

P381: G72, DDR2 MEMORY 16Mx16

Base on P381_ A04 (V056-V3.0)modify

Page8, removed mini-din 4pin. add mini-din 7pin support HDTV

Page 13: PowerSupplyI: NVVDD, A3V3 add mlcc 10U/16V 1206 5pcs
remove L5 1R0

Page 9: ADD 預留R589,R590,R591,R592,R593,R594,R595,R596 FOR EMI


Page 12: XTAL 雙LOAYOUT SMD 49US

- Page 1: P381 Overview
- Page 2: PCI Express Interface
- Page 3: Frame Buffer Interface
- Page 4: Memory 1st bank 0..31
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- Page 6: DACA, DACB, DACC, Sync Buffers
- Page 7: DACB, VGA Output, TV Out
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- Page 9: TMDS Interface
- Page 10: MIOA, MIOB Interface, LPC-ROM
- Page 11: STRAPS, Mechanical Parts
- Page 12: XTAL, GPIO, BIOS, FAN, JTAG, THERMAL
- Page 13: PowerSupplyI: NVVDD, A3V3
- Page 14: PowerSupplyII: 5V, DDC5V, F3V3, TMDS_PLLVDD

NO	VARIANT	NVPN	ASSEMBLY
0	BASE	600-10381-xxxx-400	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SKU0010	600-10381-0010-400	P381: G3-64.7300LE, 64 BIT DDR2 16Mx16 MEMORY, VGA+DVI+TVout
2	SKU0011	600-10381-0011-400	P381: G3-64.7300LE, 64 BIT DDR2 32Mx16 MEMORY, VGA+DVI+TVout
3	SKU0012	600-10381-0012-400	P381: G3-64.7300GS, 64 BIT DDR2 16Mx16 MEMORY, VGA+DVI+TVout
4	SKU0013	600-10381-0013-400	P381: G3-64.7300GS, 64 BIT DDR2 16Mx16 MEMORY, VGA+DVI+TVout
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ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL P381 Overview



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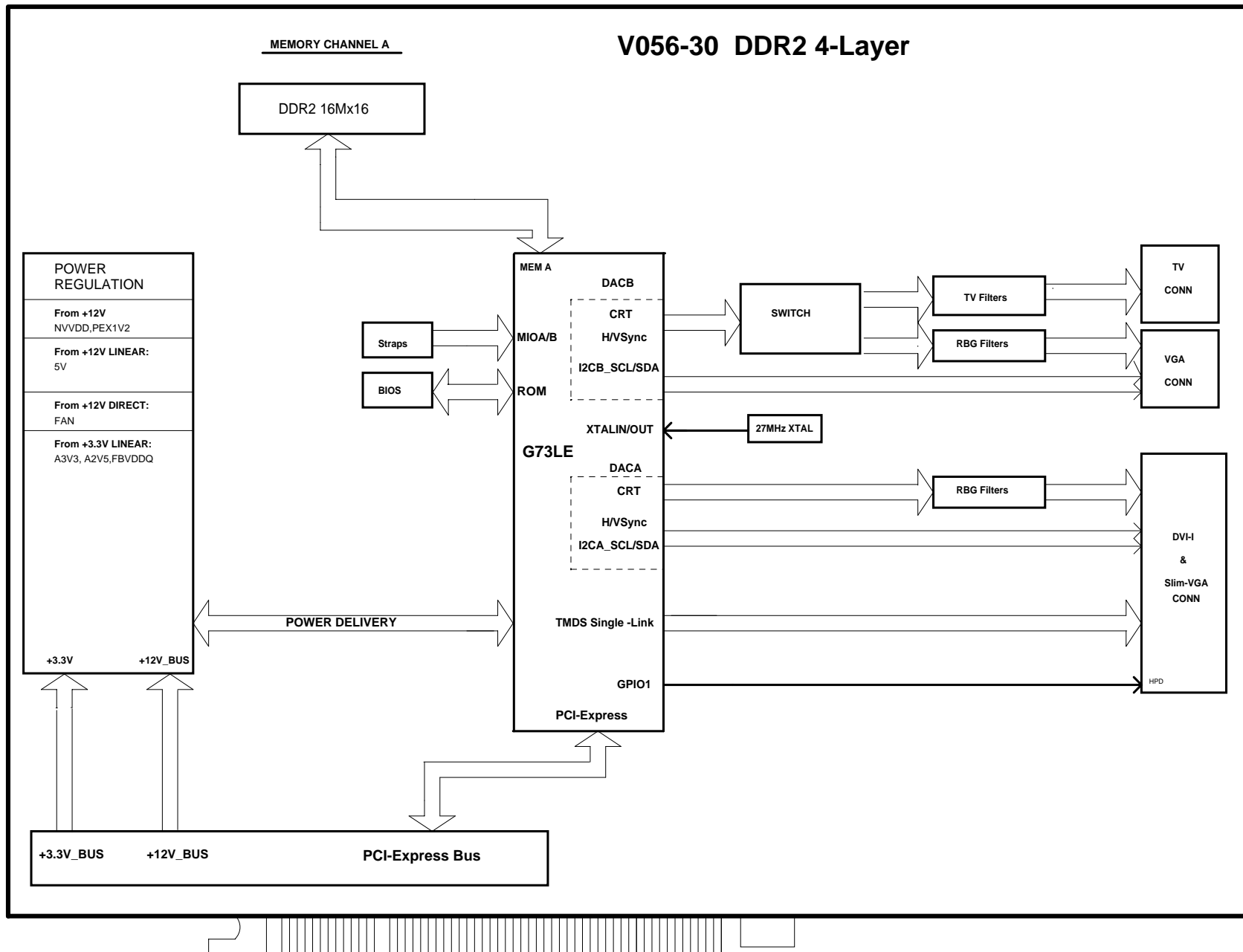
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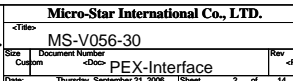
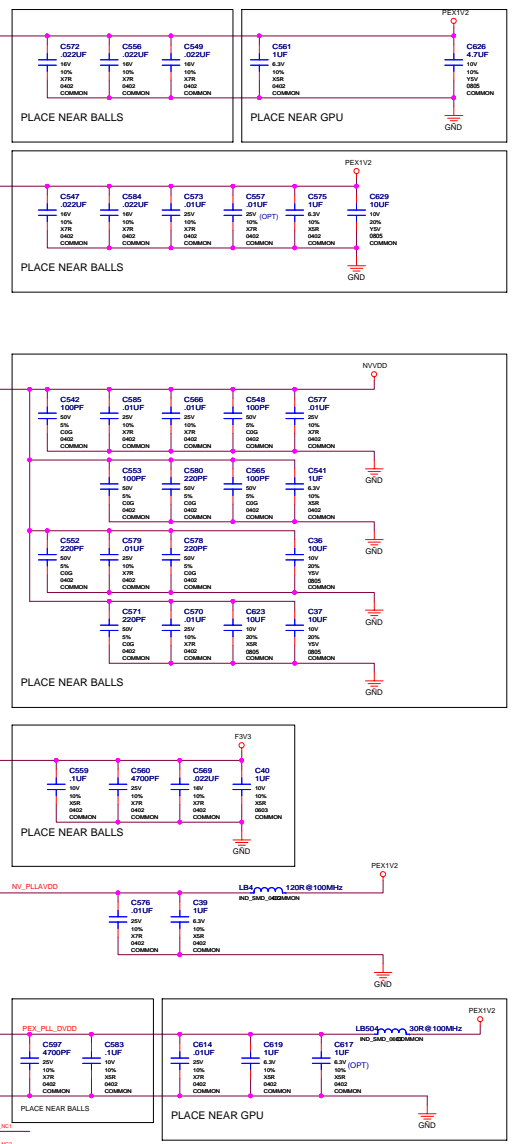
Date: Wednesday, August 02, 2006 Sheet 1 of 14

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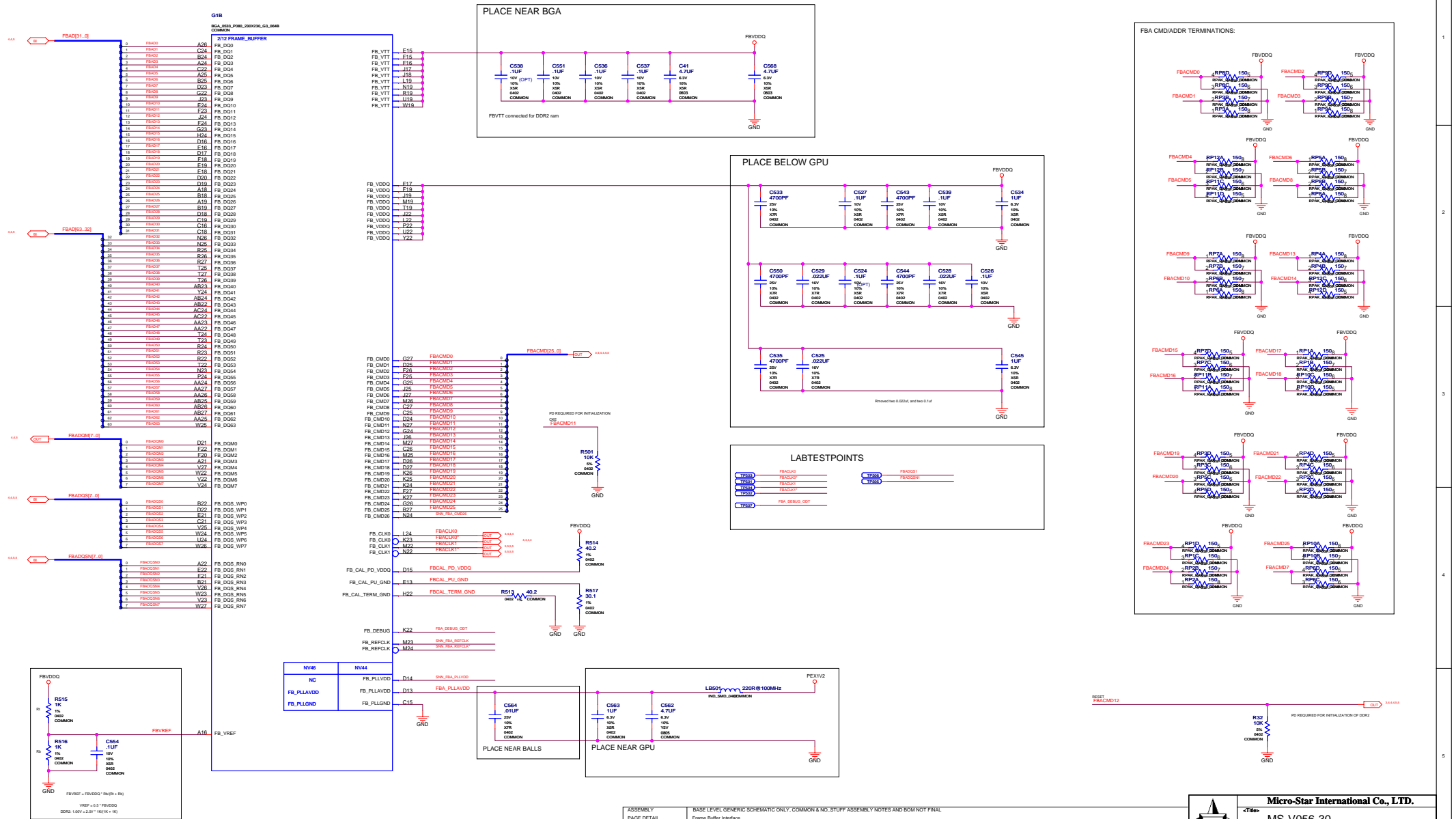


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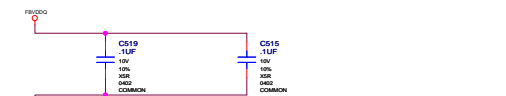
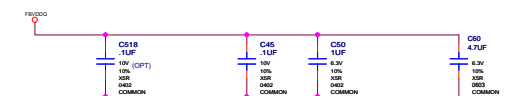
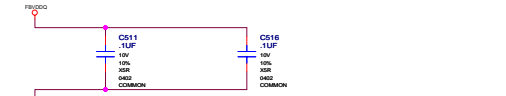
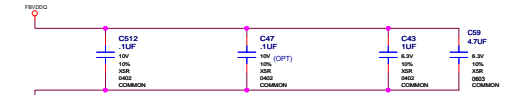
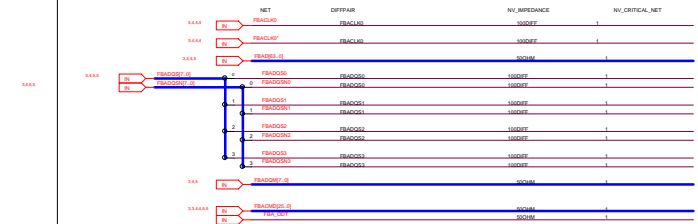
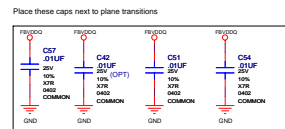
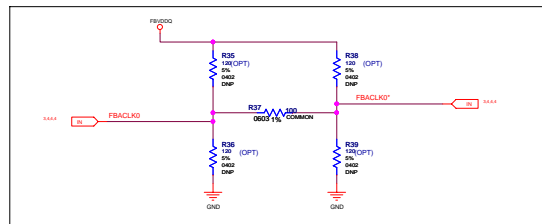
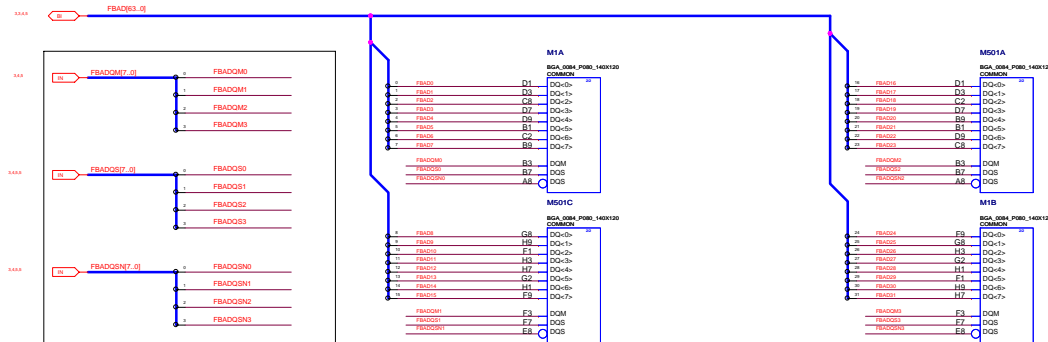
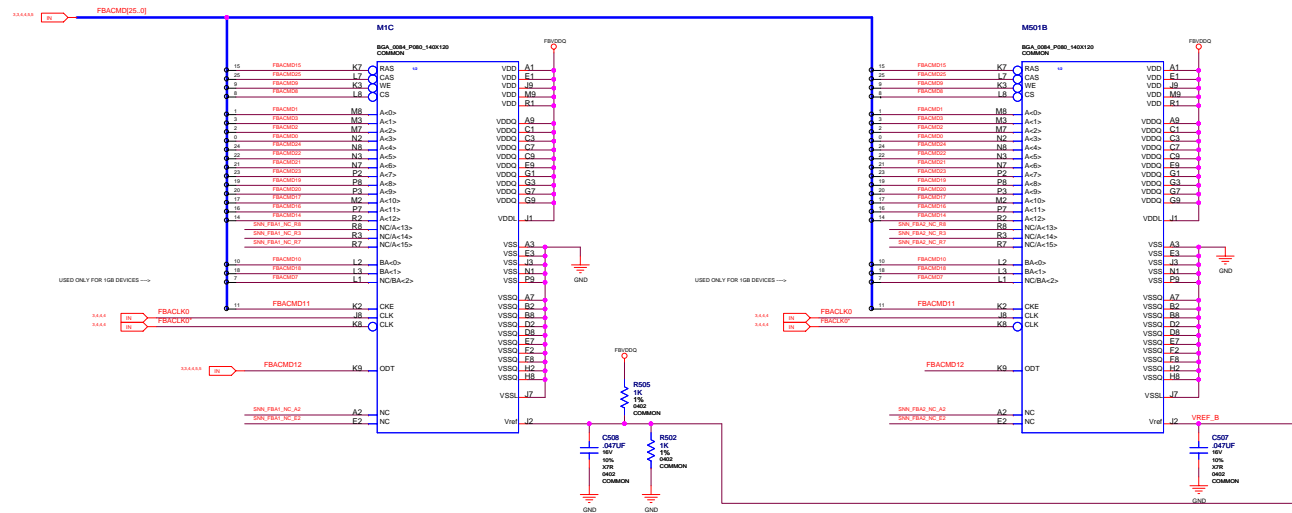
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GPU: FB-Interface

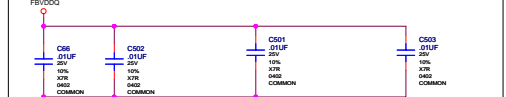
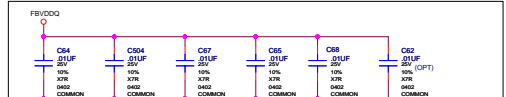


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PLACE ALL DISCRETE COMPONENTS AS NEAR AS POSSIBLE TO MEMORY

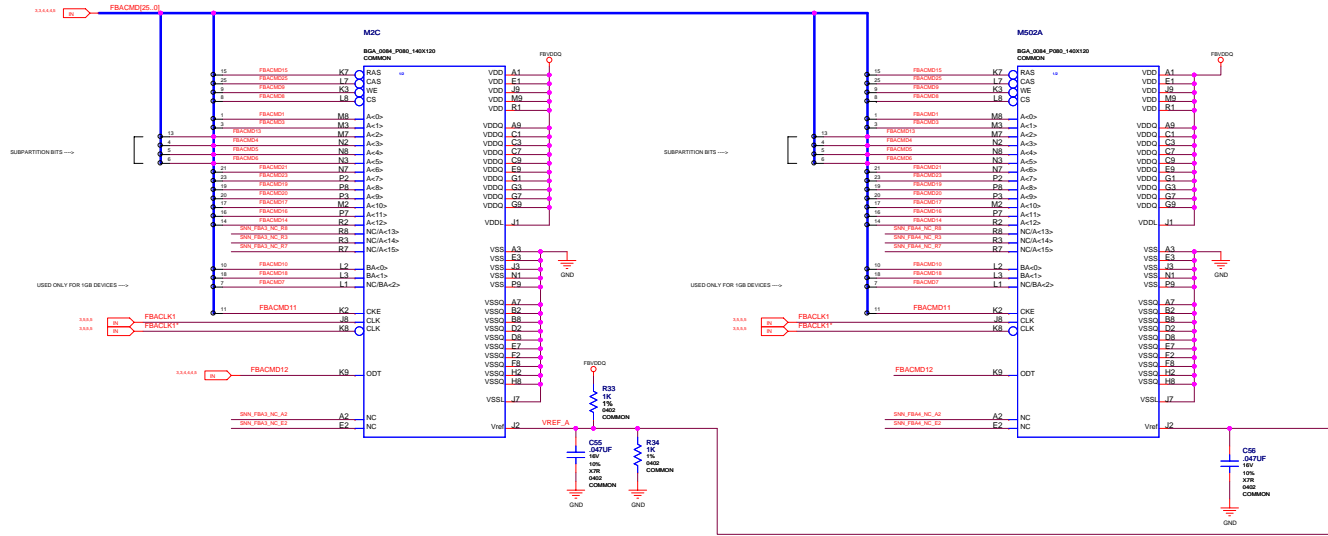


X-cap for CMD



Memory Bit 32..63

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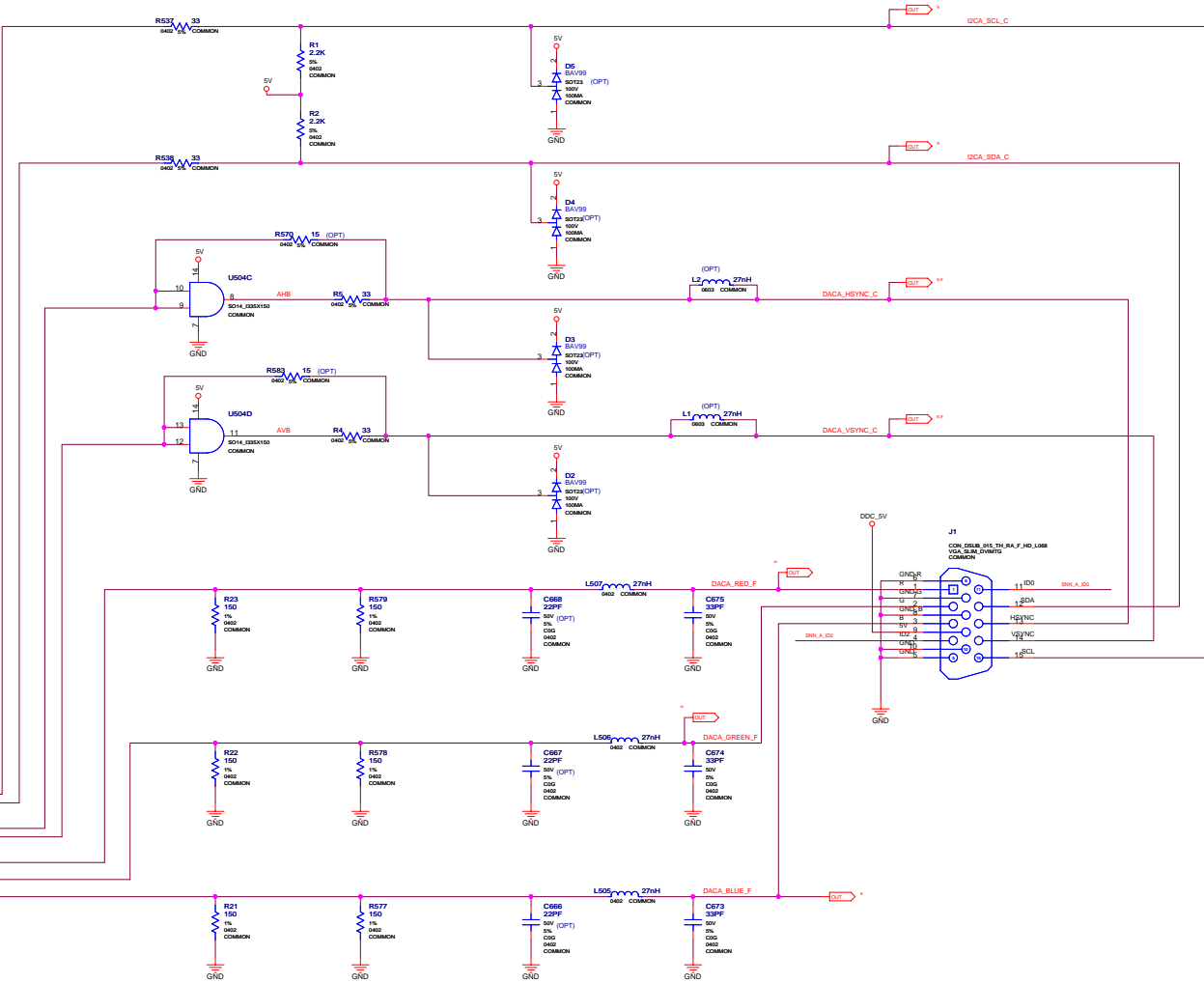
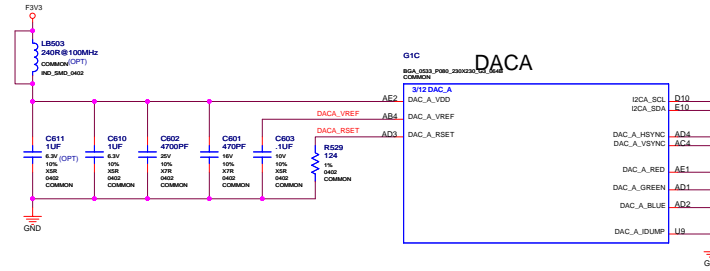


DAC-A, DB15 Connector

Net Name	MIN_LINE_WIDTH	CRITICAL_NET	IMPEDANCE
DAC_A_HSYNC	2		50OHM
DAC_A_VSYNC	2		50OHM
DAC_A_HSYNC_C	2		50OHM
DAC_A_VSYNC_C	2		50OHM
DAC_A_RED	1		50OHM
DAC_A_GREEN	1		50OHM
DAC_A_BLUE	1		50OHM
DAC_A_RED_F	1		50OHM
DAC_A_GREEN_F	1		50OHM
DAC_A_BLUE_F	1		50OHM



CAP for Sync Buffer



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ASSEMBLY PAGE DETAIL
BASE LEVEL GENERIC SCHEMATIC ONLY; COMMON & NO. 31UFF ASSEMBLY NOTES AND BOM NOT FINAL
DAC_A, DAC_B, DAC_C, Sync Buffers

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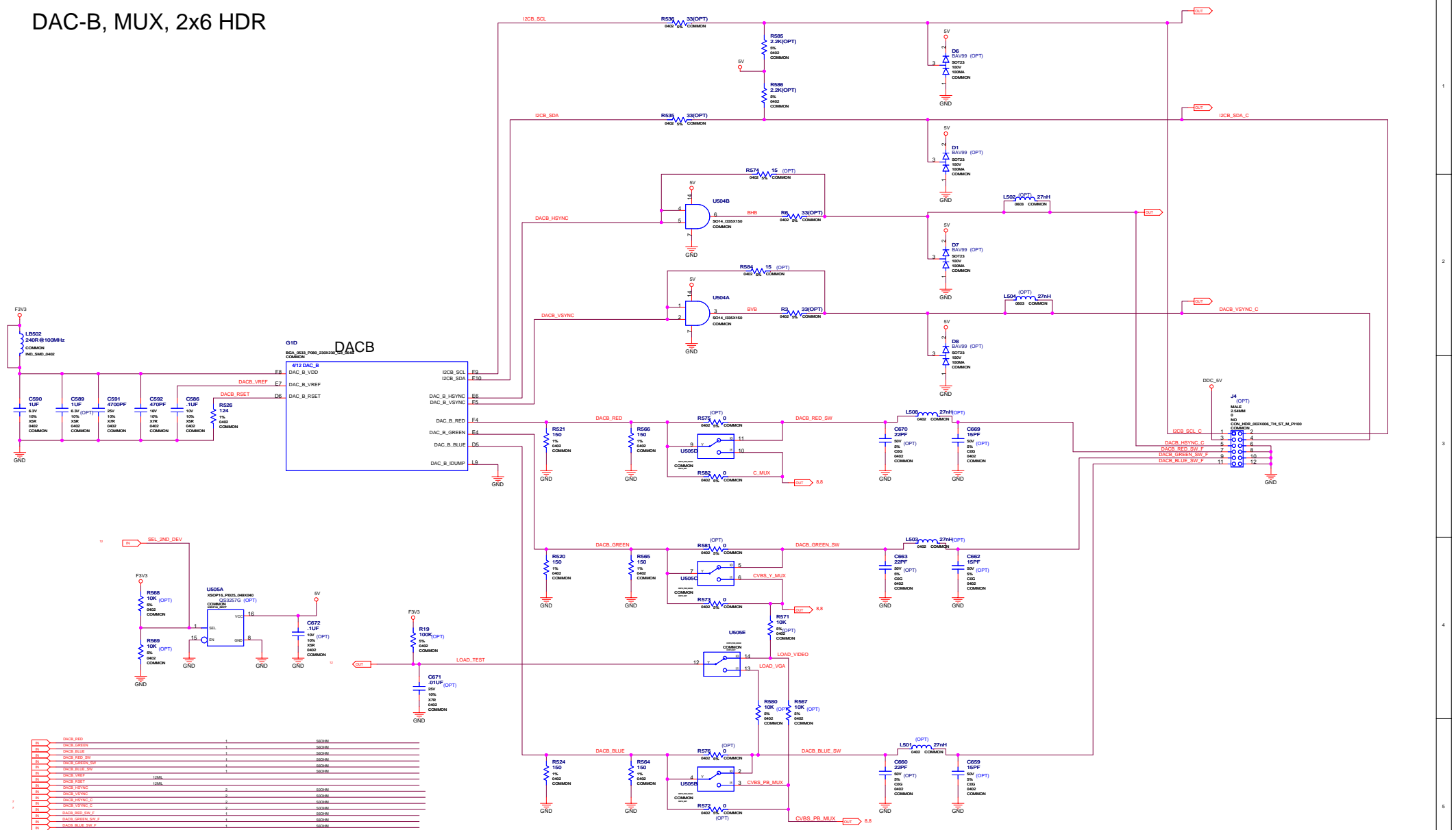
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DAC-A, DB15 Connector

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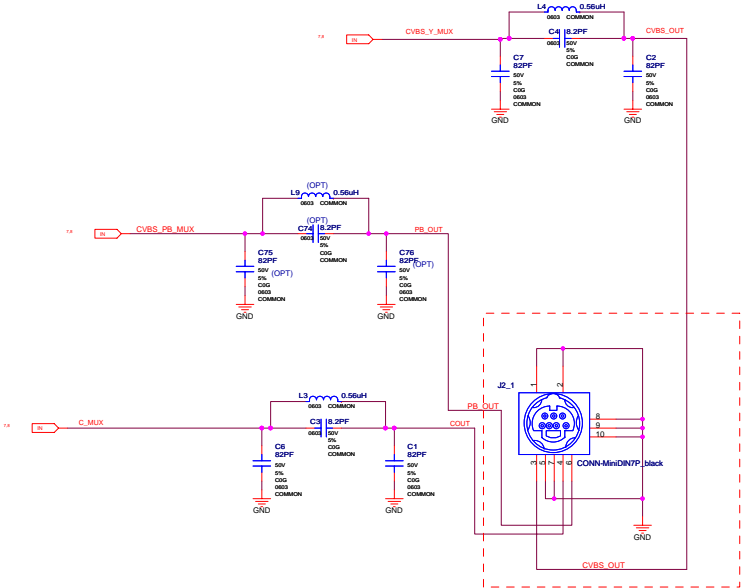
DAC-B, MUX, 2x6 HDR



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288	DANCE_KEB288	1	1000000
289	DANCE_KEB289	1	1000000
290	DANCE_KEB290	1	1000000
291	DANCE_KEB291	1	1000000
292	DANCE_KEB292	1	1000000
293	DANCE_KEB293	1	1000000
294	DANCE_KEB294	1	1000000
295	DANCE_KEB295	1	1000000
296	DANCE_KEB296	1	1000000
297	DANCE_KEB297	1	1000000
298	DANCE_KEB298	1	1000000
299	DANCE_KEB299	1	1000000
300	DANCE_KEB300	1	1000000

VIDEO CONNECTORS: MiniDIN

	Name	LINE_WIDTH	CRITICAL	IMPEDANCE
1*	C_MUX			50OHM
1*	CVBS_Y_MUX			50OHM
1*	C_OUT			50OHM
1*	CVBS_OUT			50OHM



Replace MiniDin with Compupack Part

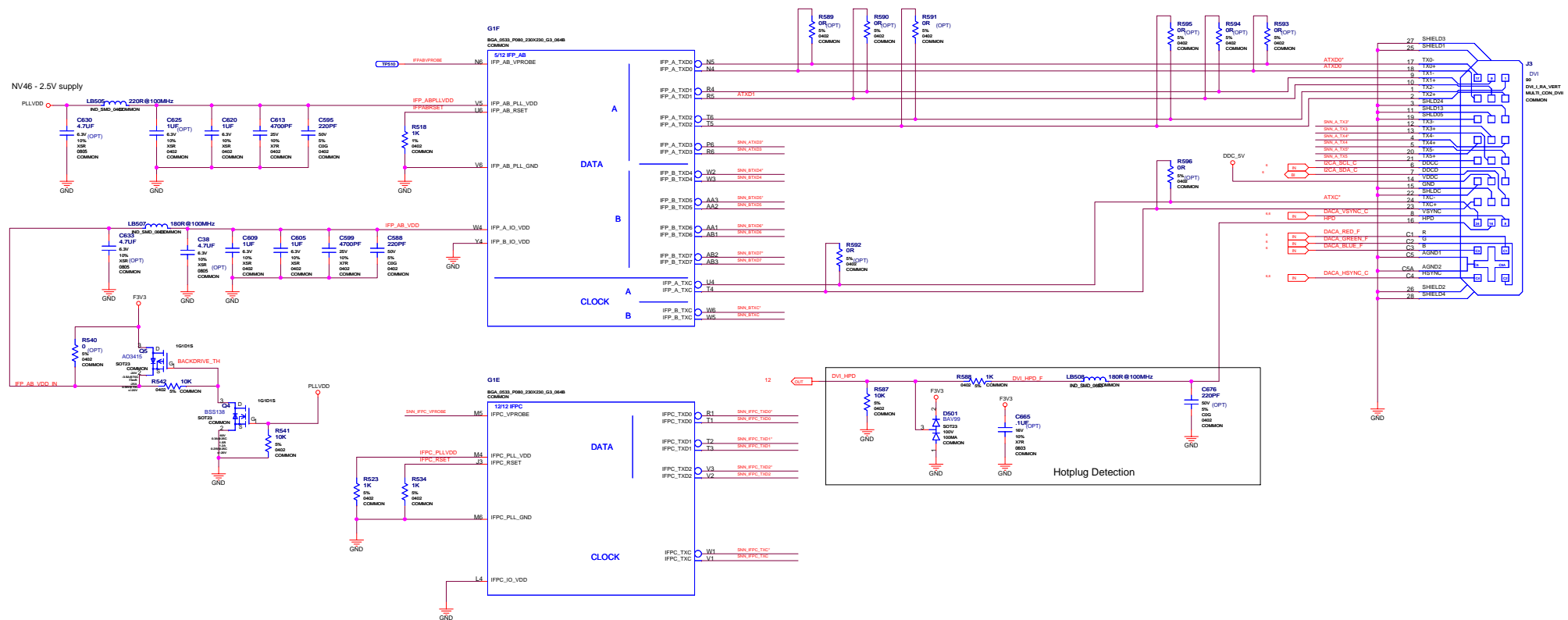
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ASSEMBLY
PAGE DETAIL
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VIDEO CONNECTORS: MxDIN, 246 HDR



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Internal TMDS, DVI-Connector



Net Name	Diff	CRITICAL	IMPEDANCE
A700	A70C	1	1000FF
A701	A70C	1	1000FF
A702	A70D	1	1000FF
A703	A70D	1	1000FF
A704	A70D	1	1000FF
A705	A70D	1	1000FF
A706	A70D	1	1000FF
A707	A70D	1	1000FF
A708	A70D	1	1000FF
A709	A70D	1	1000FF
A710	A70D	1	1000FF

Net Name	Min Line Width	Voltage
IN IFP_ABFLVDD	100MIL	3.3V
IN IFP_AB_VDD	100MIL	3.3V
IN IFP_AB_VDD_IN	100MIL	3.3V

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ASSEMBLY PAGE DETAIL	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL TMD5 Interface
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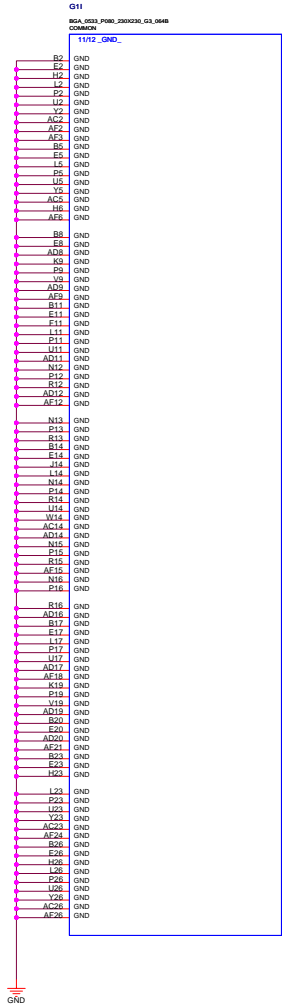
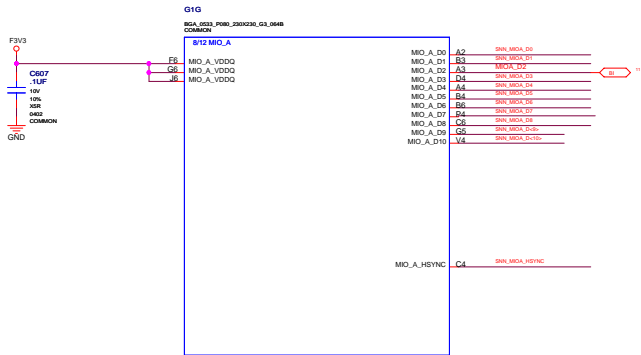
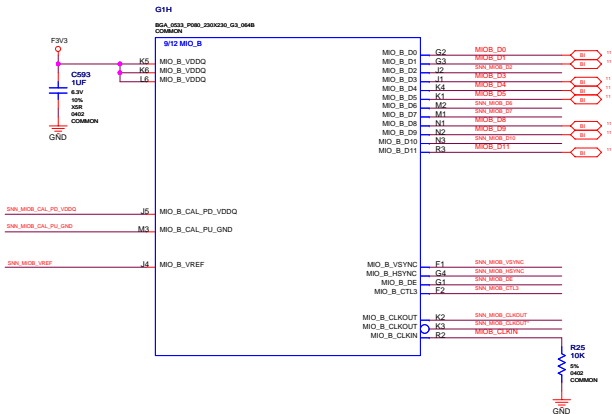
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Custom	Internal	
Internal TMD5, DVI-Connector		
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TV		
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MIOA, MIOB Interface



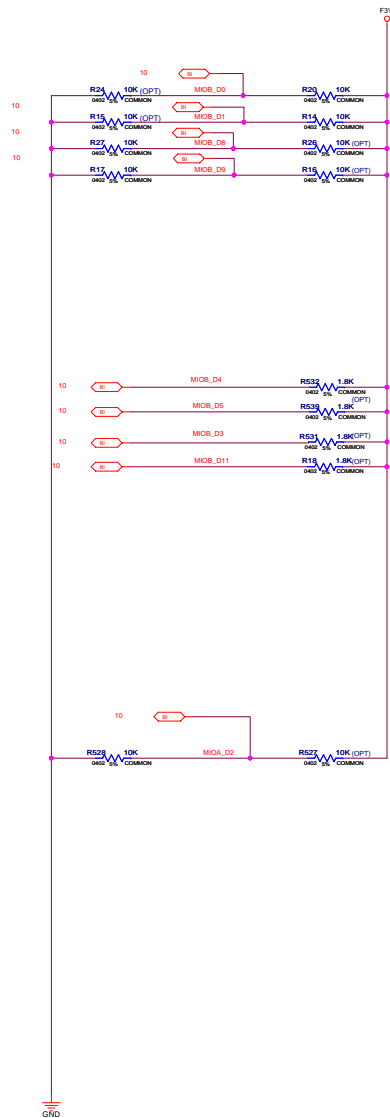
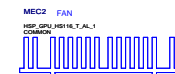
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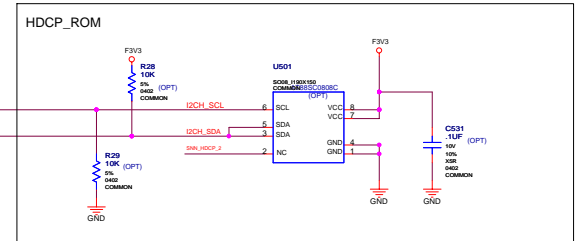
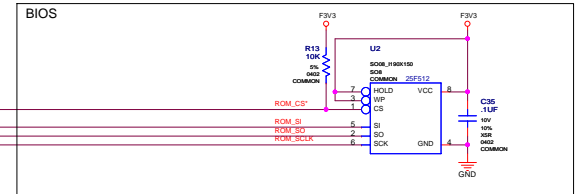
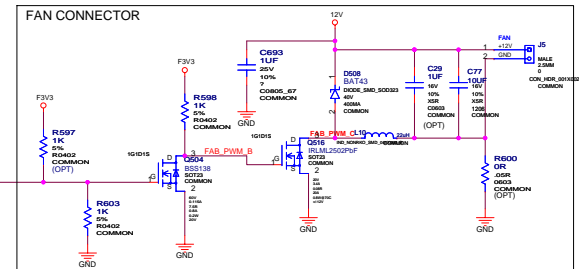
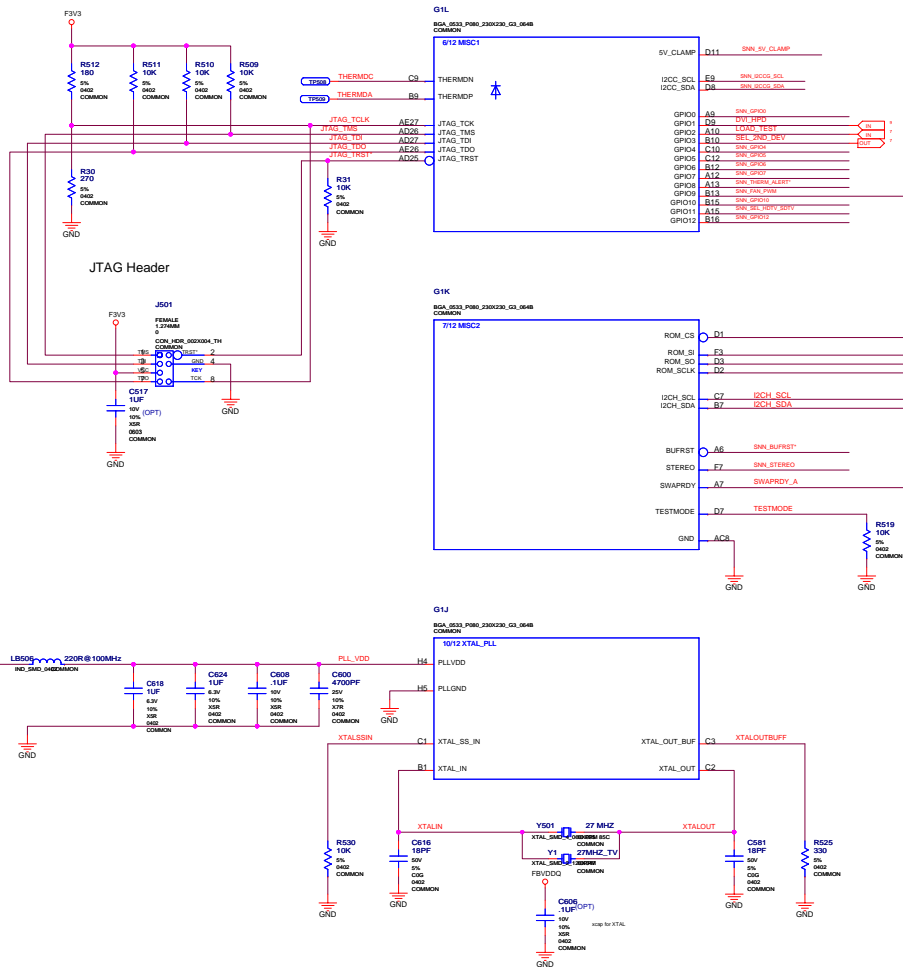
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MIOA, MIOB Interface, LPC-ROM

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STRAPS, Mechanical Parts

[illegible]

XTAL, GPIO, BIOS, FAN, JTAG, THERMAL



	Net Name	LINE_WIDTH	Voltage
21	PIN_VDD	0.005	3.3V
22	CRITICAL_NET	0.005	3.3V
23	STABLE	0.005	3.3V
24	STABLE	0.005	3.3V

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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	XTAL, GPIO, BIOS, FAN, JTAG, THERMAL



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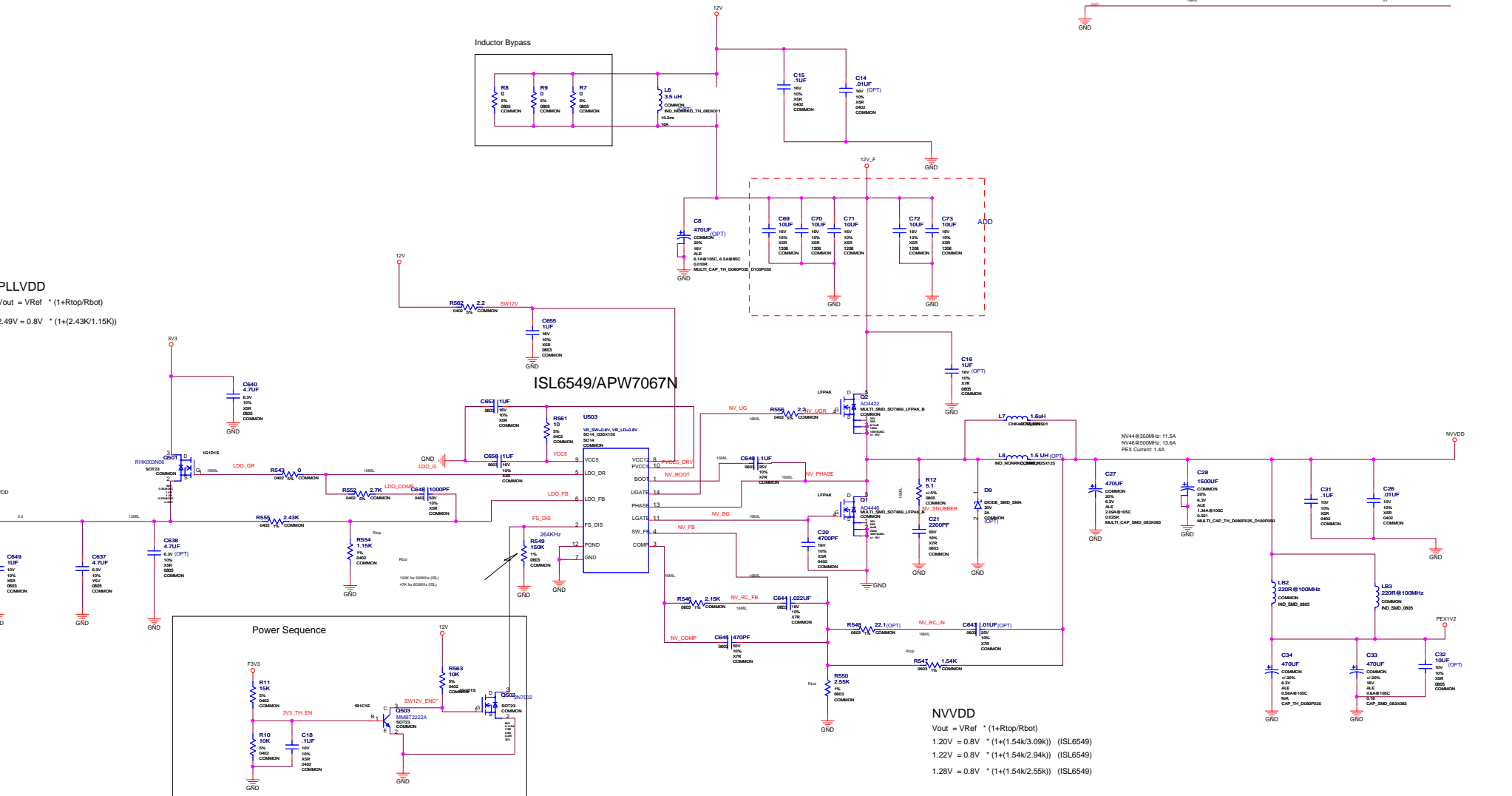
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Size	Document Number	Rev
Custom	Y191 GRIO BIOS FAN	

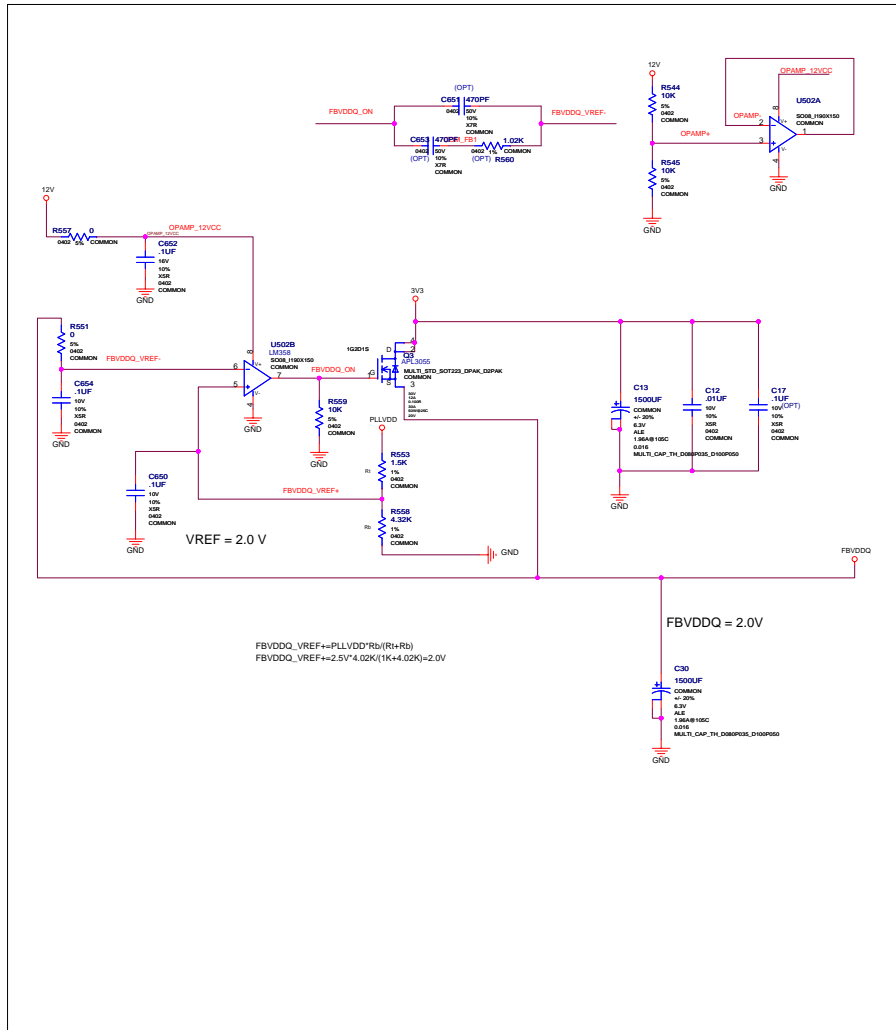
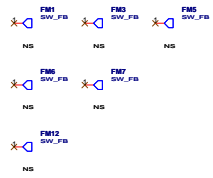
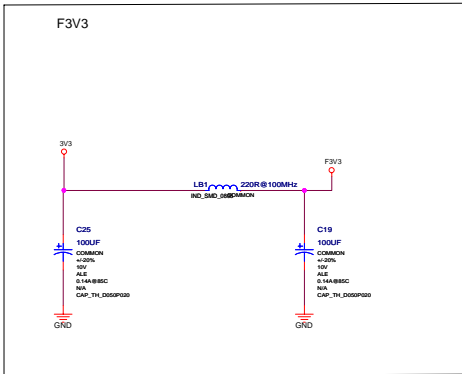
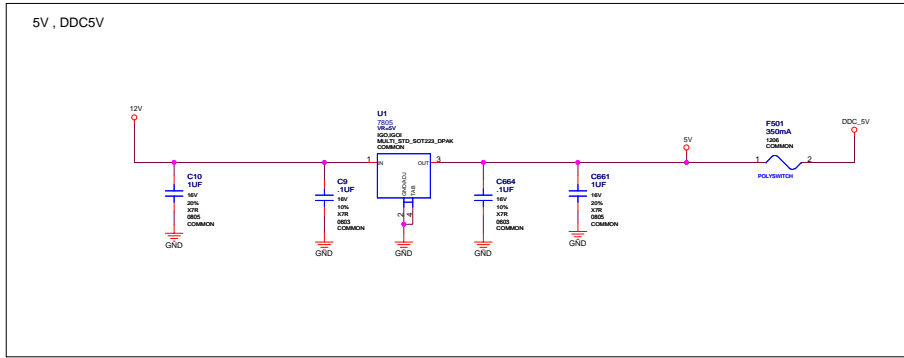
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PowerSupplyI: NVVDD, PLLVDD

PLLVDD
 $V_{out} = V_{Ref} * (1 + R_{top}/R_{bot})$
 $2.49V = 0.8V * (1 + (2.43k/1.15k))$



PowerSupplyII: 5V, DDC5V, F3V3, FBVDDQ



Net Name	LINE_WIDTH	Current	Voltage
	12MIL	250	5V
	12MIL	50	5V
	12MIL	1	3.3V
	30MIL	3	3.3V
	30MIL	3	2.0V