

P283: LOW PROFILE NV44/G3-64, TSOP MEMORY x16


REV HISTORY

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- Page2: PCI Express Interface
- Page3: Frame Buffer Interface
- Page4: Memory 1st bank 0..31
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- Page12: MIO
- Page13: STRAPS, Mechanical Parts
- Page14: NVVDD & FBVDDQ
- Page15: TMDS_IOVDD,TMDS_PLLVDD,5V,F3V3

REV	VARIANT	MYPN	ASSEMBLY
B	BASE	600-EGppp-xxxx-vvv	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	WORKSTATION_SKU00	600-50283-0000-100	NVS SKU00
2	0001	600-10283-0001-000	SKU01 - NV44 G364 VGA+QTV, 360275Mhz, 64x8 64MB MEMORY INTERFACE
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	P283 Overview



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MS-V017

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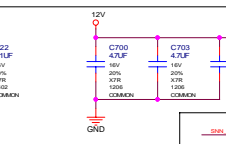
Cover Page

Date: Thursday, April 07, 2005

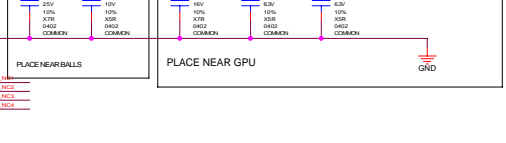
Sheet 1 of 14

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353 PLACE NEAR FINGERS



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GPU: FB-Interface

U2B

IC402B_FBI_2002BMM_0204

COMMON

212 FRAME_BUFFER

FBI.D00

FBI.D01

FBI.D02

FBI.D03

FBI.D04

FBI.D05

FBI.D06

FBI.D07

FBI.D08

FBI.D09

FBI.D10

FBI.D11

FBI.D12

FBI.D13

FBI.D14

FBI.D15

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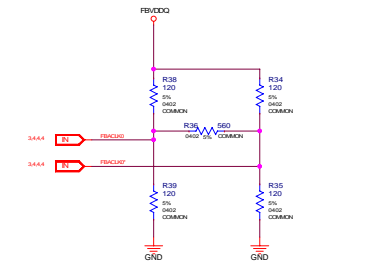
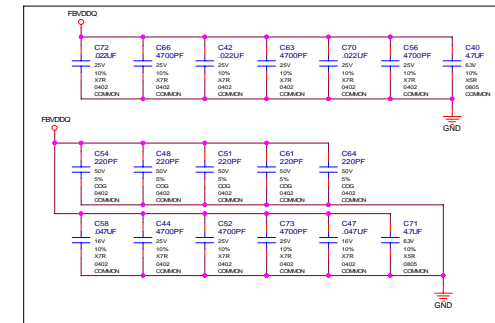
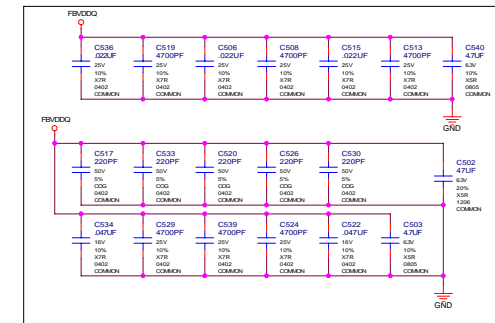
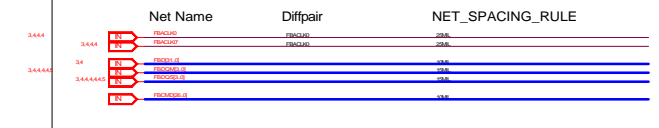
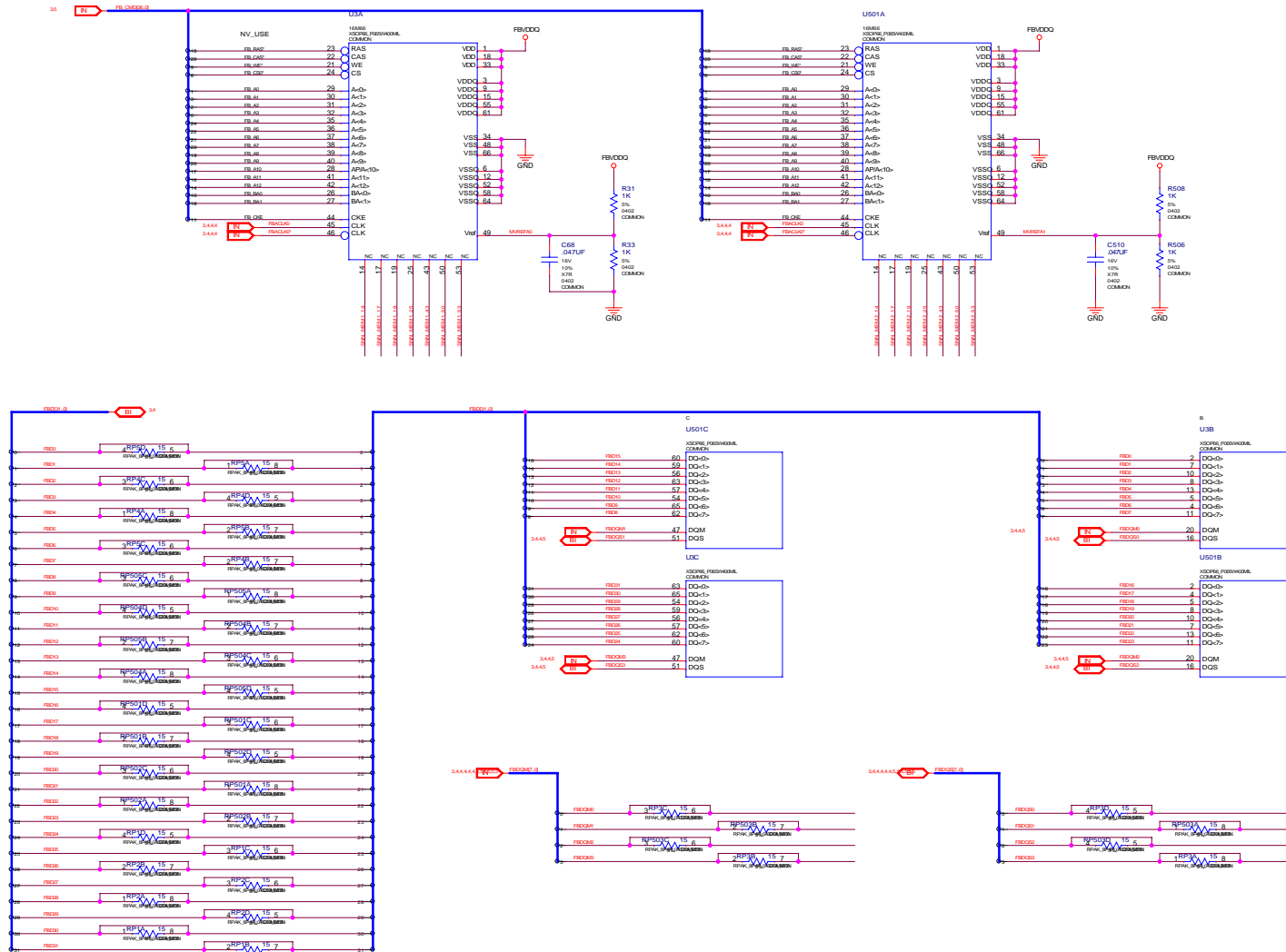
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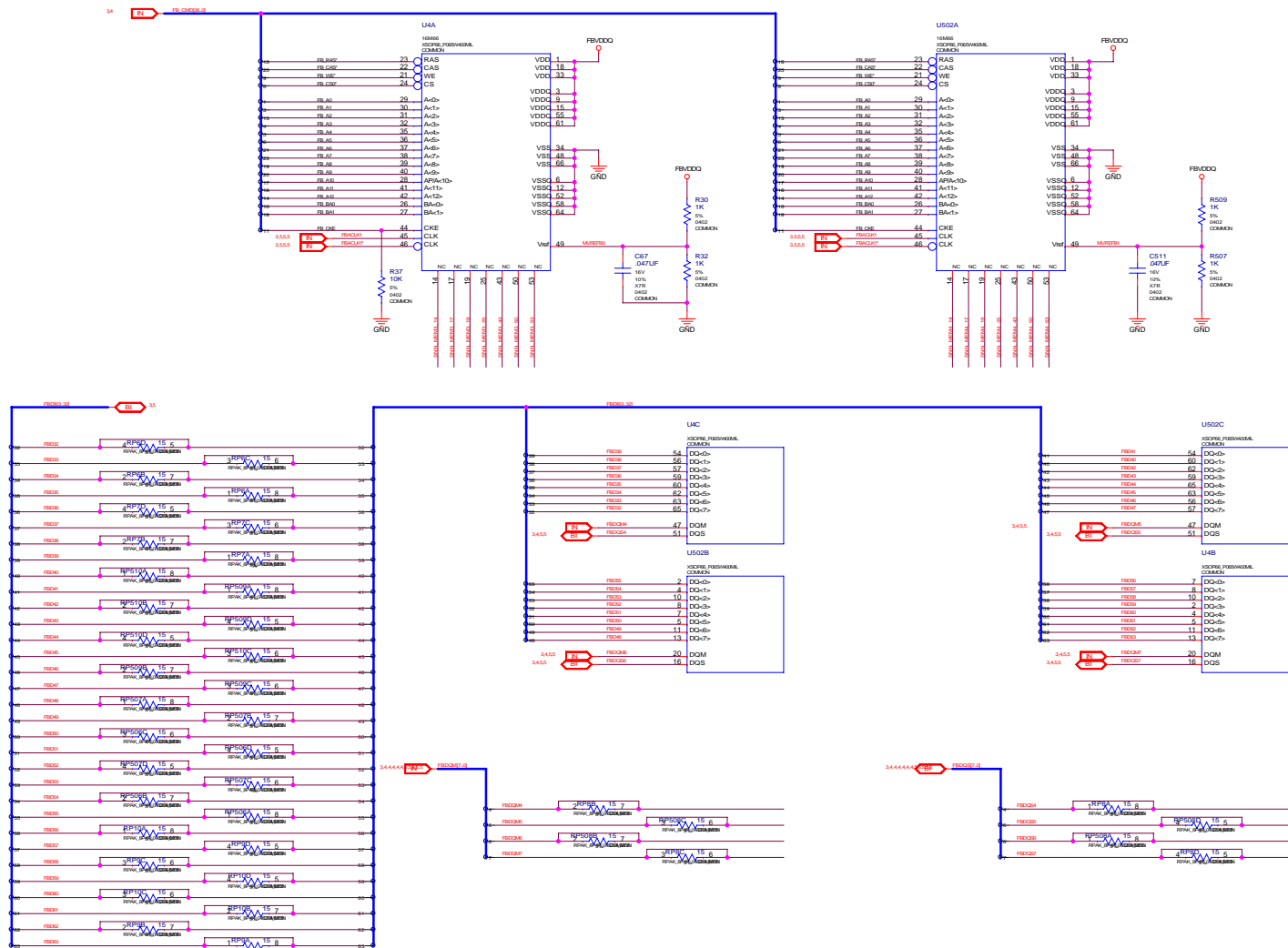
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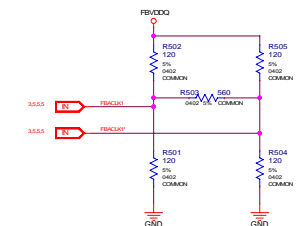
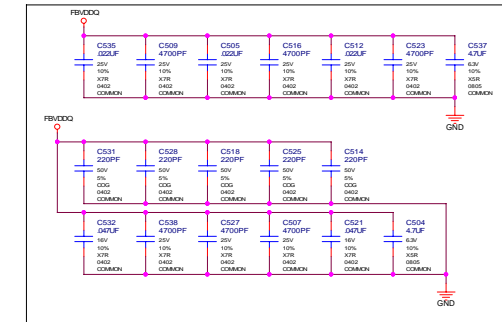
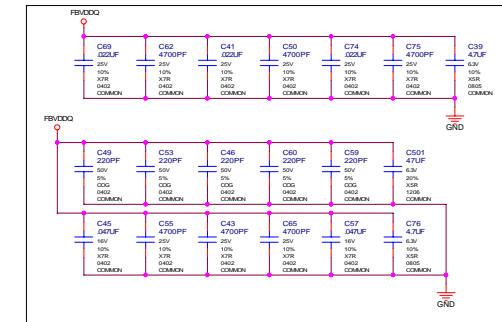
Memory Bit 0..31



Memory Bit 32..63

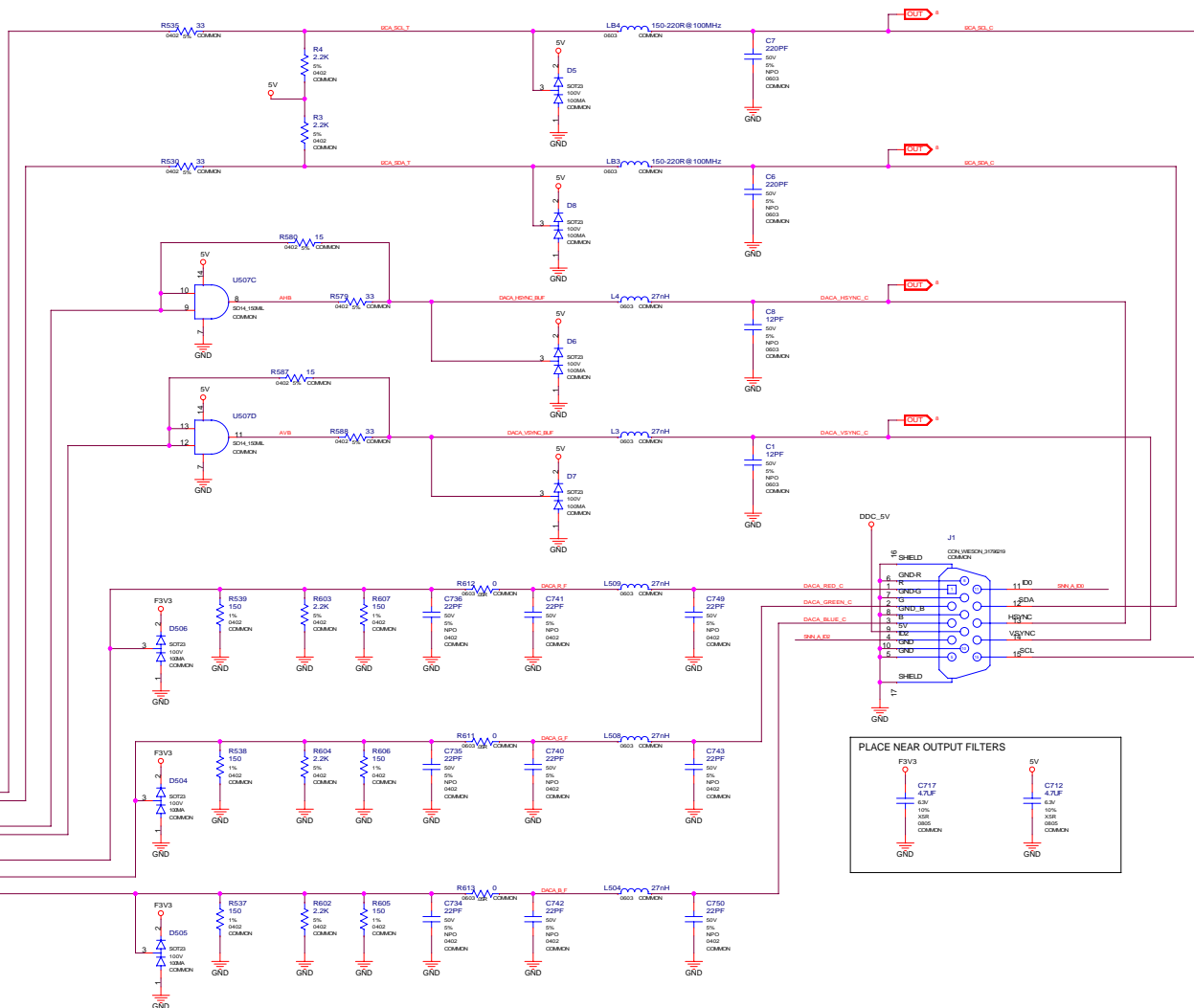
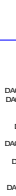
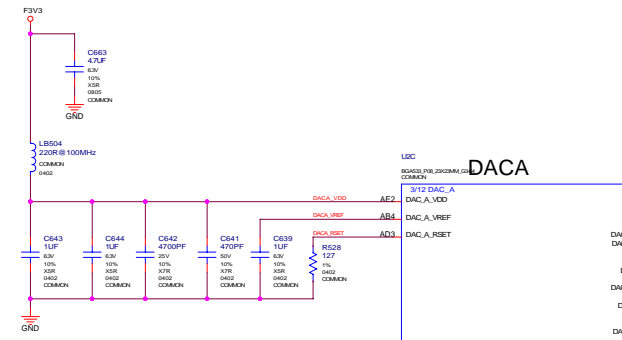
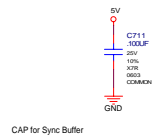


	Net Name	Diffpair	NET_SPACING_RULE
3.5,5	PCB041	PCB041_1	25.0
3.5,5	PCB047	PCB047_1	25.0
35	PCB031	PCB031_1	12.5
3.5,5,5,5	PCB045_4	PCB045_4_1	12.5
3.5,5,5,5	PCB045_5	PCB045_5_1	12.5



DAC-A, DB15 Connector

	Net Name	MIN_LINE_WIDTH	NET_SPACING_TYPE
100mil	DCA_001		100mil
	DCA_001P		100mil
	DCA_001PNC		100mil
	DCA_001PNC		100mil
	DCA_001P		100mil
100mil	DCA_002		100mil
	DCA_002P		100mil
	DCA_002PNC		100mil
	DCA_002PNC		100mil
	DCA_002P		100mil
100mil	DCA_003		100mil
	DCA_003P		100mil
	DCA_003PNC		100mil
	DCA_003PNC		100mil
	DCA_003P		100mil
100mil	DCA_004	100mil	100mil
	DCA_004P		100mil
	DCA_004P		100mil
	DCA_004P		100mil
	DCA_004P		100mil
100mil	DCA_005_C		100mil
	DCA_005PNC_C		100mil
	DCA_005PNC_C		100mil
	DCA_005PNC_C		100mil
	DCA_005PNC_C		100mil



PLACE NEAR OUTPUT FILTERS

The diagrams illustrate the placement of decoupling capacitors near output filters. The left diagram shows a 3V3 input connected to a C717 4.7uF capacitor, which is then connected to a 6V regulator (XSR) and a common ground. The right diagram shows a 5V input connected to a C712 4.7uF capacitor, which is then connected to a 6V regulator (XSR) and a common ground.

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	DACA, DACB, DACC, Sync Buffers

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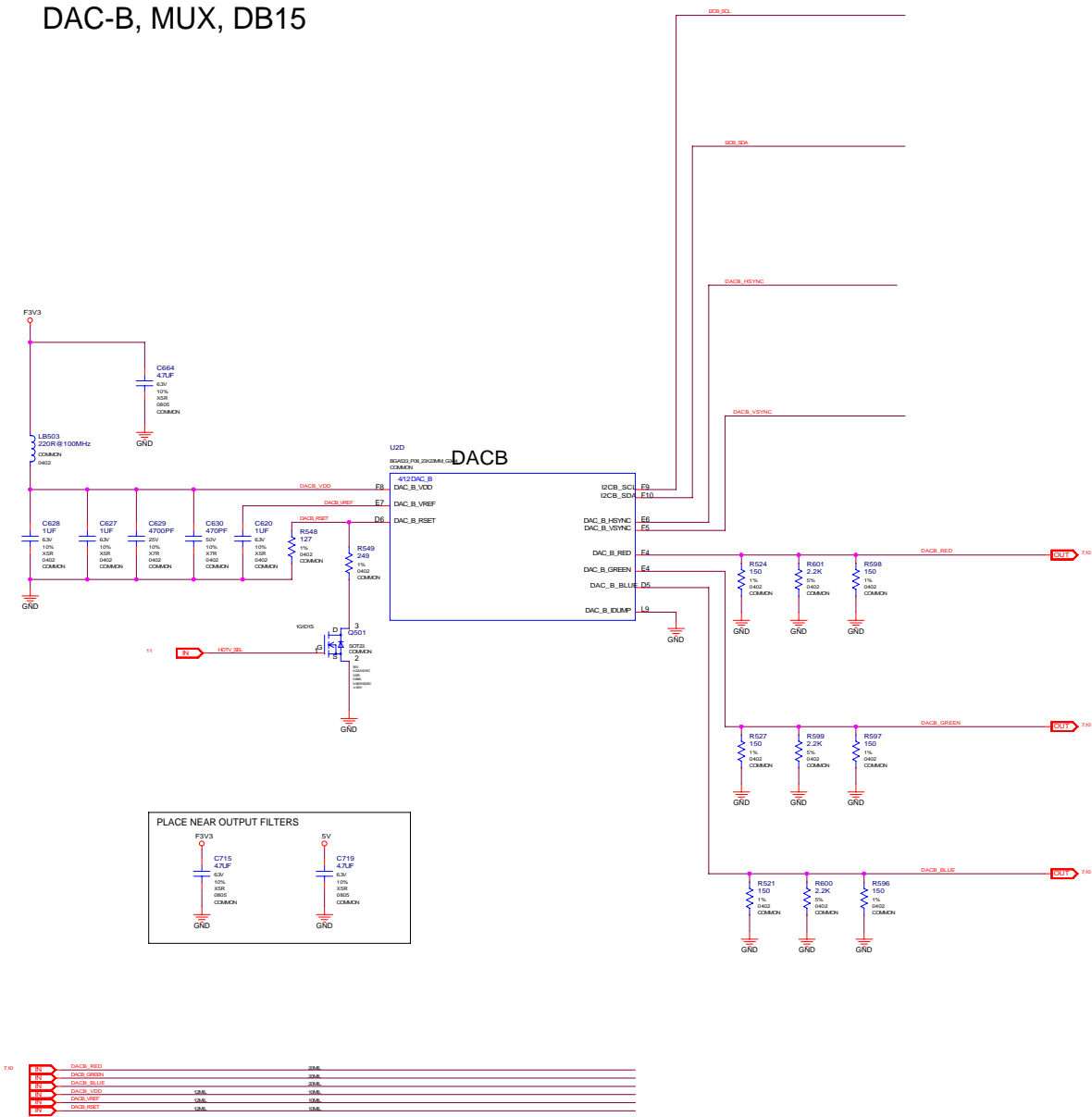
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Custom	DAC-A DB15 Connector

DAC-A, DBTS Connector	
Date: Thursday, April 07, 2005	Sheet

Rev
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DAC-B, MUX, DB15



ASSEMBLY PAGE DETAIL
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VGA Output TV Out

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Document Number

DAC-B, MUX, DB15

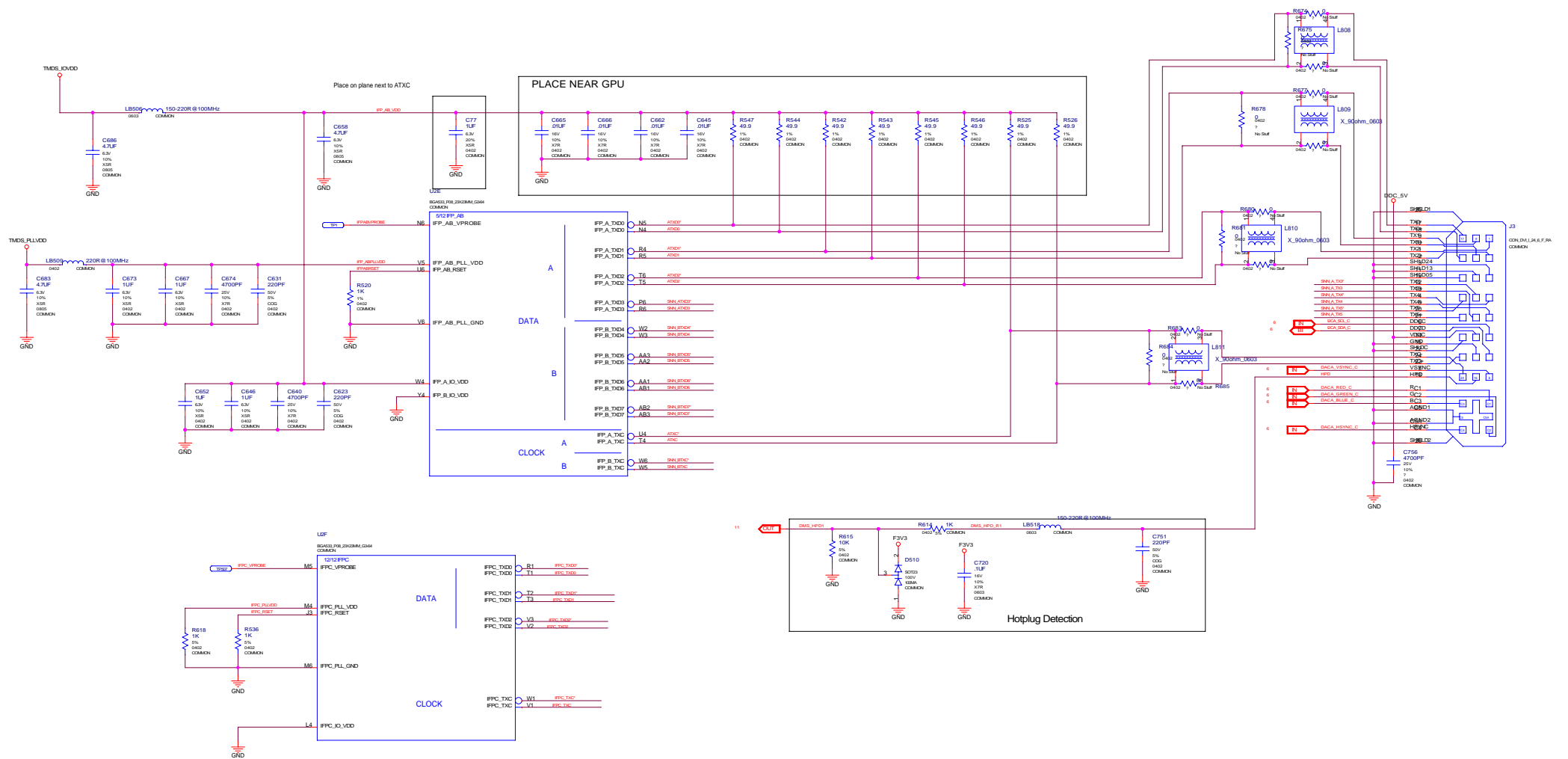
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Rev: VGA

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Internal TMDS LINK-A DMS Connector

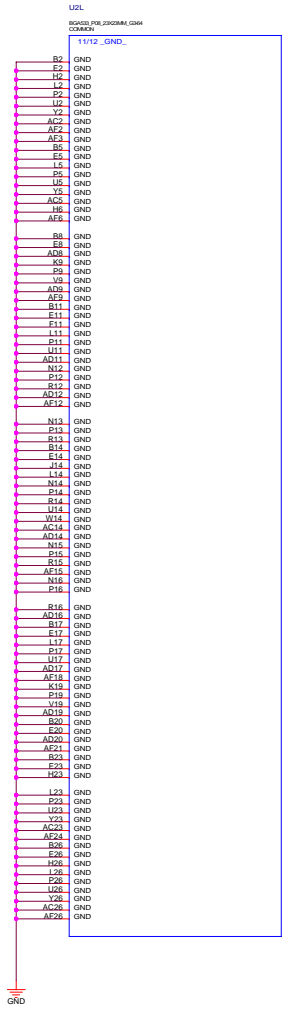
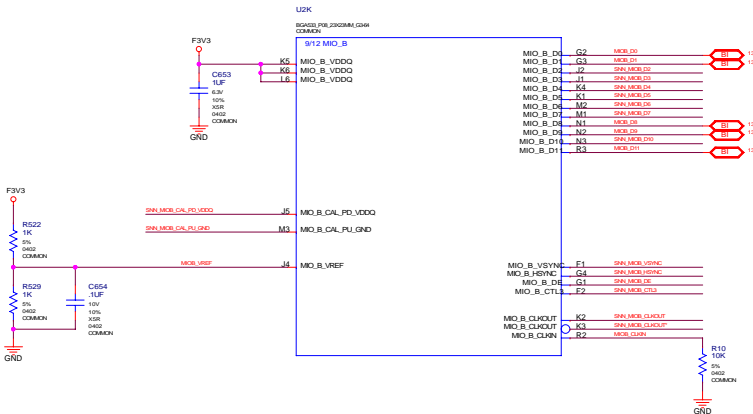
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	TMDS Interface

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	Size Custom	Document Number Internal TMDS Link-A	Rev 00A
	Date Thursday, April 07, 2005	Sheet 8 of	14


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MIOA, MIOB Interface, LPC-ROM



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ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO STUFF ASSEMBLY NOTES AND BOM NOT FINAL MIOA, MIOB Interface, LPC-ROM



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Document Number

MIOA, MIOB Interface, LPC-ROM

Thursday, April 07, 2005

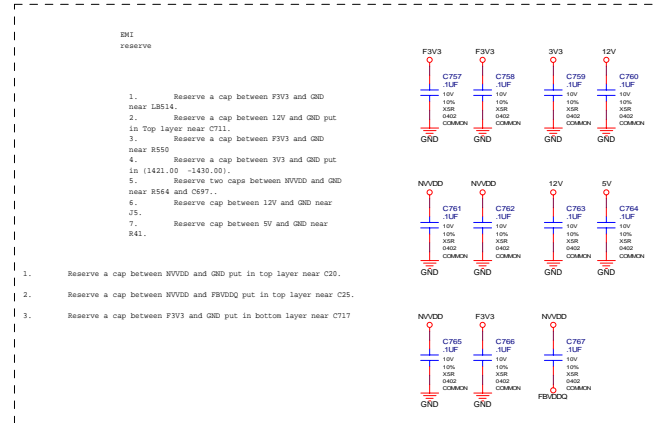
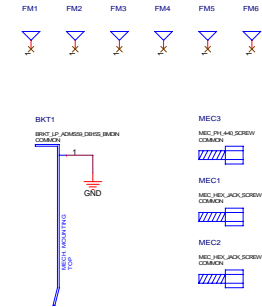
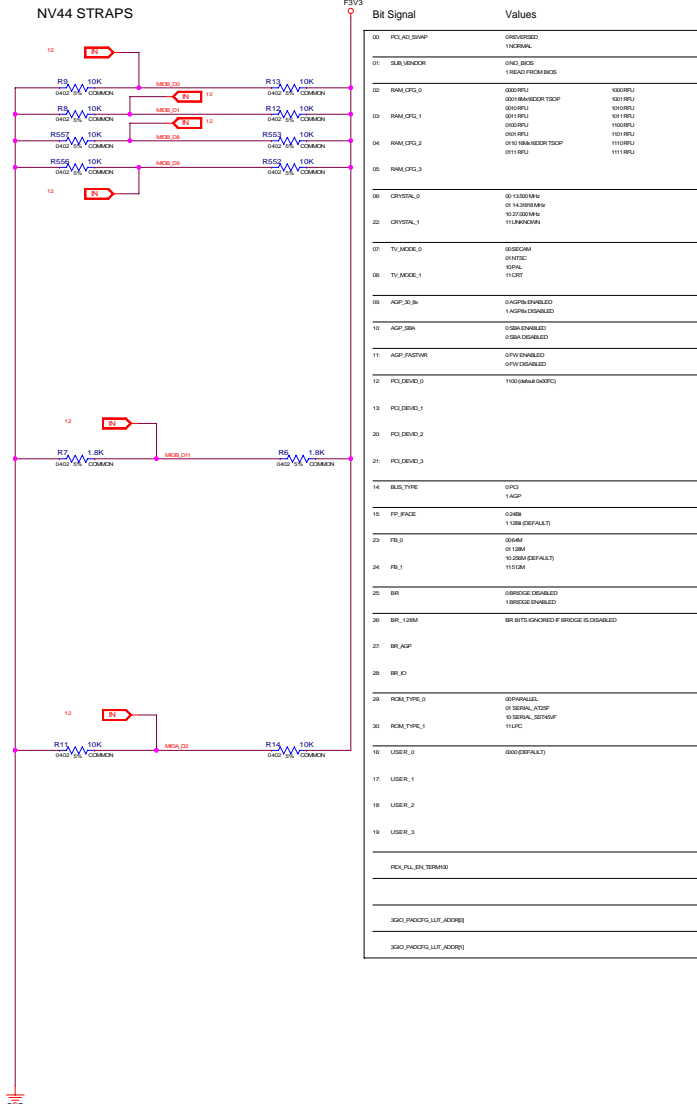
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Rev 00A

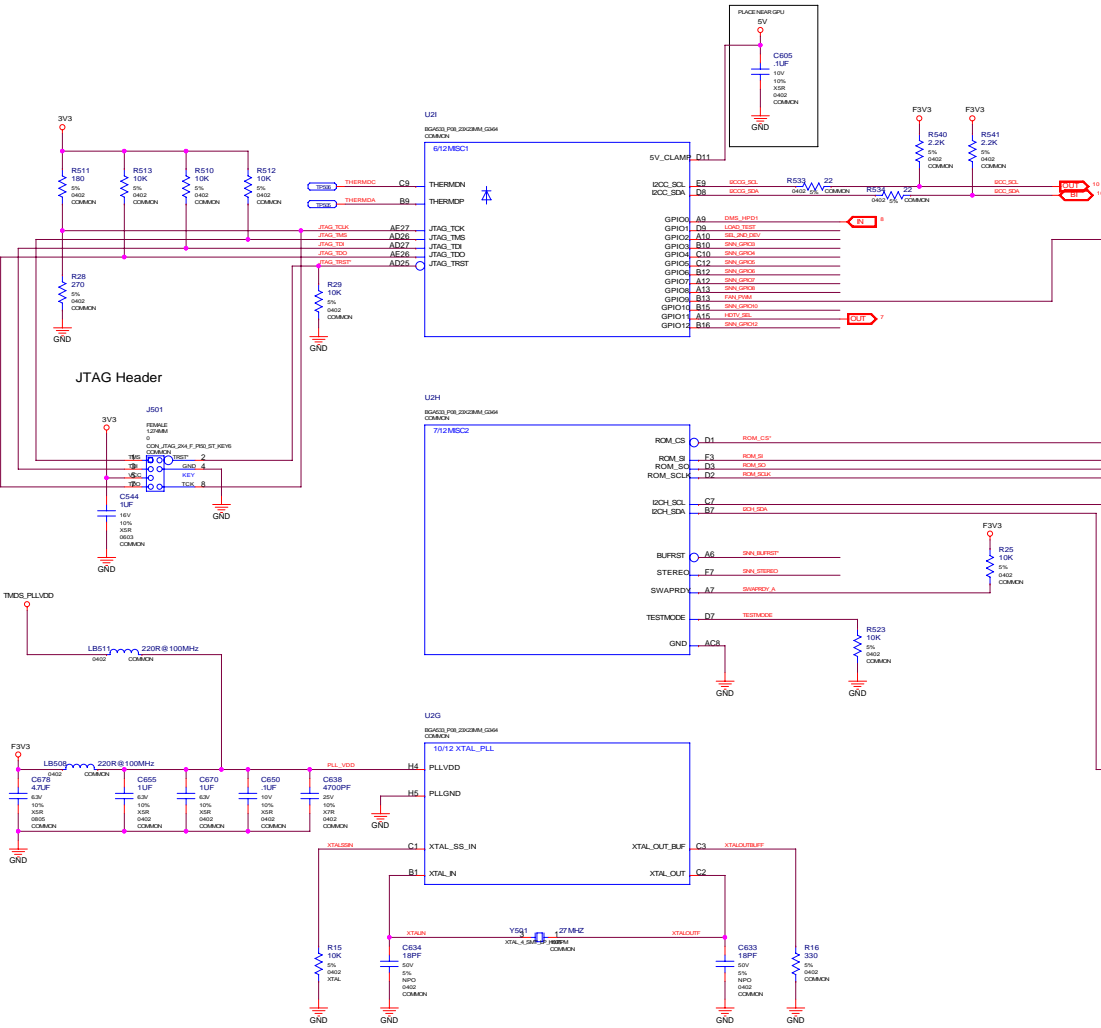
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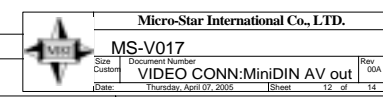
STRAPS, Mechanical Parts



XTAL, GPIO, BIOS, Fan Control, JTAG Headers

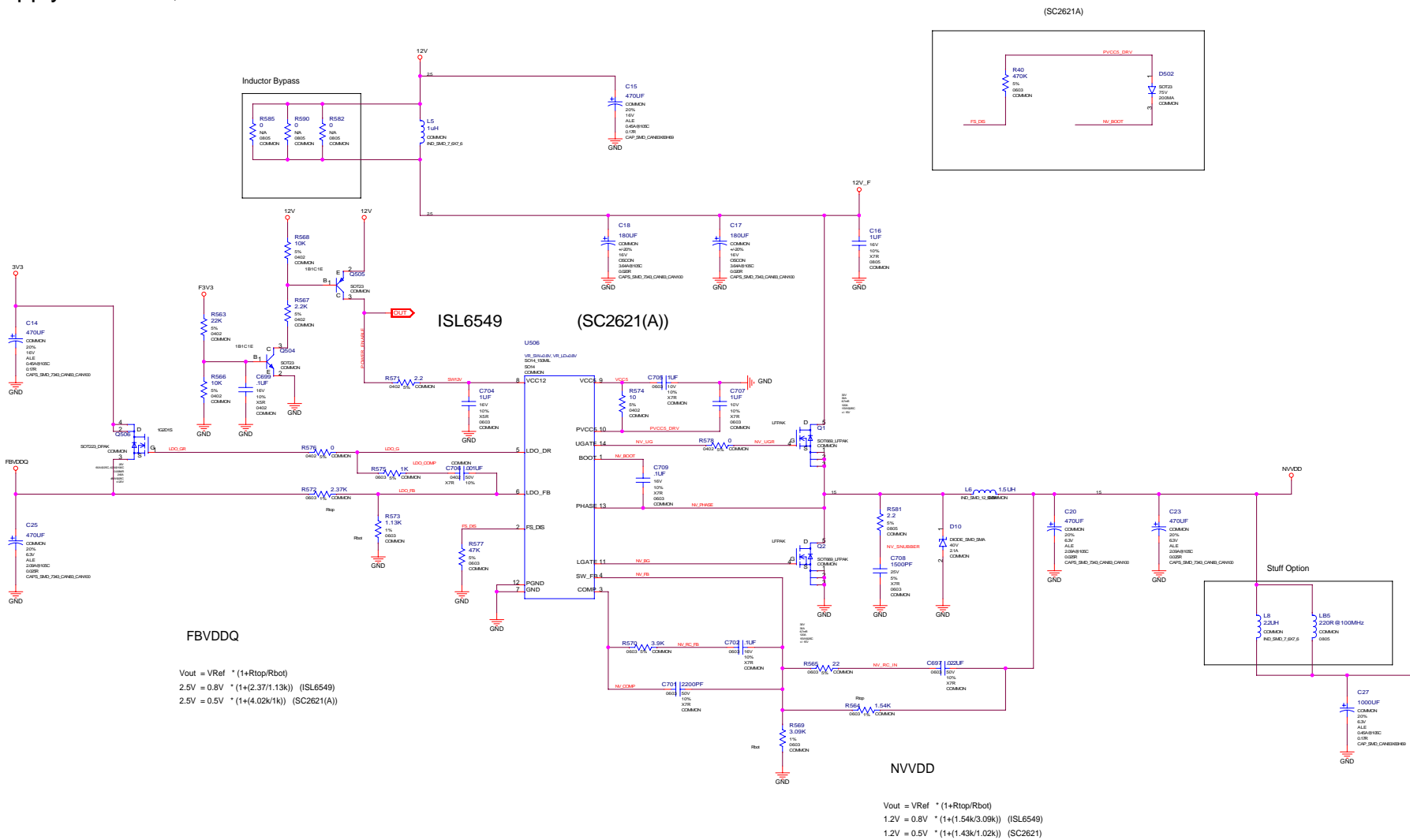
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XTALIN	0.016 INCH	0.016 INCH
XTALOUT	0.016 INCH	0.016 INCH
PLL_VDD	0.016 INCH	0.016 INCH
GPIO_PULLUP	0.016 INCH	0.016 INCH





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PowerSupply: NVVDD, FBVDDQ



ASSEMBLY PAGE DETAIL	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL PowerSupply: N/VDD, FB/VDDQ
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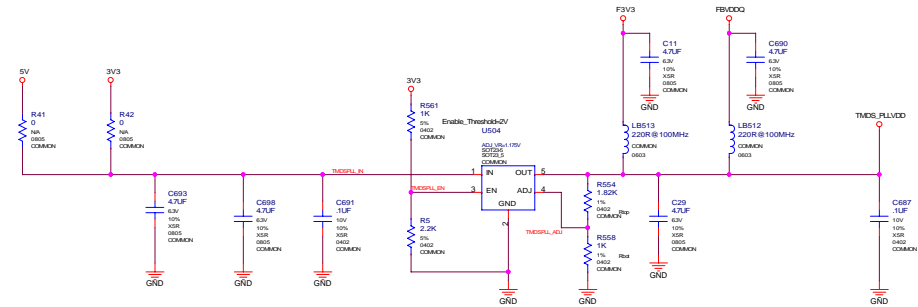
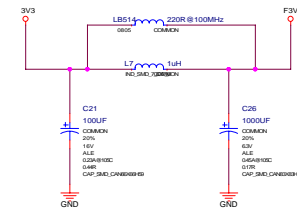
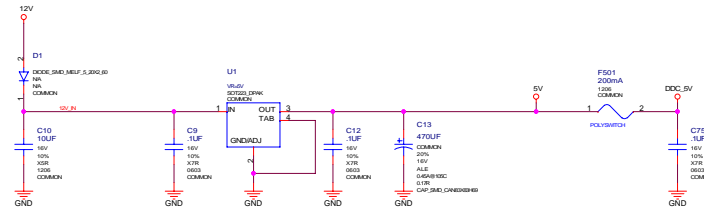


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 PowerSupply: NVVDD, FBVDDQ
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PowerSupplyII: 5V, DDC5V, A3V3, F3V3, TMDS_PLLVDD



TMDS_PLLVDD

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

$$2.5 = V_{Ref} * (1 + R_{top}/R_{bot})$$

Net Name	NET_PHYSICAL_TYPE	Voltage
5V	5V	5V
D0C_5V	D0C_5V	5V
F3V0	F3V0	3.3V
TMSD_FLUID0	TMSD_FLUID0	3.3V
IN	IN	12V
TMSD_LOAD0	TMSD_LOAD0	3.3V

