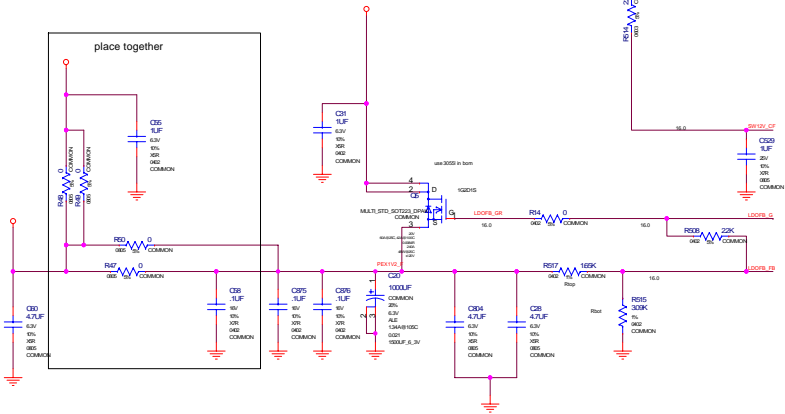
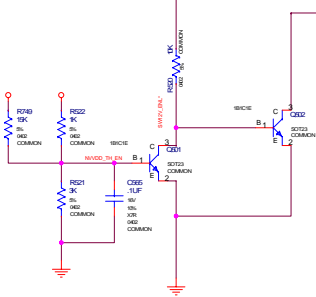


PowerSupplyIII: FBVDDQ, PEX1V2

PEX1V2
 $V_{out} = V_{Ref} * (1 + R_{top}/R_{bot})$
 $1.227V = 0.8V * (1 + (1.65K/3.09K))$ (ISL6549)

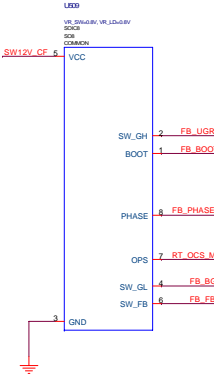


Power Sequence



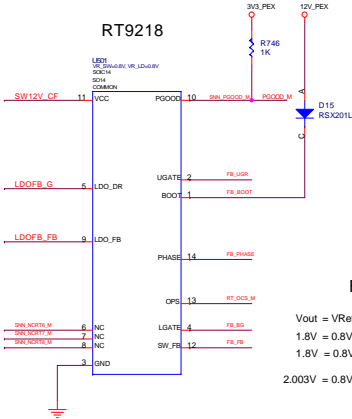
Power down option
A3V3 Rtop 15K Rbot 10K
NVVDD Rtop 1K Rbot 3K

APW7120 / RT9214



FBVDDQ & PEX1V2

RT9218



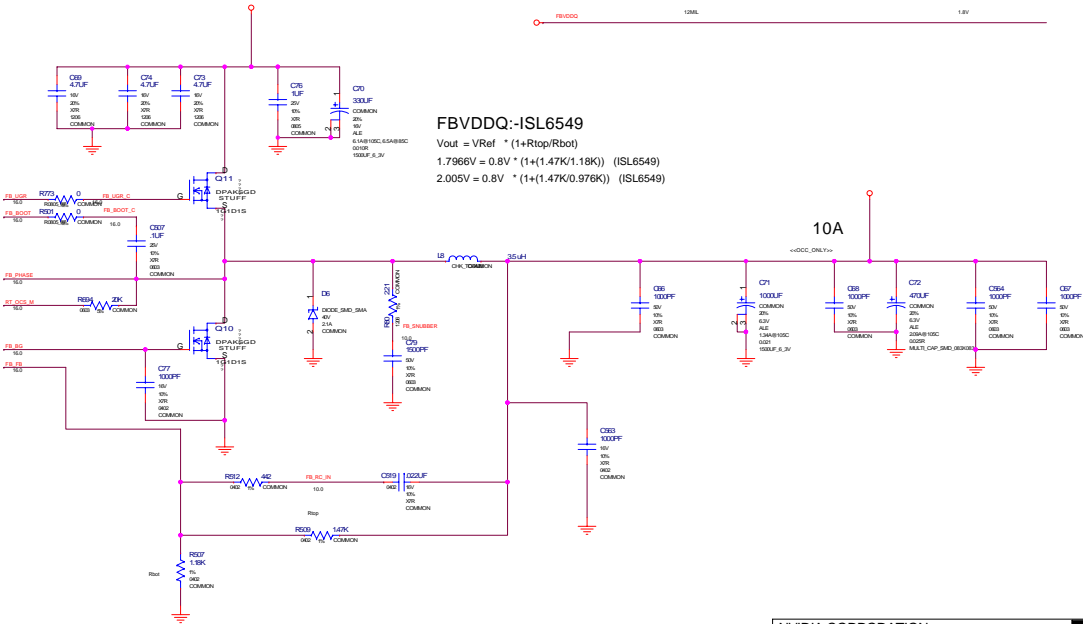
FBVDDQ:-RT9218

$V_{out} = V_{Ref} * (1 + R_{top}/R_{bot})$
 $1.8V = 0.8V * (1 + (5K/4K))$ (RT9218)
 $1.8V = 0.8V * (1 + (200/160))$ (RT9218) Samsung MEM
 $2.003V = 0.8V * (1 + (200/133))$ (RT9218) Infineon MEM default



FBVDDQ:-ISL6549

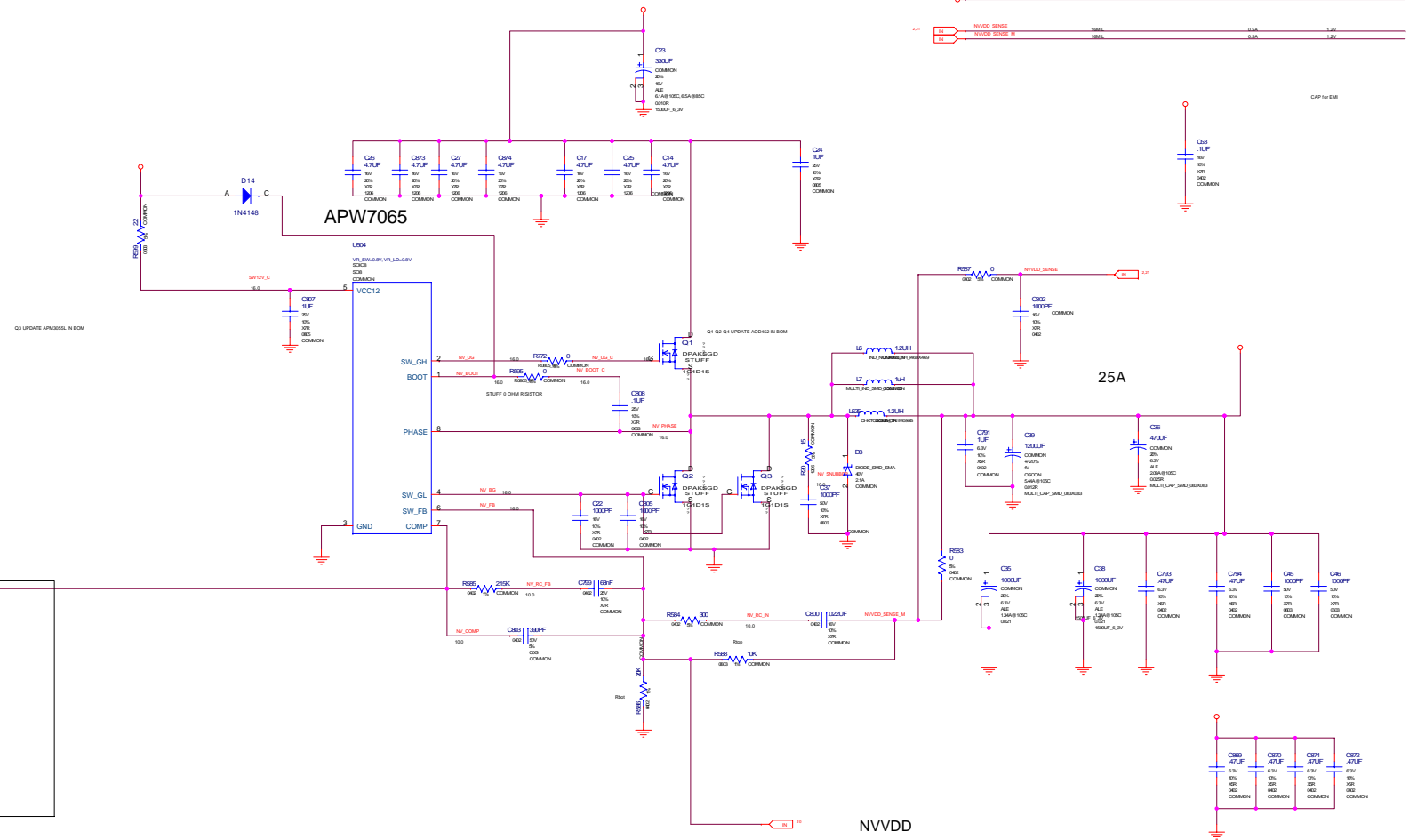
$V_{out} = V_{Ref} * (1 + R_{top}/R_{bot})$
 $1.7966V = 0.8V * (1 + (1.47K/1.18K))$ (ISL6549)
 $2.005V = 0.8V * (1 + (1.47K/0.976K))$ (ISL6549)



NVIDIA CORPORATION	
2701 SAN TOMAS EXPRESSWAY	
SANTA CLARA, CA 95050, USA	
NV_PN	600-10403-0000-200 A
ID	
NAME	
DATE	12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

PowerSupplyII: NVVDD




NVVD

$V_{out} = V_{ref} * (1 + R_{top}/R_{bot})$

$1.1V = 0.8V * (1 + (1.54k/4.02k))$ (ISL6549)

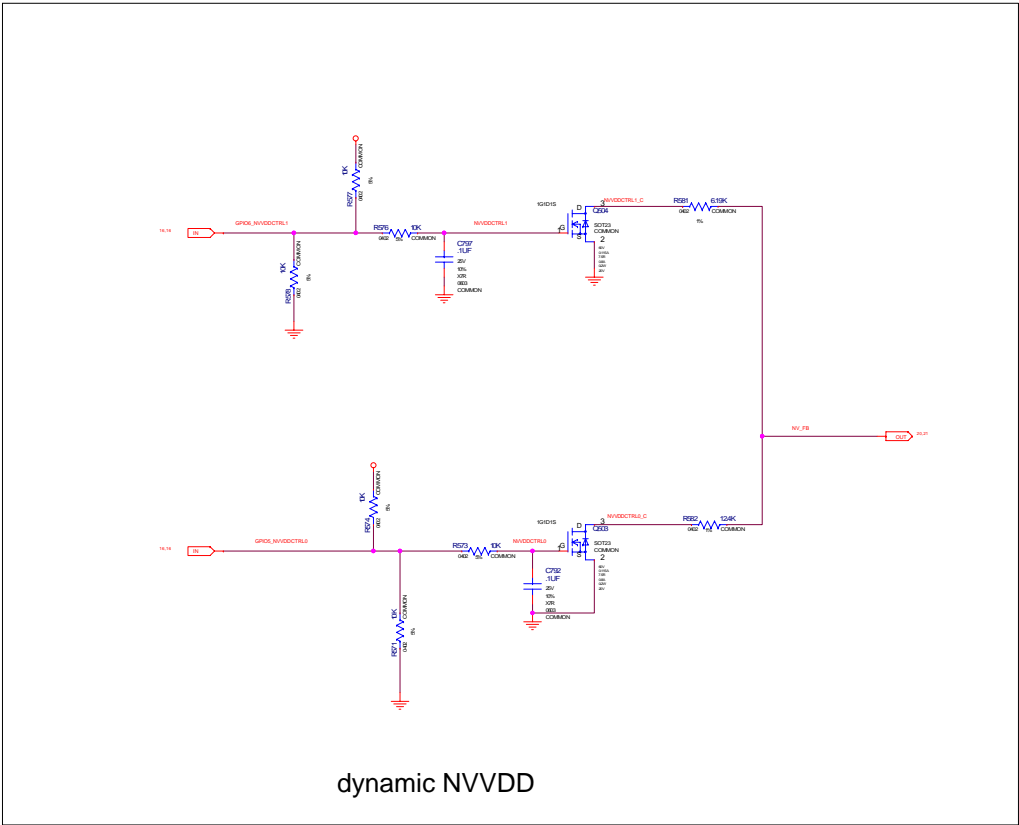
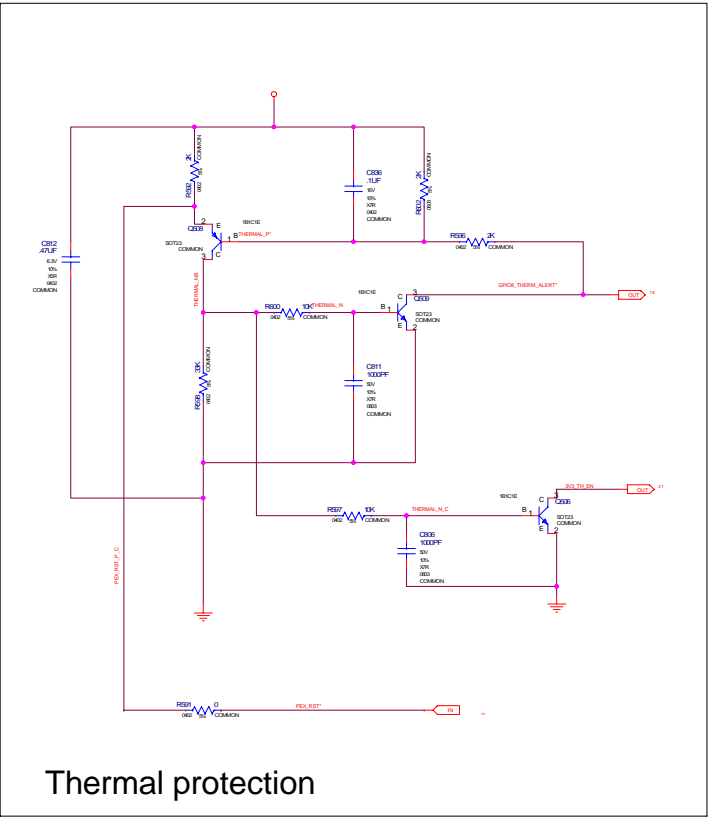
$1.2V = 0.8V * (1 + (1.54k/3.09k))$ (ISL6549)

$1.2V = 0.8V * (1 + (10k/20k))$ (APW7065)

NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN 600-10403-0000-200 A			
ID		PAGE	
NAME		DATE	12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE. EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

thermal protection and dynamic NVVDD



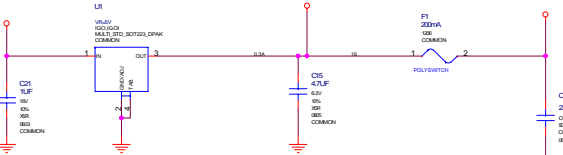
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY; COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	Thermal protection and dynamic NVVDD

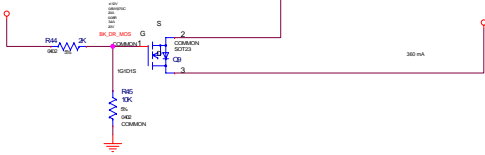
NVIDIA CORPORATION			
3701 SAN TOMAS EXPRESSWAY			
SANTA CLARA, CA 95050, USA			
NV_PN	600-10403-0000-200 A		
ID		PAGE	
NAME		DATE	12-JAN-2007

A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

DDC 5V



TMDS IO SUPPLY WITH BACKDRIVE PROTECTION

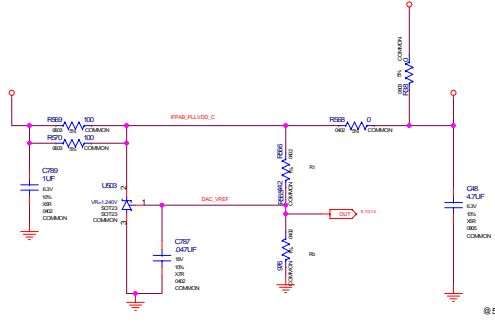


NETNAME	MAX_CURRENT	MIN_LINE_WIDTH	VOLTAGE
DIC JV	0.1A	12.0	0.0000V
AVDD	1.6A	30.0	0.0000V
DIFFER_KVDD	0.3A	16	0.0000V
GND		35.0	0.000000V
PF_PULLVD	0.3A	16	1.80000V

A3V3 Power Supply



IFP_PLL SUPPL



NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



NV_PN	600-10403-0000-200 A
-------	----------------------

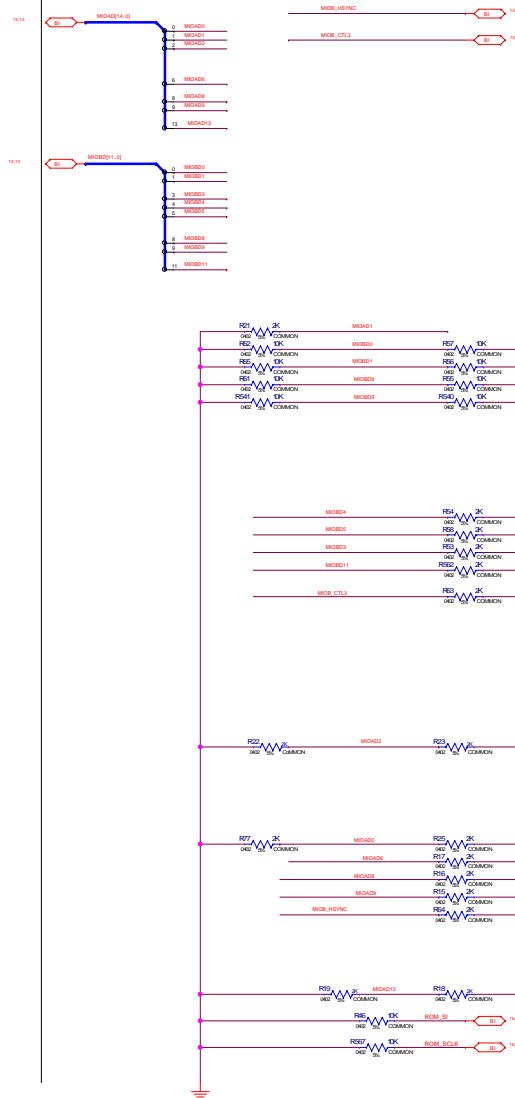
ID		PAGE	
NAME		DATE	12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	POWER SUPPLY: TMD5 KVDD,5V,A3V3

BIOS, Straps, Misc

Straps



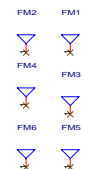
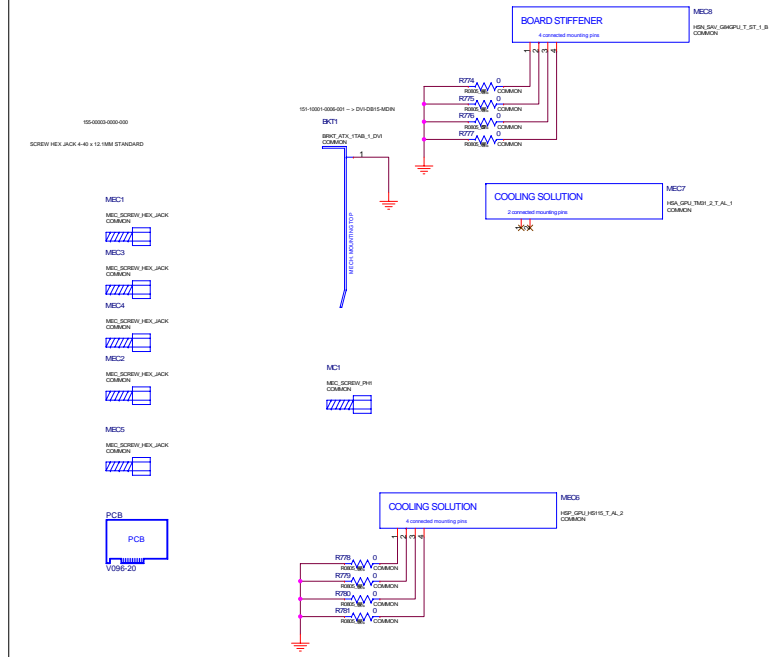
REG: NV_PEXTDEV_BOOT_0

Bit Signal	VALUE_ID	VALUES
00: GPIO_WORTH 11: USB_KEYBOARD	GPIO_WORTH	Active(HIGH) 4:Power-ON-Reset
14:RAM_CFG_0	RAM_VERSION	1:RAM_VERSION
	RAM_CFG0[0]	
00:RAM_CFG_1		
04:RAM_CFG_2		
04:RAM_CFG_3 04:RAM_CFG_4	CRYSTAL	0:76800 1:41.250000
10:TV_MODE_0	TV_MODE[0]	00:NTSC_M 01:PAL_M 11:Reserved, 1
00:TV_MODE_1		
00:TV_MODE[2]		
00:TV_MODE[3]		
10:PCI_DEV0_0	PCI_DEV0[0]	
11:PCI_DEV0_1		
12:PCI_DEV0_2		
13:PCI_DEV0_3		
20:PCI_DEV0_EXT	PCI_Dev0[0]Rev	
14: FRQ[0]		Power-Down-Not-Run
15: FRQ[1]		00:125MHz 01:125MHz 10:125MHz Reserved 11:125MHz Reserved
16: FRQ[2]		00:125MHz 01:125MHz 10:125MHz Reserved 11:125MHz Reserved
22:ROM_TYPE_0	ROM_TYPE[0]	00:Flasher 01:Serial_4732F 02:Serial_52740FF 3:Reserved
23:ROM_TYPE_1		
24:USER_0	STRAP_USER[0]E	0000:empty
25:USER_1		
26:USER_2		
27:USER_3		

REG: NV_STRAP_1

Bit Signal	VALUE_ID	VALUES
15: Slew Clock Configuration		0:Disable 1:Enable
12: MO_EN_33V_0	MIO_VDDQ Voltage	0:2.5V 1:3.3V
13: MO_EN_33V_1	MIOB_VDDQ Voltage	0:2.5V 1:3.3V
16: PCI_ICBAR		0:Disable 1:Enable

Mechanical parts



NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



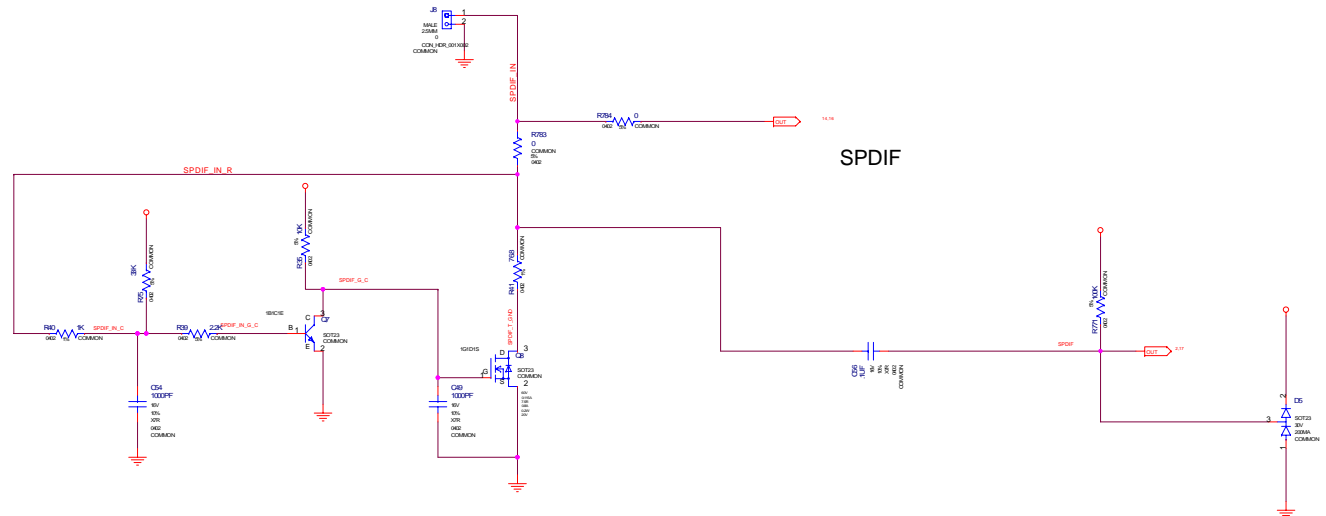
NV_PN	600-10403-0000-200 A
-------	----------------------

ID	PAGE
NAME	DATE 12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	BIOS STRAPS & MECHANICALS

SPDIF



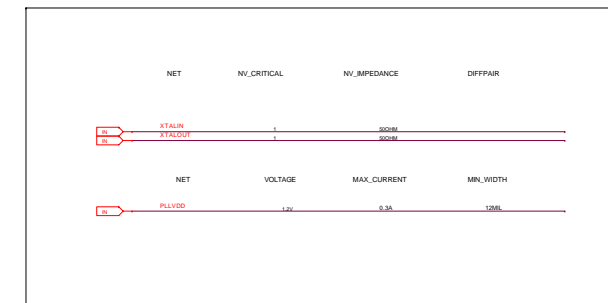
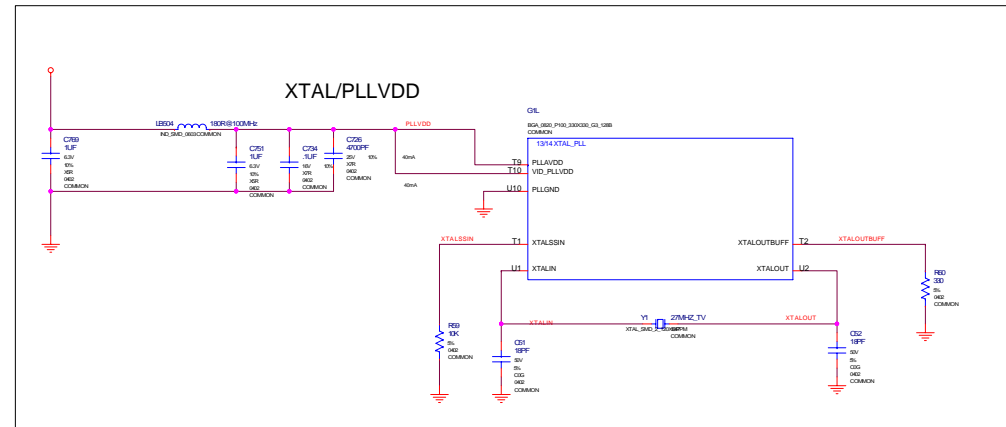
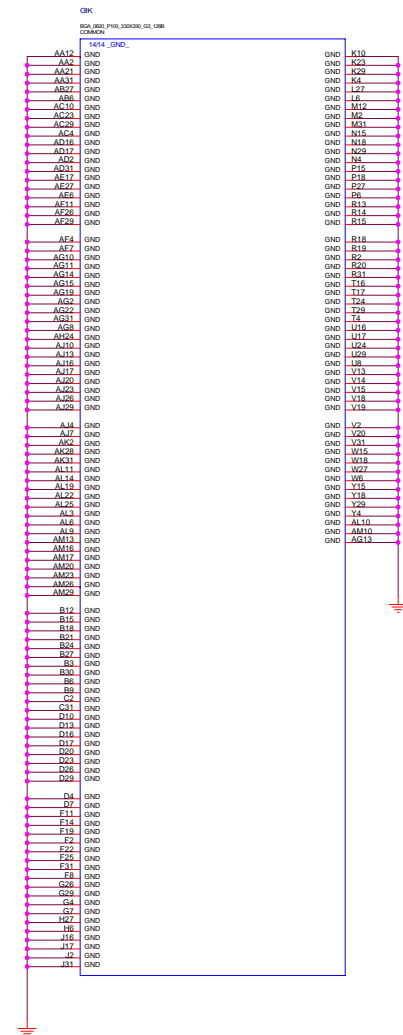
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.


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

NVIDIA CORPORATION			
3701 SAN TOMAS EXPRESSWAY			
SANTA CLARA, CA 95050, USA			
NV_PN	600-10403-0000-200 A		
ID		PAGE	
NAME		DATE	12-JAN-2007



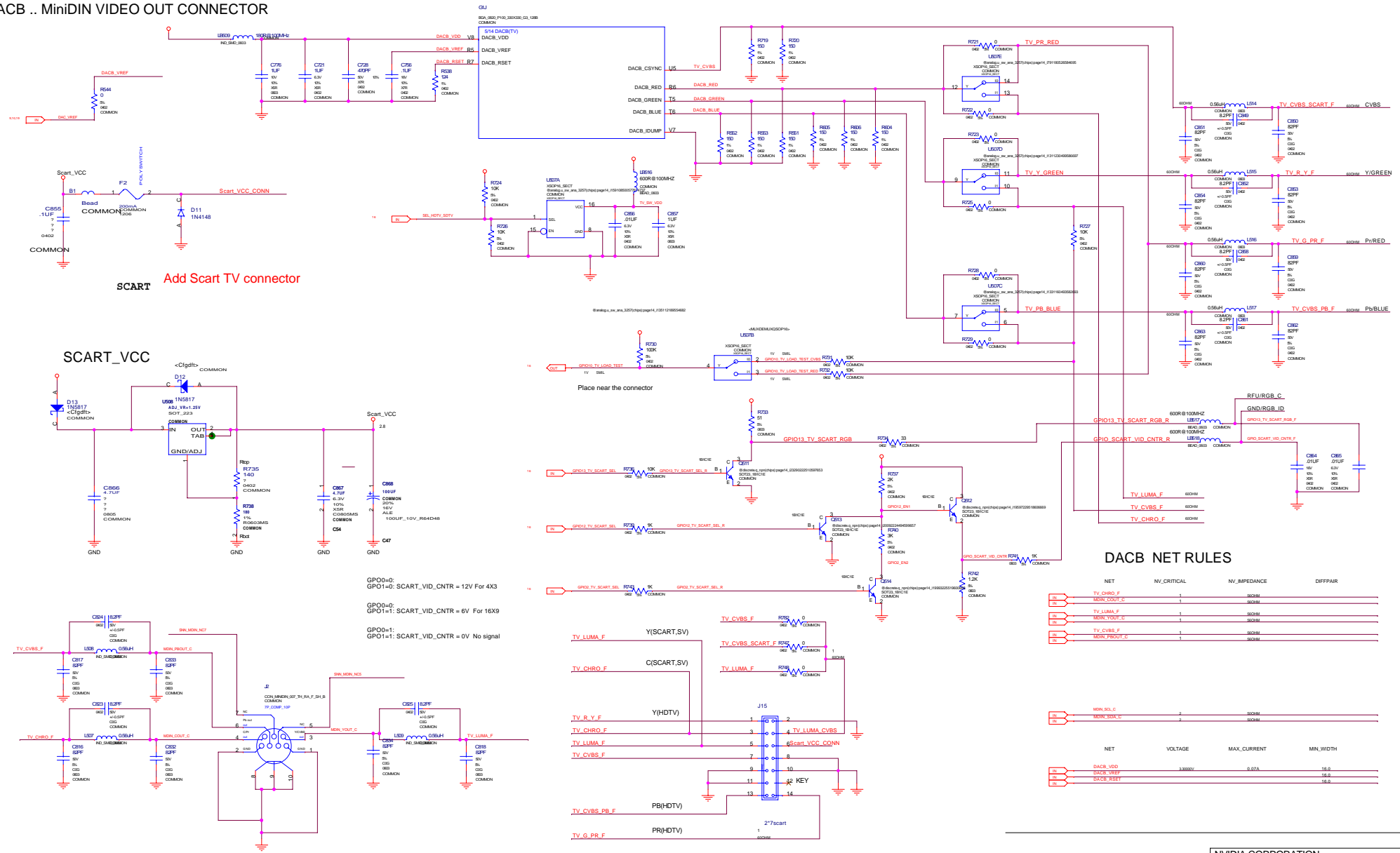
GPU GND CONNECTION, XTAL



NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN		600-10403-0000-200 A	
ID		PAGE	
NAME		DATE	12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

DACB .. MiniDIN VIDEO OUT CONNECTOR



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLETIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DACB FILTERS, SYNC STRIPPER, MINIDIN CONNECTOR NORTH, HDTV HEADER

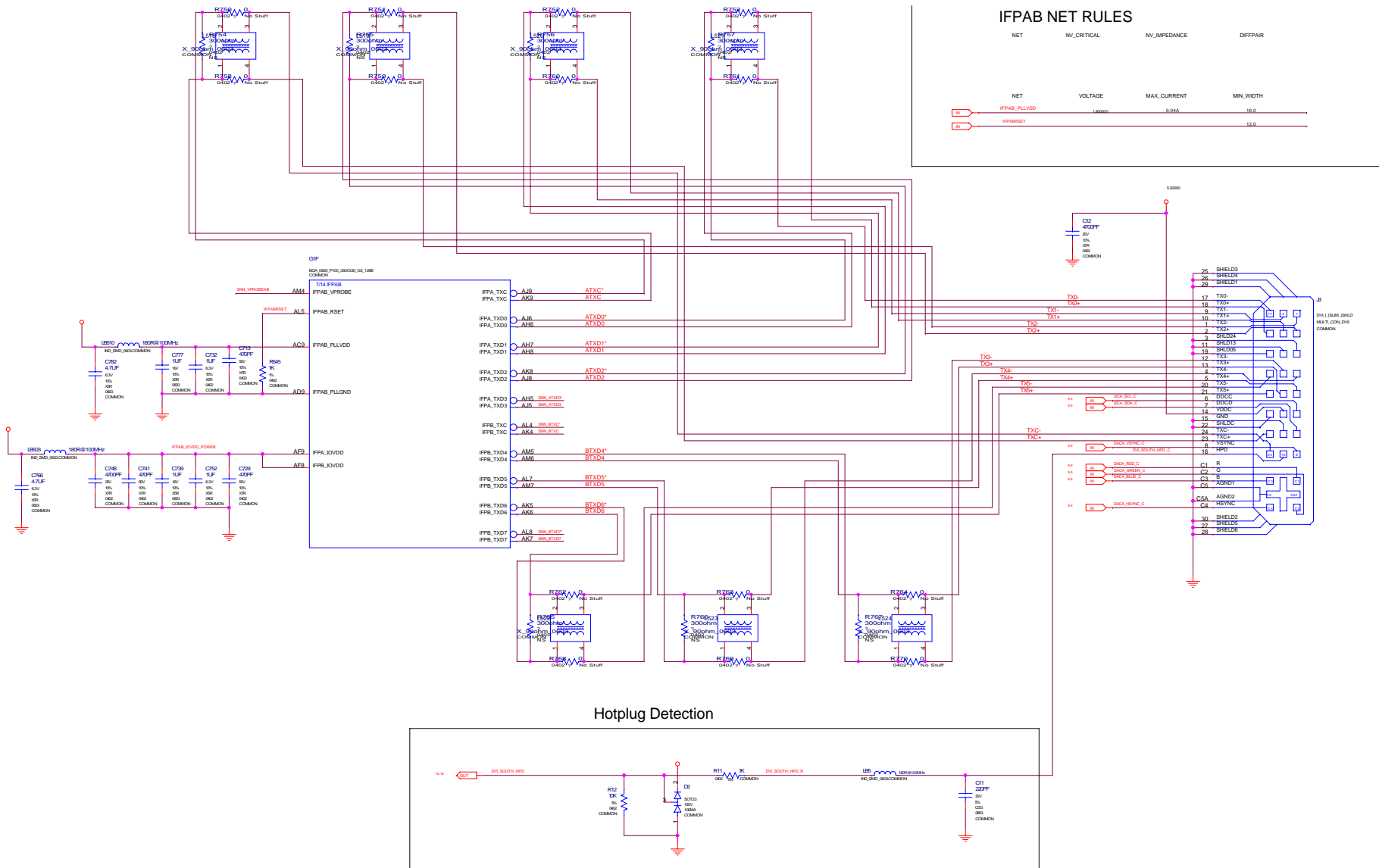
NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

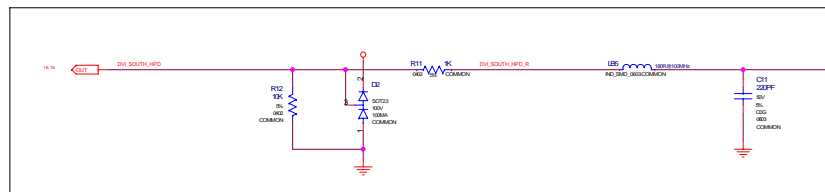


NV_PN	600-10403-0000-200 A		
ID		PAGE	
NAME		DATE	12-JAN-2007

INTERNAL TMDS .. LINK A & B



Hotplug Detection



NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



NV_PN	600-10403-0000-200 A
-------	----------------------

ID	PAGE
NAME	DATE 12-JAN-2007

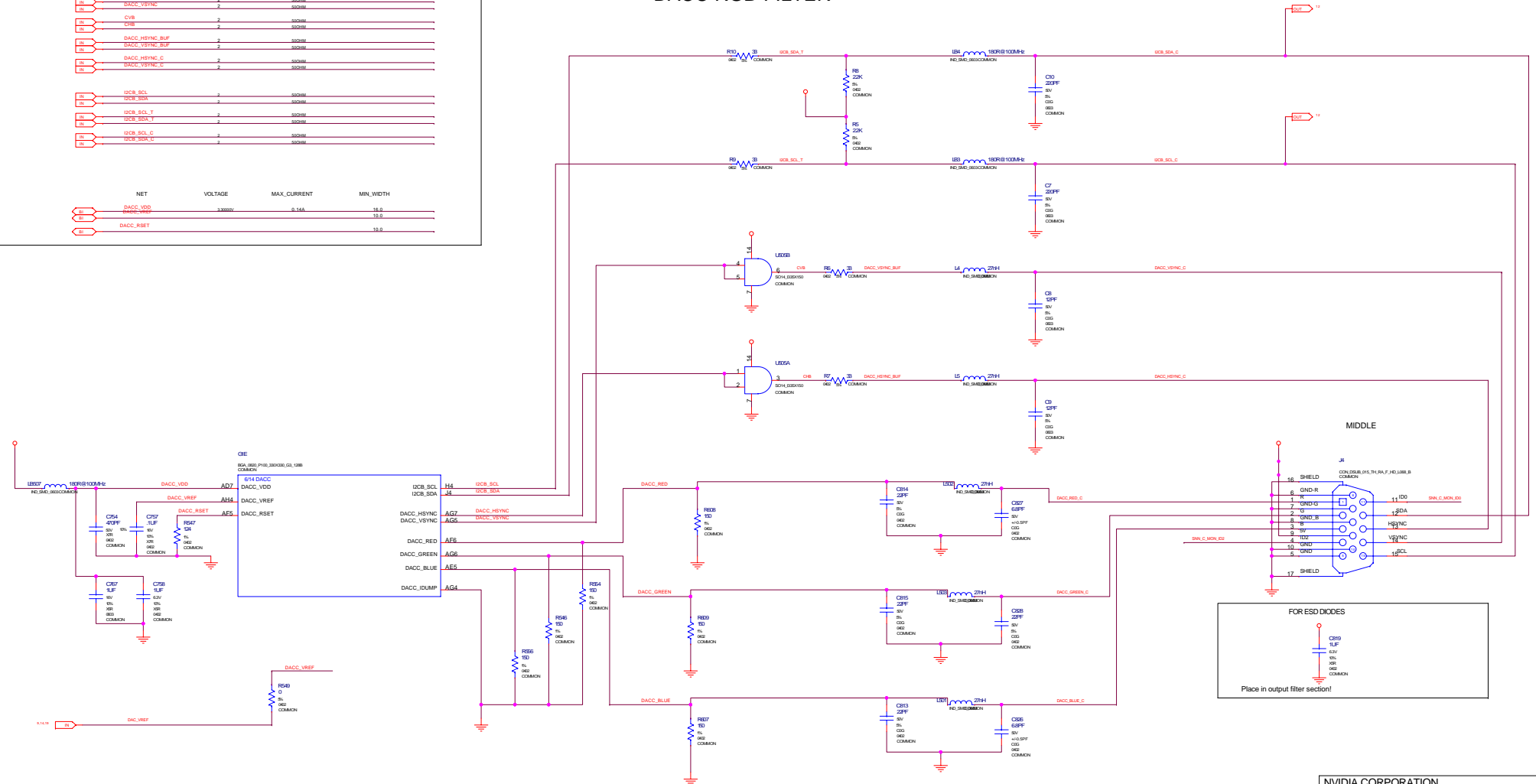
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

DACC NET RULES

NET	NV_CRITICAL	NV_IMPEDANCE	DIFFPAIR
DACC_RED	1	50OHM	
DACC_GREEN	1	50OHM	
DACC_BLUE	1	50OHM	
DACC_RED_C	1	50OHM	
DACC_GREEN_C	1	50OHM	
DACC_BLUE_C	1	50OHM	
DACC_HSYNC	2	50OHM	
DACC_VSYNC	2	50OHM	
CVR	2	50OHM	
CVR	2	50OHM	
DACC_HSYNC_BUF	2	50OHM	
DACC_VSYNC_BUF	2	50OHM	
DACC_HSYNC_C	2	50OHM	
DACC_VSYNC_C	2	50OHM	
DCC_SCL	2	50OHM	
DCC_SDA	2	50OHM	
DCC_SCL_T	2	50OHM	
DCC_SDA_T	2	50OHM	
DCC_SCL_C	2	50OHM	
DCC_SDA_C	2	50OHM	
DACC_VDD	3.3000V	0.16A	18.0
DACC_VREF			18.0
DACC_RSET			18.0

Secondary Display (DACC), DB15

DACC RGB-FILTER



NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



NV_PN 600-10403-0000-200 A

TO	DATE	12-JAN-2007
NAME		

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY; COMMON & NO STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DACC FILTER, DACC SYNC BUFFERS & DB15 MID

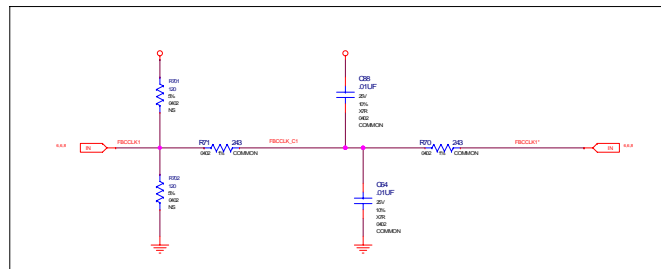
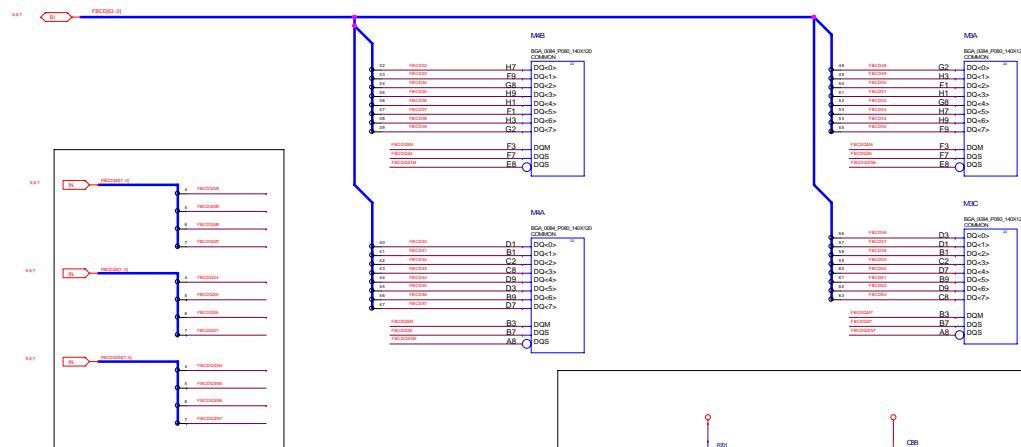
Primary Display (DACA), Slim DB15

DACA RGB-FILTER

ID		PAGE	
NAME		DATE	12-JAN-2007

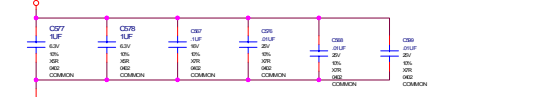
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY



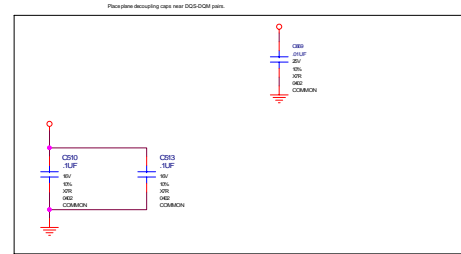
ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBC 16Mx16 DDR2 MEMORIES, 2ND BANK 32..63

ALL WIDA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. WIDA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.



ID	PAGE
NAME	DATE 12-JAN-2007

PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY



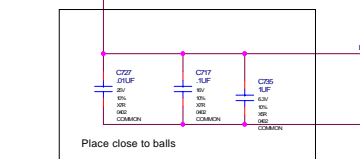
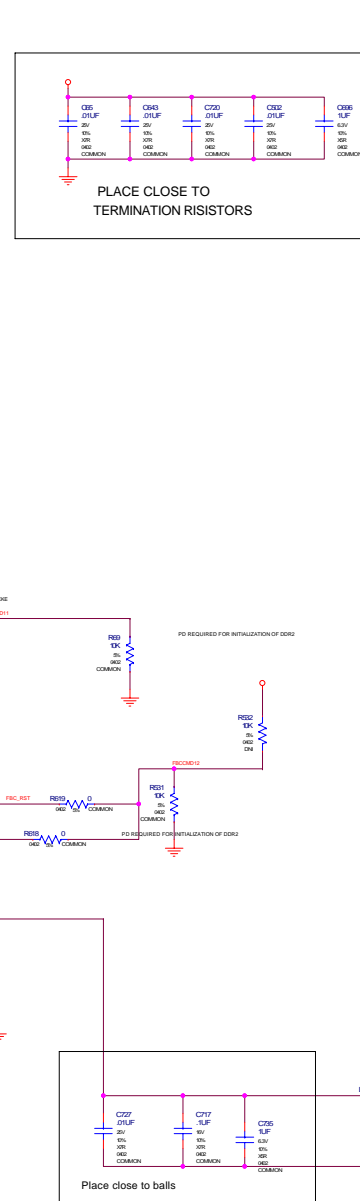
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



ID		PAGE	
NAME		DATE	12-JAN-2007

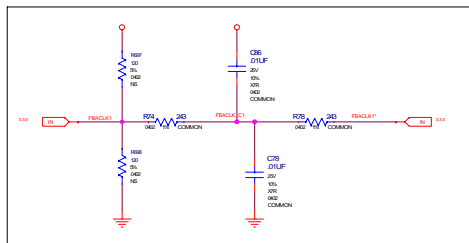
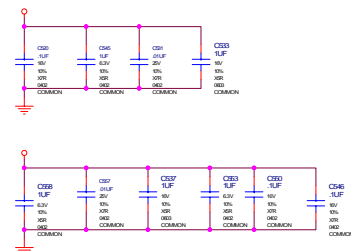
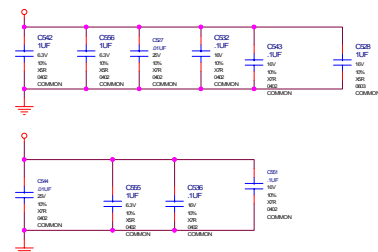
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBC 16MX16 DDR2 MEMORIES, 2ND BANK 0.31



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL LIABILITY FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES, THAT MAY BE INCURRED BY YOU OR YOUR CUSTOMERS IN CONNECTION WITH THESE MATERIALS.

PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY



ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBA 16Mx16 DDR2 MEMORIES, 1ST BANK 32..63

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

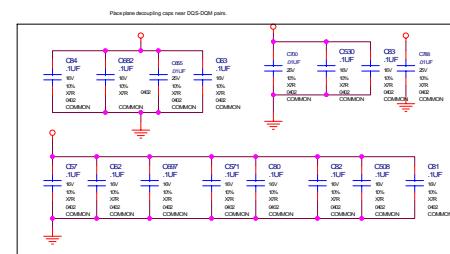
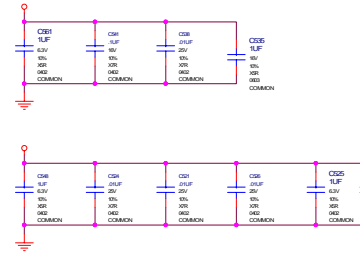
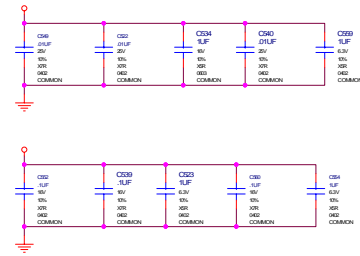


NV_PN	600-10403-0000-200 A
-------	----------------------

ID		PAGE	
NAME		DATE	12-JAN-2007

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY

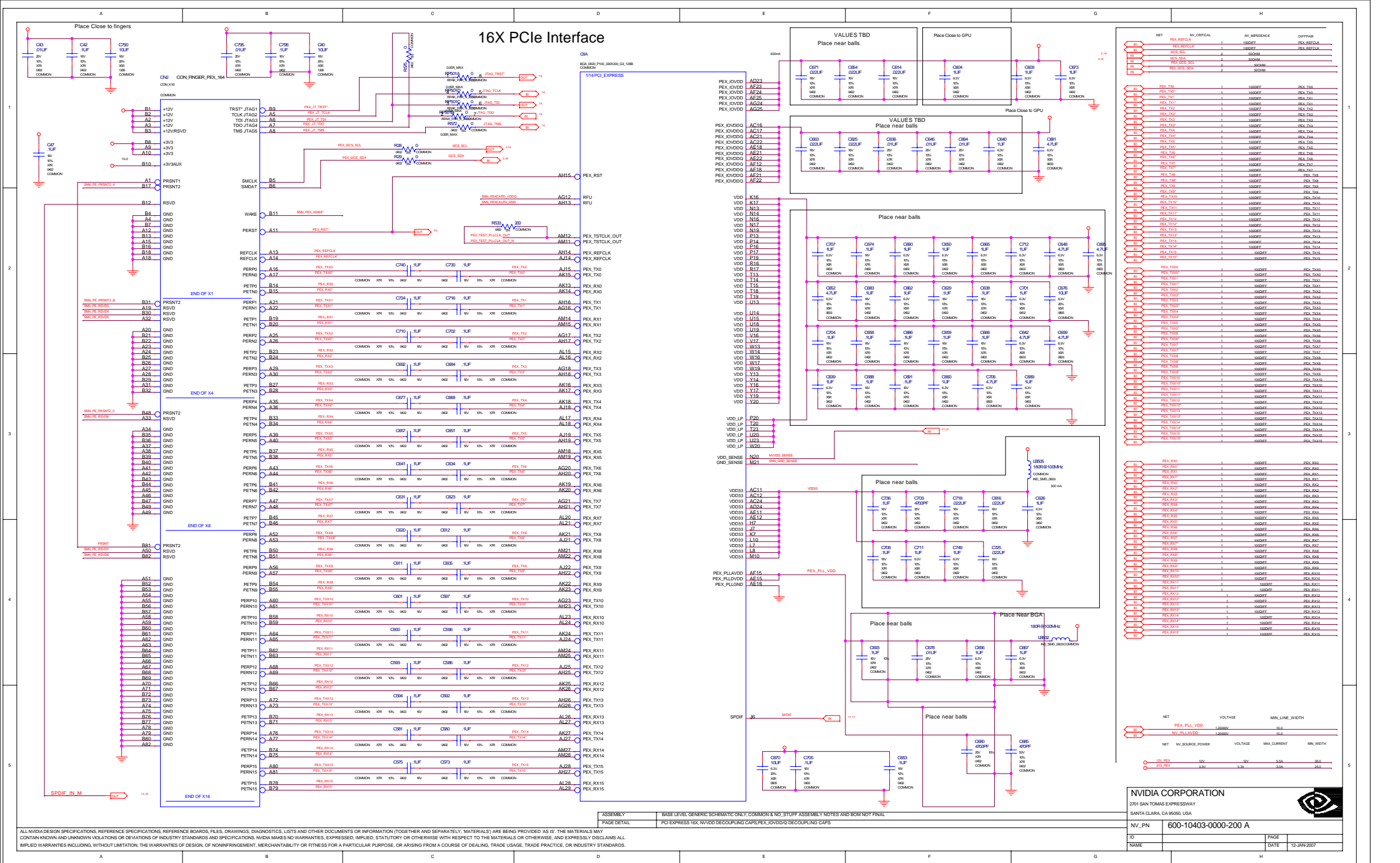


ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	FBA 16Mx16 DDR2 MEMORIES, BANK 0..31



ID		PAGE	
NAME		DATE	12-JAN-2007

PAGE	
DATE	12-JAN-2007



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.



2701 SAN TOMAS EXPRESSWAY

SANTA CLARA, CA 96050, USA

NV_PN	600-10403-0000-200 A
-------	----------------------

...	...
ID	...

ID	
NAME	

[illegible]

P403-B00 DESIGN -- G84-200, 256 MB DDR2,DVI-I, VGA, HDTV

PAGE SUMMARY:

Page 1: TABLE OF CONTENTS & REVISION HISTORY

Page 2: PCI EXPRESS 16X, NVVDD DECOUPLING CAPS,PEX_IOVDDQ DECOUPLING CAPS

Page 3: FBA MEMORY INTERFACE, GPU FBVDD/Q DECOUPLING CAPS, FBVTT TERMINATION

Page 4: FBA 16Mx16 DDR2 MEMORIES, BANK 0..31

Page 5: FBA 16Mx16 DDR2 MEMORIES, 1ST BANK 32..63

Page 6: FBC MEMORY INTERFACE, GPU FBVTT, FBVDDQ

Page 7: FBC 16Mx16 DDR2 MEMORIES, 2ND BANK 0..31

Page 8: FBC 16Mx16 DDR2 MEMORIES, 2ND BANK 32..63

Page 9: DACA FILTERS, DACA SYNC BUFFERS & DB15 SOUTH

Page 10: DACC FILTERS, DACC SYNC BUFFERS & DB15 MID

Page 11: TMDS LINK A & PUs, DVI CONNECTOR SOUTH

Page 12: TMDS LINK C

Page 13: MIOA & MIOB

Page 14: DACB FILTERS, SYNC STRIPPER, MINIDIN CONNECTOR NORTH,HDTV HEADER

Page 15: GPU GND CONNECTION, XTAL

Page 16: JTAG, BIOS ROM, HDCP ROM, FAN CONTROL, GPIO

Page 17: SPDIF

Page 18: BIOS STRAPS & MECHANICALS

Page 19: POWER SUPPLY, TMDS IOVDD,SV,A3V3

Page 20: thermal protection and dynamic NVVDD

Page 21: PowerSupplyI: NVVDD

Page 22: PowerSupplyIII: FBVDDQ, PLLVDD

REV	VARIANT	NVPN	ASSEMBLY
B	BASE	600-10403-0000-200	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SK0000	600-10403-0000-200	P403 B00 G84-200 459400MHz 256MB 16Mx16 BG484 GDDR2 DVI-I DL+VGA+HDTV-Out
2	SK0001	600-10403-0001-200	P403 B00 G84-200 459400MHz 256MB 16Mx16 BG484 GDDR2 DVI-I DL+VGA+HDTV-Out
3	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
4	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
5	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
6	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
7	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
8	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
9	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
10	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
11	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
12	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
13	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
14	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
15	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>


ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS". THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	TABLE OF CONTENTS & REVISION HISTORY

NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY

SANTA CLARA, CA 95050, USA



NV_PN

600-10403-0000-200 A

ID

PAGE

NAME

DATE

12_JAN_2007