

P672: GT215-128bit, 32Mx32 GDDR5

DL-DVI, VGA, HDMI

Page 1: TABLE OF CONTENTS

Page 2: PCI EXPRESS INTERFACE, PEX_VDD DECOUPLING CAPS

Page 3: FBA MEMORY INTERFACE, GPU NVVDD & FBVDDQ DECOUPLING CAPS

Page 4: FBA 32Mx32 GDDR5 MEMORIES, FBA CLK TERMS

Page 5: FBA MEMORY FBVDDQ DECOUPLING CAPS

Page 6: FBC MEMORY INTERFACE

Page 7: FBC 32MX32 GDDR5 MEMORIES, FBC CLK TERMS

Page 8: FBC MEMORY FBVDDQ DECOUPLING CAPS

Page 9: DACA (PRIMARY DVI-I)

Page 10: DACB (SECONDARY VGA)

Page 11: TMDS LINK A/B: DVI-I (SOUTH)

Page 12: LINK C: HDMI (NORTH)

Page 13: LINK D (UNUSED)

Page 14: LINK E/F: (UNUSED)

Page 15: MIOA & MIOB (UNUSED)

Page 16: XTAL, MECHANICALS, THERMALS

Page 17: FAN CONTROL, THERMAL ALERT, GPIO, JTAG

Page 18: VBIOS ROM, INFOROM, STRAPPING OPTIONS

Page 19: 5V, DDC5V, IFP PLLVDD, IFP IOVDD, 3V3 FILTER, 12V FILTER

Page 20: FBVDDQ SINGLE PHASE SWITCHER, PEX_VDD LINEAR

Page 21: NVVDD DUAL PHASE SWITCHER

Page 22: BaseNet Report 1

Page 23: BaseNet Report 2

Page 24: CREFER Parts

PCB 4.0

09/01	change	PAGE 04_FBA 32Mx32 GDDR5--Lower Half ----- x16 mode
Add		PAGE 04_FBA 32Mx32 GDDR5--Upper Half ----- x16 mode
change		PAGE 04_FBC 32Mx32 GDDR5--Lower Half ----- x16 mode
Add		PAGE 07_FBC 32Mx32 GDDR5--Upper Half ----- x16 mode
Add		PAGE 05_DECOUPLING CAP
Add		PAGE 08_DECOUPLING CAP
Add		PAGE 17_GPIO10_VREF_SEL

PCB 4.1

11/10	Add	PAGE 20_C2001,C2002 for EMI
11/11	Add	PAGE 20_C2003,C2004,C2005 for EMI

REV	VARIANT	NVPN	ASSEMBLY
0	BASE	600-10672-base-100	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SRU001	600-10672-0001-100	GT215-400, 550/1375MHz, 512MB, 32Mx16, 8GBx170, 1800MHz, GDDR5 DR-ANVANDOM
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600-10672-base-100 A

ID

NAME

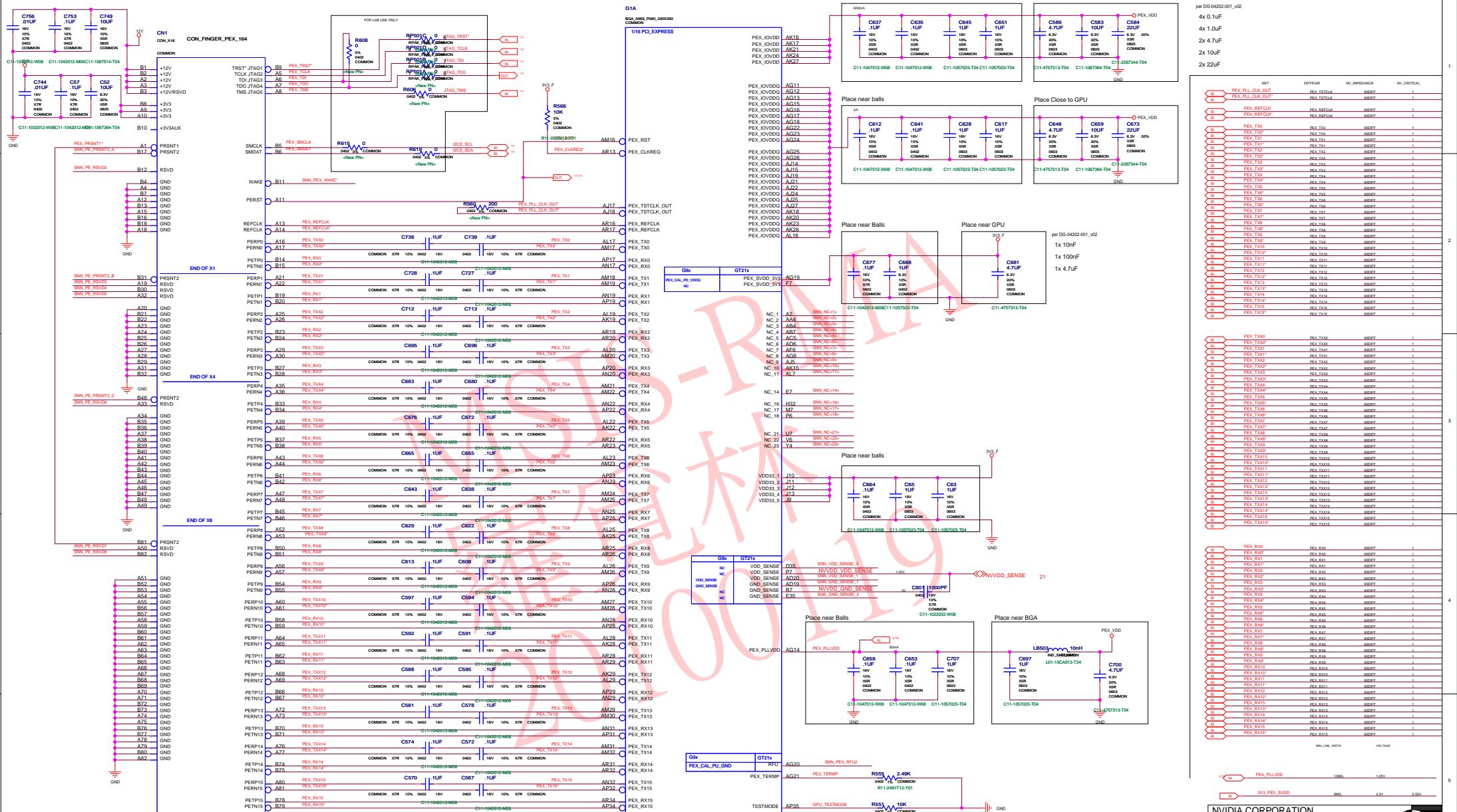
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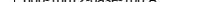




























DATE

01-JUL-2009

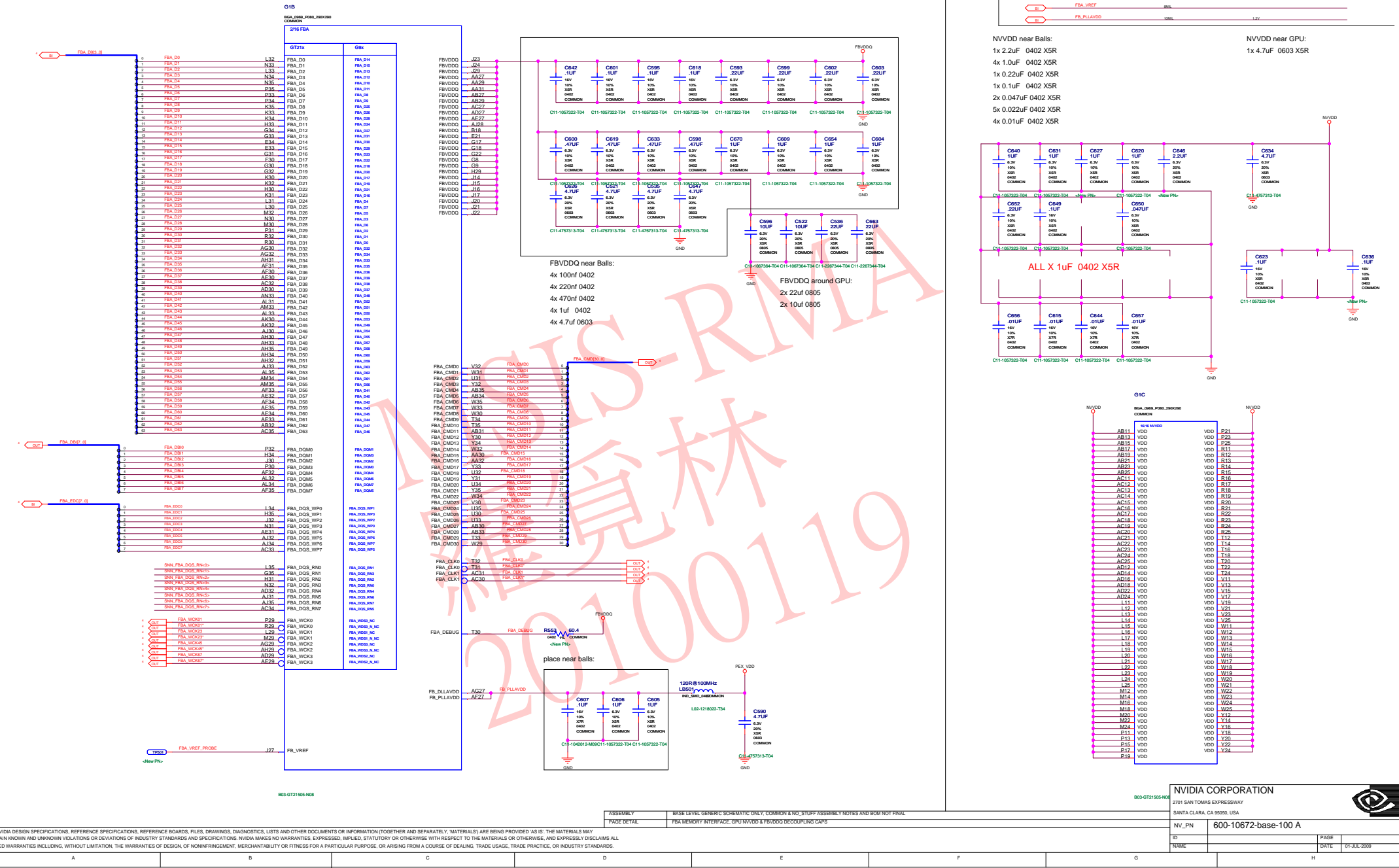


PEX x16 INTERFACE

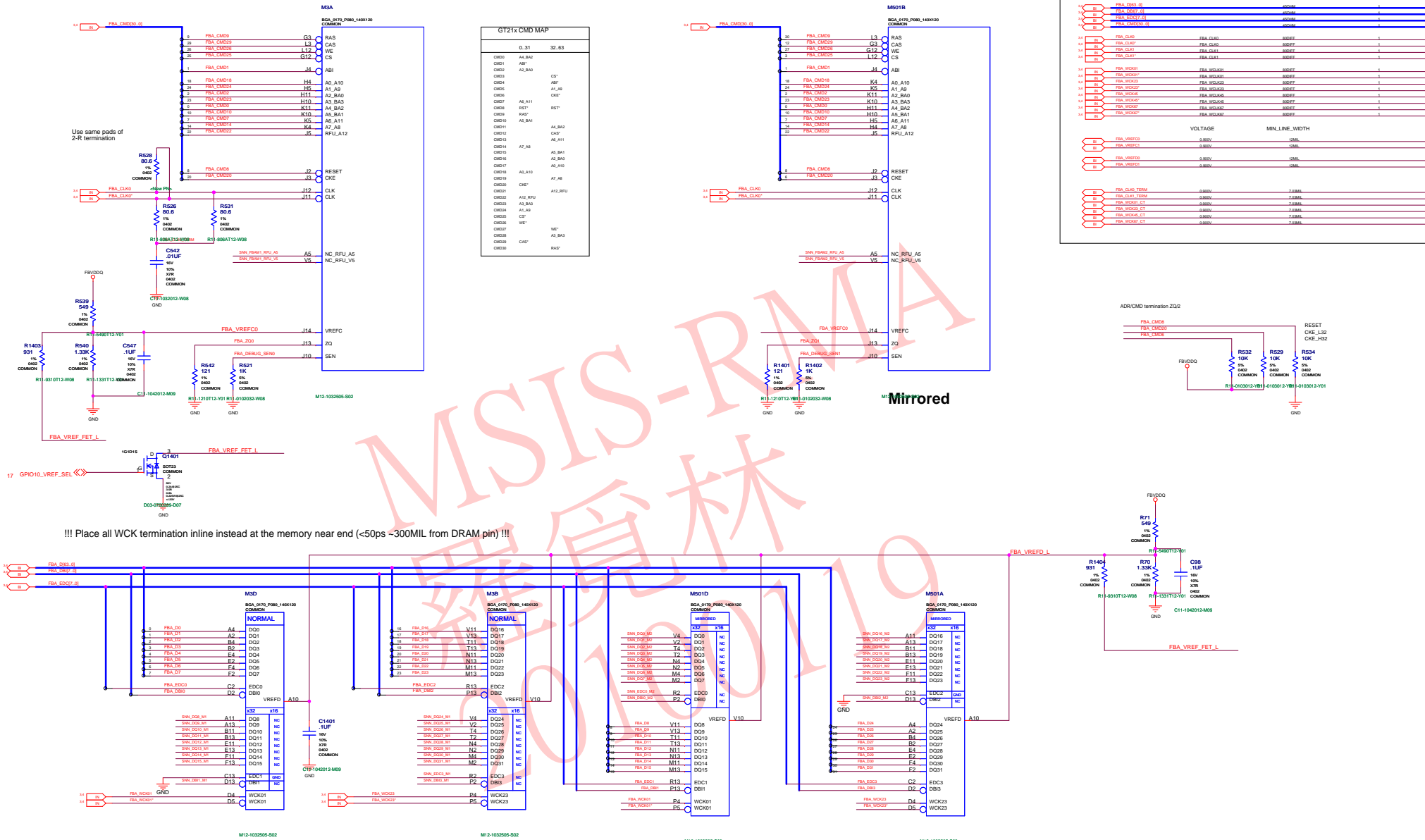
[illegible]

MEMORY Partition A - GPU, FBVDD/Q & NVVDD DECOUPLING



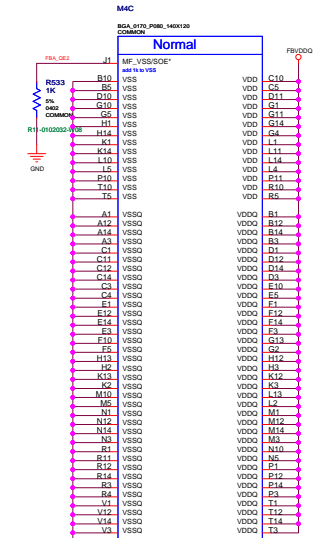
MEMORY Partition A --- Low Half



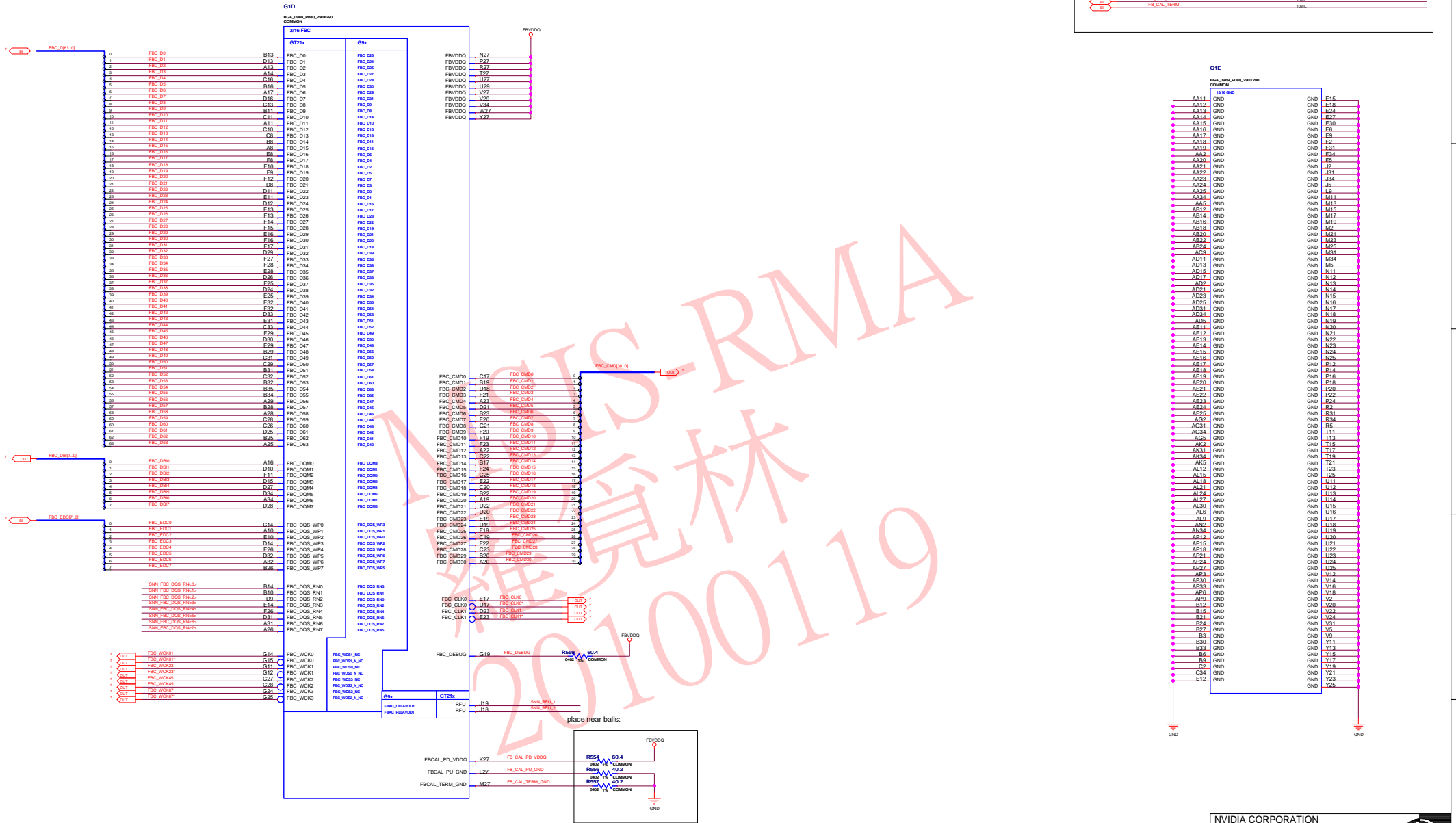
MEMORY Partition A - Decoupling

Decoupling for FBA 0.31

Decoupling for FBA 32..63



MEMORY Partition C - GPU



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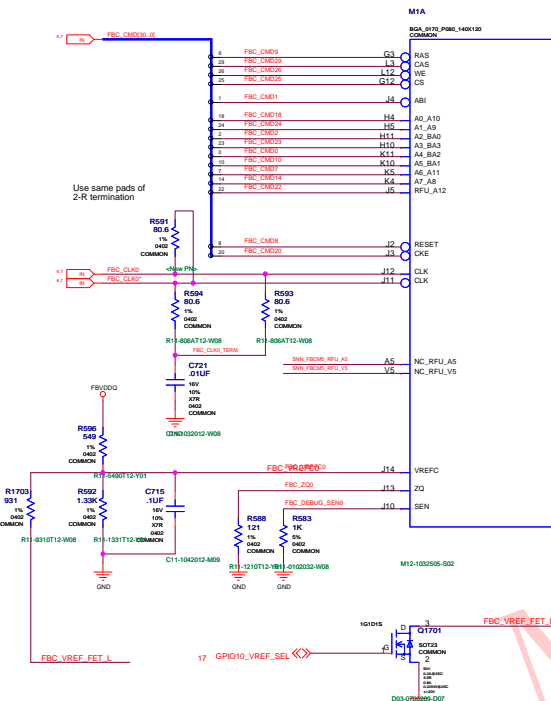
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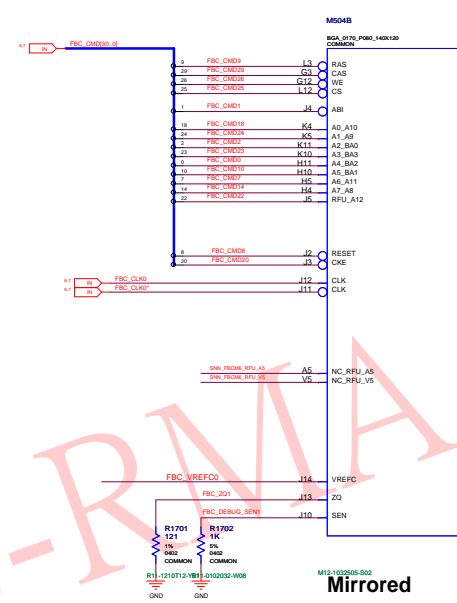
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NAME	DATE 01-JUL-2009

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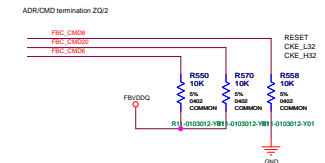
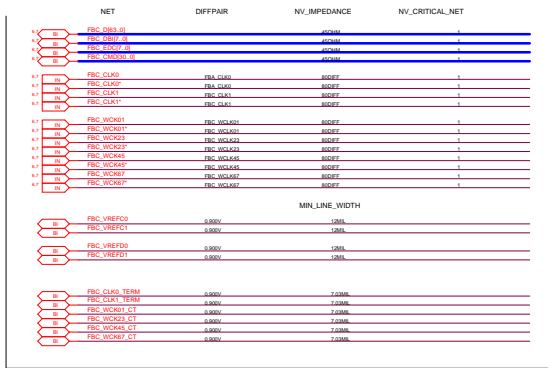
MEMORY Partition C --- Lower Half



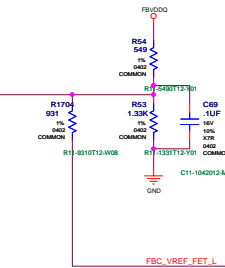
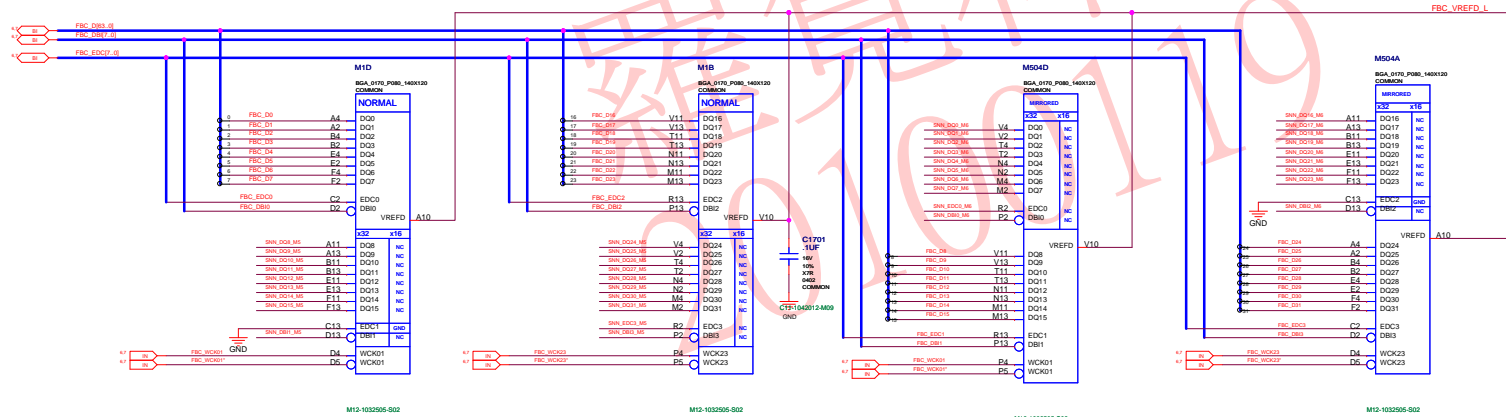
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CMD0	A8_BA2	
CMD1	ASP*	
CMD2	A2_BA0	
CMD3	CS*	
CMD4		HE*
CMD5		OK*
CMD6		C1B
CMD7		
CMD8	BS1*	BS1*
CMD9	RAS*	
CMD10	A5_BA1	
CMD11		AA_BA2
CMD12		CAS*
CMD13		AE_A11
CMD14	A7_A8	
CMD15		AO_BA1
CMD16		A2_BA4
CMD17		A7_A8
CMD18	A9_A10	
CMD19		
CMD20	CHK*	
CMD21		A12_RFU*
CMD22	A12_RFU*	
CMD23	A3_BA3	
CMD24	A1_A9	
CMD25	CS*	
CMD26	WE*	
CMD27		WE*
CMD28		A2_BA3
CMD29	CAS*	
CMD30		BA*



Mirrored



!!! Place all WCK termination inline instead at the memory near end (<50ps ~300MIL from DRAM pin)!!!



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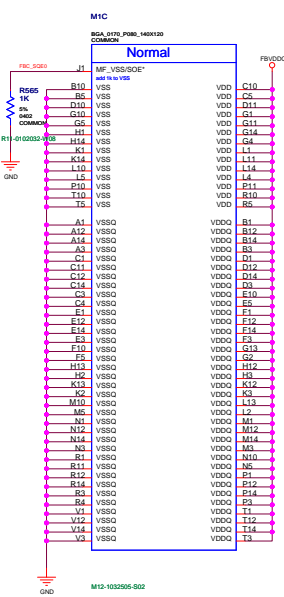
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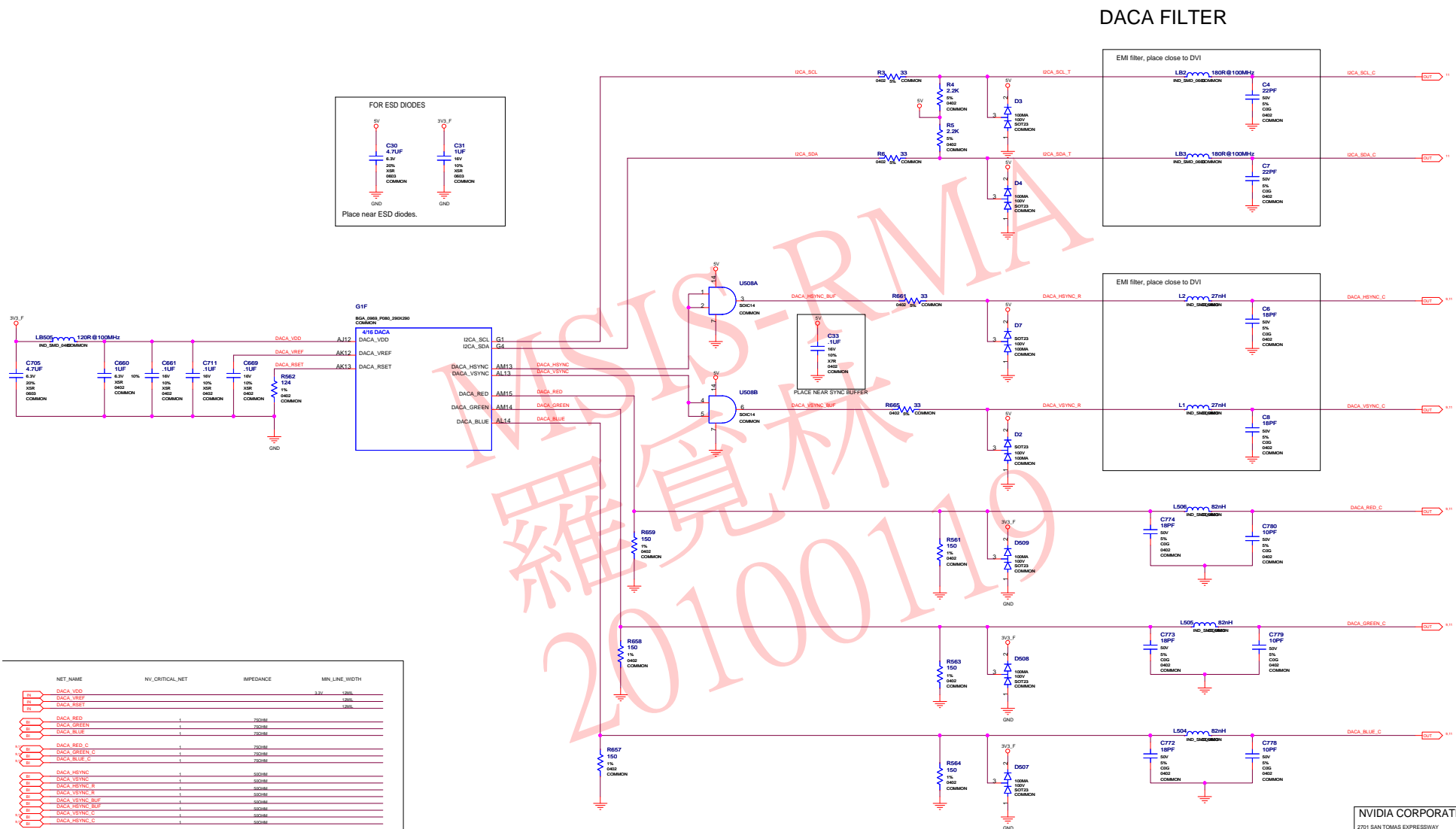
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBC 32MX32 GDDR5 MEMORIES, FBC CLK TERMS

MEMORY PARTITION C DECOUPLING



Primary Display (DACA), DVI-I (South)



	NET_NAME	IV_CRITICAL_NET	IMPEDANCE	MIN_LINE_WIDTH
W	DACA_VDD			32V 120M
B	DACA_VREF			100M
B	DACA_RESET			100M
B				100M
W	DACA_RED	I	2500M	
B	DACA_GREEN	I	2500M	
B	DACA_BLUE	I	2500M	
W	DACA_RED_C	I	2500M	
W	DACA_GREEN_C	I	2500M	
W	DACA_BLUE_C	I	2500M	
W	DACA_HYMN	I	5000M	
W	DACA_HYMN2_N	I	5000M	
B	DACA_HYMN2_P	I	5000M	
B	DACA_HYMN2_BUF	I	5000M	
B	DACA_HYMN2_BUF	I	5000M	
B	DACA_HYMN2_C	I	5000M	
W	DACA_HYMN_C	I	5000M	

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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DACA (PRIMARY DVI-I)

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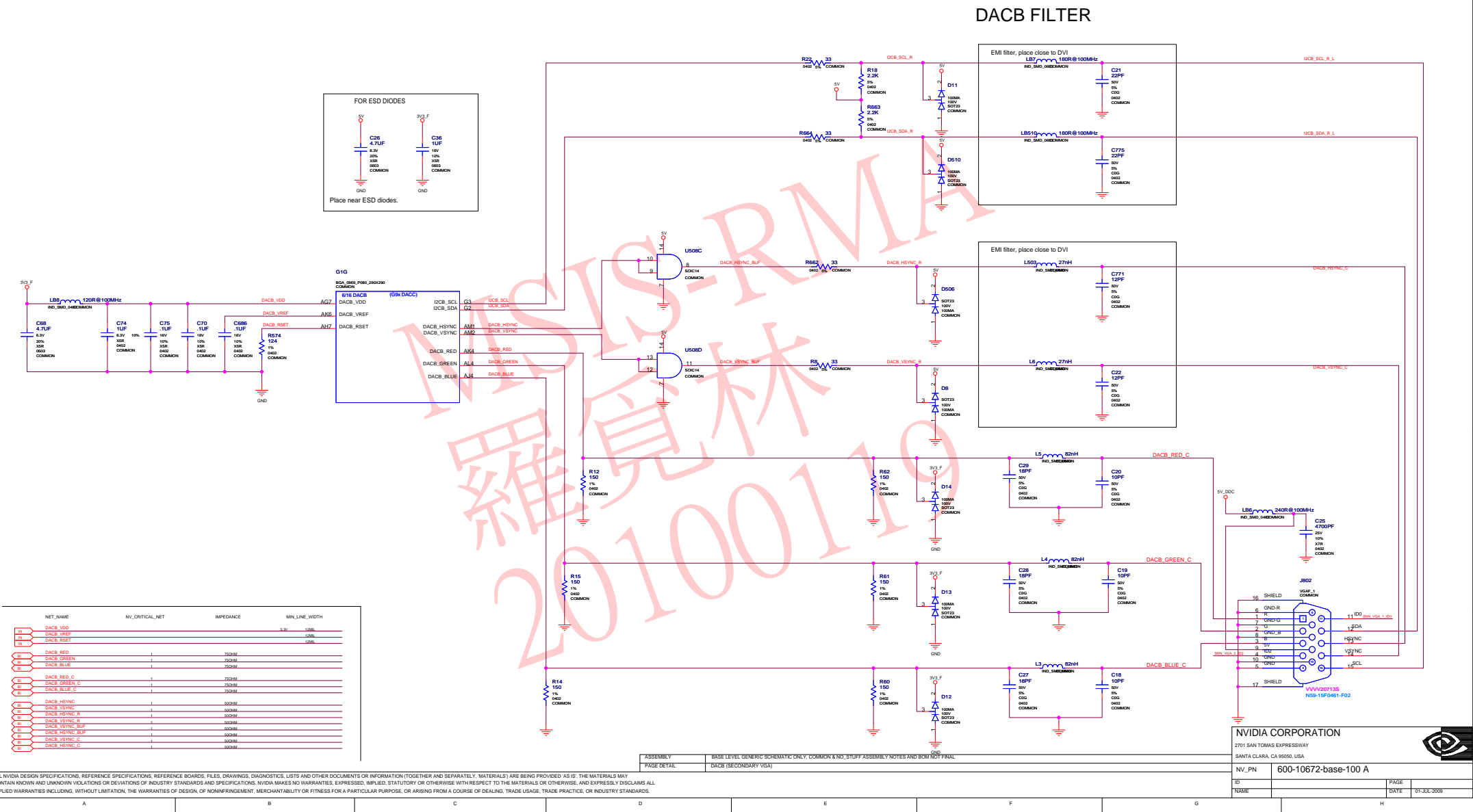
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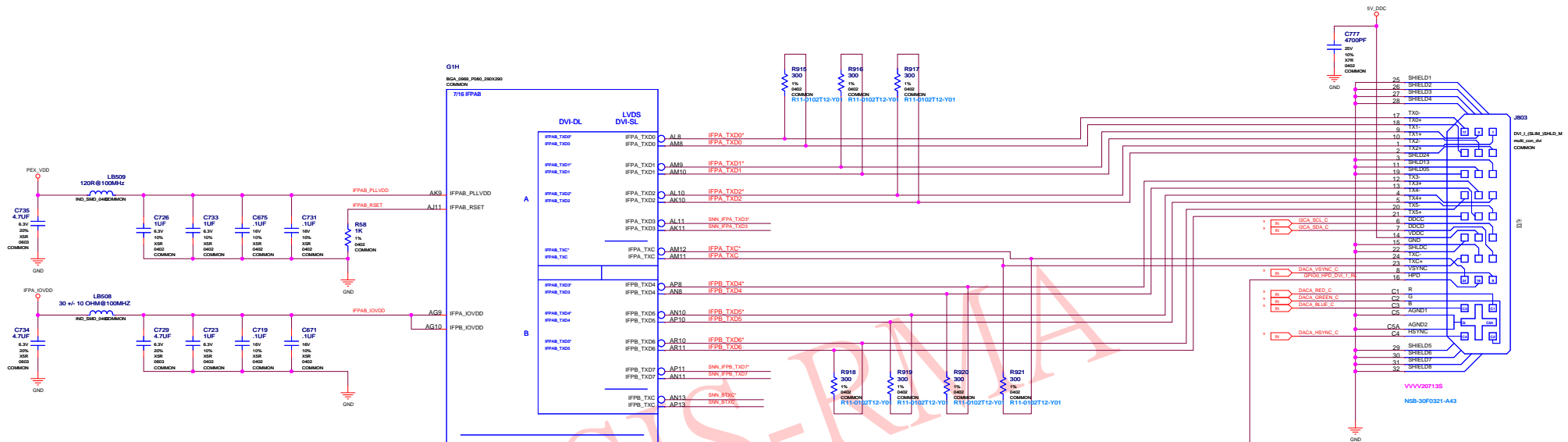
NV_PN	600-10672-base-100 A
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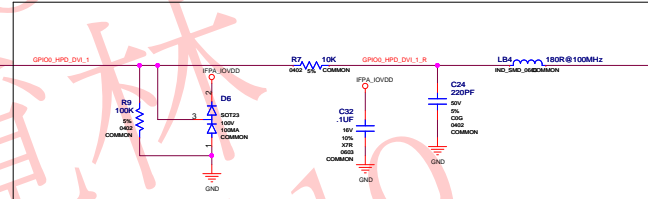
Secondary Display (DACB), VGA (Mid)



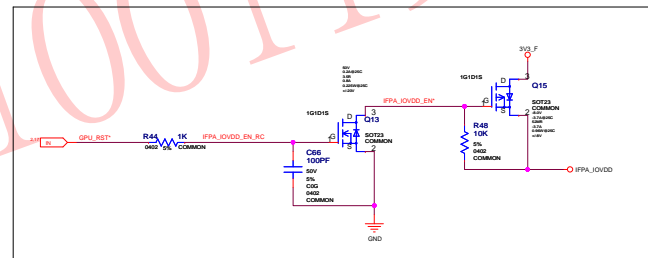
LINK A/B: TMDS, Primary DVI-I DL (South)



HOTPLUG DETECTION



IFP_IOVDD BACKDRIVE PREVENTION



	NETNAME	DEF PART NAME	NO. CRITICAL	NO. DEFERENCE
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10	IFPA_T0C2	F738_T0C2	1	1000%
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10	IFPA_T6E7	F738_T6E7	1	1000%
10	IFPA_T6E8	F738_T6E8	1	1000%
10	IFPA_T6E9	F738_T6E9	1	1000%
10	IFPA_T7D0	F738_T7D0	1	1000%
10	IFPA_T7D1	F738_T7D1	1	1000%
10	IFPA_T7D2	F738_T7D2	1	1000%
10	IFPA_T7D3	F738_T7D3	1	1000%
10	IFPA_T7D4	F738_T7D4	1	1000%
10	IFPA_T7D5	F738_T7D5	1	1000%
10	IFPA_T7D6	F738_T7D6	1	1000%
10	IFPA_T7D7	F738_T7D7	1	1000%
10	IFPA_T7D8	F738_T7D8	1	1000%
10	IFPA_T7D9	F738_T7D9	1	1000%
10	IFPA_T7E0	F738_T7E0	1	1000%
10	IFPA_T7E1	F738_T7E1	1	1000%
10	IFPA_T7E2	F738_T7E2	1	1000%
10	IFPA_T7E3	F738_T7E3	1	1000%
10	IFPA_T7E4	F738_T7E4	1	1000%
10	IFPA_T7E5	F738_T7E5	1	1000%
10	IFPA_T7E6	F738_T7E6	1	1000%
10	IFPA_T7E7	F738_T7E7	1	1000%
10	IFPA_T7E8	F738_T7E8	1	1000%
10	IFPA_T7E9	F738_T7E9	1	1000%
10	IFPA_T8D0	F738_T8D0	1	1000%
10	IFPA_T8D1	F738_T8D1	1	1000%
10	IFPA_T8D2	F738_T8D2	1	1000%
10	IFPA_T8D3	F738_T8D3	1	1000%
10	IFPA_T8D4	F738_T8D4	1	1000%
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10	IFPA_T8E7	F738_T8E7	1	1000%
10	IFPA_T8E8	F738_T8E8	1	1000%
10	IFPA_T8E9	F738_T8E9	1	1000%
10	IFPA_T9D0	F738_T9D0	1	1000%
10	IFPA_T9D1	F738_T9D1	1	1000%
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10	IFPA_T0A4	F738_T0A4	1	1000%
10	IFPA_T0A5	F738_T0A5	1	1000%
10	IFPA_T0A6	F738_T0A6	1	1000%
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10	IFPA_T1A5	F738_T1A5	1	1000%
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10	IFPA_T4A4	F738_T4A4	1	1000%
10	IFPA_T4A5	F738_T4A5	1	1000%
10	IFPA_T4A6	F738_T4A6	1	1000%
10	IFPA_T4A7	F738_T4A7	1	1000%
10	IFPA_T4A8	F738_T4A8	1	1000%
10	IFPA_T4A9	F738_T4A9	1	10

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	TMD5 LINK A/B: DVI-I (SOUTH)

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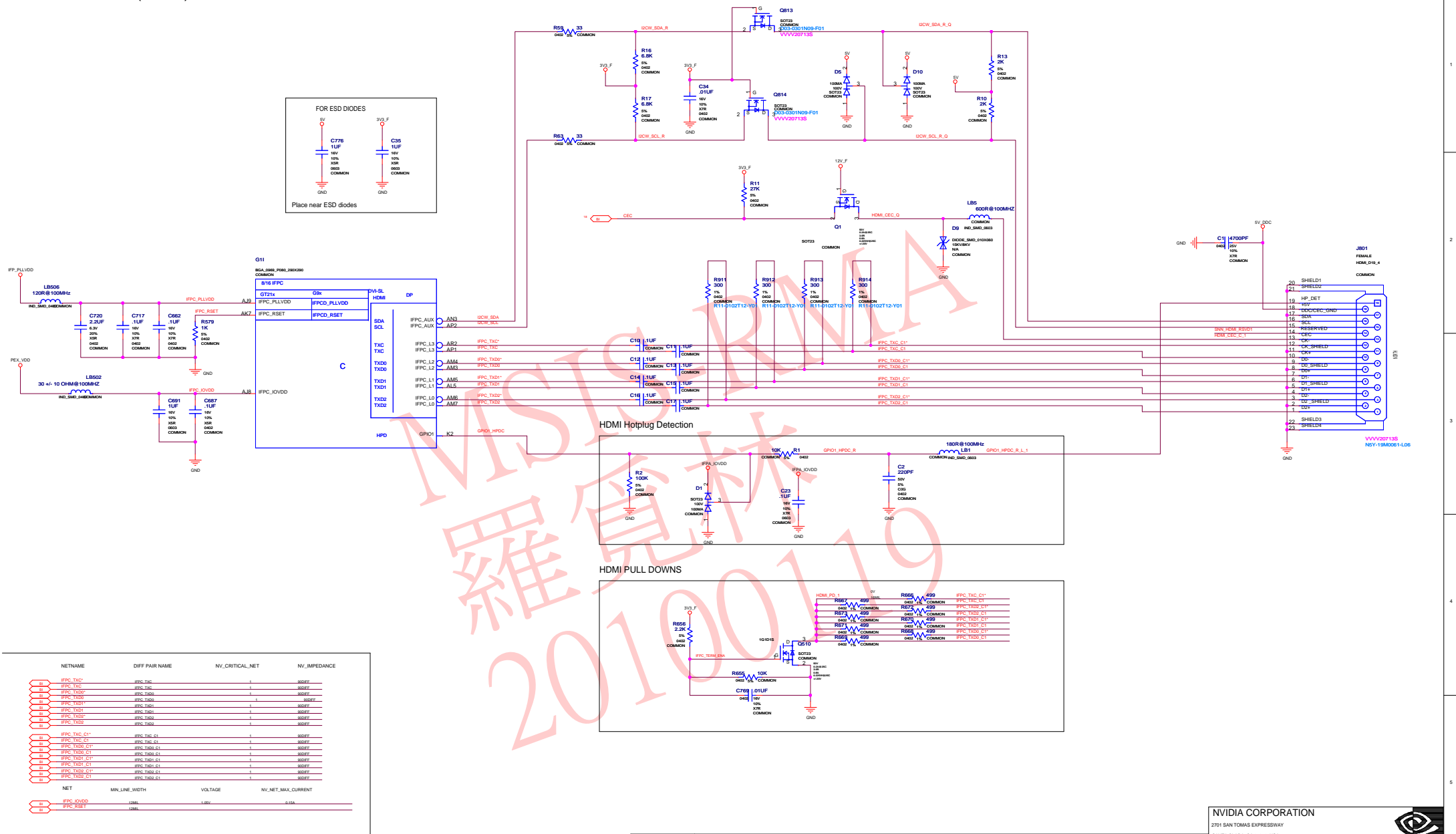
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LINK C: HDMI (North)



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NAME		DATE	01-JUL-2009

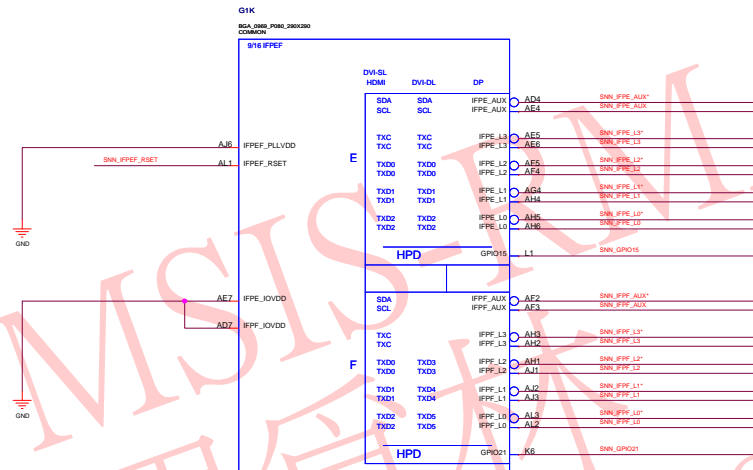
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LINK E/F: (UNUSED)



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PAGE DETAIL	LINK E/F: (UNUSED)

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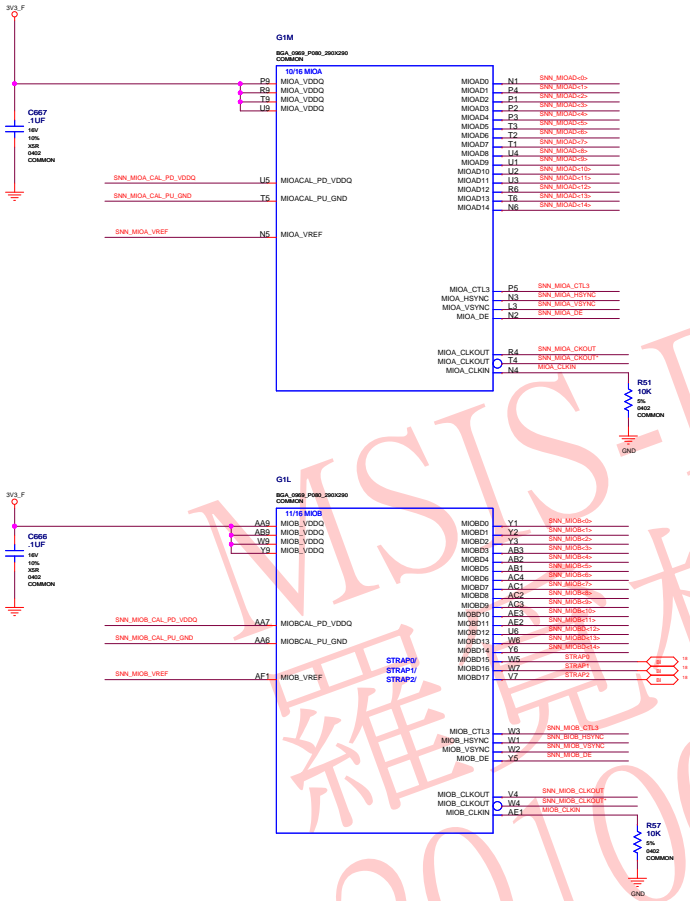


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MIOA/B UNUSED



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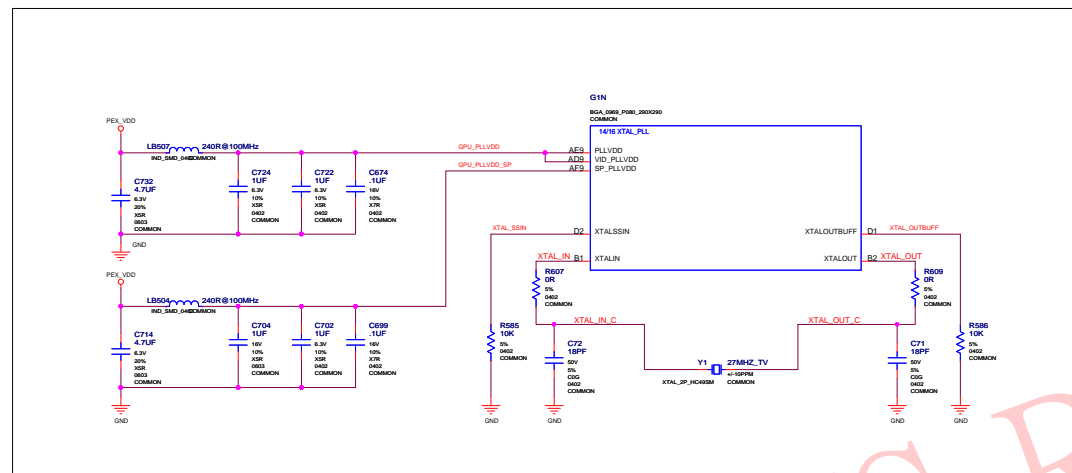
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01-JUL-2009

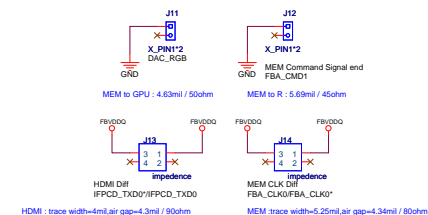
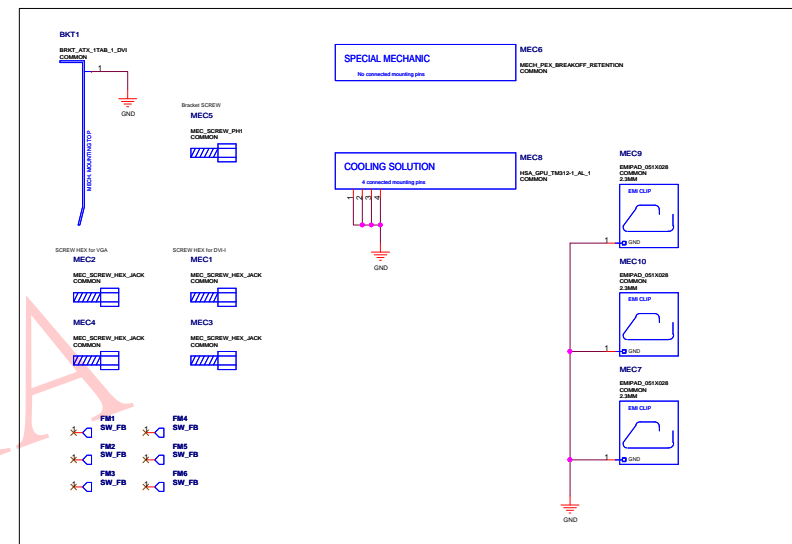
ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	MIOA & MIOB (UNUSED)

XTAL, MECHANICALS

XTAL/GPU_PLLVDD



MECHANICALS & THERMALS



NETNAME

MIN_LINE_WIDTH

125ns 1.2V

GPU_PLLVDD

125ns 1.2V

GPU_PLLVDD_SP

0.5 125ns 1

VITAL_IN

VITAL_OUT

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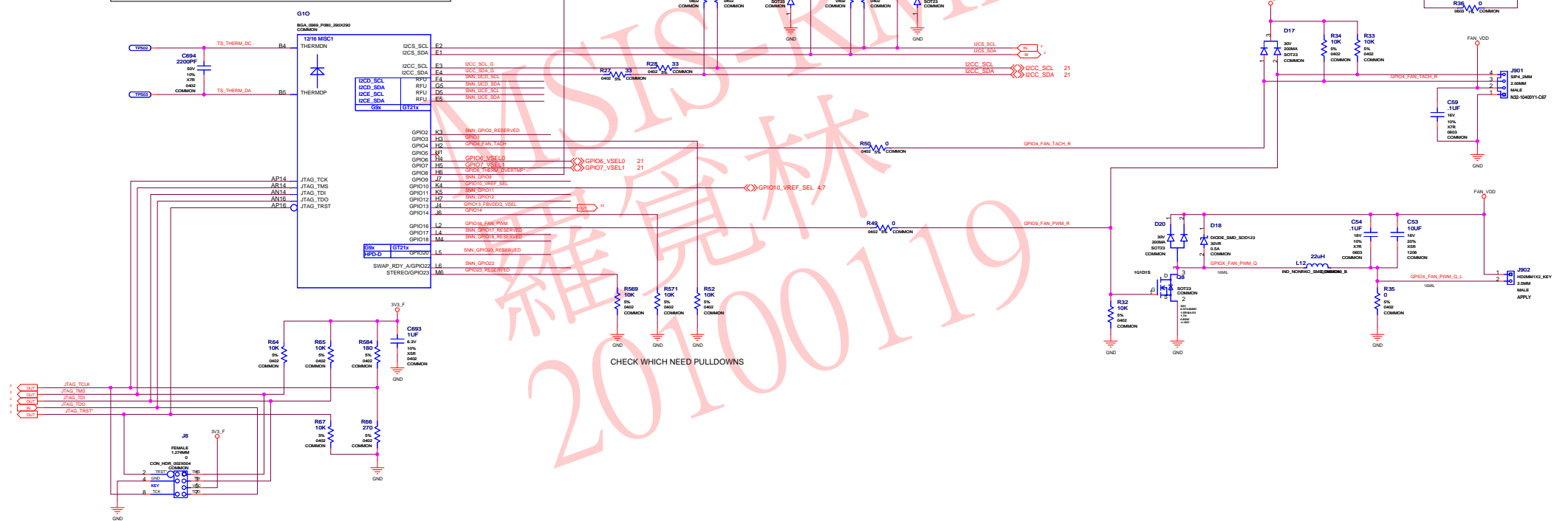
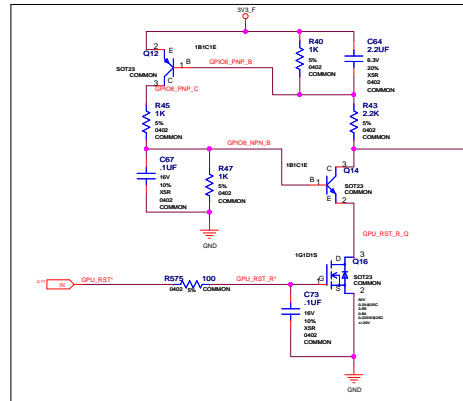
NV_PN	600-10672-base-100 A
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NAME		DATE	01-JUL-2009

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THERM ALERT, FAN CONTROL, GPIO & JTAG

THERM ALERT LATCH



NETNAME	MIN_LINE_WIDTH	CURRENT
⑥ THERM_DA	100M	
⑥ THERM_DA	100M	
⑥ FAX_PROM	100M	
⑥ FAX_PROM_B	100M	
⑥ THERM_DA_B	100M	
⑥ THERM_DA_C	100M	
FAN_VDD	100M	5A

CHECK WHICH NEED PULLDOWNS

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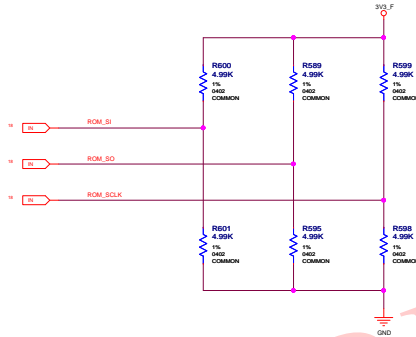
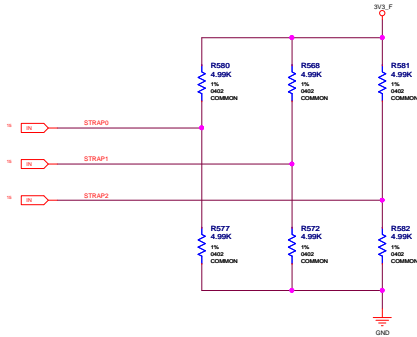
NV_PN	600-10672-base-100 A
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ID		PAGE	
NAME		DATE	01-JUL-2009

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STRAPPING, VBIOS, INFOROM

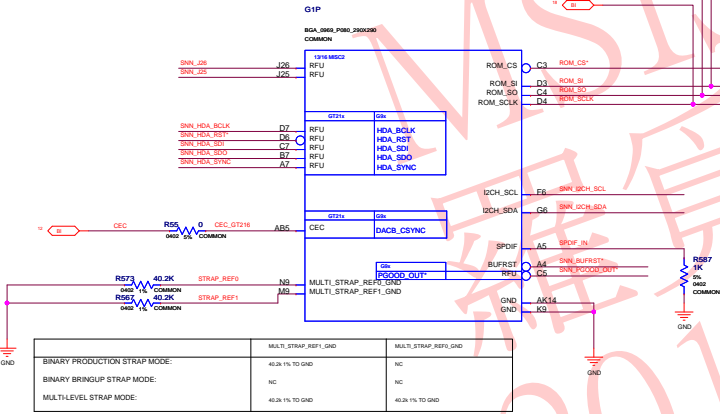
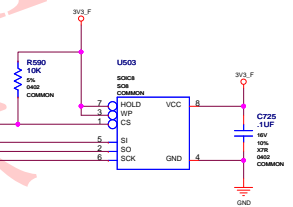
STRAPPING OPTIONS



STRAP[3:0] = 0x8 (GPIO_PADCFG DSKTOP default plus 0x8)
STRAP2[3:0] = 0x8 (PCL_DEVID = 0xCAB)
ROM_SCQ[0] = 1 (VGA Device Enable)
ROM_SCQ[1] = 0 (SMB_ALT_ADDR, default (1GPU))
ROM_SCQ[2] = 0 (FB apert. size 256MB, default)
ROM_SCQ[3] = 0 (XCLK_417, default)
ROM_SCLQ[0] = 0 (PEX_PLL_EN_TERM100 disabled, default)
ROM_SCLQ[1] = 1 (SLT_CLK_CFG, default)
ROM_SCLQ[2] = 1 (VBIOS RM present, default)
ROM_SCLQ[3] = 0 (PCL_DEVID[4] = 0)

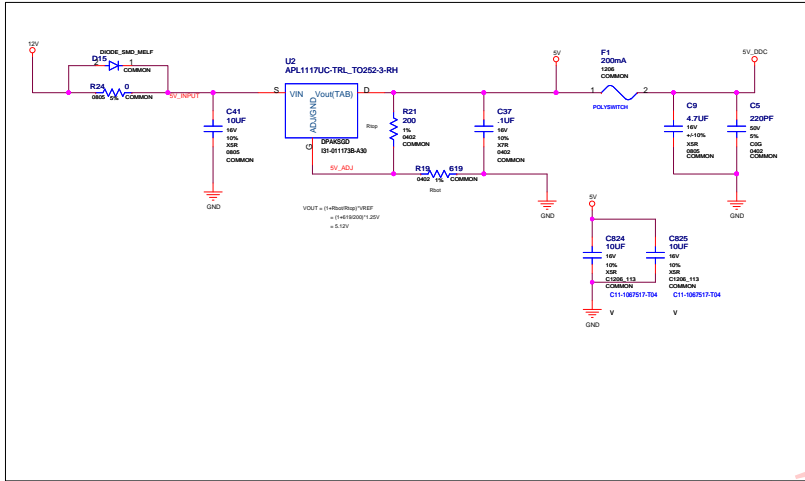
ROM_SIS[3:0] = RAMCFG[3:0]
0x0001 Qimonda 128-bit, GDDR5
0x0010 Hynix 128-bit, GDDR5
0x0011 Samsung 128-bit, GDDR5

BIOS ROM(serial)

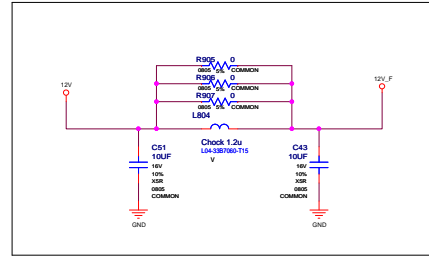


	MULTI_STRAP_REF0_GND	MULTI_STRAP_REF1_GND
BINARY PRODUCTION STRAP MODE:	NC	NC
BINARY BRINGUP STRAP MODE:	NC	NC
MULTI-LEVEL STRAP MODE:	40.2K 1% TO GND	40.2K 1% TO GND

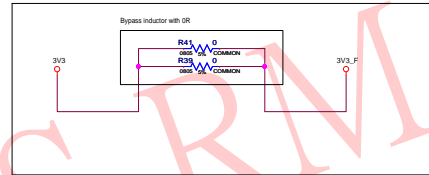
5V REGULATOR



5V DDC



3.3V filter



3V0_F

OPTIONAL 1V8 supply

U9505

ADJ_VRef=0.8V

EN

OUT

COMMON

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U04
ADJ. VR=0.8V
SYSTEM
SERIES 5.0V
COMMON

3V3 F
30k
1
2
3
4
5
6
7
8

C742 10uF
10V
100k
0805
COMMON

PEX_PU_VDD_ADJ
GND

R802 3.3k
1%
0603
COMMON

100k
Rload

C730 4.7uF
4.5V
20%
0805
COMMON

UP7703 VRef = 0.8V
Vout = VRef * (Rtop + Rbot)/Rtop
1.05 = 0.8 * (3.32k + 1.05k)/1.05k

NETNAME	MAX_CURRENT	MIN_LINE_WIDTH	VOLTAGE
EU_FUSED	0.3A	120MIL	3.3V
EU_INPUT	0.3A	120MIL	3.3V
PS_115_ADI	1.0A	120MIL	1.8V
IFPPA_XOVED	0.3A	120MIL	3.3V
12V	3A	120MIL	12V
3V3	3A	120MIL	3.3V
3V3_F0	3A	120MIL	3.3V
5V	0.3A	120MIL	5V
5V_DDC	0.3A	120MIL	5V
GND		100MIL	0V

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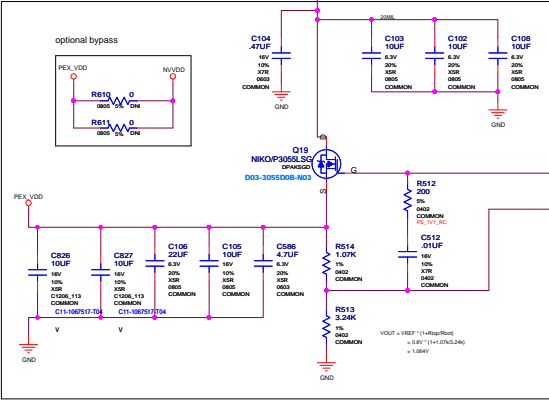


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ID		PAGE	
NAME		DATE	01-JUL-2009

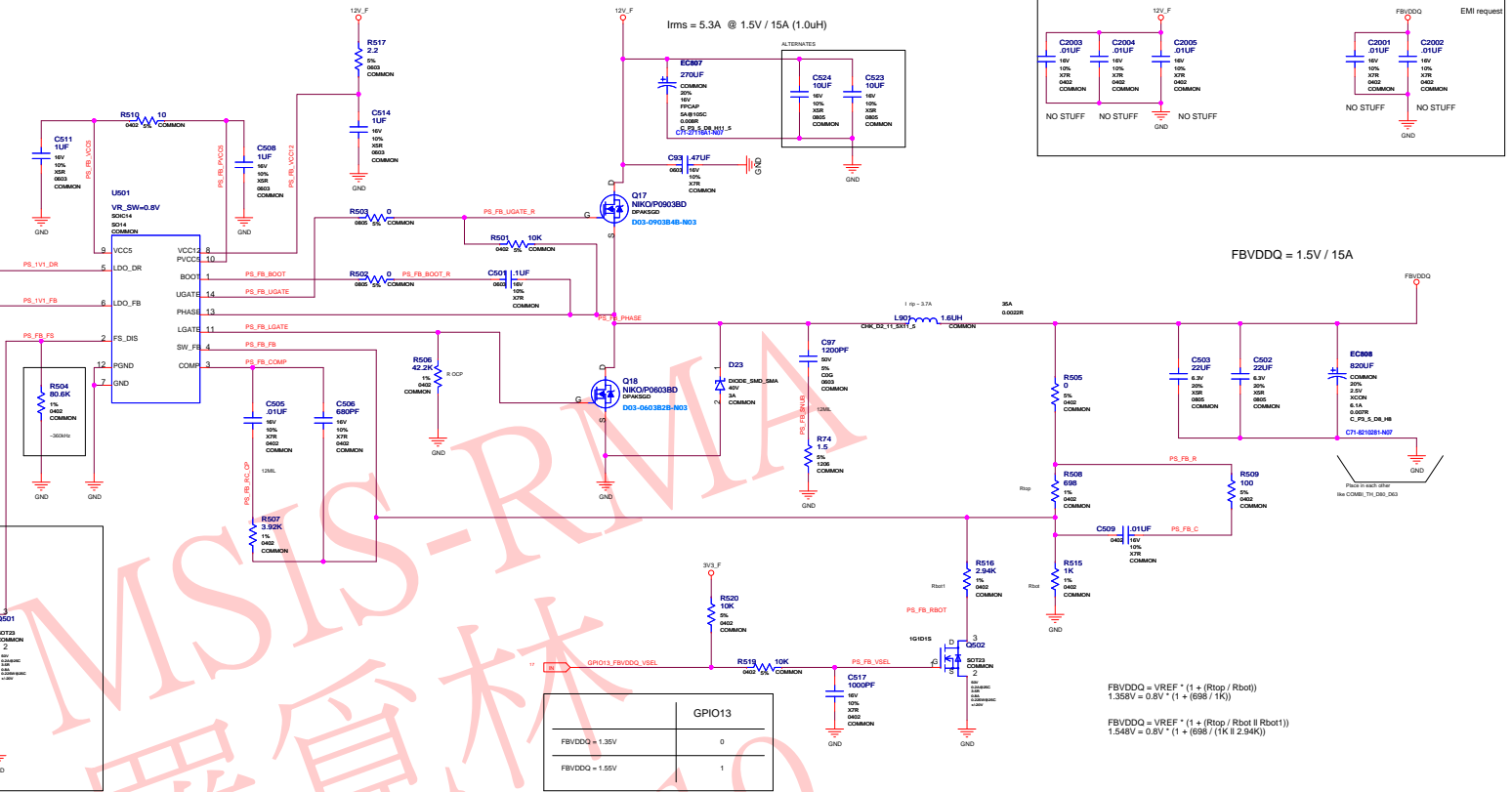
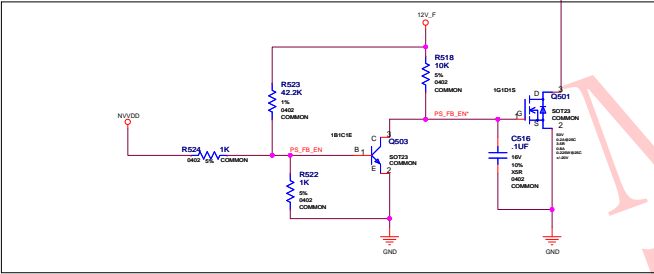
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POWER SUPPLY: FBVDDQ, PEX_VDD

PEXVDD LINEAR



PEXVDD GATING



	GPI013
FBVDDQ = 1.35V	0
FBVDDQ = 1.55V	1

NET		MIN_LEN_WIDTH	VOLTAGE	IN_NET_MAX_CURRENT
W1VDD	NVDD	200uL	1.0V	0A
FBVDD00	FBVDD00	200uL	1.0V	0A
PEX_VDD	PEX_VDD	200uL	1.00V	0A
PS_FB_BOOT		100uL		
PS_FB_BOOT_B		100uL		
PS_FB_USATE		100uL		
PS_FB_USATE_E1		100uL		
PS_FB_PHASE		200uL		0A
PS_FB_USATE		100uL		
PS_FB_VDD12		100uL	1.2V	
PS_FB_VDD3		100uL	0V	
PS_FB_VDD33		100uL	0V	
PS_V11_0B		100uL		
PS_V11_FB		100uL		
PS_V11_0C		100uL		
PS_FB_FB		100uL		
PS_FB_FB		100uL		
PS_FB_SIFHLT		100uL		
PS_FB		100uL		
PS_FB_VO		100uL		
PS_FB_SNB3		100uL		
PS_FB_COMP		100uL		
PS_FB_IC_CP		100uL		
PS_FB_E		100uL		
PS_FB_C		100uL		

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ID		PAGE	
NAME		DATE	01-JUL-2009

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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBVDDQ SINGLE PHASE SWITCHER, PEX_VDD LINEAR

PAGE DETAIL	FBVDDQ SINGLE PHASE SWITCHER, PEX_VDD LINEAR
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A		B		C		D		E		F		G		H	
Title: Baseunit Report		FBA_CMD<26> 3.4C 4.1B		FBA_CMD<26> 3.5B		FBC_D<4> 6.2A 7.4D		GPIOX_FAN_PWM_Q, L 17.4H		NVDDO_EAP 21.4C 21.5B		PEX_TXP* 2.2D 2.3C			
Design: design		FBA_CMD<27> 3.4C 4.1E		FBA_WOK01 3.4A 4.1F 4.5A		FBC_D<4> 6.2A 7.4D		GPIOX_PLVDDO 16.1B 16.5G		NVDDO_ENA 21.3C		PEX_T3B 2.2D 2.4D			
Date: Jun 10 09:58 2020		FBA_CMD<28> 3.4C 4.1E		FBA_WOK01* 3.4A 4.1F 4.5A		FBC_D<4> 6.2A 7.4D		GPIOX_TESTMODE 2.1E		NVDDO_ENA2 21.2A		PEX_T3P 2.2D 2.4C			
		FBA_CMD<29> 3.4C 4.1B		FBA_WOK01_CT 4.2F 4.5E		FBC_D<4> 6.2A 7.4D		GPU_RBT* 2.2D 11.5D 17.2A		NVDDO_ENA3 21.2B		PEX_T3D 2.2D 2.4D			
		FBA_CMD<30> 3.4C 4.1E		FBA_WOK29 3.4A 4.1F 4.5C		FBC_D<4> 6.2A 7.4D		GPU_RBT_R, G 17.2B		NVDDO_PBI 21.5B 21.5D		PEX_T3T 2.2D 2.4D			
				FBA_WOK29, CT 4.2F 4.5C		FBC_D<4> 6.2A 7.4D		GPU_TESTMODE 2.1E		NVDDO_PBI2N 21.4C 21.5B		PEX_TX1P 2.2D 2.4C			
				FBA_D<1> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3D		NVDDO_PBI_R 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<2> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3E		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<3> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3F		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<4> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3G		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<5> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3H		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<6> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3I		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<7> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3J		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<8> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3K		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<9> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3L		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<10> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3M		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<11> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3N		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<12> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3O		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<13> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3P		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<14> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3Q		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<15> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3R		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<16> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3S		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<17> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3T		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<18> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3U		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<19> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3V		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<20> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3W		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<21> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3X		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<22> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3Y		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<23> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3Z		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<24> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3A		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<25> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3B		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<26> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3C		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<27> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3D		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<28> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3E		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<29> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3F		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<30> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3G		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<31> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3H		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<32> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3I		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<33> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3J		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<34> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3K		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<35> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3L		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<36> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3M		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<37> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3N		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<38> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3O		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			
				FBA_D<39> 3.1B 4.4B		FBC_D<4> 6.2A 7.4D		HDM_CEC_C, I 12.3P		NVDDO_PBI2 21.5B 21.5D		PEX_TX1T 2.2D 2.4C			

	A	B	C	D	E	F	G	H	
1	<div><div>SNN_FBA_DQS_RN<7> 3.4B</div><div>SNN_FBCM1_RFU_A5 7.2B</div><div>SNN_FBCM1_RFU_V5 7.2B</div><div>SNN_FBCM1_RFU_A5 7.2E</div><div>SNN_FBCM1_RFU_V5 7.2E</div><div>SNN_FBC_DQS_RN<0> 6.4A</div><div>SNN_FBC_DQS_RN<1> 6.4A</div><div>SNN_FBC_DQS_RN<2> 6.4A</div><div>SNN_FBC_DQS_RN<3> 6.4A</div><div>SNN_FBC_DQS_RN<4> 6.4A</div><div>SNN_FBC_DQS_RN<5> 6.4A</div><div>SNN_FBC_DQS_RN<6> 6.4A</div><div>SNN_GND_SENSE_1 2.4E</div><div>SNN_GND_SENSE_3 2.4E</div><div>SNN_GP00_RESERVED 17.3C</div><div>SNN_GP09 17.3C</div><div>SNN_GP011 17.3C</div><div>SNN_GP012 17.3C</div><div>SNN_GP015 14.3E</div><div>SNN_GP017_RESERVED 17.4C</div><div>D</div><div>SNN_GP018_RESERVED 17.4C</div><div>D</div><div>SNN_GP019 13.3E</div><div>SNN_GP020_RESERVED 17.4C</div><div>D</div><div>SNN_GP021 14.3E</div><div>SNN_HDA_BCLK 16.3B</div><div>SNN_HDA_RST* 18.3B</div><div>SNN_HDA_SDI 18.3B</div><div>SNN_HDA_SDO 18.3B</div><div>SNN_HDA_VSYNC 18.3B</div><div>SNN_HDM_RSDV01 12.2G</div><div>SNN_I2CD_SCL 17.3C</div><div>SNN_I2CD_SDA 17.3C</div><div>SNN_I2CE_SCL 17.3C</div><div>SNN_I2CE_SDA 17.3C</div><div>SNN_I2CH_SCL 18.4C</div><div>SNN_I2CH_SDA 18.4C</div><div>SNN_IPA_TXD0 11.2D</div><div>SNN_IPA_TXD0* 11.2D</div><div>SNN_IPB_TXD7 11.2D</div><div>SNN_IPB_TXD7* 11.2D</div><div>SNN_IPFCD_RESET 13.2C</div><div>SNN_IPFD_AUX 13.3E</div><div>SNN_IPFD_AUX* 13.3E</div><div>SNN_IPFD_L0 13.3E</div><div>SNN_IPFD_L0* 13.3E</div><div>SNN_IPFD_L1 13.3E</div><div>SNN_IPFD_L1* 13.3E</div><div>SNN_IPFD_L2 13.3E</div><div>SNN_IPFD_L2* 13.3E</div><div>SNN_IPFD_L3 13.3E</div><div>SNN_IPFD_L3* 13.3E</div><div>SNN_IPFEF_RESET 14.2C</div><div>SNN_IPFE_AUX 14.2E</div><div>SNN_IPFE_AUX* 14.2E</div><div>SNN_IPFE_L0 14.2E</div><div>SNN_IPFE_L0* 14.3E</div><div>SNN_IPFE_L1 14.3E</div><div>SNN_IPFE_L1* 14.2E</div><div>SNN_IPFE_L2 14.2E</div><div>SNN_IPFE_L2* 14.2E</div><div>SNN_IPFE_L3 14.2E</div><div>SNN_IPFE_L3* 14.2E</div><div>SNN_IPFF_AUX 14.3E</div><div>SNN_IPFF_AUX* 14.3E</div><div>SNN_IPFF_L0 14.3E</div><div>SNN_IPFF_L0* 14.3E</div><div>SNN_IPFF_L1 14.3E</div><div>SNN_IPFF_L1* 14.3E</div><div>SNN_IPFF_L2 14.3E</div><div>SNN_IPFF_L2* 14.3E</div><div>SNN_IPFF_L3 14.3E</div><div>SNN_IPFF_L3* 14.3E</div><div>SNN_J25 18.3B</div><div>SNN_J26 18.3B</div><div>SNN_M0AD<0> 15.1D</div><div>SNN_M0AD<1> 15.1D</div><div>SNN_M0AD<2> 15.1D</div><div>SNN_M0AD<3> 15.1D</div><div>SNN_M0AD<4> 15.2D</div><div>SNN_M0AD<5> 15.2D</div><div>SNN_M0AD<6> 15.2D</div><div>SNN_M0AD<7> 15.2D</div><div>SNN_M0AD<8> 15.2D</div><div>SNN_M0AD<9> 15.2D</div><div>SNN_M0AD<10> 15.2D</div><div>SNN_M0AD<11> 15.2D</div><div>SNN_M0AD<12> 15.2D</div><div>SNN_M0AD<13> 15.2D</div><div>SNN_M0AD<14> 15.2D</div><div>SNN_M0A_CAL_PD_VD 15.2B</div><div>DQ</div></div>	<div><div>SNN_M0A_CAL_PD_GN 15.2B</div><div>D</div><div>SNN_M0A_CLKOUT 15.2D</div><div>SNN_M0A_CLKOUT* 15.2D</div><div>SNN_M0A_CLKOUT 15.2D</div><div>SNN_M0A_CLKOUT* 15.2D</div><div>SNN_M0A_VBNC 15.2D</div><div>SNN_M0A_VREF 15.2B</div><div>SNN_M0A_VBNC 15.2D</div><div>SNN_M0B<0> 15.3D</div><div>SNN_M0B<1> 15.3D</div><div>SNN_M0B<2> 15.3D</div><div>SNN_M0B<3> 15.3D</div><div>SNN_M0B<4> 15.3D</div><div>SNN_M0B<5> 15.3D</div><div>SNN_M0B<6> 15.3D</div><div>SNN_M0B<7> 15.3D</div><div>SNN_M0B<8> 15.3D</div><div>SNN_M0B<9> 15.3D</div><div>SNN_M0B<10> 15.3D</div><div>SNN_M0B<11> 15.3D</div><div>SNN_M0B<12> 15.3D</div><div>SNN_M0B<13> 15.3D</div><div>SNN_M0B<14> 15.3D</div><div>SNN_M0B_CAL_PD_VD 15.3B</div><div>DQ</div><div>SNN_M0B_CAL_PD_GN 15.3B</div><div>D</div><div>SNN_M0B_CLKOUT 15.4C</div><div>SNN_M0B_CLKOUT* 15.4C</div><div>SNN_M0B_CLKOUT 15.4C</div><div>SNN_M0B_CLKOUT* 15.4C</div><div>SNN_M0B_VREF 15.4B</div><div>SNN_M0B_VBNC 15.4D</div><div>SNN_NC<1> 2.2E</div><div>SNN_NC<2> 2.2E</div><div>SNN_NC<3> 2.2E</div><div>SNN_NC<4> 2.2E</div><div>SNN_NC<5> 2.3E</div><div>SNN_NC<6> 2.3E</div><div>SNN_NC<7> 2.3E</div><div>SNN_NC<8> 2.3E</div><div>SNN_NC<9> 2.3E</div><div>SNN_NC<10> 2.3E</div><div>SNN_NC<11> 2.3E</div><div>SNN_NC<14> 2.3E</div><div>SNN_NC<16> 2.3E</div><div>SNN_NC<17> 2.3E</div><div>SNN_NC<18> 2.3E</div><div>SNN_NC<21> 2.3E</div><div>SNN_NC<22> 2.3E</div><div>SNN_NC<23> 2.3E</div><div>SNN_NCP1402_NC 19.2A</div><div>SNN_PCAS15 12.1G</div><div>SNN_PCAS15_EN 12.1H</div><div>SNN_PEX_RFU1 2.2E</div><div>SNN_PEX_WAKE* 2.2B</div><div>SNN_PE_PBSNT2_A 2.1A</div><div>SNN_PE_PBSNT2_B 2.2A</div><div>SNN_PE_PBSNT2_C 2.3A</div><div>SNN_PE_RSDV2 2.2A</div><div>SNN_PE_RSDV3 2.2A</div><div>SNN_PE_RSDV4 2.2A</div><div>SNN_PE_RSDV5 2.2A</div><div>SNN_PE_RSDV6 2.2A</div><div>SNN_PE_RSDV7 2.4A</div><div>SNN_PE_RSDV8 2.4A</div><div>SNN_PGOOD_OUT* 18.4C</div><div>SNN_RFU1 6.5D</div><div>SNN_RFU2 6.5D</div><div>SNN_VDD_SENSE_1 2.4E</div><div>SNN_VDD_SENSE_3 2.4E</div><div>SNN_VGA_1_ID0 10.9I</div><div>SNN_VGA_1_ID0 10.4D</div><div>SNN_VGA_2_ID0 10.4I</div><div>SNN_VGA_2_ID2 10.5G</div><div>SPOF_IN 18.4C</div><div>STRAP0 15.4E 18.2B</div><div>STRAP1 15.4E 18.2B</div><div>STRAP2 15.4E 18.2B</div><div>STRAP_REF0 18.4B</div><div>STRAP_REF1 18.4B</div><div>THERM_DA 17.1G</div><div>THERM_DA_R 17.1G</div><div>THERM_DC 17.1G</div><div>THERM_DC_R 17.1G</div><div>TS_THERM_DA 17.3B</div><div>TS_THERM_DC 17.3B</div><div>XTAL_IN 16.2C 16.5G</div><div>XTAL_OUT 16.2D 16.5G</div><div>XTAL_OUTBUFF 16.2D 16.5G</div><div>XTAL_SSIN 16.2B 16.5G</div></div>							
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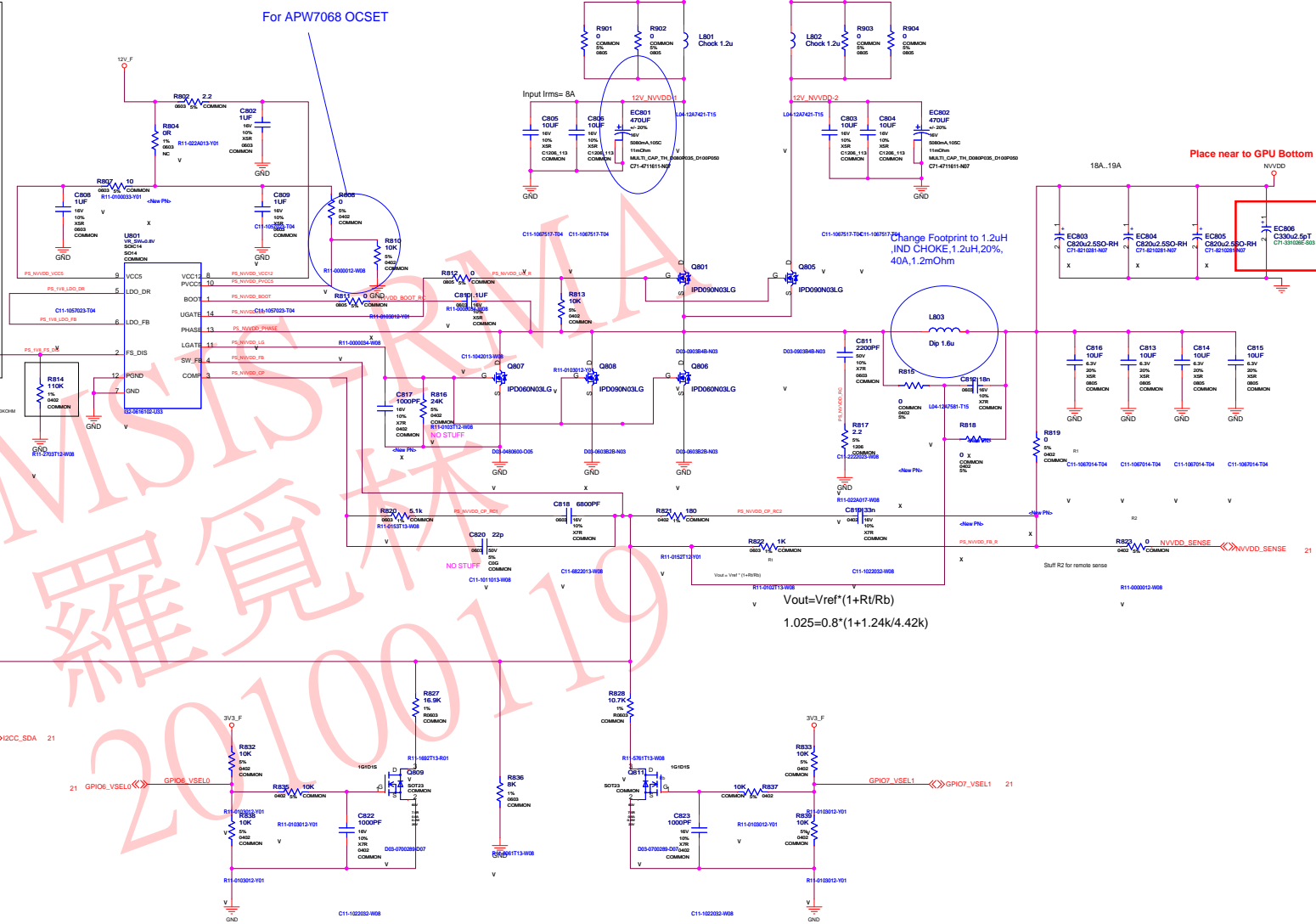
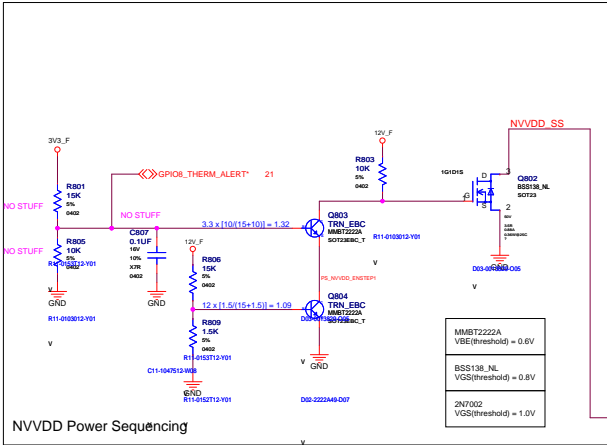
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Power Supply III: NVVDD

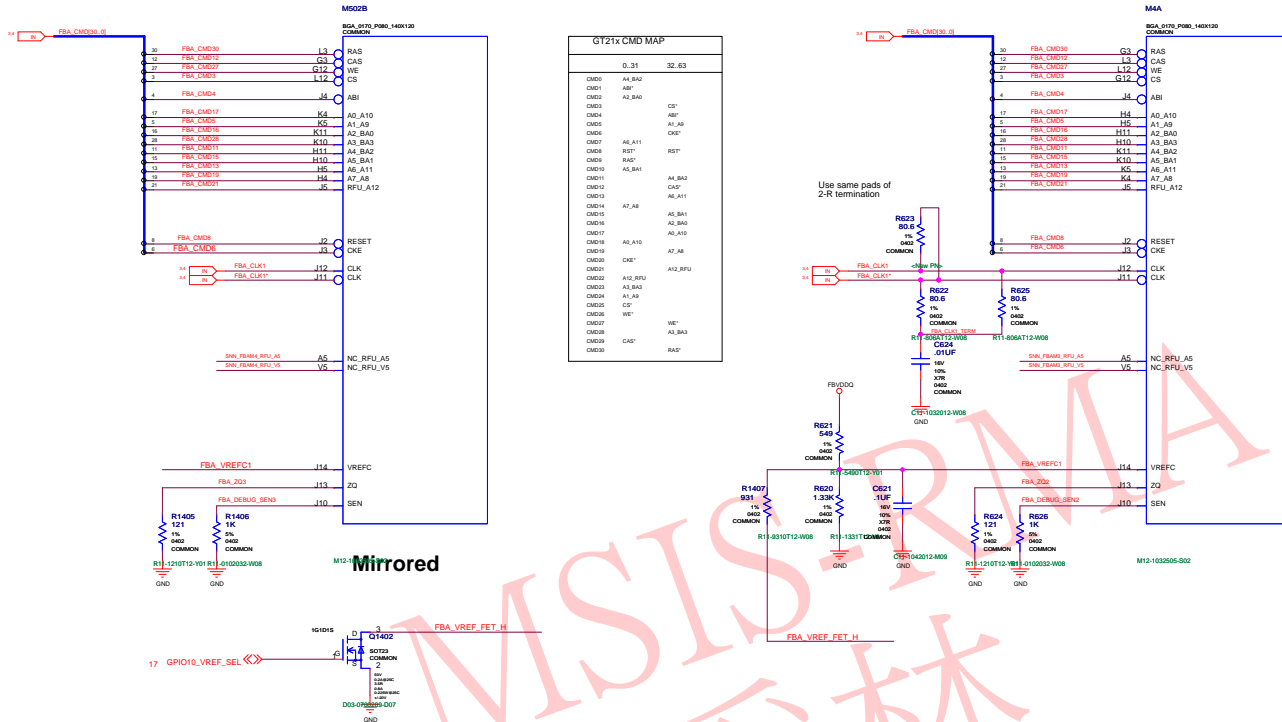


NVVDD = Vref * Rbot / (Rtop + Rbot)
1.025V = 0.8 * 2.21 / (2.00 + 2.21)

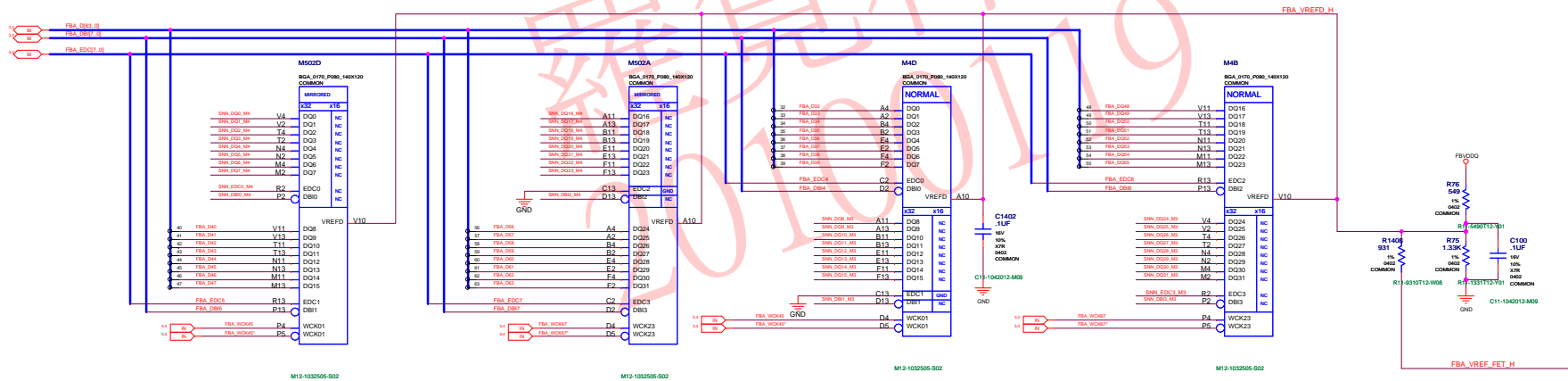
NVVDD Voltage Selection
Place close to NVVDD feedback loop

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MEMORY Partition A -Upper Half



!!! Place all WCK termination inline instead at the memory near end (<50ps ~300MIL from DRAM pin) !!!



	NET	DIFFPAIR	NV_IMPANCE	NV_CRITICAL_NET
1.0	FBA_DMS_00	0.000	1.000M	+
1.0	FBA_DMS_01	0.000	1.000M	+
1.0	FBA_DMS_02	0.000	1.000M	+
1.0	FBA_DMS_03	0.000	1.000M	+
1.0	FBA_DMS_04	0.000	1.000M	+
1.0	FBA_DMS_05	0.000	1.000M	+
1.0	FBA_DMS_06	0.000	1.000M	+
1.0	FBA_DMS_07	0.000	1.000M	+
1.0	FBA_DMS_08	0.000	1.000M	+
1.0	FBA_DMS_09	0.000	1.000M	+
1.0	FBA_DMS_10	0.000	1.000M	+
1.0	FBA_DMS_11	0.000	1.000M	+
1.0	FBA_DMS_12	0.000	1.000M	+
1.0	FBA_DMS_13	0.000	1.000M	+
1.0	FBA_DMS_14	0.000	1.000M	+
1.0	FBA_DMS_15	0.000	1.000M	+
1.0	FBA_DMS_16	0.000	1.000M	+
1.0	FBA_DMS_17	0.000	1.000M	+
1.0	FBA_DMS_18	0.000	1.000M	+
1.0	FBA_DMS_19	0.000	1.000M	+
1.0	FBA_DMS_20	0.000	1.000M	+
1.0	FBA_DMS_21	0.000	1.000M	+
1.0	FBA_DMS_22	0.000	1.000M	+
1.0	FBA_DMS_23	0.000	1.000M	+
1.0	FBA_DMS_24	0.000	1.000M	+
1.0	FBA_DMS_25	0.000	1.000M	+
1.0	FBA_DMS_26	0.000	1.000M	+
1.0	FBA_DMS_27	0.000	1.000M	+
1.0	FBA_DMS_28	0.000	1.000M	+
1.0	FBA_DMS_29	0.000	1.000M	+
1.0	FBA_DMS_30	0.000	1.000M	+
1.0	FBA_DMS_31	0.000	1.000M	+
1.0	FBA_DMS_32	0.000	1.000M	+
1.0	FBA_DMS_33	0.000	1.000M	+
1.0	FBA_DMS_34	0.000	1.000M	+
1.0	FBA_DMS_35	0.000	1.000M	+
1.0	FBA_DMS_36	0.000	1.000M	+
1.0	FBA_DMS_37	0.000	1.000M	+
1.0	FBA_DMS_38	0.000	1.000M	+
1.0	FBA_DMS_39	0.000	1.000M	+
1.0	FBA_DMS_40	0.000	1.000M	+
1.0	FBA_DMS_41	0.000	1.000M	+
1.0	FBA_DMS_42	0.000	1.000M	+
1.0	FBA_DMS_43	0.000	1.000M	+
1.0	FBA_DMS_44	0.000	1.000M	+
1.0	FBA_DMS_45	0.000	1.000M	+
1.0	FBA_DMS_46	0.000	1.000M	+
1.0	FBA_DMS_47	0.000	1.000M	+
1.0	FBA_DMS_48	0.000	1.000M	+
1.0	FBA_DMS_49	0.000	1.000M	+
1.0	FBA_DMS_50	0.000	1.000M	+
1.0	FBA_DMS_51	0.000	1.000M	+
1.0	FBA_DMS_52	0.000	1.000M	+
1.0	FBA_DMS_53	0.000	1.000M	+
1.0	FBA_DMS_54	0.000	1.000M	+
1.0	FBA_DMS_55	0.000	1.000M	+
1.0	FBA_DMS_56	0.000	1.000M	+
1.0	FBA_DMS_57	0.000	1.000M	+
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1.0	FBA_DMS_60	0.000	1.000M	+
1.0	FBA_DMS_61	0.000	1.000M	+
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1.0	FBA_DMS_67	0.000	1.000M	+
1.0	FBA_DMS_68	0.000	1.000M	+
1.0	FBA_DMS_69	0.000	1.000M	+
1.0	FBA_DMS_70	0.000	1.000M	+
1.0	FBA_DMS_71	0.000	1.000M	+
1.0	FBA_DMS_72	0.000	1.000M	+
1.0	FBA_DMS_73	0.000	1.000M	+
1.0	FBA_DMS_74	0.000	1.000M	+
1.0	FBA_DMS_75	0.000	1.000M	+
1.0	FBA_DMS_76	0.000	1.000M	+
1.0	FBA_DMS_77	0.000	1.000M	+
1.0	FBA_DMS_78	0.000	1.000M	+
1.0	FBA_DMS_79	0.000	1.000M	+
1.0	FBA_DMS_80	0.000	1.000M	+
1.0	FBA_DMS_81	0.000	1.000M	+
1.0	FBA_DMS_82	0.000	1.000M	+
1.0	FBA_DMS_83	0.000	1.000M	+
1.0	FBA_DMS_84	0.000	1.000M	+
1.0	FBA_DMS_85	0.000	1.000M	+
1.0	FBA_DMS_86	0.000	1.000M	+
1.0	FBA_DMS_87	0.000	1.000M	+
1.0	FBA_DMS_88	0.000	1.000M	+
1.0	FBA_DMS_89	0.000	1.000M	+
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1.0	FBA_DMS_91	0.000	1.000M	+
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1.0	FBA_DMS_93	0.000	1.000M	+
1.0	FBA_DMS_94	0.000	1.000M	+
1.0	FBA_DMS_95	0.000	1.000M	+
1.0	FBA_DMS_96	0.000	1.000M	+
1.0	FBA_DMS_97	0.000	1.000M	+
1.0	FBA_DMS_98	0.000	1.000M	+
1.0	FBA_DMS_99	0.000	1.000M	+
1.0	FBA_DMS_100	0.000	1.000M	+
1.0	FBA_DMS_101	0.000	1.000M	+
1.0	FBA_DMS_102	0.000	1.000M	+
1.0	FBA_DMS_103	0.000	1.000M	+
1.0	FBA_DMS_104	0.000	1.000M	+
1.0	FBA_DMS_105	0.000	1.000M	+
1.0	FBA_DMS_106	0.000	1.000M	+
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1.0	FBA_DMS_110	0.000	1.000M	+
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1.0	FBA_DMS_114	0.000	1.000M	+
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1.0	FBA_DMS_122	0.000	1.000M	+
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1.0	FBA_DMS_124	0.000	1.000M	+
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1.0	FBA_DMS_126	0.000	1.000M	+
1.0	FBA_DMS_127	0.000	1.000M	+
1.0	FBA_DMS_128	0.000	1.000M	+
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1.0	FBA_DMS_130	0.000	1.000M	+
1.0	FBA_DMS_131	0.000	1.000M	+
1.0	FBA_DMS_132	0.000	1.000M	+
1.0	FBA_DMS_133	0.000	1.000M	+
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1.0	FBA_DMS_135	0.000	1.000M	+
1.0	FBA_DMS_136	0.000	1.000M	+
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1.0	FBA_DMS_139	0.000	1.000M	+
1.0	FBA_DMS_140	0.000	1.000M	+
1.0	FBA_DMS_141	0.000	1.000M	+
1.0	FBA_DMS_142	0.000	1.000M	+
1.0	FBA_DMS_143	0.000	1.000M	+
1.0	FBA_DMS_144	0.000	1.000M	+
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1.0	FBA_DMS_147	0.000	1.000M	+
1.0	FBA_DMS_148	0.000	1.000M	+
1.0	FBA_DMS_149	0.000	1.000M	+
1.0	FBA_DMS_150	0.000	1.000M	+
1.0	FBA_DMS_151	0.000	1.000M	+
1.0	FBA_DMS_152	0.000	1.000M	+
1.0	FBA_DMS_153	0.000	1.000M	+
1.0	FBA_DMS_154	0.000	1.000M	+
1.0	FBA_DMS_155	0.000	1.000M	+
1.0	FBA_DMS_156	0.000	1.000M	+
1.0	FBA_DMS_157	0.000	1.000M	+
1.0	FBA_DMS_158	0.000	1.000M	+
1.0	FBA_DMS_159	0.000	1.000M	+
1.0	FBA_DMS_160	0.000	1.000M	+
1.0	FBA_DMS_161	0.000	1.000M	+
1.0	FBA_DMS_162	0.000	1.000M	+
1.0	FBA_DMS_163	0.000	1.000M	+
1.0	FBA_DMS_164	0.000	1.000M	+
1.0	FBA_DMS_165	0.000	1.000M	+
1.0	FBA_DMS_166	0.000	1.000M	+
1.0	FBA_DMS_167	0.000	1.000M	+
1.0	FBA_DMS_168	0.000	1.000M	+
1.0	FBA_DMS_169	0.000	1.000M	+
1.0	FBA_DMS_170	0.000	1.000M	+
1.0	FBA_DMS_171	0.000	1.000M	+
1.0	FBA_DMS_172	0.000	1.000M	+
1.0	FBA_DMS_173	0.000	1.000M	+
1.0	FBA_DMS_174	0.000	1.000M	+
1.0	FBA_DMS_175	0.000	1.000M	+
1.0	FBA_DMS_176	0.000	1.000M	+
1.0	FBA_DMS_177	0.000	1.000M	+
1.0	FBA_DMS_178	0.000	1.000M	+
1.0	FBA_DMS_179	0.000	1.000M	+
1.0	FBA_DMS_180	0.000	1.000M	+
1.0	FBA_DMS_181	0.000	1.000M	+
1.0	FBA_DMS_182	0.000	1.000M	+
1.0	FBA_DMS_183	0.000	1.000M	+
1.0	FBA_DMS_184	0.000	1.000M	+
1.0	FBA_DMS_185	0.000	1.000M	+
1.0	FBA_DMS_186	0.000	1.000M	+
1.0	FBA_DMS_187	0.000	1.000M	+
1.0	FBA_DMS_188	0.000	1.000M	+
1.0	FBA_DMS_189	0.000	1.000M	+
1.0	FBA_DMS_190	0.000	1.000M	+
1.0	FBA_DMS_191	0.000	1.000M	+
1.0	FBA_DMS_192	0.000	1.000M	+
1.0	FBA_DMS_193	0.000	1.000M	+
1.0	FBA_DMS_194	0.000	1.000M	+
1.0	FBA_DMS_195	0.000	1.000M	+
1.0	FBA_DMS_196	0.000	1.000M	+
1.0	FBA_DMS_197	0.000	1.000M	+
1.0	FBA_DMS_198	0.000	1.000M	+
1.0	FBA_DMS_199	0.000	1.000M	+
1.0	FBA_DMS_200	0.000	1.000M	+
1.0	FBA_DMS_201	0.000	1.000M	+
1.0	FBA_DMS_202	0.000	1.000M	+
1.0	FBA_DMS_203	0.000	1.000M	+
1.0	FBA_DMS_204	0.000	1.000M	+
1.0	FBA_DMS_205	0.000	1.000M	+
1.0	FBA_DMS_206	0.000	1.000M	+
1.0	FBA_DMS_207	0.000	1.000M	+
1.0	FBA_DMS_208	0.000	1.000M	+
1.0	FBA_DMS_209	0.000	1.000M	+
1.0	FBA_DMS_210	0.000	1.000M	+
1.0	FBA_DMS_211	0.000	1.000M	+
1.0	FBA_DMS_212	0.000	1.000M	+
1.0	FBA_DMS_213	0.000	1.000M	+
1.0	FBA_DMS_214	0.000	1.000M	+
1.0	FBA_DMS_215	0.000	1.000M	+
1.0	FBA_DMS_216	0.000	1.000M	+
1.0	FBA_DMS_217	0.000	1.000M	+
1.0	FBA_DMS_218	0.000	1.000M	+
1.0	FBA_DMS_219	0.000	1.000M	+
1.0	FBA_DMS_220	0.000	1.000M	+
1.0	FBA_DMS_221	0.000	1.000M	+
1.0	FBA_DMS_222	0.000	1.000M	+
1.0	FBA_DMS_223	0.000	1.000M	+
1.0	FBA_DMS_224	0.000	1.000M	+
1.0	FBA_DMS_225	0.000	1.000M	+
1.0	FBA_DMS_226	0.000	1.000M	+
1.0	FBA_DMS_227	0.000	1.000M	+
1.0	FBA_DMS_228	0.000	1.000M	+
1.0	FBA_DMS_229	0.000	1.000M	+
1.0	FBA_DMS_230	0.000	1.000M	+
1.0	FBA_DMS_231	0.000	1.000M	+
1.0	FBA_DMS_232	0.000	1.000M	+
1.0	FBA_DMS_233	0.000	1.000M	+
1.0	FBA_DMS_234	0.000	1.000M	+
1.0	FBA_DMS_235	0.000	1.000M	+
1.0	FBA_DMS_236	0.000	1.000M	+
1.0	FBA_DMS_237	0.000	1.000M	+
1.0	FBA_DMS_238	0.000	1.000M	+
1.0	FBA_DMS_239	0.000	1.000M	+
1.0	FBA_DMS_240	0.000	1.000M	+
1.0	FBA_DMS_241	0.000	1.000M	+
1.0	FBA_DMS_242	0.000	1.000M	+
1.0	FBA_DMS_243	0.000	1.000M	+
1.0	FBA_DMS_244	0.000	1.000M	+
1.0	FBA_DMS_245	0.000	1.000M	+
1.0	FBA_DMS_246	0.000	1.000M	+
1.0	FBA_DMS_247	0.000	1.000M	+
1.0	FBA_DMS_248	0.000	1.000M	

NVIDIA CORPORATION

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NV_PN	600-10672-base-100 A
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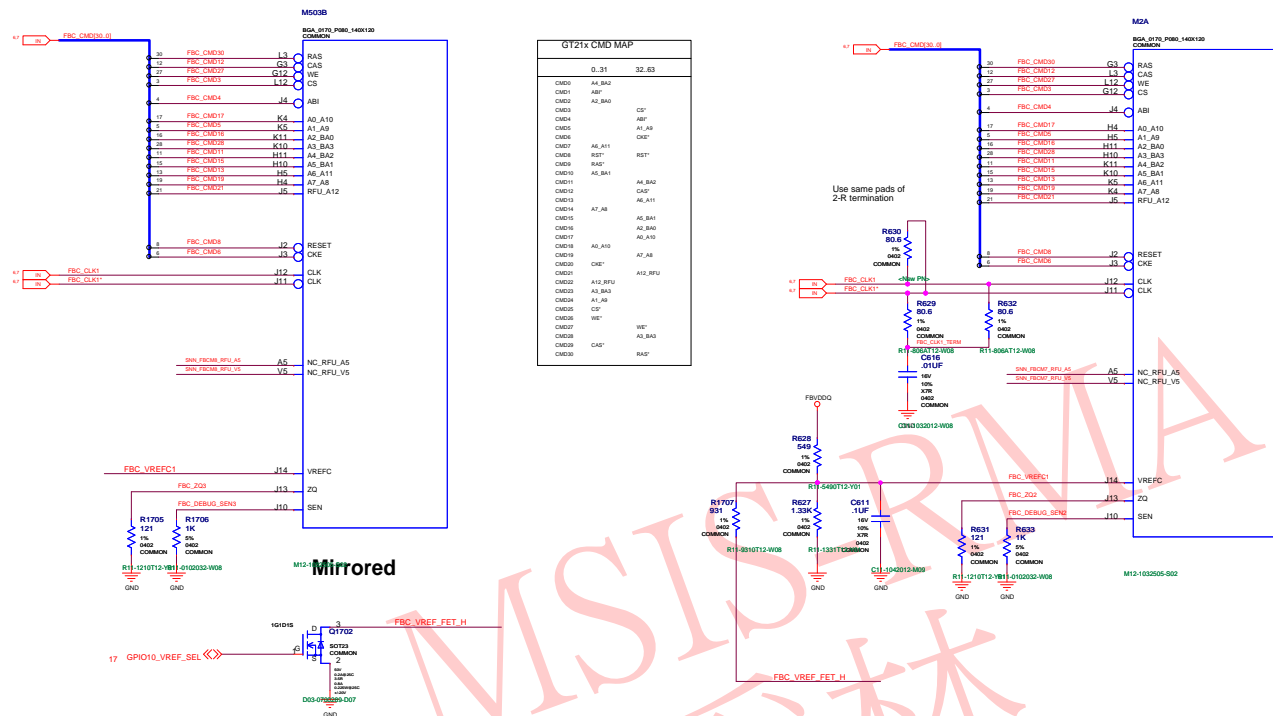
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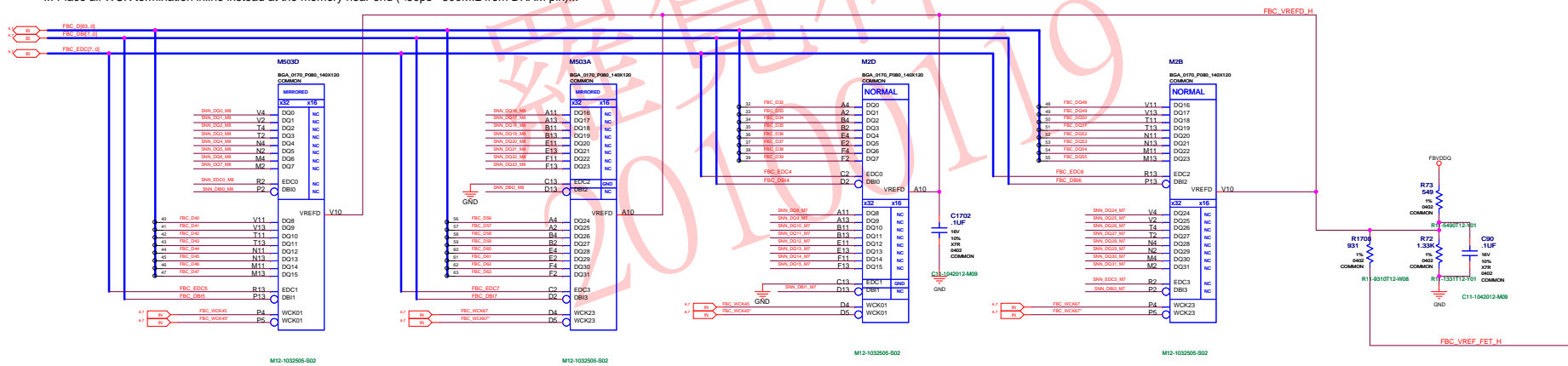
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBA 32Mx32 GDDR5 MEMORIES, FBA CLK TERMS

MEMORY Partition C-----Upper Half



!!! Place all WCK termination inline instead at the memory near end (<50ps ~300MIL from DRAM pin)!!!



NET		DIFFPAIR		NV_INVIDENCE		NV_CRITICAL_NET	
6	FBC_OB3_01			PC004	+		
6	FBC_OB3_02			PC004	+		
6	FBC_OB3_03			PC004	+		
6	FBC_OB3_04			PC004	+		
6	FBC_OB3_05			PC004	+		
6,7	FBC_CLK3	FBC_CLK3	RI007		+		
6,7	FBC_CLK4	FBC_CLK4	RI007		+		
6,7	FBC_CLK5	FBC_CLK5	RI007		+		
6,7	FBC_CLK7	FBC_CLK7	RI007		+		
6,7	FBC_WCK01	FBC_WCK001	RI007		+		
6,7	FBC_WCK02	FBC_WCK002	RI007		+		
6,7	FBC_WCK03	FBC_WCK003	RI007		+		
6,7	FBC_WCK04	FBC_WCK004	RI007		+		
6,7	FBC_WCK05	FBC_WCK005	RI007		+		
6,7	FBC_WCK07	FBC_WCK007	RI007		+		
6,7	FBC_WCK08	FBC_WCK008	RI007		+		
MIN_LINE_WIDTH							
6	FBC_VREFD0	0.90V	1.06V				
6	FBC_VREFC1	0.90V	1.06V				
6	FBC_VREFD0	0.90V	1.06V				
6	FBC_VREFD1	0.90V	1.06V				
6	FBC_CLK3_TERM	0.90V	7.03OHM				
6	FBC_CLK4_TERM	0.90V	7.03OHM				
6	FBC_WCK01_CT	0.90V	7.03OHM				
6	FBC_WCK03_CT	0.90V	7.03OHM				
6	FBC_WCK05_CT	0.90V	7.03OHM				
6	FBC_WCK07_CT	0.90V	7.03OHM				