

P1071: GF108, 1024MB x16 DDR3, DVI+HDMI+VGA

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REV	VARIANT	N/P/N	ASSEMBLY
0	BASE	600-1071-BASE-SCH	BASE LEVEL GENERIC SCHEMATIC ONLY. COMMON & NO. STUFF ASSEMBLY NOTES AND BOMNOT FINAL
1	SK00001	600-11071-0001-100	Q118-300-A1 425X250500MM 1204812180A DORS, D14D1-H0M+VGA
2	SK00002	600-11071-0002-100	Q118-200-A1 425X250500MM 1204812180A DORS, D14D1-H0M+VGA
3	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
4	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
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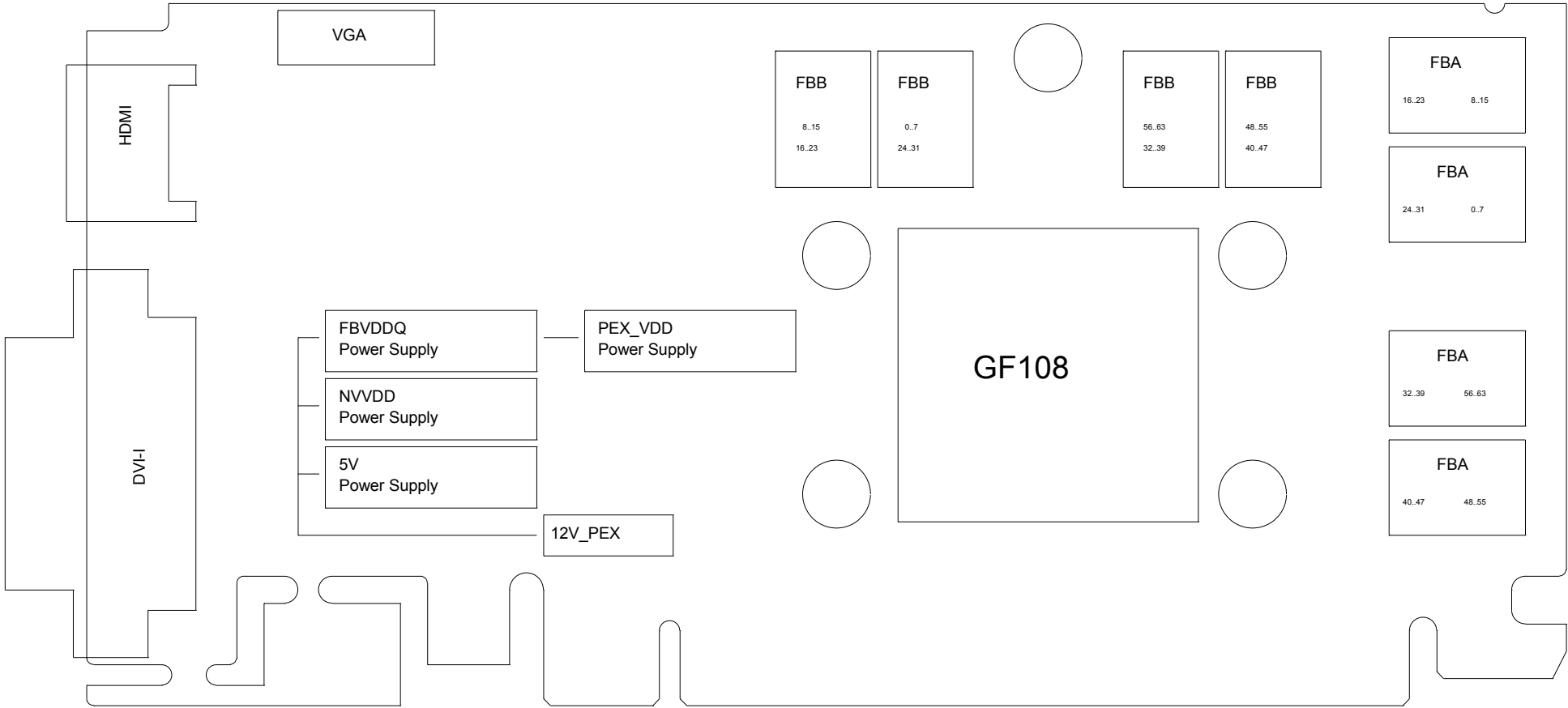
ASSEMBLY  
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO\_STUFF ASSEMBLY NOTES AND BOM NOT FINAL

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OVER VIEW			
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Block Diagram

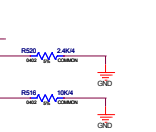
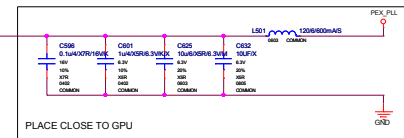
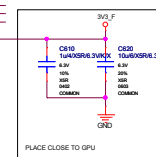
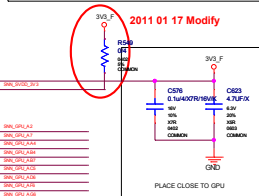
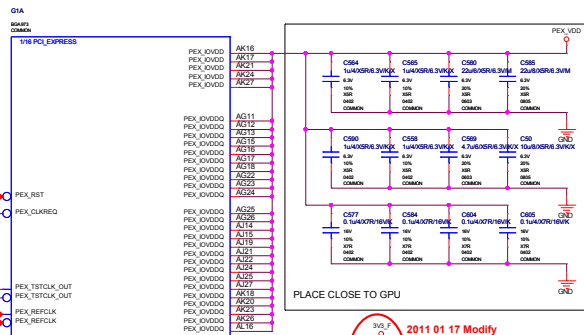
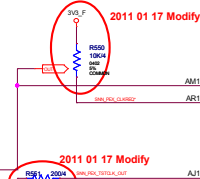
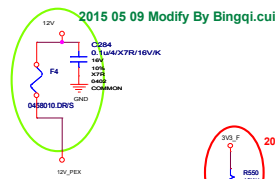
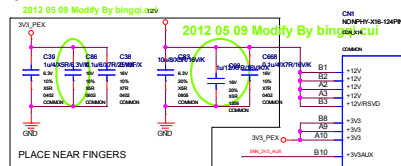


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ASSEMBLY  
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY COMMON & NO\_STUFF ASSEMBLY NOTES AND BOM NOT FINAL  
Board Block Diagram

## PCI Express Interface



	Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
IN	POL_RESET*	128u		
IN	POL_STOP*	128u		
IN	GPU_TESTMODE	128u		
IN	POL_PLU_VDD	128u	1.00V	0.100A

Net Name		DIFF_PAIR	CRITICAL	REFERENCE
A1	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A2	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A3	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A4	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A5	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A6	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A7	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A8	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A9	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A10	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A11	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A12	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A13	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A14	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A15	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A16	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A17	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A18	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A19	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A20	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A21	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A22	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A23	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A24	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A25	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A26	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A27	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A28	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A29	RS1_200	RS1_200	J	RS001
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A30	RS1_200	RS1_200	J	RS001
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A31	RS1_200	RS1_200	J	RS001
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A32	RS1_200	RS1_200	J	RS001
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	RS1_200	RS1_200	J	RS001
A95	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A96	RS1_200	RS1_200	J	RS001
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A99	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
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A102	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A103	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A104	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A105	RS1_200	RS1_200	J	RS001
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A106	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
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A109	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
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	RS1_200	RS1_200	J	RS001
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A113	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
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A118	RS1_200	RS1_200	J	RS001
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A119	RS1_200	RS1_200	J	RS001
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	RS1_200	RS1_200	J	RS001
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A122	RS1_200	RS1_200	J	RS001
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A123	RS1_200	RS1_200	J	RS001
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A124	RS1_200	RS1_200	J	RS001
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A125	RS1_200	RS1_200	J	RS001
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A126	RS1_200	RS1_200	J	RS001
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A127	RS1_200	RS1_200	J	RS001
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A128	RS1_200	RS1_200	J	RS001
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A129	RS1_200	RS1_200	J	RS001
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A131	RS1_200	RS1_200	J	RS001
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A132	RS1_200	RS1_200	J	RS001
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A133	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A134	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A135	RS1_200	RS1_200	J	RS001
	RS1_200	RS1_200	J	RS001
A136	RS1_200	RS1_200		

Figure 10 illustrates the pin connections for the 16-bit parallel input. The diagram shows a vertical bus structure with three main sections: X1, X6, and X8. Each section has a set of input pins (A1-A18, A20-A32, A34-A48) connected to a common bus. The bus is labeled "END OF X1", "END OF X6", and "END OF X8". The output pins (SMCLK, SMDAT, PERST, REFCLK, PERP0-PERN0, PERP1-PERN1, PERP2-PERN2, PERP3-PERN3, PERP4-PERN4, PERP5-PERN5, PERP6-PERN6, PERP7-PERN7, PERP8-PERN8, PERP9-PERN9, PERP10-PERN10, PERP11-PERN11, PERP12-PERN12, PERP13-PERN13, PERP14-PERN14, PERP15-PERN15) are shown on the right side of the diagram.

	BNL REGA	BNL REGA CLASSIFIED	AR16
	BNL REGA		AR13
A11	BNL REGA		
A13	BNL REGA		A117
A16	BNL REGA		A118
A17	BNL REGA		A119
A18	BNL REGA		A120
A19	BNL REGA		A121
A20	BNL REGA		A122
A21	BNL REGA		A123
A22	BNL REGA		A124
A23	BNL REGA		A125
A24	BNL REGA		A126
A25	BNL REGA		A127
A26	BNL REGA		A128
A27	BNL REGA		A129
A28	BNL REGA		A130
A29	BNL REGA		A131
A30	BNL REGA		A132
A31	BNL REGA		A133
A32	BNL REGA		A134
A33	BNL REGA		A135
A34	BNL REGA		A136
A35	BNL REGA		A137
A36	BNL REGA		A138
A37	BNL REGA		A139
A38	BNL REGA		A140
A39	BNL REGA		A141
A40	BNL REGA		A142
A41	BNL REGA		A143
A42	BNL REGA		A144
A43	BNL REGA		A145
A44	BNL REGA		A146
A45	BNL REGA		A147
A46	BNL REGA		A148
A47	BNL REGA		A149
A48	BNL REGA		A150
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A50	BNL REGA		A152
A51	BNL REGA		A153
A52	BNL REGA		A154
A53	BNL REGA		A155
A54	BNL REGA		A156
A55	BNL REGA		A157
A56	BNL REGA		A158
A57	BNL REGA		A159
A58	BNL REGA		A160
A59	BNL REGA		A161
A60	BNL REGA		A162
A61	BNL REGA		A163
A62	BNL REGA		A164
A63	BNL REGA		A165
A64	BNL REGA		A166
A65	BNL REGA		A167
A66	BNL REGA		A168
A67	BNL REGA		A169
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A69	BNL REGA		A171
A70	BNL REGA		A172
A71	BNL REGA		A173
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A77	BNL REGA		A179
A78	BNL REGA		A180
A79	BNL REGA		A181
A80	BNL REGA		A182
A81	BNL REGA		A183
A82	BNL REGA		A184
A83	BNL REGA		A185
A84	BNL REGA		A186
A85	BNL REGA		A187
A86	BNL REGA		A188
A87	BNL REGA		A189
A88	BNL REGA		A190
A89	BNL REGA		A191
A90	BNL REGA		A192
A91	BNL REGA		A193
A92	BNL REGA		A194
A93	BNL REGA		A195
A94	BNL REGA		A196
A95	BNL REGA		A197
A96	BNL REGA		A198
A97	BNL REGA		A199
A98	BNL REGA		A200
A99	BNL REGA		A201
A100	BNL REGA		A202

PEX_RST	
PEX_CRREQ	
PEX_TSTCLK_OUT	
PEX_TSTCLK_OUT	
PEX_REFCLK	
PEX_REFCLK	
PEX_T70	
PEX_T70	
PEX_R00	
PEX_R00	
PEX_T71	
PEX_T71	
PEX_R01	
PEX_R01	
PEX_T72	
PEX_T72	
PEX_R02	
PEX_R02	
PEX_T73	
PEX_T73	
PEX_R03	
PEX_R03	
PEX_T74	
PEX_T74	
PEX_R04	
PEX_R04	
PEX_T75	
PEX_T75	
PEX_R05	
PEX_R05	
PEX_T76	
PEX_T76	
PEX_R06	
PEX_R06	
PEX_T77	
PEX_T77	
PEX_R07	
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PEX_R12	
PEX_R12	
PEX_T83	
PEX_T83	
PEX_R13	
PEX_R13	
PEX_T84	
PEX_T84	
PEX_R14	
PEX_R14	
PEX_T85	
PEX_T85	
PEX_R15	
PEX_R15	

[illegible]

The image displays a series of circuit diagrams for a GPU power supply rail, specifically focusing on the 3V3\_F rail. The diagrams illustrate various components and their connections, along with specific modifications.

- Top Diagram:** Shows the initial rail configuration with capacitors CS77, CS78, CS79, CS80, CS81, CS82, CS83, CS84, CS85, and CS86 connected to GND. A red circle highlights a modification point labeled "2011 01 17 Modify".
- Middle Diagrams:** Two diagrams show the addition of a 3V3\_F capacitor to the 3V3\_F rail. The first diagram shows the capacitor connected to the 3V3\_F rail and GND. The second diagram shows the capacitor connected to the 3V3\_F rail and GND.
- Bottom Diagram:** Shows the final modified rail configuration with capacitors CS98, CS99, CS100, and CS101 connected to GND. Red arrows indicate the location of the modifications.

[illegible]

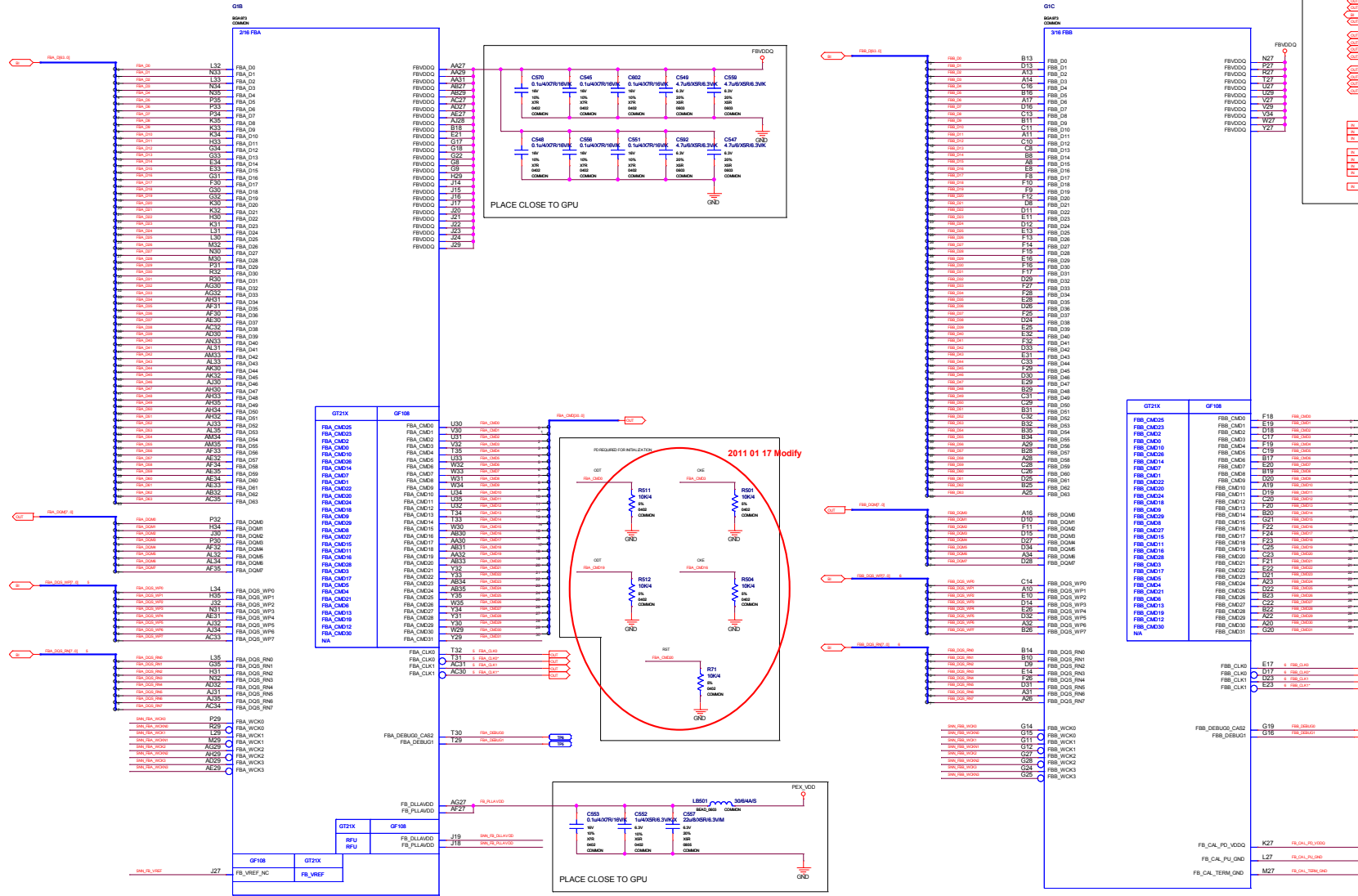
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ASSEMBLY  
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO\_STUFF ASSEMBLY NOTES AND BOM NOT FINAL  
PCI Express Interface

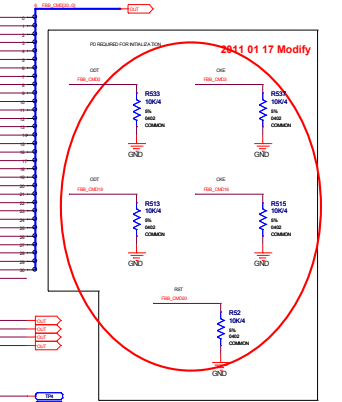
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Title			
<b>PCI Express Interface</b>			
Size	Document Number		Rev
Custom	<b>GV-N730-2GI</b>		<b>1.0</b>
Date:	Tuesday, May 20, 2014	Sheet	3 of 20

## GPU Frame Buffer

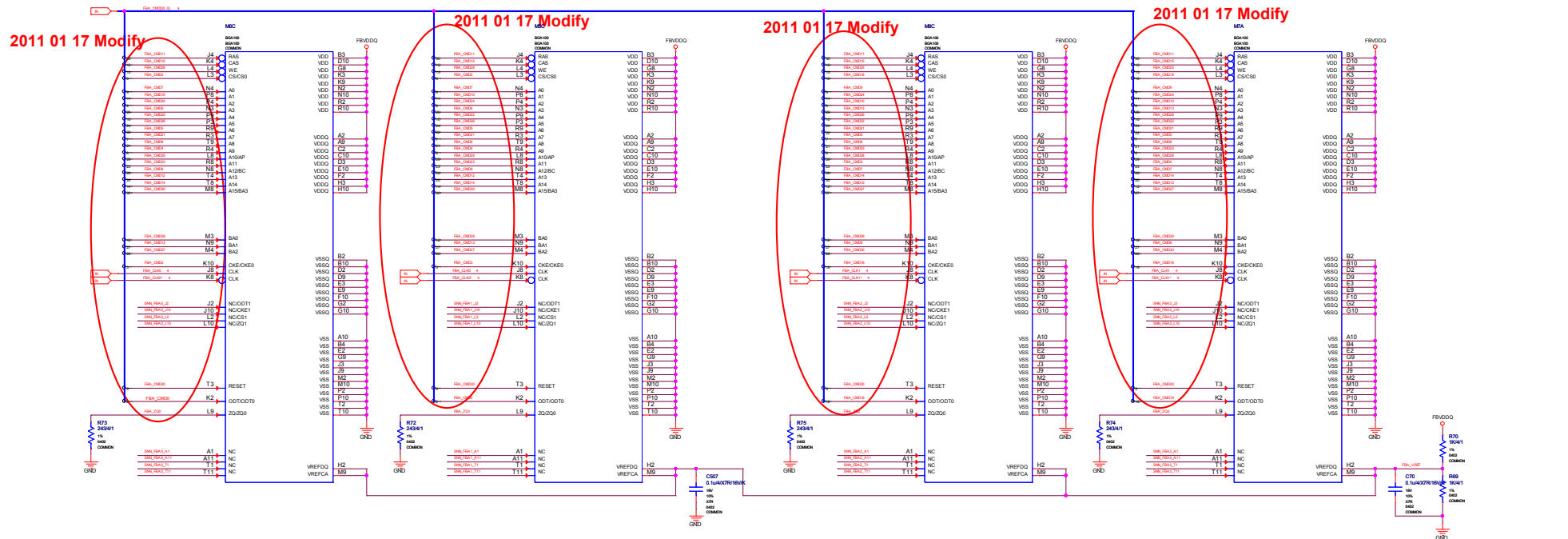
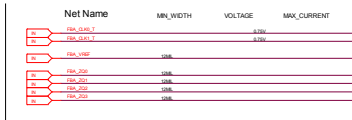


Net Name	DIFF_PAIR	CRITICAL	IMPEDANCE
TSX (DQ0) 0	0	1	50OHM
TSX (DQ0) 1	1	1	50OHM
TSX (DQ0) 2	2	1	50OHM
TSX (DQ0) 3	3	1	50OHM
TSX (DQ0) 4	4	1	50OHM
TSX (DQ0) 5	5	1	50OHM
TSX (DQ0) 6	6	1	50OHM
TSX (DQ0) 7	7	1	50OHM
TSX (DQ1) 0	TSX (DQ0) 0	1	50OHM
TSX (DQ1) 1	TSX (DQ0) 1	1	50OHM
TSX (DQ1) 2	TSX (DQ0) 2	1	50OHM
TSX (DQ1) 3	TSX (DQ0) 3	1	50OHM
TSX (DQ1) 4	TSX (DQ0) 4	1	50OHM
TSX (DQ1) 5	TSX (DQ0) 5	1	50OHM
TSX (DQ1) 6	TSX (DQ0) 6	1	50OHM
TSX (DQ1) 7	TSX (DQ0) 7	1	50OHM
TSX (DQ2) 0	TSX (DQ1) 0	1	50OHM
TSX (DQ2) 1	TSX (DQ1) 1	1	50OHM
TSX (DQ2) 2	TSX (DQ1) 2	1	50OHM
TSX (DQ2) 3	TSX (DQ1) 3	1	50OHM
TSX (DQ2) 4	TSX (DQ1) 4	1	50OHM
TSX (DQ2) 5	TSX (DQ1) 5	1	50OHM
TSX (DQ2) 6	TSX (DQ1) 6	1	50OHM
TSX (DQ2) 7	TSX (DQ1) 7	1	50OHM

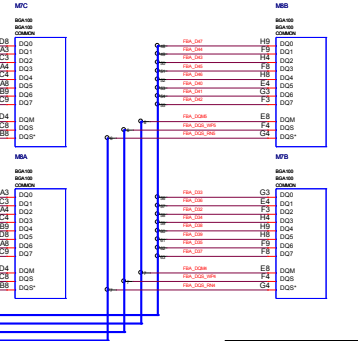
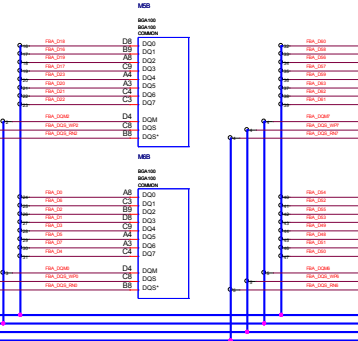
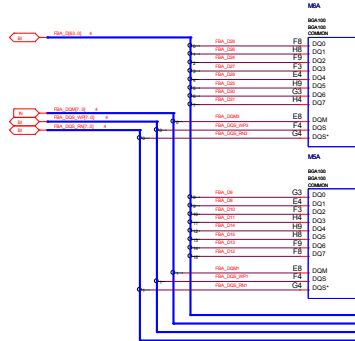
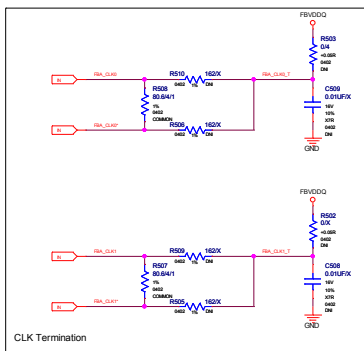
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IN	FS_OH_P0_VDD	100u		
IN	FS_OH_P0M0_GND	100u		
IN	FSM_P0M0G0	100u		
IN	FSM_P0M0G1	100u		
IN	FSM_P0M0G2	100u		
IN	FSM_P0M0G3	100u		
IN	FSM_P0M0G4	100u		
IN	FS_PLAYVDD	100u	1.00V	0.125A



## FBA Partition

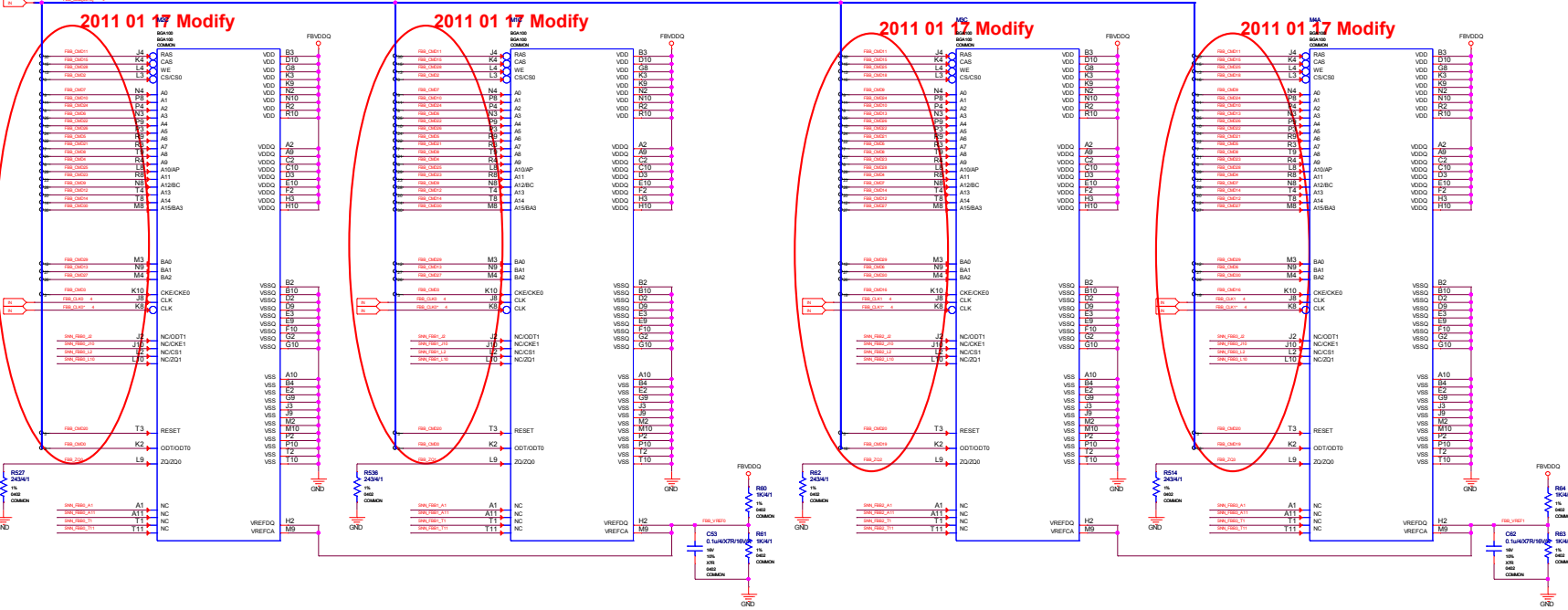


CMD	<0.25%	<0.5%
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CM01		
CM02	CM07	
CM03	CM02	
CM04		
CM05	HE0	HE0
CM06	A0	A0
CM07	A2	A2
CM08	A3	A3
CM09	A0	A0
CM10	A4	A4
CM11	A1	A1
CM12	BA0	BA0
CM13	HE0	HE0
CM14		
CM15	CM17	CM17
CM16		
CM17		
CM18		
CM19		CM07
CM20	A10	A10
CM21	A0	A0
CM22	A0	A0
CM23	A10	A10
CM24	A0	A0
CM25	A3	A3
CM26	BA0	BA0
CM27	BA1	BA1
CM28	A10	A10
CM29	A10	A10
CM30	BA0*	BA0*

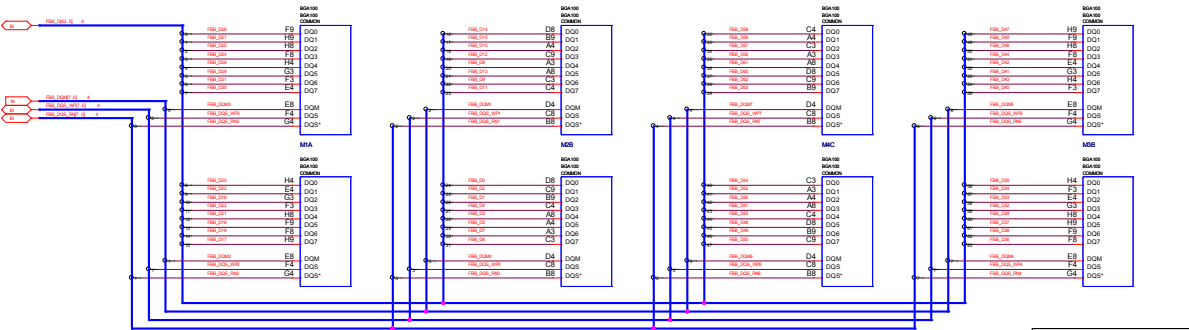
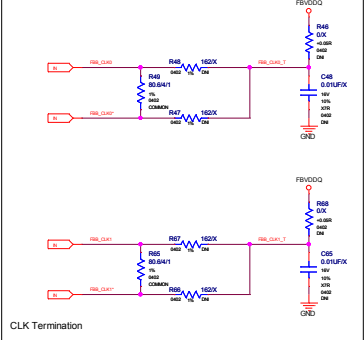


FBB Partition

Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
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FBB_D10_2	1	1.0V	
FBB_D10_3	1	1.0V	
FBB_D10_4	1	1.0V	
FBB_D10_5	1	1.0V	
FBB_D10_6	1	1.0V	
FBB_D10_7	1	1.0V	
FBB_D10_8	1	1.0V	
FBB_D10_9	1	1.0V	
FBB_D10_10	1	1.0V	
FBB_D10_11	1	1.0V	
FBB_D10_12	1	1.0V	
FBB_D10_13	1	1.0V	
FBB_D10_14	1	1.0V	
FBB_D10_15	1	1.0V	
FBB_D10_16	1	1.0V	
FBB_D10_17	1	1.0V	
FBB_D10_18	1	1.0V	
FBB_D10_19	1	1.0V	
FBB_D10_20	1	1.0V	
FBB_D10_21	1	1.0V	
FBB_D10_22	1	1.0V	
FBB_D10_23	1	1.0V	
FBB_D10_24	1	1.0V	
FBB_D10_25	1	1.0V	
FBB_D10_26	1	1.0V	
FBB_D10_27	1	1.0V	
FBB_D10_28	1	1.0V	
FBB_D10_29	1	1.0V	
FBB_D10_30	1	1.0V	
FBB_D10_31	1	1.0V	
FBB_D10_32	1	1.0V	
FBB_D10_33	1	1.0V	
FBB_D10_34	1	1.0V	
FBB_D10_35	1	1.0V	
FBB_D10_36	1	1.0V	
FBB_D10_37	1	1.0V	
FBB_D10_38	1	1.0V	
FBB_D10_39	1	1.0V	
FBB_D10_40	1	1.0V	
FBB_D10_41	1	1.0V	
FBB_D10_42	1	1.0V	
FBB_D10_43	1	1.0V	
FBB_D10_44	1	1.0V	
FBB_D10_45	1	1.0V	
FBB_D10_46	1	1.0V	
FBB_D10_47	1	1.0V	
FBB_D10_48	1	1.0V	
FBB_D10_49	1	1.0V	
FBB_D10_50	1	1.0V	
FBB_D10_51	1	1.0V	
FBB_D10_52	1	1.0V	
FBB_D10_53	1	1.0V	
FBB_D10_54	1	1.0V	
FBB_D10_55	1	1.0V	
FBB_D10_56	1	1.0V	
FBB_D10_57	1	1.0V	
FBB_D10_58	1	1.0V	
FBB_D10_59	1	1.0V	
FBB_D10_60	1	1.0V	
FBB_D10_61	1	1.0V	
FBB_D10_62	1	1.0V	
FBB_D10_63	1	1.0V	
FBB_D10_64	1	1.0V	
FBB_D10_65	1	1.0V	
FBB_D10_66	1	1.0V	
FBB_D10_67	1	1.0V	
FBB_D10_68	1	1.0V	
FBB_D10_69	1	1.0V	
FBB_D10_70	1	1.0V	
FBB_D10_71	1	1.0V	
FBB_D10_72	1	1.0V	
FBB_D10_73	1	1.0V	
FBB_D10_74	1	1.0V	
FBB_D10_75	1	1.0V	
FBB_D10_76	1	1.0V	
FBB_D10_77	1	1.0V	
FBB_D10_78	1	1.0V	
FBB_D10_79	1	1.0V	
FBB_D10_80	1	1.0V	
FBB_D10_81	1	1.0V	
FBB_D10_82	1	1.0V	
FBB_D10_83	1	1.0V	
FBB_D10_84	1	1.0V	
FBB_D10_85	1	1.0V	
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FBB_D10_87	1	1.0V	
FBB_D10_88	1	1.0V	
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FBB_D10_92	1	1.0V	
FBB_D10_93	1	1.0V	
FBB_D10_94	1	1.0V	
FBB_D10_95	1	1.0V	
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FBB_D10_98	1	1.0V	
FBB_D10_99	1	1.0V	
FBB_D10_100	1	1.0V	



CMD Mapping			
Q00	Q01	Q02	Q03
Q00	Q01	Q02	Q03
Q04	Q05	Q06	Q07
Q08	Q09	Q10	Q11
Q12	Q13	Q14	Q15
Q16	Q17	Q18	Q19
Q20	Q21	Q22	Q23
Q24	Q25	Q26	Q27
Q28	Q29	Q30	Q31
Q32	Q33	Q34	Q35
Q36	Q37	Q38	Q39
Q40	Q41	Q42	Q43
Q44	Q45	Q46	Q47
Q48	Q49	Q50	Q51
Q52	Q53	Q54	Q55
Q56	Q57	Q58	Q59
Q60	Q61	Q62	Q63
Q64	Q65	Q66	Q67
Q68	Q69	Q70	Q71
Q72	Q73	Q74	Q75
Q76	Q77	Q78	Q79
Q80	Q81	Q82	Q83
Q84	Q85	Q86	Q87
Q88	Q89	Q90	Q91
Q92	Q93	Q94	Q95
Q96	Q97	Q98	Q99



**GIGABYTE**

**FBB Partition**

Size: 100mm x 100mm

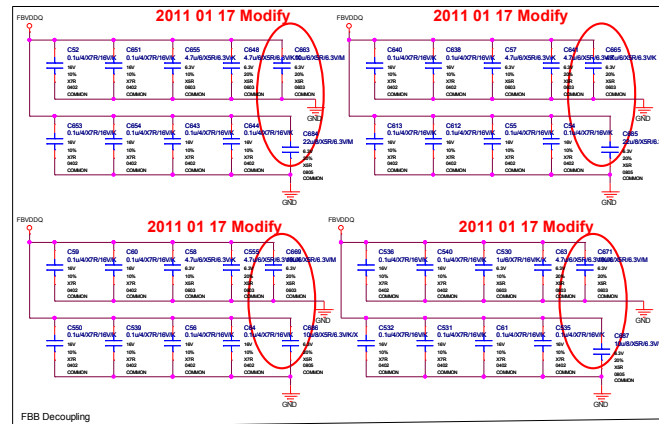
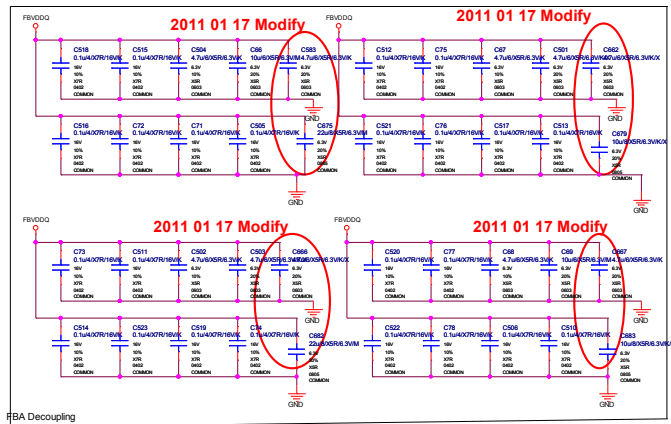
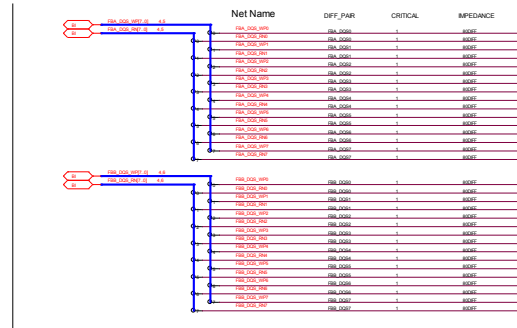
Document Number: GV-N730-2GI

Date: Tuesday, May 20, 2014

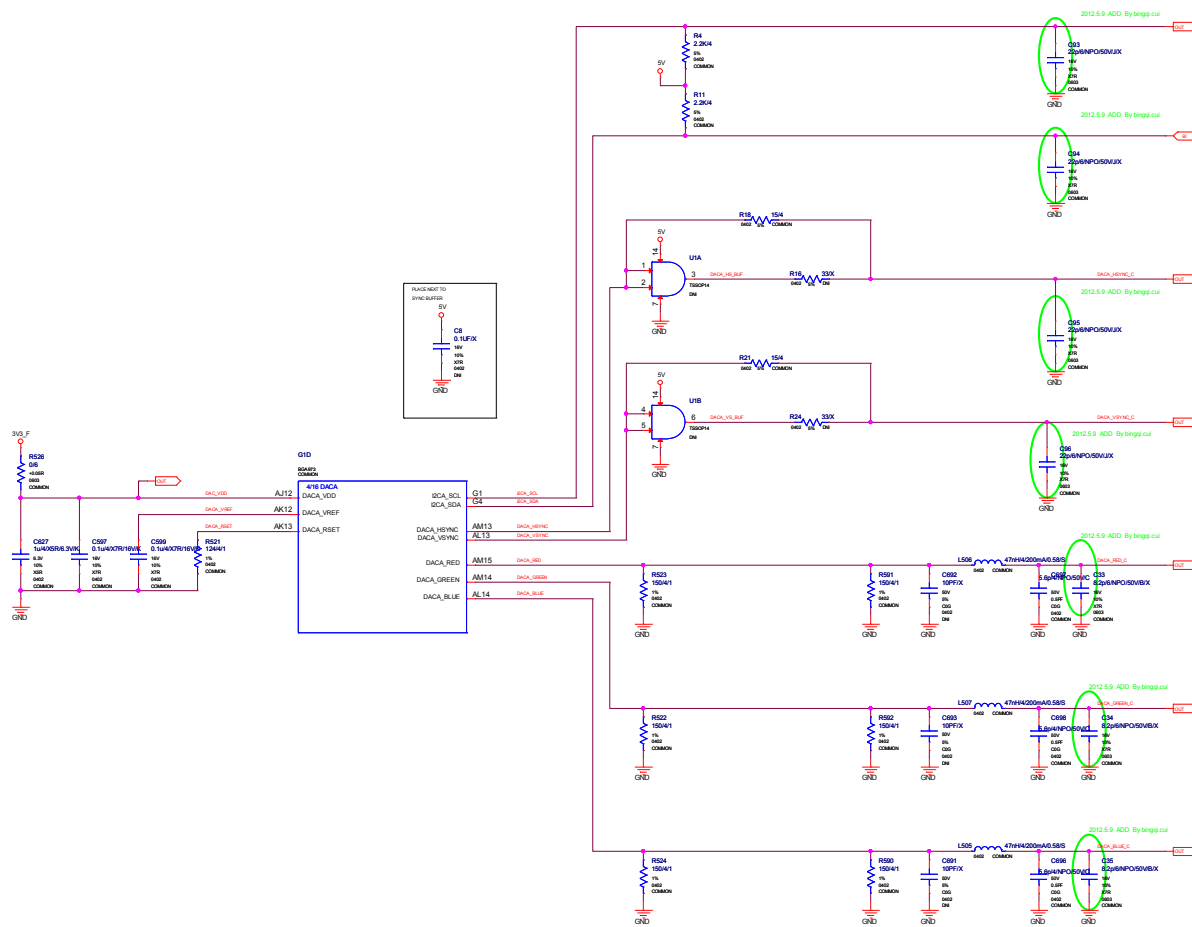
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## Memory Decoupling



## DACA VGA

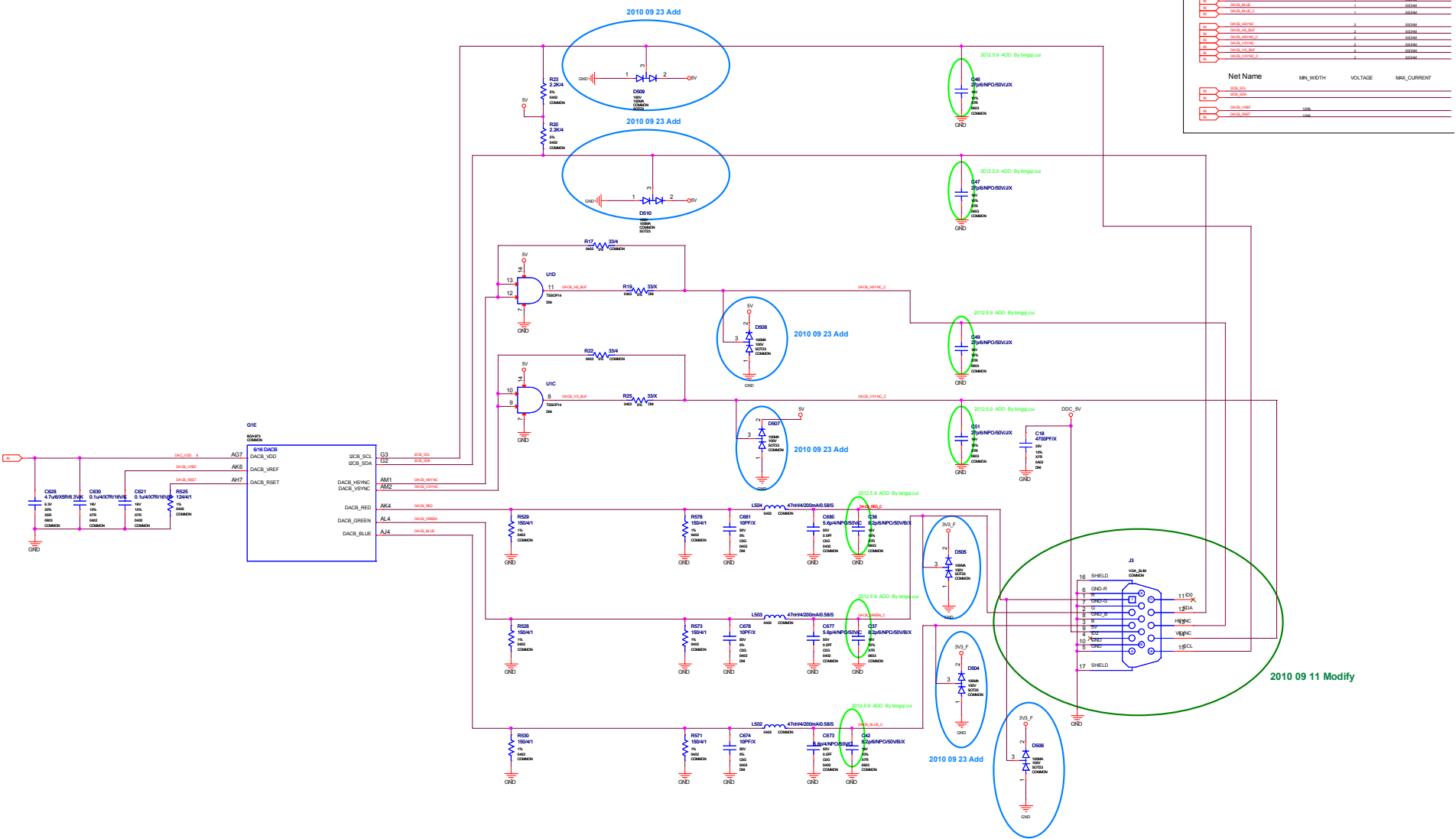


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0.01	DIOA_002C_10	1	1	0.001
0.01	DIOA_003	1	1	0.001
0.01	DIOA_003C_10	1	1	0.001
0.01	DIOA_004	1	1	0.001
0.01	DIOA_004C_10	1	1	0.001
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0.01	DIOA_051C_10	1	1	0.001
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0.01	DIOA_052C_10	1	1	0.001
0.01	DIOA_053	1	1	0.001
0.01	DIOA_053C_10	1	1	0.001
0.01	DIOA_054	1	1	0.001
0.01	DIOA_054C_10	1	1	0.001
0.01	DIOA_055	1	1	0.001
0.01	DIOA_055C_10	1	1	0.001
0.01	DIOA_056	1	1	0.001
0.01	DIOA_056C_10	1	1	0.001
0.01	DIOA_057	1	1	0.001
0.01	DIOA_057C_10	1	1	0.001
0.01	DIOA_058	1	1	0.001
0.01	DIOA_058C_10	1	1	0.001
0.01	DIOA_059	1	1	0.001
0.01	DIOA_059C_10	1	1	0.001
0.01	DIOA_060	1	1	0.001
0.01	DIOA_060C_10	1	1	0.001
0.01	DIOA_061	1	1	0.001
0.01	DIOA_061C_10	1	1	0.001
0.01	DIOA_062	1	1	0.001
0.01	DIOA_062C_10	1	1	0.001
0.01	DIOA_063	1	1	0.001
0.01	DIOA_063C_10	1	1	0.001
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0.01	DIOA_064C_10	1	1	0.001
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0.01	DIOA_065C_10	1	1	0.001
0.01	DIOA_066	1	1	0.001
0.01	DIOA_066C_10	1	1	0.001
0.01	DIOA_067	1	1	0.001
0.01	DIOA_067C_10	1	1	0.001
0.01	DIOA_068	1	1	0.001
0.01	DIOA_068C_10	1	1	0.001
0.01	DIOA_069	1	1	0.001
0.01	DIOA_069C_10	1	1	0.001
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0.01	DIOA_070C_10	1	1	0.001
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0.01	DIOA_071C_10	1	1	0.001
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0.01	DIOA_075C_10	1	1	0.001
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0.01	DIOA_085C_10	1	1	0.001
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0.01	DIOA_086C_10	1	1	0.001
0.01	DIOA_087	1	1	0.001
0.01	DIOA_087C_10	1	1	0.001
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0.01	DIOA_088C_10	1	1	0.001
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0.01	DIOA_089C_10	1	1	0.001
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0.01	DIOA_096C_10	1	1	0.001
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0.01	DIOA_098C_10	1	1	0.001
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0.01	DIOA_106C_10	1	1	0.001
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0.01	DIOA_107C_10	1	1	0.001
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0.01	DIOA_108C_10	1	1	0.001
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0.01	DIOA_113C_10	1	1	0.001
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0.01	DIOA_114C_10	1	1	0.001
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0.01	DIOA_115C_10	1	1	0.001
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0.01	DIOA_119C_10	1	1	0.001
0.01	DIOA_120	1	1	0.001
0.01	DIOA_120C_10	1	1	0.001
0.01	DIOA_121	1	1	0.001
0.01	DIOA_121C_10	1	1	0.001
0.01	DIOA_122	1	1	0.001
0.01	DIOA_122C_10	1	1	0.001
0.01	DIOA_123	1	1	0.001
0.01	DIOA_123C_10	1	1	0.001
0.01	DIOA_124	1	1	0.001
0.01	DIOA_124C_10	1	1	0.001
0.01	DIOA_125	1	1	0.001
0.01	DIOA_125C_10	1	1	0.001
0.01	DIOA_126	1	1	0.001
0.01	DIOA_126C_10	1	1	0.001
0.01	DIOA_127	1	1	0.001
0.01	DIOA_127C_10	1	1	0.001
0.01	DIOA_128	1	1	0.001
0.01	DIOA_128C_10	1	1	0.001
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0.01				

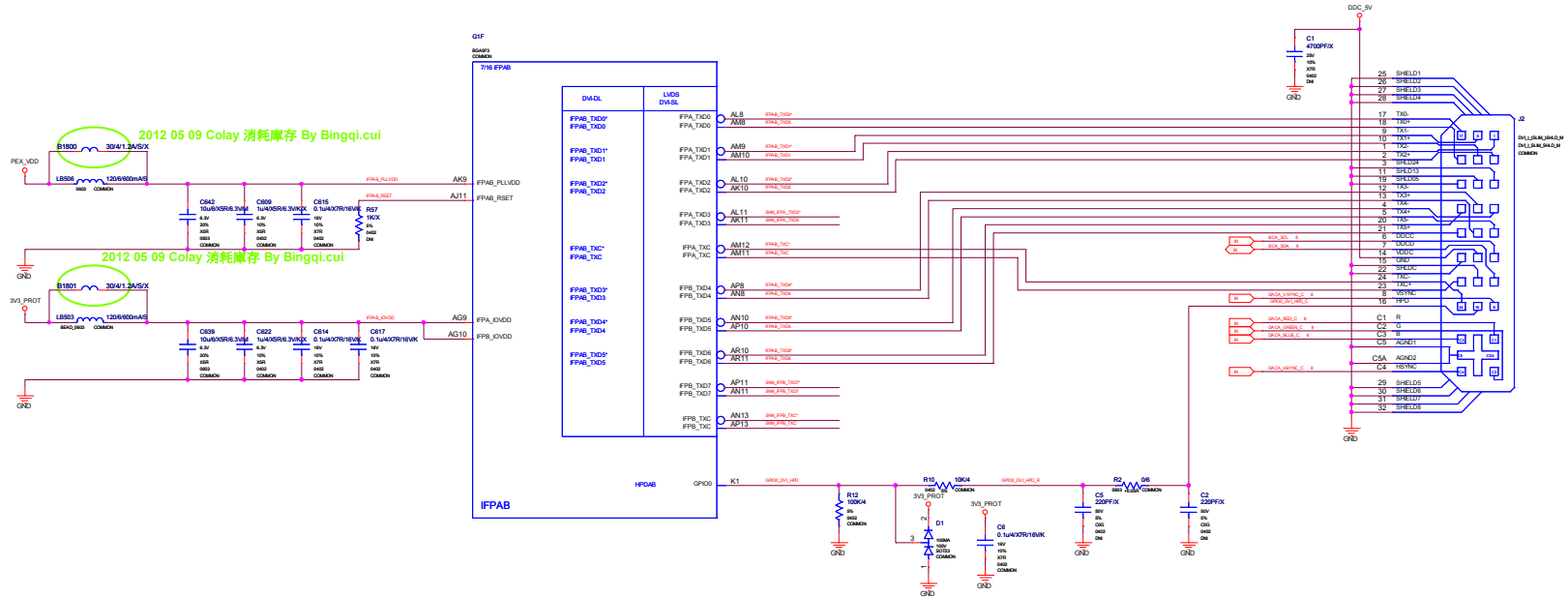
Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
OUT	SCA_SQ_10		
IN	SCA_SQA_10		
OUT	DAC_VDD_8	120k	
IN	DACA_VREF	120k	
IN	DACA_RESET	120k	



DACB VGA Header

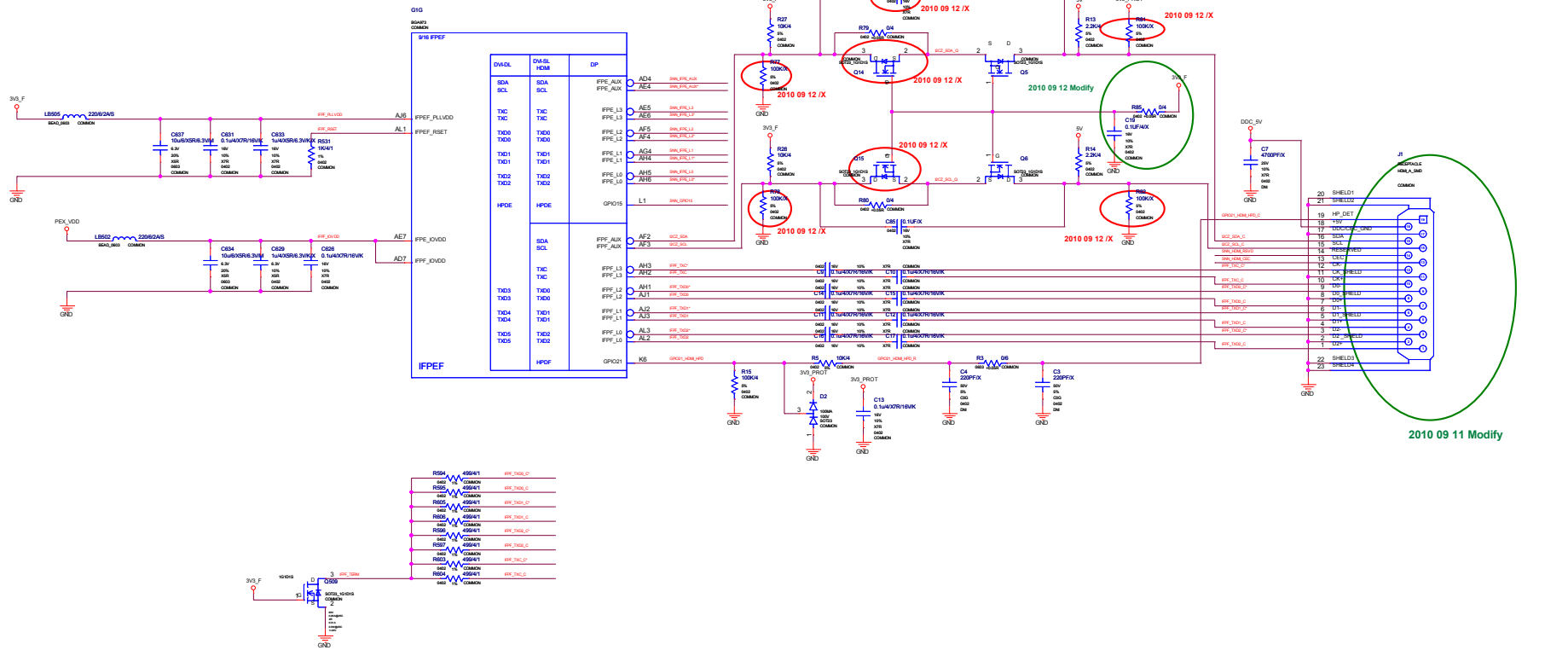


## TMD5 Interface

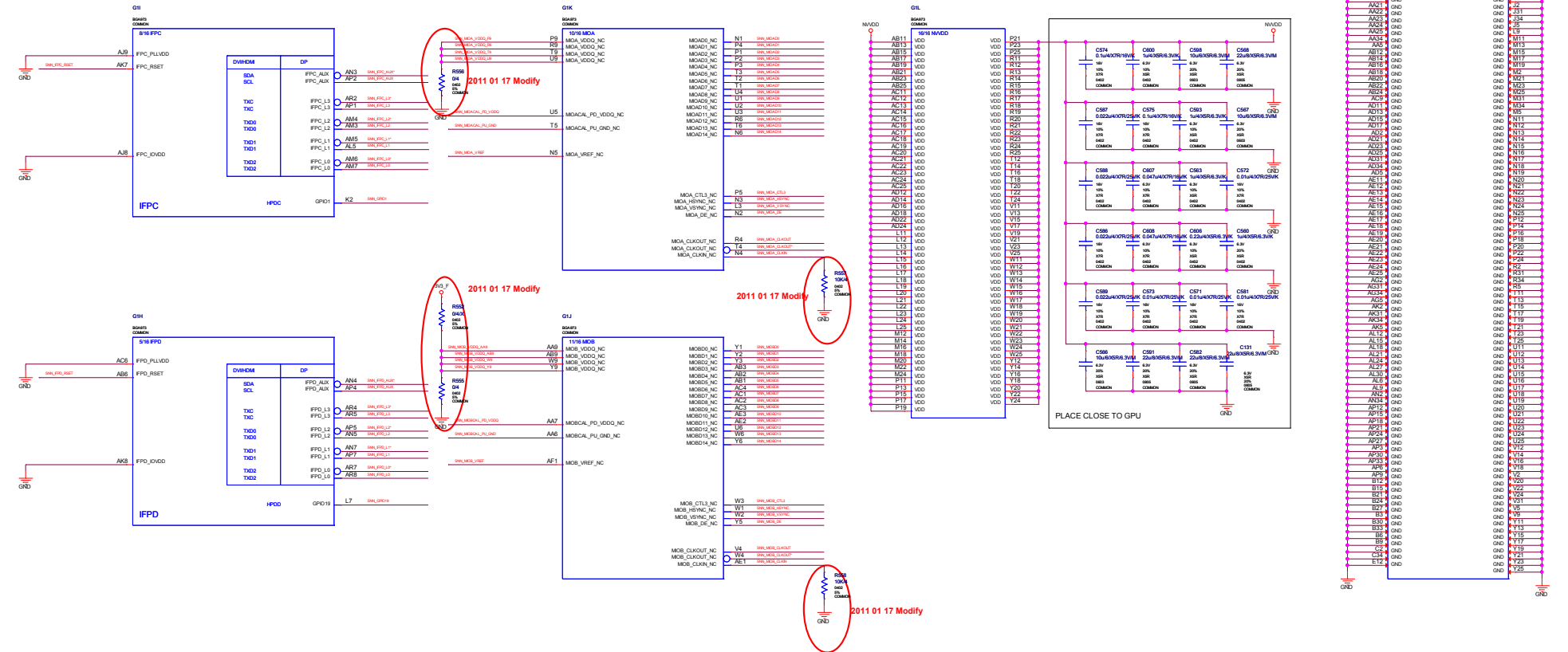


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6	FFM1_7020	#F06_7020	-	10000
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221	FFM1_7020	#F06_7020	-	10000
222	FFM1_7020	#F06_7020	-	10000
223	FFM1_7020	#F06_7020	-	10000
224	FFM1_7020	#F06_7020	-	10000
225	FFM1_7020	#F06_7020	-	10000
226	FFM1_7020	#F06_7020	-	10000
227	FFM1_7020	#F06_7020	-	10000
228	FFM1_7020	#F06_7020	-	10000
229	FFM1_7020	#F06_7020	-	10000
230	FFM1_7020	#F06_7020	-	10000
231	FFM1_7020	#F06_7020	-	10000
232	FFM1_7020	#F06_7020	-	10000
233	FFM1_7020	#F06_7020	-	10000
234	FFM1_7020	#F06_7020	-	10000
235	FFM1_7020	#F06_7020	-	10000

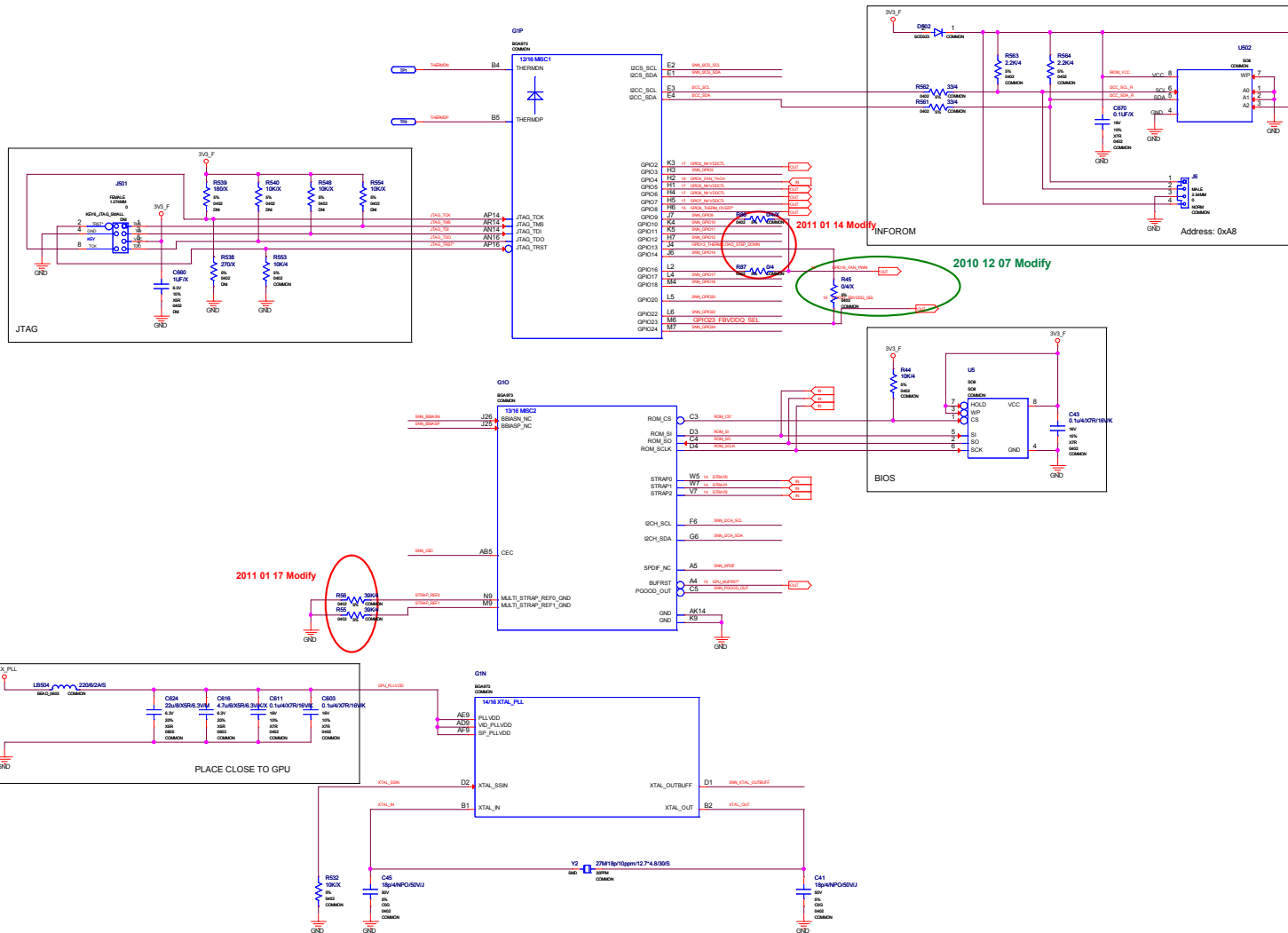
## HDMI Interface



# Unused Interfaces, NVVDD Decoupling



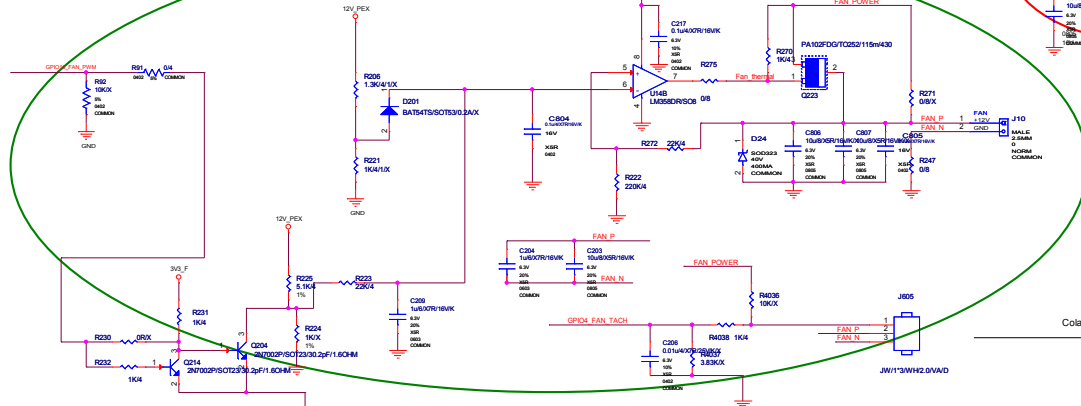
## XTAL, ROM, JTAG, Misc



Net Name		DIFF_PAIR	CRITICAL	IMPEDANCE
1	STX1_B	STX1_	1	50ohm
2	STX1_D07	STX1_	1	50ohm
Net Name		MPN_VDDTH	VOLTAGE	MIX_CURRENT
1	STX1_U00E			
1	T426N06	100k		
1	T426N07	100k		
1	JPA0_T2A			
1	JPA0_T4B			
1	JPA0_T2D			
1	JPA0_T2C			
1	JPA0_T00T			
1	ET00P_A0E1			
1	ET00P_A0E2			
1	BS0_A0A			
1	BS0_A0B			
1	BS0_A0C			
1	BS0_A0D_A			
1	BS0_A0D_B			
1	BS0_C01	100k	3.3V	
1	Q00A_00A_000A_10			
1	Q00A_00A_000A_000A_10			
1	R00A_C01			
1	R00A_D01			
1	R00A_D02			
1	R00A_D03A_10			
1	ST00A_010			
1	ST00A_011			
1	ST00A_012			
1	MPN_R01C02	100k	1.00V	0.000A

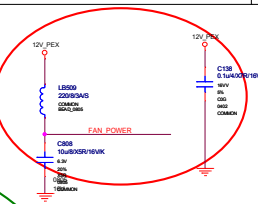
## Straps, Thermal, Mechanical

2010 09 11 Modify

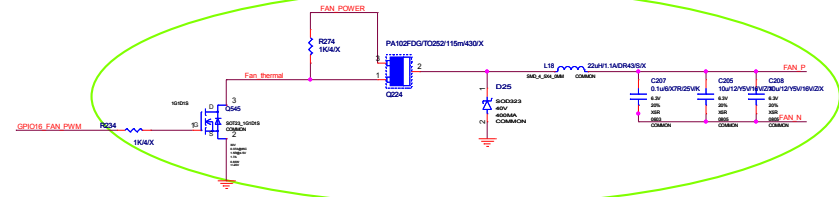


2010 09 20 Modify

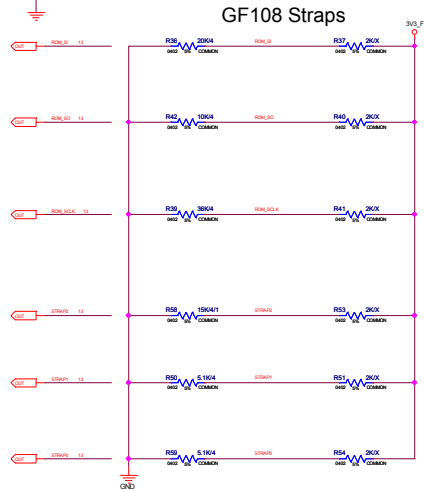
Add Copper under pad 4  
(at least  $1\text{cm}^2$ )



## 2012.5.9 Colay 消耗22uH



Colay 22uH Chock



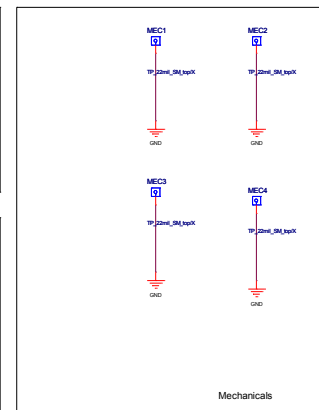
## GF108 Straps

Bit Signal

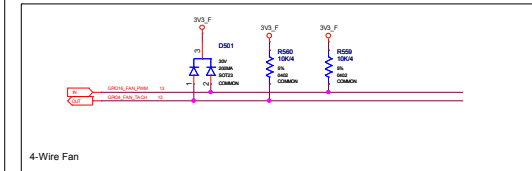
Values

[illegible]

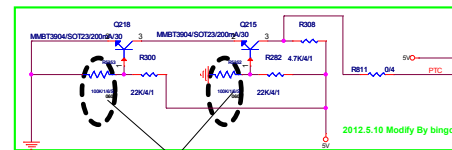
Multiple  
Straps



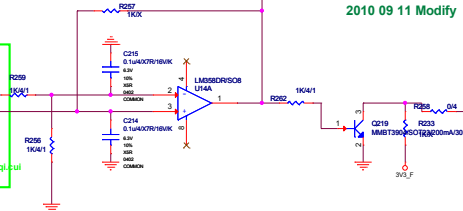
## Mechanicals



4-Wire Fa



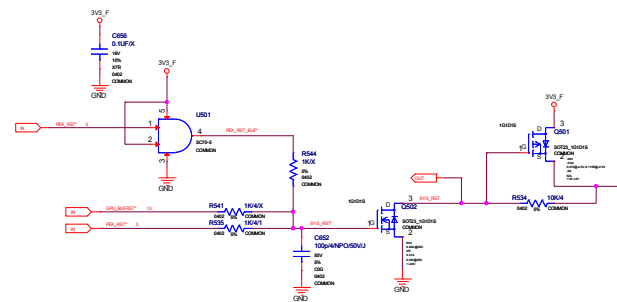
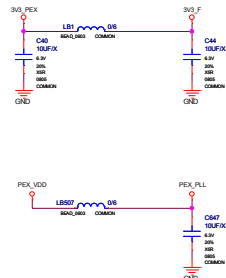
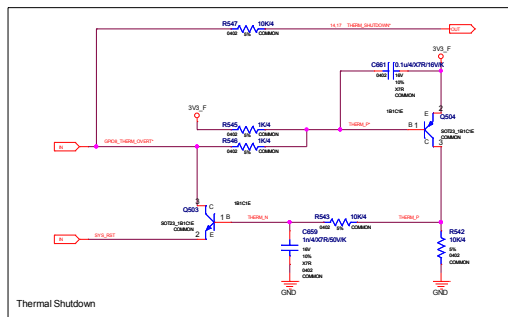
2012.5.10 Modify By bingqi.c



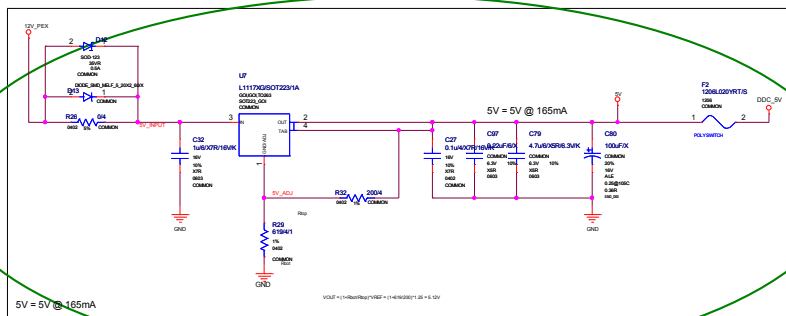
2010 09 11 Modify

Near NVDDC each high side MOS<sup>D</sup>

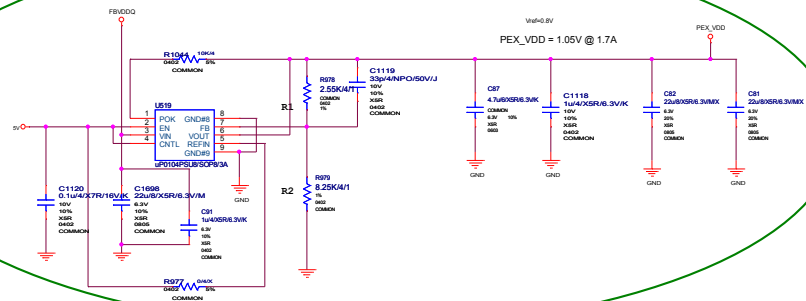
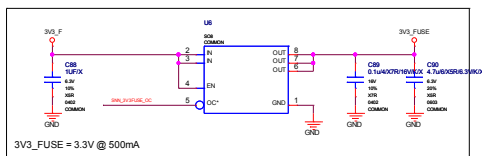
## Power Supply I: Misc Power, Thermal Shutdown



Net Name		MW_VOLTAGE	VOLTAGE	MW_CURRENT
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2	IEEE_TIEIN_4(200000)	13		
3	TIEIN_2			
4	TIEIN_3			
5	TIEIN_6			
6	IEEE_2(200000)			
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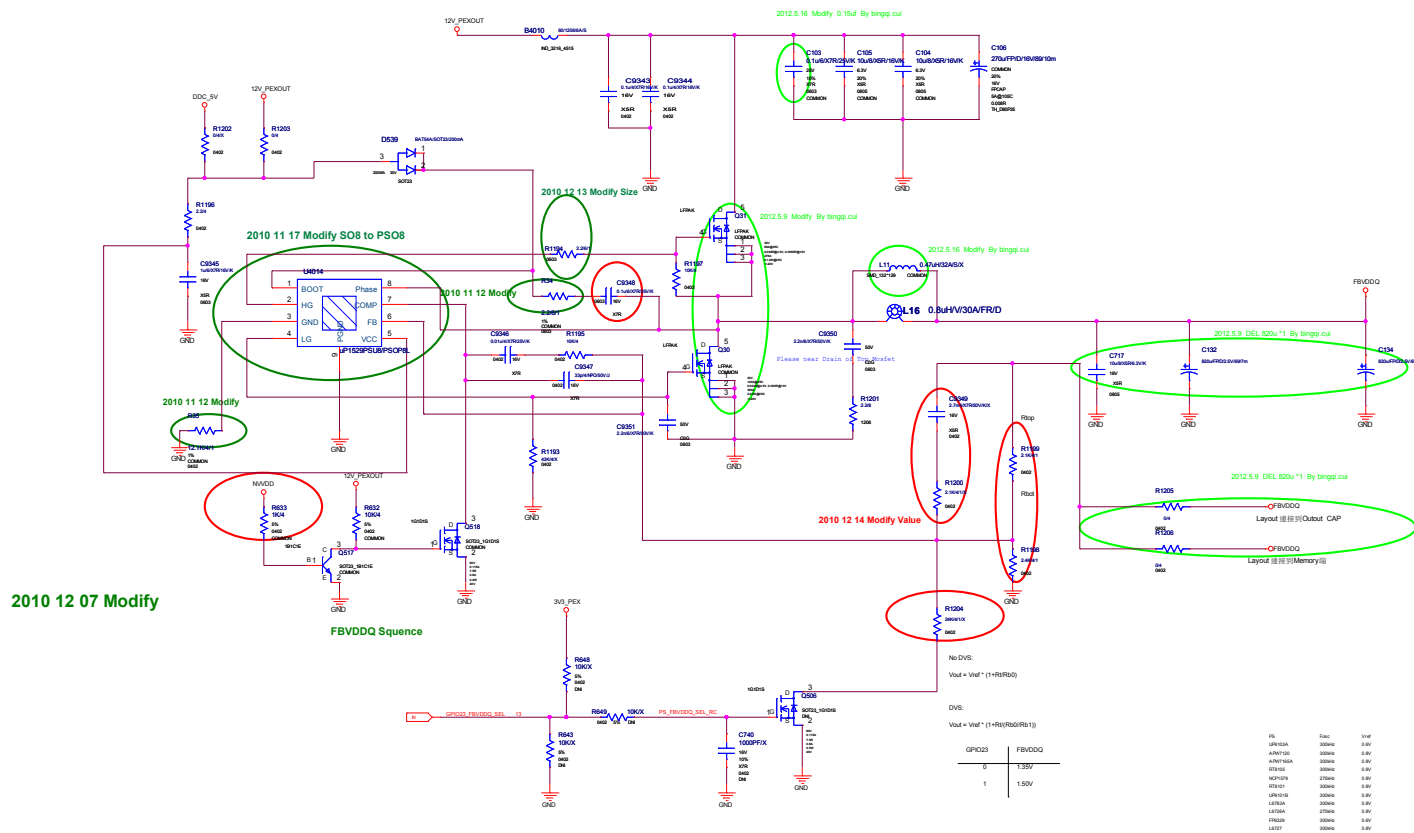


2010 09 11 Modify



2010 09 11 Modify

## Power Supply II: FBVDDQ

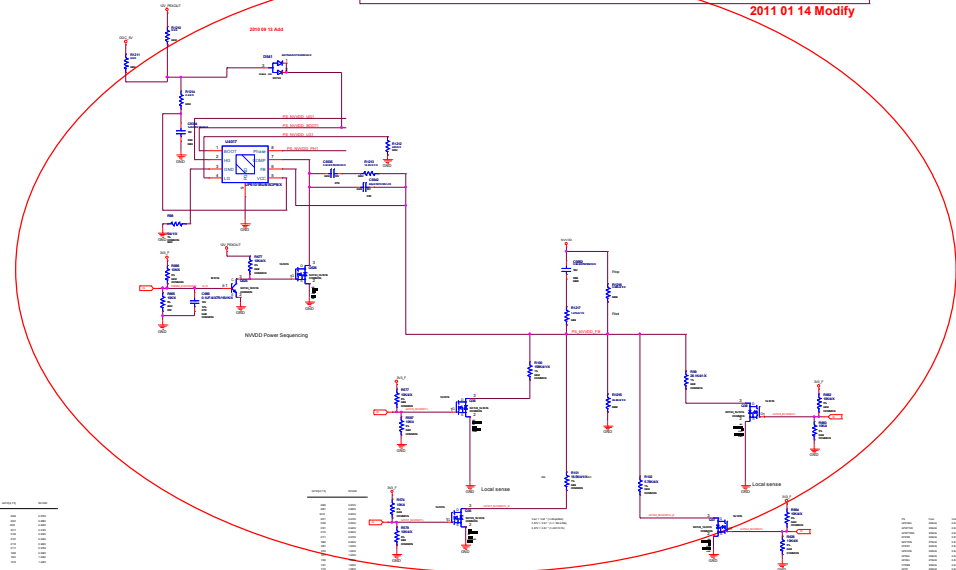
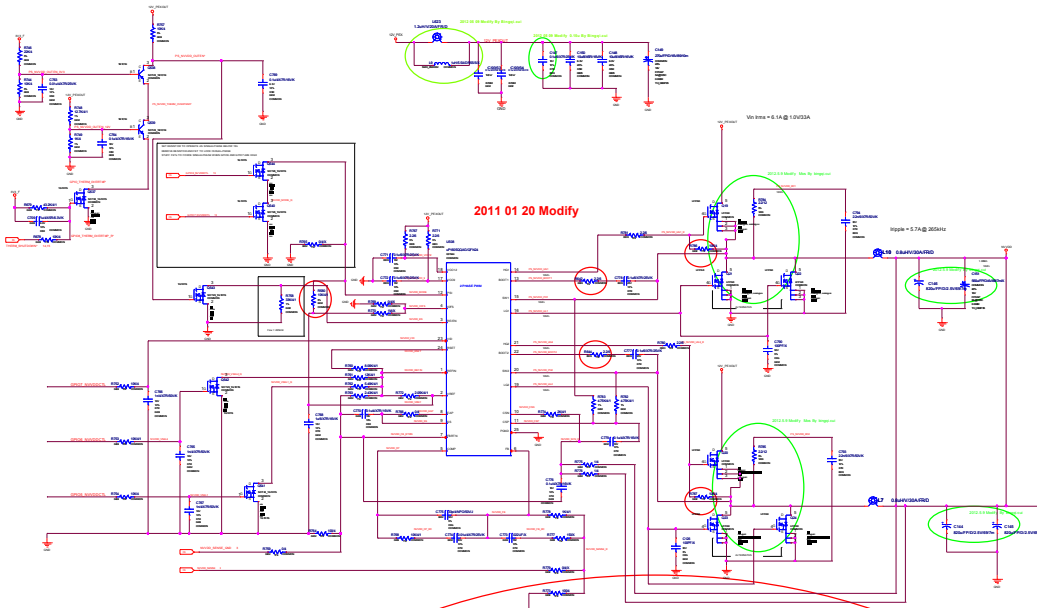
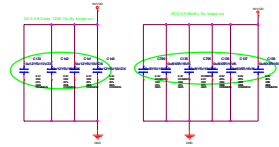
[illegible]



Net Name	Min	Max
0V	0	0
1V	1	1
2V	2	2
3V	3	3
4V	4	4
5V	5	5
6V	6	6
7V	7	7
8V	8	8
9V	9	9
10V	10	10
11V	11	11
12V	12	12
13V	13	13
14V	14	14
15V	15	15
16V	16	16
17V	17	17
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26V	26	26
27V	27	27
28V	28	28
29V	29	29
30V	30	30
31V	31	31
32V	32	32
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34V	34	34
35V	35	35
36V	36	36
37V	37	37
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39V	39	39
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91V	91	91
92V	92	92
93V	93	93
94V	94	94
95V	95	95
96V	96	96
97V	97	97
98V	98	98
99V	99	99
100V	100	100

# NVDD POWER SUPPLY

INPUT	OUTPUT	OUTPUT	OUTPUT
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
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53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
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85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100



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99	100

DESIGNED BY: [Name] DATE: [Date] CHECKED BY: [Name] DATE: [Date]

REVISION

REVISION 1.0: [Description] REVISION 1.1: [Description] REVISION 1.2: [Description]

	A	B	C	D	E	F	G	H	
1									1
2									2
3									3
4									4
5									5

GIGABYTE		
Cref Part 1		
Size	Document Number	Rev
Comp	GV-N730-2GI	1.0
Date	Tuesday, May 20, 2014	Print 18 of 20

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Title: Cref Part		C006 [7.30]		C008 [3.30]		C07 [10.31]		R0 [17.47]		R023 [0.40]		U005 [17.82]		V1 [15.92]	
Report		C006 [10.40]		C008 [10.30]		C07 [10.40]		R0 [17.47]		R024 [0.50]		U006 [17.92]		V2 [16.02]	
Design: p107_u01		C007 [7.30]		C009 [10.31]		C08 [14.30]		R10 [10.40]		R025 [0.30]		U007 [17.92]		V3 [16.12]	
Date: Mar 31		C007 [10.40]		C009 [10.31]		C08 [14.30]		R11 [10.40]		R026 [0.30]		U008 [17.92]		V4 [16.22]	
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C4 [10.40]		C014 [10.40]		C016 [10.30]		C15 [14.30]		R18 [10.40]		R033 [0.30]		U015 [17.92]		V11 [16.92]	
C5 [10.40]		C015 [10.40]		C017 [10.30]		C16 [14.30]		R19 [10.40]		R034 [0.30]		U016 [17.92]		V12 [17.02]	
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C7 [10.40]		C017 [10.40]		C019 [10.30]		C18 [14.30]		R21 [10.40]		R036 [0.30]		U018 [17.92]		V14 [17.22]	
C8 [10.40]		C018 [10.40]		C020 [10.30]		C19 [14.30]		R22 [10.40]		R037 [0.30]		U019 [17.92]		V15 [17.32]	
C9 [10.40]		C019 [10.40]		C021 [10.30]		C20 [14.30]		R23 [10.40]		R038 [0.30]		U020 [17.92]		V16 [17.42]	
		C020 [10.40]		C022 [10.30]		C21 [14.30]		R24 [10.40]		R039 [0.30]		U021 [17.92]		V17 [17.52]	
		C021 [10.40]		C023 [10.30]		C22 [14.30]		R25 [10.40]		R040 [0.30]		U022 [17.92]		V18 [17.62]	
		C022 [10.40]		C024 [10.30]		C23 [14.30]		R26 [10.40]		R041 [0.30]		U023 [17.92]		V19 [17.72]	
		C023 [10.40]		C025 [10.30]		C24 [14.30]		R27 [10.40]		R042 [0.30]		U024 [17.92]		V20 [17.82]	
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		C025 [10.40]		C027 [10.30]		C26 [14.30]		R29 [10.40]		R044 [0.30]		U026 [17.92]		V22 [18.02]	
		C026 [10.40]		C028 [10.30]		C27 [14.30]		R30 [10.40]		R045 [0.30]		U027 [17.92]		V23 [18.12]	
		C027 [10.40]		C029 [10.30]		C28 [14.30]		R31 [10.40]		R046 [0.30]		U028 [17.92]		V24 [18.22]	
		C028 [10.40]		C030 [10.30]		C29 [14.30]		R32 [10.40]		R047 [0.30]		U029 [17.92]		V25 [18.32]	
		C029 [10.40]		C031 [10.30]		C30 [14.30]		R33 [10.40]		R048 [0.30]		U030 [17.92]		V26 [18.42]	
		C030 [10.40]		C032 [10.30]		C31 [14.30]		R34 [10.40]		R049 [0.30]		U031 [17.92]		V27 [18.52]	
		C031 [10.40]		C033 [10.30]		C32 [14.30]		R35 [10.40]		R050 [0.30]		U032 [17.92]		V28 [18.62]	
		C032 [10.40]		C034 [10.30]		C33 [14.30]		R36 [10.40]		R051 [0.30]		U033 [17.92]		V29 [18.72]	
		C033 [10.40]		C035 [10.30]		C34 [14.30]		R37 [10.40]		R052 [0.30]		U034 [17.92]		V30 [18.82]	
		C034 [10.40]		C036 [10.30]		C35 [14.30]		R38 [10.40]		R053 [0.30]		U035 [17.92]		V31 [18.92]	
		C035 [10.40]		C037 [10.30]		C36 [14.30]		R39 [10.40]		R054 [0.30]		U036 [17.92]		V32 [19.02]	
		C036 [10.40]		C038 [10.30]		C37 [14.30]		R40 [10.40]		R055 [0.30]		U037 [17.92]		V33 [19.12]	
		C037 [10.40]		C039 [10.30]		C38 [14.30]		R41 [10.40]		R056 [0.30]		U038 [17.92]		V34 [19.22]	
		C038 [10.40]		C040 [10.30]		C39 [14.30]		R42 [10.40]		R057 [0.30]		U039 [17.92]		V35 [19.32]	
		C039 [10.40]		C041 [10.30]		C40 [14.30]		R43 [10.40]		R058 [0.30]		U040 [17.92]		V36 [19.42]	
		C040 [10.40]		C042 [10.30]		C41 [14.30]		R44 [10.40]		R059 [0.30]		U041 [17.92]		V37 [19.52]	
		C041 [10.40]		C043 [10.30]		C42 [14.30]		R45 [10.40]		R060 [0.30]		U042 [17.92]		V38 [19.62]	
		C042 [10.40]		C044 [10.30]		C43 [14.30]		R46 [10.40]		R061 [0.30]		U043 [17.92]		V39 [19.72]	
		C043 [10.40]		C045 [10.30]		C44 [14.30]		R47 [10.40]		R062 [0.30]		U044 [17.92]		V40 [19.82]	
		C044 [10.40]		C046 [10.30]		C45 [14.30]		R48 [10.40]		R063 [0.30]		U045 [17.92]		V41 [19.92]	
		C045 [10.40]		C047 [10.30]		C46 [14.30]		R49 [10.40]		R064 [0.30]		U046 [17.92]		V42 [20.02]	
		C046 [10.40]		C048 [10.30]		C47 [14.30]		R50 [10.40]		R065 [0.30]		U047 [17.92]		V43 [20.12]	
		C047 [10.40]		C049 [10.30]		C48 [14.30]		R51 [10.40]		R066 [0.30]		U048 [17.92]		V44 [20.22]	
		C048 [10.40]		C050 [10.30]		C49 [14.30]		R52 [10.40]		R067 [0.30]		U049 [17.92]		V45 [20.32]	
		C049 [10.40]		C051 [10.30]		C50 [14.30]		R53 [10.40]		R068 [0.30]		U050 [17.92]		V46 [20.42]	
		C050 [10.40]		C052 [10.30]		C51 [14.30]		R54 [10.40]		R069 [0.30]		U051 [17.92]		V47 [20.52]	
		C051 [10.40]		C053 [10.30]		C52 [14.30]		R55 [10.40]		R070 [0.30]		U052 [17.92]		V48 [20.62]	
		C052 [10.40]		C054 [10.30]		C53 [14.30]		R56 [10.40]		R071 [0.30]		U053 [17.92]		V49 [20.72]	
		C053 [10.40]		C055 [10.30]		C54 [14.30]		R57 [10.40]		R072 [0.30]		U054 [17.92]		V50 [20.82]	
		C054 [10.40]		C056 [10.30]		C55 [14.30]		R58 [10.40]		R073 [0.30]		U055 [17.92]		V51 [20.92]	
		C055 [10.40]		C057 [10.30]		C56 [14.30]		R59 [10.40]		R074 [0.30]		U056 [17.92]		V52 [21.02]	
		C056 [10.40]		C058 [10.30]		C57 [14.30]		R60 [10.40]		R075 [0.30]		U057 [17.92]		V53 [21.12]	
		C057 [10.40]		C059 [10.30]		C58 [14.30]		R61 [10.40]		R076 [0.30]		U058 [17.92]		V54 [21.22]	
		C058 [10.40]		C060 [10.30]		C59 [14.30]		R62 [10.40]		R077 [0.30]		U059 [17.92]		V55 [21.32]	
		C059 [10.40]		C061 [10.30]		C60 [14.30]		R63 [10.40]		R078 [0.30]		U060 [17.92]		V56 [21.42]	
		C060 [10.40]		C062 [10.30]		C61 [14.30]		R64 [10.40]		R079 [0.30]		U061 [17.92]		V57 [21.52]	
		C061 [10.40]		C063 [10.30]		C62 [14.30]		R65 [10.40]		R080 [0.30]		U062 [17.92]		V58 [21.62]	
		C062 [10.40]		C064 [10.30]		C63 [14.30]		R66 [10.40]		R081 [0.30]		U063 [17.92]		V59 [21.72]	
		C063 [10.40]		C065 [10.30]		C64 [14.30]		R67 [10.40]		R082 [0.30]		U064 [17.92]		V60 [21.82]	
		C064 [10.40]		C066 [10.30]		C65 [14.30]		R68 [10.40]		R083 [0.30]		U065 [17.92]		V61 [21.92]	
		C065 [10.40]		C067 [10.30]		C66 [14.30]		R69 [10.40]		R084 [0.30]		U066 [17.92]		V62 [22.02]	
		C066 [10.40]		C068 [10.30]		C67 [14.30]		R70 [10.40]		R085 [0.30]		U067 [17.92]		V63 [22.12]	
		C067 [10.40]		C069 [10.30]		C68 [14.30]		R71 [10.40]		R086 [0.30]		U068 [17.92]		V64 [22.22]	
		C068 [10.40]		C070 [10.30]		C69 [14.30]		R72 [10.40]		R087 [0.30]		U069 [17.92]		V65 [22.32]	
		C069 [10.40]		C071 [10.30]		C70 [14.30]		R73 [10.40]		R088 [0.30]		U070 [17.92]		V66 [22.42]	
		C070 [10.40]		C072 [10.30]		C71 [14.30]		R74 [10.40]		R089 [0.30]		U071 [17.92]		V67 [22.52]	
		C071 [10.40]		C073 [10.30]		C72 [14.30]		R75 [10.40]		R090 [0.30]		U072 [17.92]		V68 [22.62]	
		C072 [10.40]		C074 [10.30]		C73 [14.30]		R76 [10.40]		R091 [0.30]		U073 [17.92]		V69 [22.72]	
		C073 [10.40]		C075 [10.30]		C74 [14.30]		R77 [10.40]		R092 [0.30]		U074 [17.92]		V70 [22.82]	
		C074 [10.40]		C076 [10.30]		C75 [14.30]		R78 [10.40]		R093 [0.30]		U075 [17.92]		V71 [22.92]	
		C075 [10.40]		C077 [10.30]		C76 [14.30]		R79 [10.40]		R094 [0.30]		U076 [17.92]		V72 [23.02]	
		C076 [10.40]		C078 [10.30]		C77 [14.30]		R80 [10.40]		R095 [0.30]		U077 [17.92]		V73 [23.12]	
		C077 [10.40]		C079 [10.30]		C78 [14.30]		R81 [10.40]		R096 [0.30]		U078 [17.92]		V74 [23.22]	
		C078 [10.40]		C080 [10.30]		C79 [14.30]		R82 [10.40]		R097 [0.30]		U079 [17.92]		V75 [23.32]	
		C079 [10.40]		C081 [10.30]		C80 [14.30]		R83 [10.40]		R098 [0.30]		U080 [17.92]		V76 [23.42]	
		C080 [10.40]		C082 [10.30]		C81 [14.30]		R84 [10.40]		R099 [0.30]		U081 [17.92]		V77 [23.52]	
		C081 [10.40]		C083 [10.30]		C82 [14.30]		R85 [10.40]		R100 [0.30]		U082 [17.92]		V78 [23.62]	
		C082 [10.40]		C084 [10.30]		C83 [14.30]		R86 [10.40]		R101 [0.30]		U083 [17.92]		V79 [23.72]	
		C083 [10.40]		C085 [10.30]		C84 [14.30]		R87 [10.40]		R102 [0.30]		U084 [17.92]		V80 [23.82]	
		C084 [10.40]		C086 [10.30]		C85 [14.30]		R88 [10.40]		R103 [0.30]		U085 [17.92]		V81 [23.92]	
		C085 [10.40]		C087 [10.30]		C86 [14.30]		R89 [10.40]		R104 [0.30]		U086 [17.92]		V82 [24.02]	
		C086 [10.40]		C088 [10.30]		C87 [14.30]		R90 [10.40]		R105 [0.30]		U087 [17.92]		V83 [24.12]	
		C087 [10.40]		C089 [10.30]		C88 [14.30]		R91 [10.40]		R106 [0.30]		U088 [17.92]		V84 [24.22]	
		C088 [10.40]		C090 [10.30]		C89 [14.30]		R92 [10.40]		R107 [0.30]		U089 [17.92]		V85 [24.32]	
		C089 [10.40]		C091 [10.30]		C90 [14.30]		R93 [10.40]		R108 [0.30]		U090 [17.92]		V86 [24.42]	
		C090 [10.40]		C092 [10.30]		C91 [14.30]		R94 [10.40]		R109 [0.30]		U091 [17.92]		V87 [24.52]	
		C091 [10.40]		C093 [10.30]		C92 [14.30]		R95 [10.40]		R110 [0.30]		U092 [17.92]		V88 [24.62]	
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		C093 [10.40]		C095 [10.30]		C94 [14.30]		R97 [10.40]		R112 [0.30]		U094 [17.92]		V90 [24.82]	
		C094 [10.40]		C096 [10.30]		C95 [14.30]		R98 [10.40]		R113 [0.30]		U095 [17.92]		V91 [24.92]	
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