


P65U V10

GP106 8GB/4GB GDDR5, 256b, 256Mx32/128MX32
Tall DVI-D + HDMI+ DP

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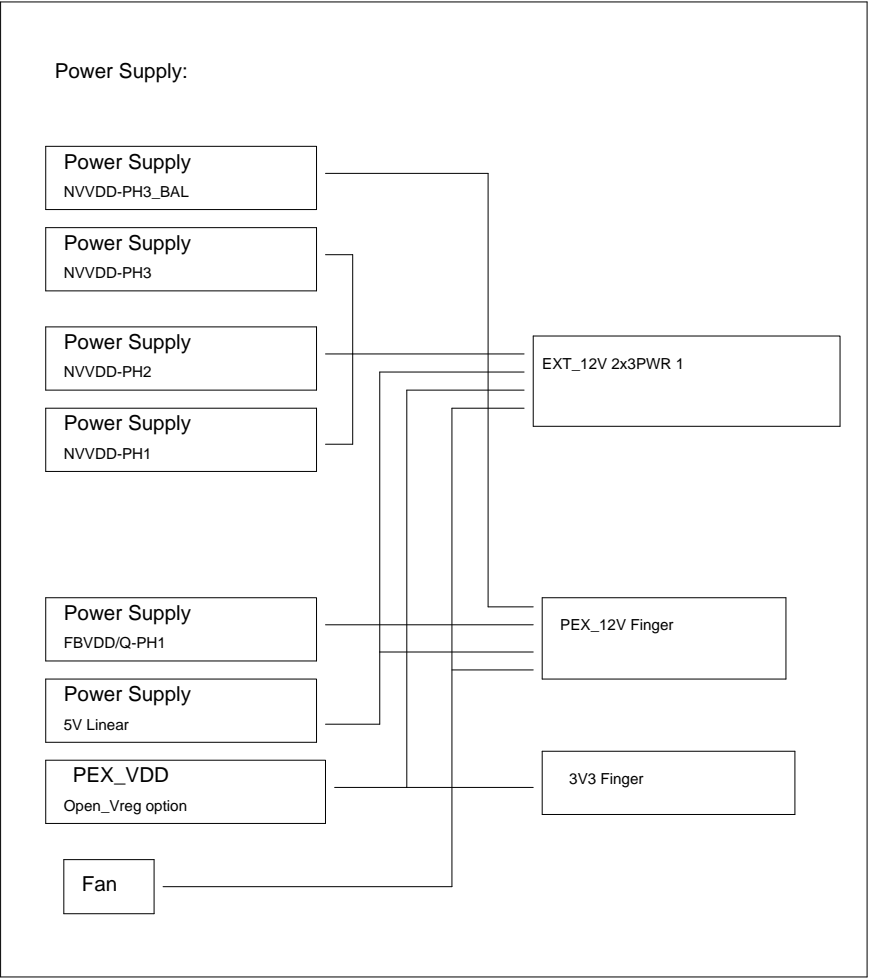
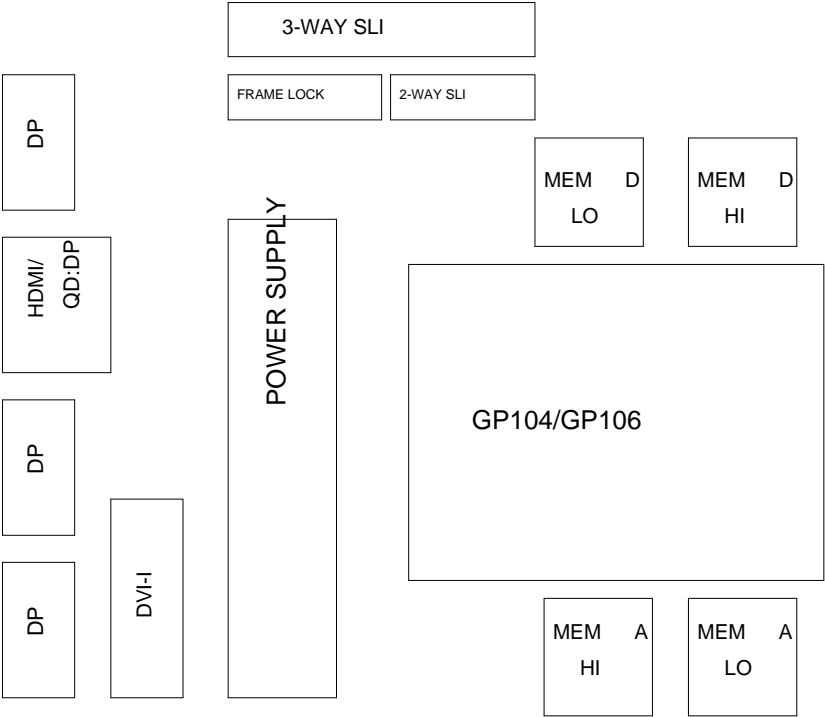


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Page Name: Table of Contents

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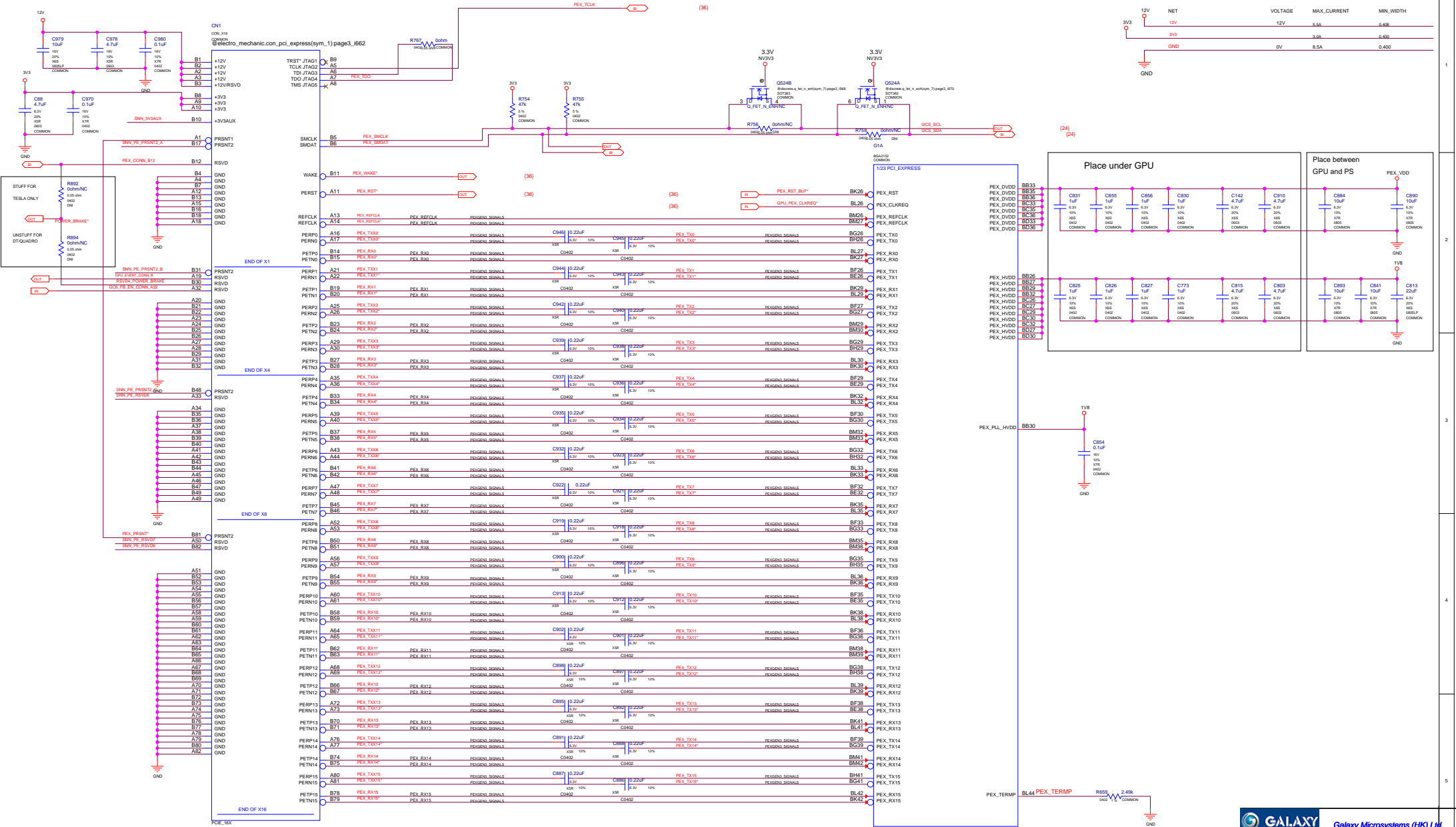
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ASSEMBLY	<ASSEMBLY DESCRIPTION>
PAGE DETAIL	Block Diagram

GALAXY Galaxy Microsystems (HK) Ltd.			
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Size: Custom	Project Name: P65U	Design By: Nelson	Rev: V1d
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Page Name: PCI Express

Size: Custom

Project Name: P65U

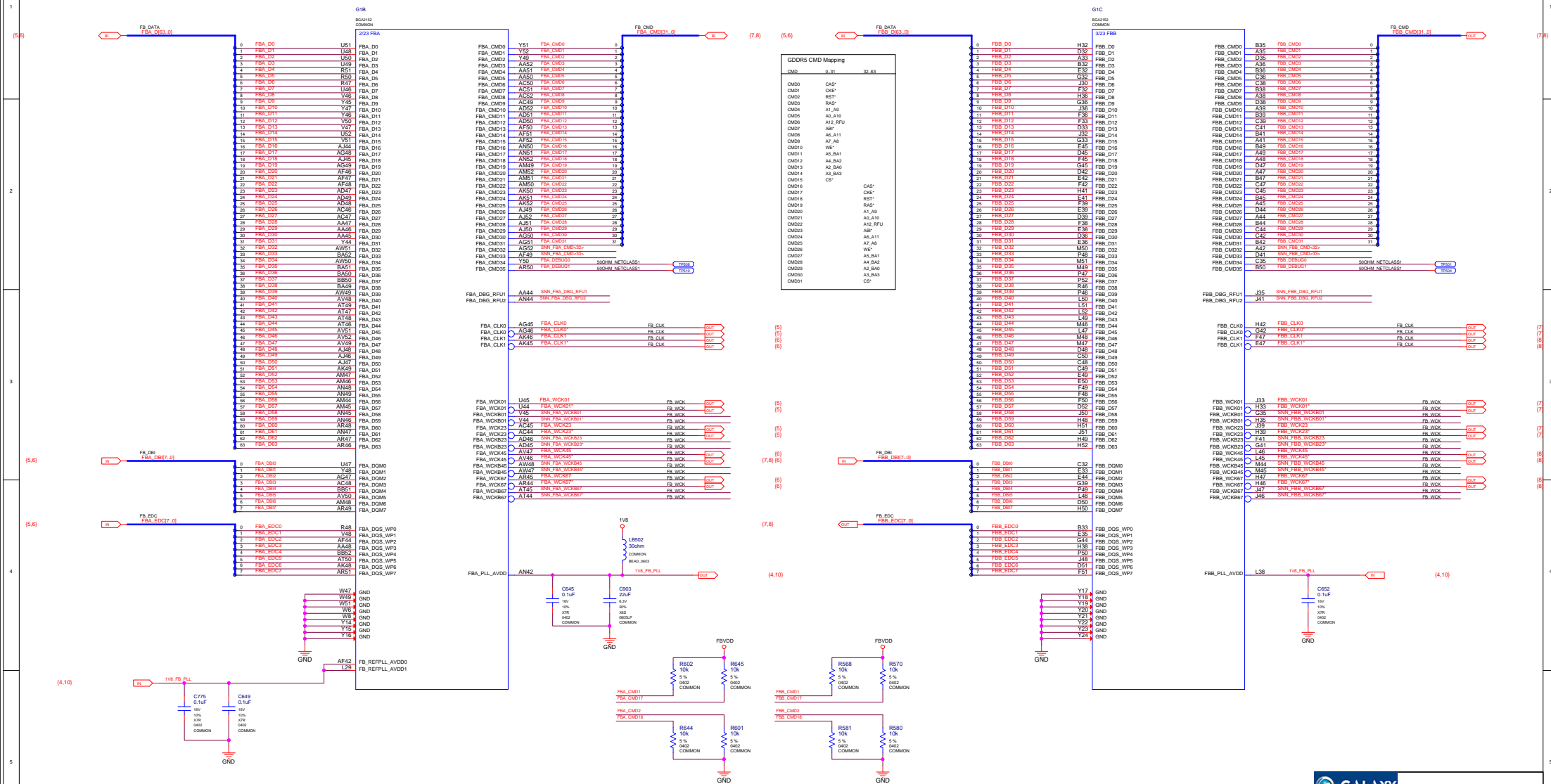
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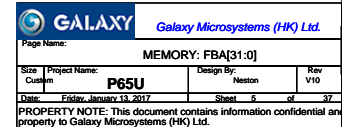
Design By: Neston

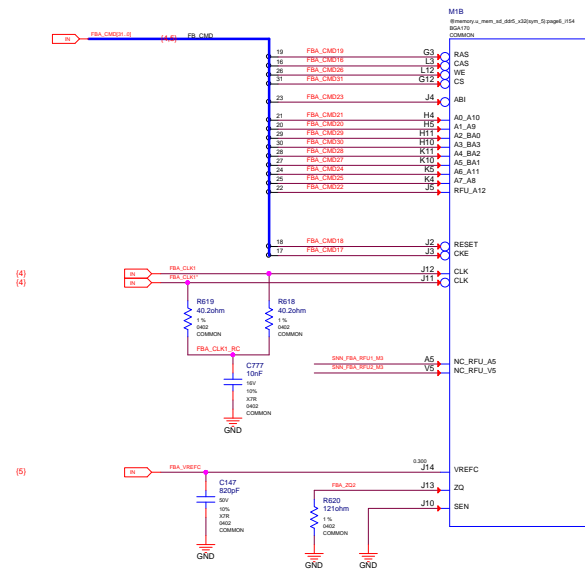
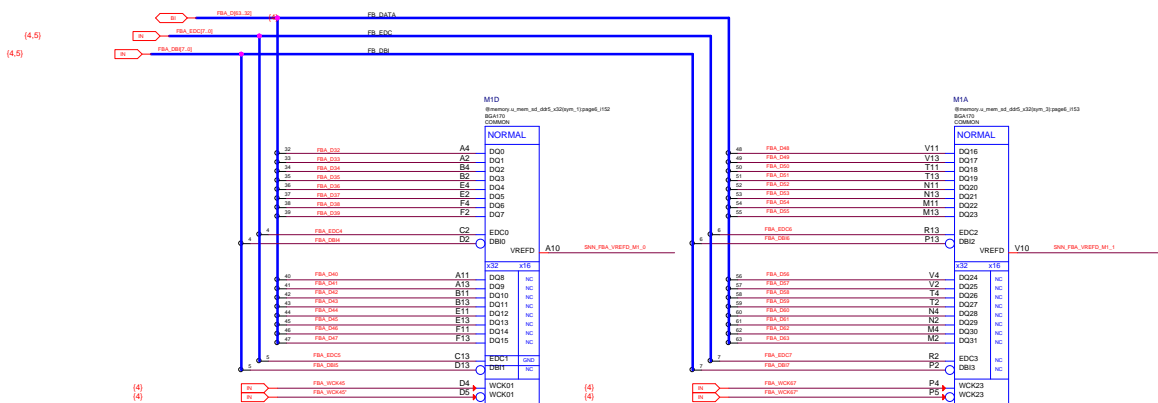
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Rev: V1.0

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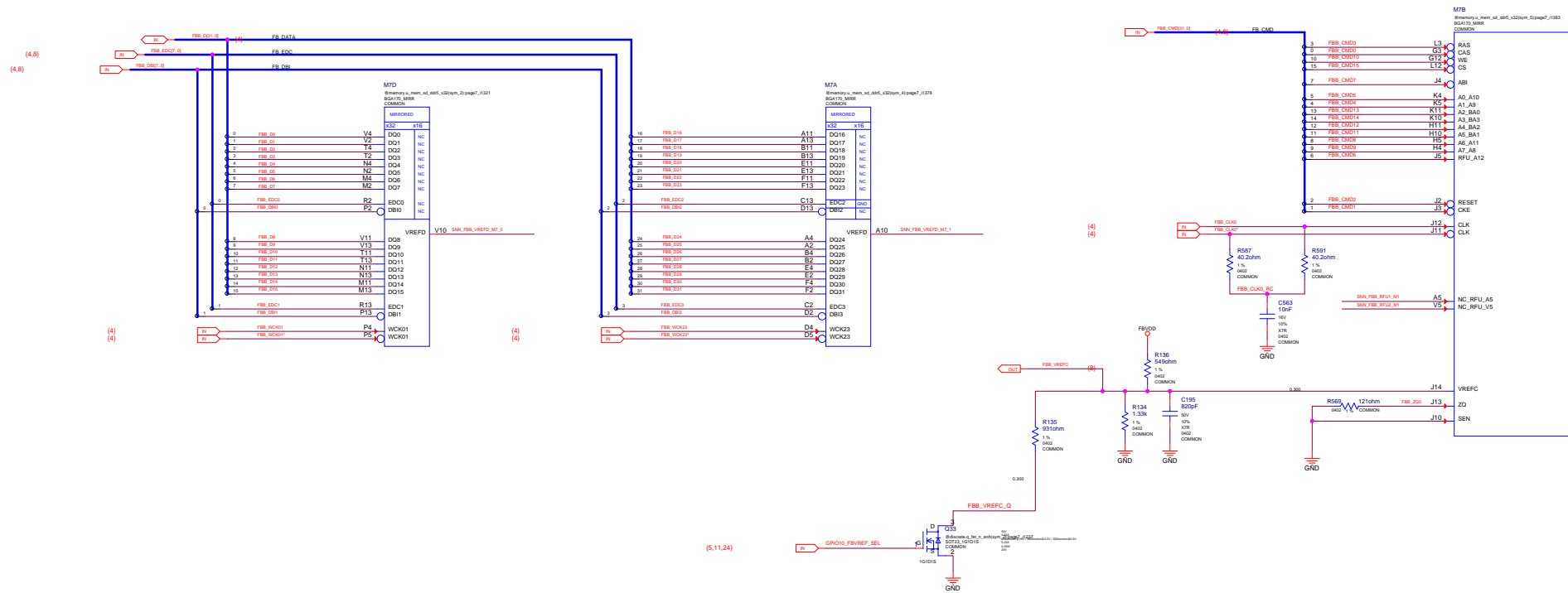




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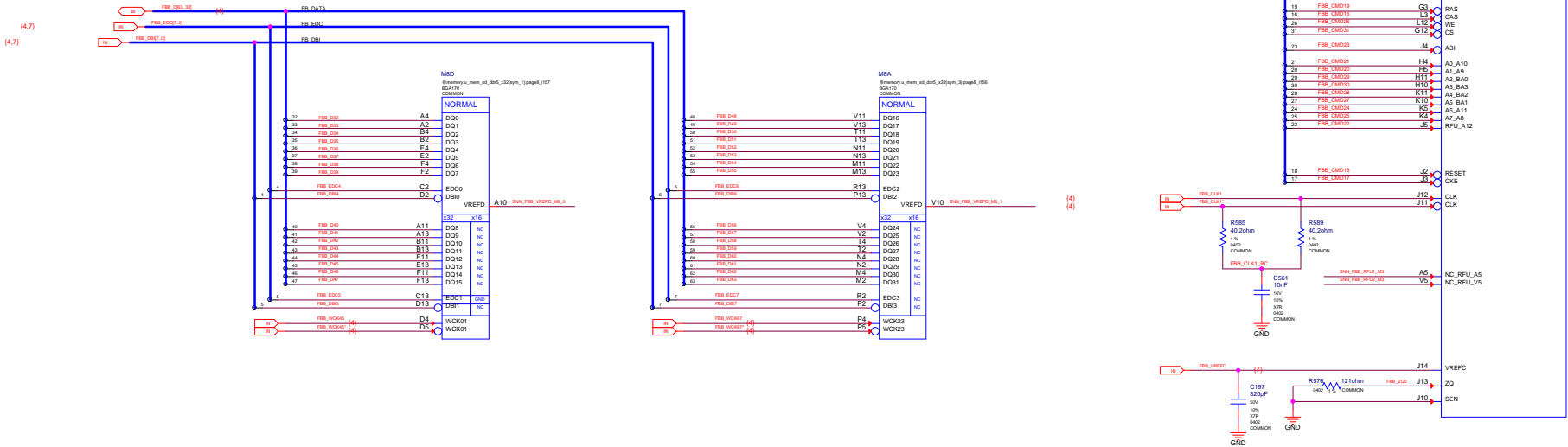
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Customer	Project No: P65U	Sheet: 6	Of: 37
Date: Friday, January 13, 2017			
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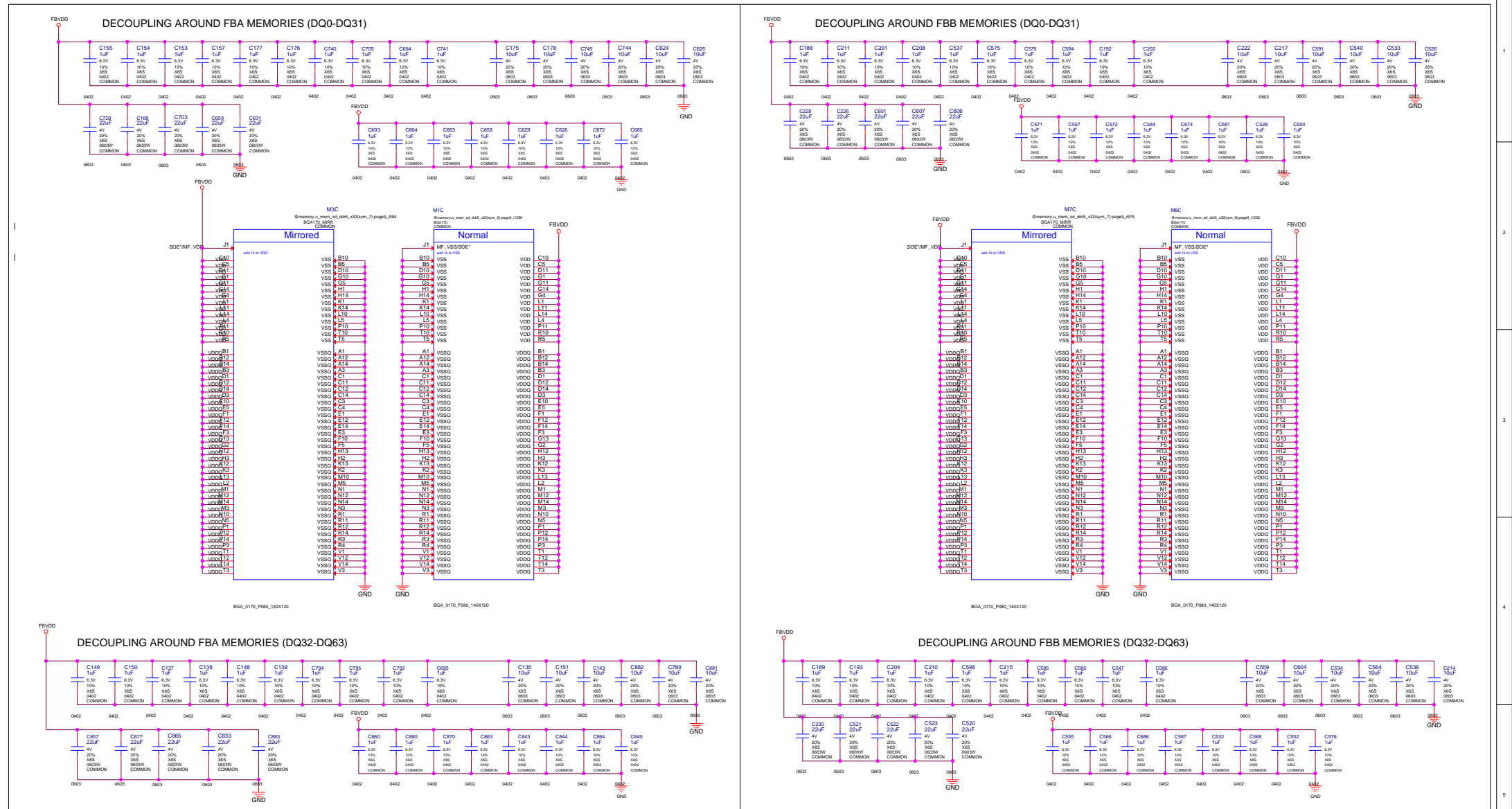
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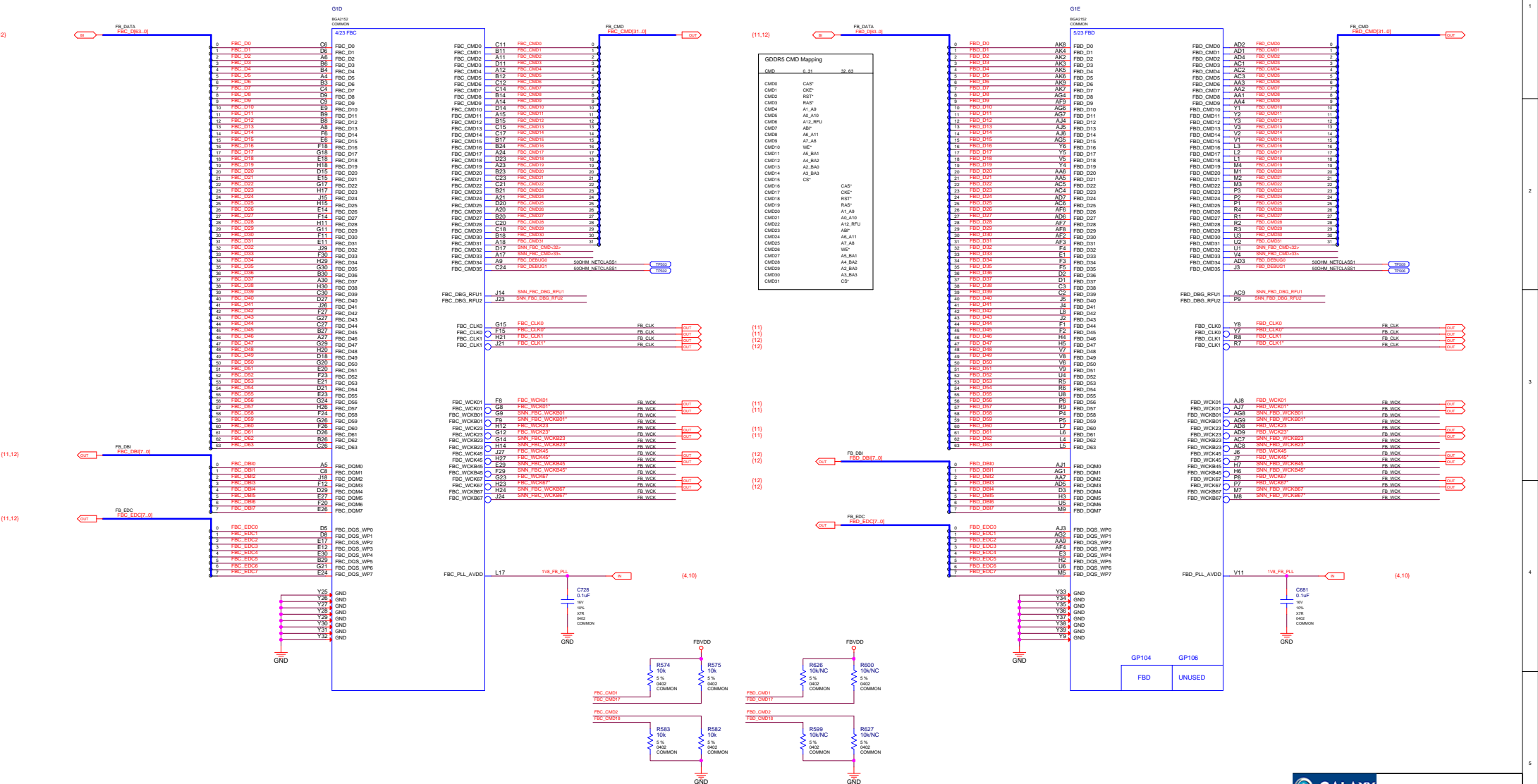


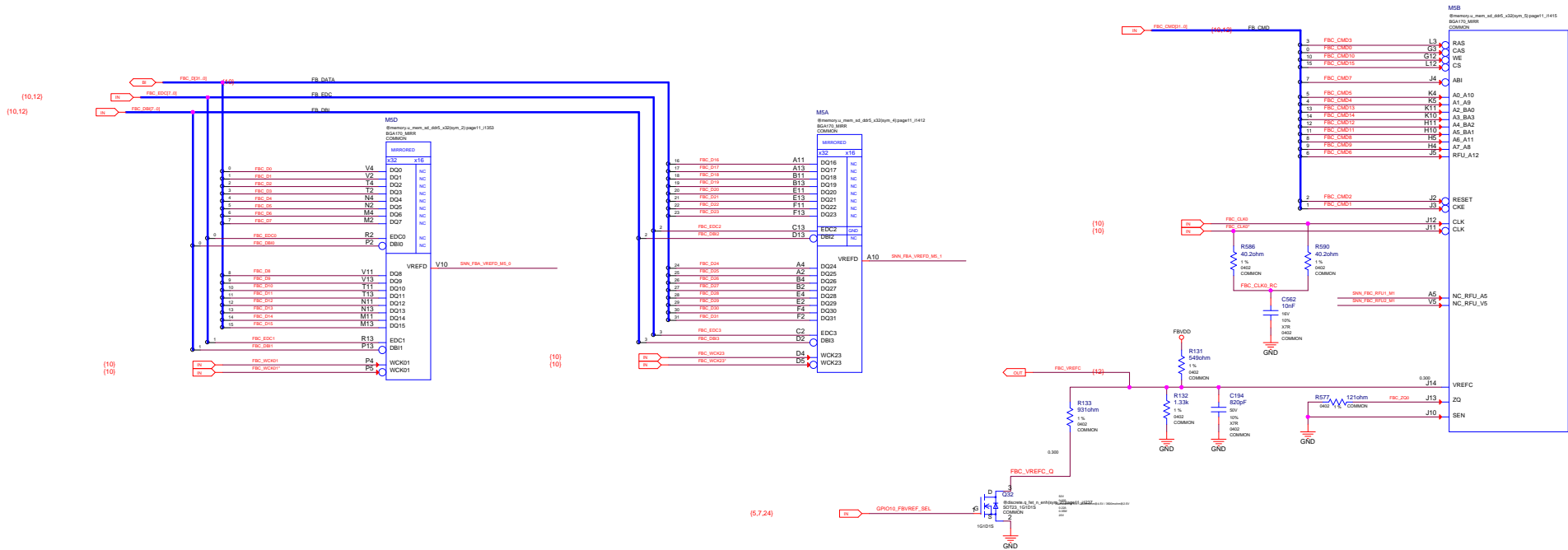
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ASSEMBLY
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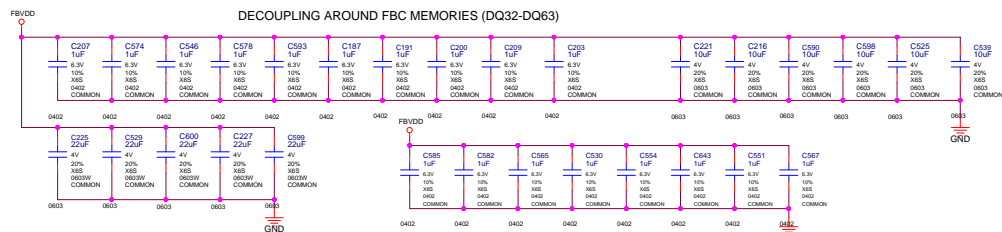
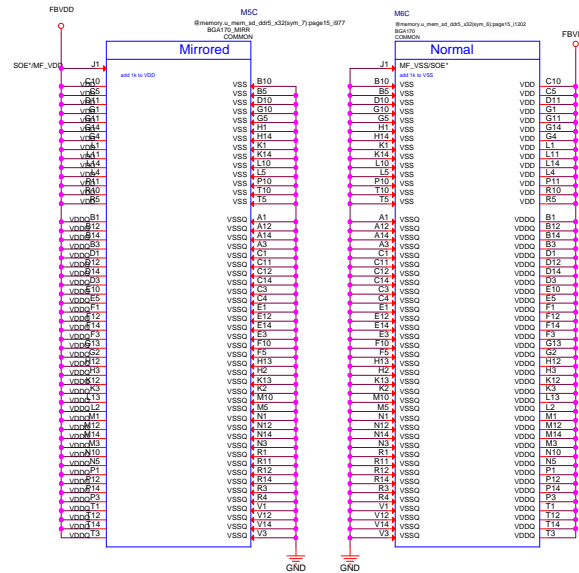


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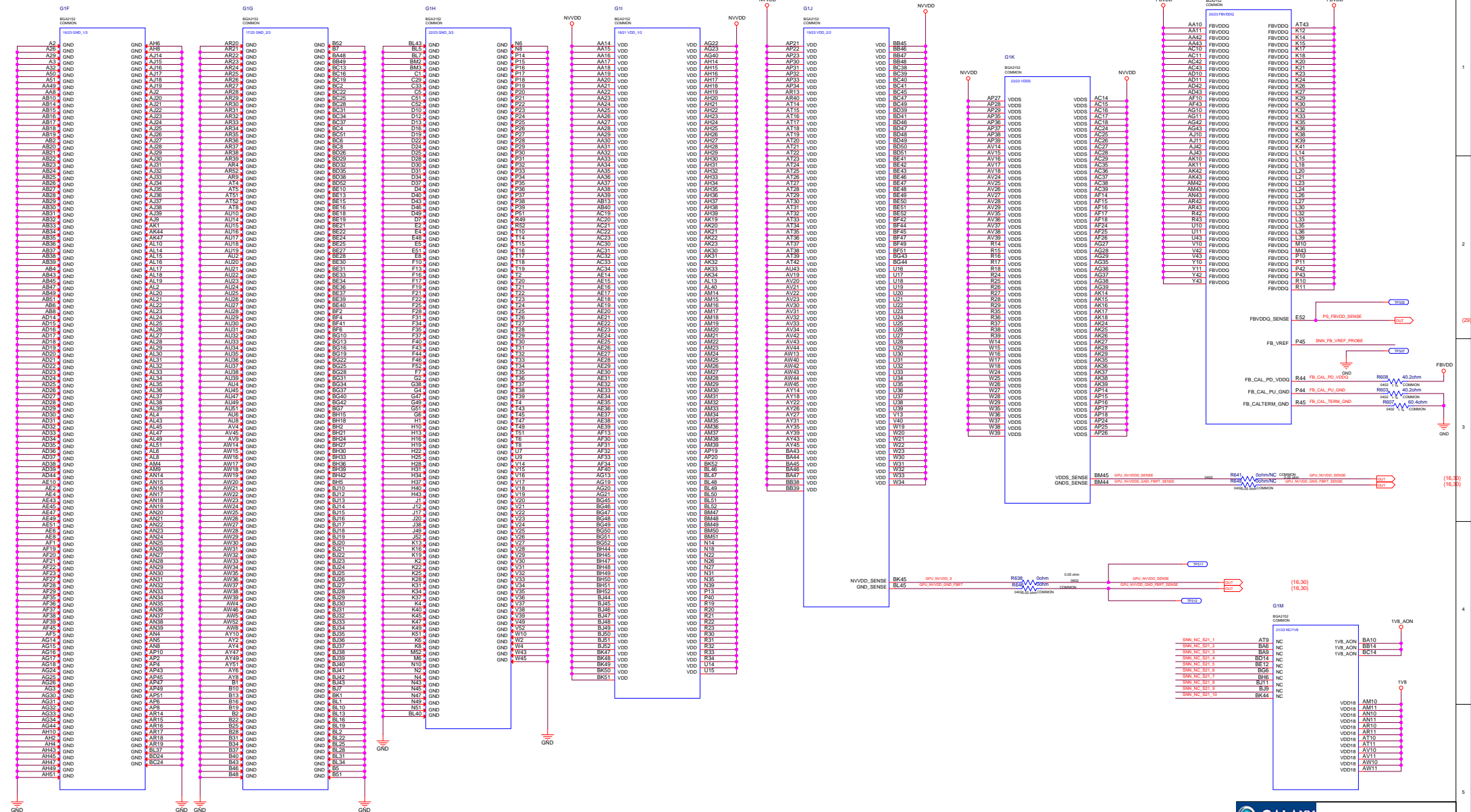
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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEM FB_CD PWR

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MEM FB_CD PWR			
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ASSEMBLY		ASSEMBLY DESCRIPTIONS:	
PAGE DETAIL		GPU PWR & GND	
Size	Project Name:	Design By:	Rev
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13, 2017	13, 2017	4	37

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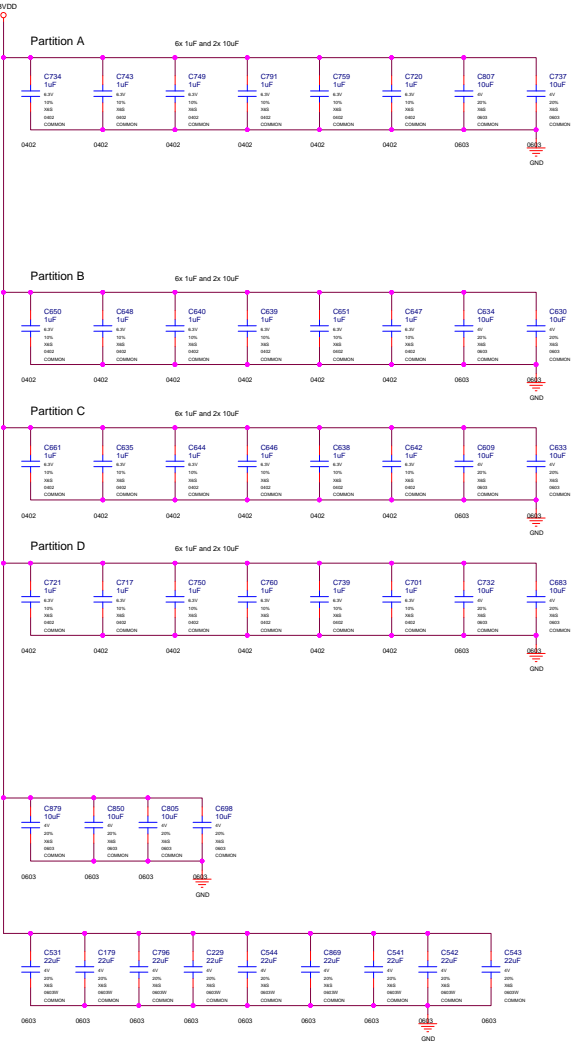
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Size: P65U Design By: Neston Rev: 16

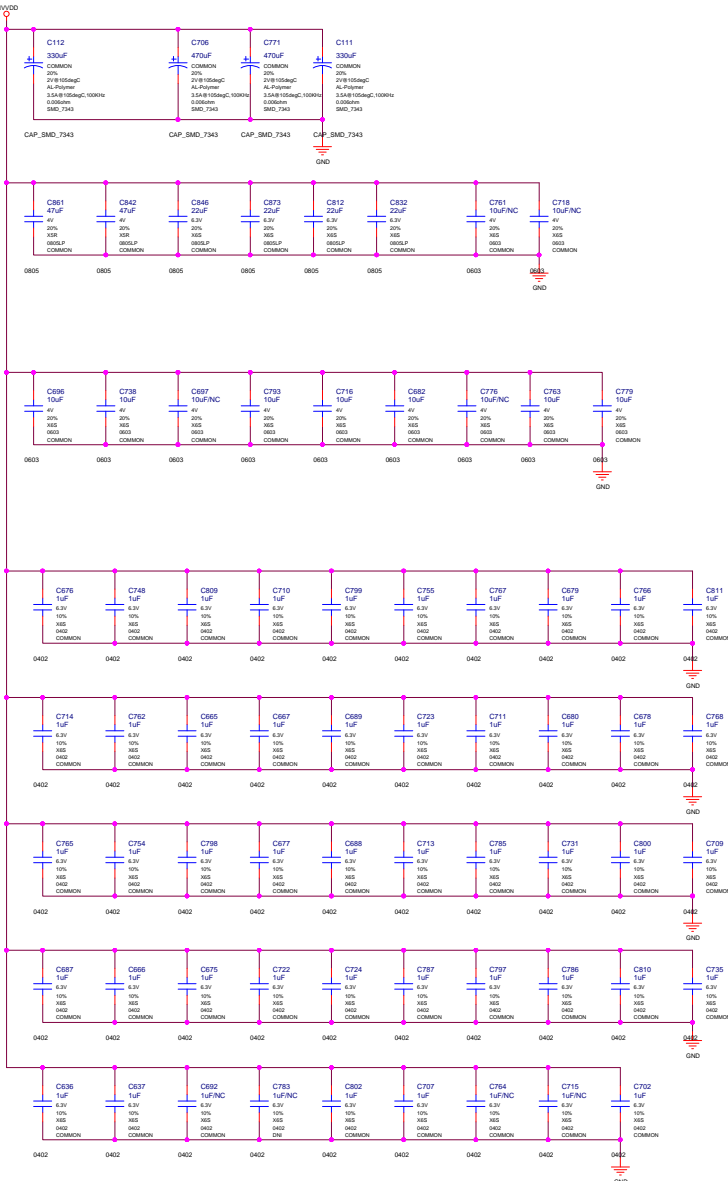
Date: 13, 2017 Drawn: 13, 2017 Sheet: 4 of 37

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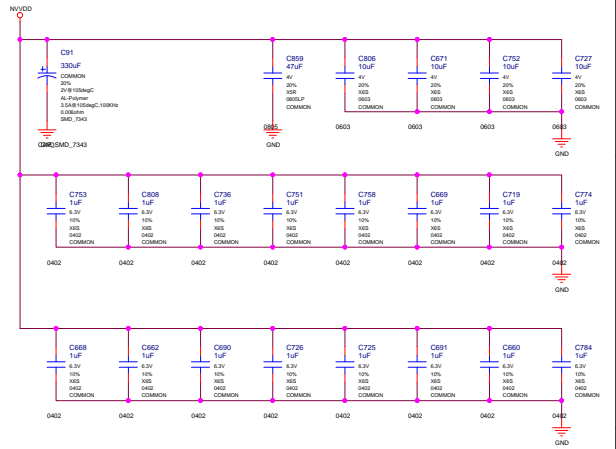
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NVDD

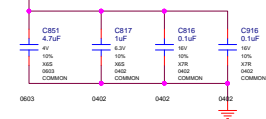


NVDD



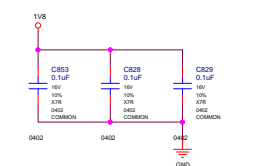
1V8_AON

Place 1.0.1uF cap near BA10



place 1.0.1uF cap for BB14 and BC14 to share

1V8_MAIN



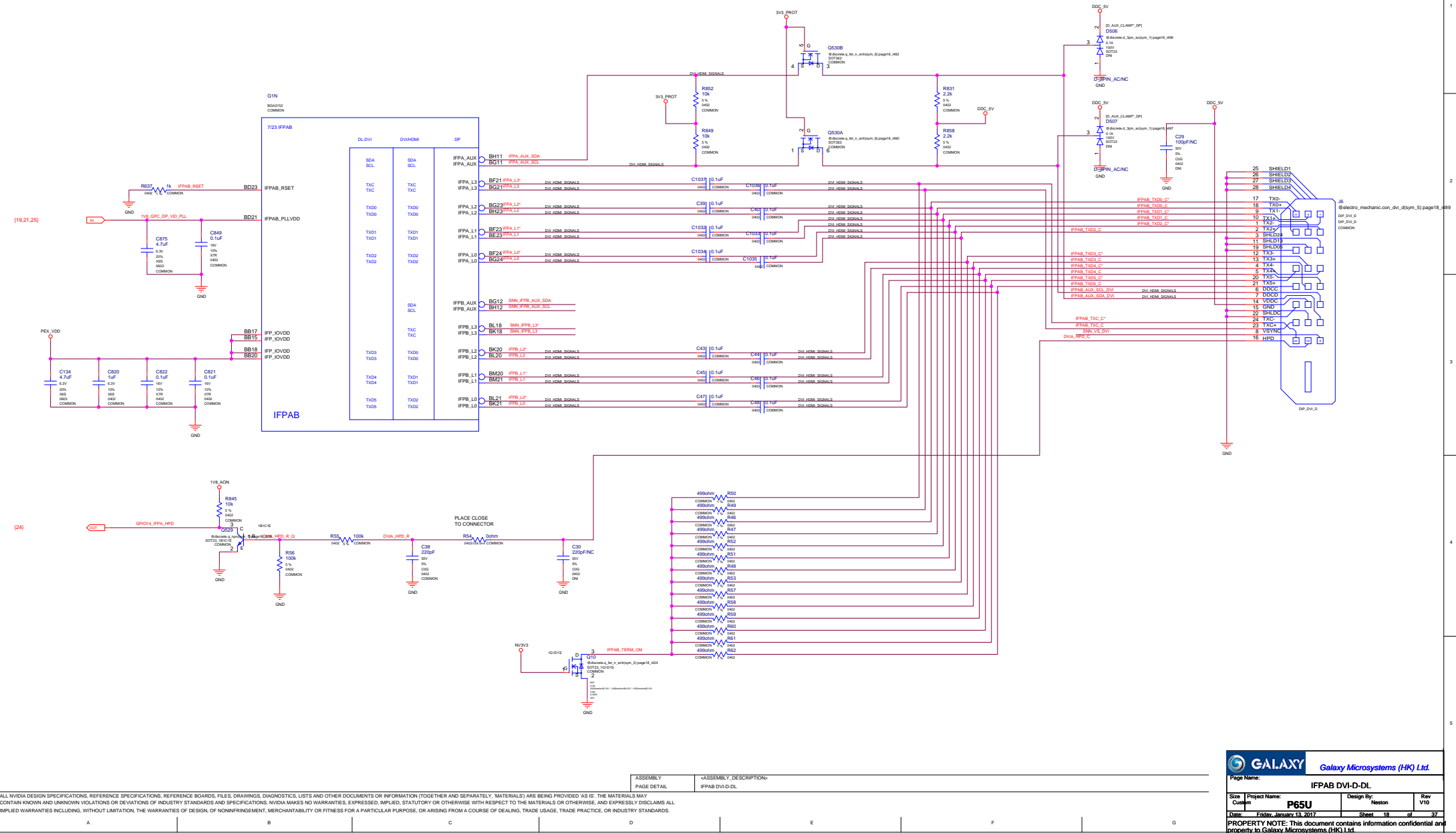
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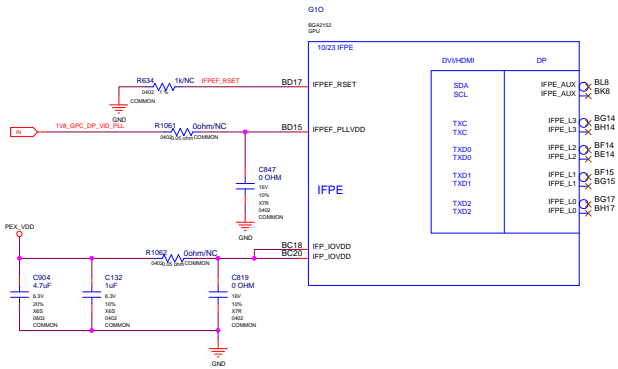
ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	GPU Decoupling

Page Name: GPU Decoupling


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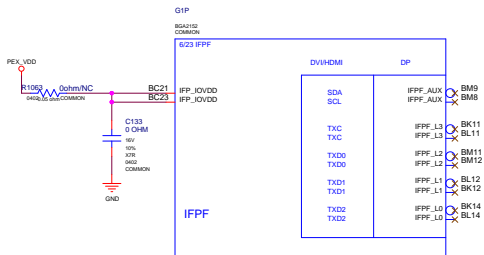
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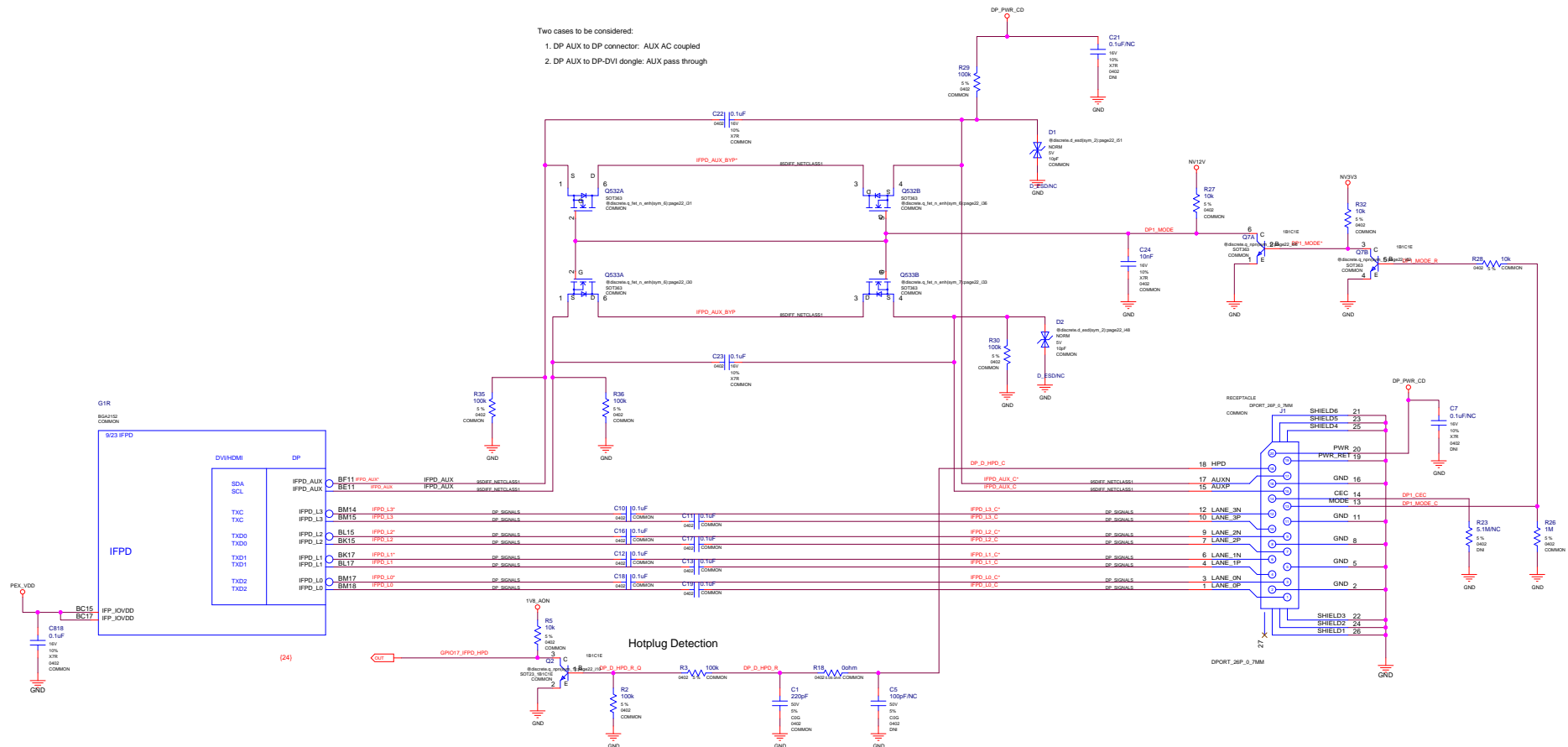
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PAGE DETAIL	IFPF DP

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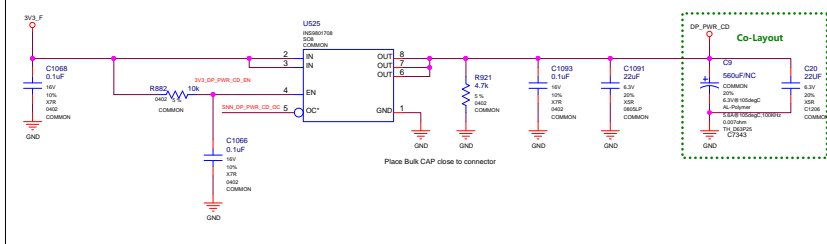
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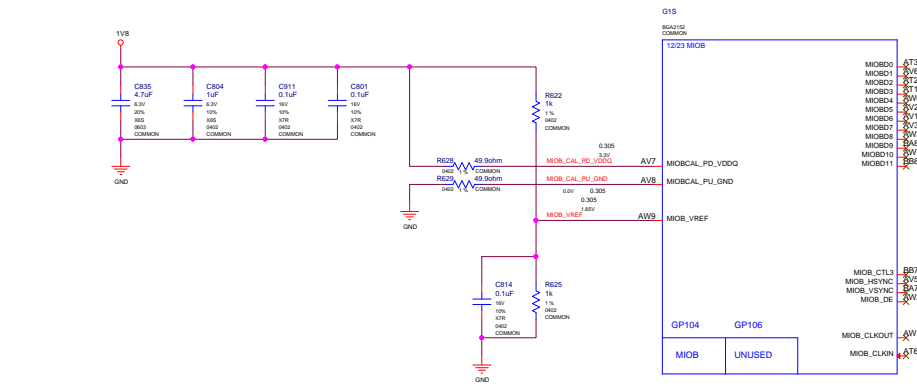
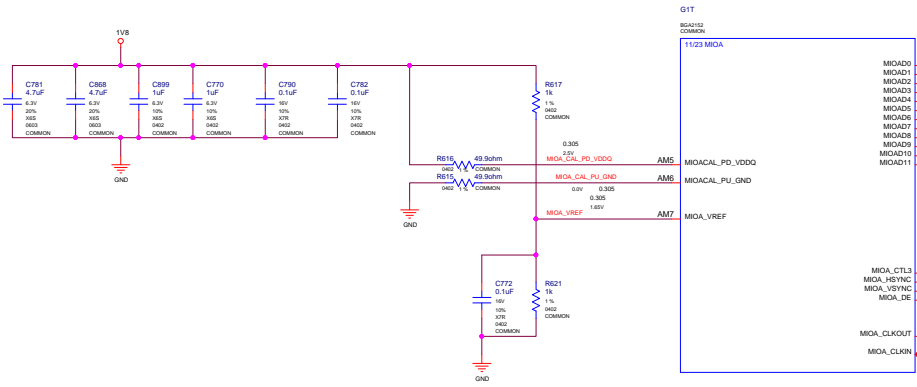


Fused DP_PWR



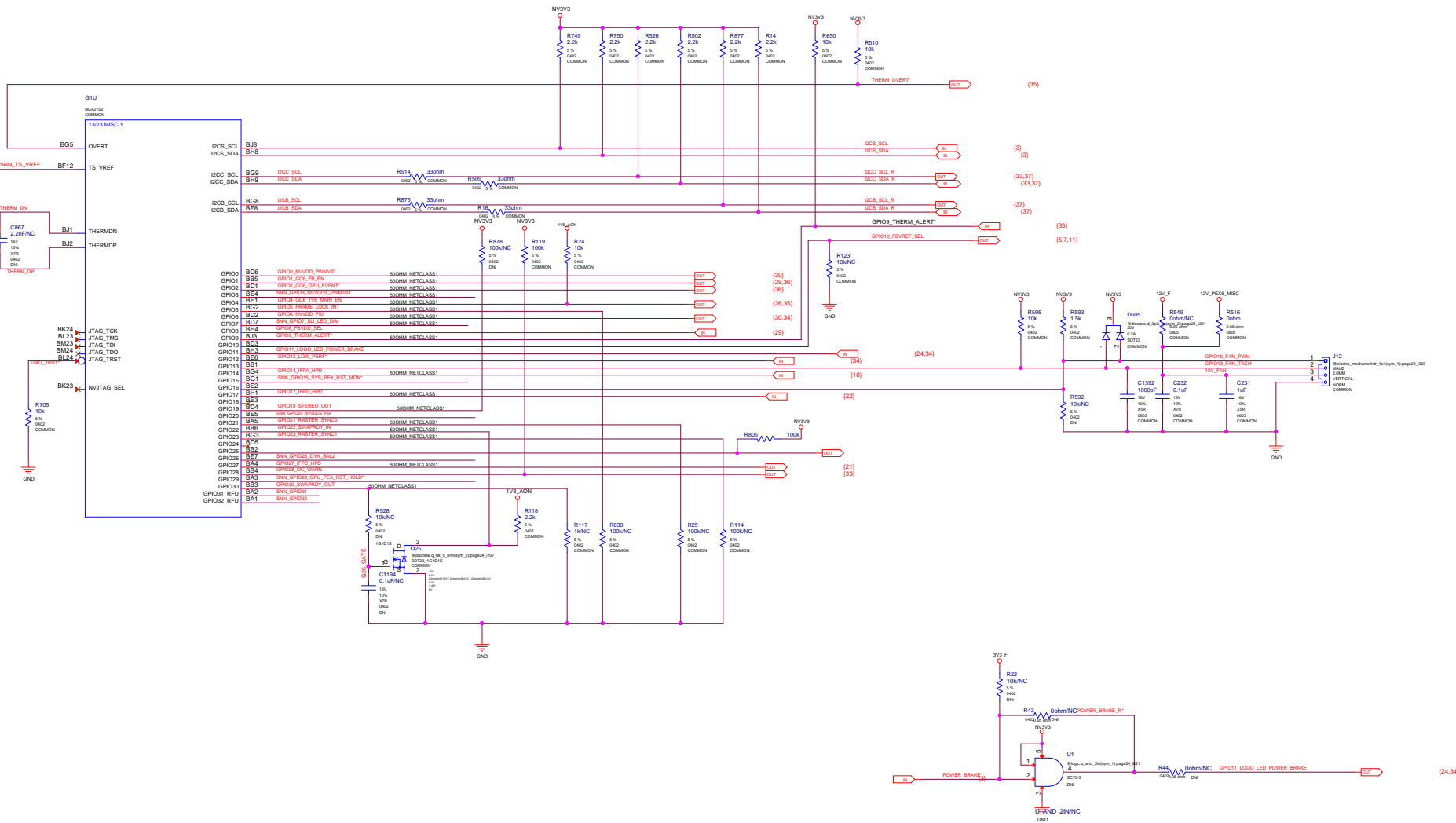
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PAGE DETAIL	IFPD DP

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Page Name: MIOA/B Interface and Frame Lock	
Size: P65U	Design By: Nestor
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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	MISC1: Fan, Thermal, JTAG, GPIO, STEREO

Page Name: MISC1: Fan, Thermal, JTAG, GPIO, STEREO			
Size	Project Name: P650	Design By: Neston	Rev: V10
Date: Friday, January 13, 2017	Sheet: 24	4	37
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STRAP2	STRAP1	STRAP0	RAMCFG[4:0]
L	L	L	00000
L	L	H	00001
L	H	L	00010
L	H	H	00011
H	H	L	00110
H	H	H	00111
L	L	M	01000

ROM_SO	ROM_SI	ROM_SCLK	SOR_EXPOSED[3:0]	1:ENABLE 0:DISABLE
L	L	L	1111 DEFAULT	SOR0/1/2/3 ENABLE
L	L	H	1110	
L	H	L	1101	
L	H	H	1100	
H	L	L	1011	
H	L	H	1010	
H	H	L	1001	
H	H	H	1000	
L	L	M	0111	
L	M	L	0110	
L	M	H	0101	
L	H	M	0100	
H	L	M	0011	
H	M	L	0010	
H	M	H	0001	
H	H	M	0000	

STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCIE_CFG	VGA_DEVICE
M	H	H	1	1	1	1
M	H	L	1	1	1	0
M	L	H	1	1	0	1
M	L	L	1	1	0	0
L	H	M	1	0	1	1
L	M	H	1	0	1	0
L	M	L	1	0	0	1
H	H	H	0	1	1	1
H	H	L	0	1	1	0
H	L	H	0	1	0	1
H	L	L	0	1	0	0
L	H	H	0	0	1	1
L	H	L	0	0	1	0
L	L	H	0	0	0	1 DEFAULT
L	L	L	0	0	0	0

H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

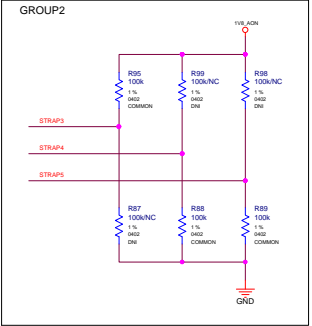
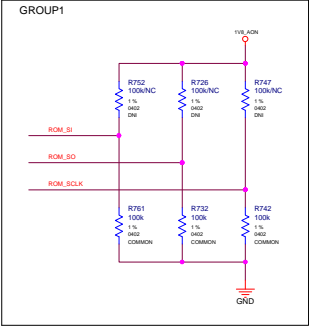
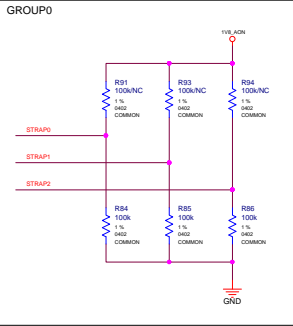
1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

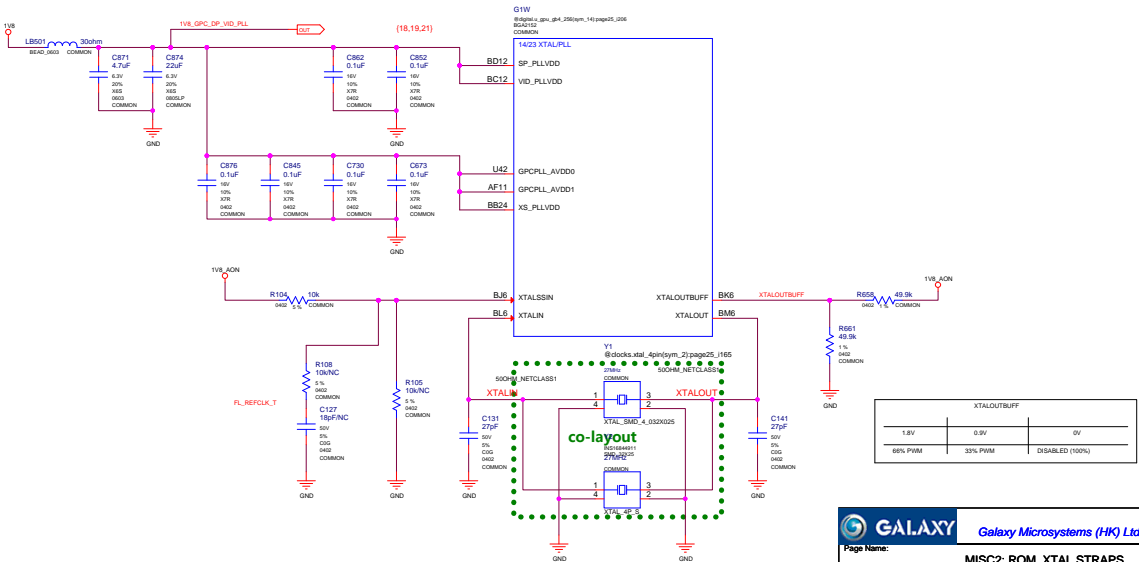
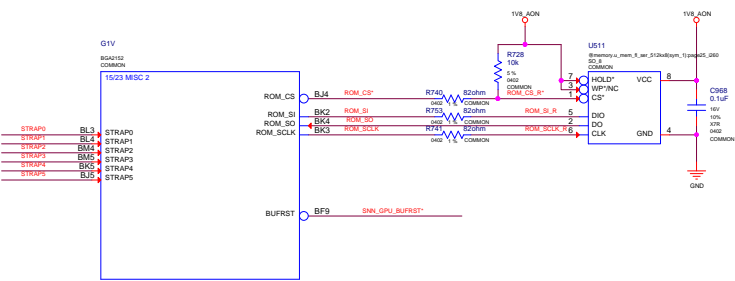
1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE

ASSEMBLY	ASSEMBLY DESCRIPTION:
PAGE DETAIL	MISC2: ROM, XTAL,STRAPS



CFG(3:0)	Config	Width	Vendor
0000	256Mx32	256-bit	Samsung
0001	256Mx32	256-bit	Micron
0010	256Mx32	256-bit	Hynix
0011	Reserved		
0100	Reserved		
0101	Reserved		
0110	Reserved		
0111	Reserved		



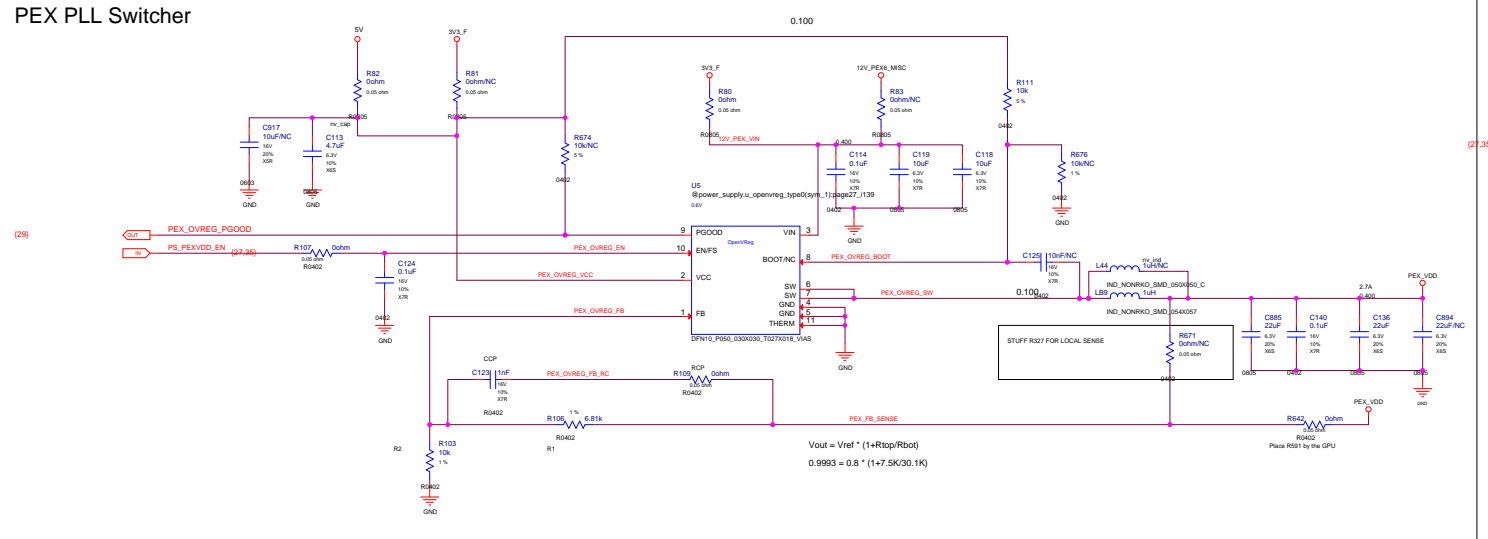
XTALOUTBUFF		
1.8V	0.9V	0V
85% PWM	33% PWM	DISABLED (100%)

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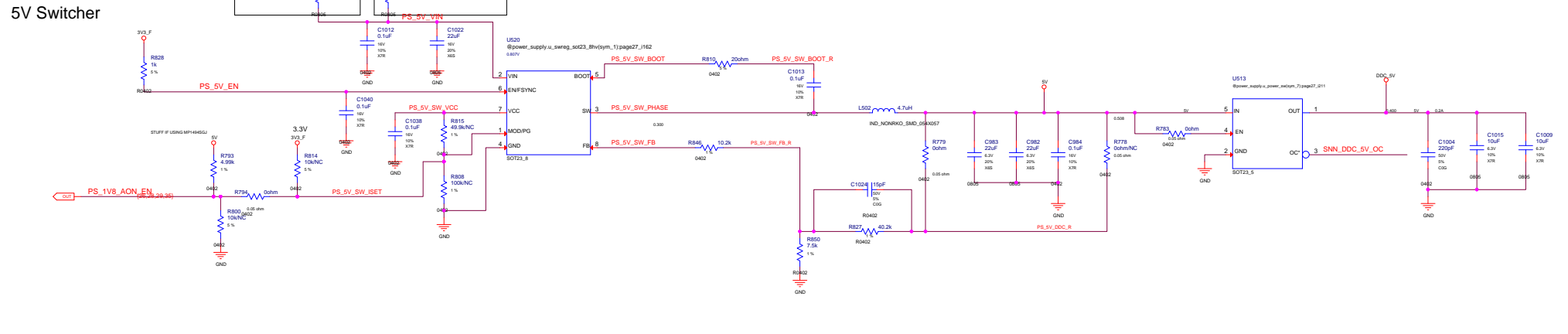
MISC2: ROM, XTAL,STRAPS			
Size	Project Name:	Design By:	Rev
Cus001	P65U	Nelson	V10

Date: Friday, January 13, 2017 Sheet: 26 of 37
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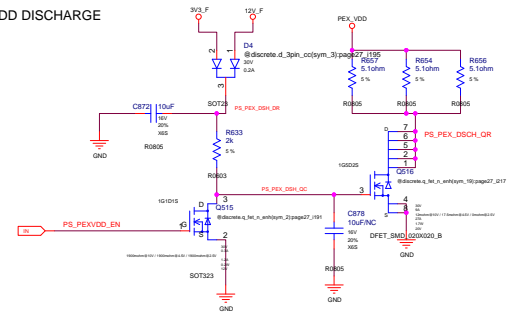
PEX PLL Switcher

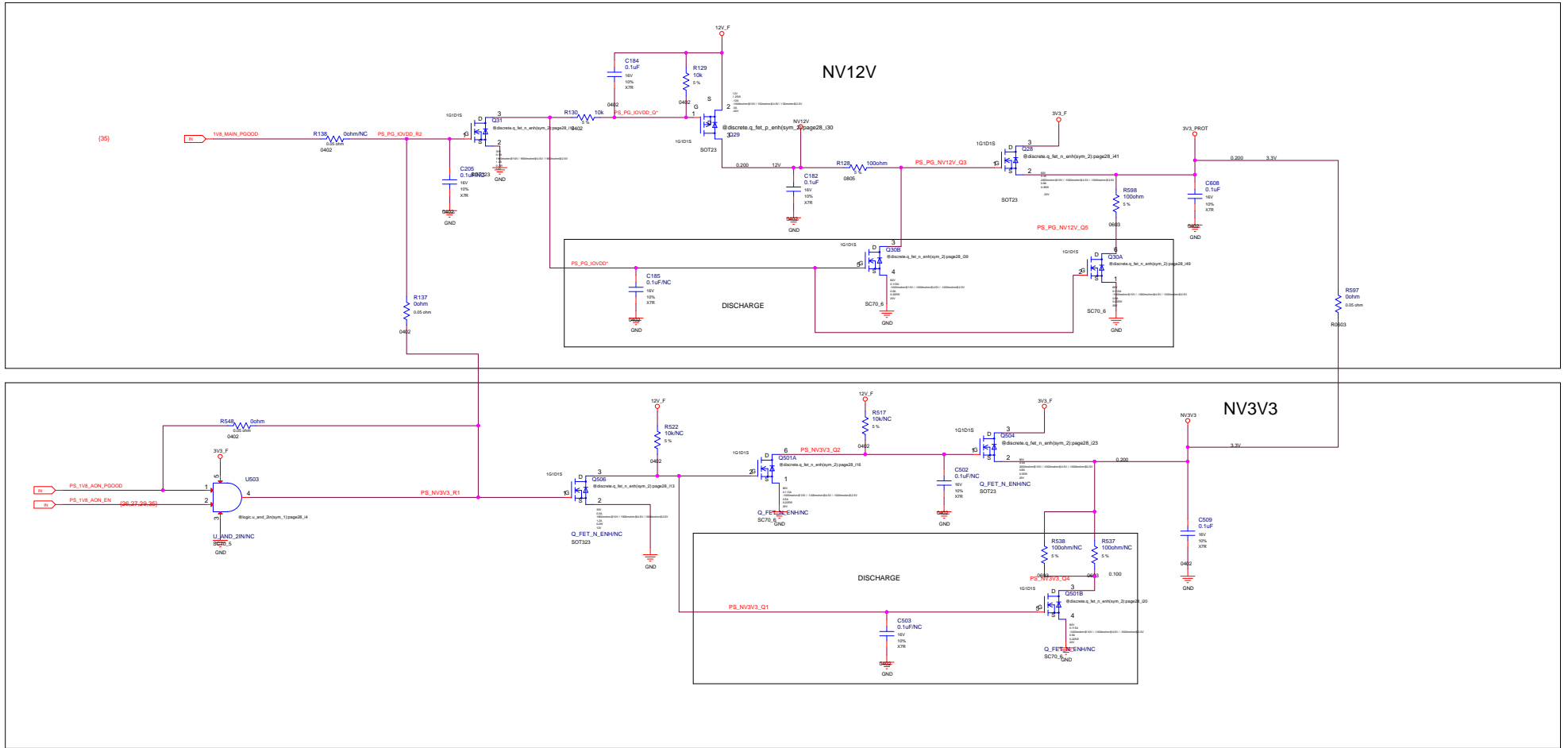


5V Switcher



PEX_VDD DISCHARGE

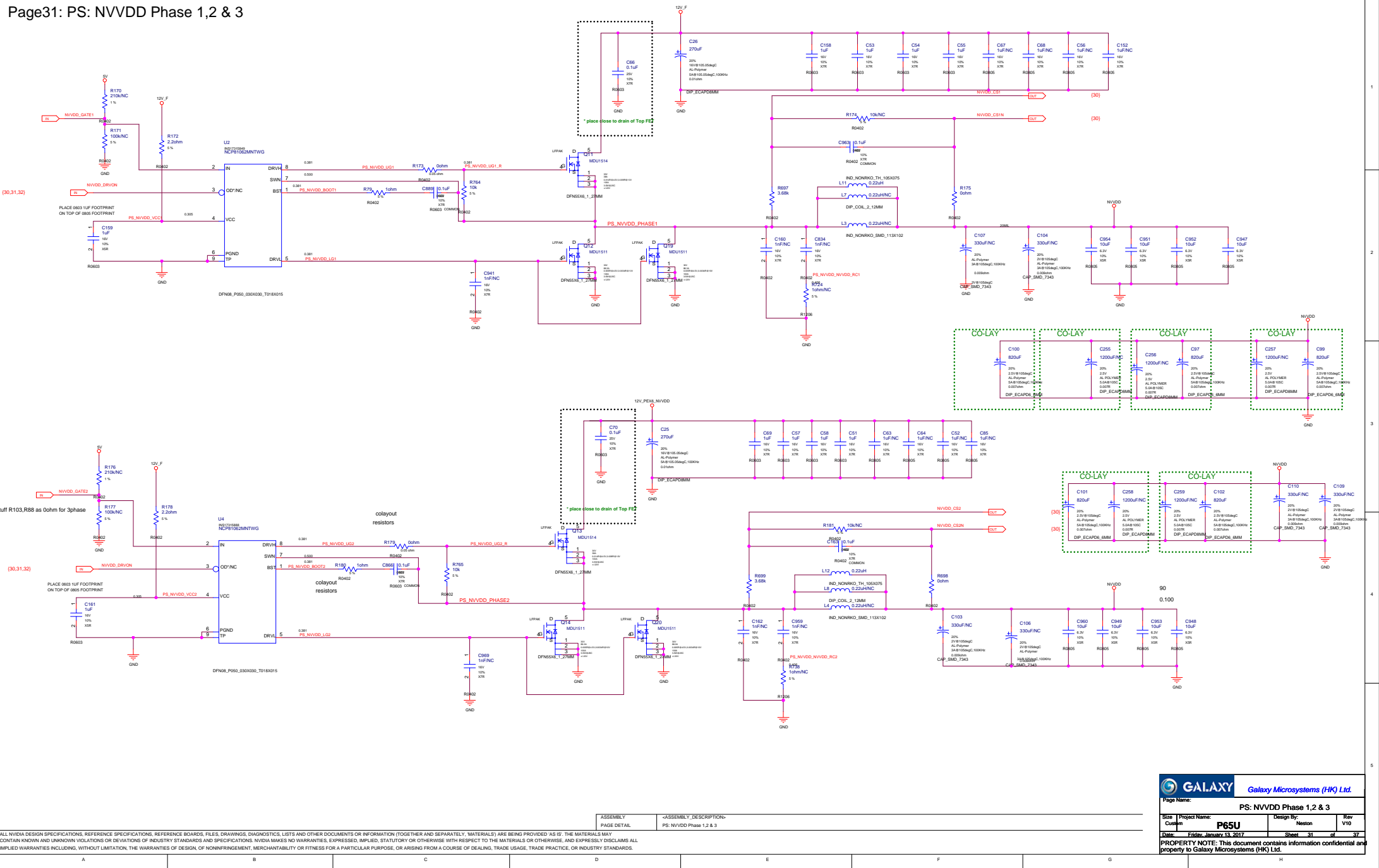


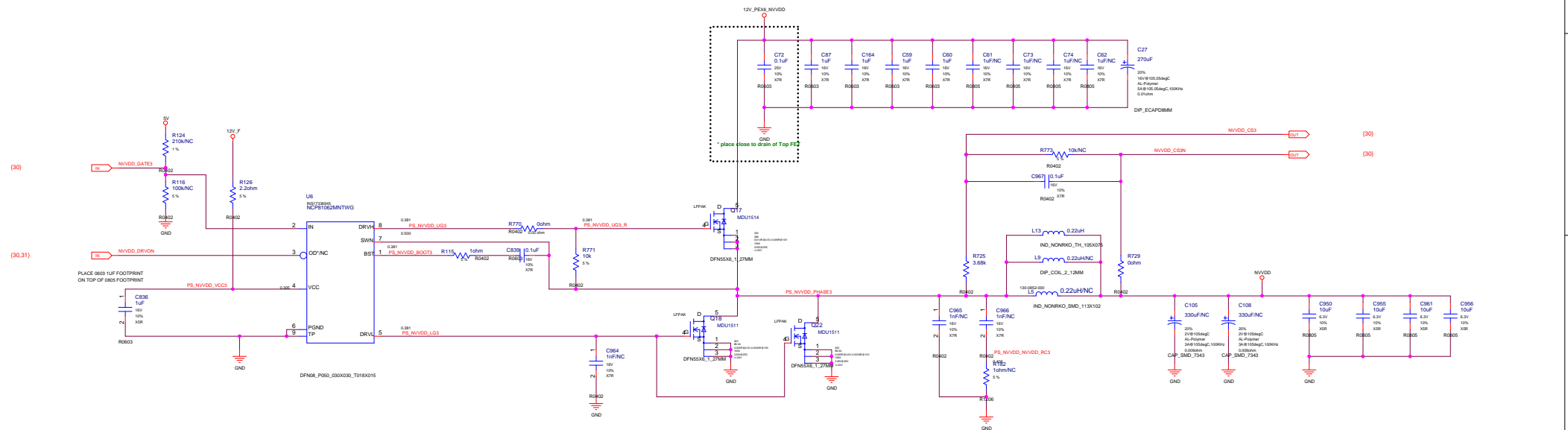


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	PS: NV3V3, NV12V


Page Name: PS: NV3V3, NV12V	
Size: P65U	Design By: Neston
Customer: P65U	Rev: V10
Date: Friday, January 13, 2017	Sheet: 28 of 37
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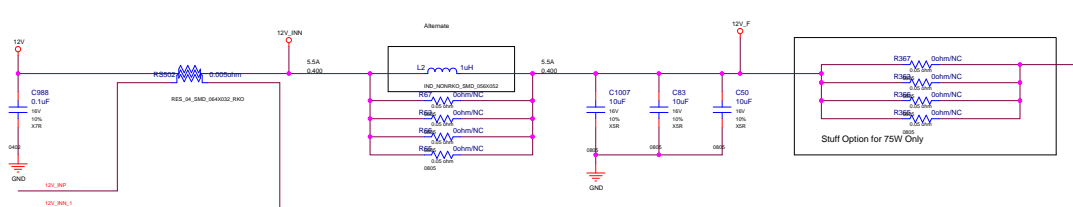
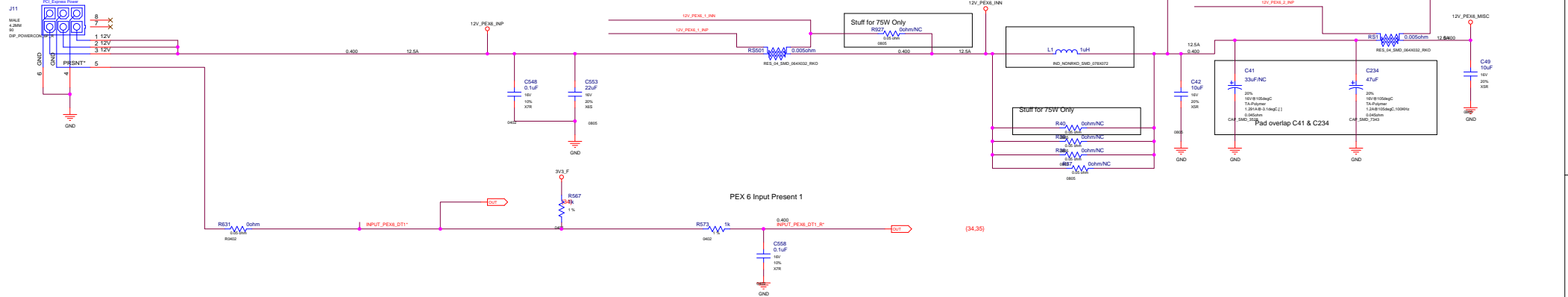
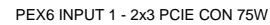
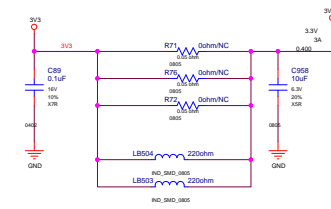
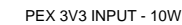
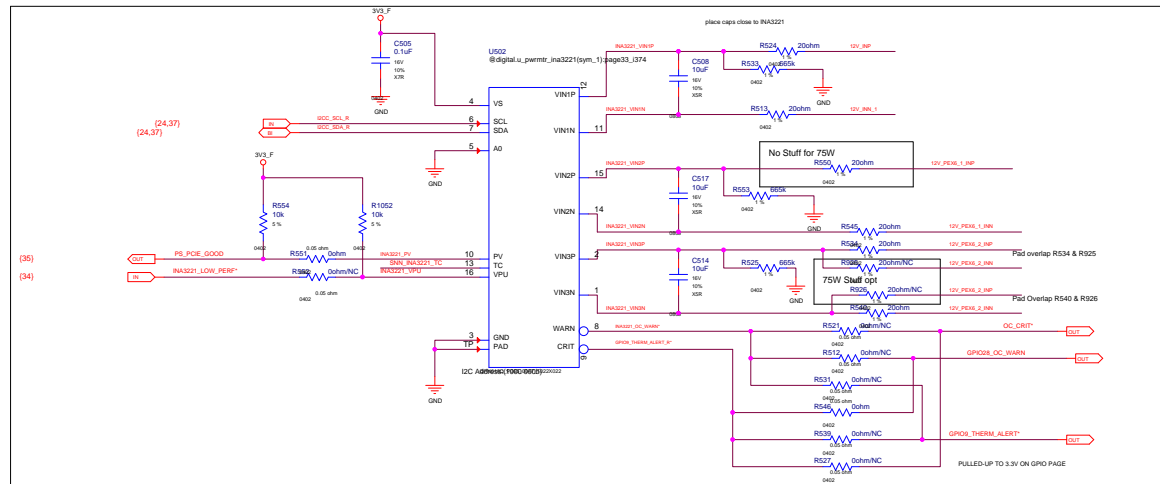


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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVDD Rail Balance Login & Dynamic Phase

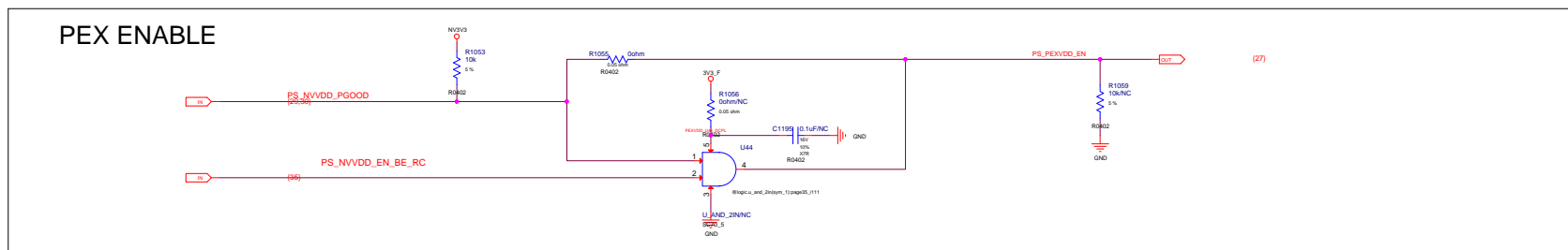
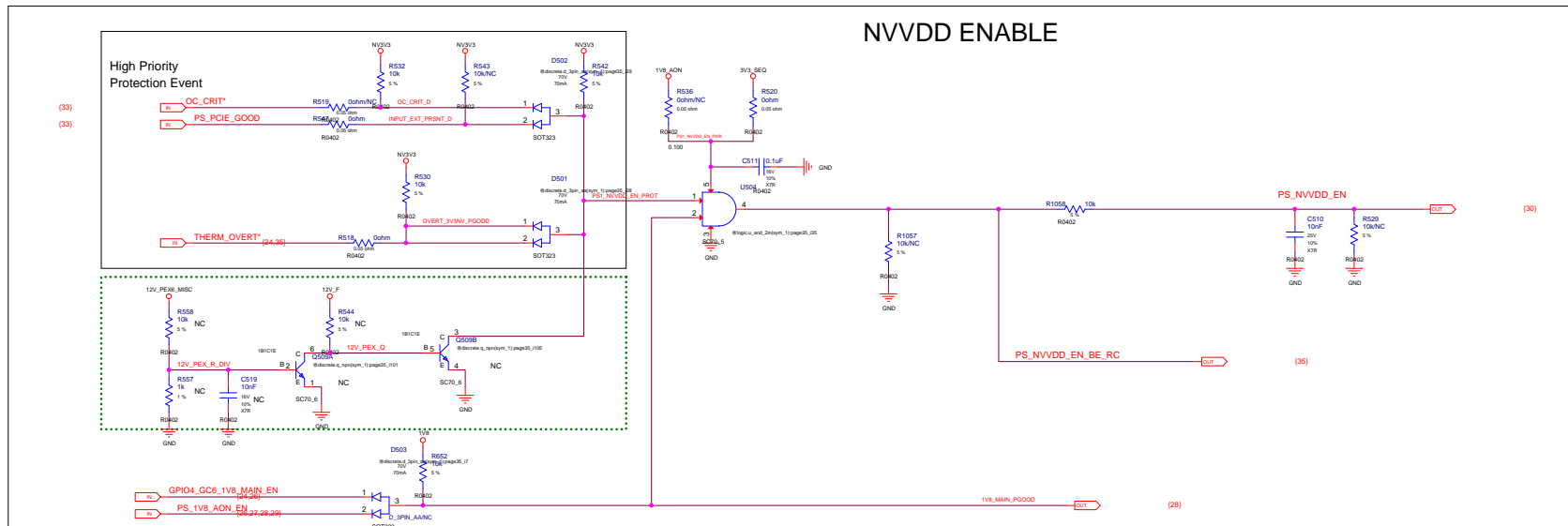
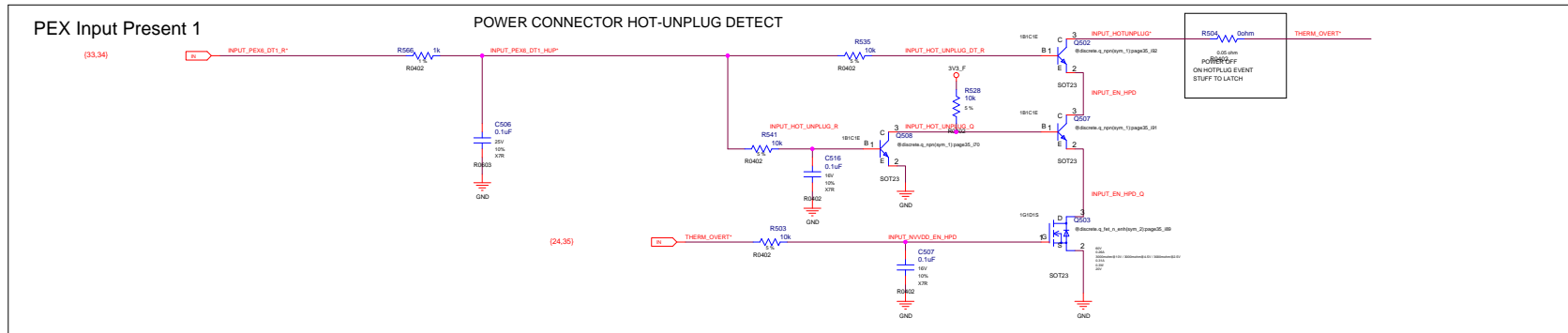
 GALAXY <i>Galaxy Microsystems (HK) Ltd.</i>	
Page Name: PS: NVVDD Rail Balance Login & Dynamic Phase	
Size Custom	Project Name: P65U
Design By: Neston	Rev V10
Date Friday, January 13, 2017	Sheet 32 of 37

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Place close to J14/J16
J14 and J16 is the soldering holes for power cable.
The power cable Need a separete wire as detect pin
This detect wire need be soldered on J15

 GALAXY		Galaxy Microsystems (HK) Ltd.	
Page Name:			
PS: Input, Filtering, and Monitoring			
Size Custom	Project Name: P65U	Design By: Neston	Rev V10
Date:	Friday, January 13, 2017	Sheet:	33 of 37
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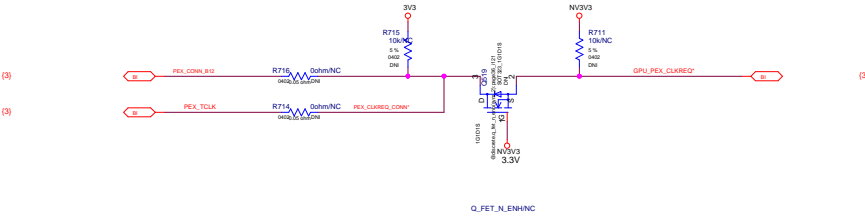


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: Shut Down and Sequencing

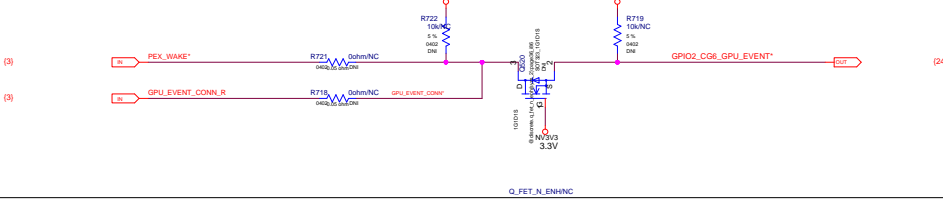
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 GALAXY		<i>Galaxy Microsystems (HK) Ltd.</i>	
Page Name:			
PS: Shut Down and Sequencing			
Size	Project Name:	Design By:	Rev
		Neston	V10
P650			
Date:	Friday, January 13, 2017	Sheet:	36 of 37
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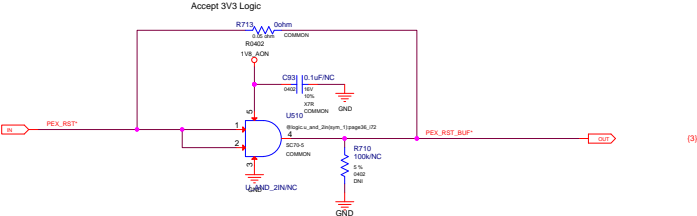
PEX_CLKREQ*



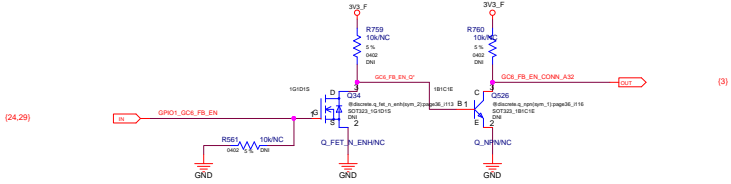
GPU_EVENT*



PEX_RST# LOGIC



GC6 FB ENABLE

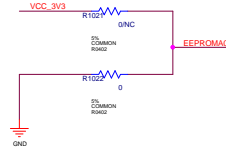
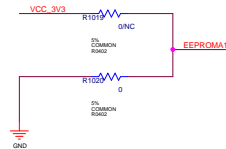
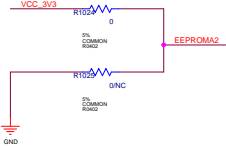
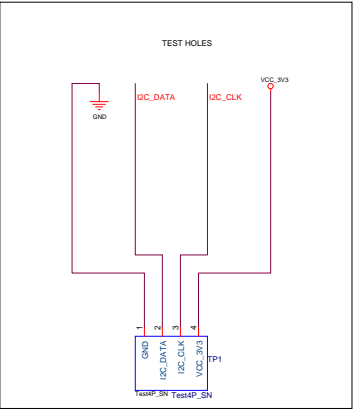


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	PS: GC6 MISC

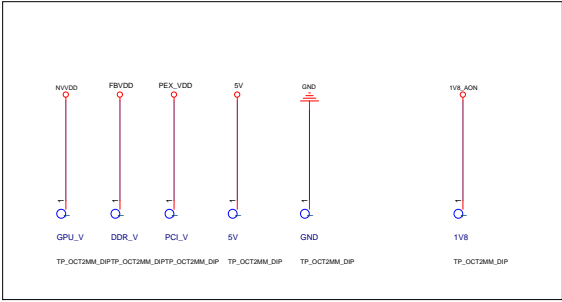
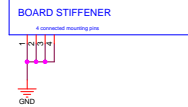
Page Name: PS: GC6 MISC			
Size	Project Name: P65U	Design By: Neston	Rev: V10
Date: Friday, January 13, 2017	Sheet: 38	4	37
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37_MECH_SN EEPRON

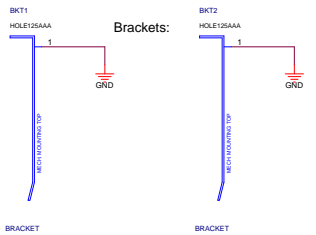


MOUNTING HOLES FOR HS DS:

GPU Stiffener:




MOUNTING HOLES FOR HS SS:



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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	MECH

 GALAXY		<u>Galaxy Microsystems (HK) Ltd.</u>	
Page Name: MECH_SN EEPRON			
Size Custom	Project Name: P65U	Design By: Neston	Rev V10
Date: Friday, January 13, 2017		Sheet 37	of 37
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