

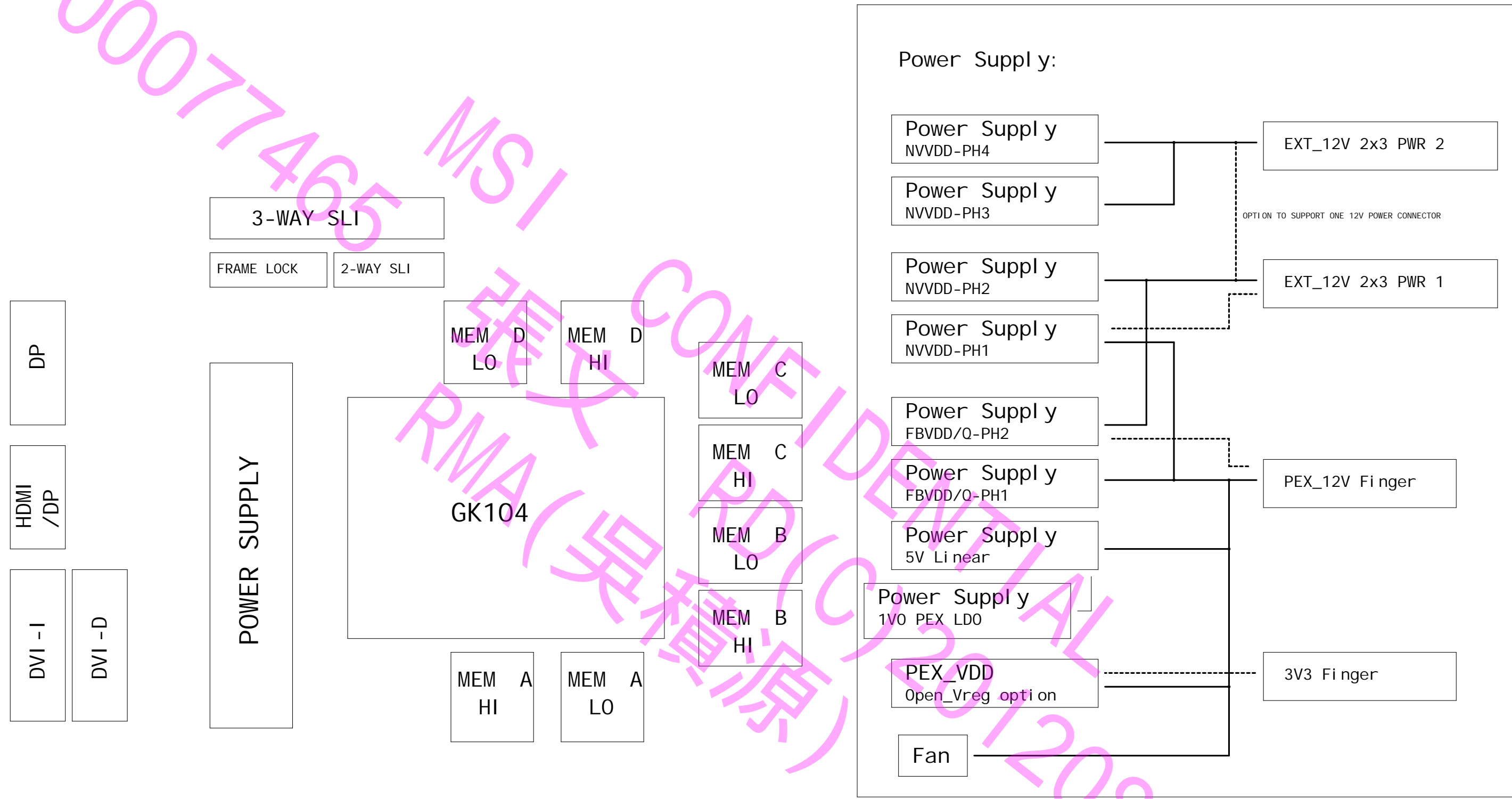
P2004

4/2GB GDDR5, 256/192b, 128Mx16/64Mx32
DVI -I +DVI -D (stacked) + HDMI /DP + DP

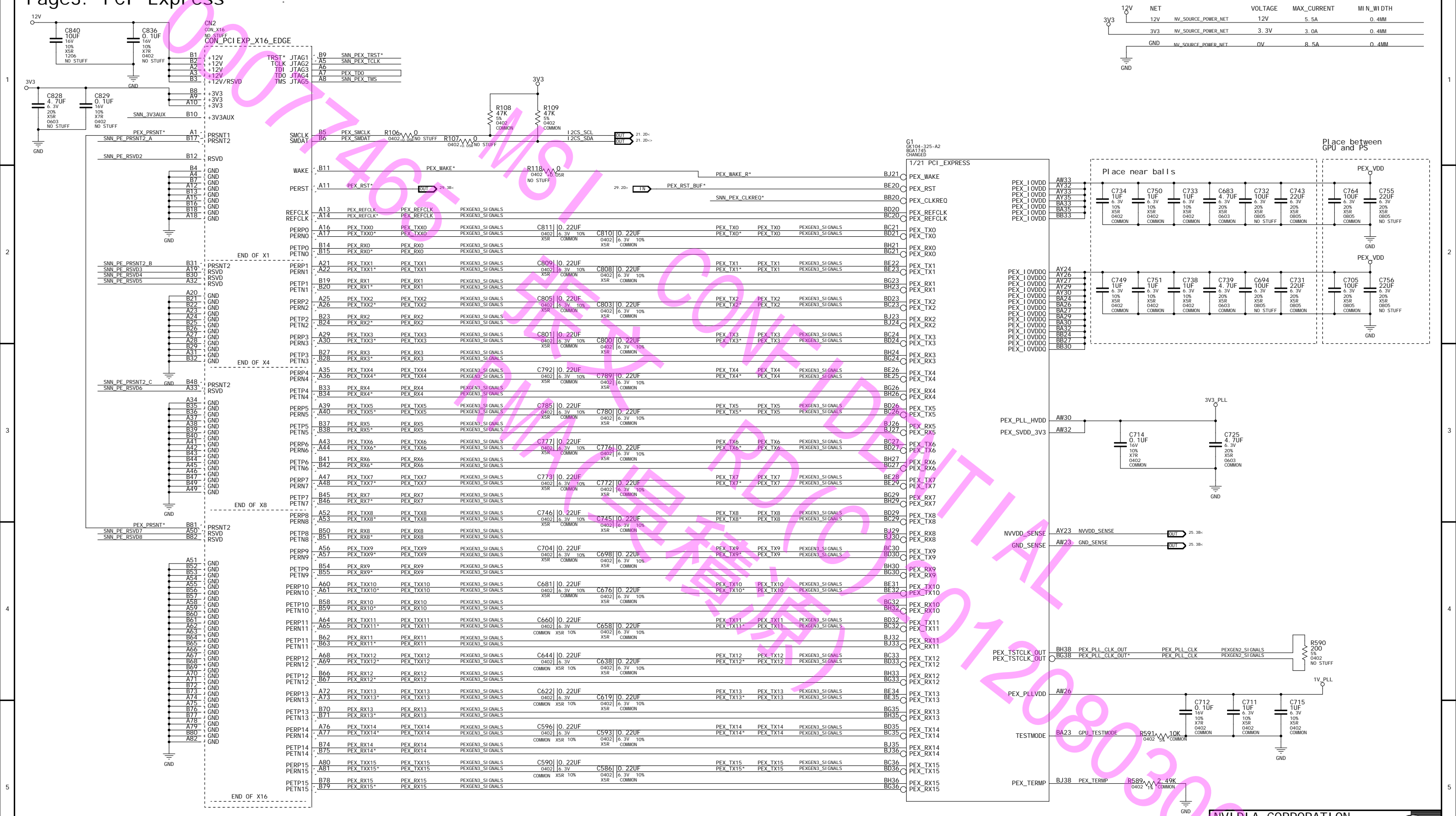
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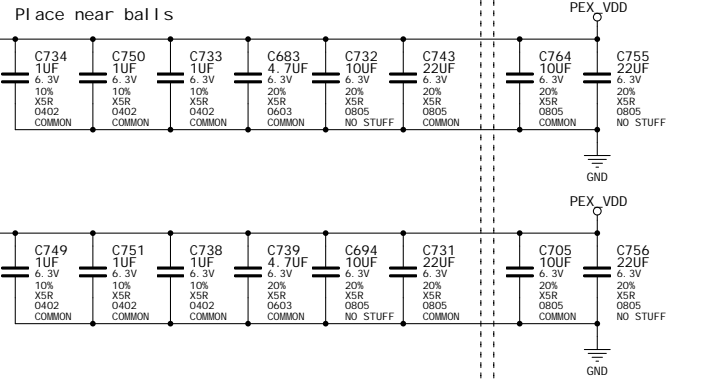
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29	PS: Thermal Shutdown & Lighted SLI DRIVER
30	PS: 12V Current Steering
31	MECH



Page3: PCI Express



VOLTAGE		MAX_CURRENT	MI N_WI DTH
12V	NET	12V	5.5A
3V3	NET	3.3V	3.0A
0V	NET	0V	0.4MM



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ASSEMBLY

SKU0005: GK104-325 / 256-BIT 2048MB GDDR5 / STACKED DVI + HDMI + DP

PAGE DETAIL

PCI Express

NV_PN

600-12004-0005-QS1

PCB REV

P2004-A00

BOM REV

A

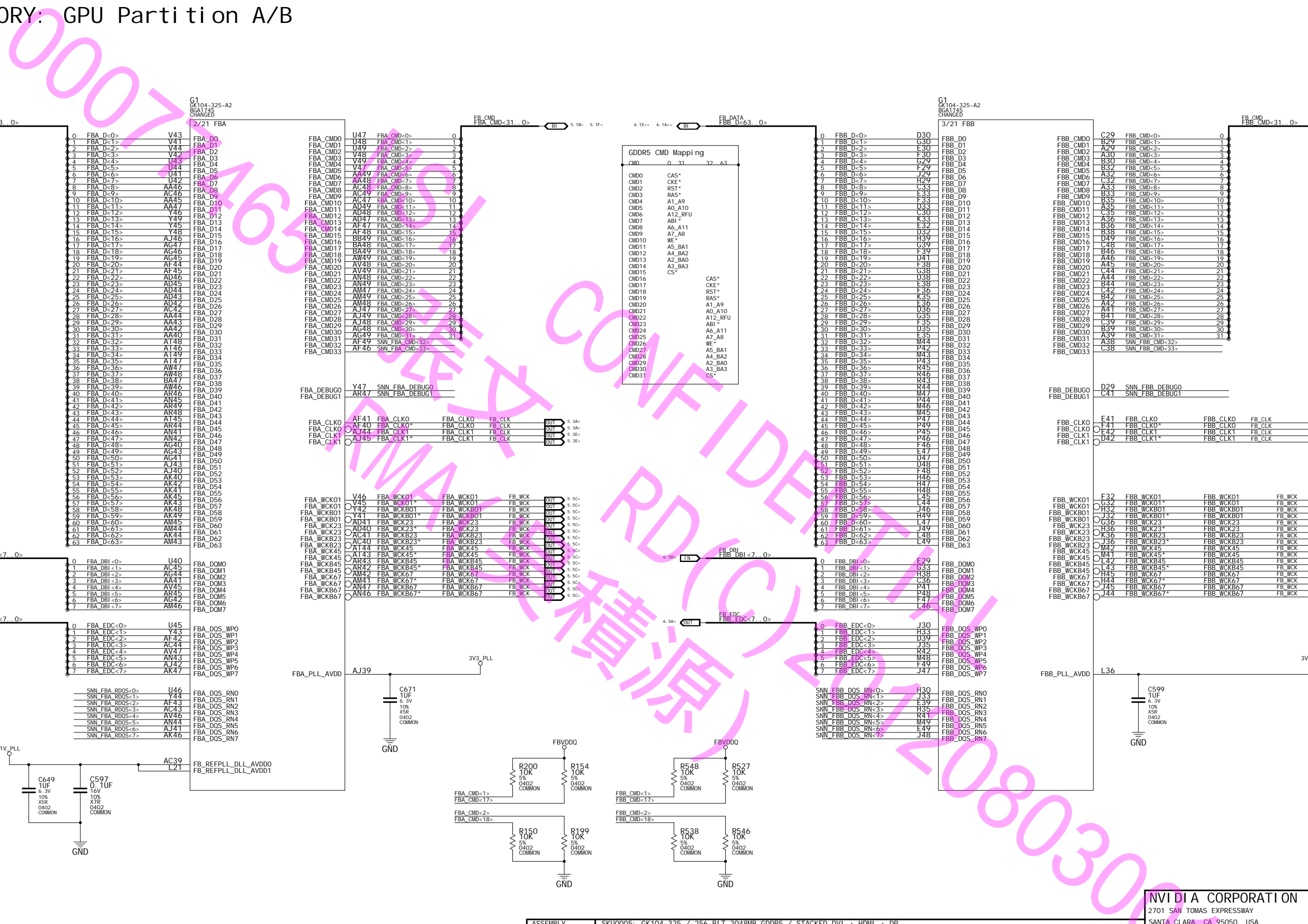
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DATE

23-FEB-2012

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25F8-FC04

MI RR

FF

COORED

X16

NC

NC

NC

NC

NC

NC

NC

R254

FBVDDO

BI

FBB_D<31...0>

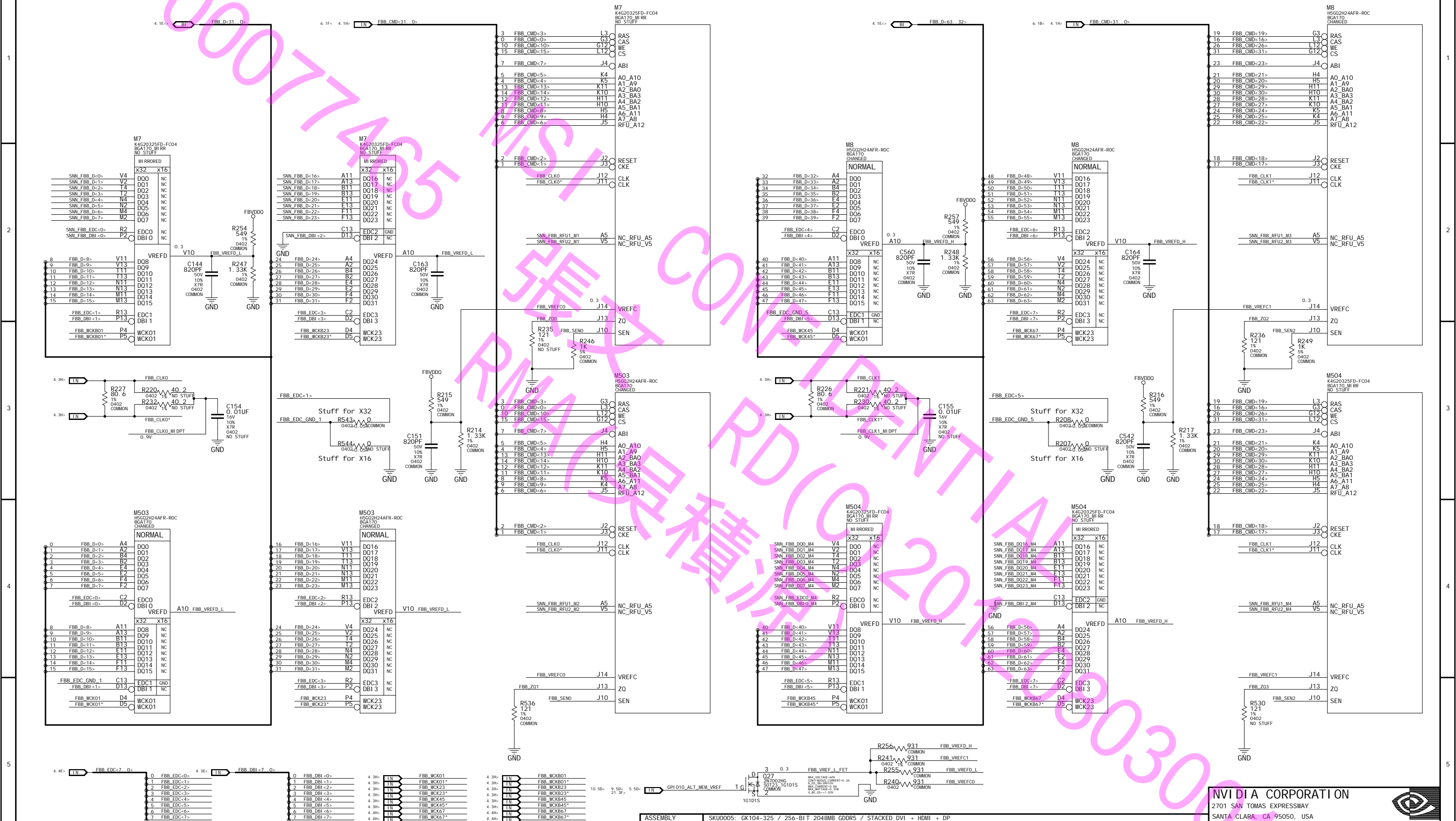
4.1E+V

6.1F+V

4.1H+V

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SNN_FBB_D<20>	E11
SNN_FBB_D<21>	E13
SNN_FBB_D<22>	F11
SNN_FBB_D<23>	F13

C13



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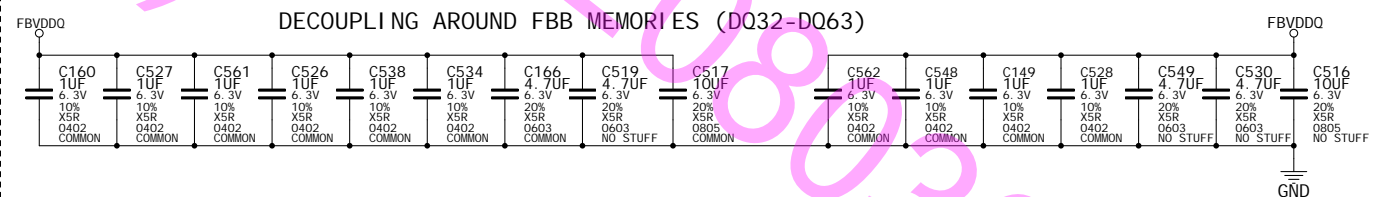
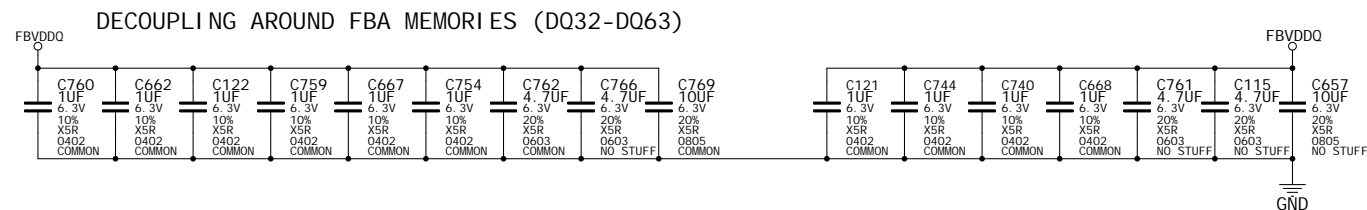
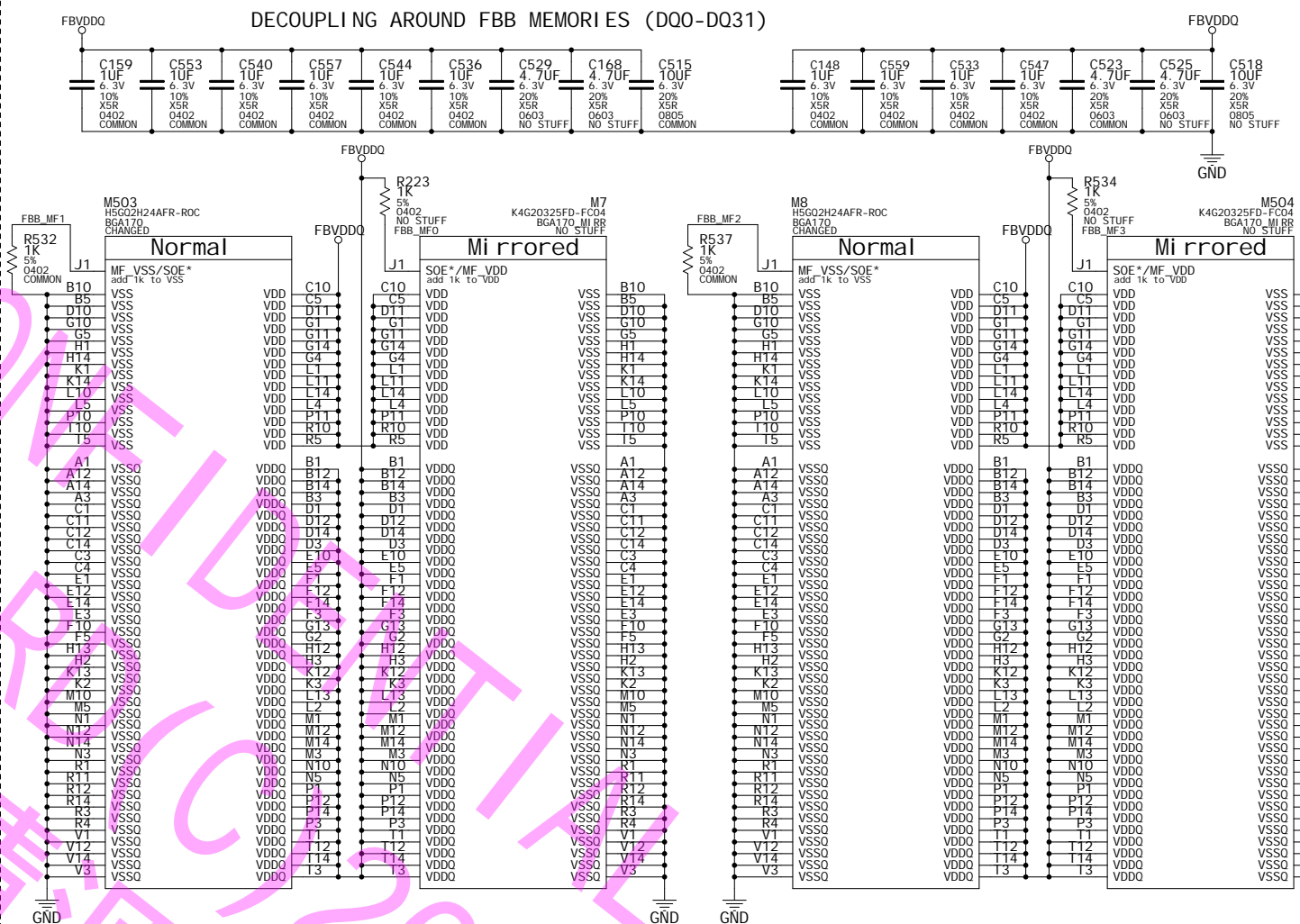
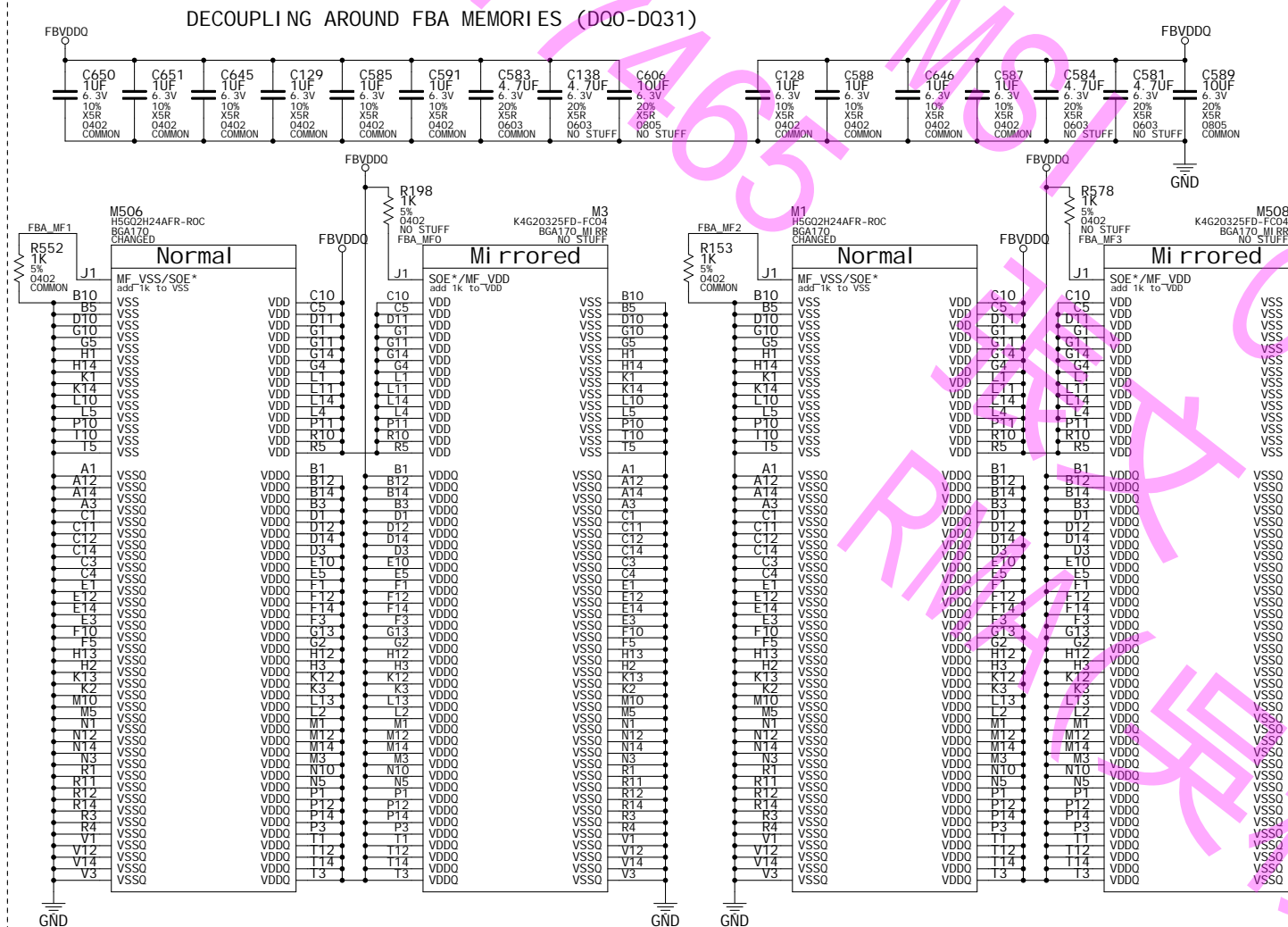
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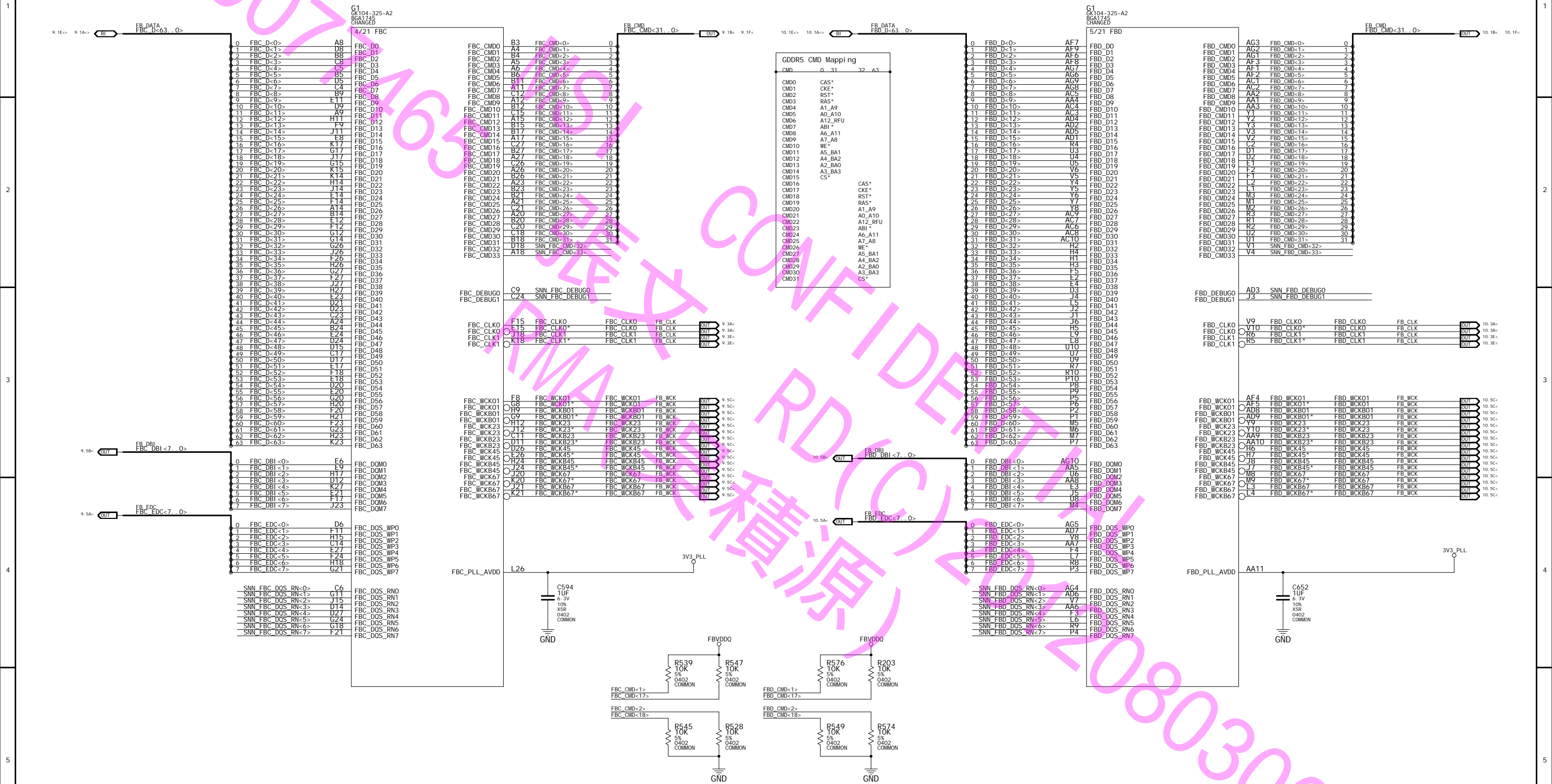
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PAGE7: FRAME BUFFER PARTITION A/B DECOUPLING





IC202

ASSEMBLY SKU0005: GK104-325 / 256-BIT 2048MB GDDR5 / STACKED DVI + HDMI + DP

MEM FB_C

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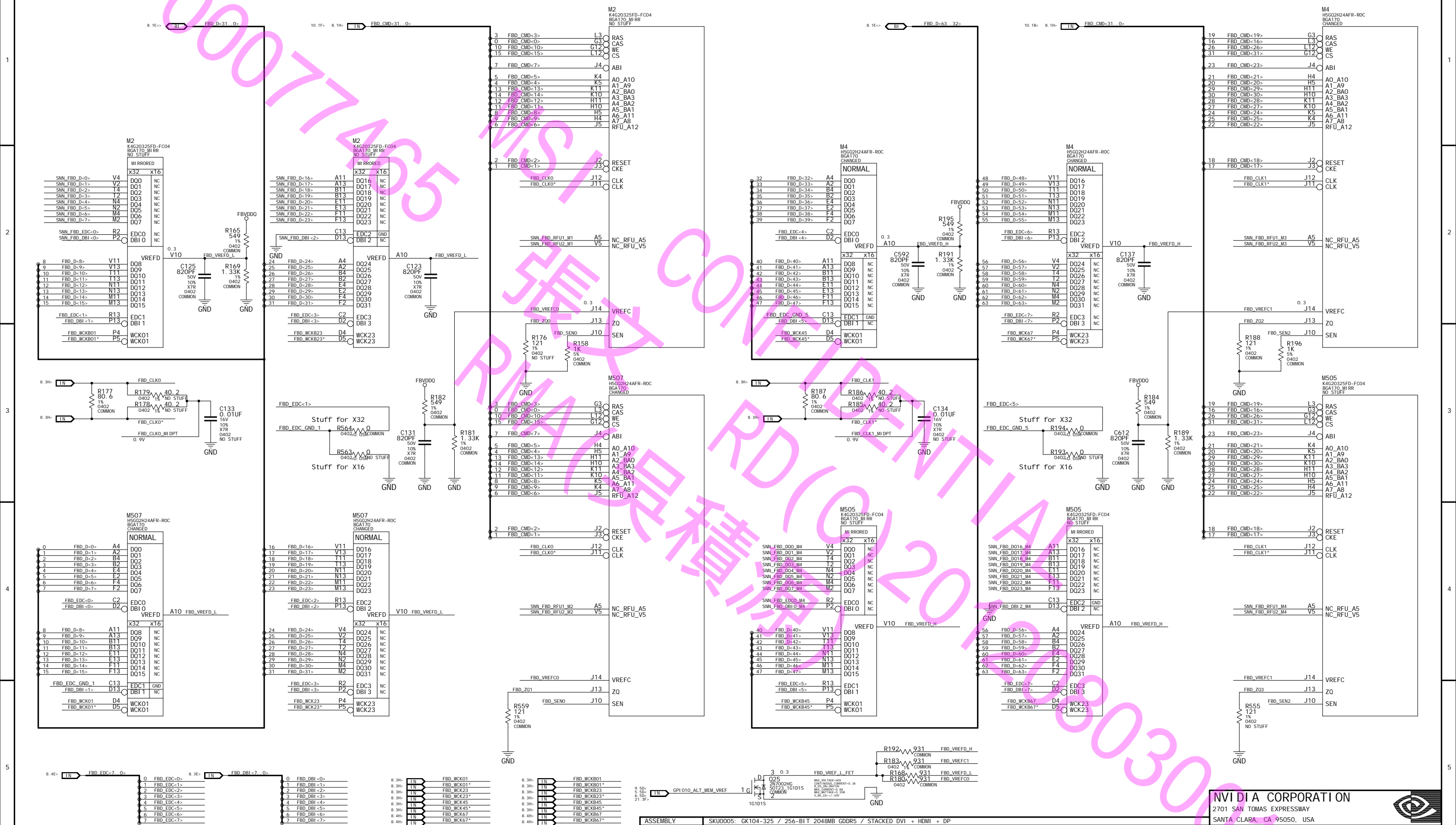
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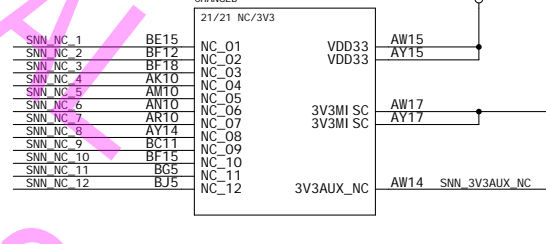
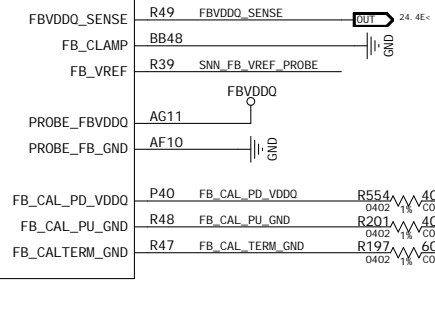
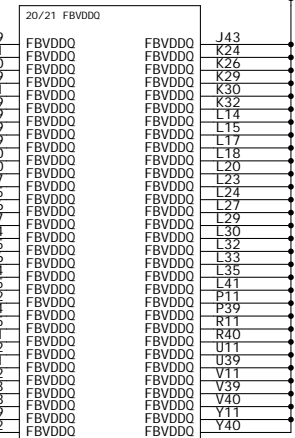
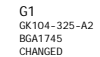
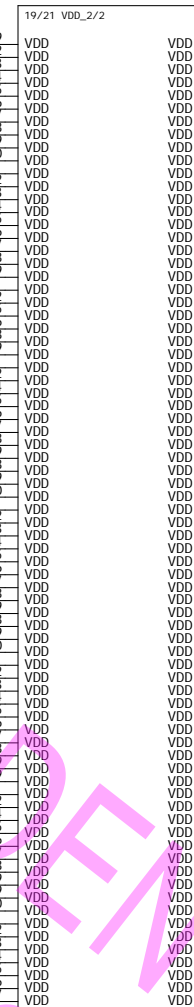
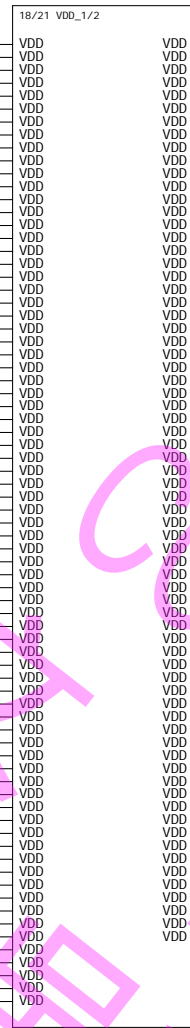
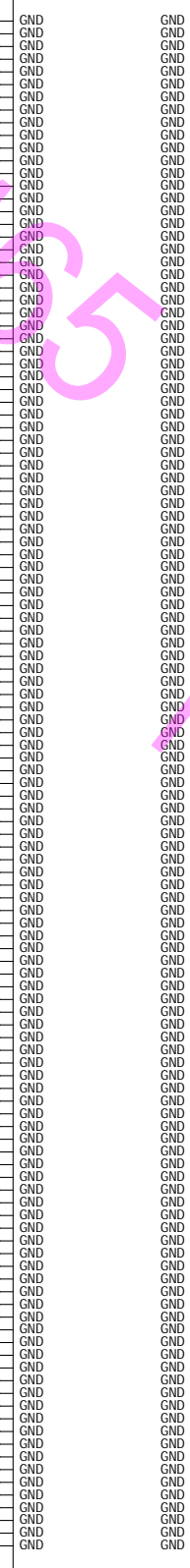
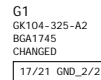
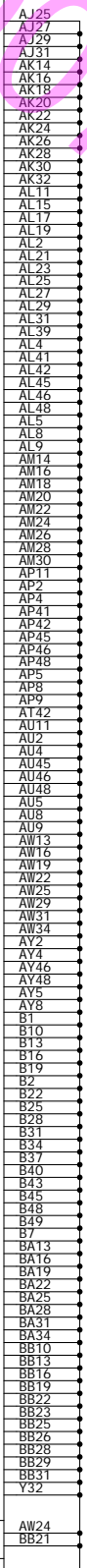
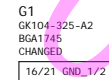


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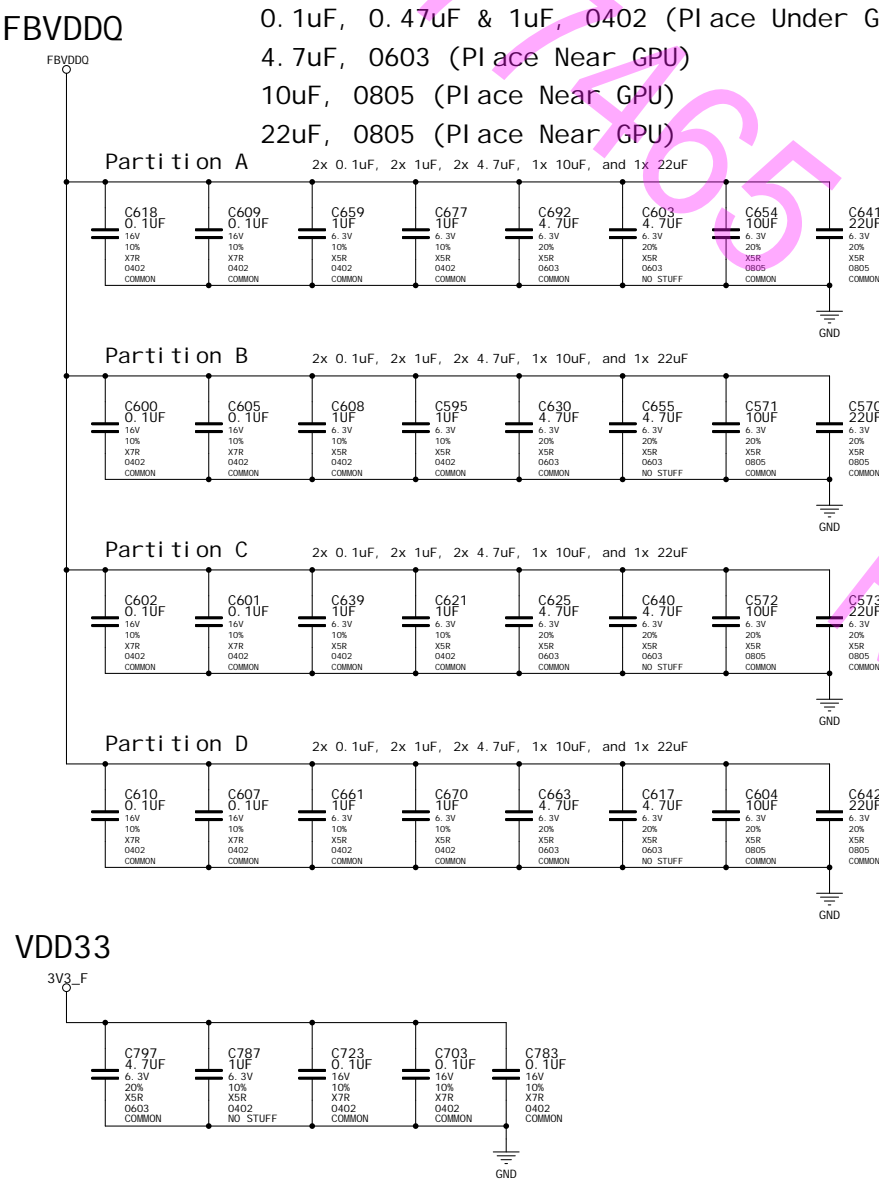
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PAGE10: FRAME BUFFER PARTITION D

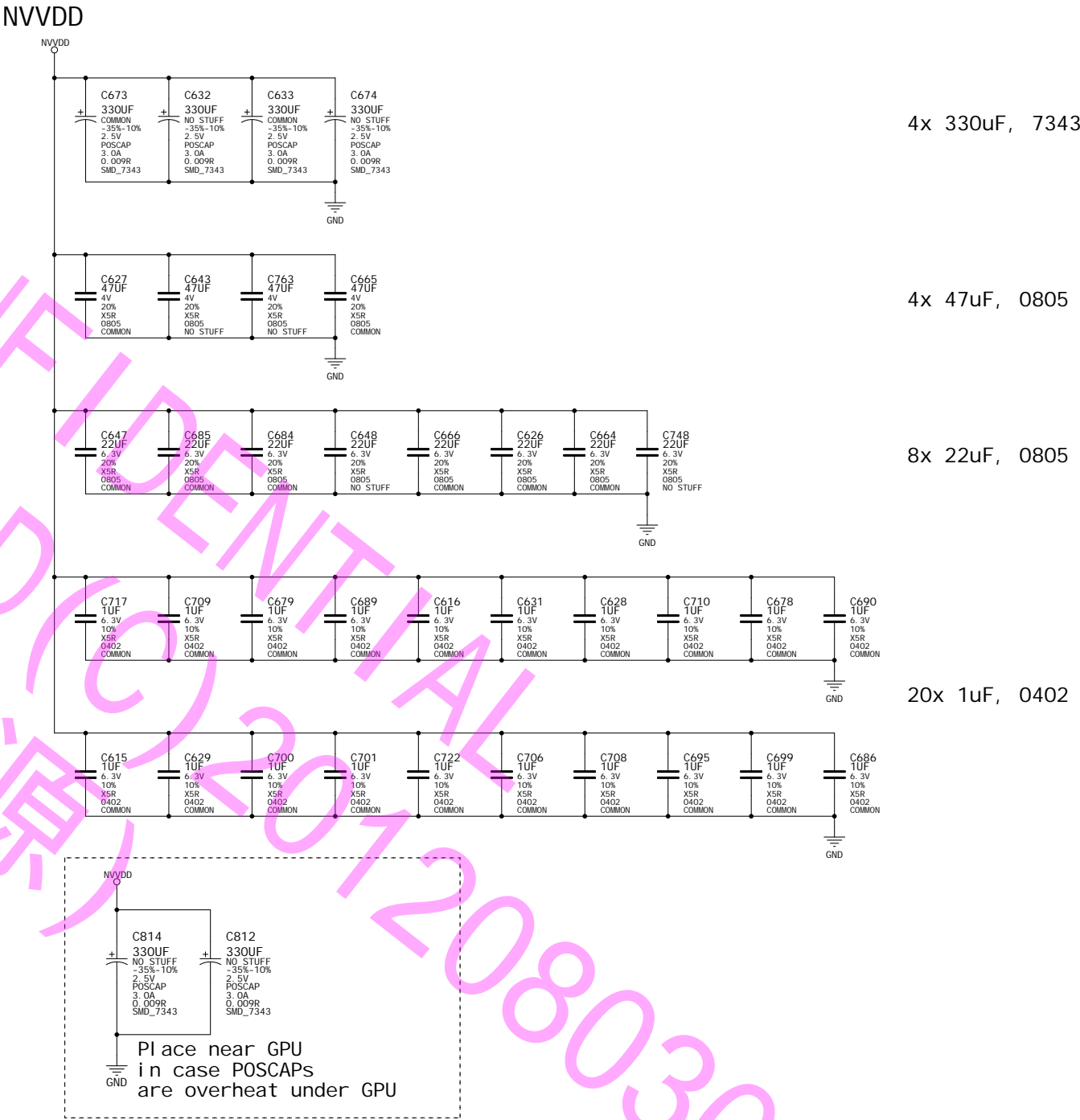


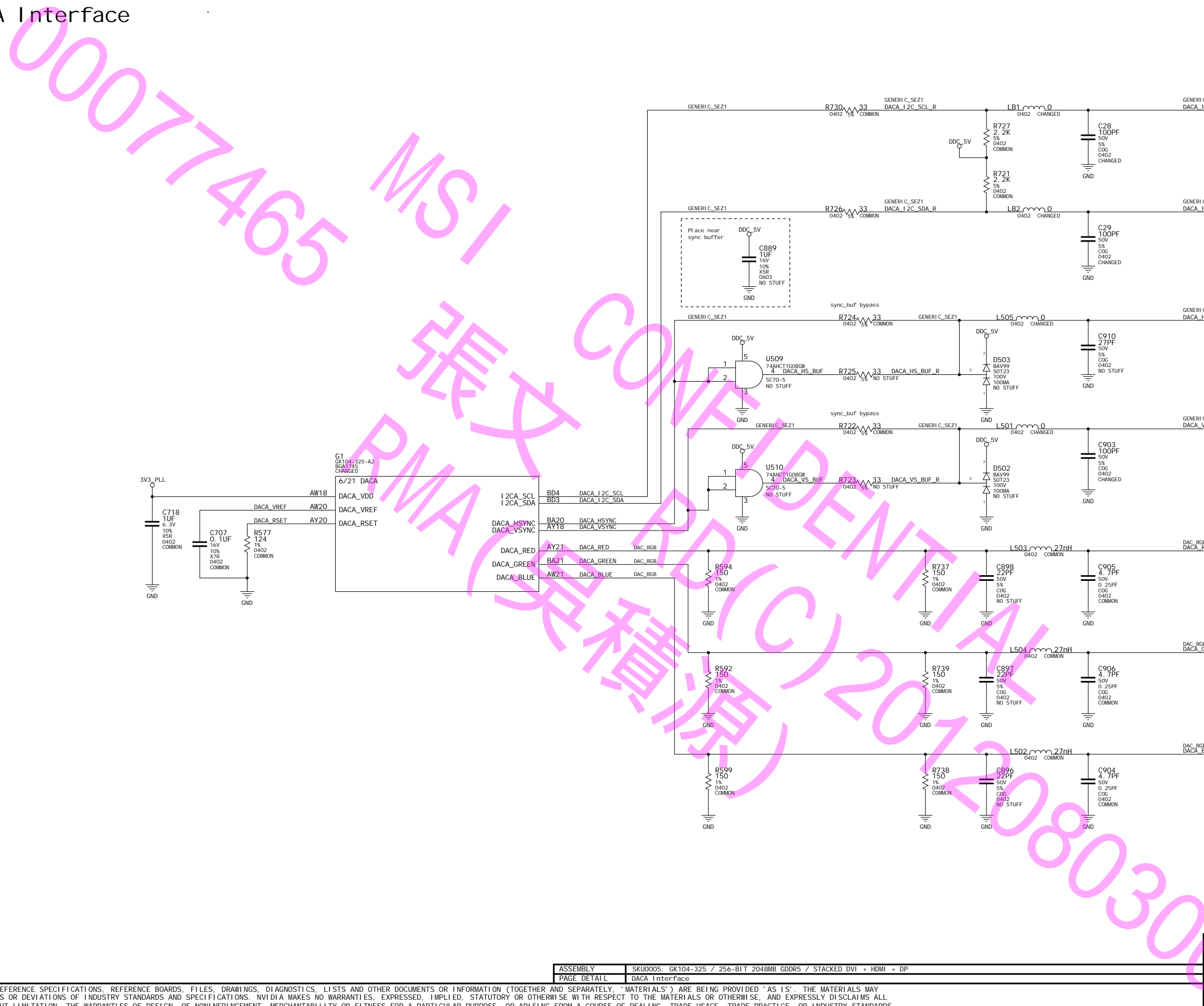



Based on GB2-X GDDR5 FBVDDQ Decap Guideline




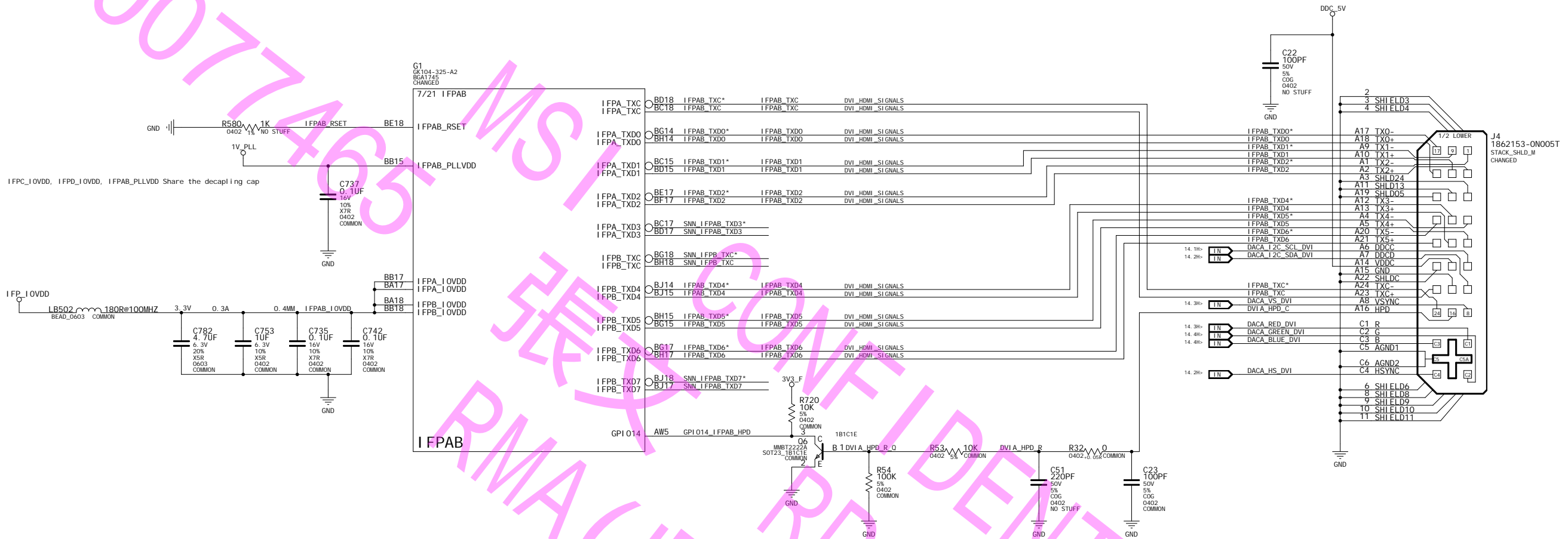
NVVDD Decoupling caps. Place under GPU.



[illegible]

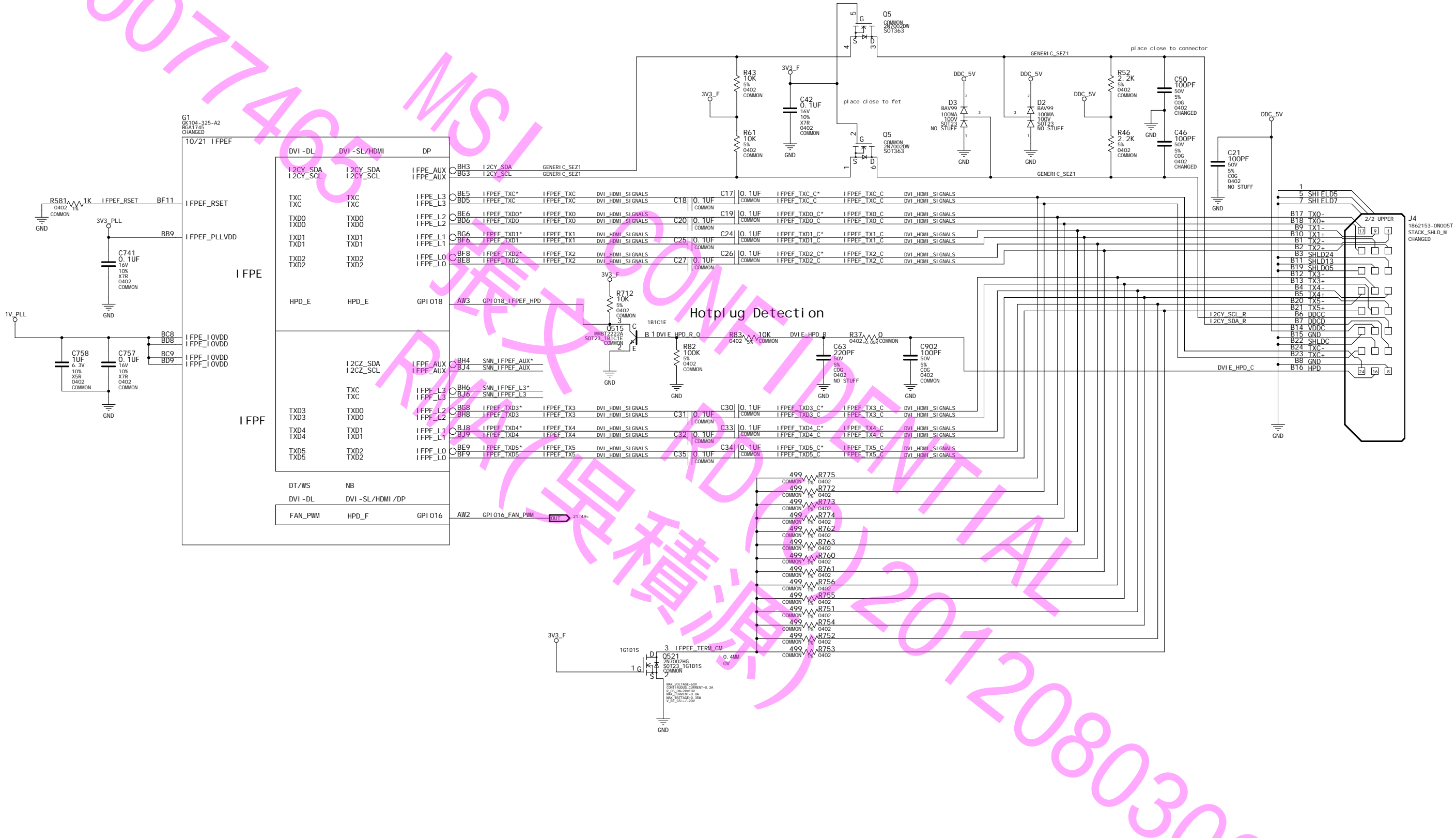
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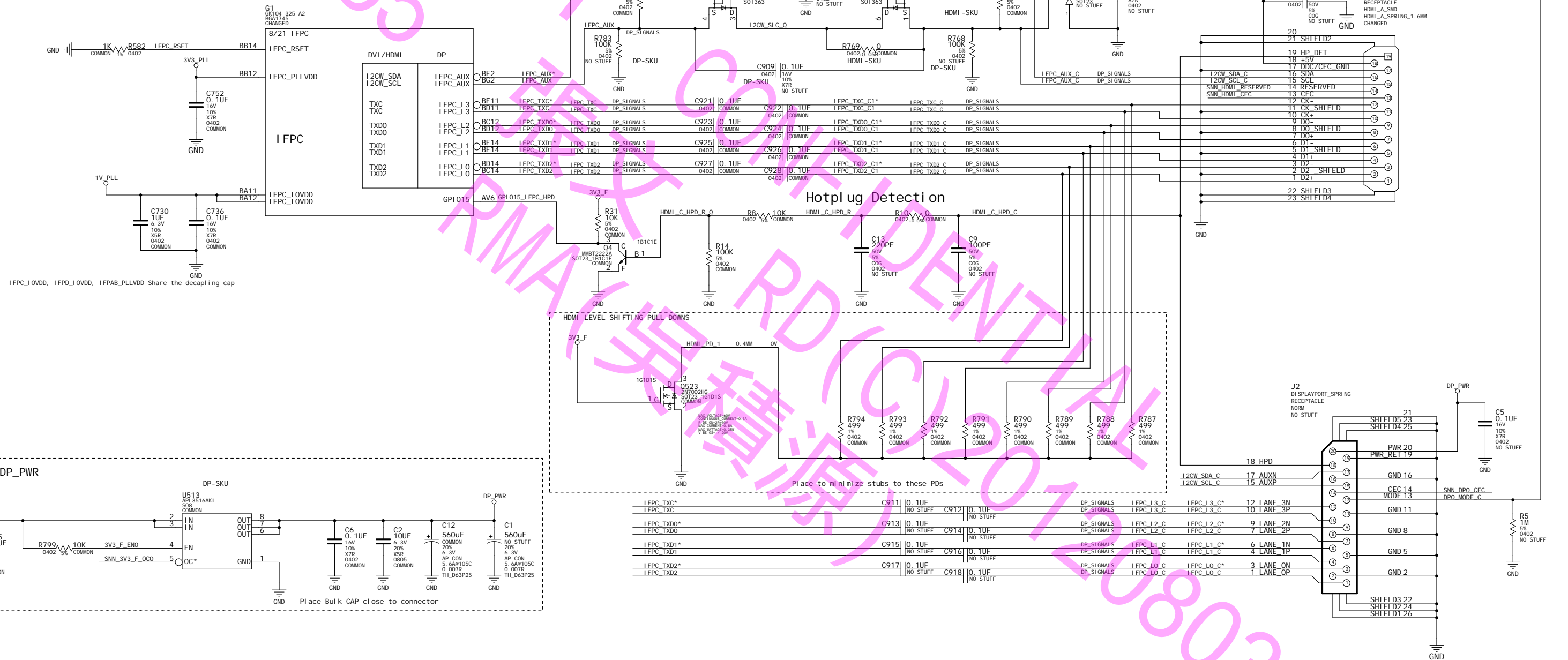
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Two cases to be considered:

1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through

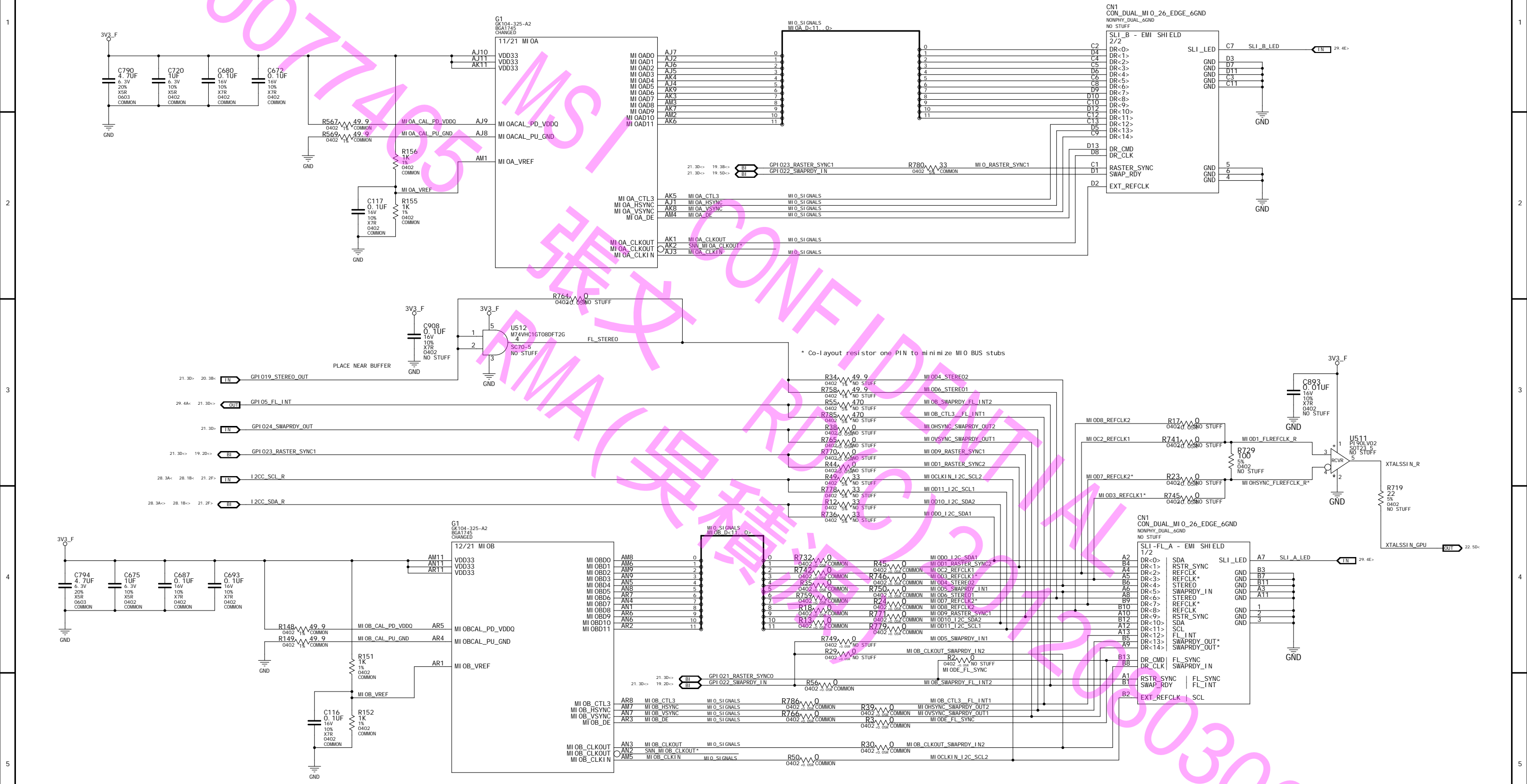
* I2C to DDC level switching

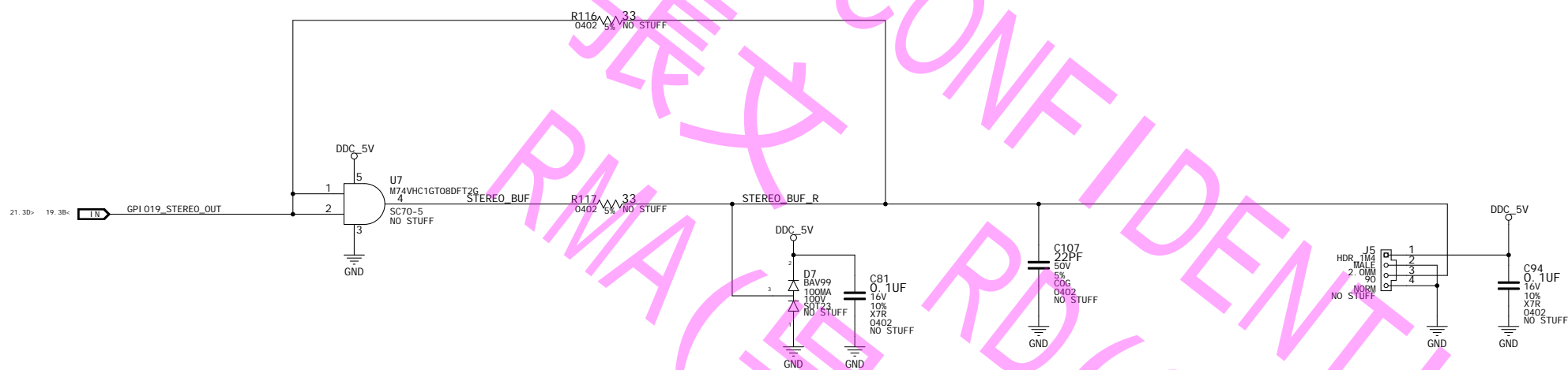


Hotplug Detection



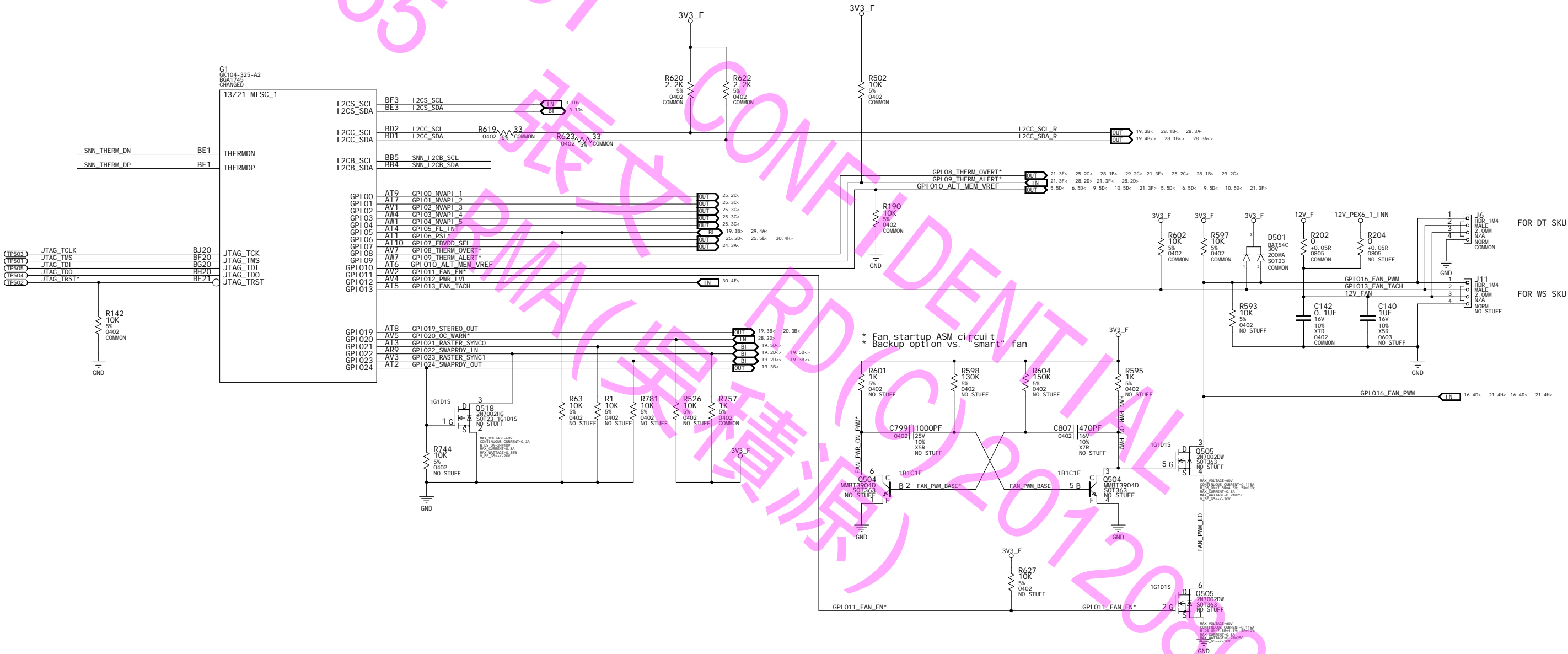
Page19: MI 0A/B Interface and Frame Lock





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Page22: MI SC2: ROM, XTAL, Straps

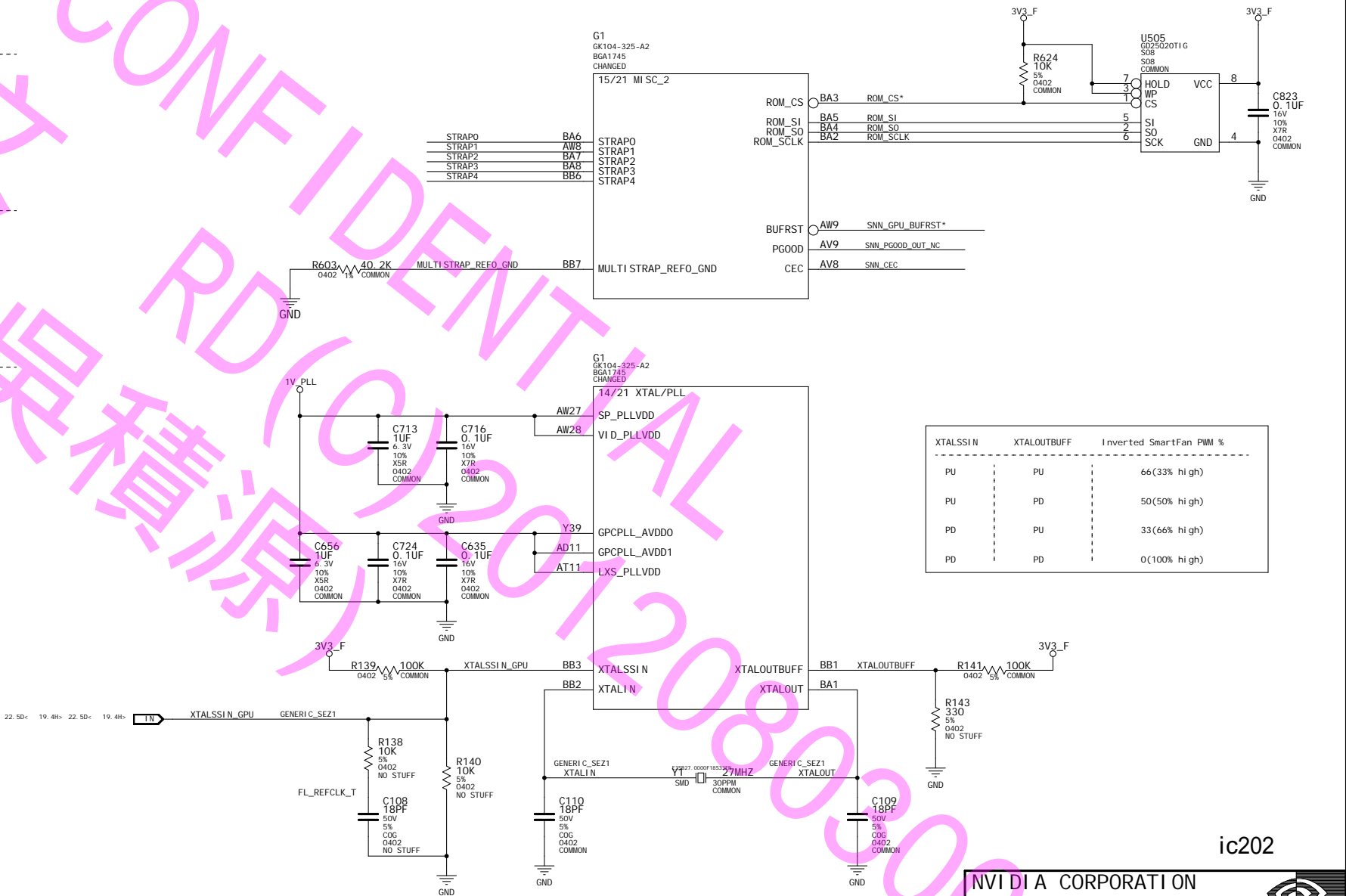
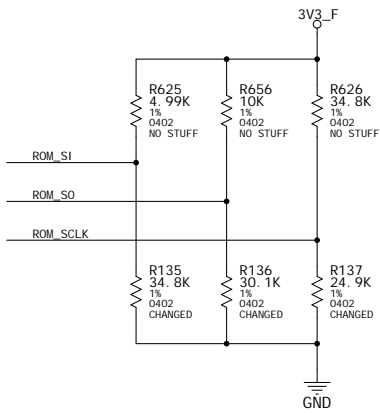
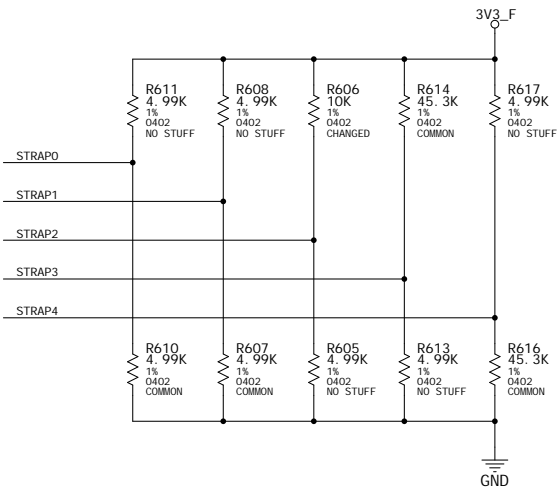
STRAPO	USER_BIT [3:0]*	0000*	5K PD*
STRAP1	3GIO_PADCFG_LUT_ADR*	0000*	5K PD Desktop*
STRAP2	PCI_DEVID [3:0]*	1001 - (0x1189)*	10K PU -325 GPU*
STRAP3	SOR_EXPOSED [3:0]*	1111*	45K PU*
STRAP4	DP_PLL_VDD_33V*	1* FOR 3_3V*	
	PEX_MAX_SPEED*	1* FOR GEN2/3*	45K PD*
	PEX_SPD_CHANGE_GEN3*	1* ENABLED*	
	*		

ROM_SI	RAMCFG[0]*	0*	
	RAMCFG[1]*	1*	64Mx32 256 bit hynix for SKUS primary memory
	RAMCFG[2]*	1*	35K PD*
	RAMCFG[3]*	0*	
ROM_SO	VGA_DEVICE*	1*	
	SMB_ALT_ADDR*	0*	30K PD*
	FB[0]_APERTURE_SIZE*	1* For 128MB*	
	FB[1]_APERTURE_SIZE*	0* For 128MB*	
ROM_SCLK	PEX_PLL_EN_TERM100*	0* DI SABLE*	
	PCI_DEVID_EXT[5]*	0* For 0x1189*	25K PD*
	SUB_VENDOR*	1* Dedicated BIOS*	
	PCI_DEVID_EXT[4]*	0* For 0x1189*	

	GND	3V3
5k	0000	1000
10k	0001	1001
15k	0010	1010
20k	0011	1011
25k	0100	1100
30k	0101	1101
35k	0110	1110
45k	0111	1111

X32 MODE 256bit			
CFG[3:0]	Config	Width	Vendor
0000	Reserved		
0001	32Mx32	256-bit	Elpi da
0010	32Mx32	256-bit	Hyni x
0011	32Mx32	256-bit	Samsung
0100	Reserved		
0101	64Mx32	256-bit	Elpi da
0110	64Mx32	256-bit	Hyni x
0111	64Mx32	256-bit	Samsung

	MULTI_STRAP_REFO_GND
BINARY PRODUCTION	NC
BINARY BRINGUP	NC
MULTI-LEVEL	40.2k 1% TO GND



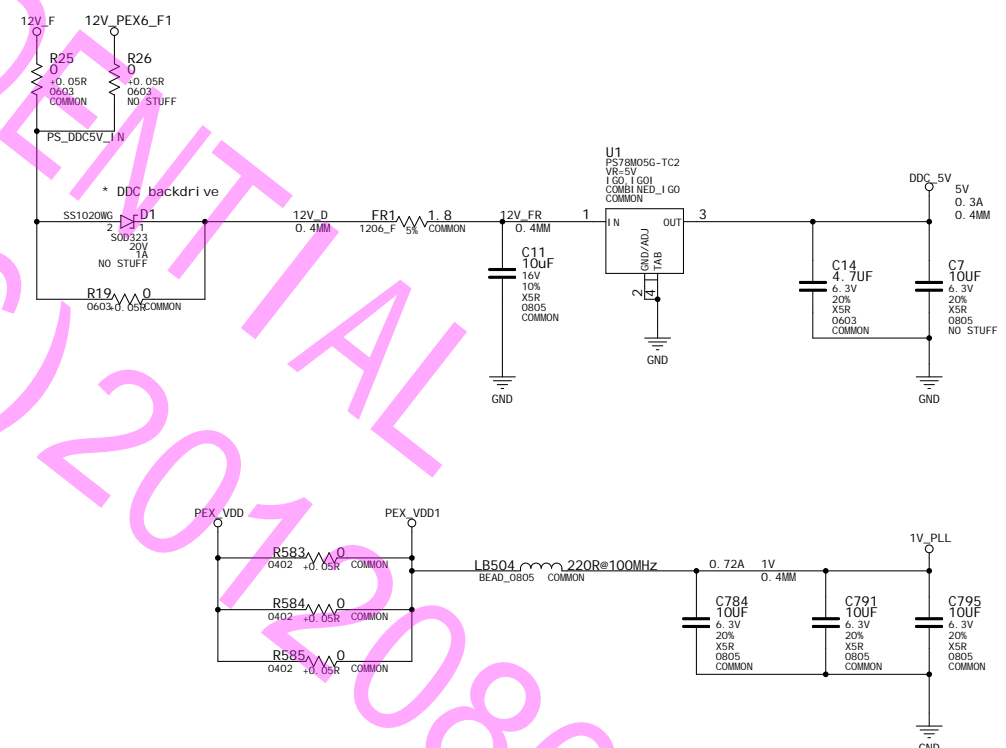
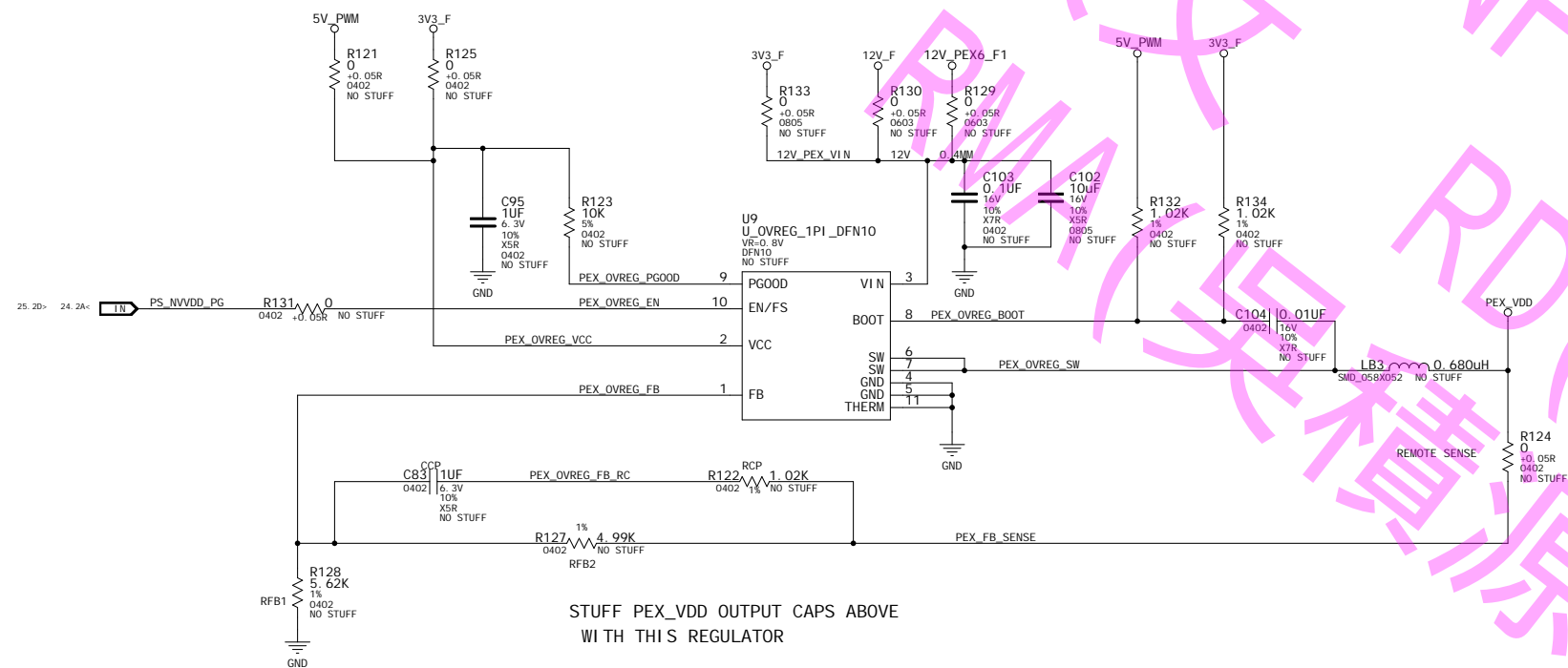
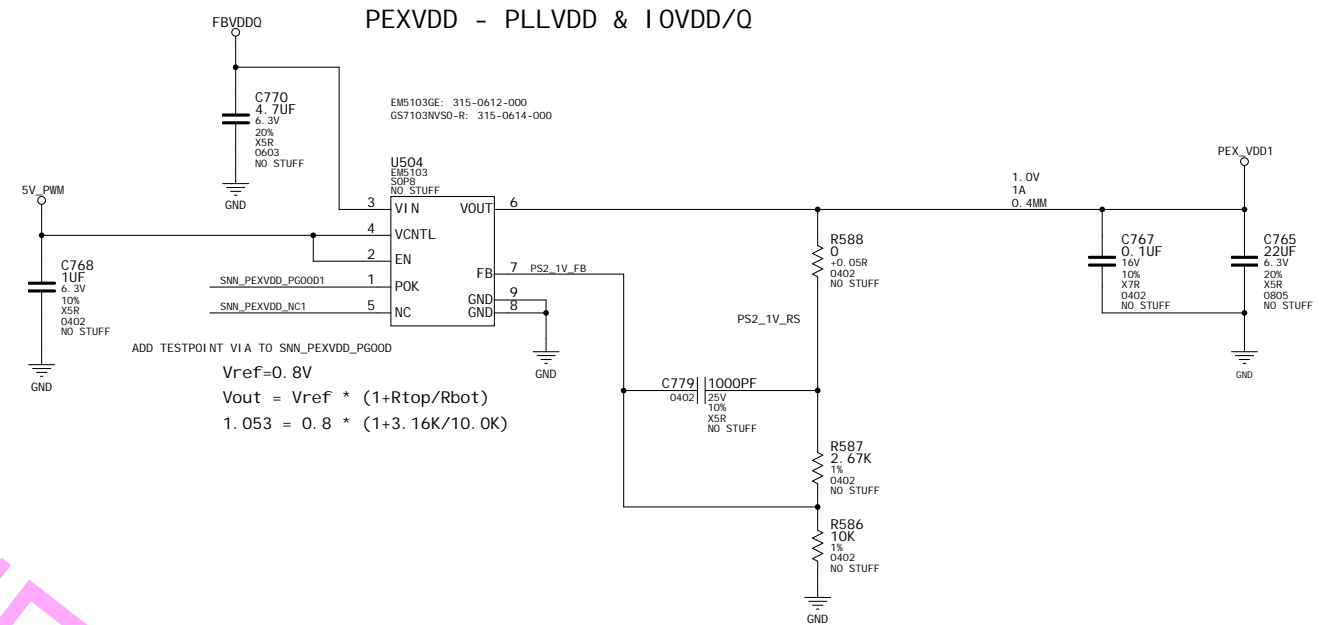
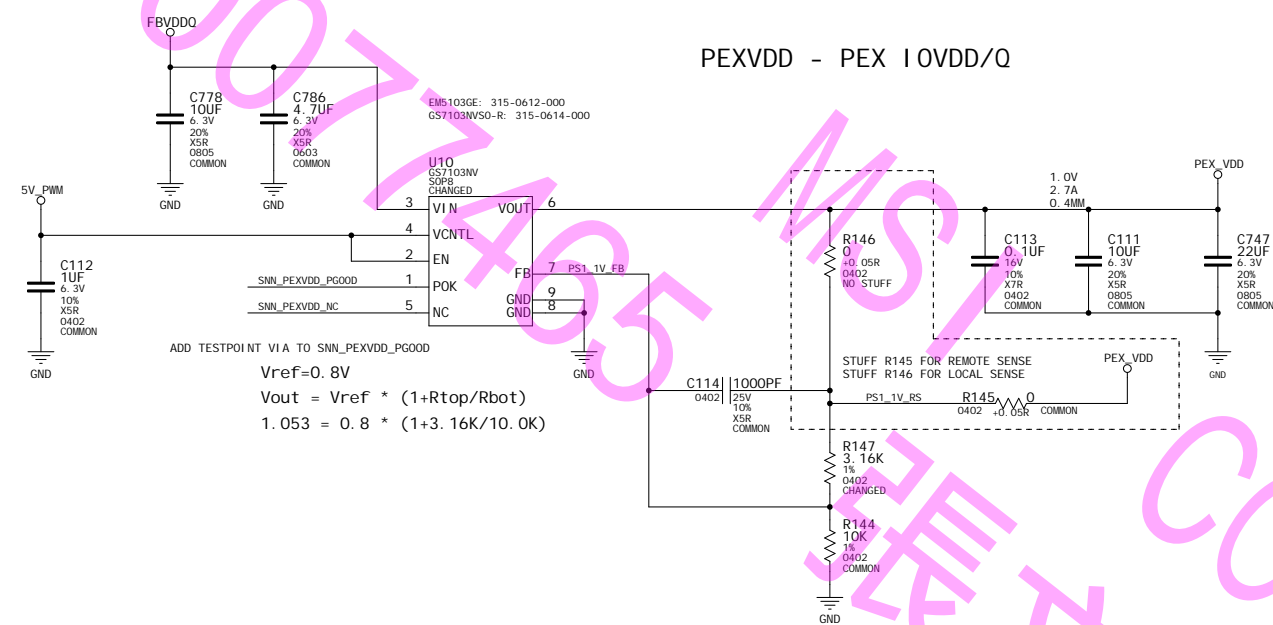
XTALSSIN	XTALOUTBUFF	Inverted SmartFan PWM %
PU	PU	66(33% high)
PU	PD	50(50% high)
PD	PU	33(66% high)
PD	PD	0(100% high)

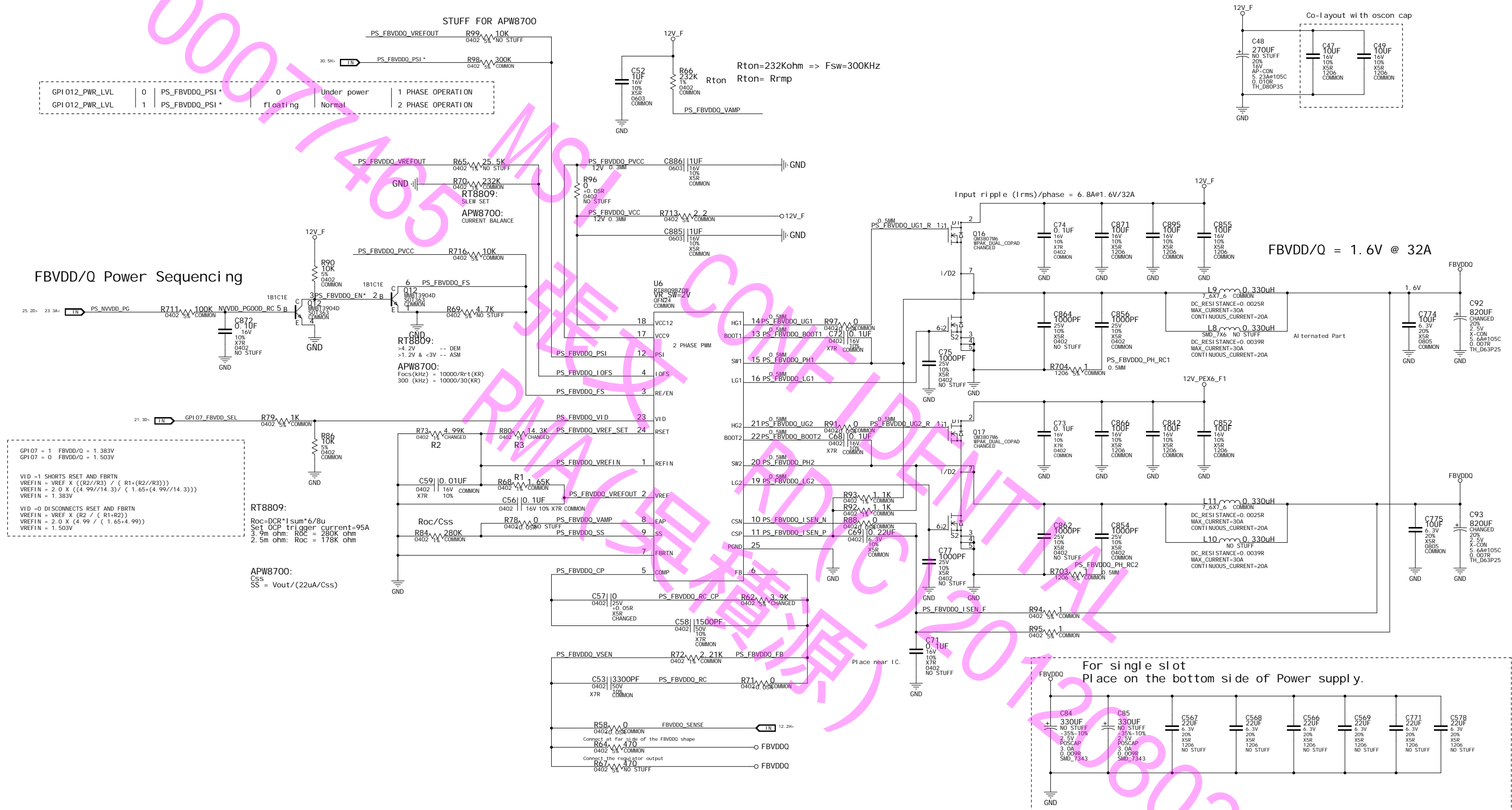
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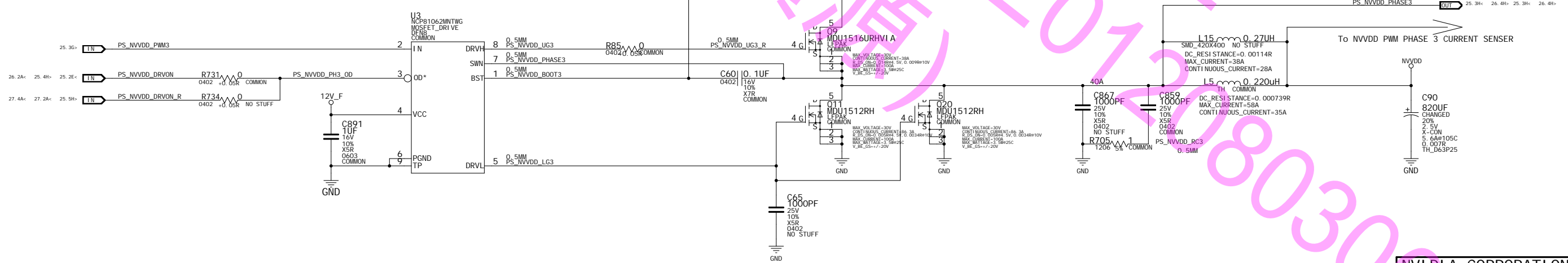
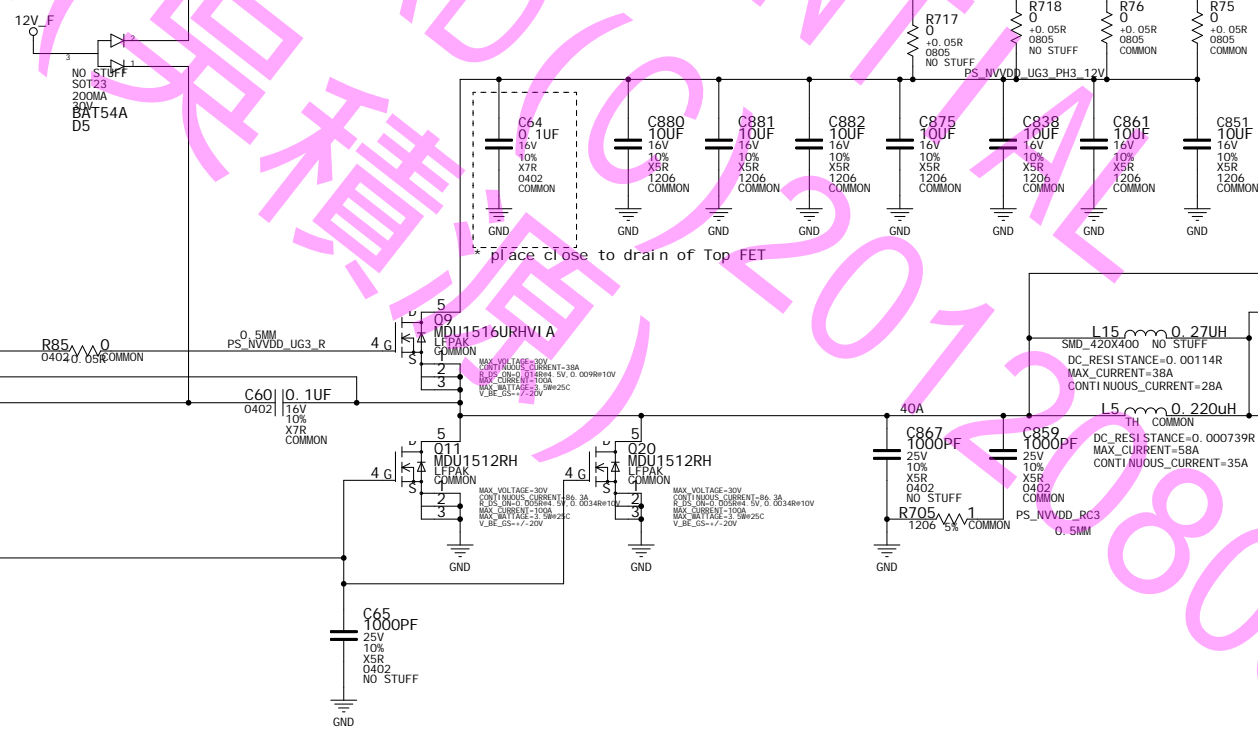
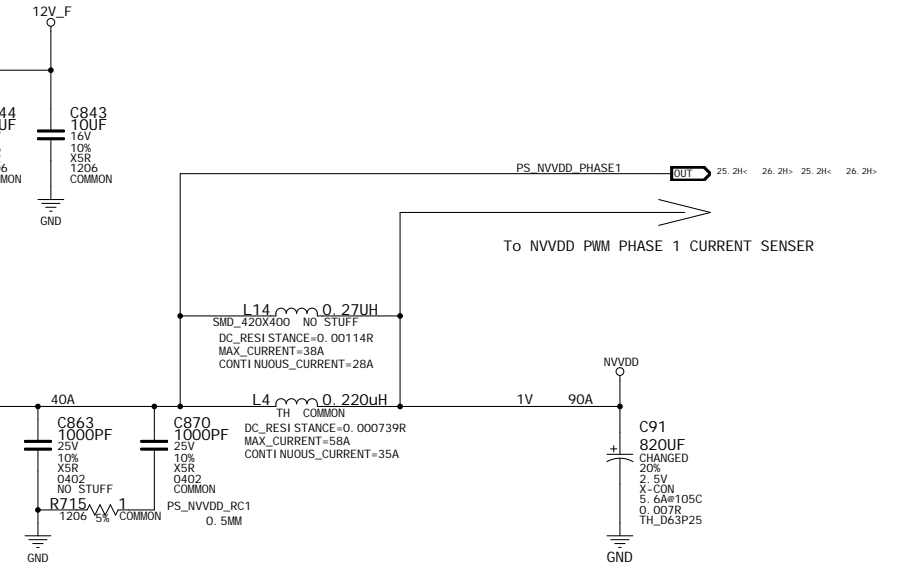


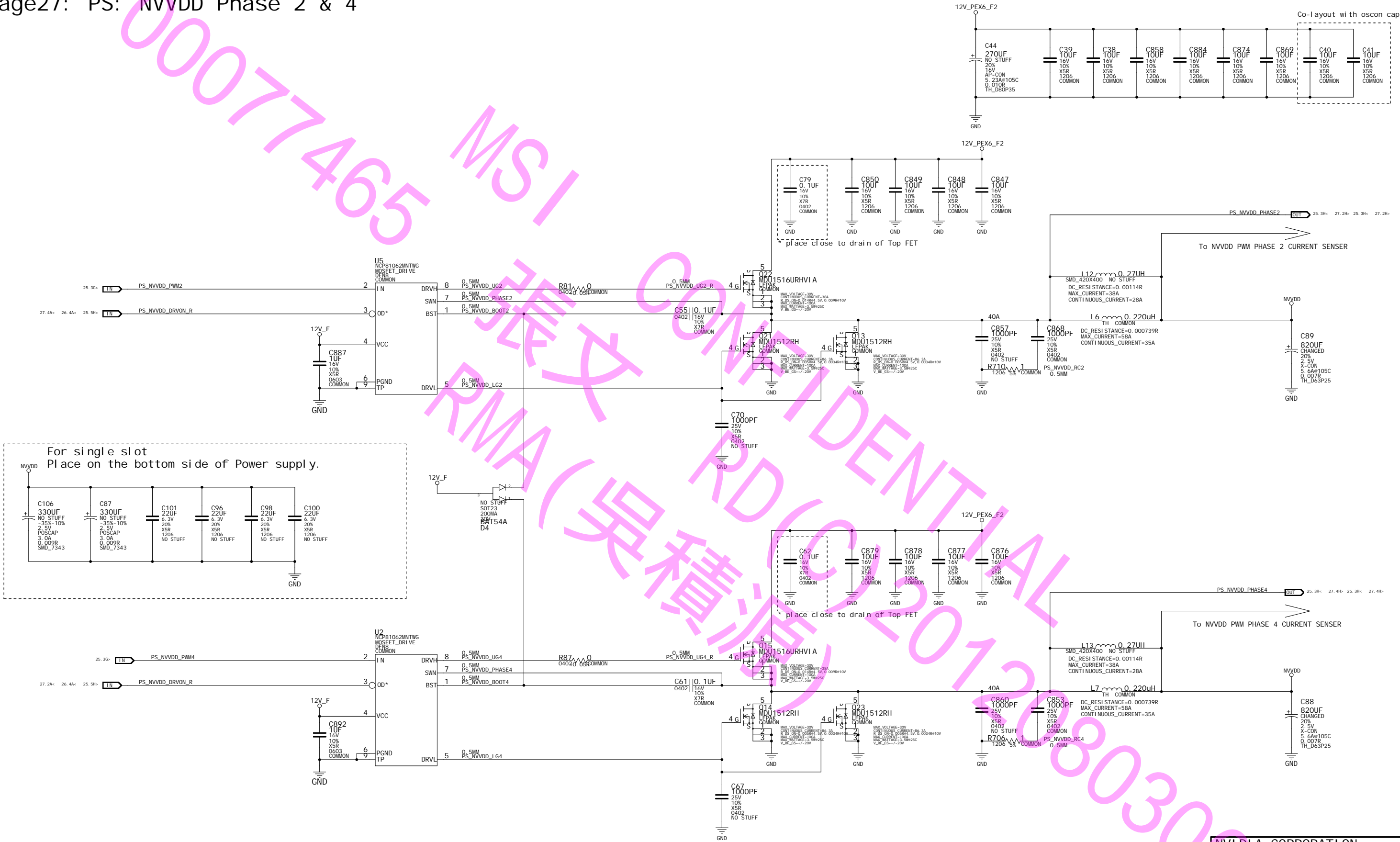
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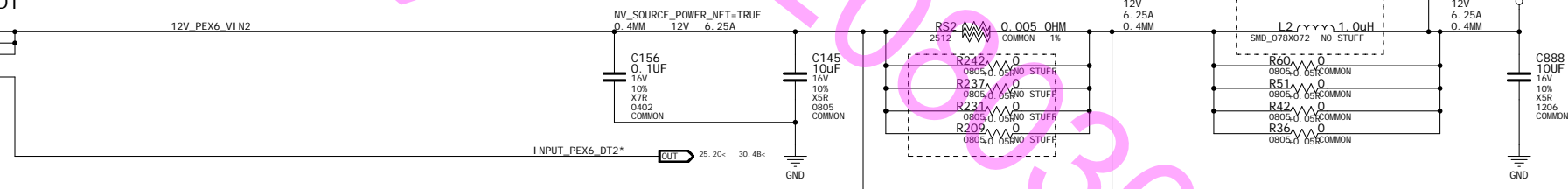
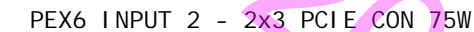
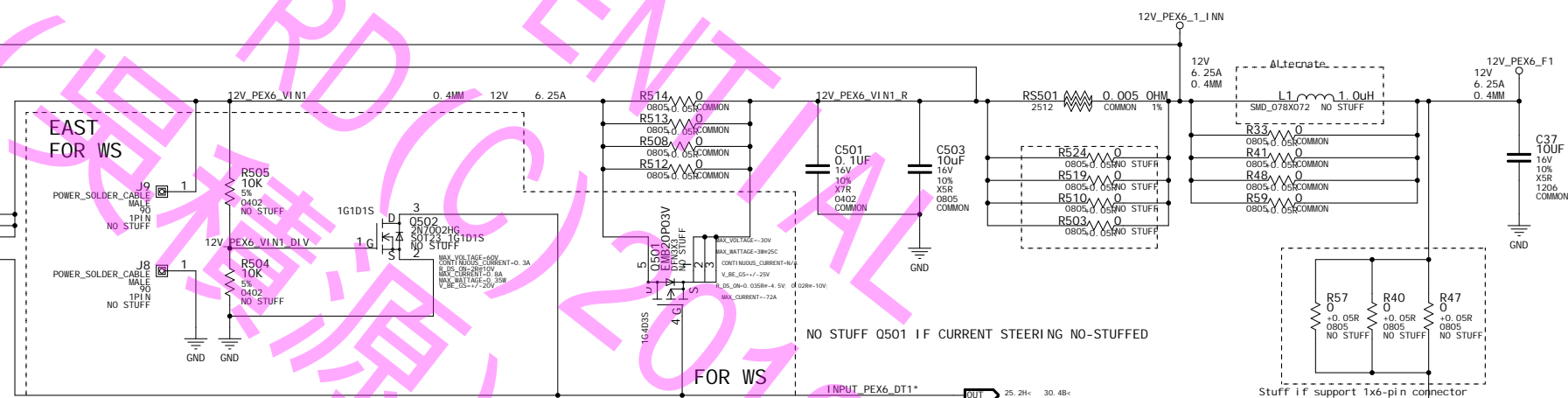
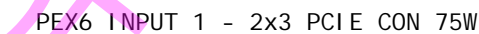
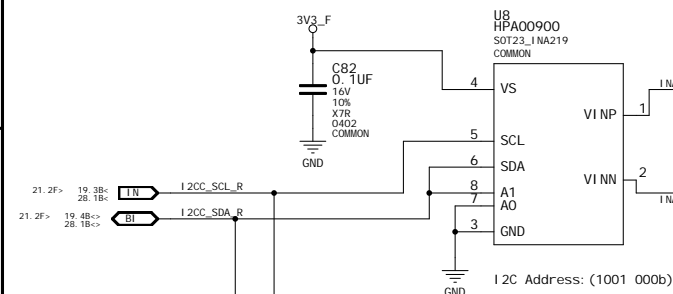
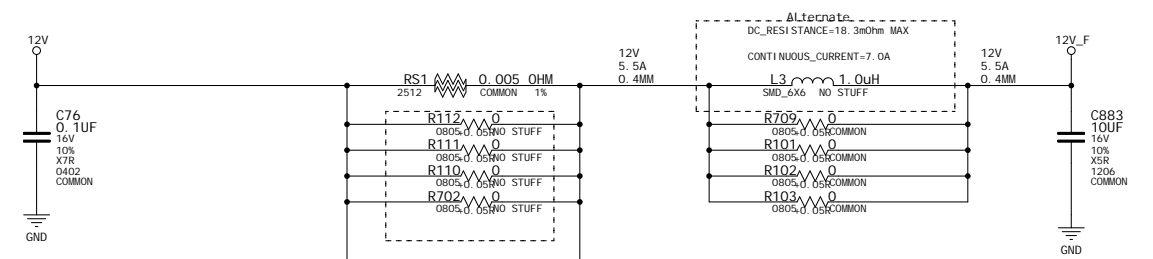
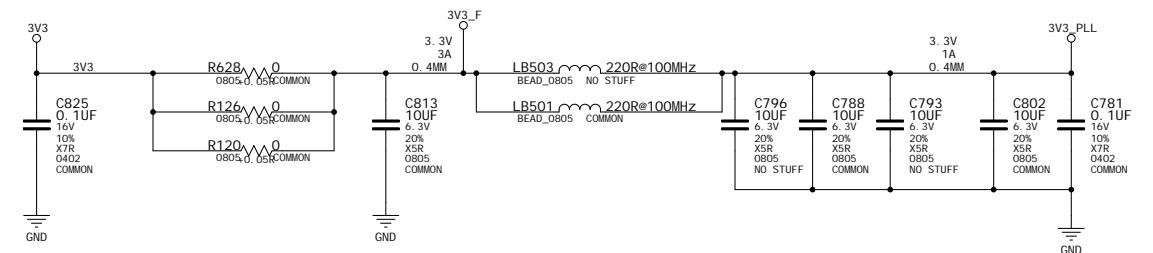
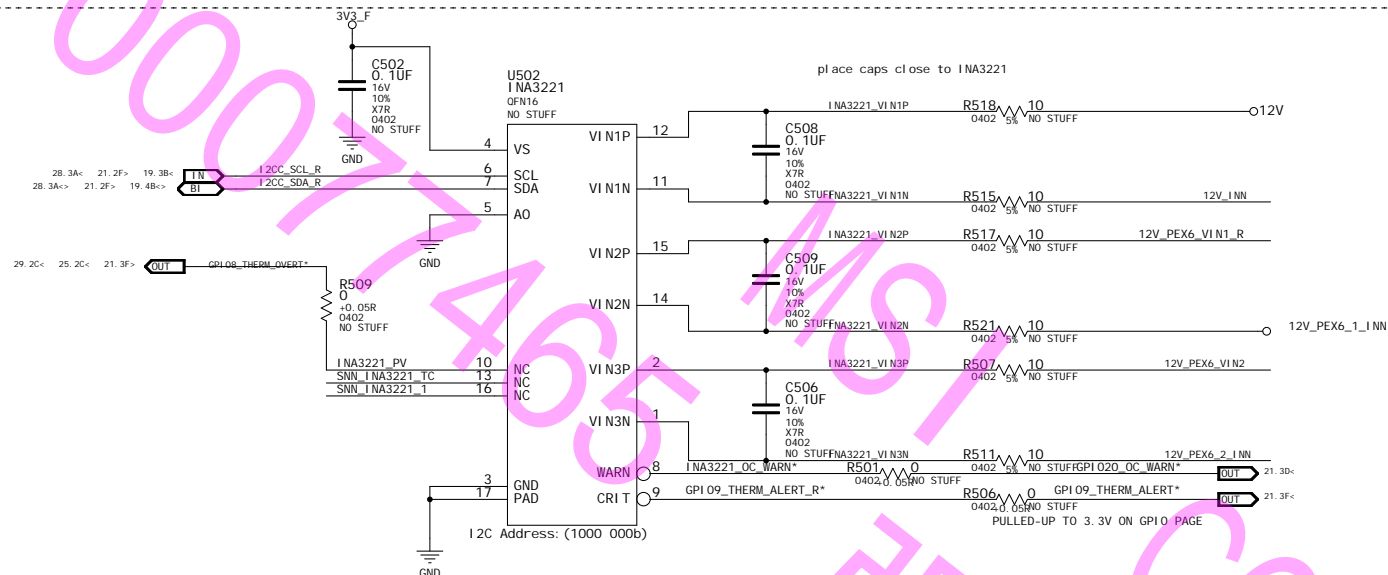








Page28: PS: Inputs, Filtering, and Monitoring



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BOM REV

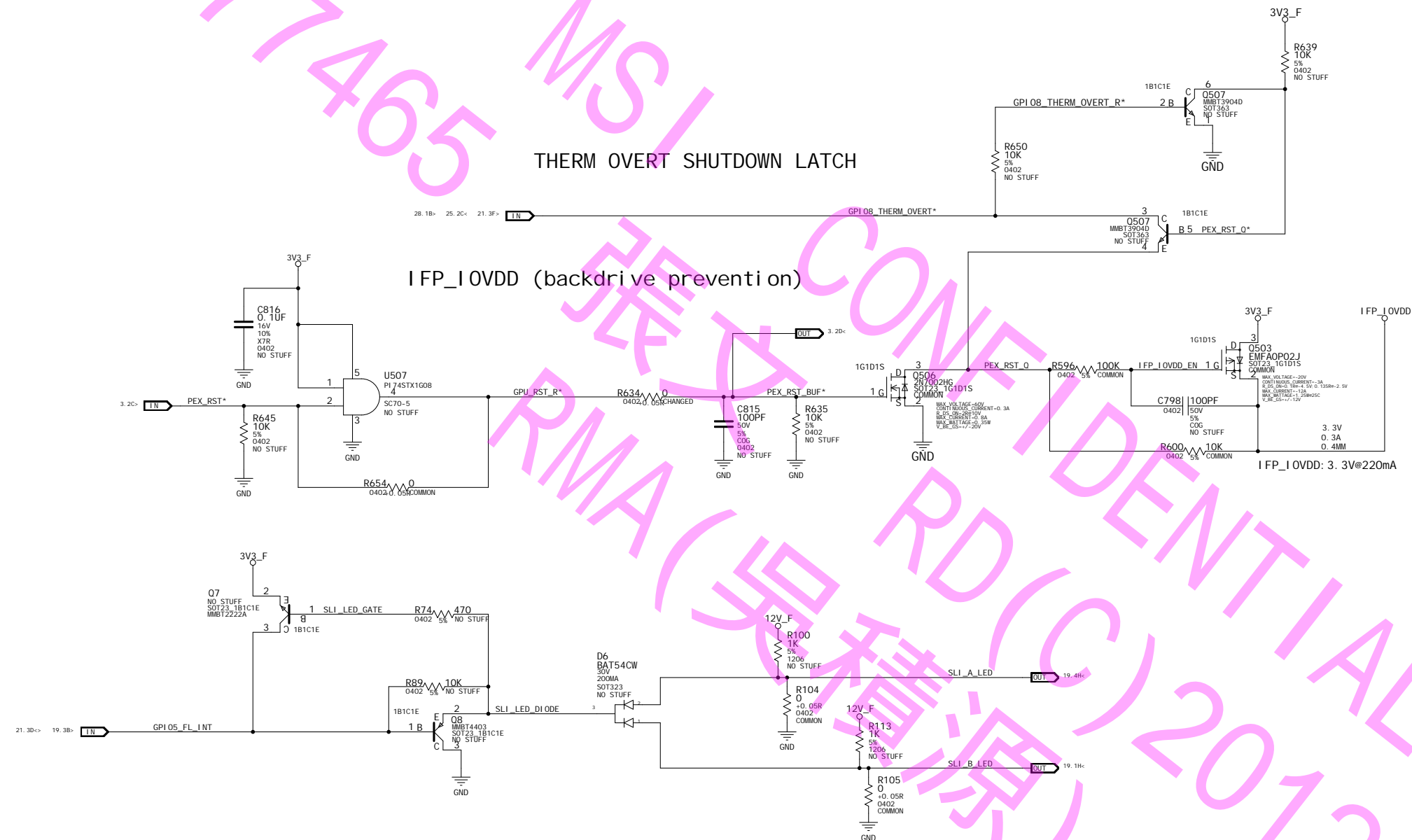
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ASSEMBLY	SKU0005: GK104-325 / 256-BIT 2048MB GDDR5 / STACKED DVI + HDMI + DP
PAGE DETAIL	PS: Inputs, Filtering, and Monitoring

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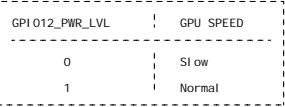



ASSEMBLY	SKU0005: GK104-325 / 256-BIT 2048MB GDDR5 / STACKED DVI + HDMI + DP
PAGE DETAIL	PS: Thermal Shutdown & Lighted SLI DRIVER

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NV_PN 600-12004-0005-QS1			
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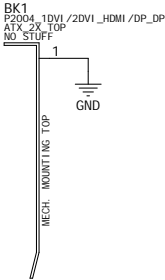
PEX Input - Power Level /PSI * Control



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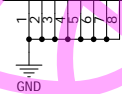
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Brackets:



GPU Sti ffener:

BOARD STIFFENER
8 connected mounting pins



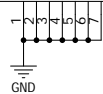
STI FFNER
NO PINS

MEC1
GPU STIFFER_GK104
8PIN
NO STUFF

MEC501
HSB GK104
NO PIN
NO STUFF

MOUNTING HOLES FOR HS:

COOLING SOLUTION
7 connected mounting pins



MEC2
P2004_GPU_HS
7PIN
NO STUFF

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