

# 35P177- NV35 Short Form Engineering Board

35P177\_A00 - NV35 Flipchip BGA, 2 x 64MB DDR1 (8 x 4Mx32 = 128MB)  
External TMDS (SINGLE link), Internal TVout

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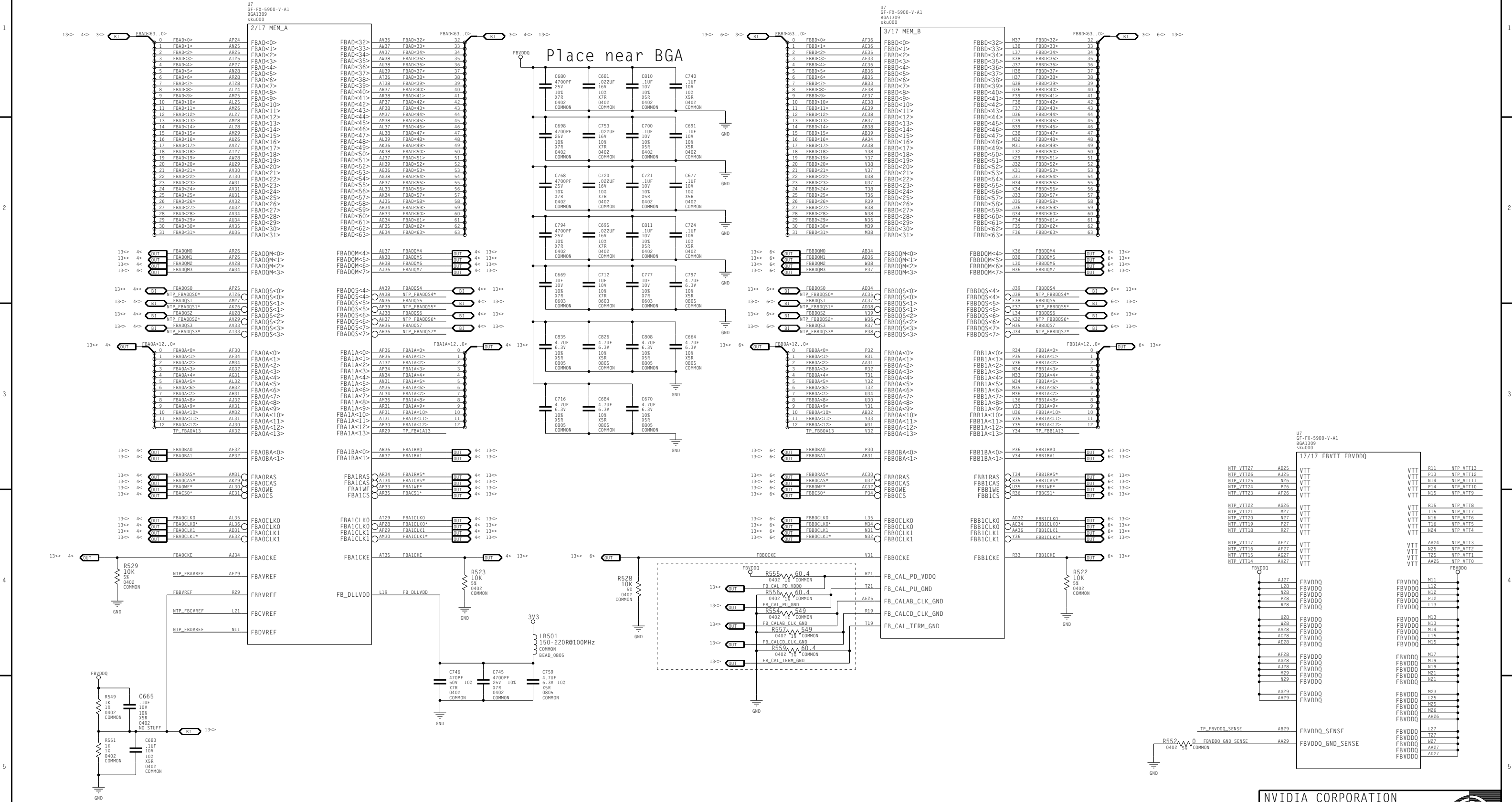
SKU	VARIANT	NVPN	ASSEMBLY
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1	000	600-10177-0000-000	NV35 Value Board. 128 MB DVI-I, VGA, TV (Internal)
2	001	600-10177-0001-000	NV35 Value Board. 128 MB DVI-I, VGA, VIVO (with Internal TV )
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ASSEMBLY	NV35 Value Board. 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	<edit here to insert page detail>

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# 3.Memory - FB\_A & FB\_B Partitions, FBVDD/Q decoupling



TO DO: RENAME TP\_FBAA13 & TP\_FBBA13 TO ABOVE NAMES

ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	Memory: FBA & FBB Partitions, FBVDD/Q

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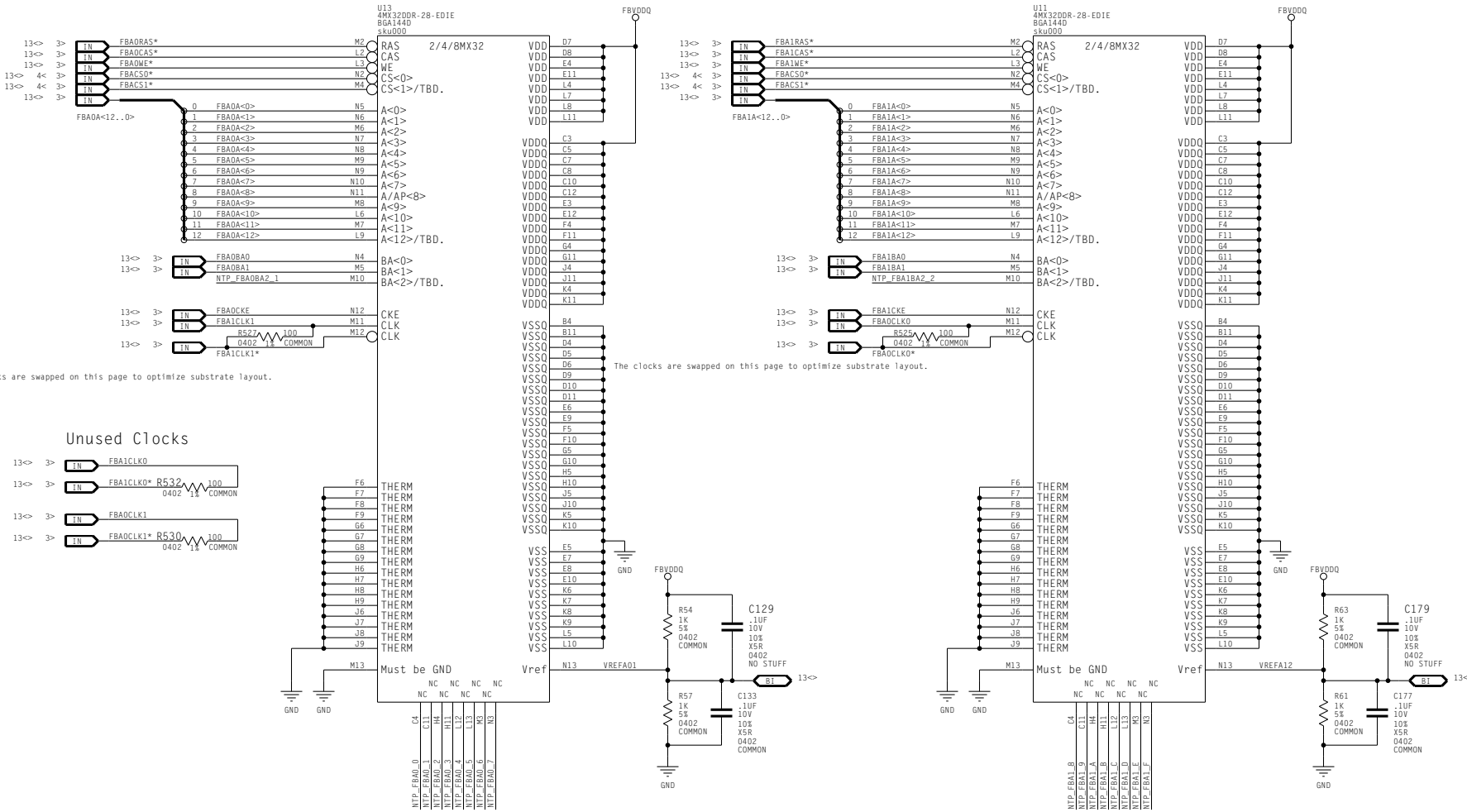
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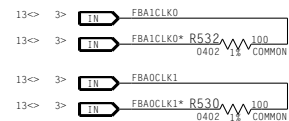
# 4. Memory Part. A - FBAD0..63

FBA0 0..31

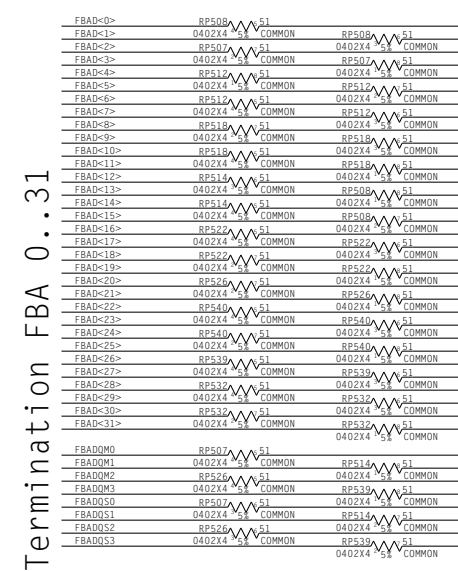
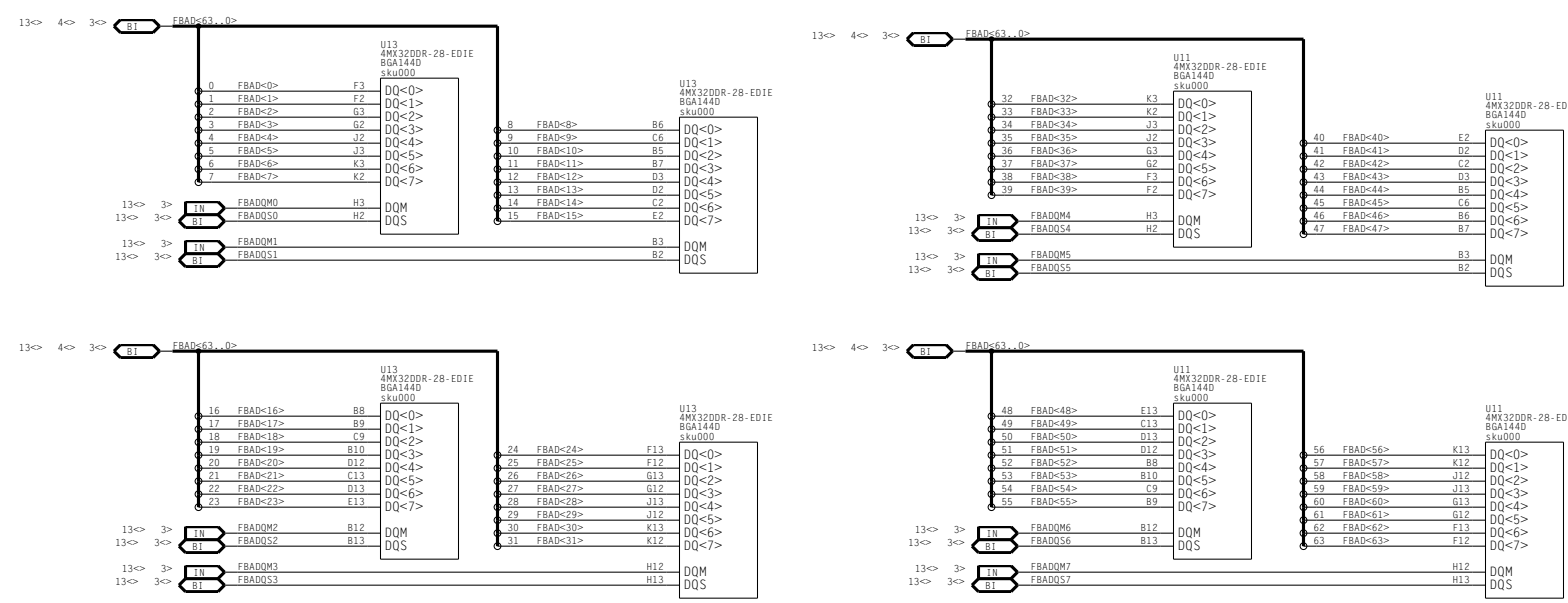
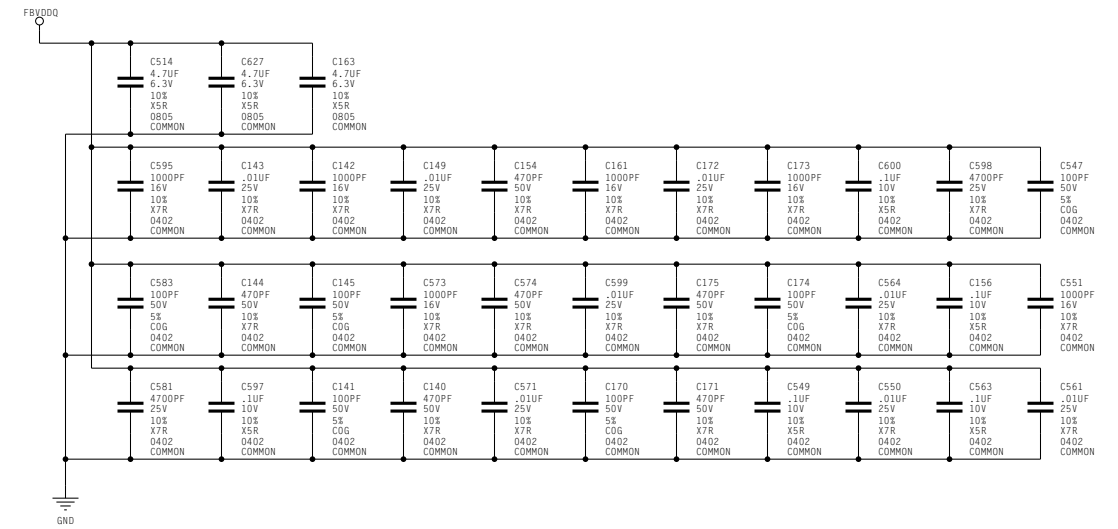
FBA1 32..63



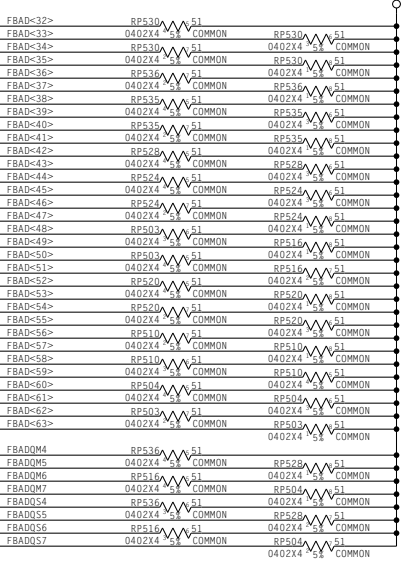
### Unused Clocks



## FBVDDQ Decoupling placement for whole Partition



### Termination FBA 32..63



ASSEMBLY	NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)
PAGE	Memory: FB_A

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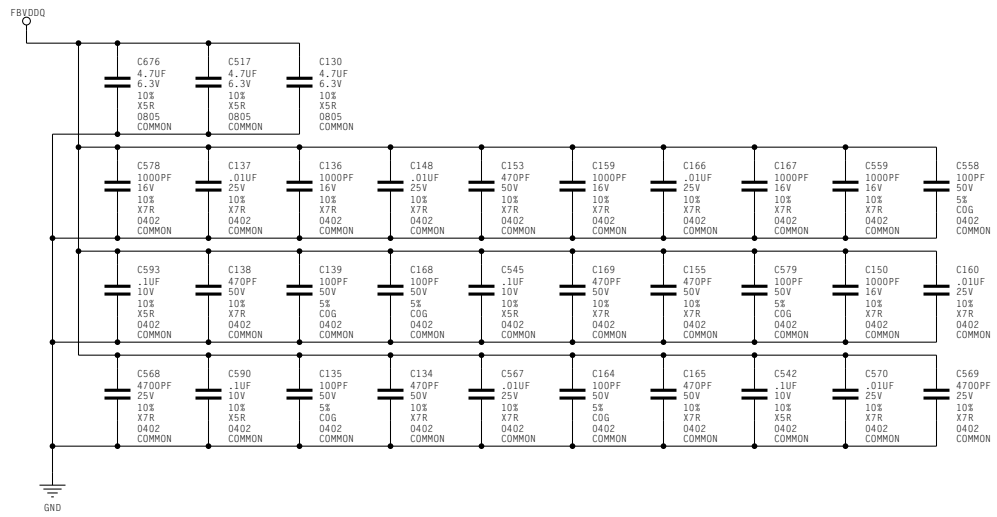
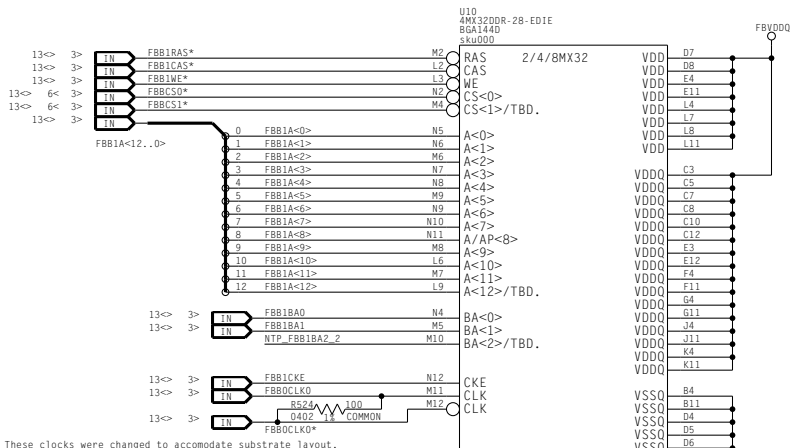
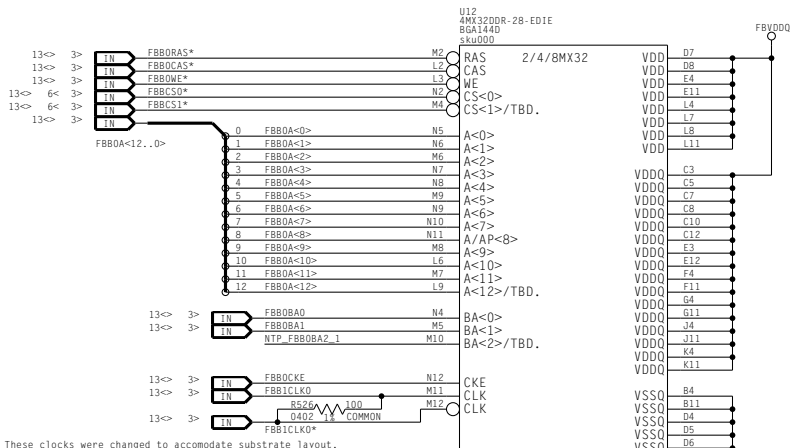
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# 5. Memory Part. B - FBBD0..63

## FBBD0 0..31

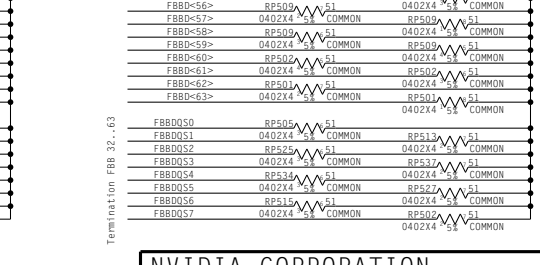
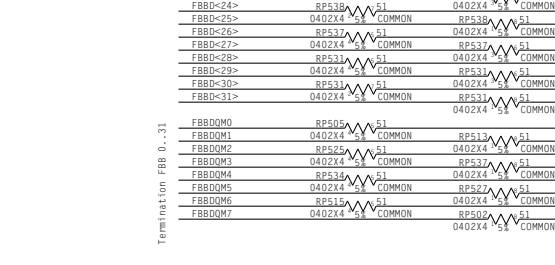
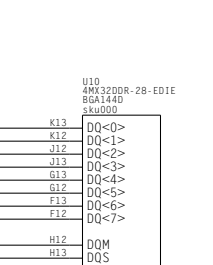
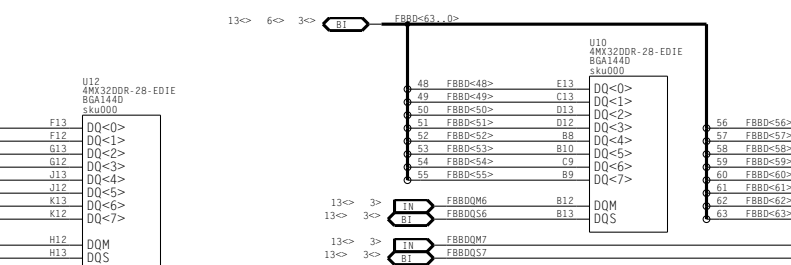
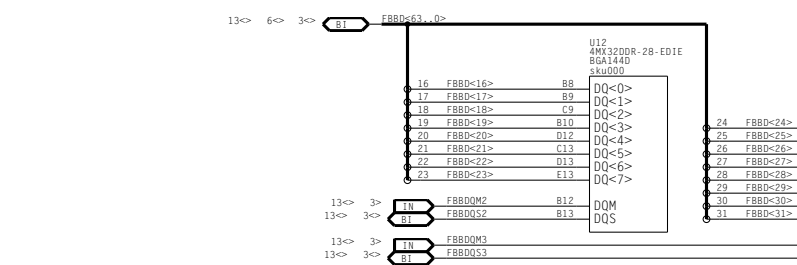
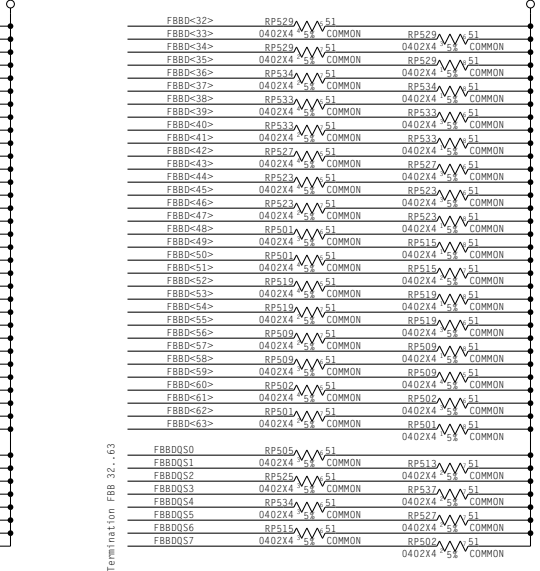
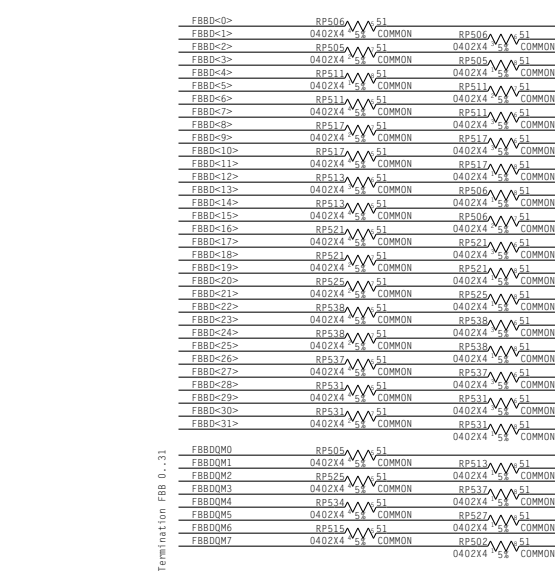
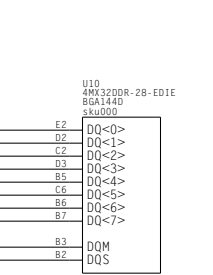
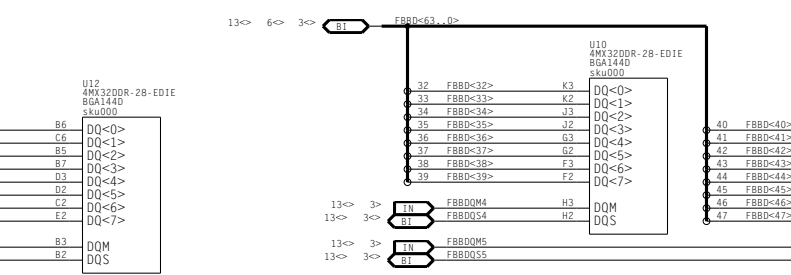
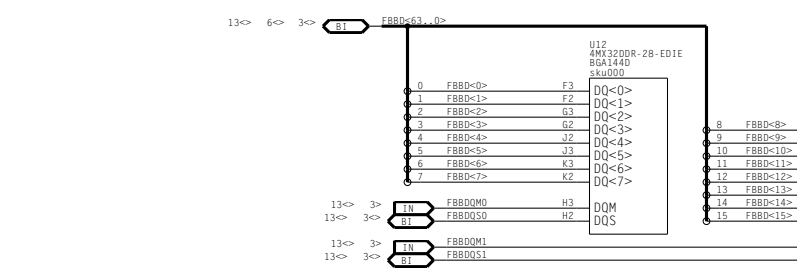
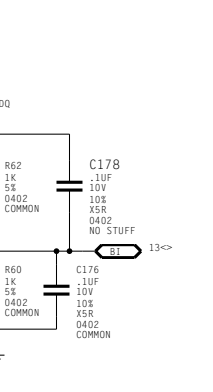
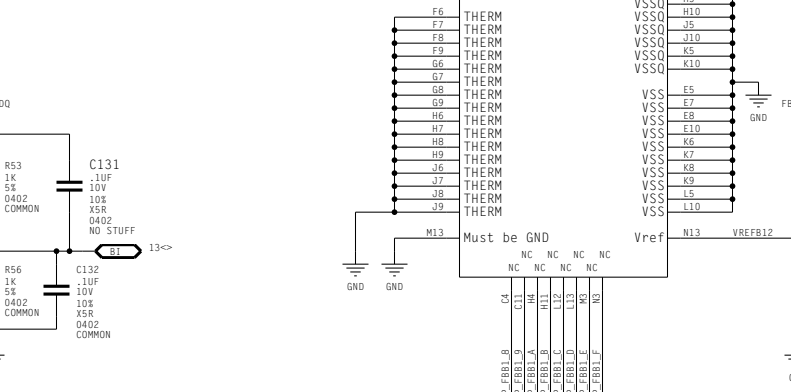
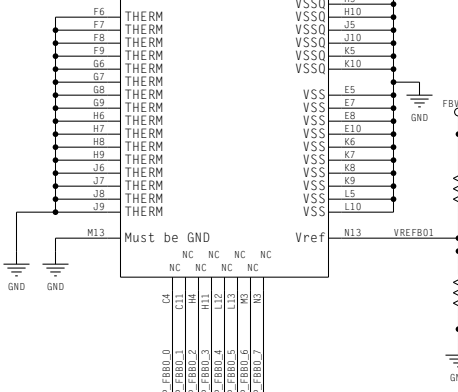
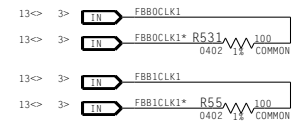
## FBBD1 32..63



These clocks were changed to accommodate substrate layout.

These clocks were changed to accommodate substrate layout.

### Unused Clocks



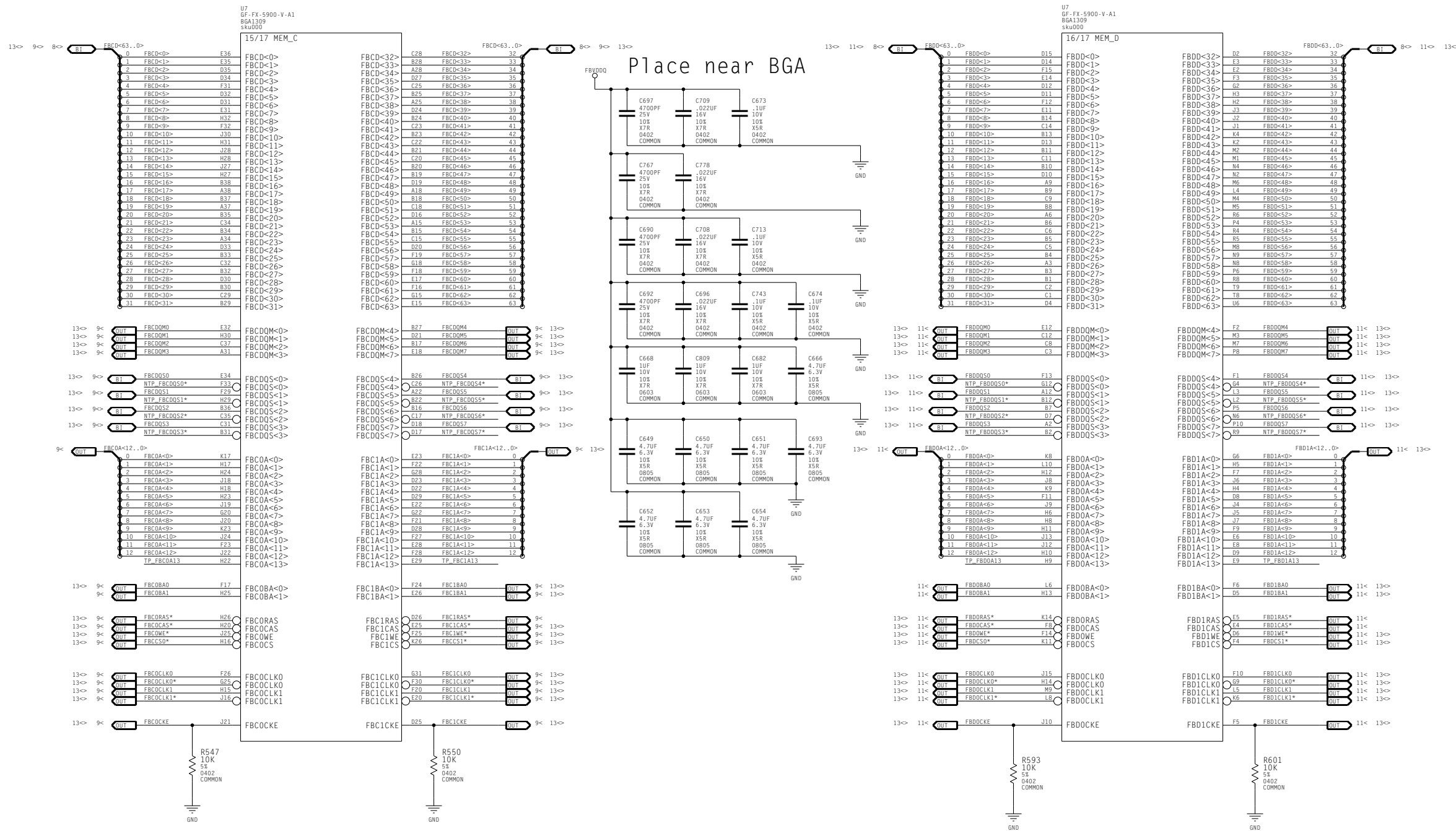
ASSEMBLY	NV35 Value Board, 128 MB DV1-1, VGA, TV (Internal)
PAGE DETAIL	Memory: FB-B

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# 6. Memory FBC & FBD, FBVDD/Q decoupling



TO DO: RENAME TP\_FBCx13 & TP\_FBDx13 TO ABOVE NAMES

ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	Memory: FBC & FBD Partitions, FBVDD/Q

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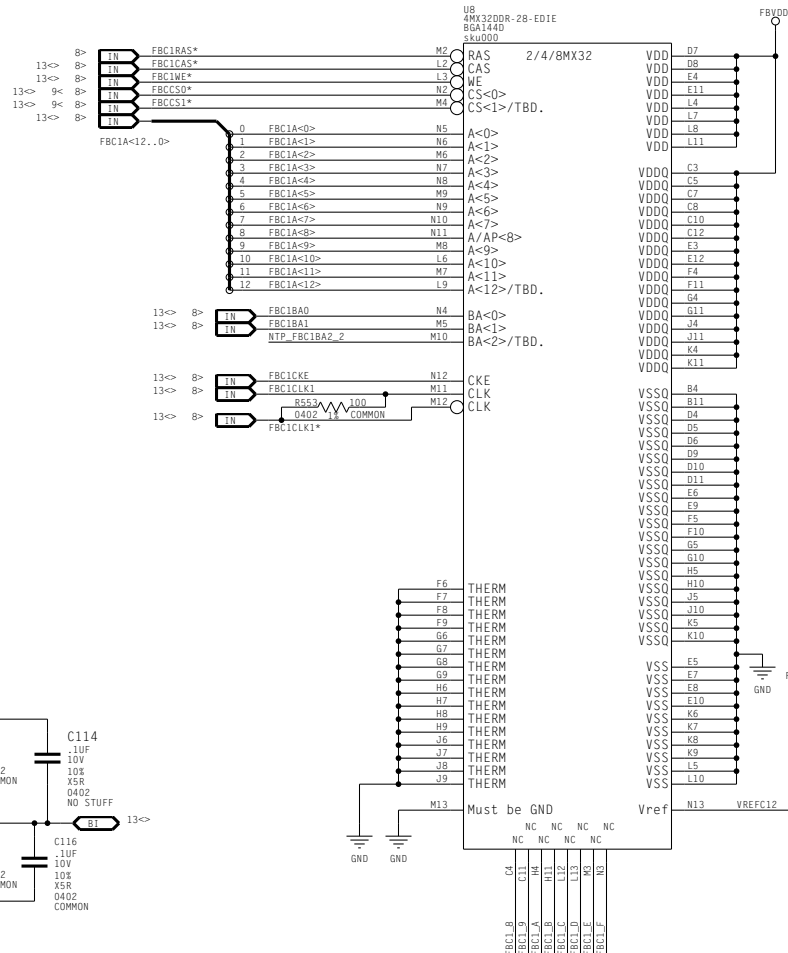
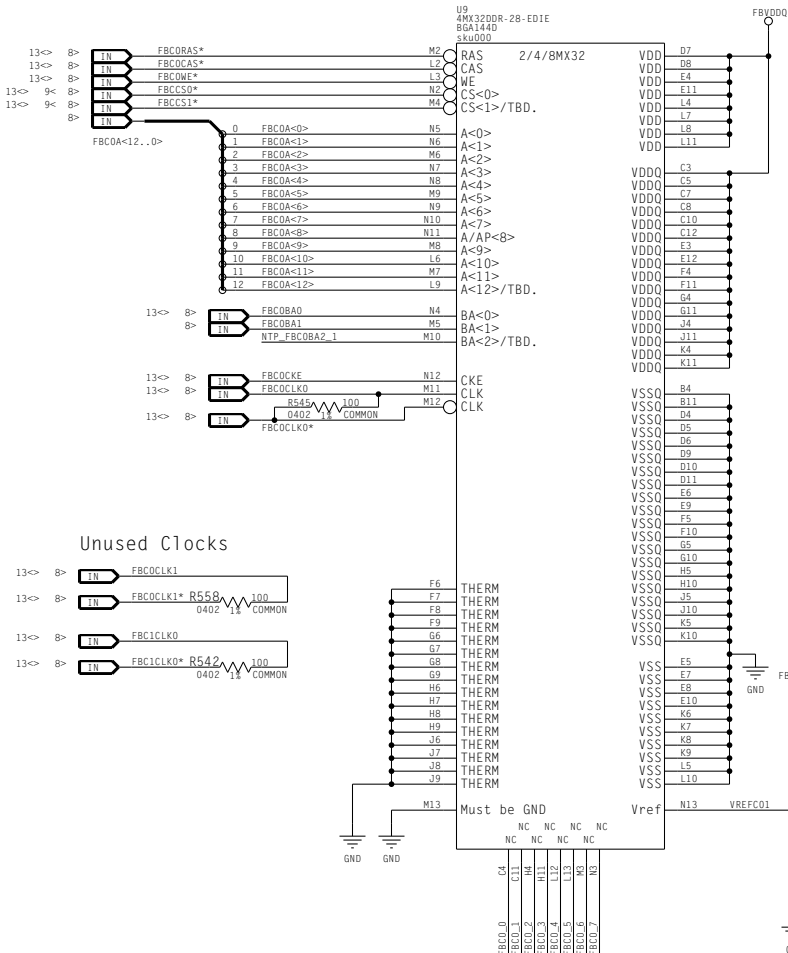
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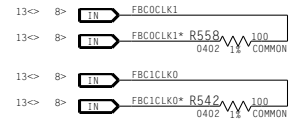
# 7. Memory Part. C - FBCD0..63

FBC0 0..31

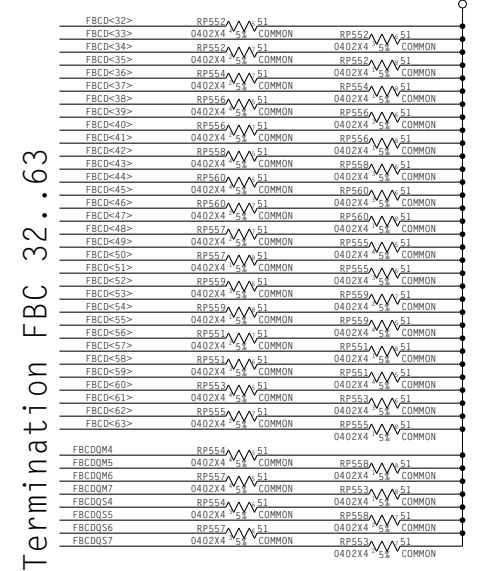
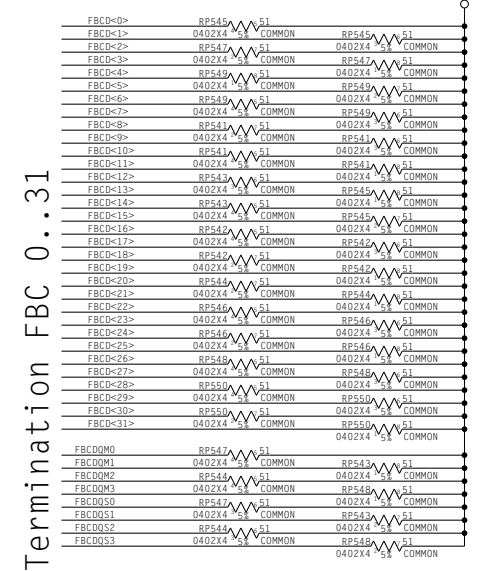
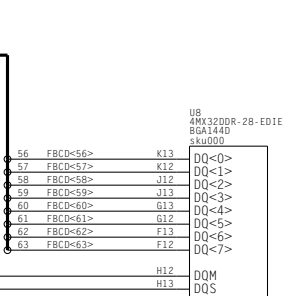
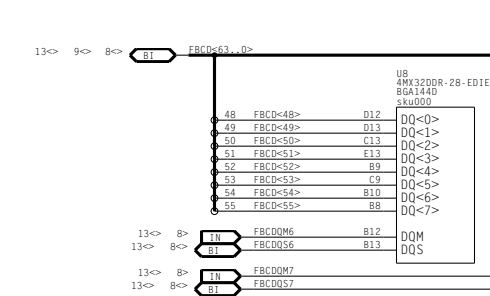
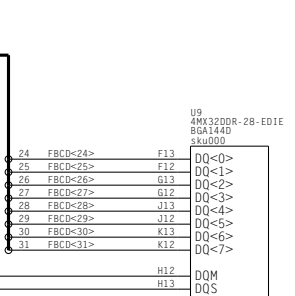
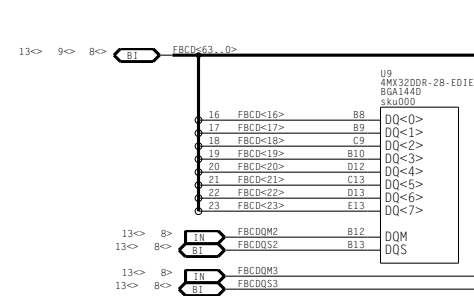
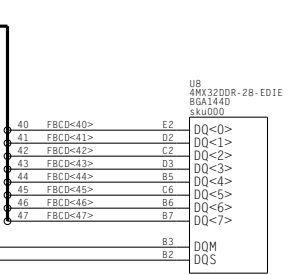
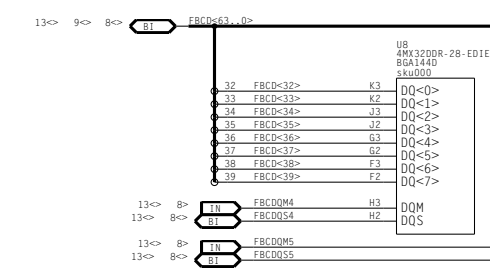
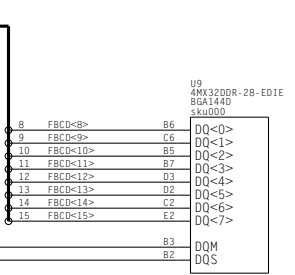
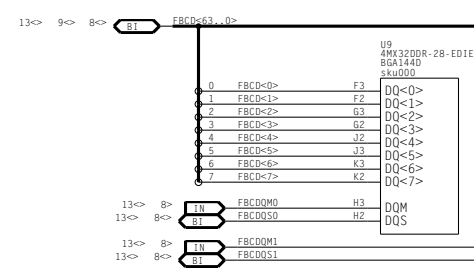
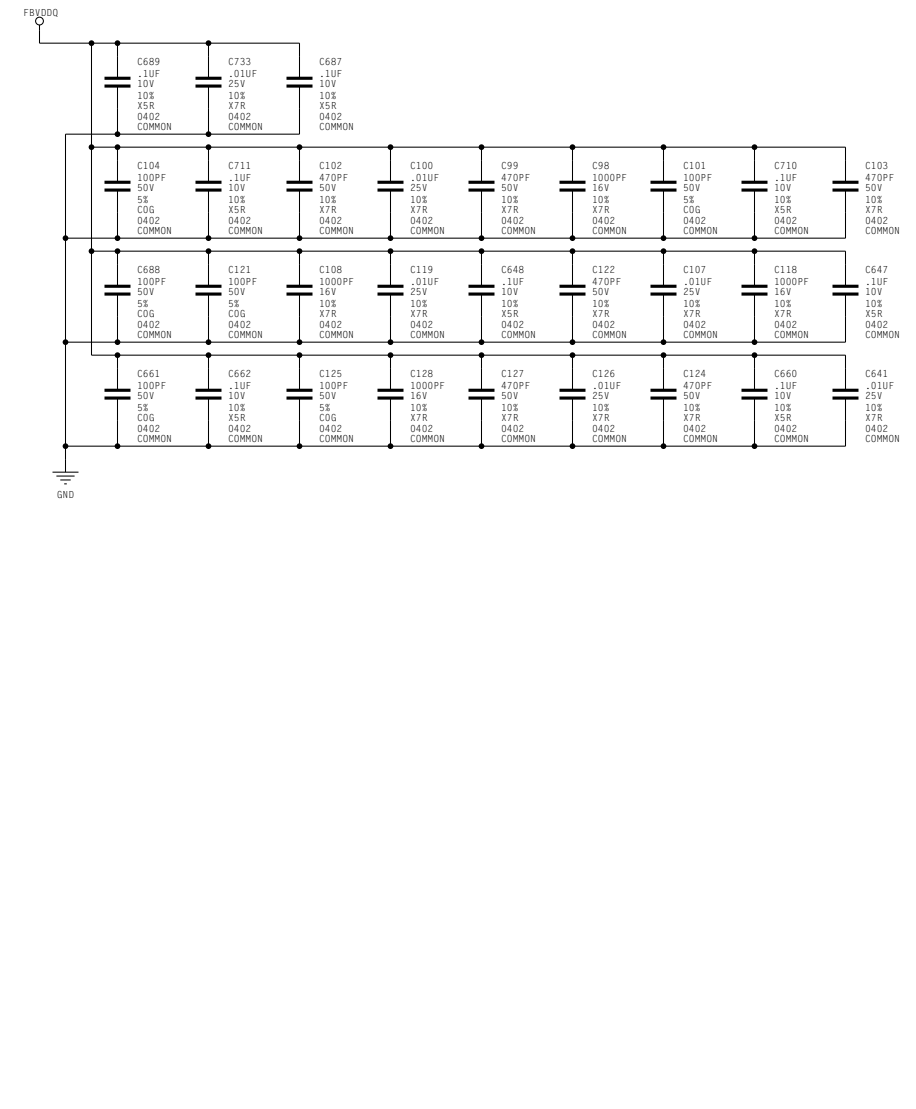
FBC1 32..63



### Unused Clocks



### FBVDDQ Decoupling placement for whole Partition



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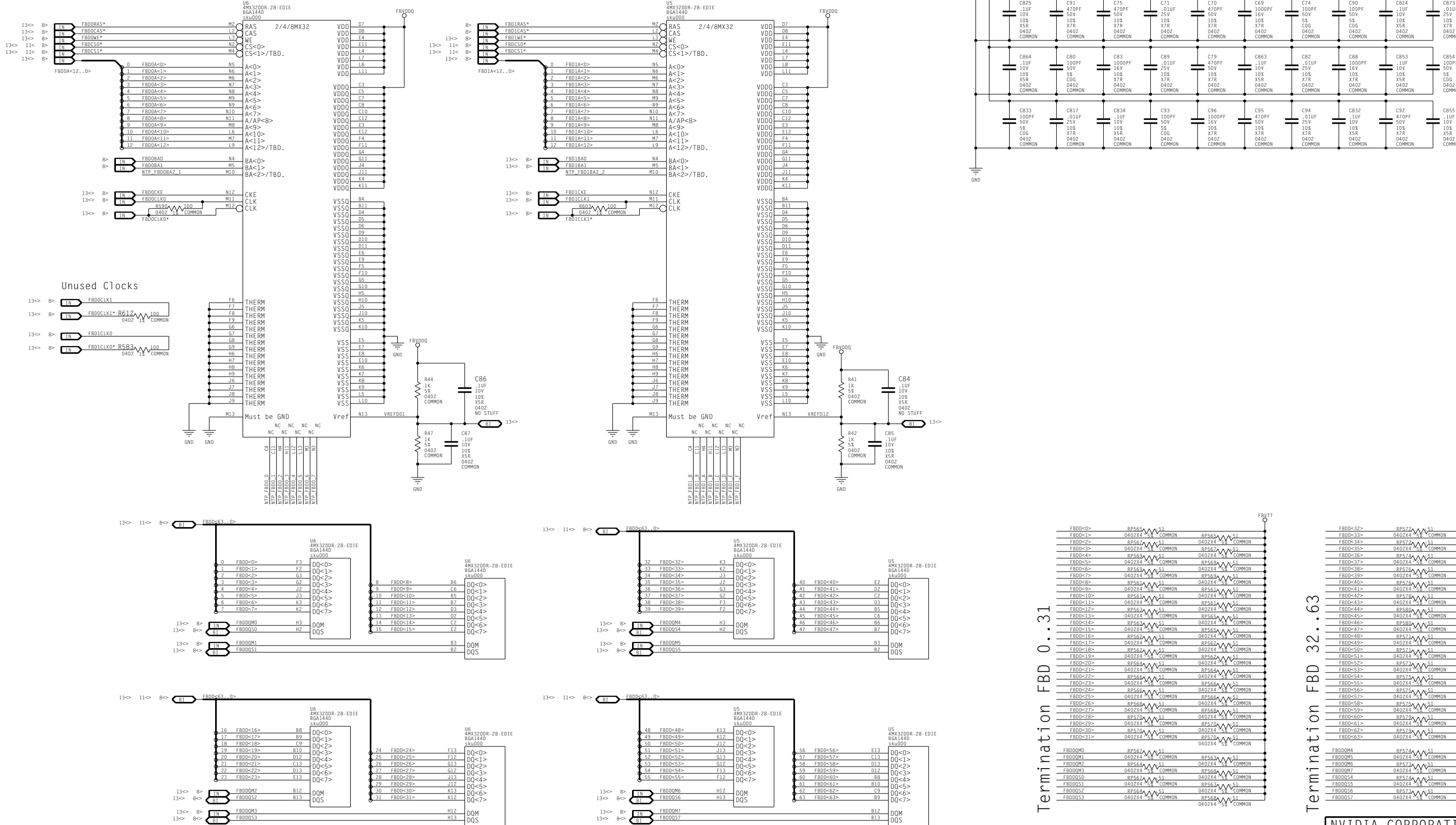
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# 8. Memory Part. D - FBDD0..63

FBDD0 0..31

FBDD1 32..63



Termination FBDD 0..31

Termination FBDD 32..63

ASSEMBLY NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)  
PAGE DETAIL Memory: FB\_D

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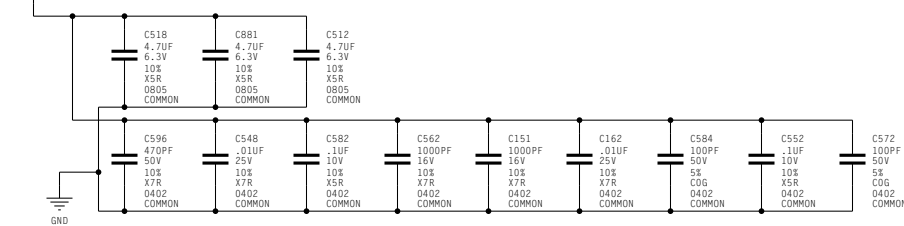


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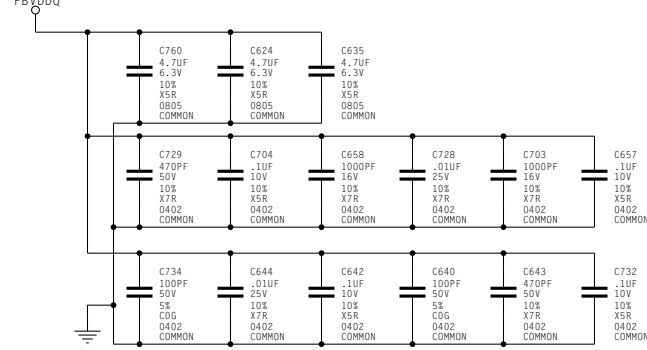
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# 9. Memory Decoupling

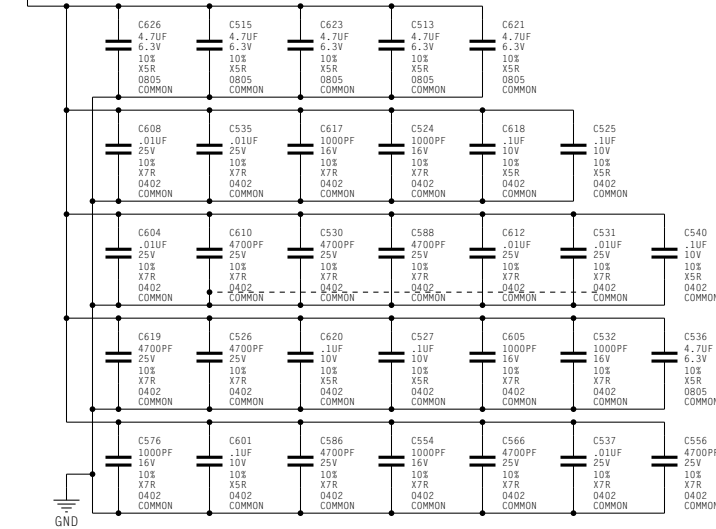
FBVDDQ Decoupling placement for whole partition A



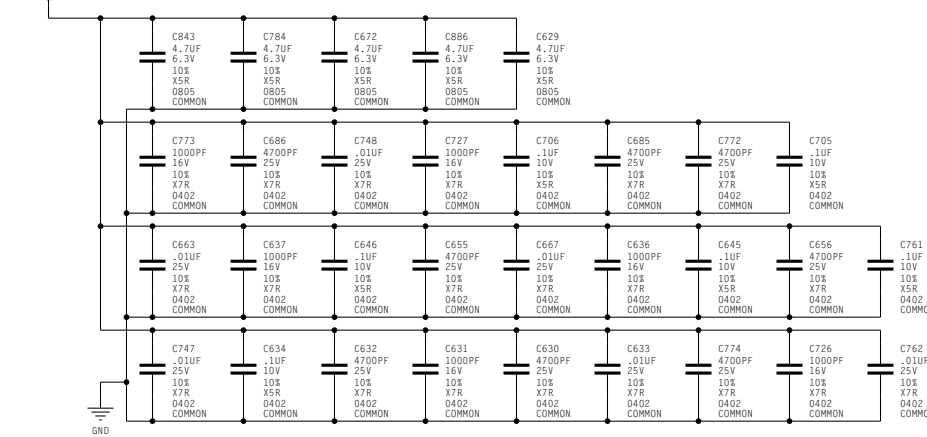
FBVDDQ Decoupling placement for whole partition C



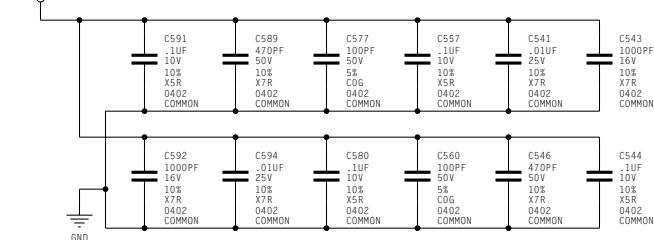
FBVTT Decoupling placement for whole partition A



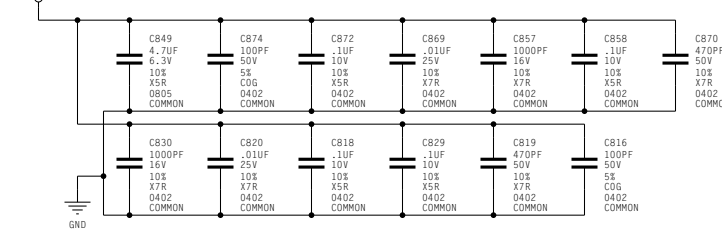
FBVTT Decoupling placement for whole partition C



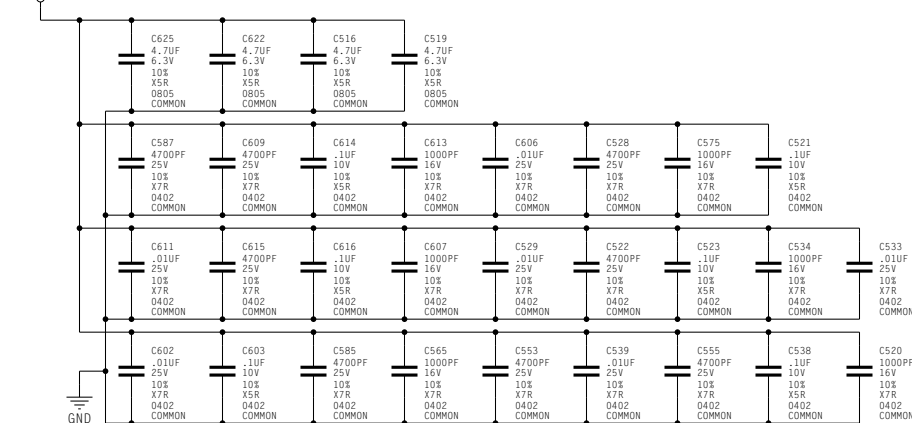
FBVDDQ Decoupling placement for whole partition B



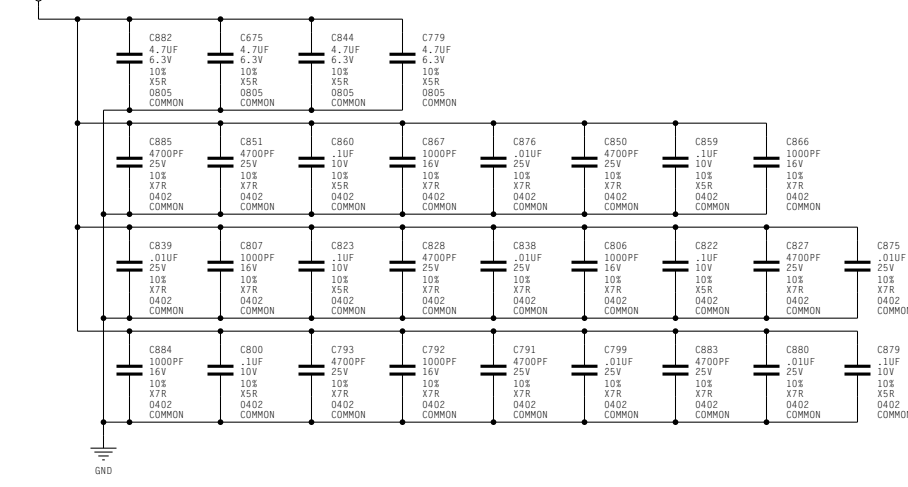
FBVDDQ Decoupling placement for whole partition D




FBVTT Decoupling placement for whole partition B



FBVTT Decoupling placement for whole partition D



ASSEMBLY	NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)
PAGE DETAIL	Memory: Decoupling

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# 10. Memory NET SPACING RULES

## Memory FBA FBB

NET Name	Diffpair	Spacing
FBADCK0	FBADCK0	18MIL G26_25MIL
FBADCK0*	FBADCK0	18MIL G26_25MIL
FBADCK1	FBADCK1	18MIL G26_25MIL
FBADCK1*	FBADCK1	18MIL G26_25MIL
FBA1CLK0	FBA1CLK0	18MIL G26_25MIL
FBA1CLK0*	FBA1CLK0	18MIL G26_25MIL
FBA1CLK1	FBA1CLK1	18MIL G26_25MIL
FBA1CLK1*	FBA1CLK1	18MIL G26_25MIL
FBB0CLK0	FBB0CLK0	18MIL G26_25MIL
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FBB1CLK0*	FBB1CLK0	18MIL G26_25MIL
FBB1CLK1	FBB1CLK1	18MIL G26_25MIL
FBB1CLK1*	FBB1CLK1	18MIL G26_25MIL
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FBB0<63_0>		15MIL
FBADQ0		15MIL
FBADQ1		15MIL
FBADQ2		15MIL
FBADQ3		15MIL
FBADQ4		15MIL
FBADQ5		15MIL
FBADQ6		15MIL
FBADQ7		15MIL
FBB0Q0		15MIL
FBB0Q1		15MIL
FBB0Q2		15MIL
FBB0Q3		15MIL
FBB0Q4		15MIL
FBB0Q5		15MIL
FBB0Q6		15MIL
FBB0Q7		15MIL
FBADQ50		20MIL
FBADQ51		20MIL
FBADQ52		20MIL
FBADQ53		20MIL
FBADQ54		20MIL
FBADQ55		20MIL
FBADQ56		20MIL
FBADQ57		20MIL
FBB0Q50		20MIL
FBB0Q51		20MIL
FBB0Q52		20MIL
FBB0Q53		20MIL
FBB0Q54		20MIL
FBB0Q55		20MIL
FBB0Q56		20MIL
FBB0Q57		20MIL
FBADA<13_0>		10MIL
FBA1A<13_0>		10MIL
FBB0A<13_0>		10MIL
FBA1A<13_0>		10MIL
FBA0RAS*		10MIL
FBA0CAS*		10MIL
FBA0WE*		10MIL
FBA0CKE		10MIL
FBA0BAD		10MIL
FBA0BA1		10MIL
FBA1RAS*		10MIL
FBA1CAS*		10MIL
FBA1WE*		10MIL
FBA1CKE		10MIL
FBA1BAD		10MIL
FBA1BA1		10MIL
FBB0RAS*		10MIL
FBB0CAS*		10MIL
FBB0WE*		10MIL
FBB0CKE		10MIL
FBB0BAD		10MIL
FBB0BA1		10MIL
FBB1RAS*		10MIL
FBB1CAS*		10MIL
FBB1WE*		10MIL
FBB1CKE		10MIL
FBB1BAD		10MIL
FBB1BA1		10MIL
FBAC50*		10MIL
FBAC51*		10MIL
FBBC50*		10MIL
FBBC51*		10MIL

NET Name	Spacing
FB_CAL_PD_VDDQ	20MIL G26_25MIL
FB_CAL_PD_GND	20MIL G26_25MIL
FB_CAL_CLK_GND	20MIL G26_25MIL
FB_CAL_TERM_GND	20MIL G26_25MIL
FB_CALAB_CLK_GND	20MIL G26_25MIL
FB_CALCD_CLK_GND	20MIL G26_25MIL

## Memory FBC FBD

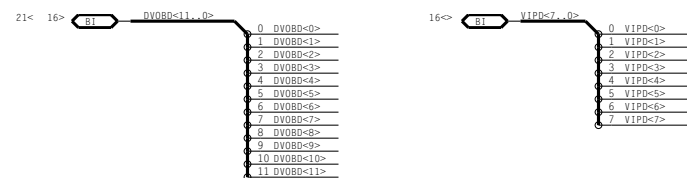
NET Name	Diffpair	Spacing
FBC0CLK0	FBC0CLK0	18MIL G26_25MIL
FBC0CLK0*	FBC0CLK0	18MIL G26_25MIL
FBC0CLK1	FBC0CLK1	18MIL G26_25MIL
FBC0CLK1*	FBC0CLK1	18MIL G26_25MIL
FBC1CLK0	FBC1CLK0	18MIL G26_25MIL
FBC1CLK0*	FBC1CLK0	18MIL G26_25MIL
FBC1CLK1	FBC1CLK1	18MIL G26_25MIL
FBC1CLK1*	FBC1CLK1	18MIL G26_25MIL
FBD0CLK0	FBD0CLK0	18MIL G26_25MIL
FBD0CLK0*	FBD0CLK0	18MIL G26_25MIL
FBD0CLK1	FBD0CLK1	18MIL G26_25MIL
FBD0CLK1*	FBD0CLK1	18MIL G26_25MIL
FBD1CLK0	FBD1CLK0	18MIL G26_25MIL
FBD1CLK0*	FBD1CLK0	18MIL G26_25MIL
FBD1CLK1	FBD1CLK1	18MIL G26_25MIL
FBD1CLK1*	FBD1CLK1	18MIL G26_25MIL
FBCD<63_0>		15MIL
FBD0<63_0>		15MIL
FBCDQ0		15MIL
FBCDQ1		15MIL
FBCDQ2		15MIL
FBCDQ3		15MIL
FBCDQ4		15MIL
FBCDQ5		15MIL
FBCDQ6		15MIL
FBCDQ7		15MIL
FBD0Q0		15MIL
FBD0Q1		15MIL
FBD0Q2		15MIL
FBD0Q3		15MIL
FBD0Q4		15MIL
FBD0Q5		15MIL
FBD0Q6		15MIL
FBD0Q7		15MIL
FBCDQ50		20MIL
FBCDQ51		20MIL
FBCDQ52		20MIL
FBCDQ53		20MIL
FBCDQ54		20MIL
FBCDQ55		20MIL
FBCDQ56		20MIL
FBCDQ57		20MIL
FBD0Q50		20MIL
FBD0Q51		20MIL
FBD0Q52		20MIL
FBD0Q53		20MIL
FBD0Q54		20MIL
FBD0Q55		20MIL
FBD0Q56		20MIL
FBD0Q57		20MIL
FBCA<13_0>		10MIL
FBA1A<13_0>		10MIL
FBD0A<13_0>		10MIL
FBA1A<13_0>		10MIL
FBCORAS*		10MIL
FBCOCAS*		10MIL
FBCOWE*		10MIL
FBCCKE		10MIL
FBCBAD		10MIL
FBCBA1		10MIL
FBCORAS*		10MIL
FBC1CAS*		10MIL
FBC1WE*		10MIL
FBC1CKE		10MIL
FBC1BAD		10MIL
FBC1BA1		10MIL
FBDORAS*		10MIL
FBDOCAS*		10MIL
FBDOWE*		10MIL
FBDCKE		10MIL
FBDBAD		10MIL
FBDBA1		10MIL
FBDORAS*		10MIL
FBD1CAS*		10MIL
FBD1WE*		10MIL
FBD1CKE		10MIL
FBD1BAD		10MIL
FBD1BA1		10MIL
FBCCS0*		10MIL
FBCCS1*		10MIL
FBCDS0*		10MIL
FBCDS1*		10MIL

NET Name	Spacing
FBBVREF	12MIL TRACE
VREFA01	12MIL TRACE
VREFA02	12MIL TRACE
VREFA11	12MIL TRACE
VREFA12	12MIL TRACE
VREFB01	12MIL TRACE
VREFB02	12MIL TRACE
VREFB11	12MIL TRACE
VREFB12	12MIL TRACE
VREFC01	12MIL TRACE
VREFC02	12MIL TRACE
VREFC11	12MIL TRACE
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VREFD02	12MIL TRACE
VREFD11	12MIL TRACE
VREFD12	12MIL TRACE

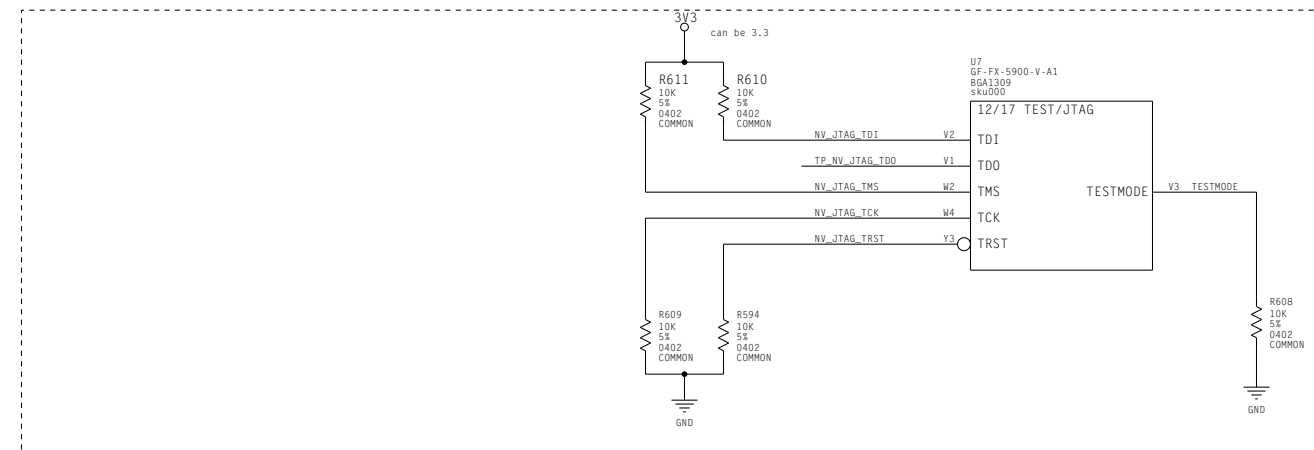
# 11. BIOS, Straps, Misc

## Straps

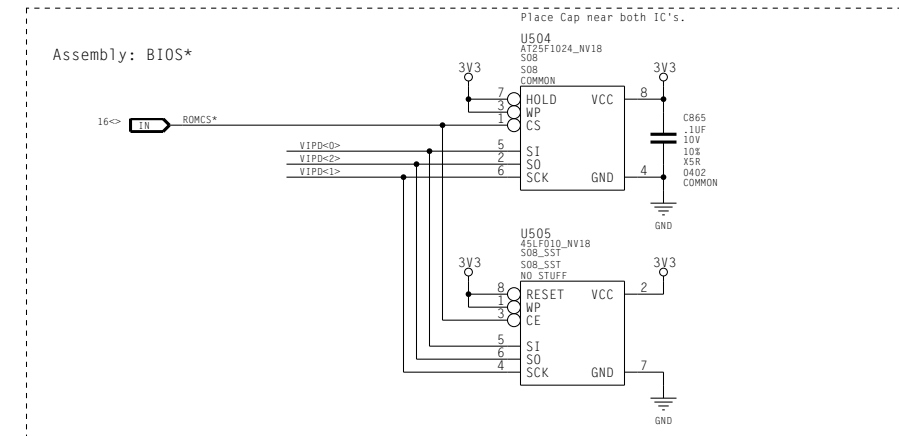
Assembly: BIOS



## Test/JTAG



## BIOS (serial)



ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	BIOS, Strappings and Misc

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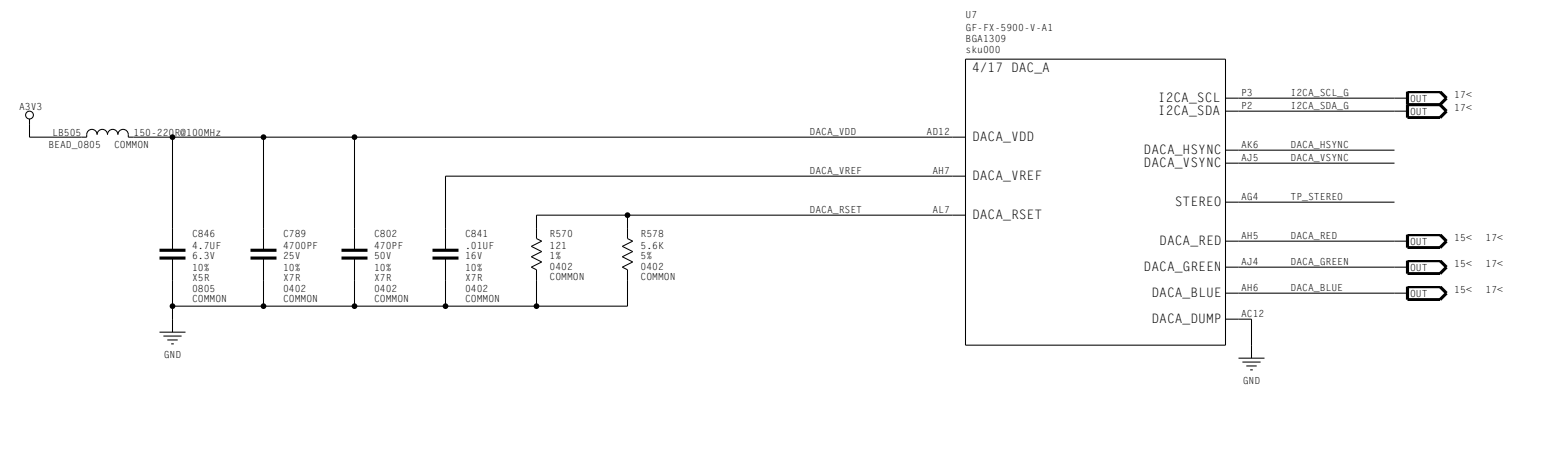
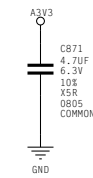
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ID	design
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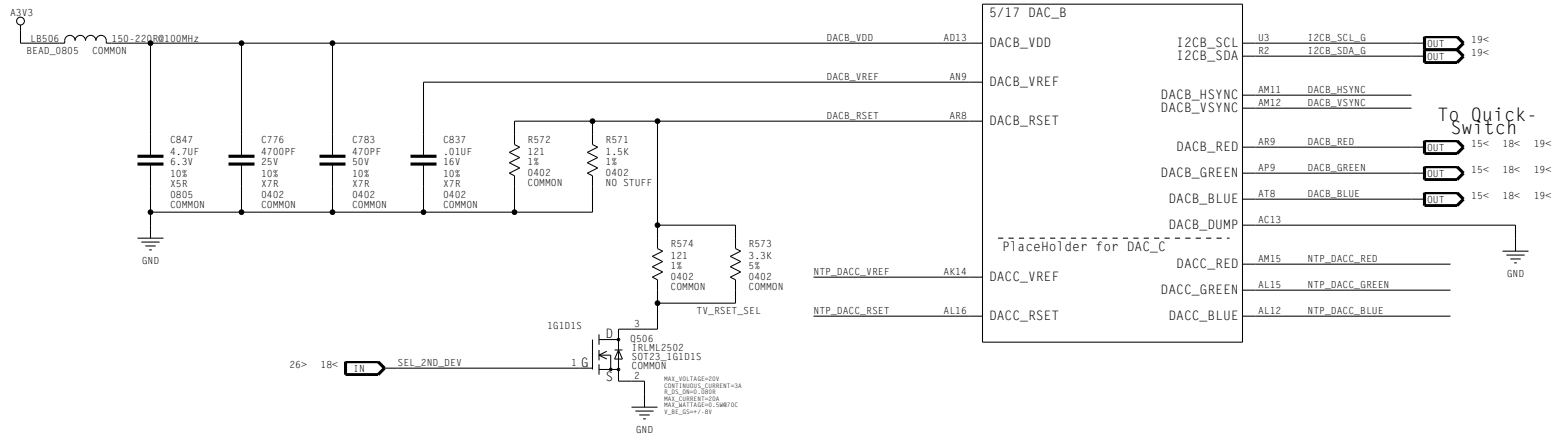
# 12. DAC\_A, DAC\_B, PLL, SyncBuffer

## DACA

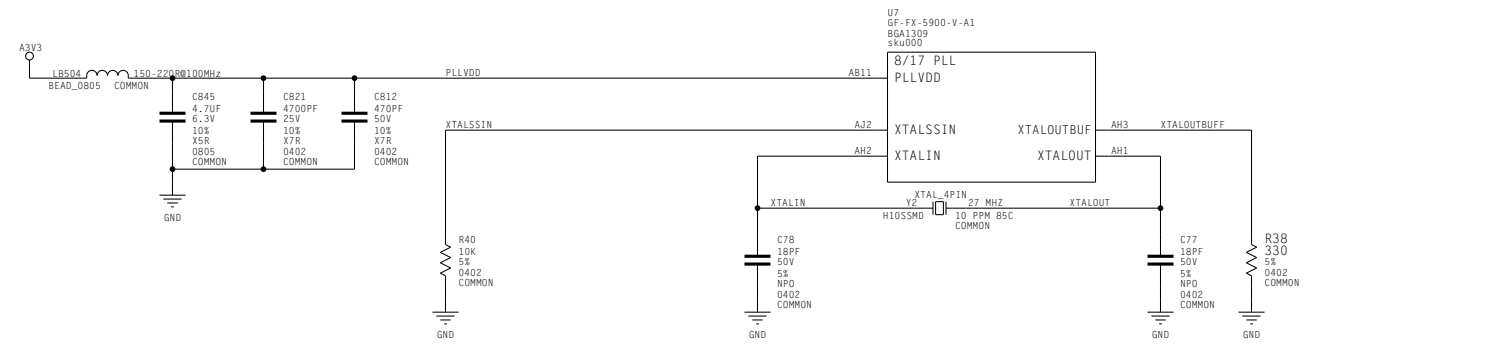
place near  
DAC\_A,B,PLL  
filter



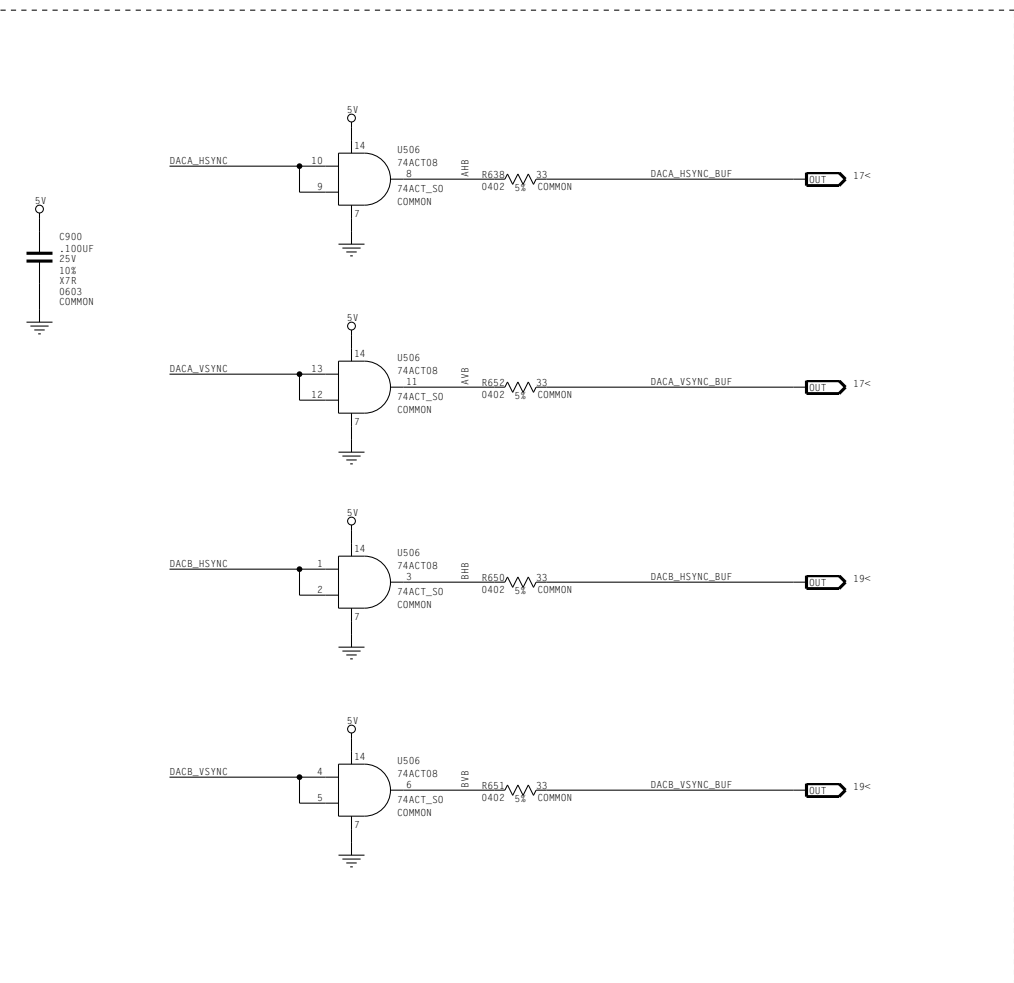
## DACB



## XTAL/PLLVDD



## DAC Sync Buffer



## NET RULES

NET	SPACING	PHYSICAL
XTALIN	15MIL	5MIL TRACE
XTALOUT	15MIL	5MIL TRACE
DACA_RED	20MIL_G2G_30MIL	
DACA_GREEN	20MIL_G2G_30MIL	
DACA_BLUE	20MIL_G2G_30MIL	
DACB_RED	20MIL_G2G_30MIL	
DACB_GREEN	20MIL_G2G_30MIL	
DACB_BLUE	20MIL_G2G_30MIL	
DACB_VDD		16MIL TRACE
DACB_RSET		16MIL TRACE
DACB_VREF		16MIL TRACE
DACA_VDD		16MIL TRACE
DACA_RSET		16MIL TRACE
DACA_VREF		16MIL TRACE
PLLVDD		16MIL TRACE

ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	DAC_A, DAC_B, PLL and SYNCbuffer

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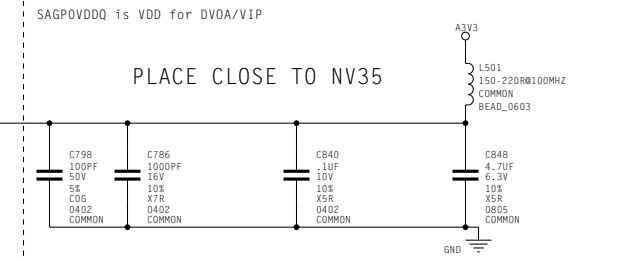
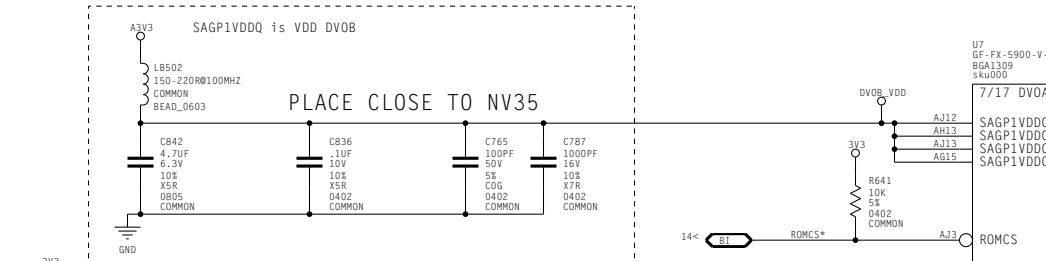
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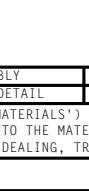
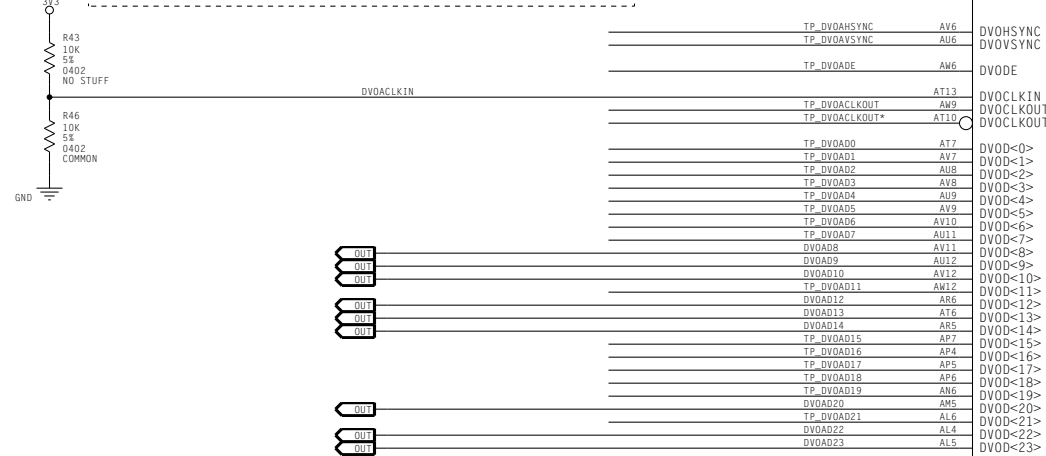
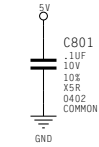
# 13. DVO/VIP Interface

NET	PHYSICAL	SPACING
SAGPOCALPD_VDDQ	12MIL TRACE	20MIL
SAGPICALPD_VDDQ	12MIL TRACE	20MIL
SAGPOCALPU_GND	12MIL TRACE	20MIL
SAGPICALPU_GND	12MIL TRACE	20MIL
DVOA_VDD	16MIL TRACE	
DVOB_VDD	16MIL TRACE	
DV0AD<23..0>		10MIL
DV0AD_R<23..0>		10MIL

Place near Power Filter



Decoupling for VDSOCLAMP1



NOTE: VIPD<9> HAS BEEN REDEFINED AS SWAP\_READY1  
VIPD<10> HAS BEEN REDEFINED AS SWAP\_READY2

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ASSEMBLY NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)  
 PAGE DETAIL DVO/VIP Interface

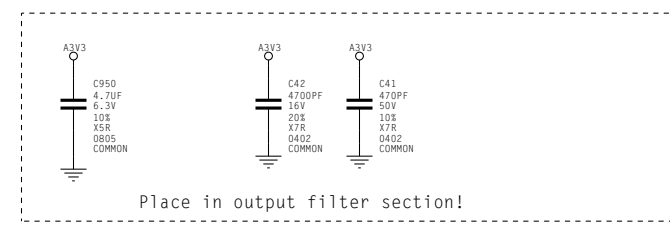
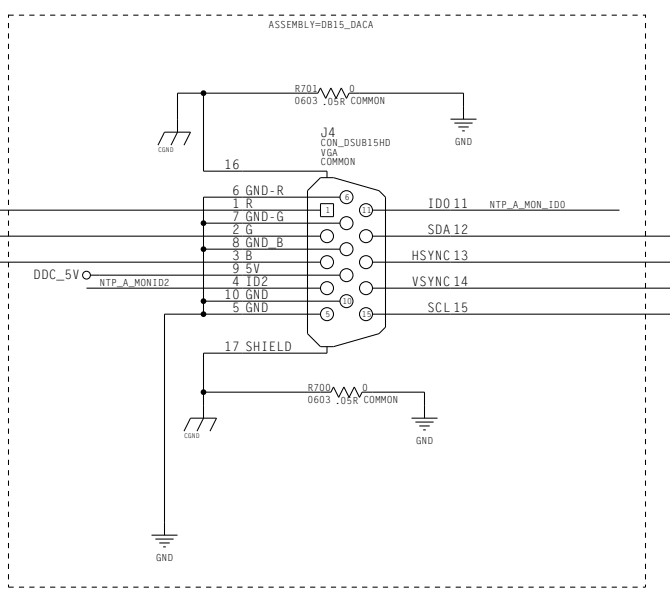
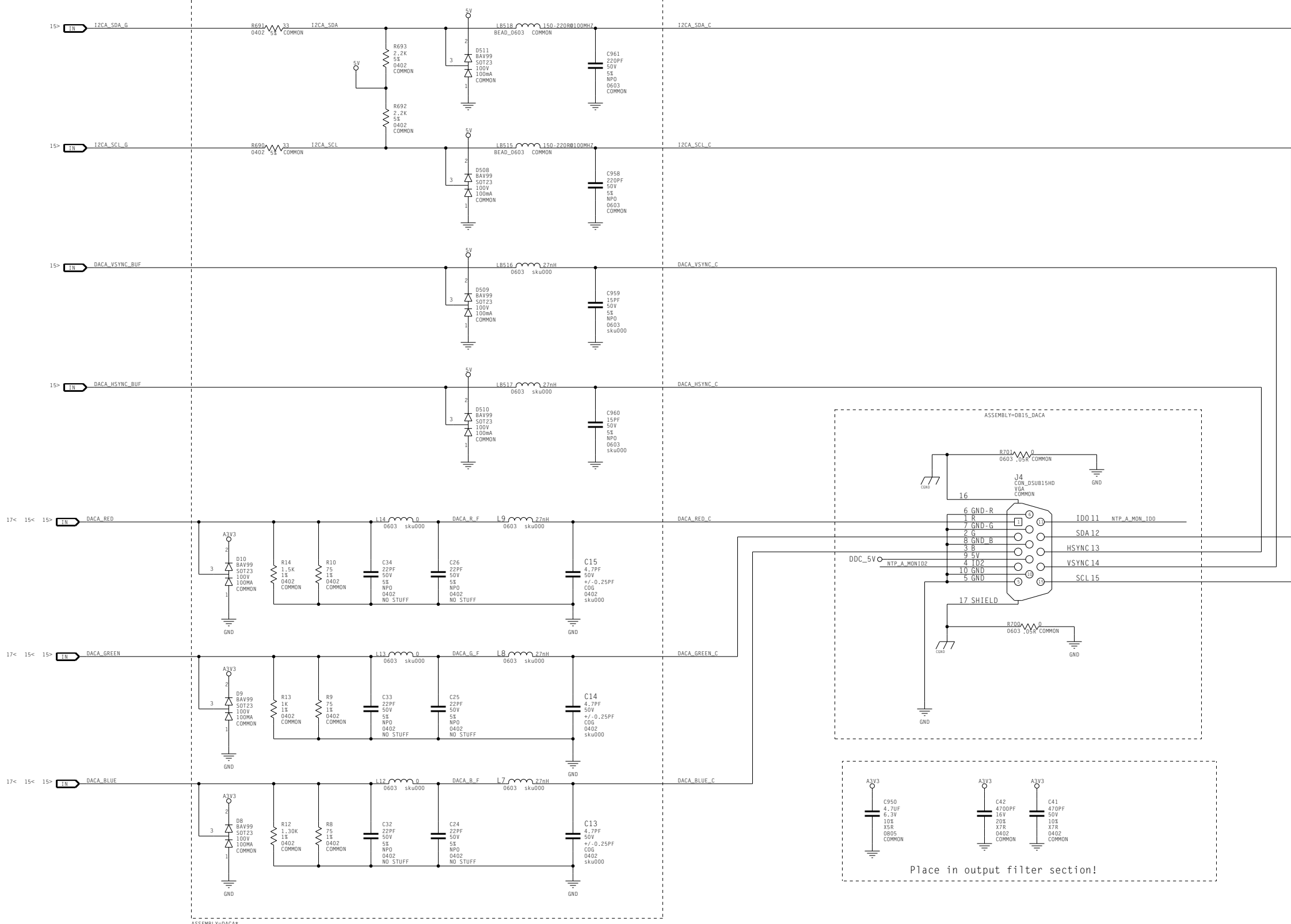
# 14. DACA RGB filters, VGA connector Output (south)

## NET RULES

NET	PHYSICAL	SPACING
DACA_RED	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_GREEN	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_BLUE	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_R_F	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_G_F	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_B_F	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_RED_C	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_GREEN_C	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL
DACA_BLUE_C	NOTE:37.5Ohm Impedance	20MIL_G26_30MIL

### DACA RGB-FILTER

### DACA VGA connector



ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	DACA Filter and VGA connector

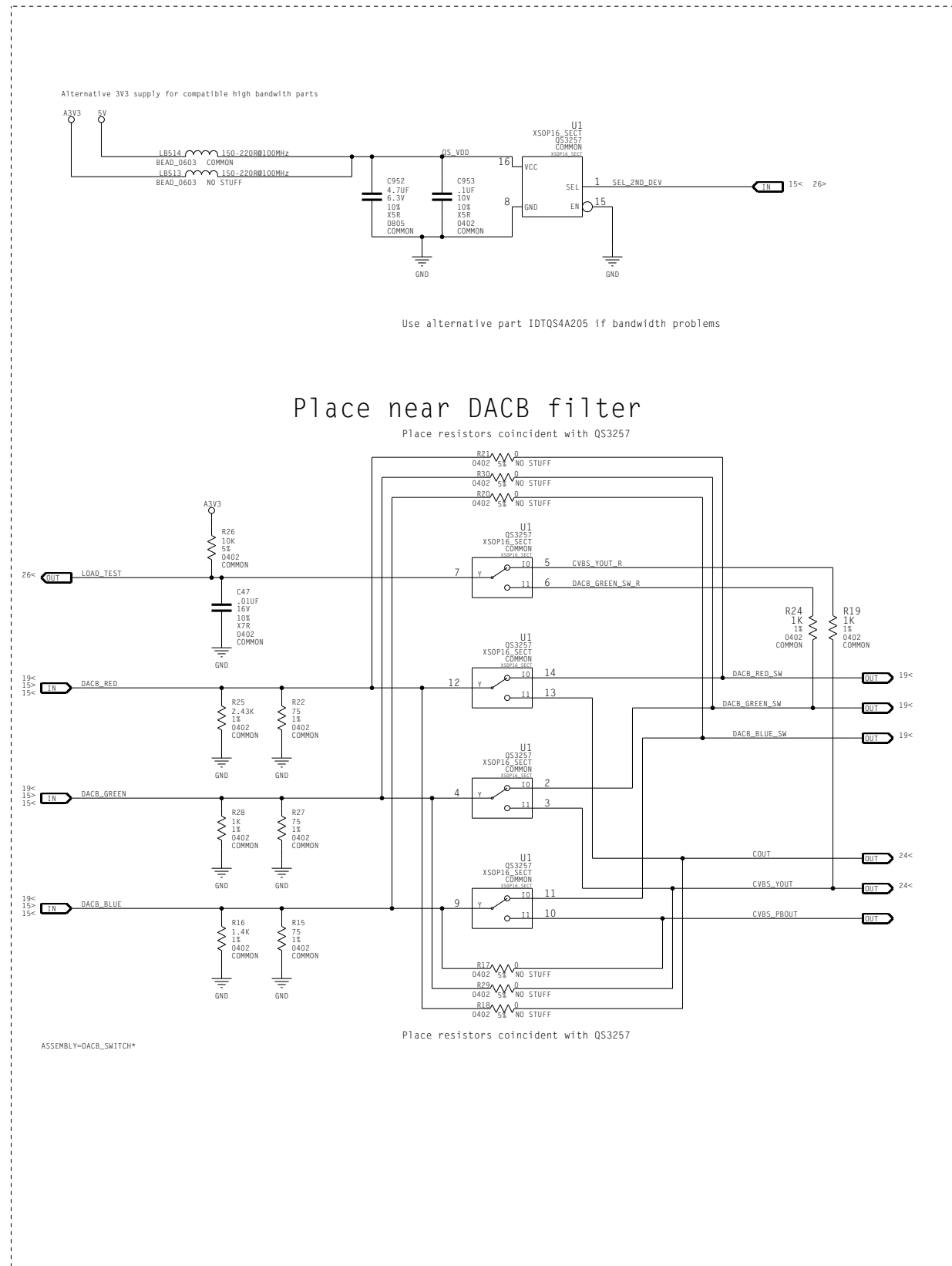
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# 15. DACB VGA/TV Switch Quickswitch for DACB



ASSEMBLY	NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)
PAGE DETAIL	DACB VGA/TV Switch

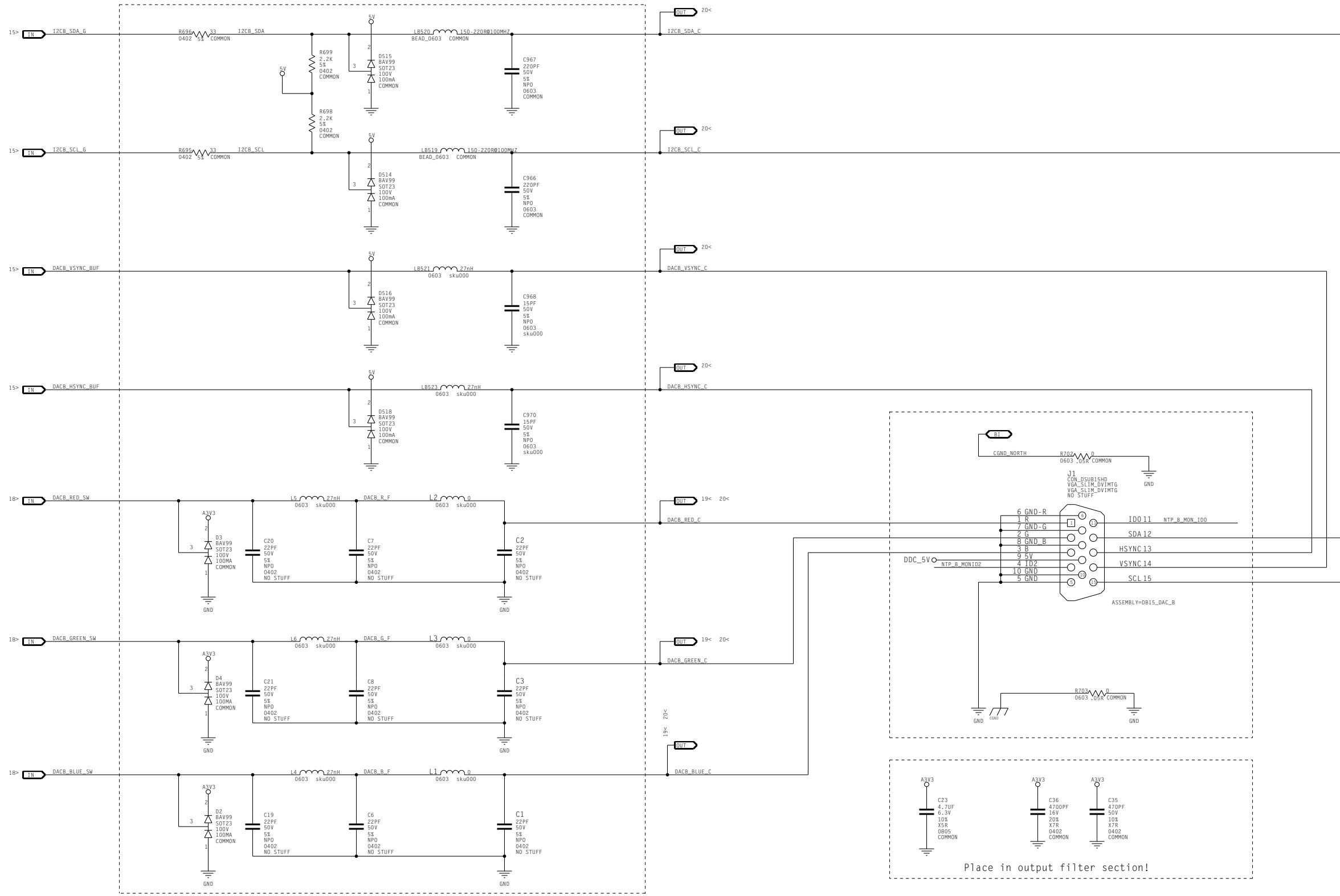
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NAME	602-10177-0000-001	DATE 9-JUL-2003

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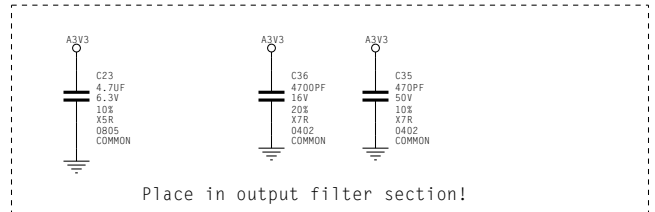
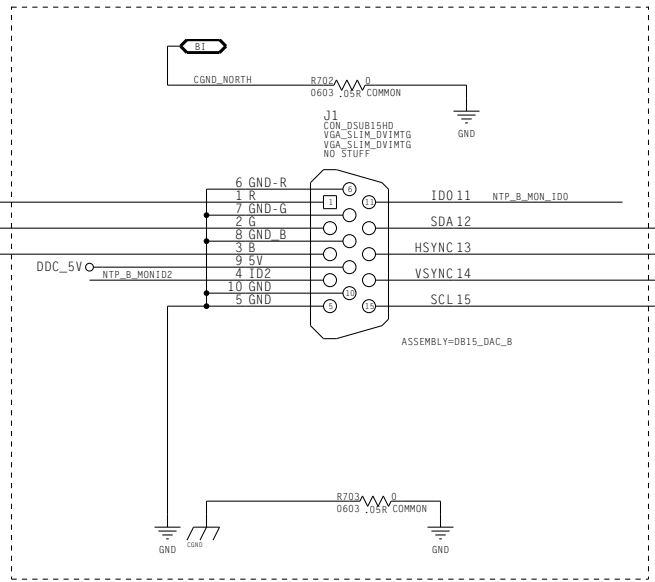
# 16. DACB RGB filters, VGA connector (north)

## DACB RGB-FILTER

## DACB VGA connector



NET RULES			
NET	PHYSICAL	SPACING	
DACB_RED	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_GREEN	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_BLUE	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_R_F	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_G_F	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_B_F	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_RED_C	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_GREEN_C	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL
DACB_BLUE_C	NOTE:37.5Ohm Impedance	20MIL	G26_30MIL



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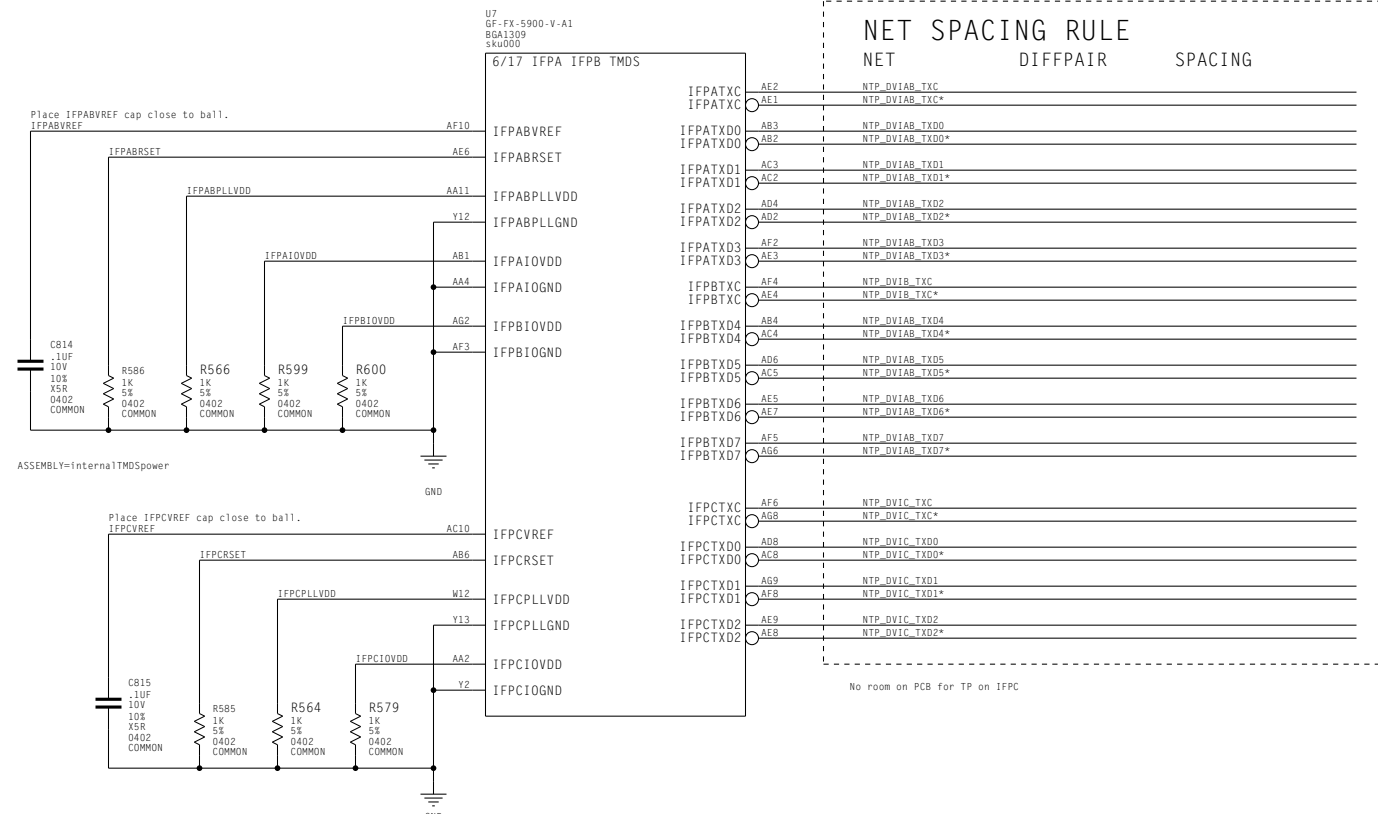
ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	DACB Filter and VGA connector

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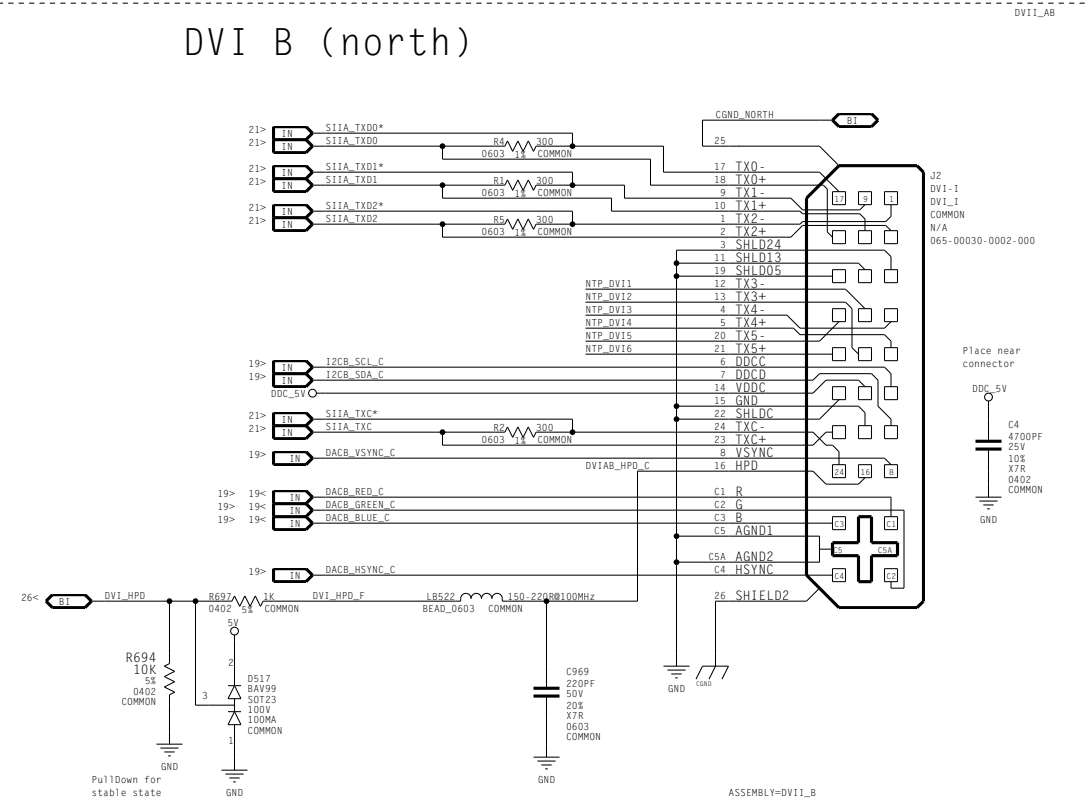
# 17. Internal TMDS/LVDS .. Link A/B, Link C

## NET RULES (OTHER)

NET	PHYSICAL	VOLTAGE
IFPABLLVDD	10MIL TRACE	3.3V
IFPABLVDD	10MIL TRACE	3.3V
IFPABVREF	10MIL TRACE	3.3V
IFPABRSET	10MIL TRACE	3.3V
IFPABLLVDD	10MIL TRACE	3.3V
IFPABLVDD	10MIL TRACE	3.3V
IFPABVREF	10MIL TRACE	3.3V
IFPABRSET	10MIL TRACE	3.3V
IFPABLLVDD	10MIL TRACE	3.3V
IFPABLVDD	10MIL TRACE	3.3V
IFPABVREF	10MIL TRACE	3.3V
IFPABRSET	10MIL TRACE	3.3V



## DVI B (north)



ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	DVI Connector

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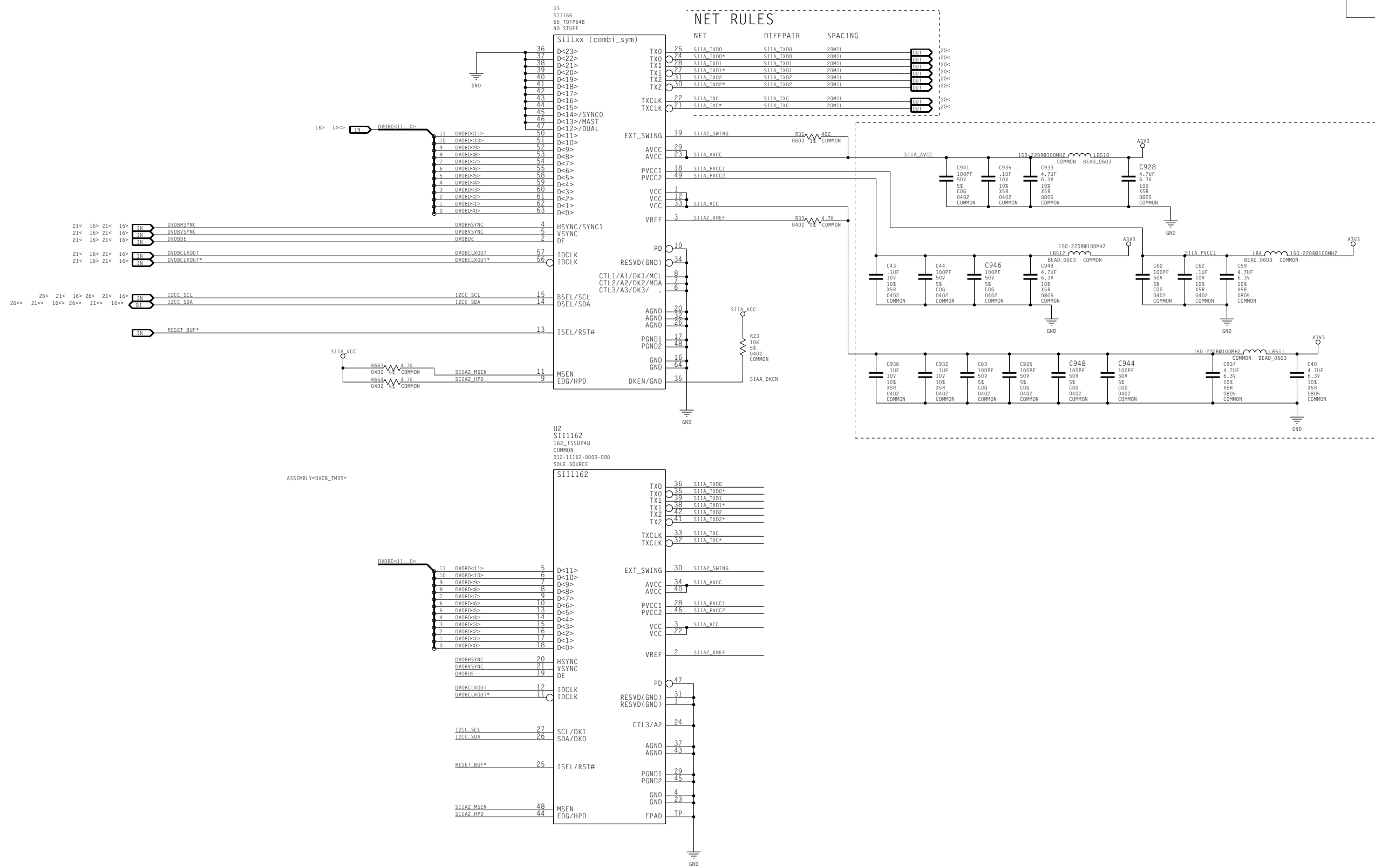
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# 18. External Single-Link Transmitter

## NET RULES (OTHER)

NET	PHYSICAL
S11A_VCC	S11A_VCC 12MIL_TRACE
S11A_AVCC	S11A_AVCC 12MIL_TRACE
S11A_PVCC1	S11A_PVCC1 12MIL_TRACE
S11A_PVCC2	S11A_PVCC2 12MIL_TRACE



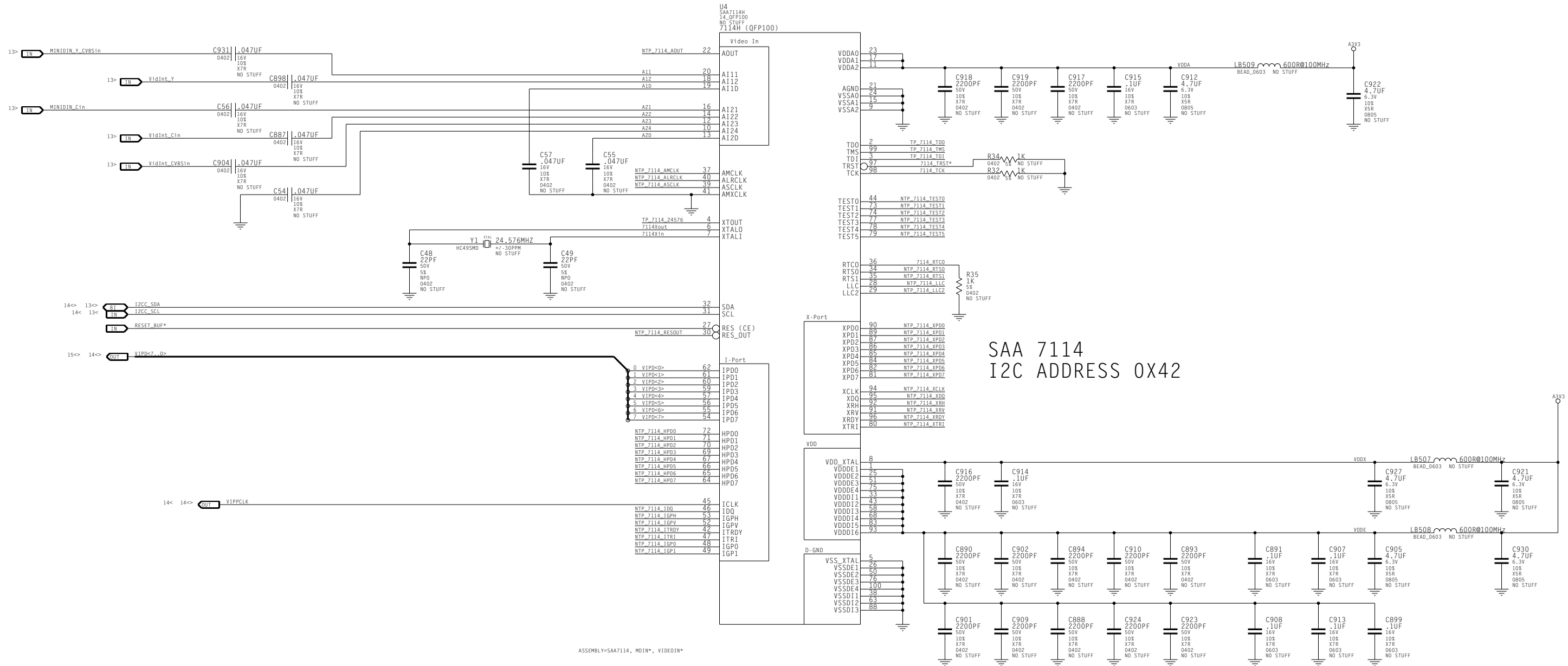
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NV\_PN: 600-10177-0000-000  
 ID: design PAGE: 18 OF 27  
 NAME: 602-10177-0000-001 DATE: 9-JUL-2003

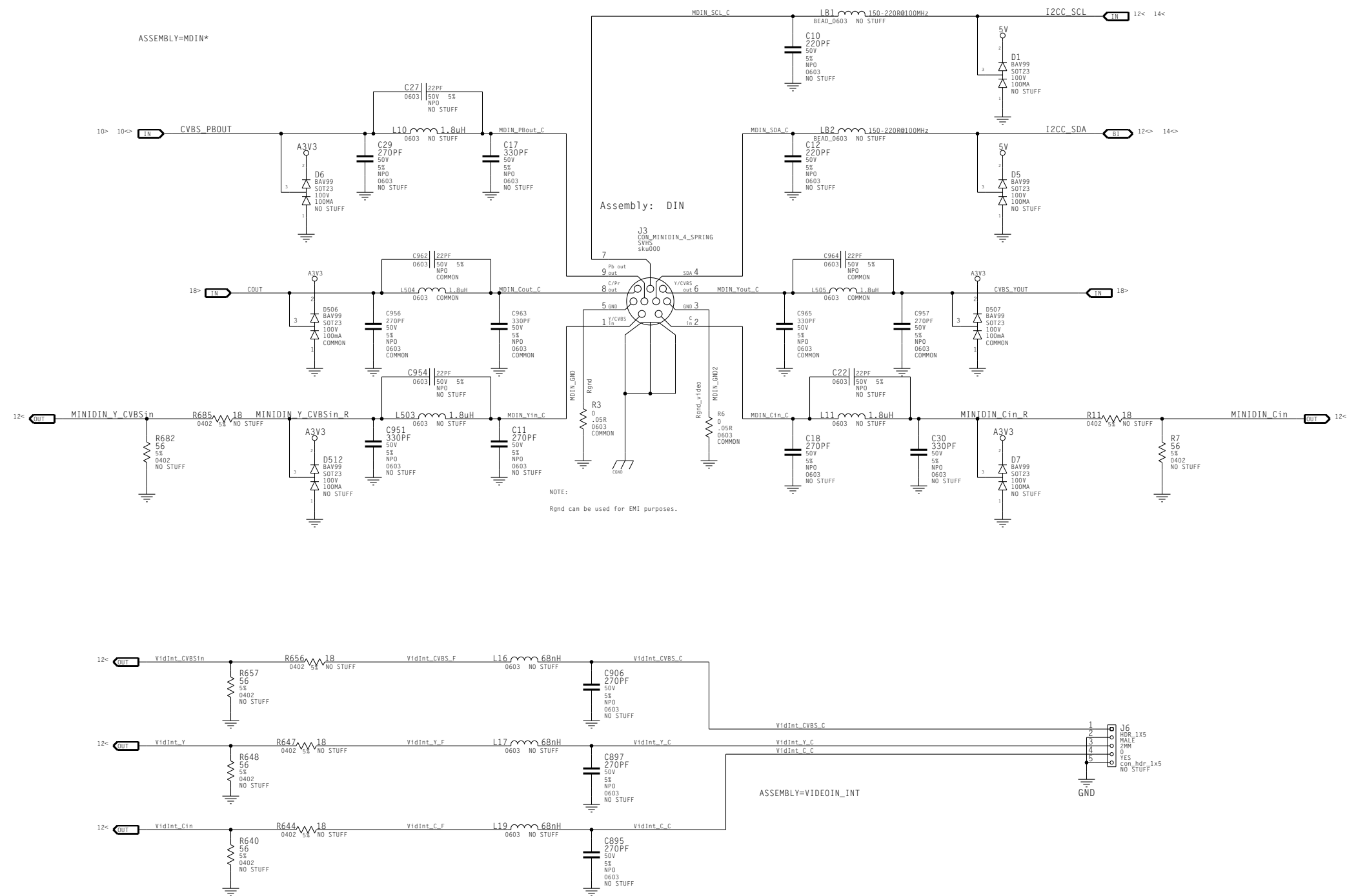
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ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	TMDS External with S11icon Image


# 19. Video Capture



# 20. MiniDIN, 9 Pin, Video IN/OUT Connector



ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	Video In/Out Connector External with Stereo Out (MiniDin)

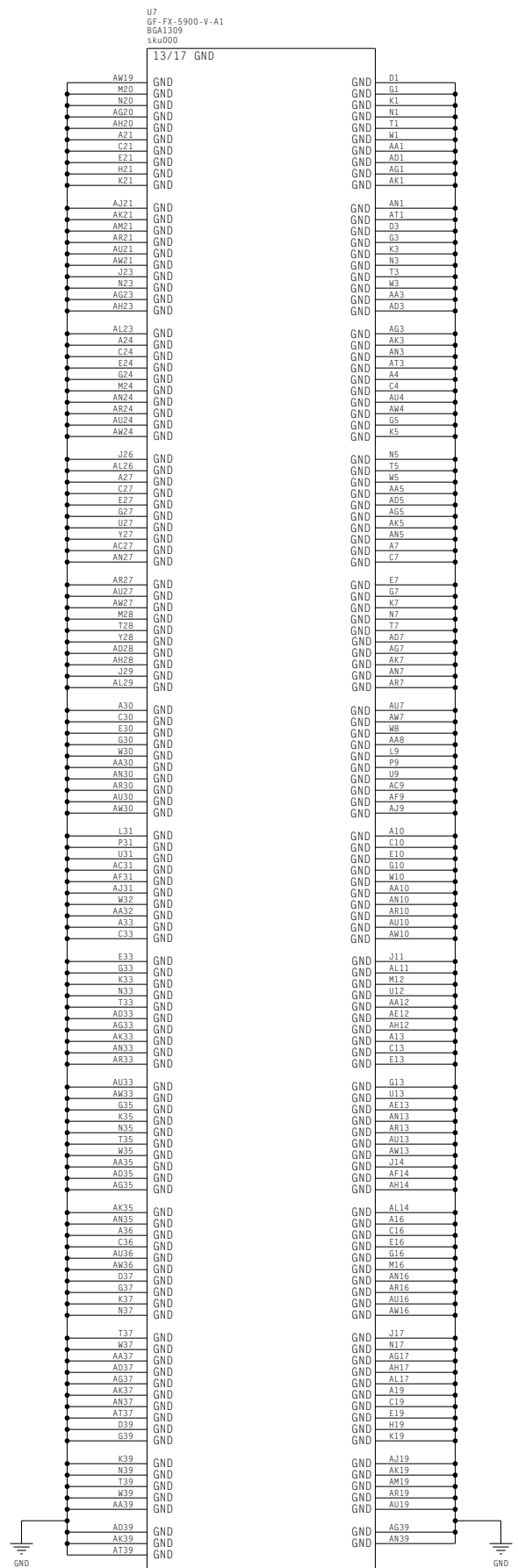
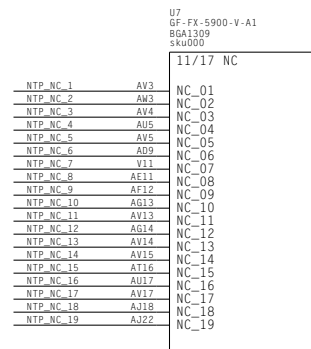
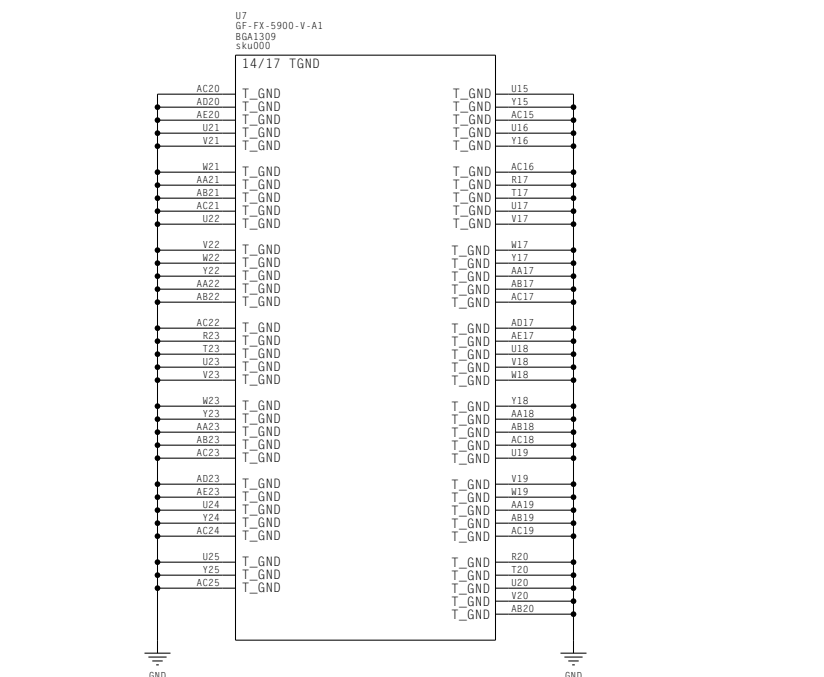
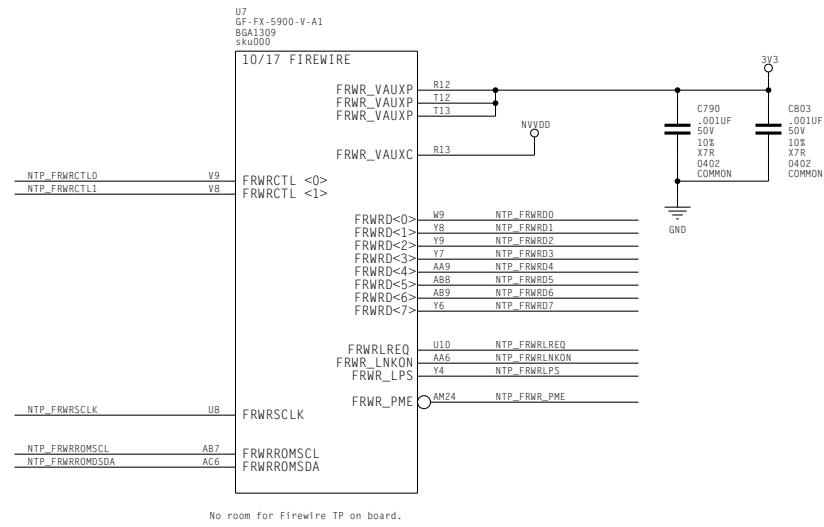
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ID	design	PAGE 20 OF 27
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# 21. GND, Thermal GND and Misc...

## NET RULES

NET	PHYSICAL	SPACING
DID2CALPD_VDD0	12MIL TRACE	20MIL
DID2CALPU_GND	12MIL TRACE	20MIL



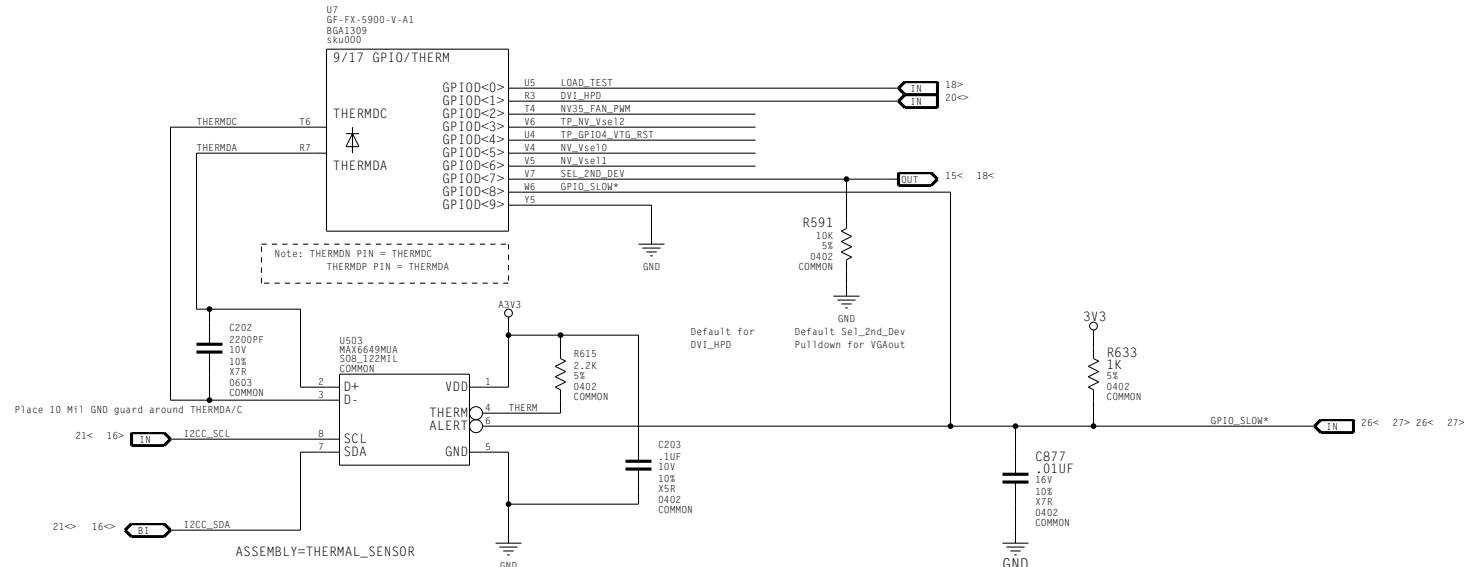
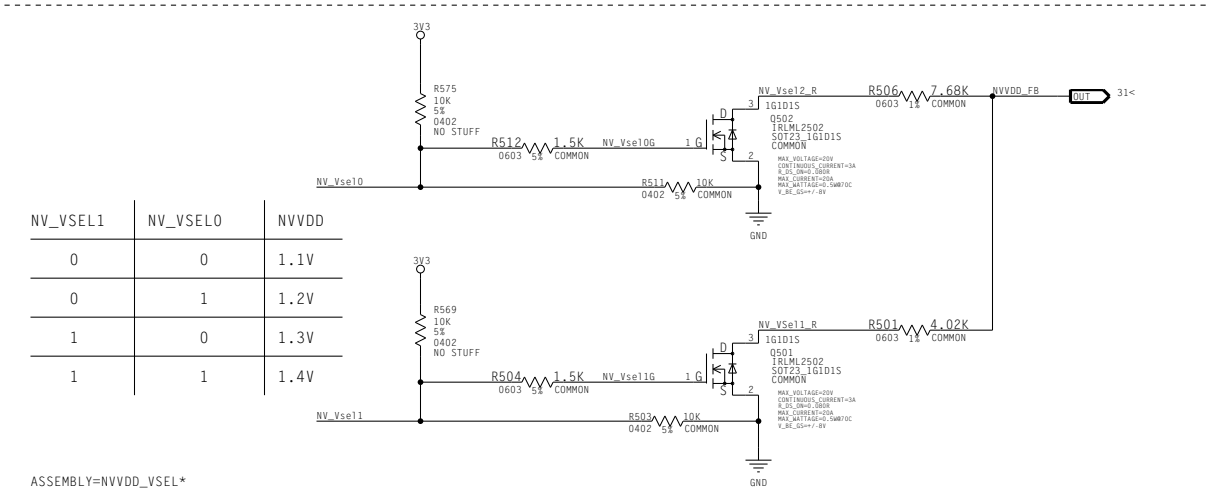
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# 22. GPIO's, NVVDD Control, Fan & Thermal Control

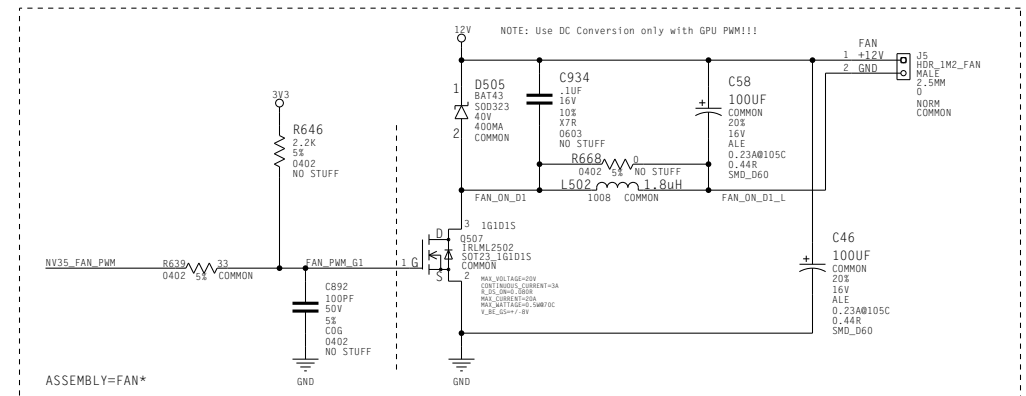
## GPIO CONTROL

### NVVDD Voltage Selection

Place close to NVVDD feedback loop!



## FAN1 CONTROL (Southwest of board)

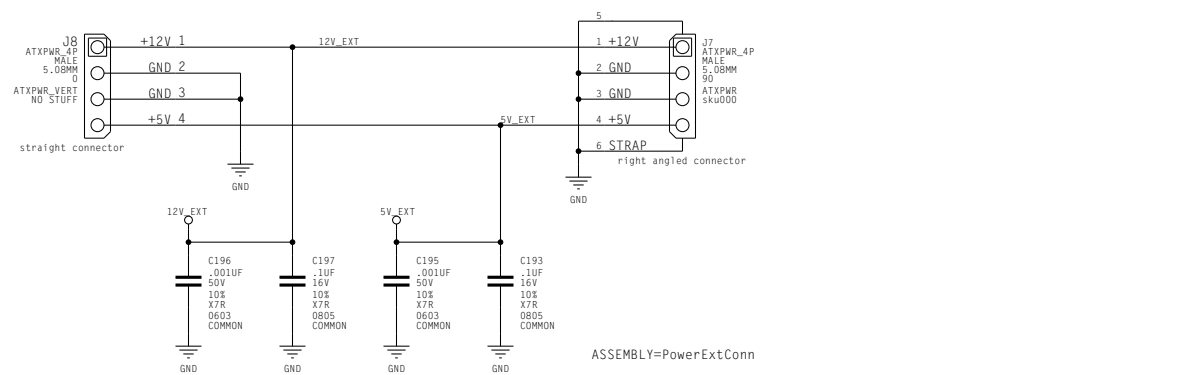


## NET RULES

NET	SPACING	PHYSICAL
THERMDC		10MIL TRACE
THERMDC		10MIL TRACE
WB_Therm1		10MIL TRACE
WB_Therm2		10MIL TRACE
WB_PWM1	20MIL	
WB_PWM2	20MIL	
NV35_FAN_PWM	20MIL	
FAN_PWM_G1	20MIL	
FAN_PWM_G2	20MIL	

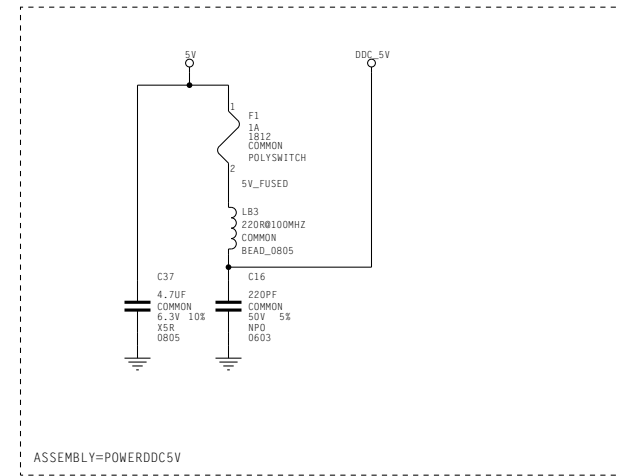
# 23. EXT POWER CONNECTION AND DETECTION

EXTERNAL 5.25 DEVICE CONNECTOR



NOTE:  
Shutdown power before (dis)connecting external!

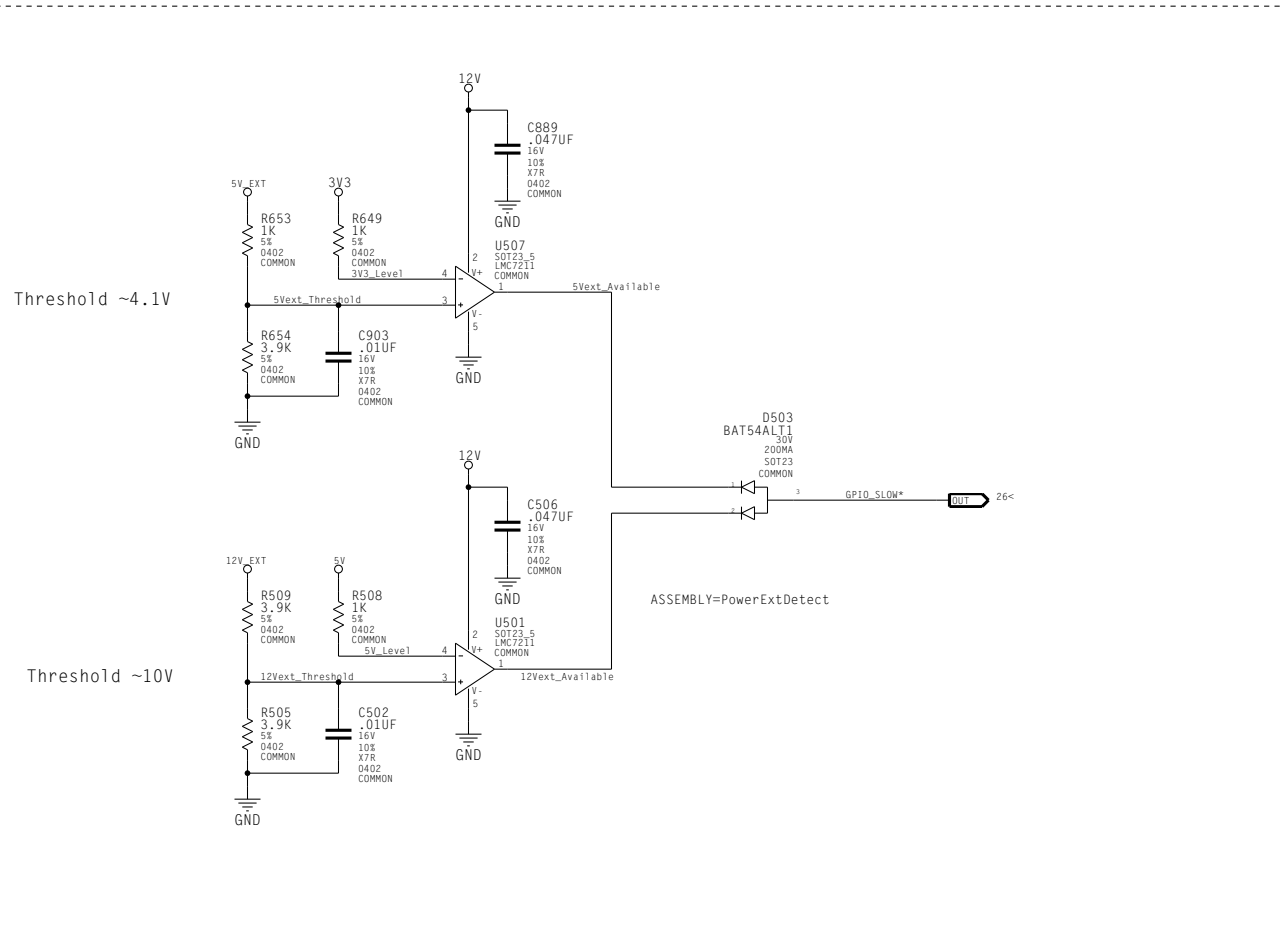
DDC 5V



## NET RULES

NET	PHYSICAL	VOLTAGE
5V_EXT	5V_EXT	5V
12V_EXT	12V_EXT	12V
	5V_EXT and 12V_EXT need to be 220mil internal and 72 mil external	
12V_EXT_D	12V_EXT_D	
12V_EXT_R	12V_EXT_R	
5V_EXT_R	5V_EXT_R	
ENABLE_12V_EXT*	ENABLE_12V_EXT*	12V
ENABLE_5V_EXT*	ENABLE_5V_EXT*	5V
EXTSENSE	EXTSENSE	
DDC_5V	DDC_5V	5V
5V_FUSED	5V_FUSED	

EXTERNAL Power detection signals



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ASSEMBLY NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)  
 PAGE DETAIL External Power Connection and Detection

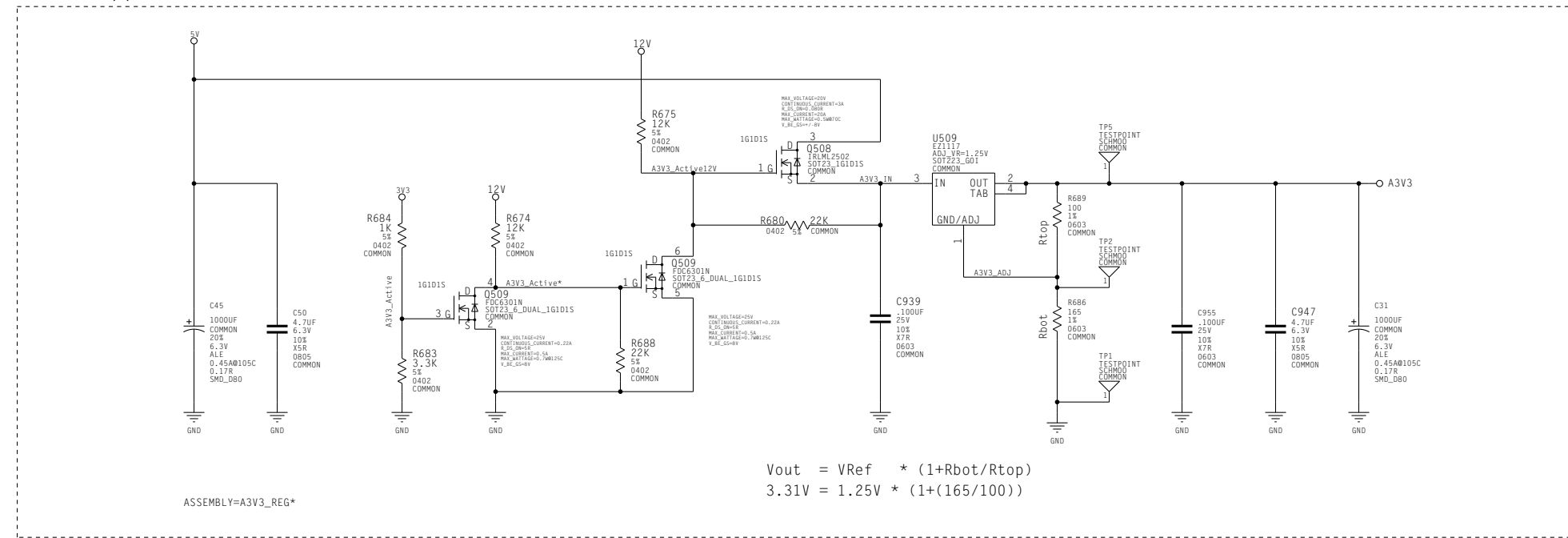
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# 24. Power Supply I: Analog 3V3

## NET RULES

NET	PHYSICAL	VOLTAGE
A3V3	12MIL TRACE	3.3V
5V1085	12MIL TRACE	5V
1085_ADJ	10MIL TRACE	3.3V

A3V3 Supply



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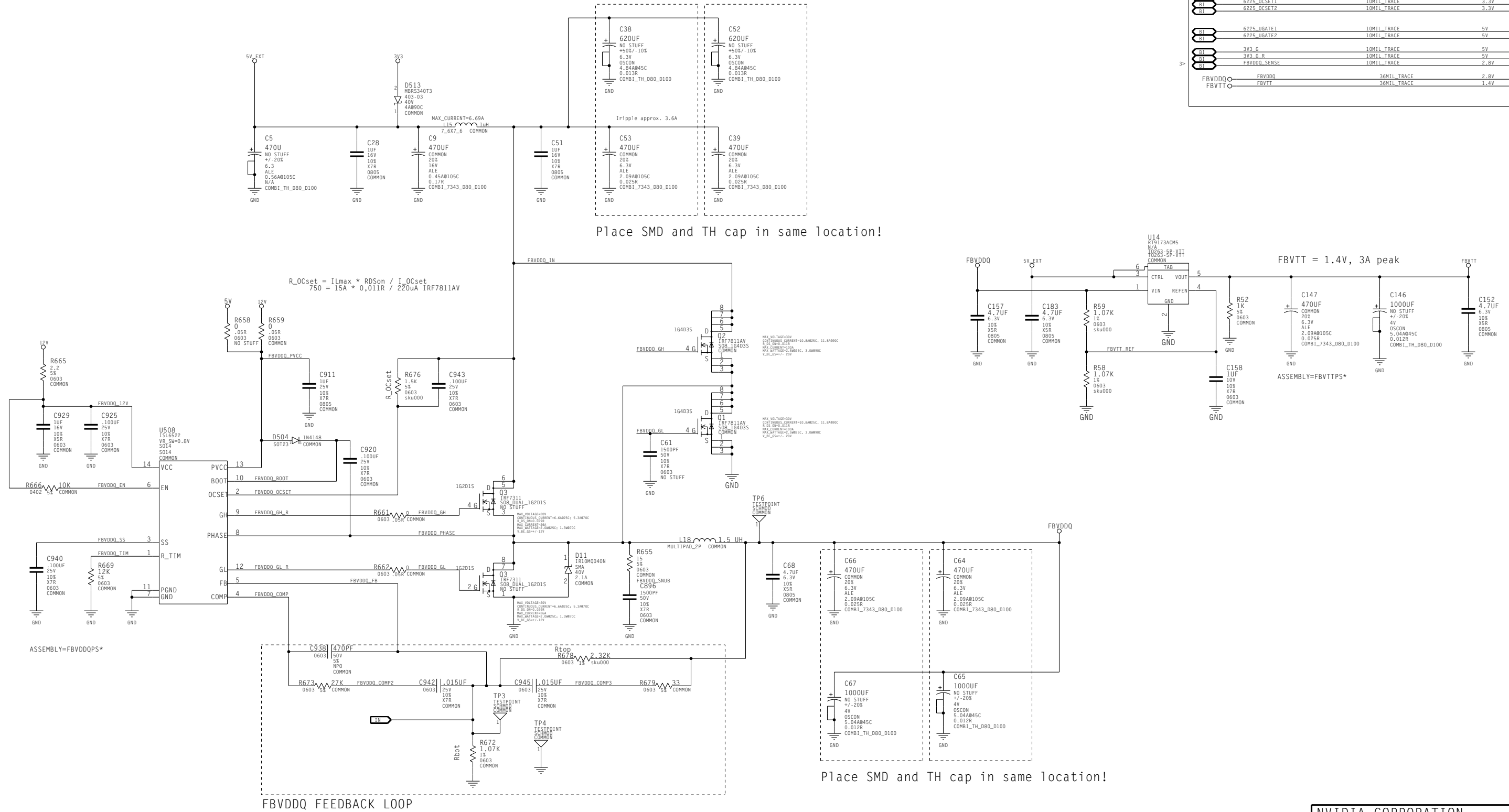
ASSEMBLY	NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)	
PAGE DETAIL	Power Supply I: A3V3	
NV_PN	600-10177-0000-000	
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# 25. Power Supply III: FBVDDQ/FBVTT

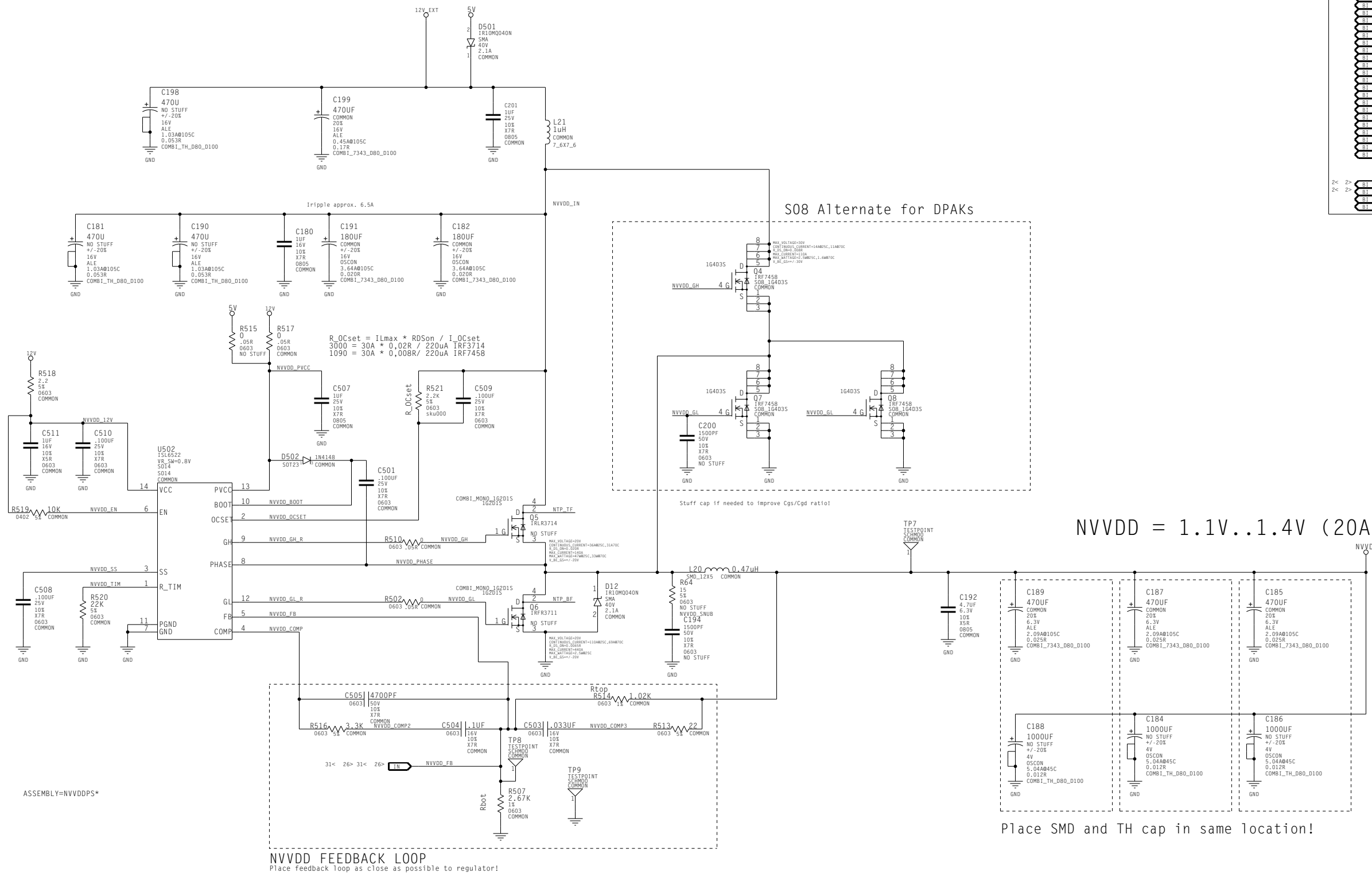
## NET RULES

NET	NET_PHYSICAL_TYPE	VOLTAGE
6225_3V3_5	36MIL_TRACE	5V
6225_VCC	36MIL_TRACE	5V
6225_PHASE1	12MIL_TRACE	5V
6225_PHASE2	12MIL_TRACE	5V
6225_VSEN1	10MIL_TRACE	3.3V
6225_BOOT1	10MIL_TRACE	3.3V
6225_BOOT2	10MIL_TRACE	3.3V
6225_ISEN1	10MIL_TRACE	3.3V
6225_ISEN2	10MIL_TRACE	3.3V
6225_LGATE1	10MIL_TRACE	3.3V
6225_LGATE2	10MIL_TRACE	3.3V
6225_OCSET1	10MIL_TRACE	3.3V
6225_OCSET2	10MIL_TRACE	3.3V
6225_UGATE1	10MIL_TRACE	5V
6225_UGATE2	10MIL_TRACE	5V
3V3_G	10MIL_TRACE	5V
3V3_G_R	10MIL_TRACE	5V
FBVDDQ_SENSE	10MIL_TRACE	2.8V
FBVDDQ	36MIL_TRACE	2.8V
FBVTT	36MIL_TRACE	1.4V



# 26. Power Supply IV: NVVDD

## ISL 6522 S014 switching with 400kHz



NET	PHYSICAL	VOLTAGE
NVVDD	36MIL TRACE	1.4V
AGP12VFUSE	24MIL TRACE	12V
NV_PHASE1	12MIL TRACE	1.2V
NV_PHASE2	12MIL TRACE	1.2V
NV_VCC	12MIL TRACE	5V
NV_BOOT1	10MIL TRACE	3.3V
NV_BOOT2	10MIL TRACE	3.3V
NV_COMP	10MIL TRACE	3.3V
NV_COMP_FB	10MIL TRACE	3.3V
NV_FB	10MIL TRACE	3.3V
NV_PWM1	10MIL TRACE	3.3V
NV_PWM2	10MIL TRACE	3.3V
NV_VDIFF	10MIL TRACE	3.3V
NV_OFS	10MIL TRACE	3.3V
NV_ISEN1	10MIL TRACE	3.3V
NV_ISEN2	10MIL TRACE	3.3V
PH1_SNB	10MIL TRACE	1.2V
PH2_SNB	10MIL TRACE	1.2V
NV_UGATE1	24MIL TRACE	12V
NV_UGATE2	24MIL TRACE	12V
NV_UGATE1_R	24MIL TRACE	12V
NV_UGATE2_R	24MIL TRACE	12V
NV_LGATE1	24MIL TRACE	12V
NV_LGATE2	24MIL TRACE	12V
NV_LGATE1_R	24MIL TRACE	12V
NV_LGATE2_R	24MIL TRACE	12V
NVVDD_SENSE	NOTE:DIFFPAIR ROUTING	10MIL TRACE
NVVDD_GND_SENSE	NOTE:DIFFPAIR ROUTING	10MIL TRACE
NV_VSEN	NV_REM_SENSE#	10MIL TRACE
NV_R6ND	NV_REM_SENSE#	10MIL TRACE

NVVDD = 1.1V..1.4V (20A)

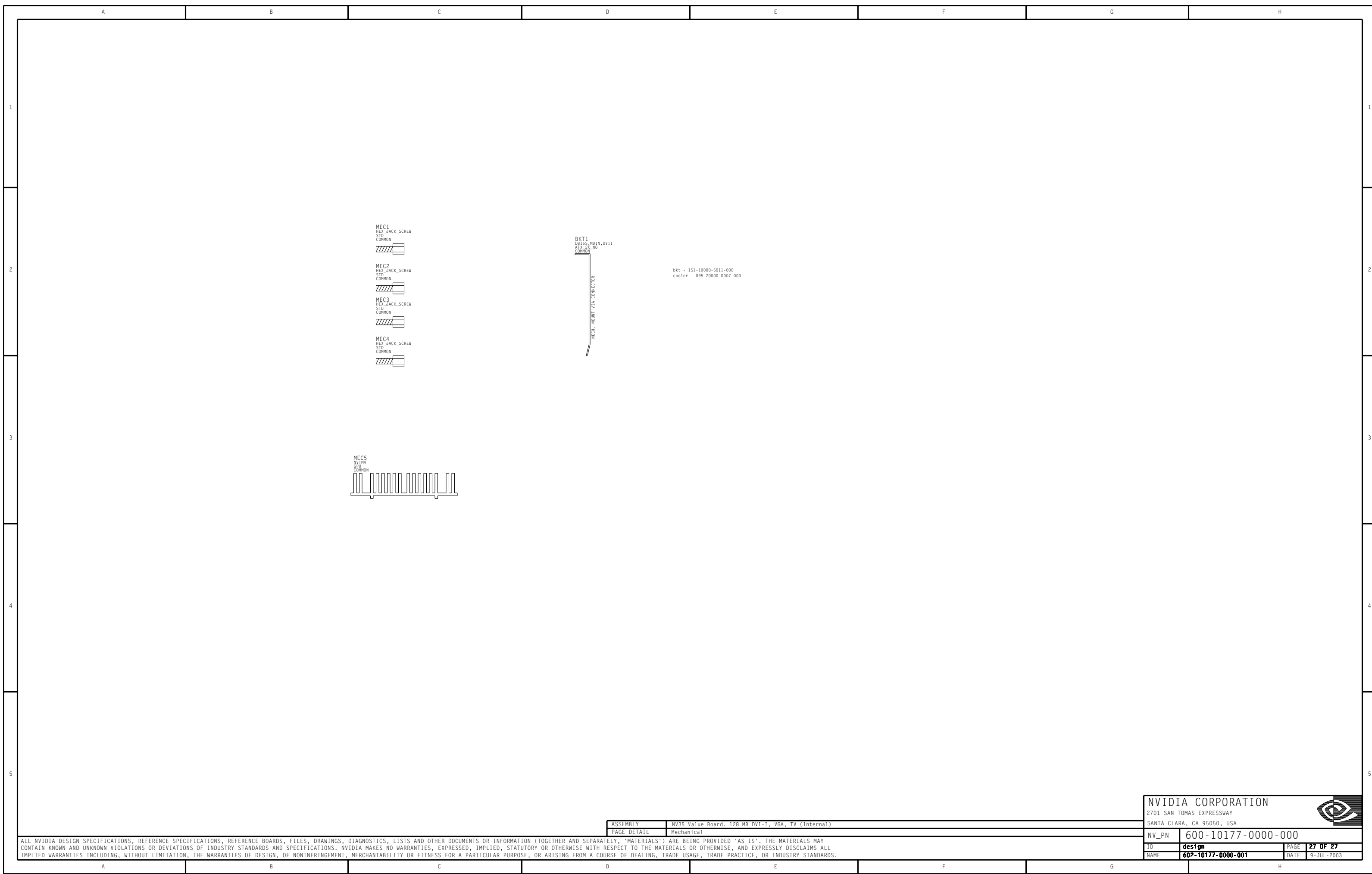
Place SMD and TH cap in same location!

ASSEMBLY	NV35 Value Board, 128 MB DV1-I, VGA, TV (Internal)
PAGE DETAIL	Power Supply III: NVVDD

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ASSEMBLY	NV35 Value Board, 128 MB DVI-I, VGA, TV (Internal)
PAGE DETAIL	Mechanical

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