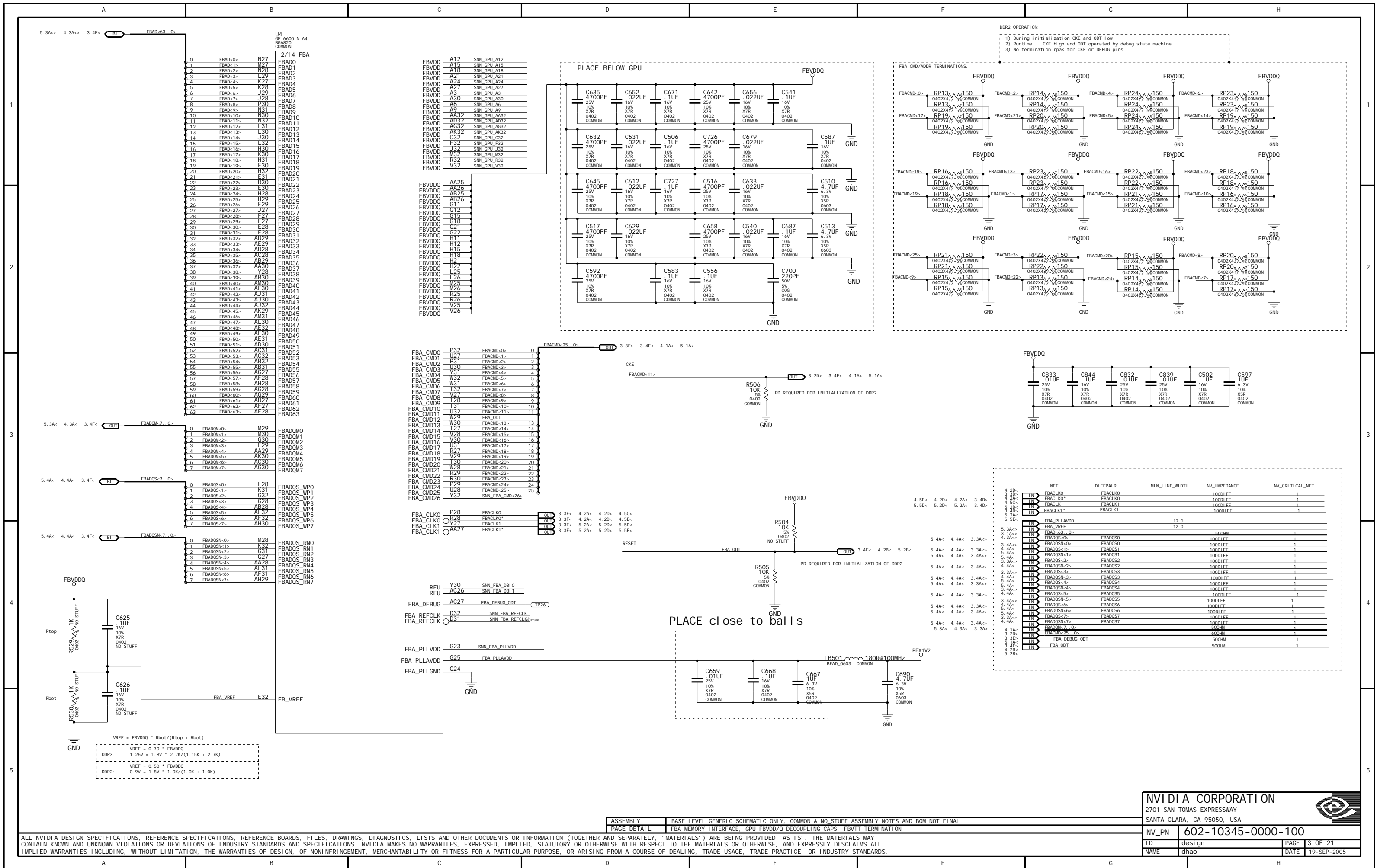


P345-A01 DESI GN -- G73, 256 MB DDR2, VGA, DVI -I , HDTV, VI VO

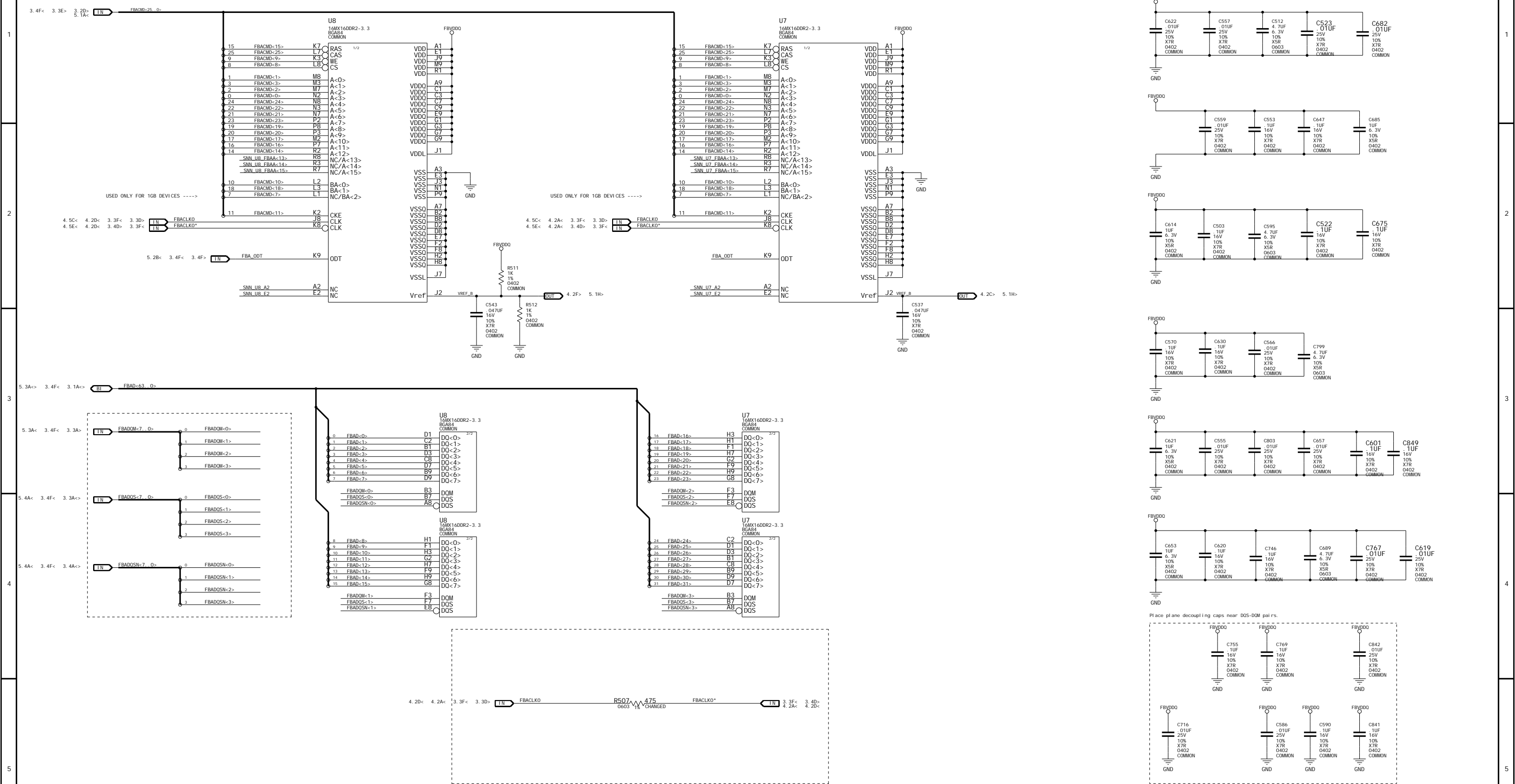
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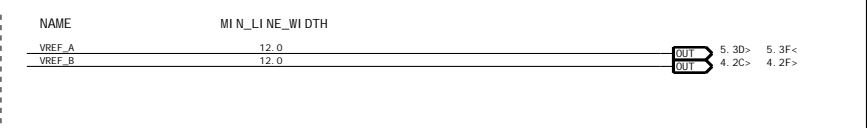
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B	0000	600-10345-0000-100	G73 400/350MHz 256MB 128bit DDR2 16MX16 DVI -I +VGA+HDTVOUT
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2	0002	600-10345-0002-100	G73-V 375/350MHZ 128MB 64bit DDR2 16MX16 DVI -I +VGA+HDTVOUT
3	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
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FBA MEMORY 1st bank 0..31
PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY

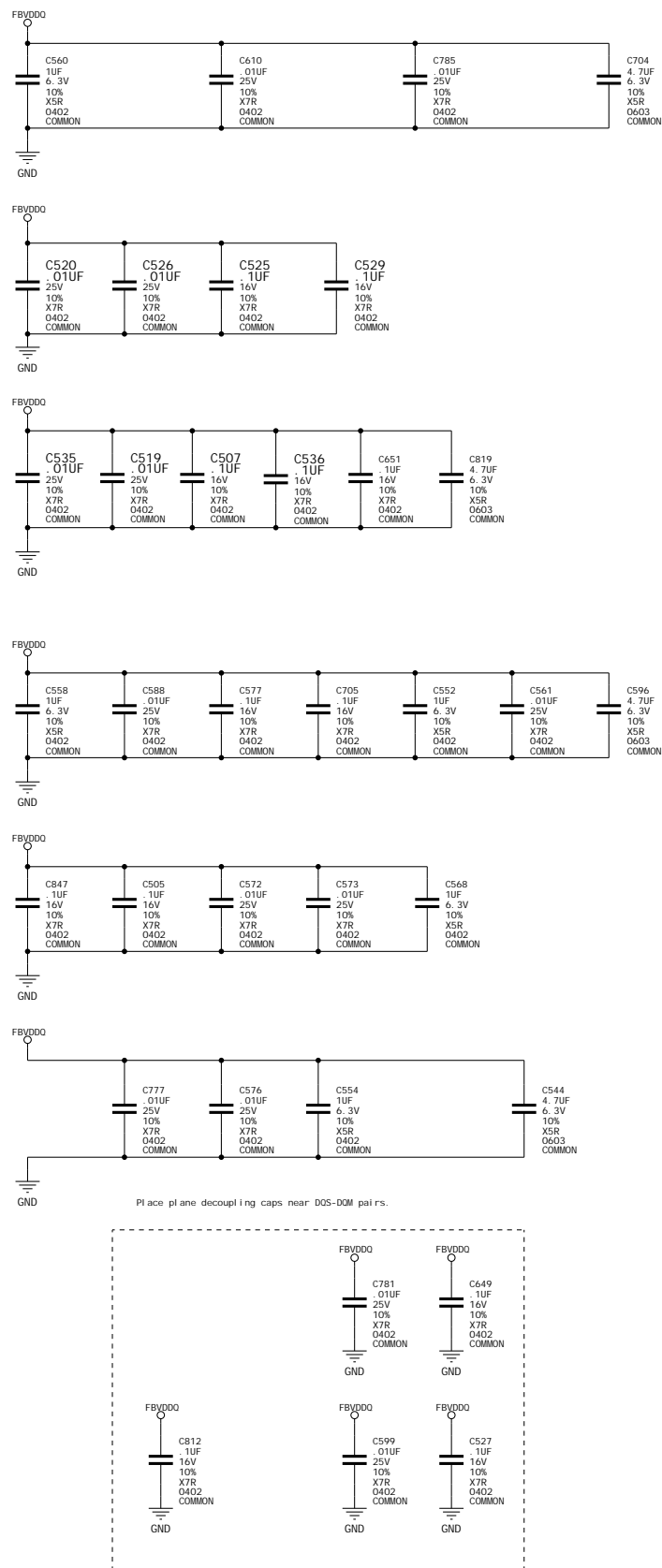



PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY



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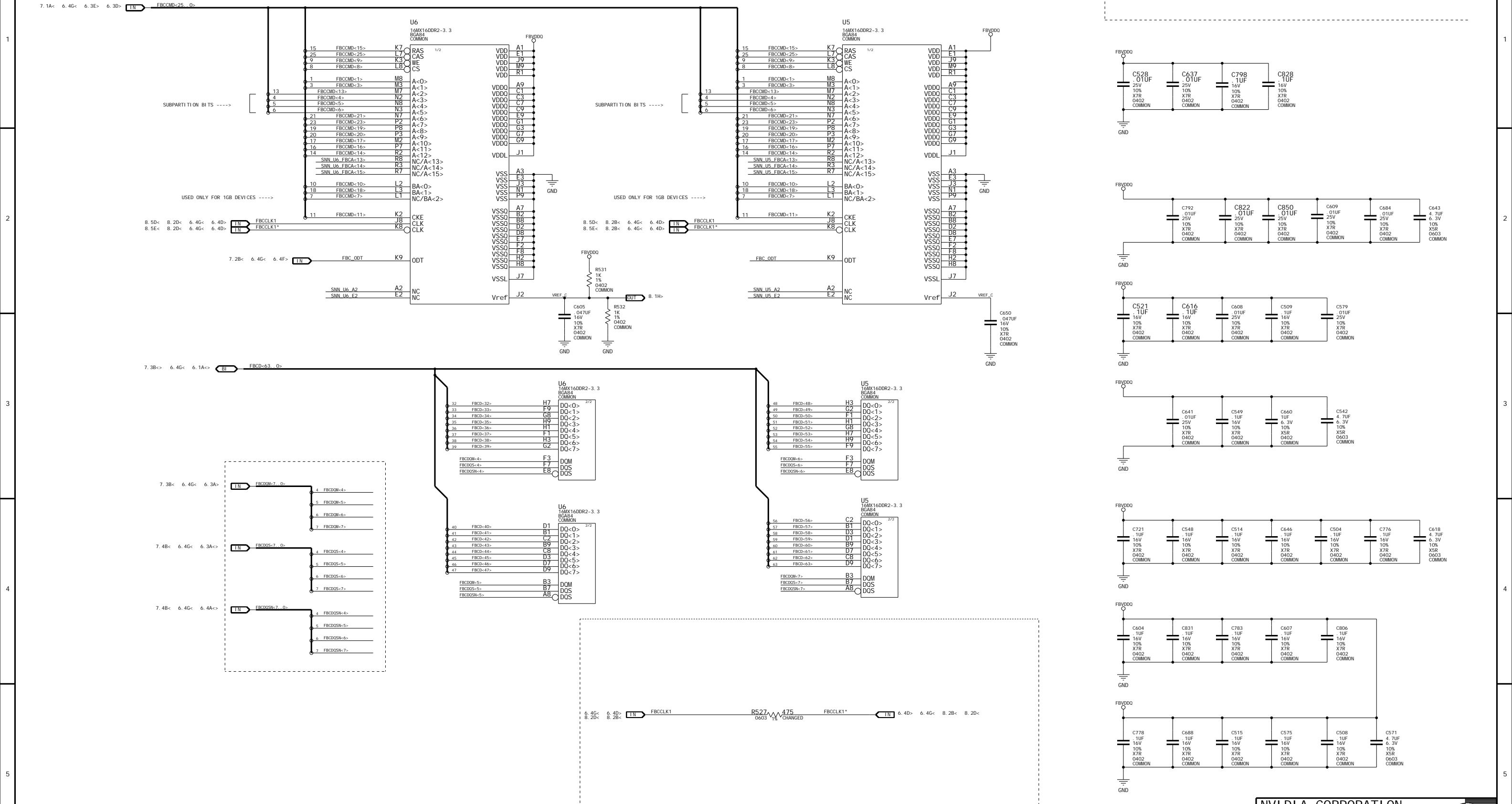


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FBC MEMORY 2nd bank 32..63

PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY



DACA NET RULES

NET NV_CRITICAL NV_IMPEDANCE DIFFPAIR

IN	DACA_RED	1	750HM
IN	DACA_GREEN	1	750HM
IN	DACA_BLUE	1	750HM

11.3G< 9.4F>	IN	DACA_RED_C	1	750HM
11.3G< 9.4F>	IN	DACA_GREEN_C	1	750HM
11.3G< 9.4F>	IN	DACA_BLUE_C	1	750HM

IN	DACA_HSYNC	2	500HM
IN	DACA_VSYNC	2	500HM
IN	AVB	2	500HM
IN	AHB	2	500HM
IN	DACA_HSYNC_BUF	2	500HM
IN	DACA_VSYNC_BUF	2	500HM

11.3G< 9.3F>	IN	DACA_HSYNC_C	2	500HM
11.3G< 9.3F>	IN	DACA_VSYNC_C	2	500HM

9.3D> 9.2C<	IN	I2CA_SCL		500HM
9.3D> 9.2C<	IN	I2CA_SDA		500HM
IN	I2CA_SCL_T			500HM
IN	I2CA_SDA_T			500HM

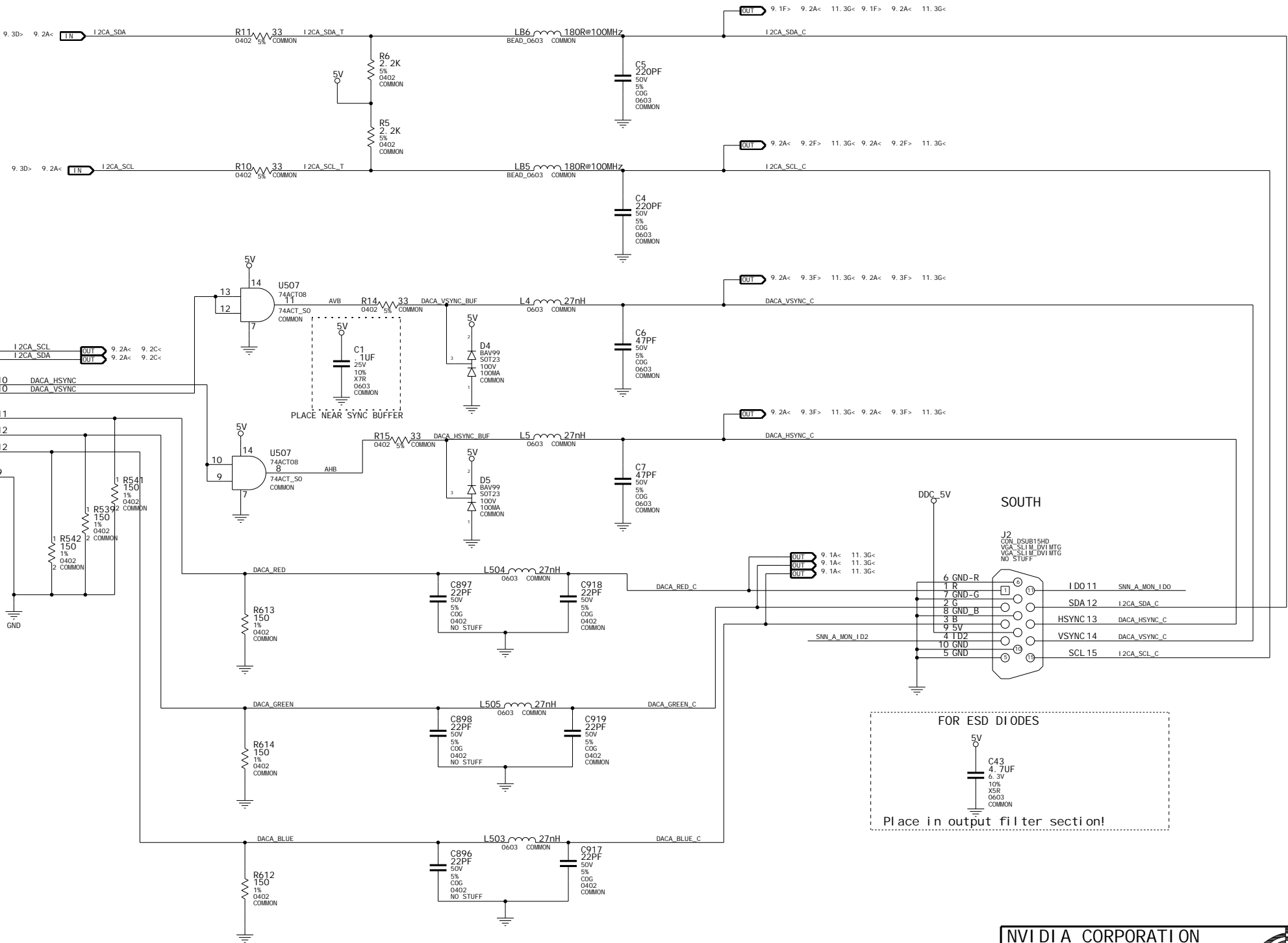
11.3G< 9.2F>	IN	I2CA_SCL_C		500HM
11.3G< 9.1F>	IN	I2CA_SDA_C		500HM

IN	DACA_VREF	1	500HM
IN	DACA_RSET	1	500HM

NET	VOLTAGE	MAX_CURRENT	MIN_WIDTH
DACA_VDD	3.30000	0.07	16.0

Primary Display (DACA), SI m DB15

DACA RGB-FILTER



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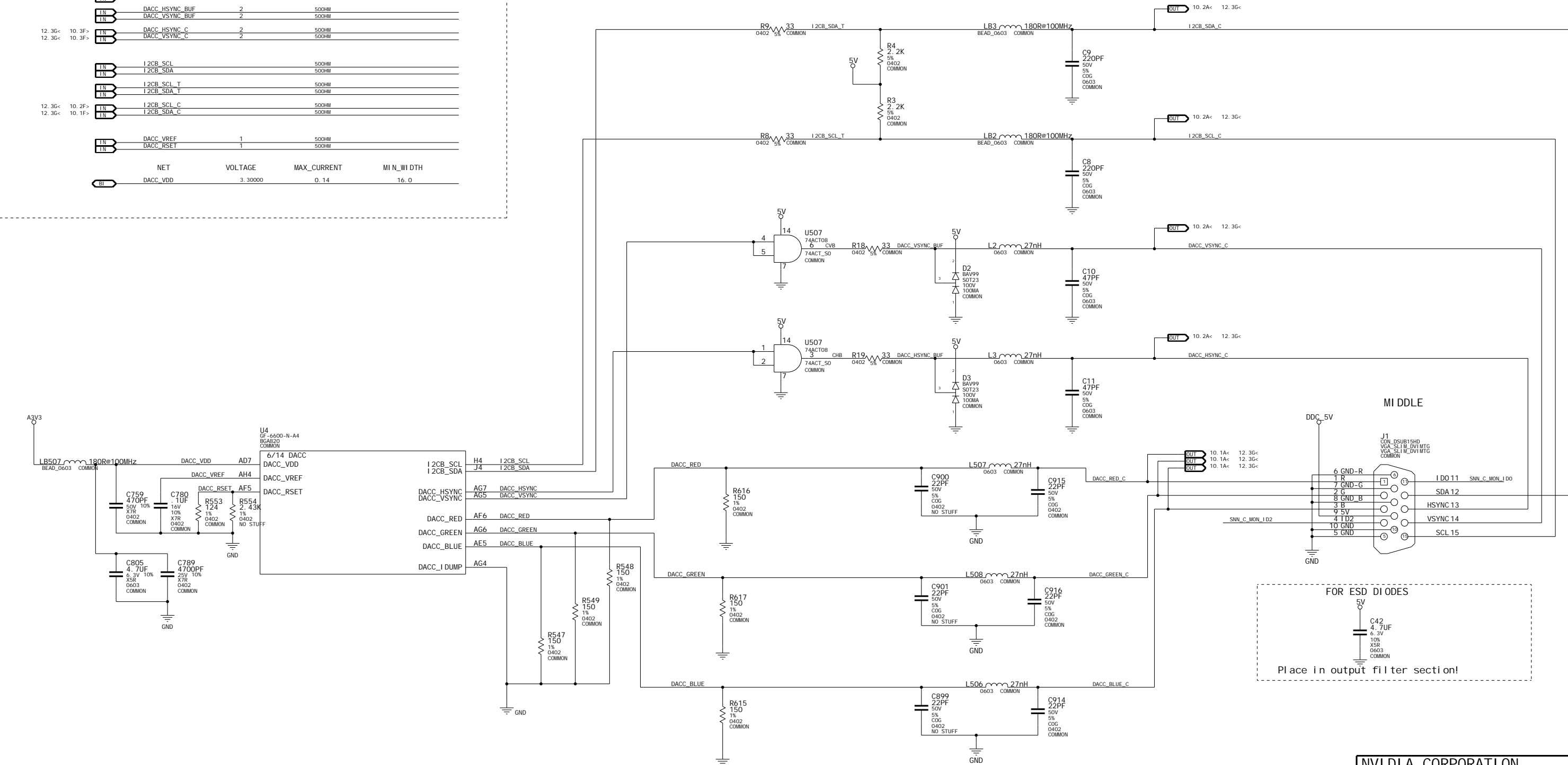
DACC NET RULES

NET NV_CRITICAL NV_IMPEDANCE DIFFPAIR

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Secondary Display (DACC), Slim DB15

DACC RGB-FILTER



FOR ESD DIODES
C42 4.7UF 10% XSR 0603 COMMON
Place in output filter section!

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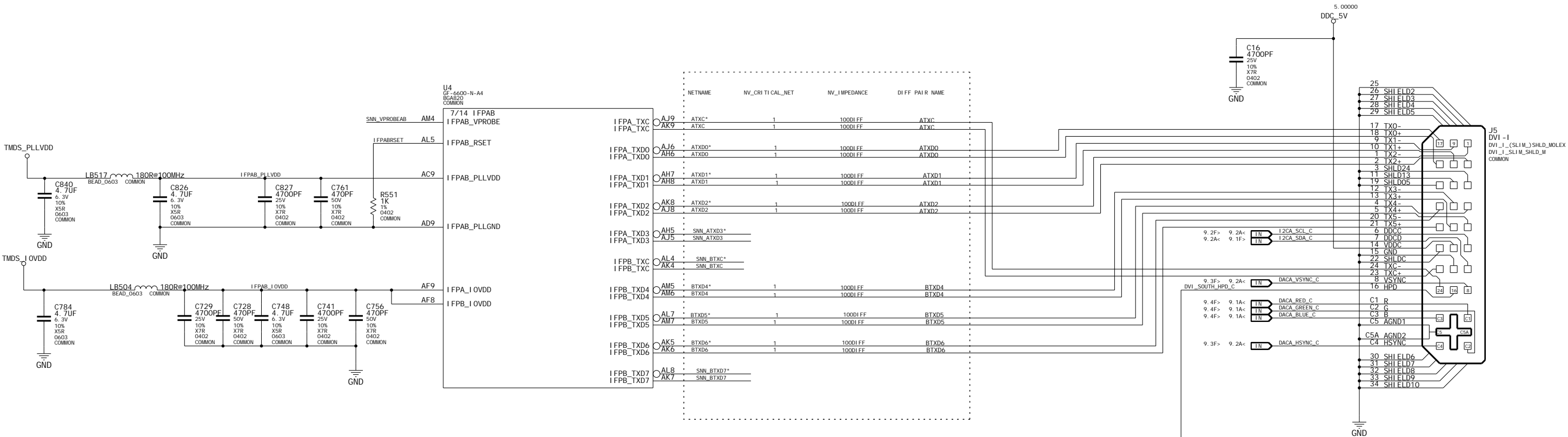
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NV_PN	602-10345-0000-100		
ID	dest gn	PAGE	10 OF 21
NAME	dhao	DATE	19-SEP-2005

INTERNAL TMDS . . LINK A & B

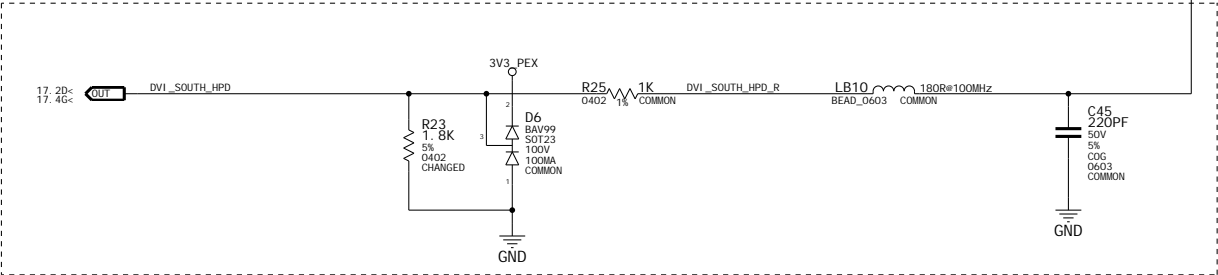
IFPAB NET RULES

NET	NV_CRI TI CAL	NV_I MPEDANCE	DI FFPAI R
IFPAB_RSET	1	500HM	
DVI_SOUTH_HPD_C	1	500HM	
DVI_SOUTH_HPD_R	1	500HM	

NET	VOLTAGE	MAX_CURRENT	MI N_WI DTH
IFPAB_PLLVDD	3.30000	0.04	16.0
IFPAB_I OVDD	3.30000	0.24	16.0



Hotplug Detection



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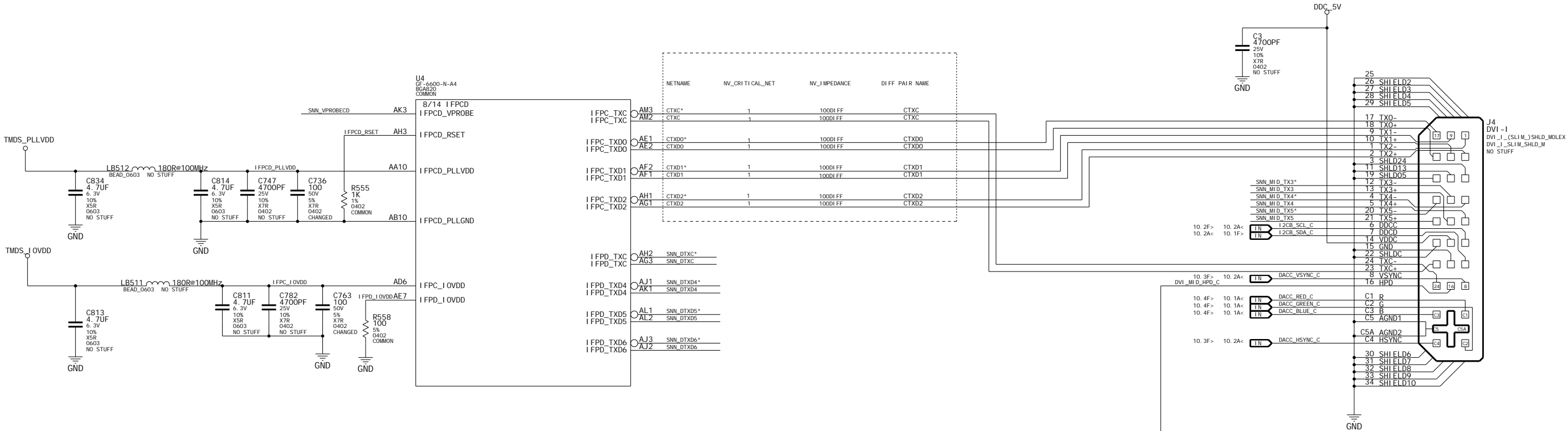
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INTERNAL TMD5 .. LINK C

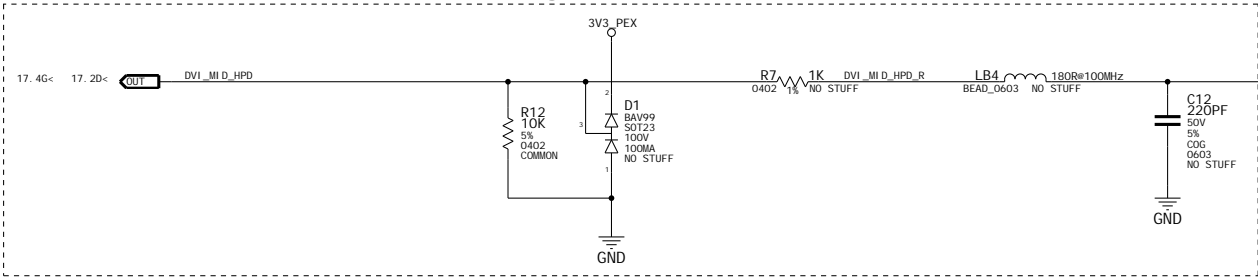
IFPAB NET RULES

NET	NV_CRI TI CAL	NV_I MPEDANCE	DI FFAI R
IFPAB_RSET	1	500HM	
DVI_MI D_HPD_C	1	500HM	
DVI_MI D_HPD_R	1	500HM	

NET	VOLTAGE	MAX_CURRENT	MI N_WI DTH
IFPCD_PLLVDD	3.30000	0.04	16.0
IFPC_I OVDD	3.30000	0.12	16.0
IFPD_I OVDD	0.000000	0	10.0



Hotplug Detection



NVIDIA CORPORATION

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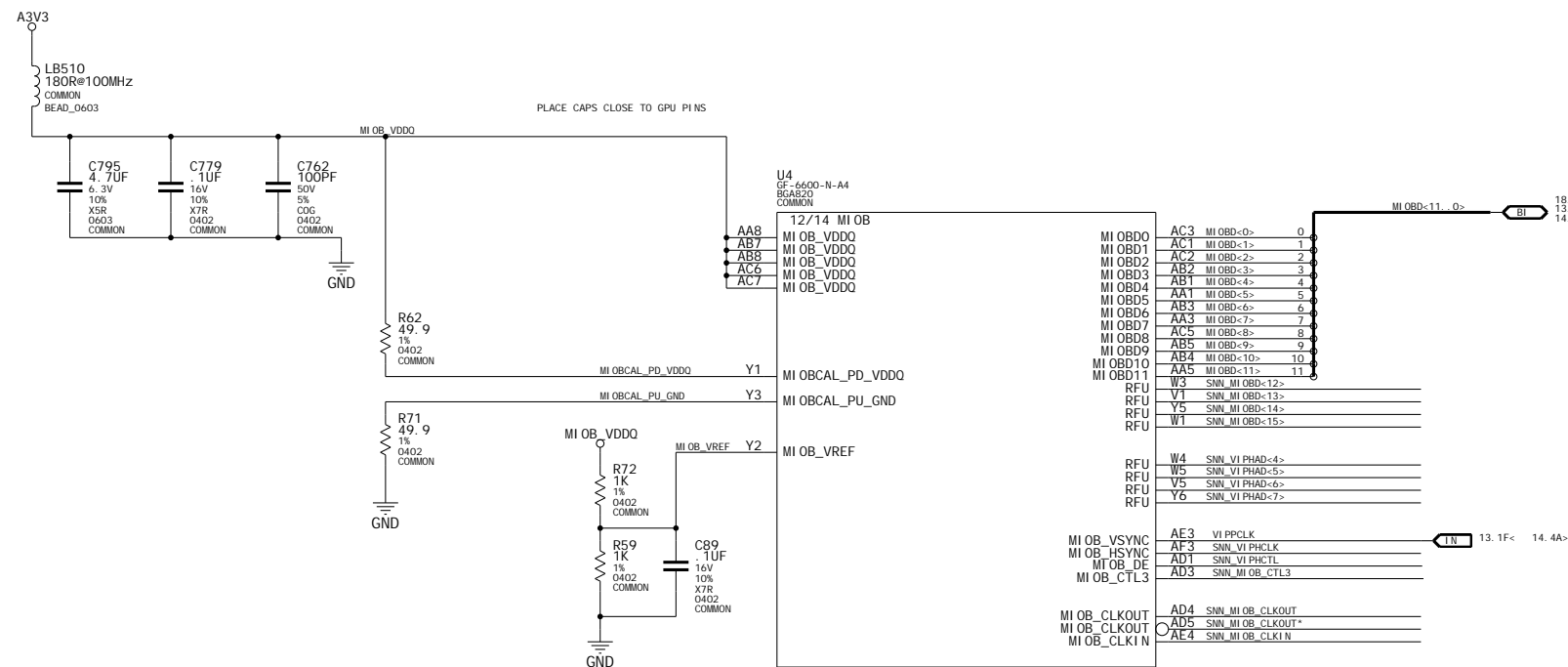


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G3 VI P/MI 0B

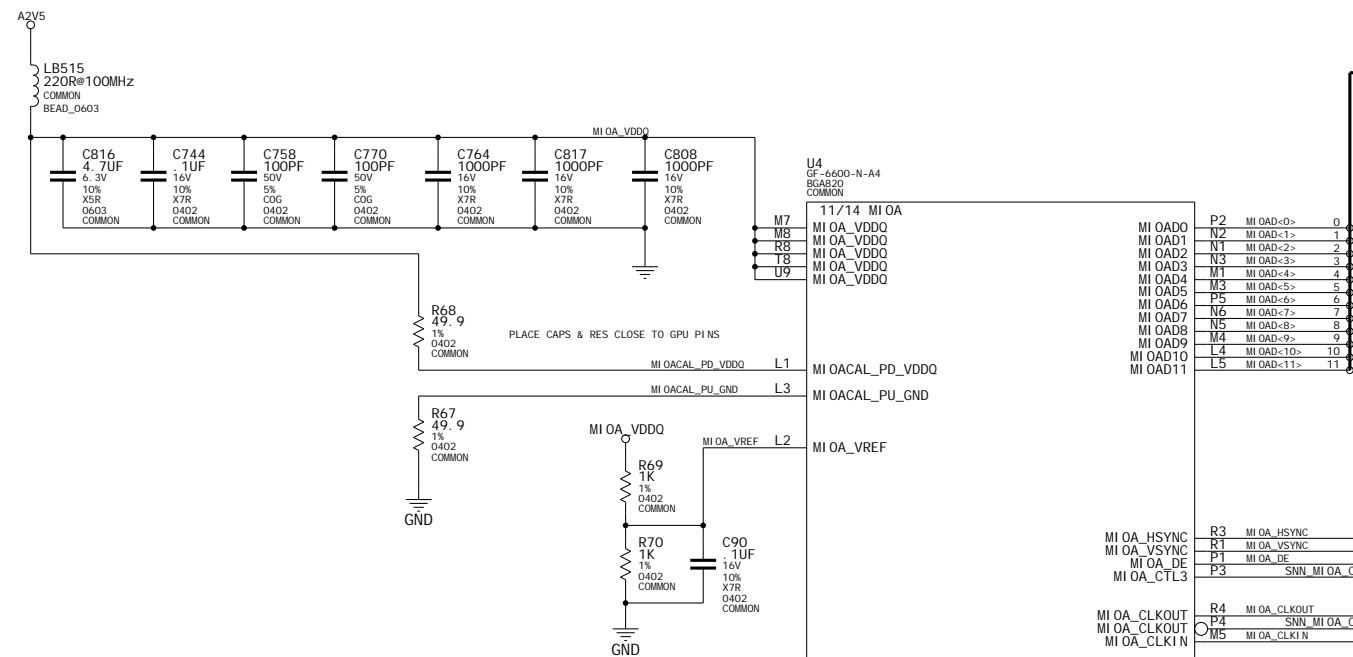


MI 0 NET RULES

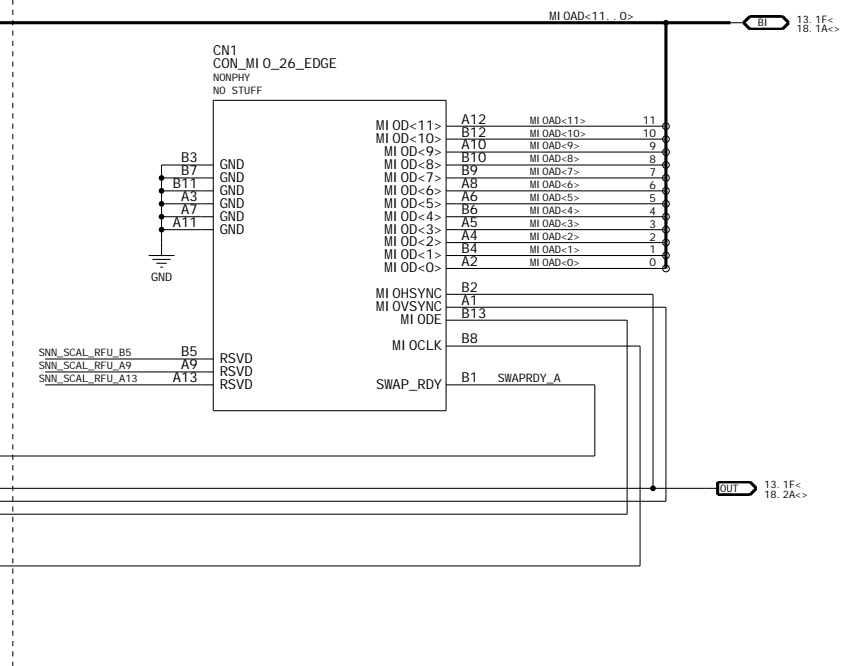
		NET	NV_CRI TI CAL	NV_I MPEDANCE	DI FFPAI R
18. 1A<>	13. 3H<>	 MI OAD<T1 _ 0>	2	500HM	
		 MI OA_CLKIN	2	500HM	
		 MI OA_CLKOUT	2	500HM	
		 MI OA_DE	2	500HM	
18. 2A<>	13. 5H<>	 MI OA_HSYNC	2	500HM	
		 MI OA_VSYNC	2	500HM	
14. 3A<>	13. 1E<>	 MI OBD<T1 _ 0>	2	500HM	
13. 2E<>	18. 2A<>	 VTTPCLK	2	500HM	
14. 4A<>					

NET		VOLTAGE	MAX_CURRENT	MIN_WI_DTH
MI OA_VDDQ	MI OA_VDDQ	2.50000	0.8	12.0
MI OA_VREF	MI OA_VREF	1.25000		12.0
MI OACAL_PD_VDDQ	MI OACAL_PD_VDDQ	2.50000		12.0
MI OACAL_PU_GND	MI OACAL_PU_GND	0.000000		12.0
MI OB_VDDQ	MI OB_VDDQ	3.30000	0.05	12.0
MI OB_VREF	MI OB_VREF	1.65000		12.0
MI OBCAL_PD_VDDQ	MI OBCAL_PD_VDDQ	3.30000		12.0
MI OBCAL_PU_GND	MI OBCAL_PU_GND	0.000000		12.0

G3 MI OA



Feature Connector



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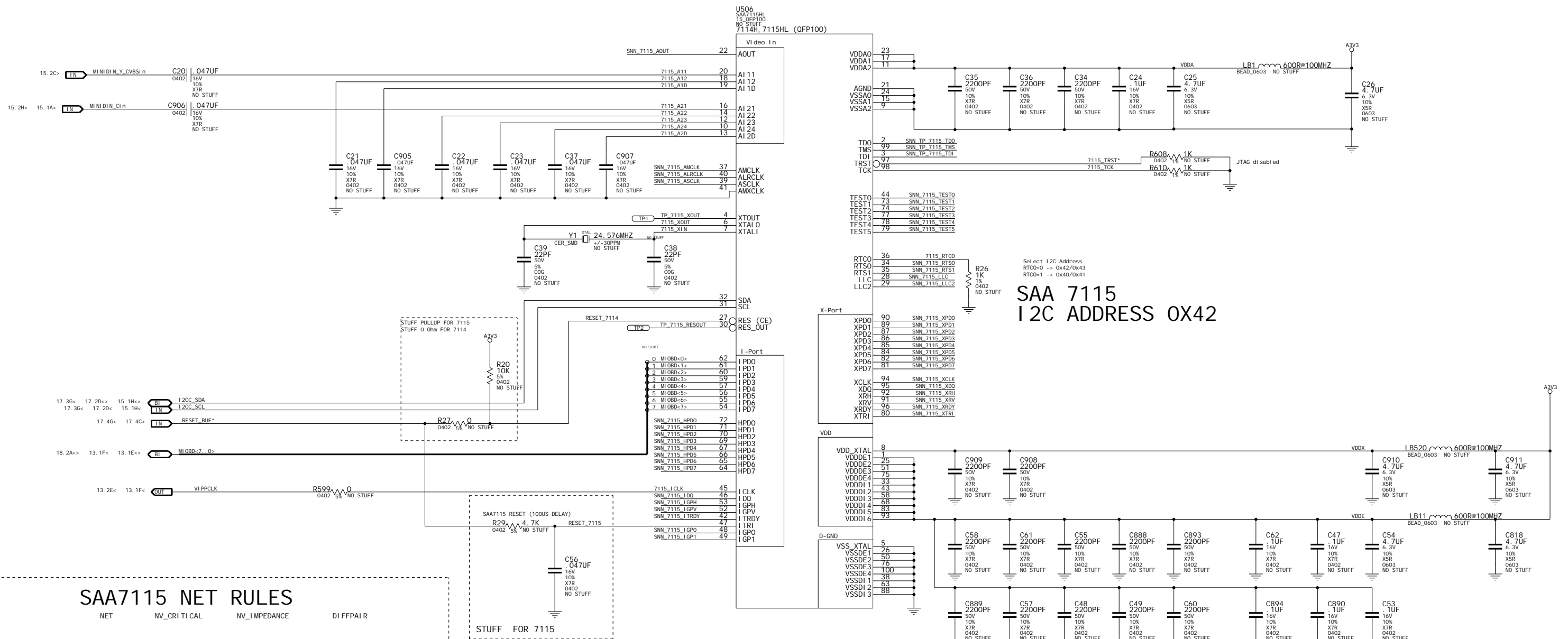
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DESIGNATION: 002 100 10 0000 100
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PHI L I P S V I D E O C A P T U R E



SAA7115 NET RULES

NET		NV_CRI TI CAL	NV_I MPEDANCE	DI FFPAIR																				
1IN	7115_A11	1	750HM																					
1IN	7115_A1D		500HM																					
1IN	7115_A2D		500HM																					
1IN	7115_A2I	1	750HM																					
1IN	7115_XOUT	2	500HM																					
1IN	7115_XIN	2	500HM																					
1IN	RESET_7114	2	500HM																					
1IN	RESET_7115	2	500HM																					
1IN	7115_TRST*	2	500HM																					
1IN	7115_TCK	2	500HM																					
1IN	7115_RTCO	2	500HM																					
1IN	TP_7115_XTOUT		500HM																					
1IN	7115_A12		500HM																					
1IN	7115_A22		500HM																					
1IN	7115_A23		500HM																					
1IN	7115_A24		500HM																					
1IN	TP_7115_RESOUT		500HM																					
<table border="1"> <thead> <tr> <th colspan="2">NET</th> <th>VOLTAGE</th> <th>MAX_CURRENT</th> <th>MIN_WIDTH</th> </tr> </thead> <tbody> <tr> <td>1IN</td> <td>VDDA</td> <td>3.30000</td> <td>0.09</td> <td>16.0</td> </tr> <tr> <td>1IN</td> <td>VBDE</td> <td>3.30000</td> <td>0.08</td> <td>16.0</td> </tr> <tr> <td>1IN</td> <td>VBDX</td> <td>3.30000</td> <td>0.01</td> <td>16.0</td> </tr> </tbody> </table>					NET		VOLTAGE	MAX_CURRENT	MIN_WIDTH	1IN	VDDA	3.30000	0.09	16.0	1IN	VBDE	3.30000	0.08	16.0	1IN	VBDX	3.30000	0.01	16.0
NET		VOLTAGE	MAX_CURRENT	MIN_WIDTH																				
1IN	VDDA	3.30000	0.09	16.0																				
1IN	VBDE	3.30000	0.08	16.0																				
1IN	VBDX	3.30000	0.01	16.0																				

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	PHILIPS SAA7115 VIDEO DECODER

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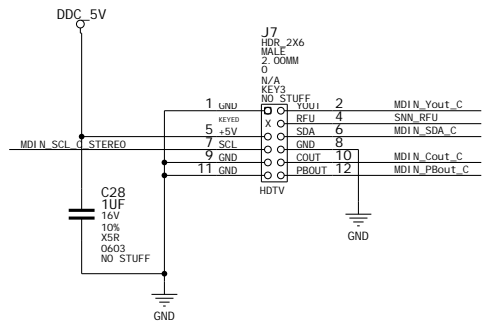
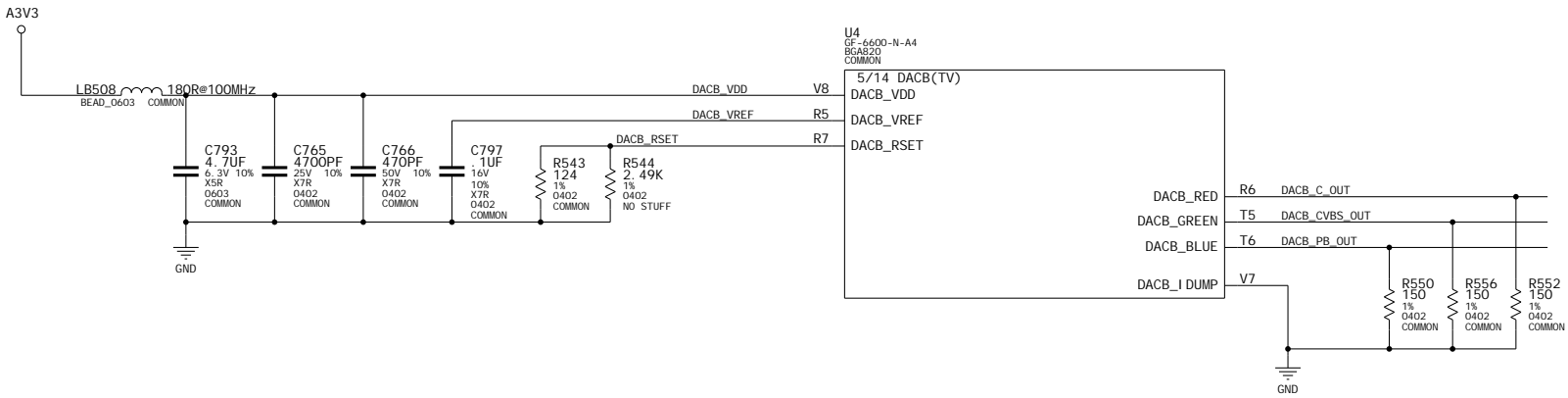
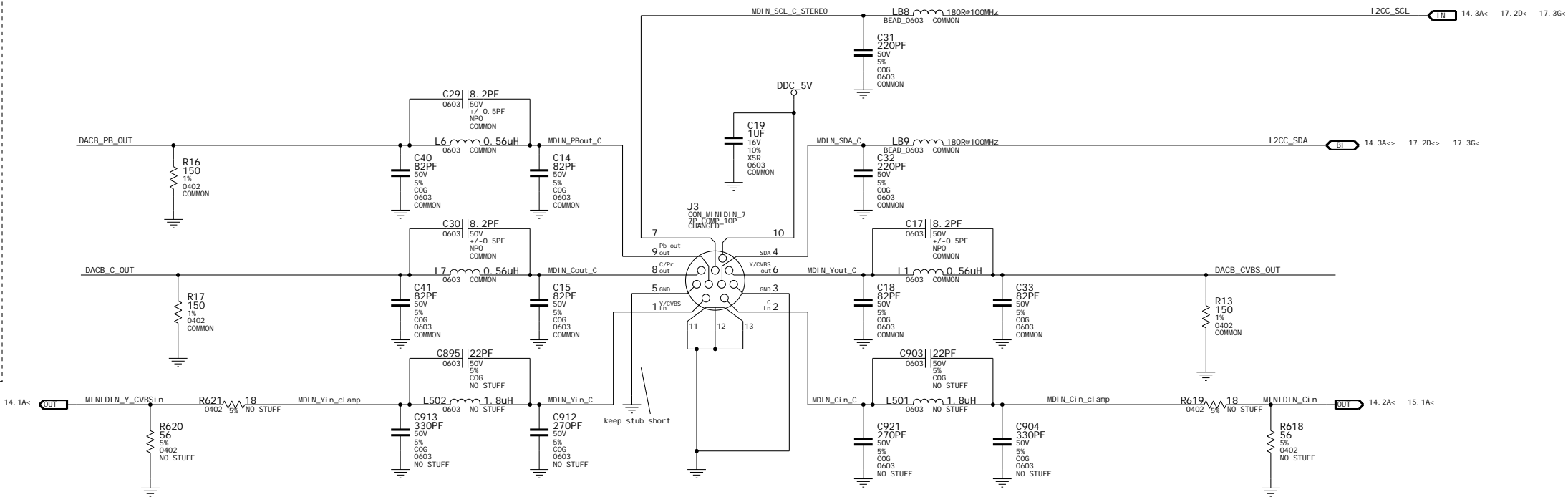


DACB . . Mi ni DI N VIDEO I N/OUT CONNECTOR /STEREO GLASSES

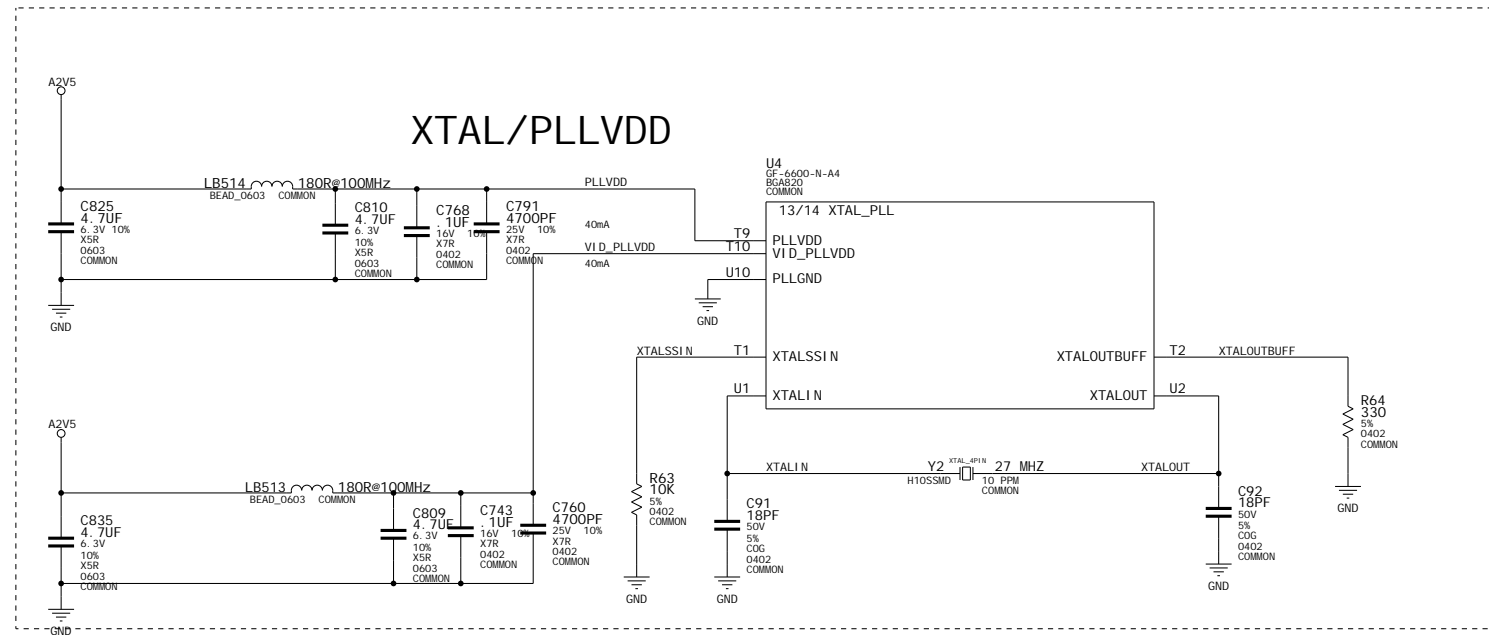
DACB NET RULES


NET	NV_CRITI CAL	NV_I MPEDANCE	DI FFPAI R
DACB_C_OUT	1	75OHM	
MDI N_COUT_C	1	75OHM	
DACB_CVBS_OUT	1	75OHM	
MDI N_YOUT_C	1	75OHM	
DACB_PB_OUT	1	75OHM	
MDI N_PBOUT_C	1	75OHM	
MI NI DI N_Y_CVBSYI N	1	75OHM	
MDI N_YI N_CLAMP	1	75OHM	
MDI N_YI N_C	1	75OHM	
MI NI DI N_CI N	1	75OHM	
MDI N_CI N_CLAMP	1	75OHM	
MDI N_CI N_C	1	75OHM	
MDI N_SCL_C_STEREO		50OHM	
MDI N_SDA_C		50OHM	

NET	VOLTAGE	MAX_CURRENT	MI N_WI DTH
DACB_VDD	3.30000	0.07	16.0
DACB_VREF			16.0
DACB_RSET			16.0
MDI N_GND1	0.0V		16MI L
MDI N_GND2	0.0V		16MI L



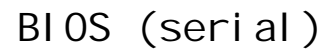
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GPI O	I/O	FUNCTION
0	IN	DVI MID HOTPLUG DET
1	IN	DVI SOUTH HOTPLUG DET
2	IN	RESERVED
3	IN	RESERVED
4	IN	RESERVED
5	OUT	RESERVED
6	OUT	RESERVED
7	IN	RESERVED
8	IN	RESERVED
9	OUT	FAN Control (ON/OFF)
10	OUT	RESERVED
11	IN	RESERVED
12	IN	RESERVED



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NAME	dhao	DATE	19-SEP-2005

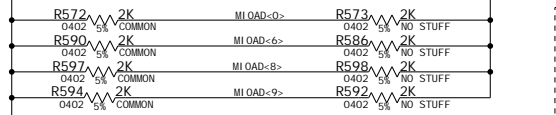
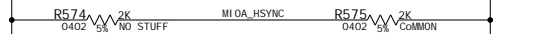
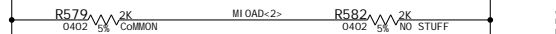
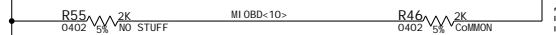
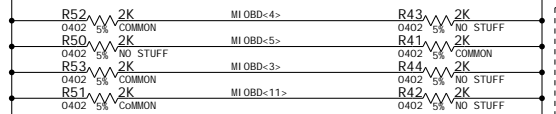
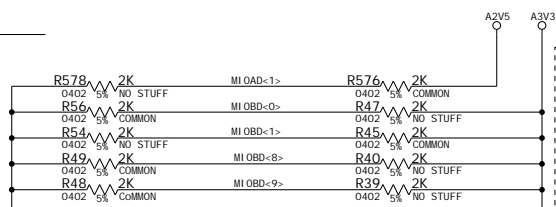
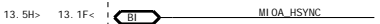
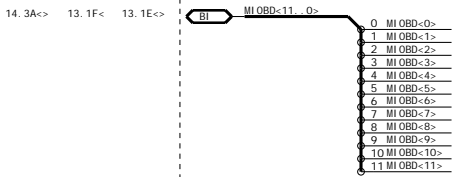
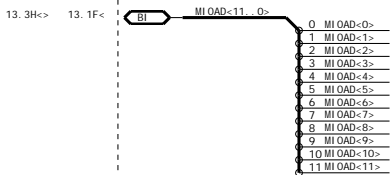
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BI OS, Straps, Mi sc

Straps

Assembly: BIOS

Mechanical parts



REG: NV_PEXTDEV_BOOT_0

Bit	Signal	VALUE_ID	VALUES
00:	PCI_AD_SWAP	PCI_AD_SWAP	0 REVERSED 1 NORMAL
01:	SUB_VENDOR	SUB_VENDOR	0 NO BIOS 1 Read from BIOS
02:	RAM_CFG_0	RAM_CFG[3:0]	0000 8Mx16 DDR2 128BIT 0001 RFU 1000 8Mx16 DDR2 64BIT 0010 16Mx16 DDR2 128BIT 0011 RFU 1010 16Mx16 DDR2 64BIT 0100 RFU 0101 RFU 0110 RFU 0111 RFU
03:	RAM_CFG_1		
04:	RAM_CFG_2		
05:	RAM_CFG_3		
06:	CRYSTAL_0	CRYSTAL[1:0]	00 13.500 Mhz 01 14.31818 Mhz 10 27.000 Mhz 11 unknown
22:	CRYSTAL_1		
07:	TV_MODE_0	TV_MODE[1:0]	00 SECAM 01 NTSC 10 PAL 11 CRT
08:	TV_MODE_1		
09:	AGP8xEnabled	AGP_8x	0 AGP8x enabled 1 AGP8x disabled
10:	AGP_SBA	AGP_SBA[0]	0 SBA enabled 1 SBA disabled
11:	AGP_FASTWR	AGP_FASTWR[0]	0 enabled 1 disabled
12:	PCI_DEVID_0	PCI_DEVID[3:0]	0000 0x140 ... 1111 0x014F 0000 (default 0x140) 0101 (0x145)
13:	PCI_DEVID_1		
20:	PCI_DEVID_2		
21:	PCI_DEVID_3		
14:	BUS_TYPE	BUS_TYPE[0]	0 PCI 1 AGP
15:	FP_FACE	FP_FACE[0]	0 24BIT 1 128BIT (DEFAULT)
23:	FB_0	FB[1:0]	00 64M 01 128M 10 256M (DEFAULT) 11 512M
24:	FB_1		
25:	BR	BR[0]	0 BRIDGE disabled 1 BRIDGE enabled
26:	BR_128M		BR bits are ignored if BRIDGE is disabled
27:	BR_AGP		
28:	BR_10		
29:	ROM_TYPE_0	ROM_TYPE[1:0]	00 Parallel 01 Serial_AT25F 10 Serial_SST45VF 11 RFU
30:	ROM_TYPE_1		

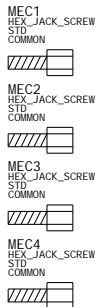
16:	USER_0	STRAP_USER[3:0]	0000 (default)
17:	USER_1		
18:	USER_2		
19:	USER_3		

31: SLOT_CLOCK_CFG 0 COMMON PCIe REF CLK enabled
1 COMMON PCIe REF CLK disabled

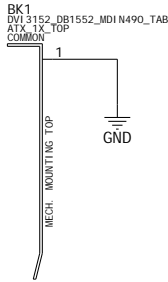
REG: NV_STRAP_1

Bit	Signal	VALUE_ID	VALUES
11:	PEX_PLL_EN_TERM100		0 (default -- internal term on)
12:	3GI_O_PADCFG_LUT_ADR[0]		
13:	3GI_O_PADCFG_LUT_ADR[1]		
14:	3GI_O_PADCFG_LUT_ADR[2]		

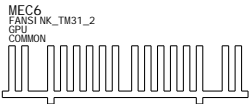
155-00003-0000-000
SCREW HEX JACK 4-40 x 12.1MM STANDARD



151-10001-0006-001 --> DB15-DVI-MDIN
151-10001-0006-002 --> DVI-DB15-MDIN



MC5
PH 4_40X. 1875_SCREW
STD
COMMON



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PAGE DETAIL	BIOS STRAPS & MECHANICALS

1

3

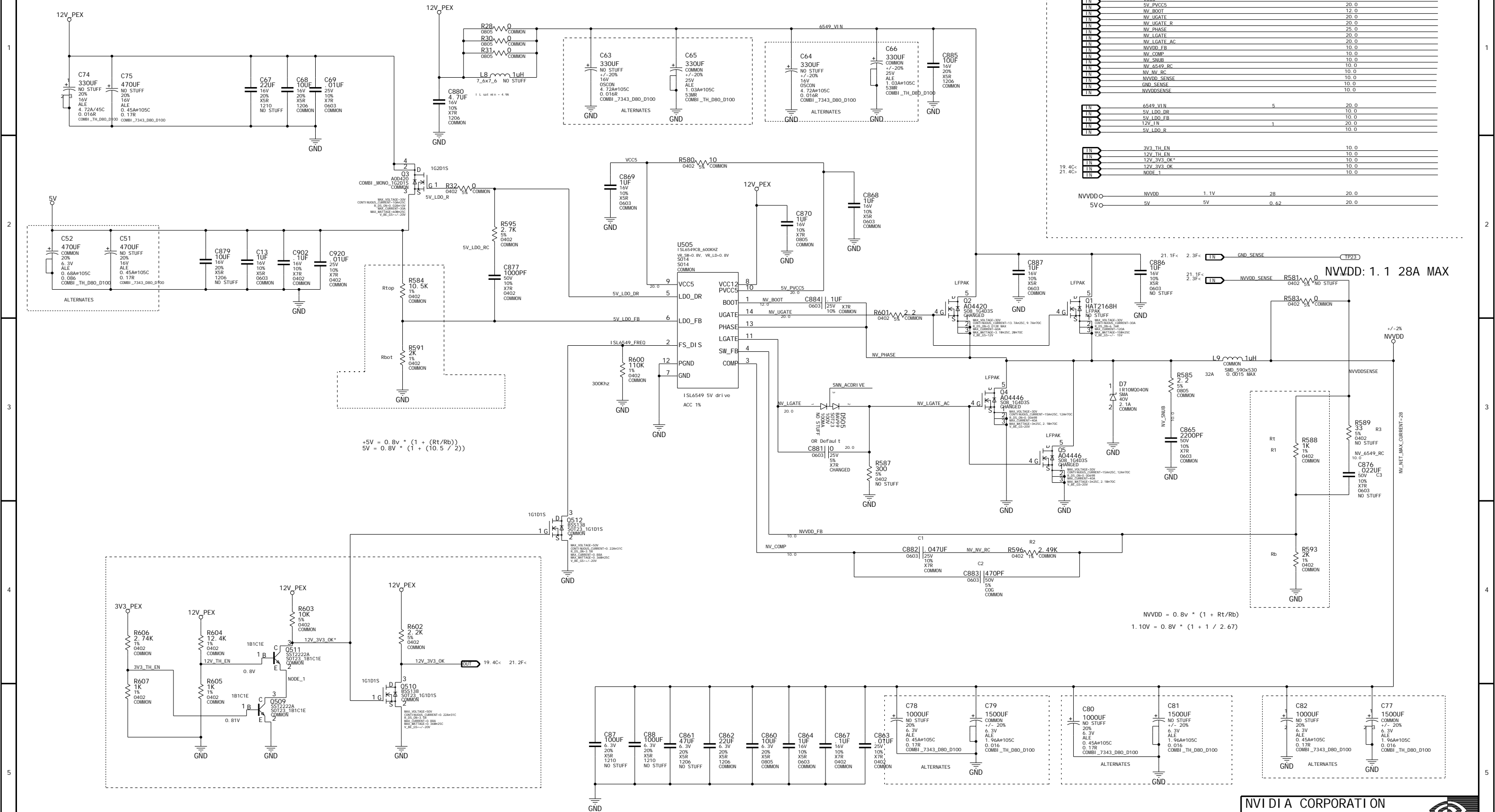
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F

Power Supply . . . I SL6549 NVVDD, 5V



	VOLTAGE	MAX_CURRENT	MI N_WI DTH
1N	VCC5		20.0
1N	SV_PVCC5		20.0
1N	NV_ROOT		12.0
1N	NV_UGATE		20.0
1N	NV_UGATE_R		20.0
1N	NV_PHASE		25.0
1N	NV_LGATE		20.0
1N	NV_LGATE_AC		20.0
1N	NVVD0_FB		10.0
1N	NV_COMP		10.0
1N	NV_SMB		10.0
1N	NV_6549_RC		10.0
1N	NV_NV_RC		10.0
1N	NVVD0_SENSE		10.0
1N	GND_SENSE		10.0
1N	NVVD0SENSE		10.0
1N	6549_VIN	5	20.0
1N	SV_LDO_DR		10.0
1N	SV_LDO_FB		10.0
1N	12V_1N	1	20.0
1N	SV_LDO_R		10.0
1N	3V3_TH_EN		10.0
1N	12V_TH_EN		10.0
1N	12V_3V3_OK*		10.0
1N	12V_3V3_OK		10.0
1N	NODE_1		10.0
NVVD0	NVVD0	1.1V	28
5V	SV	5V	0.62

NVVD: 1.1 28A MAX

$$5V = 0.8V * (1 + (10.5 / 2))$$

$$1.10V = 0.8V * (1 + 1 / 2.67)$$

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	POWER SUPPLY ISL6549: NVVDD, 5V

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