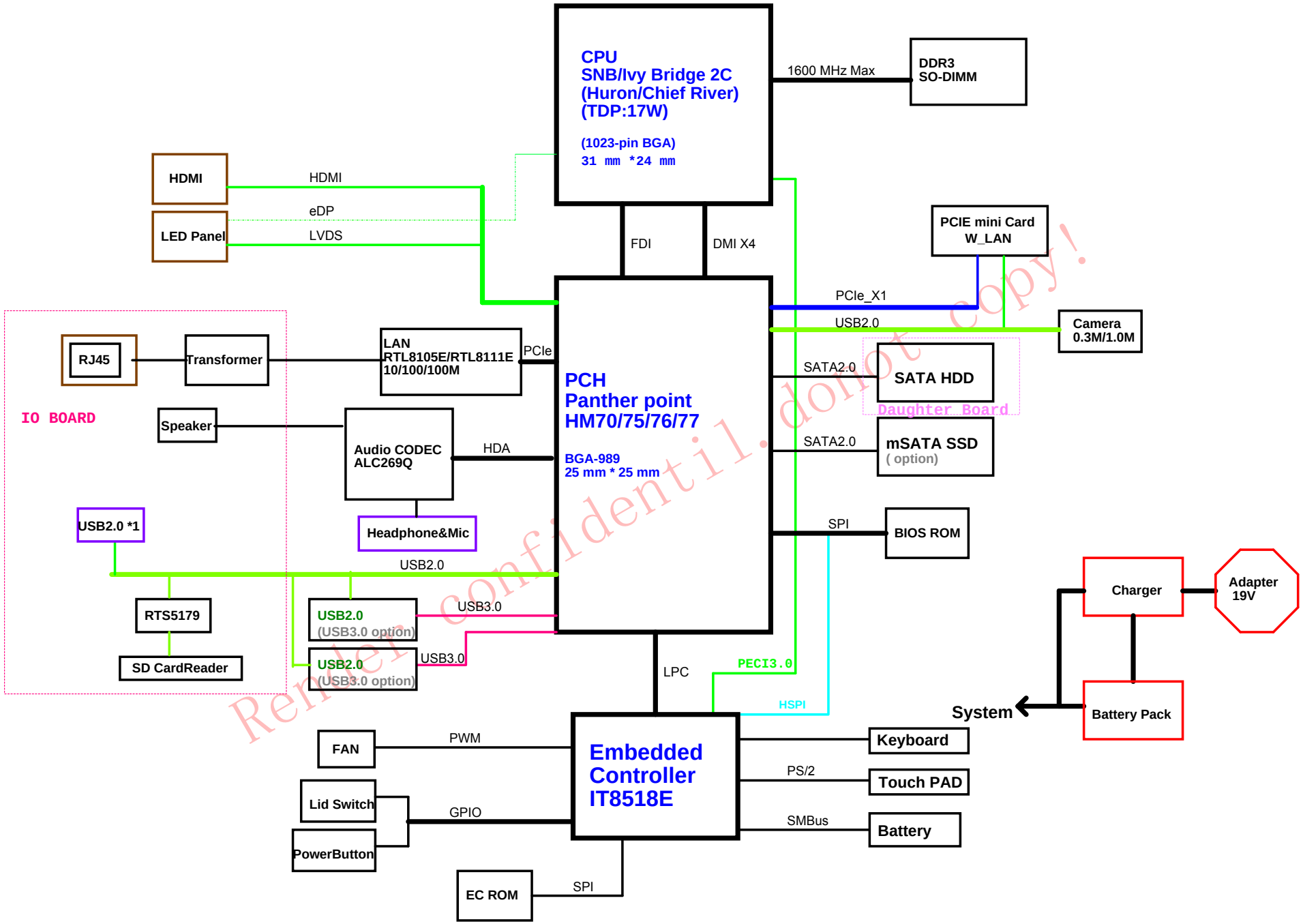
Project Name: C21

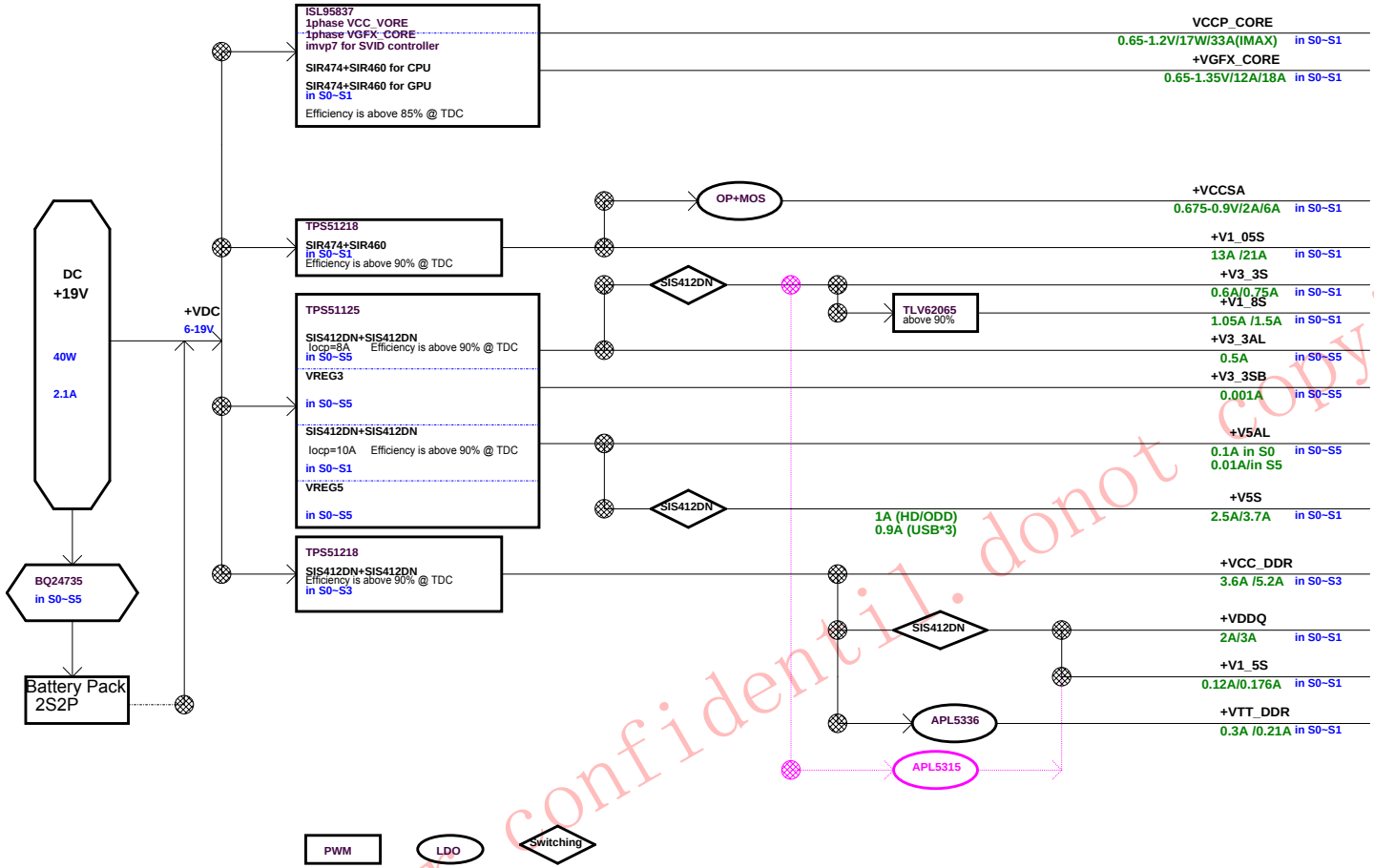
SCH Vertion: VC

EA EXCELSIOR RENDER		
Title: COVER		
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 1 of 57	



EA EXCELSIOR RENDER

Title	SYSTEM BLOCK	
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 2 of 57	



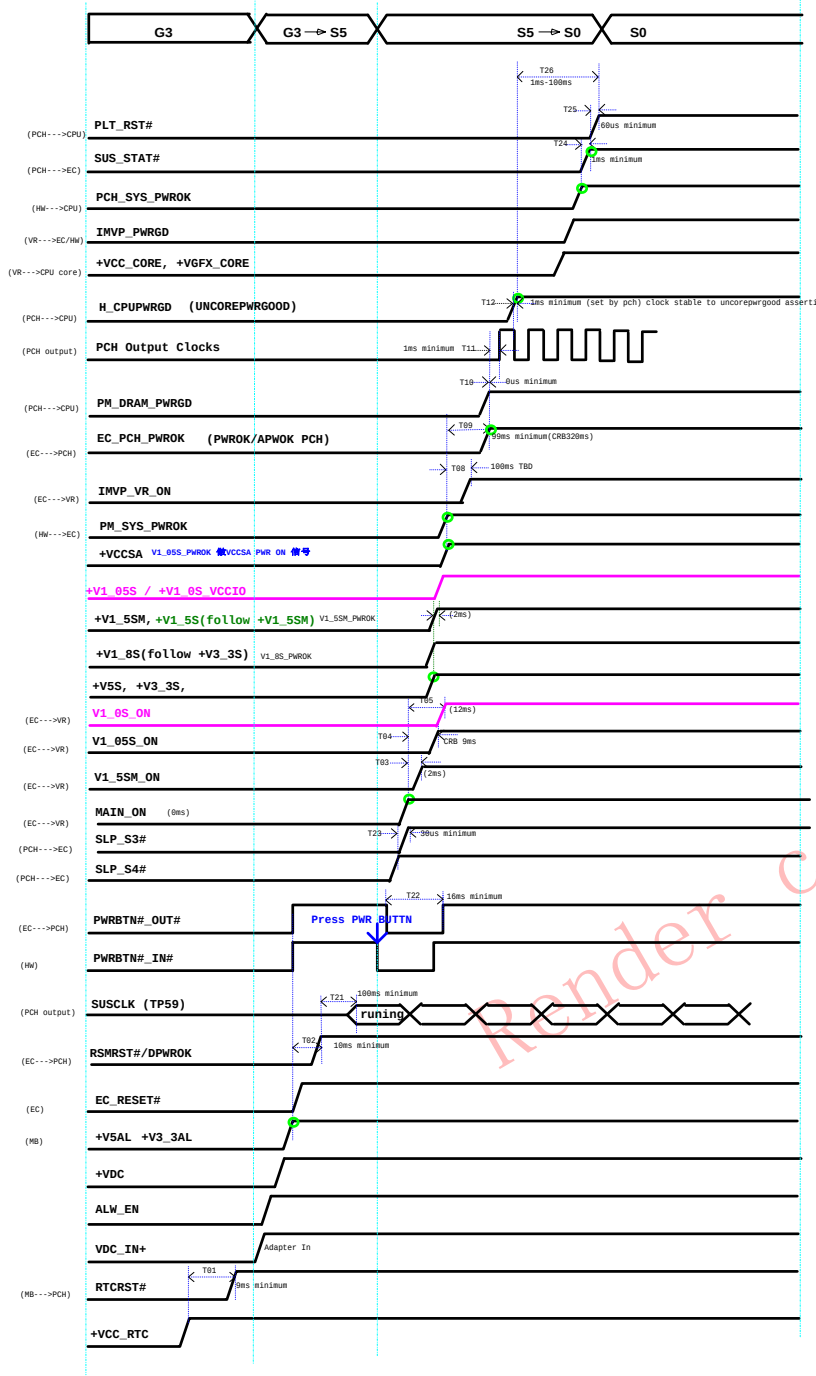
EA EXCELSIOR RENDER

Title: POWER MAP

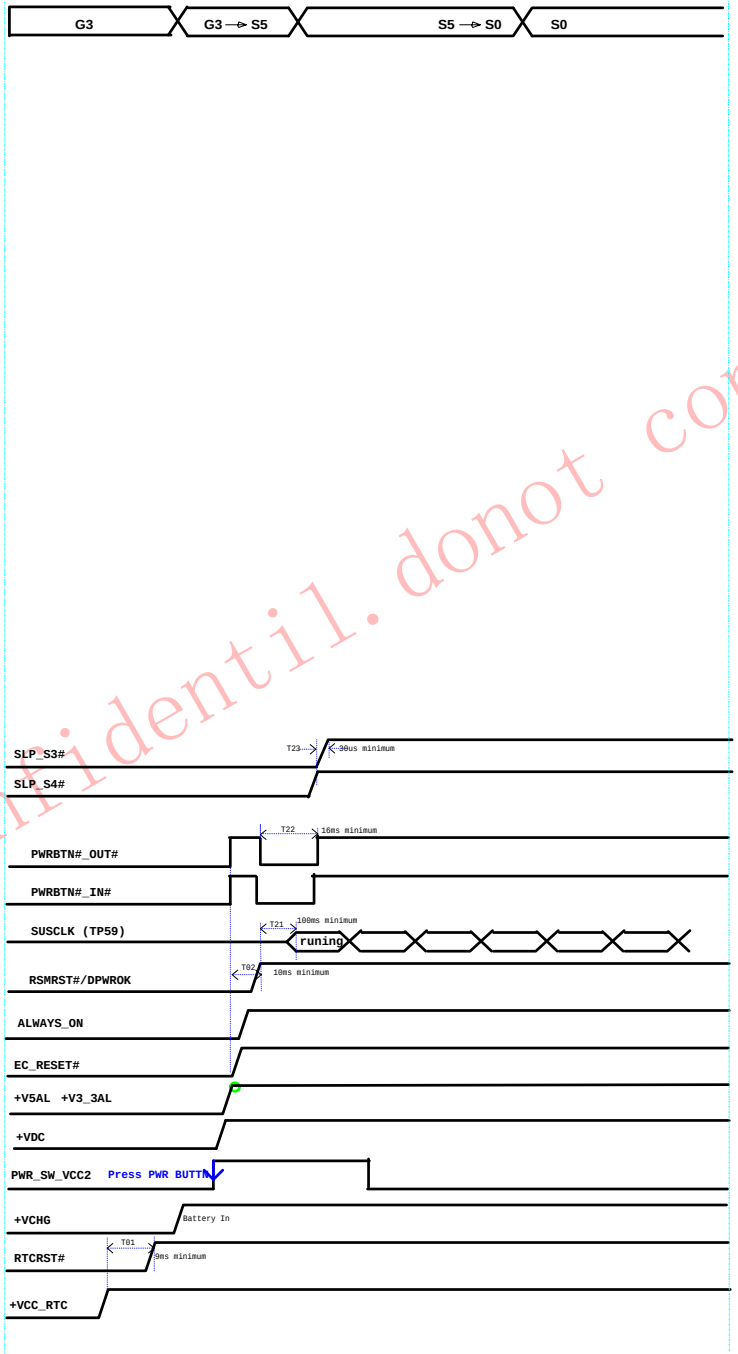
Size: Custom | Document Number: C21 | Rev: C

Date: Thursday, March 14, 2013 | Sheet 4 of 57

POWER ON SEQUENCE(Adapter Mode)



POWER ON SEQUENCE(BatteryMode)



Platform Sequencing Timing Spec

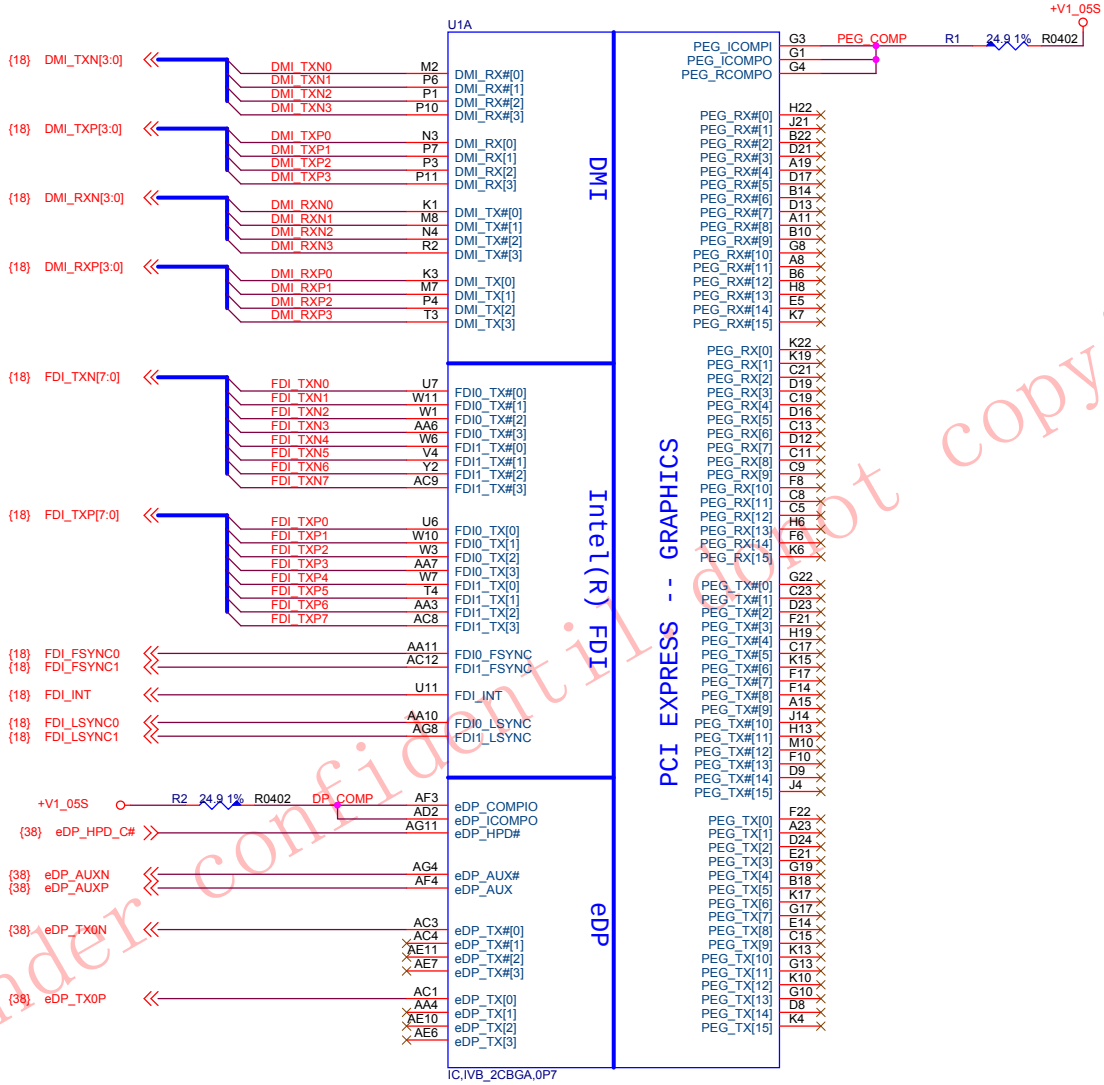
Label	Description	Min(ms)	Max(ms)	Units
T01	VccRTC active to RTCRST# deassertion	9	--	ms
T02	VccSUS active to RSMRST# deassertion	10	--	ms
T03	platform power rails active to PCH PWROK high	100	300	ms
T04	PWROK assertion to DRAMPWROK assertion	0	--	us
T05	PWROK high to PCH clock outputs stable	1	--	ms
T06	SYS_PWROK high to PLTRST# deassertion	1.06	--	ms
Ta	SUS_STAT# active to PLTRST# active	210	--	us
Tb	PLTRST# active to PROCPWRGD inactive	30	--	us
Tc	PROCPWRGD inactive to clocks invalid	10	--	us
Td	Clocks invalid to SLP_S3# assertion	1	--	us
	SLP_S3# assertion to VccCore (PCH) rails falling	0	--	us

EA EXCELSIOR RENDER

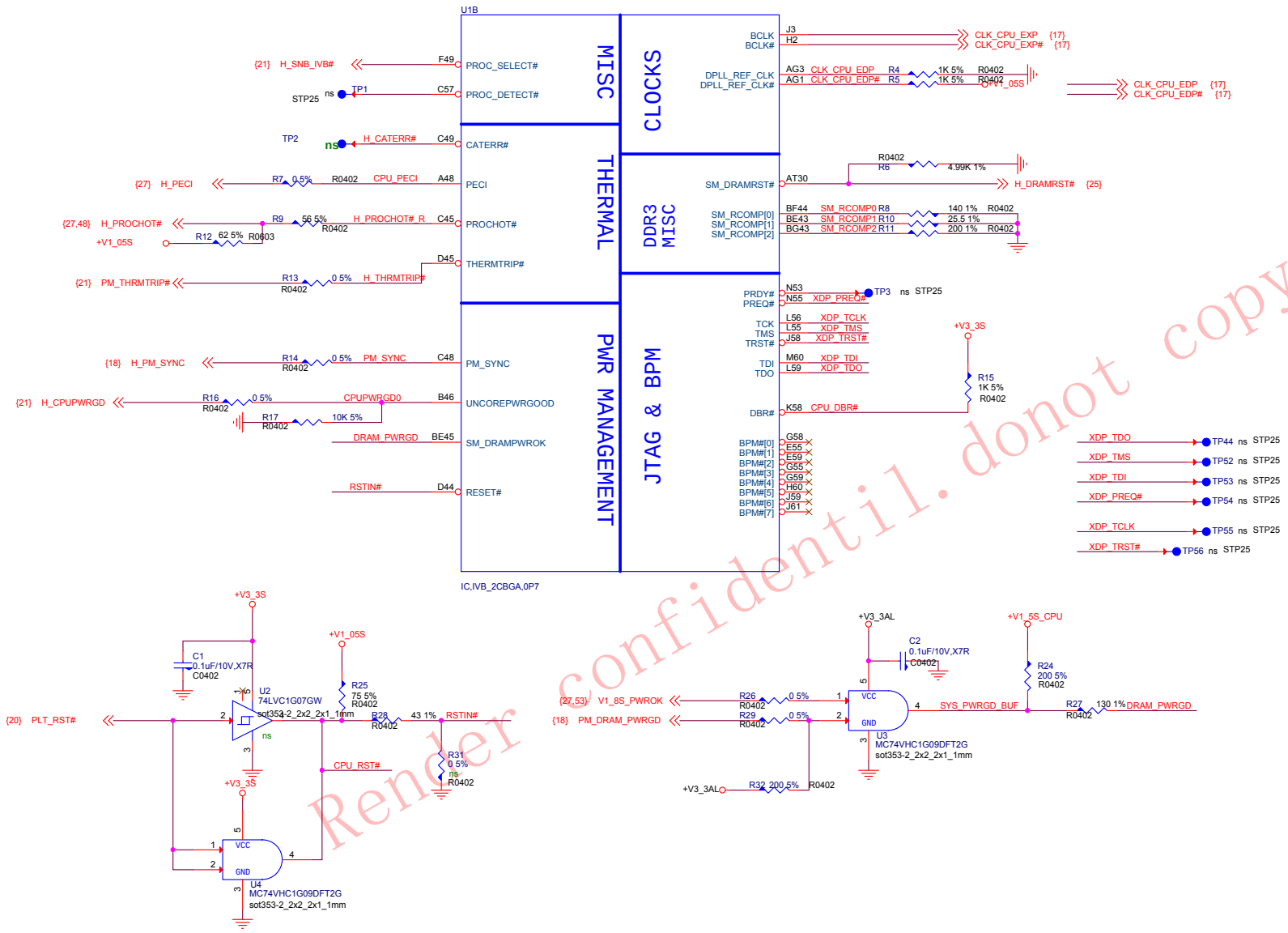
Title: POWER sequencing

Size: A2 | Document Number: C21 | Rev: C

Date: Thursday, March 14, 2013 | Sheet 6 of 57

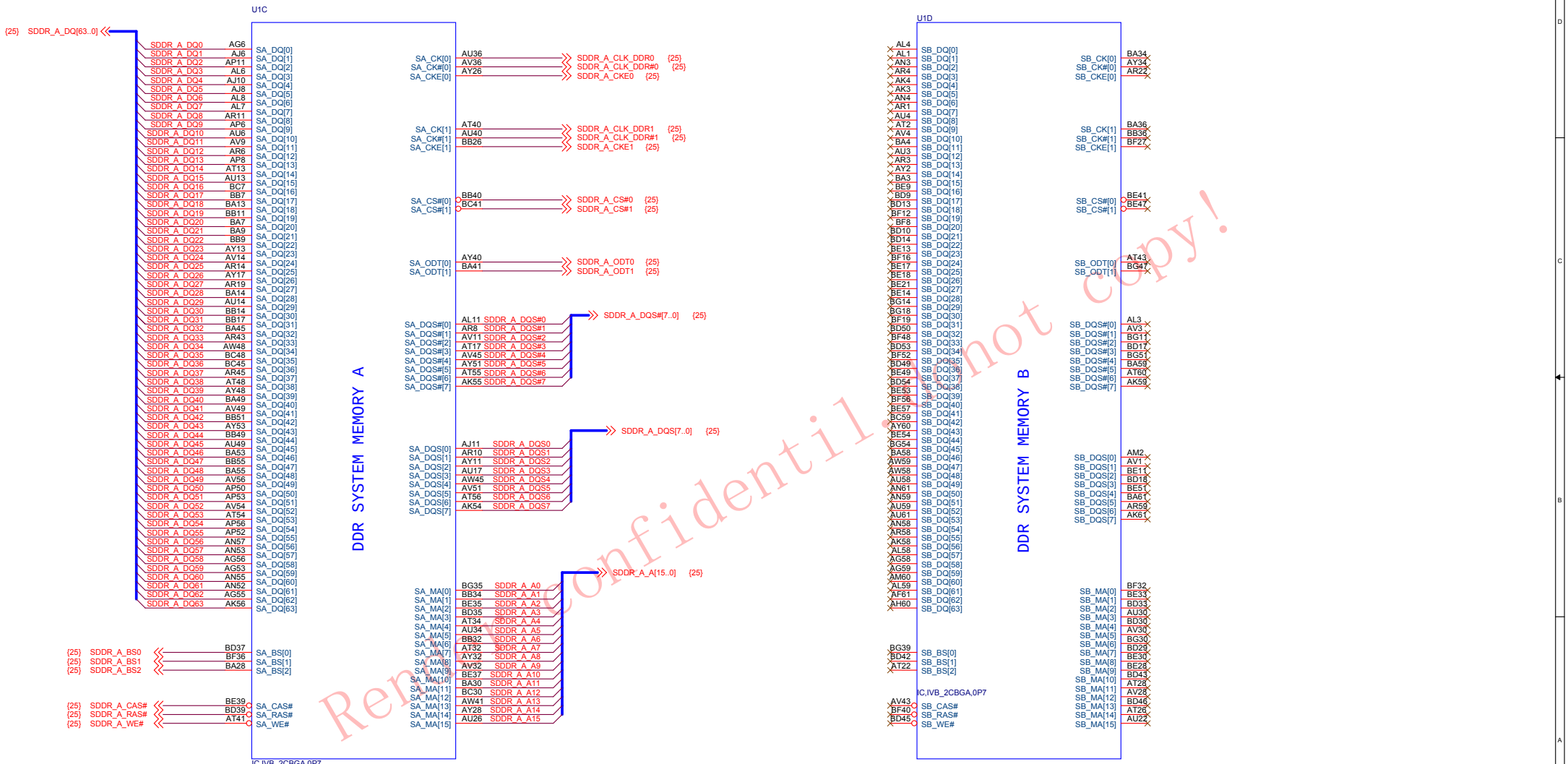


EA EXCELSIOR RENDER		
Title: IVB (DMI,PEG,FDI)		
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 9 of 57	



EA EXCELSIOR RENDER

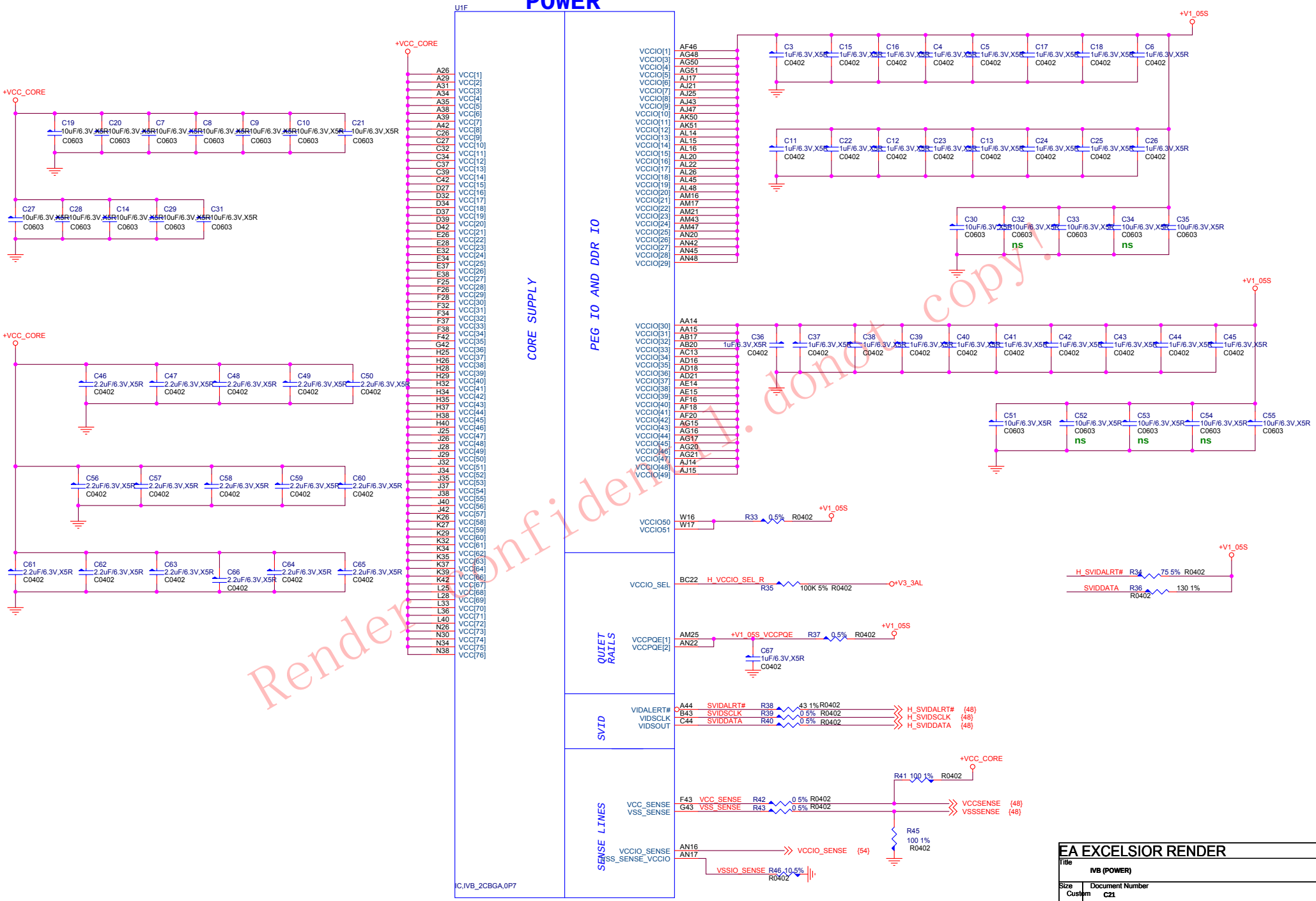
Title	IVB (CLK,MISC,JTAG)	
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 10 of 57	



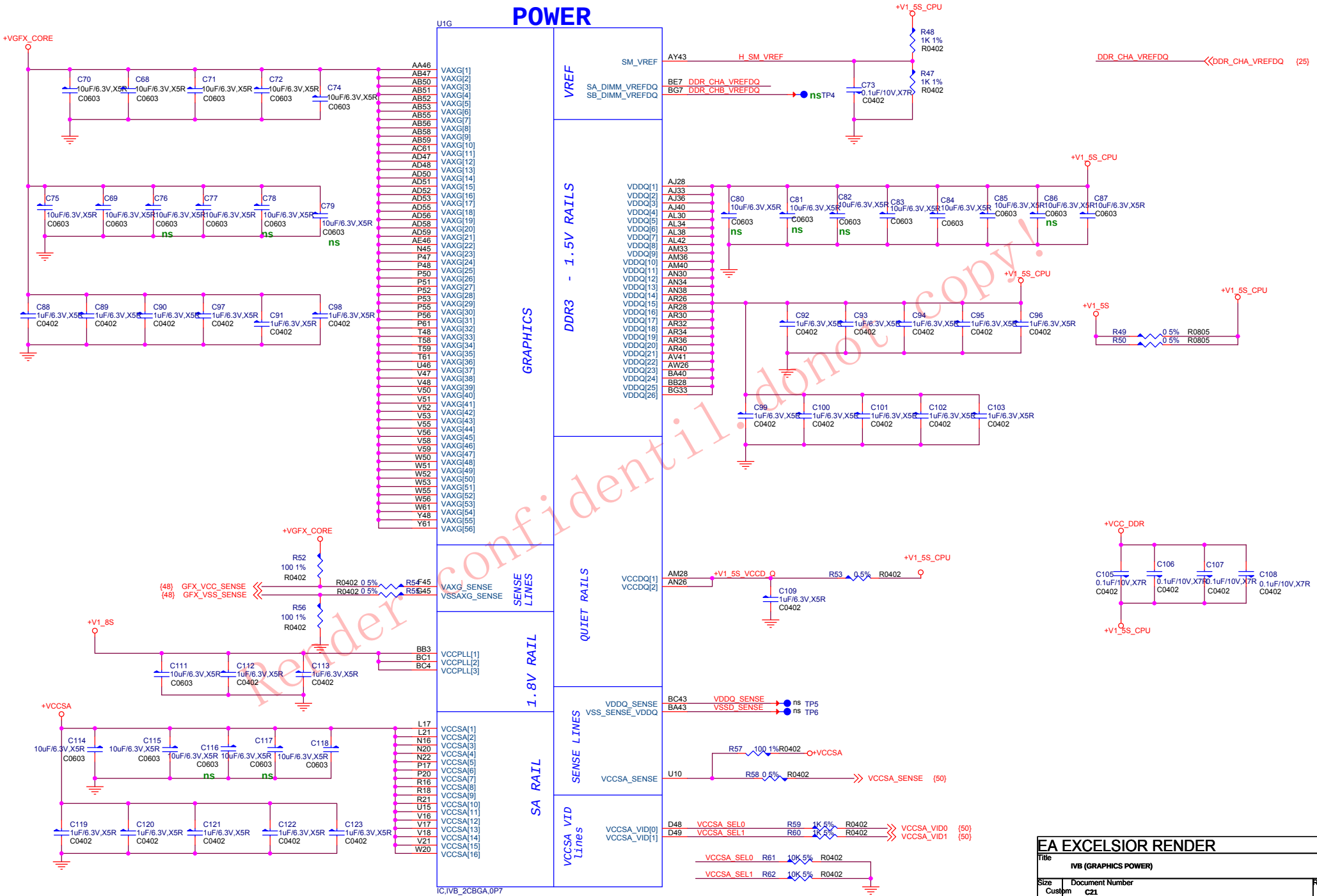
EA EXCELSIOR RENDER

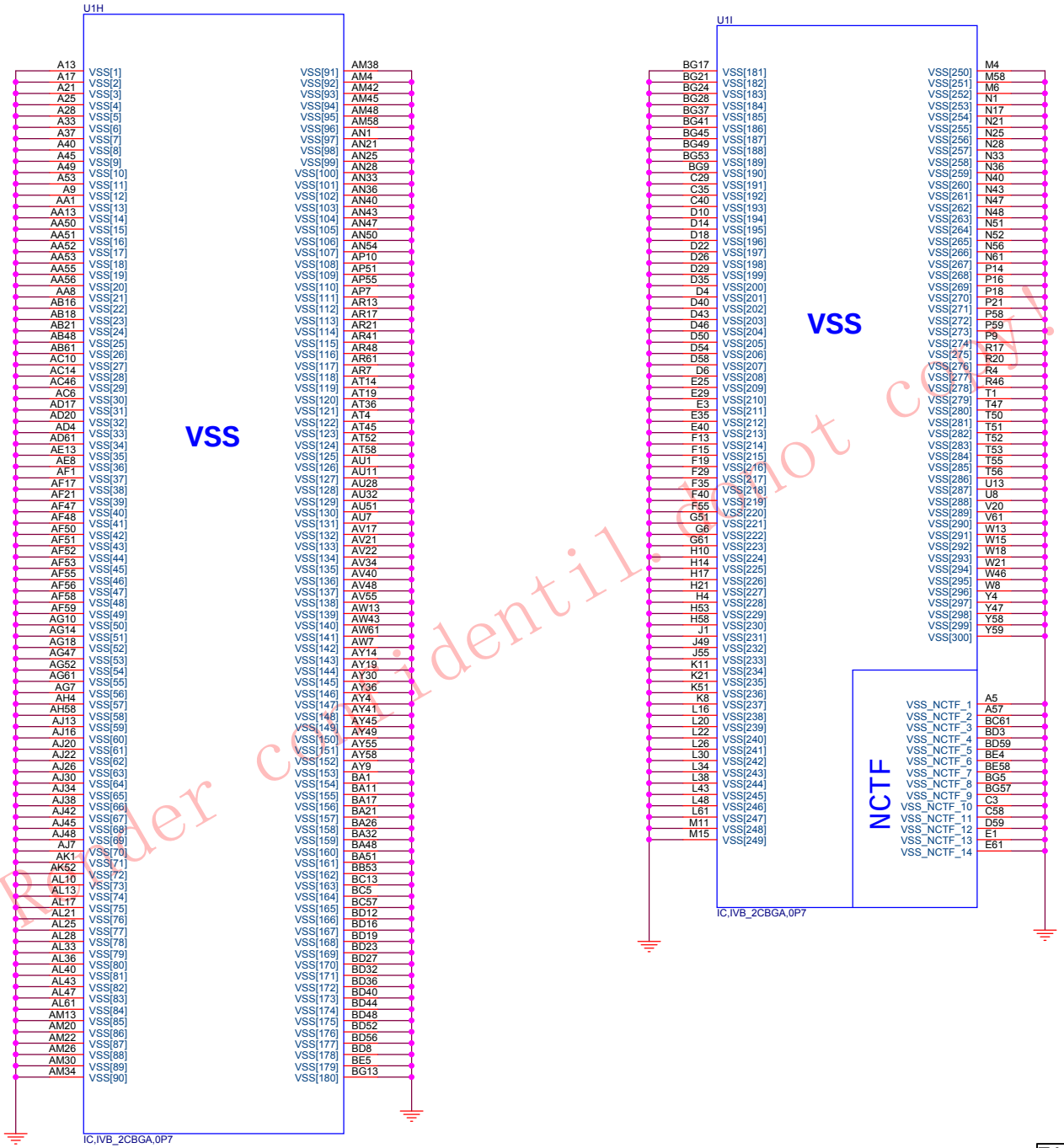
Title: DDR3		
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 11 of 57	

POWER



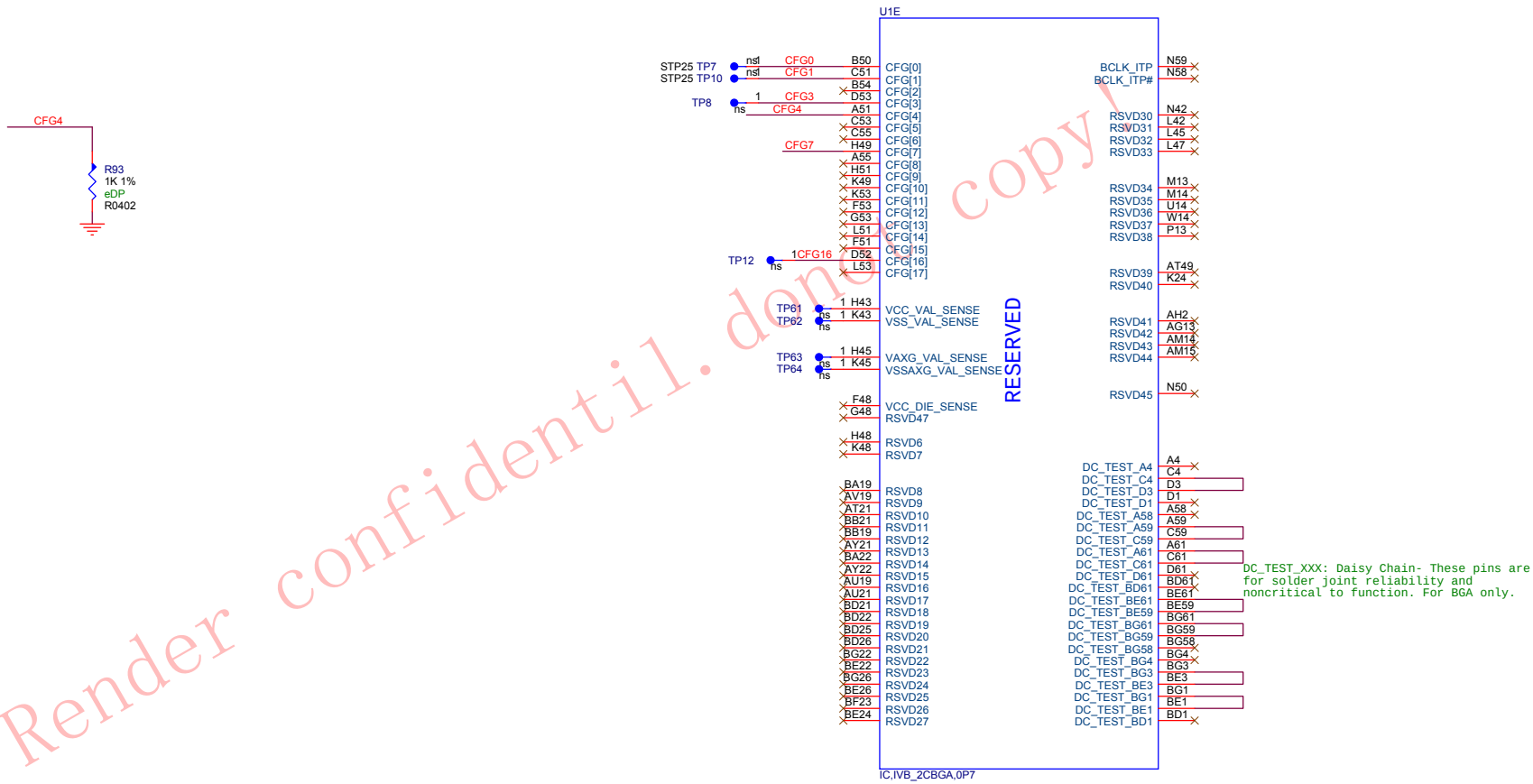
Title	EA EXCELSIOR RENDER
	IVB (POWER)
Size	Custom
Document Number	C21
Rev	C
Date:	Thursday, March 14, 2013
Sheet	12 of 57


POWER
U1G
GRAPHICS
VREF
DDR3 - 1.5V RAILS
SENSE LINES
QUIET RAILS
1.8V RAIL
SA RAIL
SENSE LINES
VCCSA VID lines
+VGFX_CORE
+V1_5S_CPU
+V1_8S
+VCCSA
+VCC_DDR
DDR_CHA_VREFDQ
H_SM_VREF
VDDQ_SENSE
VSS_SENSE_VDDQ
VCCSA_SENSE
VCCSA_VID0
VCCSA_VID1
VCCSA_SEL0
VCCSA_SEL1
IC,IVB_2CBGA,0P7
EA EXCELSIOR RENDER
IVB (GRAPHICS POWER)
Custom
C21
Rev C
Thursday, March 14, 2013
Sheet 13 of 57
Render confidential: do not copy!

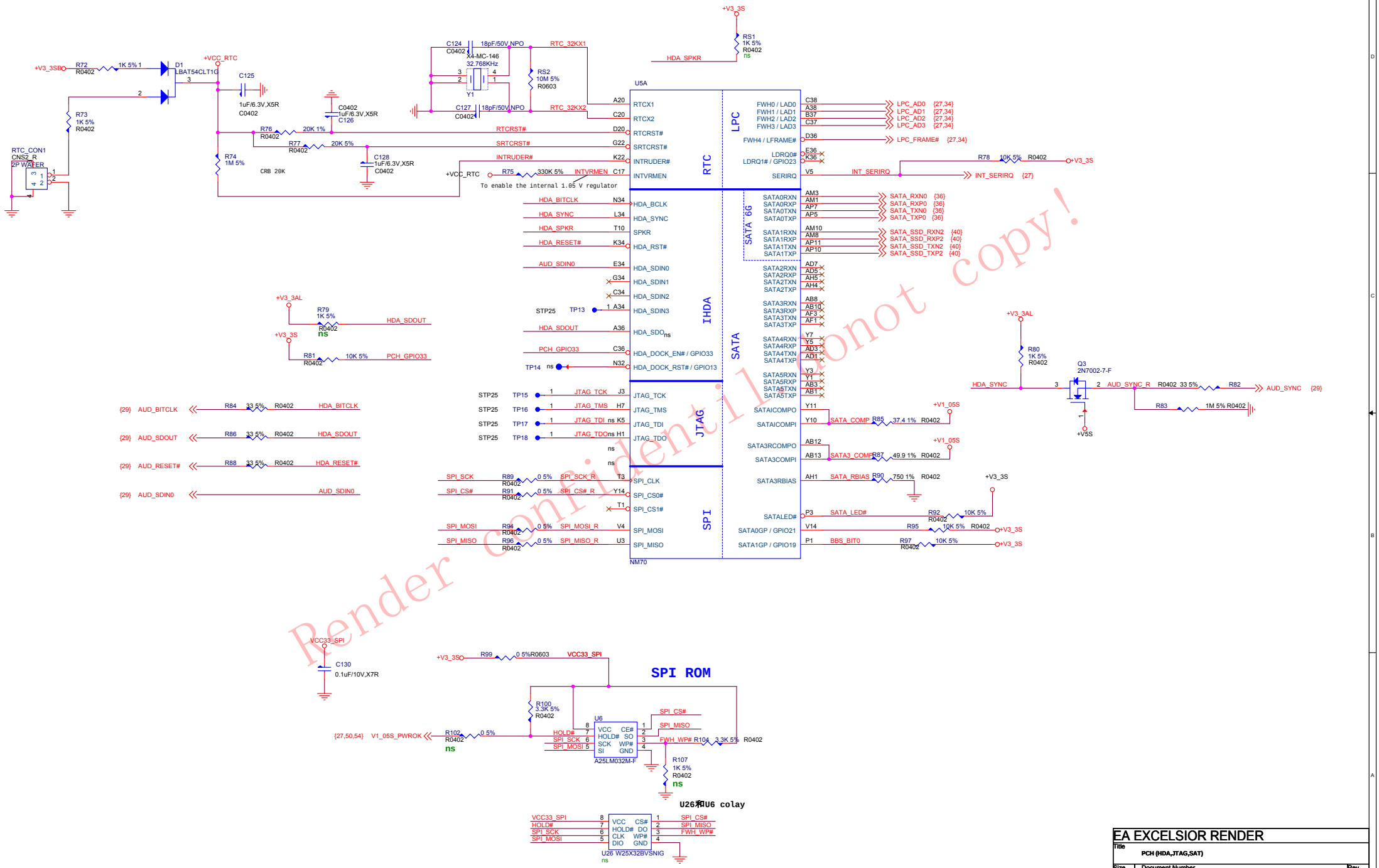


EA EXCELSIOR RENDER

Title	IVB (GND)	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 14 of 57	



EA EXCELSIOR RENDER			
Title: IVB (RSVD)			
Size: Custom	Document Number: C21		Rev: C
Date: Thursday, March 14, 2013	Sheet 15 of 57		


U5A
RTC
LPC
IHDA
SATA
JTAG
SPI
SATA 6G
RTCX1
RTCX2
RTCRST#
SRTCRST#
INTRUDER#
INTVRMEN
HDA_BCLK
HDA_SYNC
SPKR
HDA_RST#
HDA_SDIN0
HDA_SDIN1
HDA_SDIN2
HDA_SDIN3
HDA_SDO
HDA_DOCK_EN# / GPIO33
HDA_DOCK_RST# / GPIO13
JTAG_TCK
JTAG_TMS
JTAG_TDI
JTAG_TDO
SPI_CLK
SPI_CS0#
SPI_CS1#
SPI_MOSI
SPI_MISO
FWH0 / LAD0
FWH1 / LAD1
FWH2 / LAD2
FWH3 / LAD3
FWH4 / LFRAME#
LDRQ0#
LDRQ1# / GPIO23
SERIRQ
SATA0RXN
SATA0RXP
SATA0TXN
SATA0TXP
SATA1RXN
SATA1RXP
SATA1TXN
SATA1TXP
SATA2RXN
SATA2RXP
SATA2TXN
SATA2TXP
SATA3RXN
SATA3RXP
SATA3TXN
SATA3TXP
SATA4RXN
SATA4RXP
SATA4TXN
SATA4TXP
SATA5RXN
SATA5RXP
SATA5TXN
SATA5TXP
SATAICOMPO
SATAICOMPI
SATA3RCOMPO
SATA3COMPI
SATA3RBIAS
SATALED#
SATA0GP / GPIO21
SATA1GP / GPIO19
NM70
RTC_CON1
CNS2_R
2P WAFER
R72 1K 5% R0402
D1 LBAT54CLT1G
C125 1uF/6.3V,X5R C0402
R73 1K 5% R0402
R74 1M 5%
CRB 20K
C0402 1uF/6.3V,X5R C126
R76 20K 1% R0402
R77 20K 5% R0402
C128 1uF/6.3V,X5R C0402
C124 18pF/50V,NPO C0402
C127 18pF/50V,NPO C0402
X4-MC-146 32.768KHz Y1
RS2 10M 5% R0603
RTC_32KX1
RTC_32KX2
RTCRST#
SRTCRST#
INTRUDER#
+VCC_RTC
R75 330K 5% INTVRMEN
To enable the internal 1.05 V regulator
+V3_3S
RS1 1K 5% R0402 ns
HDA_SPKR
HDA_BITCLK
HDA_SYNC
HDA_SPKR
HDA_RESET#
AUD_SDIN0
HDA_SDOUT
PCH_GPIO33
+V3_3AL
R79 1K 5% R0402 ns
R81 10K 5% R0402
STP25 TP13
TP14 ns
STP25 TP15 JTAG_TCK J3
STP25 TP16 JTAG_TMS H7
STP25 TP17 JTAG_TDI K5
STP25 TP18 JTAG_TDO H1
SPI_SCK R89 0 5% SPI_SCK_R T3
SPI_CS# R91 0 5% SPI_CS#_R Y14
SPI_MOSI R94 0 5% SPI_MOSI_R V4
SPI_MISO R96 0 5% SPI_MISO_R U3
{29} AUD_BITCLK R84 33 5% R0402 HDA_BITCLK
{29} AUD_SDOUT R86 33 5% R0402 HDA_SDOUT
{29} AUD_RESET# R88 33 5% R0402 HDA_RESET#
{29} AUD_SDIN0
LPC_AD0 {27,34}
LPC_AD1 {27,34}
LPC_AD2 {27,34}
LPC_AD3 {27,34}
LPC_FRAME# {27,34}
R78 10K 5% R0402 +V3_3S
INT_SERIRQ
INT_SERIRQ {27}
SATA_RXN0 {36}
SATA_RXP0 {36}
SATA_TXN0 {36}
SATA_TXP0 {36}
SATA_SSD_RXN2 {40}
SATA_SSD_RXP2 {40}
SATA_SSD_TXN2 {40}
SATA_SSD_TXP2 {40}
SATA_COMP R85 37.4 1% R0402
+V1_05S
SATA3_COMP R87 49.9 1% R0402
+V1_05S
SATA_RBIAS R90 750 1% R0402
+V3_3S
SATA_LED# R92 10K 5% R0402
R95 10K 5% R0402 +V3_3S
BBS_BIT0 R97 10K 5% R0402 +V3_3S
+V3_3AL
R80 1K 5% R0402
Q3 2N7002-7-F
HDA_SYNC
AUD_SYNC_R R0402 33 5%
R82
AUD_SYNC {29}
R83 1M 5% R0402
+V5S
SPI ROM
VCC33_SPI
C130 0.1uF/10V,X7R
+V3_3S R99 0 5% R0603 VCC33_SPI
R100 3.3K 5% R0402
U6
A25LM032M-F
R102 0 5% R0402 ns
{27,50,54} V1_05S_PWROK
R104 3.3K 5% R0402
R107 1K 5% R0402 ns
U26和U6 colay
U26 W25X32BVSNIG ns
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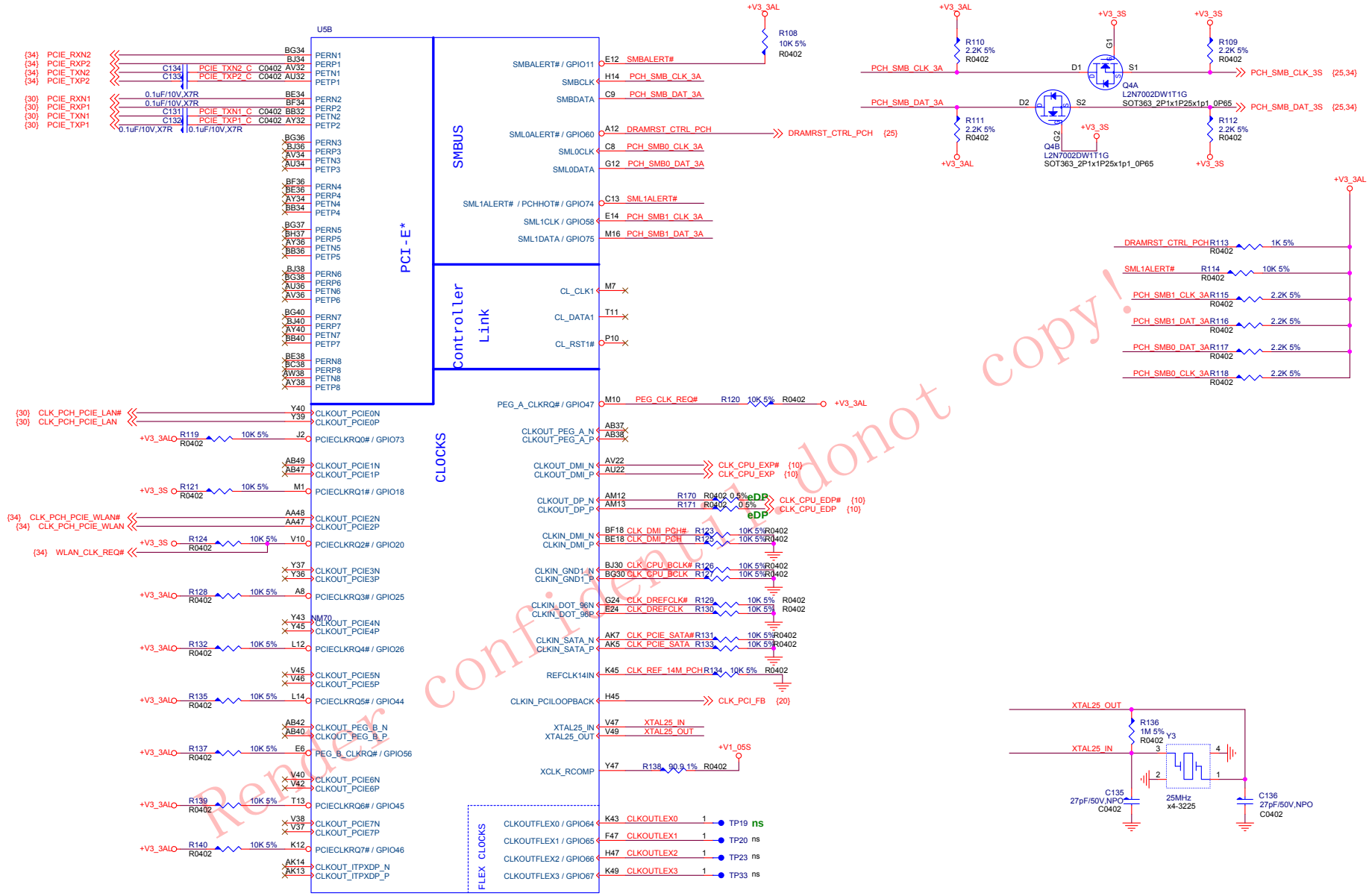
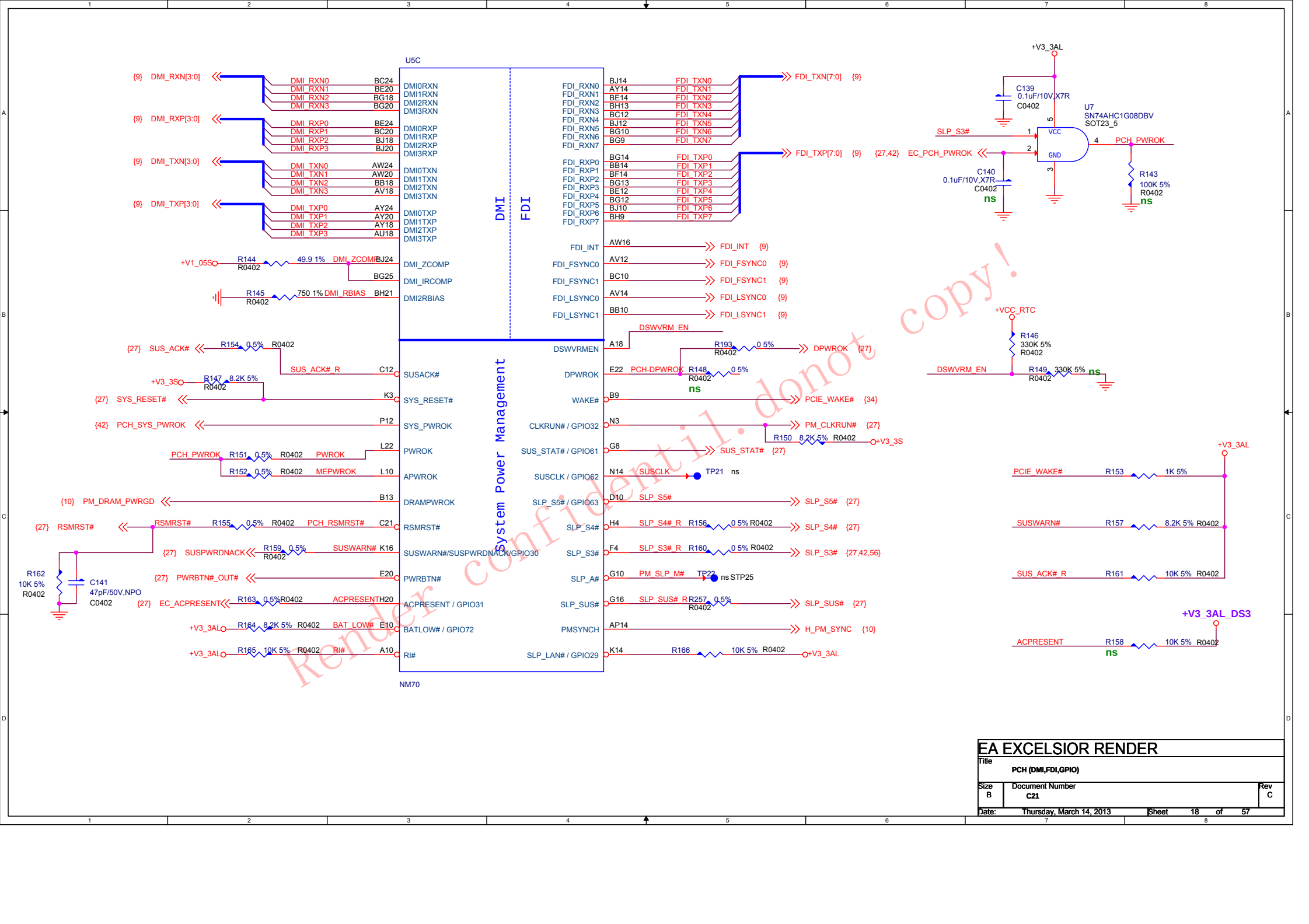
EA EXCELSIOR RENDER
Title
PCH (HDA,JTAG,SAT)
Size Custom
Document Number C21
Rev C
Date: Thursday, March 14, 2013
Sheet 16 of 57

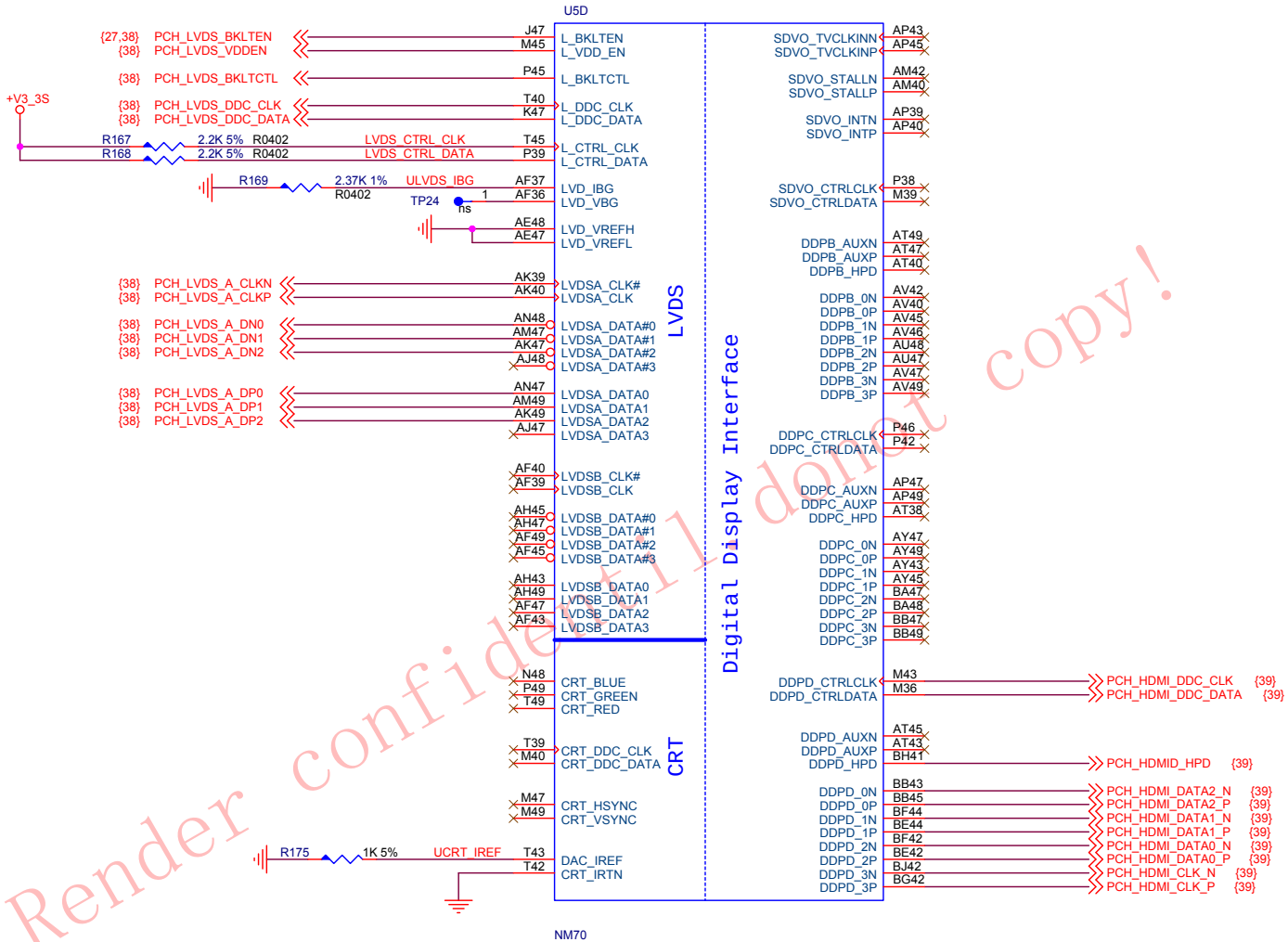


EA EXCELSIOR RENDER		
Title: PCH (PCI-E,SMBUS,CLK)		
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 17 of 57	



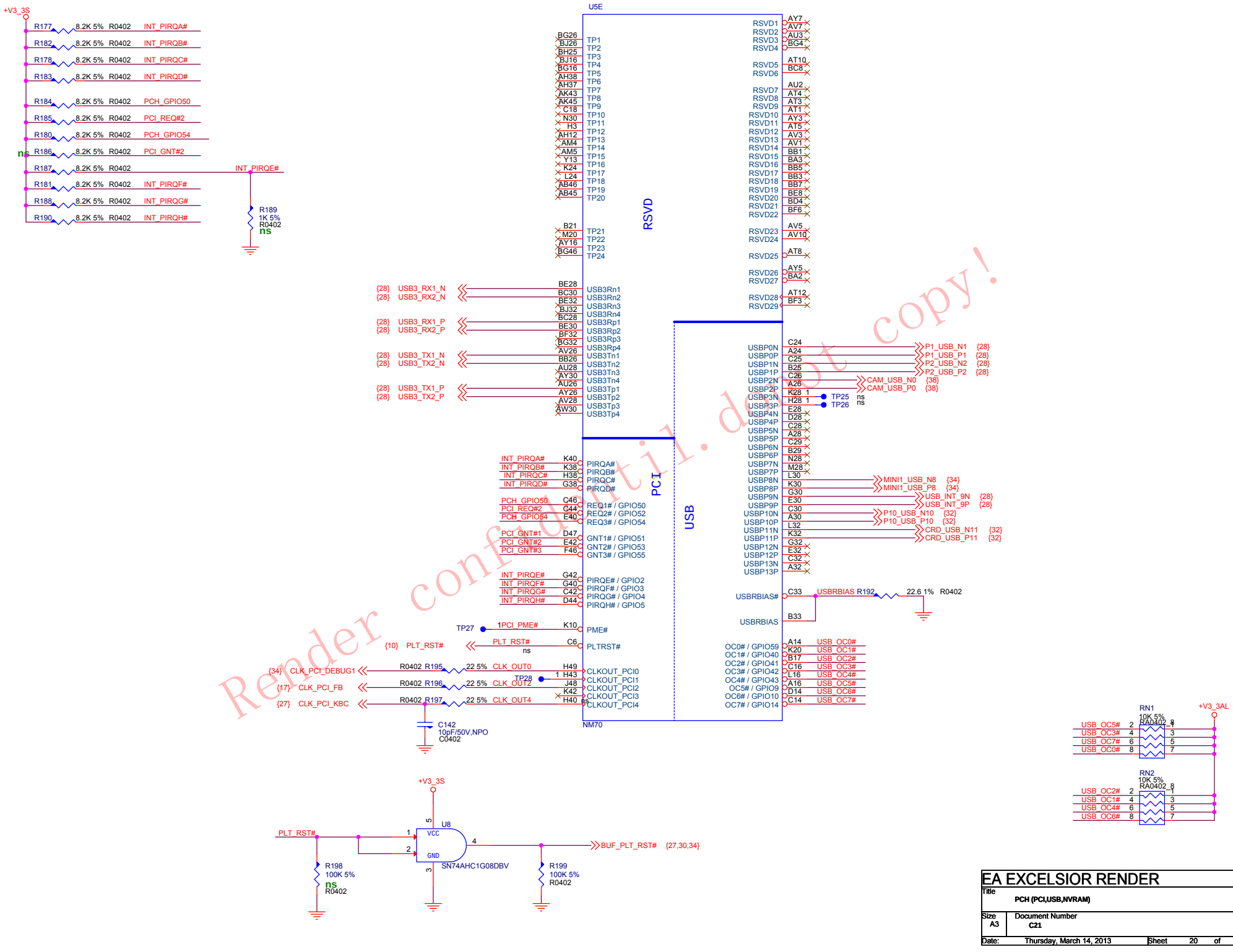
EA EXCELSIOR RENDER

Title	PCH (DMI,FDI,GPIO)	
Size B	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 18 of 57	

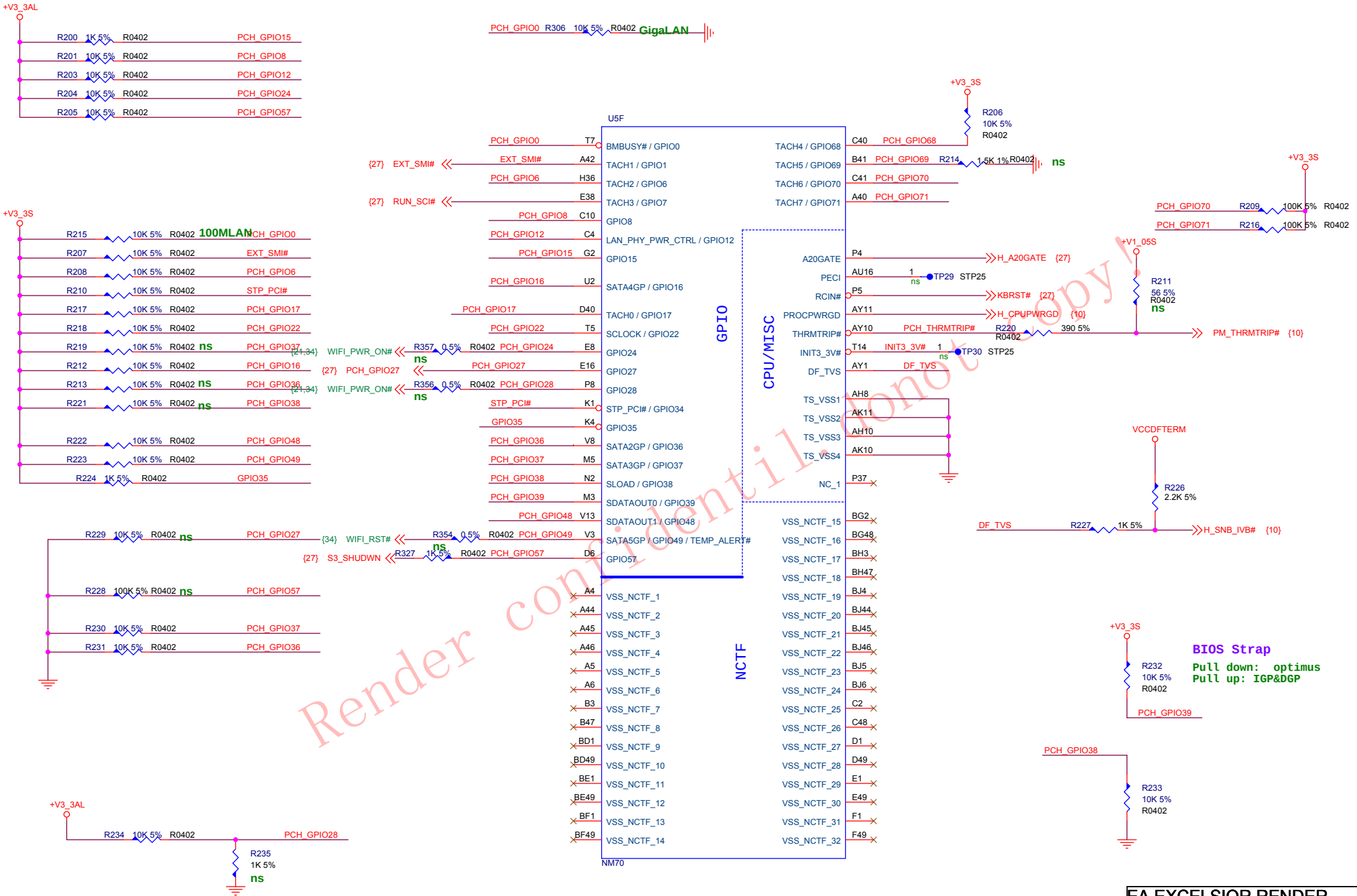


EA EXCELSIOR RENDER

Title	PCH (LVDS,DDI)	
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 19 of 57	

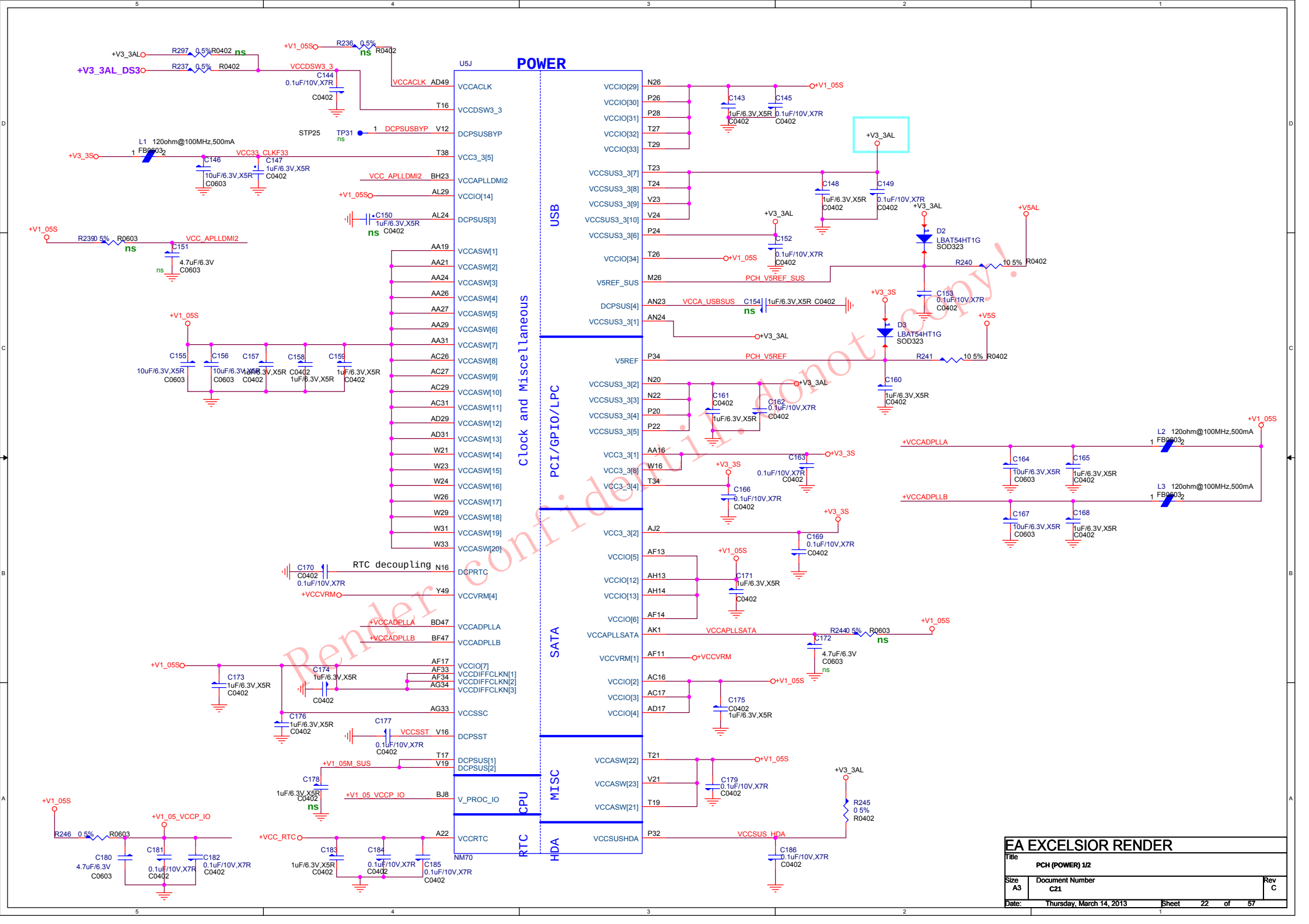


EA EXCELSIOR RENDER		
Title: PCH (PCI,USB,NVRAM)		
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 20 of 57	



EA EXCELSIOR RENDER

Title	PCH (GPIO,VSS_NCTF,RSVD)	
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 21 of 57	

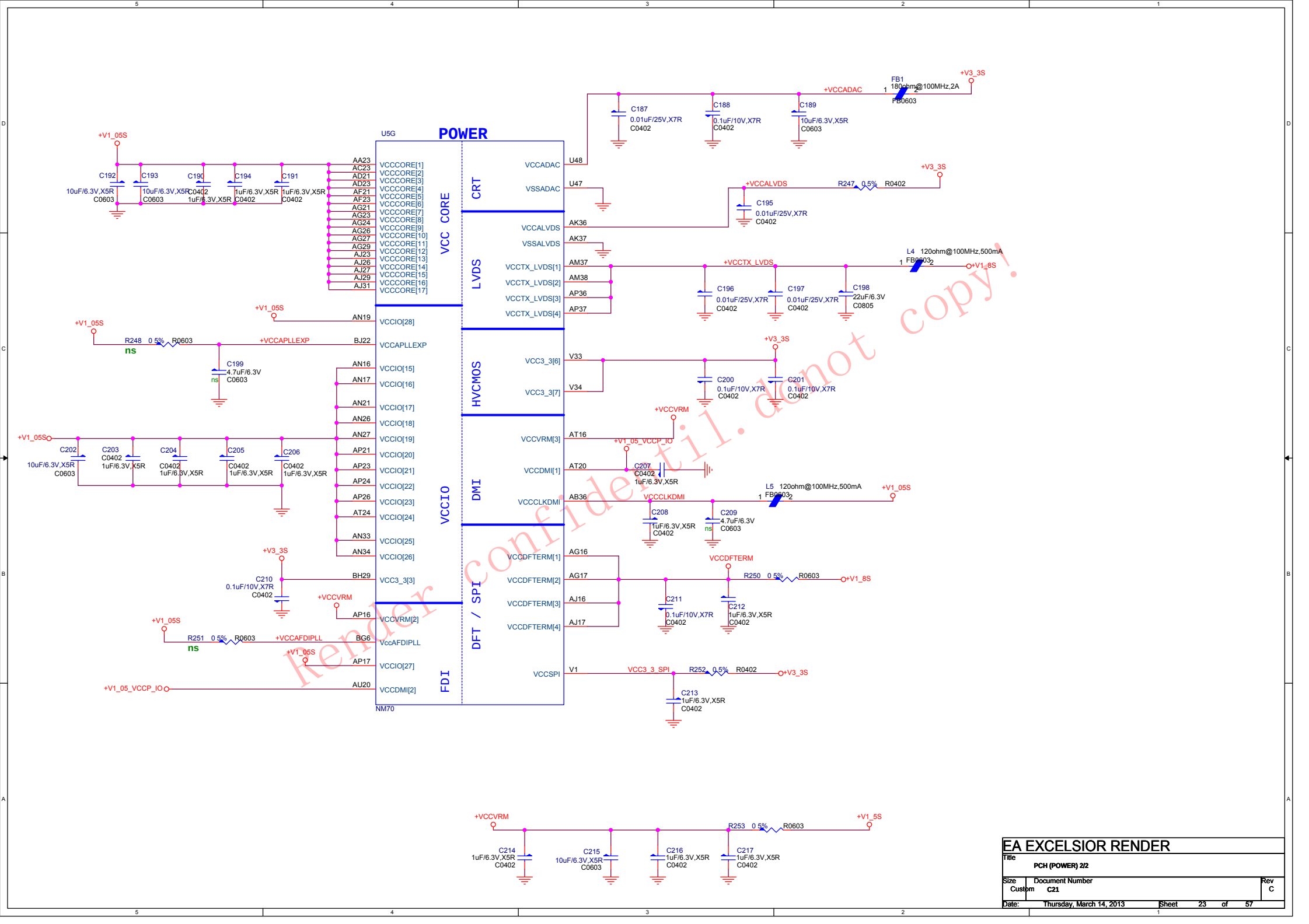


EA EXCELSIOR RENDER

Title: PCH (POWER) 1/2

Size: A3 | Document Number: C21 | Rev: C

Date: Thursday, March 14, 2013 | Sheet 22 of 57


POWER
U5G
VCC CORE
VCCIO
FDI
CRT
LVDS
HVCMOS
DMI
DFT / SPI
NM70
VCCCORE[1]
VCCCORE[2]
VCCCORE[3]
VCCCORE[4]
VCCCORE[5]
VCCCORE[6]
VCCCORE[7]
VCCCORE[8]
VCCCORE[9]
VCCCORE[10]
VCCCORE[11]
VCCCORE[12]
VCCCORE[13]
VCCCORE[14]
VCCCORE[15]
VCCCORE[16]
VCCCORE[17]
VCCIO[28]
VCCAPLLEXP
VCCIO[15]
VCCIO[16]
VCCIO[17]
VCCIO[18]
VCCIO[19]
VCCIO[20]
VCCIO[21]
VCCIO[22]
VCCIO[23]
VCCIO[24]
VCCIO[25]
VCCIO[26]
VCC3_3[3]
VCCVRM[2]
VccAFDIPLL
VCCIO[27]
VCCDMI[2]
VCCADAC
VSSADAC
VCCALVDS
VSSALVDS
VCCTX_LVDS[1]
VCCTX_LVDS[2]
VCCTX_LVDS[3]
VCCTX_LVDS[4]
VCC3_3[6]
VCC3_3[7]
VCCVRM[3]
VCCDMI[1]
VCCCLKDMI
VCCDFTERM[1]
VCCDFTERM[2]
VCCDFTERM[3]
VCCDFTERM[4]
VCCSPI
+V1_05S
+V3_3S
+V1_8S
+VCCADAC
+VCCALVDS
+VCCTX_LVDS
+VCCAPLLEXP
+VCCVRM
+V1_05_VCCP_IO
+VCCAFDIPLL
VCCDFTERM
VCC3_3_SPI
FB1 180ohm@100MHz,2A FB0603
L4 120ohm@100MHz,500mA FB0603
L5 120ohm@100MHz,500mA FB0603
R247 0.5% R0402
R248 0.5% R0603
R250 0.5% R0603
R251 0.5% R0603
R252 0.5% R0402
R253 0.5% R0603
C187 0.01uF/25V,X7R C0402
C188 0.1uF/10V,X7R C0402
C189 10uF/6.3V,X5R C0603
C192 10uF/6.3V,X5R C0603
C193 10uF/6.3V,X5R C0603
C190 C0402 1uF/6.3V,X5R
C194 1uF/6.3V,X5R C0402
C191 1uF/6.3V,X5R C0402
C195 0.01uF/25V,X7R C0402
C196 0.01uF/25V,X7R C0402
C197 0.01uF/25V,X7R C0402
C198 22uF/6.3V C0805
C199 4.7uF/6.3V C0603
C200 0.1uF/10V,X7R C0402
C201 0.1uF/10V,X7R C0402
C202 10uF/6.3V,X5R C0603
C203 C0402 1uF/6.3V,X5R
C204 C0402 1uF/6.3V,X5R
C205 C0402 1uF/6.3V,X5R
C206 C0402 1uF/6.3V,X5R
C207 C0402 1uF/6.3V,X5R
C208 1uF/6.3V,X5R C0402
C209 4.7uF/6.3V C0603
C210 0.1uF/10V,X7R C0402
C211 0.1uF/10V,X7R C0402
C212 1uF/6.3V,X5R C0402
C213 1uF/6.3V,X5R C0402
C214 1uF/6.3V,X5R C0402
C215 10uF/6.3V,X5R C0603
C216 1uF/6.3V,X5R C0402
C217 1uF/6.3V,X5R C0402
ns
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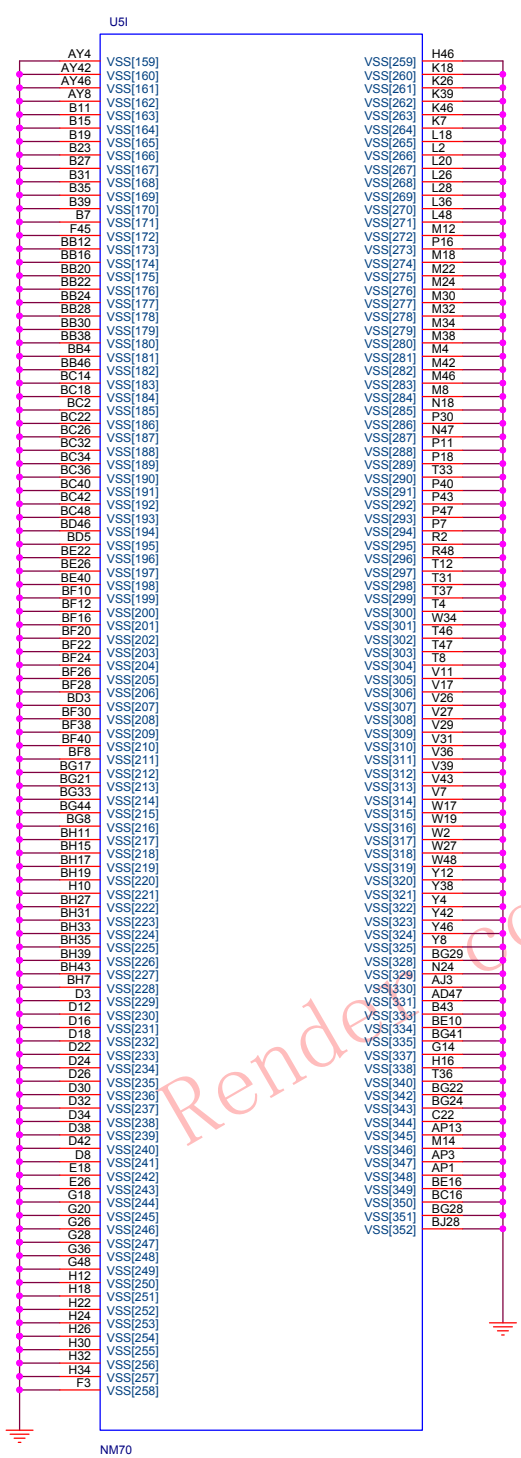
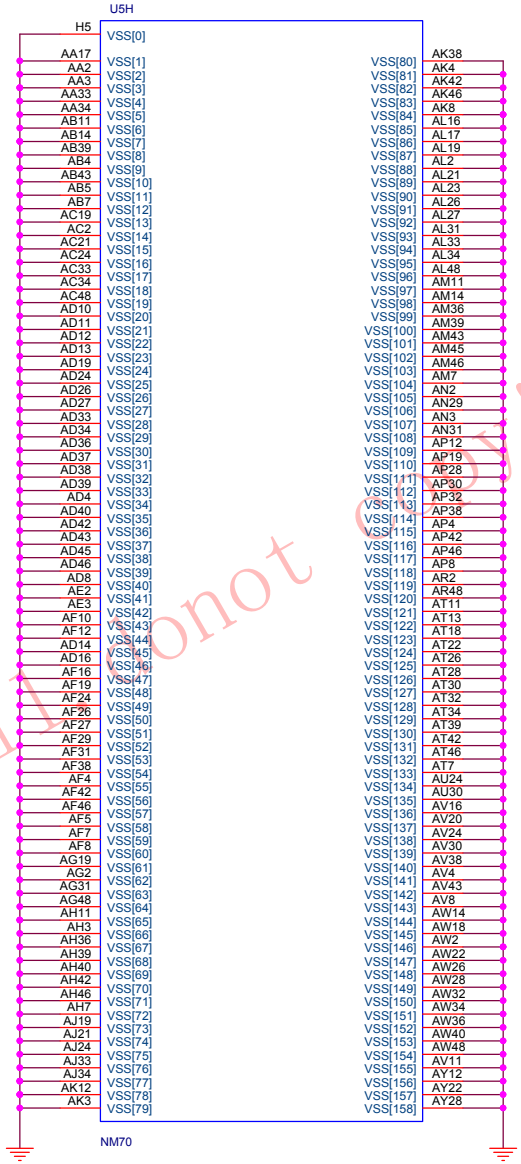
EA EXCELSIOR RENDER
Title
PCH (POWER) 2/2
Size Custom
Document Number C21
Rev C
Date: Thursday, March 14, 2013
Sheet 23 of 57



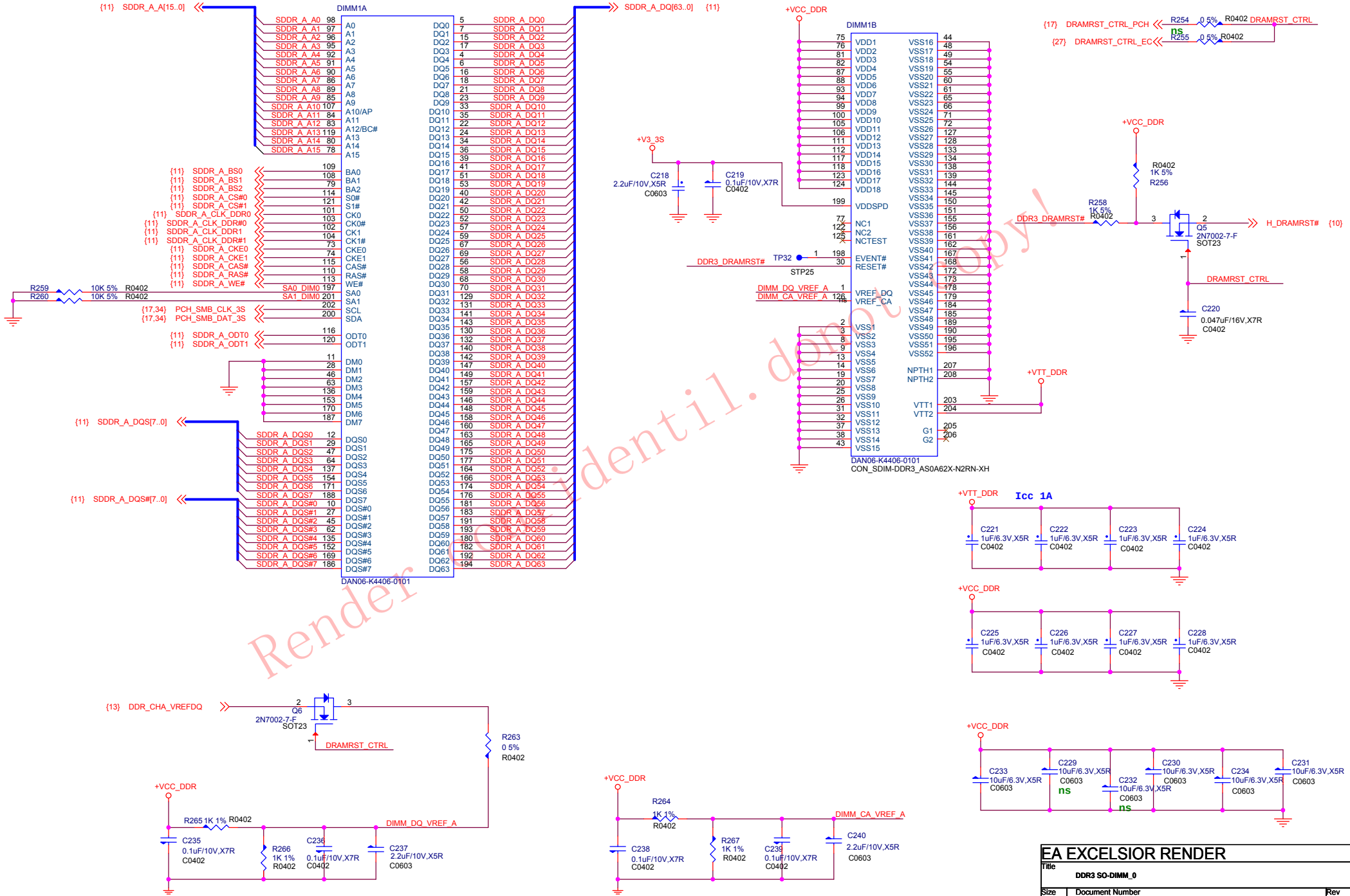


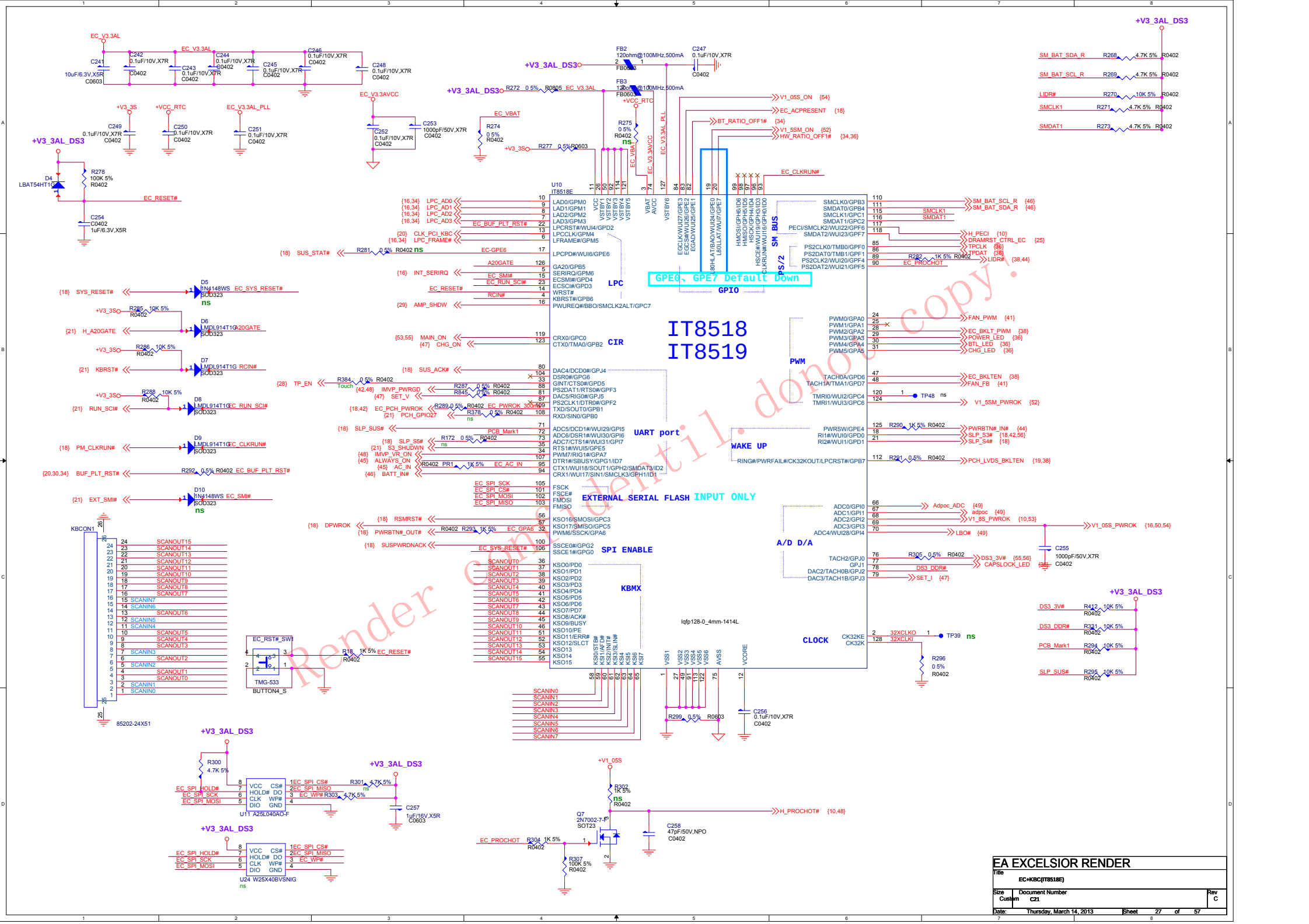
EA EXCELSIOR RENDER

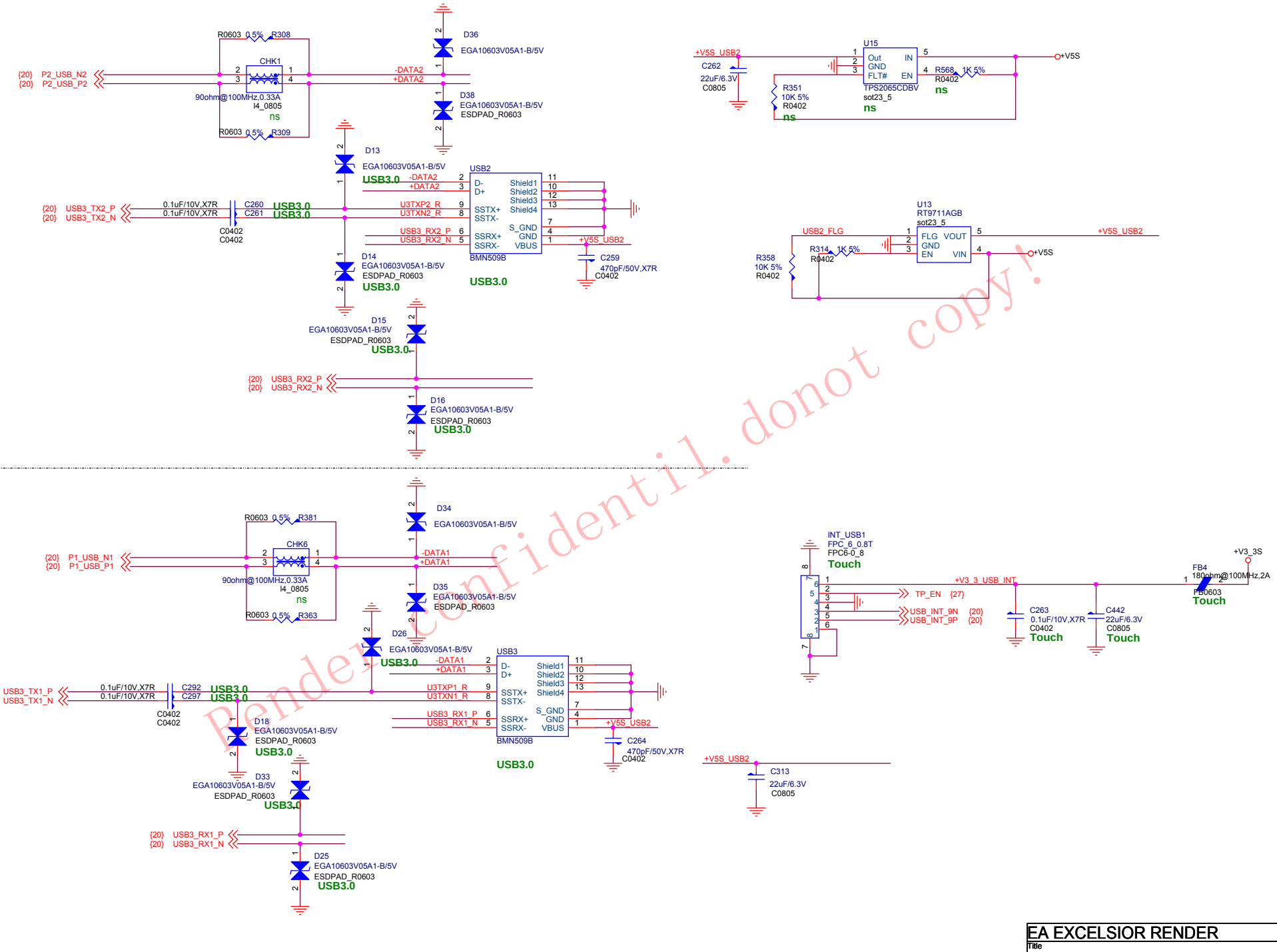
Title: PCH (VSS)

Size: Custom | Document Number: C21 | Rev: C

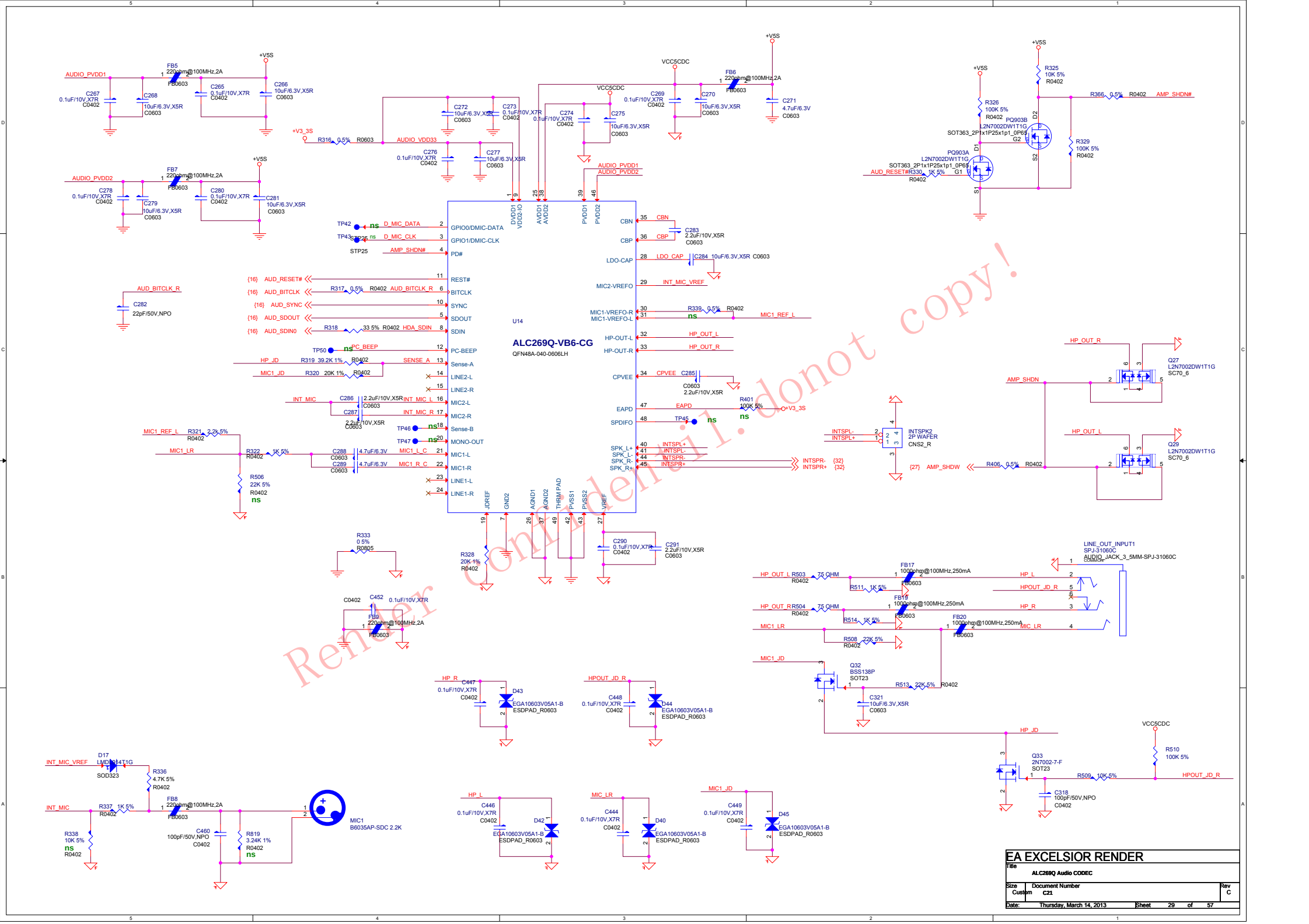
Date: Thursday, March 14, 2013 | Sheet 24 of 57

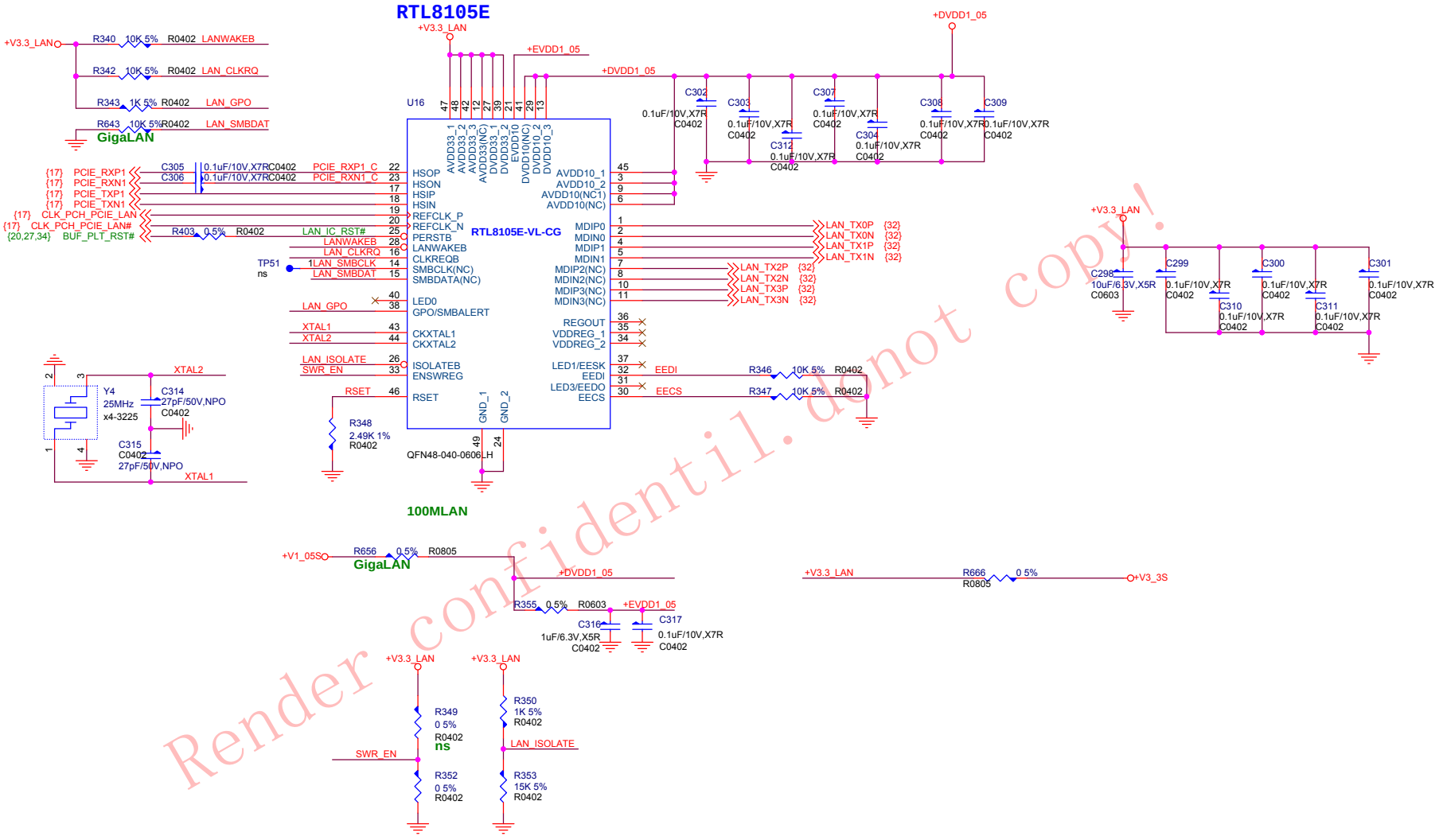






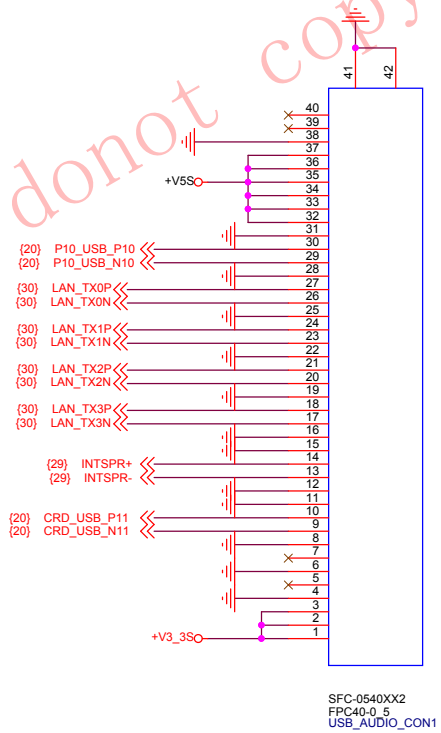
EA EXCELSIOR RENDER		
Title: USB3.0		
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 28 of 57	





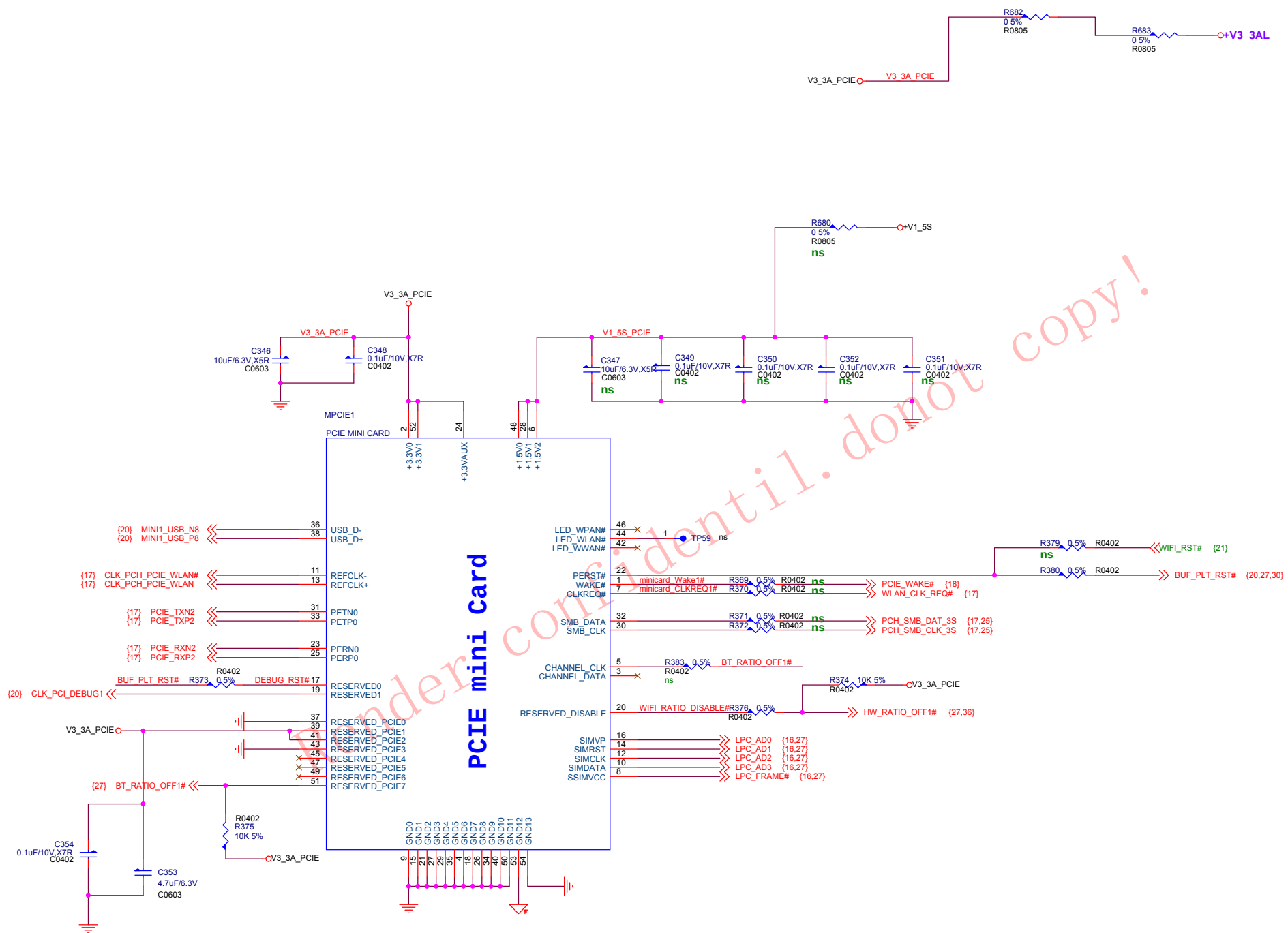
EA EXCELSIOR RENDER

Title	LAN (RTL8105EL)	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 30 of 57	



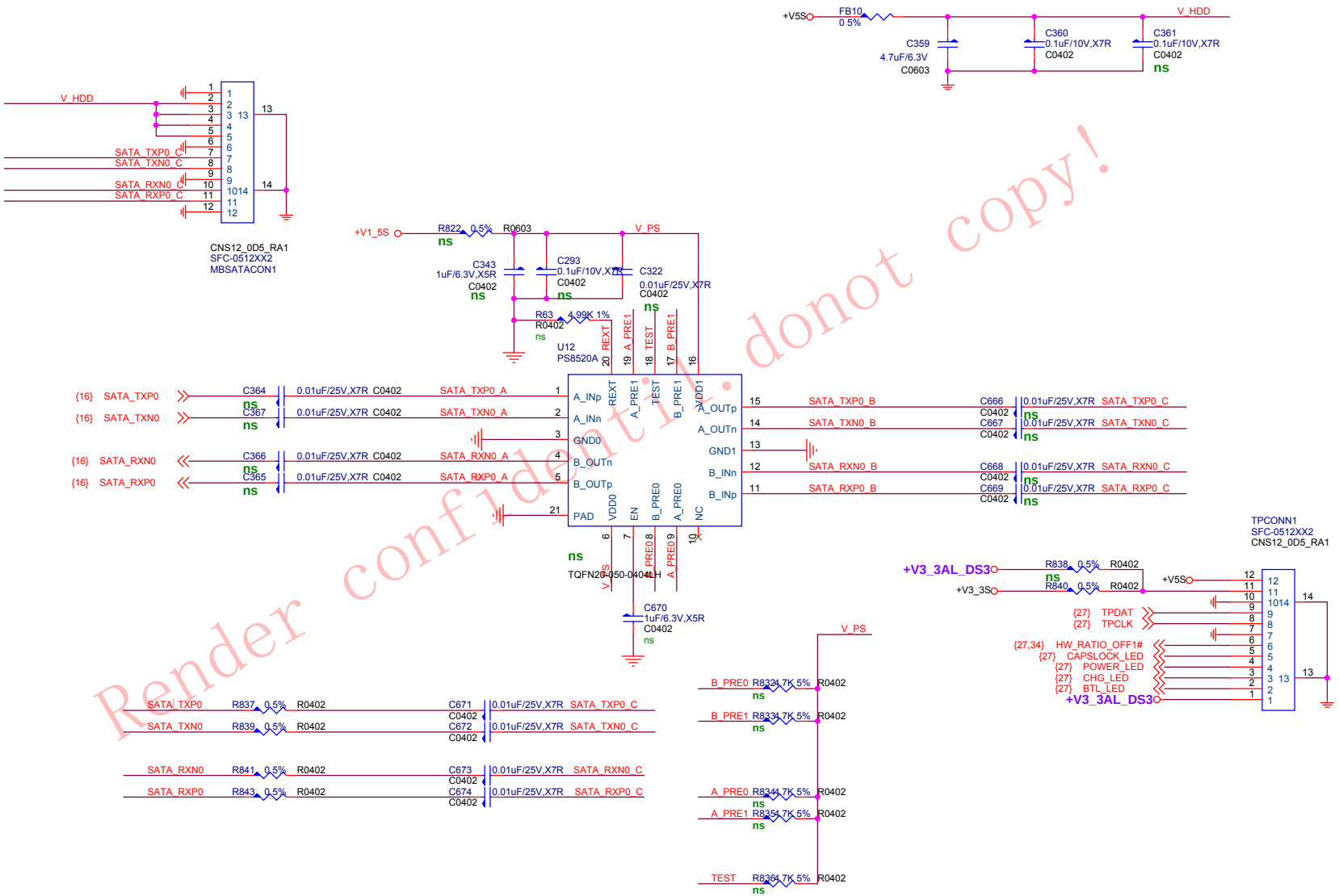
EA EXCELSIOR RENDER

Title	AUDIO_B_CONN,RSVD USB	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 32 of 57	



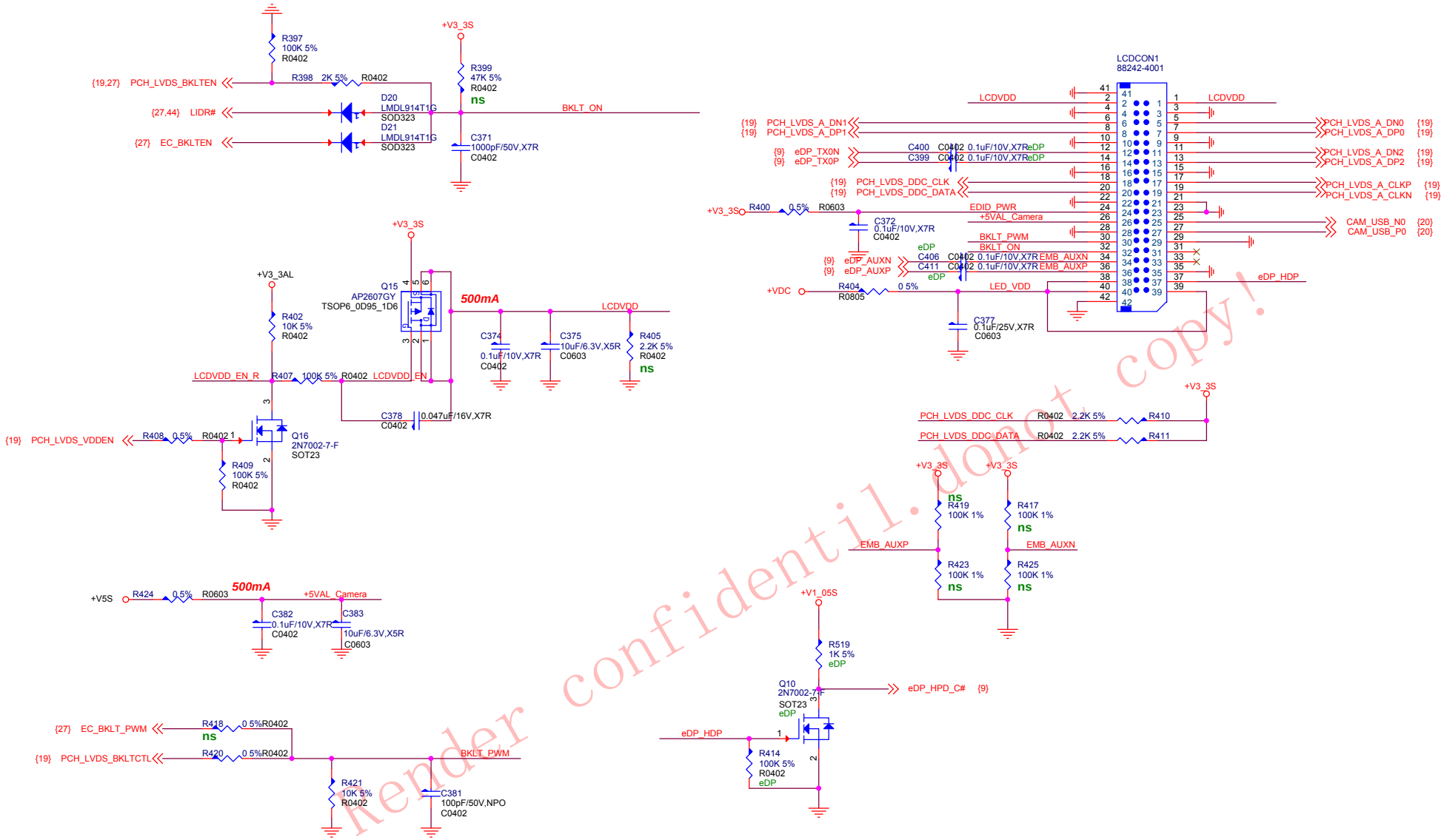
EA EXCELSIOR RENDER

Title	WLAN Mini-PCIE Card	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 34 of 57	



EA EXCELSIOR RENDER

Title	SATA HDD/ODD	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 36 of 57	



EA EXCELSIOR RENDER

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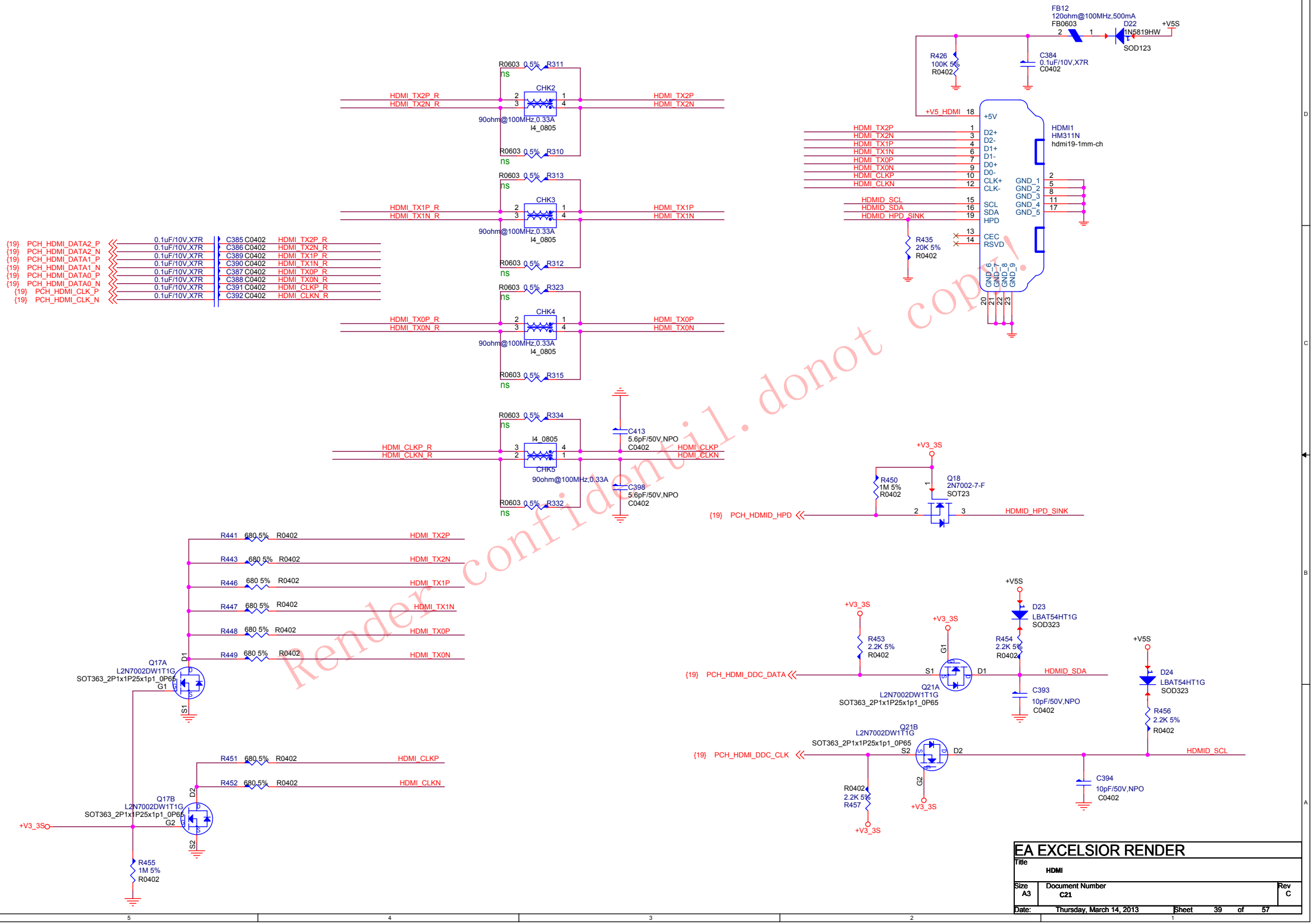
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 38 of 57	



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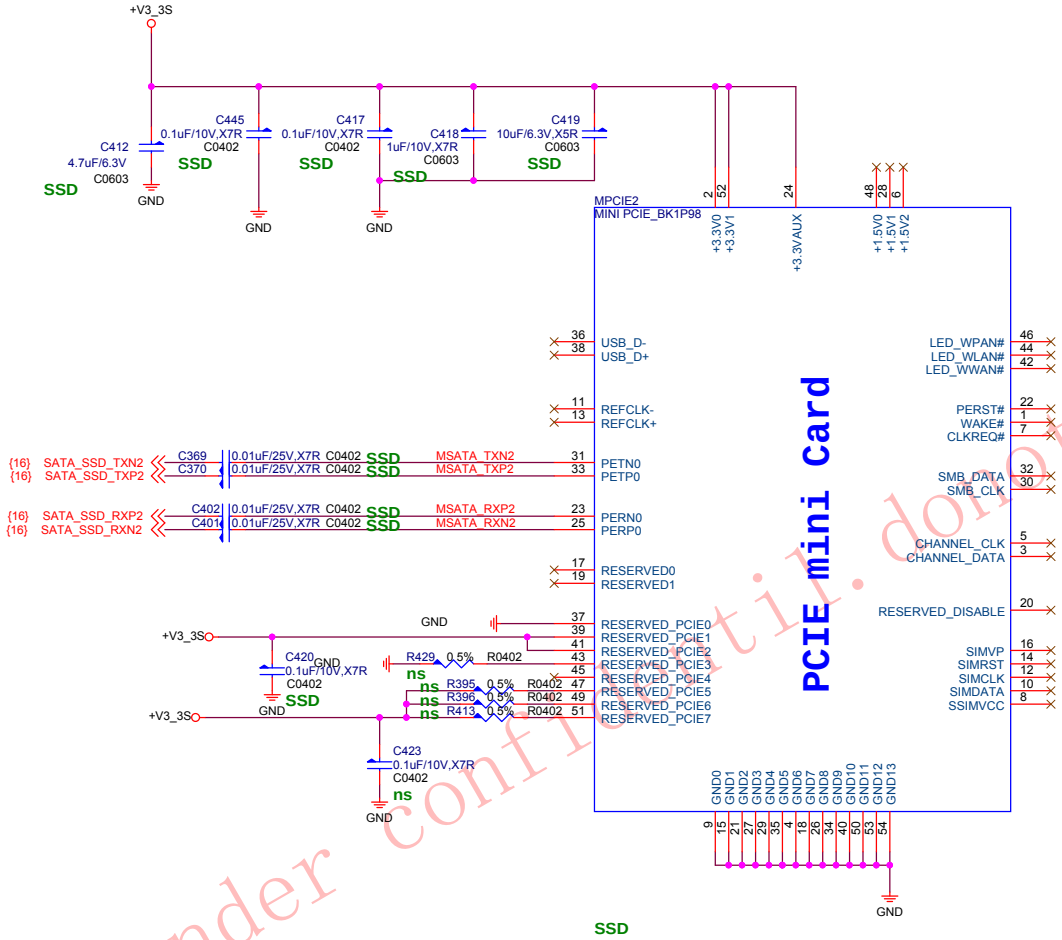
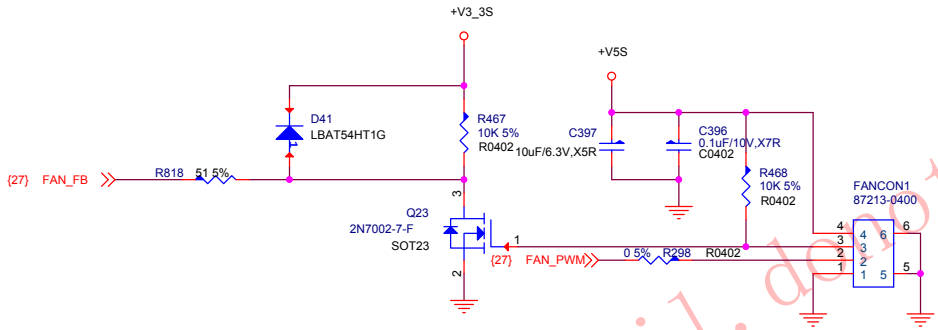
Title: HDMI		
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 39 of 57	



Title	SATA BOARD	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 40 of 57	



EA EXCELSIOR RENDER

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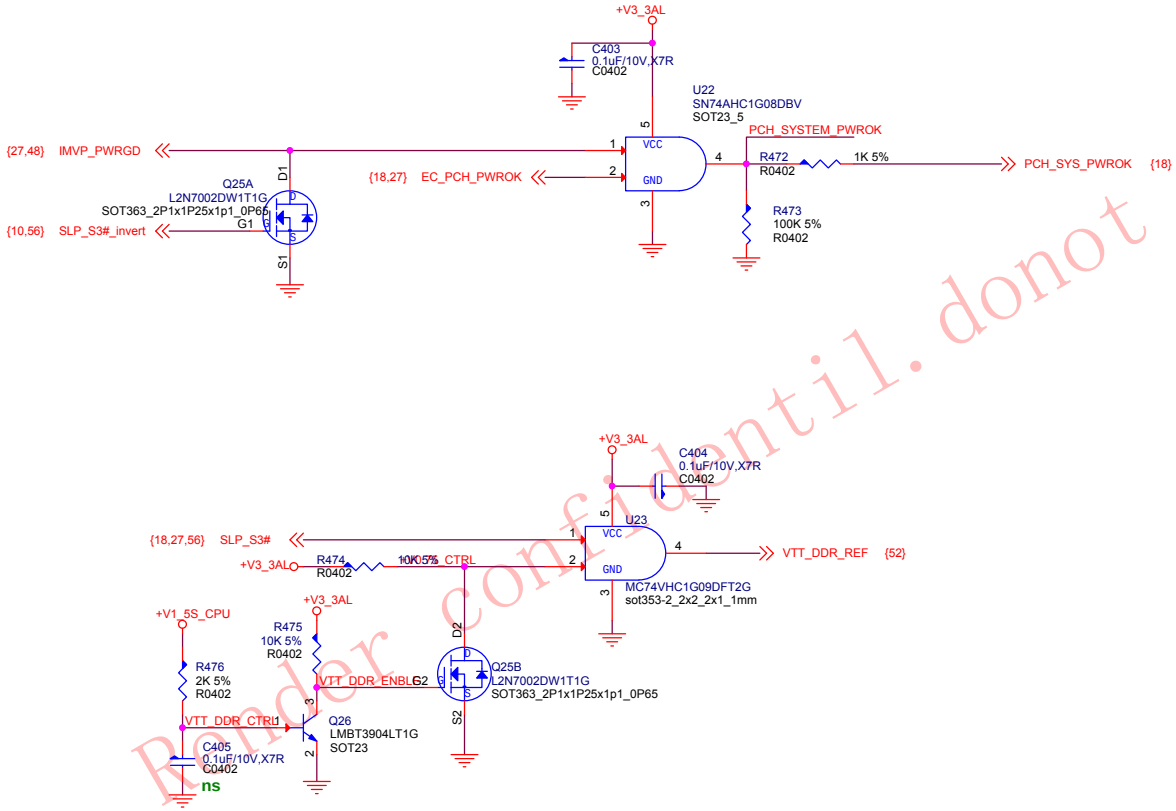
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 41 of 57	



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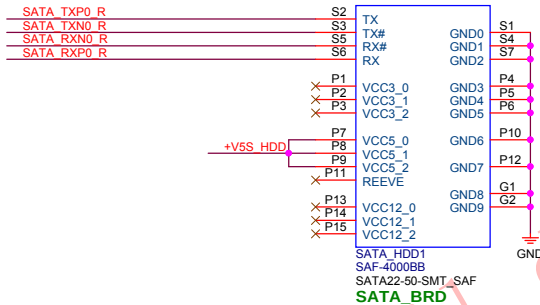
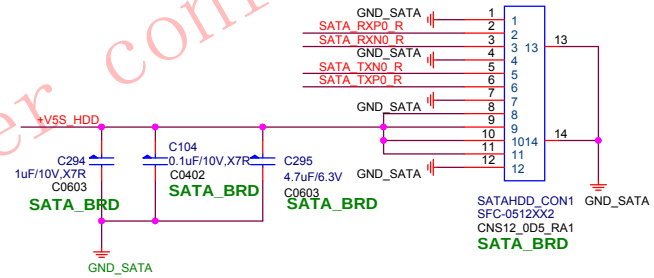
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 42 of 57	





EA EXCELSIOR RENDER

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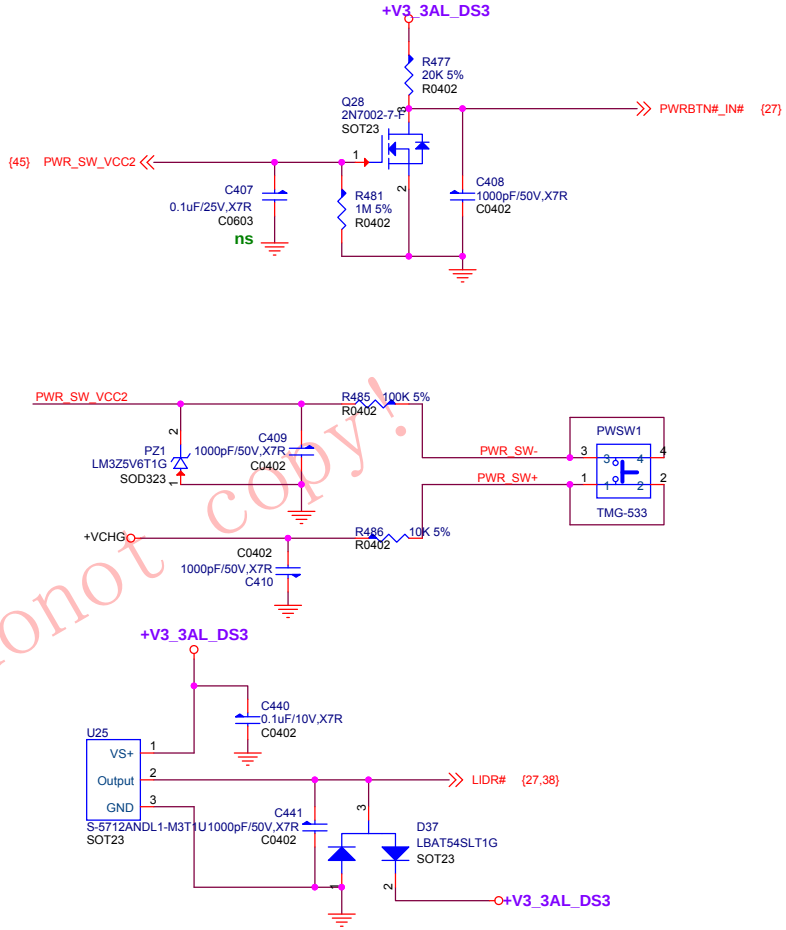
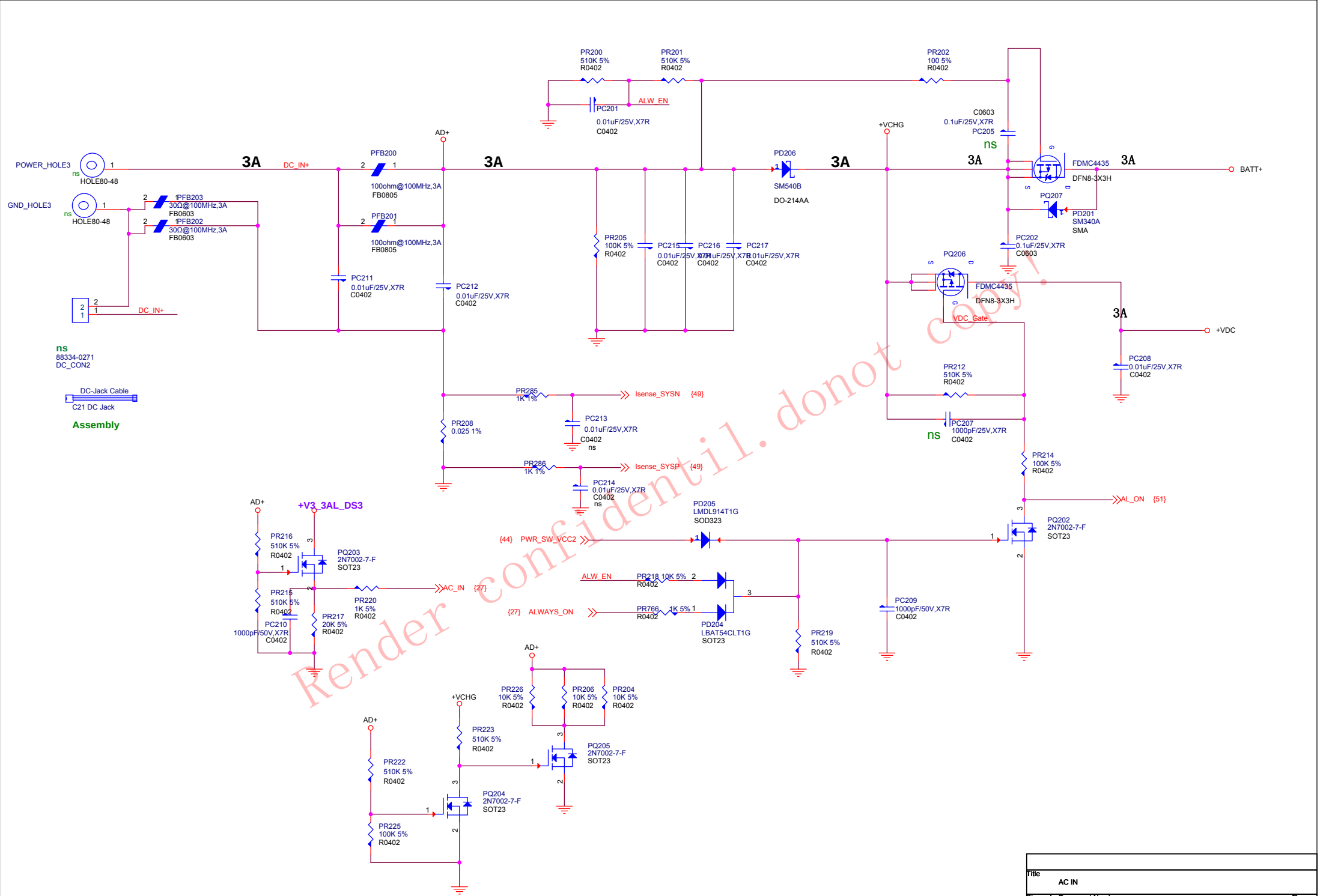
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 43 of 57	



EA EXCELSIOR RENDER

Title	Power Button Board/LED	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 44 of 57	



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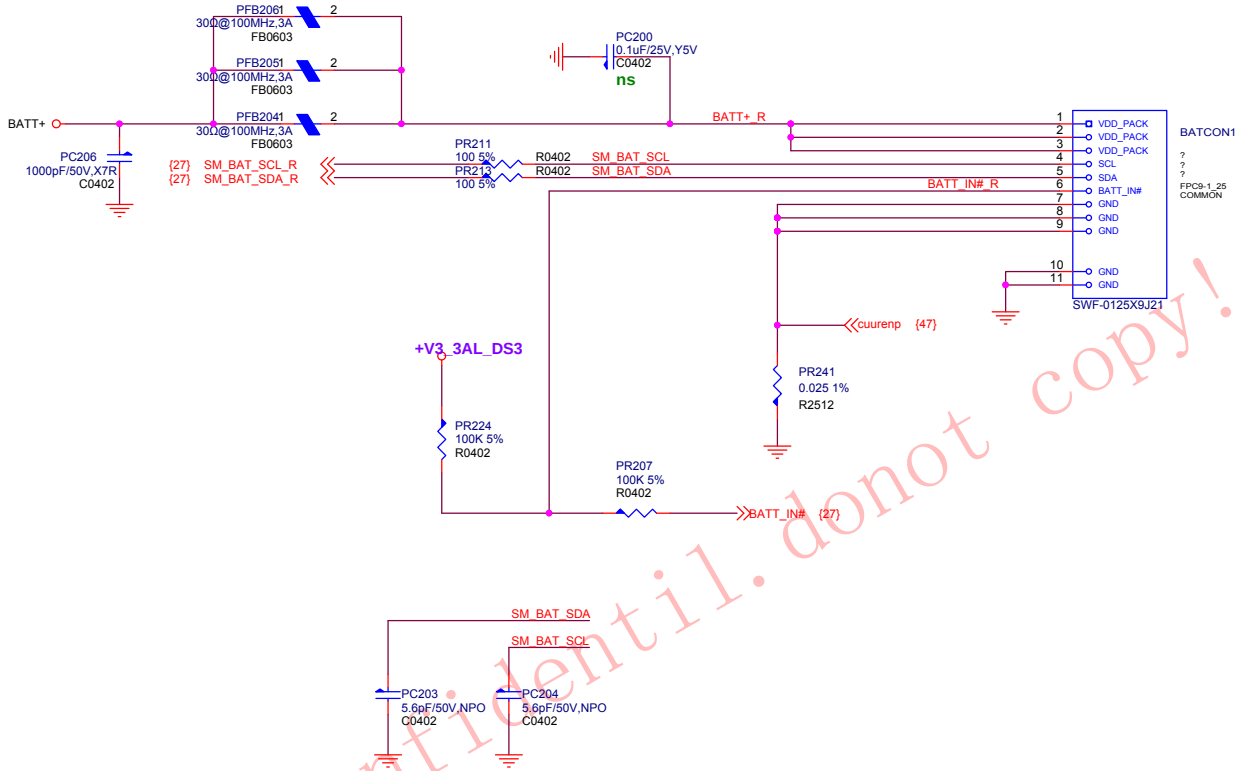
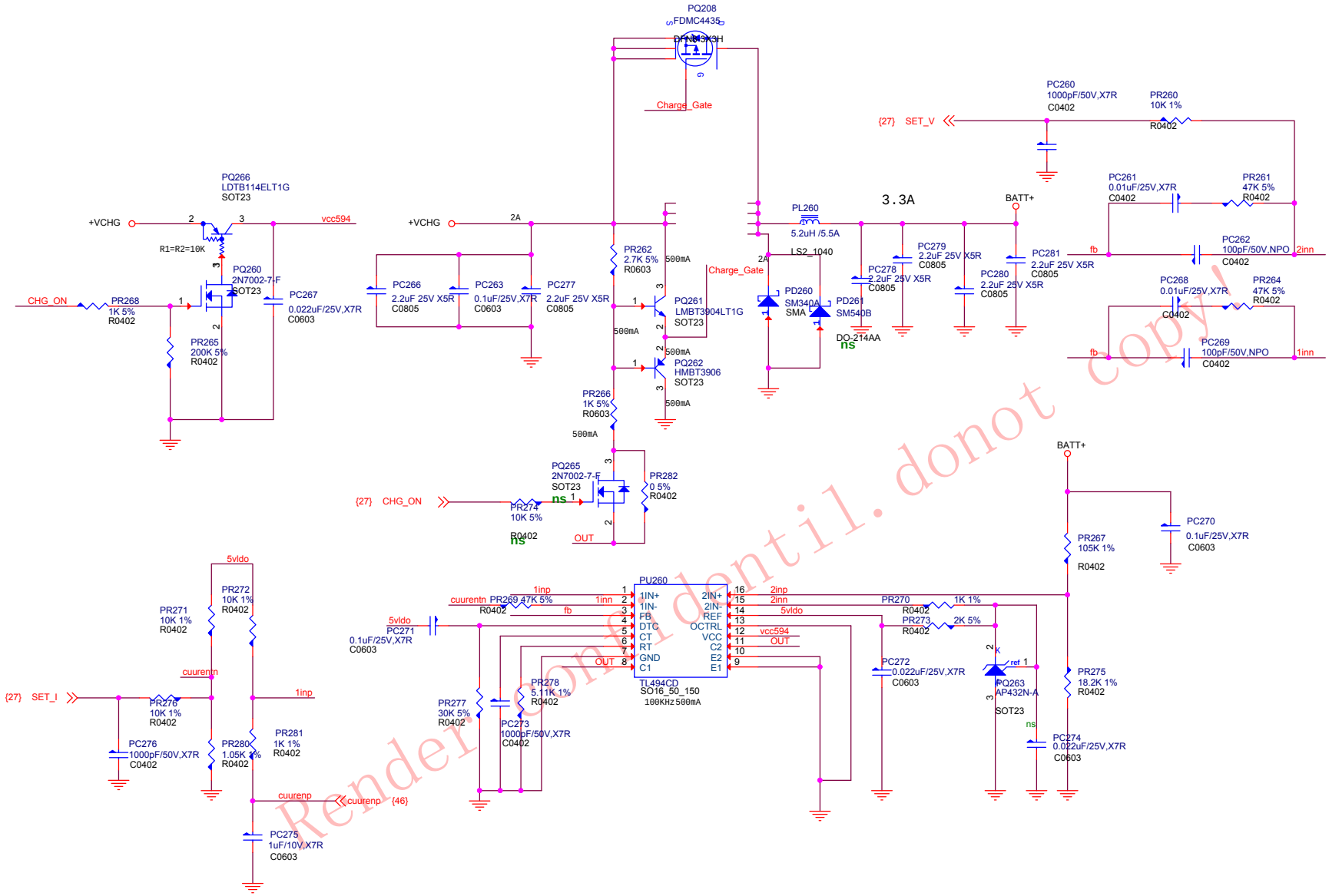
Size A3	Document Number C21		Rev C
Date: Thursday, March 14, 2013	Sheet 45 of 57		

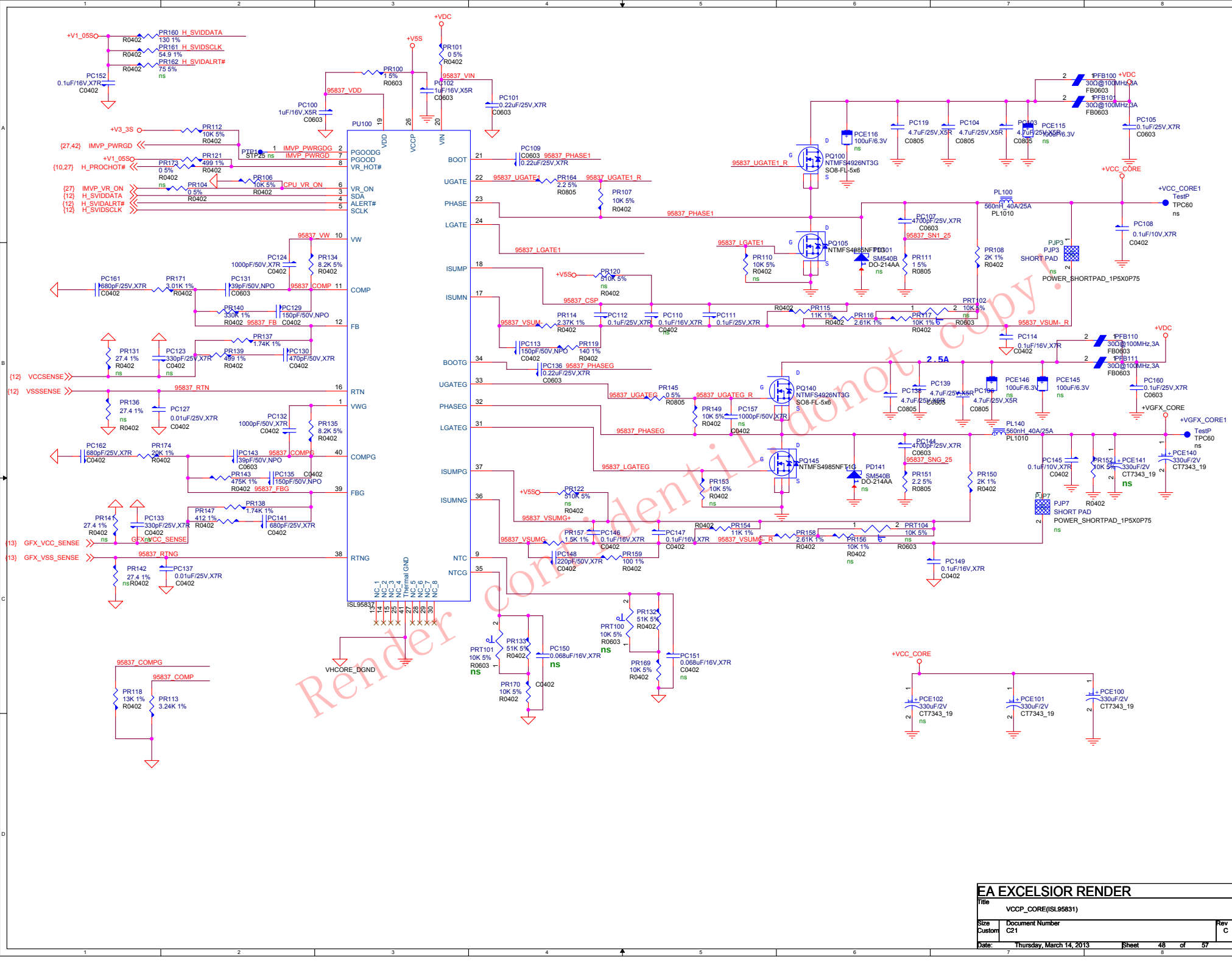


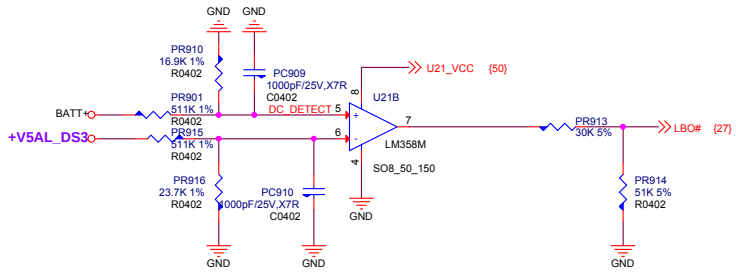
EA EXCELSIOR RENDER

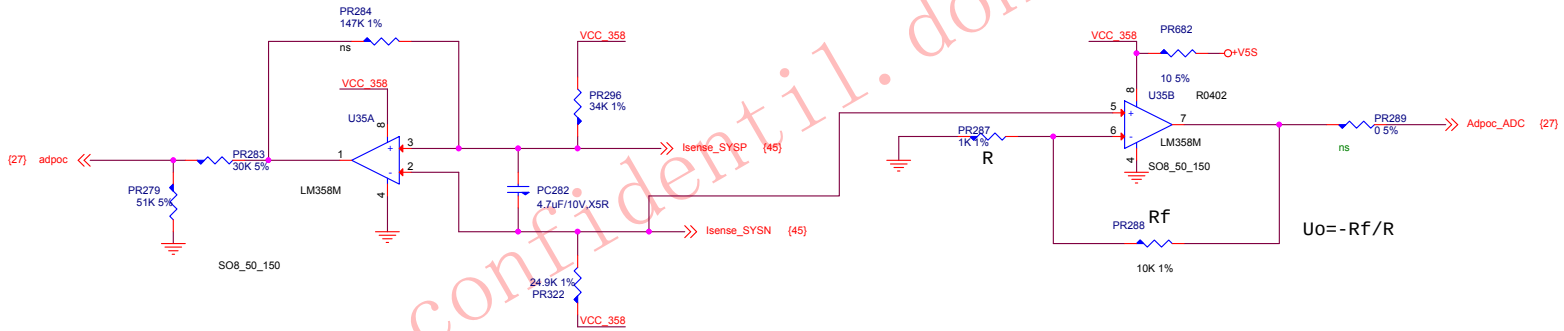
Title	BATTERY	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 46 of 57	



Title	CHARGER	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 47 of 57	

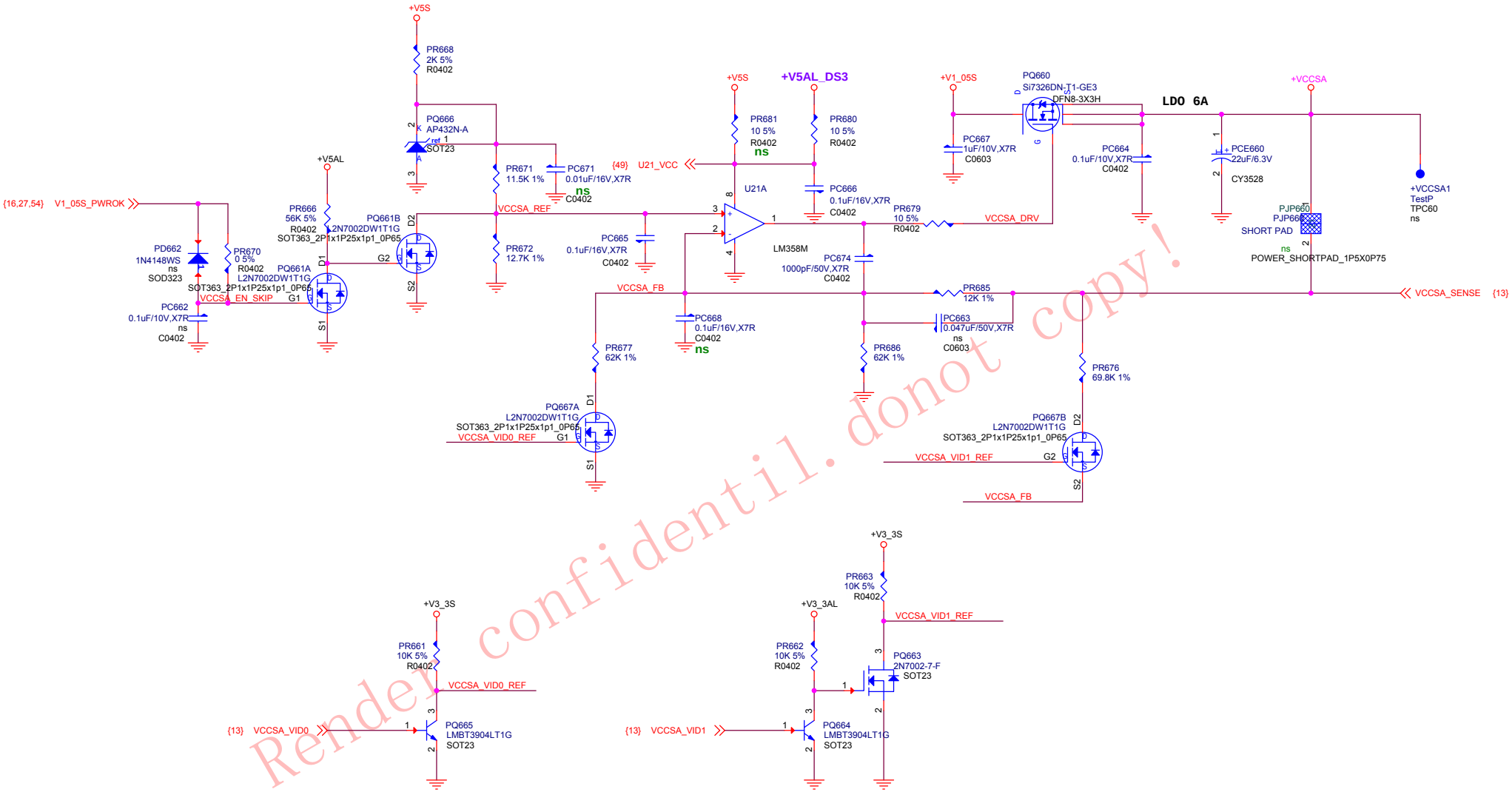






EA EXCELSIOR RENDER

Title	VCCP_CORE(62882)	
Size: Custom	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 49 of 57	



EA EXCELSIOR RENDER		
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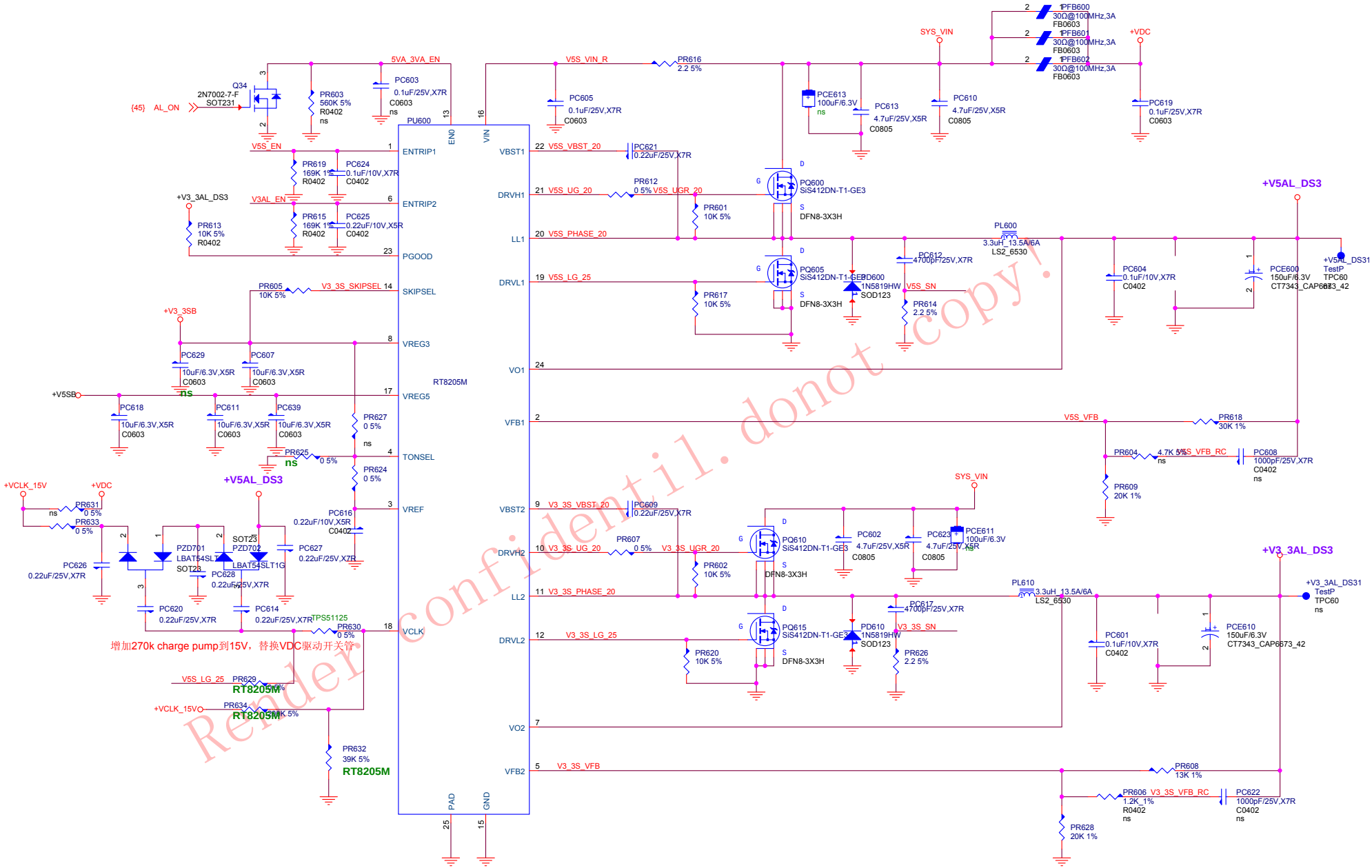
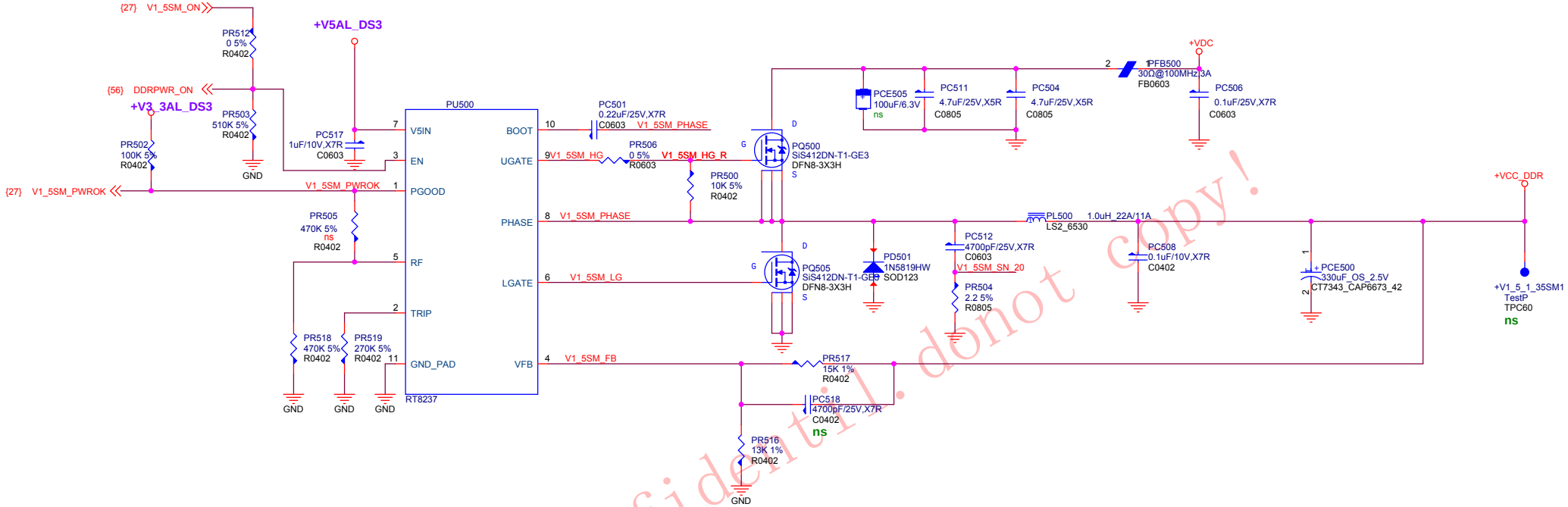
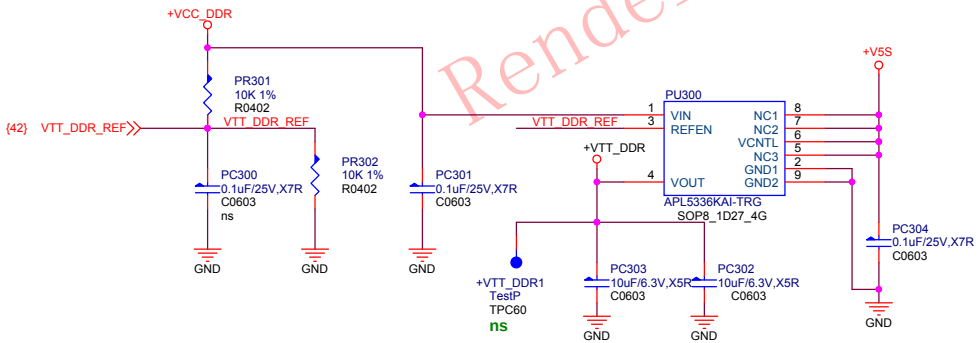
Size: A3	Document Number: C21	Rev: C
Date: Thursday, March 14, 2013	Sheet 50 of 57	



EA EXCELSIOR RENDER

Title	SYSTEM POWER	
Size: CustomC21	Document Number	Rev: C
Date: Thursday, March 14, 2013	Sheet 51 of 57	





EA EXCELSIOR RENDER

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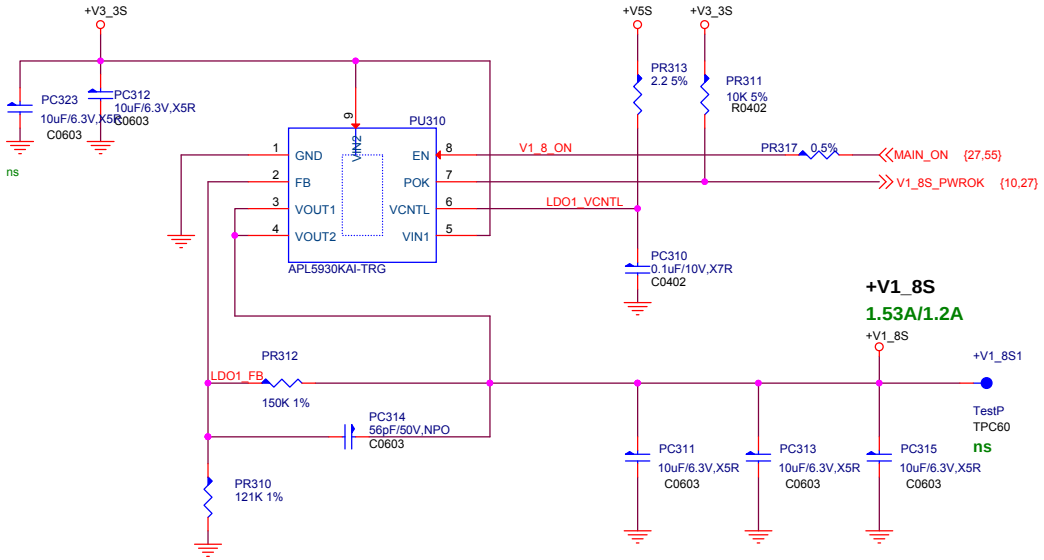
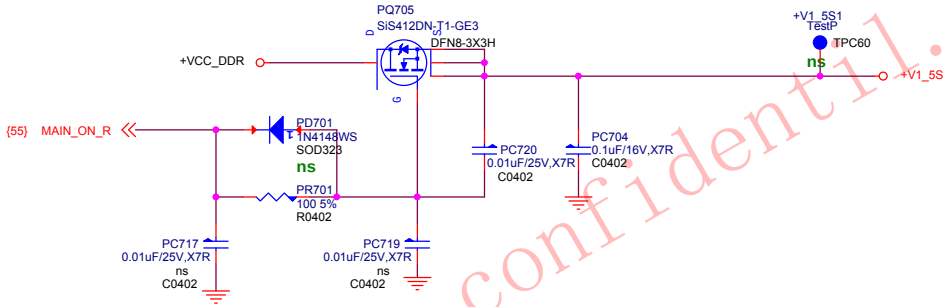
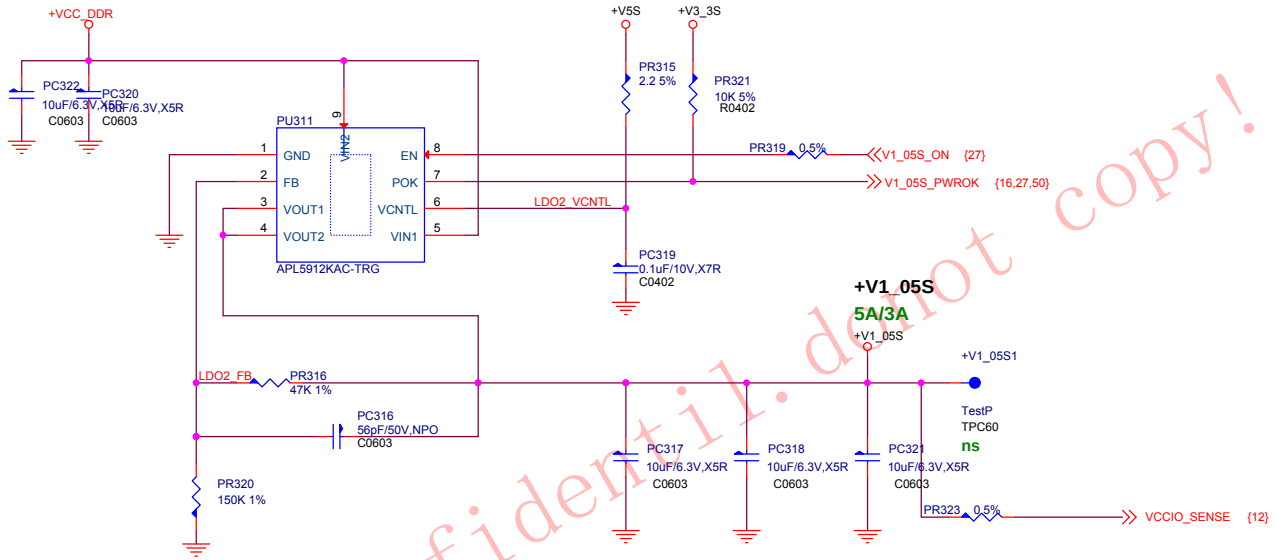
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 52 of 57	





Title	V1_8S	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 53 of 57	



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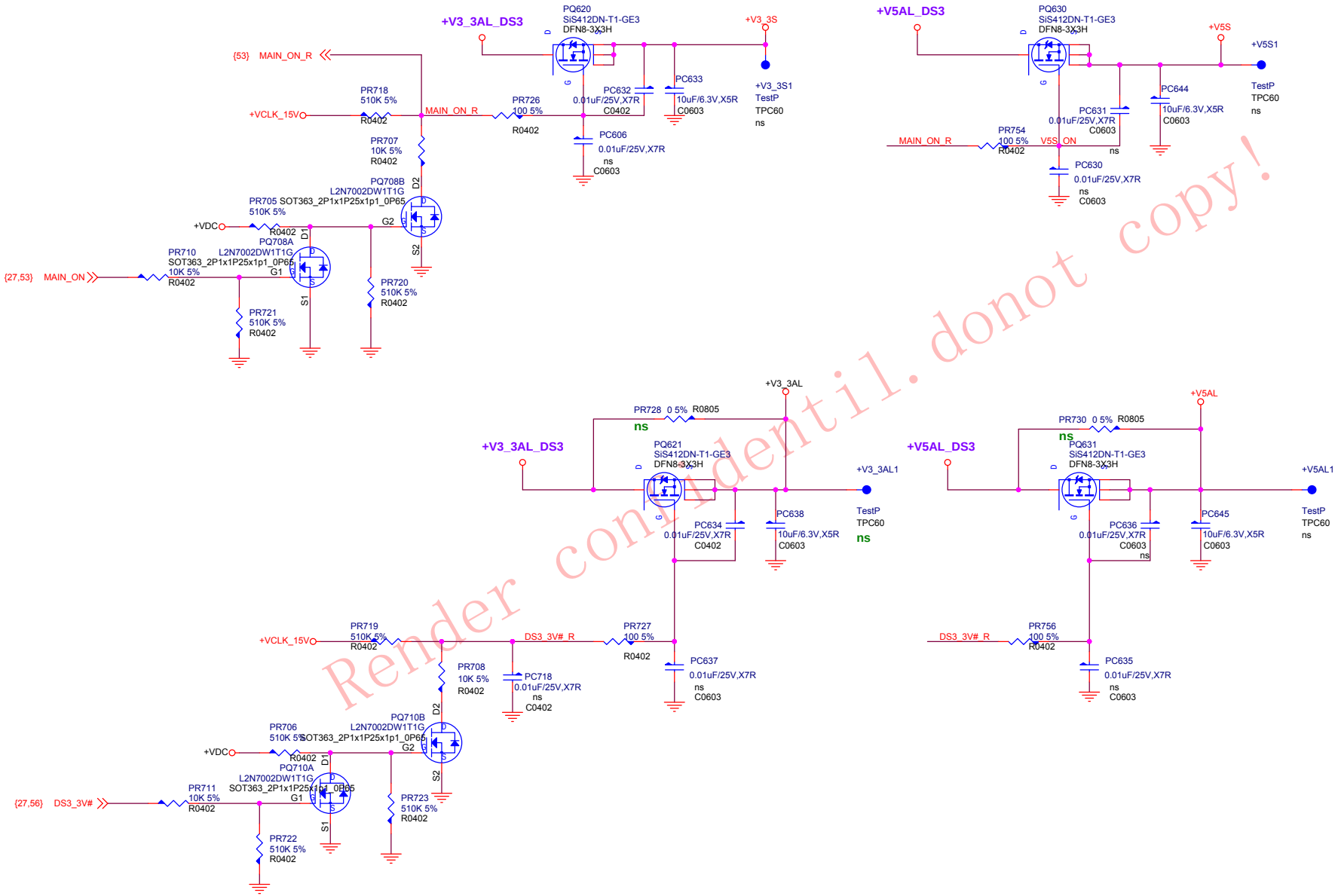
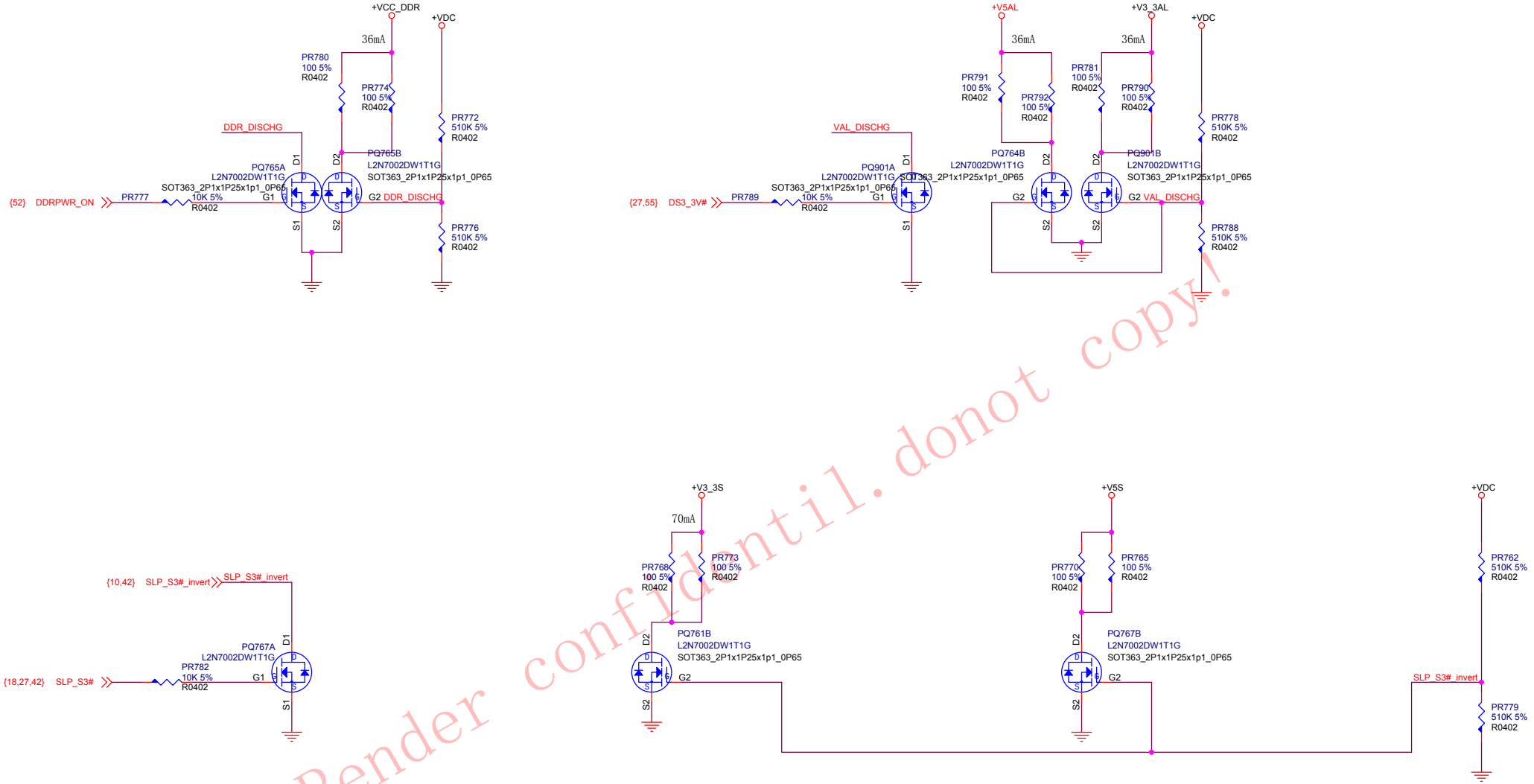
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 54 of 57	



Title	SWITCH POWER	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 55 of 57	



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Title	SYSTEM DISCHARGE	
Size A3	Document Number C21	Rev C
Date: Thursday, March 14, 2013	Sheet 56 of 57	