

P691: G98/GT218, DDR2 MEMORY 64MX16/32MX16

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REV	VARIANT	NVFN	ASSEMBLY
B	BASE	600-10691-BASE-100	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SKU0001	600-10691-0001-100	GT218-300, 550/1375/500, 256MB/64kL, 32Mx16 DDR2, DVI-DL+DP+VGA, DT
2	SKU0002	600-10691-0002-100	GT218-300, 550/1375/500, 512MB/64kL, 64Mx16 DDR2, DVI-DL+DP+VGA, DT
3	SKU0010	600-10691-0010-100	G98-400, 550/1375/500, 256MB/64kL, 32Mx16 DDR2, DVI-DL+DP+VGA, DT
4	SKU0011	600-10691-0011-100	G98-400, 550/1375/500, 512MB/64kL, 64Mx16 DDR2, DVI-DL+DP+VGA, DT
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	P691 Overview

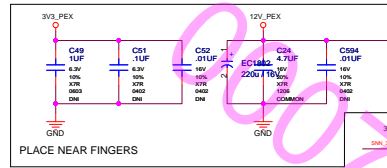
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NV_PN	600-10691-BASE-100 A	PAGE	
ID		DATE	05-FEB-2009
NAME			

PCI Express Interface



CN1
CON_FINGER_PEX_164.B

CON_A16

COMMON

B1 +12V

B2 +12V

B3 +12V

B4 +12V

B5 +12V

B6 +12V

B7 +12V

B8 +12V

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B292 +12V

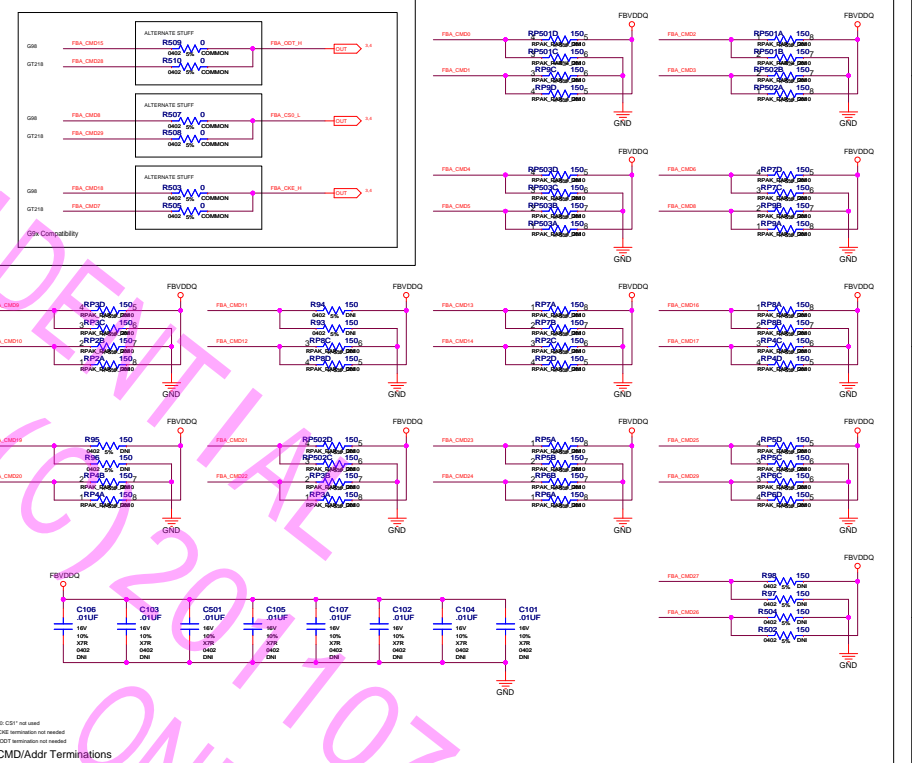
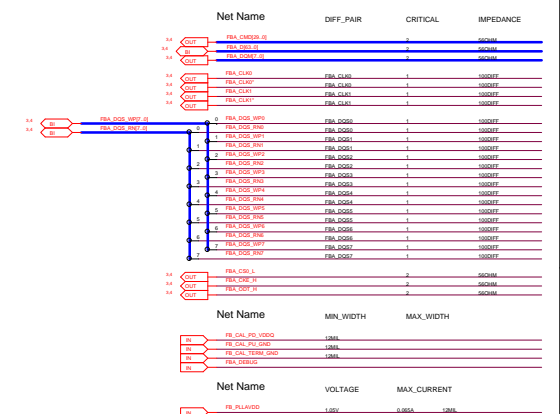
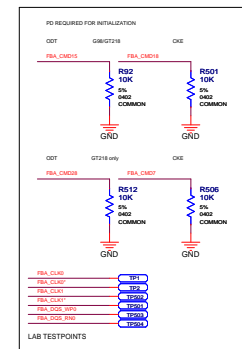
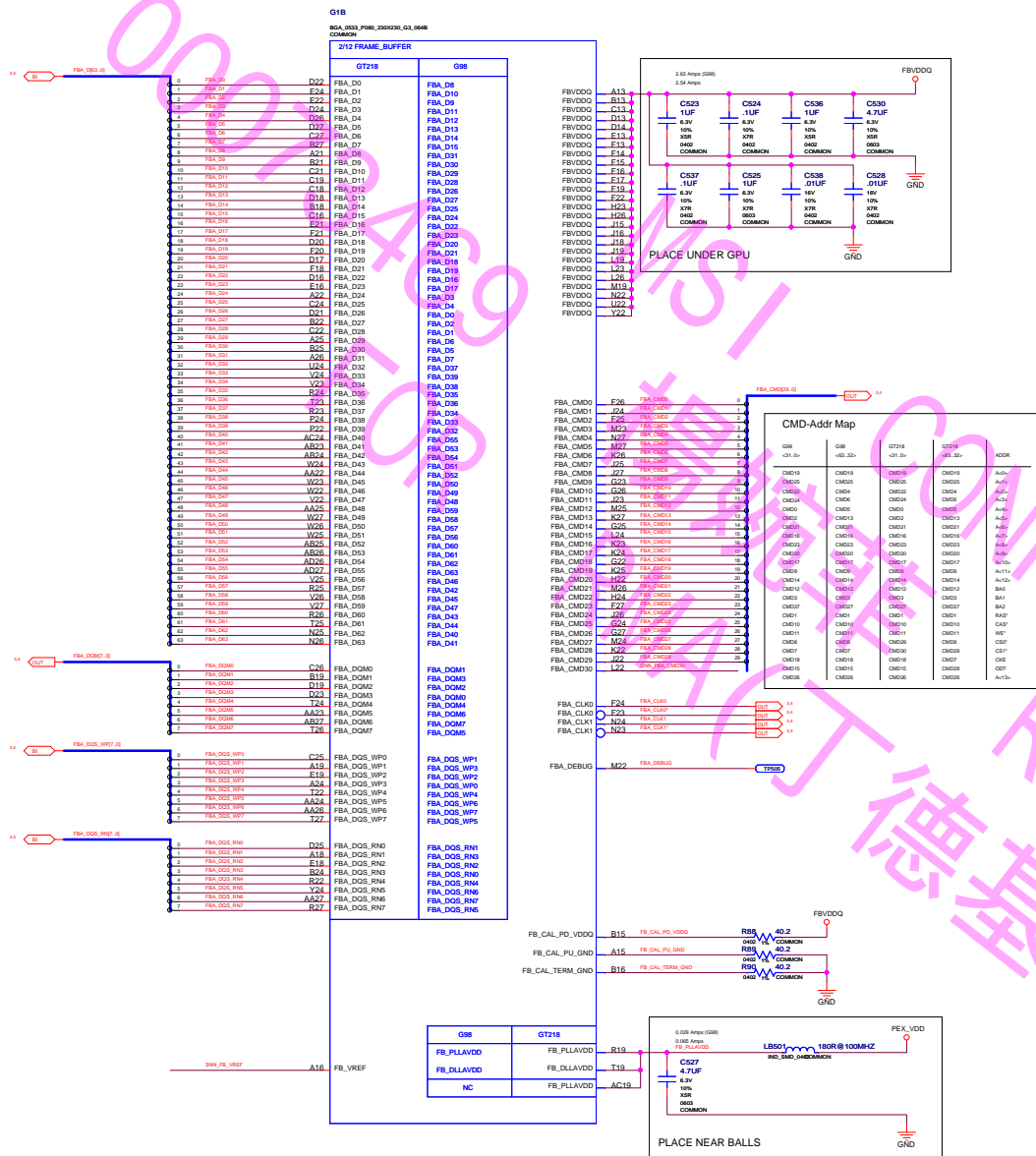
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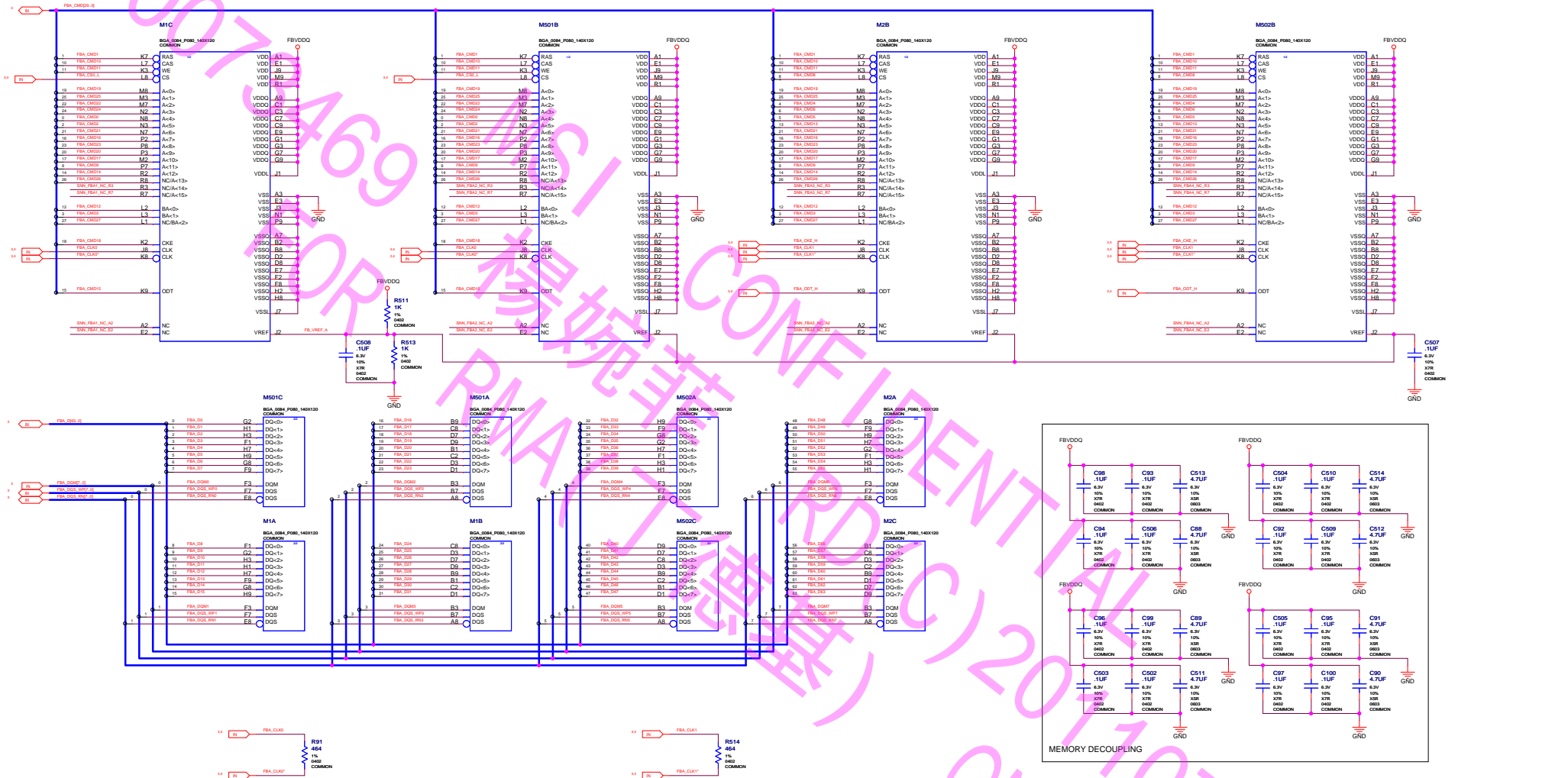
Frame Buffer Interface



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NAME		DATE	05-FEB-2009

DDR2 Memories

Net Name	MIN_WIDTH	MAX_WIDTH
FB_VREF_A	12MIL	



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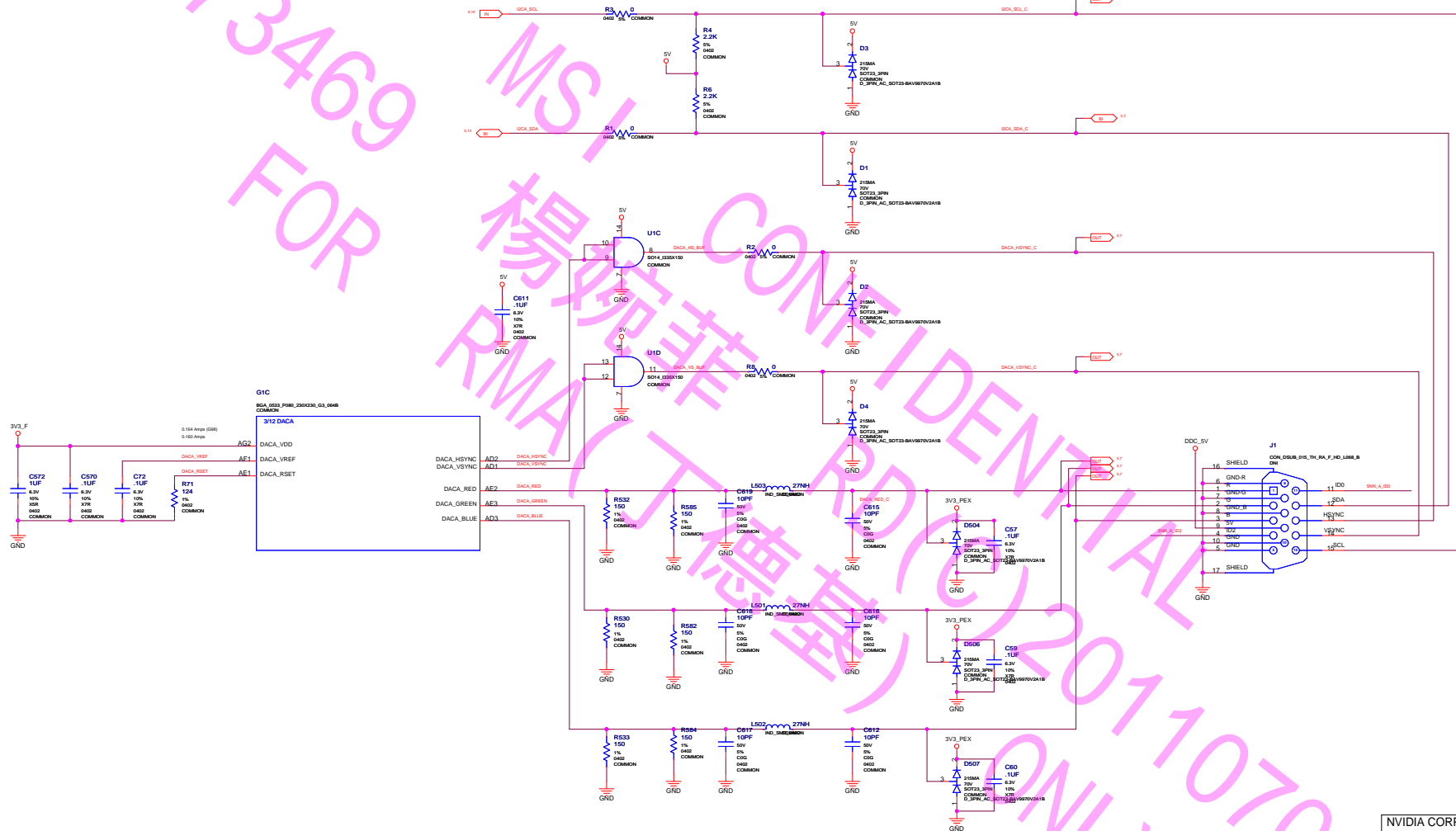
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DAC A Slim VGA

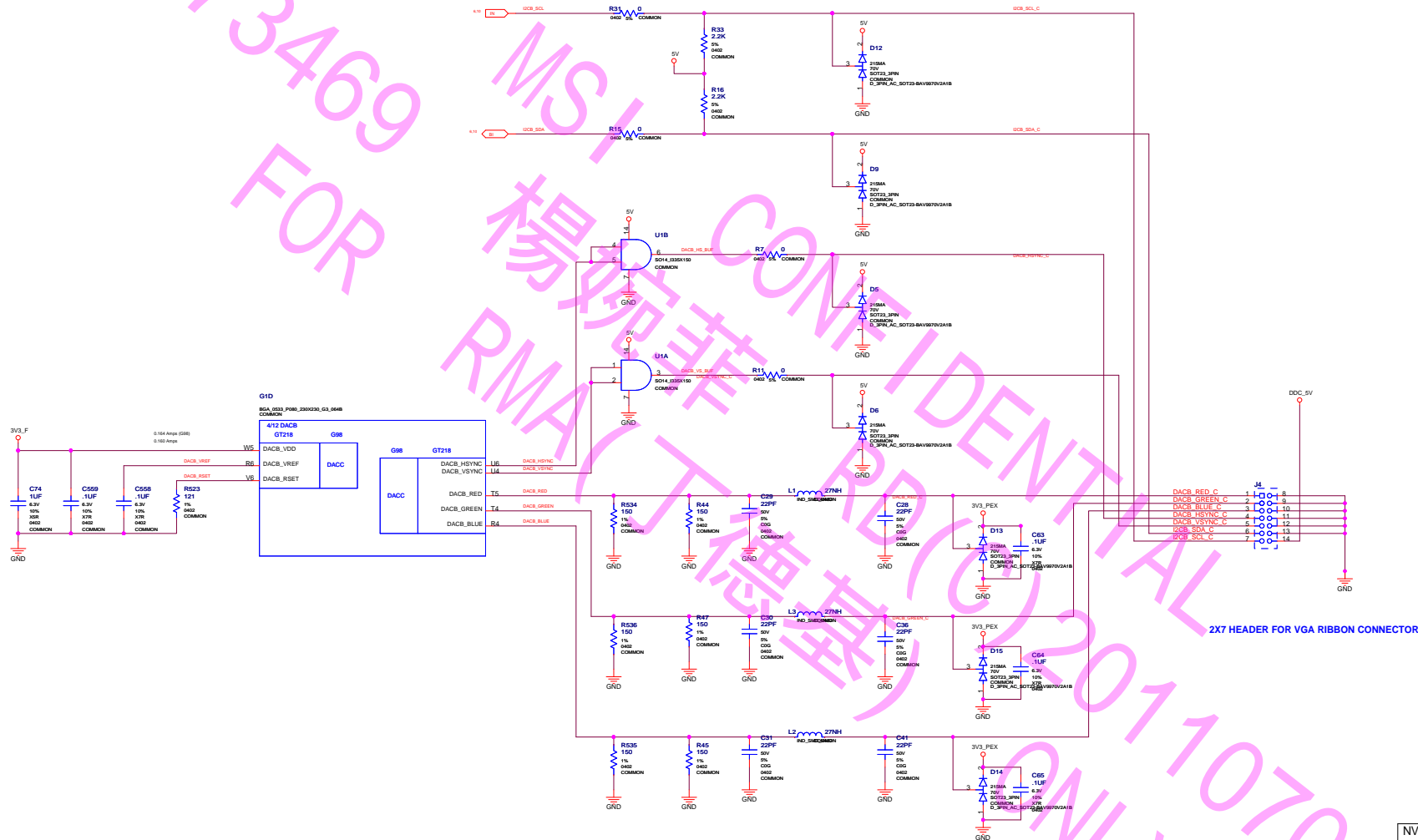


Net Name		CRITICAL	IMPEDANCE
0.0	IN DQCA_WB0	1	500CM
	OUT DQCA_WB0EN	1	500CM
	IN DQCA_WB1	1	500CM
	OUT DQCA_WB1EN	1	500CM
	IN DQCA_WB2	1	500CM
0.1	OUT DQCA_WB2EN	1	500CM
	IN DQCA_WB3	1	500CM
	OUT DQCA_WB3EN	1	500CM
	IN DQCA_WB4	1	500CM
	OUT DQCA_WB4EN	1	500CM
0.2	IN DQCA_WB5	2	500CM
	OUT DQCA_WB5EN	2	500CM
	IN DQCA_WB6	2	500CM
	OUT DQCA_WB6EN	2	500CM
	IN DQCA_WB7	2	500CM
0.3	OUT DQCA_WB7EN	2	500CM
	IN DQCA_WB8	2	500CM
	OUT DQCA_WB8EN	2	500CM
	IN DQCA_WB9	2	500CM
	OUT DQCA_WB9EN	2	500CM
Net Name		MIN_WIDTH	MAX_WIDTH
0.0	IN DQCA_S0		
	OUT DQCA_S0N		
0.1	IN DQCA_S1		
	OUT DQCA_S1N		
0.2	IN DQCA_S2		
	OUT DQCA_S2N		
0.3	IN DQCA_S3	1.00M	
	OUT DQCA_S3N	1.00M	

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DAC B VGA Header



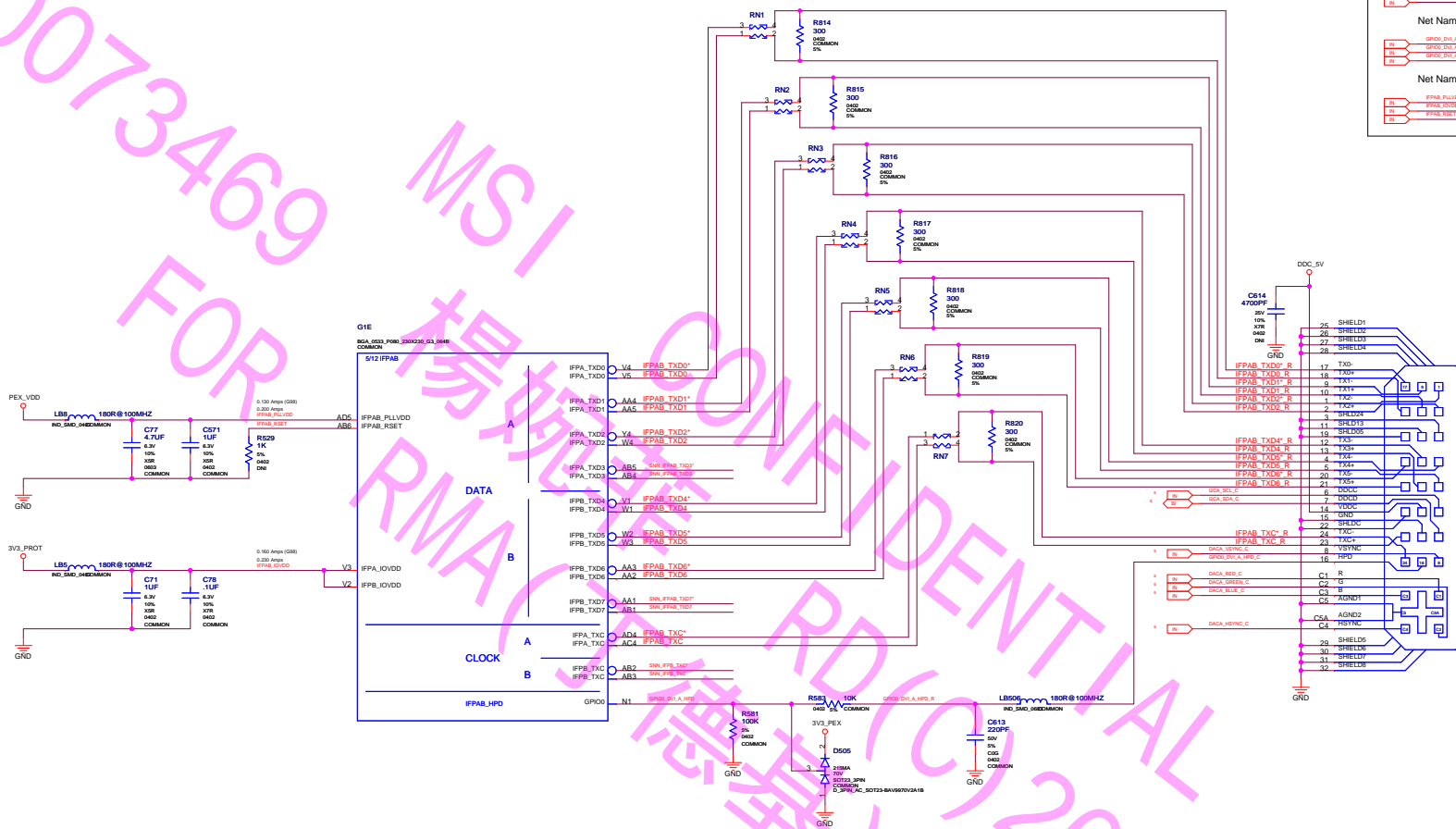
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106	DACK_RED	1	50OHMS
107	DACK_GREEN	1	50OHMS
108	DACK_BLUE	1	50OHMS
109	DACK_PINK_0	1	50OHMS
110	DACK_GREEN_0	1	50OHMS
111	DACK_BLUE_0	1	50OHMS
112	DACK_PINK1	2	50OHMS
113	DACK_PINK2	2	50OHMS
114	DACK_PINK3	2	50OHMS
115	DACK_PINK4	2	50OHMS
116	DACK_VIE_STOP	2	50OHMS
117	DACK_VIE_STOP	2	50OHMS
118	DACK_VIE_STOP	2	50OHMS

Net Name		MRL_WIDTH	MAX_WIDTH
106	DOCK_S01		
107	DOCK_S02		
108	DOCK_S01_0		
109	DOCK_P001_0		
110	DACK_VIE0P	12MIL	
111	DACK_VIE0T	12MIL	

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DAC B VGA Header

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NV_PN	600-10691-BASE-100 A		
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NAME		DATE	05-FEB-2009

TMDS Interface

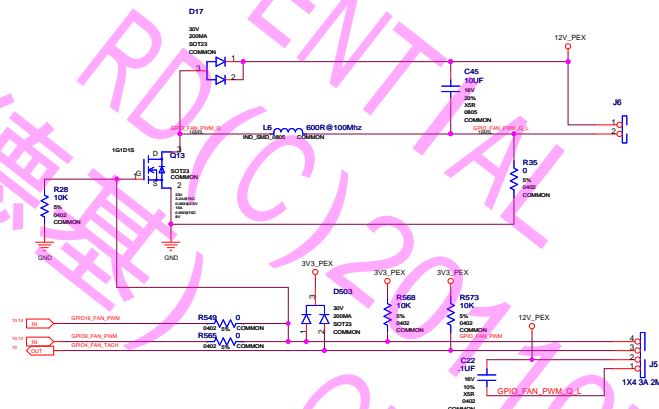
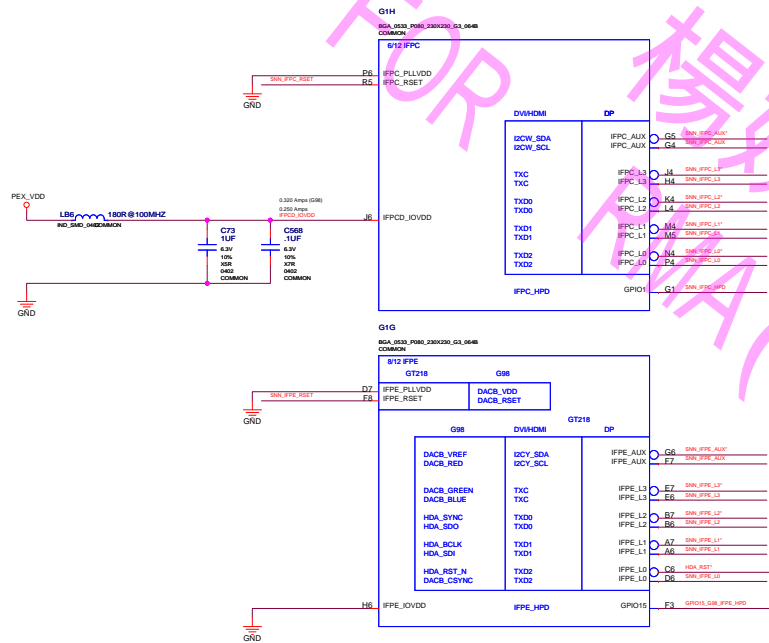
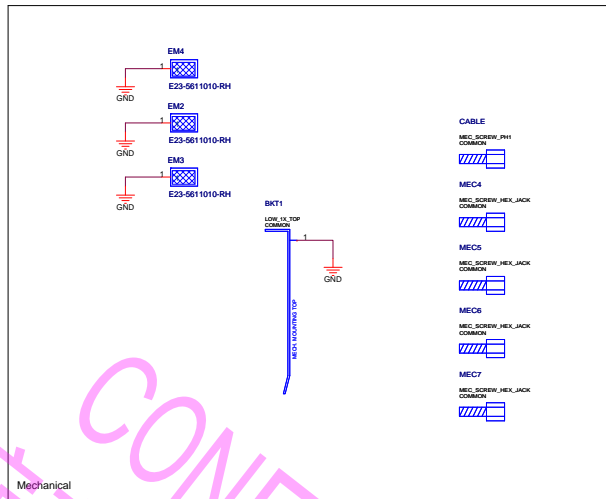
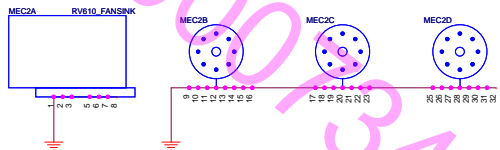


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IN	FPIN_T102	FPIN_T102	1	50OHM
IN	FPIN_T103	FPIN_T103	1	50OHM
IN	FPIN_T104	FPIN_T104	1	50OHM
IN	FPIN_T105	FPIN_T105	1	50OHM
IN	FPIN_T106	FPIN_T106	1	50OHM
IN	FPIN_T107	FPIN_T107	1	50OHM
IN	FPIN_T108	FPIN_T108	1	50OHM
IN	FPIN_T109	FPIN_T109	1	50OHM
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IN	FPIN_T113	FPIN_T113	1	50OHM
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IN	FPIN_T213	FPIN_T213	1	50OHM
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IN	FPIN_T215	FPIN_T215	1	50OHM
IN	FPIN_T216	FPIN_T216	1	50OHM
IN	FPIN_T217	FPIN_T217	1	50OHM
IN	FPIN_T218	FPIN_T218	1	50OHM
IN	FPIN_T219	FPIN_T219	1	50OHM
IN	FPIN_T220	FPIN_T220	1	50OHM
IN	FPIN_T221	FPIN_T221	1	50OHM
IN	FPIN_T222	FPIN_T222	1	50OHM
IN	FPIN_T223	FPIN_T223	1	50OHM
IN	FPIN_T224	FPIN_T224	1	50OHM
IN	FPIN_T225	FPIN_T225	1	50OHM
IN	FPIN_T226	FPIN_T226	1	50OHM
IN	FPIN_T227	FPIN_T227	1	50OHM
IN	FPIN_T228	FPIN_T228	1	50OHM
IN	FPIN_T229	FPIN_T229	1	50OHM
IN	FPIN_T230	FPIN_T230	1	50OHM
IN	FPIN_T231	FPIN_T231	1	50OHM
IN	FPIN_T232	FPIN_T232	1	50OHM
IN	FPIN_T233	FPIN_T233	1	50OHM
IN	FPIN_T234	FPIN_T234	1	50OHM
IN	FPIN_T235	FPIN_T235	1	50OHM
IN	FPIN_T236	FPIN_T236	1	50OHM
IN	FPIN_T237	FPIN_T237	1	50OHM
IN	FPIN_T238	FPIN_T238	1	50OHM
IN	FPIN_T239	FPIN_T239	1	50OHM
IN	FPIN_T240	FPIN_T240	1	50OHM
IN	FPIN_T241	FPIN_T241	1	50OHM
IN	FPIN_T242	FPIN_T242	1	50OHM
IN	FPIN_T243	FPIN_T243	1	50OHM
IN	FPIN_T244	FPIN_T244	1	50OHM
IN	FPIN_T245	FPIN_T245	1	50OHM
IN	FPIN_T246	FPIN_T246	1	50OHM
IN	FPIN_T247	FPIN_T247	1	50OHM
IN	FPIN_T248	FPIN_T248	1	50OHM
IN	FPIN_T249	FPIN_T249	1	50OHM
IN	FPIN_T250	FPIN_T250	1	50OHM
IN	FPIN_T251	FPIN_T251	1	50OHM
IN	FPIN_T252	FPIN_T252	1	50OHM
IN	FPIN_T253	FPIN_T253	1	50OHM
IN	FPIN_T254	FPIN_T254	1	50OHM
IN	FPIN_T255	FPIN_T255	1	50OHM
IN	FPIN_T256	FPIN_T256	1	50OHM
IN	FPIN_T257	FPIN_T257	1	50OHM
IN	FPIN_T258	FPIN_T258	1	50OHM
IN	FPIN_T259	FPIN_T259	1	50OHM
IN	FPIN_T260	FPIN_T260	1	50OHM
IN	FPIN_T261	FPIN_T261	1	50OHM
IN	FPIN_T262	FPIN_T262	1	50OHM
IN	FPIN_T263	FPIN_T263	1	50OHM
IN	FPIN_T264	FPIN_T264	1	50OHM
IN	FPIN_T265	FPIN_T265	1	50OHM
IN	FPIN_T266	FPIN_T266	1	50OHM
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IN	FPIN_T268	FPIN_T268	1	50OHM
IN	FPIN_T269	FPIN_T269	1	50OHM
IN	FPIN_T270	FPIN_T270	1	50OHM
IN	FPIN_T271	FPIN_T271	1	50OHM
IN	FPIN_T272	FPIN_T272	1	50OHM
IN	FPIN_T273	FPIN_T273	1	50OHM
IN	FPIN_T274	FPIN_T274	1	50OHM
IN	FPIN_T275	FPIN_T275	1	50OHM
IN	FPIN_T276	FPIN_T276	1	50OHM
IN	FPIN_T277	FPIN_T277	1	50OHM
IN	FPIN_T278	FPIN_T278	1	50OHM
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IN	FPIN_T280	FPIN_T280	1	50OHM
IN	FPIN_T281	FPIN_T281	1	50OHM
IN	FPIN_T282	FPIN_T282	1	50OHM
IN	FPIN_T283	FPIN_T283	1	50OHM
IN	FPIN_T284	FPIN_T284	1	50OHM
IN	FPIN_T285	FPIN_T285	1	50OHM
IN	FPIN_T286	FPIN_T286	1	50OHM
IN	FPIN_T287	FPIN_T287	1	50OHM
IN	FPIN_T288	FPIN_T288	1	50OHM
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IN	FPIN_T290	FPIN_T290	1	50OHM
IN	FPIN_T291	FPIN_T291	1	50OHM
IN	FPIN_T292	FPIN_T292	1	50OHM
IN	FPIN_T293	FPIN_T293	1	50OHM
IN	FPIN_T294	FPIN_T294	1	50OHM
IN	FPIN_T295	FPIN_T295	1	50OHM
IN	FPIN_T296	FPIN_T296	1	50OHM
IN	FPIN_T297	FPIN_T297	1	50OHM
IN	FPIN_T298	FPIN_T298	1	50OHM
IN	FPIN_T299	FPIN_T299	1	50OHM
IN	FPIN_T300	FPIN_T300	1	50OHM
IN	FPIN_T301	FPIN_T301	1	50OHM
IN	FPIN_T302	FPIN_T302	1	50OHM
IN	FPIN_T303	FPIN_T303	1	50OHM
IN	FPIN_T304	FPIN_T304	1	50OHM
IN	FPIN_T305	FPIN_T305	1	50OHM
IN	FPIN_T306	FPIN_T306	1	50OHM
IN	FPIN_T307	FPIN_T307	1	50OHM
IN	FPIN_T308	FPIN_T308	1	50OHM
IN	FPIN_T309	FPIN_T309	1	50OHM
IN	FPIN_T310	FPIN_T310	1	50OHM
IN	FPIN_T311	FPIN_T311	1	50OHM
IN	FPIN_T312	FPIN_T312	1	50OHM
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IN	FPIN_T319	FPIN_T319	1	50OHM
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IN	FPIN_T323	FPIN_T323	1	50OHM
IN	FPIN_T324	FPIN_T324	1	50OHM
IN	FPIN_T325	FPIN_T325	1	50OHM
IN	FPIN_T326	FPIN_T326	1	50OHM
IN	FPIN_T327	FPIN_T327	1	50OHM
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IN	FPIN_T353	FPIN_T353	1	50OHM
IN	FPIN_T354	FPIN_T354	1	50OHM
IN	FPIN_T355	FPIN_T355	1	50OHM
IN	FPIN_T356	FPIN_T356	1	50OHM
IN	FPIN_T357	FPIN_T357	1	50OHM
IN	FPIN_T358	FPIN_T358	1	50OHM
IN	FPIN_T359	FPIN_T359	1	50OHM
IN	FPIN_T360	FPIN_T360	1	50OHM
IN	FPIN_T361	FPIN_T361	1	50OHM
IN	FPIN_T362	FPIN_T362		

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	TMDS Interface

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IFPC, IFPE Interface, Mechanical, SPDIF



Net Name		MIN_WIDTH	MAX_WIDTH
IN	HDA_RST	12000	
IN	GPIO_IN_PUEN		
IN	GPIO_TEMP		
IN	GPIO_IN_0		
IN	GPIO_IN_1		
IN	GPIO_IN_2		
OUT	GPIO		
OUT	GPIO_IN	2	50000
IN	GPIO_IN	2	50000
Net Name		VOLTAGE	MAX_CURRENT
IN	IFPCD_CVDD0	1.80V	0.220A 15000

GSI					
BSA_GSI_F080_230X330_G1_0608					
COMBOP					
1212 GND_NC					
	AC11.	GND		NC	C15.
	AC14.	GND			D15.
	AC17.	GND			J5.
	AC2.	GND			
	AC20.	GND			
	AC23.	GND			
	AC26.	GND			
	AC5.	GND			
	AC8.	GND			
	AE11.	GND			
	AE14.	GND			
	AE17.	GND			
	AE2.	GND			
	AF20.	GND			
	AF23.	GND			
	AF26.	GND			
	AEL.	GND			
	AER.	GND			
	B11.	GND			
	B14.	GND			
	B17.	GND			
	B2.	GND			
	B20.	GND			
	B23.	GND			
	B26.	GND			
	B5.	GND			
	B8.	GND			
	E11.	GND			
	E17.	GND			
	E2.	GND			
	E20.	GND			
	E23.	GND			
	E26.	GND			
	E5.	GND			
	F8.	GND			
	H2.	GND			
	H5.	GND			
	J11.	GND			
	J14.	GND			
	J17.	GND			
	K18.	GND			
	K9.	GND			
	L11.	GND			
	L12.	GND			
	L13.	GND			
	L14.	GND			
	L15.	GND			
	L16.	GND			
	L17.	GND			
	L2.	GND			
	L6.	GND			
	M12.	GND			
	M13.	GND			
	M14.	GND			
	M15.	GND			
	M16.	GND			
	P18.	GND			
	P2.	GND			
	P23.	GND			
	P26.	GND			
	P5.	GND			
	P9.	GND			
	T12.	GND			
	T13.	GND			
	T14.	GND			
	T15.	GND			
	T16.	GND			
	U11.	GND			
	U12.	GND			
	U13.	GND			
	U14.	GND			
	U15.	GND			
	U16.	GND			
	U17.	GND			
	U2.	GND			
	U23.	GND			
	U26.	GND			
	U5.	GND			
	V18.	GND			
	V9.	GND			
	W11.	GND			
	W14.	GND			
	W17.	GND			
	Y2.	GND			
	Y23.	GND			
	Y26.	GND			
	Y5.	GND			

NVIDIA CORPORATION

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SANTA CLARA, CA 95050, USA

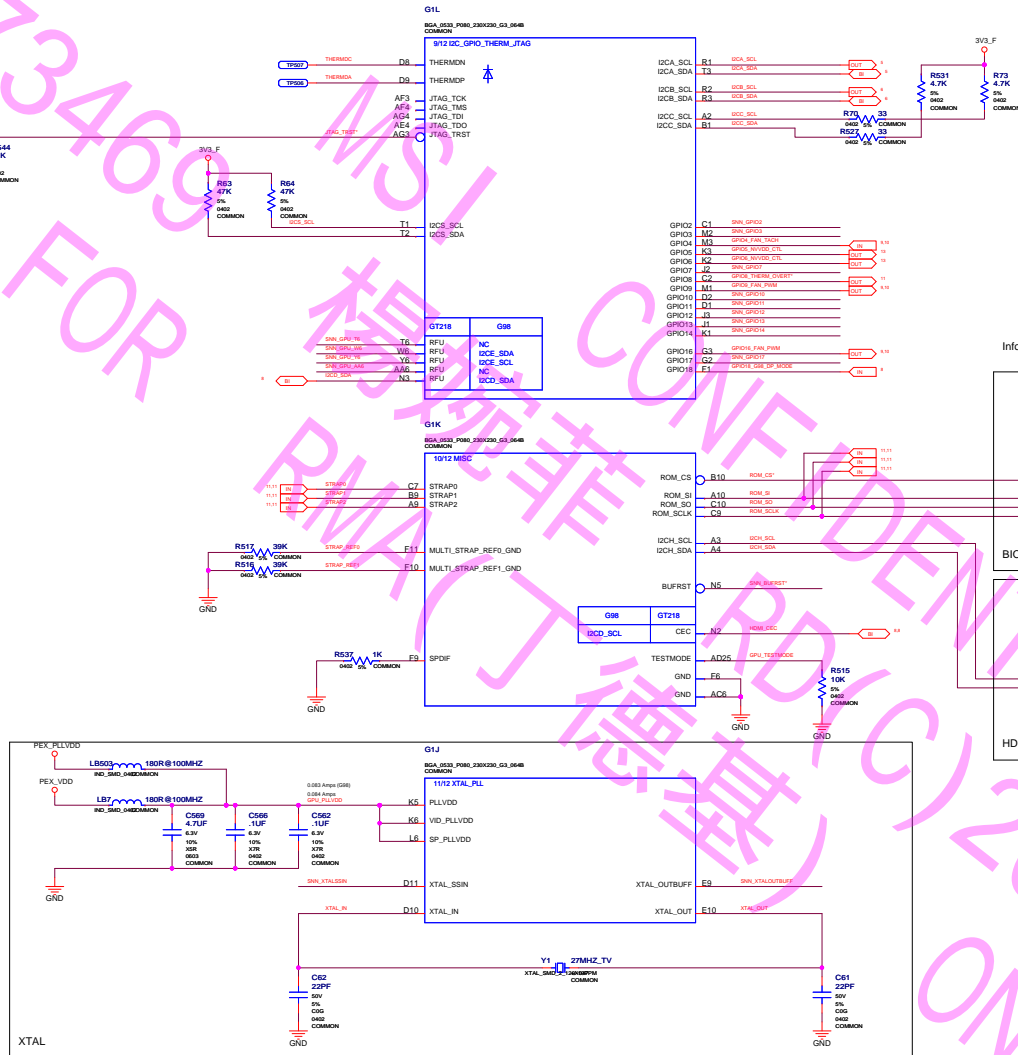
NV_PN	600-10691-BASE-100 A
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NAME		DATE	05-FEB-2009

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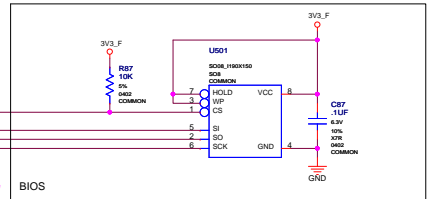
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XTAL, ROM, JTAG

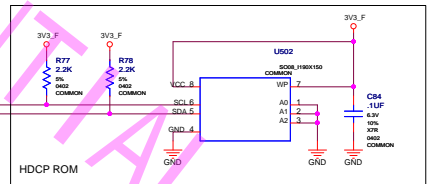


Net Name	CRITICAL	IMPEDANCE	Net Name	MIN_WIDTH	MAX_WIDTH
XTAL_OUT	1	50OHM	UCC_SCL		
XTAL_IN	1	50OHM	UCC_SDA		
			UCC_SCL_B		
			UCC_SDA_B		
			UCC_SCL_A		
			UCC_SDA_A		
			UCC_SCL_C		
			UCC_SDA_C		
			UCC_SCL_D		
			UCC_SDA_D		
			UCC_SCL_E		
			UCC_SDA_E		
			UCC_SCL_F		
			UCC_SDA_F		
			UCC_SCL_G		
			UCC_SDA_G		
			UCC_SCL_H		
			UCC_SDA_H		
			UCC_SCL_I		
			UCC_SDA_I		
			UCC_SCL_J		
			UCC_SDA_J		
			UCC_SCL_K		
			UCC_SDA_K		
			UCC_SCL_L		
			UCC_SDA_L		
			UCC_SCL_M		
			UCC_SDA_M		
			UCC_SCL_N		
			UCC_SDA_N		
			UCC_SCL_O		
			UCC_SDA_O		
			UCC_SCL_P		
			UCC_SDA_P		
			UCC_SCL_Q		
			UCC_SDA_Q		
			UCC_SCL_R		
			UCC_SDA_R		
			UCC_SCL_S		
			UCC_SDA_S		
			UCC_SCL_T		
			UCC_SDA_T		
			UCC_SCL_U		
			UCC_SDA_U		
			UCC_SCL_V		
			UCC_SDA_V		
			UCC_SCL_W		
			UCC_SDA_W		
			UCC_SCL_X		
			UCC_SDA_X		
			UCC_SCL_Y		
			UCC_SDA_Y		
			UCC_SCL_Z		
			UCC_SDA_Z		

InfoROM



BIOS

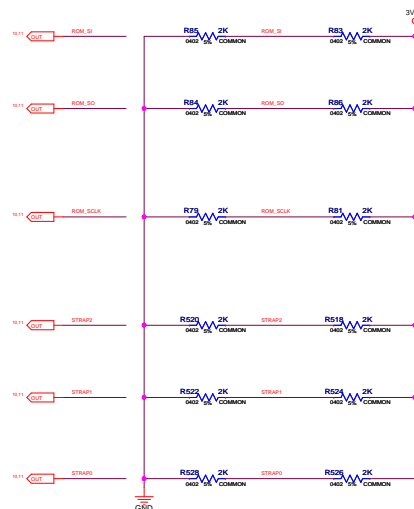
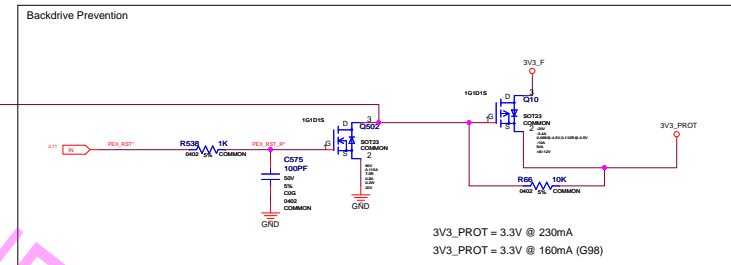
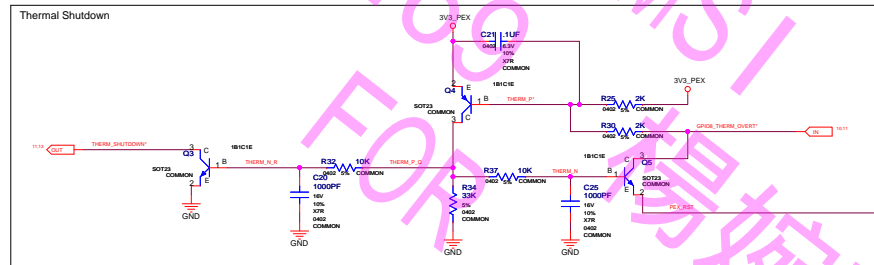


HDCP ROM

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Thermal Protection, Protected 3V3, Straps



GT218 Straps
MLS Mode
Bit Signal

Bit Signal		Values		Multilevel Straps	
03	RANCFG[2]	0000	Europe	50 to GND	0000
02	RANCFG[3]	0001	South&North America	10K to GND	0001
01	RANCFG[4]	0010	Oceania	20K to GND	0010
		0011	Asia	50K to GND	0011
		0100	North	100K to GND	0100
		0101	South	20K to GND	0101
		0110	Europe	50K to GND	0110
		0111	North	10K to VCC	0111
03	WOLR_417	0	27T (Default)	10K to VCC	1000
		1	255M (Default)	10K to VCC	1001
				10K to VCC	1010
				10K to VCC	1011
01	SWR_ACT_ADDR	0	SWR	10K to VCC	1000
		1	SWR	10K to VCC	1001
03	VGA_DEVICE	0	Class class 300	10K to VCC	0110
		1	Class class 300	10K to VCC	0111
				10K to VCC	1100
				10K to VCC	1101
				10K to VCC	1110
				10K to VCC	1111
03	PCI_DEVICE_EXT	0	GT1B-300-A1		
		1	8050		
03	SUB_VENDOR	0	No SBCs		
		1	8050		
01	SLOT_CIA_CFG	0	Disable		
		1	Enable		
03	PEX_FLT_EN_TERR100	0	Disable		
		1	Enable		
03	PCI_DEVICE[5]	0000	GT1B-300-A1		
		0001	8050		
		0010	8050		
		0011	8050		
		0100	8050		
		0101	8050		
		0110	8050		
		0111	8050		
03	SGSD_PCICFG_LUT_ADDR[0]	0000	DISKTOP_DEFAULT	1000	DISKTOP_OTHERS
		0001	MOBILE_DEFAULT	1001	MOBILE_ETHERS_NAAP
		0010	MOBILE_ETHERS_LAMP	1010	MOBILE_ETHERS_LAMP
		0011	MOBILE_ETHERS_LAMP	1011	MOBILE_ETHERS_LAMP
		0100	MOBILE_ETHERS_NAAP	1100	MOBILE_ETHERS_NAAP
		0101	MOBILE_ETHERS_NAAP	1101	MOBILE_ETHERS_NAAP
		0110	MOBILE_ETHERS_NAAP	1110	MOBILE_ETHERS_NAAP
		0111	MOBILE_ETHERS_NAAP	1111	MOBILE_ETHERS_NAAP
03	USER[0]	0000	Default		
		0001	Default		
01	USER[1]				
03	USER[2]				

GT218 Straps
BU Mode
Bit Signal

Bit Signal		Values
PCL_DEV0_EXT	0	01716-000-A1
<hr/>		
XCL_A11	0	077 (Don't)
<hr/>		
XSG0_PADCFG_LUT_ADR[0]	0000	CGATOP_DEFAULT
	0001	NRMLA_DEFAULT
	0004	MOICLX_HTHRES_LAMP
	0011	MOICLX_HTHRES_LAMP
	0100	MOICLX_HTHRES_LAMP
	0101	MOICLX_HTHRES_LAMP
	0110	MOICLX_HTHRES_LAMP
	0111	MOICLX_HTHRES_LAMP
	1000	CGATOP_HTHRES
	1001	MOICLX_HTHRES_LAMP
	1010	MOICLX_HTHRES_LAMP
	1011	MOICLX_HTHRES_LAMP
XSG0_PADCFG_LUT_ADR[0]	1100	MOICLX_HTHRES_LAMP
	1101	MOICLX_HTHRES_LAMP
	1110	MOICLX_HTHRES_LAMP
	1111	MOICLX_HTHRES_LAMP
<hr/>		
XSG0_PADCFG_LUT_ADR[1]		
<hr/>		
XSG0_PADCFG_LUT_ADR[2]		


GT218 Straps
PM Mode
Bit Signal

Bit Signal	Values
PCI_DEVIO_EXT	0 Q7218-300-A1
PCIA_AKT	0 270257 OR 467047
PCI_DEVIOEE	0 Q7218-300-A1
RANKCFGQ	0000 Empty 0001 Samsung, Micron 0010 Commodore 0011 Hyatt 0100 Nanya
RANKCFGQ1	
RANKCFGQ2	
RANKCFGQ3	
RANKCFGQ4	
RANKCFGQ5	
RANKCFGQ6	
RANKCFGQ7	
RANKCFGQ8	
RANKCFGQ9	
RANKCFGQ10	
RANKCFGQ11	
RANKCFGQ12	
RANKCFGQ13	
RANKCFGQ14	
RANKCFGQ15	
RANKCFGQ16	
RANKCFGQ17	
RANKCFGQ18	
RANKCFGQ19	
RANKCFGQ20	
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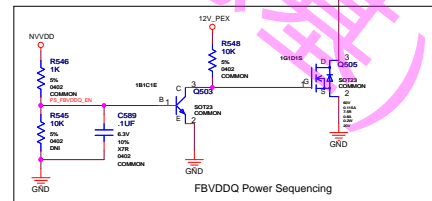
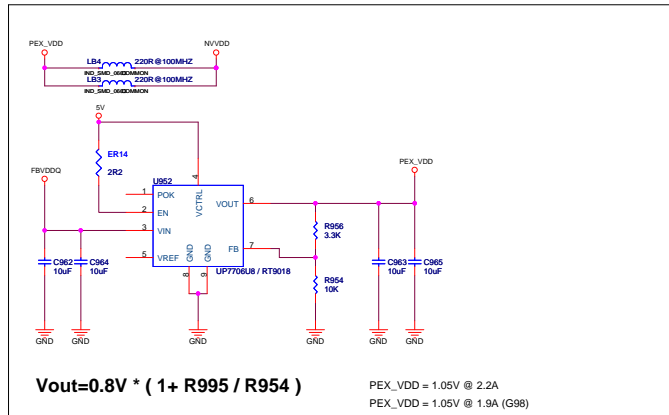
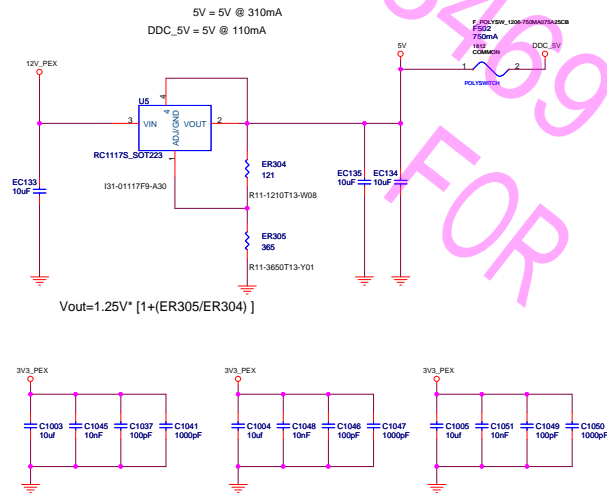
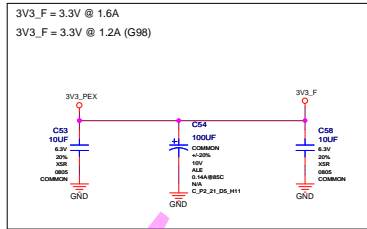
G98 Straps
MLS Mode
Bit Signal

Bit Signal		Values
05	RAMCFG[2]	0000 Elysia
06	RAMCFG[2]	0001 Nanya
07	RAMCFG[2]	0010 Samsung
08	RAMCFG[2]	0100 GDDR5
09	RAMCFG[2]	0111 Hynix
0A	NCCK_237	1 Enabled
0B	TIME0[2]	001 NTSC_I
0C	TIME0[3]	
0D	TIME0[3]	
0E	TIME0[3]	
0F	PCI_DEVID_EXT	0 038-403-02
		038-403-A2
		038-403-02
10	SUB_VENDOR	1 8025
11	SLOT_CLK_CFG	0 Disable
		1 Enable
12	PEX_PULL_EN_TERMINUS	0 Disable
13	PCI_DEVID[0]	0000 RTU
		0100 038-403-02
		038-403-A2
		0100 038-403-02
		038-403-02
14	PCI_DEVID[8]	
15	SGD_PADCFG_LUT_ADDR[0]	0000 CSKTOP_DEFAULT
16	SGD_PADCFG_LUT_ADDR[1]	
17	SGD_PADCFG_LUT_ADDR[2]	
18	SGD_PADCFG_LUT_ADDR[3]	
19	SGD_PADCFG_LUT_ADDR[4]	
1A	SGD_PADCFG_LUT_ADDR[5]	
1B	SGD_PADCFG_LUT_ADDR[6]	
1C	SGD_PADCFG_LUT_ADDR[7]	
1D	SGD_PADCFG_LUT_ADDR[8]	
1E	SGD_PADCFG_LUT_ADDR[9]	
1F	SGD_PADCFG_LUT_ADDR[10]	
20	SGD_PADCFG_LUT_ADDR[11]	
21	SGD_PADCFG_LUT_ADDR[12]	
22	SGD_PADCFG_LUT_ADDR[13]	
23	SGD_PADCFG_LUT_ADDR[14]	
24	SGD_PADCFG_LUT_ADDR[15]	
25	SGD_PADCFG_LUT_ADDR[16]	
26	SGD_PADCFG_LUT_ADDR[17]	
27	SGD_PADCFG_LUT_ADDR[18]	
28	SGD_PADCFG_LUT_ADDR[19]	
29	SGD_PADCFG_LUT_ADDR[20]	
2A	SGD_PADCFG_LUT_ADDR[21]	
2B	SGD_PADCFG_LUT_ADDR[22]	
2C	SGD_PADCFG_LUT_ADDR[23]	
2D	SGD_PADCFG_LUT_ADDR[24]	
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2F	SGD_PADCFG_LUT_ADDR[26]	
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3C	SGD_PADCFG_LUT_ADDR[39]	
3D	SGD_PADCFG_LUT_ADDR[40]	
3E	SGD_PADCFG_LUT_ADDR[41]	
3F	SGD_PADCFG_LUT_ADDR[42]	
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47	SGD_PADCFG_LUT_ADDR[50]	
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4B	SGD_PADCFG_LUT_ADDR[54]	
4C	SGD_PADCFG_LUT_ADDR[55]	
4D	SGD_PADCFG_LUT_ADDR[56]	
4E	SGD_PADCFG_LUT_ADDR[57]	
4F	SGD_PADCFG_LUT_ADDR[58]	
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52	SGD_PADCFG_LUT_ADDR[61]	
53	SGD_PADCFG_LUT_ADDR[62]	
54	SGD_PADCFG_LUT_ADDR[63]	
55	SGD_PADCFG_LUT_ADDR[64]	
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57	SGD_PADCFG_LUT_ADDR[66]	
58	SGD_PADCFG_LUT_ADDR[67]	
59	SGD_PADCFG_LUT_ADDR[68]	
5A	SGD_PADCFG_LUT_ADDR[69]	
5B	SGD_PADCFG_LUT_ADDR[70]	
5C	SGD_PADCFG_LUT_ADDR[71]	
5D	SGD_PADCFG_LUT_ADDR[72]	
5E	SGD_PADCFG_LUT_ADDR[73]	
5F	SGD_PADCFG_LUT_ADDR[74]	
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10E	SGD_PADCFG_LUT_ADDR[153]	
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110	SGD_PADCFG_LUT_ADDR[155]	
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112	SGD_PADCFG_LUT_ADDR[157]	
113	SGD_PADCFG_LUT_ADDR[158]	
114	SGD_PADCFG_LUT_ADDR[159]	
115	SGD_PADCFG_LUT_ADDR[160]	
116	SGD_PADCFG_LUT_ADDR[161]	
117	SGD_PADCFG_LUT_ADDR[162]	
118	SGD_PADCFG_LUT_ADDR[163]	
119	SGD_PADCFG_LUT_ADDR[164]	
11A	SGD_PADCFG_LUT_ADDR[165]	
11B	SGD_PADCFG_LUT_ADDR[166]	
11C	SGD_PADCFG_LUT_ADDR[167]	
11D	SGD_PADCFG_LUT_ADDR[168]	
11E	SGD_PADCFG_LUT_ADDR[169]	
11F	SGD_PADCFG_LUT_ADDR[170]	
120	SGD_PADCFG_LUT_ADDR[171]	
121	SGD_PADCFG_LUT_ADDR[172]	
122	SGD_PADCFG_LUT_ADDR[173]	
123	SGD_PADCFG_LUT_ADDR[174]	
124	SGD_PADCFG_LUT_ADDR[175]	
125	SGD_PADCFG_LUT_ADDR[176]	
126	SGD_PADCFG_LUT_ADDR[177]	
127	SGD_PADCFG_LUT_ADDR[178]	
128	SGD_PADCFG_LUT_ADDR[179]	
129	SGD_PADCFG_LUT_ADDR[180]	
12A	SGD_PADCFG_LUT_ADDR[181]	
12B	SGD_PADCFG_LUT_ADDR[182]	
12C	SGD_PADCFG_LUT_ADDR[183]	
12D	SGD_PADCFG_LUT_ADDR[184]	
12E	SGD_PADCFG_LUT_ADDR[185]	
12F	SGD_PADCFG_LUT_ADDR[186]	
130	SGD_PADCFG_LUT_ADDR[187]	
131	SGD_PADCFG_LUT_ADDR[188]	
132	SGD_PADCFG_LUT_ADDR[189]	
133	SGD_PADCFG_LUT_ADDR[190]	
134	SGD_PADCFG_LUT_ADDR[191]	
135	SGD_PADCFG_LUT_ADDR[192]	
136	SGD_PADCFG_LUT_ADDR[193]	
137	SGD_PADCFG_LUT_ADDR[194]	
138	SGD_PADCFG_LUT_ADDR[195]	
139	SGD_PADCFG_LUT_ADDR[196]	
13A	SGD_PADCFG_LUT_ADDR[197]	
13B	SGD_PADCFG_LUT_ADDR[198]	
13C	SGD_PADCFG_LUT_ADDR[199]	
13D	SGD_PADCFG_LUT_ADDR[200]	
13E	SGD_PADCFG_LUT_ADDR[201]	
13F	SGD_PADCFG_LUT_ADDR[202]	
140	SGD_PADCFG_LUT_ADDR[203]	
141	SGD_PADCFG_LUT_ADDR[204]	
142	SGD_PADCFG_LUT_ADDR[205]	
143	SGD_PADCFG_LUT_ADDR[206]	
144	SGD_PADCFG_LUT_ADDR[207]	
145	SGD_PADCFG_LUT_ADDR[208]	
146	SGD_PADCFG_LUT_ADDR[209]	
147	SGD_PADCFG_LUT_ADDR[210]	
148	SGD_PADCFG_LUT_ADDR[211]	
149	SGD_PADCFG_LUT_ADDR[212]	
14A	SGD_PADCFG_LUT_ADDR[213]	
14B	SGD_PADCFG_LUT_ADDR[214]	
14C	SGD_PADCFG_LUT_ADDR[215]	
14D	SGD_PADCFG_LUT_ADDR[216]	
14E	SGD_PADCFG_LUT_ADDR[217]	
14F	SGD_PADCFG_LUT_ADDR[218]	
150	SGD_PADCFG_LUT_ADDR[219]	
151	SGD_PADCFG_LUT_ADDR[220]	
152	SGD_PADCFG_LUT_ADDR[221]	
153	SGD_PADCFG_LUT_ADDR[222]	
154	SGD_PADCFG_LUT_ADDR[223]	
155	SGD_PADCFG_LUT_ADDR[224]	
156	SGD_PADCFG_LUT_ADDR[225]	
157	SGD_PADCFG_LUT_ADDR[226]	
158	SGD_PADCFG_LUT_ADDR[227]	
159	SGD_PADCFG_LUT_ADDR[228]	
15A	SGD_PADCFG_LUT_ADDR[229]	
15B	SGD_PADCFG_LUT_ADDR[230]	
15C	SGD_PADCFG_LUT_ADDR[231]	
15D	SGD_PADCFG_LUT_ADDR[232]	
15E	SGD_PADCFG_LUT_ADDR[233]	
15F	SGD_PADCFG_LUT_ADDR[234]	
160	SGD_PADCFG_LUT_ADDR[235]	
161	SGD_PADCFG_LUT_ADDR[236]	
162	SGD_PADCFG_LUT_ADDR[237]	
163	SGD_PADCFG_LUT_ADDR[238]	
164	SGD_PADCFG_LUT_ADDR[239]	
165	SGD_PADCFG_LUT_ADDR[240]	
166	SGD_PADCFG_LUT_ADDR[241]	
167	SGD_PADCFG_LUT_ADDR[242]	
168	SGD_PADCFG_LUT_ADDR[243]	
169	SGD_PADCFG_LUT_ADDR[244]	
16A	SGD_PADCFG_LUT_ADDR[245]	
16B	SGD_PADCFG_LUT_ADDR[246]	
16C	SGD_PADCFG_LUT_ADDR[247]	
16D	SGD_PADCFG_LUT_ADDR[248]	
16E	SGD_PADCFG_LUT_ADDR[249]	
16F	SGD_PADCFG_LUT_ADDR[250]	
170	SGD_PADCFG_LUT_ADDR[251]	
171	SGD_PADCFG_LUT_ADDR[252]	
172	SGD_PADCFG_LUT_ADDR[253]	
173	SGD_PADCFG_LUT_ADDR[254]	
174	SGD_PADCFG_LUT_ADDR[255]	

Multilevel Straps	
5K to GND	0000
10K to GND	0001
15K to GND	0010
20K to GND	0011
25K to GND	0100
30K to GND	0101
35K to GND	0110
45K to GND	0111
5K to VCC	1000
10K to VCC	1001
15K to VCC	1010
20K to VCC	1011
25K to VCC	1100
30K to VCC	1101
35K to VCC	1110
45K to VCC	1111

NVIDIA CORPORATION			
2701 SAN TOMAS EXPRESSWAY			
SANTA CLARA, CA 95050, USA			
NV_PN	600-10691-BASE-100 A		
ID		PAGE	
NAME		DATE	05-FEB-2009


Power Supply I: FBVDD/Q, PEX_VDD, 5V, 3V3_F



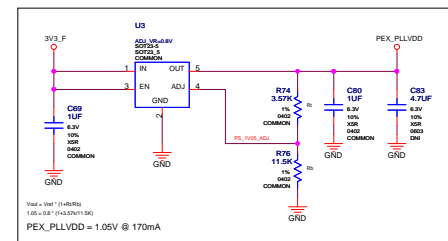
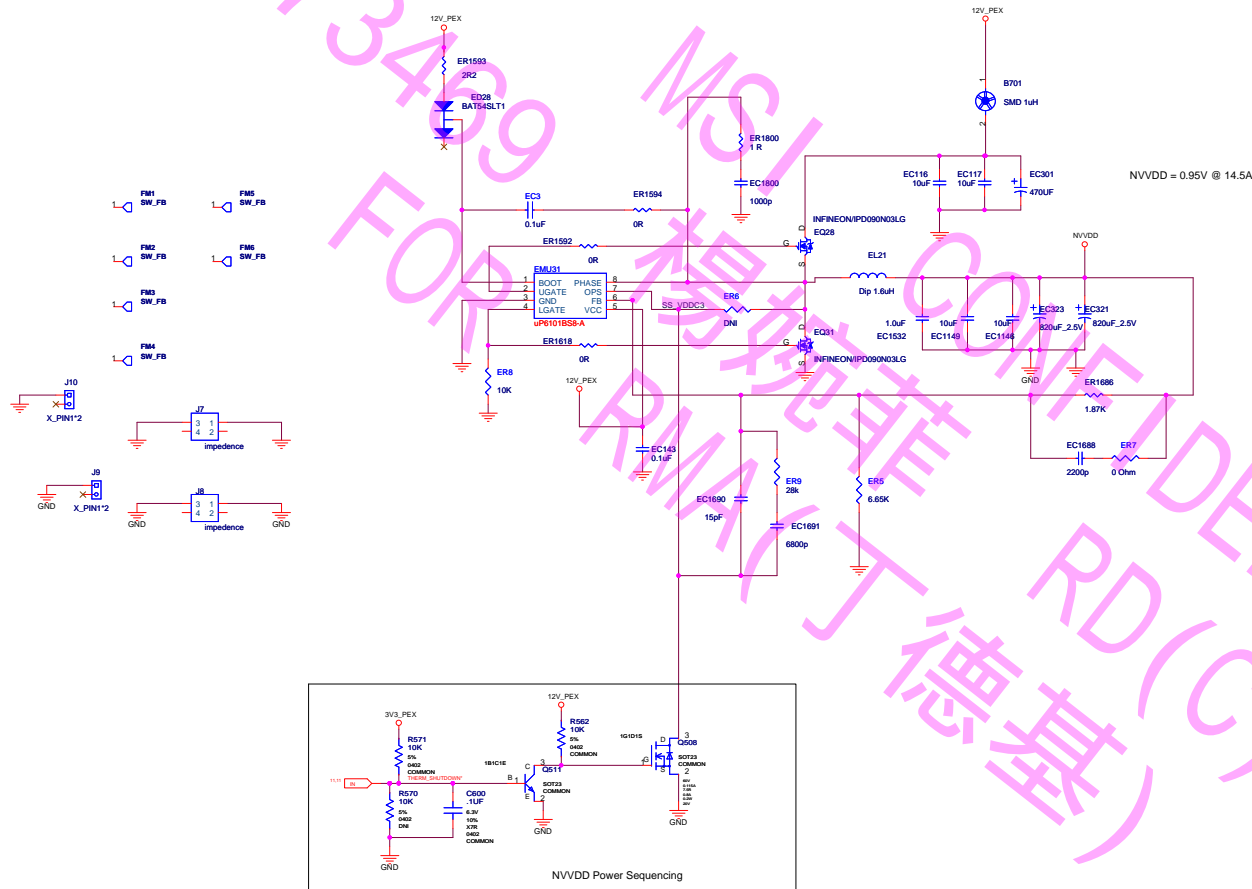
Net Name		MIN_WIDTH	MAX_WIDTH
126	PE_SV_A2U1		
127	PE_PEX_V0	1.0000	
128	PE_PEX_V0	1.0000	
129	PE_PEX_V0	1.0000	
130	PE_PEX_V0	1.0000	
131	PE_PEX_V0	1.0000	
132	PE_PEX_V0	1.0000	
133	PE_PEX_V0	1.0000	
134	PE_PEX_V0	1.0000	
135	PE_PEX_V0	1.0000	
136	PE_PEX_V0	1.0000	
137	PE_PEX_V0	1.0000	
138	PE_PEX_V0	1.0000	
139	PE_PEX_V0	1.0000	
140	PE_PEX_V0	1.0000	
141	PE_PEX_V0	1.0000	
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153	PE_PEX_V0	1.0000	
154	PE_PEX_V0	1.0000	
155	PE_PEX_V0	1.0000	
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216	PE_PEX_V0	1.0000	
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454	PE_PEX_V0	1.0000	
455	PE_PEX_V0	1.0000	
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457	PE_PEX_V0	1.0000	
458	PE_PEX_V0	1.0000	
459	PE_PEX_V0	1.0000	

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	Power Supply I: FBVDDQ, PEX_VDD, 5V, 3V3_F

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NV PN	600-10691-BASE-100 A		
ID		PAGE	
NAME		DATE	05-FEB-2009

Power Supply II: PEX_PLLVDD, NVVDD



	Net Name	MIN_WIDTH	MAX_WIDTH	CRITICAL
	PS_NVRWD_F0	1280		
	PS_NVRWD_F0P	1280		
	PS_NVRWD_V0C0T0	1280		
	PS_NVRWD_V0C0T0P	1280		
	PS_NVRWD_F0C0S0	1280		
	PS_NVRWD_A0D0T0	1280		
	PS_NVRWD_MODE_0	1280		
	PS_NVRWD_L0D0	1280		
	PS_NVRWD_L0S0	1024		
	PS_NVRWD_L0S_0	1024		
	PS_NVRWD_F0H0S0	1024		
	PS_NVRWD_L0S_0P	1024		
	PS_NVRWD_L0S_0P	1024		
	PS_NVRWD_L0S_0P	1024		
	PS_NVRWD_F0S0	1280		
	PS_NVRWD_F0S_0	1280		
	PS_NVRWD_C0P	1280		
	PS_NVRWD_C0P_0S0	1280		
2.0	NVRWD Sense			2
3.0	OPCODE_NVRWD_C0S0	1280		
	OPCODE_NVRWD_C0S_0	1280		
3.0	OPCODE_NVRWD_C0S_0	1280		
	OPCODE_NVRWD_C0S_0	1280		
3.0	PS_F0C0S0_A0D0			

Net Name	VOLTAGE	MAX_CURRENT	POWER_NET
12V_PEX	12V	5.5A	300W
3V3_PEX	3.3V	3.0A	150W
NVDD	1.5V	11.7A	300W
PEX_PLVDD	1.0V	0.17A	170W

NVDD = 0.95V @ 14.5A

NVVDD Power Sequencing

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	Power Supply II: PEX_PLLVDD, NVVDD

NVIDIA CORPORATION


2701 SAN TOMAS EXPRESSWAY
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