

P897 - GT200/NVI 02

P897, GT200-100, 896MB/1792MB - GDDR3 BGA136 16M/32Mx32
DVI -I + DVI -I + HD/SD/TVout, SPDIF, Dual SLI

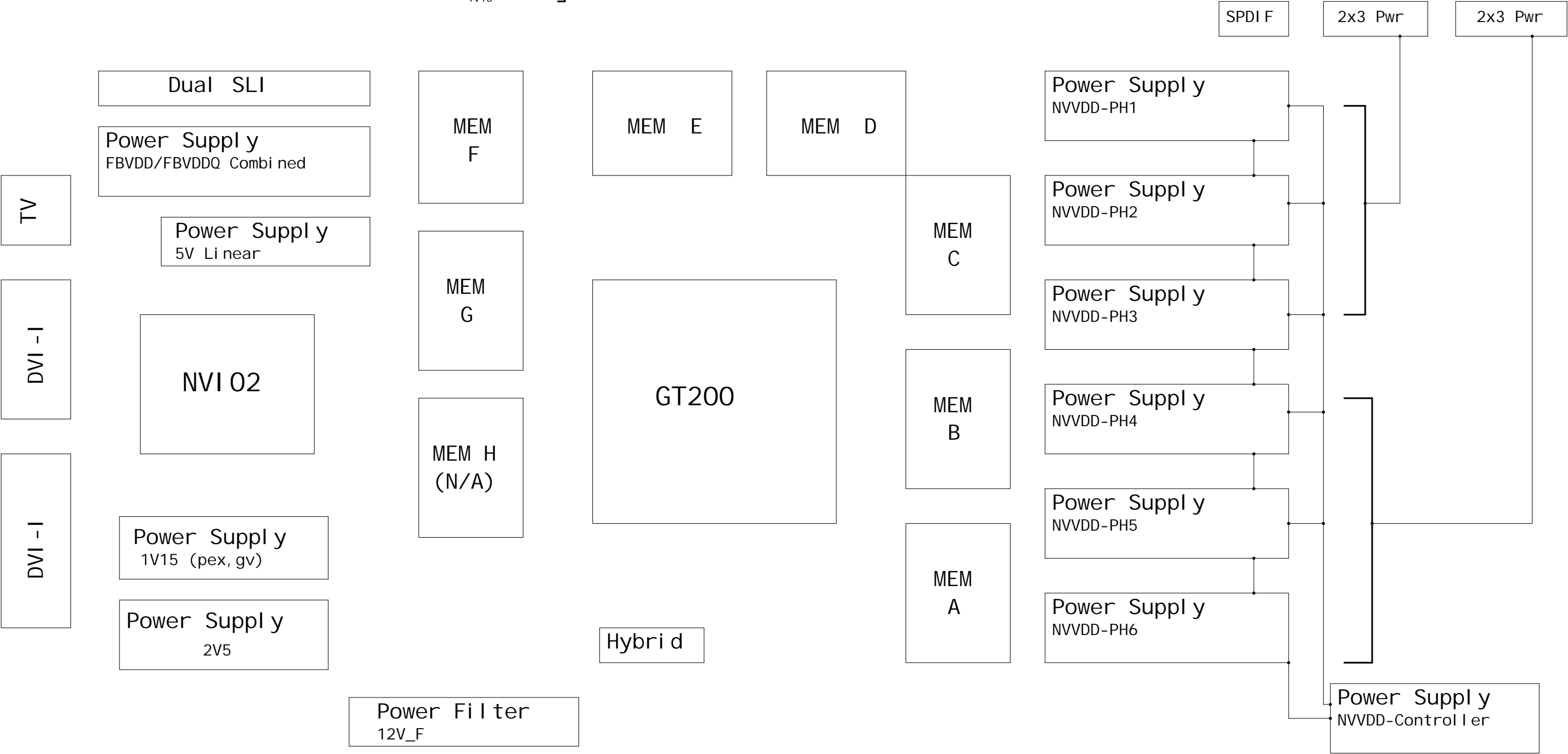
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SKU	VARIANT	NVPN	ASSEMBLY
B	BASE	600-10897-BASE-B01	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO-STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SKU0053	600-10897-0053-300	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI -I + DVI -I
2	SKU0054	600-10897-0054-300	DT, GT200-103-B3, 640/1440/1200, 896MB - 16Mx32 GDDR3, DVI -I + DVI -I
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>

Block Diagram

- Power Sequence
- 5V - Always On
 - 3V3 - Always On
 - 12V_F - Always On
 - 12V_PEX6_F1 - Always On
 - 12V_PEX6_F2 - Always On
 - FBVDD/FBVDDQ - NVVDD Enabled
 - NVVDD - Input_PEX_Enable
 - 2V5 - + Therm Shutdown Latch
 - 1V15 -



PCI Express / JTAG

JTAG

1

2

3

4

5

ASSEMBLY

PAGE DETAIL

DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I

PCI Express / JTAG

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NV_PN

600-10897-0053-300 A

ID

p897

NAME

mi sun

PAGE

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DATE

31-DEC-2008

A	B	C	D	E	F	G	H
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NAME	mi sun	DATE	31-DEC-2008

[illegible]

Framebuffer C, D: GPU Section

G1
G200-100-B1
BGA2236
COMMON

4/21 MEM_C

FBC D<0>	AB53	FBC D0
FBC D<1>	W53	FBC D1
FBC D<2>	W52	FBC D2
FBC D<3>	Y52	FBC D3
FBC D<4>	AA52	FBC D4
FBC D<5>	Y51	FBC D5
FBC D<6>	AA50	FBC D6
FBC D<7>	AA49	FBC D7
FBC D<8>	U49	FBC D8
FBC D<9>	U48	FBC D9
FBC D<10>	U47	FBC D10
FBC D<11>	T47	FBC D11
FBC D<12>	U46	FBC D12
FBC D<13>	U45	FBC D13
FBC D<14>	T45	FBC D14
FBC D<15>	R46	FBC D15
FBC D<16>	U52	FBC D16
FBC D<17>	U51	FBC D17
FBC D<18>	U50	FBC D18
FBC D<19>	R50	FBC D19
FBC D<20>	P50	FBC D20
FBC D<21>	P51	FBC D21
FBC D<22>	P52	FBC D22
FBC D<23>	R52	FBC D23
FBC D<24>	P45	FBC D24
FBC D<25>	P46	FBC D25
FBC D<26>	N47	FBC D26
FBC D<27>	N47	FBC D27
FBC D<28>	P48	FBC D28
FBC D<29>	N48	FBC D29
FBC D<30>	L48	FBC D30
FBC D<31>	L49	FBC D31

FBC DOM0	W51	FBC DOM0
FBC DOM1	U49	FBC DOM1
FBC DOM2	T51	FBC DOM2
FBC DOM3	P49	FBC DOM3

FBC DOS RNO	Y49	FBC DOS RNO
FBC DOS RN1	R47	FBC DOS RN1
FBC DOS RN2	T52	FBC DOS RN2
FBC DOS RN3	M50	FBC DOS RN3
FBC DOS WPO	C46	FBC DOS WPO
FBC DOS WP1	T48	FBC DOS WP1
FBC DOS WP2	T53	FBC DOS WP2
FBC DOS WP3	M49	FBC DOS WP3

FBC CMD<0>	AD53	FBC CMD0
FBC CMD<1>	AC55	FBC CMD1
FBC CMD<2>	AC54	FBC CMD2
FBC CMD<3>	AC53	FBC CMD3
FBC CMD<4>	AA55	FBC CMD4
FBC CMD<5>	AA53	FBC CMD5
FBC CMD<6>	Y55	FBC CMD6
FBC CMD<7>	Y54	FBC CMD7
FBC CMD<8>	Y53	FBC CMD8
FBC CMD<9>	V55	FBC CMD9
FBC CMD<10>	V53	FBC CMD10
FBC CMD<11>	U55	FBC CMD11
FBC CMD<12>	U54	FBC CMD12
FBC CMD<13>	U53	FBC CMD13
FBC CMD<14>	R55	FBC CMD14
FBC CMD<15>	R53	FBC CMD15
FBC CMD<16>	P53	FBC CMD16
FBC CMD<17>	P54	FBC CMD17
FBC CMD<18>	P55	FBC CMD18
FBC CMD<19>	M55	FBC CMD19
FBC CMD<20>	M53	FBC CMD20
FBC CMD<21>	L55	FBC CMD21
SNN_FBC_CMD<22>	L54	FBC CMD22
FBC CMD<23>	L53	FBC CMD23
FBC CMD<24>	J55	FBC CMD24
FBC CMD<25>	J53	FBC CMD25
FBC CMD<26>	H55	FBC CMD26
FBC CMD<27>	H54	FBC CMD27
FBC CMD<28>	H53	FBC CMD28
SNN_FBC_CMD<29>	F55	FBC CMD29
SNN_FBC_CMD<30>	F53	FBC CMD30
SNN_FBC_CMD<31>	E55	FBC CMD31
SNN_FBC_CMD<32>	E54	FBC CMD32

FBC0_CLK0	FBC0_CLK0	AA47	FBC0_CLK0
FBC0_CLK0	FBC0_CLK0	AA45	FBC0_CLK0
SNN_FBC0_CLK1	FBC0_CLK1	AB45	FBC0_CLK1
SNN_FBC0_CLK1*	FBC0_CLK1	AB45	FBC0_CLK1

FBC1_CLK0	FBC1_CLK0	AA47	FBC1_CLK0
FBC1_CLK0	FBC1_CLK0	AA45	FBC1_CLK0
SNN_FBC1_CLK1	FBC1_CLK1	AB45	FBC1_CLK1
SNN_FBC1_CLK1*	FBC1_CLK1	AB45	FBC1_CLK1

G1
G200-100-B1
BGA2236
COMMON

5/21 MEM_D

FBD D<0>	E46	FBD D0
FBD D<1>	E45	FBD D1
FBD D<2>	F45	FBD D2
FBD D<3>	H45	FBD D3
FBD D<4>	G44	FBD D4
FBD D<5>	F44	FBD D5
FBD D<6>	D44	FBD D6
FBD D<7>	E43	FBD D7
FBD D<8>	L43	FBD D8
FBD D<9>	K42	FBD D9
FBD D<10>	J43	FBD D10
FBD D<11>	J42	FBD D11
FBD D<12>	G41	FBD D12
FBD D<13>	H40	FBD D13
FBD D<14>	G39	FBD D14
FBD D<15>	F39	FBD D15
FBD D<16>	C43	FBD D16
FBD D<17>	D43	FBD D17
FBD D<18>	D42	FBD D18
FBD D<19>	E42	FBD D19
FBD D<20>	D41	FBD D20
FBD D<21>	D40	FBD D21
FBD D<22>	C39	FBD D22
FBD D<23>	E39	FBD D23
FBD D<24>	J40	FBD D24
FBD D<25>	K41	FBD D25
FBD D<26>	J39	FBD D26
FBD D<27>	H39	FBD D27
FBD D<28>	G38	FBD D28
FBD D<29>	H37	FBD D29
FBD D<30>	H36	FBD D30
FBD D<31>	K36	FBD D31

FBD DOM0	D45	FBD DOM0
FBD DOM1	H43	FBD DOM1
FBD DOM2	C40	FBD DOM2
FBD DOM3	L37	FBD DOM3

FBD DOS RNO	D46	FBD DOS RNO
FBD DOS RN1	G42	FBD DOS RN1
FBD DOS RN2	E40	FBD DOS RN2
FBD DOS RN3	J36	FBD DOS RN3
FBD DOS WP4	C46	FBD DOS WP4
FBD DOS WP1	H42	FBD DOS WP1
FBD DOS WP2	F41	FBD DOS WP2
FBD DOS WP3	J37	FBD DOS WP3

FBD CMD<0>	C54	FBD CMD0
FBD CMD<1>	B53	FBD CMD1
FBD CMD<2>	C51	FBD CMD2
FBD CMD<3>	C50	FBD CMD3
FBD CMD<4>	B51	FBD CMD4
FBD CMD<5>	A51	FBD CMD5
FBD CMD<6>	A50	FBD CMD6
FBD CMD<7>	C48	FBD CMD7
FBD CMD<8>	B48	FBD CMD8
FBD CMD<9>	A48	FBD CMD9
FBD CMD<10>	C47	FBD CMD10
FBD CMD<11>	A47	FBD CMD11
FBD CMD<12>	C45	FBD CMD12
FBD CMD<13>	B45	FBD CMD13
FBD CMD<14>	A45	FBD CMD14
FBD CMD<15>	A44	FBD CMD15
FBD CMD<16>	C44	FBD CMD16
FBD CMD<17>	C42	FBD CMD17
FBD CMD<18>	B42	FBD CMD18
FBD CMD<19>	A42	FBD CMD19
FBD CMD<20>	C41	FBD CMD20
FBD CMD<21>	A41	FBD CMD21
SNN_FBD_CMD<22>	C39	FBD CMD22
FBD CMD<23>	B39	FBD CMD23
FBD CMD<24>	A39	FBD CMD24
FBD CMD<25>	C38	FBD CMD25
FBD CMD<26>	A38	FBD CMD26
FBD CMD<27>	C36	FBD CMD27
FBD CMD<28>	B36	FBD CMD28
SNN_FBD_CMD<29>	A36	FBD CMD29
SNN_FBD_CMD<30>	C35	FBD CMD30
SNN_FBD_CMD<31>	A35	FBD CMD31
SNN_FBD_CMD<32>	C33	FBD CMD32

FBD0_CLK0	FBD0_CLK0	K44	FBD0_CLK0
FBD0_CLK0*	FBD0_CLK0	L33	FBD0_CLK0
SNN_FBD0_CLK1	FBD0_CLK1	L33	FBD0_CLK1
SNN_FBD0_CLK1*	FBD0_CLK1	L33	FBD0_CLK1

FBD1_CLK0	FBD1_CLK0	K44	FBD1_CLK0
FBD1_CLK0*	FBD1_CLK0	L33	FBD1_CLK0
SNN_FBD1_CLK1	FBD1_CLK1	L33	FBD1_CLK1
SNN_FBD1_CLK1*	FBD1_CLK1	L33	FBD1_CLK1

FBC D<0>	500HM	2	0	OUT	10.2A<>
FBC D<1>	500HM	2	1	OUT	10.2A<>
FBC D<2>	500HM	2	2	OUT	10.2A<>
FBC D<3>	500HM	2	3	OUT	10.2A<>
FBC D<4>	500HM	2	4	OUT	10.2A<>
FBC D<5>	500HM	2	5	OUT	10.2A<>
FBC D<6>	500HM	2	6	OUT	10.2A<>
FBC D<7>	500HM	2	7	OUT	10.2A<>
FBC D<8>	500HM	2	8	OUT	10.2A<>
FBC D<9>	500HM	2	9	OUT	10.2A<>
FBC D<10>	500HM	2	10	OUT	10.2A<>
FBC D<11>	500HM	2	11	OUT	10.2A<>
FBC D<12>	500HM	2	12	OUT	10.2A<>
FBC D<13>	500HM	2	13	OUT	10.2A<>
FBC D<14>	500HM	2	14	OUT	10.2A<>
FBC D<15>	500HM	2	15	OUT	10.2A<>
FBC D<16>	500HM	2	16	OUT	10.2A<>
FBC D<17>	500HM	2	17	OUT	10.2A<>
FBC D<18>	500HM	2	18	OUT	10.2A<>
FBC D<19>	500HM	2	19	OUT	10.2A<>
FBC D<20>	500HM	2	20	OUT	10.2A<>
FBC D<21>	500HM	2	21	OUT	10.2A<>
FBC D<22>	500HM	2	22	OUT	10.2A<>
FBC D<23>	500HM	2	23	OUT	10.2A<>
FBC D<24>	500HM	2	24	OUT	10.2A<>
FBC D<25>	500HM	2	25	OUT	10.2A<>
FBC D<26>	500HM	2	26	OUT	10.2A<>
FBC D<27>	500HM	2	27	OUT	10.2A<>
FBC D<28>	500HM	2	28	OUT	10.2A<>
FBC D<29>	500HM	2	29	OUT	10.2A<>
FBC D<30>	500HM	2	30	OUT	10.2A<>
FBC D<31>	500HM	2	31	OUT	10.2A<>
FBC D<32>	500HM	2	32	OUT	10.2A<>
FBC D<33>	500HM	2	33	OUT	10.2A<>
FBC D<34>	500HM	2	34	OUT	10.2A<>
FBC D<35>	500HM	2	35	OUT	10.2A<>
FBC D<36>	500HM	2	36	OUT	10.2A<>
FBC D<37>	500HM	2	37	OUT	10.2A<>
FBC D<38>	500HM	2	38	OUT	10.2A<>
FBC D<39>	500HM	2	39	OUT	10.2A<>
FBC D<40>	500HM	2	40	OUT	10.2A<>
FBC D<41>	500HM	2	41	OUT	10.2A<>
FBC D<42>	500HM	2	42	OUT	10.2A<>
FBC D<43>	500HM	2	43	OUT	10.2A<>
FBC D<44>	500HM	2	44	OUT	10.2A<>
FBC D<45>	500HM	2	45	OUT	10.2A<>
FBC D<46>	500HM	2	46	OUT	10.2A<>
FBC D<47>	500HM	2	47	OUT	10.2A<>
FBC D<48>	500HM	2	48	OUT	10.2A<>
FBC D<49>	500HM	2	49	OUT	10.2A<>
FBC D<50>	500HM	2	50	OUT	10.2A<>
FBC D<51>	500HM	2	51	OUT	10.2A<>
FBC D<52>	500HM	2	52	OUT	10.2A<>
FBC D<53>	500HM	2	53	OUT	10.2A<>
FBC D<54>	500HM	2	54	OUT	10.2A<>
FBC D<55>	500HM	2	55	OUT	10.2A<>
FBC D<56>	500HM	2	56	OUT	10.2A<>
FBC D<57>	500HM	2	57	OUT	10.2A<>
FBC D<58>	500HM	2	58	OUT	10.2A<>
FBC D<59>	500HM	2	59	OUT	10.2A<>
FBC D<60>	500HM	2	60	OUT	10.2A<>
FBC D<61>	500HM	2	61	OUT	10.2A<>
FBC D<62>	500HM	2	62	OUT	10.2A<>
FBC D<63>	500HM	2	63	OUT	10.2A<>

FBC D<26>	500HM	2	26
FBC D<27>	500HM	2	27
FBC D<28>	500HM	2	28
FBC D<29>	500HM	2	29
FBC D<30>	500HM	2	30
FBC D<31>	500HM	2	31
FBC D<32>	500HM	2	32
FBC D<33>	500HM	2	33
FBC D<34>	500HM	2	34
FBC D<35>	500HM	2	35
FBC D<36>	500HM	2	36
FBC D<37>	500HM	2	37
FBC D<38>	500HM	2	38
FBC D<39>	500HM	2	39
FBC D<40>	500HM	2	40
FBC D<41>	500HM	2	41
FBC D<42>	500HM	2	42
FBC D<43>	500HM	2	43
FBC D<44>	500HM	2	44
FBC D<45>	500HM	2	45
FBC D<46>	500HM	2	46
FBC D<47>	500HM	2	47
FBC D<48>	500HM	2	48
FBC D<49>	500HM	2	49
FBC D<50>	500HM	2	50
FBC D<51>	500HM	2	51
FBC D<52>	500HM	2	52
FBC D<53>	500HM	2	53
FBC D<54>	500HM	2	54
FBC D<55>	500HM	2	55
FBC D<56>	500HM	2	56
FBC D<57>	500HM	2	57
FBC D<58>	500HM	2	58
FBC D<59>	500HM	2	59
FBC D<60>	500HM	2	60
FBC D<61>	500HM	2	61
FBC D<62>	500HM	2	62
FBC D<63>	500HM	2	63

[illegible]

Framebuffer G, H: GPU Section

G1
G200-100-B1
BGA2236
COMMON

FBG_D<0>	Y8	FBG_D0	AG4	FBG_D<32>
FBG_D<1>	W9	FBG_D1	AH3	FBG_D<33>
FBG_D<2>	Y9	FBG_D2	AH4	FBG_D<34>
FBG_D<3>	Y10	FBG_D3	AJ4	FBG_D<35>
FBG_D<4>	AA9	FBG_D4	AL3	FBG_D<36>
FBG_D<5>	AB8	FBG_D5	AL4	FBG_D<37>
FBG_D<6>	AC7	FBG_D6	AL5	FBG_D<38>
FBG_D<7>	AC6	FBG_D7	AM4	FBG_D<39>
FBG_D<8>	AC8	FBG_D8	AL9	FBG_D<40>
FBG_D<9>	AC9	FBG_D9	AK10	FBG_D<41>
FBG_D<10>	AC10	FBG_D10	AK11	FBG_D<42>
FBG_D<11>	AD10	FBG_D11	AL11	FBG_D<43>
FBG_D<12>	AE9	FBG_D12	AM10	FBG_D<44>
FBG_D<13>	AF8	FBG_D13	AN9	FBG_D<45>
FBG_D<14>	AF7	FBG_D14	AN8	FBG_D<46>
FBG_D<15>	AF6	FBG_D15	AP8	FBG_D<47>
FBG_D<16>	AB4	FBG_D16	AM6	FBG_D<48>
FBG_D<17>	AB5	FBG_D17	AM6	FBG_D<49>
FBG_D<18>	AC4	FBG_D18	AN6	FBG_D<50>
FBG_D<19>	AC5	FBG_D19	AP5	FBG_D<51>
FBG_D<20>	AD6	FBG_D20	AR4	FBG_D<52>
FBG_D<21>	AE5	FBG_D21	AT4	FBG_D<53>
FBG_D<22>	AF4	FBG_D22	AT5	FBG_D<54>
FBG_D<23>	AF5	FBG_D23	AT6	FBG_D<55>
FBG_D<24>	AG10	FBG_D24	AN7	FBG_D<56>
FBG_D<25>	AG9	FBG_D25	AP9	FBG_D<57>
FBG_D<26>	AH9	FBG_D26	AR9	FBG_D<58>
FBG_D<27>	AJ9	FBG_D27	AR7	FBG_D<59>
FBG_D<28>	AK9	FBG_D28	AT7	FBG_D<60>
FBG_D<29>	AK7	FBG_D29	AV7	FBG_D<61>
FBG_D<30>	AK8	FBG_D30	AV9	FBG_D<62>
FBG_D<31>	AJ6	FBG_D31	AV10	FBG_D<63>

FBG_DOM0	AA10	FBG_DOM0	AK4	FBG_DOM4
FBG_DOM1	AD9	FBG_DOM1	AM9	FBG_DOM5
FBG_DOM2	AE4	FBG_DOM2	AP3	FBG_DOM6
FBG_DOM3	AJ7	FBG_DOM3	AU9	FBG_DOM7

FBG_DOS_RN0	WB	FBG_DOS_RN0	AK6	FBG_DOS_RN4
FBG_DOS_RN1	AD7	FBG_DOS_RN1	AL8	FBG_DOS_RN5
FBG_DOS_RN2	AD4	FBG_DOS_RN2	AN4	FBG_DOS_RN6
FBG_DOS_RN3	AH8	FBG_DOS_RN3	AT8	FBG_DOS_RN7
FBG_DOS_WP0	Y7	FBG_DOS_WP0	AK5	FBG_DOS_WP4
FBG_DOS_WP1	AE8	FBG_DOS_WP1	AM7	FBG_DOS_WP5
FBG_DOS_WP2	AE3	FBG_DOS_WP2	AP4	FBG_DOS_WP6
FBG_DOS_WP3	AG7	FBG_DOS_WP3	AJ8	FBG_DOS_WP7

FBG_CMD<0>	P1	FBG_CMD0	AE13	FBG_DEBUG
FBG_CMD<1>	R3	FBG_CMD1	BC16	FBGH_REFCLK
FBG_CMD<2>	R1	FBG_CMD2	BC17	FBGH_REFCLK*
FBG_CMD<3>	U3	FBG_CMD3		
FBG_CMD<4>	U2	FBG_CMD4		
FBG_CMD<5>	U1	FBG_CMD5		
FBG_CMD<6>	V3	FBG_CMD6		
FBG_CMD<7>	V1	FBG_CMD7		
FBG_CMD<8>	Y3	FBG_CMD8		
FBG_CMD<9>	Y2	FBG_CMD9		
FBG_CMD<10>	Y1	FBG_CMD10		
FBG_CMD<11>	AA3	FBG_CMD11		
FBG_CMD<12>	AA1	FBG_CMD12		
FBG_CMD<13>	AC3	FBG_CMD13		
FBG_CMD<14>	AC2	FBG_CMD14		
FBG_CMD<15>	AC1	FBG_CMD15		
FBG_CMD<16>	AD3	FBG_CMD16		
FBG_CMD<17>	AD1	FBG_CMD17		
FBG_CMD<18>	AF3	FBG_CMD18		
FBG_CMD<19>	AF2	FBG_CMD19		
FBG_CMD<20>	AF1	FBG_CMD20		
FBG_CMD<21>	AG3	FBG_CMD21		
SNN_FBG_CMD<22>	AG1	FBG_CMD22		
FBG_CMD<23>	AJ1	FBG_CMD23		
FBG_CMD<24>	AJ3	FBG_CMD24		
FBG_CMD<25>	AK1	FBG_CMD25		
FBG_CMD<26>	AK2	FBG_CMD26		
FBG_CMD<27>	AK3	FBG_CMD27		
FBG_CMD<28>	AM1	FBG_CMD28		
SNN_FBG_CMD<29>	AM3	FBG_CMD29		
SNN_FBG_CMD<30>	AN1	FBG_CMD30		
SNN_FBG_CMD<31>	AN2	FBG_CMD31		
SNN_FBG_CMD<32>	AN3	FBG_CMD32		

FBGO_CLK0	FBGO_CLK0	V10	FBGO_CLK0
FBGO_CLK1	FBGO_CLK1	AE11	FBGO_CLK0
SNN_FBG0_CLK1*	FBGO_CLK1	AF11	FBGO_CLK1

FBG1_CLK0	AF10	FBG1_CLK0	FBG1_CLK0
FBG1_CLK1	AN11	FBG1_CLK1	FBG1_CLK1
FBG1_CLK1*	AP11	FBG1_CLK1*	FBG1_CLK1

SNN_FBG0_CLK0	FBHO_CLK0	AT10	FBHO_CLK0
SNN_FBG0_CLK1*	FBHO_CLK1	AT11	FBHO_CLK0
SNN_FBG0_CLK1*	FBHO_CLK1	AU11	FBHO_CLK1

G1
G200-100-B1
BGA2236
COMMON

9/21 MEM_H

SNN_FBH_D<0>	AU3	FBH_D0	BF11	SNN_FBH_D<32>
SNN_FBH_D<1>	AU4	FBH_D1	BF12	SNN_FBH_D<33>
SNN_FBH_D<2>	AV4	FBH_D2	BG11	SNN_FBH_D<34>
SNN_FBH_D<3>	AV6	FBH_D3	BG12	SNN_FBH_D<35>
SNN_FBH_D<4>	AY3	FBH_D4	BG13	SNN_FBH_D<36>
SNN_FBH_D<5>	AY4	FBH_D5	BG14	SNN_FBH_D<37>
SNN_FBH_D<6>	BA4	FBH_D6	BH14	SNN_FBH_D<38>
SNN_FBH_D<7>	BB6	FBH_D7	BJ14	SNN_FBH_D<39>
SNN_FBH_D<8>	AB7	FBH_D8	BG4	SNN_FBH_D<40>
SNN_FBH_D<9>	AB8	FBH_D9	BJ4	SNN_FBH_D<41>
SNN_FBH_D<10>	AW9	FBH_D10	BH7	SNN_FBH_D<42>
SNN_FBH_D<11>	AW10	FBH_D11	BJ5	SNN_FBH_D<43>
SNN_FBH_D<12>	AY9	FBH_D12	BK4	SNN_FBH_D<44>
SNN_FBH_D<13>	AY8	FBH_D13	BF3	SNN_FBH_D<45>
SNN_FBH_D<14>	BA9	FBH_D14	BG6	SNN_FBH_D<46>
SNN_FBH_D<15>	BA10	FBH_D15	BJ3	SNN_FBH_D<47>
SNN_FBH_D<16>	BC3	FBH_D16	BM3	SNN_FBH_D<48>
SNN_FBH_D<17>	BB4	FBH_D17	BL3	SNN_FBH_D<49>
SNN_FBH_D<18>	BB5	FBH_D18	BL4	SNN_FBH_D<50>
SNN_FBH_D<19>	BC5	FBH_D19	BL5	SNN_FBH_D<51>
SNN_FBH_D<20>	BE4	FBH_D20	BM5	SNN_FBH_D<52>
SNN_FBH_D<21>	BF4	FBH_D21	BM6	SNN_FBH_D<53>
SNN_FBH_D<22>	BE5	FBH_D22	BM7	SNN_FBH_D<54>
SNN_FBH_D<23>	BE6	FBH_D23	BN6	SNN_FBH_D<55>
SNN_FBH_D<24>	BB10	FBH_D24	BK12	SNN_FBH_D<56>
SNN_FBH_D<25>	BB9	FBH_D25	BK11	SNN_FBH_D<57>
SNN_FBH_D<26>	BC9	FBH_D26	BK9	SNN_FBH_D<58>
SNN_FBH_D<27>	BD7	FBH_D27	BK8	SNN_FBH_D<59>
SNN_FBH_D<28>	BE8	FBH_D28	BM8	SNN_FBH_D<60>
SNN_FBH_D<29>	BE9	FBH_D29	BN9	SNN_FBH_D<61>
SNN_FBH_D<30>	BF8	FBH_D30	BN8	SNN_FBH_D<62>
SNN_FBH_D<31>	BE7	FBH_D31	BN7	SNN_FBH_D<63>

SNN_FBH_DOM0	AY5	FBH_DOM0	BJ12	SNN_FBH_DOM4
SNN_FBH_DOM1	AW6	FBH_DOM1	BH4	SNN_FBH_DOM5
SNN_FBH_DOM2	BD6	FBH_DOM2	BP5	SNN_FBH_DOM6
SNN_FBH_DOM3	BB8	FBH_DOM3	BL11	SNN_FBH_DOM7

SNN_FBH_DOS_RN0	AW5	FBH_DOS_RN0	BH11	SNN_FBH_DOS_RN4
SNN_FBH_DOS_RN1	BA7	FBH_DOS_RN1	BH6	SNN_FBH_DOS_RN5
SNN_FBH_DOS_RN2	BC4	FBH_DOS_RN2	BN4	SNN_FBH_DOS_RN6
SNN_FBH_DOS_RN3	BC8	FBH_DOS_RN3	BL8	SNN_FBH_DOS_RN7
SNN_FBH_DOS_WP0	AA4	FBH_DOS_WP0	BJ11	SNN_FBH_DOS_WP4
SNN_FBH_DOS_WP1	BA6	FBH_DOS_WP1	BH5	SNN_FBH_DOS_WP5
SNN_FBH_DOS_WP2	BD4	FBH_DOS_WP2	BN5	SNN_FBH_DOS_WP6
SNN_FBH_DOS_WP3	BB7	FBH_DOS_WP3	BM9	SNN_FBH_DOS_WP7

SNN_FBH_CMD<0>	AR1	FBH_CMD0	AW13	SNN_FBH_DEBUG
SNN_FBH_CMD<1>	AR3	FBH_CMD1		
SNN_FBH_CMD<2>	AT1	FBH_CMD2		
SNN_FBH_CMD<3>	AT2	FBH_CMD3		
SNN_FBH_CMD<4>	AT3	FBH_CMD4		
SNN_FBH_CMD<5>	AV1	FBH_CMD5		
SNN_FBH_CMD<6>	AV3	FBH_CMD6		
SNN_FBH_CMD<7>	AW1	FBH_CMD7		
SNN_FBH_CMD<8>	AW2	FBH_CMD8		
SNN_FBH_CMD<9>	AW3	FBH_CMD9		
SNN_FBH_CMD<10>	BA1	FBH_CMD10		
SNN_FBH_CMD<11>	BA3	FBH_CMD11		
SNN_FBH_CMD<12>	BB1	FBH_CMD12		
SNN_FBH_CMD<13>	BB2	FBH_CMD13		
SNN_FBH_CMD<14>	BB3	FBH_CMD14		
SNN_FBH_CMD<15>	BD1	FBH_CMD15		
SNN_FBH_CMD<16>	BD3	FBH_CMD16		
SNN_FBH_CMD<17>	BE1	FBH_CMD17		
SNN_FBH_CMD<18>	BE2	FBH_CMD18		
SNN_FBH_CMD<19>	BE3	FBH_CMD19		
SNN_FBH_CMD<20>	BE1	FBH_CMD20		
SNN_FBH_CMD<21>	BE3	FBH_CMD21		
SNN_FBH_CMD<22>	BH1	FBH_CMD22		
SNN_FBH_CMD<23>	BH2	FBH_CMD23		
SNN_FBH_CMD<24>	BH3	FBH_CMD24		
SNN_FBH_CMD<25>	BK1	FBH_CMD25		
SNN_FBH_CMD<26>	BK3	FBH_CMD26		
SNN_FBH_CMD<27>	BL1	FBH_CMD27		
SNN_FBH_CMD<28>	BL2	FBH_CMD28		
SNN_FBH_CMD<29>	BK2	FBH_CMD29		
SNN_FBH_CMD<30>	BP3	FBH_CMD30		
SNN_FBH_CMD<31>	BR5	FBH_CMD31		
SNN_FBH_CMD<32>	BR6	FBH_CMD32		

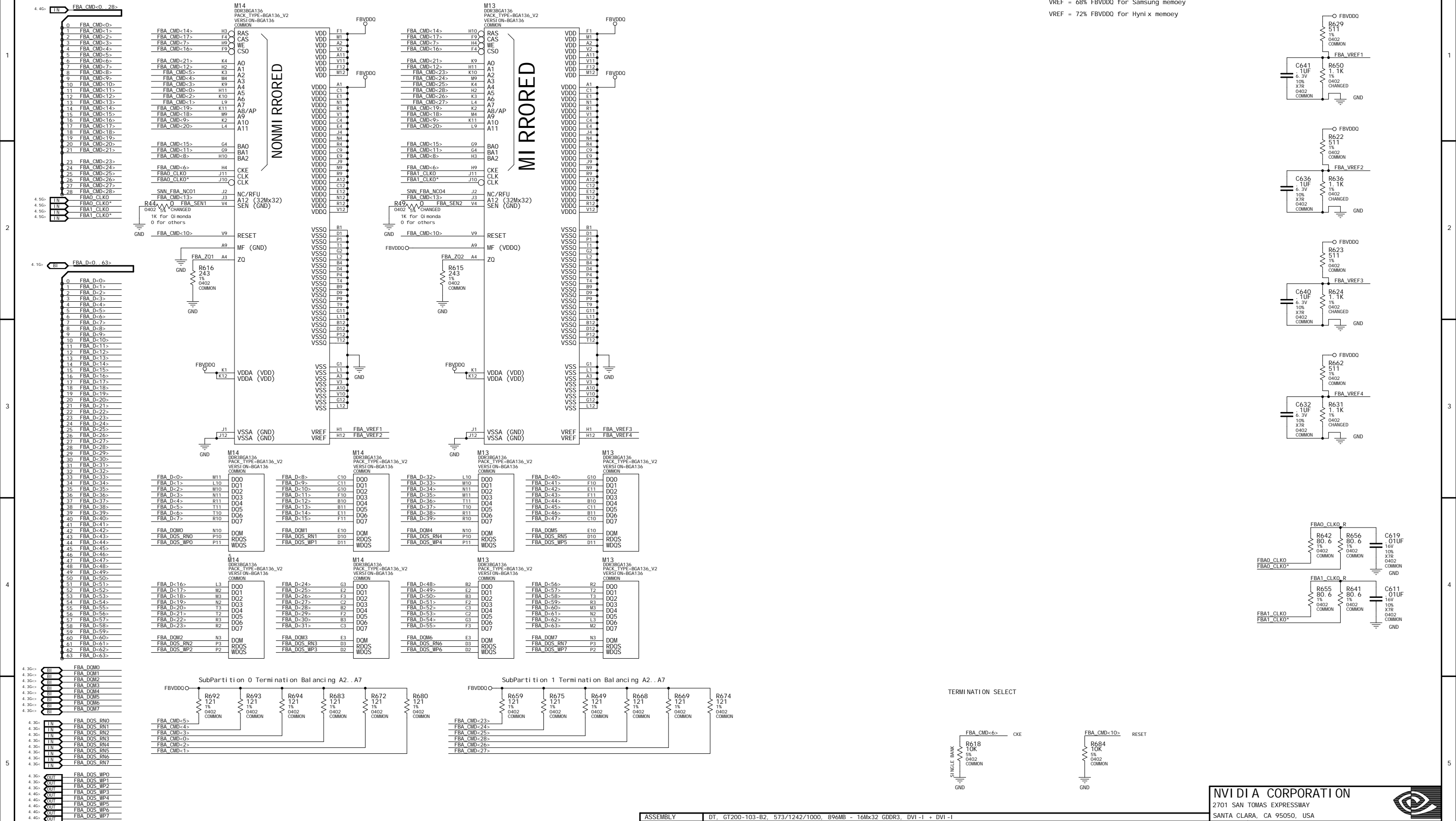
FBH_DEBUG

FBG_D<0>	500HM	2	0	OUT	14. 2A<>
FBG_D<1>	500HM	2	1	OUT	14. 2A<>
FBG_D<2>	500HM	2	2	OUT	14. 2A<>
FBG_D<3>	500HM	2	3	OUT	14. 2A<>
FBG_D<4>	500HM	2	4	OUT	14. 2A<>
FBG_D<5>	500HM	2	5	OUT	14. 2A<>
FBG_D<6>	500HM	2	6	OUT	14. 2A<>
FBG_D<7>	500HM	2	7	OUT	14. 2A<>
FBG_D<8>	500HM	2	8	OUT	14. 2A<>
FBG_D<9>	500HM	2	9	OUT	14. 2A<>
FBG_D<10>	500HM	2	10	OUT	14. 2A<>
FBG_D<11>	500HM	2	11	OUT	14. 2A<>
FBG_D<12>	500HM	2	12	OUT	14. 2A<>
FBG_D<13>	500HM	2	13	OUT	14. 2A<>
FBG_D<14>	500HM	2	14	OUT	14. 2A<>
FBG_D<15>	500HM	2	15	OUT	14. 2A<>
FBG_D<16>	500HM	2	16	OUT	14. 2A<>
FBG_D<17>	500HM	2	17	OUT	14. 2A<>
FBG_D<18>	500HM	2	18	OUT	14. 2A<>
FBG_D<19>	500HM	2	19	OUT	14. 2A<>
FBG_D<20>	500HM	2	20	OUT	14. 2A<>
FBG_D<21>	500HM	2	21	OUT	14. 2A<>
FBG_D<22>	500HM	2	22	OUT	14. 2A<>
FBG_D<23>	500HM	2	23	OUT	14. 2A<>
FBG_D<24>	500HM	2	24	OUT	14. 2A<>
FBG_D<25>	500HM	2	25	OUT	14. 2A<>
FBG_D<26>	500HM	2	26	OUT	14. 2A<>
FBG_D<27>	500HM	2	27	OUT	14. 2A<>
FBG_D<28>	500HM	2	28	OUT	14. 2A<>
FBG_D<29>	500HM	2	29	OUT	14. 2A<>
FBG_D<30>	500HM	2	30	OUT	14. 2A<>
FBG_D<31>	500HM	2	31	OUT	14. 2A<>
FBG_D<32>	500HM	2	32	OUT	14. 2A<>
FBG_D<33>	500HM	2	33	OUT	14. 2A<>
FBG_D<34>	500HM	2	34	OUT	14. 2A<>
FBG_D<35>	500HM	2	35	OUT	14. 2A<>
FBG_D<36>	500HM	2	36	OUT	14. 2A<>
FBG_D<37>	500HM	2	37	OUT	14. 2A<>
FBG_D<38>	500HM	2	38	OUT	14. 2A<>
FBG_D<39>	500HM	2	39	OUT	14. 2A<>
FBG_D<40>	500HM	2	40	OUT	14. 2A<>
FBG_D<41>	500HM	2	41	OUT	14. 2A<>
FBG_D<42>	500HM	2	42	OUT	14. 2A<>
FBG_D<43>	500HM	2	43	OUT	14. 2A<>
FBG_D<44>	500HM	2	44	OUT	14. 2A<>
FBG_D<45>	500HM	2	45	OUT	14. 2A<>
FBG_D<46>	500HM	2	46	OUT	14. 2A<>
FBG_D<47>	500HM	2	47	OUT	14. 2A<>
FBG_D<48>	500HM	2	48	OUT	14. 2A<>
FBG_D<49>	500HM	2	49	OUT	14. 2A<>
FBG_D<50>	500HM	2	50	OUT	14. 2A<>
FBG_D<51>	500HM	2	51	OUT	14. 2A<>
FBG_D<52>	500HM	2	52	OUT	14. 2A<>
FBG_D<53>	500HM	2	53	OUT	14. 2A<>
FBG_D<54>	500HM	2	54	OUT	14. 2A<>
FBG_D<55>	500HM	2	55	OUT	14. 2A<>
FBG_D<56>	500HM	2	56	OUT	14. 2A<>
FBG_D<57>	500HM	2	57	OUT	14. 2A<>
FBG_D<58>	500HM	2	58	OUT	14. 2A<>
FBG_D<59>	500HM	2	59	OUT	14. 2A<>
FBG_D<60>	500HM	2	60	OUT	14. 2A<>
FBG_D<61>	500HM	2	61	OUT	14. 2A<>
FBG_D<62>	500HM	2	62	OUT	14. 2A<>
FBG_D<63>	500HM	2	63	OUT	14. 2A<>

FBG_DOM0	500HM	2	BI	14. 4A<>
FBG_DOM1	500HM	2	BI	14. 5A<>

Framebuffer A: Memory Section

VREF = 68% FBVDDQ for Samsung memoeoy
VREF = 72% FBVDDQ for Hynix memoeoy



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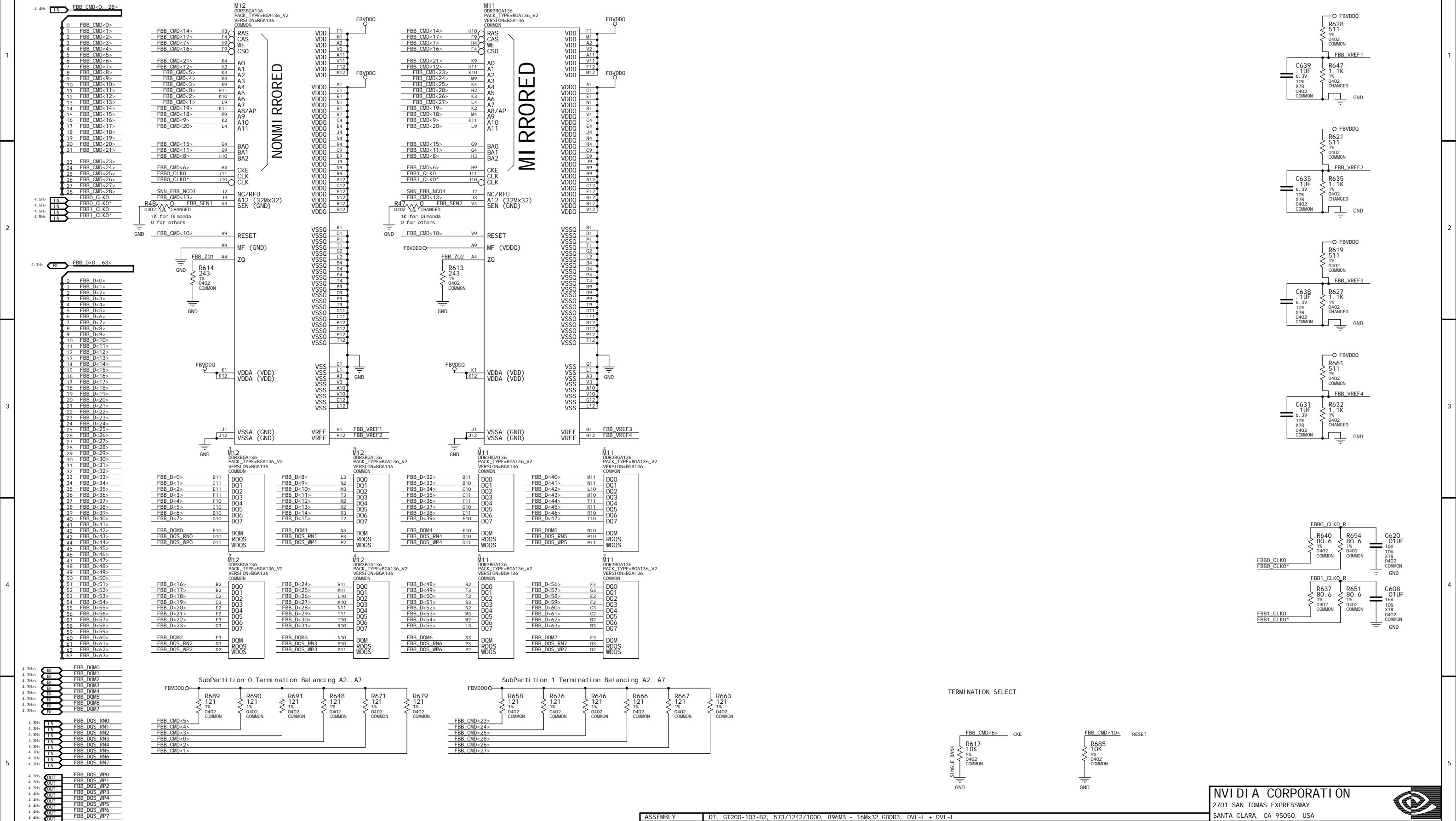


ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I
PAGE DETAIL	Framebuffer A: Memory Section

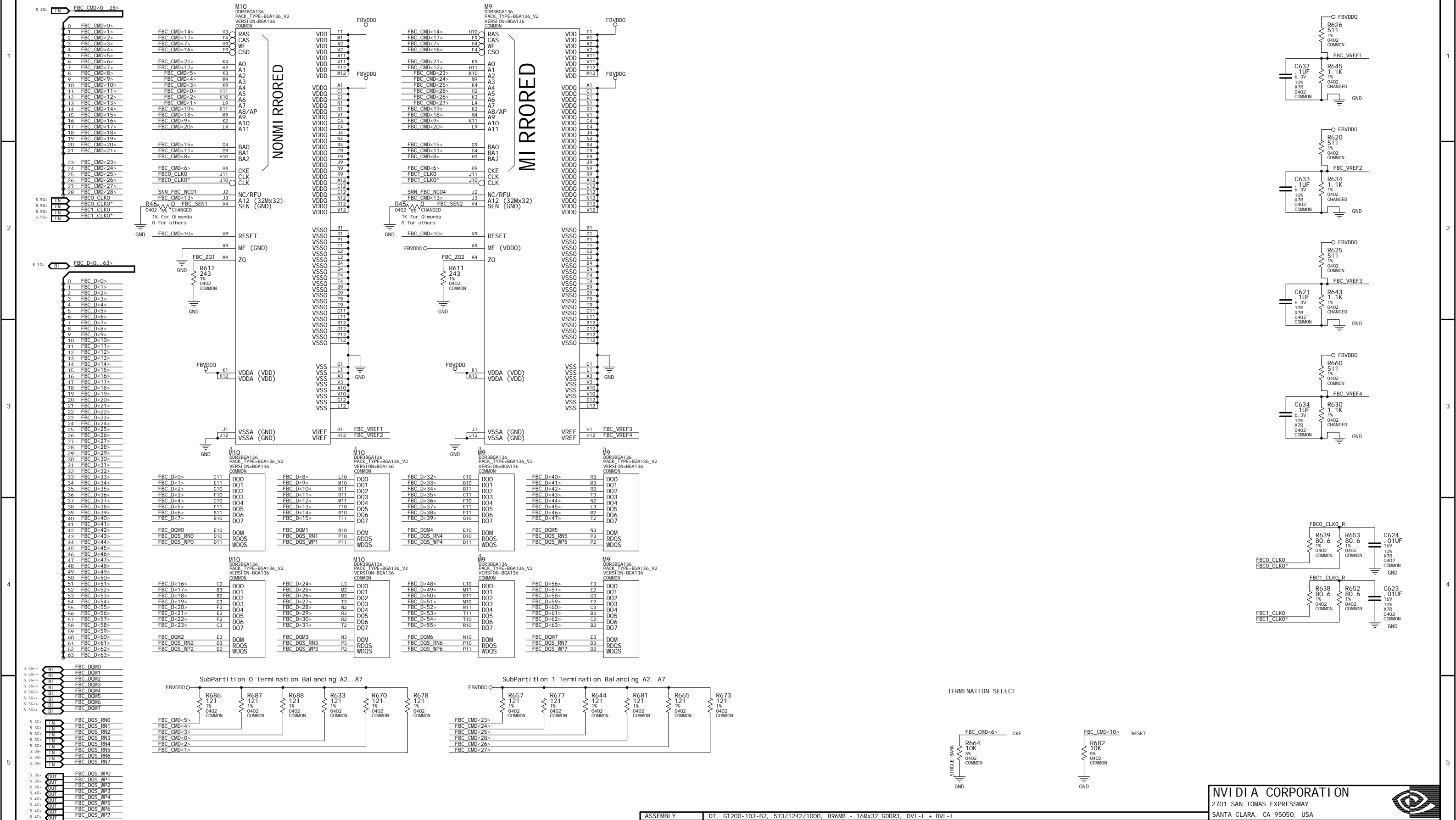
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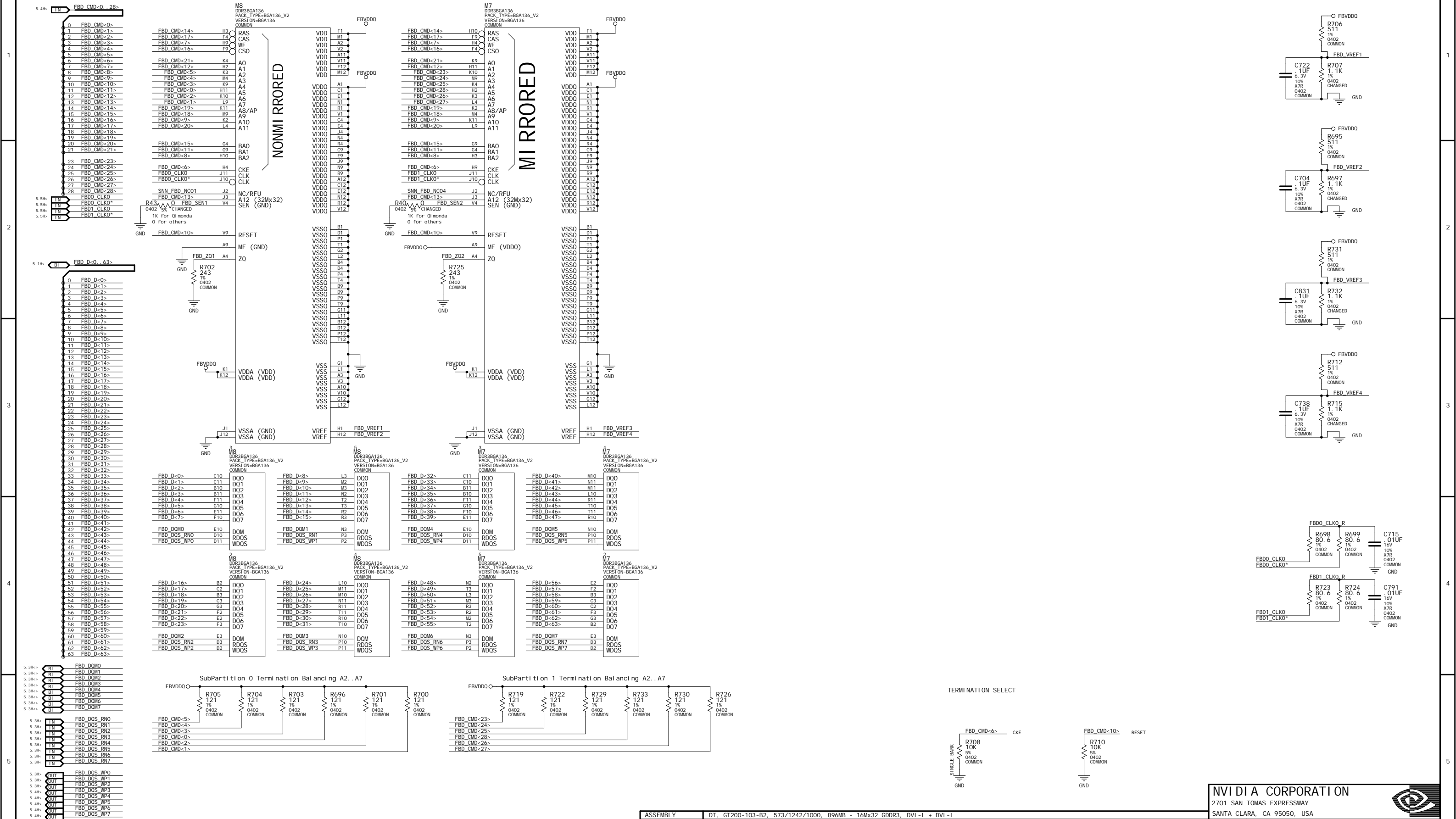
Framebuffer B: Memory Section



Framebuffer C: Memory Section



Framebuffer D: Memory Section



Framebuffer E: Memory Section

The diagram illustrates the memory section of Framebuffer E, detailing the connections for command, data, and address buses, as well as control signals and termination networks. It includes four memory modules (M6 and M5) and various passive components like resistors and capacitors.

Command Buses:

- FBE_CMD<0..28>**: Connected to M6 and M5.
- FBE_CMD<14>**: Connected to M6 and M5.
- FBE_CMD<15>**: Connected to M6 and M5.
- FBE_CMD<16>**: Connected to M6 and M5.
- FBE_CMD<21>**: Connected to M6 and M5.
- FBE_CMD<22>**: Connected to M6 and M5.
- FBE_CMD<23>**: Connected to M6 and M5.
- FBE_CMD<24>**: Connected to M6 and M5.
- FBE_CMD<25>**: Connected to M6 and M5.
- FBE_CMD<26>**: Connected to M6 and M5.
- FBE_CMD<27>**: Connected to M6 and M5.
- FBE_CMD<28>**: Connected to M6 and M5.

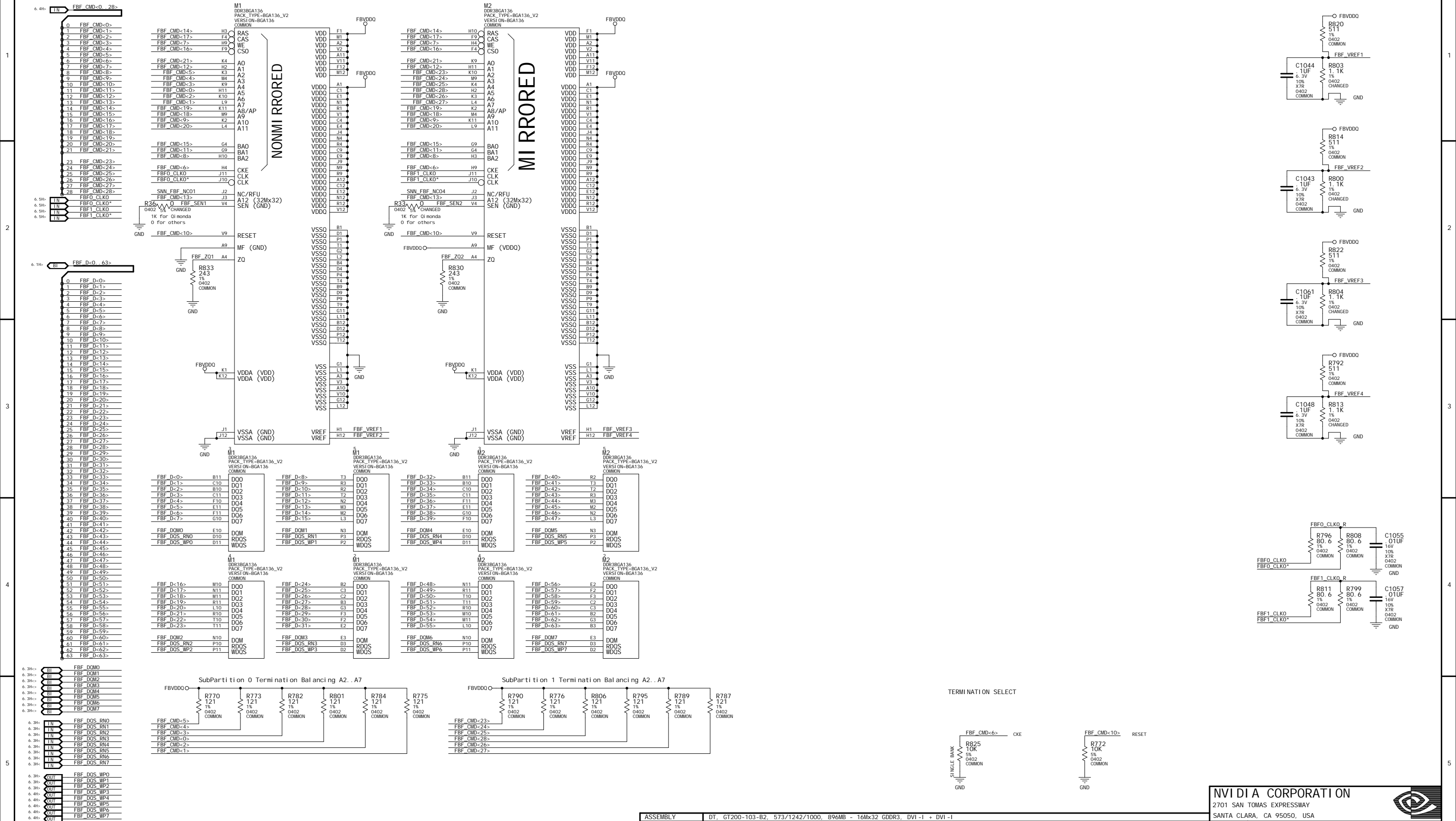
Data Buses:

- FBE_D<0..63>**: Connected to M6 and M5.
- FBE_D<16>**: Connected to M6 and M5.
- FBE_D<17>**: Connected to M6 and M5.
- FBE_D<18>**: Connected to M6 and M5.
- FBE_D<19>**: Connected to M6 and M5.
- FBE_D<20>**: Connected to M6 and M5.
- FBE_D<21>**: Connected to M6 and M5.
- FBE_D<22>**: Connected to M6 and M5.
- FBE_D<23>**: Connected to M6 and M5.
- FBE_D<24>**: Connected to M6 and M5.
- FBE_D<25>**: Connected to M6 and M5.
- FBE_D<26>**: Connected to M6 and M5.
- FBE_D<27>**: Connected to M6 and M5.
- FBE_D<28>**: Connected to M6 and M5.
- FBE_D<29>**: Connected to M6 and M5.
- FBE_D<30>**: Connected to M6 and M5.
- FBE_D<31>**: Connected to M6 and M5.
- FBE_D<32>**: Connected to M6 and M5.
- FBE_D<33>**: Connected to M6 and M5.
- FBE_D<34>**: Connected to M6 and M5.
- FBE_D<35>**: Connected to M6 and M5.
- FBE_D<36>**: Connected to M6 and M5.
- FBE_D<37>**: Connected to M6 and M5.
- FBE_D<38>**: Connected to M6 and M5.
- FBE_D<39>**: Connected to M6 and M5.
- FBE_D<40>**: Connected to M6 and M5.
- FBE_D<41>**: Connected to M6 and M5.
- FBE_D<42>**: Connected to M6 and M5.
- FBE_D<43>**: Connected to M6 and M5.
- FBE_D<44>**: Connected to M6 and M5.
- FBE_D<45>**: Connected to M6 and M5.
- FBE_D<46>**: Connected to M6 and M5.
- FBE_D<47>**: Connected to M6 and M5.
- FBE_D<48>**: Connected to M6 and M5.
- FBE_D<49>**: Connected to M6 and M5.
- FBE_D<50>**: Connected to M6 and M5.
- FBE_D<51>**: Connected to M6 and M5.
- FBE_D<52>**: Connected to M6 and M5.
- FBE_D<53>**: Connected to M6 and M5.
- FBE_D<54>**: Connected to M6 and M5.
- FBE_D<55>**: Connected to M6 and M5.
- FBE_D<56>**: Connected to M6 and M5.
- FBE_D<57>**: Connected to M6 and M5.
- FBE_D<58>**: Connected to M6 and M5.
- FBE_D<59>**: Connected to M6 and M5.
- FBE_D<60>**: Connected to M6 and M5.
- FBE_D<61>**: Connected to M6 and M5.
- FBE_D<62>**: Connected to M6 and M5.
- FBE_D<63>**: Connected to M6 and M5.

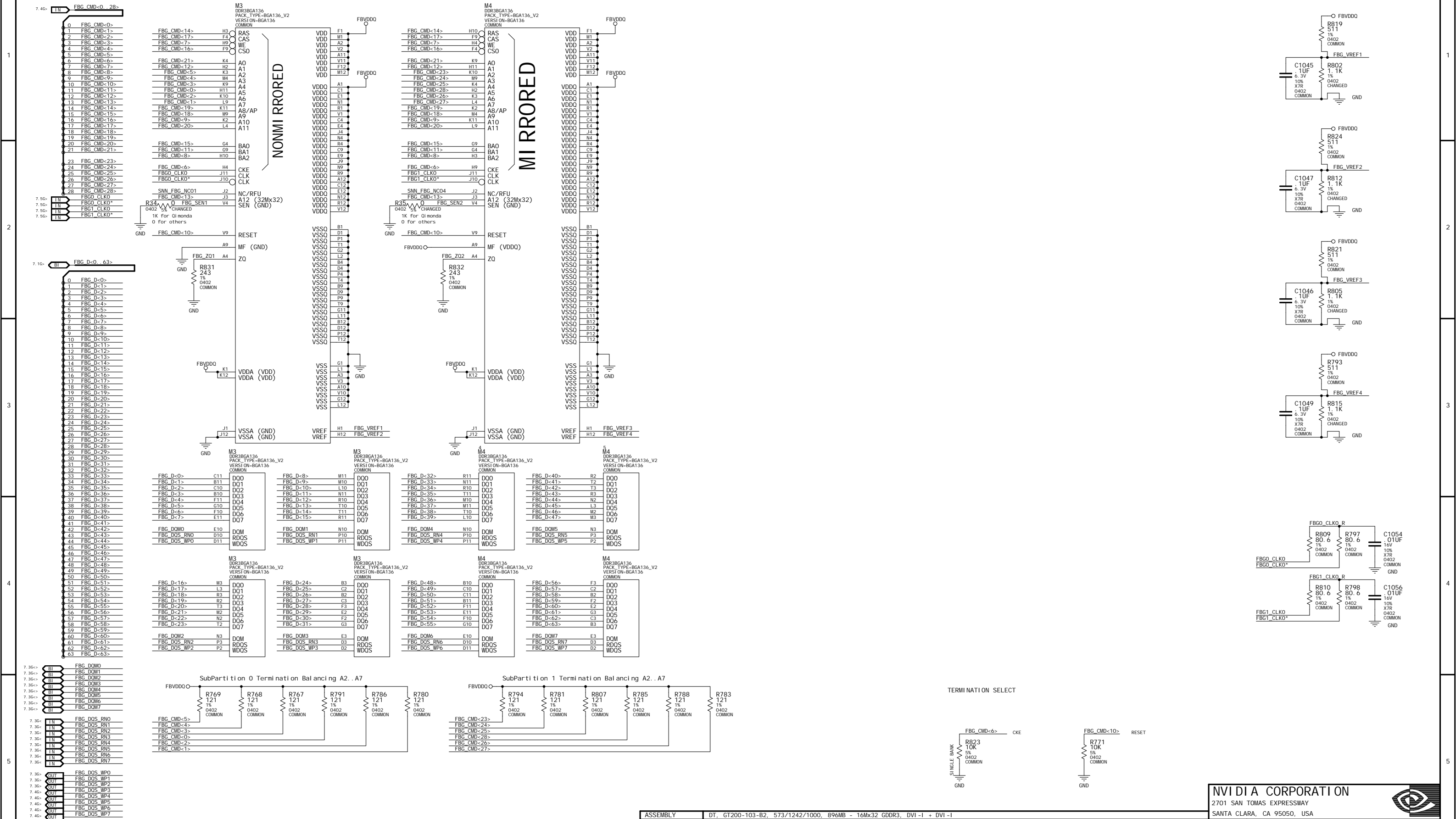
Address Buses:

- FBE_A<0..11>**: Connected to M6 and M5.
- FBE_A<12..23>**: Connected to M6 and M5.
- FBE_A<24..35>**: Connected to M6 and M5.
- FBE_A<36..47>**: Connected to M6 and M5.
- FBE_A<48..59>**: Connected to M6 and M5.
- FBE_A<60..71>**: Connected to M6 and M5.
- FBE_A<72..83>**: Connected to M6 and M5.
- FBE_A<84..95>**: Connected to M6 and M5.
- FBE_A<96..107>**: Connected to M6 and M5.
- FBE_A<108..119>**: Connected to M6 and M5.
- FBE_A<120..131>**: Connected to M6 and M5.
- FBE_A<132..143>**: Connected to M6 and M5.
- FBE_A<144..155>**: Connected to M6 and M5.
- FBE_A<156..167>**: Connected to M6 and M5.
- FBE_A<168..179>**: Connected to M6 and M5.
- FBE_A<180..191>**: Connected to M6 and M5.
- FBE_A<192..203>**: Connected to M6 and M5.
- FBE_A<204..215>**: Connected to M6 and M5.
- FBE_A<216..227>**: Connected to M6 and M5.
- FBE_A<228..239>**: Connected to M6 and M5.
- FBE_A<240..251>**: Connected to M6 and M5.
- FBE_A<252..263>**: Connected to M6 and M5.
- FBE_A<264..275>**: Connected to M6 and M5.
- FBE_A<276..287>**: Connected to M6 and M5.
- FBE_A<288..299>**: Connected to M6 and M5.
- FBE_A<300..311>**: Connected to M6 and M5.
- FBE_A<312..323>**: Connected to M6 and M5.
- FBE_A<324..335>**: Connected to M6 and M5.
- FBE_A<336..347>**: Connected to M6 and M5.
- FBE_A<348..359>**: Connected to M6 and M5.
- FBE_A<360..371>**: Connected to M6 and M5.
- FBE_A<372..383>**: Connected to M6 and M5.
- FBE_A<384..395>**: Connected to M6 and M5.
- FBE_A<396..407>**: Connected to M6 and M5.
- FBE_A<408..419>**: Connected to M6 and M5.
- FBE_A<420..431>**: Connected to M6 and M5.
- FBE_A<432..443>**: Connected to M6 and M5.
- FBE_A<444..455>**: Connected to M6 and M5.
- FBE_A<456..467>**: Connected to M6 and M5.
- FBE_A<468..479>**: Connected to M6 and M5.
- FBE_A<480..491>**: Connected to M6 and M5.
- FBE_A<492..503>**: Connected to M6 and M5.
- FBE_A<504..515>**: Connected to M6 and M5.
- FBE_A<516..527>**: Connected to M6 and M5.
- FBE_A<528..539>**: Connected to M6 and M5.
- FBE_A<540..551>**: Connected to M6 and M5.
- FBE_A<552..563>**: Connected to M6 and M5.
- FBE_A<564..575>**: Connected to M6 and M5.
- FBE_A<576..587>**: Connected to M6 and M5.
- FBE_A<588..599>**: Connected to M6 and M5.
- FBE_A<600..611>**: Connected to M6 and M5.
- FBE_A<612..623>**: Connected to M6 and M5.
- FBE_A<624..635>**: Connected to M6 and M5.
- FBE_A<636..647>**: Connected to M6 and M5.
- FBE_A<648..659>**: Connected to M6 and M5.
- FBE_A<660..671>**: Connected to M6 and M5.
- FBE_A<672..683>**: Connected to M6 and M5.
- FBE_A<684..695>**: Connected to M6 and M5.
- FBE_A<696..707>**: Connected to M6 and M5.
- FBE_A<708..719>**: Connected to M6 and M5.
- FBE_A<720..731>**: Connected to M6 and M5.
- FBE_A<732..743>**: Connected to M6 and M5.
- FBE_A<744..755>**: Connected to M6 and M5.
- FBE_A<756..767>**: Connected to M6 and M5.
- FBE_A<768..779>**: Connected to M6 and M5.
- FBE_A<780..791>**: Connected to M6 and M5.
- FBE_A<792..803>**: Connected to M6 and M5.
- FBE_A<804..815>**: Connected to M6 and M5.
- FBE_A<816..827>**: Connected to M6 and M5.
- FBE_A<828..839>**: Connected to M6 and M5.
- FBE_A<840..851>**: Connected to M6 and M5.
- FBE_A<852..863>**: Connected to M6 and M5.
- FBE_A<864..875>**: Connected to M6 and M5.
- FBE_A<876..887>**: Connected to M6 and M5.
- FBE_A<888..899>**: Connected to M6 and M5.
- FBE_A<900..911>**: Connected to M6 and M5.
- FBE_A<912..923>**: Connected to M6 and M5.
- FBE_A<924..935>**: Connected to M6 and M5.
- FBE_A<936..947>**: Connected to M6 and M5.
- FBE_A<948..959>**: Connected to M6 and M5.
- FBE_A<960..971>**: Connected to M6 and M5.
- FBE_A<972..983>**: Connected to M6 and M5.
- FBE_A<984..995>**: Connected to M6 and M5.
- FBE_A<996..1007>**: Connected to M6 and M5.
- FBE_A<1008..1019>**: Connected to M6 and M5.
- FBE_A<10**

Framebuffer F: Memory Section

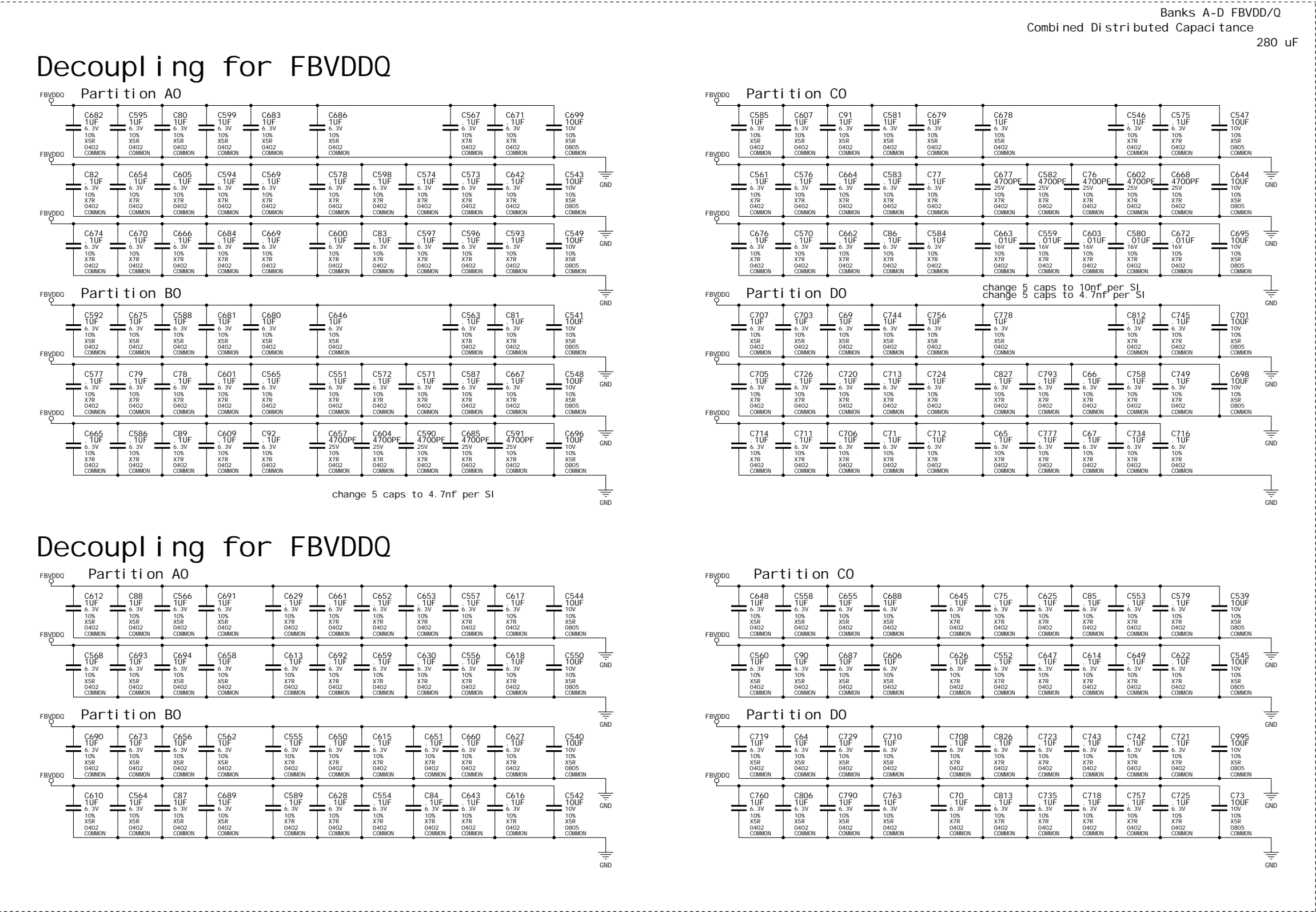


Framebuffer G: Memory Section



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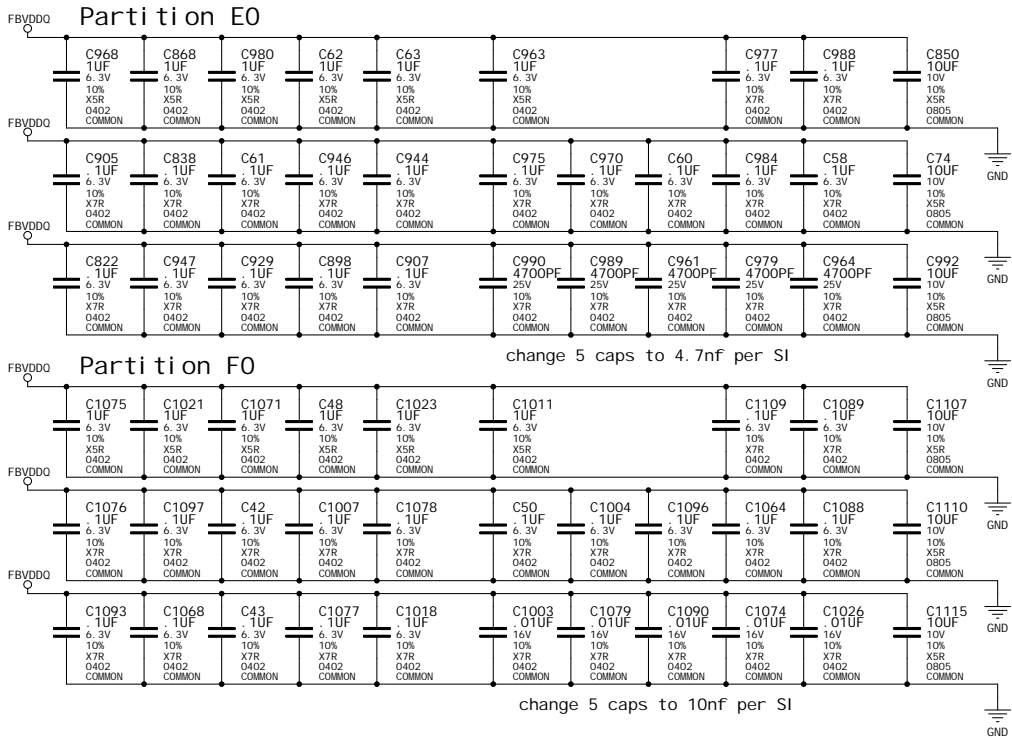
Decoupling: Memory Section A-D



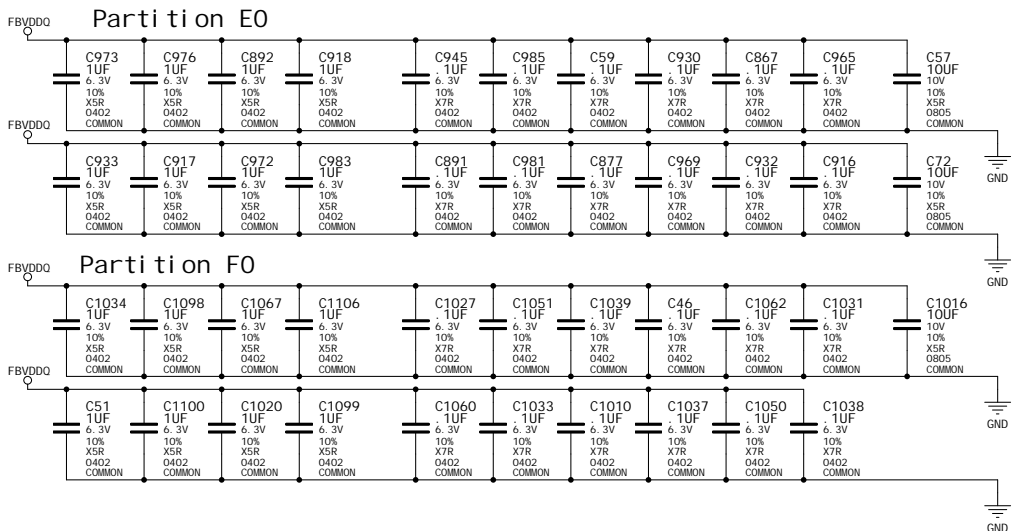
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Decoupling: Memory Section E-G

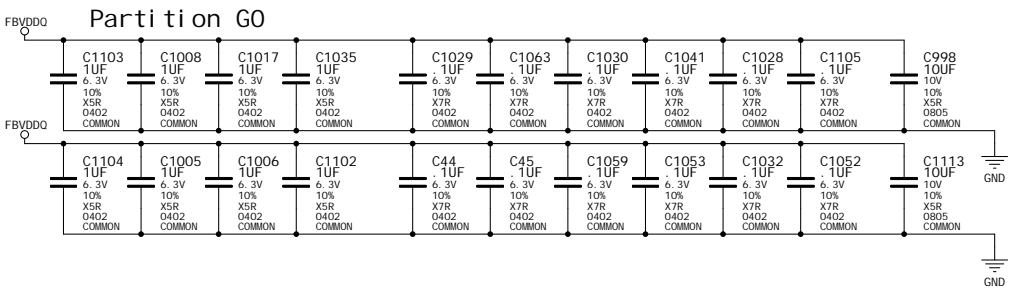
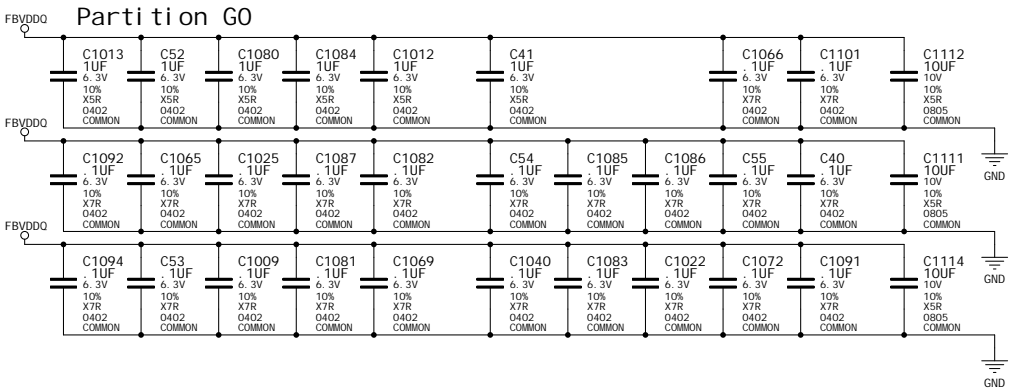
Decoupling for FBVDDQ



Decoupling for FBVDDQ



Banks E-G FBVDD/Q
Combined Distributed Capacitance
210 uF



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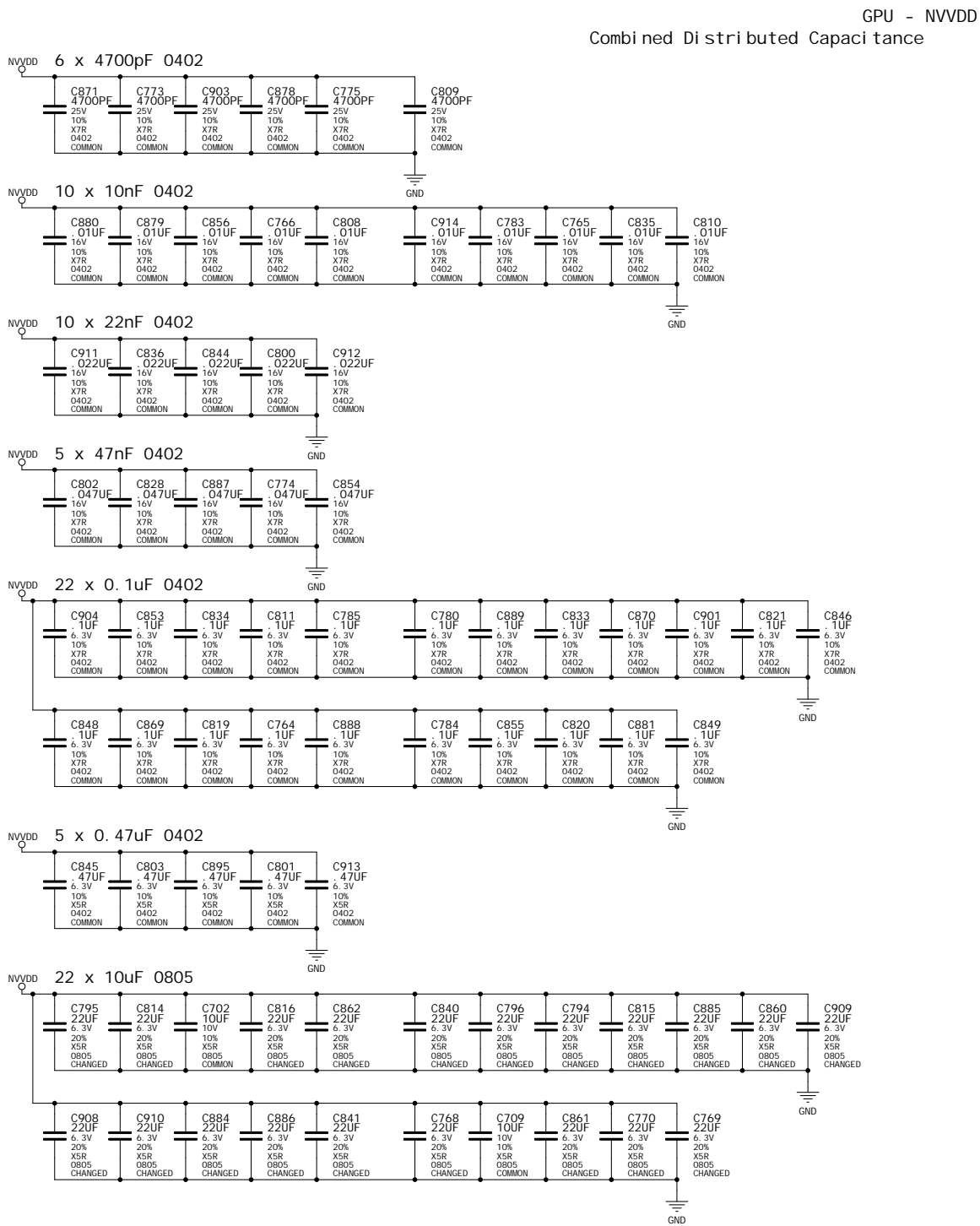
ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I
PAGE DETAIL	Decoupling: Memory Section E-G

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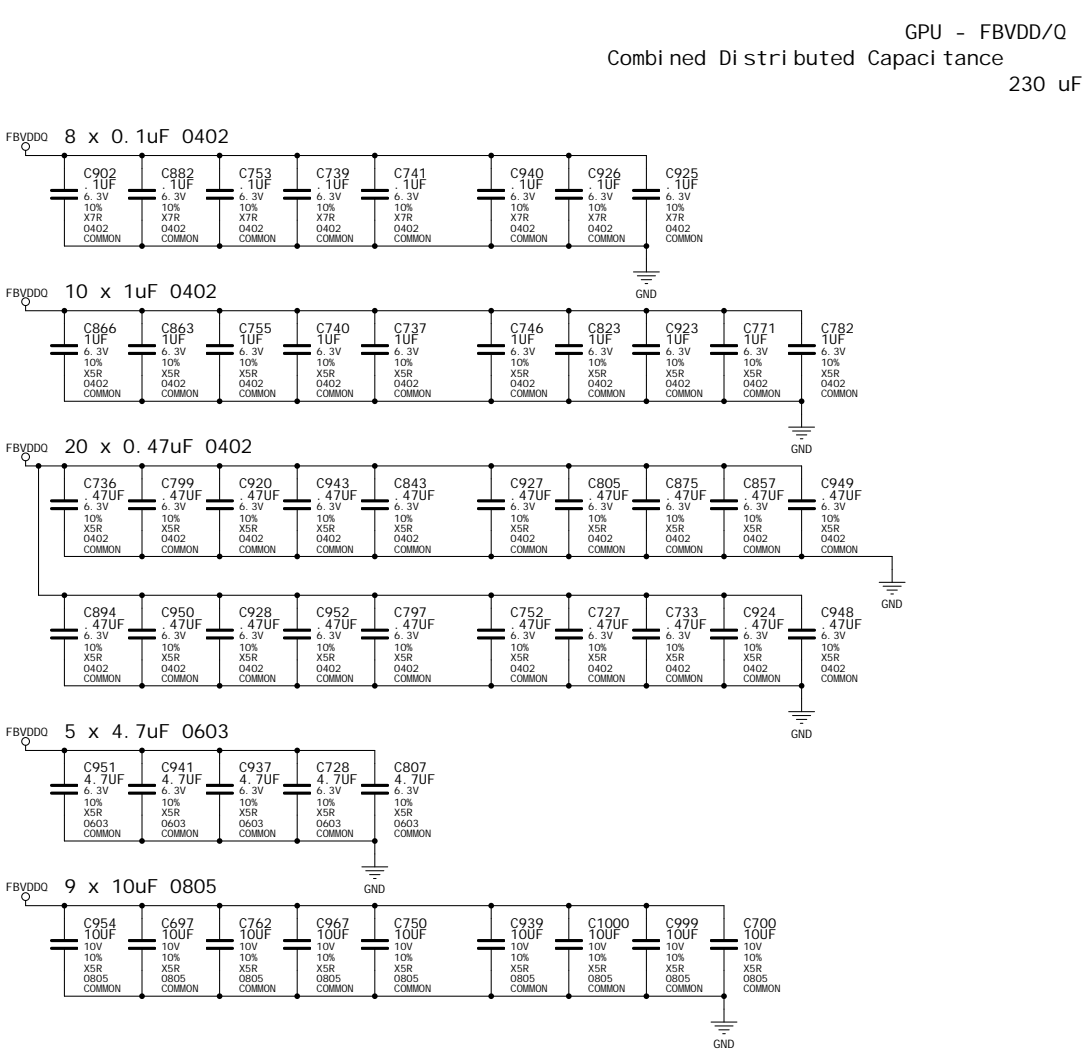
NV_PN	600-10897-0053-300 A		
ID	p897	PAGE	16 OF 41
NAME	mi sun	DATE	31-DEC-2008

Decoupling: GPU (NVVDD, FBVDDQ)

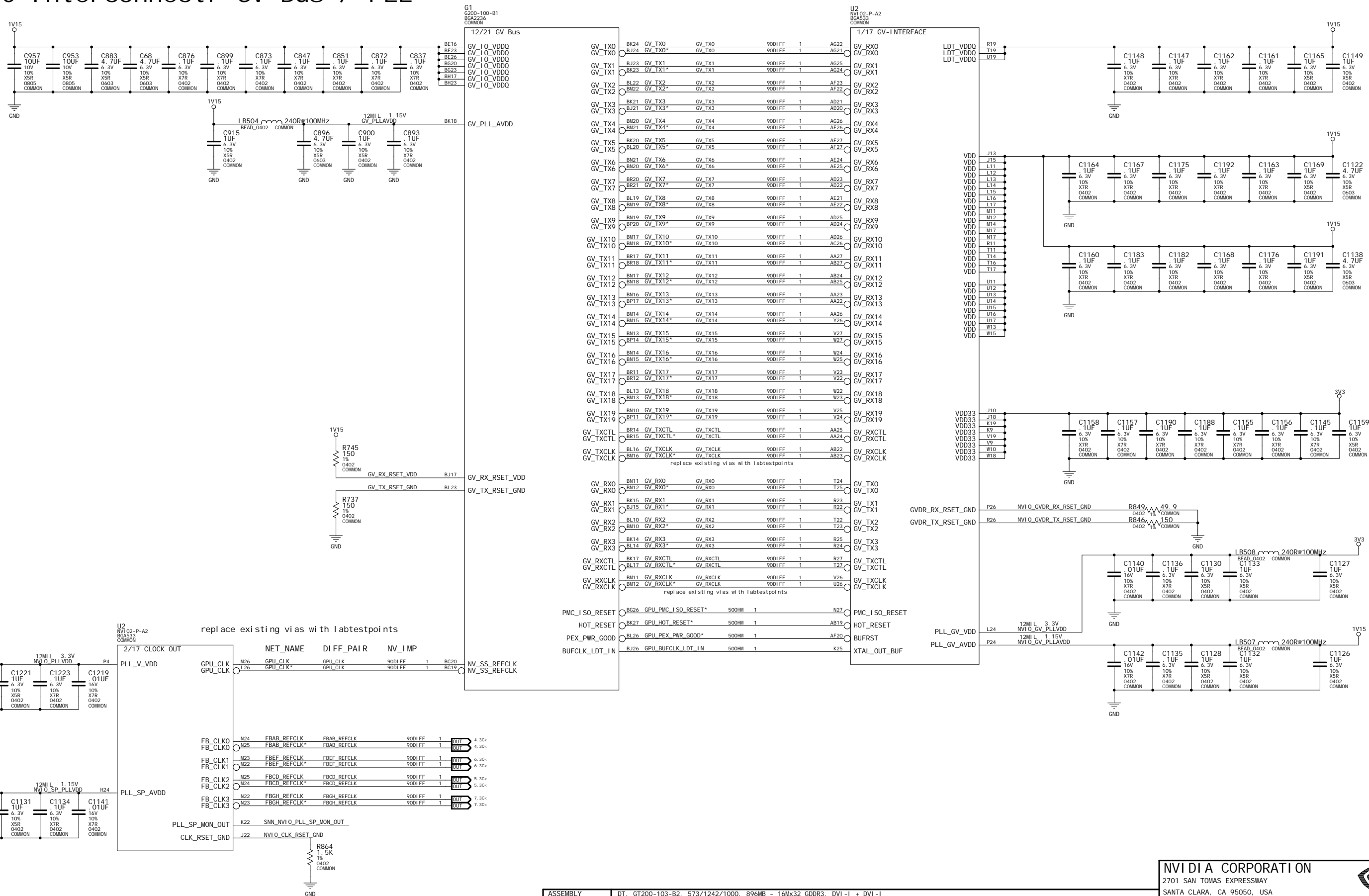
Decoupling for NVVDD (under GPU)



Decoupling for FBVDDQ (under GPU)



GPU-NVI 0 Interconnect: GV Bus / PLL

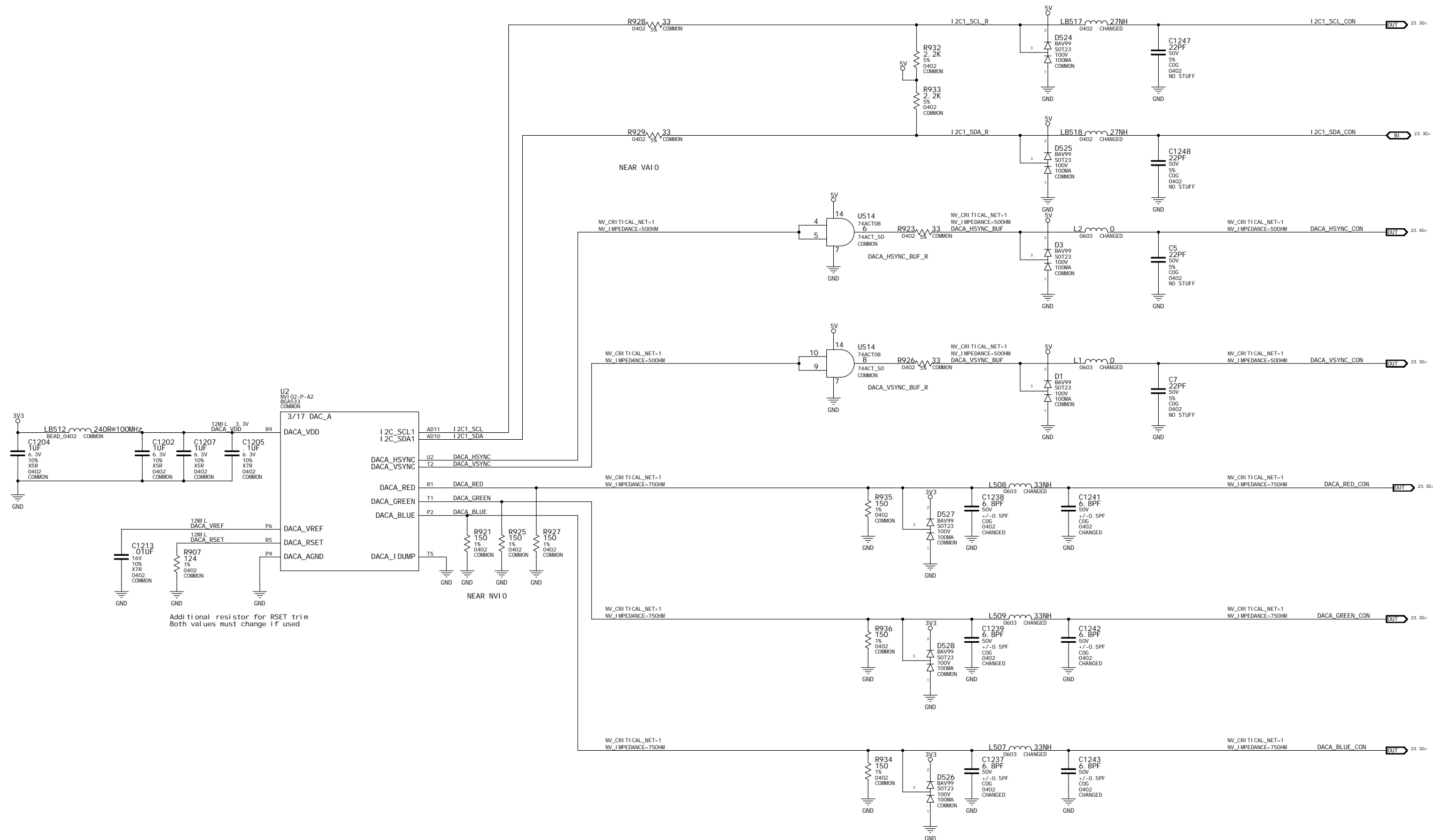


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ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I
PAGE DETAIL	GPU-NVIO Interconnect: GV Bus / PLL

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Di spl ay: DACA (Mi ddl e DVI -I)

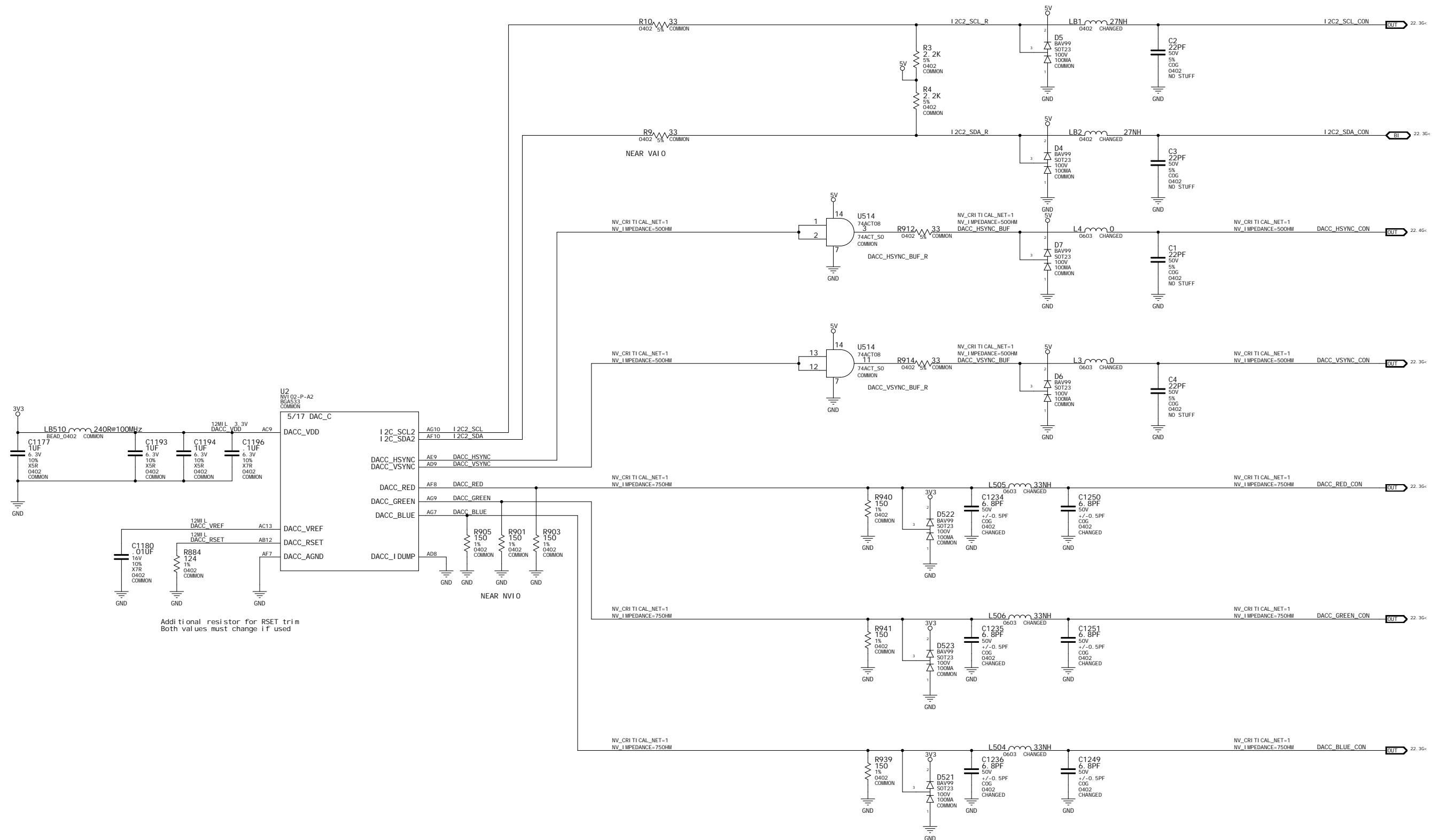


ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI -I + DVI -I
PAGE DETAIL	Display: DACA (Mi ddle DVI -I)

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Display: DACC (South DVI -I)

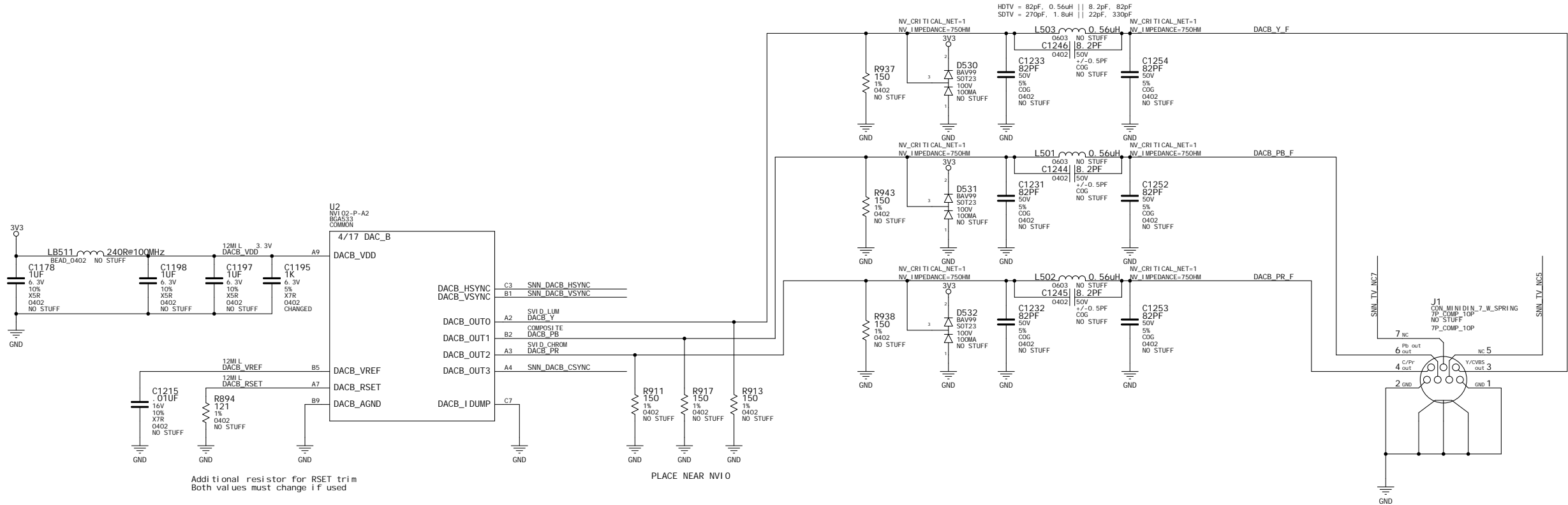


ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI -I + DVI -I
PAGE DETAIL	Display: DACC (South DVI -I)

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Di spl ay: DACB (North Mi ni DI N) SD/HDTV out



1



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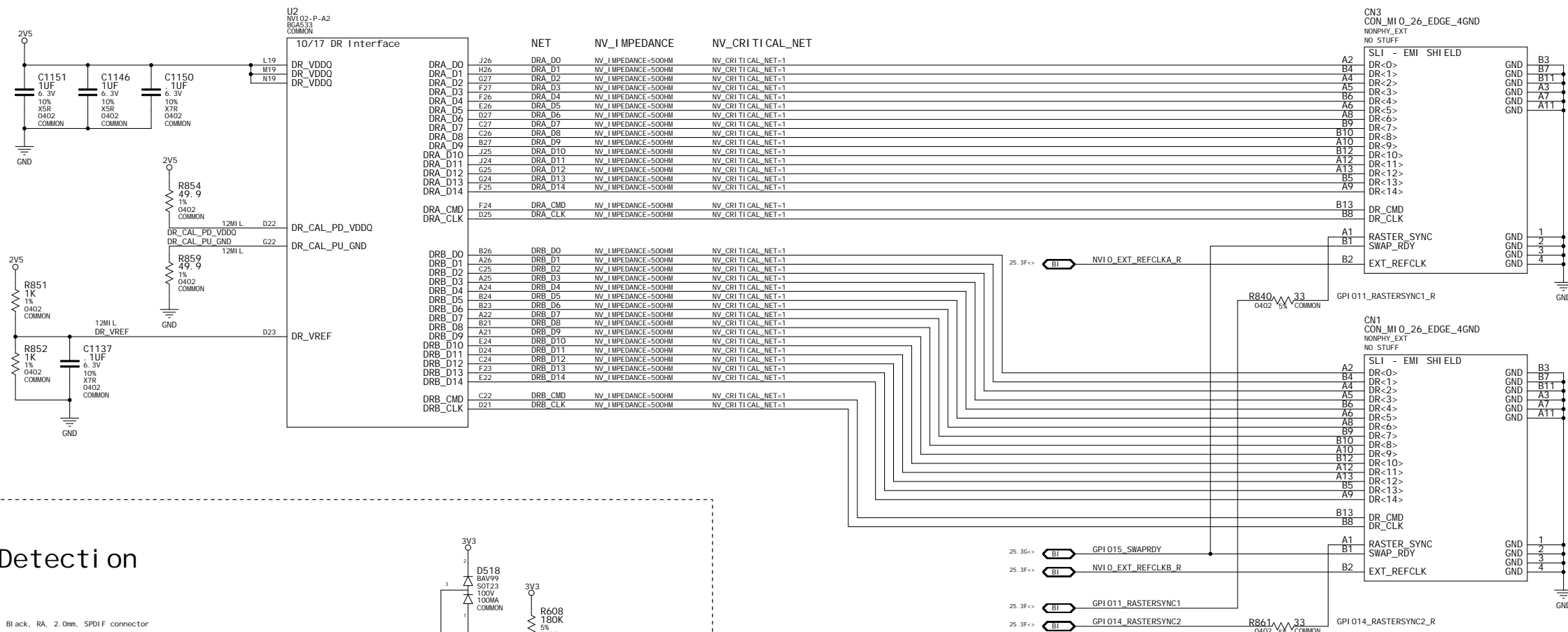
1



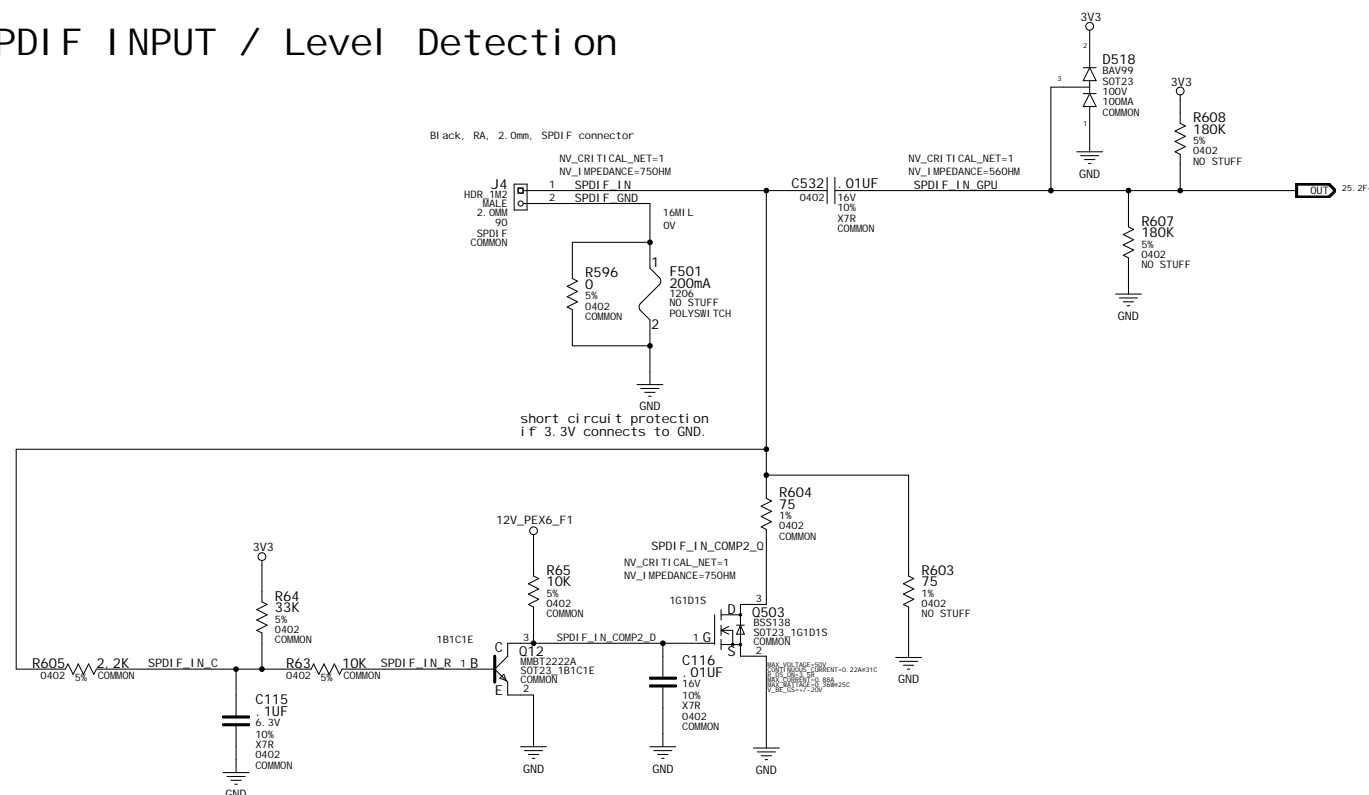
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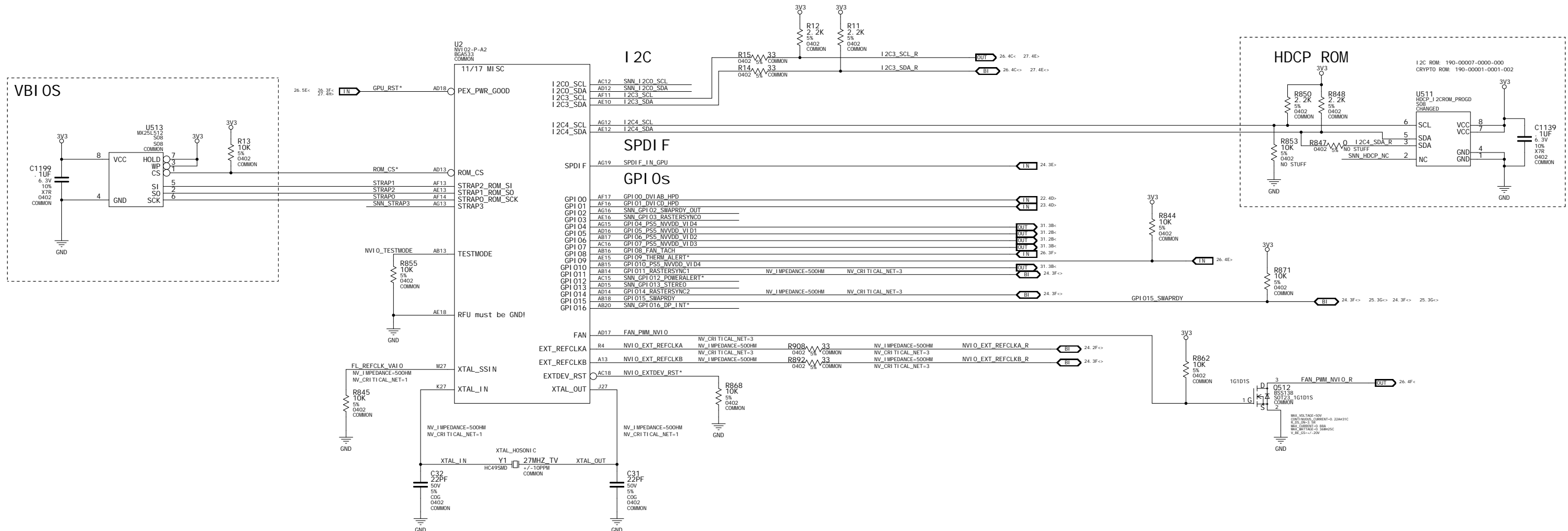
Connectors: DR Interface (Dual SLI) / SPDIF



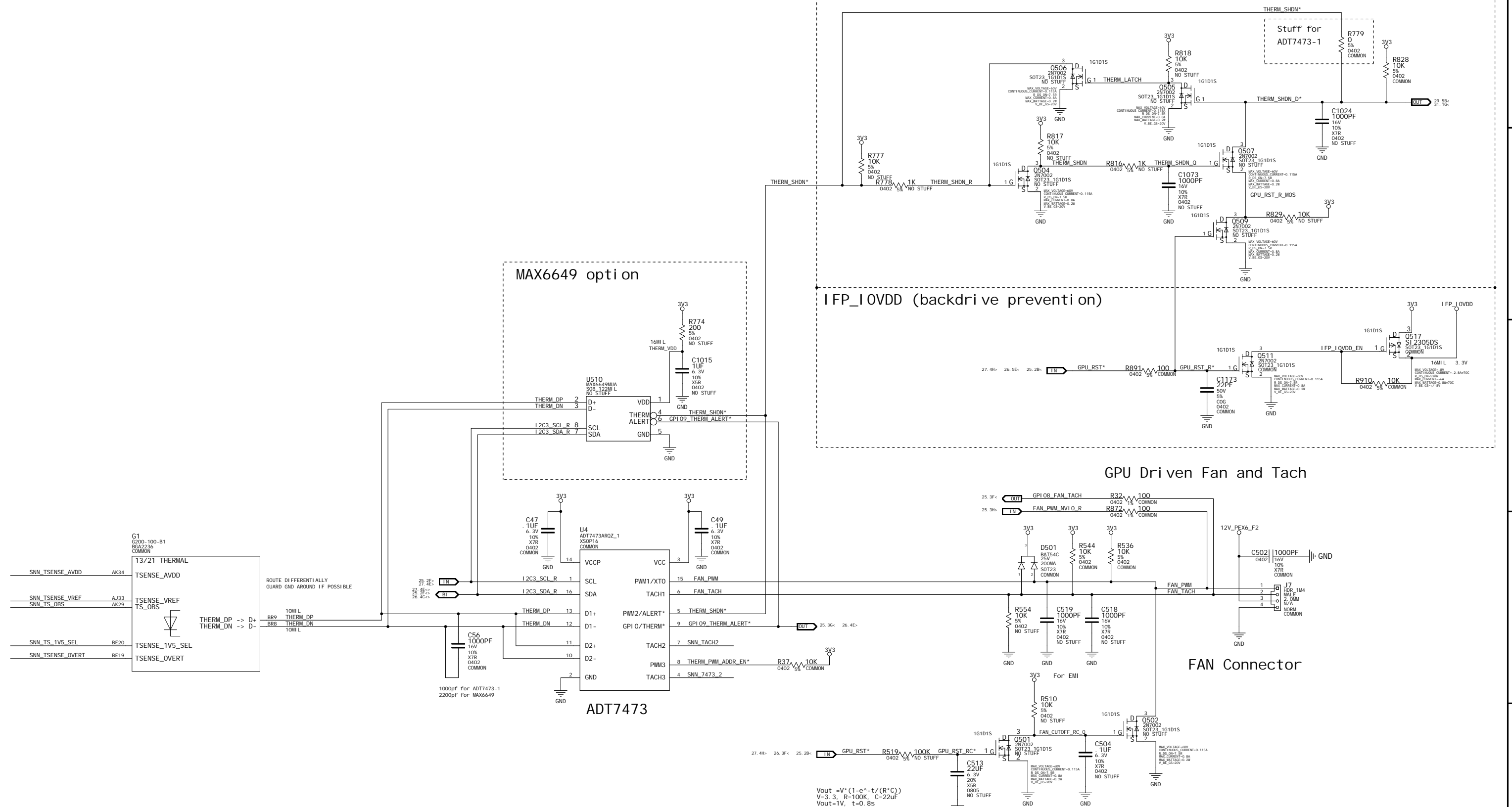
SPDI F INPUT / Level Detecti on



MI SC: GPI O / XTAL / VBI OS / HDCP / I 2C



MI SC: FAN / THERM / I FP_I OVDD



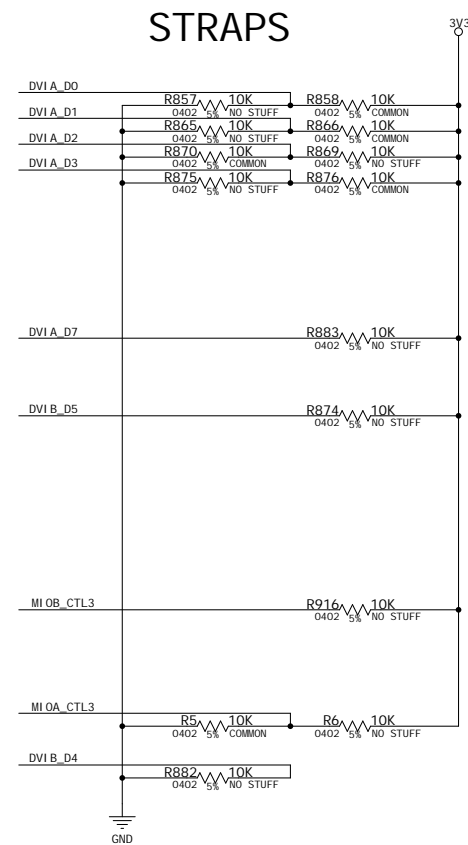
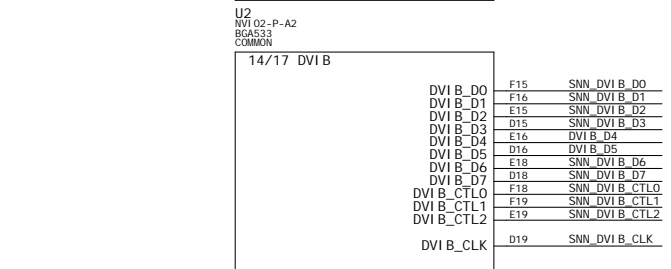
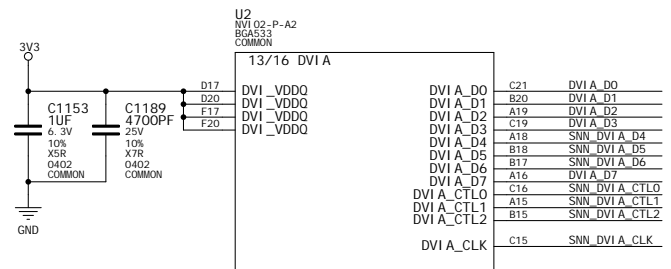
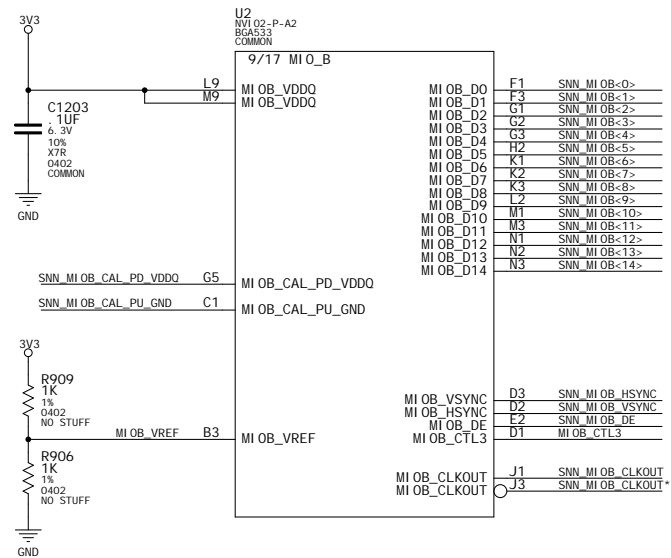
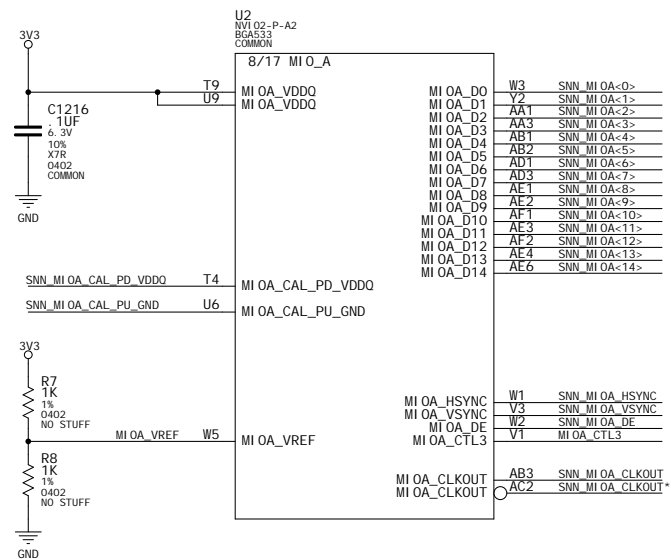
At power on (not warm boot) stops fan for ~0.8sec

ASSEMBLY	
PAGE DETAIL	MISC: FAN / THERM / IFP_IOVDD

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MI SC: MI 0 / DVI / STRAPS / Hybrid



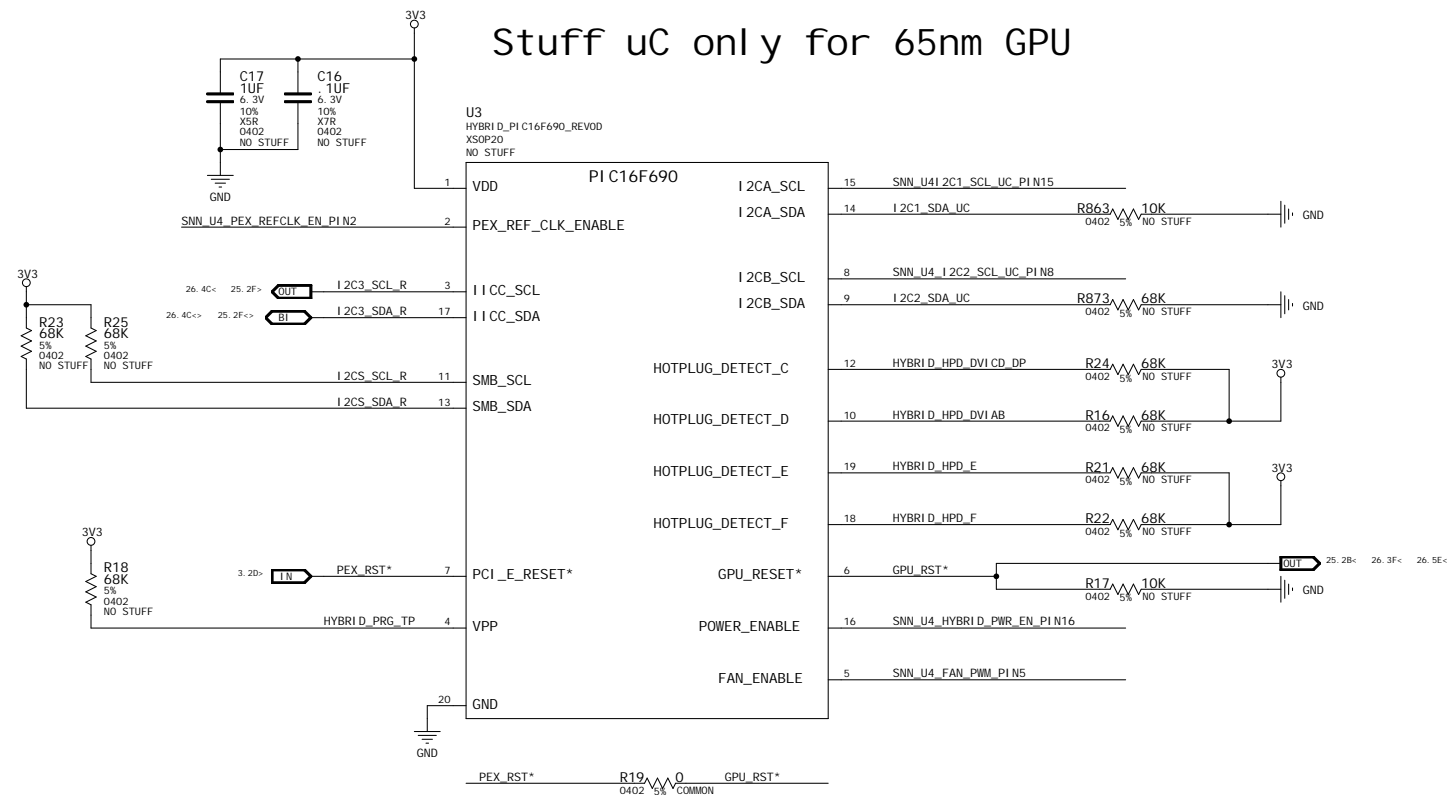
STRAP BITS B00T0 = 0x101000

NR.	USAGE	COMMENT
00 :	GV_WI DTH	DEFAULT=0x0 (WI DE)
01 :	SUB_VENDOR	DEFAULT=0x1 (FROM BIOS)
02 :	RAM_CFG[0]	
03 :	RAM_CFG[1]	
04 :	RAM_CFG[2]	
05 :	RAM_CFG[3]	
06 :	CRYSTAL	DEFAULT=0x0 (27MHz)
07 :	TV_MODE[0]	DEFAULT=0x1 (NTSC_J)
08 :	TV_MODE[1]	
09 :	TV_MODE[2]	
10 :	PCI_DEVID[0]	SET BY BIOS
11 :	PCI_DEVID[1]	
12 :	PCI_DEVID[2]	
13 :	PCI_DEVID[3]	DEFAULT=0x0
14 :	FB_SIZ E[0]	DEFAULT=0x2 (256MB ??)
15 :	FB_SIZ E[1]	
16 :	FB_SIZ E[2]	
17 :	PEX_PLL_EN_TERM100	DEFAULT=0x0 (ENABLED)
18 :	3GI 0_PAD_CFG_LUT_ADR[0]	DEFAULT=0x3 (DESKTOP_DEFAULT)
19 :	3GI 0_PAD_CFG_LUT_ADR[1]	
20 :	3GI 0_PAD_CFG_LUT_ADR[2]	
21 :	3GI 0_PAD_CFG_LUT_ADR[3]	
22 :	ROMTYPE[0]	DEFAULT=0x1 (AT25S)
23 :	ROMTYPE[1]	
24 :	USER[0]	SET BY BIOS
25 :	USER[1]	
26 :	USER[2]	
27 :	USER[3]	
28 :	PCI_DEVID_EXT	DEFAULT=0x0

CFG	Config	Width	Vendor
0000	Reserved		
0001	16Mx32	512-bit	Ql monda
0010	16Mx32	512-bit	Hynl x*
0011	16Mx32	512-bit	Samsunq*
0100	Reserved		
0101	32Mx32	512-bit	Ql monda
0110	32Mx32	512-bit	Hynl x
0111	32Mx32	512-bit	Samsunq
1000	Reserved		
1001	16Mx32	448-bit	Ql monda
1010	16Mx32	448-bit	Hynl x
1011	16Mx32	448-bit	Samsunq
1100	Reserved		
1101	32Mx32	448-bit	Ql monda
1110	32Mx32	448-bit	Hynl x
1111	32Mx32	448-bit	Samsunq

STRAP BITS B00T3 = 0x10100C

NR : _USAGE_	COMMENT
06 : XCLK_555	DEFAULT=0x0
16 : PCI_I_OBAR	DEFAULT=0x1 0=DI SABLE, 1=ENABLE



Stuff only to bypass the micro-controller

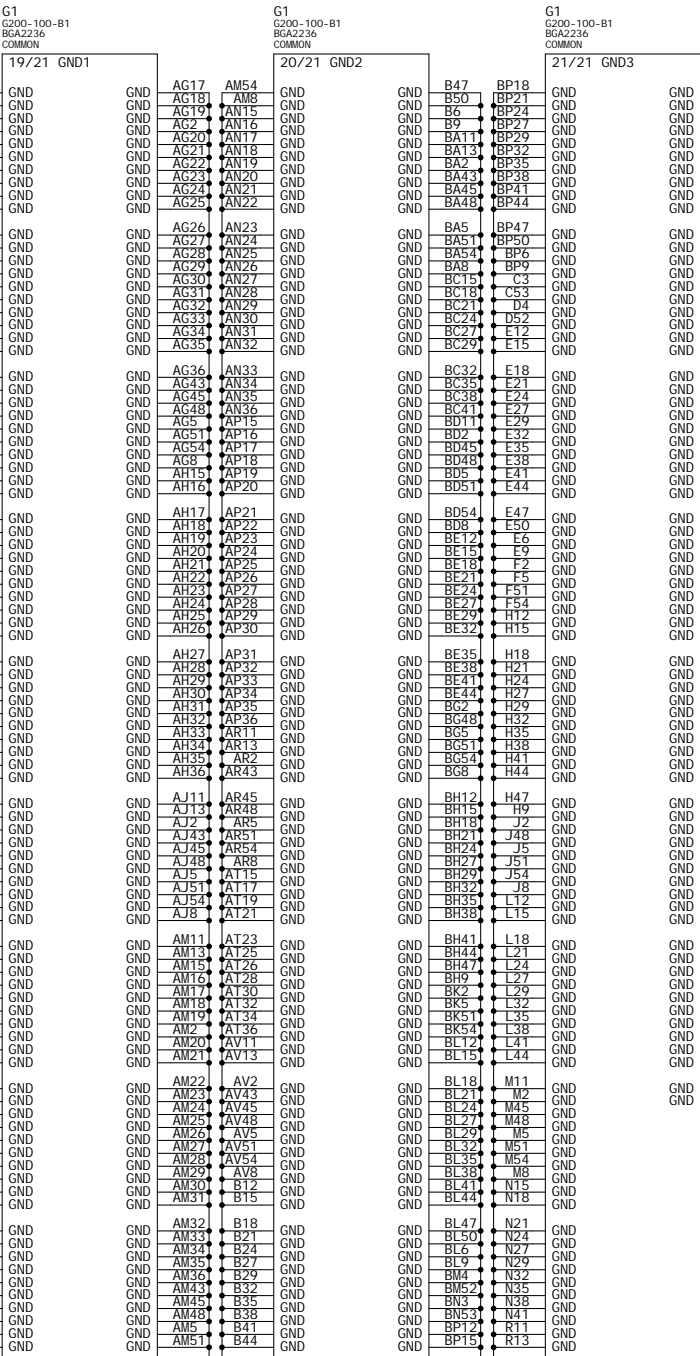
ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI -I + DVI -I
PAGE DETAIL	MI SC: MIO / DVI / STRAPS / Hybrid

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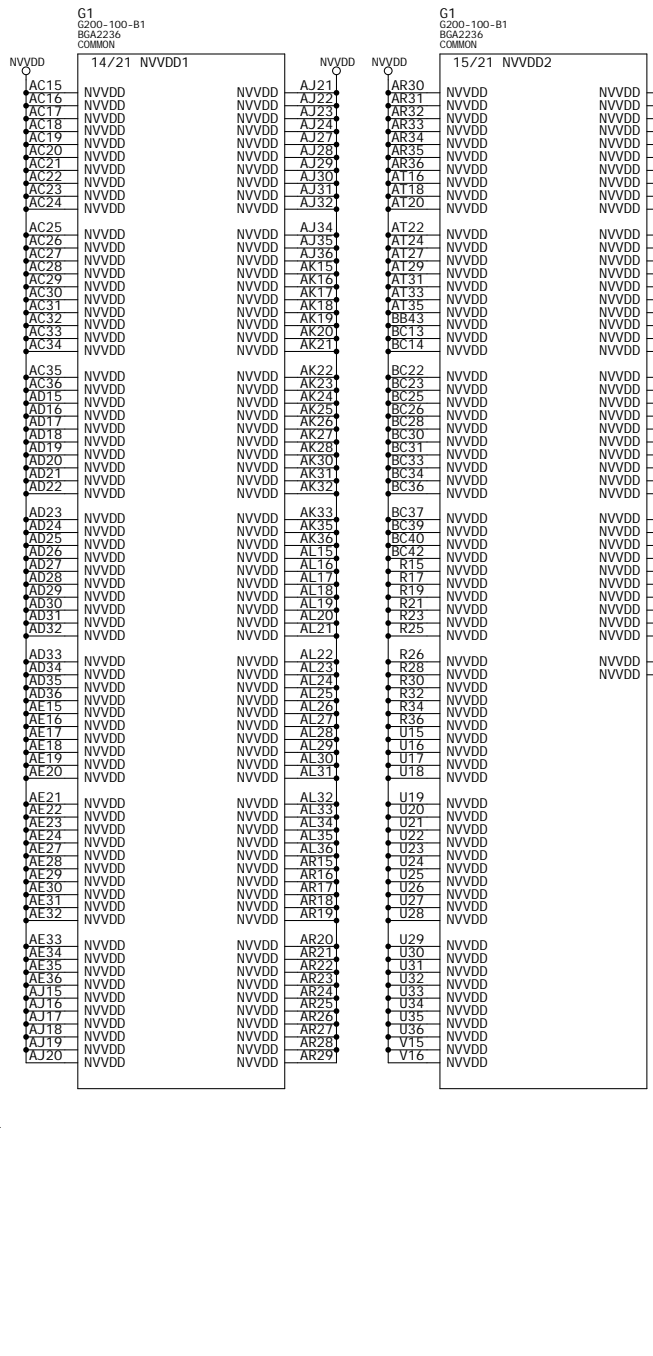
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NV_PN	600-10897-0053-300 A		
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NAME	mi sun	DATE	31-DEC-2008

Power and GND (GPU and NVIOx)

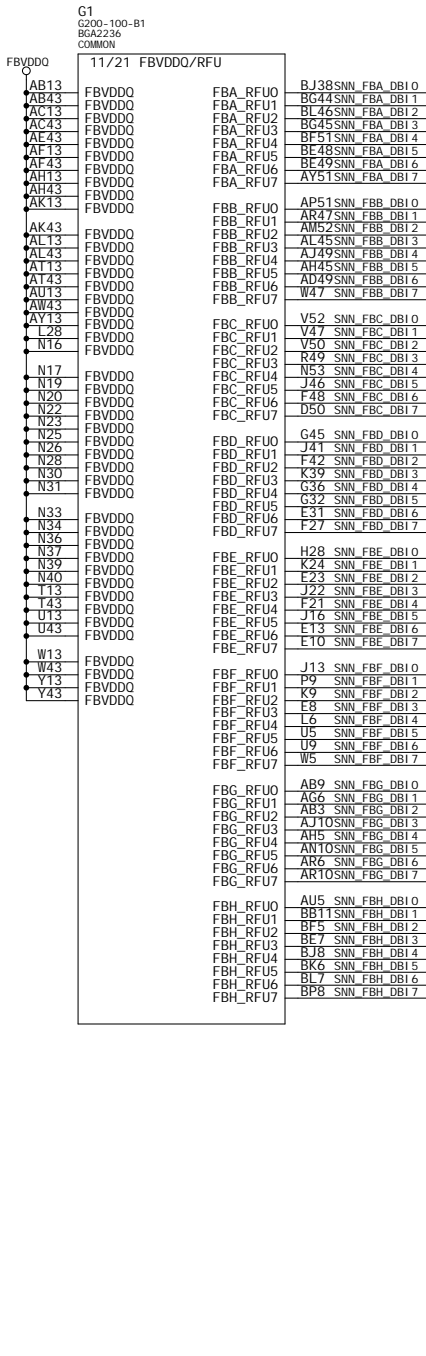
GPU SECTION GND



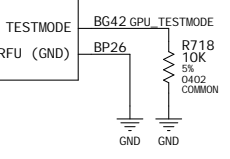
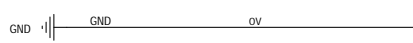
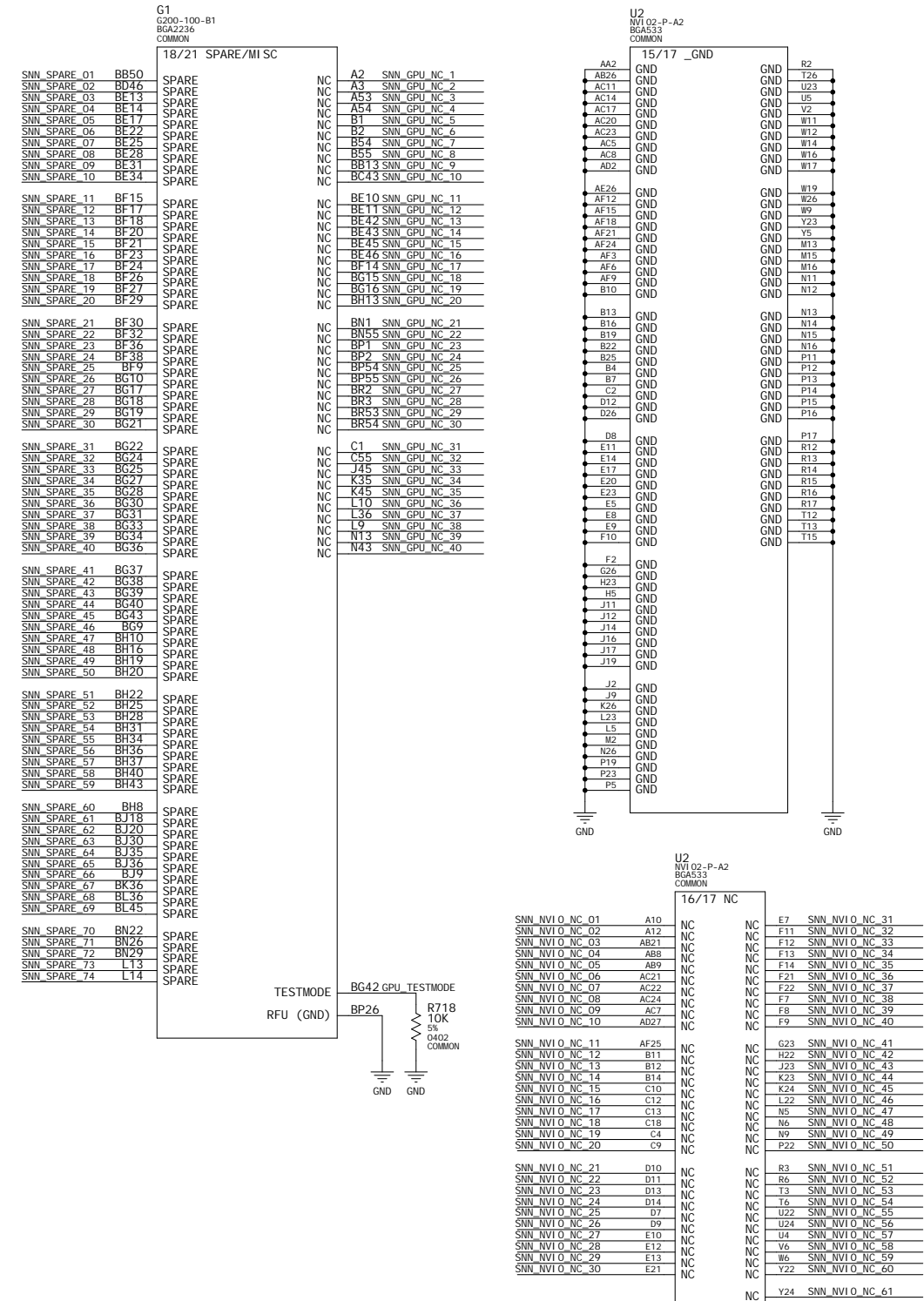
GPU SECTION POWER



GPU SECTION MI SC

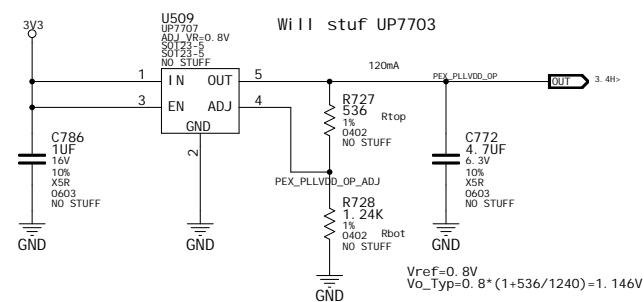


NVIOx SECTION GND

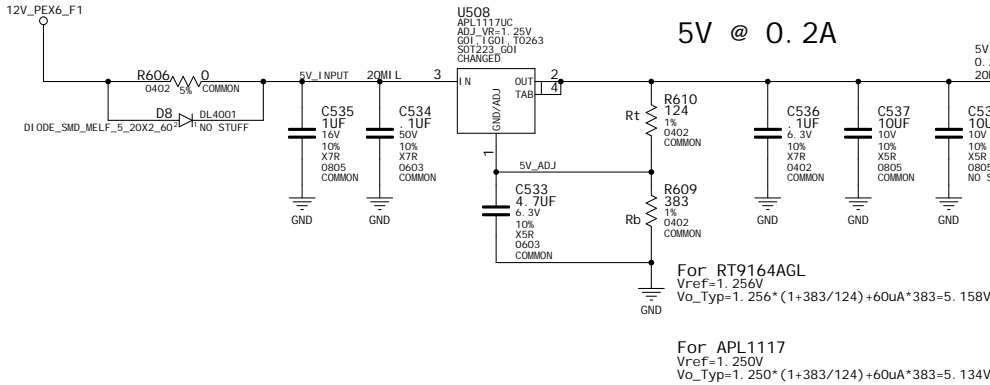


Power Supply: 2V5 / PEX_PLLVDD / 1V15 (PEX_VDD, GV_VDD)

PEX PLLVDD optional Supply

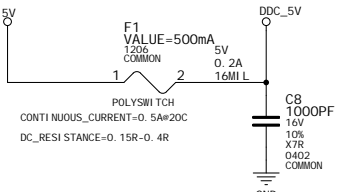


5V Linear

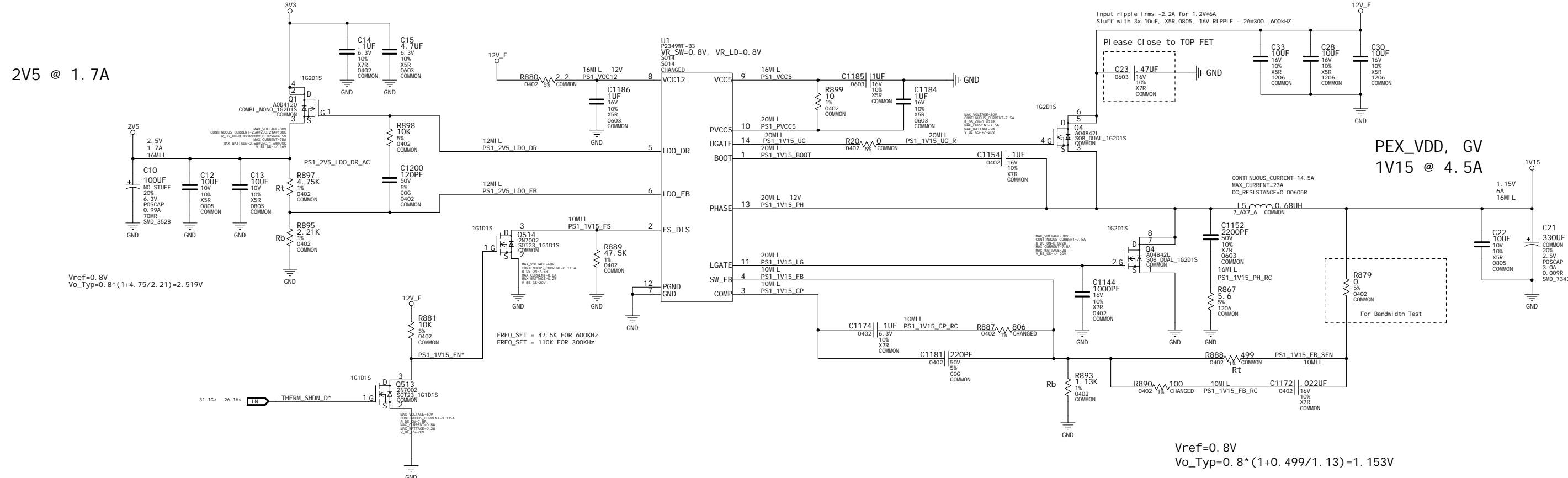


DDC_5V

5V @ 200mA



1V15 (PEX_VDD AND GV_VDD/Q) and 2V5



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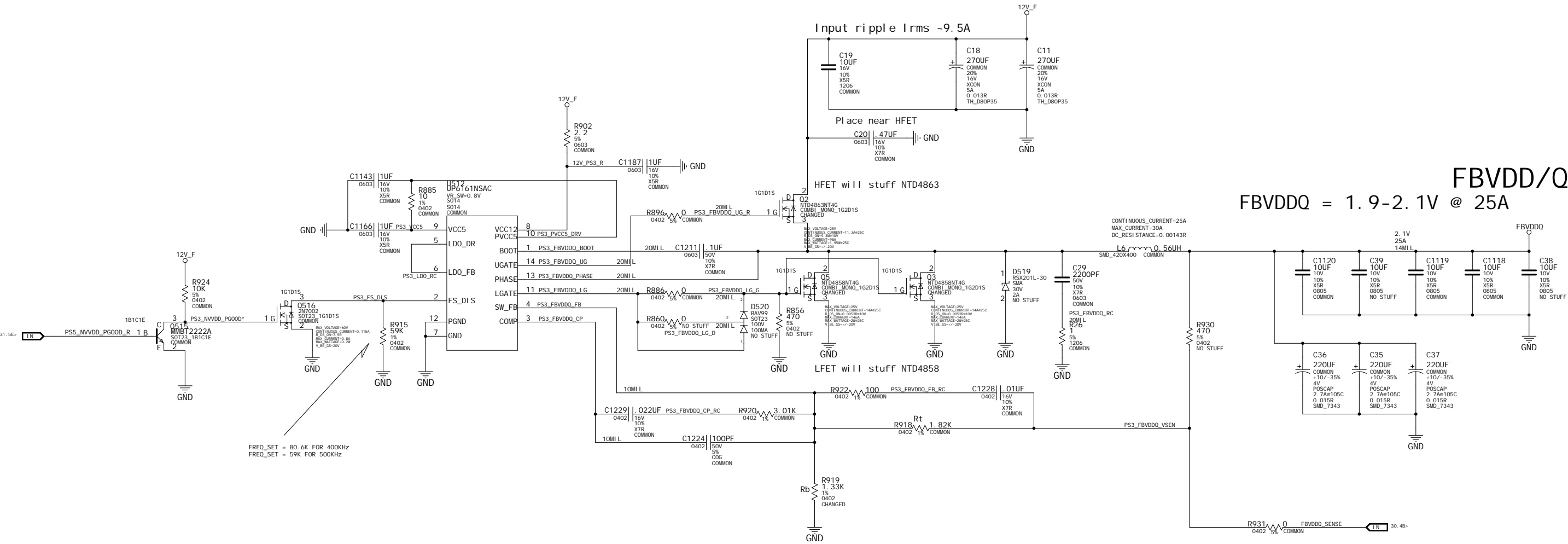


ASSEMBLY
PAGE DETAIL
Power Supply: 2V5 / PEX_PLLVDD / 1V15 (PEX_VDD, GV_VDD)

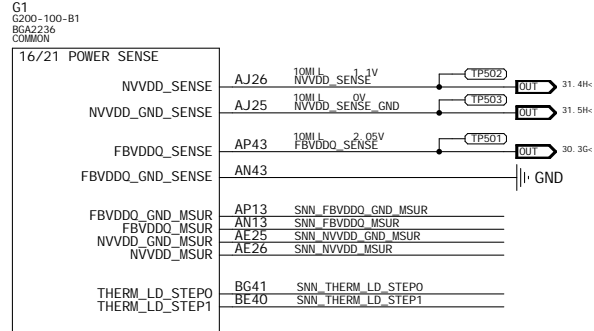
NV_PN	600-10897-0053-300 A		
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Power Supply: Combined FBVDD/Q



NVDD & FBVDDQ SENSE/MSUR



Vref=0.8V
Vo_Typ=0.8*(1+1.82/1.15)=2.066V for Hynix memory
Vo_Typ=0.8*(1+1.82/1.33)=1.895V for Samsung memory

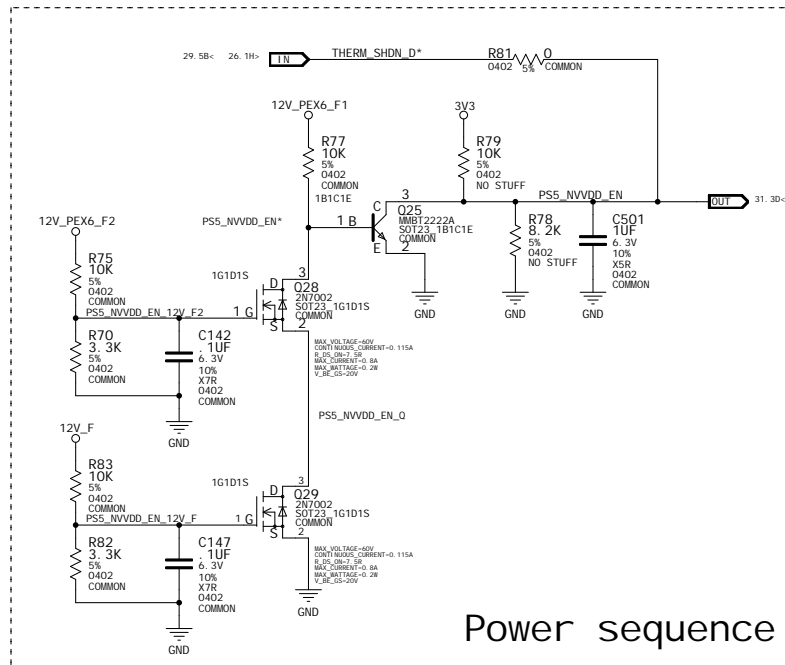
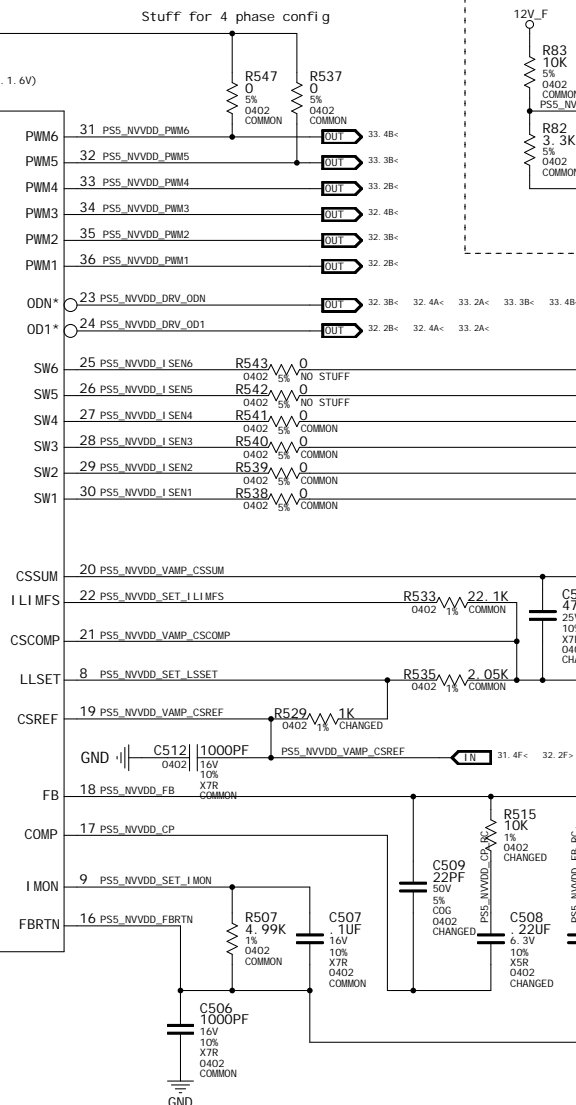
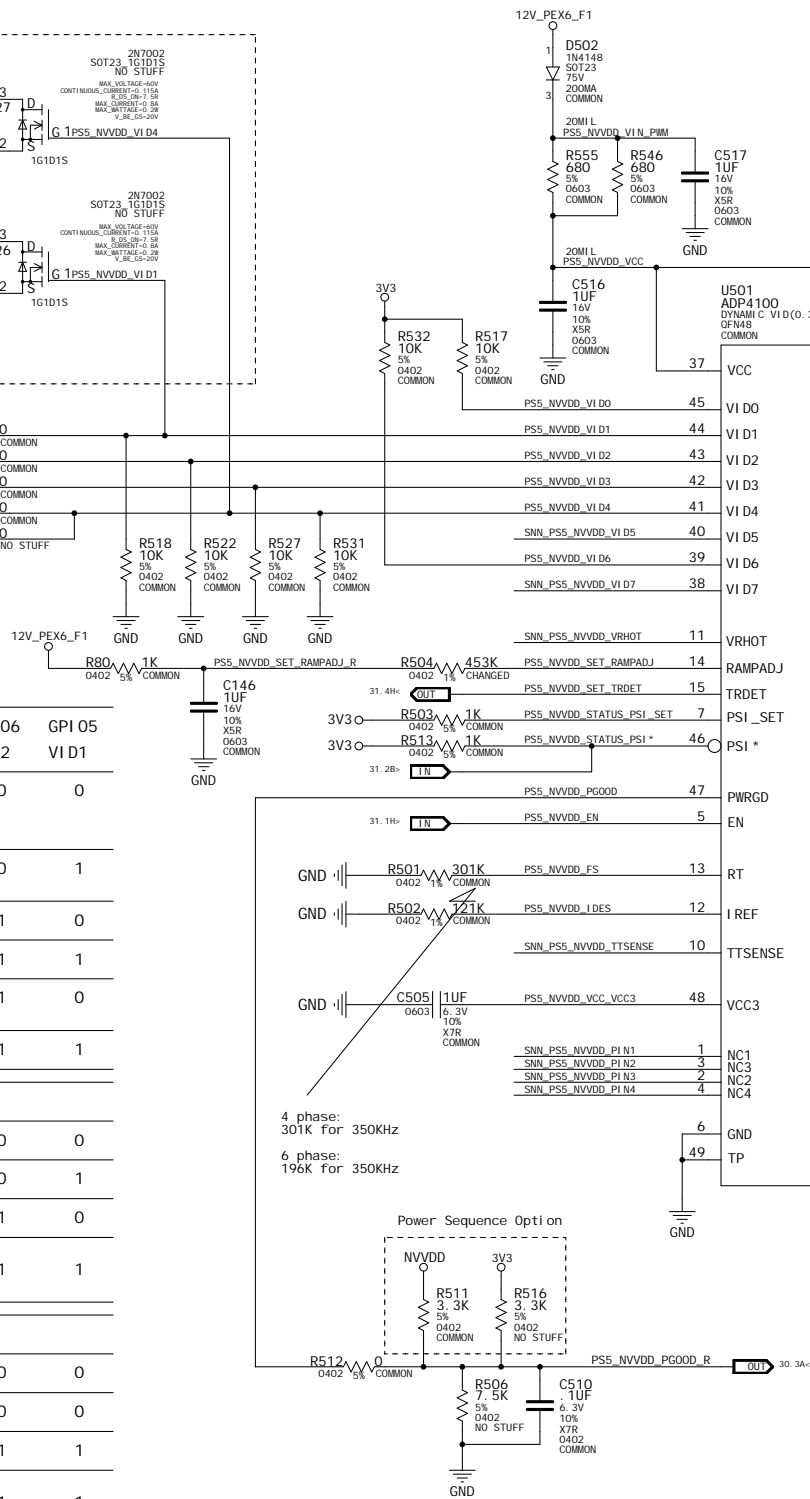
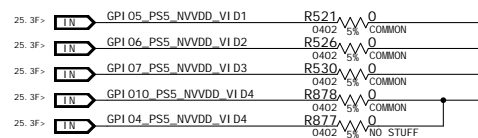
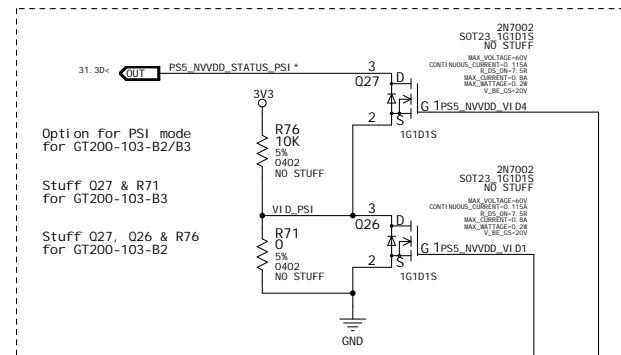
Power Supply: NVVDD Regulator

GPI 010	GPI 07	GPI 06	GPI 05		
VI D4	VI D3	VI D2	VI D1	VI D0	VOLTAGE
0	0	0	0	1	1. 20625
0	0	0	1	0	1. 20000
0	0	0	1	1	1. 19375
0	0	1	0	0	1. 18750
0	0	1	0	1	1. 18125
0	0	1	1	0	1. 17500
0	0	1	1	1	1. 16875
0	1	0	0	0	1. 16250
0	1	0	0	1	1. 15625
0	1	0	1	0	1. 15000
0	1	0	1	1	1. 14375
0	1	1	0	0	1. 13750
0	1	1	0	1	1. 13125
0	1	1	1	0	1. 12500
0	1	1	1	1	1. 11875
1	0	0	0	0	1. 11250
1	0	0	0	1	1. 10625
1	0	0	1	0	1. 10000
1	0	0	1	1	1. 09375
1	0	1	0	0	1. 08750
1	0	1	0	1	1. 08125
1	0	1	1	0	1. 07500
1	0	1	1	1	1. 06875
1	1	0	0	0	1. 06250
1	1	0	0	1	1. 05625
1	1	0	1	0	1. 05000

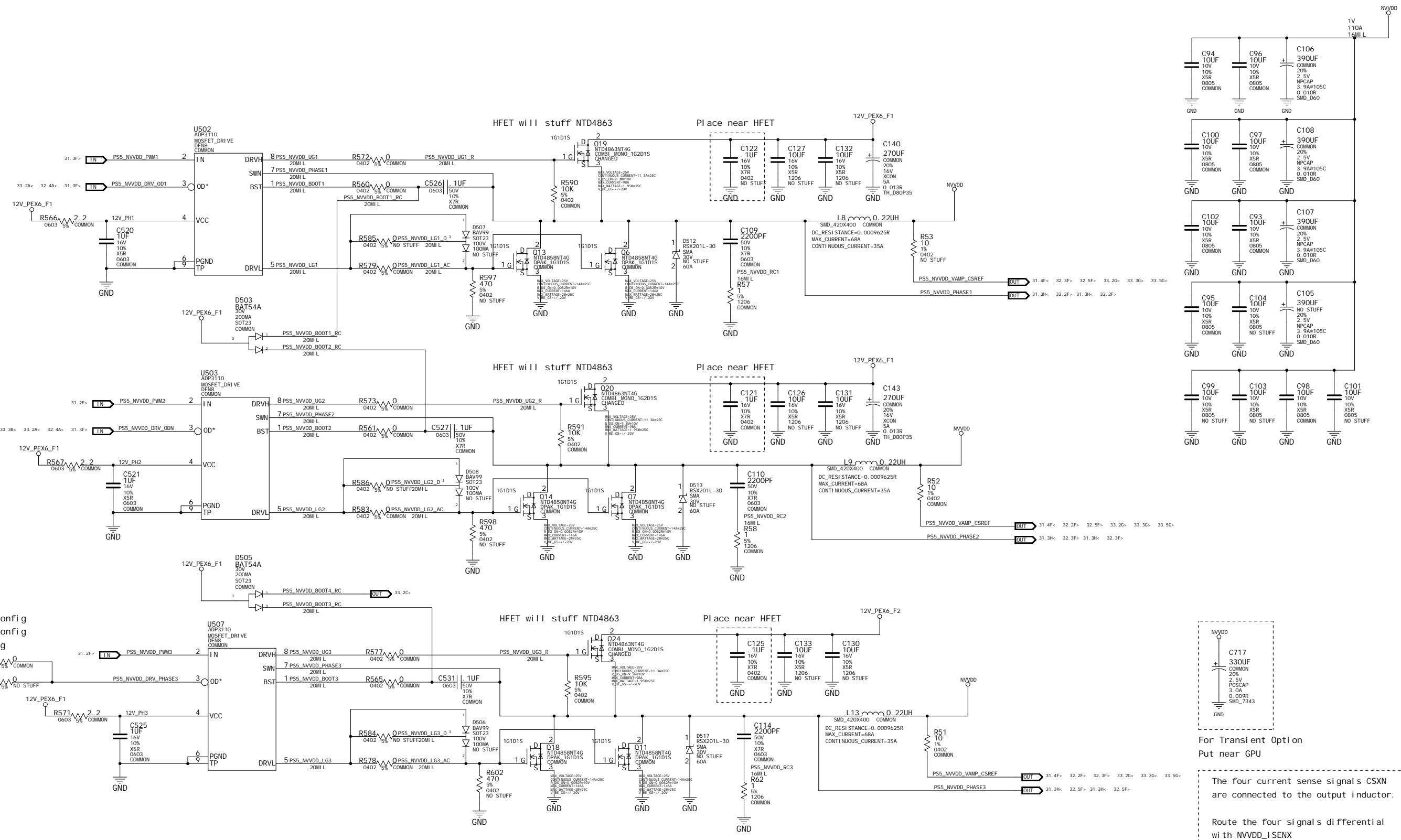
NVVDD Vol tage Sel ect

ADP4100 has VID offset controlled by Rb
Here VID code can set higher to counteract
this offset voltage.

GT200-103-A2		VOLTAGE	VI D SETTING	GPI 010 VI D4	GPI 07 VI D3	GPI 06 VI D2	GPI 05 VI D1
BOOT VOLTAGE		1. 1875V	1. 20625V	0	0	0	0
VBO	2D MODE, DOS;						
	3D MODE, PO MODE; 2D MODE, P8 MODE;	1. 1250V	1. 14375V	0	1	0	1
	2D MODE, P12 MODE;	1. 1125V	1. 13125V	0	1	1	0
VB1	2D MODE, DOS;	1. 1500V	1. 16875V	0	0	1	1
	3D MODE, PO MODE; 2D MODE, P8 MODE;	1. 0625V	1. 08125V	1	0	1	0
	2D MODE, P12 MODE;	1. 0500V	1. 06875V	1	0	1	1
GT200-103-B2							
BOOT VOLTAGE		1. 1875V	1. 20625V	0	0	0	0
VBO	3D MODE, PO MODE;	1. 1250V	1. 14375V	0	1	0	1
VB1	3D MODE, PO MODE;	1. 0625V	1. 08125V	1	0	1	0
VBO/VB1	2D MODE, P8 MODE; 2D MODE, P12 MODE; 2D MODE, DOS;	1. 0500V	1. 06875V	1	0	1	1
GT200-103-B3							
BOOT VOLTAGE		1. 1875V	1. 20625V	0	0	0	0
VBO	3D MODE, PO MODE;	1. 1875V	1. 20625V	0	0	0	0
VB1	3D MODE, PO MODE;	1. 1000V	1. 11875V	0	1	1	1
VBO/VB1	2D MODE, P8 MODE; 2D MODE, P12 MODE; 2D MODE, DOS;	1. 0500V	1. 06875V	1	0	1	1



Power Supply: NVVDD Phase 1, 2, 3 powered from external PEX 6PIN



NVI DI A CORPORATI ON 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN	600-10897-0053-300 A		
1D	p897	PAGE	32 OF 41
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1

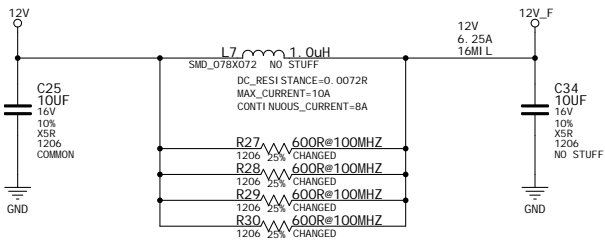


Power: Input Rail Filter

Connector Power State Table

2x3 Connector	2x3 Connector	Power	STATE
Connected	Connected	225W	Full Perf
Connected	Not Connected	150W	Board Off
Not Connected	Connected	150W	Board Off
Not Connected	Not Connected	75W	Board Off

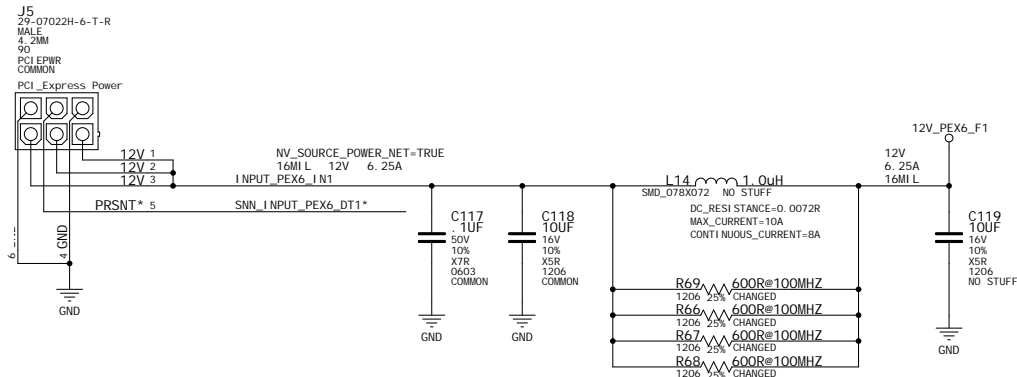
PEX_12V INPUT - 66W



Additional input filtering and Cin moved to respective PS sheets

ALTERNATIVE

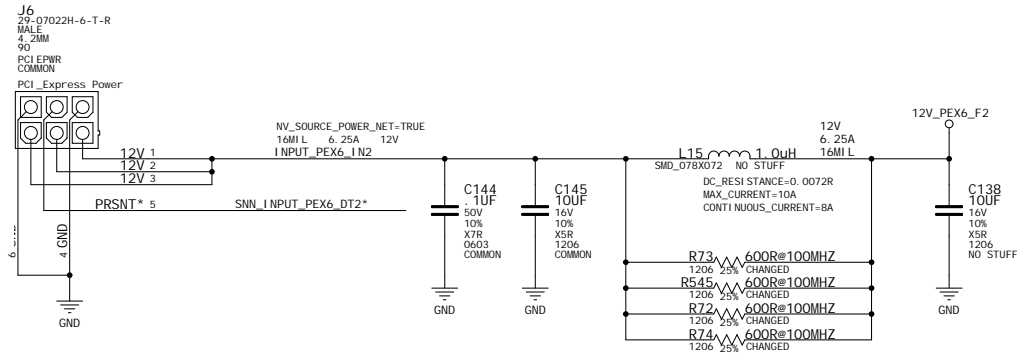
PEX6 INPUT 1 - 2x3 PCIE CON 75W
MUST BE ATTACHED AND POWERED TO START BOARD



Additional input filtering and Cin moved to respective PS sheets

ALTERNATIVE

PEX6 INPUT 2 - 2x3 PCIE CON 75W
MUST BE ATTACHED AND POWERED TO START BOARD



Additional input filtering and Cin moved to respective PS sheets

ALTERNATIVE

NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA



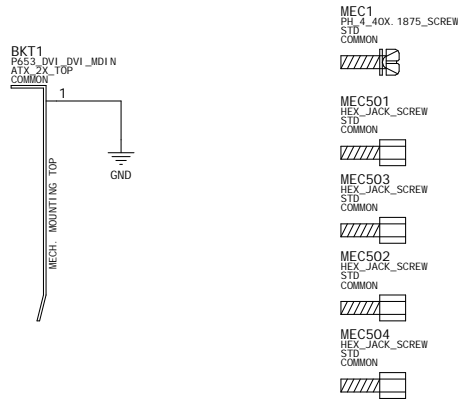
ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I
PAGE DETAIL	Power: Input Rail Filter

NV_PN	600-10897-0053-300 A		
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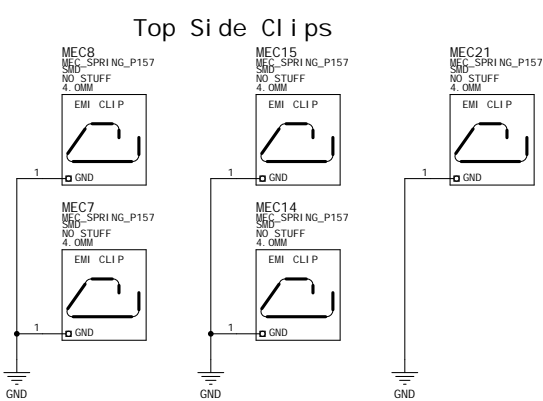
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Thermal /Mechanical /ID

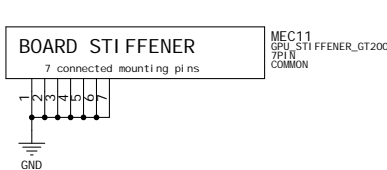
Bracket and Assembly



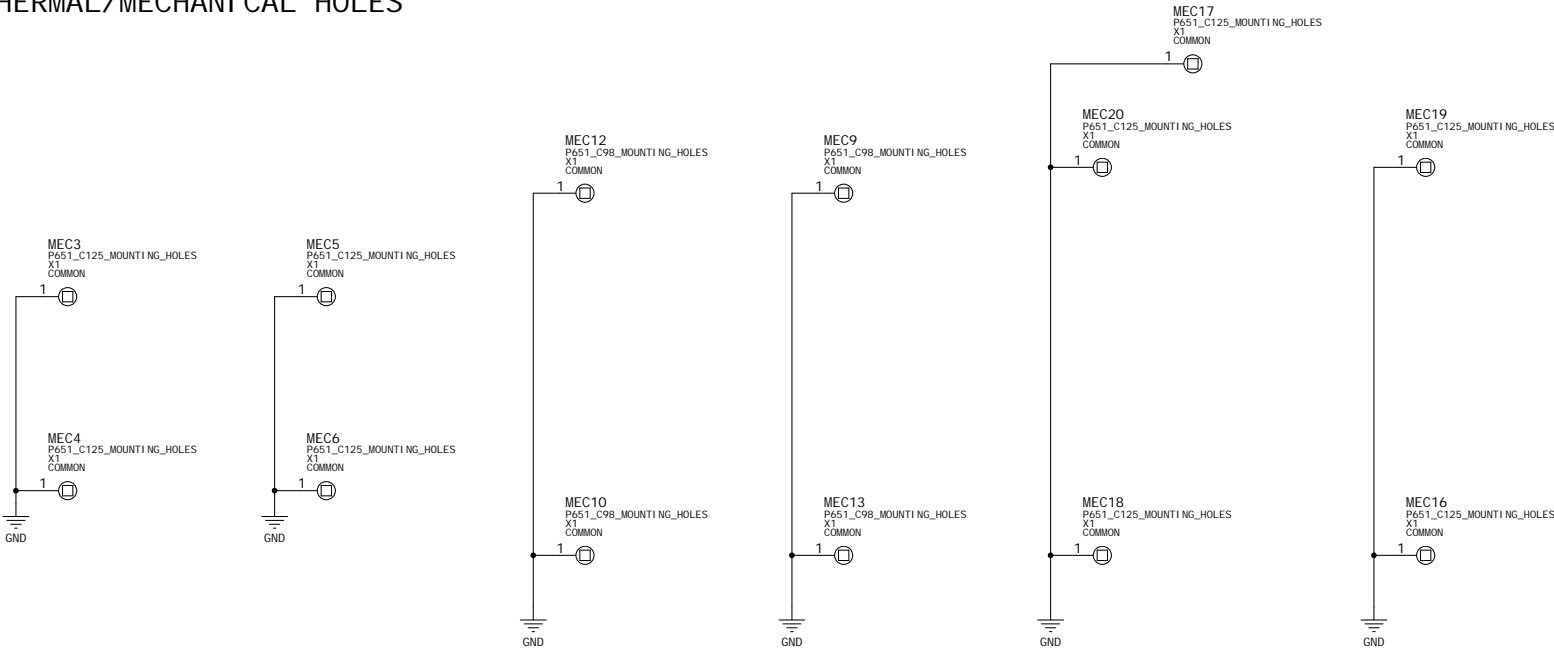
EMI Gnd Clips



GPU Stiffener



THERMAL/MECHANICAL HOLES



Hockey Stick Retention Mechanism



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ASSEMBLY	DT, GT200-103-B2, 573/1242/1000, 896MB - 16Mx32 GDDR3, DVI-I + DVI-I
PAGE DETAIL	Thermal /Mechanical

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A			B			C			D			E			F			G			H		
1		Title: Basenet Report Desig: p897 Date: Dec 2 14:57:45 2008			DR_CAL_PU_GND 24.2C DR_VREF 24.2C DVI_A_DO 27.1E 27.4C DVI_A_D1 27.1E 27.4C DVI_A_D2 27.1E 27.4C DVI_A_D3 27.1E 27.4C DVI_A_D7 27.2E 27.4C DVI_B_D4 27.3E 27.5C DVI_B_D5 27.2E 27.5C FAN_CUTOFF_RC_Q 26.5F FAN_PWM 26.4D 26.4G FAN_PWM_NVIO 25.3D FAN_PWM_NVIO_R 25.3H> 26.4F< FAN_TACH 26.4D 26.4G FBAO_CLKO 4.4A 4.5G> 8.2A< 8.2A 8.4G FBAO_CLKO* 4.4A 4.5G> 8.2A< 8.2A 8.4G FBAO_CLKO_R 8.4H FBA1_CLKO 4.4B 4.5G> 8.2A< 8.2C 8.4G FBA1_CLKO* 4.4B 4.5G> 8.2A< 8.2C 8.4G FBA1_CLKO_R 8.4H FBABCD_MPLL_AVDD 4.3C> 5.4C< FBAB_REFCLK 4.3C< 18.5D> FBAB_REFCLK* 4.3C< 18.5D> FBA_CMD<0> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<0 . 28> 4.4G> 8.1A< FBA_CMD<1> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<2> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<3> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<4> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<5> 4.3A 4.4F 8.1A 8.1A 8.5A FBA_CMD<6> 4.3A 4.4F 8.1A 8.2A 8.2C 8.5F FBA_CMD<7> 4.3A 4.4F 8.1A 8.1A 8.1C FBA_CMD<8> 4.3A 4.4F 8.1A 8.2A 8.2C FBA_CMD<9> 4.3A 4.4F 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8.3B DR_CAL_PD_VDDO 24.2C			FBA_D<11> 4.1A 4.1F 8.3A 8.3B FBA_D<12> 4.1A 4.1F 8.3A 8.4B FBA_D<13> 4.1A 4.1F 8.3A 8.4B FBA_D<14> 4.1A 4.1F 8.3A 8.4B FBA_D<15> 4.1F 4.2A 8.3A 8.4B FBA_D<16> 4.1F 4.2A 8.3A 8.4A FBA_D<17> 4.1F 4.2A 8.3A 8.4A FBA_D<18> 4.1F 4.2A 8.3A 8.4A FBA_D<19> 4.1F 4.2A 8.3A 8.4A FBA_D<20> 4.1F 4.2A 8.3A 8.4A FBA_D<21> 4.1F 4.2A 8.3A 8.4A FBA_D<22> 4.1F 4.2A 8.3A 8.4A FBA_D<23> 4.1F 4.2A 8.3A 8.4A FBA_D<24> 4.1F 4.2A 8.3A 8.4B FBA_D<25> 4.1F 4.2A 8.3A 8.4B FBA_D<26> 4.2A 4.2F 8.3A 8.4B FBA_D<27> 4.2A 4.2F 8.3A 8.4B FBA_D<28> 4.2A 4.2F 8.3A 8.4B FBA_D<29> 4.2A 4.2F 8.3A 8.4B FBA_D<30> 4.2A 4.2F 8.3A 8.4B FBA_D<31> 4.2A 4.2F 8.3A 8.4B FBA_D<32> 4.1B 4.2F 8.3A 8.3C FBA_D<33> 4.1B 4.2F 8.3A 8.3C FBA_D<34> 4.1B 4.2F 8.3A 8.3C FBA_D<35> 4.1B 4.2F 8.3A 8.3C FBA_D<36> 4.1B 4.2F 8.3A 8.4C FBA_D<37> 4.1B 4.2F 8.4A 8.4C FBA_D<38> 4.1B 4.2F 8.4A 8.4C FBA_D<39> 4.1B 4.2F 8.4A 8.4C FBA_D<40> 4.1B 4.2F 8.3C 8.4A FBA_D<41> 4.1B 4.2F 8.3C 8.4A FBA_D<42> 4.1B 4.2F 8.3C 8.4A FBA_D<43> 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	SNN_FBG1_CLK1*	7. 4B	SNN_FBH_D<39>	7. 2E	SNN_GPU_NC_25	28. 2G	SNN_NVI 0_NC_12	28. 4G	SNN_SPARE_15	28. 2F	THERM_SHDN_D*	26. 1H> 29. 5B< 31. 1G<			
	SNN_FBG_CMD<22>	7. 4A	SNN_FBH_D<40>	7. 2E	SNN_GPU_NC_26	28. 2G	SNN_NVI 0_NC_13	28. 4G	SNN_SPARE_16	28. 2F	THERM_SHDN_Q	26. 2G			
2	SNN_FBG_CMD<29>	7. 4A	SNN_FBH_D<41>	7. 2E	SNN_GPU_NC_27	28. 2G	SNN_NVI 0_NC_14	28. 4G	SNN_SPARE_17	28. 2F	THERM_SHDN_R	26. 2E			
	SNN_FBG_CMD<30>	7. 4A	SNN_FBH_D<42>	7. 2E	SNN_GPU_NC_28	28. 2G	SNN_NVI 0_NC_15	28. 4G	SNN_SPARE_18	28. 2F	THERM_VDD	26. 3D			
	SNN_FBG_CMD<31>	7. 4A	SNN_FBH_D<43>	7. 2E	SNN_GPU_NC_29	28. 2G	SNN_NVI 0_NC_16	28. 4G	SNN_SPARE_19	28. 2F	VID_PSI	31. 2C			
	SNN_FBG_CMD<32>	7. 4A	SNN_FBH_D<44>	7. 2E	SNN_GPU_NC_30	28. 2G	SNN_NVI 0_NC_17	28. 4G	SNN_SPARE_20	28. 2F	XTAL_I_N	25. 4C			
	SNN_FBG_DBI 0	28. 3E	SNN_FBH_D<45>	7. 2E	SNN_GPU_NC_31	28. 2G	SNN_NVI 0_NC_18	28. 4G	SNN_SPARE_21	28. 2F	XTAL_OUT	25. 4C			
	SNN_FBG_DBI 1	28. 3E	SNN_FBH_D<46>	7. 2E	SNN_GPU_NC_32	28. 2G	SNN_NVI 0_NC_19	28. 4G	SNN_SPARE_22	28. 2F					
	SNN_FBG_DBI 2	28. 3E	SNN_FBH_D<47>	7. 2E	SNN_GPU_NC_33	28. 2G	SNN_NVI 0_NC_20	28. 4G	SNN_SPARE_23	28. 2F					
	SNN_FBG_DBI 3	28. 3E	SNN_FBH_D<48>	7. 2E	SNN_GPU_NC_34	28. 2G	SNN_NVI 0_NC_21	28. 4G	SNN_SPARE_24	28. 2F					
	SNN_FBG_DBI 4	28. 3E	SNN_FBH_D<49>	7. 2E	SNN_GPU_NC_35	28. 2G	SNN_NVI 0_NC_22	28. 5G	SNN_SPARE_25	28. 2F					
	SNN_FBG_DBI 5	28. 3E	SNN_FBH_D<50>	7. 2E	SNN_GPU_NC_36	28. 3G	SNN_NVI 0_NC_23	28. 5G	SNN_SPARE_26	28. 2F					
3	SNN_FBG_DBI 6	28. 3E	SNN_FBH_D<51>	7. 2E	SNN_GPU_NC_37	28. 3G	SNN_NVI 0_NC_24	28. 5G	SNN_SPARE_27	28. 2F					
	SNN_FBG_DBI 7	28. 3E	SNN_FBH_D<52>	7. 2E	SNN_GPU_NC_38	28. 3G	SNN_NVI 0_NC_25	28. 5G	SNN_SPARE_28	28. 2F					
	SNN_FBG_NC01	14. 2A	SNN_FBH_D<53>	7. 2E	SNN_GPU_NC_39	28. 3G	SNN_NVI 0_NC_26	28. 5G	SNN_SPARE_29	28. 2F					
	SNN_FBG_NC04	14. 2C	SNN_FBH_D<54>	7. 2E	SNN_GPU_NC_40	28. 3G	SNN_NVI 0_NC_27	28. 5G	SNN_SPARE_30	28. 2F					
	SNN_FBHO_CLK0	7. 4C	SNN_FBH_D<55>	7. 2E	SNN_HDCP_NC	25. 2G	SNN_NVI 0_NC_28	28. 5G	SNN_SPARE_31	28. 2F					
	SNN_FBHO_CLK0*	7. 4C	SNN_FBH_D<56>	7. 2E	SNN_I2C0_SCL	25. 2D	SNN_NVI 0_NC_29	28. 5G	SNN_SPARE_32	28. 2F					
	SNN_FBHO_CLK1	7. 4C	SNN_FBH_D<57>	7. 2E	SNN_I2C0_SDA	25. 2D	SNN_NVI 0_NC_30	28. 5G	SNN_SPARE_33	28. 2F					
	SNN_FBHO_CLK1*	7. 4C	SNN_FBH_D<58>	7. 2E	SNN_I1FPAB_VPROBE	22. 2B	SNN_NVI 0_NC_31	28. 4H	SNN_SPARE_34	28. 2F					
	SNN_FBH1_CLK0	7. 4E	SNN_FBH_D<59>	7. 2E	SNN_I1FPA_TXD3	22. 3D	SNN_NVI 0_NC_32	28. 4H	SNN_SPARE_35	28. 2F					
	SNN_FBH1_CLK0*	7. 4E	SNN_FBH_D<60>	7. 2E	SNN_I1FPA_TXD3*	22. 3D	SNN_NVI 0_NC_33	28. 4H	SNN_SPARE_36	28. 3F					
4	SNN_FBH1_CLK1	7. 4E	SNN_FBH_D<61>	7. 2E	SNN_I1FPB_TXC	22. 3D	SNN_NVI 0_NC_34	28. 4H	SNN_SPARE_37	28. 3F					
	SNN_FBH1_CLK1*	7. 4E	SNN_FBH_D<62>	7. 2E	SNN_I1FPB_TXC*	22. 3D	SNN_NVI 0_NC_35	28. 4H	SNN_SPARE_38	28. 3F					
	SNN_FBH_CMD<0>	7. 3D	SNN_FBH_D<63>	7. 3E	SNN_I1FPB_TXD7	22. 4D	SNN_NVI 0_NC_36	28. 4H	SNN_SPARE_39	28. 3F					
	SNN_FBH_CMD<1>	7. 3D	SNN_FBH_DBI 0	28. 3E	SNN_I1FPB_TXD7*	22. 4D	SNN_NVI 0_NC_37	28. 4H	SNN_SPARE_40	28. 3F					
	SNN_FBH_CMD<2>	7. 3D	SNN_FBH_DBI 1	28. 3E	SNN_I1FPCD_VPROBE	23. 2B	SNN_NVI 0_NC_38	28. 4H	SNN_SPARE_41	28. 3F					
	SNN_FBH_CMD<3>	7. 3D	SNN_FBH_DBI 2	28. 3E	SNN_I1FPC_TXD3	23. 3D	SNN_NVI 0_NC_39	28. 4H	SNN_SPARE_42	28. 3F					
	SNN_FBH_CMD<4>	7. 3D	SNN_FBH_DBI 3	28. 3E	SNN_I1FPC_TXD3*	23. 3D	SNN_NVI 0_NC_40	28. 4H	SNN_SPARE_43	28. 3F					
	SNN_FBH_CMD<5>	7. 3D	SNN_FBH_DBI 4	28. 3E	SNN_I1FPD_TXC	23. 3D	SNN_NVI 0_NC_41	28. 4H	SNN_SPARE_44	28. 3F					
	SNN_FBH_CMD<6>	7. 3D	SNN_FBH_DBI 5	28. 4E	SNN_I1FPD_TXC*	23. 3D	SNN_NVI 0_NC_42	28. 4H	SNN_SPARE_45	28. 3F					
	SNN_FBH_CMD<7>	7. 3D	SNN_FBH_DBI 6	28. 4E	SNN_I1FPD_TXD7	23. 4D	SNN_NVI 0_NC_43	28. 4H	SNN_SPARE_46	28. 3F					
5	SNN_FBH_CMD<8>	7. 3D	SNN_FBH_DBI 7	28. 4E	SNN_I1FPD_TXD7*	23. 4D	SNN_NVI 0_NC_44	28. 4H	SNN_SPARE_47	28. 3F					
	SNN_FBH_CMD<9>	7. 3D	SNN_FBH_DEBUG	7. 3E	SNN_I1NPUT_PEX6_DT1	34. 3A	SNN_NVI 0_NC_45	28. 4H	SNN_SPARE_48	28. 3F					
	SNN_FBH_CMD<10>	7. 3D	SNN_FBH_DQIM0	7. 3D	*		SNN_NVI 0_NC_46	28. 4H	SNN_SPARE_49	28. 3F					
	SNN_FBH_CMD<11>	7. 4D	SNN_FBH_DQIM1	7. 3D	SNN_I1NPUT_PEX6_DT2	34. 4A	SNN_NVI 0_NC_47	28. 4H	SNN_SPARE_50	28. 3F					
	SNN_FBH_CMD<12>	7. 4D	SNN_FBH_DQIM2	7. 3D	*		SNN_NVI 0_NC_48	28. 4H	SNN_SPARE_51	28. 3F					
	SNN_FBH_CMD<13>	7. 4D	SNN_FBH_DQIM3	7. 3D	SNN_MI 0A<0>	27. 1C	SNN_NVI 0_NC_49	28. 4H	SNN_SPARE_52	28. 3F					
	SNN_FBH_CMD<14>	7. 4D	SNN_FBH_DQIM4	7. 3E	SNN_MI 0A<1>	27. 1C	SNN_NVI 0_NC_50	28. 4H	SNN_SPARE_53	28. 3F					
	SNN_FBH_CMD<15>	7. 4D	SNN_FBH_DQIM5	7. 3E	SNN_MI 0A<2>	27. 1C	SNN_NVI 0_NC_51	28. 4H	SNN_SPARE_54	28. 3F					
	SNN_FBH_CMD<16>	7. 4D	SNN_FBH_DQIM6	7. 3E	SNN_MI 0A<3>	27. 1C	SNN_NVI 0_NC_52	28. 5H	SNN_SPARE_55	28. 3F					
	SNN_FBH_CMD<17>	7. 4D	SNN_FBH_DQIM7	7. 3E	SNN_MI 0A<4>	27. 1C	SNN_NVI 0_NC_53	28. 5H	SNN_SPARE_56	28. 3F					
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A		B		C		D		E		F		G		H						
1	Title: Cref Part		C89	[15. 3E]	C548	[26. 5F]	C653	[15. 4E]	C749	[15. 2E]	C862	[15. 3F]	C991	[17. 2E]	C1089	[16. 4E]	C1185	[16. 4B]	C1312	[19. 3B]
	Report		C90	[15. 5G]	C549	[30. 3D]	C654	[15. 2E]	C750	[11. 2H]	C863	[3. 3G]	C993	[6. 4C]	C1090	[16. 5B]	C1186	[3. 2D]	C1313	[23. 3B]
	Desig n: p897		C91	[16. 2D]	C550	[30. 3E]	C655	[9. 4H]	C751	[15. 3E]	C864	[11. 2H]	C994	[3. 2G]	C1091	[16. 5C]	C1187	[16. 5B]	C1314	[22. 3B]
	Date: Dec 2		C92	[15. 4F]	C551	[30. 3D]	C656	[15. 3B]	C752	[15. 3E]	C865	[17. 2B]	C995	[17. 2G]	C1092	[16. 2E]	C1188	[16. 3C]	C1315	[22. 3C]
	14: 57: 45 2008		C93	[15. 2F]	C552	[30. 2D]	C657	[15. 5B]	C753	[15. 2E]	C867	[17. 3B]	C996	[17. 3G]	C1093	[26. 3D]	C1189	[16. 3D]	C1319	[23. 3B]
	BKT1		C94	[15. 2E]	C553	[31. 5D]	C658	[8. 4H]	C754	[15. 4E]	C868	[16. 2E]	C997	[17. 2G]	C1094	[16. 2C]	C1190	[16. 2C]	C1320	[19. 4B]
	C1		C95	[15. 3B]	C554	[24. 3C]	C659	[15. 4B]	C755	[17. 4A]	C871	[17. 2B]	C998	[17. 2F]	C1095	[16. 2E]	C1191	[16. 2C]	C1321	[22. 3B]
	C2		C96	[15. 3B]	C555	[30. 2D]	C660	[15. 4B]	C756	[17. 4C]	C872	[17. 2F]	C999	[17. 2F]	C1096	[3. 3D]	C1192	[16. 4C]	C1323	[21. 4B]
	C3		C97	[15. 2B]	C557	[30. 2B]	C661	[15. 4F]	C757	[15. 4E]	C873	[17. 3F]	C1000	[17. 3E]	C1097	[16. 3B]	C1193	[16. 3C]	C1324	[27. 1B]
	C4		C98	[15. 2C]	C558	[30. 2B]	C662	[15. 4C]	C758	[15. 3E]	C874	[15. 2G]	C1001	[16. 2B]	C1098	[16. 3D]	C1196	[13. 2H]	C1326	[22. 3B]
2	C5		C99	[15. 2B]	C559	[29. 2D]	C663	[15. 5C]	C759	[15. 3E]	C875	[17. 2C]	C1002	[3. 4D]	C1099	[16. 4E]	C1197	[16. 5B]	C1327	[23. 3B]
	C6		C100	[15. 2C]	C560	[29. 2D]	C664	[15. 4C]	C760	[15. 3E]	C877	[17. 3C]	C1003	[7. 4B]	C1100	[3. 3D]	C1198	[16. 3C]	C1328	[18. 4B]
	C7		C101	[15. 5C]	C561	[30. 2H]	C665	[15. 4C]	C761	[17. 4B]	C878	[17. 2B]	C1004	[6. 4C]	C1101	[16. 5C]	C1200	[25. 2A]	C1329	[23. 3B]
	C8		C102	[15. 4F]	C562	[29. 2E]	C666	[8. 4H]	C762	[15. 3E]	C879	[17. 2B]	C1005	[3. 3G]	C1102	[16. 3B]	C1204	[18. 2H]	C1330	[18. 4A]
	C9		C103	[15. 2E]	C564	[30. 2G]	C667	[9. 4H]	C763	[11. 4H]	C882	[3. 2G]	C1006	[16. 2B]	C1103	[16. 2F]	C1205	[18. 5A]	C1331	[23. 3B]
	C10		C104	[15. 5B]	C570	[32. 2G]	C668	[10. 2H]	C764	[15. 3F]	C883	[17. 1A]	C1007	[12. 4H]	C1104	[16. 2E]	C1210	[18. 4H]	C1332	[18. 4A]
	C11		C105	[15. 4B]	C571	[32. 1G]	C669	[15. 4F]	C765	[15. 5F]	C885	[17. 3B]	C1008	[16. 2B]	C1105	[16. 5C]	C1211	[23. 4E]	C1333	[18. 4A]
	C12		C106	[15. 3B]	C572	[32. 1G]	C670	[15. 4E]	C766	[15. 4E]	C886	[3. 2G]	C1009	[17. 2F]	C1106	[16. 4F]	C1212	[3. 2A]	C1334	[23. 3B]
	C13		C107	[15. 4E]	C573	[32. 2G]	C671	[10. 4H]	C767	[15. 4E]	C887	[17. 2F]	C1010	[17. 3E]	C1107	[16. 4E]	C1213	[18. 4H]	C1335	[23. 3A]
	C14		C108	[15. 2E]	C576	[32. 2G]	C672	[15. 4F]	C768	[15. 3E]	C888	[6. 4B]	C1011	[6. 4F]	C1108	[16. 4F]	C1215	[26. 1H]	C1336	[18. 4A]
3	C15		C109	[15. 3B]	C577	[32. 2G]	C673	[15. 4E]	C769	[15. 4F]	C889	[3. 3G]	C1012	[17. 2F]	C1109	[16. 2B]	C1216	[3. 1A]	C1340	[21. 3E]
	C16		C110	[33. 3E]	C578	[32. 2G]	C674	[15. 4C]	C770	[11. 1H]	C891	[17. 2B]	C1013	[17. 3G]	C1110	[16. 3C]	C1217	[18. 4G]	C1341	[21. 3E]
	C17		C111	[33. 4E]	C579	[32. 2G]	C675	[15. 5C]	C771	[15. 4F]	C893	[17. 1B]	C1014	[17. 2G]	C1111	[16. 5C]	C1218	[3. 1A]	C1342	[21. 2E]
	C18		C112	[33. 2E]	C580	[30. 2H]	C676	[15. 4B]	C772	[17. 3E]	C894	[3. 5D]	C1016	[17. 3E]	C1112	[16. 4F]	C1219	[18. 5A]	C1343	[20. 3F]
	C19		C113	[33. 3E]	C581	[30. 2G]	C677	[15. 4C]	C773	[17. 4C]	C895	[3. 5D]	C1017	[17. 3E]	C1113	[16. 4E]	C1220	[18. 4G]	C1344	[20. 4F]
	C20		C114	[30. 4E]	C582	[30. 2G]	C678	[9. 3H]	C774	[15. 3E]	C896	[3. 2G]	C1018	[16. 4C]	C1114	[16. 3B]	C1222	[18. 5A]	C1345	[20. 5F]
	C21		C115	[33. 2F]	C583	[29. 2F]	C679	[8. 3H]	C775	[15. 5F]	C897	[17. 1B]	C1019	[17. 3F]	C1115	[16. 4D]	C1223	[26. 2G]	C1346	[19. 5F]
	C22		C116	[33. 3F]	C584	[29. 2E]	C680	[10. 2H]	C776	[15. 3E]	C898	[17. 2C]	C1020	[16. 4B]	C1116	[16. 4C]	C1224	[18. 4H]	C1347	[19. 3F]
	C23		C117	[33. 4F]	C585	[29. 2F]	C681	[10. 3H]	C777	[17. 3E]	C899	[18. 1C]	C1021	[16. 4B]	C1117	[16. 4B]	C1226	[18. 4H]	C1348	[19. 4F]
	C24		C118	[30. 3G]	C586	[15. 4G]	C682	[9. 2H]	C778	[32. 4G]	C901	[3. 2G]	C1022	[17. 4C]	C1118	[3. 3D]	C1228	[18. 5A]	C1350	[22. 4E]
4	C25		C119	[30. 3G]	C587	[15. 4D]	C683	[8. 2H]	C780	[17. 4B]	C902	[17. 4B]	C1023	[18. 1A]	C1119	[16. 5C]	C1229	[18. 4G]	C1351	[19. 1G]
	C26		C120	[30. 3G]	C588	[15. 2D]	C684	[10. 1H]	C781	[15. 3F]	C903	[17. 4C]	C1024	[7. 4C]	C1120	[16. 2C]	C1230	[18. 4G]	C1352	[19. 2G]
	C27		C121	[33. 2F]	C589	[15. 5D]	C685	[9. 2H]	C782	[15. 5F]	C904	[17. 4A]	C1025	[3. 4D]	C1121	[13. 4H]	C1231	[24. 2B]	C1353	[21. 3E]
	C28		C122	[33. 3F]	C590	[15. 2D]	C686	[9. 1H]	C783	[11. 3H]	C906	[3. 2G]	C1026	[18. 1A]	C1122	[16. 2F]	C1234	[18. 2H]	C1354	[21. 3E]
	C29		C123	[33. 4F]	C591	[15. 4D]	C687	[8. 2H]	C784	[15. 4F]	C907	[17. 2F]	C1027	[16. 2B]	C1123	[16. 3C]	C1237	[18. 4G]	C1355	[21. 2E]
	C30		C124	[33. 2F]	C592	[15. 4G]	C688	[8. 1H]	C785	[15. 4F]	C908	[17. 2B]	C1028	[16. 4C]	C1124	[16. 4F]	C1238	[18. 5B]	C1356	[19. 5F]
	C31		C125	[33. 3F]	C593	[15. 2F]	C689	[15. 2C]	C786	[15. 2E]	C909	[17. 1B]	C1029	[12. 1H]	C1125	[3. 3D]	C1239	[18. 4G]	C1357	[19. 3F]
	C32		C126	[31. 3C]	C594	[15. 2G]	C690	[15. 5C]	C787	[15. 2F]	C910	[18. 1C]	C1030	[16. 4C]	C1126	[16. 4B]	C1242	[18. 3B]	C1358	[19. 4F]
	C33		C127	[34. 1C]	C595	[15. 3D]	C691	[15. 2G]	C788	[17. 3F]	C911	[17. 1B]	C1031	[16. 4B]	C1127	[13. 1H]	C1244	[24. 1C]	C1359	[20. 5F]
	C34		C128	[31. 2G]	C596	[15. 2D]	C692	[15. 4E]	C789	[17. 3F]	C913	[17. 2C]	C1032	[6. 4C]	C1128	[16. 3B]	C1245	[18. 1G]	C1360	[20. 3F]
5	C35		C129	[31. 4D]	C597	[15. 4D]	C693	[15. 2C]	C790	[15. 3F]	C914	[18. 1C]	C1033	[3. 4D]	C1129	[14. 1H]	C1246	[18. 1G]	C1361	[20. 4F]
	C36		C130	[31. 2D]	C598	[15. 3C]	C694	[15. 4F]	C791	[3. 2H]	C916	[3. 5D]	C1034	[16. 2B]	C1130	[14. 2H]	C1247	[18. 1H]	C1363	[21. 3F]
	C37		C131	[30. 2F]	C599	[15. 4F]	C695	[15. 4E]	C792	[3. 3H]	C917	[17. 3C]	C1035	[16. 4B]	C1131	[14. 2H]	C1248	[24. 1C]	C1364	[21. 3F]
	C38		C132	[34. 1E]	C600	[15. 4F]	C696	[15. 4F]	C793	[15. 2E]	C918	[17. 4B]	C1036	[16. 2B]	C1132	[16. 3B]	C1249	[24. 1B]	C1365	[21. 2F]

A			B			C			D			E			F			G			H		
1	G1	[7. 3E 7. 3B]	M13	[8. 4D 8. 2C 8. 4D	R22	[27. 4G]	R118	[31. 3F]	R630	[8. 2C]	R726	[11. 3H]	R826	[14. 2H]	R964	[19. 2E]							
		[18. 3D]		8. 4C 8. 4C]		[32. 2C]		[31. 3F]		[8. 2B]		[11. 5C]		[3. 1G]		[20. 2E]							
		[26. 4B]		8. 4C 8. 4C 8. 4B		[32. 2C]		[31. 3F]		[9. 5F]		[3. 4H]		[14. 5F]		[27. 2F]							
		[28. 3C 28. 2E		8. 2B 8. 4B]		[32. 4C]		[31. 3F]		[8. 5F]		[5. 3E]		[13. 5C]		[26. 2G]							
		28. 3A 28. 3B				[35. 2B]		[31. 3F]		[9. 2H]		[4. 5A]		[13. 3H]		[24. 3G]							
		28. 3B 28. 3D				[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		28. 3F]				[35. 4D]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		G1				[35. 4E]		[31. 4F]		[8. 2H]		[11. 5C]		[13. 5F]		[19. 3C]							
		J2				[35. 4E]		[31. 4F]		[8. 2H]		[28. 4G]		[3. 1D]		[19. 3D]							
		J3				[35. 4E]		[31. 4F]		[8. 2H]		[4. 3C]		[13. 5D]		[19. 3E]							
2	L1	[21. 3G]	M14	[8. 4C 8. 4C 8. 4B	R23	[32. 2C]	R119	[31. 3F]	R631	[8. 2B]	R728	[11. 5C]	R827	[3. 1G]	R965	[20. 2E]							
		[23. 3H]		8. 2B 8. 4B]		[32. 2C]		[31. 3F]		[9. 5F]		[3. 4H]		[14. 5F]		[27. 2F]							
		J4				[32. 4C]		[31. 3F]		[8. 5F]		[5. 3E]		[13. 5C]		[26. 2G]							
		J5				[27. 5G]		[31. 3F]		[9. 2H]		[4. 5A]		[13. 3H]		[24. 3G]							
		J6				[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		J7				[35. 4D]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		J8				[35. 4E]		[31. 4F]		[8. 2H]		[11. 5C]		[13. 5F]		[19. 3C]							
		J501				[35. 4E]		[31. 4F]		[8. 2H]		[28. 4G]		[3. 1D]		[19. 3D]							
		L1				[35. 4E]		[31. 4F]		[8. 2H]		[4. 3C]		[13. 5D]		[19. 3E]							
		L2				[35. 4E]		[31. 4F]		[8. 2H]		[28. 4G]		[3. 1D]		[19. 3D]							
3	L2	[20. 3F]	MEC1	[35. 5B]	R24	[32. 2C]	R120	[31. 3F]	R632	[9. 5F]	R729	[3. 4H]	R828	[14. 5F]	R966	[27. 2F]							
		[20. 2F]		[35. 5B]		[32. 4C]		[31. 3F]		[8. 5F]		[5. 3E]		[13. 5C]		[26. 2G]							
		L3		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 5A]		[13. 3H]		[24. 3G]							
		L4		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L5		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L6		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L7		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L8		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L9		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L10		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
4	L11	[33. 4F]	MEC2	[35. 5B]	R25	[32. 4C]	R121	[31. 3F]	R633	[8. 5F]	R730	[5. 3E]	R829	[13. 5C]	R969	[26. 2G]							
		[32. 3F]		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 5A]		[13. 3H]		[24. 3G]							
		L13		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L14		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L15		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L16		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L501		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L502		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L503		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L504		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
5	L505	[19. 4F]	MEC3	[35. 5B]	R26	[27. 5G]	R122	[31. 3F]	R634	[9. 2H]	R731	[4. 5A]	R830	[13. 3H]	R970	[24. 3G]							
		[19. 4F]		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L506		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L507		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		L508		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		L509		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		LB1		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		LB2		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							
		LB4		[35. 5B]		[27. 5G]		[31. 3F]		[9. 2H]		[4. 3F]		[13. 5C]		[19. 3C]							
		LB502		[35. 5B]		[27. 5G]		[31. 3F]		[10. 2H]		[5. 3C]		[14. 2H]		[21. 4D]							

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