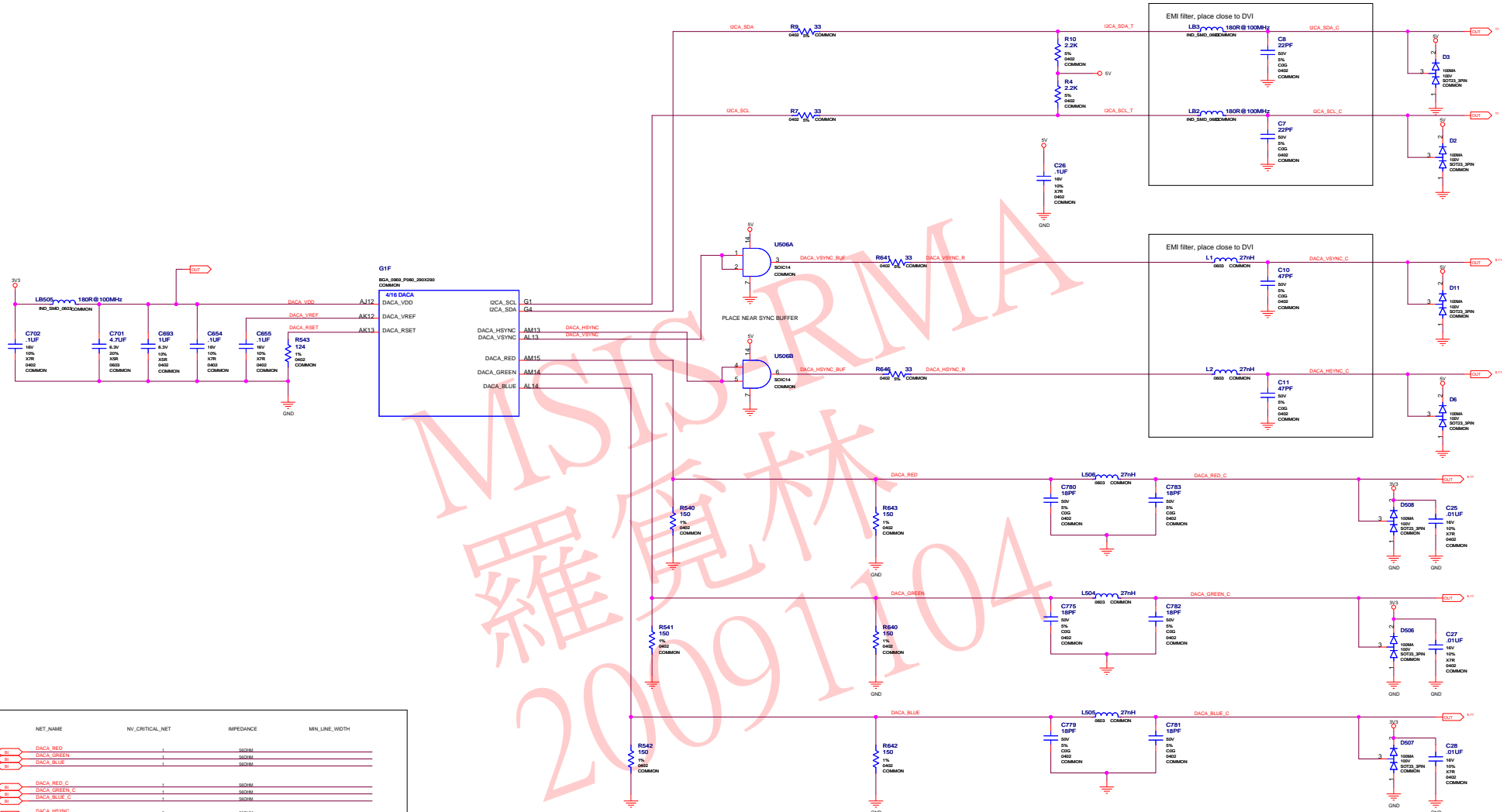



DACA (SOUTH DVI-I)

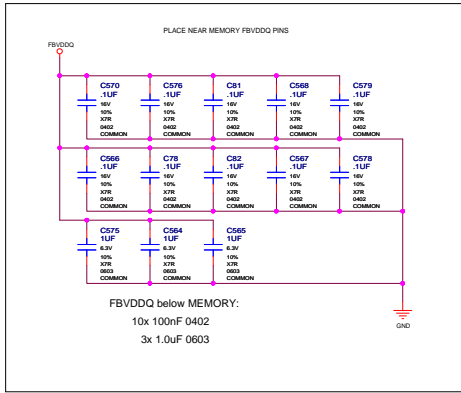


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W	DACA_RED	1	500ohm	
W	DACA_GREEN	1	500ohm	
W	DACA_BLUE	1	500ohm	
W	DACA_RED_C	1	500ohm	
W	DACA_GREEN_C	1	500ohm	
W	DACA_BLUE_C	1	500ohm	
W	DACA_VERNIC	2	500ohm	
W	DACA_VERNIC_N	2	500ohm	
W	DACA_VERNIC_W	2	500ohm	
W	DACA_VERNIC_EUP	2	500ohm	
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W	DACA_VERNIC_O	2	500ohm	

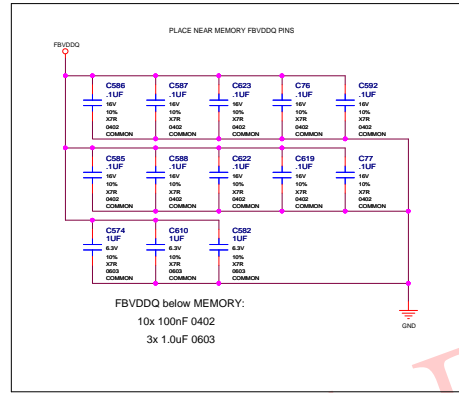
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NV_PN	600-10681-base-100 A		
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NAME		DATE	05-FEB-2009

FBC DECOUPLING CAPS & NVVDD DECOUPLING CAPS

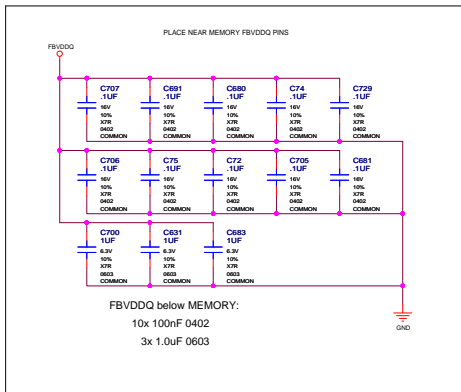
Decoupling for FBC 0..15



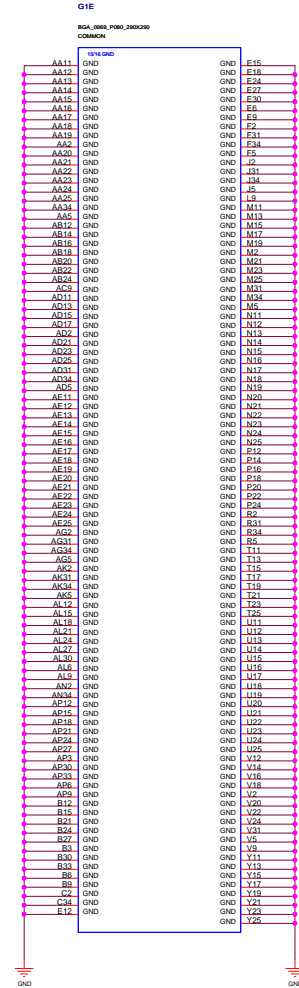
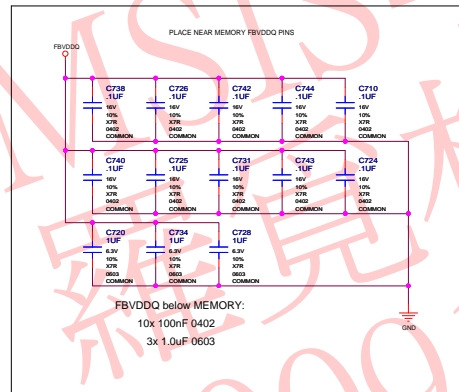
Decoupling for FBC 16..31



Decoupling for FBC 32..47



Decoupling for FBC 48..63



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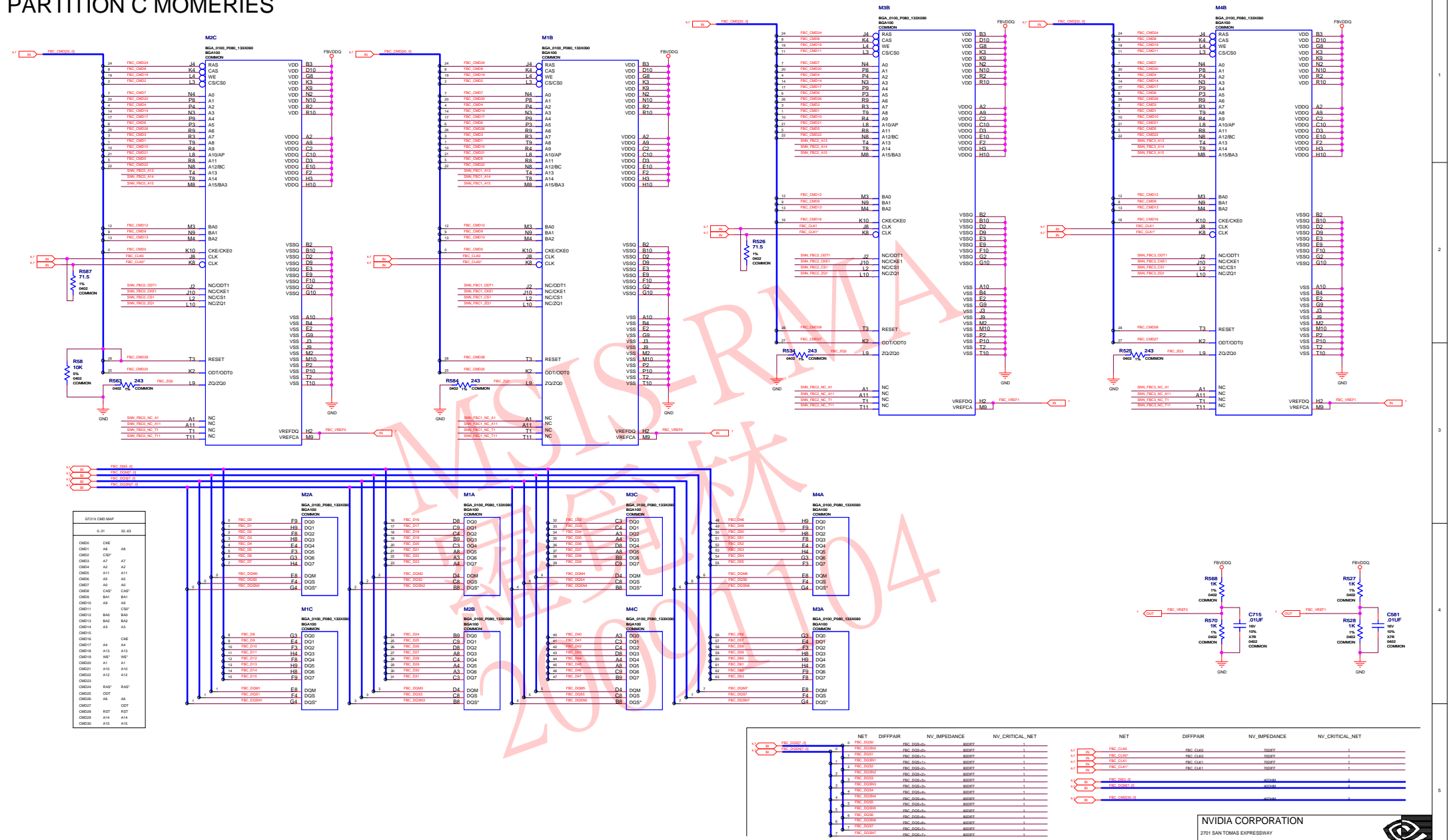


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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY; COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	PARTITION C MEMORIES

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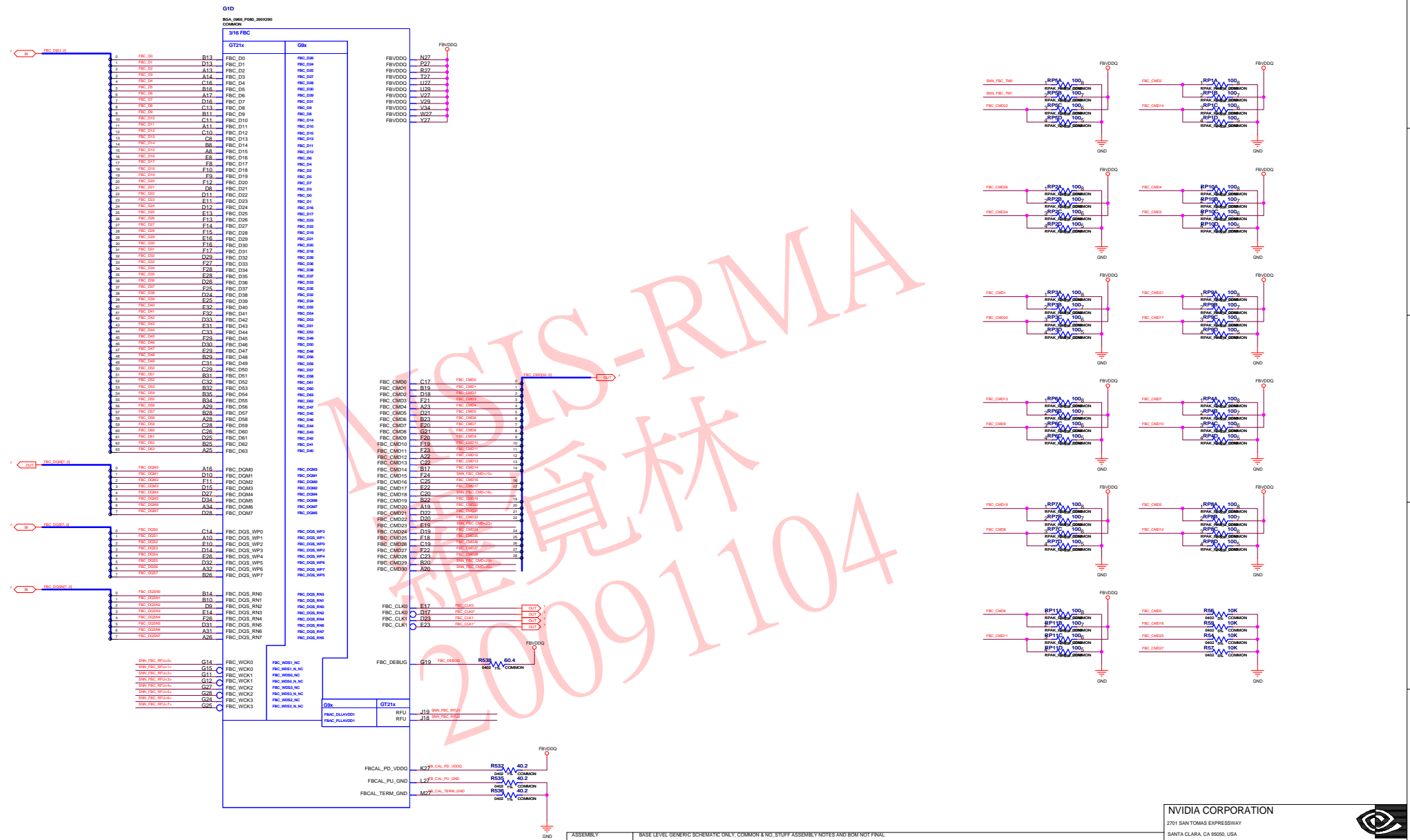
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PARTITION C FRAME BUFFER INTERFACE



2701 SAN TOMAS EXPRESSWAY

NV PN	600-10681-base
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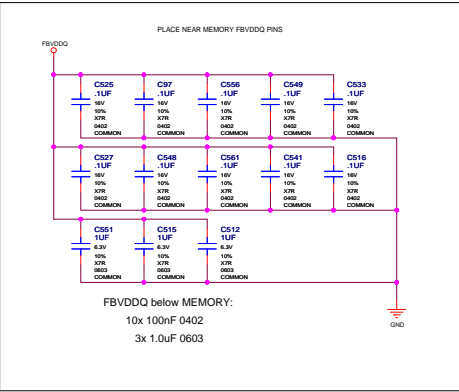
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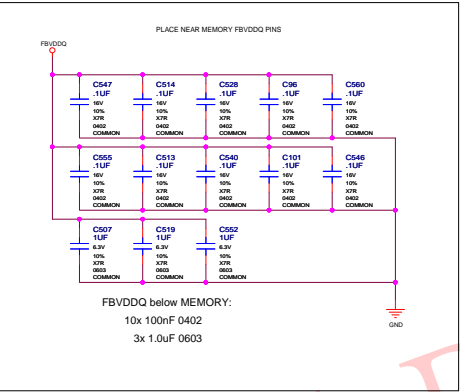
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FBA DECOUPLING CAPS & NVVDD DECOUPLING CAPS

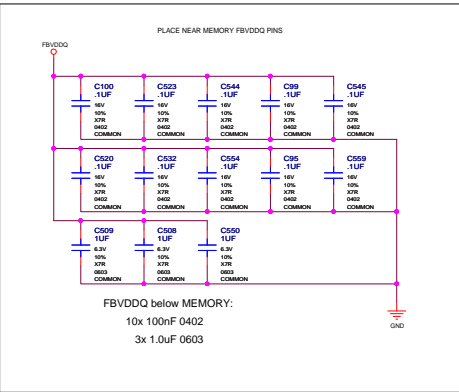
Decoupling for FBA 0..15



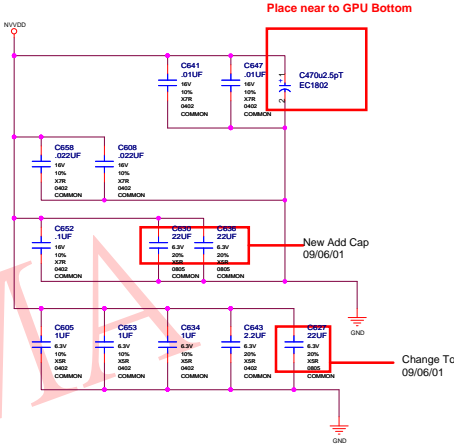
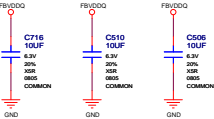
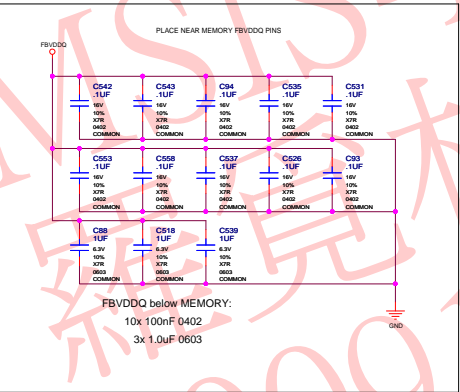
Decoupling for FBA 16..31



Decoupling for FBA 32..47

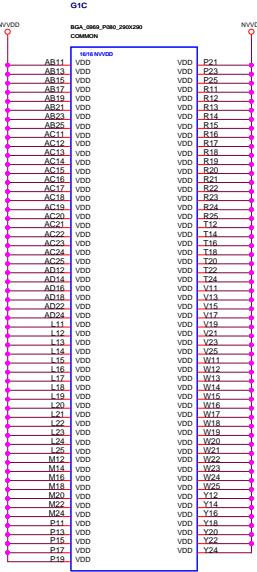
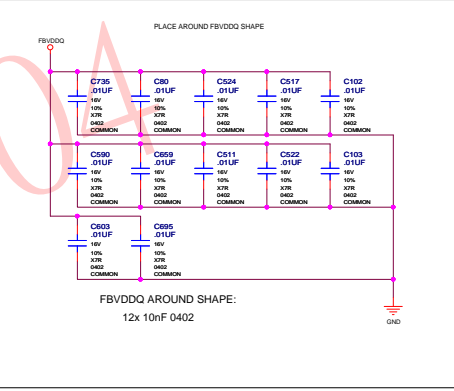


Decoupling for FBA 48..63



- NVVDD under GPU:
- 4x 0.01uF 0402 X7R
 - 5x 0.022uF 0402 X7R
 - 2x 0.047uF 0402 X7R
 - 1x 0.1uF 0402 X7R
 - 1x 0.22uF 0402 X7R
 - 4x 1.0uF 0402 X5R
 - 1x 2.2uF 0402 X5R
 - 2x 10uF 0805 X5R

Decoupling for EMI



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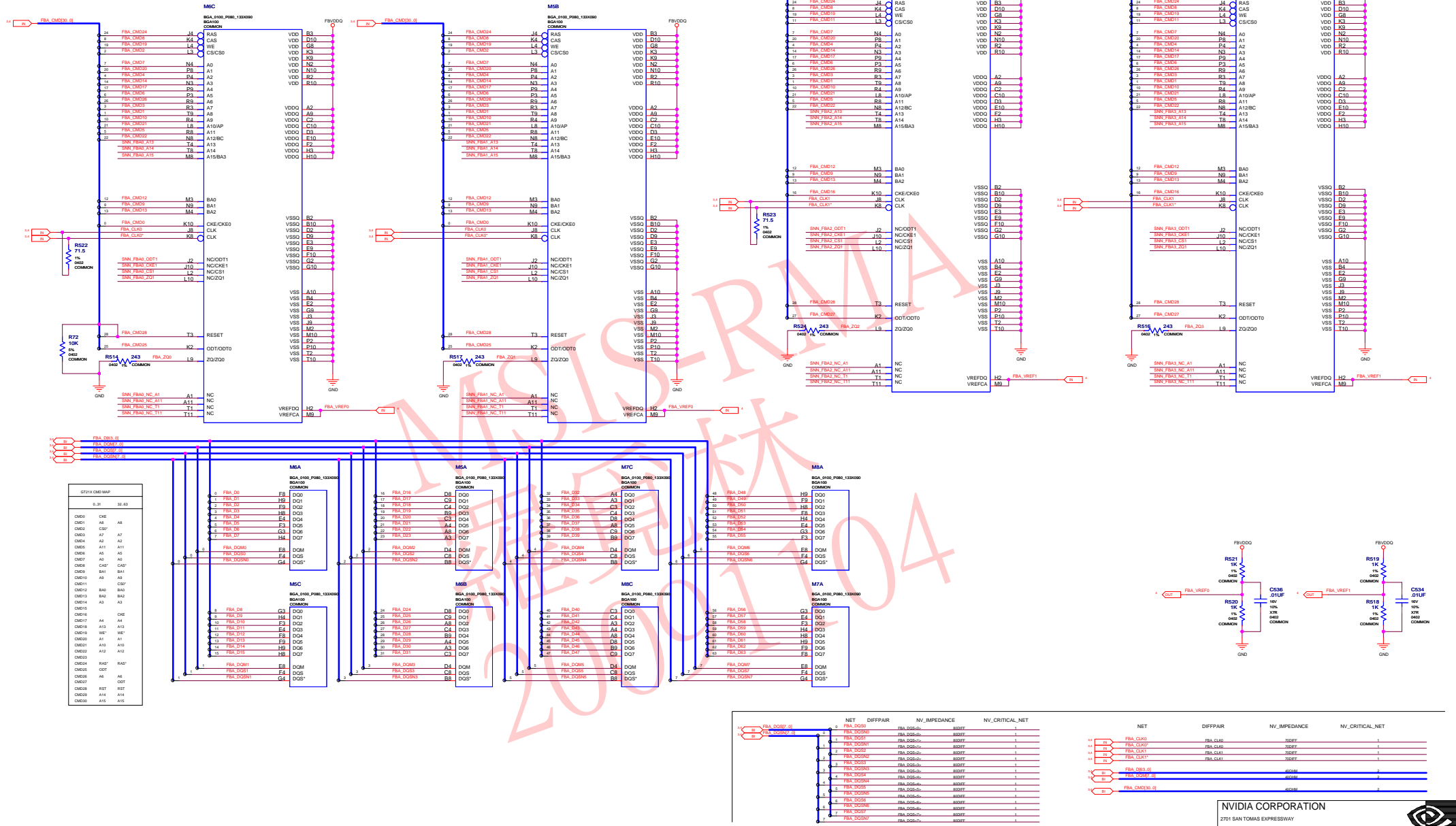
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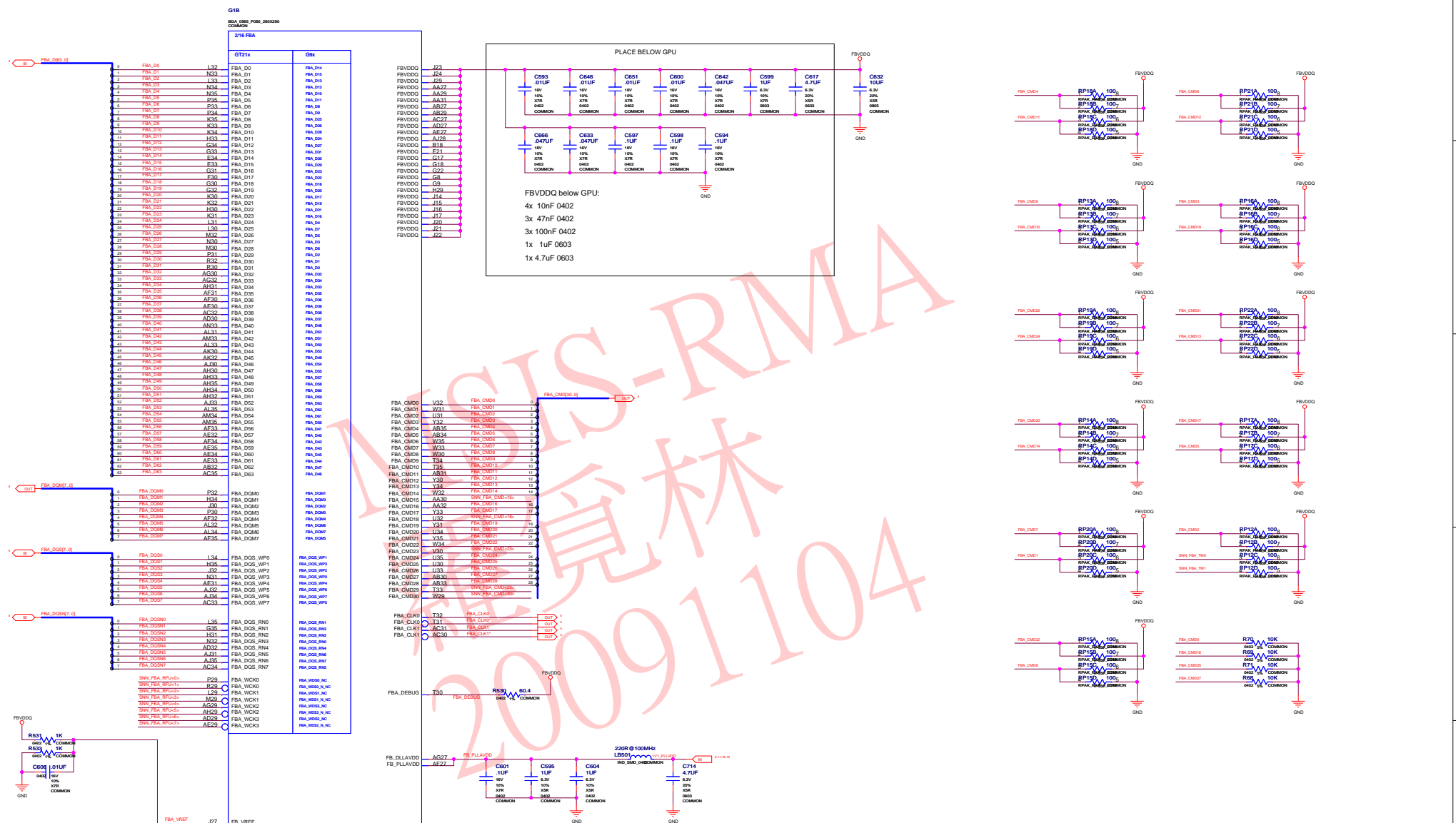
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PARTITION A MOMERIES



PARTITION A FRAME BUFFER INTERFACE



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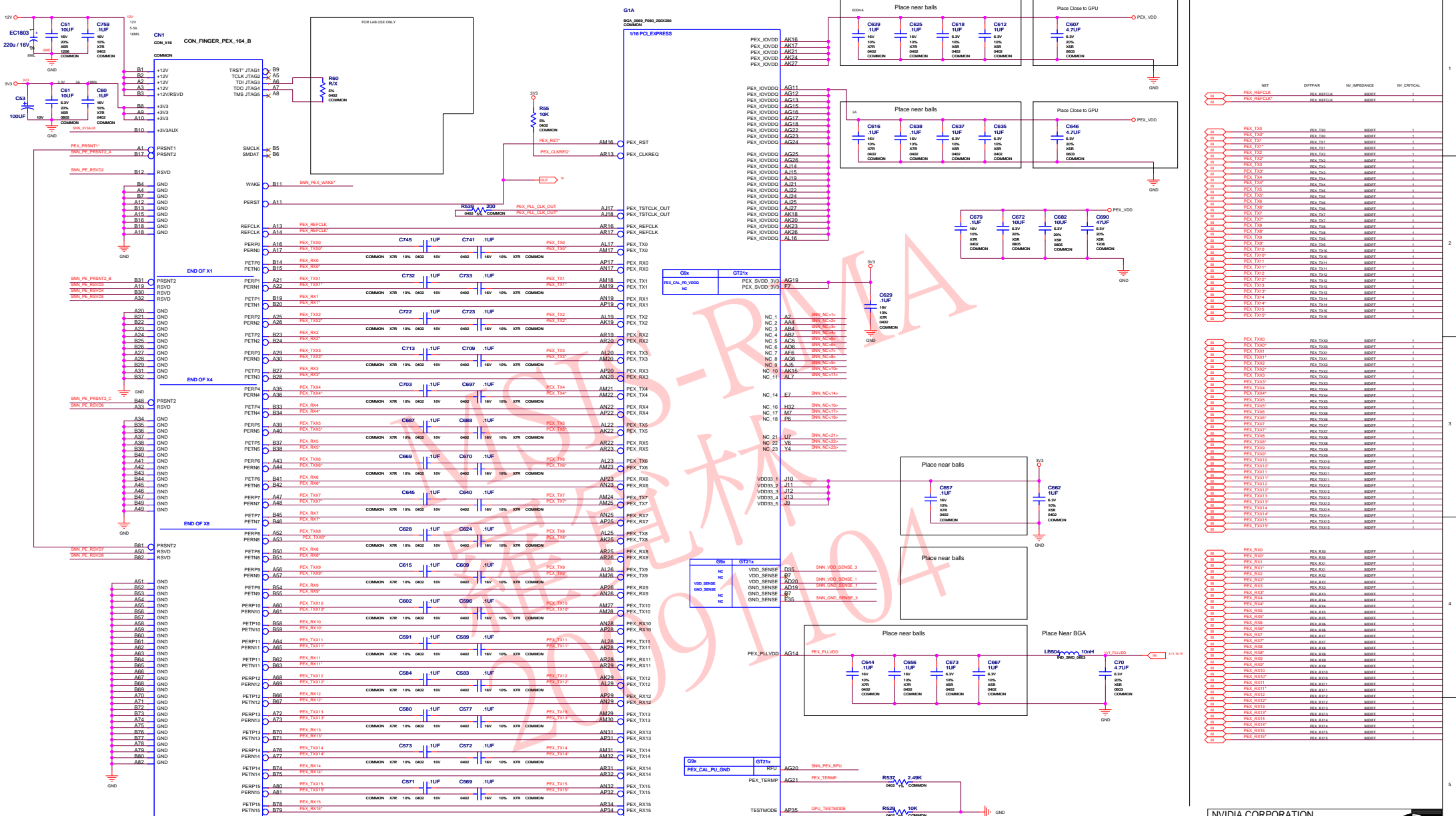
A schematic diagram of a horizontal beam of length L . A vertical line is drawn at a distance x from the left end. The right end of the beam is labeled H .

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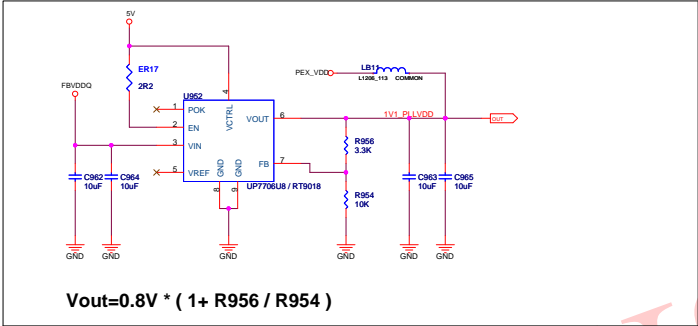
A		B		C		D		E		F		G		H	
Title: Basepad Report		FBA_CMD<21> 3.20 3.4C 4.1A 4.1C		FBA_D0Bn<0> 3.4B 4.4B 4.5E		FBC_D<25> 6.2B 7.4C		GPIO0_FAN_PWM_Q_L 17.4G		NVDDO_GND_SENSE_R 21.2B 21.4C		PEX_TX00 2.2B 2.3G			
Design: p081		4.1E 4.1G		FBA_D0Bn<7> 3.4A 4.3A 4.5E		FBC_D<26> 6.2B 7.4C		GPIO0_FAN_PWM_R 17.3F		NVDDO_OPS 21.3C		PEX_TX00? 2.2B 2.3G			
Date: Jan 22 13:35:02 2009		FBA_CMD<21> 3.4C 3.4F 4.1E 4.1G		FBA_D0Bn<1> 3.4B 4.4B 4.5E		FBC_D<27> 6.2B 7.4C		GPIO0_FIBROD_VBEL 17.4D 20.4D		NVDDO_MODE 21.3C		PEX_TX01 2.2B 2.3G			
		4.2A 4.2C		FBA_D0Bn<2> 3.4B 4.4C 4.5E		FBC_D<28> 6.2B 7.4C		GPIO0_FAN_PWM 17.4C		NVDDO_MODE_Q 21.1B		PEX_TX01? 2.2B 2.3G			
		FBA_CMD<4> 3.3F 3.4C 4.1A 4.1C		FBA_D0Bn<3> 3.4B 4.4C 4.5E		FBC_D<29> 6.2B 7.4C		GPU_PLLVDD 16.3B		NVDDO_MODE_R 21.2B		PEX_TX02 2.2B 2.3G			
		4.1E 4.1G		FBA_D0Bn<4> 3.4B 4.4C 4.5E		FBC_D<30> 6.2B 7.4C		GPU_TESTMODE 2.5E		NVDDO_REFIN 21.3C		PEX_TX02? 2.2B 2.3G			
p081_3b_P081(p081_3b_P081) (sch_1)		FBA_CMD<5> 3.4C 3.4D 4.3A 4.3C		FBA_D0Bn<5> 3.4B 4.4C 4.5E		FBC_D<31> 6.2B 7.4C		HDA_PIO 16.3C		NVDDO_RESET 21.3C		PEX_TX03 2.2B 2.3G			
Base Signal Location (20m9109)		FBA_CMD<26> 3.3F 3.4C 4.1A 4.1C		FBA_D0Bn<6> 3.4B 4.4E 4.5E		FBC_D<32> 6.2B 7.3D		HDA_SCL 9.3C 9.3D		NVDDO_SENSE 2.4F 21.4D		PEX_TX03? 2.2B 2.3G			
		4.1E 4.1G		FBA_D0Bn<7> 3.4B 4.4E 4.5E		FBC_D<33> 6.2B 7.4D		HDA_SCL_C 9.2H 11.3G		NVDDO_SENSE_R 21.4E		PEX_TX04 2.2B 2.3G			
1V1_ADJ 19.2B		FBA_CMD<27> 3.4C 3.4D 4.3E 4.3D		FBA_VREF 3.5B		FBC_D<34> 6.2B 7.4D		HDA_SCL_T 9.2F		NVDDO_SS 21.3C		PEX_TX04? 2.2B 2.3G			
1V1_PLLVDD 2.4G 3.5E 11.2A 16.3A		FBA_CMD<28> 3.4E 4.2E 4.2D 4.3A		FBA_VREF0 4.3C 4.3E 4.4H		FBC_D<35> 6.2B 7.4D		HDA_SDA 9.1D 9.3C		NVDDO_VD 21.3C		PEX_TX05 2.2B 2.3G			
19.2C				FBA_VREF1 4.3F 4.3H 4.4H		FBC_D<36> 6.2B 7.4D		HDA_VREF 9.1F 11.3G		NVDDO_VBEL 21.3C		PEX_TX05? 2.2B 2.3G			
3V3 2.1A				FBA_Z00 4.3A		FBC_D<37> 6.2B 7.4D		HDA_SDA_T 6.1F		NVDDO_VBEL2 21.3B		PEX_TX06 2.2B 2.3G			
3V3_INF 18.5F				FBA_Z01 4.3C		FBC_D<38> 6.2B 7.4D		HDA_SCL 10.2C		NVDDO_VBEL2_Q 21.3B		PEX_TX06? 2.2B 2.3G			
3V3_INF0 18.4B				FBA_Z02 4.3E		FBC_D<39> 6.2B 7.4D		HDA_SCL_R 10.1E		NVDDO_VBEL3 21.4B		PEX_TX07 2.2B 2.3G			
12V 2.1A				FBA_Z03 4.3D		FBC_D<40> 6.2B 7.4D		HDA_VBEL2_L 21.3C		NVDDO_VBEL3_Q 21.3C		PEX_TX07? 2.2B 2.3G			
12V_D 19.4A				FBC_CLK0 6.4D 7.2A 7.2C 7.5G		FBC_D<41> 6.2B 7.4D		HDA_SCL 10.2C		PEX_CLKREQ? 2.1C		PEX_TX08 2.3G 2.4B			
12V_F 21.1F				FBC_CLK0? 6.4D 7.2A 7.2C 7.5G		FBC_D<42> 6.3B 7.4D		HDA_SDA_R 10.1E		PEX_PLLVDD 2.4E		PEX_TX08? 2.3G 2.4B			
DACA_BLUE 9.4E 9.5A				FBC_CLK1 6.4D 7.2D 7.2F 7.5G		FBC_D<43> 6.3B 7.4D		HDA_SDA_R_L 10.1G		PEX_P_L_CLK_OUT 2.2C		PEX_TX09 2.3G 2.4B			
DACA_BLUE_C 9.4H 9.5A 11.3G				FBC_CLK1? 6.4D 7.2D 7.2F 7.5G		FBC_D<44> 6.3B 7.4D		HDA_SCL 17.2B 17.3F 18.5E		PEX_TX09? 2.3G 2.4B		PEX_TX09? 2.3G 2.4B			
DACA_GREEN 9.4E 9.5A				FBC_D0Bn<0> 6.3C 6.4D 7.2A 7.2C		FBC_D<45> 6.3B 7.4E		HDA_SCL_Q 17.3C		PEX_TX09? 2.3G 2.4B		PEX_TX10 2.3G 2.4B			
DACA_GREEN_C 9.4H 9.5A 11.3G				FBC_CMD<30> 6.3D 7.1A 7.1C 7.1D		FBC_D<46> 6.3B 7.4E		HDA_SCL 17.2B 17.3F 18.5E		PEX_REFCLK 2.1G 2.2B		PEX_TX10? 2.3G 2.4B			
DACA_HYMC 9.3C 9.5A				7.1F 7.5G		FBC_D<47> 6.3B 7.4E		HDA_SCL_Q 17.3C		PEX_REFCLK? 2.1G 2.2B		PEX_TX11 2.3G 2.4B			
DACA_HYMC_BUF 9.3E 9.5A				FBC_CMD<1> 6.2F 6.3D 7.1A 7.1C		FBC_D<48> 6.3B 7.3E		HDA_SCL 16.4D		PEX_RST? 2.2D 19.4E		PEX_TX11? 2.3G 2.4B			
DACA_HYMC_C 9.3H 9.5A				FBC_D<11> 6.1B 6.4B		FBC_D<49> 6.3B 7.4E		HDA_SCL 16.4D		PEX_RST 2.2D 19.4E		PEX_TX12 2.3G 2.4B			
DACA_HYMC_C 9.3H 9.5A 11.3G				FBC_D<12> 6.2B 6.4B		FBC_D<50> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX12? 2.3G 2.4B			
DACA_HYMC_R 9.3E 9.5A				FBC_D<13> 6.2B 6.4B		FBC_D<51> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX13 2.3G 2.5B			
DACA_RED 9.3E 9.5A				FBC_D<14> 6.2B 6.4B		FBC_D<52> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX13? 2.3G 2.5B			
DACA_RED_C 9.3H 9.5A 11.3G				FBC_D<15> 6.2B 6.4B		FBC_D<53> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX14 2.3G 2.5B			
DACA_RESET 9.3B				FBC_D<16> 6.2B 6.4B		FBC_D<54> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX14? 2.3G 2.5B			
DACA_VDD 9.2B				FBC_D<17> 6.2B 6.4B		FBC_D<55> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX15 2.4G 2.5B			
DACA_VREF 9.3B				FBC_D<18> 6.2B 6.4B		FBC_D<56> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_TX15? 2.4G 2.5B			
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DACA_VYMC_BUF 9.3E 9.5A				FBC_D0Bn<1> 6.3C 6.4F 7.1A 7.1C		FBC_D<58> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PEX_V11_CP 20.3B			
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DACA_VYMC_R 9.3E 9.5A				FBC_D<12> 6.2B 6.4B		FBC_D<60> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_CP 20.3C			
DACA_BLUE 10.4D 10.5A				FBC_D<23> 6.2B 6.4B		FBC_D<61> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_BOOT 20.3D			
DACA_BLUE_C 10.4F 10.5A				FBC_D<24> 6.2B 6.4B		FBC_D<62> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_CP_R0 20.3D			
DACA_GREEN 10.4D 10.5A				FBC_D<25> 6.2B 6.4B		FBC_D<63> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_CP_R0 20.3D			
DACB_GREEN_C 10.4F 10.5A				FBC_D<26> 6.2B 6.4B		FBC_D<64> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_EN 20.4B			
DACB_HYMC 10.3C 10.5A				FBC_D<27> 6.2B 6.4B		FBC_D<65> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_ENV 20.4C			
DACB_HYMC_BUF 10.3E 10.5A				FBC_D<28> 6.2B 6.4B		FBC_D<66> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_F0 20.4C			
DACB_HYMC_C 10.3G 10.5A				FBC_D<29> 6.2B 6.4B		FBC_D<67> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_F0C_R 20.3C			
DACB_HYMC_R 10.3E 10.5A				FBC_D<30> 6.2B 6.4B		FBC_D<68> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_L01 21.2D			
DACB_RED 10.3F 10.5A				FBC_D<31> 6.2B 6.4B		FBC_D<69> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_L02 21.2D			
DACB_RED_C 10.3F 10.5A				FBC_D<32> 6.2B 6.4B		FBC_D<70> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_PHI 20.3D			
DACB_RESET 10.3B				FBC_D<33> 6.2B 6.4B		FBC_D<71> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_PVDD 20.2D			
DACB_VDD 10.2B				FBC_D<34> 6.2B 6.4B		FBC_D<72> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_PVDD_R 20.2C			
DACB_VREF 10.3B				FBC_D<35> 6.2B 6.4B		FBC_D<73> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_R01 20.3F			
DACB_VYMC 10.3C 10.5A				FBC_D<36> 6.2B 6.4B		FBC_D<74> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_U0 20.3D			
DACB_VYMC_BUF 10.3E 10.5A				FBC_D<37> 6.2B 6.4B		FBC_D<75> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_U0_R 20.2E			
DACB_VYMC_C 10.3G 10.5A				FBC_D<38> 6.2B 6.4B		FBC_D<76> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C 20.2D			
DACB_VYMC_R 10.3E 10.5A				FBC_D<39> 6.2B 6.4B		FBC_D<77> 6.3B 7.4E		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C01 21.2D			
DACA_VDD 9.2B				FBC_D0Bn<0> 6.3C 6.4F 7.1A 7.1C		FBC_D<11> 6.1B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C02 21.2C			
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DACA_VYMC 9.3C 9.5A				FBC_D0Bn<2> 6.3C 6.4F 7.1A 7.1C		FBC_D<13> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C04 21.2C			
DACA_VYMC_BUF 10.3E 10.5A				FBC_D0Bn<3> 6.3C 6.4F 7.1A 7.1C		FBC_D<14> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C05 21.2C			
DACA_VYMC_C 10.3G 10.5A				FBC_D0Bn<4> 6.3C 6.4F 7.1A 7.1C		FBC_D<15> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C06 21.2C			
DACA_VYMC_R 10.3E 10.5A				FBC_D0Bn<5> 6.3C 6.4F 7.1A 7.1C		FBC_D<16> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C07 21.2C			
DACA_BLUE 10.4D 10.5A				FBC_D0Bn<6> 6.3C 6.4F 7.1A 7.1C		FBC_D<17> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C08 21.2C			
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DACA_GREEN 10.4D 10.5A				FBC_D0Bn<8> 6.3C 6.4F 7.1A 7.1C		FBC_D<19> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C10 21.2C			
DACB_GREEN_C 10.4F 10.5A				FBC_D0Bn<9> 6.3C 6.4F 7.1A 7.1C		FBC_D<20> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C11 21.2C			
DACB_HYMC 10.3C 10.5A				FBC_D0Bn<10> 6.3C 6.4F 7.1A 7.1C		FBC_D<21> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C12 21.2C			
DACB_HYMC_BUF 10.3E 10.5A				FBC_D0Bn<11> 6.3C 6.4F 7.1A 7.1C		FBC_D<22> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C13 21.2C			
DACB_HYMC_C 10.3G 10.5A				FBC_D0Bn<12> 6.3C 6.4F 7.1A 7.1C		FBC_D<23> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C14 21.2C			
DACB_HYMC_R 10.3E 10.5A				FBC_D0Bn<13> 6.3C 6.4F 7.1A 7.1C		FBC_D<24> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C15 21.2C			
DACB_RED 10.3F 10.5A				FBC_D0Bn<14> 6.3C 6.4F 7.1A 7.1C		FBC_D<25> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C16 21.2C			
DACB_RED_C 10.3F 10.5A				FBC_D0Bn<15> 6.3C 6.4F 7.1A 7.1C		FBC_D<26> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C17 21.2C			
DACB_RESET 10.3B				FBC_D0Bn<16> 6.3C 6.4F 7.1A 7.1C		FBC_D<27> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C18 21.2C			
DACB_VDD 10.2B				FBC_D0Bn<17> 6.3C 6.4F 7.1A 7.1C		FBC_D<28> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C19 21.2C			
DACB_VREF 10.3B				FBC_D0Bn<18> 6.3C 6.4F 7.1A 7.1C		FBC_D<29> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C20 21.2C			
DACB_VYMC 10.3C 10.5A				FBC_D0Bn<19> 6.3C 6.4F 7.1A 7.1C		FBC_D<30> 6.2B 6.4B		PEX_RST 2.2D 19.4E		PEX_RST? 2.2D 19.4E		PS_FIBVDD_V0C21 21.2C			
DACB_VYMC_BUF 10.3E															

PCI-EXPRESS INTERFACE

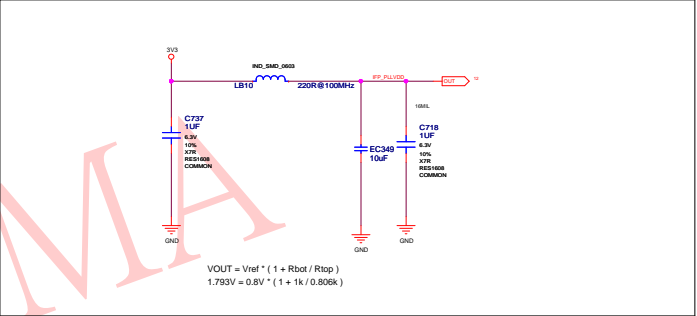


LINEAR POWER SUPPLIES

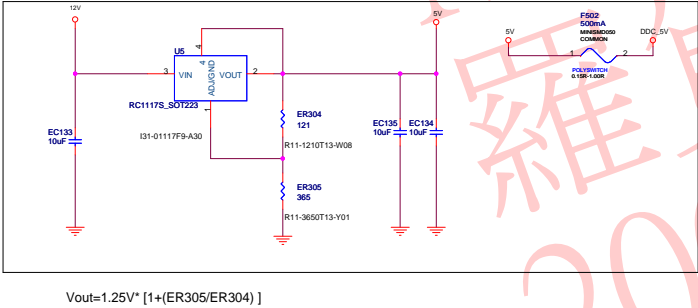
PEX_PLLVDD SUPPLY (OPTIAN)



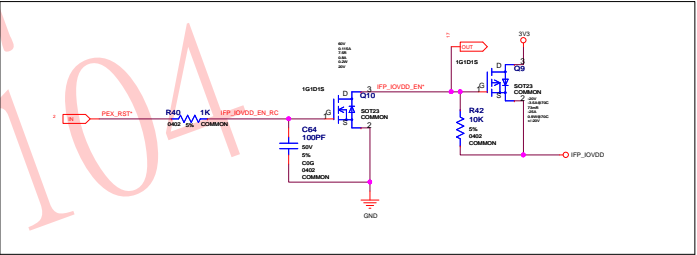
IFP_PLLVDD SUPPLY



5V & DDC_5V REGULATOR



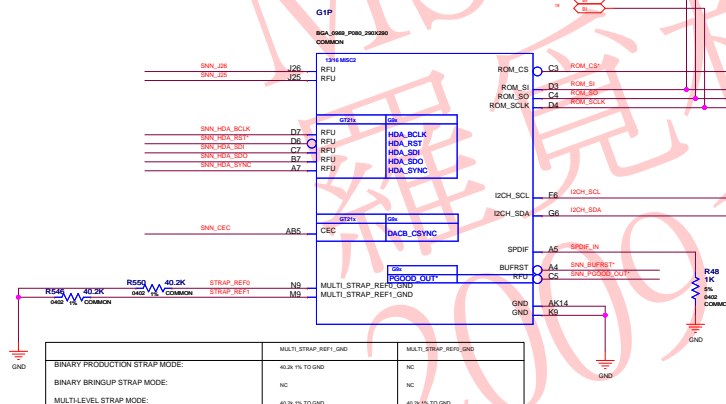
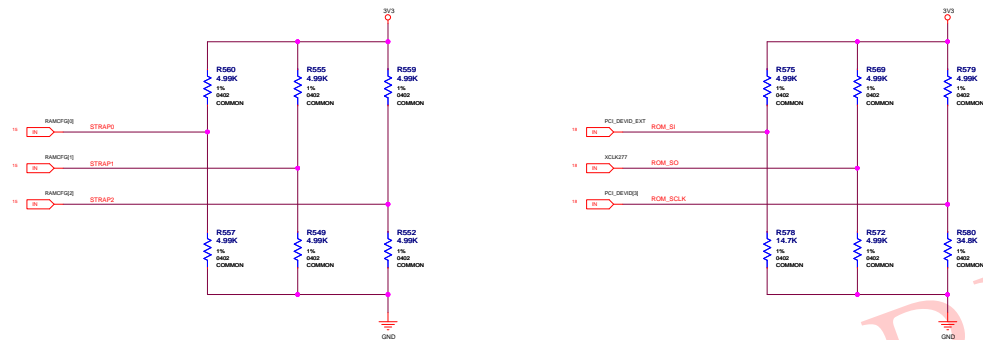
IFP_IOVDD BACKDRIVE PREVENTION



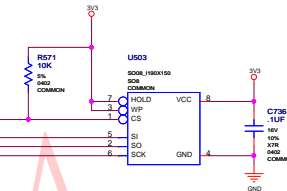
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BIOS ROM, HDCP ROM, STRAPPING OPTIONS

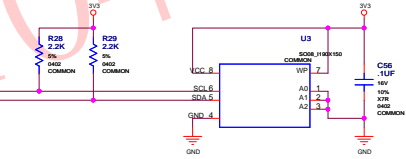
STRAPPING OPTIONS




BIOS ROM(serial



HDCP I2C EEROM



Strap0	USERID[0]	EDID: 1111	45k PU
Strap1	3G0_PNOCFG[0]	DESKTOP 0000	5k PD
Strap2	PD_DEV[0]	GT716-200 (XAT) 0001	15k PD
ROM_S1	RWKCFG[0]	0001 128M 64Mx16 DORS Omicron	1001 64M 64Mx16 DORS Omicron
		0010 128M 64Mx16 DORS Icyon	1010 64M 64Mx16 DORS Icyon
ROM_S1	RWKCFG[0]	0011 128M 64Mx16 DORS Samsung	1011 64M 64Mx16 DORS Samsung
		0101 128M 128Mx16 DORS Omicron	1101 64M 128Mx16 DORS Omicron
ROM_S1K	3 POL_DEV2_EXT	0110 128M 128Mx16 DORS Icyon	1110 64M 128Mx16 DORS Icyon
		0111 128M 128Mx16 DORS Samsung	1111 64M 128Mx16 DORS Samsung
ROM_S1K	3 POL_DEV2_EXT	0110	35k PD
ROM_SQ	2 SUB_VENDOR (1 = BIOS not present)	1 SUB_CK_CFG (1 = command not MCFGPU)	0k PD
		0 POL_PU_EN_TERR (0 = disable p4 term)	
ROM_SQ	3 POL_41T (0 = POL 270MHz)	0001	5k PD
ROM_SQ	2 POL_36M_50M (0 = POL 50MHz)	0001	5k PD
ROM_SQ	1 DRW_ALT_ADDR (LAPOR, 1 = multiGPU)	0001	5k PD
ROM_SQ	1 VGA_DEVICE (0=0 device, 1=LAPOR VGA device)	0001	5k PD
ROM_SQ	0 PD 3k	0001	5k PD
ROM_SQ	1 PD 10k	0001	5k PD
ROM_SQ	2 PD 15k	0001	5k PD
ROM_SQ	3 PD 20k	0001	5k PD
ROM_SQ	4 PD 25k	0001	5k PD
ROM_SQ	5 PD 30k	0001	5k PD
ROM_SQ	6 PD 35k	0001	5k PD
ROM_SQ	7 PD 40k	0001	5k PD
ROM_SQ	8 PD 45k	0001	5k PD
ROM_SQ	9 PD 50k	0001	5k PD
ROM_SQ	10 PD 55k	0001	5k PD
ROM_SQ	11 PD 60k	0001	5k PD
ROM_SQ	12 PD 65k	0001	5k PD
ROM_SQ	13 PD 70k	0001	5k PD
ROM_SQ	14 PD 75k	0001	5k PD
ROM_SQ	15 PD 80k	0001	5k PD
ROM_SQ	16 PD 85k	0001	5k PD
ROM_SQ	17 PD 90k	0001	5k PD
ROM_SQ	18 PD 95k	0001	5k PD
ROM_SQ	19 PD 100k	0001	5k PD
ROM_SQ	20 PD 105k	0001	5k PD
ROM_SQ	21 PD 110k	0001	5k PD
ROM_SQ	22 PD 115k	0001	5k PD

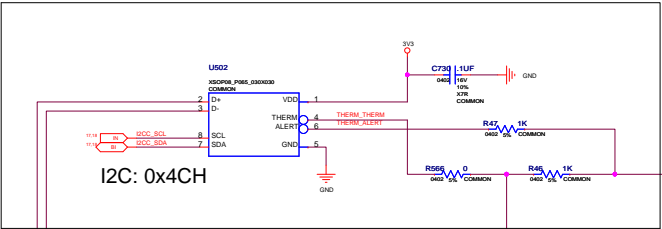
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NV_PN		600-10681-base-100 A	
ID		PAGE	
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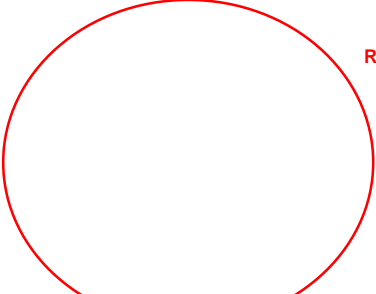
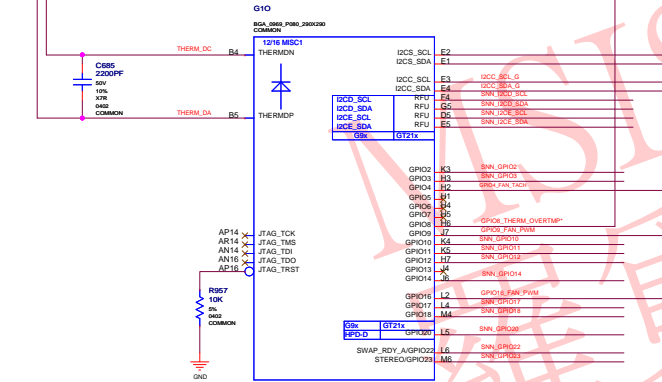
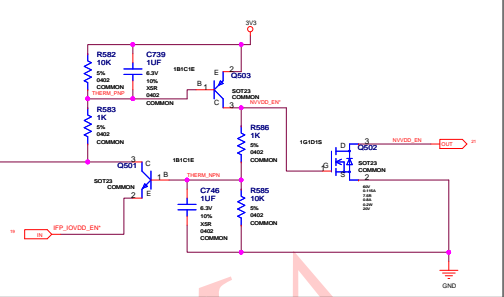
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PAGE DETAIL	BIDS ROM, HDXP ROM, STRAPPING OPTIONS

EXTERNAL THERMAL SENSOR, FAN CONTROL, GPIO, JTAG

THERMAL SENSOR



OVERTEMP LATCH



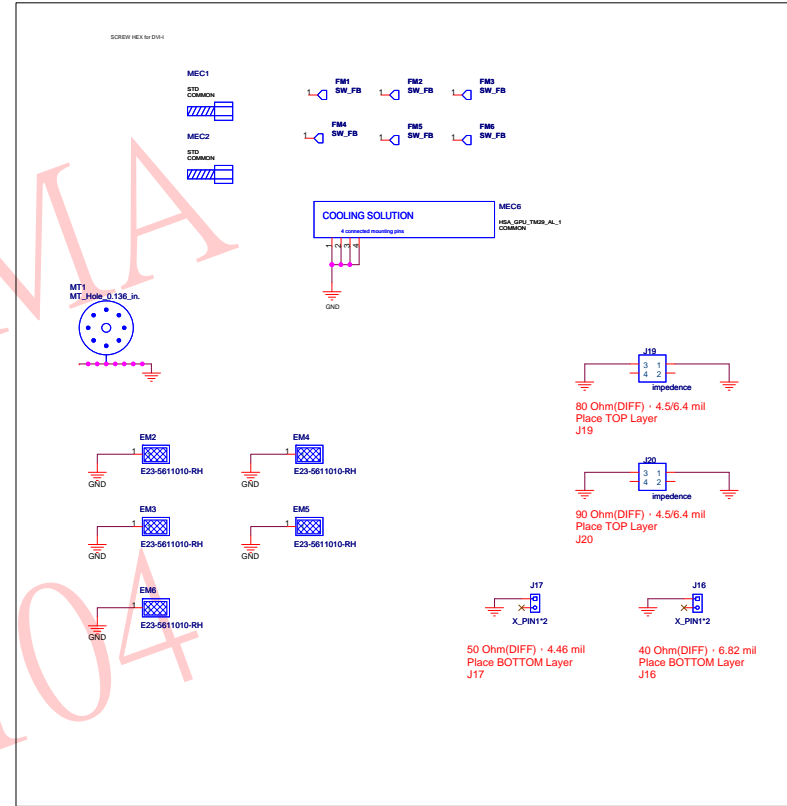
Remove JTAG Connector

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY; COMMON & NO. 310FF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	EXTERNAL THERMAL SENSOR, FAN CONTROL, GPIO, JTAG

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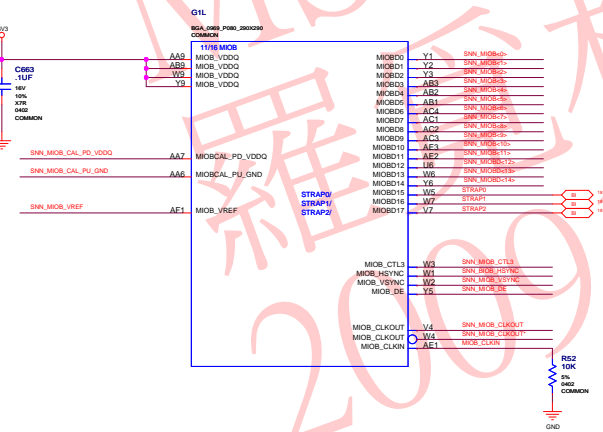
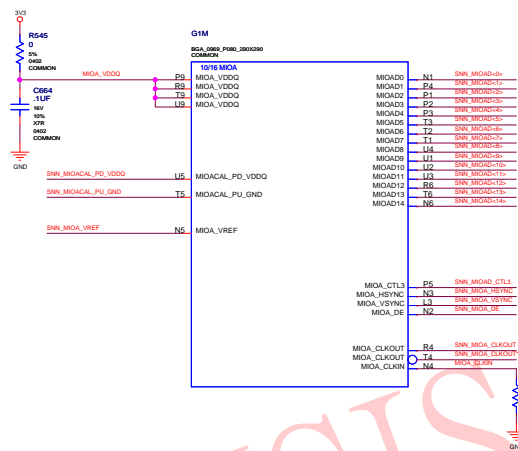
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PAGE DETAIL	XTAL, MECHANICALS, THERMALS

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MIOA & MIOB



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PAGE DETAIL	MIOA & MIOB

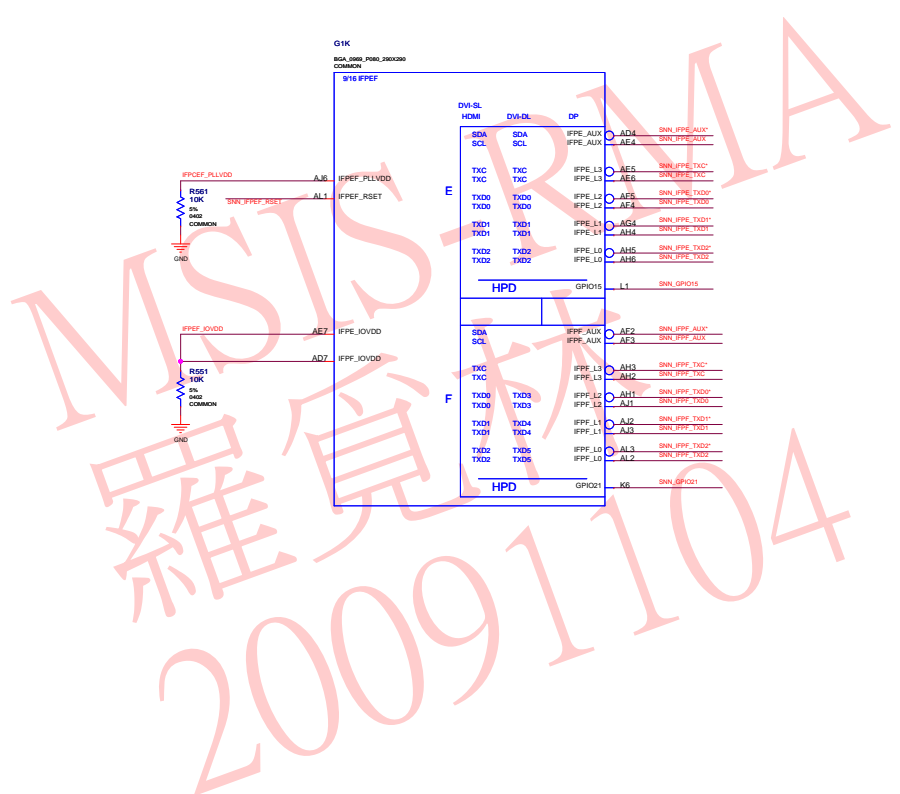
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NAME		DATE	05-FEB-2009



ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL	SANTA CLARA, CA 95050, USA	
PAGE DETAIL	IFPEF (UNUSED)	NV PN	600-10681-base-100 A

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Diagram illustrating the IFPD (Image Forming Photodiode) circuit connections for the G1J camera module.

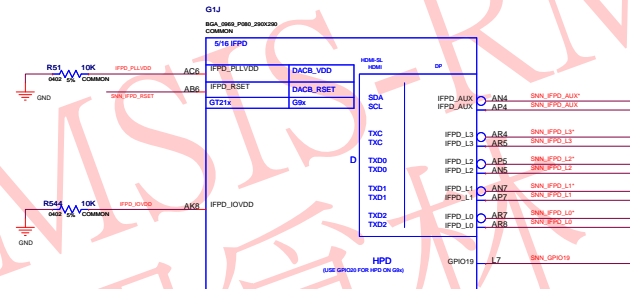
Power and Biasing:

- IFPD_FL1VDD:** Connected to R51 (10K) and COMMON. GND is connected to the IFPD_FL1VDD pin.
- IFPD_R1SET:** Connected to R52 (10K) and COMMON. GND is connected to the IFPD_R1SET pin.
- IFPD_KV1VDD:** Connected to R54 (10K) and COMMON. GND is connected to the IFPD_KV1VDD pin.
- IFPD_IQVDD:** Connected to AG3.

Control and Data Pins:

- DACB_VDD:** Connected to AG6.
- DACB_RSET:** Connected to AG6.
- G5a:** Connected to AG6.
- TXC0, TXC1, TXD0, TXD1, TXD2:** Connected to IFPD_L1, IFPD_L2, IFPD_L3, IFPD_L4, IFPD_L5, and IFPD_L6 respectively.
- HPD:** Connected to GP1015 and L7.

IFPD Block: The IFPD block is shown with pins for IFPD_FL1VDD, IFPD_R1SET, IFPD_KV1VDD, IFPD_IQVDD, DACB_VDD, DACB_RSET, G5a, TXC0, TXC1, TXD0, TXD1, TXD2, HPD, and GP1015.

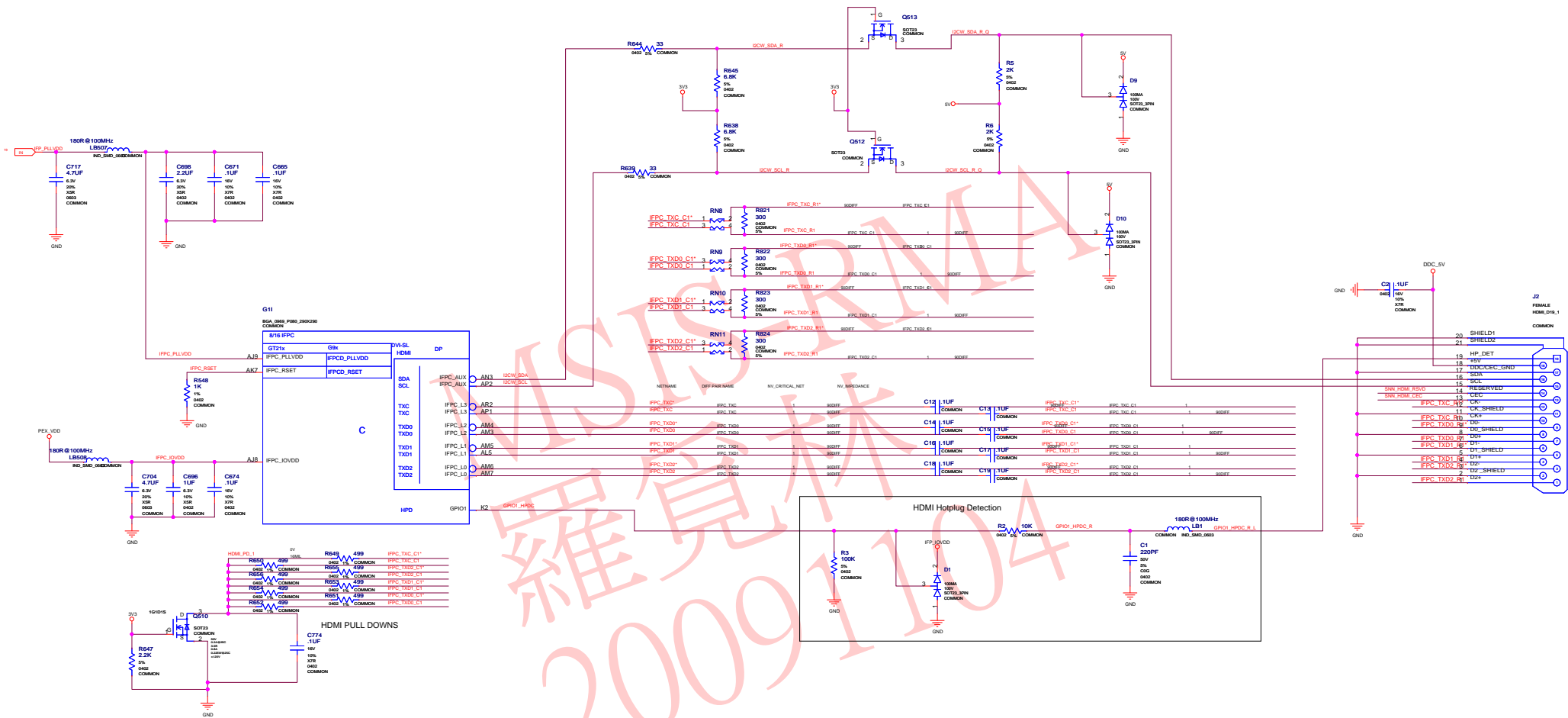


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PAGE DETAIL	IFP D (UNUSED)



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IFP C (NORTH HDMI)



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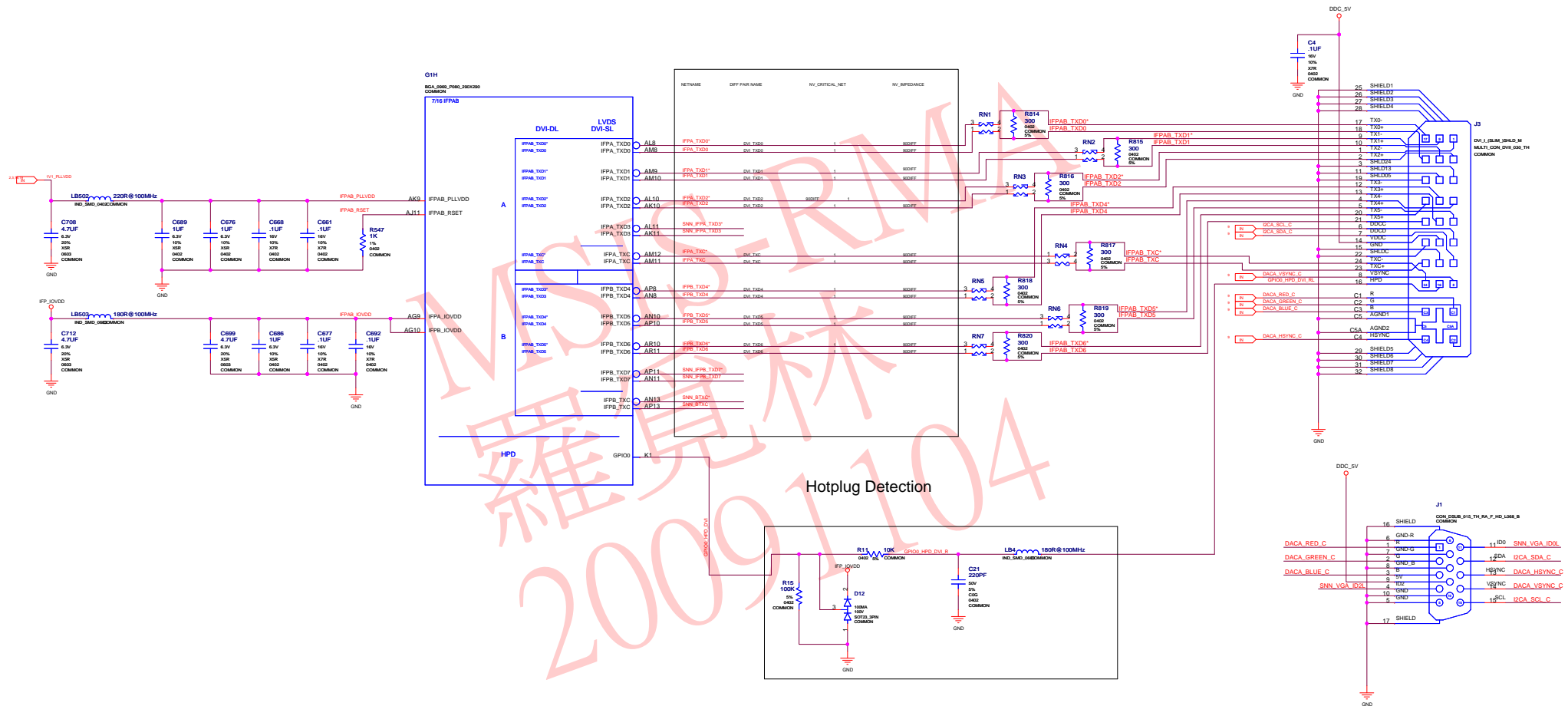
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IFP AB (SOUTH DVI-I)



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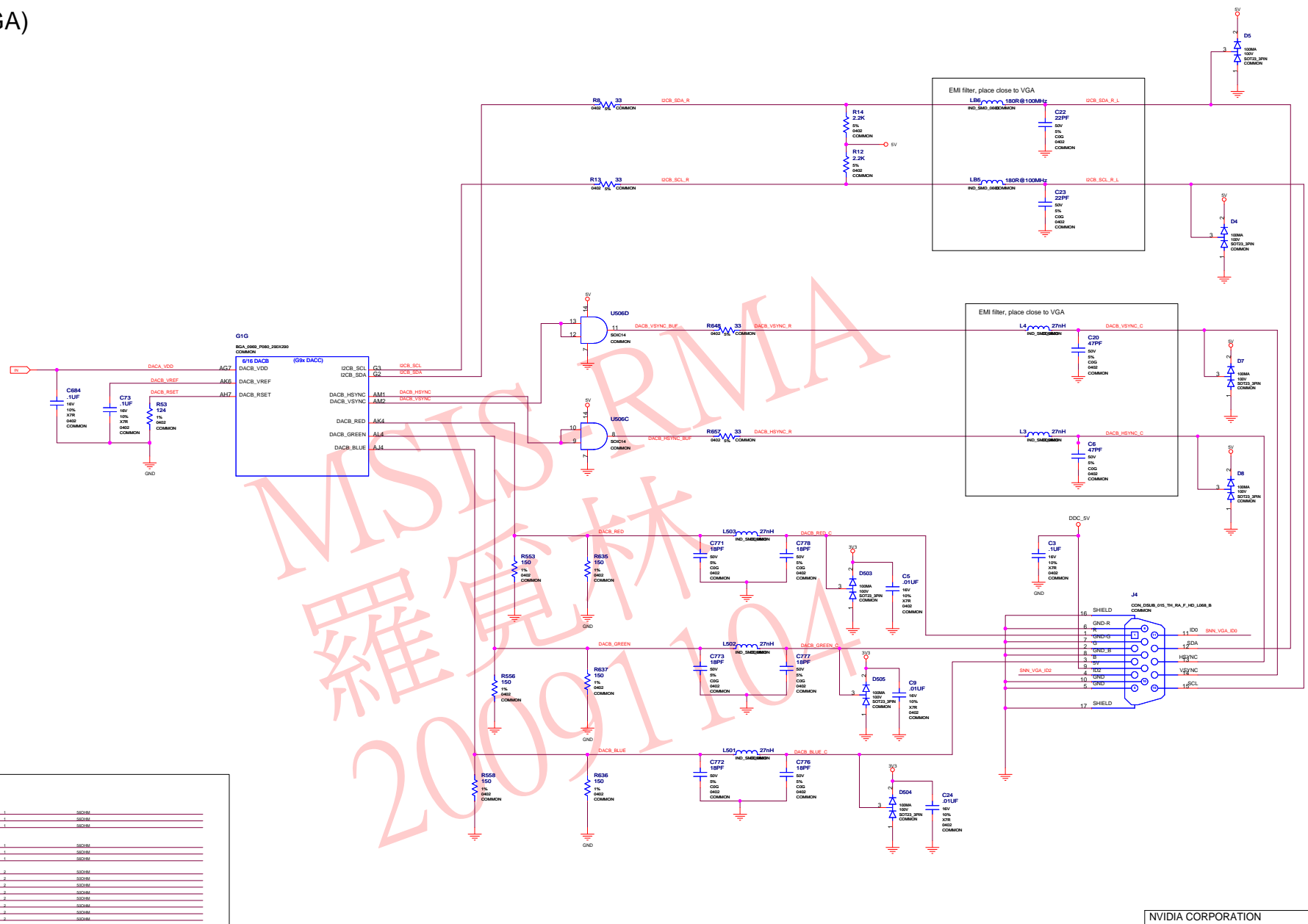


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DACB (MID VGA)



B	DABC RED	1	500M
B	DABC GREEN	1	500M
B	DABC BLUE	1	500M
C			
C	DABC RED C	1	500M
C	DABC GREEN C	1	500M
C	DABC BLUE C	1	500M
D			
D	DABC HYBRID	2	500M
D	DABC HYBRID	2	500M
D	DABC HYBRID - R	2	500M
D	DABC HYBRID - G	2	500M
D	DABC HYBRID - B	2	500M
D	DABC HYBRID - R/B	2	500M
D	DABC HYBRID - G/B	2	500M
D	DABC HYBRID - C	2	500M

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DACB (MID VGA)

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P681-A01 GT215/216 DESKTOP GB1-128 DDR3

PCI-EXPRESSx16 DL-DVI VGA HDMI

- Page 1: P681-A01 OVERVIEW
- Page 2: PCI-EXPRESS INTERFACE
- Page 3: PARTITION A FRAME BUFFER INTERFACE
- Page 4: PARTITION A MEMORIES
- Page 5: FBA DECOUPLING CAPS & NVVDD DECOUPLING CAPS
- Page 6: PARTITION C FRAME BUFFER INTERFACE
- Page 7: PARTITION C MEMORIES
- Page 8: FBC DECOUPLING CAPS
- Page 9: DACA (SOUTH DVI-I)
- Page 10: DACB (MID VGA)
- Page 11: IFP AB (SOUTH DVI-I)
- Page 12: IFP C (NORTH HDMI)
- Page 13: IFP D (UNUSED)
- Page 14: IFP EF (UNUSED)
- Page 15: MIOA & MIOB
- Page 16: XTAL, MECHANICALS, THERMALS
- Page 17: EXTERNAL THERMAL SENSOR, FAN CONTROL, GPIO, JTAG
- Page 18: BIOS ROM, HDCP ROM, STRAPPING OPTIONS
- Page 19: LINEAR POWER SUPPLIES
- Page 20: FBVDDQ/PEXVDD POWER SUPPLY
- Page 21: NVVDD POWER SUPPLY

V199 For Lenovo Schematic Change List 2009/03/31 by STEVEN CHANG

- Page 2: Remove JTAG Component
- Page 10: Move J1 D-SUB Connector to Page 11
- Page 11: Add Slim Type D-SUB Connector
- Page 17: Remove JTAG Connector
- Page 19: Remove IFP_PLLVDD SUPPLY LDO IC
- Page 19: Add UP7706 LDO to Change PEX_VDD Power Supply
- Page 19: Change AP1117 LDO External Schematic Design
- Page 20: Change UP6161 PWM IC to use UP6101 PWM IC Solution For FBVDDQ Power Supply
- Page 20: Change UP6210 PWM IC to use RT9232 PWM IC Solution For NVVDD Power Supply
- Page 20: Remove NVVDD SENSE Net

REV	VARIANT	NVPN	ASSEMBLY
0	BASE	600-10681-base-100	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SKU001	600-10681-0001-100	GT216-300 600/1500MHz 1024MB 64Mx16 BGA100 800MHz DDR3 DVI-I/VGA/HDMI
2	SKU002	600-10681-0002-100	GT216-300 600/1500MHz 1024MB 64Mx16 BGA100 1000MHz DDR3 DVI-I/VGA/HDMI
3	SKU011	600-10681-0011-100	GT215-300 600/1500MHz 1024MB 64Mx16 BGA100 800MHz DDR3 DVI-I/VGA/HDMI
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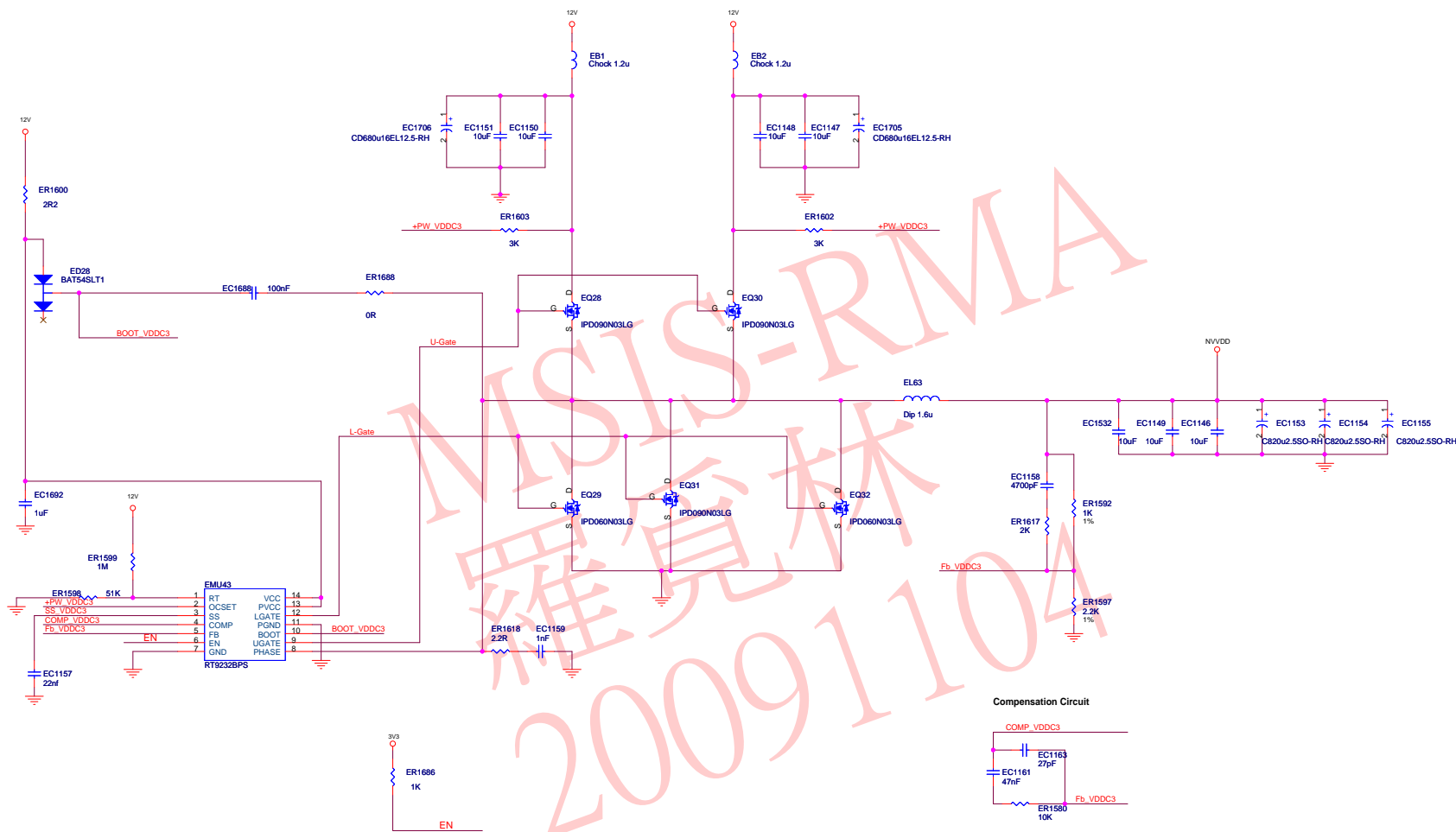
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Title: RH RV730 512MB DDR2 DL-DVI DP HDMI FH G		Date: Tuesday, June 02, 2009 Sheet 13 of 24 Rev 0	
Doc No: 105-8665xx-00A			

CORE REGULATOR NVVDD



$$NVVDD=0.8*(1+(ER1592/ER1597))$$