

P2131_A00

GK208 GDDR5 128X32Bit

DP+DP

TABLE OF CONTENTS


Page	Description
1	Table of Contents
2	PCI EXPRESS
3	GPU MEMORY FBA
4	FB Partition A bits 31..0
5	FB Partition A bits 63..32
6	DECOUPLING for DRAMs
7	POWER/DECOUPLING: NVVDD, FBVDDQ, VDD33, GND
8	UNUSED IFPA_B,IFPE & IFPF
9	IFPC DP01
10	IFPD DP02
11	UNUSED DACA
12	BIOS, JTAG, GPIO & XTAL
13	PCI-E Reset, STRAPS & FAN
14	PS: PEXVDD,Mechanical
15	PS: FBVDDQ
16	PS: NVVDD

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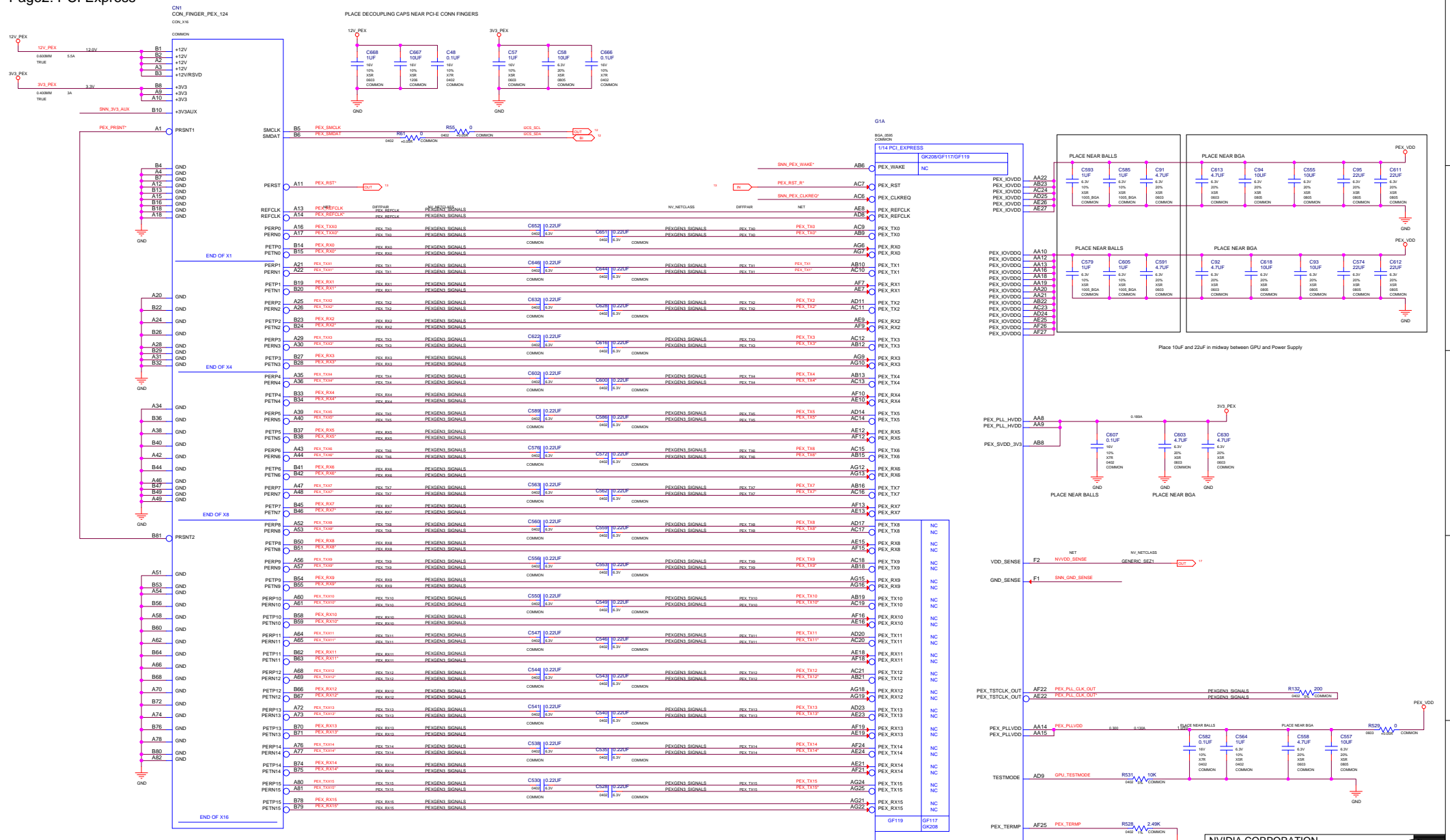
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PAGE DETAIL	Table of Contents

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NV_PN	600-12131-BASE-000		
PCB REV	P2131-A00	PAGE	1 OF 17
BOM REV	A	DATE	22-AUG-2012



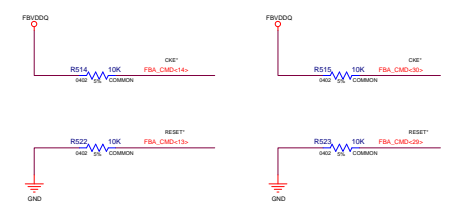
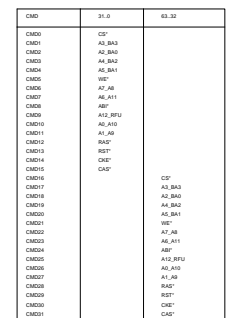
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PAGE DETAIL	PCI EXPRESS

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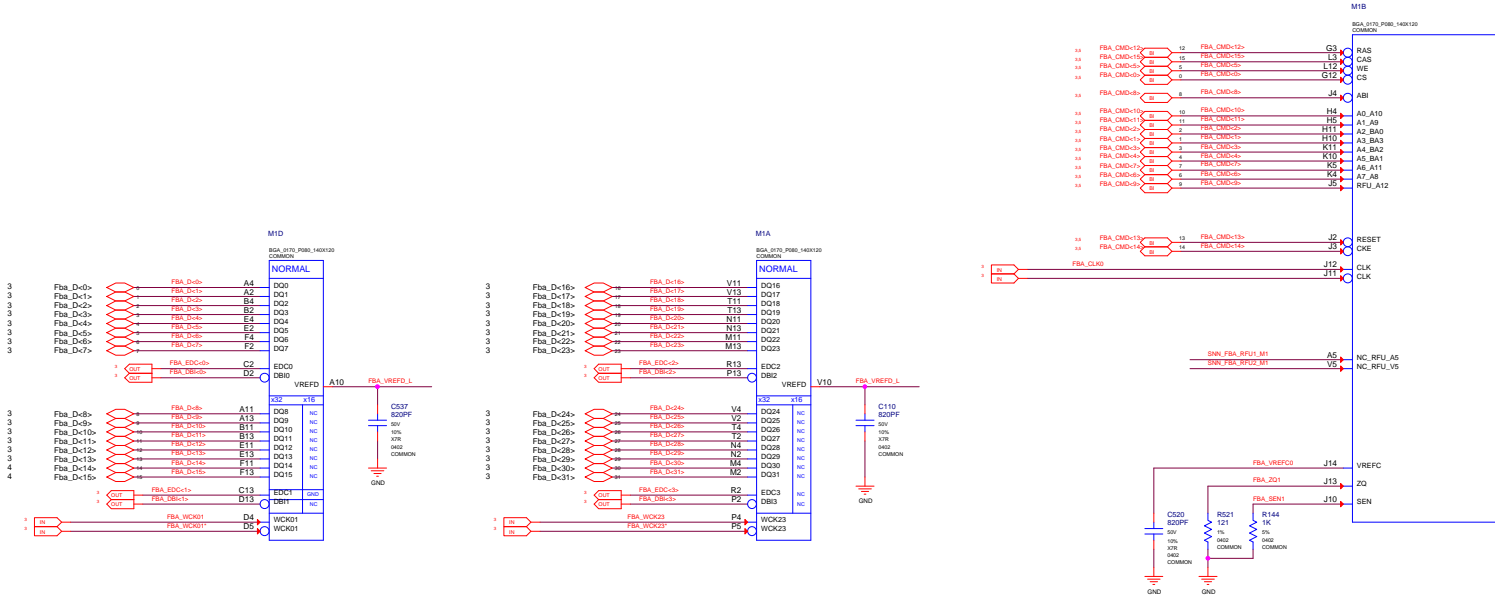
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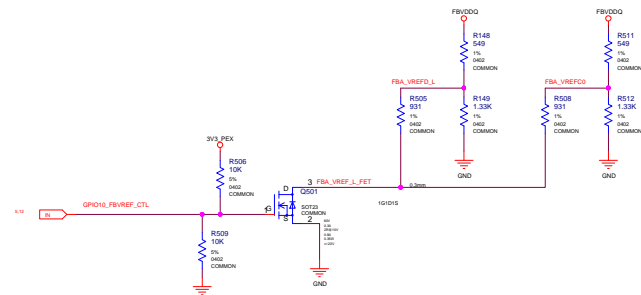
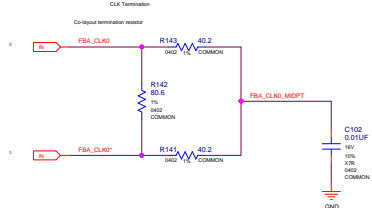
PCB REV	P2131-ADD	PAGE	2 OF 17
BOM REV	A	DATE	22-AUG-



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QND	31..0	63..32
QND0	CS*	
QND1	A3, BA3	
QND2	A2, BA2	
QND3	A1, BA1	
QND4	A5, BA5	
QND5	RS*	
QND6	A7, A8	
QND7	AL, A11	
QND8	AB*	
QND9	A12, RFU	
QND10	AL, A10	
QND11	A1, A9	
QND12	RS*	
QND13	RS*	
QND14	CS*	
QND15	CS*	
QND16	CS*	
QND17	A3, BA3	
QND18	A2, BA2	
QND19	A1, BA1	
QND20	A5, BA5	
QND21	RS*	
QND22	A7, A8	
QND23	AL, A11	
QND24	AB*	
QND25	A12, RFU	
QND26	AL, A10	
QND27	A1, A9	
QND28	RS*	
QND29	RS*	
QND30	CS*	
QND31	CS*	



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ASSEMBLY
PAGE DETAIL
FB Partition A Die 31..0

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P2131-A00

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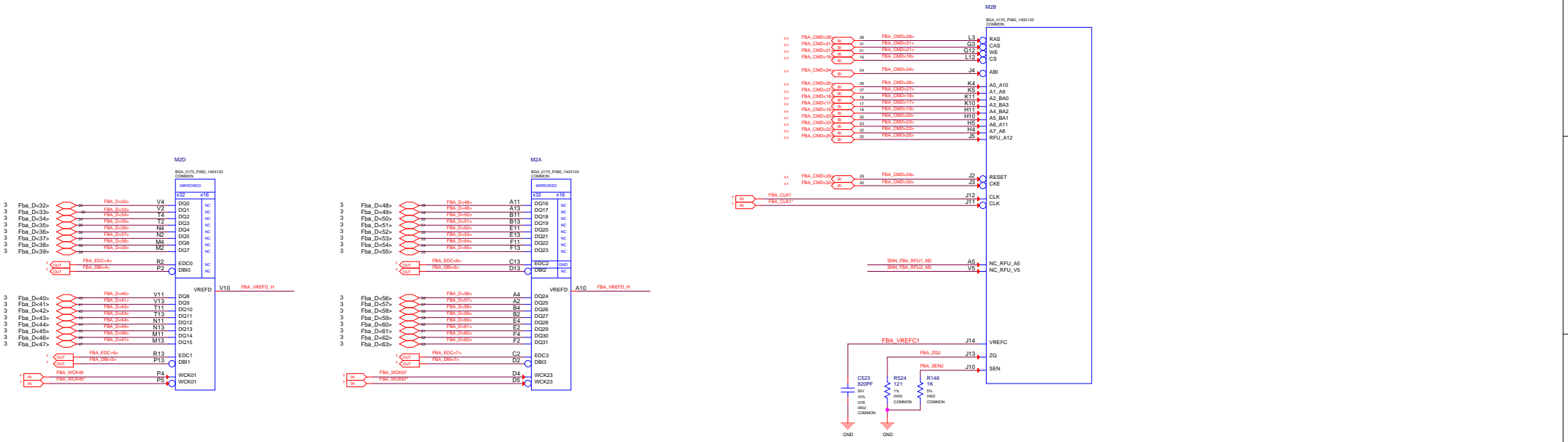
PAGE

4 OF 17

DATE

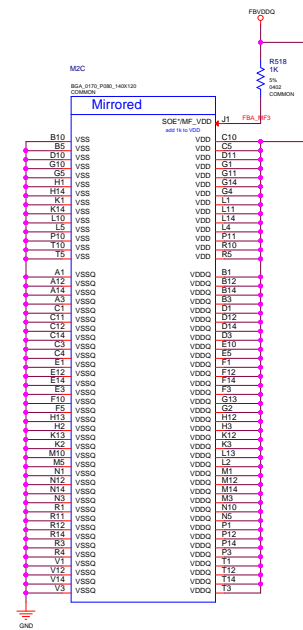
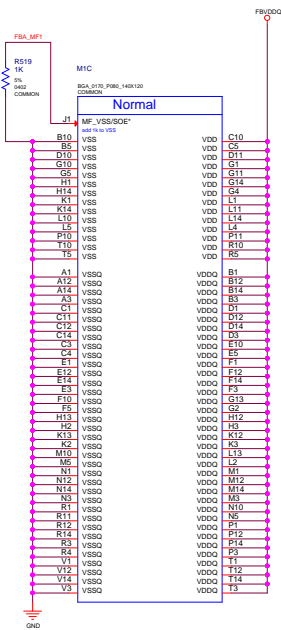
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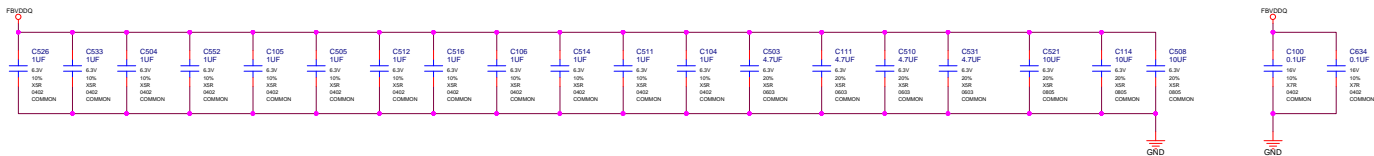


QND	31..3	63..32
QND0	C3*	
QND1	A3_BA3	
QND2	A2_BA2	
QND3	A4_BA4	
QND4	AL_BA1	
QND5	VE*	
QND6	A7_A8	
QND7	AE_A11	
QND8	AB*	
QND9	A12_RFU	
QND10	AL_A10	
QND11	A1_A9	
QND12	BA*	
QND13	BE*	
QND14	CE*	
QND15	CA*	
QND16		
QND17	C3*	
QND18	A3_BA3	
QND19	A2_BA2	
QND20	A4_BA4	
QND21	AL_BA1	
QND22	VE*	
QND23	A7_A8	
QND24	AE_A11	
QND25	AB*	
QND26	A12_RFU	
QND27	AL_A10	
QND28	A1_A9	
QND29	BA*	
QND30	BE*	
QND31	CE*	
QND32	CA*	

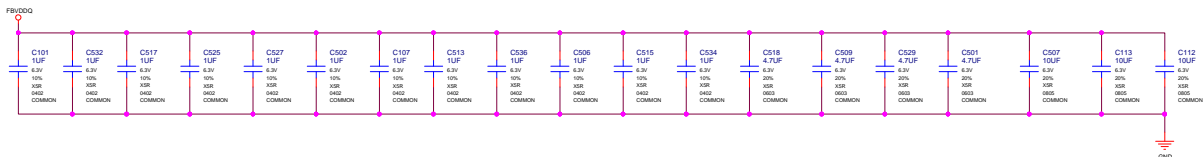
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DECOUPLING FOR M1 and M501 DEVICE



DECOUPLING FOR M2 and M502 DEVICE




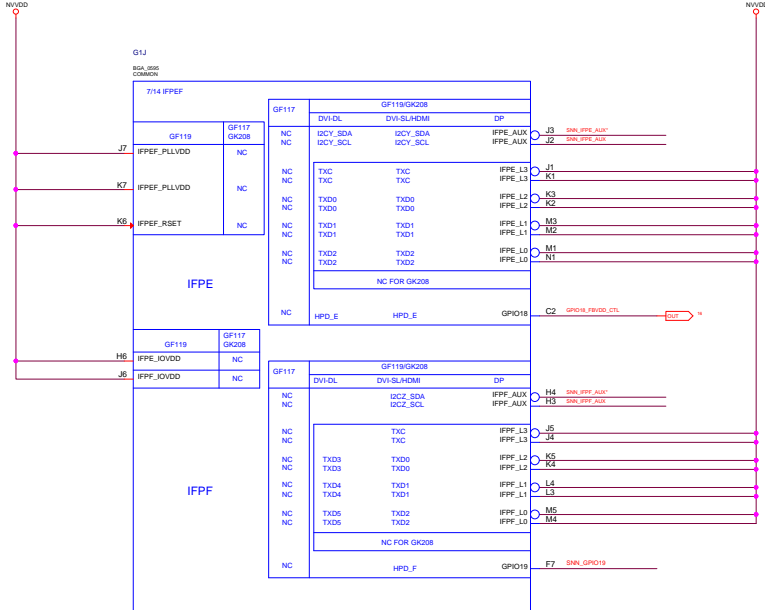
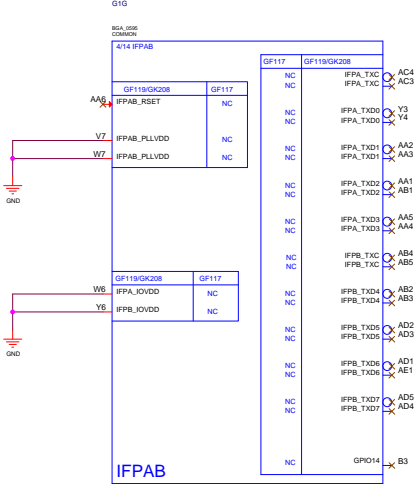
PLACE 1uF CAPS CLOSEST TO THE MEMORY DEVICES

PLACE LARGER CAPACITORS SLIGHTLY FARTHER AWAY

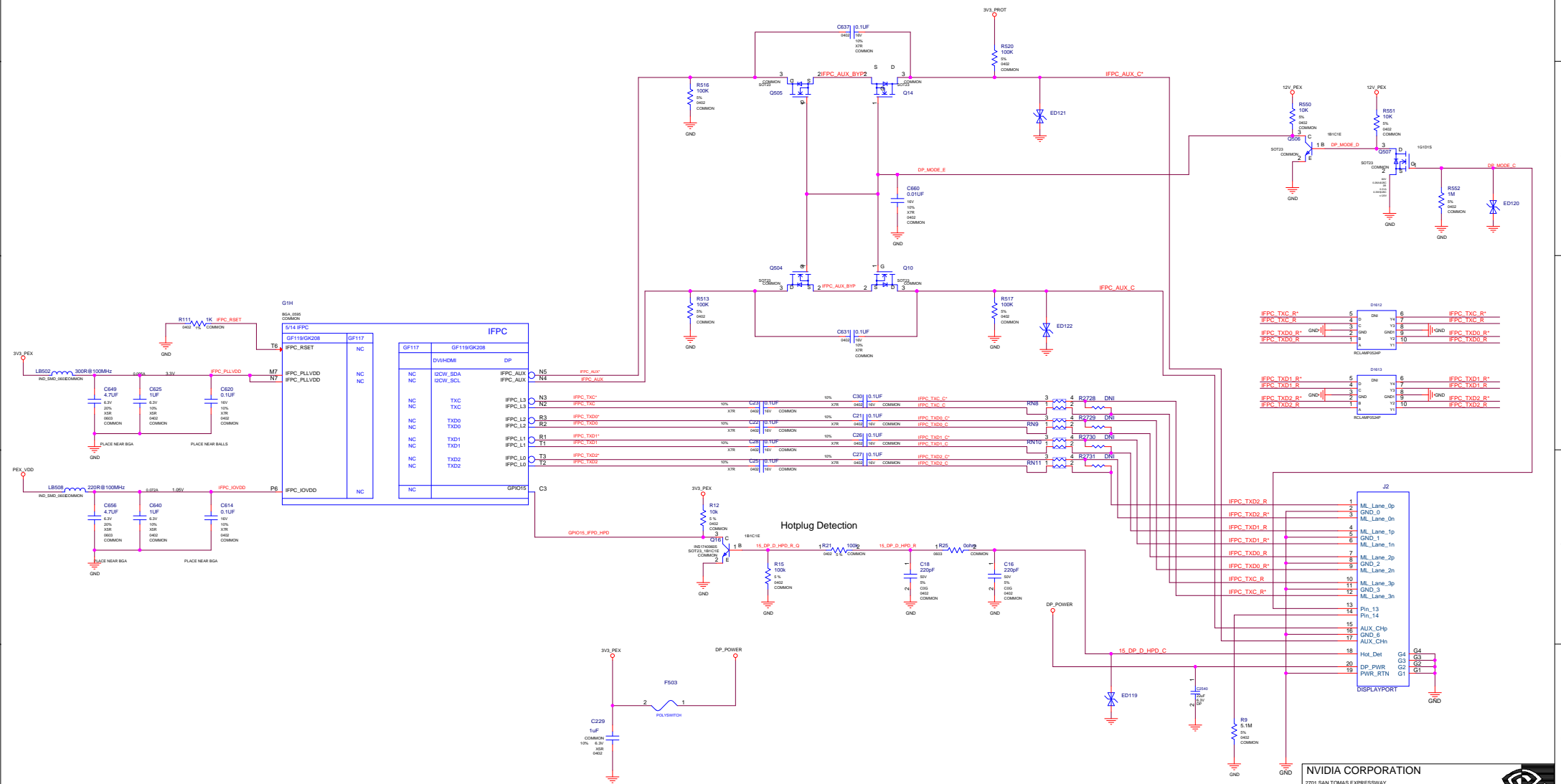





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NV_PN	600-12131-BASE-000		
PCB REV	P2131-ADU	PAGE	7 OF 17
BOM REV	A	DATE	22-AUG-2012

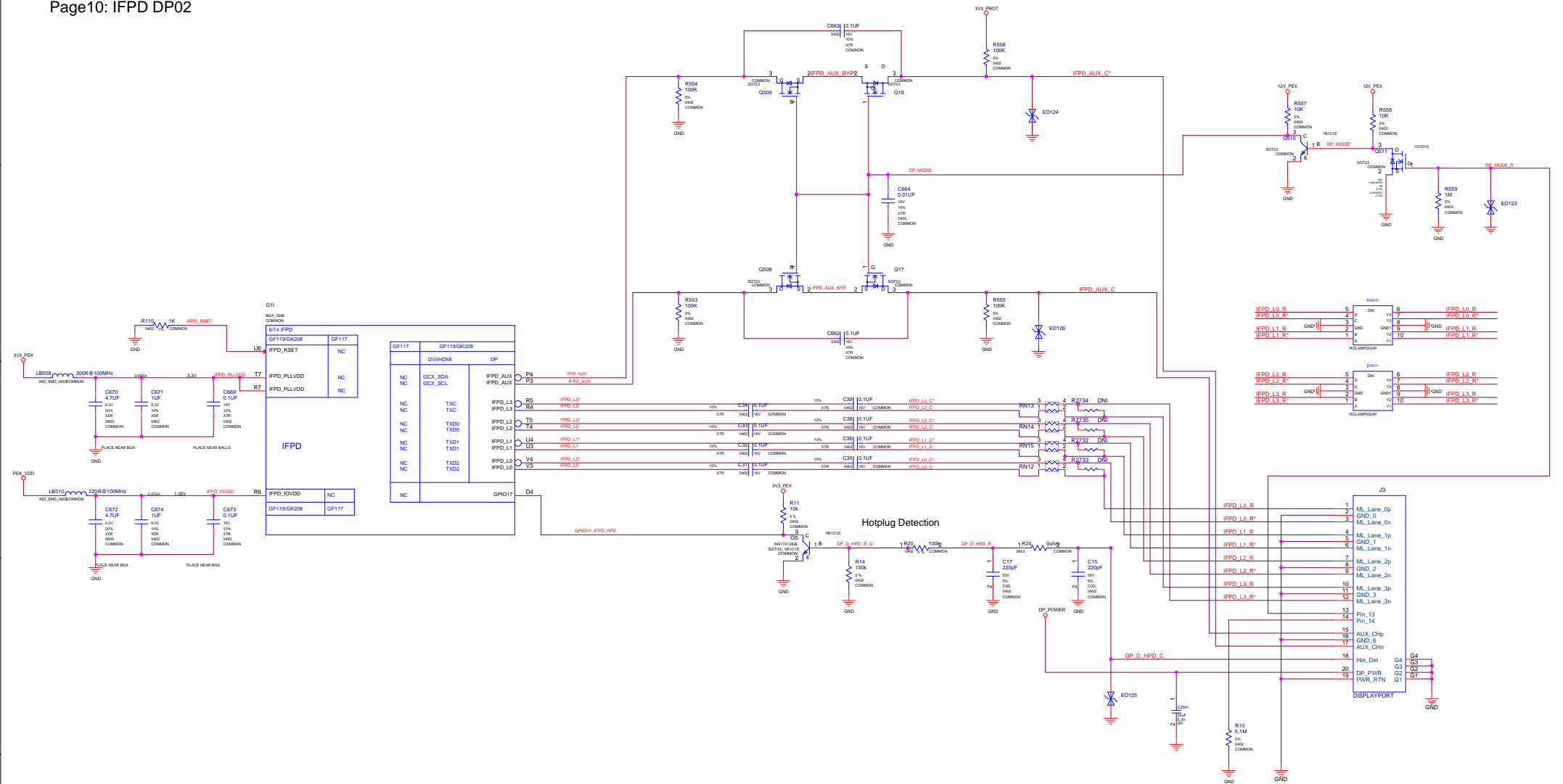


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PAGE DETAIL	IFPC HDMI/DP, DP_PWR

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NV_PN	600-12131-BASE-000		
PCB REV	P2131-A00	PAGE	3 OF 17
BOM REV	A	DATE	22-AUG-2012



ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	UNUSED IFPD, IFPE & IFPF

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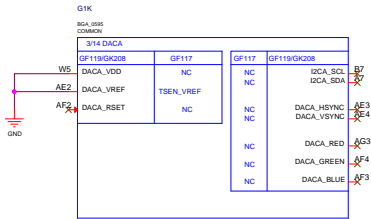
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NV_PN	600-12131-BASE-000
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PCB REV	P2131-A00	PAGE	10 OF 17
BOM REV	A	DATE	22-AUG-2012

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GK208 GB2-64 package only supports
DACA, so one SKU can only have
one VGA output: North or South.

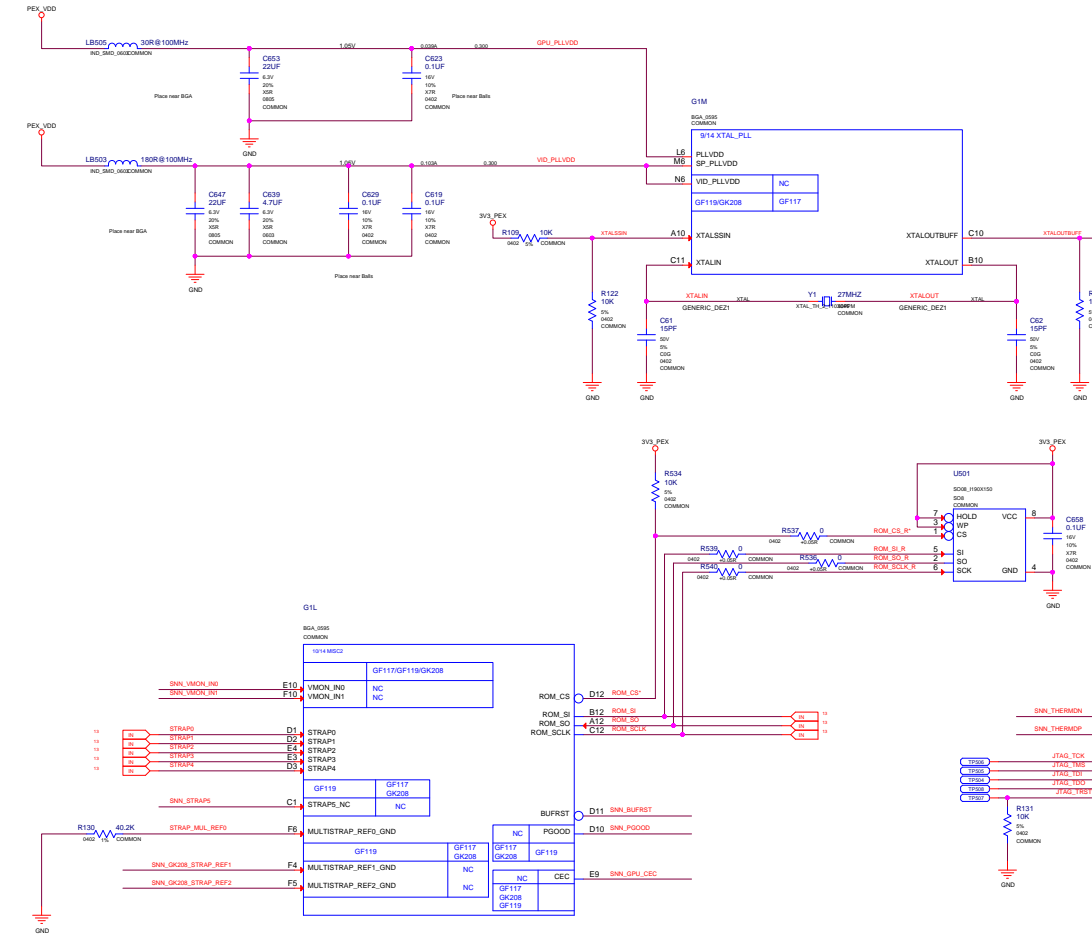
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PAGE DETAIL	DACA VGA

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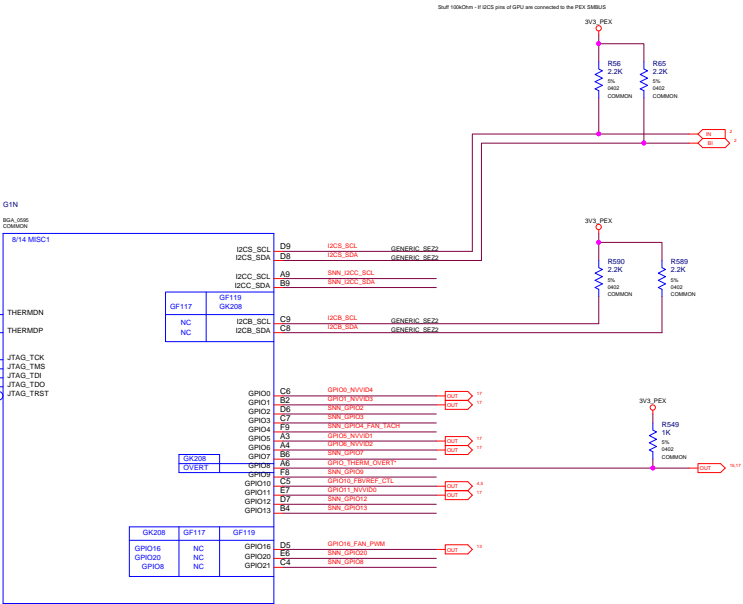


NV_PN	600-12131-BASE-000		
PCB REV	P2131-A00	PAGE	11 OF 17
BOM REV	A	DATE	22-AUG-2012



Smart Fan

XTALSSIN	XTALOUTBUFF	Inverted PWM %
PU	PU	66 (33% HIGH)
PU	PD	50 (50% HIGH)
PD	PU	33 (66% HIGH)
PD	PD	0 (100% HIGH)



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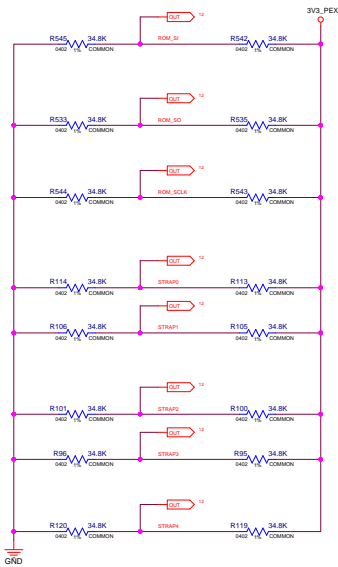
ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	BIOS, JTAG, GPIO & XTAL

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NV_PN	600-12131-BASE-000
PCB REV	P2131-A00
BCM REV	A
PAGE	12 OF 17
DATE	22-AUG-2012

Multilevel Straps

0000	5.1K to GND	1000	5.1K to VCC
0001	10K to GND	1001	10K to VCC
0010	15K to GND	1010	15K to VCC
0011	20K to GND	1011	20K to VCC
0100	24.9K to GND	1100	24.9K to VCC
0101	30.1K to GND	1101	30.1K to VCC
0110	34.8K to GND	1110	34.8K to VCC
0111	45.3K to GND	1111	45.3K to VCC

GK208 Straps

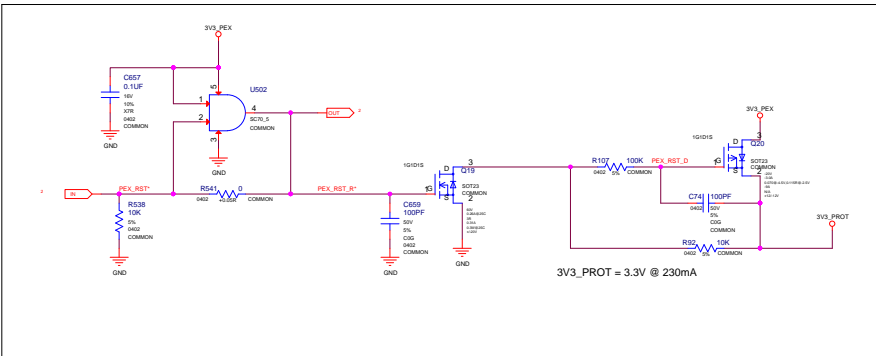


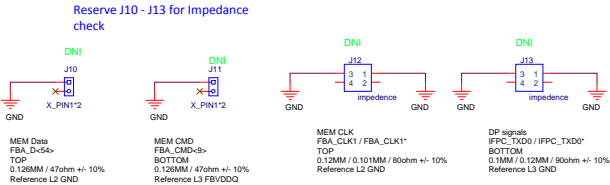
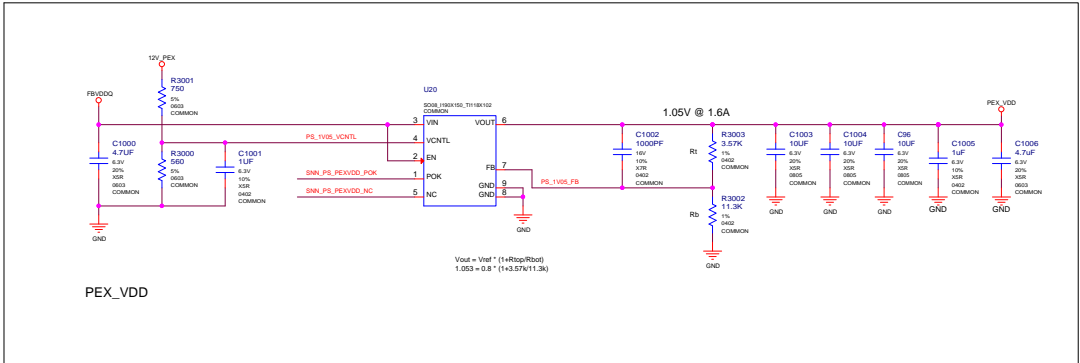
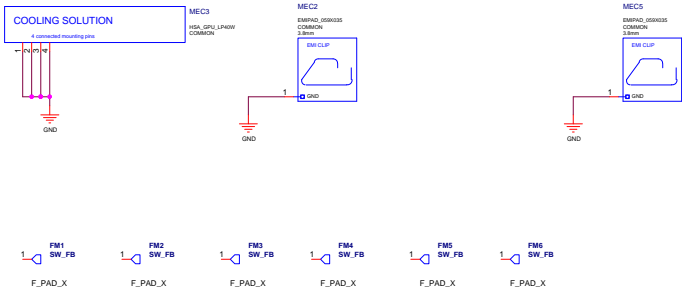
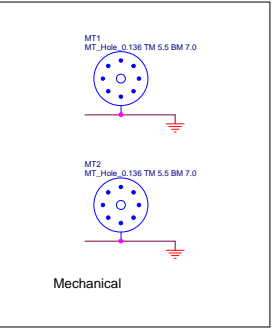
Bit Signal

Values

03	RAMCFG[0]	0000	Reserved			ROM_SI
02	RAMCFG[0]	0001	USB1A16 GCORE3 X16 64MB Epilog			
01	RAMCFG[0]	0010	USB1A16 GCORE3 X16 64MB Epilog A-die			
00	RAMCFG[0]	0011	USB1A16 GCORE3 X16 64MB Samsung D-die			
03	FB[1]	01	128MB			ROM_SO
02	FB[0]	10	256MB			
01	SMB_ALT_ADDR	0	DISABLED	1	ENABLED	
00	VGA_DEVICE	0	DISABLED	1	ENABLED	
03	PCI_DEV0_EXT	0000	0	0001	TBD	ROM_SCLK
02	SUB_VENDOR	0	NO_BIOS	1	BIOS	
01	PCI_DEV0_EXT_BTS	0000	0	0001	TBD	
00	PEX_PAL_EN_TERMINO	0	DISABLED	1	ENABLED	
03	USER[0]	0000	NOT			Strap0
02	USER[0]					
01	USER[0]					
00	USER[0]					
03	3G0G_PADCFG_LUT_ADDR[0]	0000	DISKTOP_DEFAULT	1000	DISKTOP_JTHRS	Strap1
02	3G0G_PADCFG_LUT_ADDR[0]	0001	MOBILE_DEFAULT	1001	MOBILE_JTHRS_HAMP	
01	3G0G_PADCFG_LUT_ADDR[0]	0010	MOBILE_JTHRS_LLAMP	1010	MOBILE_JTHRS_LLAMP	
00	3G0G_PADCFG_LUT_ADDR[0]	0011	MOBILE_JTHRS_LAMP	1011	MOBILE_JTHRS_LAMP	
03	3G0G_PADCFG_LUT_ADDR[0]	0100	MOBILE_JTHRS_LAMP	1100	MOBILE_JTHRS_HAMP	
02	3G0G_PADCFG_LUT_ADDR[0]	0101	MOBILE_JTHRS_HAMP	1101	MOBILE_JTHRS_HAMP	
01	3G0G_PADCFG_LUT_ADDR[0]	0110	MOBILE_JTHRS_HAMP	1110	MOBILE_JTHRS_HAMP	
00	3G0G_PADCFG_LUT_ADDR[0]	0111	MOBILE_JTHRS_HAMP	1111	MOBILE_JTHRS_HAMP	
03	PCI_DEV0[0]	0000	0010			Strap2
02	PCI_DEV0[0]					
01	PCI_DEV0[0]					
00	PCI_DEV0[0]					
03	SCORE_EXPOSED	0	DISABLED	1	ENABLED	Strap3
02	SCORE_EXPOSED	0	DISABLED	1	ENABLED	
01	SCORE_EXPOSED	0	DISABLED	1	ENABLED	
00	SCORE_EXPOSED	0	DISABLED	1	ENABLED	
03	PCI_SPEED_CHANGE_GND	0	DISABLED	1	ENABLED	Strap4
02	PCI_SPEED_CHANGE_GND	0	DISABLED	1	ENABLED	
01	PCI_SPEED_CHANGE_GND	0	DISABLED	1	ENABLED	
00	PCI_SPEED_CHANGE_GND	0	DISABLED	1	ENABLED	
03	DP_PAL_VDD_3V3	0	USE V3	1	USE V3	
02	DP_PAL_VDD_3V3	0	USE V3	1	USE V3	
01	DP_PAL_VDD_3V3	0	USE V3	1	USE V3	
00	DP_PAL_VDD_3V3	0	USE V3	1	USE V3	

PCI-E Reset

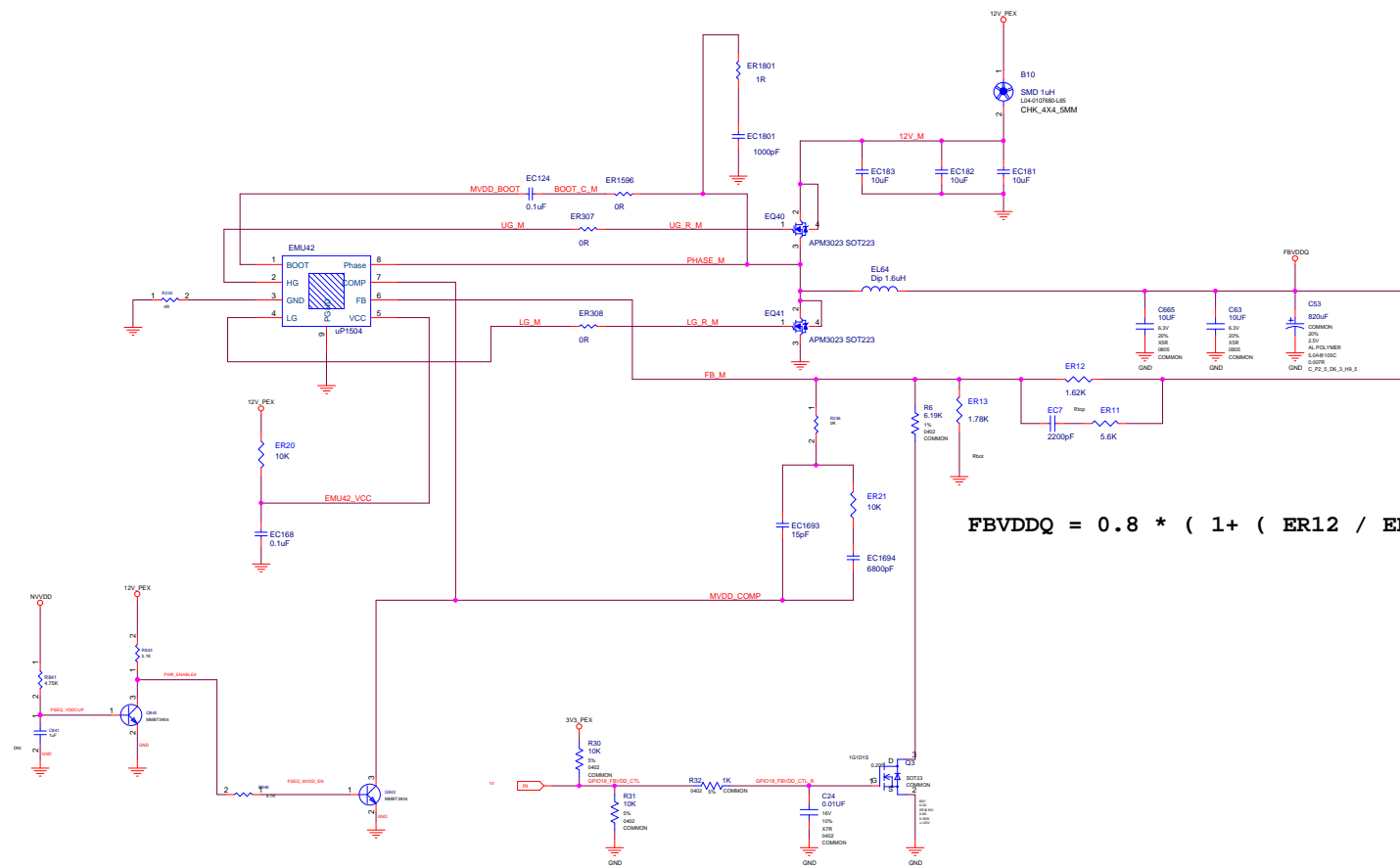




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PAGE DETAIL	PS: SV, PEXVDD

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2701 SAN TOMAS EXPRESSWAY			
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NV_PN	600-12131-BASE-000		
PCB REV	P2131-A00	PAGE	14 OF 17
BOX REV	A	DATE	22-AUG-2012



$$FBVDDQ = 0.8 * (1 + (ER12 / ER13))$$

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PCB REV P2131-A00

BOX REV A

PAGE 16 OF 17

DATE 22-AUG-2012

