

PG401 A02


4GB GDDR5, 256b, 128Mx32

Tall DVI-I + DP + DP + DP/HDMI + DP

TABLE OF CONTENTS

Page	Description
1	Table of Contents
2	Block Diagram
3	PCI Express
4	MEMORY: GPU Partition A/B
5	MEMORY: FBA[31:0]
6	MEMORY: FBA[63:32]
7	MEMORY: FBB[31:0]
8	MEMORY: FBB[63:32]
9	MEMORY: GPU Partition C/D
10	MEMORY: FBC[31:0]
11	MEMORY: FBC[63:32]
12	MEMORY: FBD[31:0]
13	MEMORY: FBD[63:32]
14	GPU PWR and GND
15	GPU Decoupling
16	DACA Interface
17	IFPAB DVI-I-DL
18	IFPEF with IFPE DP
19	IFPF DP
20	IFPC HDMI/DP
21	IFPD DP
22	MIOA/B Interface and Frame Lock
23	MISC1: Fan, Thermal, JTAG, GPIO, Stereo
24	MISC2: ROM, XTAL, Straps
25	PS: 5V, PEX_VDD

Page	Description
26	PS: FBVDD/Q
27	PS: NVVDD Controller
28	PS: NVVDD Phase 1,2
29	PS: NVVDD Phase 3,4
30	PS: NVVDD Phase 5, 6
31	PS: Dynamic Power Balance Logic
32	PS: Dynamic Power Balance Phases
33	PS: Inputs, Filtering, and Monitoring
34	PS: Shutdown
35	PS: 12V Current Steering PSI Control and LED
36	MECH: Bracket/Thermal
37	MICROCONTROLLER



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Size	Custom	Document Description	Rev
		Table of contents	1.1
Date:	Thursday, September 18, 2014	Sheet	1 of 37

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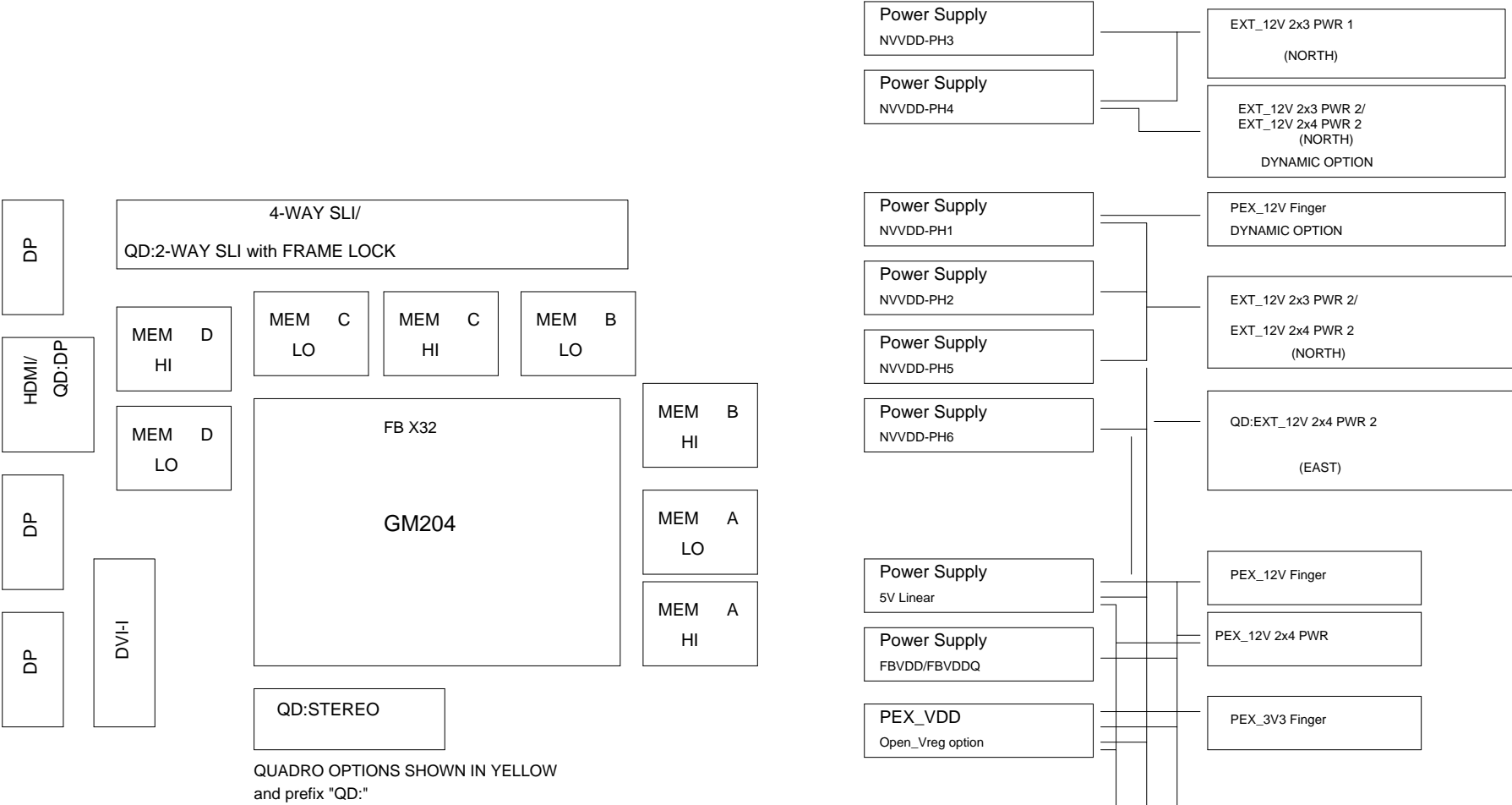
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NV_PN	600-1G401-BASE-QS1		
PCB REV	PG401-A02	PAGE	1 OF 37
ROM REV	A	DATE	04-AUG-2014

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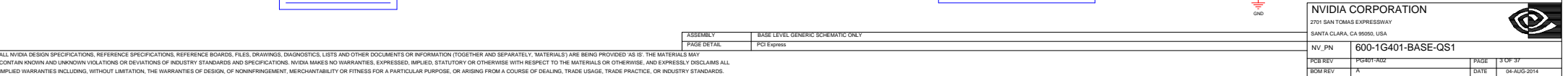


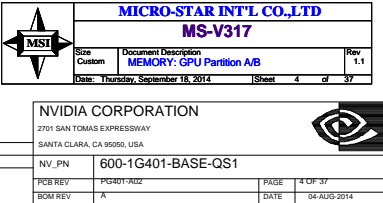
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Date:	Thursday, September 18, 2014	Sheet	2 of 37

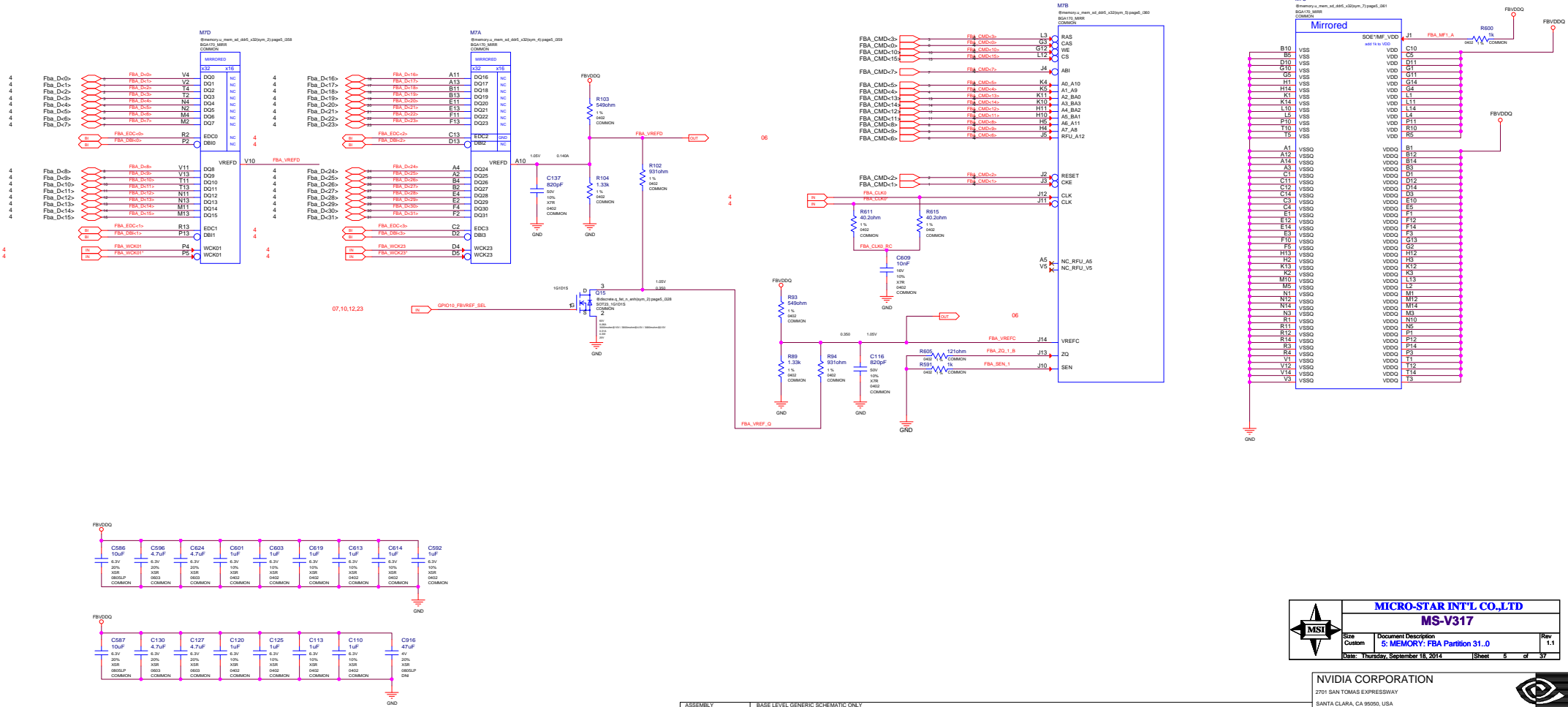
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NV_PN	600-1G401-BASE-QS1		
PCB REV	PG401-A02	PAGE	2 OF 37
BOX REV	A	DATE	04-AUG-2014



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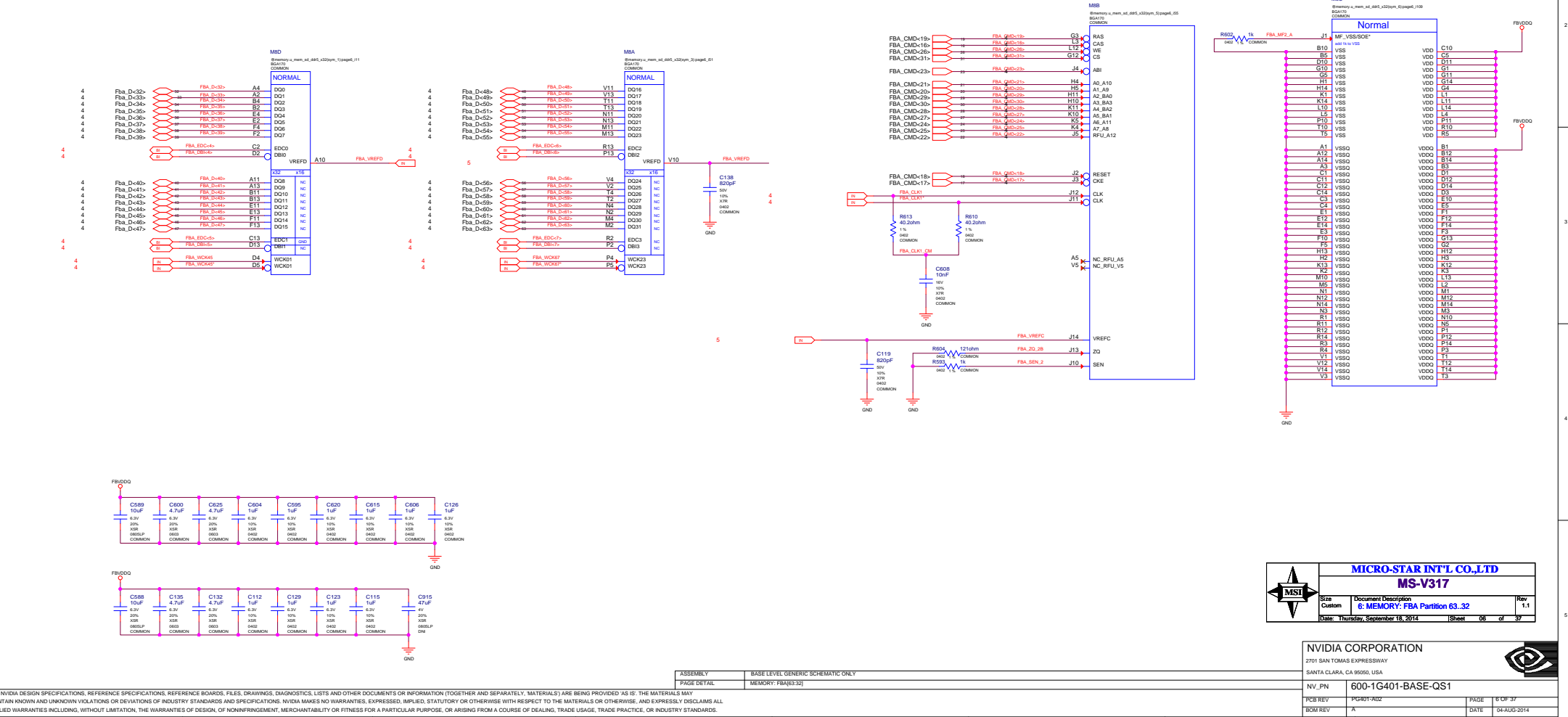
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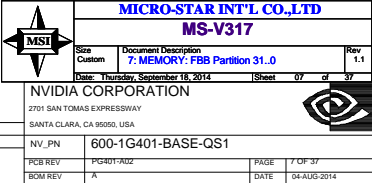
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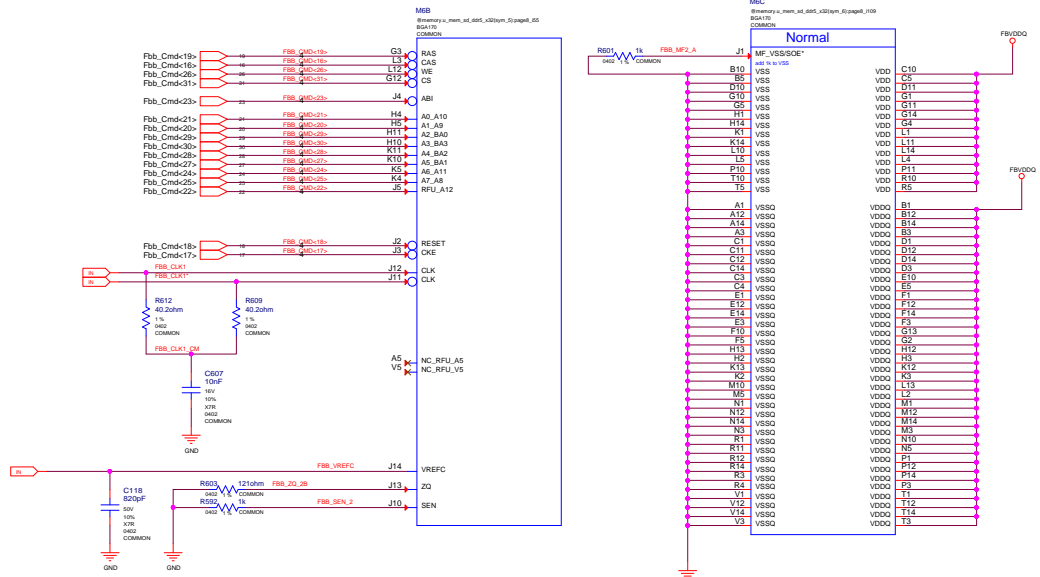
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Date:	Thursday, September 16, 2014	Sheet	5 of 37


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INV_PN	600-1G401-BASE-QS1
PCB REV	PG401-AD2
BOB REV	A
PAGE	5 OF 37
DATE	04-AUG-2014







	MI-STAR INT'L CO.,LTD MS-V317		
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	Date: Thursday, September 16, 2014		Sheet 6 of 37

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
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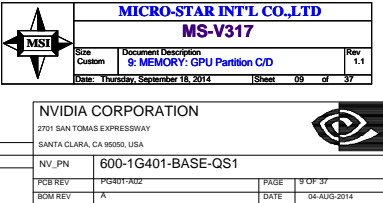
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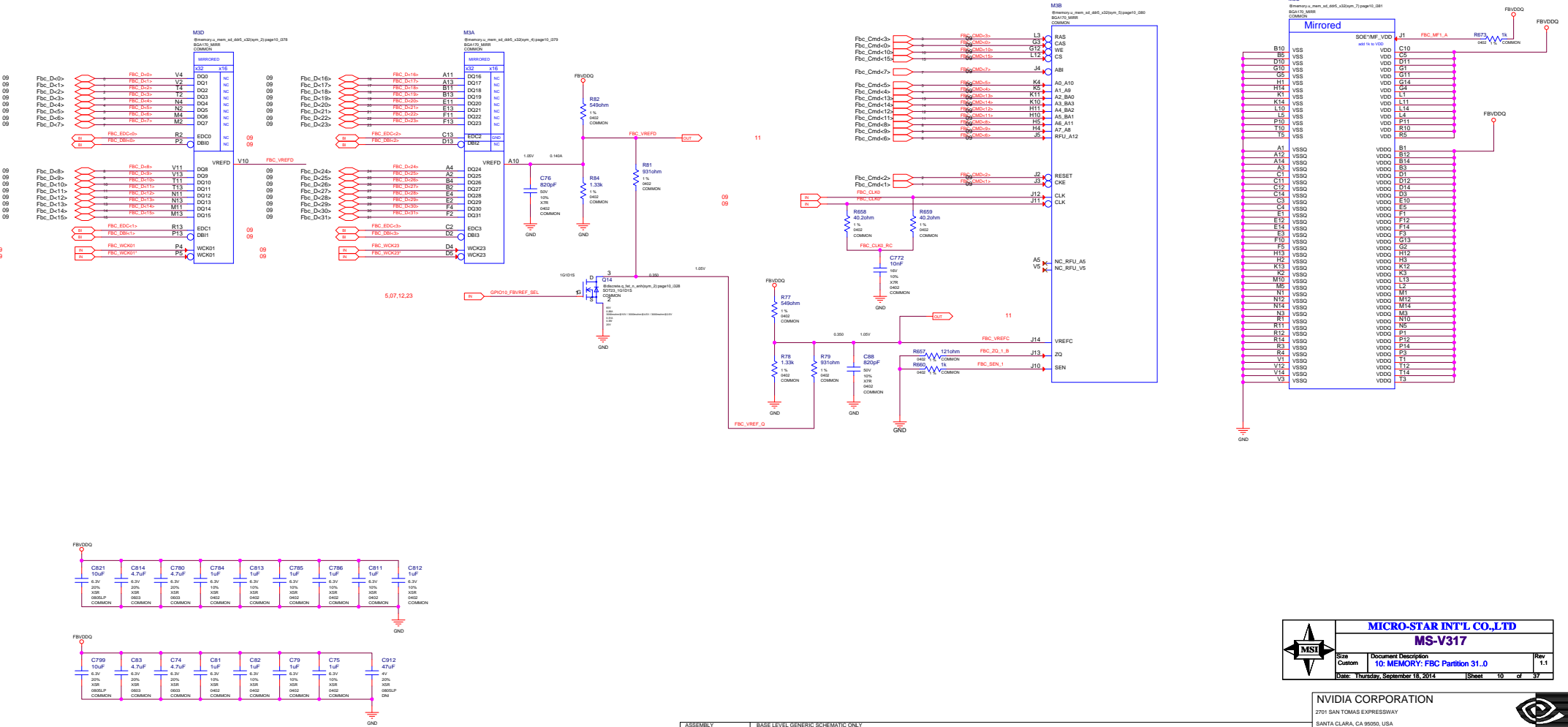
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PAGE 6 OF 37

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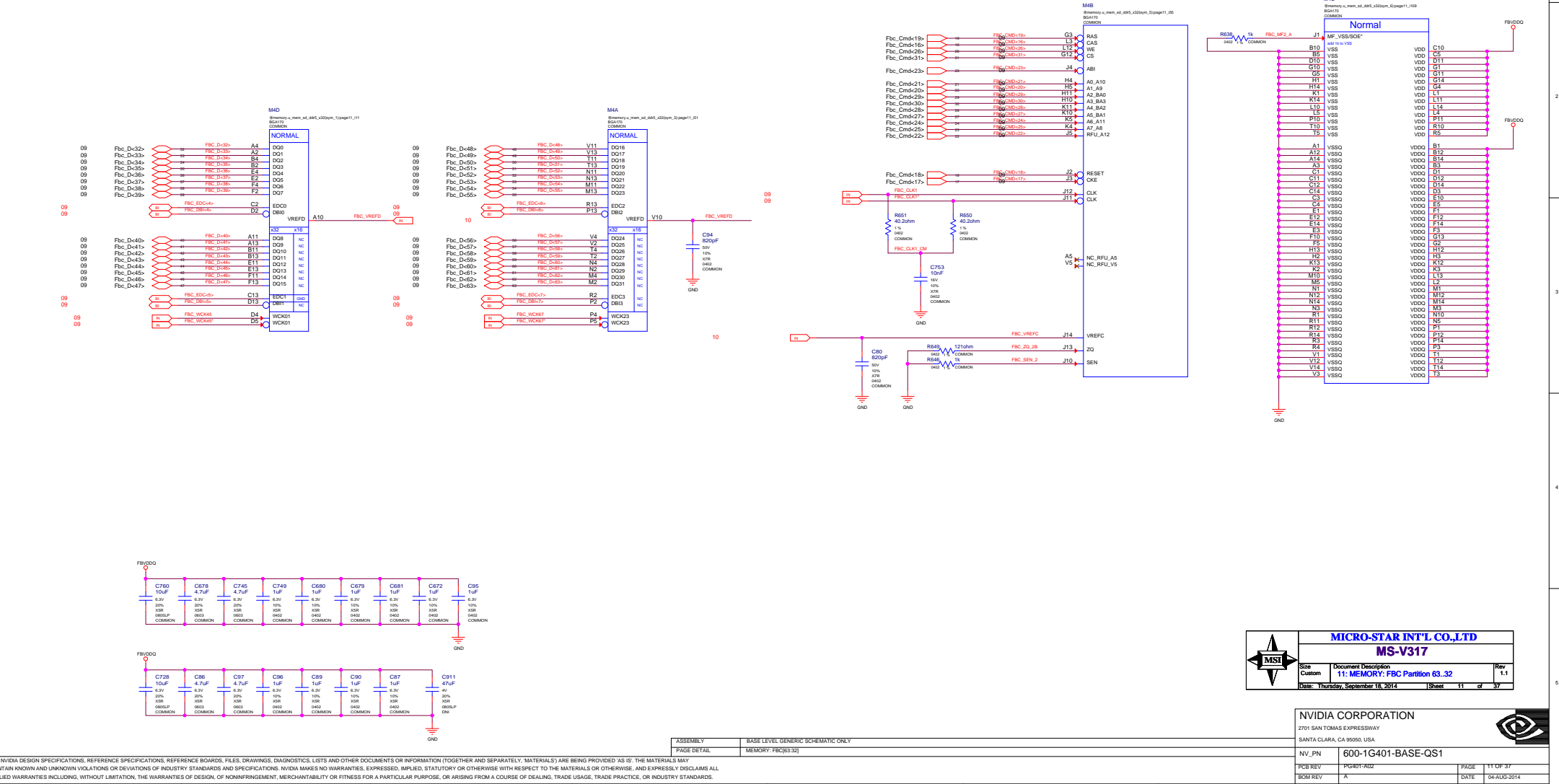
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Date:	Thursday, September 18, 2014	Sheet 10 of 37

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INV_PN	600-1G401-BASE-QS1
PCB REV	PG401-A02
BOB REV	A
PAGE	10 OF 37
DATE	04-AUG-2014



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Size	Document Description	Rev
Custom	11: MEMORY: FBC Partition 63..32	1.1
Date:	Thursday, September 18, 2014	Sheet 11 of 37

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PCB REV	PG401-A02
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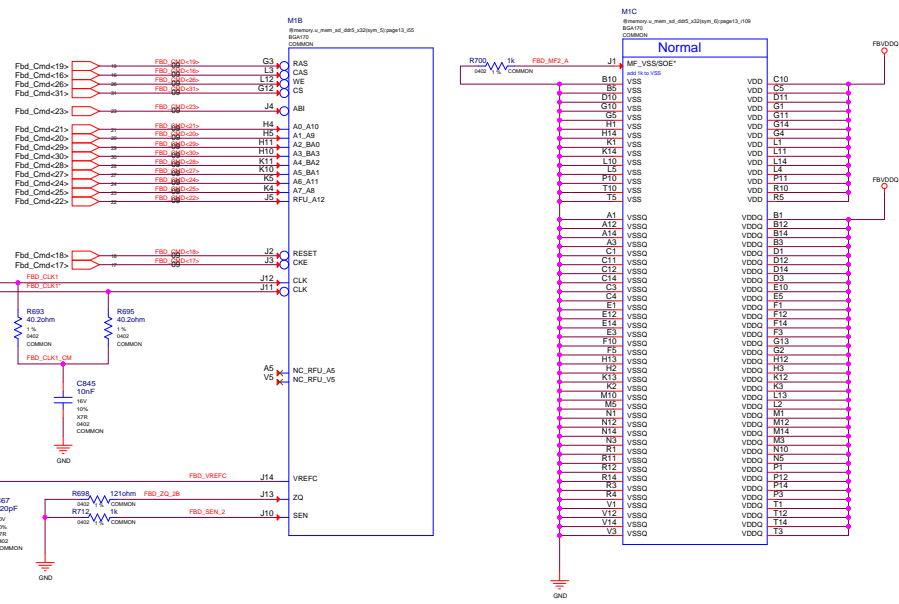
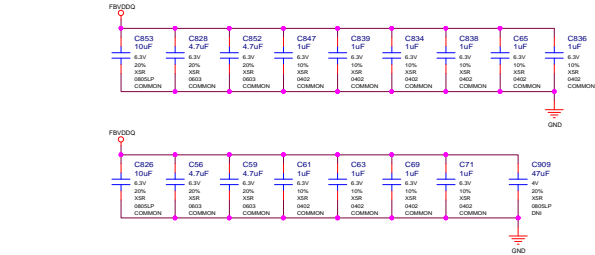
PAGE	11 OF 37
DATE	04-AUG-2014



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PCB REV	PG401-A02	PAGE	12 OF 37
BOM REV	A	DATE	04-AUG-2014



	MICRO-STAR INT'L CO.,LTD		
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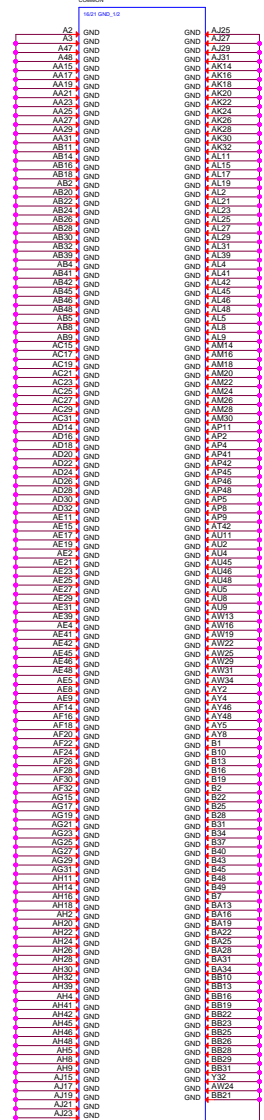
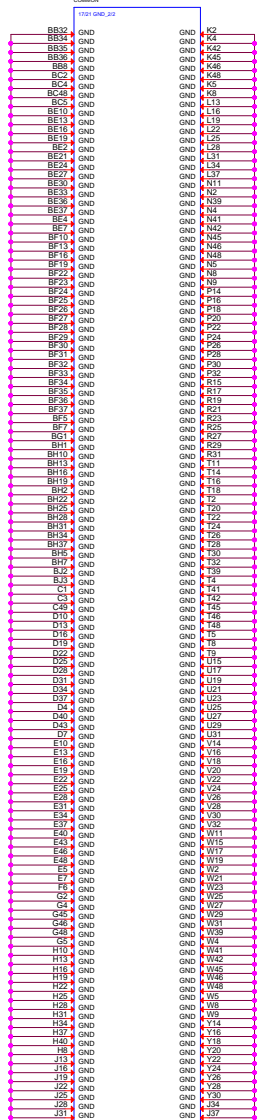
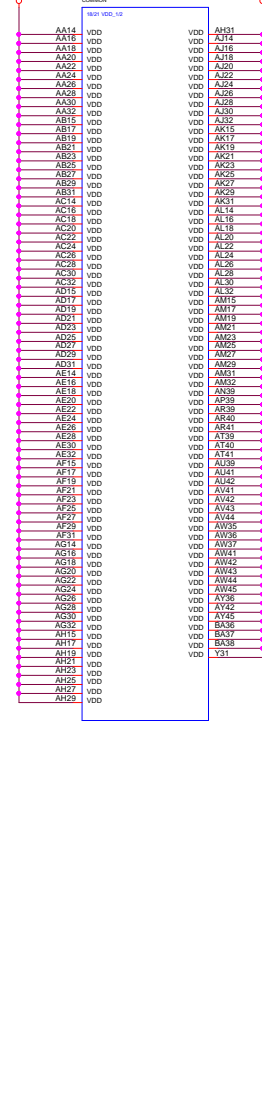
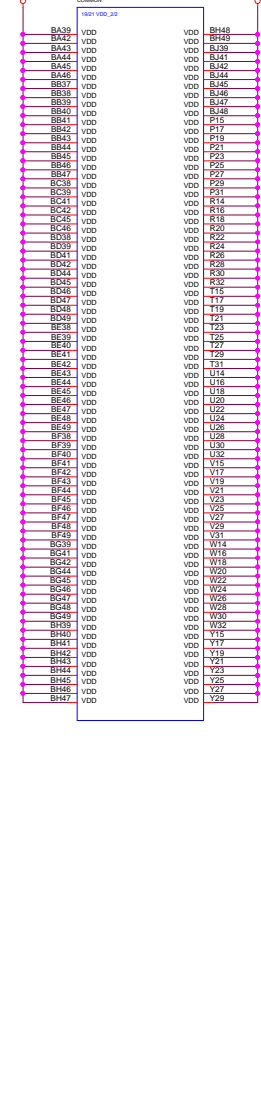
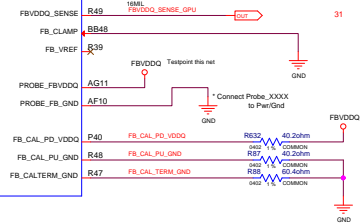
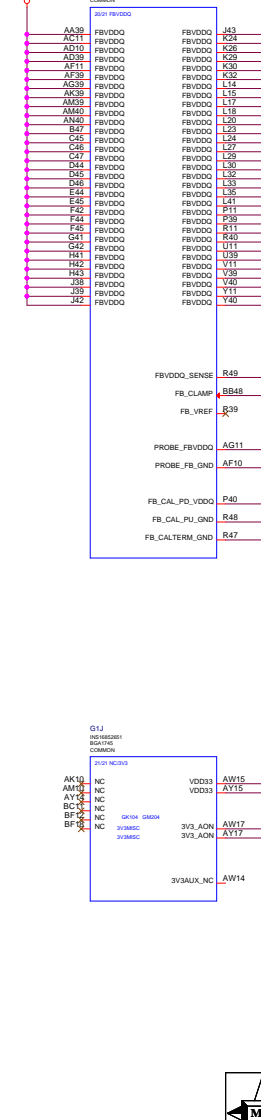
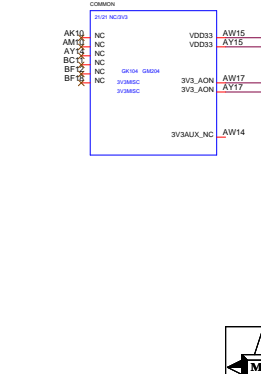
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BOM REV	A

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COMMONASSEMBLY
PAGE DETAILBASE LEVEL GENERIC SCHEMATIC ONLY
GPU PWR and GND

		MICRO-STAR INT'L CO.,LTD	
		MS-V317	
Size	Custom	Document Description	GPU PWR and GND
Date:	Thursday, September 18, 2014	Sheet	14 of 37

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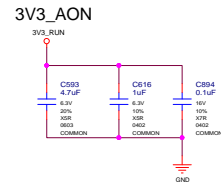
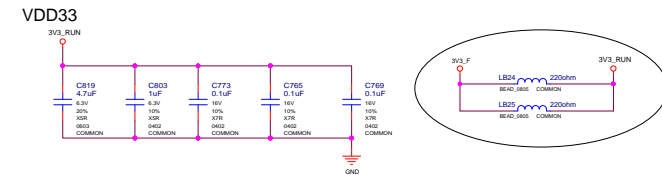
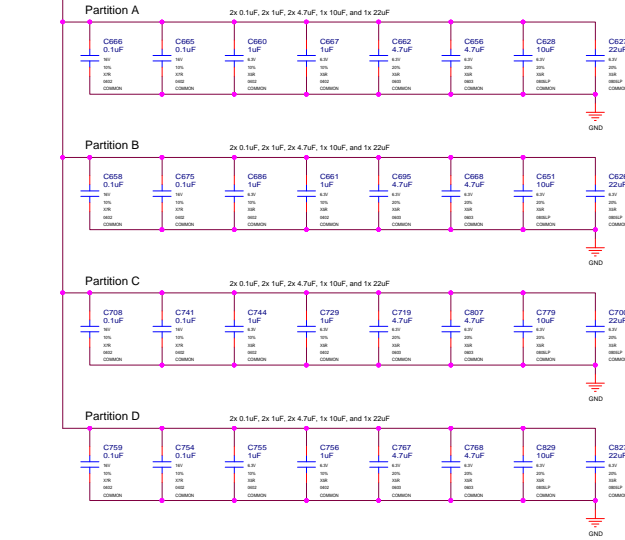
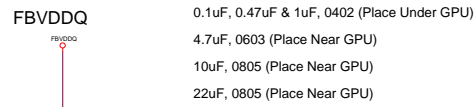
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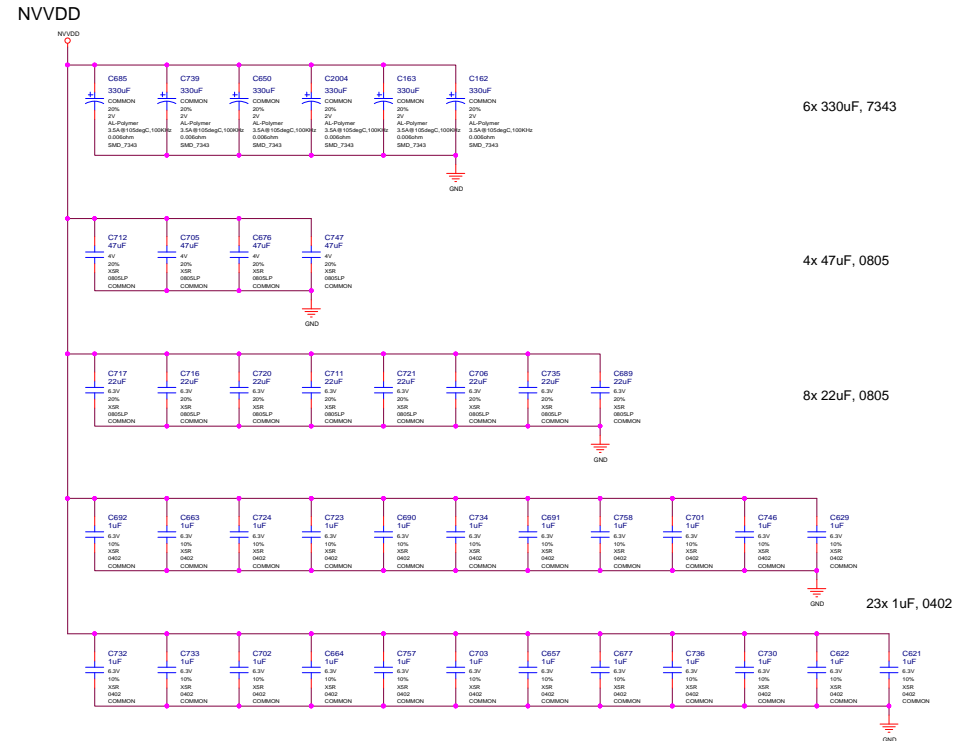
PAGE 14 of 37

DATE 04-AUG-2014

Based on GB2-X GDDR5 FBVDDQ Decap Guideline



NVVDD Decoupling caps. Place under GPU.



ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	GPU Decoupling

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NV_PN	600-1G401-BASE-QS1
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PCB REV	PG401-A02	PAGE	15 OF 37
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BOM REV	A	DATE	04-AUG-2014
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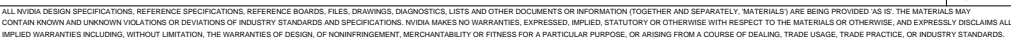
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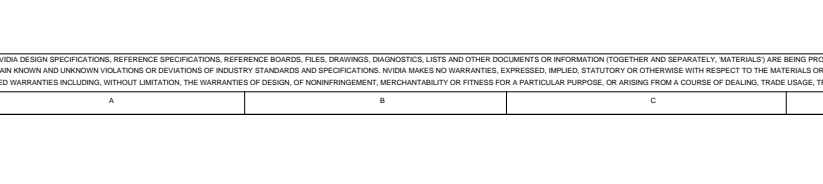
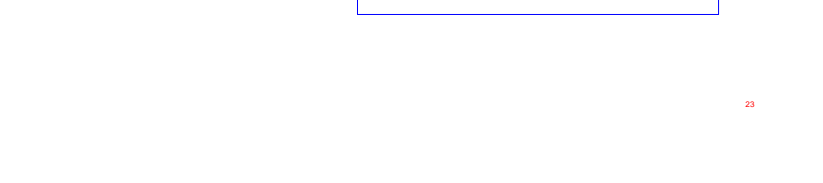
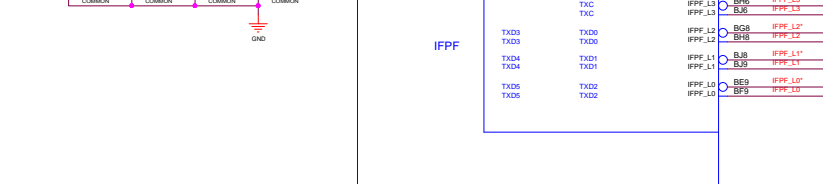
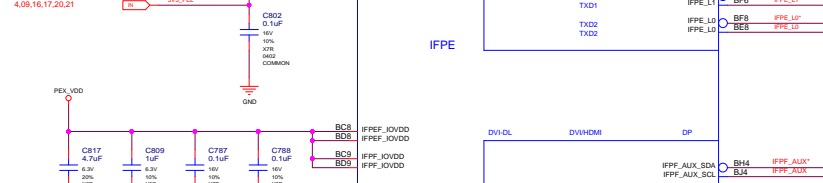
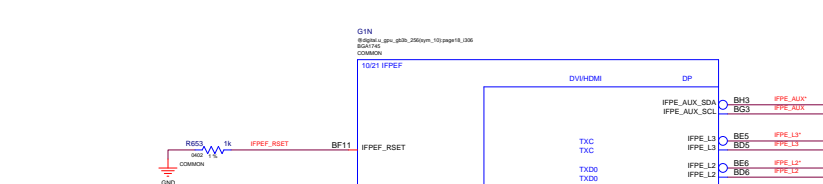
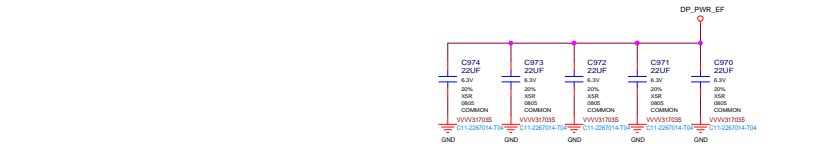
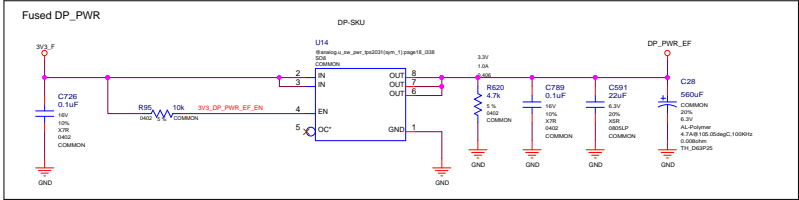
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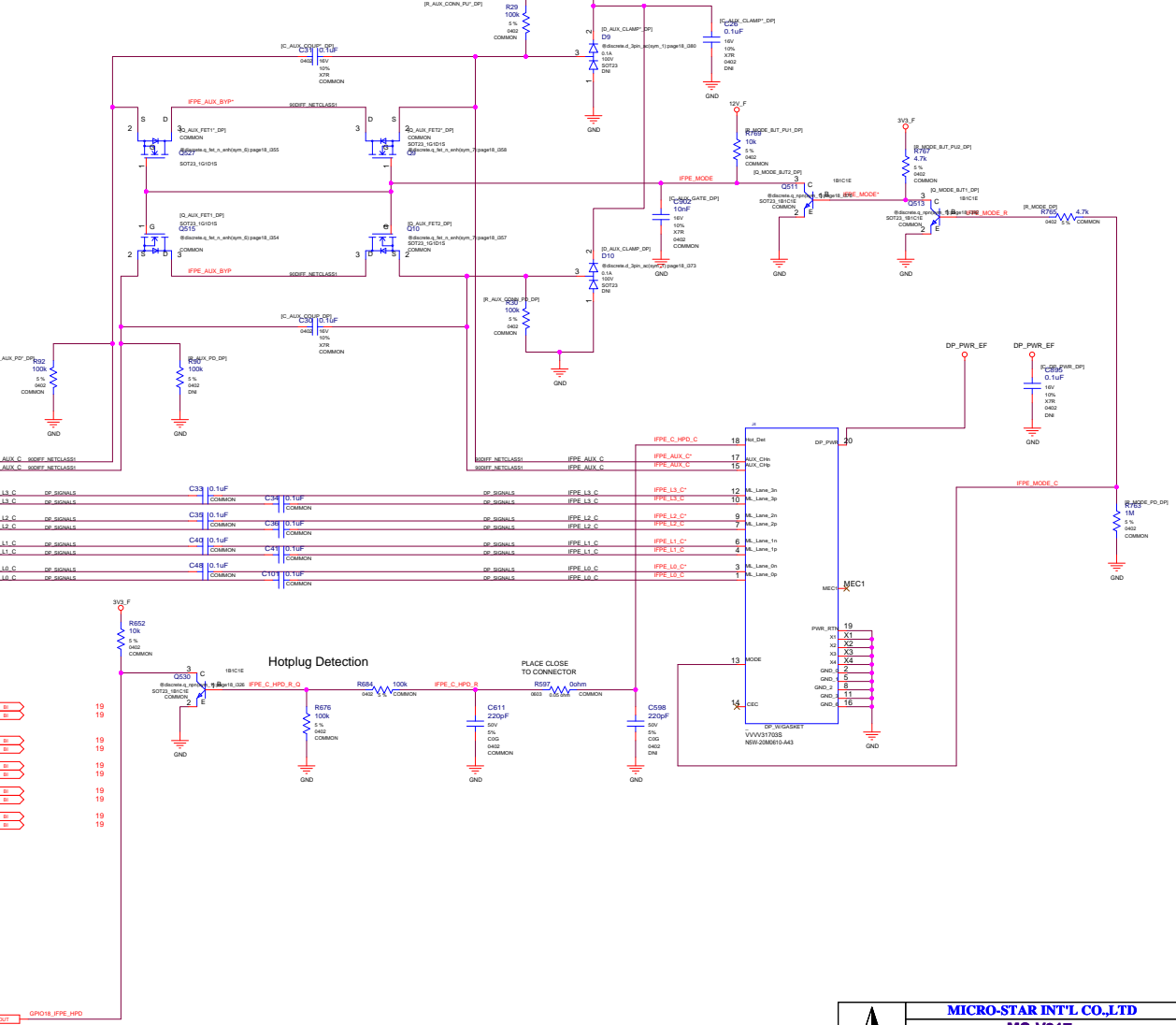
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	Date: Thursday, September 18, 2014		Sheet 17 of 37

7 OF 37

7 OF 37



- Two cases to be considered:
1. DP AUX to DP connector: AUX AC coupled
 2. DP AUX to DP-DVI dongle: AUX pass through



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Size	Custom	Document Description	IFPEF with IFPE DP	Rev	1.1
Date:	Thursday, September 16, 2014	Sheet	18	of	37

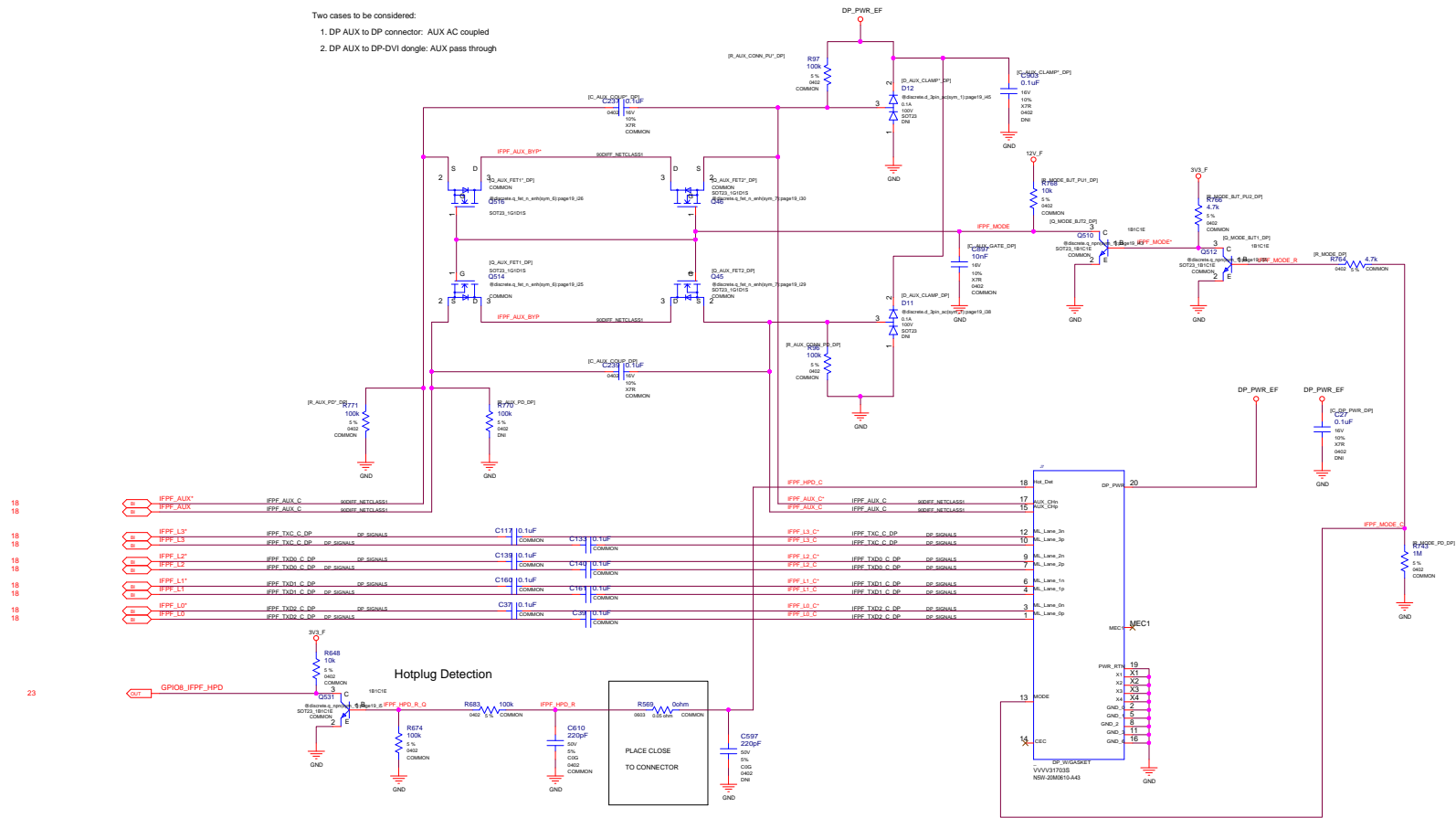
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NV_PN	600-1G401-BASE-QS1	PAGE	18 OF 37
PCB REV	PG401-A02	DATE	04-AUG-2014
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Two cases to be considered:

1. DP AUX to DP connector: AUX AC coupled
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PAGE DETAIL	IFPF DP

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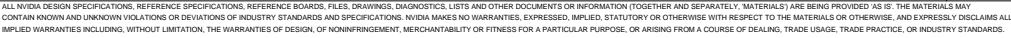
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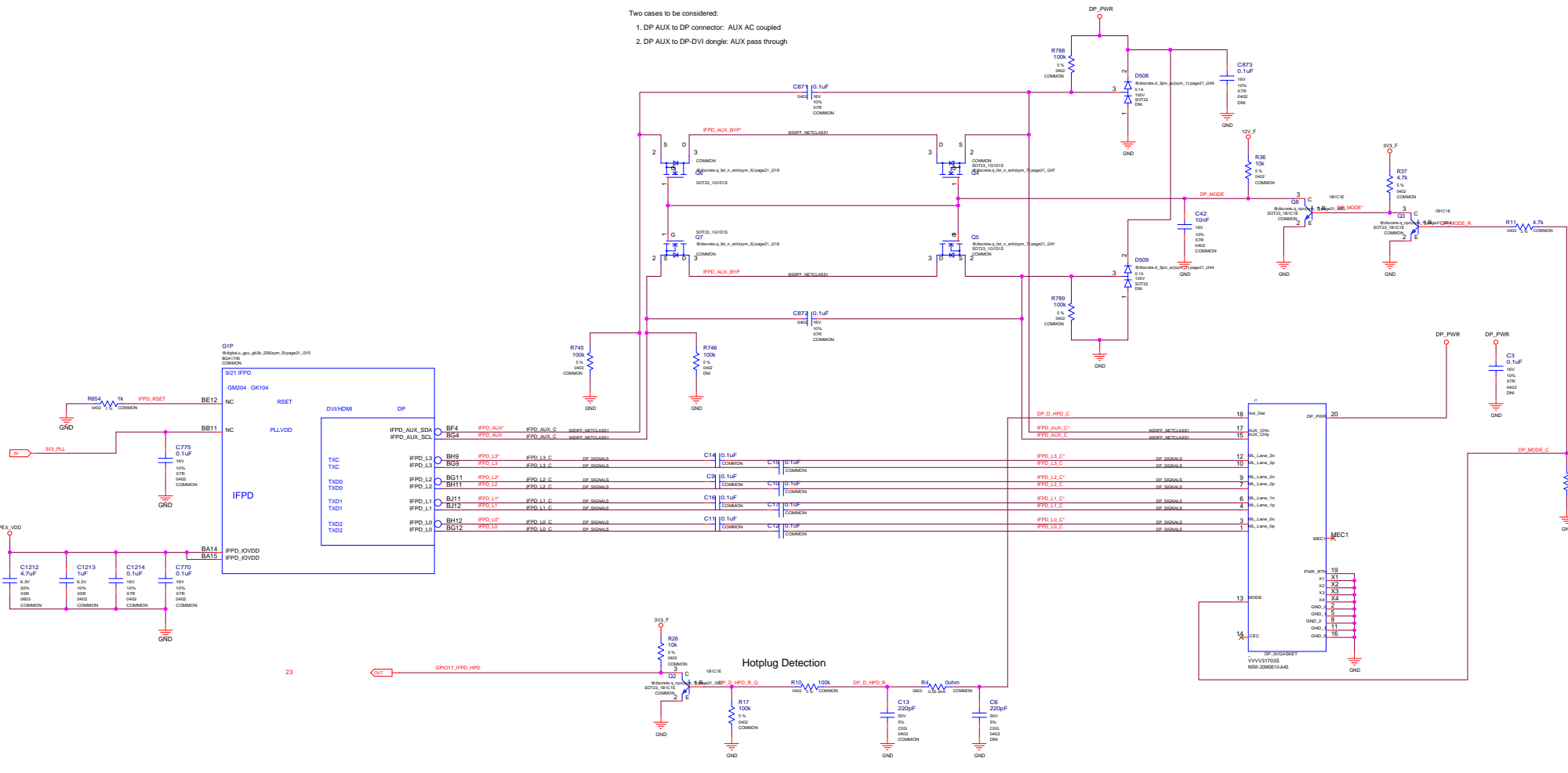
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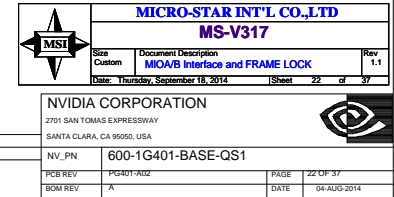
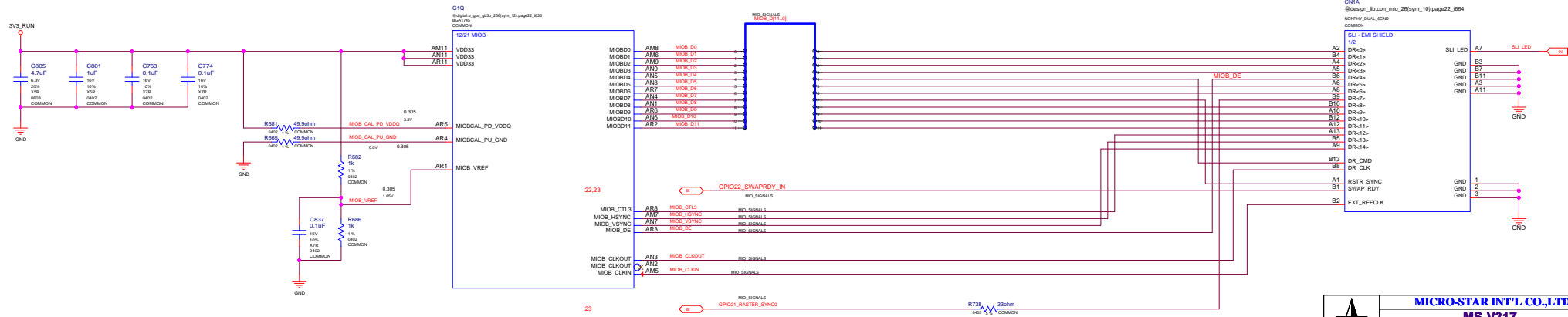


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PCB REV	PG401-A02	PAGE	19 OF 37
BOM REV	A	DATE	04-AUG-2014



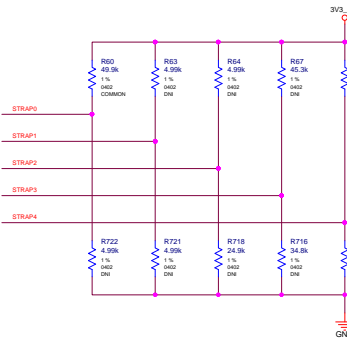


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NV_PN 600-1G401-Base-QS1			
PCB REV	P-GR1-R02	PAGE	21 OF 37
BOM REV		DATE	04-AUG-2014

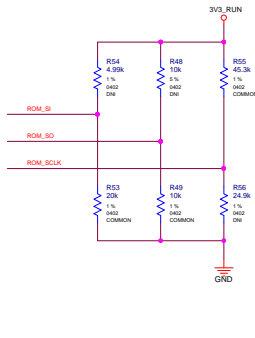


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STRAP2	PCI_DEVID [3:0]*	0100 - (0x1184)*	25K PD - 425 GP1*†				
STRAP3	SOR_EXPOSED [3:0]*	1111*	45K PU*				
STRAP4	DP_PLL_VDD_33V*	1*	FOR 3_3V*				
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ROM_SO	VGA_DEVICE*	1*		VGA_DEVICE*	1*		
	SMB_ALT_ADDR*	0*	30K PD*	SMB_ALT_ADDR*	0*	10K PD*	
	FB[0]_APERTURE_SIZE*	1*	For 128MB*	PCIE_CFG*	0*		
	FB[1]_APERTURE_SIZE*	0*	For 128MB*	DEVID_SEL*	0*		
ROM_SCLK	PEX_PLL_EN_TERM100*	0*	DISABLED*	SOR0_EXPOSED*	1*		
	PCI_DEVID_EXT[5]*	0*	For 0x1184*	SOR1_EXPOSED*	1*	45K PU*	
	SUB_VENDOR*	1*	Dedicated BIOS*	SOR2_EXPOSED*	1*		
	PCI_DEVID_EXT[4]*	0*	For 0x1184*	SOR3_EXPOSED*	1*		

MULTI_STRAP_REF0_GND	
BINARY PRODUCTION	NC
BINARY BRINGUP	NC
MULTI-LEVEL	45.3K 1% TO GND



MAXWELL		
STRAP0	3.3V	1.85V
STRAP1	1.85V	0V
STRAP2	0V	0V
STRAP3	0V	0V
STRAP4	0V	0V



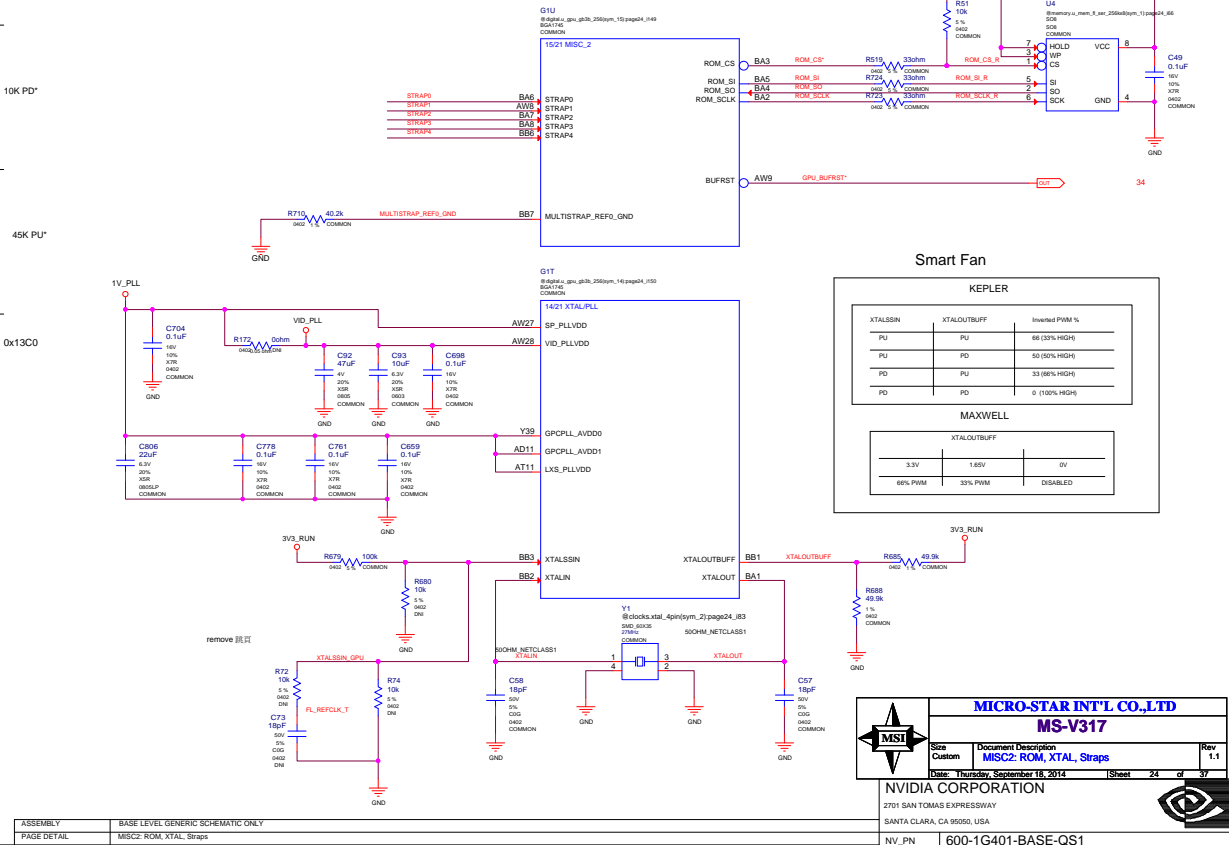
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10k	0001
15k	0010
20k	0011
25k	0100
30k	0101
35k	0110
45k	0111

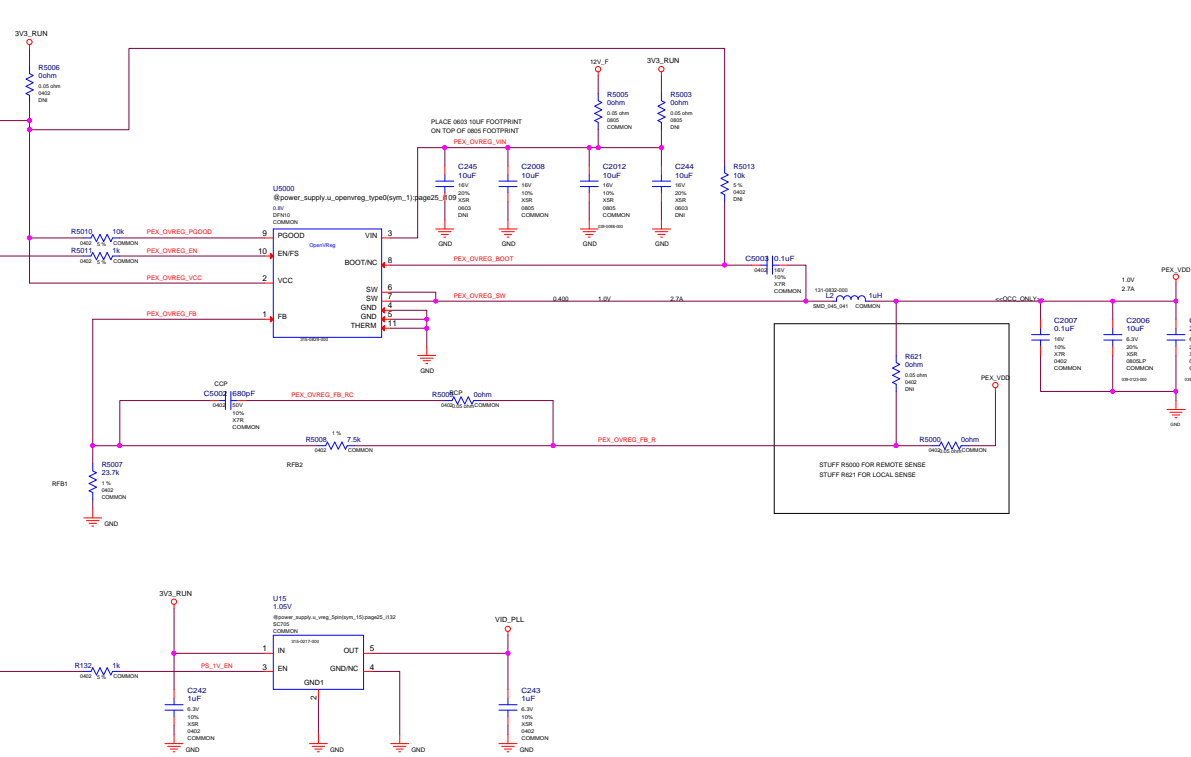
KEPLER



CFG[3:0] Config	Width	Vendor
0000	Reserved	
0001	32Mx32 256-bit Elpida	
0010	32Mx32 256-bit Hynix	
0011	32Mx32 256-bit Samsung	
0100	Reserved	
0101	64Mx32 256-bit Elpida	
0110	64Mx32 256-bit Hynix	
0111	64Mx32 256-bit Samsung	
1000	Reserved	
1001	32Mx32 192-bit Elpida	
1010	32Mx32 192-bit Hynix	
1011	32Mx32 192-bit Samsung	
1100	Reserved	
1101	64Mx32 192-bit Elpida	
1110	64Mx32 192-bit Hynix	
1111	64Mx32 192-bit Samsung	

MAXWELL

CFG[3:0] Config	Width	Vendor
0000	Reserved	
0001	128Mx32 256-bit Elpida	
0010	128Mx32 256-bit Hynix	
0011	128Mx32 256-bit Samsung	
0100	Reserved	
0101	64Mx32 256-bit Elpida	
0110	64Mx32 256-bit Hynix	
0111	64Mx32 256-bit Samsung	





	MICRO-STAR INT'L CO.,LTD MS-V317			
	Size	Document Description		Rev
	Custom	PB_V317_PEX_V0D		1.1
	Date: Thursday, September 18, 2014	Sheet	25	of 37
NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA				
				
NV_PN	600-1G401-BASE-QS1			
PICB REV	P_CRO7AUZ		PAGE	25 OF 37
MOD REV	ACRY	DATE	04-AUG-2014	

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3

4

5

ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	P/S FBVDDV

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MS-V317		
Size	Document Description	Rev
Custom	NA	1.1
Date: Thursday, September 18, 2014		Sheet 26 of 37

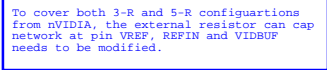
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NV_P/N	600-1G401-BASE-QS1		
PCB REV	PG401-A02	PAGE	26 OF 37
BOM REV	A	DATE	04-AUG-2014



SANTA CLARA, CA 95050, USA

PCB REV	PG401-A02
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BOM REV	A	DATE	04-AUG-2014
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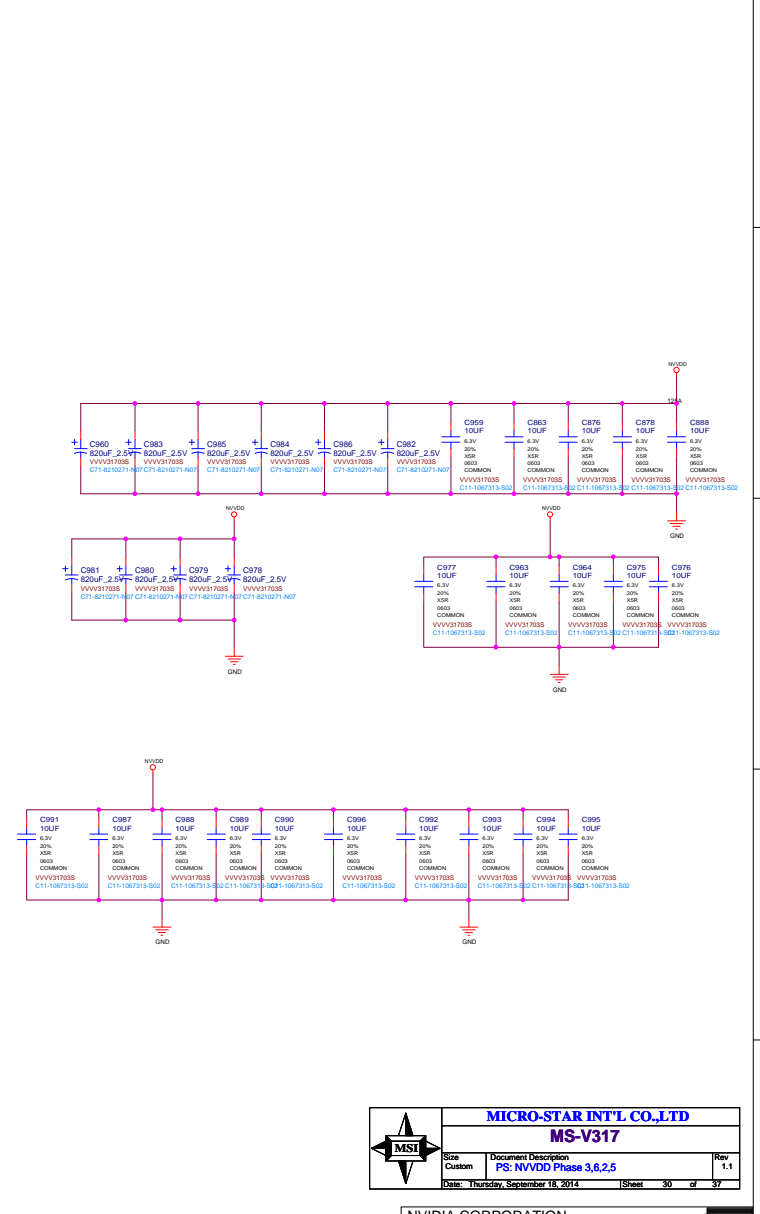
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PAGE DETAIL	PS: NVDD Controller




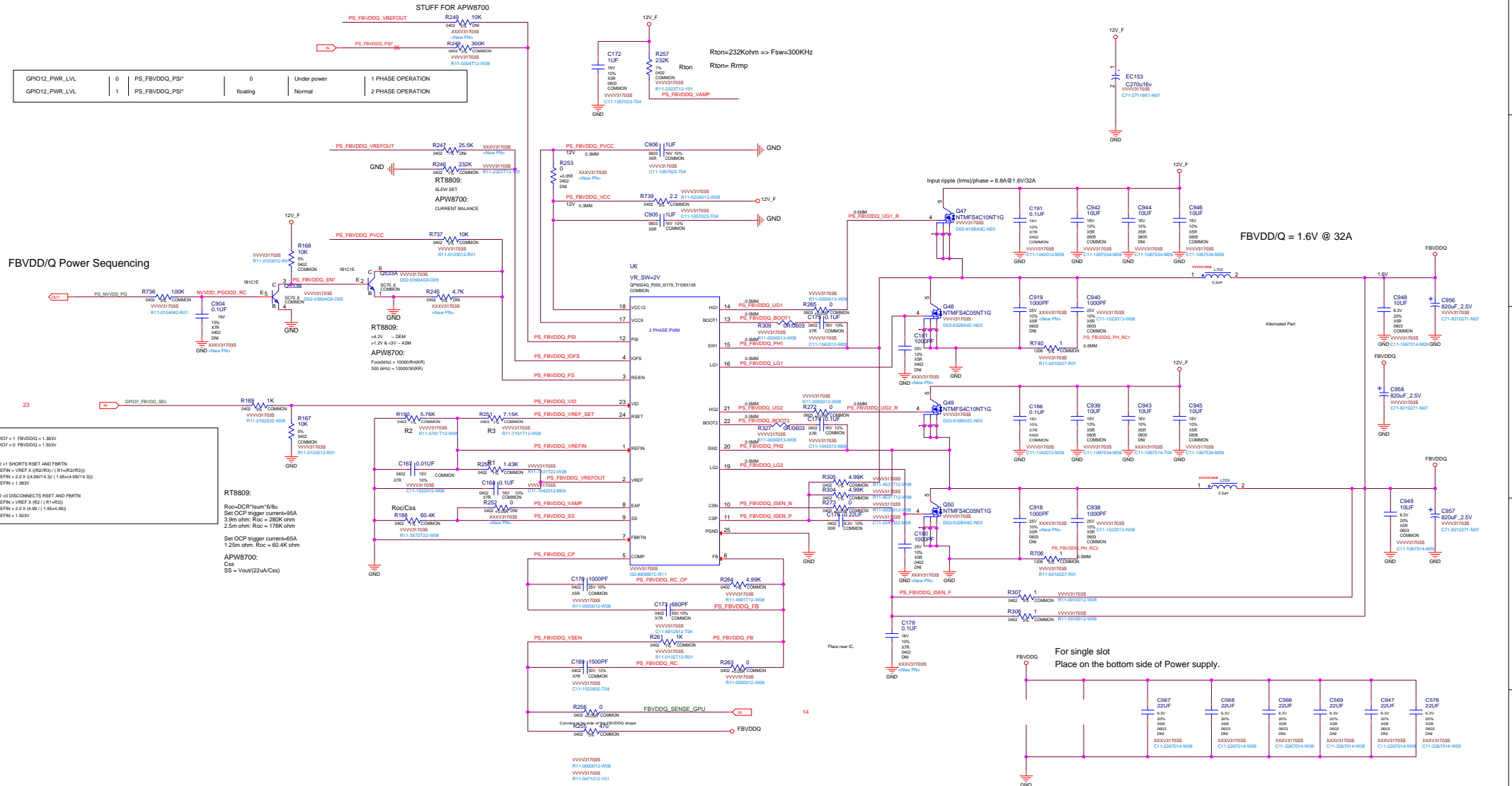
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NV_PN	600-1G401-BASE-QS1		
PCB REV	PG401-A02	PAGE	29 OF 37
BOM REV	A	DATE	04-AUG-2014



NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN	600-1G401-BASE-QS1		
PCB REV	BGM401-A02	PAGE	30 OF 37
COM REV	A	DATE	04-AUG-2014



For single slot
Place on the bottom side of Power supply.

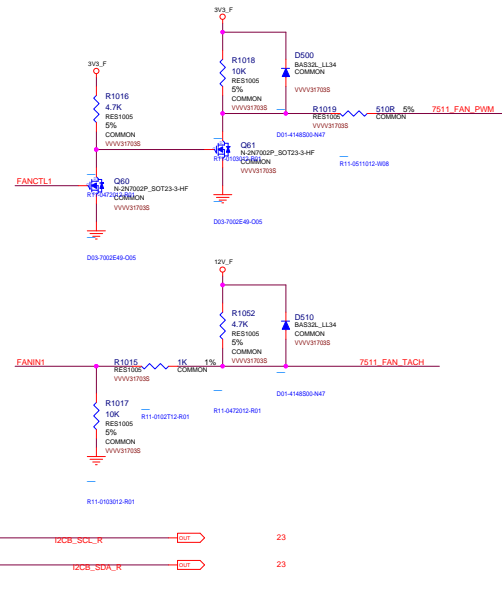
NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN		600-1G401-BASE-QS1	
PCB REV	PG401-A02	PAGE	31 OF 37
BOM REV	A	DATE	04-AUG-2014

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Layout notice :

- *Add ground shielding for D+ and Dtraces.
- *D+/D- route has to be away from the high noise area.
- *The recommended traces width and ground shielding spacing are 10mils.

Please refer datasheet
TCRIT_SET Table
If floating, shutdown temp. set to 65°C



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IN 7511_FAN_PWM
IN 7511_FAN_TACH

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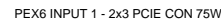
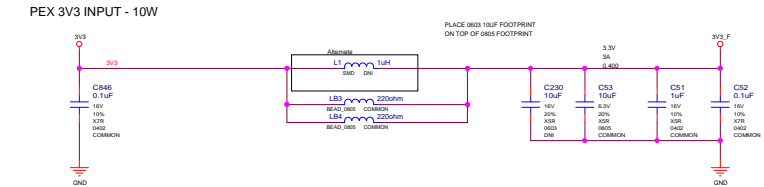


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PCB REV	PG401-A02	PAGE	32 OF 37
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PCB REV	PG401-A02	PAGE	33 OF 37
BOM REV	A	DATE	04-AUG-2014

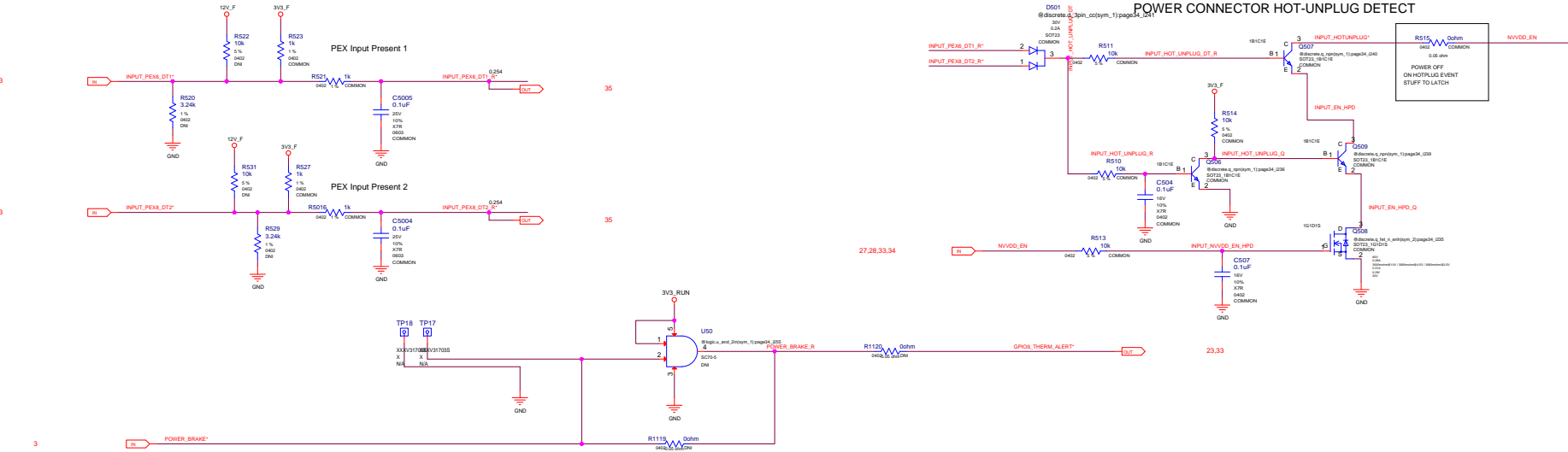
ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	PS: Inputs, Filtering, and Monitoring

PCB REV	PG401-A02	PAGE	33 OF 37
BOM REV	A	DATE	04-AUG-2014

THERM OVERT SHUTDOWN LATCH

IFP_IOVDD (backdrive prevention)

PEX Input - NVVDD Power Sequence



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ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
PAGE DETAIL	PS: Shutdown

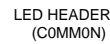
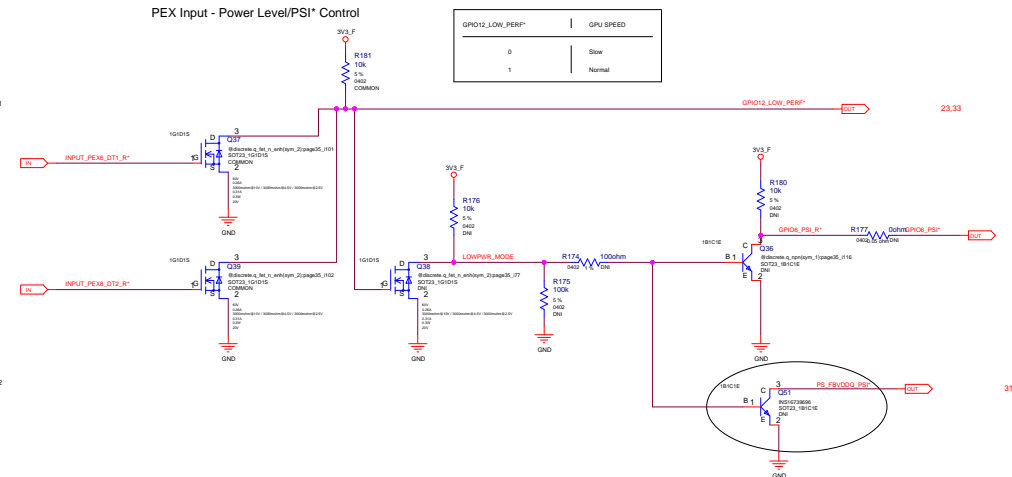
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2701 SAN TOMAS EXPRESSWAY
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NV_P/N 600-1G401-BASE-QS1

PCB REV	PG401-A02	PAGE	34 OF 37
BOX REV	A	DATE	04-AUG-2014





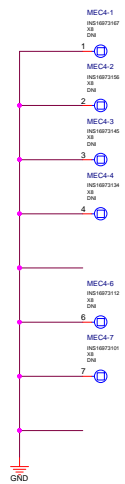
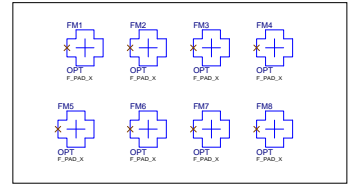
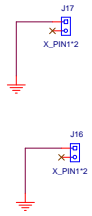
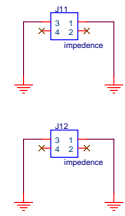
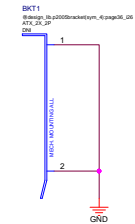
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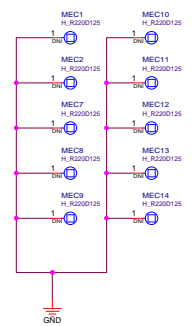
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Brackets:




Mechanical Holes Symbol



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PAGE DETAIL	MECH Bracket/Thermal



MICRO-STAR INT'L CO.,LTD
MS-V317

Size Custom


Document Description
Mechanical: Bracket/Thermal Solution

Rev 1-1

Date: Thursday, September 18, 2014

Sheet 36 of 37

NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
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NV_P/N

600-1G401-BASE-QS1

PCB REV

PG401-AD2

BOX REV

A

PAGE

36 OF 37

DATE

04-AUG-2014

- Page37:
- 1.P17 增加DVI ESD
 - 2.P18~P21 修改HDMI,DP footprint, 增加HDMI ESD
 - 3.简化S L I 線路
 - 4.移除原本FBVDDQ線路
 - 5.P27~P30 更換NVVD 線路
 - 6.P31~32 移除dynamic power circuit/增加風扇7511線路
 - 7.P33 更換反插8PIN,Input choke
 - 8.P35 增加MEM PSI 晶體
 - 9.Remove MICROCONTROLLER




MICRO-STAR INT'L CO.,LTD		
MS-V317		
Size	Document Description	Rev
Custom	NA	1.0
Date: Thursday, September 18, 2014		Sheet 37 of 37

NVIDIA CORPORATION

2701 SAN TOMAS EXPRESSWAY

SANTA CLARA, CA 95050, USA



NV_PN	600-1G401-BASE-QS1		
PCB REV	PG401-A02	PAGE	37 OF 37
BOM REV	A	DATE	04-AUG-2014

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