

P262: NV44/G3-64, TSOP MEMORY x16

REV HISTORY


A01

- 9/22/2004:
- Changed TMDS, PLLVDD to PLLVDD
 - Added bead option to PLLVDD rail of NV44
 - Changed RSET values for DACA and DACB
 - Changed DACB RSET FET to a dual package with GPIO11 control-Macrovision
 - Added F3V3 bypass to PLLVDD linear regulator
 - Changed location of R62

REV	VARIANT	NVPN	ASSEMBLY
0	BASE	600-102pp-xxxx-vvv	BASE LEVEL GENERIC SCHEMATIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
1	0000	600-10262-0000-000	<UNDEFINED>
2	0001	600-10262-0001-000	<UNDEFINED>
3	0002	600-10262-0002-000	<UNDEFINED>
4	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
5	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
6	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
7	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
8	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
9	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
10	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
11	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
12	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
13	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
14	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>
15	<UNDEFINED>	<UNDEFINED>	<UNDEFINED>

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL P228 Overview



Micro-Star International Co., LTD.

V001

Size Custom Document Number Rev A00

Date Monday, February 14, 2005 Sheet 1 of 19

3V3

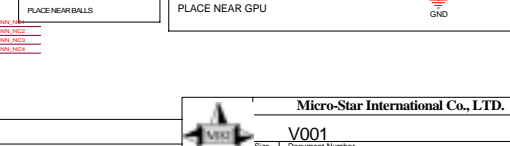
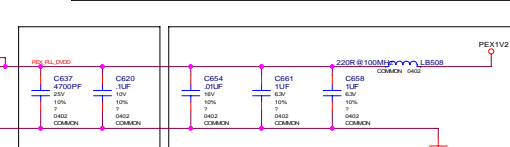
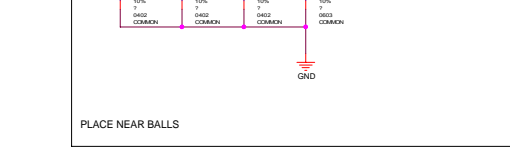
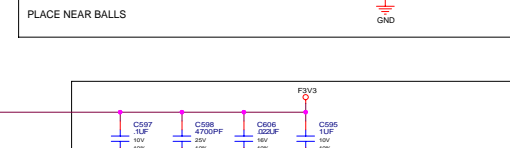
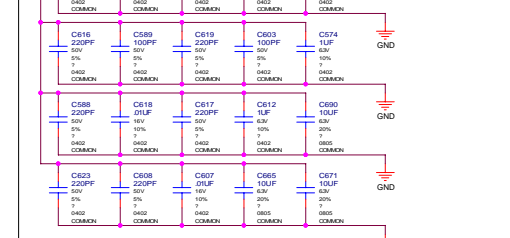
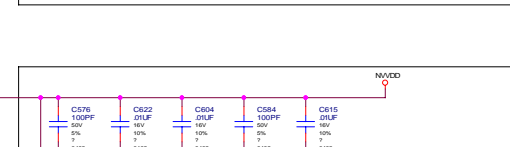
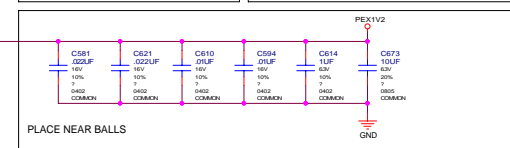
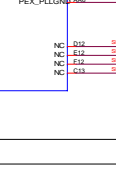
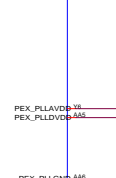
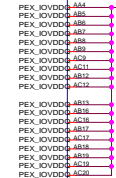
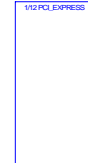
PLACE NEAR FINGERS

C44
1uF
10V
10%
7
0603
COMMON

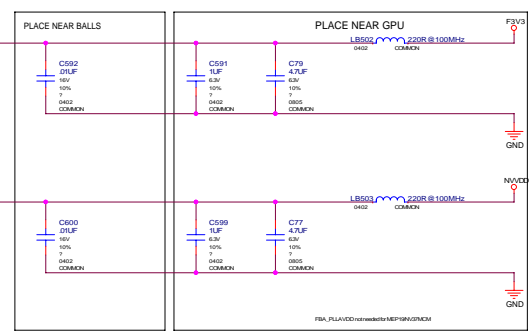
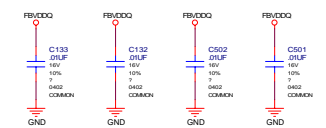
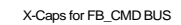
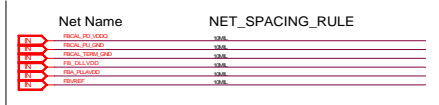
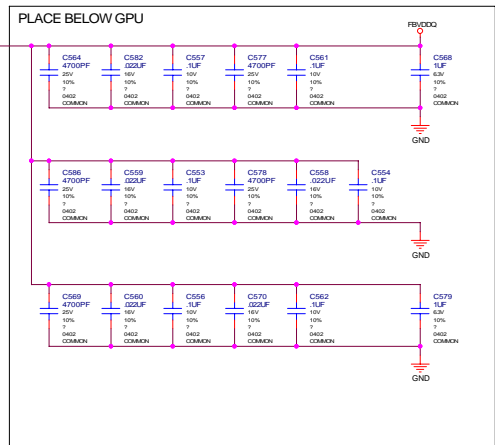
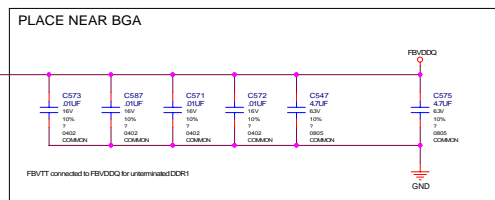
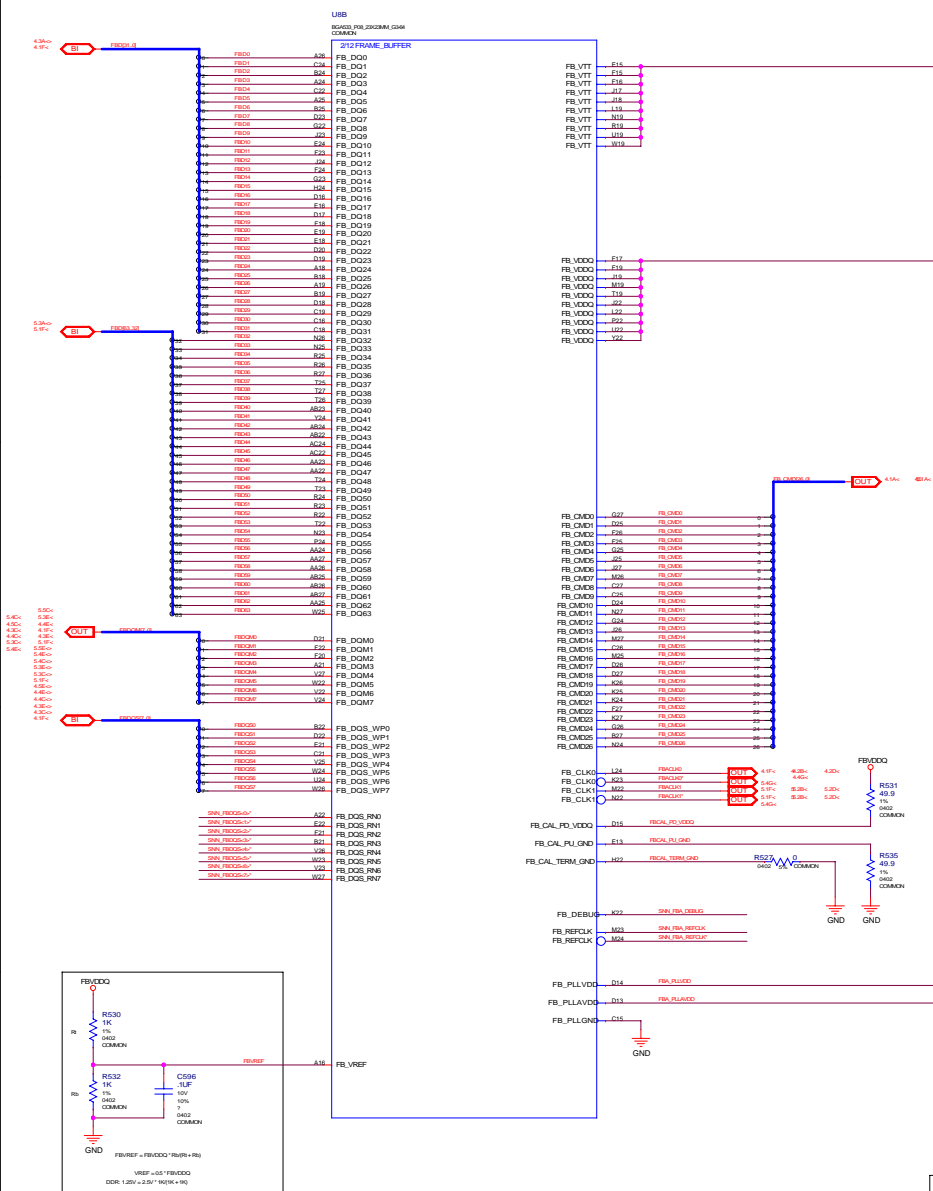
C40
0.1uF
10V
10%
7
0402
COMMON

GND

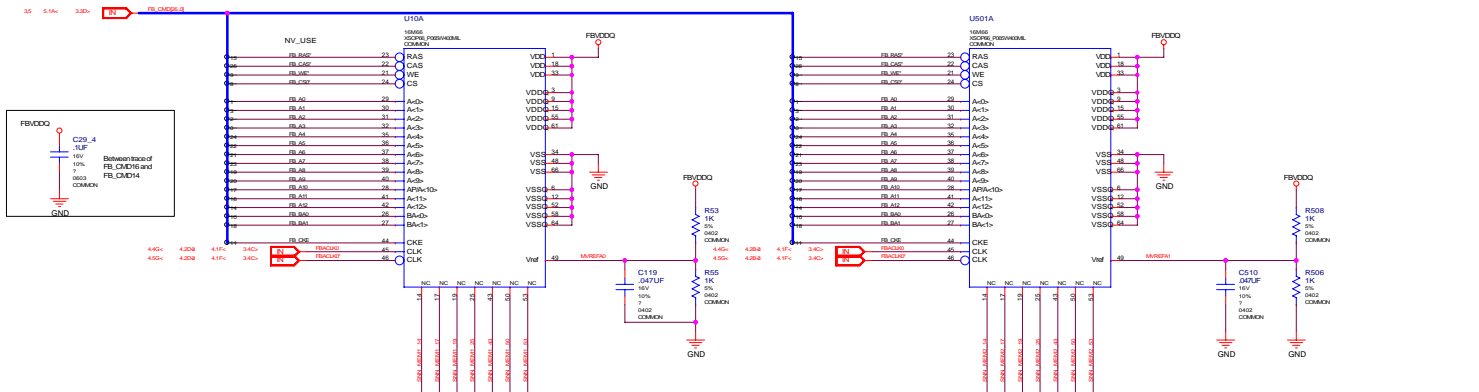
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, PERFORMANCE BENCHMARKS, SLICES, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VULNERABILITIES OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.



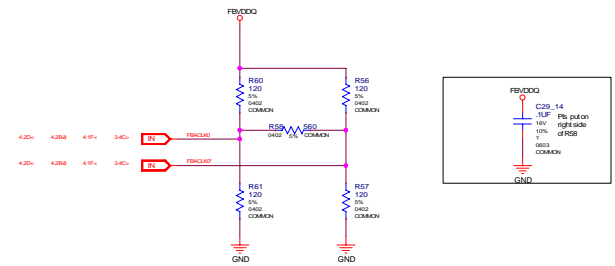
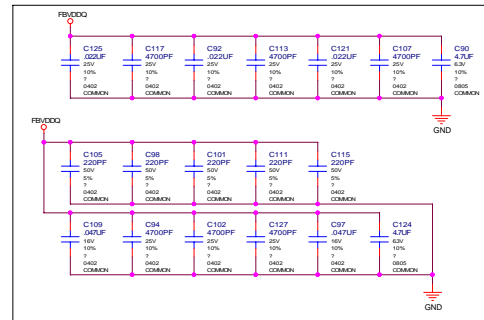
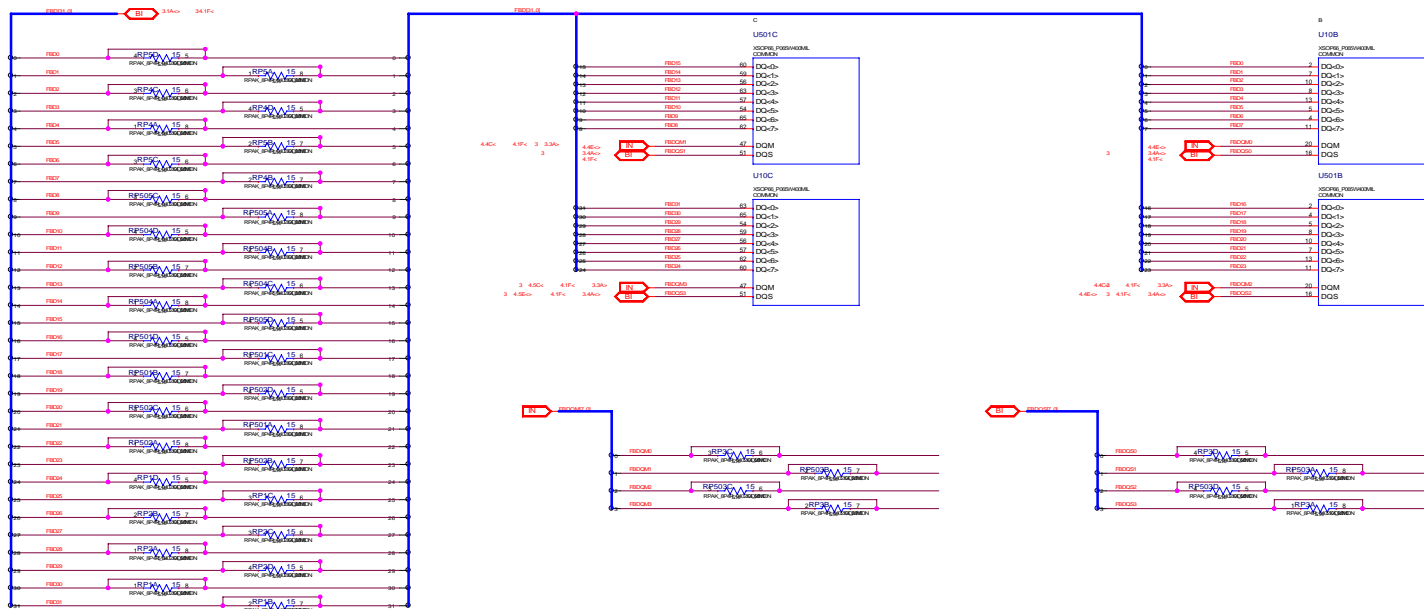
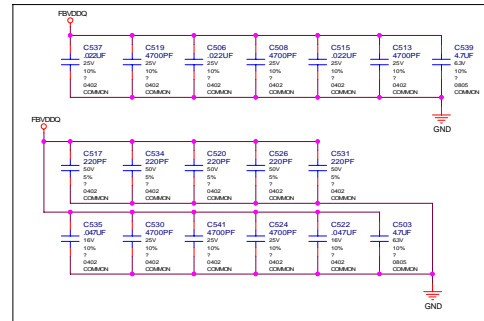
GPU: FB-Interface



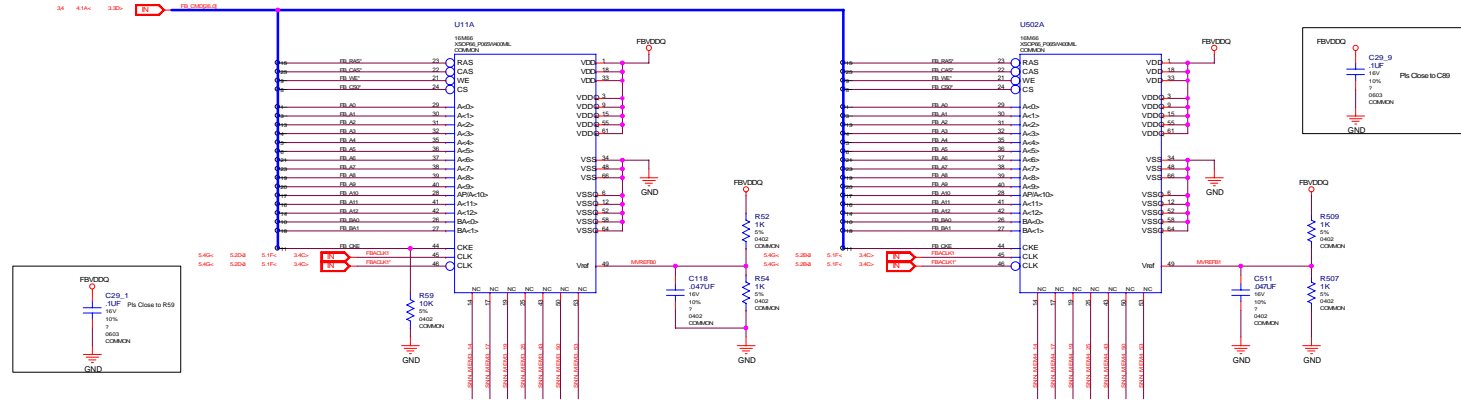
Memory Bit
0..31



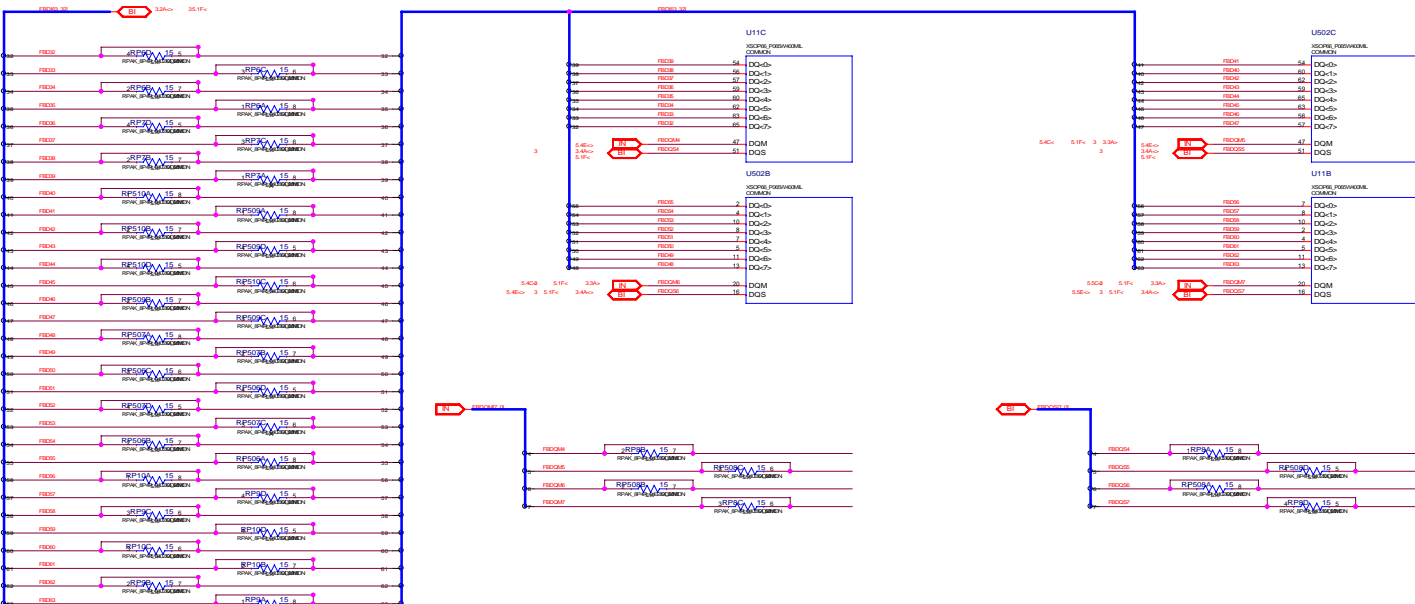
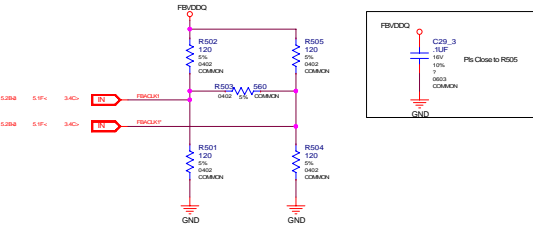
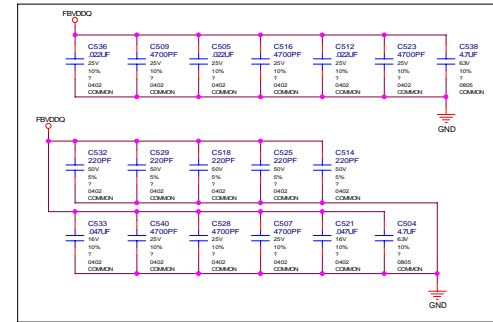
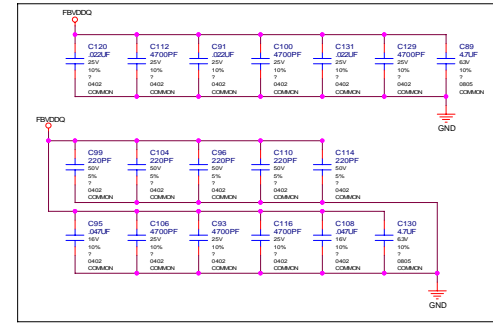
	Net Name	Diffpair	NET_SPACING_RULE
4.0u		DIFFPAIR	200
4.0u		DIFFPAIR	200
3.6u		DIFFPAIR	200
4.0u		DIFFPAIR	200
3.5u		DIFFPAIR_2	320
3.0u		DIFFPAIR_2	320
3.6u		DIFFPAIR_2	320
4.0u		DIFFPAIR_2	320
4.0u		DIFFPAIR_3	320
4.0u		DIFFPAIR_3	320
4.0u		DIFFPAIR_3	320
4.0u		DIFFPAIR_3	320



Memory Bit 32..63



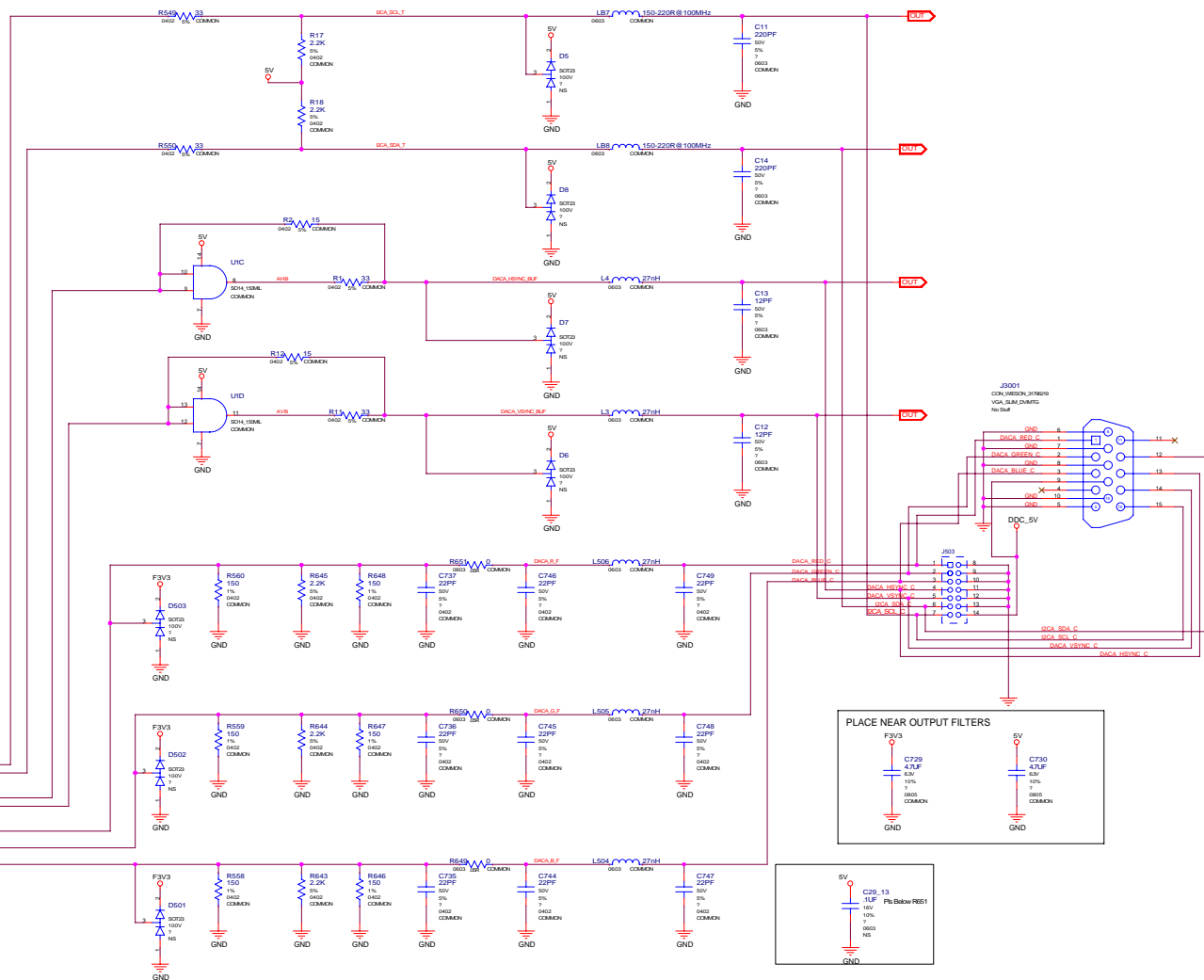
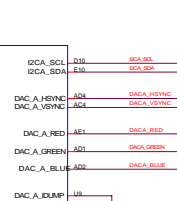
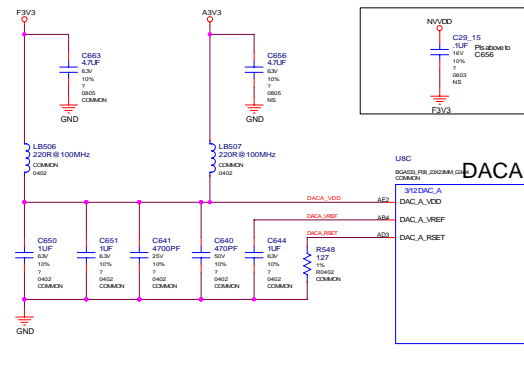
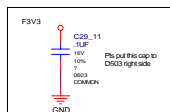
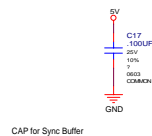
Net Name	Diffpair	NET_SPACING_RULE
FBVDDQ	FBVDDQ1 FBVDDQ2	22A
FBVDDQ	FBVDDQ3 FBVDDQ4	22A
FBVDDQ	FBVDDQ5 FBVDDQ6	22A
FBVDDQ	FBVDDQ7 FBVDDQ8	22A



ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC ONLY, COMMON & NO. STUFF ASSEMBLY NOTES AND BOM NOT FINAL
Memory 1st bank 32..63

DAC-A, DB15 Connector

	Net Name	M_LINE_WIDTH	NET_SPACING_TYPE
100	DQ0A_001		100M
101	DQ0A_004		100M
102	DQ0A_007M01		100M
103	DQ0A_007M02		100M
104	DQ0A_007M03		100M
105	DQ0A_007M04		100M
106	DQ0A_007M05		100M
107	DQ0A_007M06		100M
108	DQ0A_007M07		100M
109	DQ0A_007M08		100M
110	DQ0A_007M09		100M
111	DQ0A_007M10		100M
112	DQ0A_007M11		100M
113	DQ0A_007M12		100M
114	DQ0A_007M13		100M
115	DQ0A_007M14		100M
116	DQ0A_007M15		100M
117	DQ0A_007M16		100M
118	DQ0A_007M17		100M
119	DQ0A_007M18		100M
120	DQ0A_007M19		100M
121	DQ0A_007M20		100M
122	DQ0A_007M21		100M
123	DQ0A_007M22		100M
124	DQ0A_007M23		100M
125	DQ0A_007M24		100M
126	DQ0A_007M25		100M
127	DQ0A_007M26		100M
128	DQ0A_007M27		100M
129	DQ0A_007M28		100M
130	DQ0A_007M29		100M
131	DQ0A_007M30		100M
132	DQ0A_007M31		100M
133	DQ0A_007M32		100M
134	DQ0A_007M33		100M
135	DQ0A_007M34		100M
136	DQ0A_007M35		100M
137	DQ0A_007M36		100M
138	DQ0A_007M37		100M
139	DQ0A_007M38		100M
140	DQ0A_007M39		100M
141	DQ0A_007M40		100M
142	DQ0A_007M41		100M
143	DQ0A_007M42		100M
144	DQ0A_007M43		100M
145	DQ0A_007M44		100M
146	DQ0A_007M45		100M
147	DQ0A_007M46		100M
148	DQ0A_007M47		100M
149	DQ0A_007M48		100M
150	DQ0A_007M49		100M
151	DQ0A_007M50		100M
152	DQ0A_007M51		100M
153	DQ0A_007M52		100M
154	DQ0A_007M53		100M
155	DQ0A_007M54		100M
156	DQ0A_007M55		100M
157	DQ0A_007M56		100M
158	DQ0A_007M57		100M
159	DQ0A_007M58		100M
160	DQ0A_007M59		100M
161	DQ0A_007M60		100M
162	DQ0A_007M61		100M
163	DQ0A_007M62		100M
164	DQ0A_007M63		100M
165	DQ0A_007M64		100M
166	DQ0A_007M65		100M
167	DQ0A_007M66		100M
168	DQ0A_007M67		100M
169	DQ0A_007M68		100M
170	DQ0A_007M69		100M
171	DQ0A_007M70		100M
172	DQ0A_007M71		100M
173	DQ0A_007M72		100M
174	DQ0A_007M73		100M
175	DQ0A_007M74		100M
176	DQ0A_007M75		100M
177	DQ0A_007M76		100M
178	DQ0A_007M77		100M
179	DQ0A_007M78		100M
180	DQ0A_007M79		100M
181	DQ0A_007M80		100M
182	DQ0A_007M81		100M
183	DQ0A_007M82		100M
184	DQ0A_007M83		100M
185	DQ0A_007M84		100M
186	DQ0A_007M85		100M
187	DQ0A_007M86		100M
188	DQ0A_007M87		100M
189	DQ0A_007M88		100M
190	DQ0A_007M89		100M
191	DQ0A_007M90		100M
192	DQ0A_007M91		100M
193	DQ0A_007M92		100M
194	DQ0A_007M93		100M
195	DQ0A_007M94		100M
196	DQ0A_007M95		100M
197	DQ0A_007M96		100M
198	DQ0A_007M97		100M
199	DQ0A_007M98		100M
200	DQ0A_007M99		100M
201	DQ0A_007M100		100M
202	DQ0A_007M101		100M
203	DQ0A_007M102		100M
204	DQ0A_007M103		100M
205	DQ0A_007M104		100M
206	DQ0A_007M105		100M
207	DQ0A_007M106		100M
208	DQ0A_007M107		100M
209	DQ0A_007M108		100M
210	DQ0A_007M109		100M
211	DQ0A_007M110		100M
212	DQ0A_007M111		100M
213	DQ0A_007M112		100M
214	DQ0A_007M113		100M
215	DQ0A_007M114		100M
216	DQ0A_007M115		100M
217	DQ0A_007M116		100M
218	DQ0A_007M117		100M
219	DQ0A_007M118		100M
220	DQ0A_007M119		100M
221	DQ0A_007M120		100M
222	DQ0A_007M121		100M
223	DQ0A_007M122		100M
224	DQ0A_007M123		100M
225	DQ0A_007M124		100M
226	DQ0A_007M125		100M
227	DQ0A_007M126		100M
228	DQ0A_007M127		100M
229	DQ0A_007M128		100M
230	DQ0A_007M129		100M
231	DQ0A_007M130		100M
232	DQ0A_007M131		100M
233	DQ0A_007M132		100M
234	DQ0A_007M133		100M
235	DQ0A_007M134		100M
236	DQ0A_007M135		100M
237	DQ0A_007M136		100M
238	DQ0A_007M137		100M
239	DQ0A_007M138		100M
240	DQ0A_007M139		100M
241	DQ0A_007M140		100M
242	DQ0A_007M141		100M
243	DQ0A_007M142		100M
244	DQ0A_007M143		100M
245	DQ0A_007M144		100M
246	DQ0A_007M145		100M
247	DQ0A_007M146		100M
248	DQ0A_007M147		100M
249	DQ0A_007M148		100M
250	DQ0A_007M149		100M
251	DQ0A_007M150		100M
252	DQ0A_007M151		100M
253	DQ0A_007M152		100M
254	DQ0A_007M153		100M
255	DQ0A_007M154		100M
256	DQ0A_007M155		100M
257	DQ0A_007M156		100M
258	DQ0A_007M157		100M
259	DQ0A_007M158		100M
260	DQ0A_007M159		100M
261	DQ0A_007M160		100M
262	DQ0A_007M161		100M
263	DQ0A_007M162		100M
264	DQ0A_007M163		100M
265	DQ0A_007M164		100M
266	DQ0A_007M165		100M
267	DQ0A_007M166		100M
268	DQ0A_007M167		100M
269	DQ0A_007M168		100M
270	DQ0A_007M169		100M
271	DQ0A_007M170		100M
272	DQ0A_007M171		100M
273	DQ0A_007M172		100M
274	DQ0A_007M173		100M
275	DQ0A_007M174		100M
276	DQ0A_007M175		100M
277	DQ0A_007M176		100M
278	DQ0A_007M177		100M
279	DQ0A_007M178		100M
280	DQ0A_007M179		100M
281	DQ0A_007M180		100M
282	DQ0A_007M181		100M
283	DQ0A_007M182		100M
284	DQ0A_007M183		100M
285	DQ0A_007M184		100M
286	DQ0A_007M185		100M
287	DQ0A_007M186		100M
288	DQ0A_007M187		100M
289	DQ0A_007M188		100M
290	DQ0A_007M189		100M
291	DQ0A_007M190		100M
292	DQ0A_007M191		100M
293	DQ0A_007M192		100M
294	DQ0A_007M193		100M
295	DQ0A_007M194		100M
296	DQ0A_007M195		100M
297	DQ0A_007M196		100M
298	DQ0A_007M197		100M
299	DQ0A_007M198		100M
300	DQ0A_007M199		100M
301	DQ0A_007M200		100M
302	DQ0A_007M201		100M
303	DQ0A_007M202		100M
304	DQ0A_007M203		100M
305	DQ0A_007M204		100M
306	DQ0A_007M205		100M
307	DQ0A_007M206		100M
308	DQ0A_007M207		100M
309	DQ0A_007M208		100M
310	DQ0A_007M209		100M
311	DQ0A_007M210		100M
312	DQ0A_007M211		100M
313	DQ0A_007M212		100M
314	DQ0A_007M213		100M
315	DQ0A_007M214		100M
316	DQ0A_007M215		100M
317	DQ0A_007M216		100M
318	DQ0A_007M217		100M
319	DQ0A_007M218		100M
320	DQ0A_007M219		100M
321	DQ0A_007M220		100M
322	DQ0A_007M221		100M
323	DQ0A_007M222		100M
324	DQ0A_007M223		100M
325	DQ0A_007M224		100M
326	DQ0A_007M225		100M
327	DQ0A_007M226		100M
328	DQ0A_007M227		100M
329	DQ0A_007M228		100M
330	DQ0A_007M229		100M
331	DQ0A_007M230		100M
332	DQ0A_007M231		100M
333	DQ0A_007M232		100M
334	DQ0A_007M233		100M
335	DQ0A_007M234		100M
336	DQ0A_007M235		100M
337	DQ0A_007M236		100M
338	DQ0A_007M237		100M
339	DQ0A_007M238		100M
340	DQ0A_007M239		100M
341	DQ0A_007M240		100M
342	DQ0A_007M241		100M
343	DQ0A_007M242		100M
344	DQ0A_007M243		100M
345	DQ0A_007M244		100M
346	DQ0A_007M245		100M
347	DQ0A_007M246		100M
348	DQ0A_007M247		100M
349	DQ0A_007M248		100M
350	DQ0A_007M249		100M
351	DQ0A_007M250		100M
352	DQ0A_007M251		100M
353	DQ0A_007M252		100M
354	DQ0A_007M253		100M
355	DQ0A_007M254		100M
356	DQ0A_007M255		100M
357	DQ0A_007M256		100M
358	DQ0A_007M257		100M
359	DQ0A_007M258		100M
360	DQ0A_007M259		100M
361	DQ0A_007M260		100M
362	DQ0A_007M261		100M
363	DQ0A_007M262		100M
364	DQ0A_007M263		100M
365	DQ0A_007M264		100M
366	DQ0A_007M265		100M
367	DQ0A_007M266		100M
368	DQ0A_007M267		100M
369	DQ0A_007M268		100M
370	DQ0A_007M269		100M
371	DQ0A_007M270		100M
372	DQ0A_007M271		100M
373	DQ0A_007M272		100M
374	DQ0A_007M273		100M
375	DQ0A_007M274		100M
376	DQ0A_007M275		100M
377	DQ0A_007M276		100M
378	DQ0A_007M277		100M
379	DQ0A_007M278		100M
380	DQ0A_007M279		100M
381	DQ0A_007M280		100M
382	DQ0A_007M281		100M
383	DQ0A_007M282		100M
384	DQ0A_007M283		100M
385	DQ0A_007M284		100M
386	DQ0A_007M285		100M
387	DQ0A_007M286		100M
388	DQ0A_007M287		100M
389	DQ0A_007M288		100M
390	DQ0A_007M289		100M
391	DQ0A_007M290		100M
392	DQ0A_007M291		100M
393	DQ0A_007M292		100M
394	DQ0A_007M293		100M
395	DQ0A_007M294		100M
396	DQ0A_007M295		100M
397	DQ0A_007M296		100M
398	DQ0A_007M297		100M
399	DQ0A_007M298		100M
400	DQ0A_007M299		100M
401	DQ0A_007M300		100M
402	DQ0A_007M301		100M
403	DQ0A_007M302		100



PLACE NEAR OUTPUT FILTERS

The image shows two circuit diagrams side-by-side, illustrating the placement of output filters near the output. Both diagrams show a power supply line connected to a capacitor (C729 or C730) which is then connected to ground (GND). The capacitor is labeled with its value (4.7uF), voltage rating (63V), and tolerance (10%). The output voltage is indicated above the capacitor: 3V3 on the left and 5V on the right. The ground connection is labeled GND.

Left diagram: 3V3 output, capacitor C729 (4.7uF, 63V, 10%), connected to GND.

Right diagram: 5V output, capacitor C730 (4.7uF, 63V, 10%), connected to GND.

5V

C29_13
.1uF
16V
10%
?
0603
NS

Pls Below R

GND

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY CUSTOM.

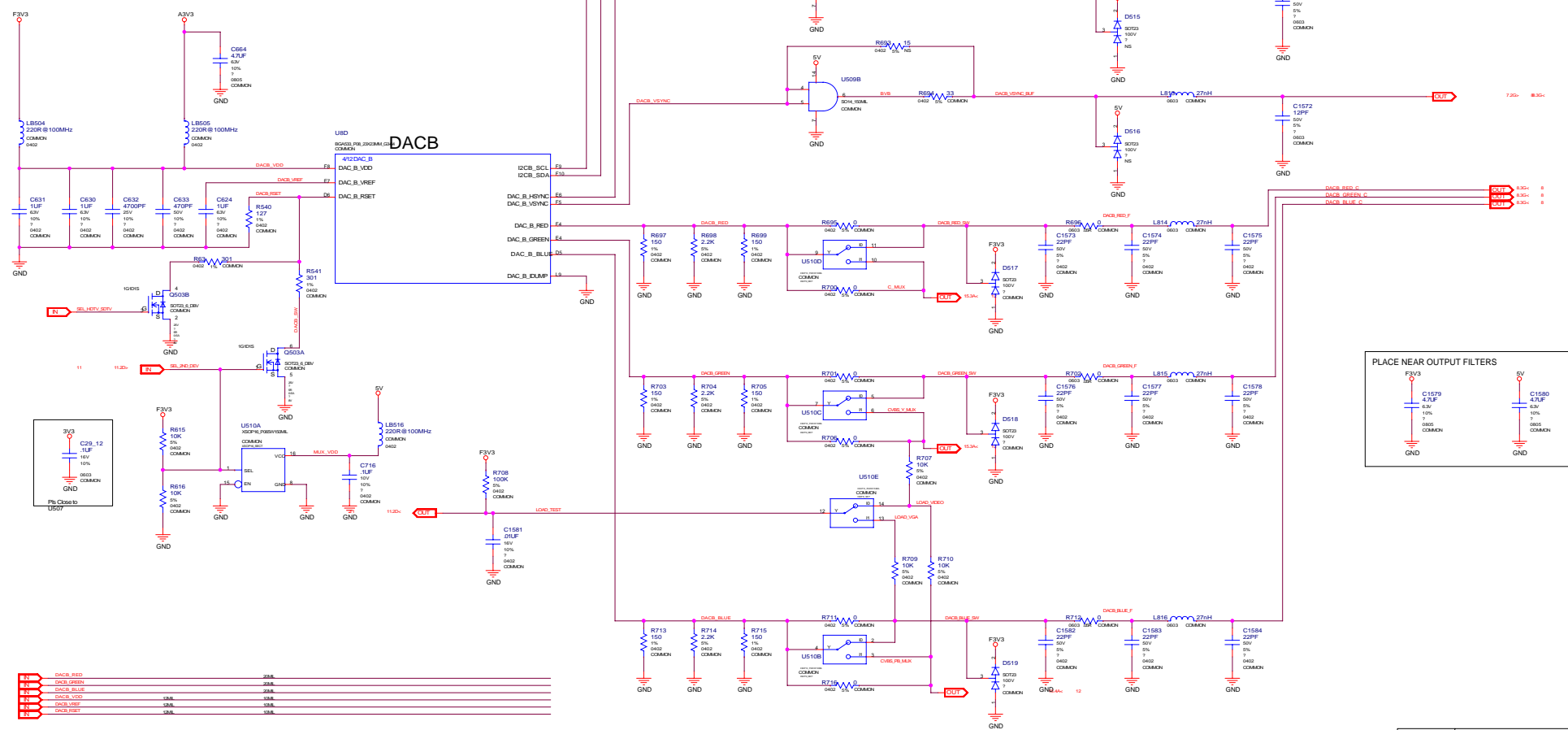
ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE/DETAIL	DACA, DACB, DACC, Sync Buffers

Micro-Star International Co., LTD.

V001

Size	Document Number
------	-----------------

Date: Monday, February 14, 2005 Sheet 6 of 1

DAC-B, MUX,
DB15

PLACE NEAR OUTPUT FILTERS



Micro-Star International Co., LTD.

V001

Size	Document Number
------	-----------------

Custom Add

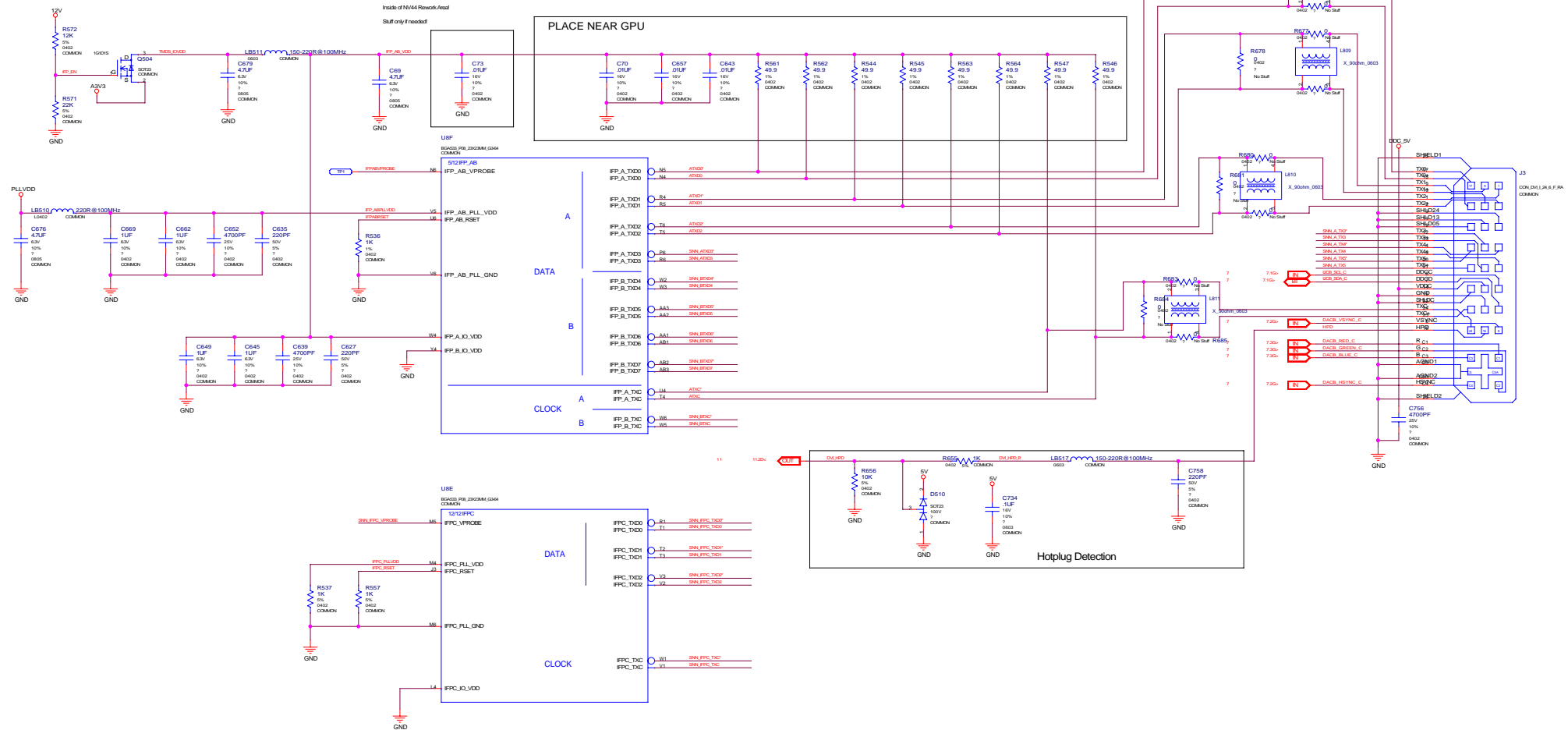
Date: Monday, February 14, 2006 Sheet 7 of 13

[illegible]

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOMs, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, MATERIALS) ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	VGA Output, TV Out

Internal TMDS,
DVI-Connector

[illegible]

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	TMD5
	Interlock



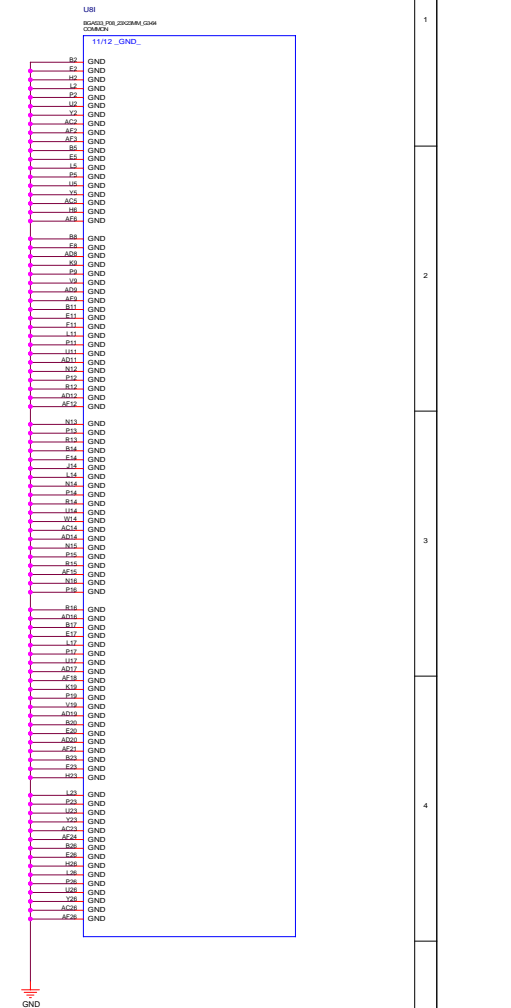
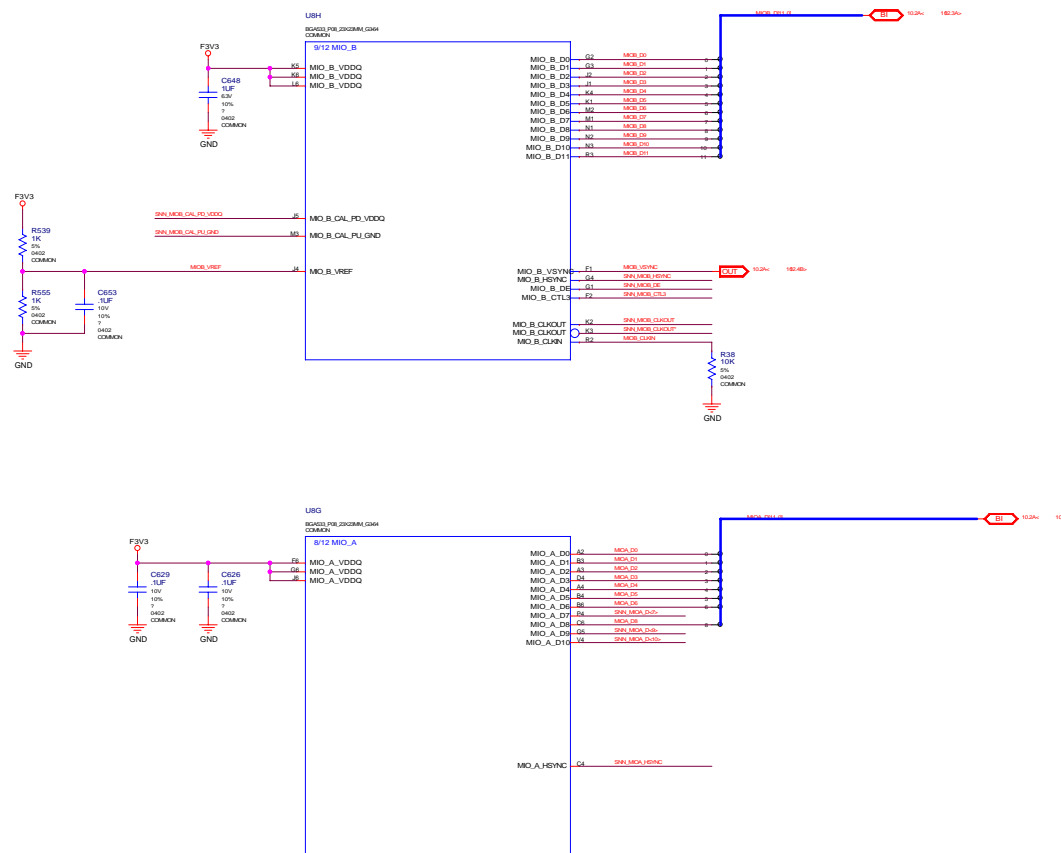
Micro-Star International Co., LTD.

V001


Size Custom	Document Number	Rev A00
Date: Monday, February 14, 2005	Sheet 8 of 13	

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, MATERIALS) ARE BEING PROVIDED "AS IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

MIOA, MIOB Interface, LPC-ROM



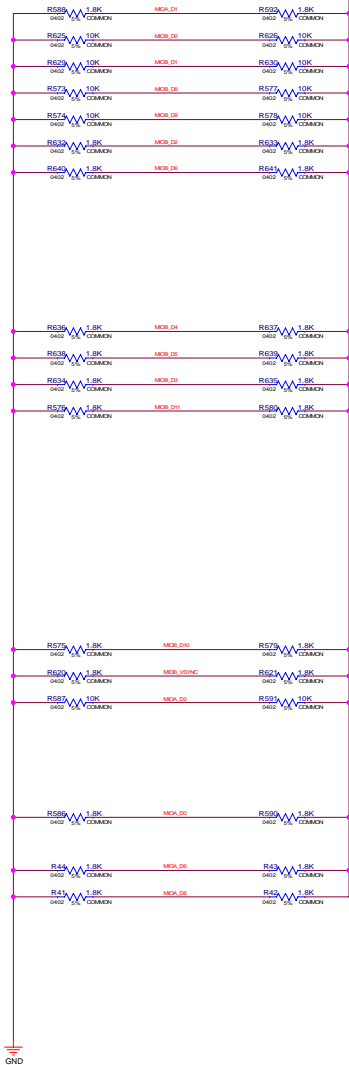
ASSEMBLY	LPC_ROM
PAGE DETAIL	MOA, MIOB Interface, LPC_ROM

	Micro-Star International Co., LTD.		
	V001		
	Size Custom	Document Number	Rev A00
	Date: Monday, February 14, 2005	Sheet 9 of 13	

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

STRAPS, Mechanical Parts

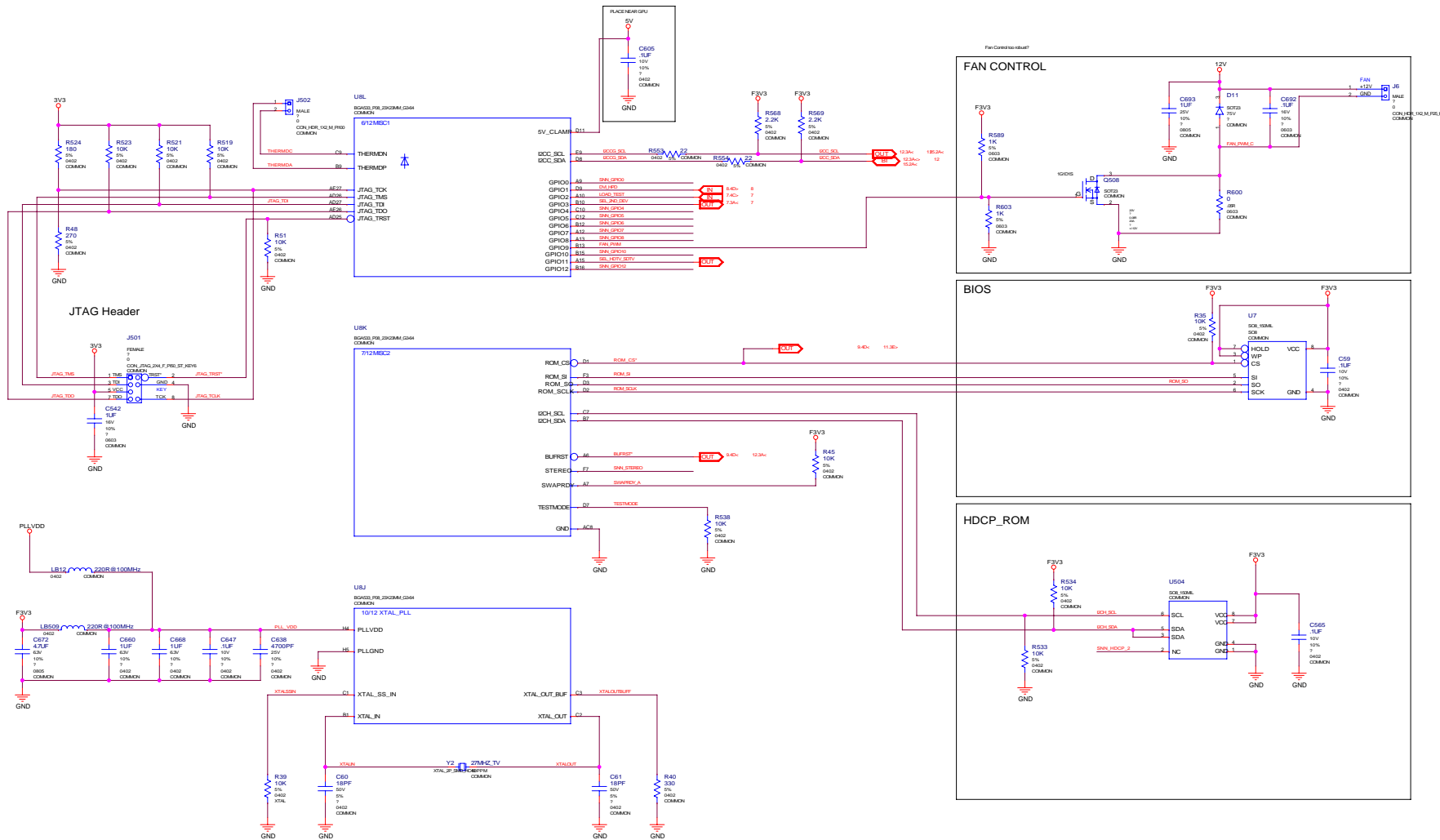
NV44 STRAPS



Bit Signal	Values
00: PCI_AD_SWAP	01=SWAPPED 1=DEFAULT
01: SUB_VENDOR	0=NO_VENDOR 1=READ FROM BIOS
02: RWM_CPLT_0	0000 REFU 0001 SWAP/READ TSCP 0002 REFU 0003 REFU 0004 REFU 0005 REFU 0006 REFU 0007 REFU 0008 REFU 0009 REFU 0010 REFU 0011 REFU
03: RWM_CPLT_1	0000 REFU 0001 SWAP/READ TSCP 0002 REFU 0003 REFU 0004 REFU 0005 REFU 0006 REFU 0007 REFU 0008 REFU 0009 REFU 0010 REFU 0011 REFU
04: RWM_CPLT_2	0000 REFU 0001 SWAP/READ TSCP 0002 REFU 0003 REFU 0004 REFU 0005 REFU 0006 REFU 0007 REFU 0008 REFU 0009 REFU 0010 REFU 0011 REFU
05: RWM_CPLT_3	0000 REFU 0001 SWAP/READ TSCP 0002 REFU 0003 REFU 0004 REFU 0005 REFU 0006 REFU 0007 REFU 0008 REFU 0009 REFU 0010 REFU 0011 REFU
06: RWM_CPLT_4	0000 REFU 0001 SWAP/READ TSCP 0002 REFU 0003 REFU 0004 REFU 0005 REFU 0006 REFU 0007 REFU 0008 REFU 0009 REFU 0010 REFU 0011 REFU
07: TV_MODE_0	00=SECAM 01=NTSC 10=PAL 11=CRT
08: TV_MODE_1	00=SECAM 01=NTSC 10=PAL 11=CRT
09: AGP_30_31	0=AGP30/31 1=AGP30/31
10: AGP_32_33	0=AGP32/33 1=AGP32/33
11: AGP_34_35	0=AGP34/35 1=AGP34/35
12: AGP_36_37	0=AGP36/37 1=AGP36/37
13: AGP_38_39	0=AGP38/39 1=AGP38/39
14: AGP_40_41	0=AGP40/41 1=AGP40/41
15: AGP_42_43	0=AGP42/43 1=AGP42/43
16: AGP_44_45	0=AGP44/45 1=AGP44/45
17: AGP_46_47	0=AGP46/47 1=AGP46/47
18: AGP_48_49	0=AGP48/49 1=AGP48/49
19: AGP_50_51	0=AGP50/51 1=AGP50/51
20: AGP_52_53	0=AGP52/53 1=AGP52/53
21: AGP_54_55	0=AGP54/55 1=AGP54/55
22: AGP_56_57	0=AGP56/57 1=AGP56/57
23: AGP_58_59	0=AGP58/59 1=AGP58/59
24: AGP_60_61	0=AGP60/61 1=AGP60/61
25: AGP_62_63	0=AGP62/63 1=AGP62/63
26: AGP_64_65	0=AGP64/65 1=AGP64/65
27: AGP_66_67	0=AGP66/67 1=AGP66/67
28: AGP_68_69	0=AGP68/69 1=AGP68/69
29: AGP_70_71	0=AGP70/71 1=AGP70/71
30: AGP_72_73	0=AGP72/73 1=AGP72/73
31: AGP_74_75	0=AGP74/75 1=AGP74/75
32: AGP_76_77	0=AGP76/77 1=AGP76/77
33: AGP_78_79	0=AGP78/79 1=AGP78/79
34: AGP_80_81	0=AGP80/81 1=AGP80/81
35: AGP_82_83	0=AGP82/83 1=AGP82/83
36: AGP_84_85	0=AGP84/85 1=AGP84/85
37: AGP_86_87	0=AGP86/87 1=AGP86/87
38: AGP_88_89	0=AGP88/89 1=AGP88/89
39: AGP_90_91	0=AGP90/91 1=AGP90/91
40: AGP_92_93	0=AGP92/93 1=AGP92/93
41: AGP_94_95	0=AGP94/95 1=AGP94/95
42: AGP_96_97	0=AGP96/97 1=AGP96/97
43: AGP_98_99	0=AGP98/99 1=AGP98/99
44: AGP_100_101	0=AGP100/101 1=AGP100/101
45: AGP_102_103	0=AGP102/103 1=AGP102/103
46: AGP_104_105	0=AGP104/105 1=AGP104/105
47: AGP_106_107	0=AGP106/107 1=AGP106/107
48: AGP_108_109	0=AGP108/109 1=AGP108/109
49: AGP_110_111	0=AGP110/111 1=AGP110/111
50: AGP_112_113	0=AGP112/113 1=AGP112/113
51: AGP_114_115	0=AGP114/115 1=AGP114/115
52: AGP_116_117	0=AGP116/117 1=AGP116/117
53: AGP_118_119	0=AGP118/119 1=AGP118/119
54: AGP_120_121	0=AGP120/121 1=AGP120/121
55: AGP_122_123	0=AGP122/123 1=AGP122/123
56: AGP_124_125	0=AGP124/125 1=AGP124/125
57: AGP_126_127	0=AGP126/127 1=AGP126/127
58: AGP_128_129	0=AGP128/129 1=AGP128/129
59: AGP_130_131	0=AGP130/131 1=AGP130/131
60: AGP_132_133	0=AGP132/133 1=AGP132/133
61: AGP_134_135	0=AGP134/135 1=AGP134/135
62: AGP_136_137	0=AGP136/137 1=AGP136/137
63: AGP_138_139	0=AGP138/139 1=AGP138/139
64: AGP_140_141	0=AGP140/141 1=AGP140/141
65: AGP_142_143	0=AGP142/143 1=AGP142/143
66: AGP_144_145	0=AGP144/145 1=AGP144/145
67: AGP_146_147	0=AGP146/147 1=AGP146/147
68: AGP_148_149	0=AGP148/149 1=AGP148/149
69: AGP_150_151	0=AGP150/151 1=AGP150/151
70: AGP_152_153	0=AGP152/153 1=AGP152/153
71: AGP_154_155	0=AGP154/155 1=AGP154/155
72: AGP_156_157	0=AGP156/157 1=AGP156/157
73: AGP_158_159	0=AGP158/159 1=AGP158/159
74: AGP_160_161	0=AGP160/161 1=AGP160/161
75: AGP_162_163	0=AGP162/163 1=AGP162/163
76: AGP_164_165	0=AGP164/165 1=AGP164/165
77: AGP_166_167	0=AGP166/167 1=AGP166/167
78: AGP_168_169	0=AGP168/169 1=AGP168/169
79: AGP_170_171	0=AGP170/171 1=AGP170/171
80: AGP_172_173	0=AGP172/173 1=AGP172/173
81: AGP_174_175	0=AGP174/175 1=AGP174/175
82: AGP_176_177	0=AGP176/177 1=AGP176/177
83: AGP_178_179	0=AGP178/179 1=AGP178/179
84: AGP_180_181	0=AGP180/181 1=AGP180/181
85: AGP_182_183	0=AGP182/183 1=AGP182/183
86: AGP_184_185	0=AGP184/185 1=AGP184/185
87: AGP_186_187	0=AGP186/187 1=AGP186/187
88: AGP_188_189	0=AGP188/189 1=AGP188/189
89: AGP_190_191	0=AGP190/191 1=AGP190/191
90: AGP_192_193	0=AGP192/193 1=AGP192/193
91: AGP_194_195	0=AGP194/195 1=AGP194/195
92: AGP_196_197	0=AGP196/197 1=AGP196/197
93: AGP_198_199	0=AGP198/199 1=AGP198/199
94: AGP_200_201	0=AGP200/201 1=AGP200/201
95: AGP_202_203	0=AGP202/203 1=AGP202/203
96: AGP_204_205	0=AGP204/205 1=AGP204/205
97: AGP_206_207	0=AGP206/207 1=AGP206/207
98: AGP_208_209	0=AGP208/209 1=AGP208/209
99: AGP_210_211	0=AGP210/211 1=AGP210/211
100: AGP_212_213	0=AGP212/213 1=AGP212/213
101: AGP_214_215	0=AGP214/215 1=AGP214/215
102: AGP_216_217	0=AGP216/217 1=AGP216/217
103: AGP_218_219	0=AGP218/219 1=AGP218/219
104: AGP_220_221	0=AGP220/221 1=AGP220/221
105: AGP_222_223	0=AGP222/223 1=AGP222/223
106: AGP_224_225	0=AGP224/225 1=AGP224/225
107: AGP_226_227	0=AGP226/227 1=AGP226/227
108: AGP_228_229	0=AGP228/229 1=AGP228/229
109: AGP_230_231	0=AGP230/231 1=AGP230/231
110: AGP_232_233	0=AGP232/233 1=AGP232/233
111: AGP_234_235	0=AGP234/235 1=AGP234/235
112: AGP_236_237	0=AGP236/237 1=AGP236/237
113: AGP_238_239	0=AGP238/239 1=AGP238/239
114: AGP_240_241	0=AGP240/241 1=AGP240/241
115: AGP_242_243	0=AGP242/243 1=AGP242/243
116: AGP_244_245	0=AGP244/245 1=AGP244/245
117: AGP_246_247	0=AGP246/247 1=AGP246/247
118: AGP_248_249	0=AGP248/249 1=AGP248/249
119: AGP_250_251	0=AGP250/251 1=AGP250/251
120: AGP_252_253	0=AGP252/253 1=AGP252/253
121: AGP_254_255	0=AGP254/255 1=AGP254/255
122: AGP_256_257	0=AGP256/257 1=AGP256/257
123: AGP_258_259	0=AGP258/259 1=AGP258/259
124: AGP_260_261	0=AGP260/261 1=AGP260/261
125: AGP_262_263	0=AGP262/263 1=AGP262/263
126: AGP_264_265	0=AGP264/265 1=AGP264/265
127: AGP_266_267	0=AGP266/267 1=AGP266/267
128: AGP_268_269	0=AGP268/269 1=AGP268/269
129: AGP_270_271	0=AGP270/271 1=AGP270/271
130: AGP_272_273	0=AGP272/273 1=AGP272/273
131: AGP_274_275	0=AGP274/275 1=AGP274/275
132: AGP_276_277	0=AGP276/277 1=AGP276/277
133: AGP_278_279	0=AGP278/279 1=AGP278/279
134: AGP_280_281	0=AGP280/281 1=AGP280/281
135: AGP_282_283	0=AGP282/283 1=AGP282/283
136: AGP_284_285	0=AGP284/285 1=AGP284/285
137: AGP_286_287	0=AGP286/287 1=AGP286/287
138: AGP_288_289	0=AGP288/289 1=AGP288/289
139: AGP_290_291	0=AGP290/291 1=AGP290/291
140: AGP_292_293	0=AGP292/293 1=AGP292/293
141: AGP_294_295	0=AGP294/295 1=AGP294/295
142: AGP_296_297	0=AGP296/297 1=AGP296/297
143: AGP_298_299	0=AGP298/299 1=AGP298/299
144: AGP_300_301	0=AGP300/301 1=AGP300/301
145: AGP_302_303	0=AGP302/303 1=AGP302/303
146: AGP_304_305	0=AGP304/305 1=AGP304/305
147: AGP_306_307	0=AGP306/307 1=AGP306/307
148: AGP_308_309	0=AGP308/309 1=AGP308/309
149: AGP_310_311	0=AGP310/311 1=AGP310/311
150: AGP_312_313	0=AGP312/313 1=AGP312/313
151: AGP_314_315	0=AGP314/315 1=AGP314/315
152: AGP_316_317	0=AGP316/317 1=AGP316/317
153: AGP_318_319	0=AGP318/319 1=AGP318/319
154: AGP_320_321	0=AGP320/321 1=AGP320/321
155: AGP_322_323	0=AGP322/323 1=AGP322/323
156: AGP_324_325	0=AGP324/325 1=AGP324/325
157: AGP_326_327	0=AGP326/327 1=AGP326/327
158: AGP_328_329	0=AGP328/329 1=AGP328/329
159: AGP_330_331	0=AGP330/331 1=AGP330/331
160: AGP_332_333	0=AGP332/333 1=AGP332/333
161: AGP_334_335	0=AGP334/335 1=AGP334/335
162: AGP_336_337	0=AGP336/337 1=AGP336/337
163: AGP_338_339	0=AGP338/339 1=AGP338/339
164: AGP_340_341	0=AGP340/341 1=AGP340/341
165: AGP_342_343	0=AGP342/343 1=AGP342/343
166: AGP_344_345	0=AGP344/345 1=AGP344/345
167: AGP_346_347	0=AGP346/347 1=AGP346/347
168: AGP_348_349	0=AGP348/349 1=AGP348/349
169: AGP_350_351	0=AGP350/351 1=AGP350/351
170: AGP_352_353	0=AGP352/353 1=AGP352/353
171: AGP_354_355	0=AGP354/355 1=AGP354/355
172: AGP_356_357	0=AGP356/357 1=AGP356/357
173: AGP_358_359	0=AGP358/359 1=AGP358/359
174: AGP_360_361	0=AGP360/361 1=AGP360/361
175: AGP_362_363	0=AGP362/363 1=AGP362/363
176: AGP_364_365	0=AGP364/365 1=AGP364/365
177: AGP_366_367	0=AGP366/367 1=AGP366/367
178: AGP_368_369	0=AGP368/369 1=AGP368/369
179: AGP_370_371	0=AGP370

XTAL, GPIO, BIOS, Fan Control, JTAG Headers

Net Name	NET_PHYSICAL_TYPE	NET_SPACING_RULE
IN	XVALIN	50M
IN	XVALOUT	50M
IN	PLLVD0	50M
IN	DSP PLLVD0	50M



ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	XTAL, GPIO, BIOS, Fan Control, JTAG Headers



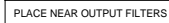
Micro-Star International Co., LTD.


V001

Size	Document Number
Custom	

Date: Monday, February 14, 2005 Sheet 11 of 13

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED AS IS. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.



	Micro-Star International Co., LTD.		
	V001		
	Size Custom	Document Number	Rev A00
	Date: Monday, February 14, 2005	Sheet 12 of 13	

ALL MEDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BONDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS-IS." THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. INDIVIDUALS MAKE NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

PowerSupplyII: 5V, DDC5V, A3V3, F3V3, TMDS_PLLVDD

