

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

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REV	VARIANT	NVPIN	ASSEMBLY
B	BASE	600-11071-BASE-SCH	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	SKU0001	600-11071-0001-100	GF108-300-A1 625/1250/900MHz 1024MB/128bit DDR3, DVI-DL+HDMI+VGA
2	SKU0002	600-11071-0002-100	GF108-300-A1 650/1300/900MHz 1024MB/128bit DDR3, DVI-DL+HDMI+VGA
3	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
4	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
5	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
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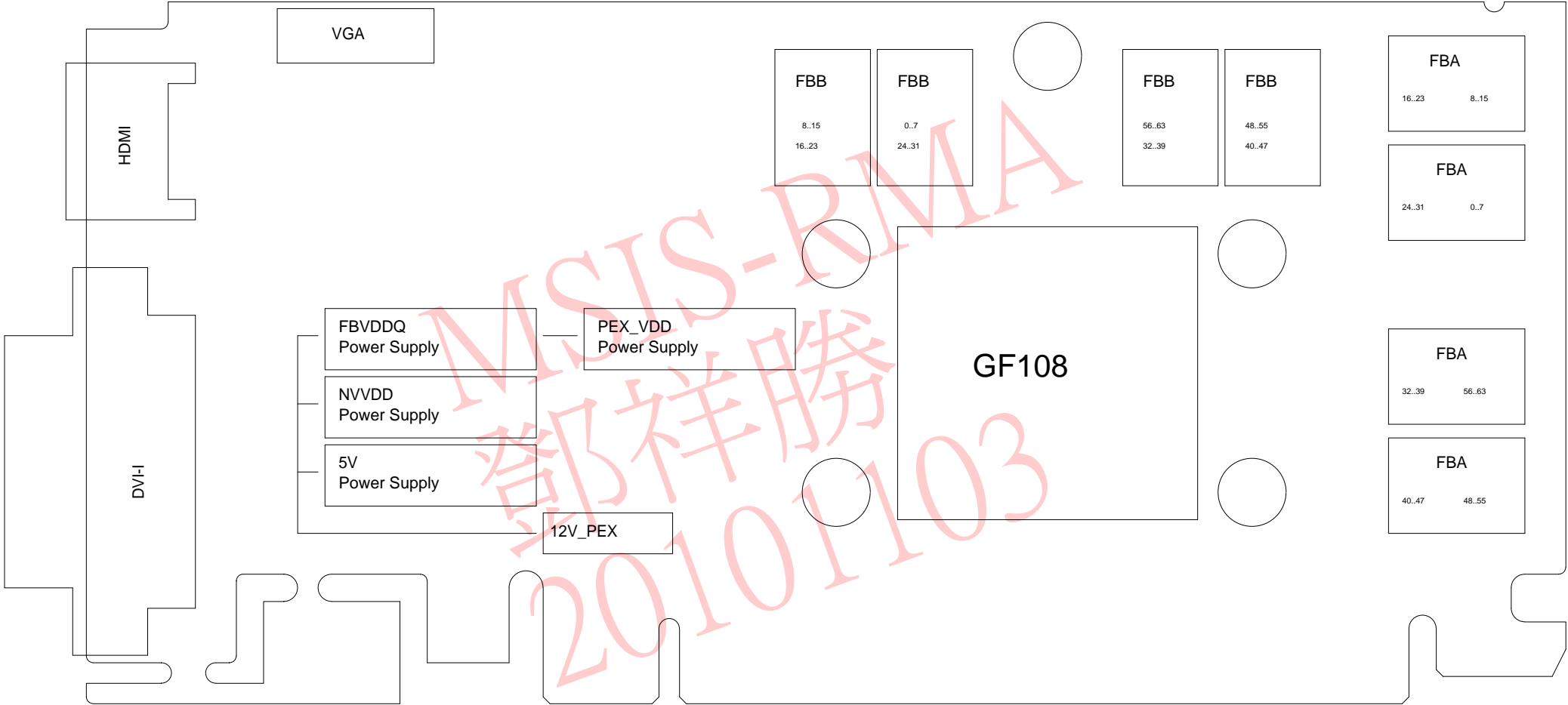
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	Overview

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Block Diagram



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PAGE DETAIL		Board Block Diagram	
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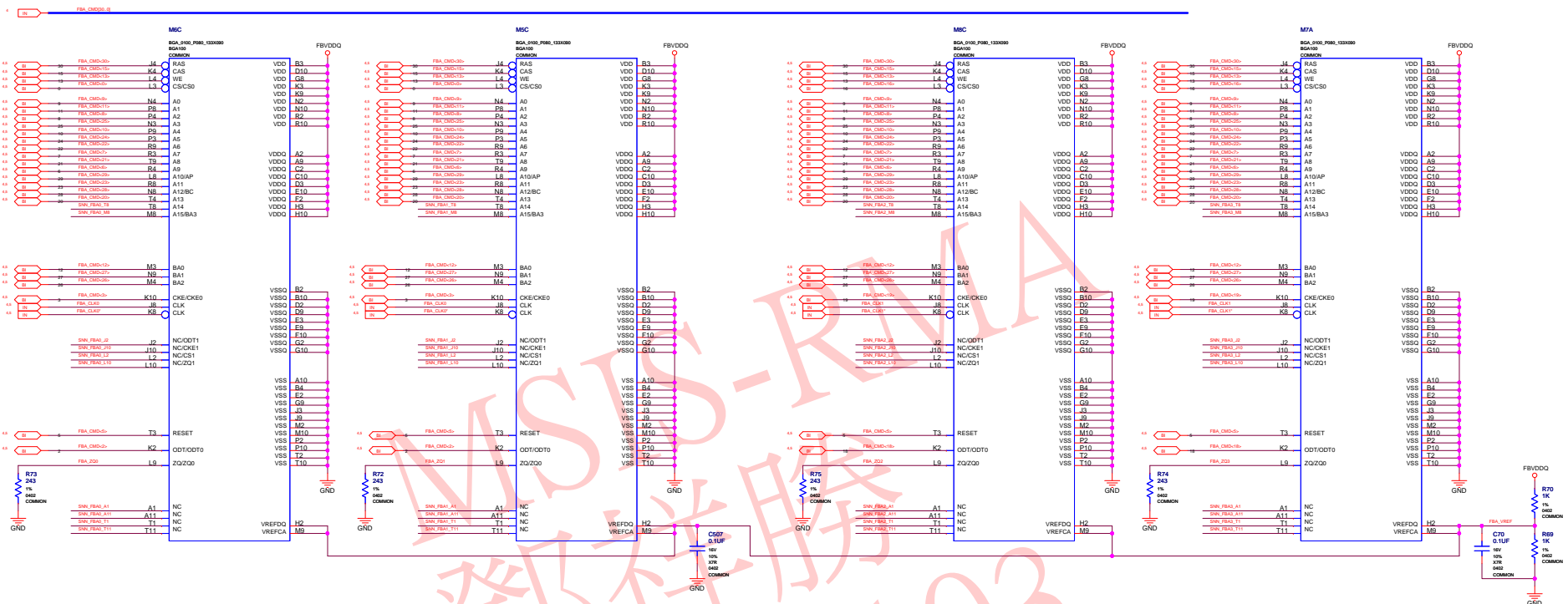




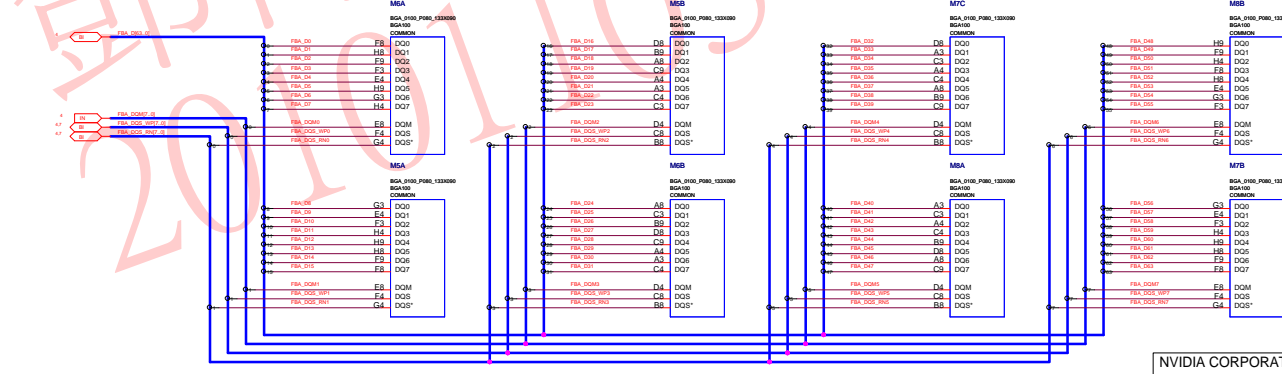
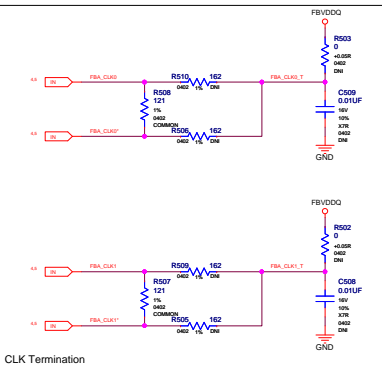


FBA Partition

Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
FBA_CLK0-T		0.9V	
FBA_CLK1-T		0.9V	
FBA_VREF			
FBA_Z00			
FBA_Z01			
FBA_Z02			
FBA_Z03			



CMD Mapping		
CMD	<0.3V>	<0.8V>
CM00	C00*	
CM01		
CM02	C00*	
CM03	C00*	
CM04		
CM05	E07	E07
CM06	A0	A0
CM07	A7	A7
CM08	A2	A2
CM09	A0	A0
CM10	A4	A4
CM11	A1	A1
CM12	B00	B00
CM13	W0*	W0*
CM14		
CM15	C00*	C00*
CM16		
CM17		
CM18		
CM19	C00	
CM20	A13	A13
CM21	A6	A6
CM22	A6	A6
CM23	A11	A11
CM24	A6	A6
CM25	A3	A3
CM26	B02	B02
CM27	B01	B01
CM28	A12	A12
CM29	A10	A10
CM30	B02*	B02*
CM31		



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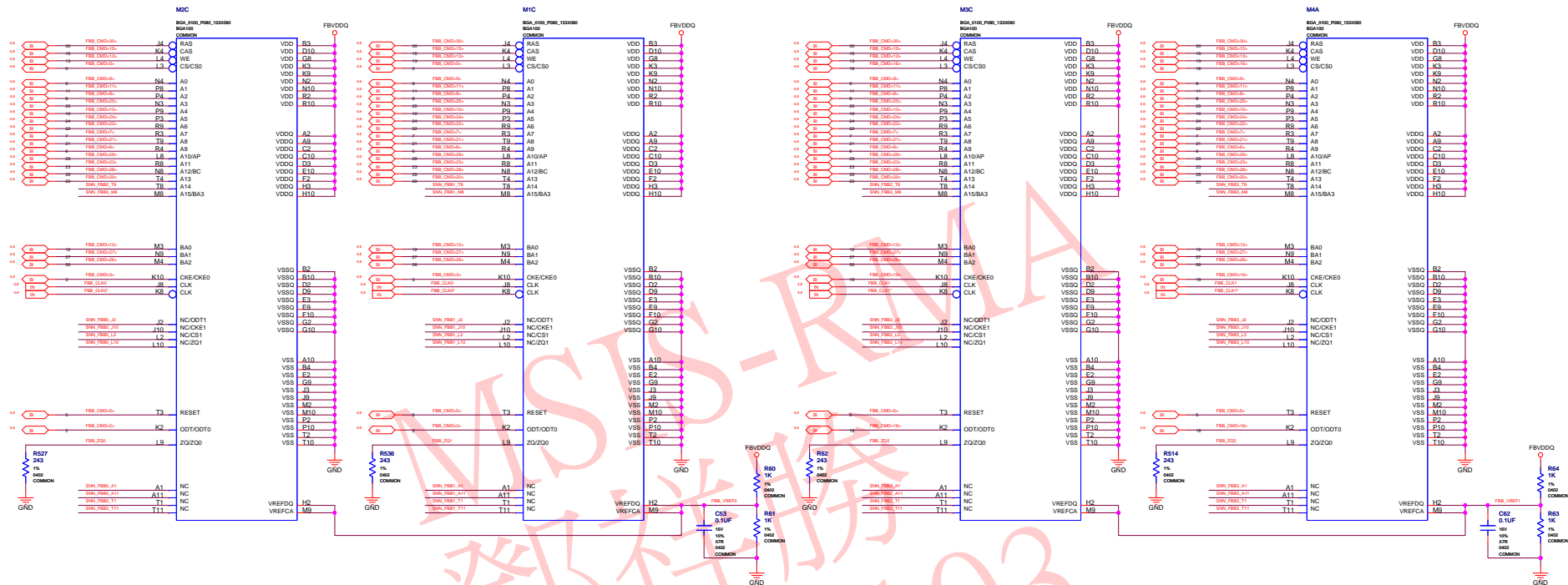
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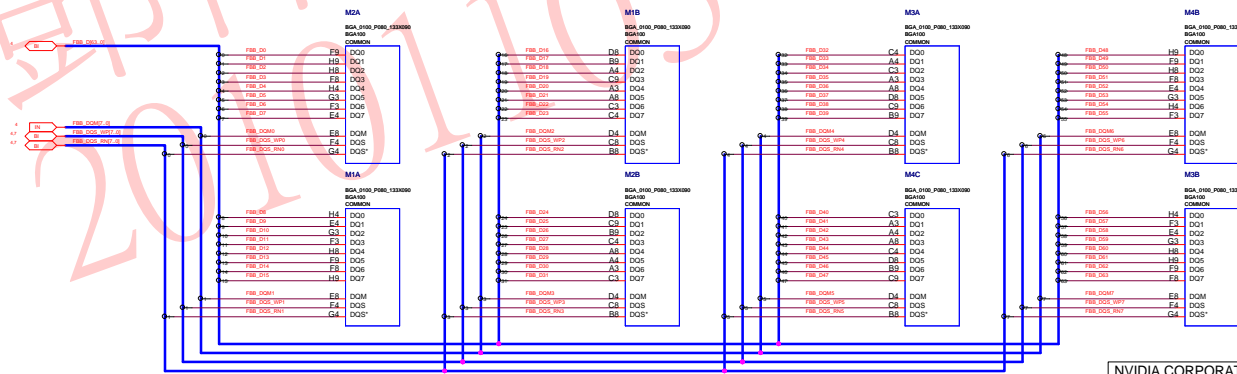
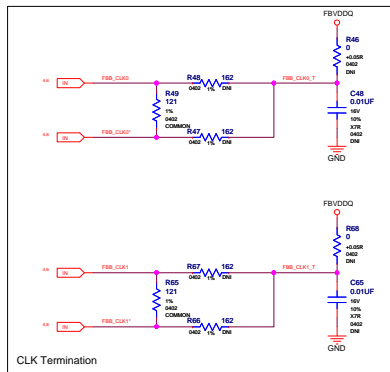
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PAGE DETAIL	FBA Partition


## FBB Partition

	Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
04	FBD_CLK0_T		0.75V	
04	FBD_CLK0_T		0.75V	
04	FBD_VREF0	1.00M		
04	FBD_VREF1	1.00M		
05	FBD_Z00	1.00M		
05	FBD_Z01	1.00M		
05	FBD_Z02	1.00M		
05	FBD_Z03	1.00M		



CMD Mapping		
CMD	+0.21s	+0.23s
CMD0	CSD*	
CMD1		
CMD2	OST	
CMD3	CNE	
CMD4		
CMD5	BST	BST
CMD6	AB	AB
CMD7	A7	A7
CMD8	A2	A2
CMD9	A3	A3
CMD10	AI	AI
CMD11	A1	A1
CMD12	BA0	BA0
CMD13	HE*	HE*
CMD14		
CMD15	CAD*	CAD*
CMD16		CSF
CMD17		
CMD18		OST
CMD19		
CMD20	A13	A13
CMD21	AB	AB
CMD22	AE	AE
CMD23	AH1	AH1
CMD24	A11	A11
CMD25	A3	A3
CMD26	BA2	BA2
CMD27	BA1	BA1
CMD28	A12	A12
CMD29	BA3	BA3
CMD30	RA5*	RA5*
CMD31		

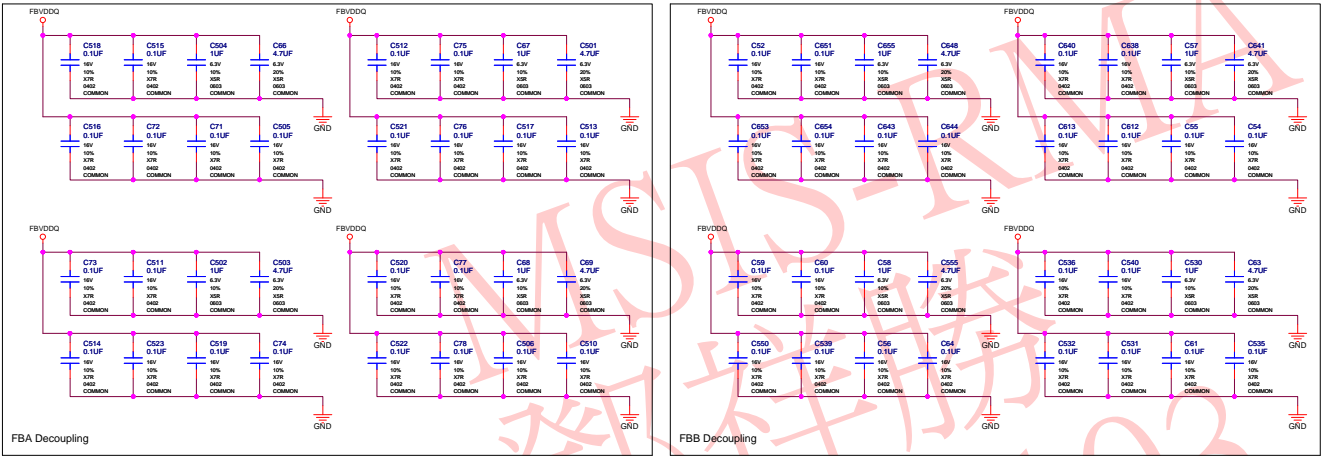


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PAGE DETAIL	FBB Partition

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Memory Decoupling

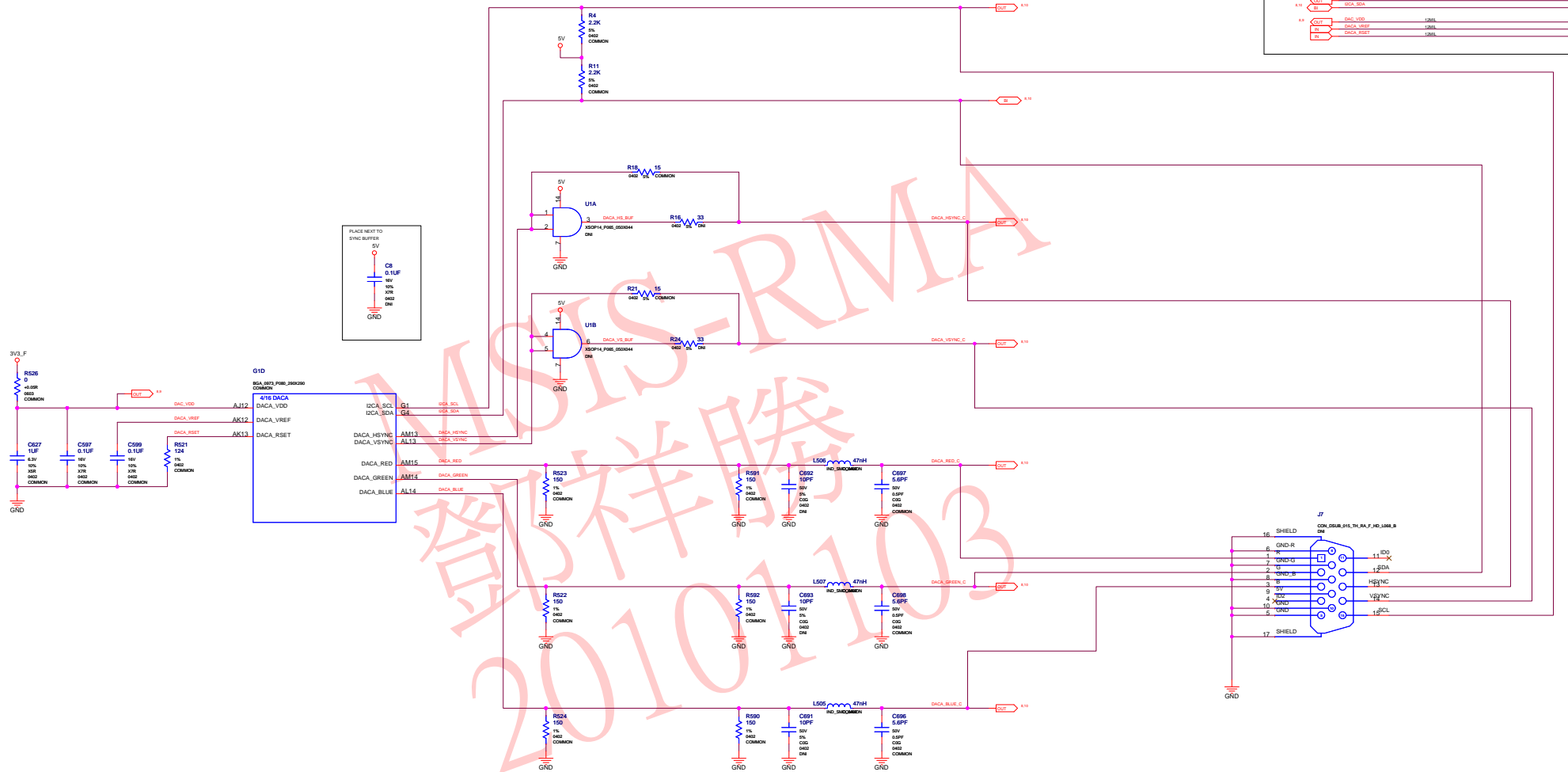
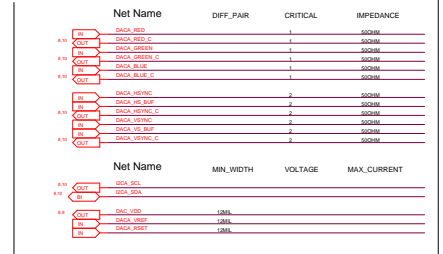



Net Name		DIFF_PAIR	CRITICAL	IMPEDANCE
FBA_DQS_W0V0	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
	FBA_DQS_W0V0	FBA_DQS0	+	NOSET
FBB_DQS_W0V0	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET
	FBB_DQS_W0V0	FBB_DQS0	+	NOSET

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## DACA VGA

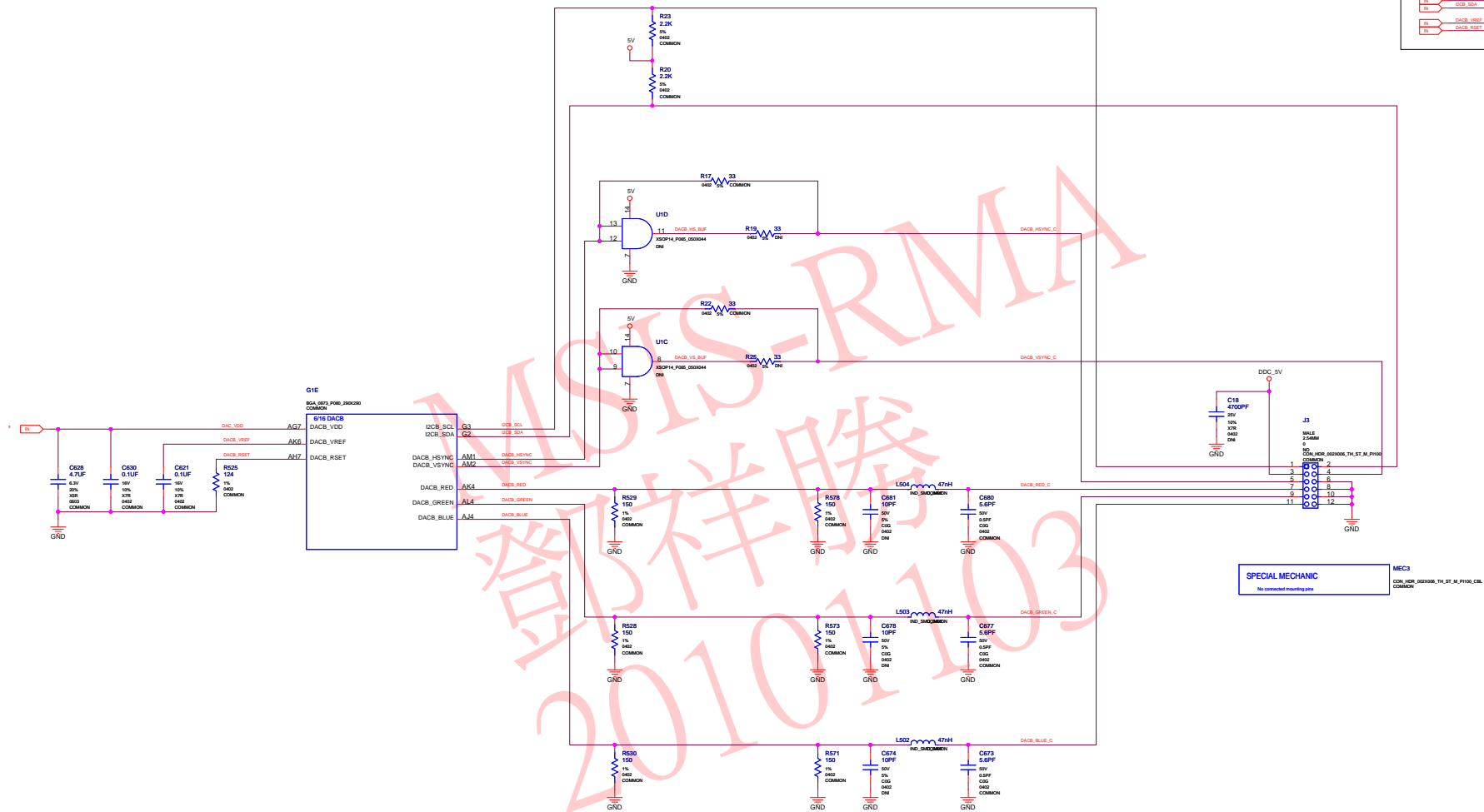


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## DACB VGA Header



Net Name		DIFF_PAIR	CRITICAL	IMPEDANCE
N1	DACH_RED		1	50OHM
N1	DACH_RED_C		1	50OHM
N1	DACH_GREEN		1	50OHM
N1	DACH_GREEN_C		1	50OHM
N1	DACH_BLUE		1	50OHM
N1	DACH_BLUE_C		1	50OHM
N1	DACH_HVING		2	50OHM
N1	DACH_VS_BUF		2	50OHM
N1	DACH_HVING_C		2	50OHM
N1	DACH_HVING_C		2	50OHM
N1	DACH_VS_BUF		2	50OHM
N1	DACH_HVING_C		2	50OHM
N1	DACH_HVING_C		2	50OHM

Net Name		MIN_WIDTH	VOLTAGE	MAX_CURRENT
N1	DCH_DSL			
N1	DCH_DSL			
N1	DACH_VOFF	12MIL		
N1	DACH_VOFF	12MIL		

SPECIAL MECHANIC

No connected mounting pins

MEC3  
CON\_HDR\_002X006\_TH\_ST\_M\_PH00\_CBL  
COMMON

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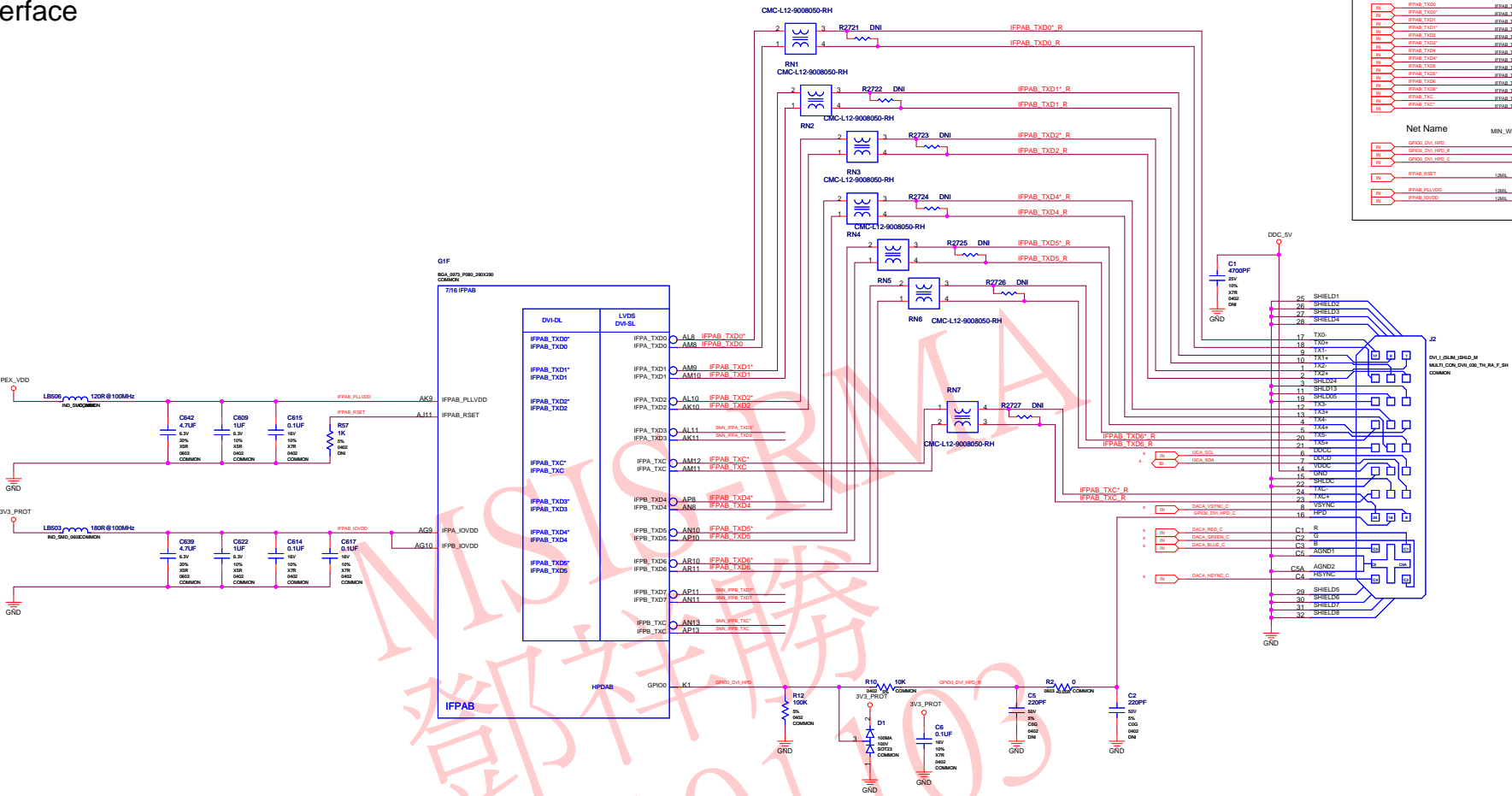


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TMDS Interface



Net Name	DIFF_PAIR	CRITICAL	IMPEDANCE
IFPAB_TXD0	IFPAB_TXD0	1	50ohm
IFPAB_TXD1	IFPAB_TXD1	1	50ohm
IFPAB_TXD2	IFPAB_TXD2	1	50ohm
IFPAB_TXD3	IFPAB_TXD3	1	50ohm
IFPAB_TXD4	IFPAB_TXD4	1	50ohm
IFPAB_TXD5	IFPAB_TXD5	1	50ohm
IFPAB_TXD6	IFPAB_TXD6	1	50ohm
IFPAB_TXC	IFPAB_TXC	1	50ohm
IFPAB_TXD0	IFPAB_TXD0	1	50ohm
IFPAB_TXD1	IFPAB_TXD1	1	50ohm
IFPAB_TXD2	IFPAB_TXD2	1	50ohm
IFPAB_TXD3	IFPAB_TXD3	1	50ohm
IFPAB_TXD4	IFPAB_TXD4	1	50ohm
IFPAB_TXD5	IFPAB_TXD5	1	50ohm
IFPAB_TXD6	IFPAB_TXD6	1	50ohm
IFPAB_TXC	IFPAB_TXC	1	50ohm
IFPAB_TXD0	IFPAB_TXD0	1	50ohm
IFPAB_TXD1	IFPAB_TXD1	1	50ohm
IFPAB_TXD2	IFPAB_TXD2	1	50ohm
IFPAB_TXD3	IFPAB_TXD3	1	50ohm
IFPAB_TXD4	IFPAB_TXD4	1	50ohm
IFPAB_TXD5	IFPAB_TXD5	1	50ohm
IFPAB_TXD6	IFPAB_TXD6	1	50ohm
IFPAB_TXC	IFPAB_TXC	1	50ohm

Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
IFPAB_TXD0	1.0mm	1.50V	0.100A
IFPAB_TXD1	1.0mm	1.50V	0.100A
IFPAB_TXD2	1.0mm	1.50V	0.100A
IFPAB_TXD3	1.0mm	1.50V	0.100A
IFPAB_TXD4	1.0mm	1.50V	0.100A
IFPAB_TXD5	1.0mm	1.50V	0.100A
IFPAB_TXD6	1.0mm	1.50V	0.100A
IFPAB_TXC	1.0mm	1.50V	0.100A

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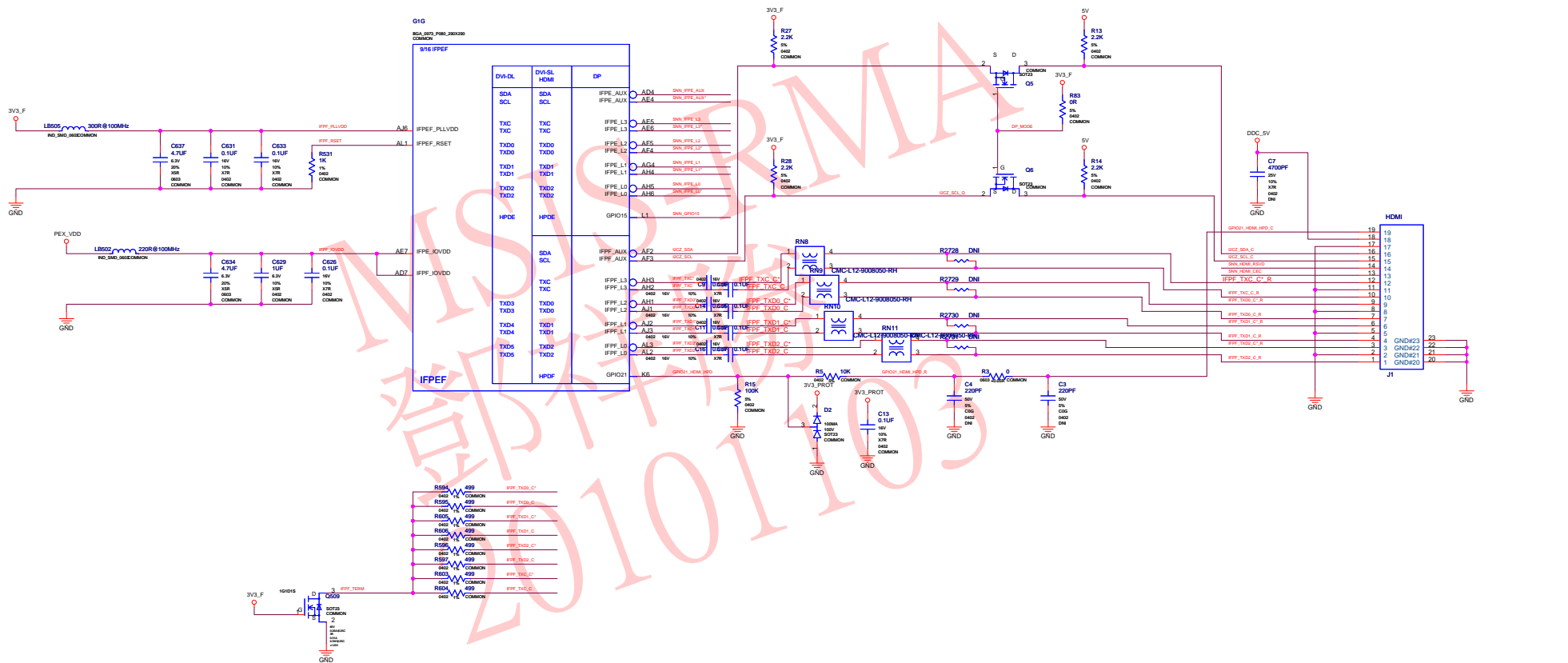
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## HDMI Interface

[illegible]

	Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
IN	DC2_GND			
IN	DC2_VCC			
IN	DC2_GND_C			
IN	DC2_VCC_C			
IN	GPIO1_KEMD_HRD			
IN	GPIO1_KEMD_HRD_B			
IN	GPIO1_KEMD_HRD_C			
IN	FTF_TENM	1.200V	0V	
IN	FTF_RESET	1.200V		
IN	FTF_PLVDD	1.200V	3.3V	0.050A
IN	FTF_DVDD	1.200V	1.050V	0.050A

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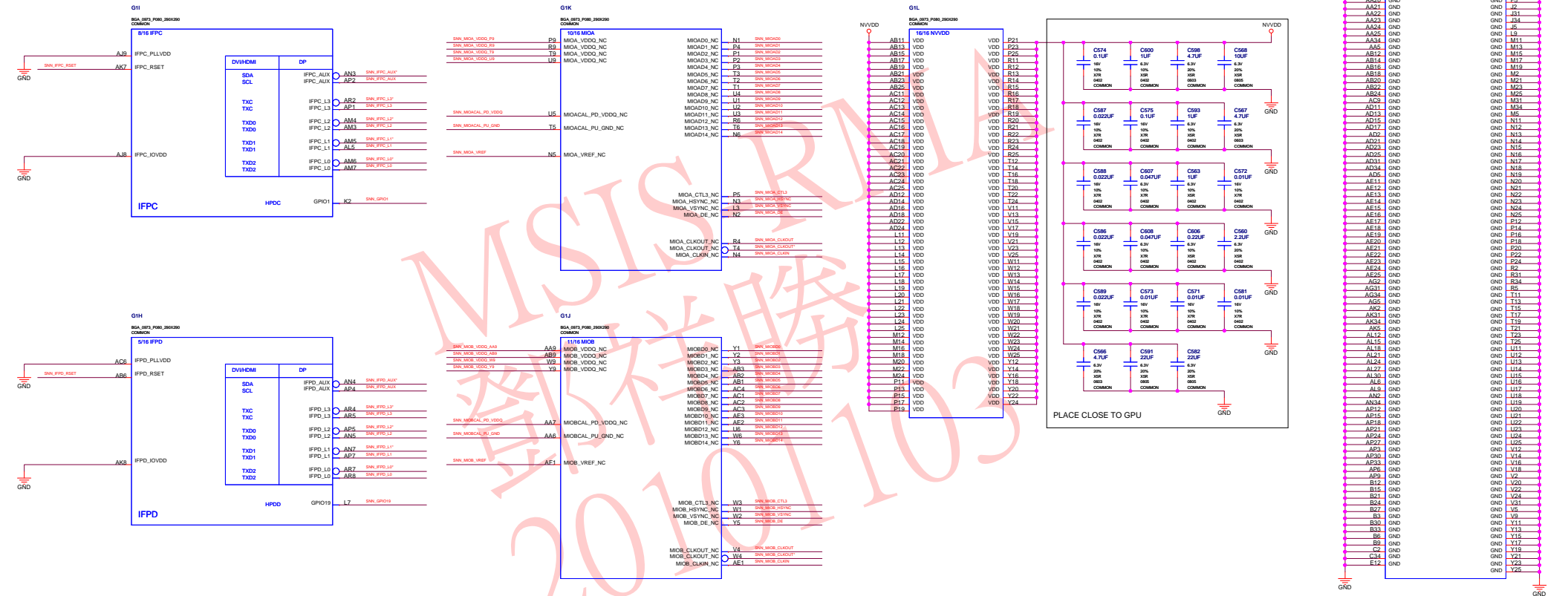
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Unused Interfaces, NVVDD Decoupling

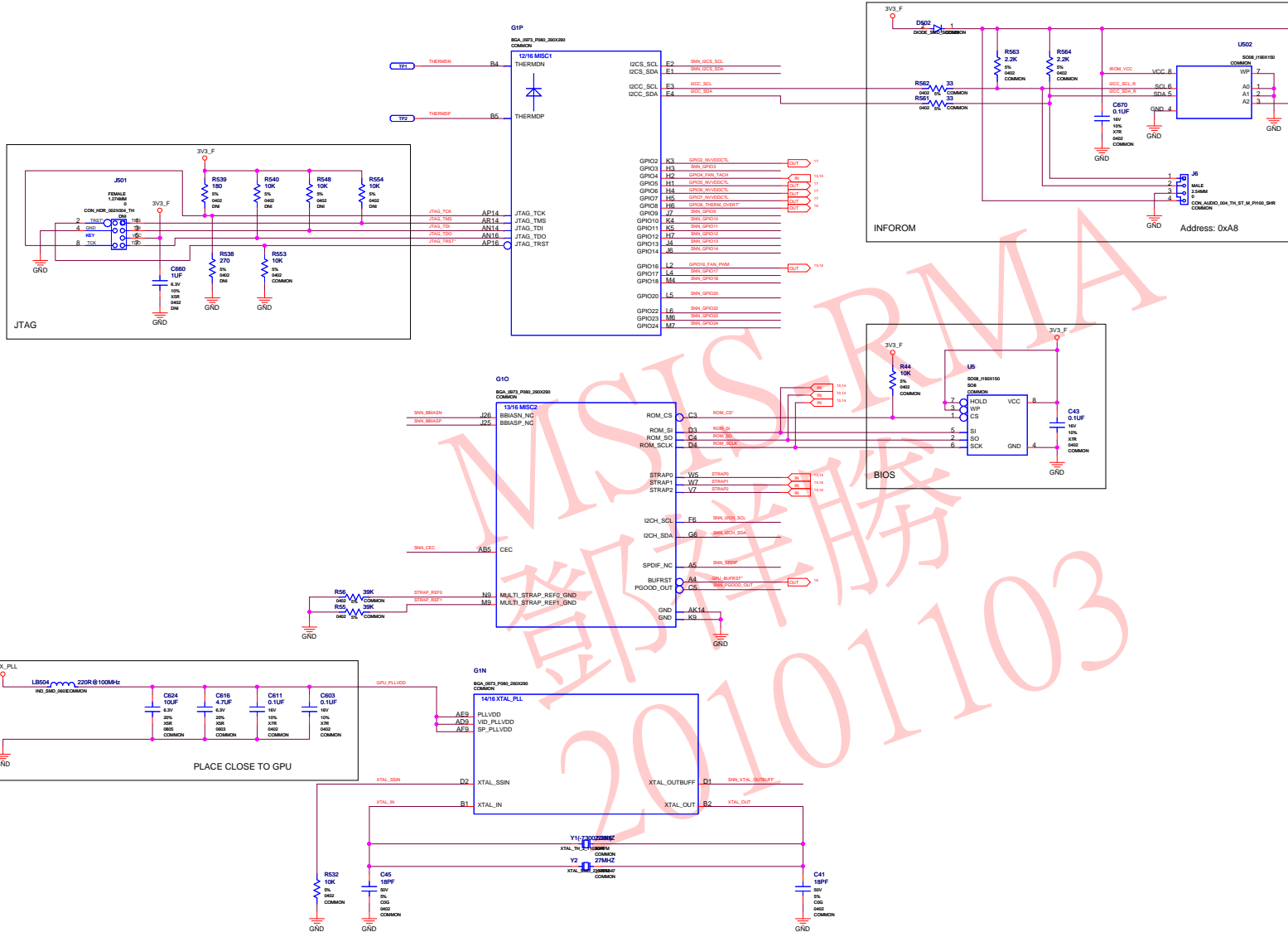


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## XTAL, ROM, JTAG, Misc



Net Name		DIFF_PAIR	CRITICAL	IMPEDANCE
IN	XTAL_IN		1	50OHM
IN	XTAL_OUT	XTAL	1	50OHM

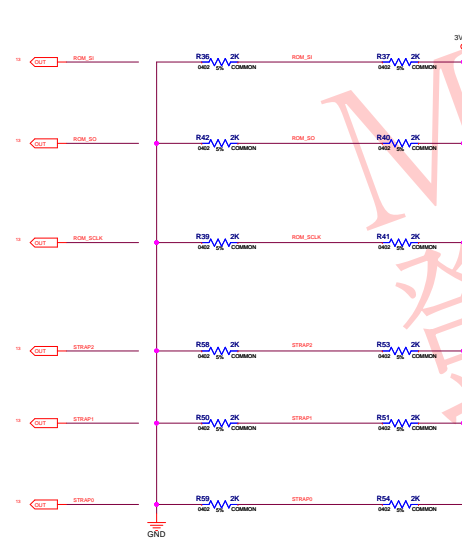
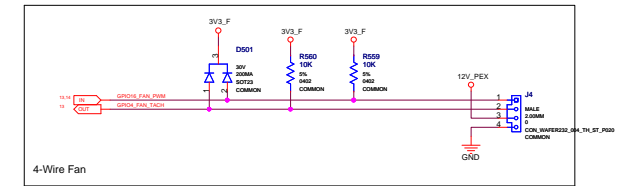
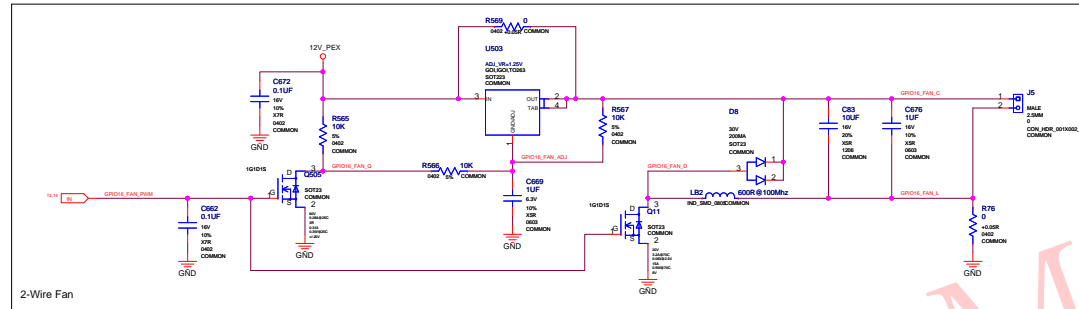
  

Net Name		MIN_WIDTH	VOLTAGE	MAX_CURRENT
IN	XTAL_BIAS			
IN	TRIMEN1	1.0MM		
IN	TRIMEN2	1.0MM		
IN	JTAG_T00			
IN	JTAG_T02			
IN	JTAG_T01			
IN	JTAG_T03			
IN	JTAG_T04			
IN	JTAG_T05T			
IN	STRAP_RESET			
IN	GROUP_RESET			
IN	IO0_S0L			
IN	IO0_S0A			
IN	IO0_S0L_B			
IN	IO0_S0A_B			
IN	IO0M_VDD	1.0MM	3.3V	
IN	IO0M_VDD			
IN	GPIO_FAN_TACH			
IN	GPIO_FAN_PWM			
IN	IO0_C0P			
IN	IO0M_C0B			
IN	IO0M_C0L			
IN	IO0M_C0A			
IN	IO0M_C0C			
IN	STRAP0			
IN	STRAP1			
IN	STRAP2			
IN	GPU_PLVDD0	1.0MM	1.0V	0.066A

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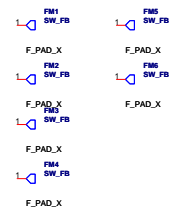
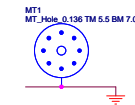
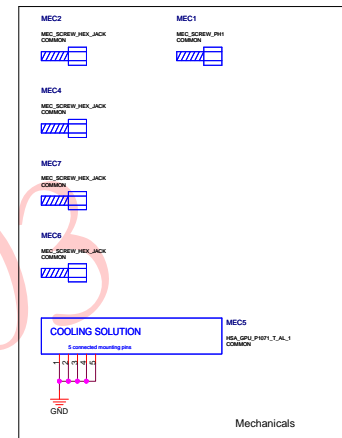
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## Straps, Thermal, Mechanical



GF108 Straps

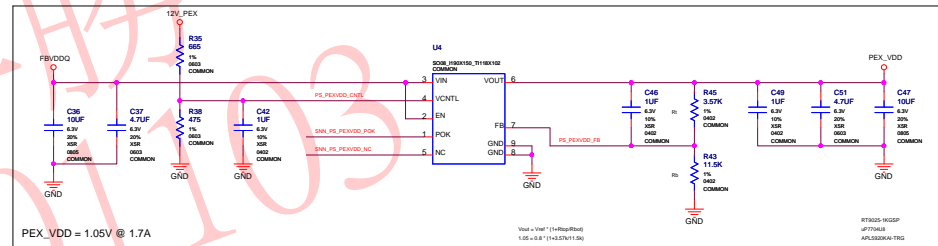
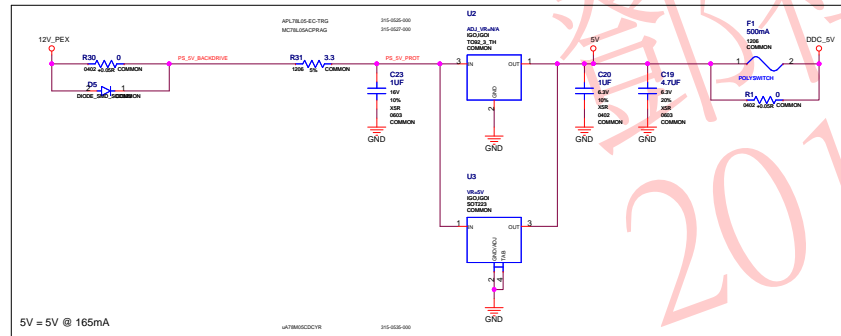
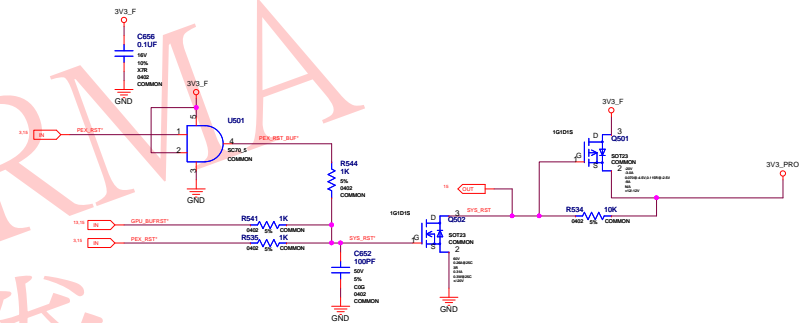
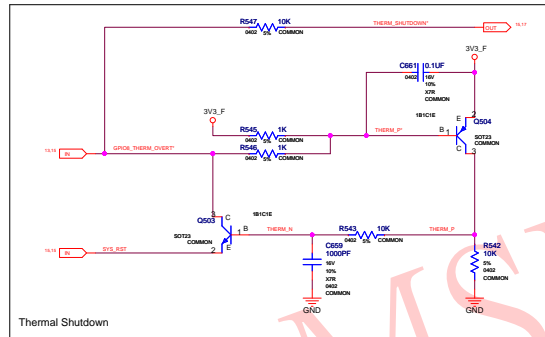
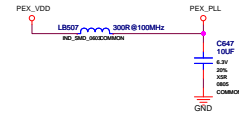
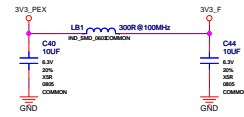
Bit Signal		Values		Multilevel Straps	
E3	RUNCQ[0]	0000	Micro		0000
E3	RUNCQ[1]	0001	Hydra		0001
E1	RUNCQ[2]	0010	Storming		0010
		0100			0100
		0110			0110
		0111			0111
E3	NOCK_HLT	0	Disable	25K in SDR0	0000
		1	Enable	10K in SDR0	0001
				1K in SDR0	0010
				25K in SDR0	0011
				30K in SDR0	0100
				35K in SDR0	0101
				35K in SDR0	0110
				40K in SDR0	0111
E3	FREE	1-0	Default	54K in VCC	1000
E1	DSB_ALT_ADDR	0	Disable	10K in VCC	0000
		1	Enable	150K in VCC	0001
				25K in VCC	0010
				35K in VCC	0011
				30K in VCC	0100
				35K in VCC	0101
				40K in VCC	0110
				45K in VCC	0111
E3	PCI_DEV_ID_EXT	0	GF100-300-A1		
		1	GF100-300-A1		
E3	SUB_VENDOR	0	No BIOS		
		1	BIOS		
E1	SLUT_CLK_CFG	0	Disable		
		1	Enable		
E3	PERF_PLN_EN_THERMAL	0	Disable		
		1	Enable		
E3	PCI_DEV_ID	0001	GF100-300-A1		
		0010	GF100-300-A1		
E1	PCI_DEV_ID2				
E1	PCI_DEV_ID3				
E3	GPIO_PIN_CFG[0]_LUT_ADDR0	0000	GPIO0_DEFAULT	1000	GPIO00_0THRES
		0001	MOBILE_DEFAULT	1001	MOBILE_0THRES_WAMP
		0010	MOBILE_0THRES_LAMP	1002	MOBILE_0THRES_WAMP
		0011	MOBILE_0THRES_LAMP	1003	MOBILE_0THRES_WAMP
		0100	MOBILE_0THRES_LAMP	1004	MOBILE_0THRES_WAMP
		0101	MOBILE_0THRES_WAMP	1005	MOBILE_0THRES_WAMP
		0110	MOBILE_0THRES_WAMP	1006	MOBILE_0THRES_WAMP
		0111	MOBILE_0THRES_WAMP	1007	MOBILE_0THRES_WAMP
E3	GPIO_PIN_CFG[1]_LUT_ADDR1	0000	GPIO0_DEFAULT	1008	GPIO00_1THRES
		0001	MOBILE_DEFAULT	1009	MOBILE_1THRES_WAMP
		0010	MOBILE_1THRES_LAMP	1010	MOBILE_1THRES_WAMP
		0011	MOBILE_1THRES_LAMP	1011	MOBILE_1THRES_WAMP
		0100	MOBILE_1THRES_LAMP	1012	MOBILE_1THRES_WAMP
		0101	MOBILE_1THRES_WAMP	1013	MOBILE_1THRES_WAMP
		0110	MOBILE_1THRES_WAMP	1014	MOBILE_1THRES_WAMP
		0111	MOBILE_1THRES_WAMP	1015	MOBILE_1THRES_WAMP
E3	GPIO_PIN_CFG[2]_LUT_ADDR2	0000	GPIO0_DEFAULT	1016	GPIO00_2THRES
		0001	MOBILE_DEFAULT	1017	MOBILE_2THRES_WAMP
		0010	MOBILE_2THRES_LAMP	1018	MOBILE_2THRES_WAMP
		0011	MOBILE_2THRES_LAMP	1019	MOBILE_2THRES_WAMP
		0100	MOBILE_2THRES_LAMP	1020	MOBILE_2THRES_WAMP
		0101	MOBILE_2THRES_WAMP	1021	MOBILE_2THRES_WAMP
		0110	MOBILE_2THRES_WAMP	1022	MOBILE_2THRES_WAMP
		0111	MOBILE_2THRES_WAMP	1023	MOBILE_2THRES_WAMP
E3	GPIO_PIN_CFG[3]_LUT_ADDR3	0000	GPIO0_DEFAULT	1024	GPIO00_3THRES
		0001	MOBILE_DEFAULT	1025	MOBILE_3THRES_WAMP
		0010	MOBILE_3THRES_LAMP	1026	MOBILE_3THRES_WAMP
		0011	MOBILE_3THRES_LAMP	1027	MOBILE_3THRES_WAMP
		0100	MOBILE_3THRES_LAMP	1028	MOBILE_3THRES_WAMP
		0101	MOBILE_3THRES_WAMP	1029	MOBILE_3THRES_WAMP
		0110	MOBILE_3THRES_WAMP	1030	MOBILE_3THRES_WAMP
		0111	MOBILE_3THRES_WAMP	1031	MOBILE_3THRES_WAMP
E3	GPIO_PIN_CFG[4]_LUT_ADDR4	0000	GPIO0_DEFAULT	1032	GPIO00_4THRES
		0001	MOBILE_DEFAULT	1033	MOBILE_4THRES_WAMP
		0010	MOBILE_4THRES_LAMP	1034	MOBILE_4THRES_WAMP
		0011	MOBILE_4THRES_LAMP	1035	MOBILE_4THRES_WAMP
		0100	MOBILE_4THRES_LAMP	1036	MOBILE_4THRES_WAMP
		0101	MOBILE_4THRES_WAMP	1037	MOBILE_4THRES_WAMP
		0110	MOBILE_4THRES_WAMP	1038	MOBILE_4THRES_WAMP
		0111	MOBILE_4THRES_WAMP	1039	MOBILE_4THRES_WAMP



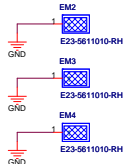
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## Power Supply I: Misc Power, Thermal Shutdown

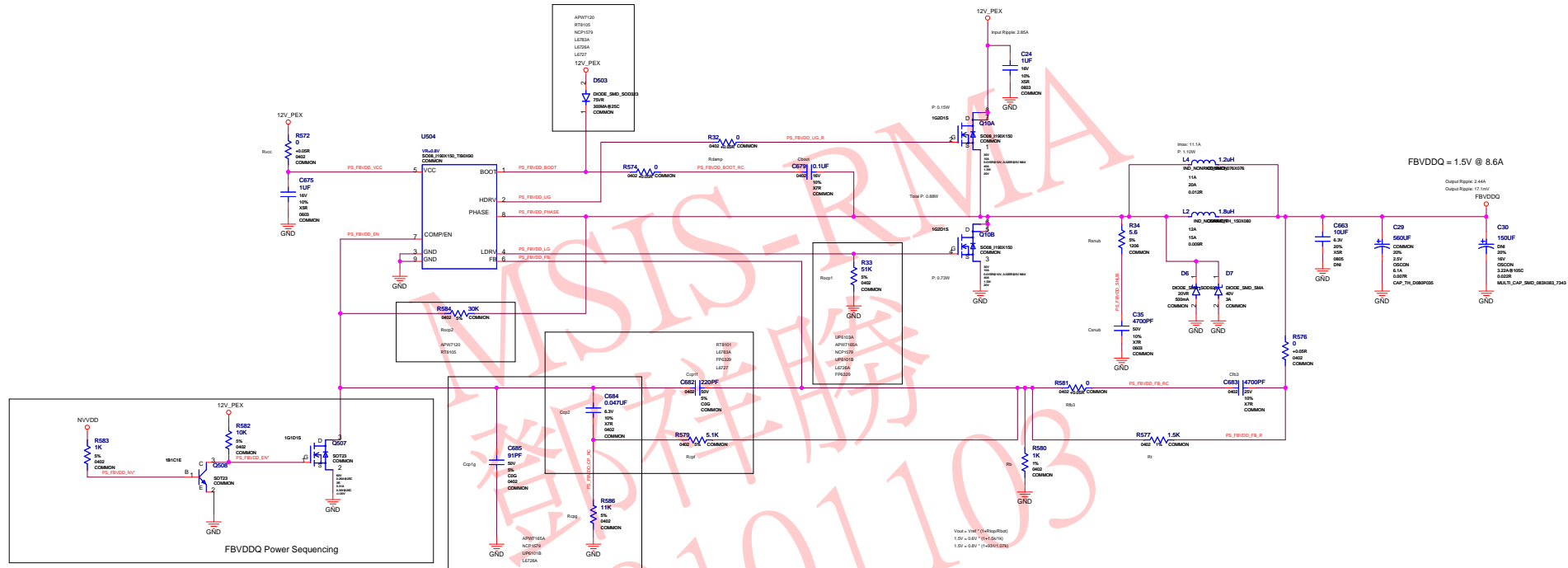


	Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
15.10	TEST	1.00MIL		
	THERM_SALVATORY			
	GND_THERM_OVERT			
	THERM_P			
	THERM_F			
15.11	TEST	1.00MIL		
	THERM_N			
	SYS_RST			
	SYS_RST2			
15.12	TEST	1.00MIL		
	PEX_RST			
15.13	TEST	1.00MIL		
	GPU_RESET			
15.14	TEST	1.00MIL		
	PEX_RST_BUT			
15.15	TEST	1.00MIL		
	PS_IO_INTERRUPT			
15.16	TEST	1.00MIL		
	PS_IO_RESET			
15.17	TEST	1.00MIL		
	PS_RESERVED_FB			
15.18	TEST	1.00MIL		
	PS_RESERVED_FB			
15.19	TEST	1.00MIL		
	PEX_PLLO		1.00V	0.300A
15.20	TEST	1.00MIL		
	SVS_V		2.80V	3A
15.21	TEST	1.00MIL		
	3V3_PROT		3.30V	0.300A
15.22	TEST	1.00MIL		
	SVS_V		2.80V	3A
15.23	TEST	1.00MIL		
	5V_V		5.00V	0.300A
15.24	TEST	1.00MIL		
	1000_V		1.00V	1A
15.25	TEST	1.00MIL		
	PEX_VDD		1.00V	1.5A



## Power Supply II: FBVDDQ

	Net Name	MIN_WIDTH	VOLTAGE	MAX_CURRENT
28	PS_FBIQD_VDD	10mil		
29	PS_FBIQD_EN	10mil		
30	PS_FBIQD_CLK			
31	PS_FBIQD_B080F	10mil		
32	PS_FBIQD_B080F_IC	10mil		
33	PS_FBIQD_FB	10mil		
34	PS_FBIQD_FB_IC	10mil		
35	PS_FBIQD_IC_IC	10mil		
36	PS_FBIQD_US	10mil		
37	PS_FBIQD_US_R	10mil		
38	PS_FBIQD_LS	10mil		
39	PS_FBIQD_PHASE	10mil		
40	PS_FBIQD_SINUS	10mil		
41	FBVDDO	1.50V	0.6A	



PS	Fosc	Vint
UP6103A	300kHz	0.6
APW17120	300kHz	0.8
APW17105A	300kHz	0.8
RT8105	300kHz	0.8
NCP1679	275kHz	0.8
RT8101	300kHz	0.8
UP6101B	300kHz	0.8
LE783A	300kHz	0.8
LE726A	270kHz	0.8
FP6329	300kHz	0.6
LE727	300kHz	0.6

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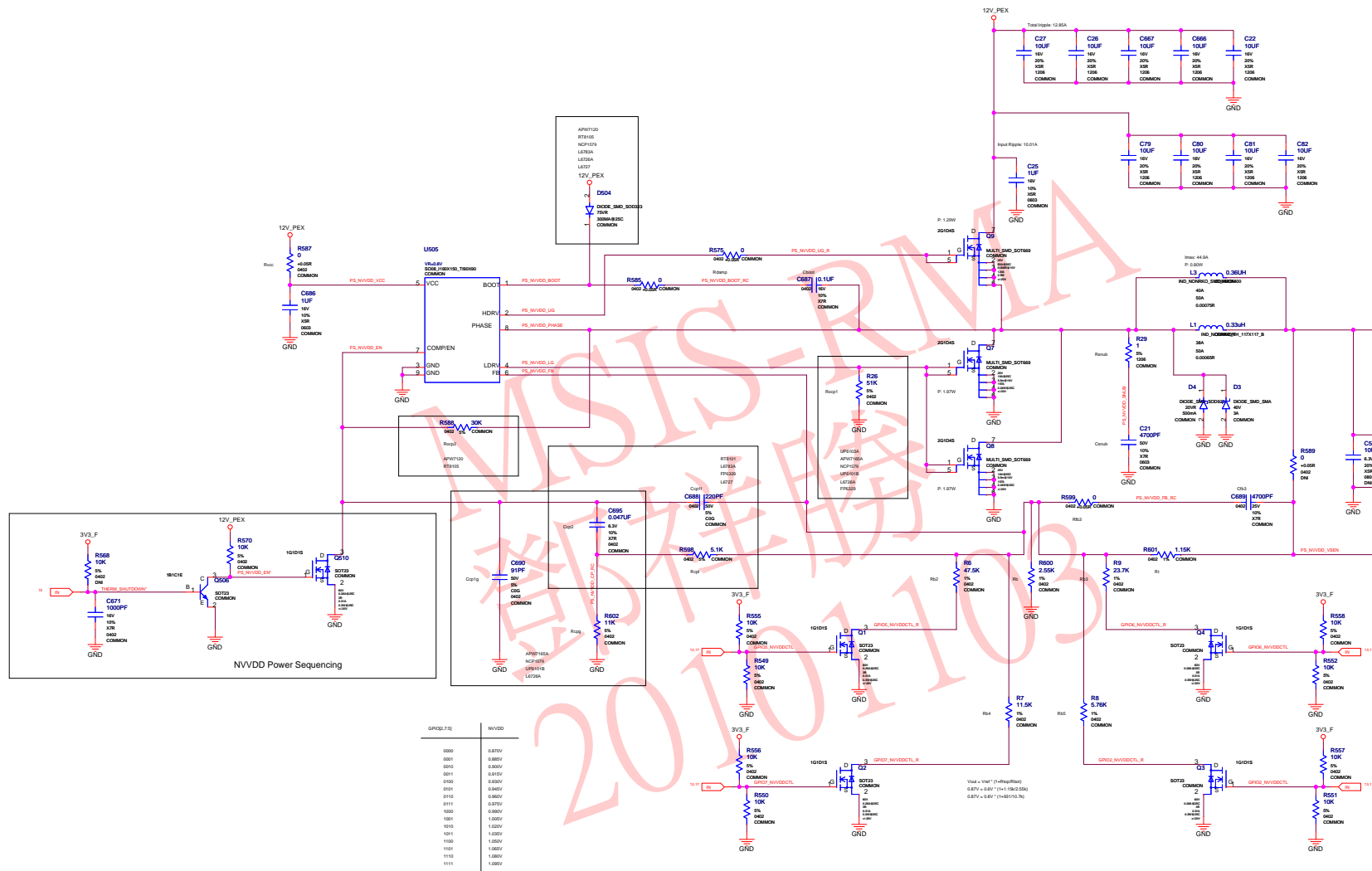
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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	Power Supply II: FBVDDQ



## Power Supply III: NVVDD



Net Name		MIN_WIDTH	MAX_WIDTH
PS	PS_NVIDEO_VCC	120mil	
PS	PS_NVIDEO_EN	120mil	
PS	PS_NVIDEO_DP	120mil	
PS	PS_NVIDEO_BOOT	120mil	
PS	PS_NVIDEO_BOOT_B	120mil	
PS	PS_NVIDEO_FB	120mil	
PS	PS_NVIDEO_PS_FDC	120mil	
PS	PS_NVIDEO_DP_ID	120mil	
PS	PS_NVIDEO_US	120mil	
PS	PS_NVIDEO_US_B	120mil	
PS	PS_NVIDEO_CS	120mil	
PS	PS_NVIDEO_PHASE	120mil	
PS	PS_NVIDEO_PHASEB	120mil	
PS	PS_NVIDEO_VIBEN	120mil	
PS	NVIDEO_SENSOR	120mil	
PS	GPIO_NVIDEOCTRL_0	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	
PS	GPIO_NVIDEOCTRL_8	120mil	


  

Net Name		VOLTAGE	MAX_CURRENT
NVIDEO	NVIDEO	1.2V	1.0A
12V_FED	12V_FED	12.0V	3.0A
3V3_FED	3V3_FED	3.3V	3A
GND	GND	0V	1000A

NVVD = 1.05V @ 35A

Output Regulator 3.40V  
Output Regulator 34.4mV

[illegible]

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A		B		C		D		E		F		G		H	
Title: Cvd Part		C004 (7.28)		C005 (3.20)		D7 (16.37)		R8 (17.47)		R523 (8.40)		U005 (17.30)			
Report: C006 (7.28)		C006 (7.30)		C006 (7.30)		D8 (14.30)		R9 (17.47)		R524 (8.50)		Y1 (17.30)			
Design: p1071_001		C006 (7.30)		C007 (12.37)		D001 (14.20)		R10 (16.40)		R525 (8.38)		Y2 (13.30)			
Date: Mar 31		C007 (12.37)		C008 (12.37)		D002 (13.16)		R11 (8.20)		R526 (8.34)					
14/05/2010		C008 (8.50)		C008 (10.38)		D003 (16.30)		R12 (10.40)		R527 (8.34)					
		C009 (11.38)		C009 (14.40)		D010 (17.37)		R13 (10.40)		R528 (8.40)					
		C010 (7.30)		C011 (13.40)		F1 (16.40)		R14 (17.37)		R529 (8.40)					
		B0K1 (14.47)		C012 (7.30)		G1 (3.30)		R15 (11.40)		R530 (8.50)					
		C1 (10.37)		C012 (7.30)		G1 (4.37 4.38)		R16 (8.20)		R531 (11.30)					
		C2 (14.47)		C013 (7.30)		G1 (10.30)		R17 (8.20)		R532 (13.38)					
		C3 (11.47)		C014 (7.34)		G1 (9.30)		R18 (20.20)		R533 (4.34)					
		C4 (11.47)		C015 (10.38)		G1 (10.30)		R19 (16.20)		R534 (15.30)					
		C5 (10.47)		C016 (7.28)		G1 (11.30)		R20 (8.20)		R535 (15.37)					
		C6 (10.40)		C017 (7.30)		G1 (12.38 12.38)		R21 (8.20)		R536 (8.30)					
		C7 (11.30)		C018 (7.28)		J8 (12.20 12.40)		R22 (8.30)		R537 (4.34)					
		C8 (8.30)		C019 (7.38)		J2.38 (12.48)		R23 (8.10)		R538 (13.28)					
		C9 (11.38)		C020 (7.30)		G1 (13.30 13.30)		R24 (8.30)		R539 (13.28)					
		C10 (11.38)		C021 (7.30)		C022 (10.40)		R25 (8.30)		R540 (13.28)					
		C11 (11.38)		C022 (7.30)		C023 (9.37)		R26 (17.30)		R541 (15.37)					
		C12 (11.38)		C023 (7.38)		C024 (13.44)		R27 (11.20)		R542 (15.30)					
		C13 (11.40)		C024 (3.50)		C025 (8.30)		R28 (11.30)		R543 (15.30)					
		C14 (11.38)		C025 (10.30)		C026 (11.30)		R29 (17.37)		R544 (15.37)					
		C15 (11.38)		C026 (8.30)		C027 (8.34)		R30 (14.40)		R545 (15.30)					
		C16 (11.38)		C027 (3.50)		C028 (8.34)		R31 (15.40)		R546 (15.20)					
		C17 (11.40)		C028 (3.50)		C029 (11.38)		R32 (16.20)		R547 (15.20)					
		C18 (8.37)		C029 (3.50)		C030 (8.34)		R33 (16.30)		R548 (15.28)					
		C19 (10.40)		C030 (11.38)		C031 (11.38)		R34 (17.40)		R549 (17.40)					
		C20 (10.40)		C031 (7.30)		C032 (10.40)		R35 (15.40)		R550 (17.50)					
		C21 (17.37)		C032 (11.38)		C033 (17.27)		R36 (14.38)		R551 (17.50)					
		C22 (17.17)		C033 (3.40)		C034 (7.38)		R37 (14.30)		R552 (17.40)					
		C23 (10.40)		C034 (10.40)		C035 (10.40)		R38 (15.40)		R553 (13.28)					
		C24 (16.20)		C035 (7.37)		C036 (3.50)		R39 (14.40)		R554 (13.28)					
				C25 (17.20)		C037 (11.38)		R40 (14.30)		R555 (17.40)					
				C26 (17.17)		C038 (7.20)		R41 (14.40)		R556 (17.50)					
				C27 (17.10)		C038 (10.40)		R42 (17.50)		R557 (17.50)					
				C28 (3.18)		C039 (7.20)		R43 (15.40)		R558 (17.40)					
				C29 (16.30)		C040 (7.30)		R44 (13.38)		R559 (14.30)					
				C30 (16.37)		C041 (7.27)		R45 (14.40)		R560 (14.30)					
				C31 (17.24)		C042 (10.38)		R46 (14.40)		R561 (14.40)					
				C32 (17.34)		C043 (3.40)		R47 (8.40)		R562 (13.10)					
						C044 (3.40)		R48 (8.40)		R563 (13.10)					
						C045 (3.20)		R49 (8.40)		R564 (13.10)					
						C046 (3.20)		R50 (14.40)		R565 (14.20)					
						C047 (7.20)		R51 (14.40)		R566 (14.20)					
						C048 (10.28)		R52 (14.40)		R567 (14.20)					
						C049 (3.20)		R53 (14.40)		R568 (17.44)					
						C050 (17.20)		R54 (14.40)		R569 (14.10)					
						C051 (10.40)		R55 (13.40)		R570 (17.40)					
						C052 (10.37)		R56 (13.40)		R571 (8.50)					
						C053 (7.30)		R57 (10.30)		R572 (16.28)					
						C054 (7.30)		R58 (16.40)		R573 (16.40)					
						C055 (10.38)		R59 (16.40)		R574 (16.20)					
						C056 (10.38)		R60 (8.30)		R575 (17.20)					
						C057 (3.20)		R61 (8.40)		R576 (16.30)					
						C058 (10.37)		R62 (16.40)		R577 (16.40)					
						C059 (10.40)		R63 (8.40)		R578 (8.40)					
						C060 (13.24)		R64 (8.30)		R579 (16.40)					
						C061 (15.20)		R65 (8.50)		R580 (16.40)					
						C062 (14.28)		R66 (8.50)		R581 (16.44)					
						C063 (14.30)		R67 (8.58)		R582 (16.30)					
						C064 (17.30)		R68 (8.50)		R583 (16.44)					
						C065 (17.30)		R69 (8.50)		R584 (16.30)					
						C066 (17.17)		R70 (16.30)		R585 (16.45)					
						C067 (12.20)		R71 (14.40)		R586 (17.28)					
						C068 (12.20)		R72 (8.30)		R587 (17.30)					
						C069 (3.17)		R73 (8.34)		R588 (17.40)					
						C070 (7.30)		R74 (17.30)		R589 (8.50)					
						C071 (12.30)		R75 (14.28)		R590 (16.40)					
						C072 (7.30)		R76 (14.28)		R591 (8.40)					
						C073 (12.30)		R77 (17.30)		R592 (8.40)					
						C074 (9.60)		R78 (11.30)		R593 (11.40)					
						C075 (10.37)		R79 (11.30)		R594 (11.40)					
						C076 (10.37)		R80 (11.30)		R595 (11.40)					
						C077 (3.20)		R81 (11.30)		R596 (11.40)					
						C078 (3.20)		R82 (11.30)		R597 (11.40)					
						C079 (3.20)		R83 (11.30)		R598 (11.40)					
						C080 (3.20)		R84 (11.30)		R599 (17.37)					
						C081 (12.30)		R85 (11.20)		R600 (17.40)					
						C082 (12.30)		R86 (11.30)		R601 (17.40)					
						C083 (12.30)		R87 (11.30)		R602 (17.40)					
						C084 (12.30)		R88 (11.30)		R603 (17.40)					
						C085 (12.30)		R89 (11.30)		R604 (17.40)					
						C086 (12.30)		R90 (11.30)		R605 (17.40)					
						C087 (12.30)		R91 (11.30)		R606 (17.40)					
						C088 (12.30)		R92 (11.30)		R607 (17.40)					
						C089 (12.30)		R93 (11.30)		R608 (17.40)					
						C090 (12.30)		R94 (11.30)		R609 (17.40)					
						C091 (12.30)		R95 (11.30)		R610 (17.40)					
						C092 (12.30)		R96 (11.30)		R611 (17.40)					
						C093 (12.30)		R97 (11.30)		R612 (17.40)					
						C094 (12.30)		R98 (11.30)		R613 (17.40)					
						C095 (12.30)		R99 (11.30)		R614 (17.40)					
						C096 (12.30)		R100 (11.30)		R615 (17.40)					
						C097 (12.30)		R101 (11.30)		R616 (17.40)					
						C098 (12.30)		R102 (11.30)		R617 (17.40)					
						C099 (12.30)		R103 (11.30)		R618 (17.40)					
						C100 (12.30)		R104 (11.30)		R619 (17.40)					
						C101 (12.30)		R105 (11.30)		R620 (17.40)					
						C102 (12.30)		R106 (11.30)		R621 (17.40)					
						C103 (12.30)		R107 (11.30)		R622 (17.40)					
						C104 (12.30)		R108 (11.30)		R623 (17.40)					
						C105 (12.30)		R109 (11.30)		R624 (17.40)					
						C106 (12.30)		R110 (11.30)		R625 (17.40)					
						C107 (12.30)		R111 (11.30)		R626 (17.40)					
						C108 (12.30)		R112 (11.30)		R627 (17.40)					
						C109 (12.30)		R113 (11.30)		R628 (17.40)					
						C110 (12.30)		R114 (11.30)		R629 (17.40)					
						C111 (12.30)		R115 (11.30)		R630 (17.40)					
						C112 (12.30)		R116 (11.30)		R631 (17.40)					
						C113 (12.30)		R117 (11.30)		R632 (17.40)					
						C114 (12.30)		R118 (11.30)		R633 (17.40)					
						C115 (12.30)		R119 (11.30)		R634 (17.40)					
						C116 (12.30)		R120 (11.30)		R635 (17.40)					
						C117 (12.30)		R121 (11.30)		R636 (17.40)					
						C118 (12.30)		R122 (11.30)		R637 (17.40)					
						C119 (12.30)		R123 (11.30)		R638 (17.40)					
						C120 (12.30)		R124 (11.30)		R639 (17.40)					
						C121 (12.30)		R125 (11.30)		R640 (17.40)					
						C122 (12.30)		R126 (11.30)		R641 (17.40)					
						C123 (12.30)		R127 (11.30)		R642 (17.40)					
						C124 (12.30)		R128 (11.30)		R643 (17.40)					
						C125 (12.30)		R129 (11.30)		R644 (17.40)					
						C126 (12.30)		R130 (11.30)		R645 (17.40)					
						C127 (12.30)		R131 (11.30)		R646 (17.40)					
						C128 (12.30)		R132 (11.30)		R647 (17.40)					
						C129 (12.30)		R							