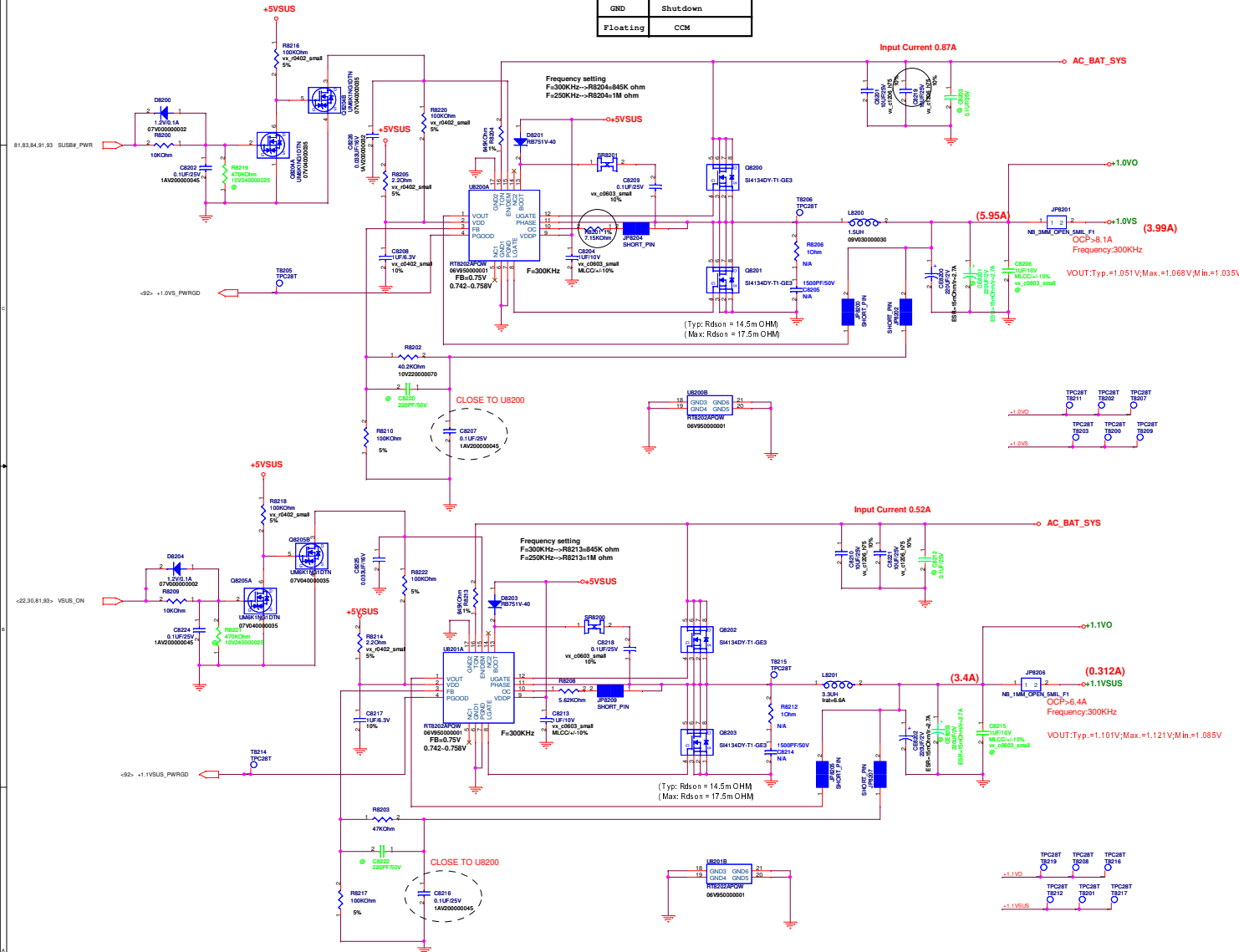
OCP > 8A  
Frequency: 306KHz  
VOUT: Typ.=5.085V; Max.=5.224V; Min.=4.973V;

OCP > 6A  
Frequency: 357KHz  
VOUT: T yp.=3.3V; Max.=3.376V; Min.=3.225V

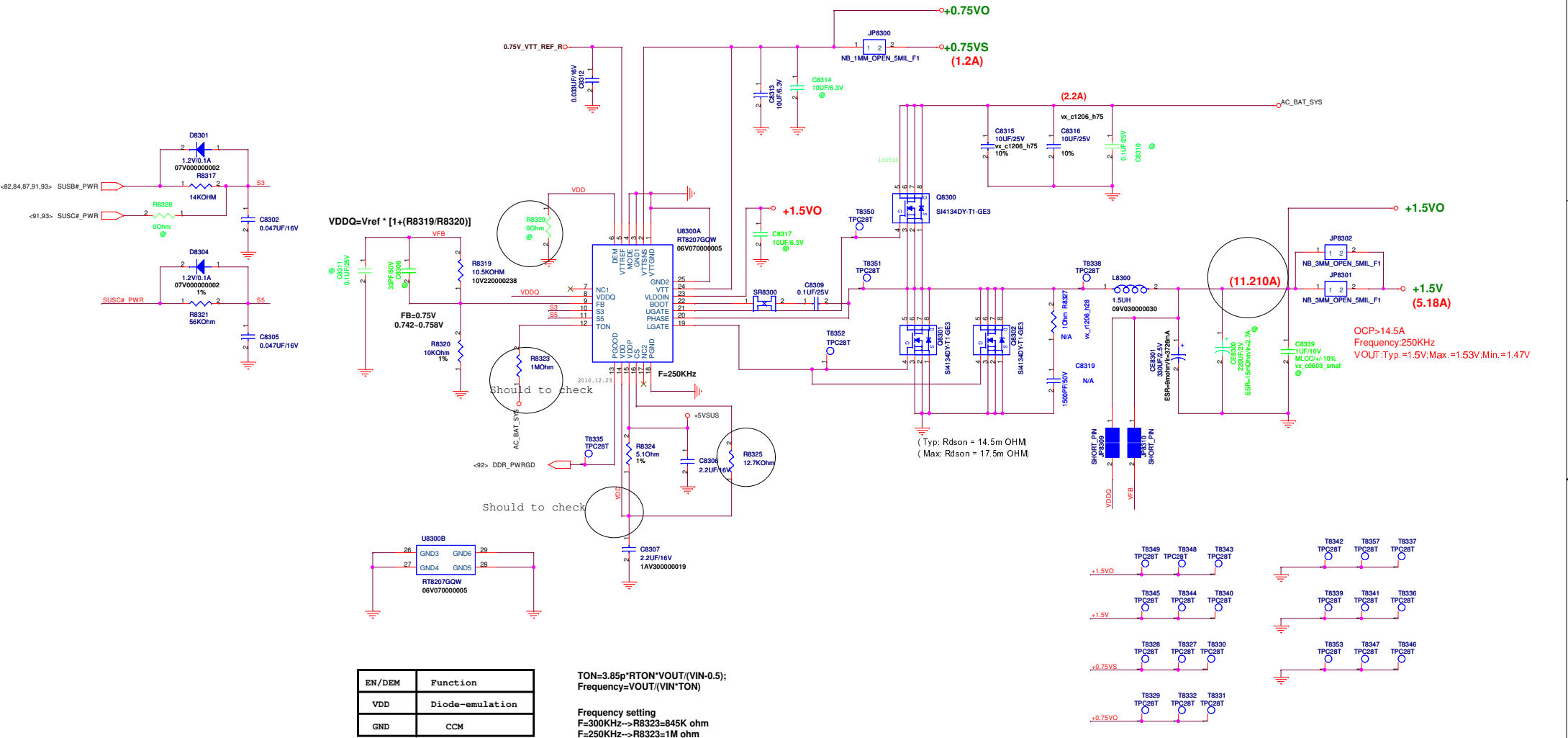


# HMA71 DSC +1.0V&+1.1V POWER SUPPLY

EN/DEM	Function
VDD	Diode-emulation
GND	Shutdown
Floating	CCM

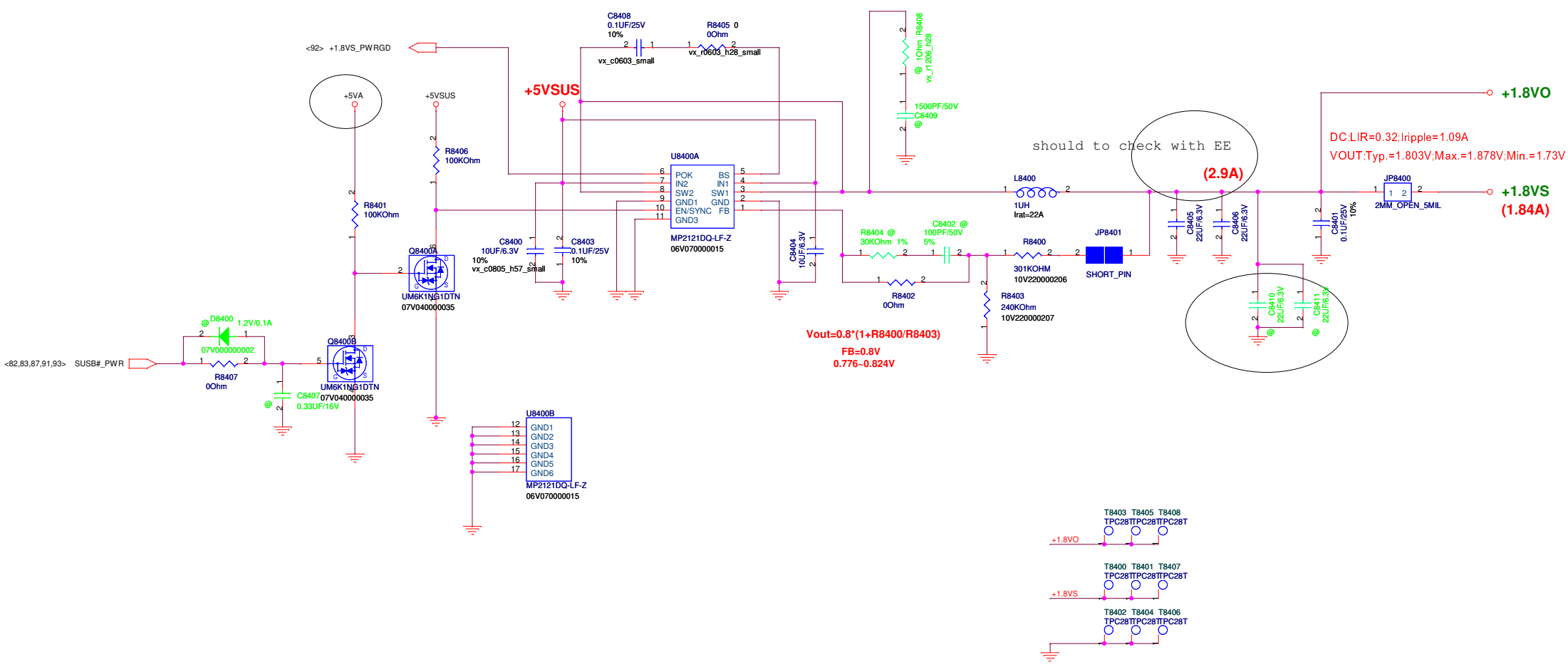


# +1.5VO & +0.75VS POWER SUPPLY



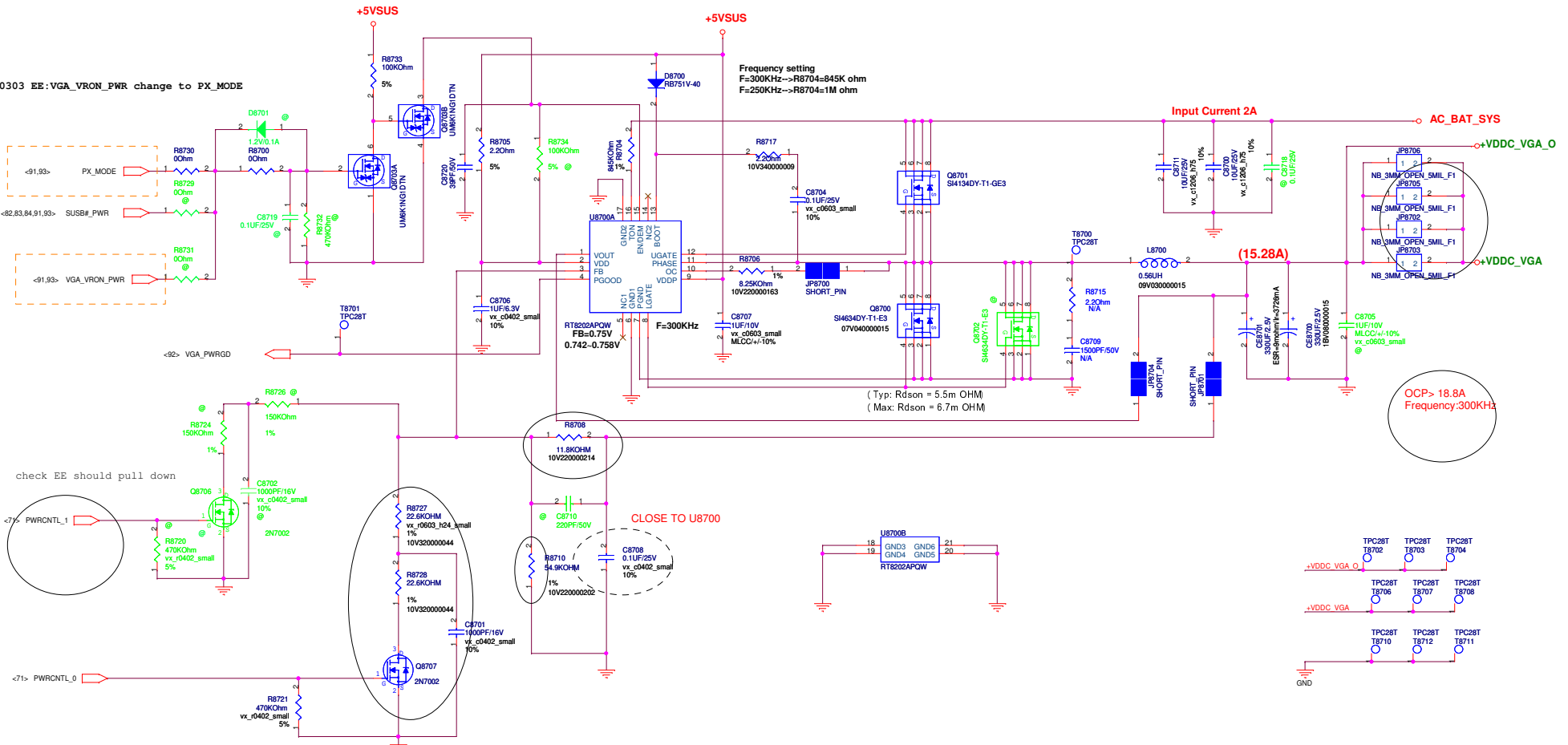
EN/DEM	Function
VDD	Diode-emulation
GND	CCM

# +1.8VS POWER SUPPLY



# AAB70 DSC +VGA\_VCORE POWER SUPPLY

EN/DEM	Function
VDD	Diode-emulation
GND	Shutdown
Floating	CCM



Seymour XT (17W)

PWR_CNTL_1 (GPIO20)	PWR_CNTL_0 (GPIO15)	+VGA_VCORE
LOW	LOW	0.9V/real 0.911V
LOW	HIGH	1.1V / real1.107V

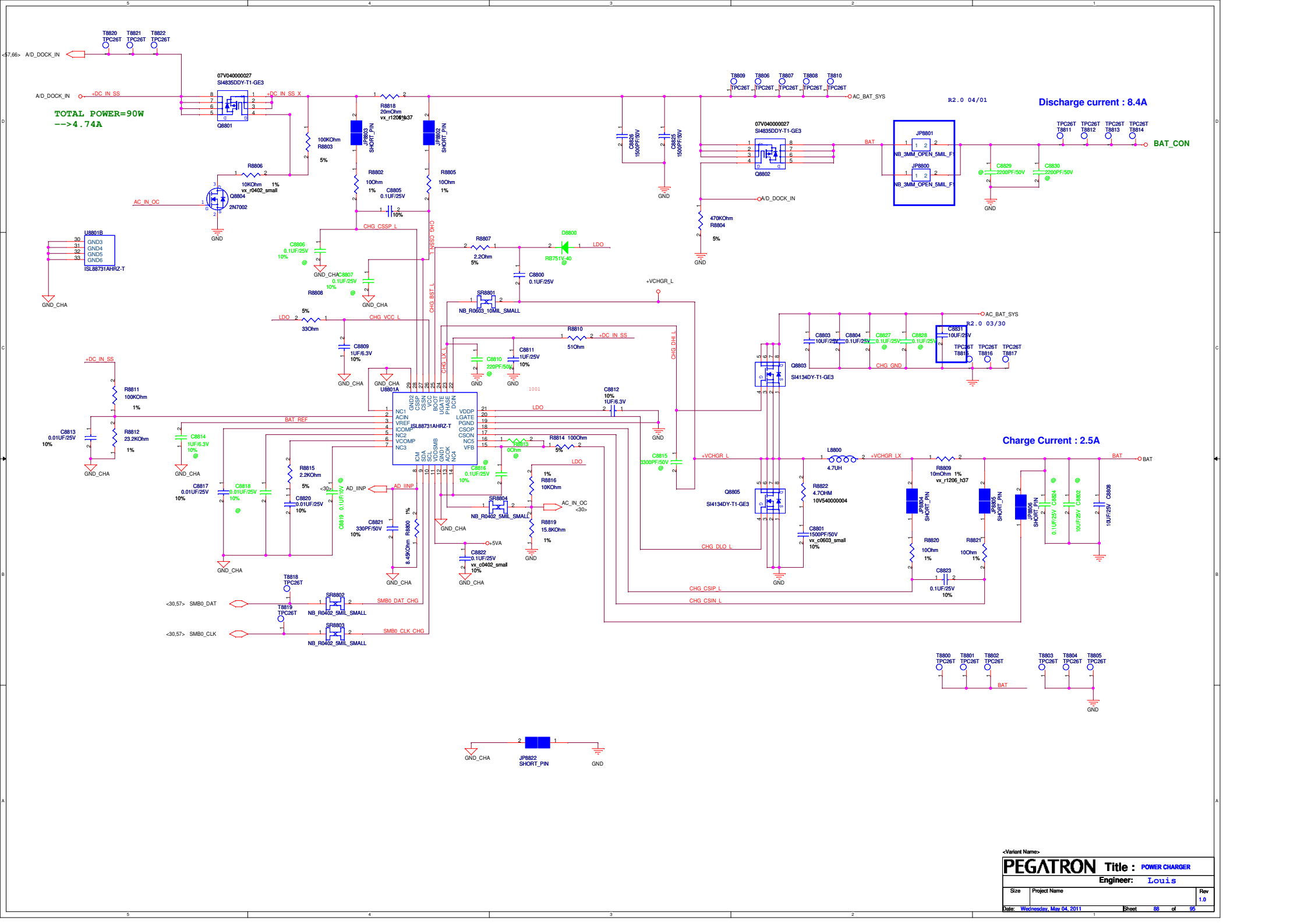
Capilano LP

PWR_CNTL_1 (GPIO20)	PWR_CNTL_0 (GPIO15)	+VGA_VCORE
LOW	LOW	1V
LOW	HIGH	0.9V
HIGH	HIGH	0.95V

R8727=75K ohm  
R8728=75K ohm  
R8726, R8724, R8720, Q8708 must be mounted.

Robson LP

PWR_CNTL_1 (GPIO20)	PWR_CNTL_0 (GPIO15)	+VGA_VCORE
LOW	LOW	0.95V
LOW	HIGH	0.9V



TOTAL POWER=90W  
-->4.74A

Discharge current : 8.4A

Charge Current : 2.5A



**BATTERY IN DETECT**

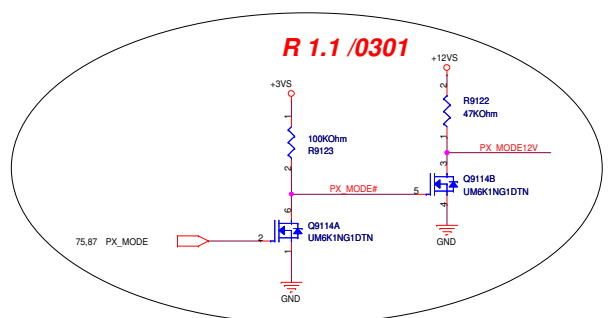
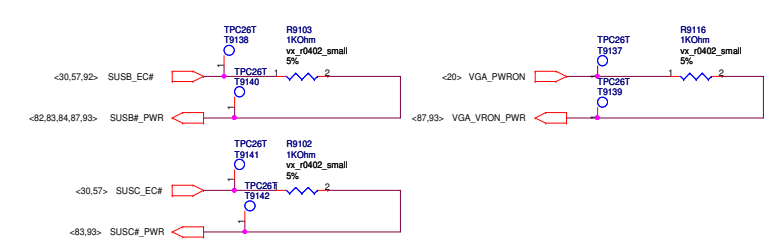
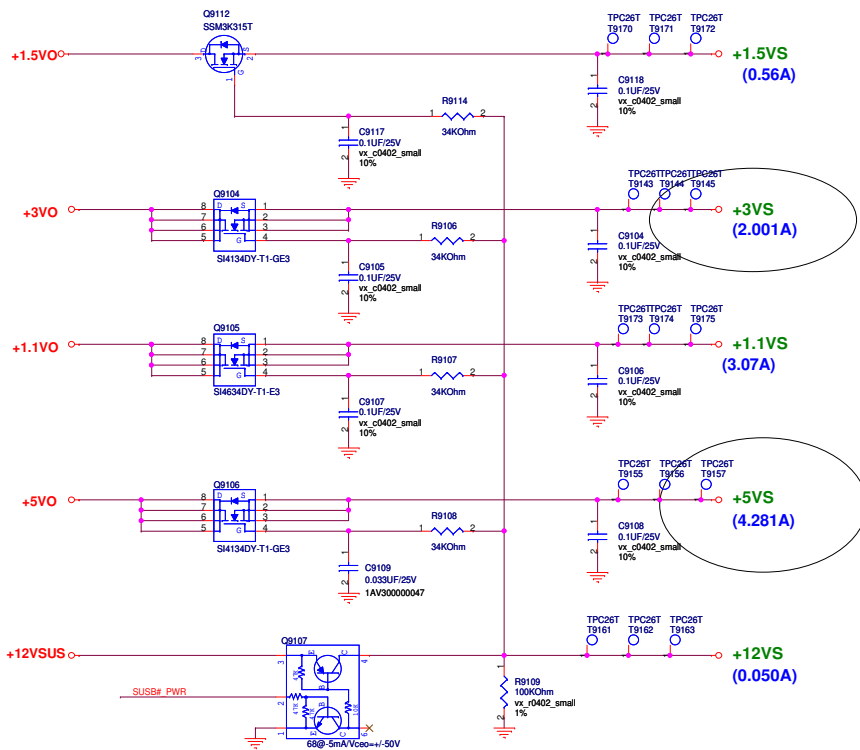


<Variant Name>

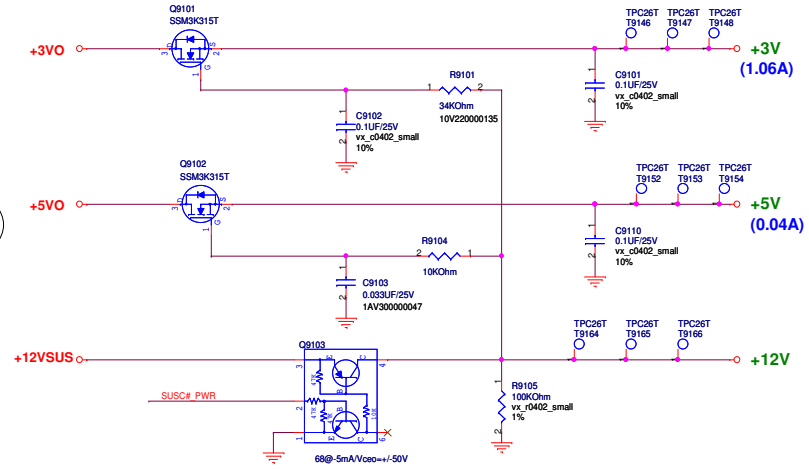
**PEGATRON** Title : **POWER\_DETECT**  
Engineer: *Louis*

Size	Project Name	Rev
Custom		1.0
Date: Wednesday, May 04, 2011	Sheet 90 of 99	

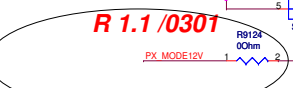
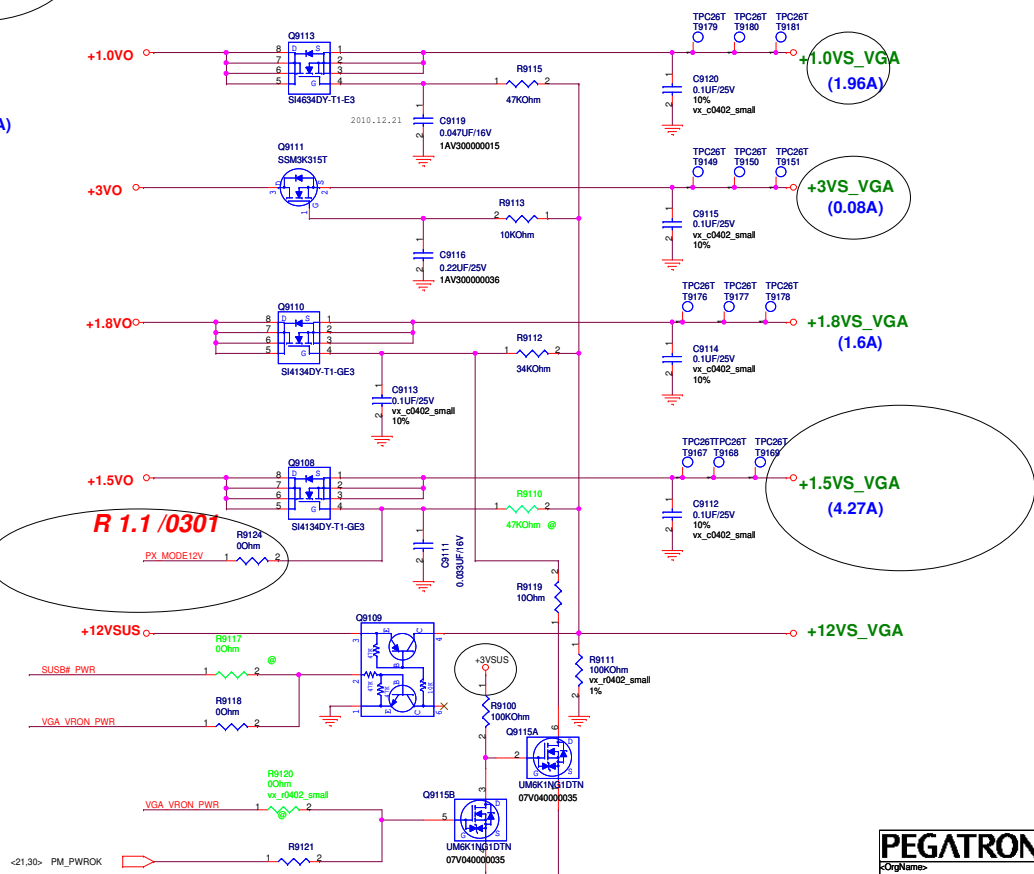
# SUSB#\_PWR POWER



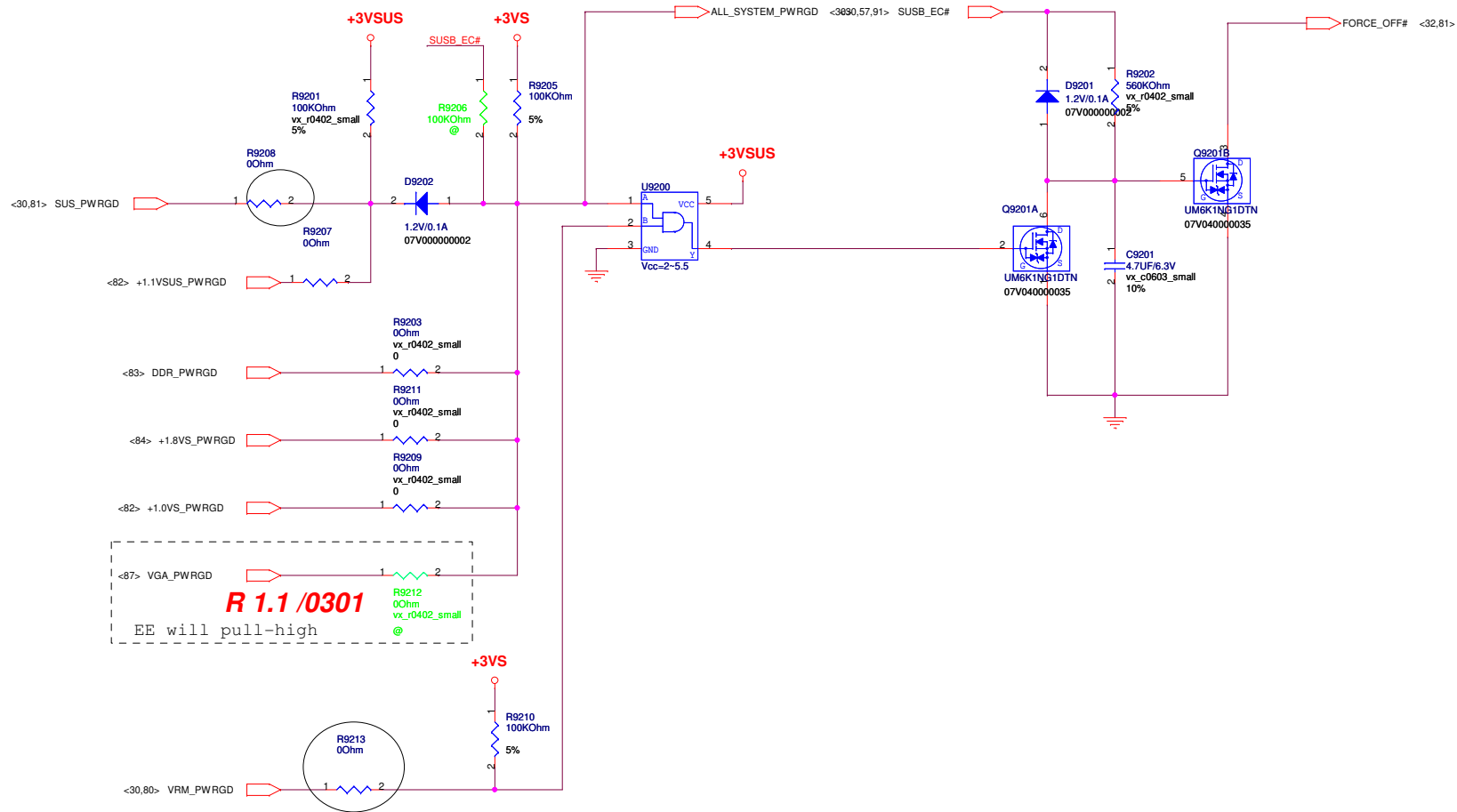
# SUSC#\_PWR POWER



# VGA\_VRON\_PWR\_PWR POWER

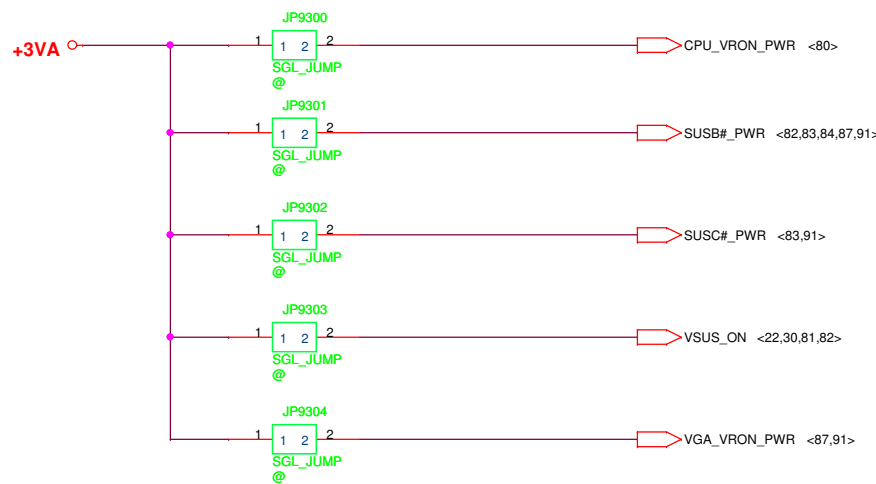


# POWER GOOD DETECTOR



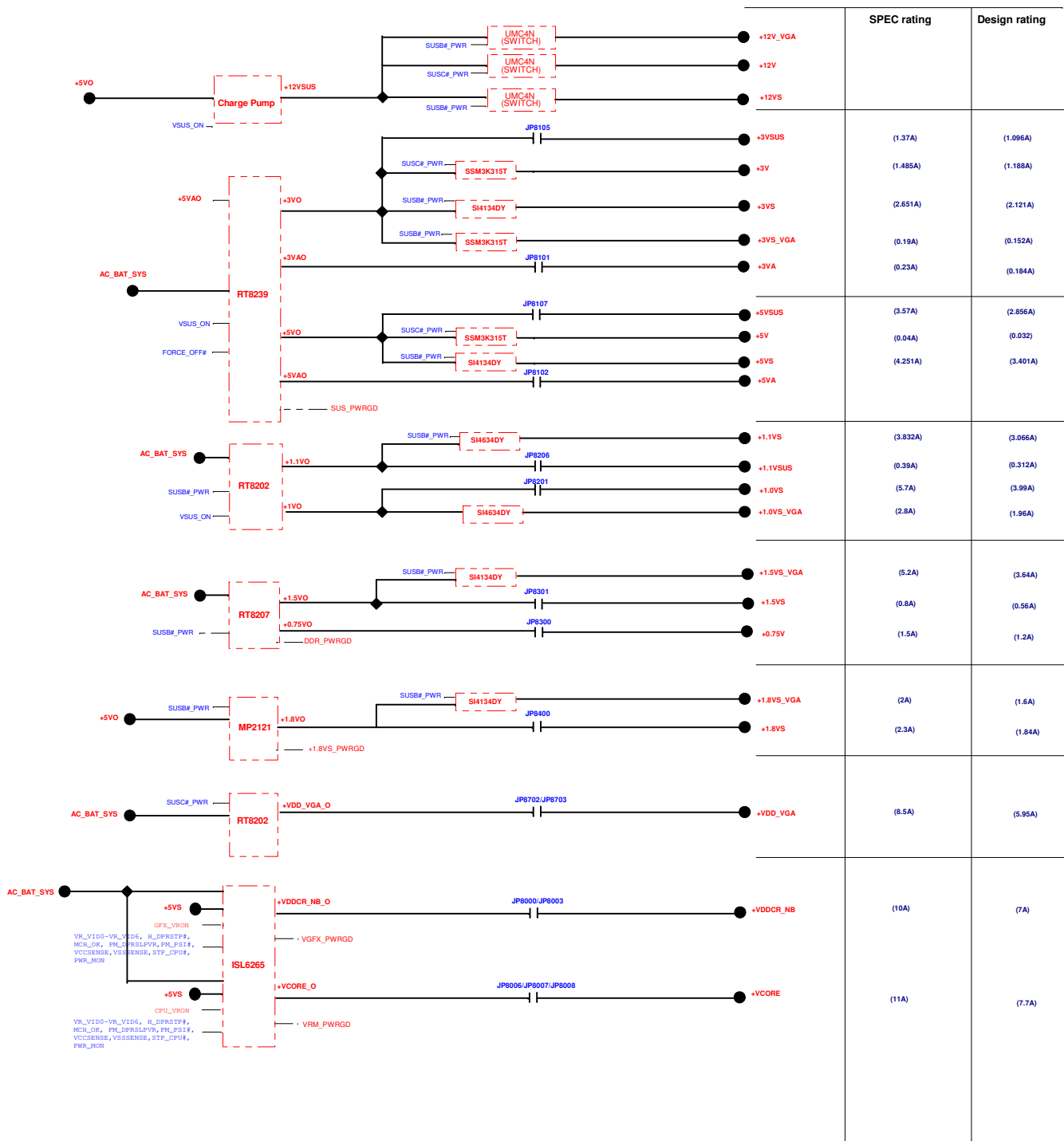


**FOR POWER TEST**



<Variant Name>

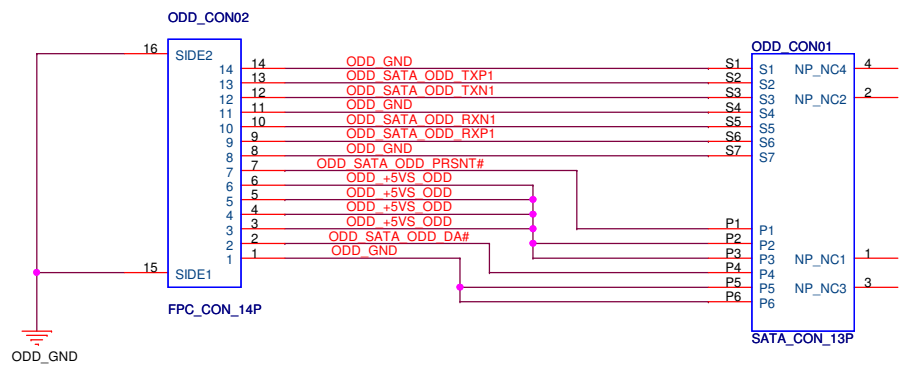
<b>PEGATRON</b> Title :POWER_SIGNAL		
Engineer: <b>Louis</b>		
Size B	Project Name	Rev 1.0
Date: Wednesday, May 04, 2011	Sheet	93 of 99



# R20

Item	Date	Description
1	0328-11	P.72 Add R7210~R7215, C7201, C7202 for VRAM Channel A reseved. P.5 Change C0508=>0805, L0501=>1K 0603 for CRT ripple noise. P.39 Add R3909, R3910, R3914, R3915 for POP issue P.50 Add R5010, C5020, C5021, Q5001, U5005 for Thermal Palm rest. P.04 Add SP0410, SP0411 for Thermal Palm rest. P.32 Add R3210 for Thermal Palm rest.
7	0330-11	P.98 Copy TP BTN Board from AIH24
8		P.66 Add 2nd USB power switch (U6605) for Audio board USB port voltage drop
9		P.50 Un-mount R5010, C5020, C5021, Q5001, U5005
10	0331-11	P.22 Add Test Pad T2201, T2202 for U2001.W5 and AE29 ICT function.
11		P38. Update CON3801, CON3802=>1217-00P1000
12		P66. Update CON6602=>1218-01BJ000
13		P99. Update IOCON5=>1218-01BJ000
14		P31. CON3102, CON3103=>1218-00C7000
15	0404-11	P65. Change H6539, H6541, H6542, H6545, H6633 to NPTH
16		P66. Change CON6603, CON6605 to 4 pin. Del C6605, C6608. Un-mount R6609
17		P97. Change PWR_U01 to 4 pin, delete PWR_R2, PWR_LED2
18	0406-11	P65. Modify H6541, H6542, H6545 GND
19		P33. Add L3303 for AVDDL EMI issue
20		P34. Add U3405 for EMI Home issue
21	0407-11	P66. Add CON6608
22		P99. Add IOCON6
23		P34. Un-mount R3408, R3409
24		P72. Un-mount C7201, C7202
25	0410-11	P39. R3905, R3906=> 51 ohm
26		P33. Mount R3317=> 10K
27		P46. Change L4601~L4603=> 56nH (Not yet)
28		P66. Change U6601=>1.5A, Mount U6605
29	0411-11	P30. Change R3035 option as /SJV_ID
30		P21. Change R3042 option as /SJV_ID
31	0421-11	P66. Change U6601, U6605 => 2.5A
32		P50. Change R5001 => 39K ohm for Thermal
33		P56. Change R5603,R5621 => 100 ohm,390 ohm ; LED5610,R5611=> 0713-1QJ000,0713-1QK000
34		P33. Change C3321,C3322 => 15PF
35		P33. Change L3303 => 0 ohm (0603)
36		P46. Change L4601, L4602, L4603 => 56nH for EMI
37		Update Power AAB7A_BRAZO_PWR_2R0_0411_DSC_A& AIC70 Sub board AIC70_R20_201104211100
38	0503-11	P66 unmount con6608
39	0504-11	P34 Mount R3408
40		P65 Un-mount H6535, H6536
41		P99 Un-mount IOCON6
42		Update Power AAB7A_BRAZO_PWR_2R0_0504_DSC_A
43	0505-11	P39 Un-mount R3910, Mount R3914=1M ohm

<b>PEGATRON</b> Title :History		
<OrgName>		Engineer: <OrgAddr1>
Size B	Project Name <b>AAB70</b>	Rev 1.1
Date: Thursday, May 05, 2011		Sheet 95 of 99



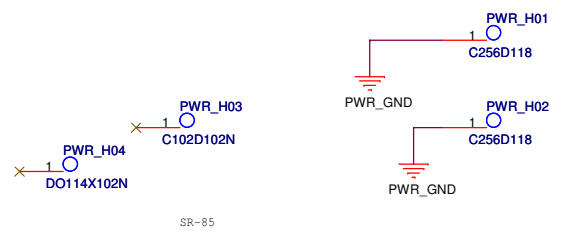
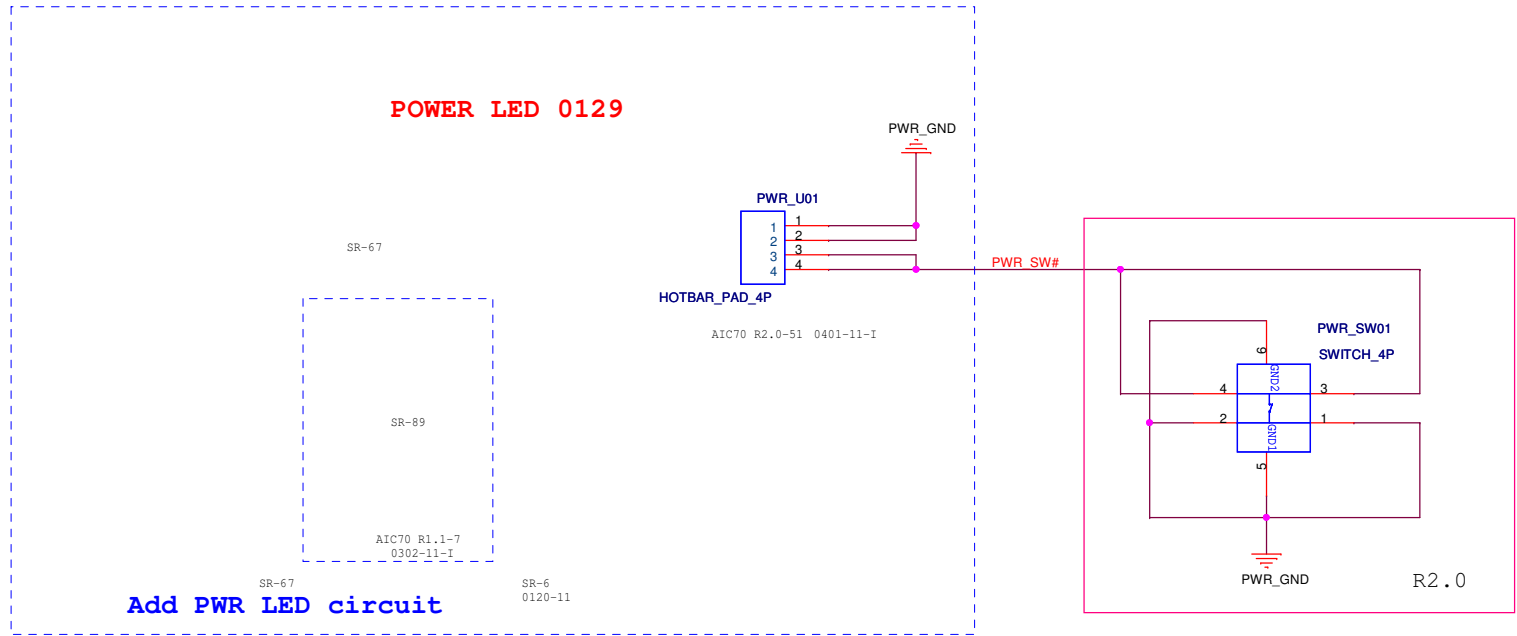
ODD\_H5  
 C102D102N

SR-88

ODD\_H01  
 C256D118  
 ODD\_GND

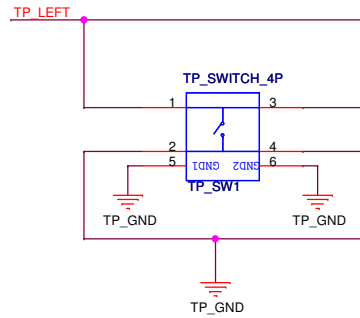
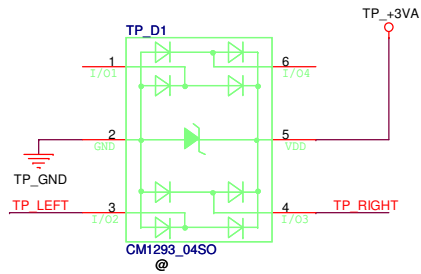
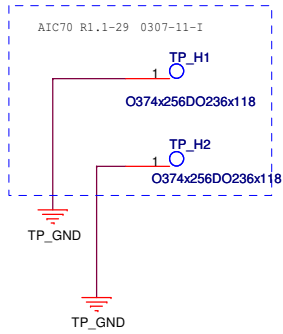
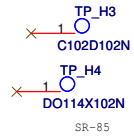
SR-85

<b>PEGATRON</b> Title :ODD		Engineer: <i>Johnson Huang</i>
BU1-RD Div.1-HW RD Dept.1		
Size B	Project Name <b>TOD ODD BOARD</b>	Rev 2.0
Date: Thursday, April 21, 2011		Sheet 96 of 77

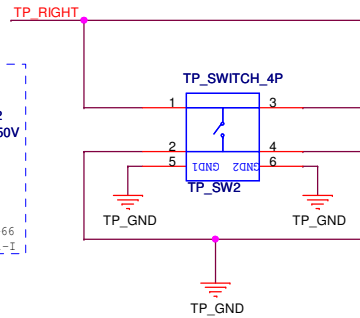
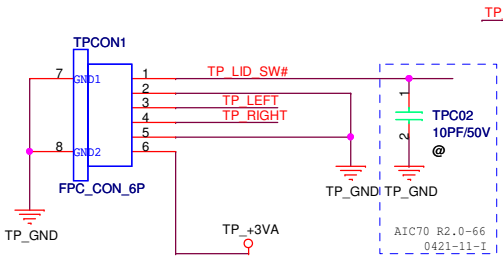
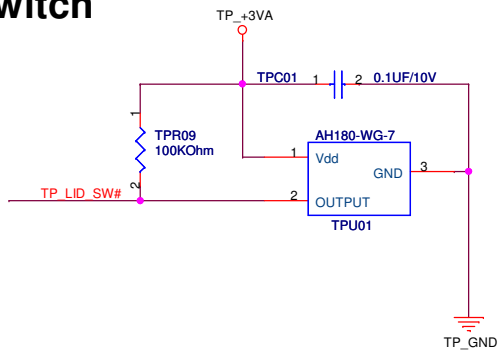


<b>PEGATRON</b> Title : <b>PWR BTN</b>	
BU1-RD Div.1-HW RD Dept.1 Engineer: <b>Johnson Huang</b>	
Size B	Project Name <b>TOD POWER SW</b>
Date: <b>Thursday, April 21, 2011</b>	Rev 2.0
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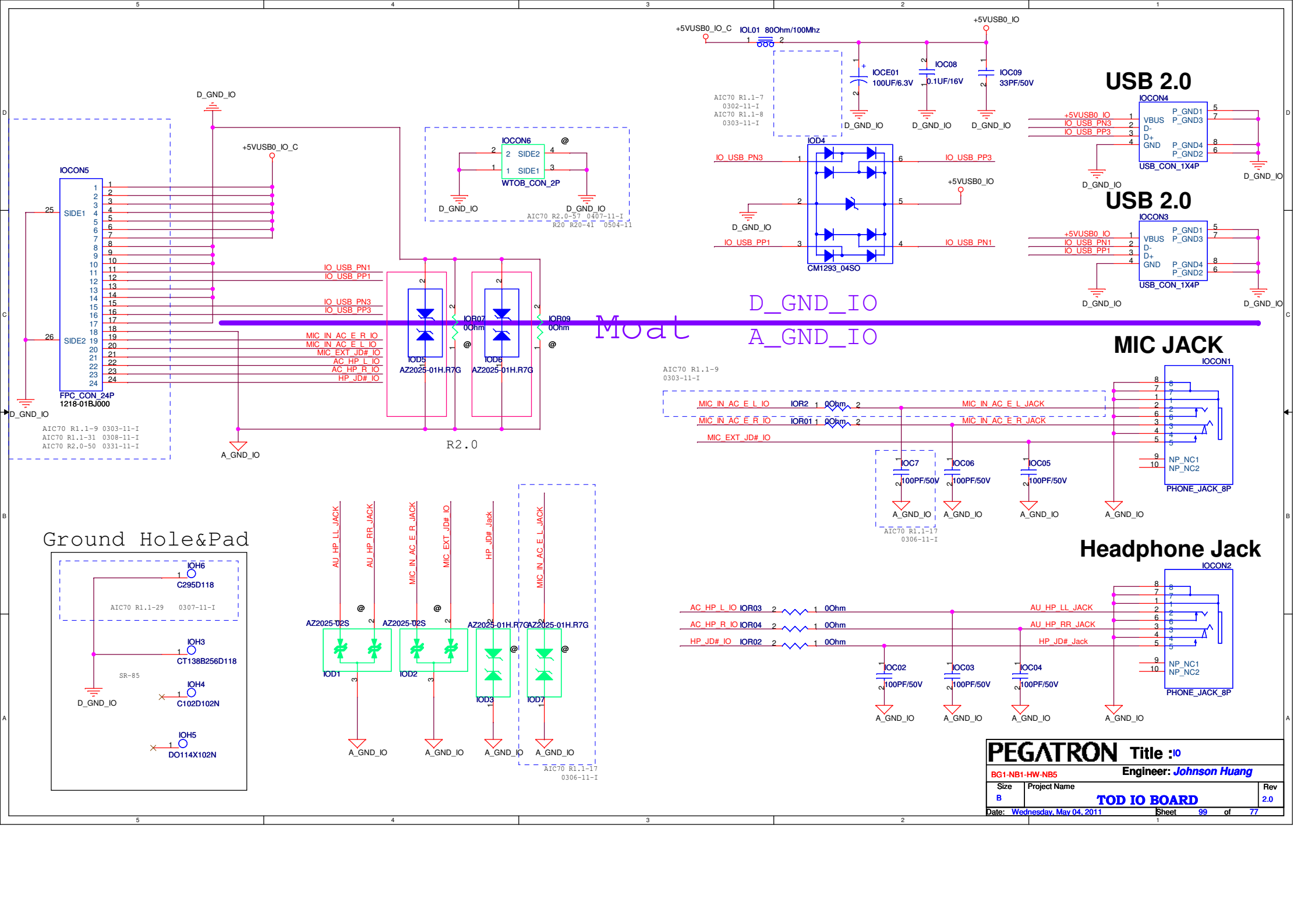


# LID Switch

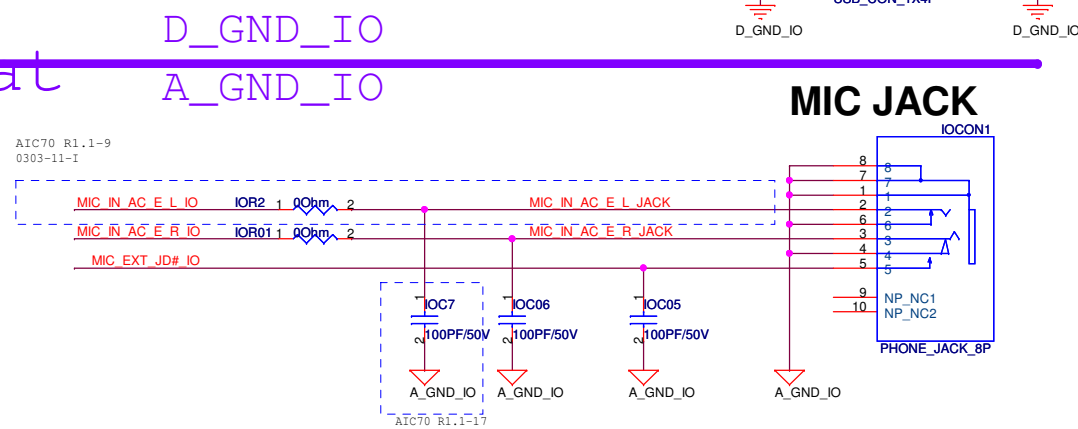
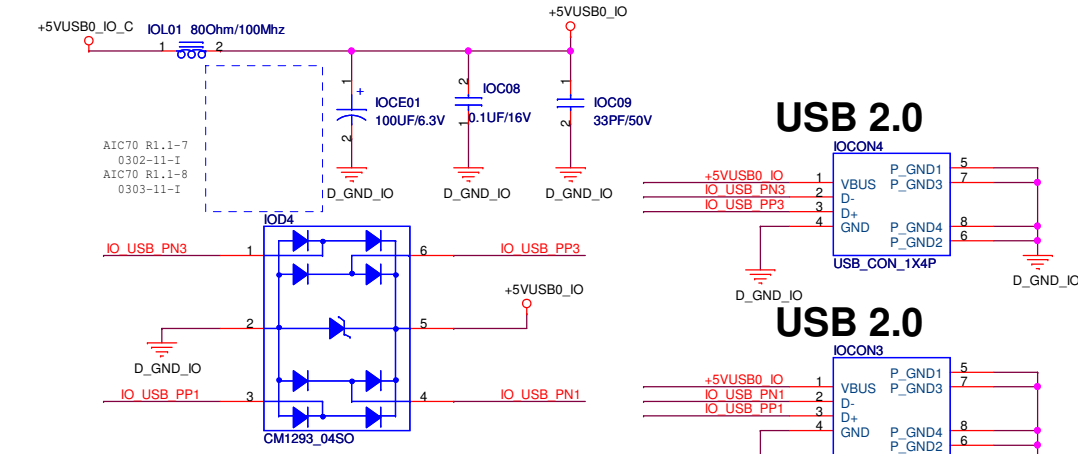
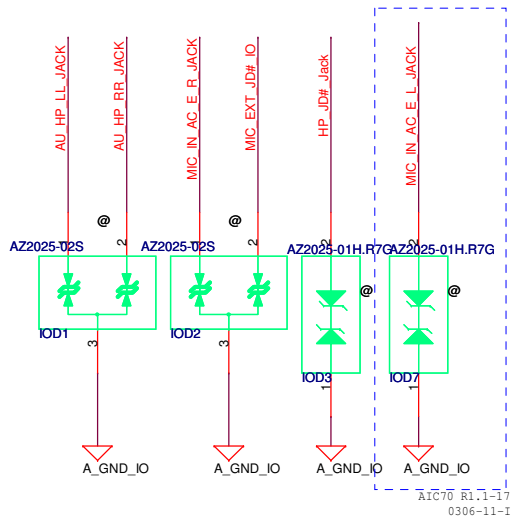
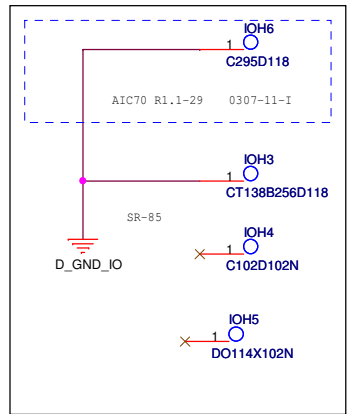


AIC70 R2.0-48 0330-11-I  
AIC70 R2.0-67 0421-11-I

<b>PEGATRON</b>		Title : <b>A03 TP</b>	
<OrgName>		Engineer: <b>Johnson Huang</b>	
Size	Project Name		Rev
<b>B</b>	<b>AIH70</b>		<b>1.0</b>
Date: <b>Thursday, April 21, 2011</b>		Sheet	98 of 99



### Ground Hole&Pad



<b>PEGATRON</b> Title : 10		Engineer: <b>Johnson Huang</b>
BG1-NB1-HW-NB5		Rev 2.0
Size B	Project Name <b>TOD IO BOARD</b>	Date: <b>Wednesday, May 04, 2011</b>
Date: <b>Wednesday, May 04, 2011</b>		Sheet <b>99</b> of <b>77</b>

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