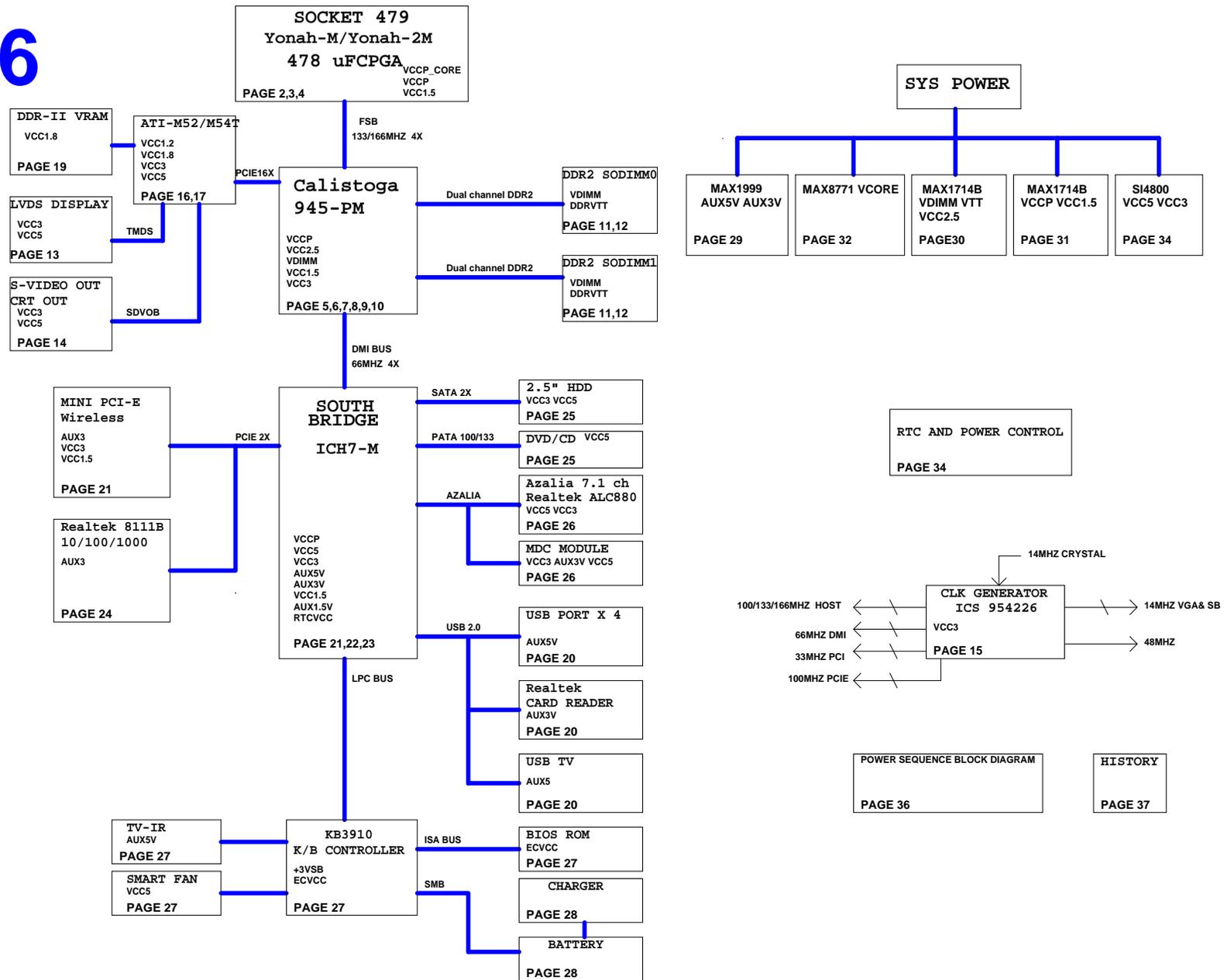


# G336



## PCB P/N:15-F72-011000

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DATE	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19	06/04/19

PAGE	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
REV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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Approved by	Checked by	Designed by

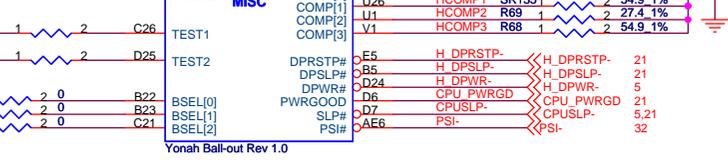
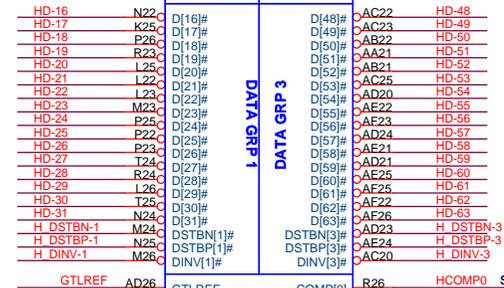
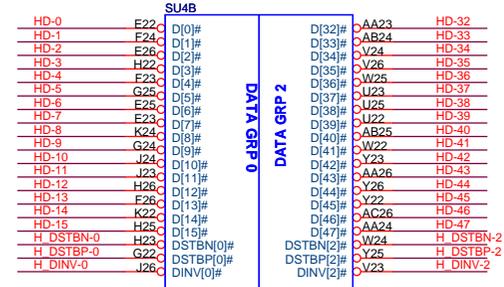
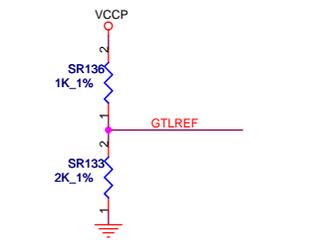
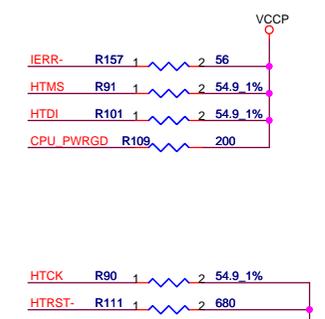
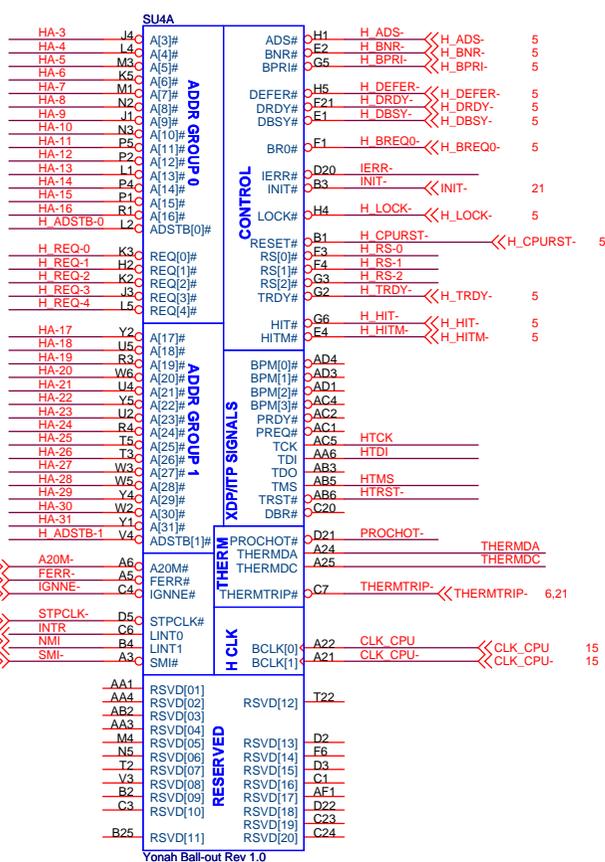
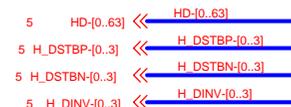
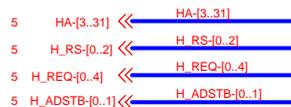
**Elitegroup Computer Systems**

Title: **Pebble Beach BLOCK DIAGRAM**

Size: \_\_\_\_\_ Document Number: \_\_\_\_\_ Rev: 1.0

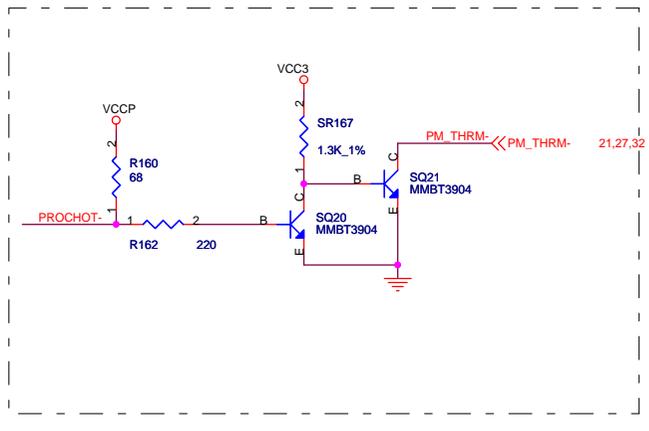
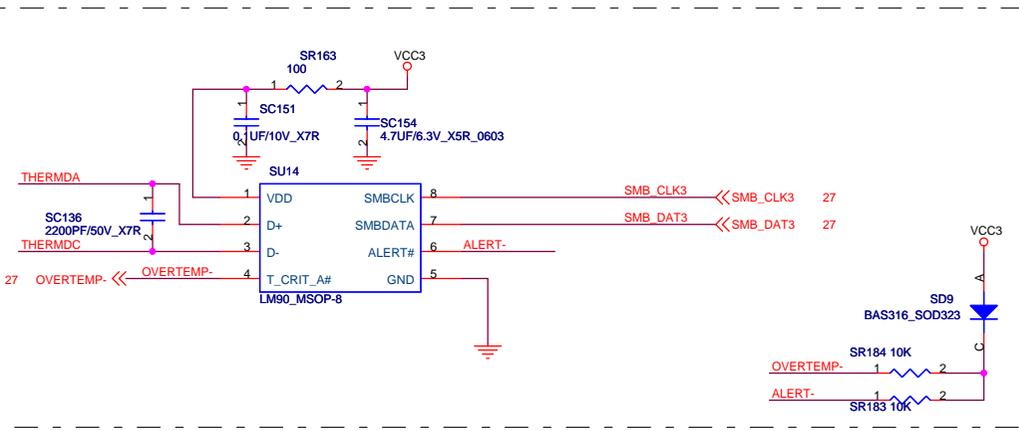
Date: Wednesday, April 16, 2008 Sheet: 1 of 37

P. Leader



Yonah Ball-out Rev 1.0

Yonah Ball-out Rev 1.0



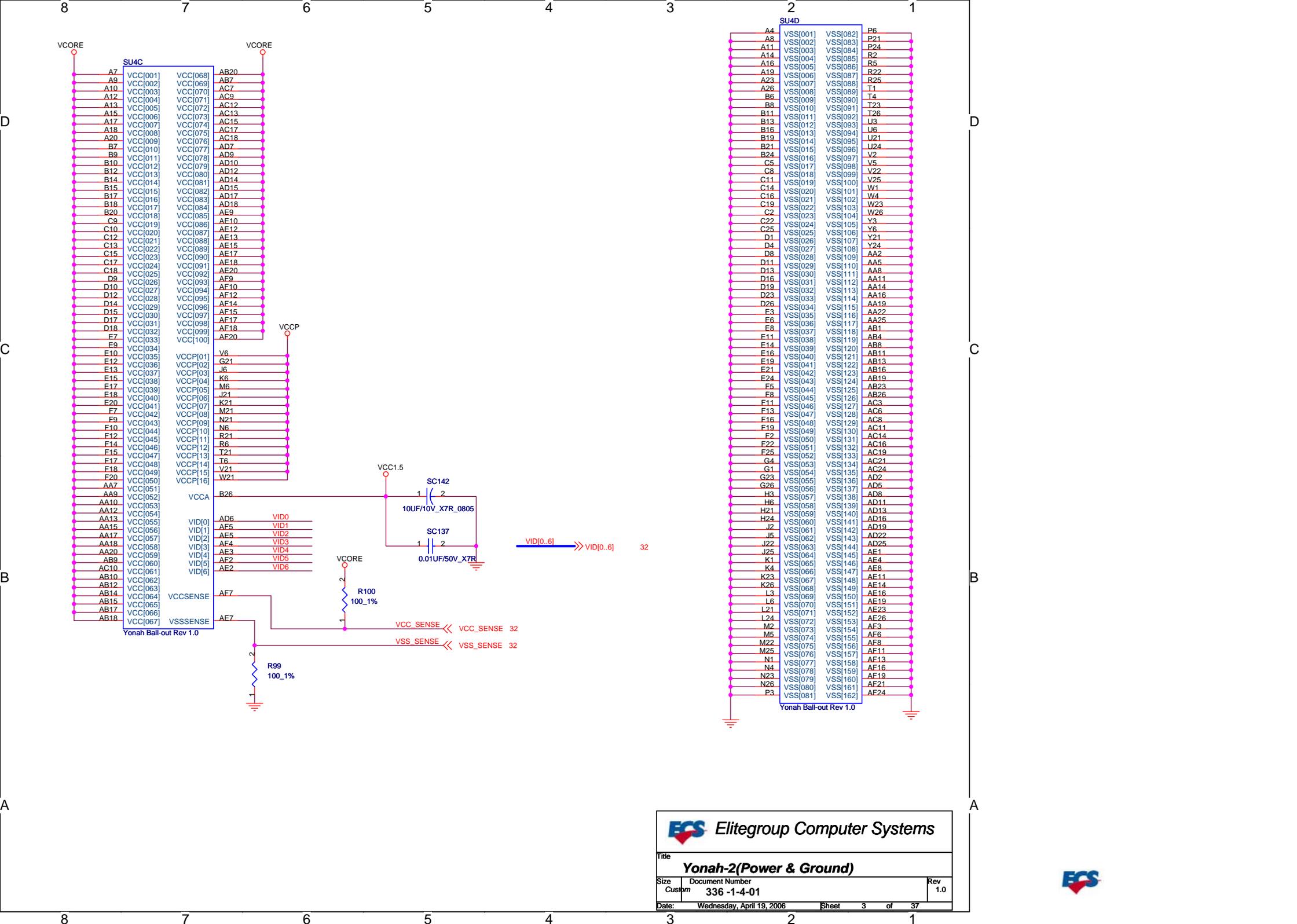
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L	L	L	RESERVED
H	L	L	133MHZ
L	H	L	RESERVED
H	H	L	166MHZ

**Elitegroup Computer Systems**

Title: **Yonah-1(CPU I/O)**

Size A3 Document Number: **336-1-4-01** Rev 1.0

Date: Wednesday, April 19, 2006 Sheet 2 of 37

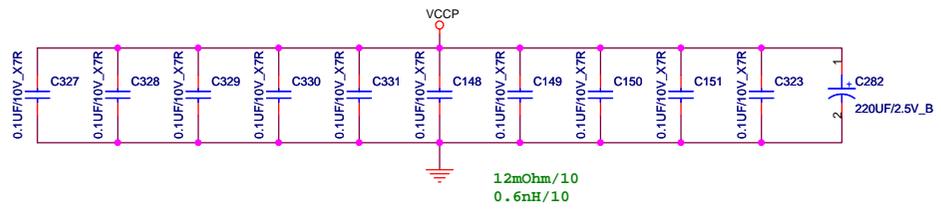
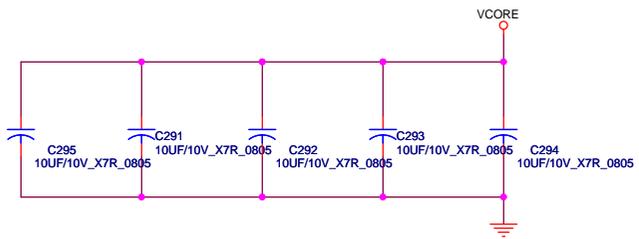
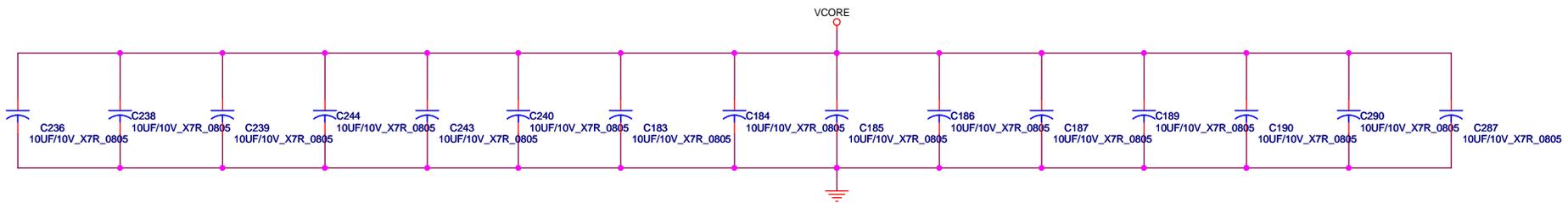
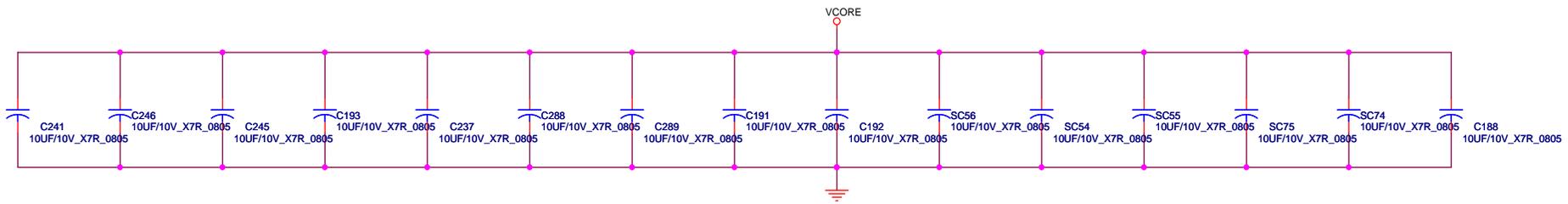


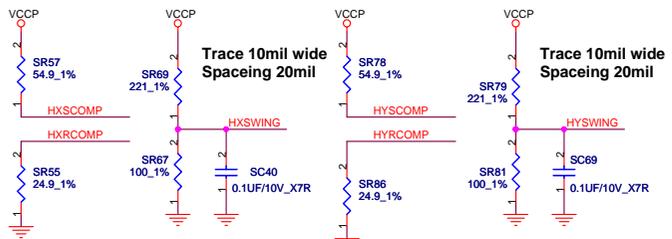
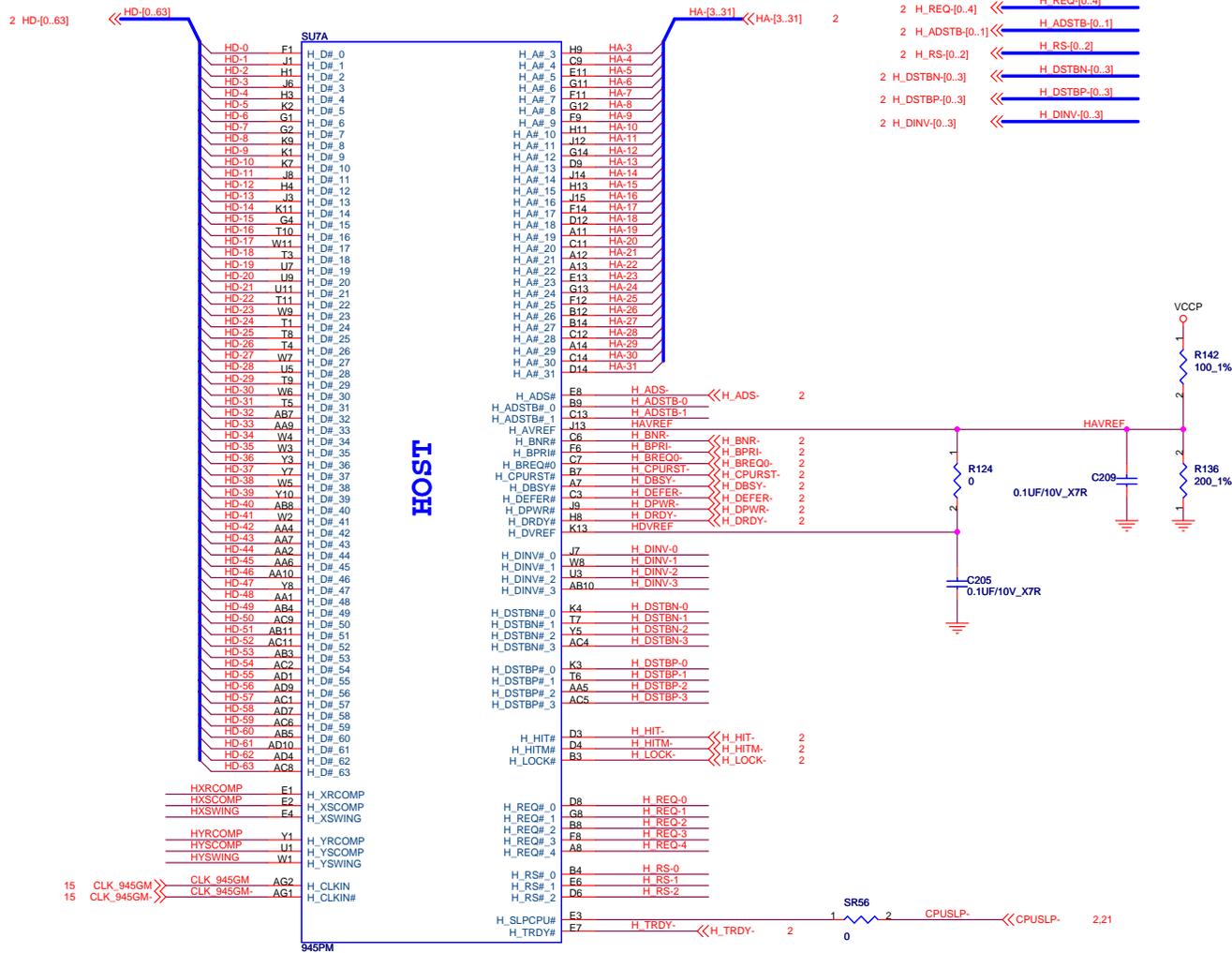
**ECS Elitegroup Computer Systems**

Title: **Yonah-2(Power & Ground)**

Size	Document Number	Rev
Custom	336 -1-4-01	1.0
Date:	Wednesday, April 19, 2006	Sheet 3 of 37





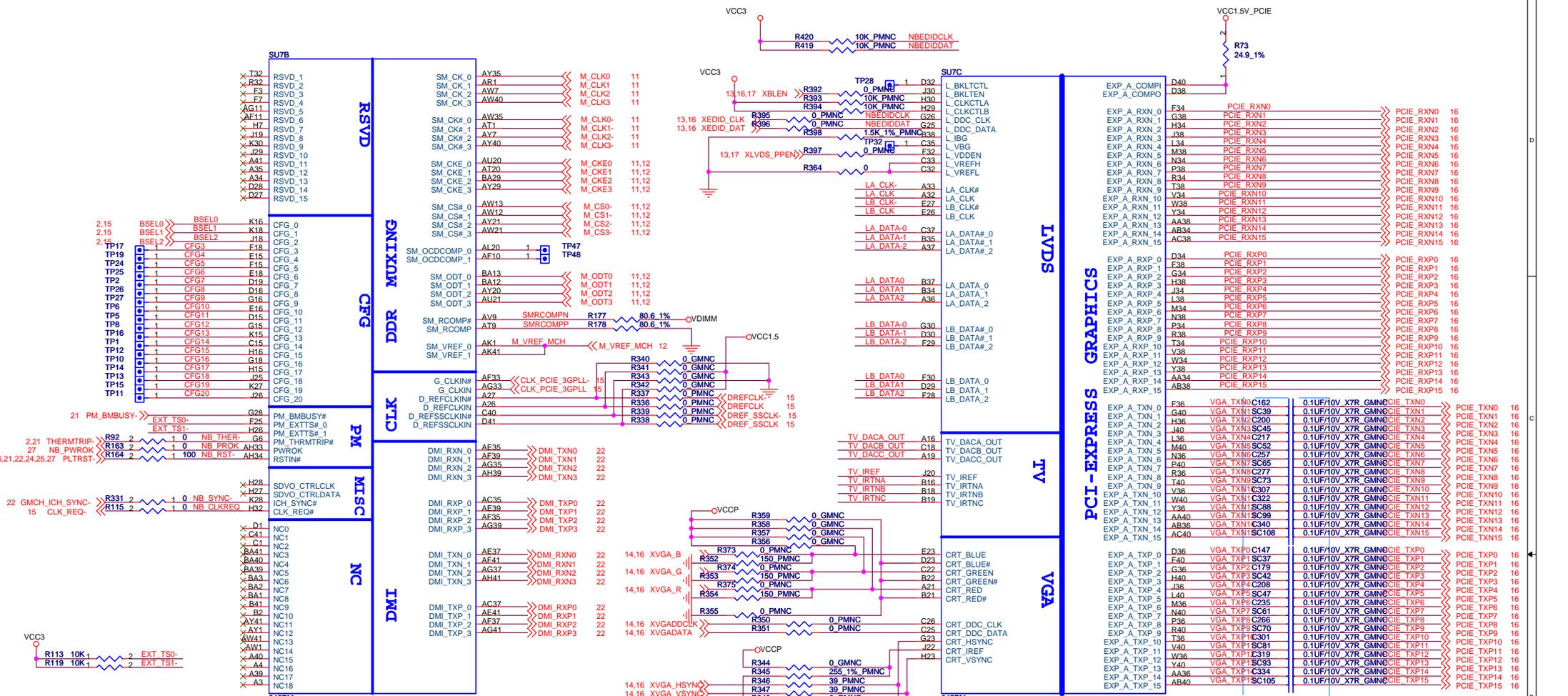


**Elitegroup Computer Systems**

Title: **945GM/PM\_A (HOST)**

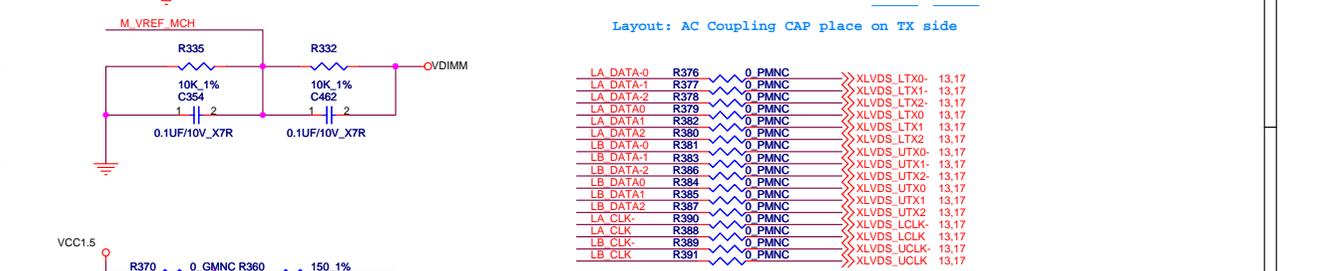
Size	Document Number	Rev
Custpm	336-1-4-01	1.0

Date: Wednesday, April 19, 2006 Sheet 5 of 37



CFG[3:17] have internal pull-ups  
 CFG[18:19] have internal pull-downs

<b>CFG[2:0]</b> 001= FSB 533 MHZ 011= FSB 667 MHZ	<b>CFG9(PCIE Graphics Lane)</b> LOW= Reversal Lane HIGH=Normal Operation (default)	<b>CFG17(Global Rcomp Disable)</b> LOW=All Rcomp Disable HIGH=Normal Operation
<b>CFG[4:3]</b> 00 = DDR 800 01 = DDR 533(default) 10 = DDR 667 11 = DDR 400	<b>CFG10 (HOST PLL VCC SELET)</b> LOW=Reserved HIGH=MOBILITY	<b>CFG18 (VCC SELECT)</b> LOW=1.05V (default) HIGH=1.5V
<b>CFG5</b> LOW=DMIx2 HIGH=DMIx4 (default)	<b>CFG11 (PSB 4X CLK ENABLE)</b> LOW= 4X ENABLED HIGH=8X ENABLED	<b>CFG19 (DMI LANE RESERVED)</b> LOW=Normal (default) HIGH=LANES REVERSED
<b>CFG6</b> LOW=Reserved (DDR2 for MOBYDICK) HIGH=DDR2	<b>CFG14 DF STRAP ENABLE</b> LOW=DF STRAP ENABLE HIGH=Normal Operation	<b>CFG20 (PCIe Backward Interoperability mode)</b> LOW=only SDVO or PCIe x1 is operational (defaults) HIGH=SDVO and PCIe x1 are operating simultaneously via the PEG port
<b>CFG7 (CPU Strap)</b> LOW=RSVD HIGH=Mobile CPU (default)	<b>CFG15 (ICH RESET DISABLE)</b> LOW= ICH RESET DISABLE HIGH=Normal Operation	
<b>CFG8 (LP PCIe)</b> LOW=Normal Mode HIGH=Low Power Mode	<b>CFG16 (FSB Dynamic ODT)</b> LOW=Dynamic ODT Disabled HIGH=Dynamic ODT Enabled (default)	

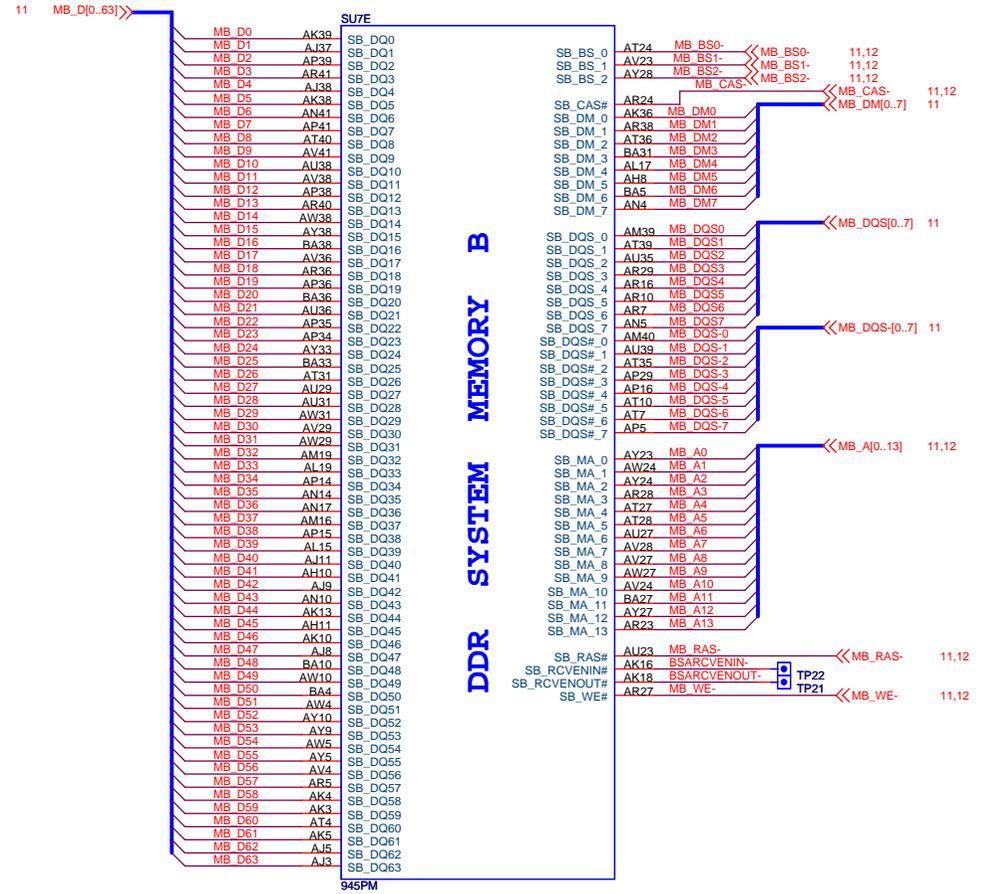
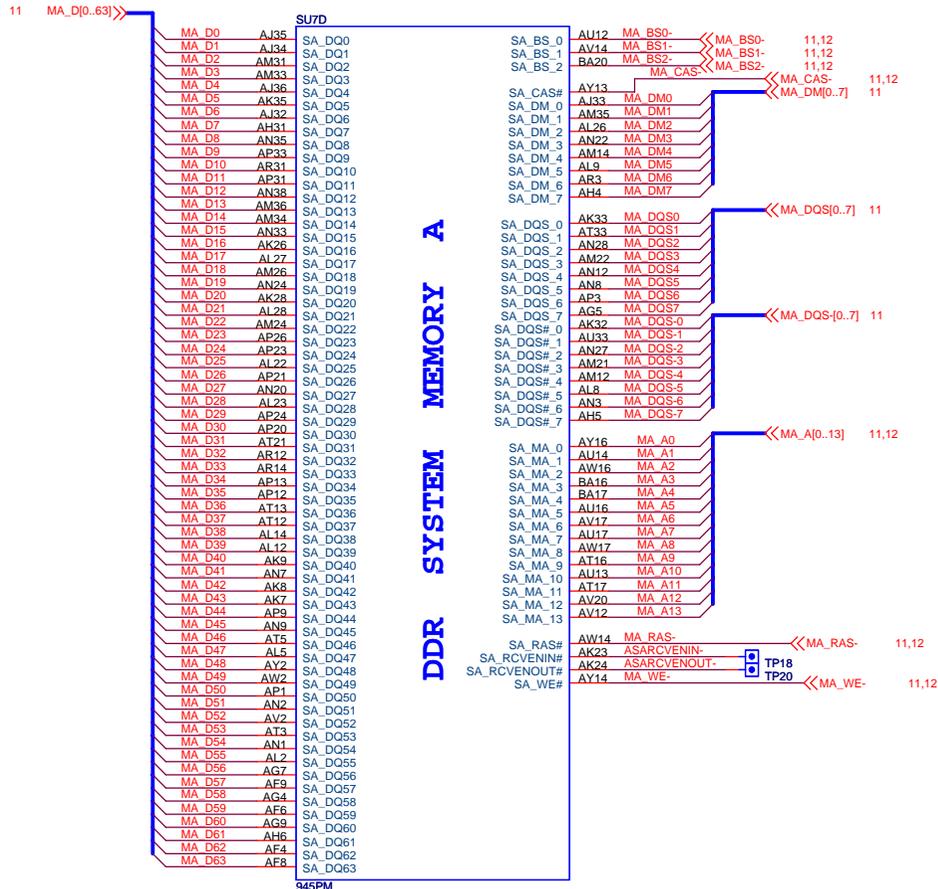


Layout: AC Coupling CAP place on TX side

**Elitegroup Computer Systems**

Title: **945GM/PM B (VGA,DMI)**

Size	Document Number	Rev
Custom	336 -1-4-01	1.0
Date:	Wednesday, April 19, 2006	Sheet 6 of 37

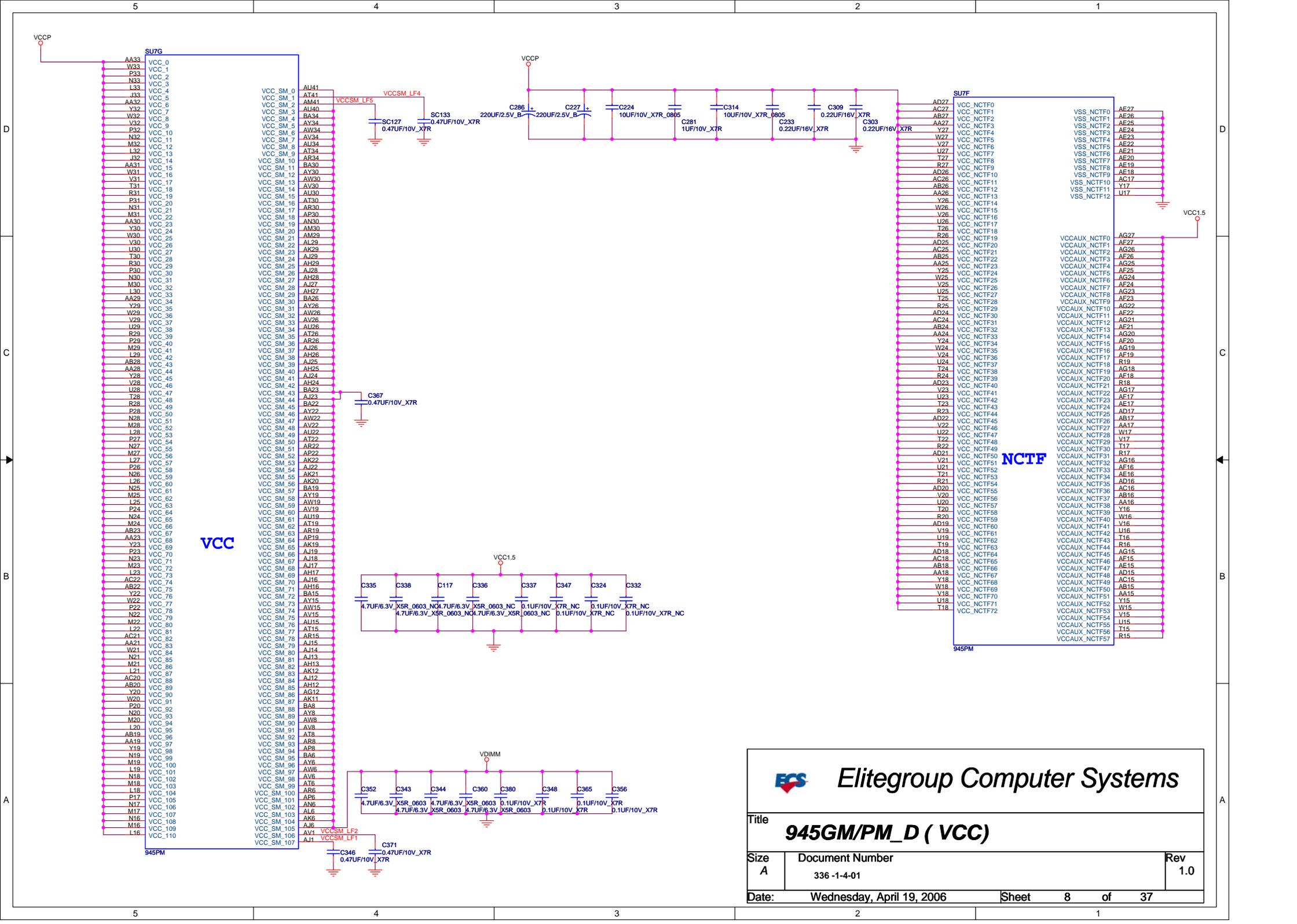


**ECS Elitegroup Computer Systems**

Title: **945GM/PM\_C (DDR)**

Size: Document Number  
 Custom: 336-1-4-01 Rev: 1.0

Date: Wednesday, April 19, 2006 Sheet 7 of 37



- SU7G**
- AA33 VCC\_0
  - W33 VCC\_1
  - F33 VCC\_2
  - N33 VCC\_3
  - L33 VCC\_4
  - J33 VCC\_5
  - AA32 VCC\_6
  - Y32 VCC\_7
  - W32 VCC\_8
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  - VCCAUX\_NCTF35 AC16
  - VCCAUX\_NCTF36 AB16
  - VCCAUX\_NCTF37 AA16
  - VCCAUX\_NCTF38 W16
  - VCCAUX\_NCTF39 V16
  - VCCAUX\_NCTF40 U16
  - VCCAUX\_NCTF41 R16
  - VCCAUX\_NCTF42 T16
  - VCCAUX\_NCTF43 AG15
  - VCCAUX\_NCTF44 AG15
  - VCCAUX\_NCTF45 AE15
  - VCCAUX\_NCTF46 AE15
  - VCCAUX\_NCTF47 AD15
  - VCCAUX\_NCTF48 AC15
  - VCCAUX\_NCTF49 AB15
  - VCCAUX\_NCTF50 AA15
  - VCCAUX\_NCTF51 W15
  - VCCAUX\_NCTF52 W15
  - VCCAUX\_NCTF53 U15
  - VCCAUX\_NCTF54 T15
  - VCCAUX\_NCTF55 U15
  - VCCAUX\_NCTF56 R15
  - VCCAUX\_NCTF57 R15

**Elitegroup Computer Systems**

**945GM/PM\_D ( VCC )**

Size A	Document Number 336 -1-4-01	Rev 1.0
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SU71		AK34	
AC41	VSS_0	VSS_97	AK34
AA41	VSS_1	VSS_98	AG34
WA1	VSS_2	VSS_99	AF34
T41	VSS_3	VSS_100	AE34
P41	VSS_4	VSS_101	AC24
M41	VSS_5	VSS_102	C24
A41	VSS_6	VSS_103	AW33
F41	VSS_7	VSS_104	AV33
AV40	VSS_8	VSS_105	AR33
AP40	VSS_9	VSS_106	AE33
AN40	VSS_10	VSS_107	AB33
AK40	VSS_11	VSS_108	Y33
AJ40	VSS_12	VSS_109	V33
AH40	VSS_13	VSS_110	T33
AG40	VSS_14	VSS_111	M33
AF40	VSS_15	VSS_112	H33
AE40	VSS_16	VSS_113	A22
B40	VSS_17	VSS_114	G33
AY39	VSS_18	VSS_115	F33
AW39	VSS_19	VSS_116	AR21
AV39	VSS_20	VSS_117	B33
AR39	VSS_21	VSS_118	AH32
AN39	VSS_22	VSS_119	AG32
AJ39	VSS_23	VSS_120	AF32
AC39	VSS_24	VSS_121	AE32
AB39	VSS_25	VSS_122	AC32
AA39	VSS_26	VSS_123	AB32
Y39	VSS_27	VSS_124	C32
W39	VSS_28	VSS_125	B32
V39	VSS_29	VSS_126	AY31
T39	VSS_30	VSS_127	AV31
R39	VSS_31	VSS_128	AN31
P39	VSS_32	VSS_129	AJ31
N39	VSS_33	VSS_130	AG31
M39	VSS_34	VSS_131	AB31
L39	VSS_35	VSS_132	A20
J39	VSS_36	VSS_133	AN19
H39	VSS_37	VSS_134	AC19
G39	VSS_38	VSS_135	W19
F39	VSS_39	VSS_136	K19
D39	VSS_40	VSS_137	AN29
AT38	VSS_41	VSS_138	AB29
AM38	VSS_42	VSS_139	T29
AH38	VSS_43	VSS_140	N29
AG38	VSS_44	VSS_141	K29
AF38	VSS_45	VSS_142	H18
AE38	VSS_46	VSS_143	D18
C38	VSS_47	VSS_144	C29
AK37	VSS_48	VSS_145	A18
AH37	VSS_49	VSS_146	B29
AB37	VSS_50	VSS_147	AR17
AA37	VSS_51	VSS_148	AP17
Y37	VSS_52	VSS_149	AM17
W37	VSS_53	VSS_150	AK17
V37	VSS_54	VSS_151	AV16
T37	VSS_55	VSS_152	AN16
R37	VSS_56	VSS_153	AL16
P37	VSS_57	VSS_154	AC28
N37	VSS_58	VSS_155	J16
M37	VSS_59	VSS_156	W28
L37	VSS_60	VSS_157	E28
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G37	VSS_63	VSS_160	AM15
F37	VSS_64	VSS_161	AK15
D37	VSS_65	VSS_162	M15
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AN36	VSS_68	VSS_165	F27
AK36	VSS_69	VSS_166	B15
AG36	VSS_70	VSS_167	C27
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C36	VSS_73	VSS_170	AK14
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AV35	VSS_76	VSS_173	AA14
AR35	VSS_77	VSS_174	U14
AH35	VSS_78	VSS_175	K14
AG35	VSS_79	VSS_176	E25
AF35	VSS_80	VSS_177	H25
AE35	VSS_81	VSS_178	AV13
Y35	VSS_82	VSS_179	AR13
W35	VSS_83		AN13
V35	VSS_84		A25
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R35	VSS_86		AG13
P35	VSS_87		F13
N35	VSS_88		D13
M35	VSS_89		B13
L35	VSS_90		AV12
J35	VSS_91		AC12
H35	VSS_92		K12
G35	VSS_93		H12
F35	VSS_94		E12
D35	VSS_95		AD11
AN34	VSS_96		AA11
	VSS_99		Y11

VSS

SU7J		J11	
AT23	VSS_180	VSS_273	J11
AN23	VSS_181	VSS_274	D11
AM23	VSS_182	VSS_275	B11
AH23	VSS_183	VSS_276	AV10
AC23	VSS_184	VSS_277	AP10
W23	VSS_185	VSS_278	AL10
AW20	VSS_186	VSS_279	AJ10
AV20	VSS_187	VSS_280	AG10
AR20	VSS_188	VSS_281	AC10
AE20	VSS_189	VSS_282	W10
AB20	VSS_190	VSS_283	U10
Y21	VSS_191	VSS_284	BA9
X21	VSS_192	VSS_285	BA9
G22	VSS_193	VSS_286	AW9
F22	VSS_194	VSS_287	AR9
E22	VSS_195	VSS_288	AH9
D22	VSS_196	VSS_289	Y9
C22	VSS_197	VSS_290	R9
BA21	VSS_198	VSS_291	G9
AV21	VSS_199	VSS_292	E9
AN21	VSS_200	VSS_293	A9
AL21	VSS_201	VSS_294	AG8
AK21	VSS_202	VSS_295	AD8
X21	VSS_203	VSS_296	AA8
P21	VSS_204	VSS_297	U8
K21	VSS_205	VSS_298	K8
J21	VSS_206	VSS_299	CA8
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AV20	VSS_209	VSS_302	AP7
AR20	VSS_210	VSS_303	AL7
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K20	VSS_213	VSS_306	AF7
R20	VSS_214	VSS_307	AC7
A20	VSS_215	VSS_308	R7
AN19	VSS_216	VSS_309	G7
AC19	VSS_217	VSS_310	D7
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K19	VSS_219	VSS_312	AD6
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AB29	VSS_221	VSS_314	Y6
T29	VSS_222	VSS_315	U6
N29	VSS_223	VSS_316	N6
K29	VSS_224	VSS_317	K6
H18	VSS_225	VSS_318	H6
D18	VSS_226	VSS_319	B6
C29	VSS_227	VSS_320	AV5
A18	VSS_228	VSS_321	AF5
B29	VSS_229	VSS_322	AD5
AR17	VSS_230	VSS_323	AY4
AP17	VSS_231	VSS_324	AR4
AM17	VSS_232	VSS_325	AP4
AK17	VSS_233	VSS_326	AL4
AV16	VSS_234	VSS_327	Y4
AN16	VSS_235	VSS_328	U4
AL16	VSS_236	VSS_329	R4
AC28	VSS_237	VSS_330	J4
J16	VSS_238	VSS_331	F4
W28	VSS_239	VSS_332	C4
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C16	VSS_241	VSS_334	AW3
AN15	VSS_242	VSS_335	AV3
AM15	VSS_243	VSS_336	AL3
AK15	VSS_244	VSS_337	AD3
M15	VSS_245	VSS_338	AB3
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U14	VSS_257	VSS_350	U2
K14	VSS_258	VSS_351	T2
E25	VSS_259	VSS_352	N2
H25	VSS_260	VSS_353	J2
AV13	VSS_261	VSS_354	H2
AR13	VSS_262	VSS_355	F2
AN13	VSS_263	VSS_356	C2
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AL13	VSS_265	VSS_358	
AG13	VSS_266	VSS_359	
F13	VSS_267	VSS_360	
D13	VSS_268		
B13	VSS_269		
AV12	VSS_270		
AC12	VSS_271		
K12	VSS_272		
H12			
E12			
AD11			
AA11			
Y11			

VSS

945PM

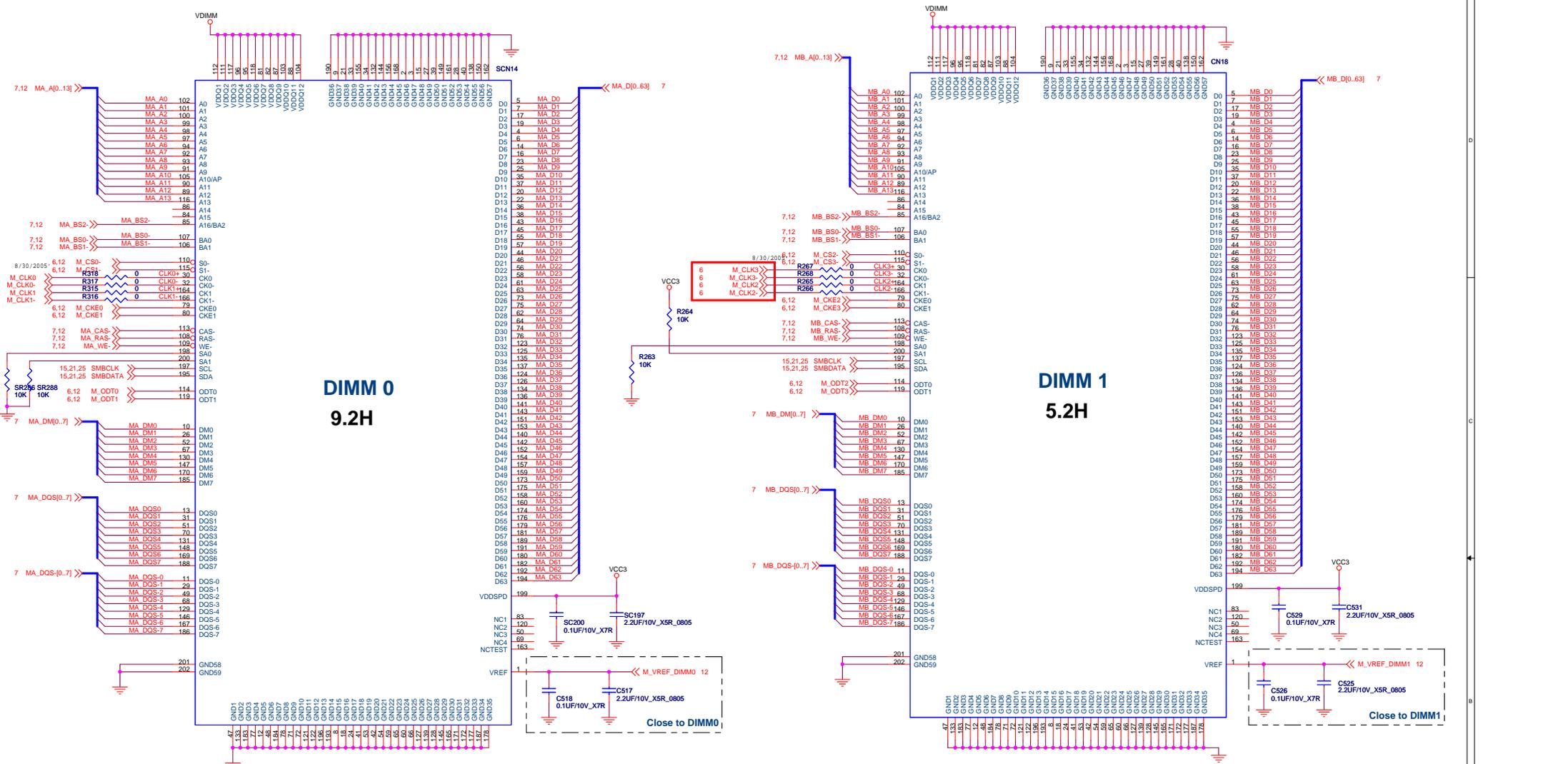
945PM

**ECS Elitegroup Computer Systems**

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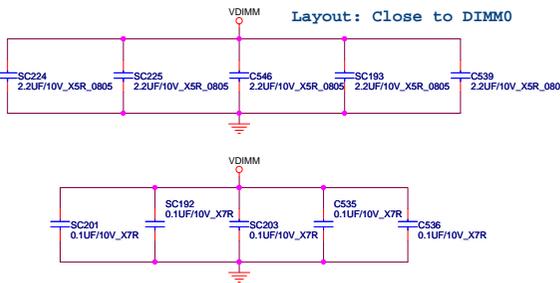
Date: Wednesday, April 19, 2006 Sheet 10 of 37



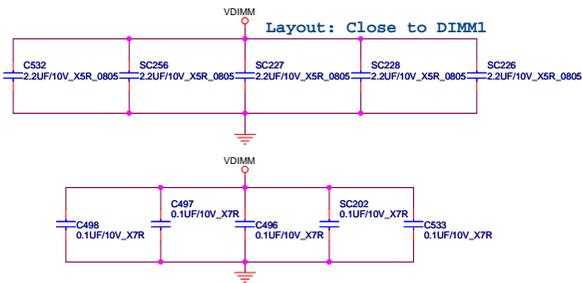
**DIMM 0  
9.2H**

**DIMM 1  
5.2H**

Layout: Close to DIMM0



Layout: Close to DIMM1



**Elitegroup Computer Systems**

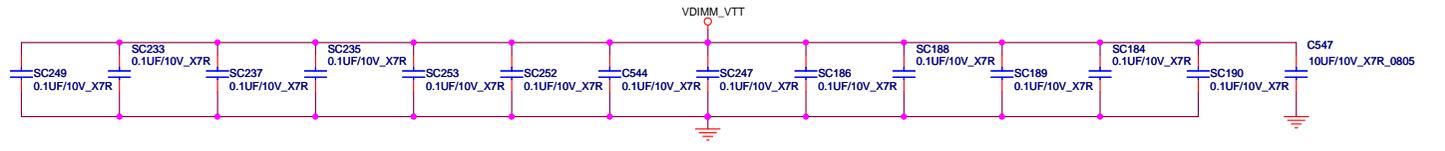
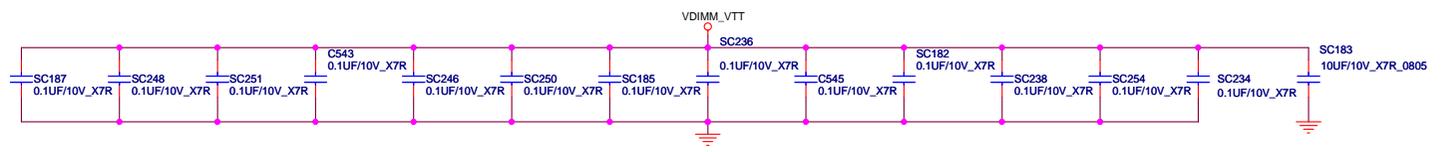
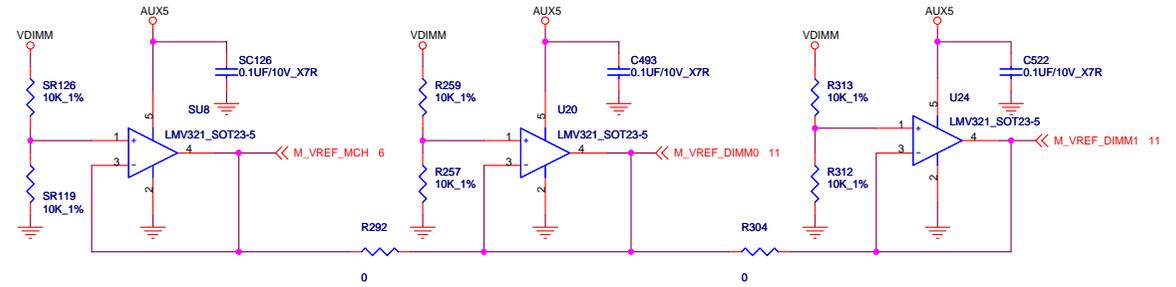
DDR2 SODIMM

336-1-4-01

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				MA_A[0..13]	7,11
				MB_A[0..13]	7,11
VDIMM_VTT					
RP18B	7	2	56 8P4R	MB_WE-	7,11
RP18A	8	1	56 8P4R	MB_CAS-	7,11
RP18C	6	3	56 8P4R	MB_BS0-	7,11
RP18D	5	4	56 8P4R	MB_A10	7,11
RP17B	7	2	56 8P4R	MB_A3	
RP17A	8	1	56 8P4R	MB_A1	
RP17C	6	3	56 8P4R	MB_A5	
RP17D	5	4	56 8P4R	MB_A8	
SRP10B	7	2	56 8P4R	MA_WE-	7,11
SRP10A	8	1	56 8P4R	MB_A13	7,11
SRP10D	5	4	56 8P4R	MB_RAS-	7,11
SRP10C	6	3	56 8P4R	MA_BS0-	7,11
SR239			56 1%	M_ODT1	6,11
SR238			56 1%	M_CS1-	6,11
R322			56 1%	M_ODT3	6,11
R321			56 1%	M_CS3-	6,11
SRP13A	8	1	56 8P4R	M_CKE1	6,11
SRP13B	7	2	56 8P4R	MA_A11	
SRP13D	5	4	56 8P4R	MA_A6	
SRP13C	6	3	56 8P4R	MA_A7	
RP19A	8	1	56 8P4R	MB_A9	
RP19C	6	3	56 8P4R	MB_BS2-	7,11
RP19B	7	2	56 8P4R	MB_A12	
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SRP11C	6	3	56 8P4R	MB_A0	
SRP11B	7	2	56 8P4R	MB_BS1-	7,11
SRP11D	5	4	56 8P4R	M_ODT2	6,11
SRP15A	8	1	56 8P4R	MA_RAS-	7,11
SRP15C	6	3	56 8P4R	M_ODT0	6,11
SRP15B	7	2	56 8P4R	M_CS0-	6,11
SRP15D	5	4	56 8P4R	MA_A13	6,11
SRP9B	7	2	56 8P4R	MA_A5	
SRP9A	8	1	56 8P4R	MA_A3	
SRP9C	6	3	56 8P4R	MB_A4	
SRP9D	5	4	56 8P4R	MB_A11	
SRP8A	8	1	56 8P4R	MA_A9	
SRP8B	7	2	56 8P4R	MA_A8	
SRP8C	6	3	56 8P4R	MB_A7	
SRP8D	5	4	56 8P4R	MB_A6	
SRP14A	8	1	56 8P4R	MA_A4	
SRP14C	6	3	56 8P4R	MA_A0	
SRP14B	7	2	56 8P4R	MA_A2	
SRP14D	5	4	56 8P4R	MA_BS1-	7,11
SRP7B	7	2	56 8P4R	M_CKE3	6,11
SRP7A	8	1	56 8P4R	MA_A12	
SRP7D	5	4	56 8P4R	M_CKE0	6,11
SRP7C	6	3	56 8P4R	MA_BS2-	7,11
SRP6B	7	2	56 8P4R	MB_A2	
SRP6A	8	1	56 8P4R	M_CS2-	6,11
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SRP6C	6	3	56 8P4R	MA_A10	



**ECS** Elitegroup Computer Systems

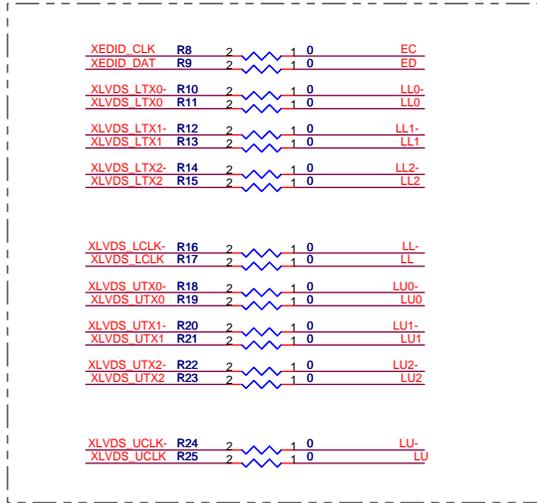
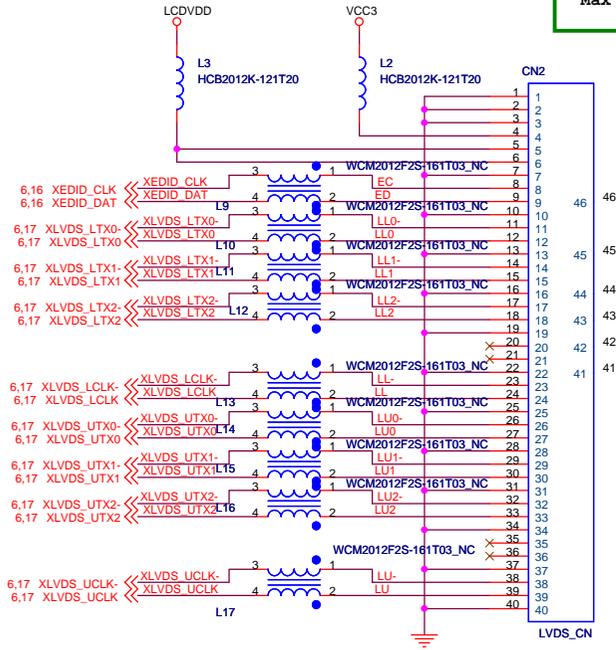
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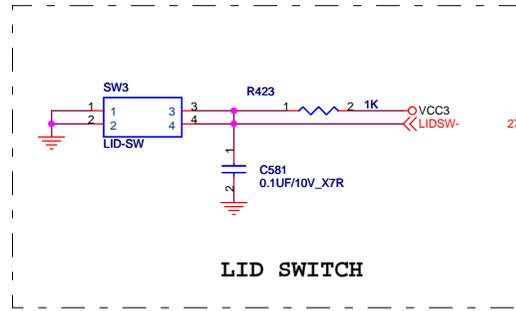
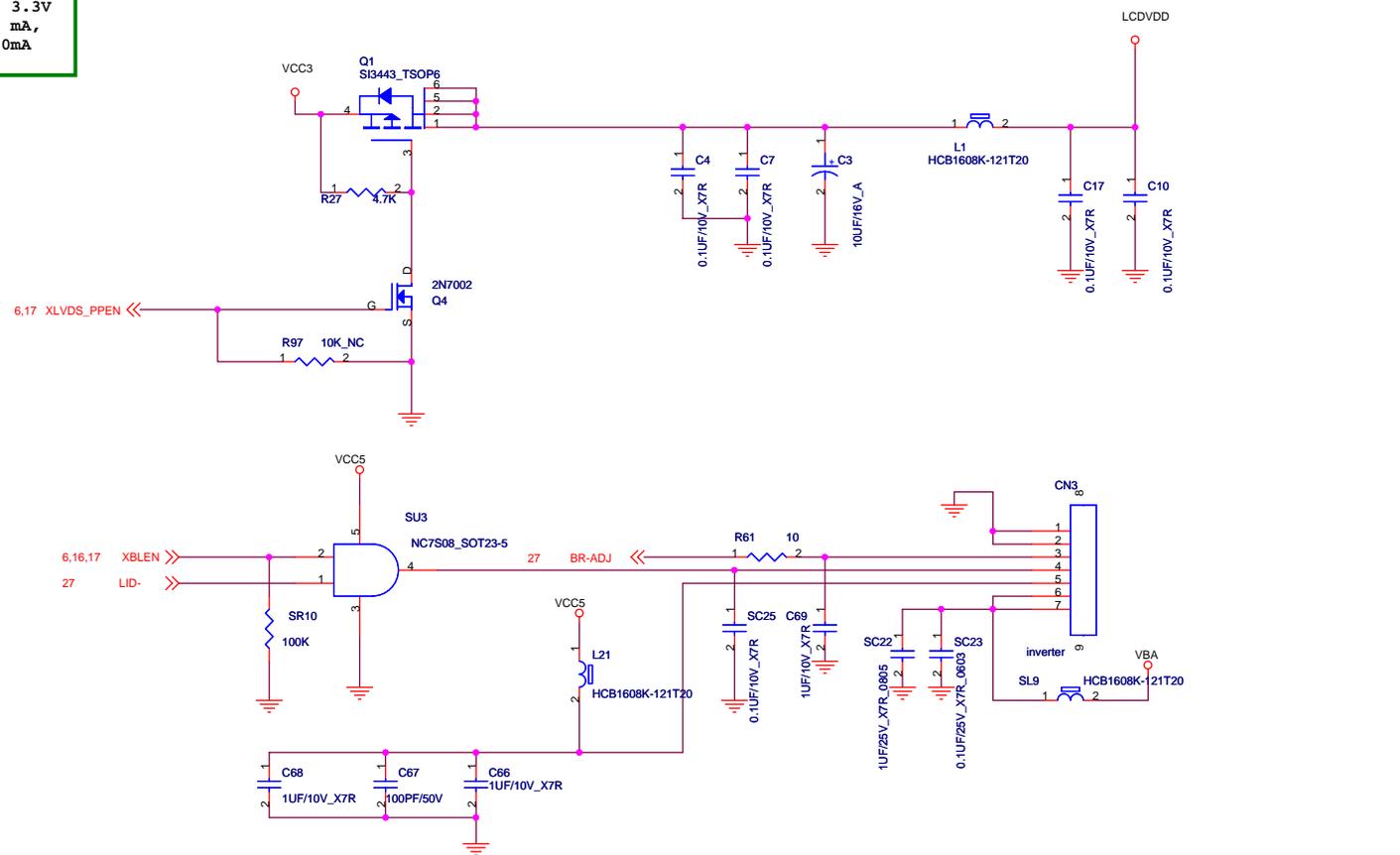
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### LVDS

LCDVDD = 3.3V  
 Typ = 500 mA,  
 Max = 650mA



CO-LAYOUT



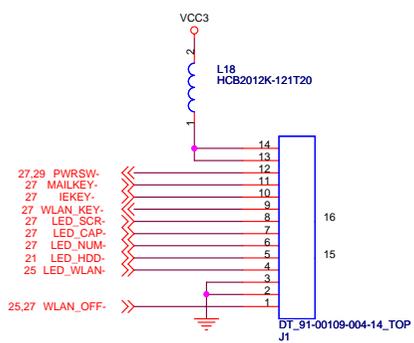
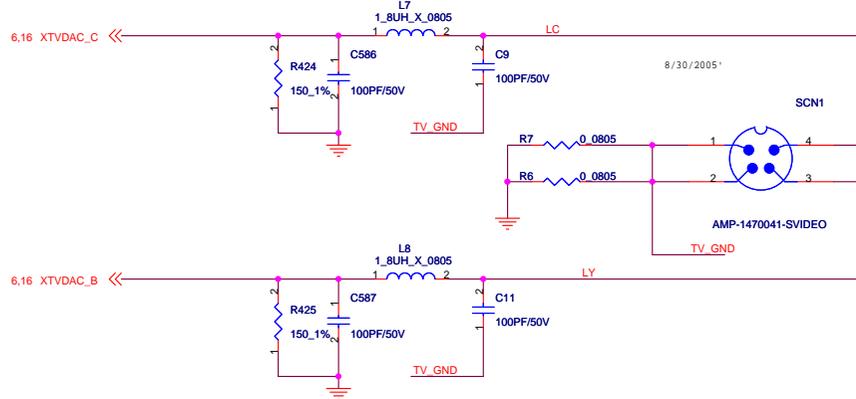
LID SWITCH

**ECS Elitegroup Computer Systems**

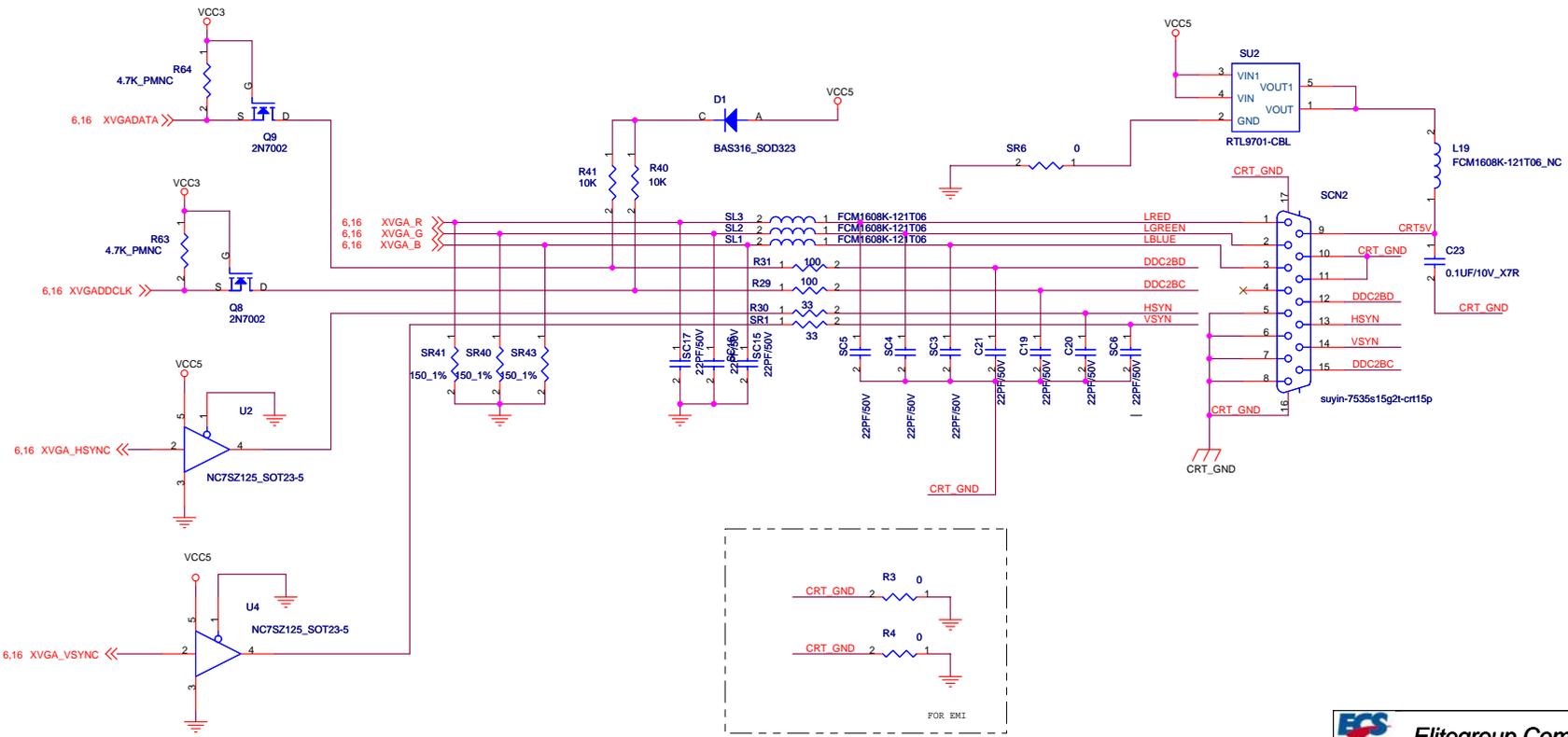
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Size	Document Number	Rev
Custom	336 -1-4-01	1.0

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LED BOARD CONN.



**Elitegroup Computer Systems**

Title: **CRT & TV**

Size: 336 -1-4-01

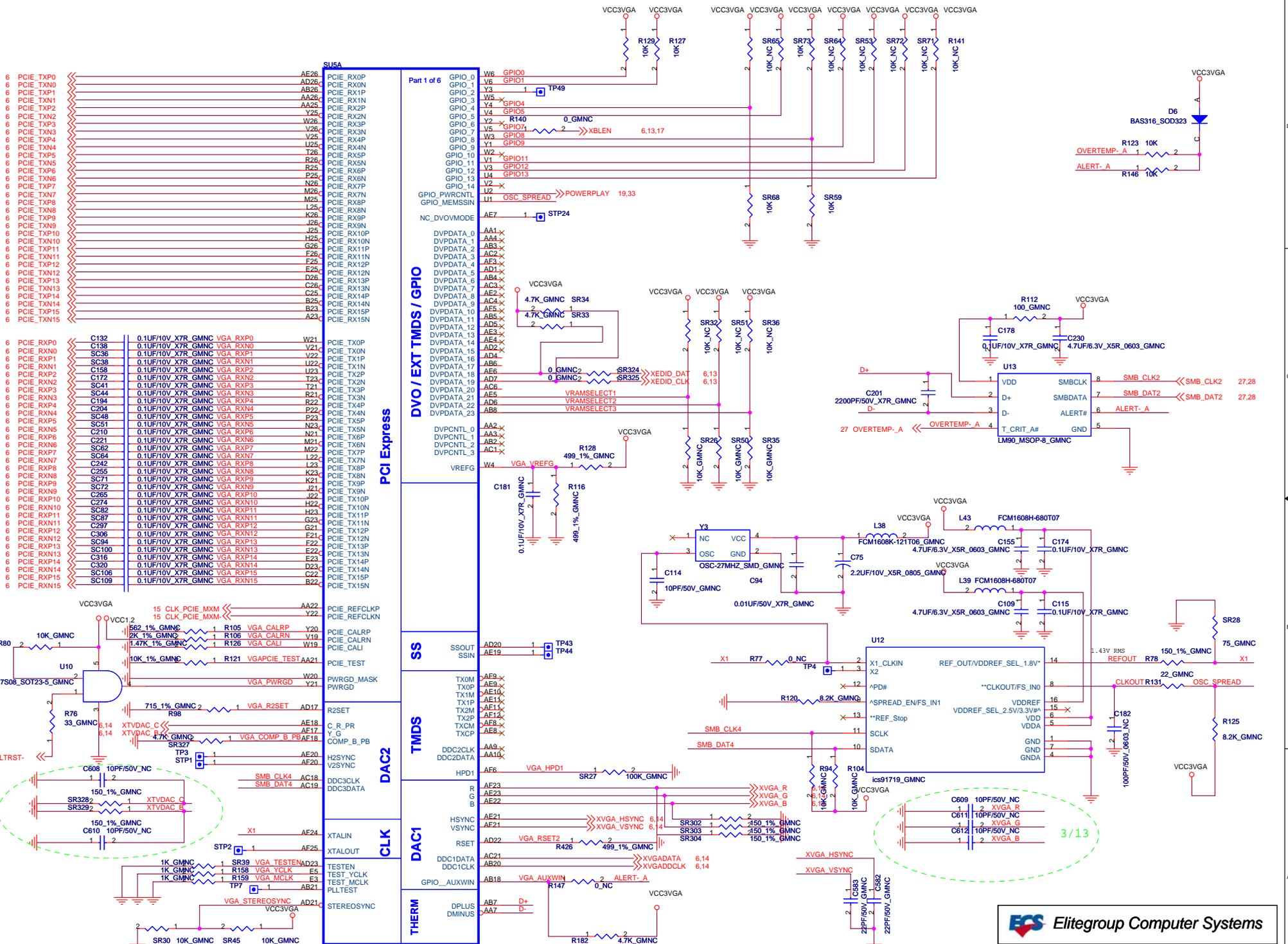
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**Elitegroup Computer Systems**

Title: **M21-P MAIN**

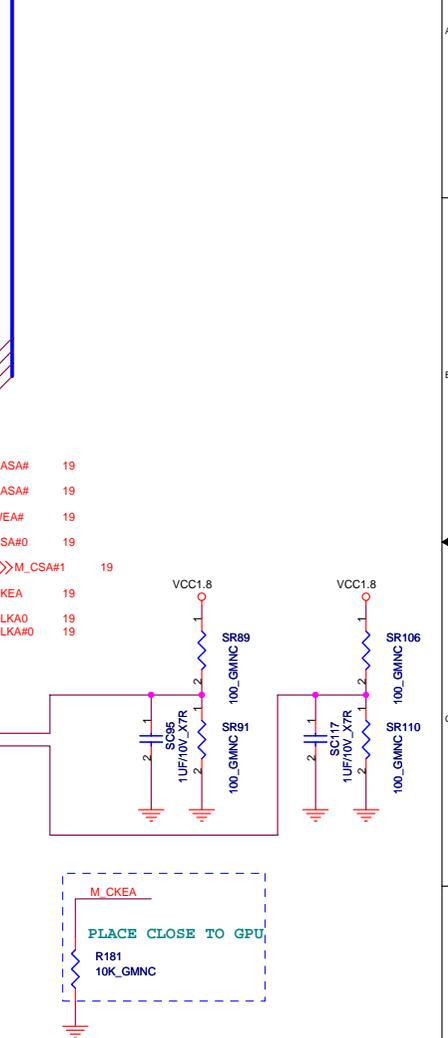
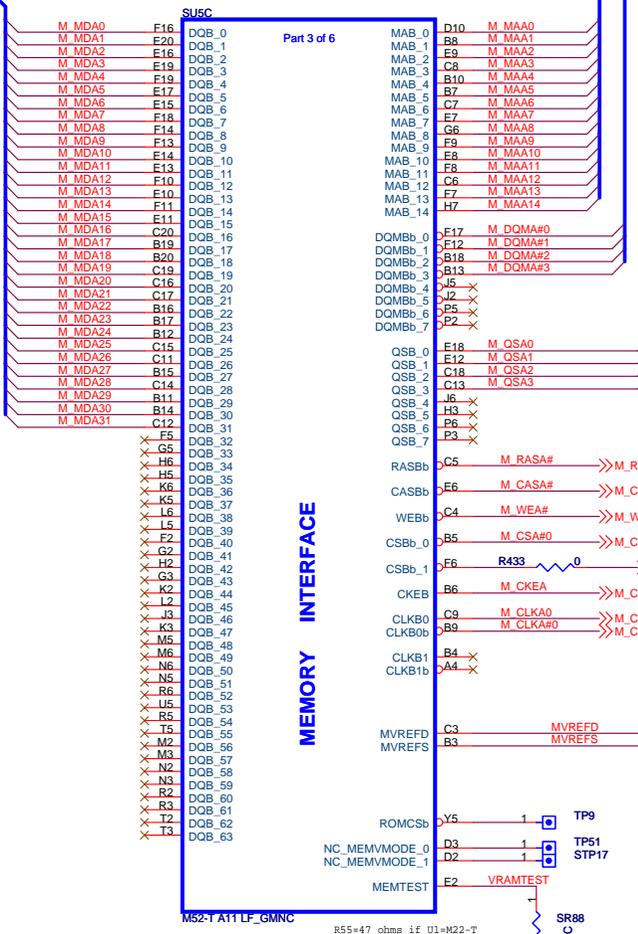
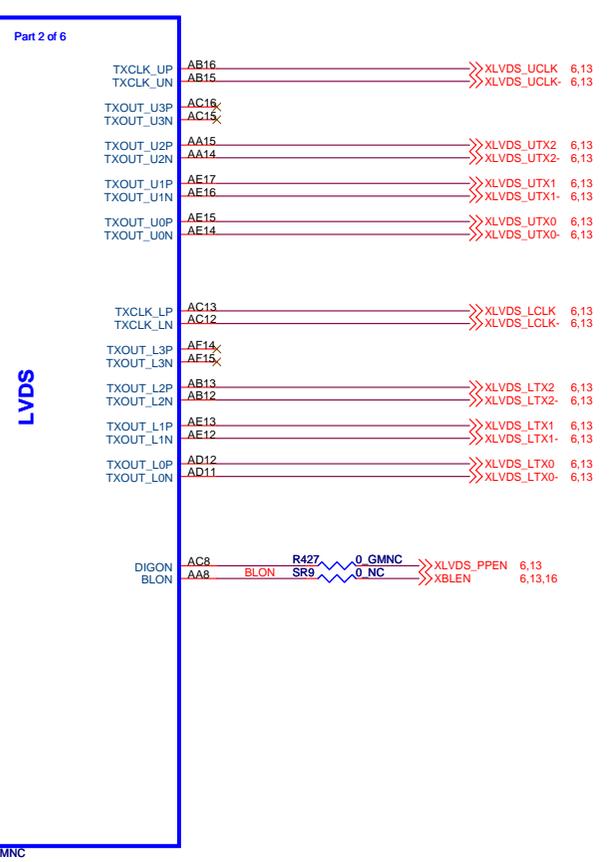
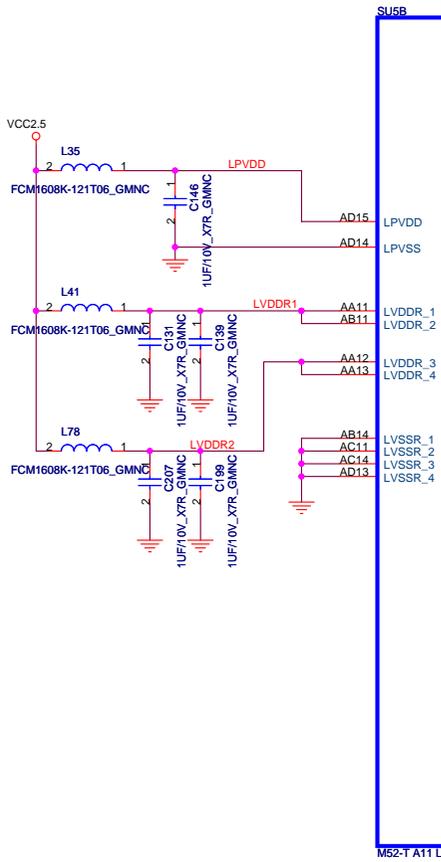
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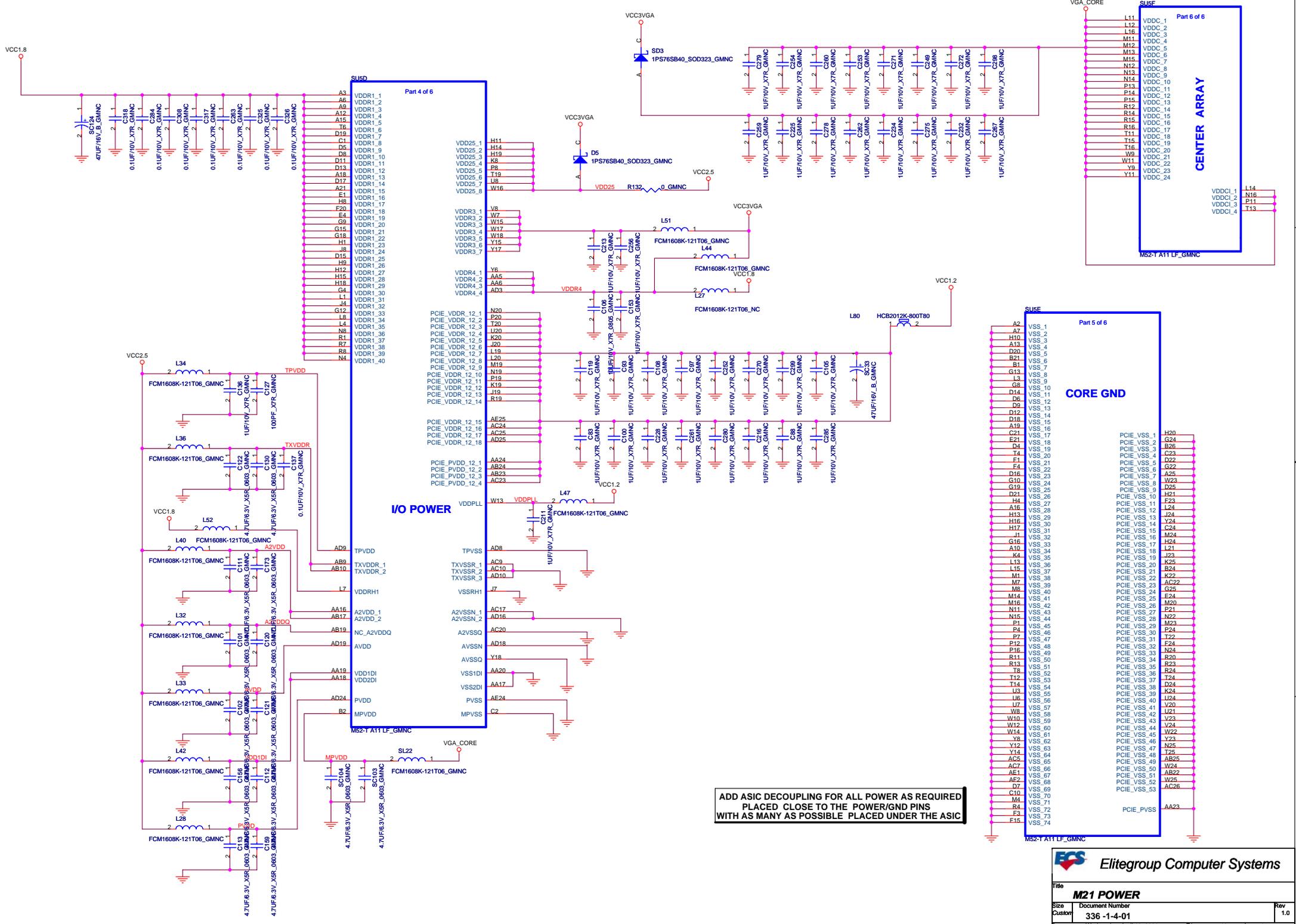
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Date: Wednesday, April 19, 2006

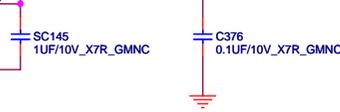
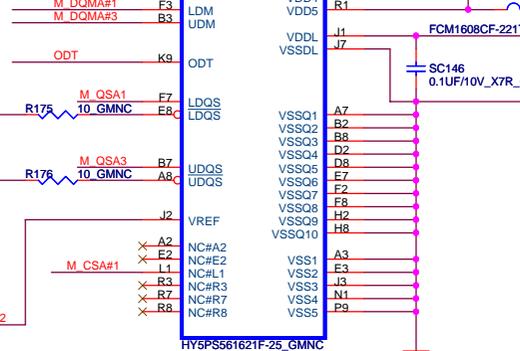
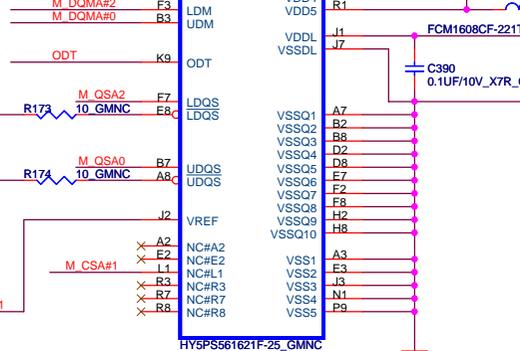
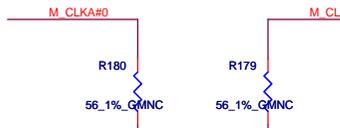
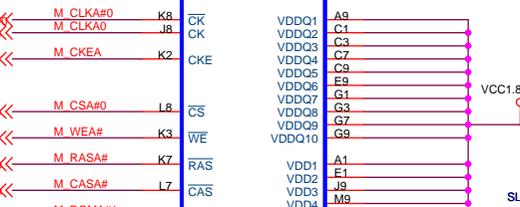
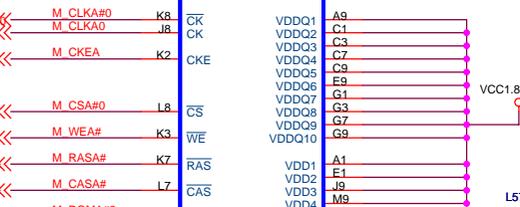
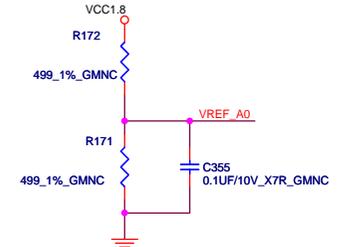
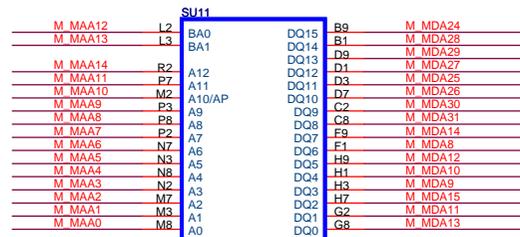
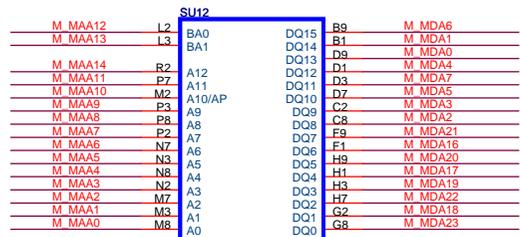
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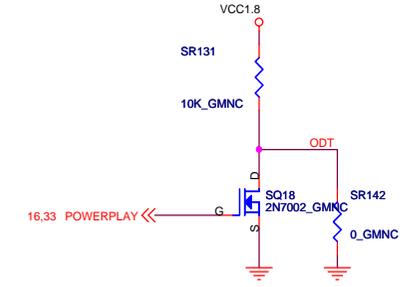
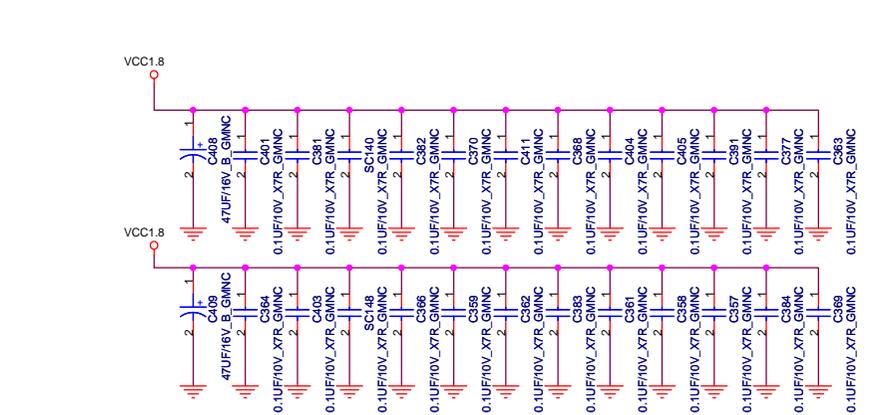




**ADD ASIC DECOUPLING FOR ALL POWER AS REQUIRED  
PLACED CLOSE TO THE POWER/GND PINS  
WITH AS MANY AS POSSIBLE PLACED UNDER THE ASIC**



- 17 M\_DOMA#3[3..0] << M\_DOMA#3\_0
- 17 M\_MAA#14[4..0] << M\_MAA#14\_0
- 17 M\_QSA#3[3..0] << M\_QSA#3\_0
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**ECS Elitegroup Computer Systems**

**Title**  
BGA 4Mx32

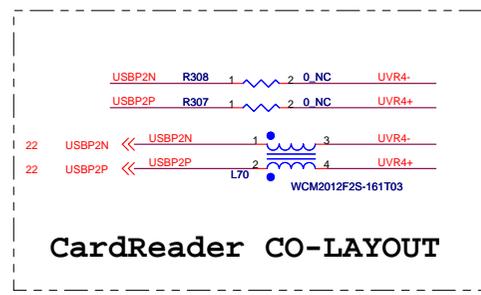
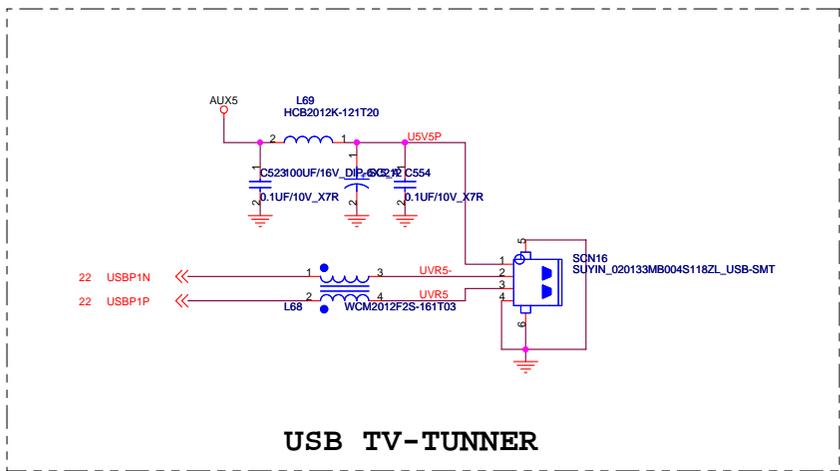
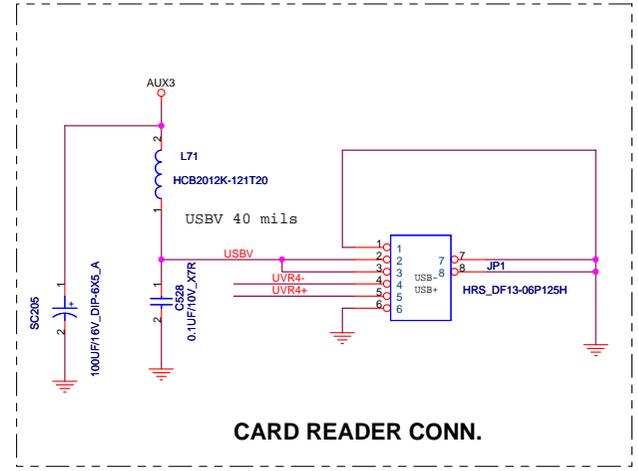
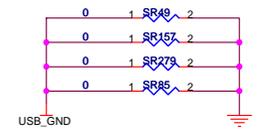
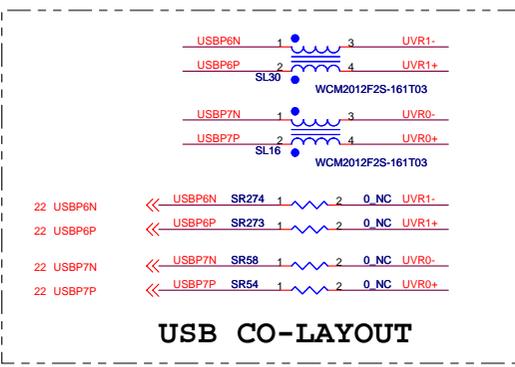
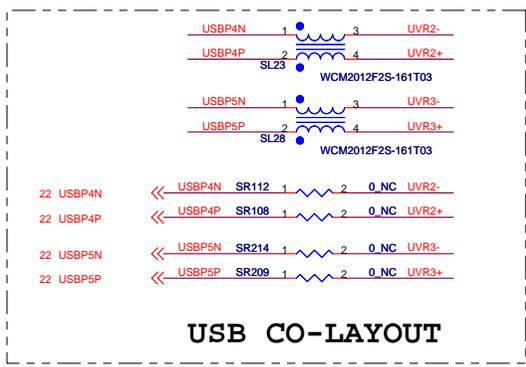
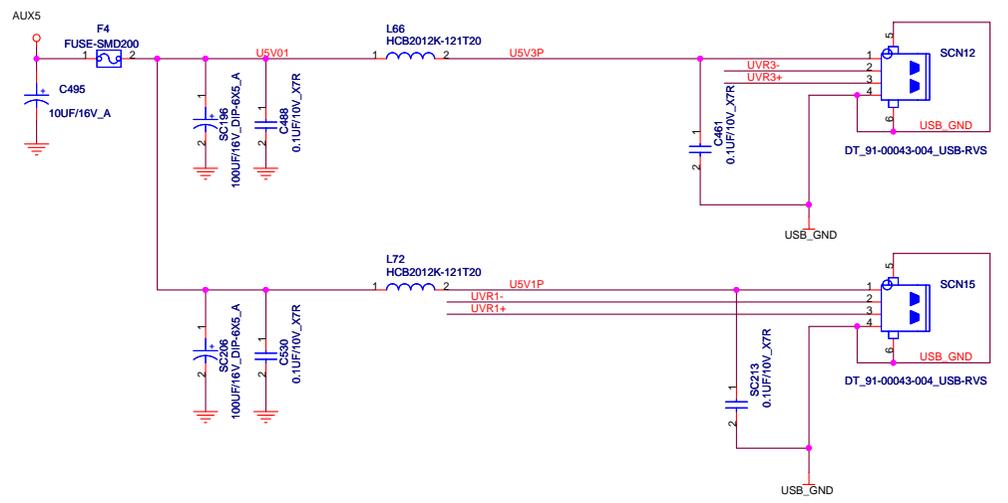
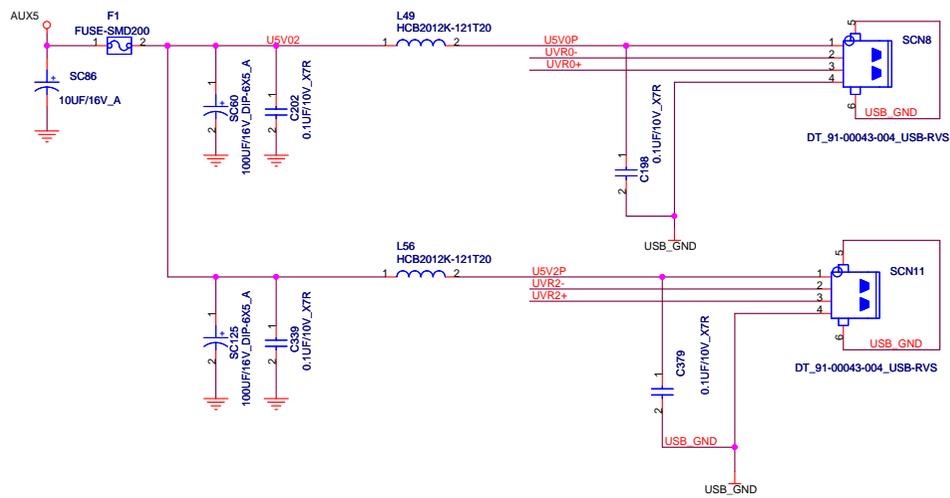
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336 -1-4-01

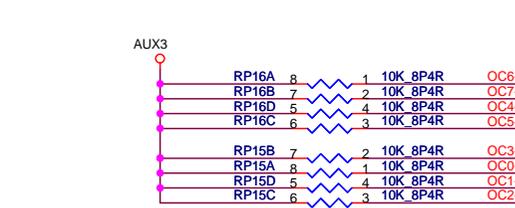
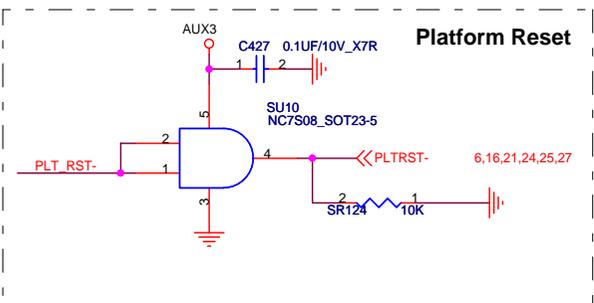
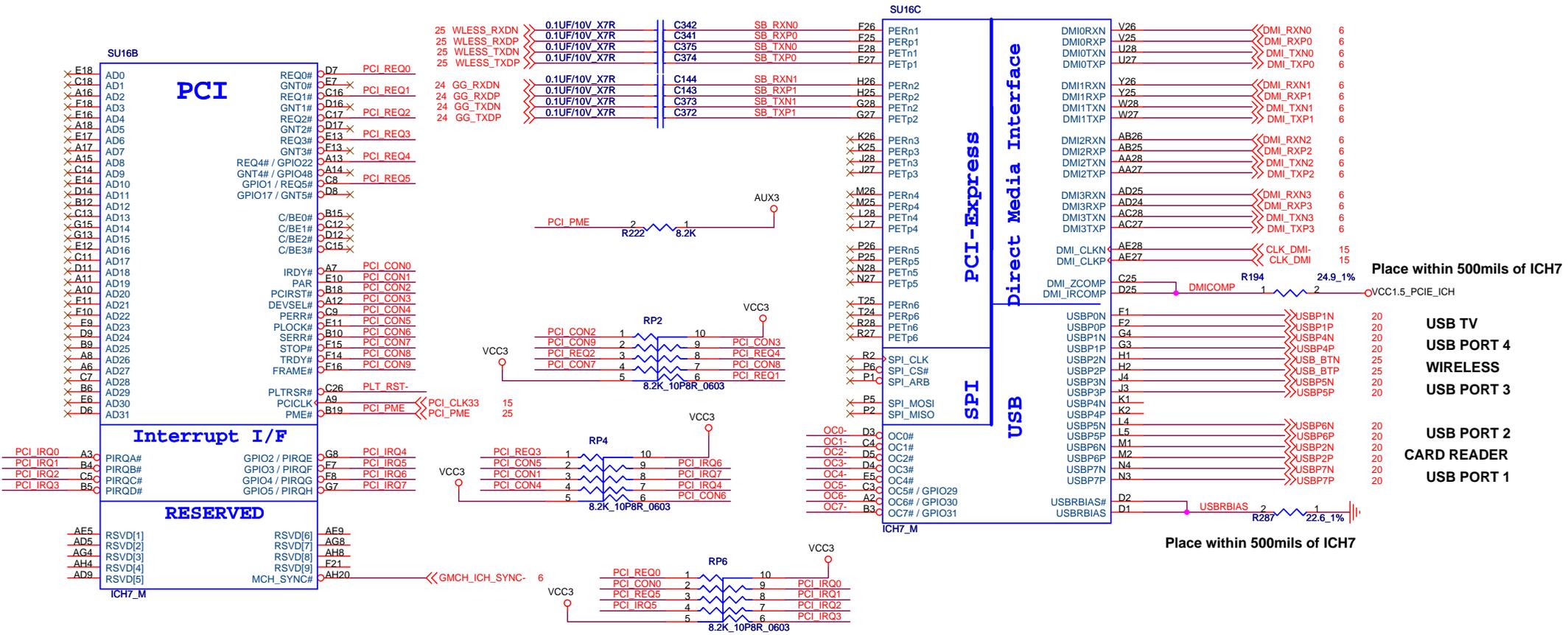
**Date**  
Wednesday, April 19, 2006

**Rev**  
1.0

**Sheet**  
19 of 37





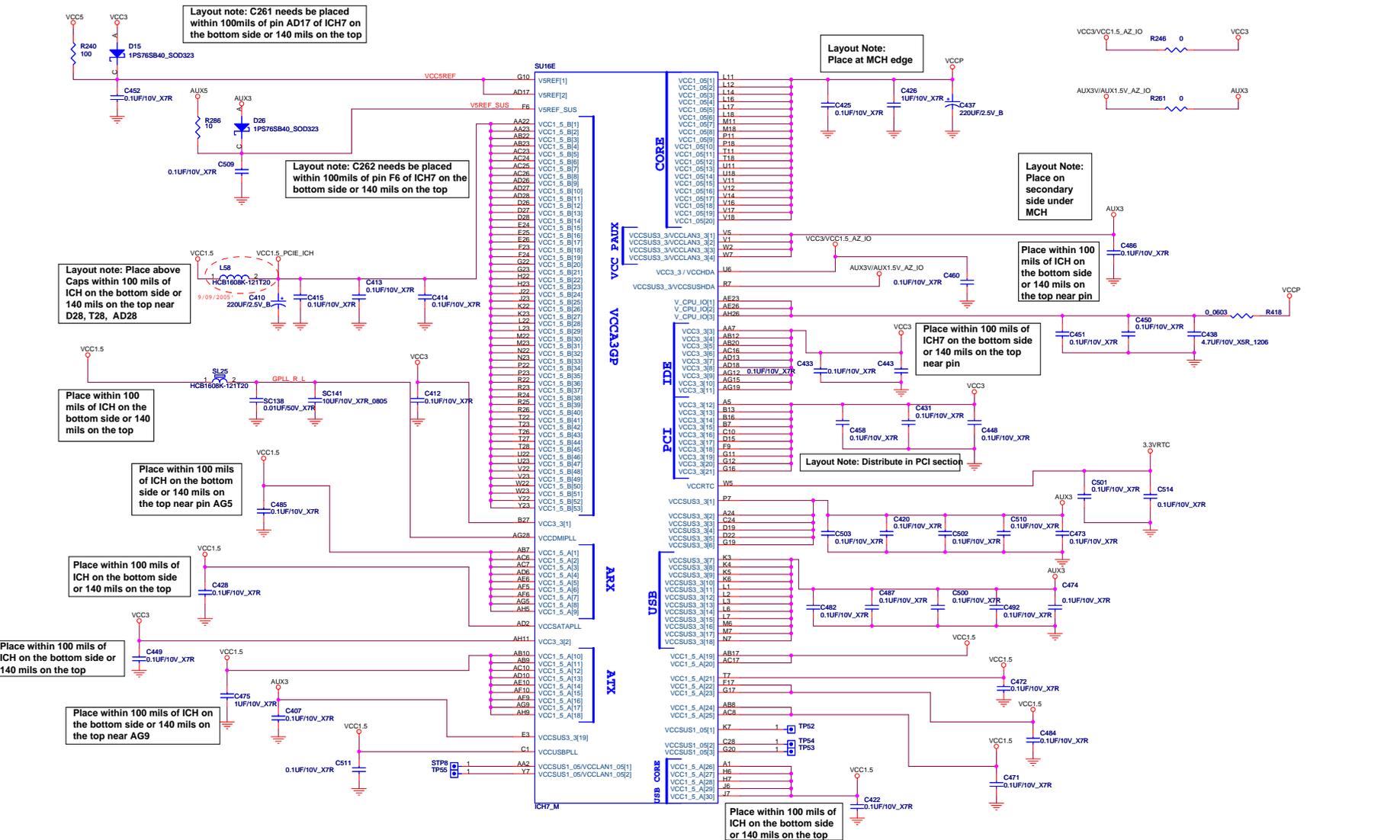


**ECS Elitegroup Computer Systems**

Title: **ICH7-M(DMI/PCI/USB/PCIE)**

Size: Custom  
 Document Number: **336 -1-4-01**  
 Rev: 1.0

Date: Wednesday, April 19, 2006 Sheet 22 of 37



Layout note: C261 needs to be placed within 100mils of pin AD17 of ICH7 on the bottom side or 140 mils on the top

Layout note: C262 needs to be placed within 100mils of pin F6 of ICH7 on the bottom side or 140 mils on the top

Layout Note: Place at MCH edge

Layout Note: Place on secondary side under MCH

Place within 100 mils of ICH on the bottom side or 140 mils on the top near pin

Place within 100 mils of ICH7 on the bottom side or 140 mils on the top near pin

Layout Note: Distribute in PCI section

Layout note: Place above Caps within 100 mils of ICH on the bottom side or 140 mils on the top near D28, T28, AD28

Place within 100 mils of ICH on the bottom side or 140 mils on the top

Place within 100 mils of ICH on the bottom side or 140 mils on the top near pin AG5

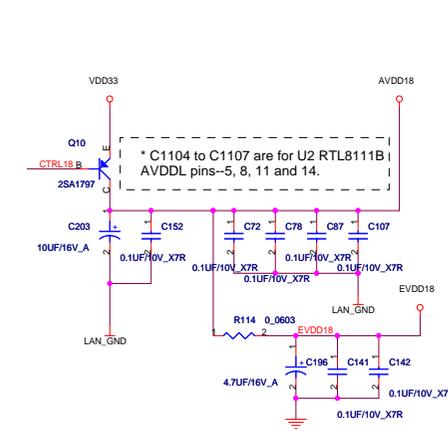
Place within 100 mils of ICH on the bottom side or 140 mils on the top

Place within 100 mils of ICH on the bottom side or 140 mils on the top

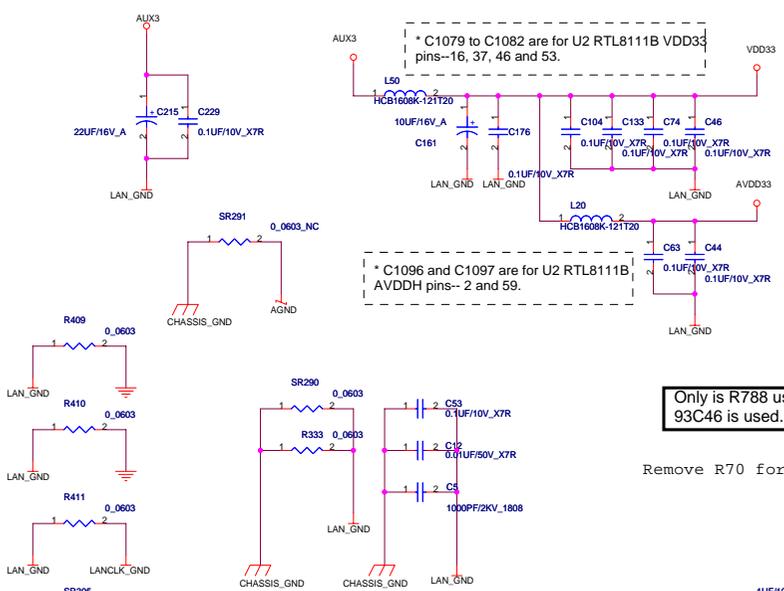
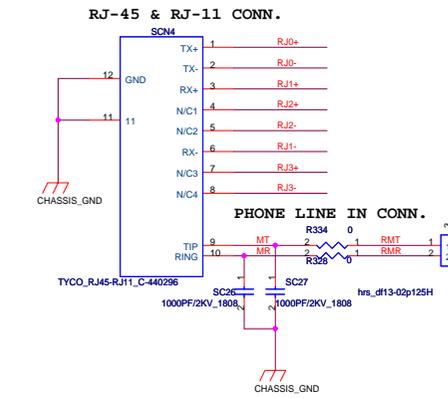
Place within 100 mils of ICH on the bottom side or 140 mils on the top near AG9

Place within 100 mils of ICH on the bottom side or 140 mils on the top

AA1	VSUS10	AA2	VSUS11	AA3	VSUS12	AA4	VSUS13	AA5	VSUS14	AA6	VSUS15	AA7	VSUS16	AA8	VSUS17	AA9	VSUS18	AA10	VSUS19	AA11	VSUS20	AA12	VSUS21	AA13	VSUS22	AA14	VSUS23	AA15	VSUS24	AA16	VSUS25	AA17	VSUS26	AA18	VSUS27	AA19	VSUS28	AA20	VSUS29	AA21	VSUS30	AA22	VSUS31	AA23	VSUS32	AA24	VSUS33	AA25	VSUS34	AA26	VSUS35	AA27	VSUS36	AA28	VSUS37	AA29	VSUS38	AA30	VSUS39	AA31	VSUS40	AA32	VSUS41	AA33	VSUS42	AA34	VSUS43	AA35	VSUS44	AA36	VSUS45	AA37	VSUS46	AA38	VSUS47	AA39	VSUS48	AA40	VSUS49	AA41	VSUS50	AA42	VSUS51	AA43	VSUS52	AA44	VSUS53	AA45	VSUS54	AA46	VSUS55	AA47	VSUS56	AA48	VSUS57	AA49	VSUS58	AA50	VSUS59	AA51	VSUS60	AA52	VSUS61	AA53	VSUS62	AA54	VSUS63	AA55	VSUS64	AA56	VSUS65	AA57	VSUS66	AA58	VSUS67	AA59	VSUS68	AA60	VSUS69	AA61	VSUS70	AA62	VSUS71	AA63	VSUS72	AA64	VSUS73	AA65	VSUS74	AA66	VSUS75	AA67	VSUS76	AA68	VSUS77	AA69	VSUS78	AA70	VSUS79	AA71	VSUS80	AA72	VSUS81	AA73	VSUS82	AA74	VSUS83	AA75	VSUS84	AA76	VSUS85	AA77	VSUS86	AA78	VSUS87	AA79	VSUS88	AA80	VSUS89	AA81	VSUS90	AA82	VSUS91	AA83	VSUS92	AA84	VSUS93	AA85	VSUS94	AA86	VSUS95	AA87	VSUS96	AA88	VSUS97	AA89	VSUS98	AA90	VSUS99	AA91	VSUS100	AA92	VSUS101	AA93	VSUS102	AA94	VSUS103	AA95	VSUS104	AA96	VSUS105	AA97	VSUS106	AA98	VSUS107	AA99	VSUS108	AA100	VSUS109	AA101	VSUS110	AA102	VSUS111	AA103	VSUS112	AA104	VSUS113	AA105	VSUS114	AA106	VSUS115	AA107	VSUS116	AA108	VSUS117	AA109	VSUS118	AA110	VSUS119	AA111	VSUS120	AA112	VSUS121	AA113	VSUS122	AA114	VSUS123	AA115	VSUS124	AA116	VSUS125	AA117	VSUS126	AA118	VSUS127	AA119	VSUS128	AA120	VSUS129	AA121	VSUS130	AA122	VSUS131	AA123	VSUS132	AA124	VSUS133	AA125	VSUS134	AA126	VSUS135	AA127	VSUS136	AA128	VSUS137	AA129	VSUS138	AA130	VSUS139	AA131	VSUS140	AA132	VSUS141	AA133	VSUS142	AA134	VSUS143	AA135	VSUS144	AA136	VSUS145	AA137	VSUS146	AA138	VSUS147	AA139	VSUS148	AA140	VSUS149	AA141	VSUS150	AA142	VSUS151	AA143	VSUS152	AA144	VSUS153	AA145	VSUS154	AA146	VSUS155	AA147	VSUS156	AA148	VSUS157	AA149	VSUS158	AA150	VSUS159	AA151	VSUS160	AA152	VSUS161	AA153	VSUS162	AA154	VSUS163	AA155	VSUS164	AA156	VSUS165	AA157	VSUS166	AA158	VSUS167	AA159	VSUS168	AA160	VSUS169	AA161	VSUS170	AA162	VSUS171	AA163	VSUS172	AA164	VSUS173	AA165	VSUS174	AA166	VSUS175	AA167	VSUS176	AA168	VSUS177	AA169	VSUS178	AA170	VSUS179	AA171	VSUS180	AA172	VSUS181	AA173	VSUS182	AA174	VSUS183	AA175	VSUS184	AA176	VSUS185	AA177	VSUS186	AA178	VSUS187	AA179	VSUS188	AA180	VSUS189	AA181	VSUS190	AA182	VSUS191	AA183	VSUS192	AA184	VSUS193	AA185	VSUS194	AA186	VSUS195	AA187	VSUS196	AA188	VSUS197	AA189	VSUS198	AA190	VSUS199	AA191	VSUS200	AA192	VSUS201	AA193	VSUS202	AA194	VSUS203	AA195	VSUS204	AA196	VSUS205	AA197	VSUS206	AA198	VSUS207	AA199	VSUS208	AA200	VSUS209	AA201	VSUS210	AA202	VSUS211	AA203	VSUS212	AA204	VSUS213	AA205	VSUS214	AA206	VSUS215	AA207	VSUS216	AA208	VSUS217	AA209	VSUS218	AA210	VSUS219	AA211	VSUS220	AA212	VSUS221	AA213	VSUS222	AA214	VSUS223	AA215	VSUS224	AA216	VSUS225	AA217	VSUS226	AA218	VSUS227	AA219	VSUS228	AA220	VSUS229	AA221	VSUS230	AA222	VSUS231	AA223	VSUS232	AA224	VSUS233	AA225	VSUS234	AA226	VSUS235	AA227	VSUS236	AA228	VSUS237	AA229	VSUS238	AA230	VSUS239	AA231	VSUS240	AA232	VSUS241	AA233	VSUS242	AA234	VSUS243	AA235	VSUS244	AA236	VSUS245	AA237	VSUS246	AA238	VSUS247	AA239	VSUS248	AA240	VSUS249	AA241	VSUS250	AA242	VSUS251	AA243	VSUS252	AA244	VSUS253	AA245	VSUS254	AA246	VSUS255	AA247	VSUS256	AA248	VSUS257	AA249	VSUS258	AA250	VSUS259	AA251	VSUS260	AA252	VSUS261	AA253	VSUS262	AA254	VSUS263	AA255	VSUS264	AA256	VSUS265	AA257	VSUS266	AA258	VSUS267	AA259	VSUS268	AA260	VSUS269	AA261	VSUS270	AA262	VSUS271	AA263	VSUS272	AA264	VSUS273	AA265	VSUS274	AA266	VSUS275	AA267	VSUS276	AA268	VSUS277	AA269	VSUS278	AA270	VSUS279	AA271	VSUS280	AA272	VSUS281	AA273	VSUS282	AA274	VSUS283	AA275	VSUS284	AA276	VSUS285	AA277	VSUS286	AA278	VSUS287	AA279	VSUS288	AA280	VSUS289	AA281	VSUS290	AA282	VSUS291	AA283	VSUS292	AA284	VSUS293	AA285	VSUS294	AA286	VSUS295	AA287	VSUS296	AA288	VSUS297	AA289	VSUS298	AA290	VSUS299	AA291	VSUS300	AA292	VSUS301	AA293	VSUS302	AA294	VSUS303	AA295	VSUS304	AA296	VSUS305	AA297	VSUS306	AA298	VSUS307	AA299	VSUS308	AA300	VSUS309	AA301	VSUS310	AA302	VSUS311	AA303	VSUS312	AA304	VSUS313	AA305	VSUS314	AA306	VSUS315	AA307	VSUS316	AA308	VSUS317	AA309	VSUS318	AA310	VSUS319	AA311	VSUS320	AA312	VSUS321	AA313	VSUS322	AA314	VSUS323	AA315	VSUS324	AA316	VSUS325	AA317	VSUS326	AA318	VSUS327	AA319	VSUS328	AA320	VSUS329	AA321	VSUS330	AA322	VSUS331	AA323	VSUS332	AA324	VSUS333	AA325	VSUS334	AA326	VSUS335	AA327	VSUS336	AA328	VSUS337	AA329	VSUS338	AA330	VSUS339	AA331	VSUS340	AA332	VSUS341	AA333	VSUS342	AA334	VSUS343	AA335	VSUS344	AA336	VSUS345	AA337	VSUS346	AA338	VSUS347	AA339	VSUS348	AA340	VSUS349	AA341	VSUS350	AA342	VSUS351	AA343	VSUS352	AA344	VSUS353	AA345	VSUS354	AA346	VSUS355	AA347	VSUS356	AA348	VSUS357	AA349	VSUS358	AA350	VSUS359	AA351	VSUS360	AA352	VSUS361	AA353	VSUS362	AA354	VSUS363	AA355	VSUS364	AA356	VSUS365	AA357	VSUS366	AA358	VSUS367	AA359	VSUS368	AA360	VSUS369	AA361	VSUS370	AA362	VSUS371	AA363	VSUS372	AA364	VSUS373	AA365	VSUS374	AA366	VSUS375	AA367	VSUS376	AA368	VSUS377	AA369	VSUS378	AA370	VSUS379	AA371	VSUS380	AA37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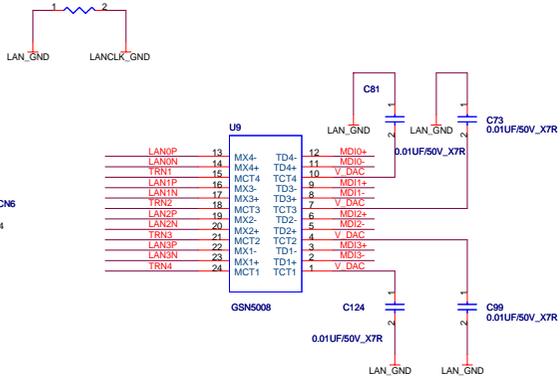


\* C1111 to C1112 are for U2 RTL8111B VDD1A pins, such as 22 and 28.

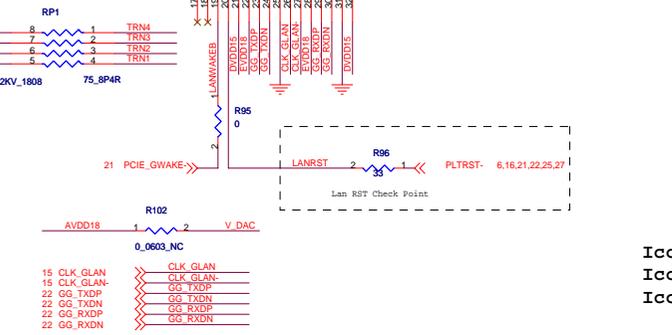
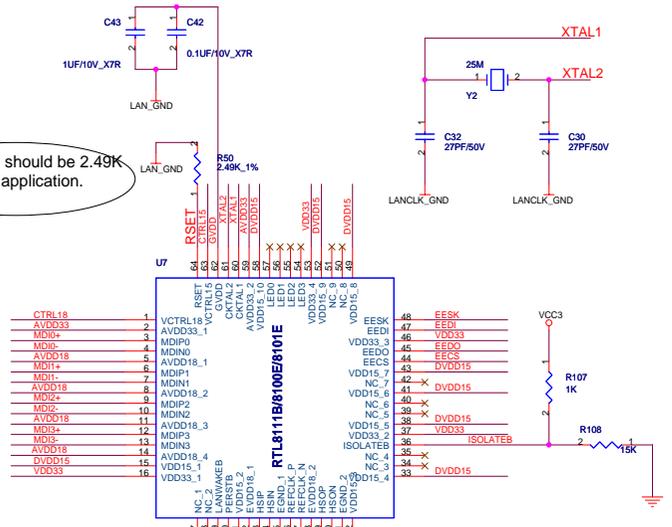


Only is R788 used when 93C56 is used. NC if 93C46 is used.

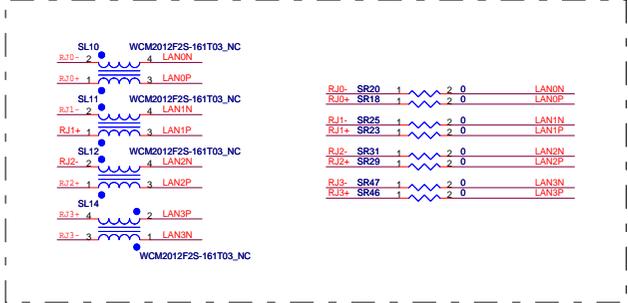
Remove R70 for 8111B and 8100E



R790 value should be 2.49K (1%) for all application.

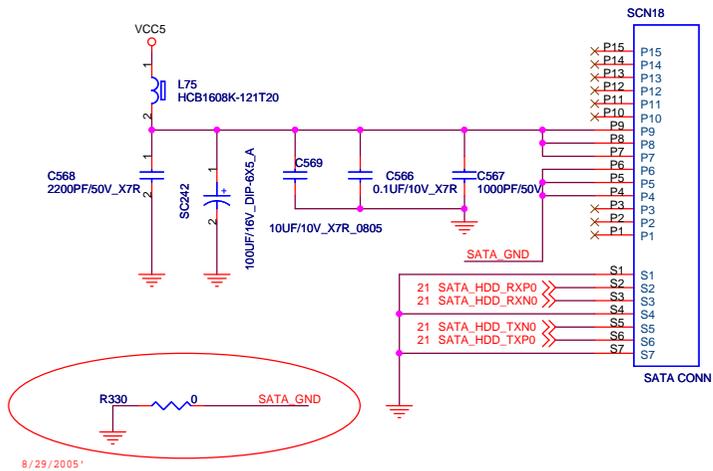


Icc 1.5v 367mA  
Icc 1.8v 198mA  
Icc 3.3v 103mA

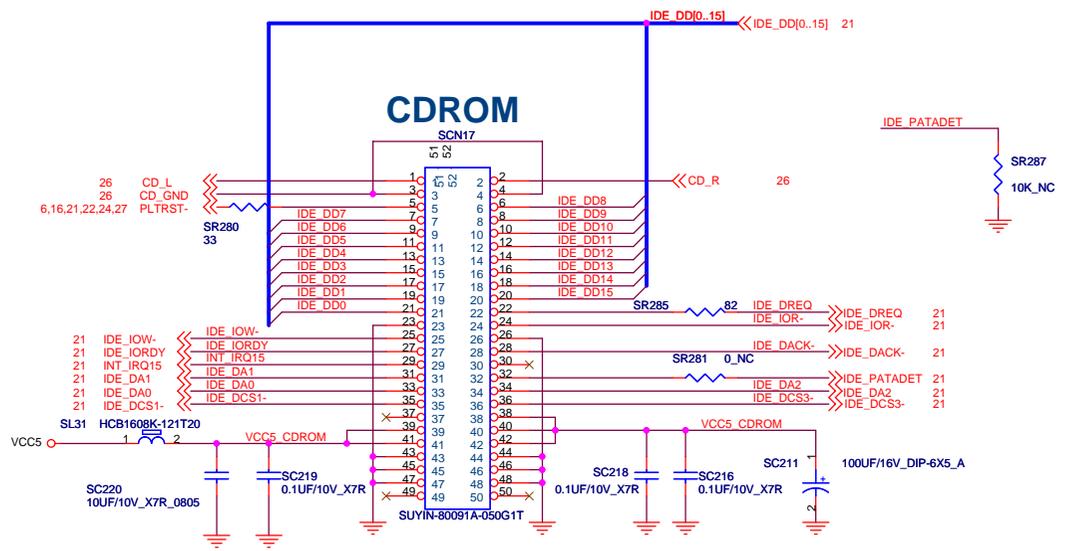


CO-LAYOUT

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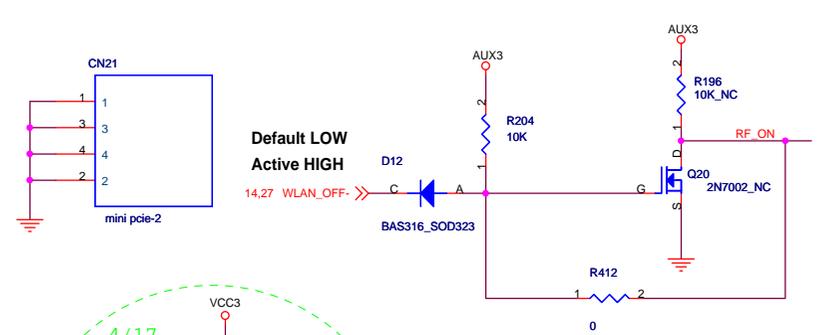
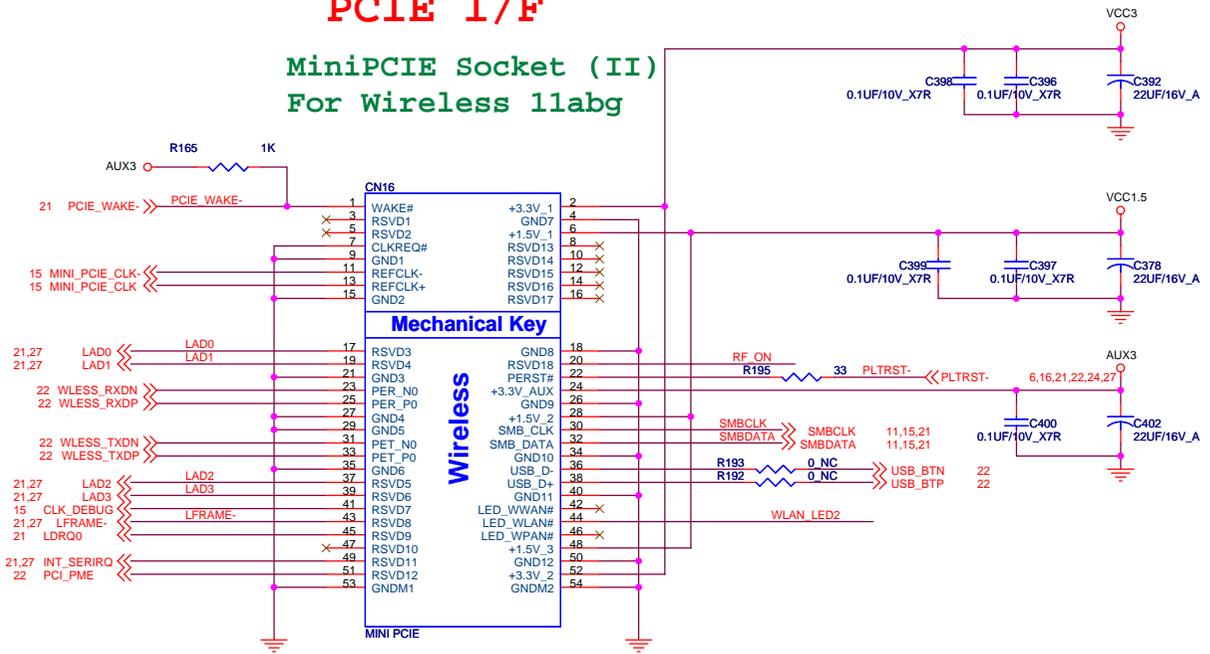


### CDROM

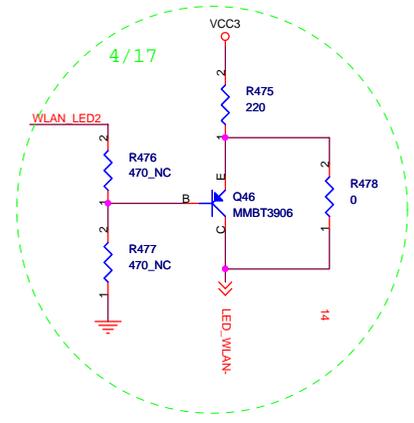


### PCIE I/F

#### MiniPCIE Socket (II) For Wireless 11abg



### WIRELESS POWER OFF CIRCUIT

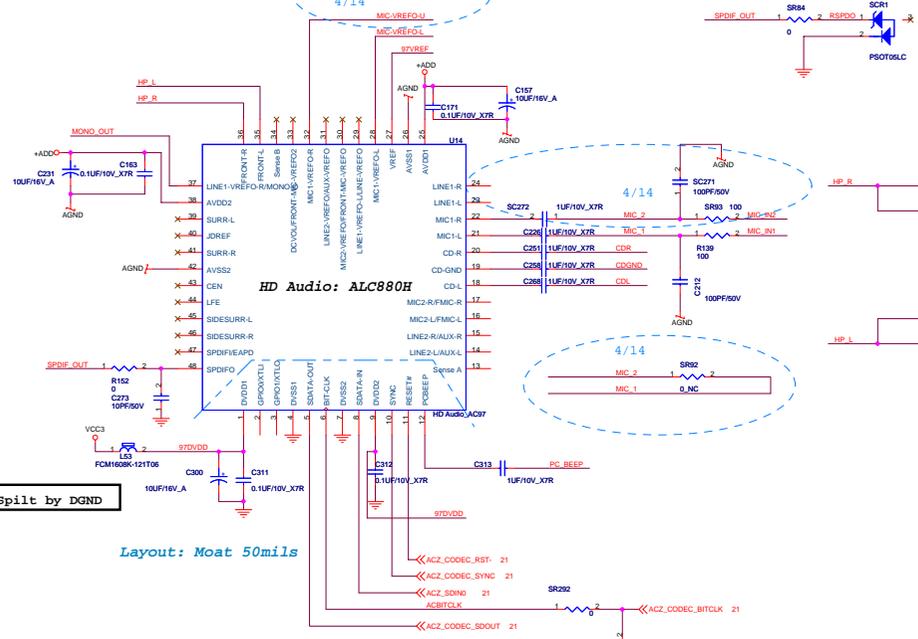


**ECS Elitegroup Computer Systems**

Title: **HDD & CDROM CONN & NEW CARD**

Size: Document Number 336 -1-4-01 Rev 1.0

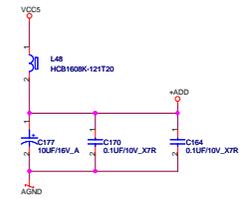
Date: Wednesday, April 19, 2006 Sheet 25 of 37

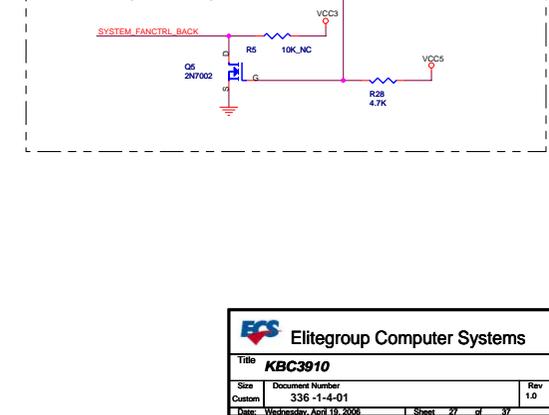
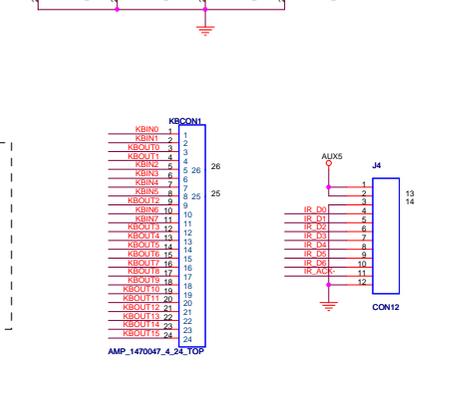
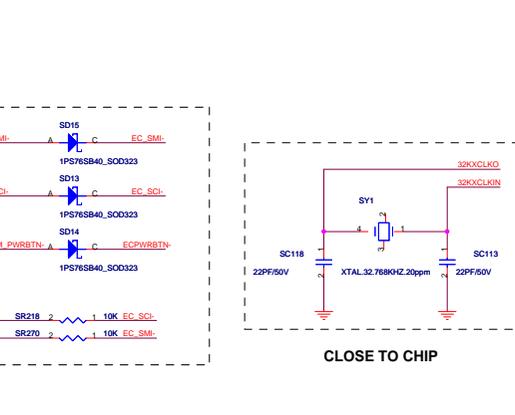
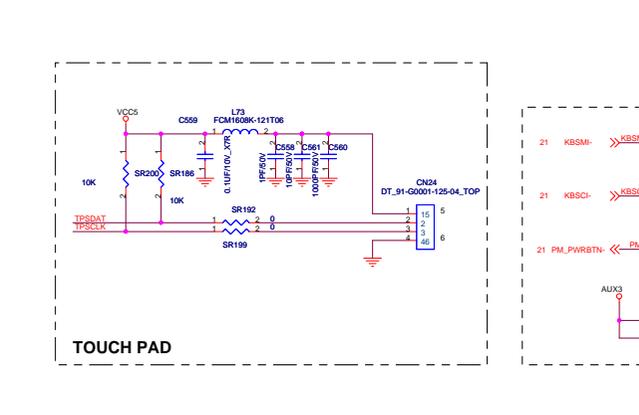
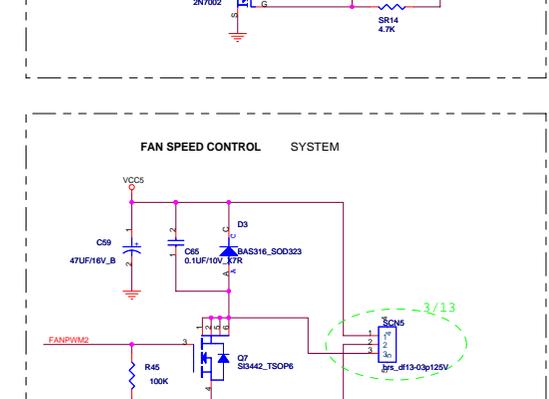
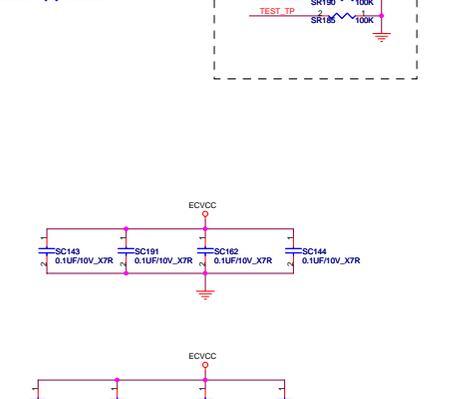
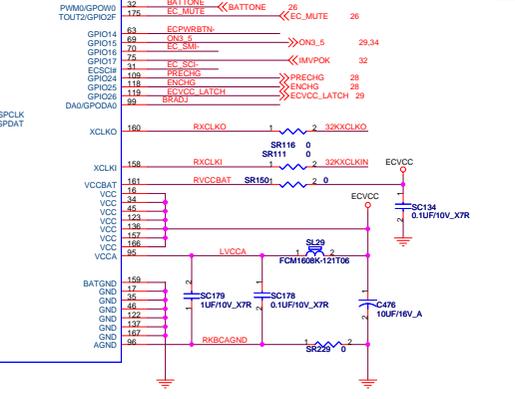
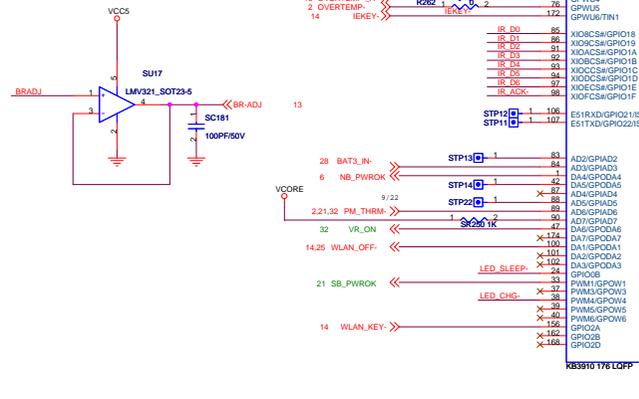
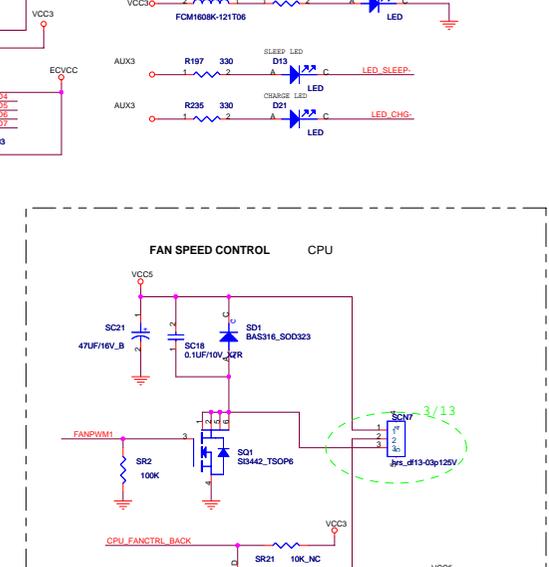
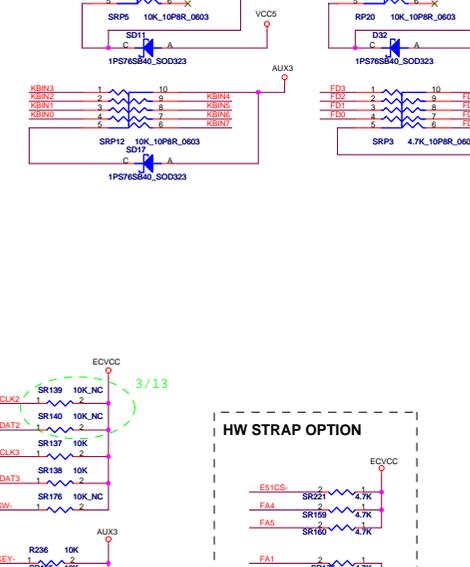
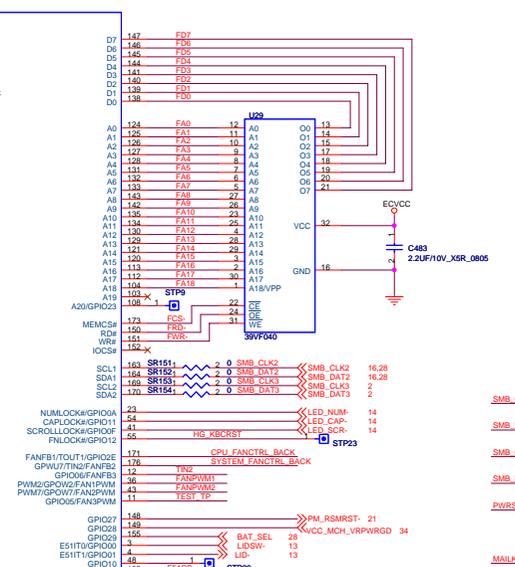
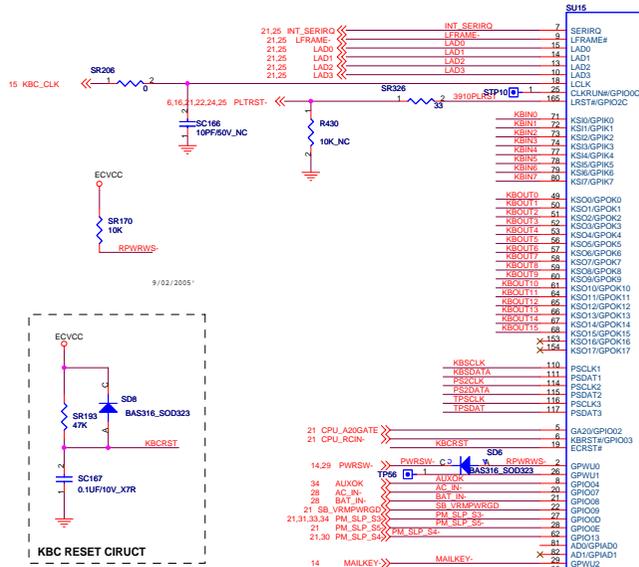


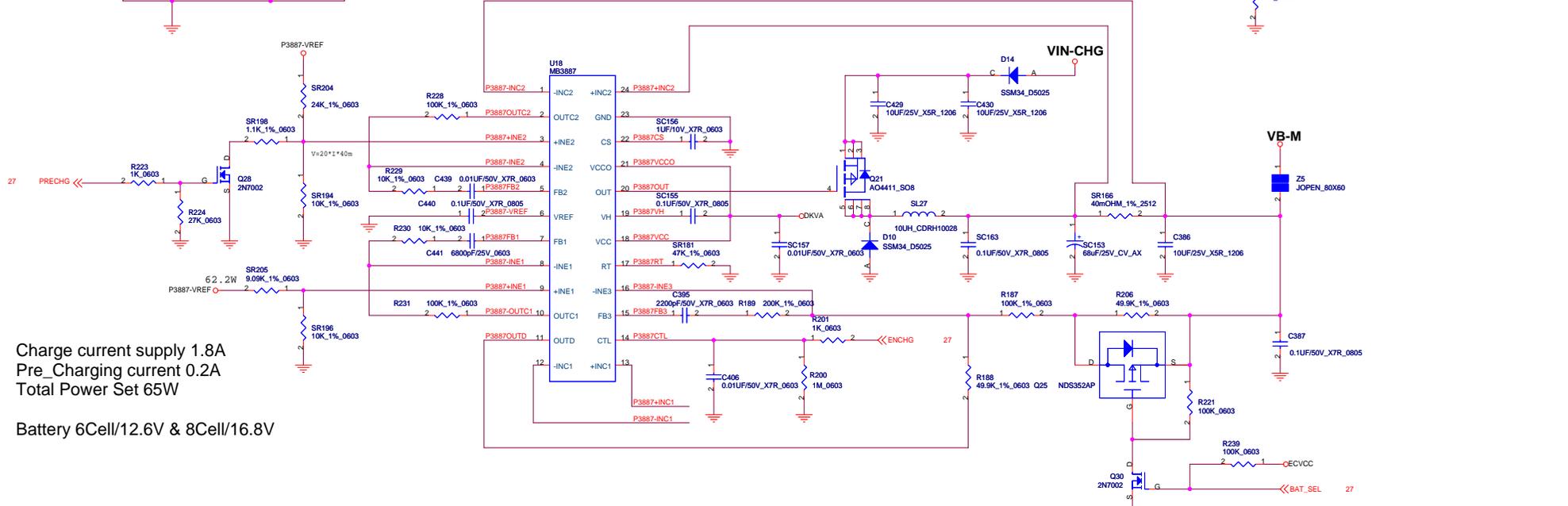
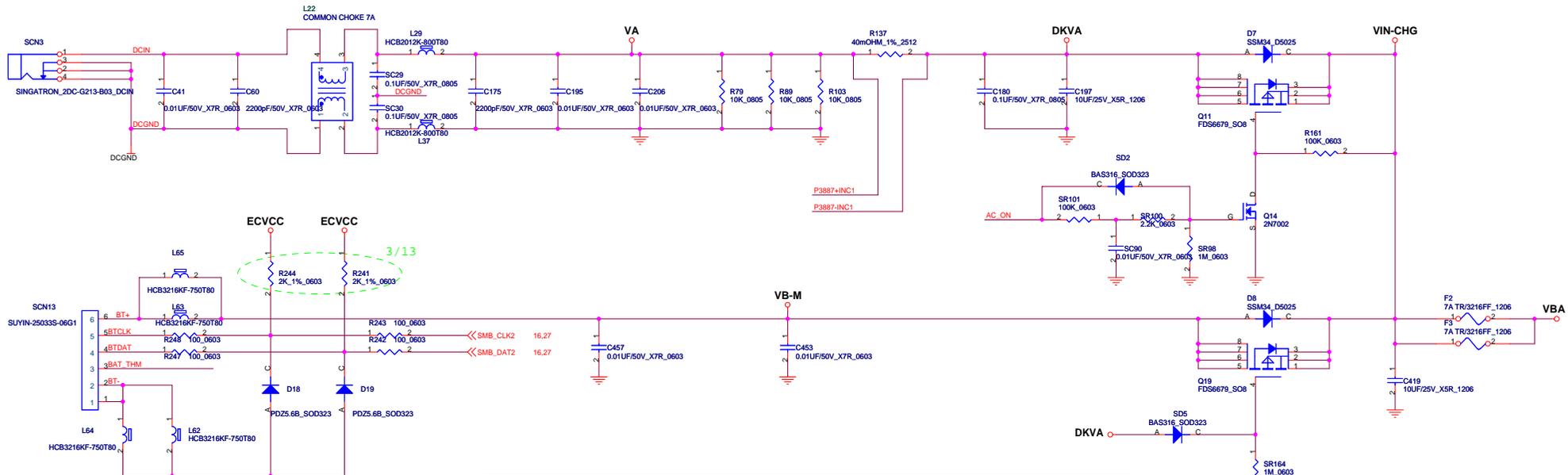
HD Audio: ALC880H

Layout: Moat 50mils

Spilt by DGND



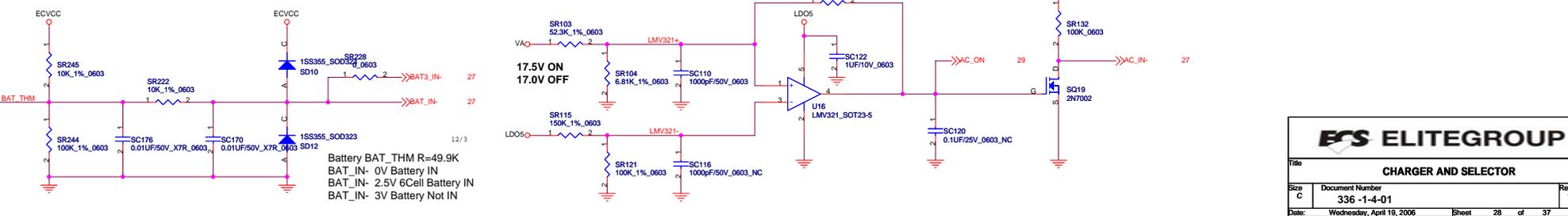




Charge current supply 1.8A  
 Pre\_Charging current 0.2A  
 Total Power Set 65W

Battery 6Cell/12.6V & 8Cell/16.8V

BAT\_SEL H->6Cell L->8Cell



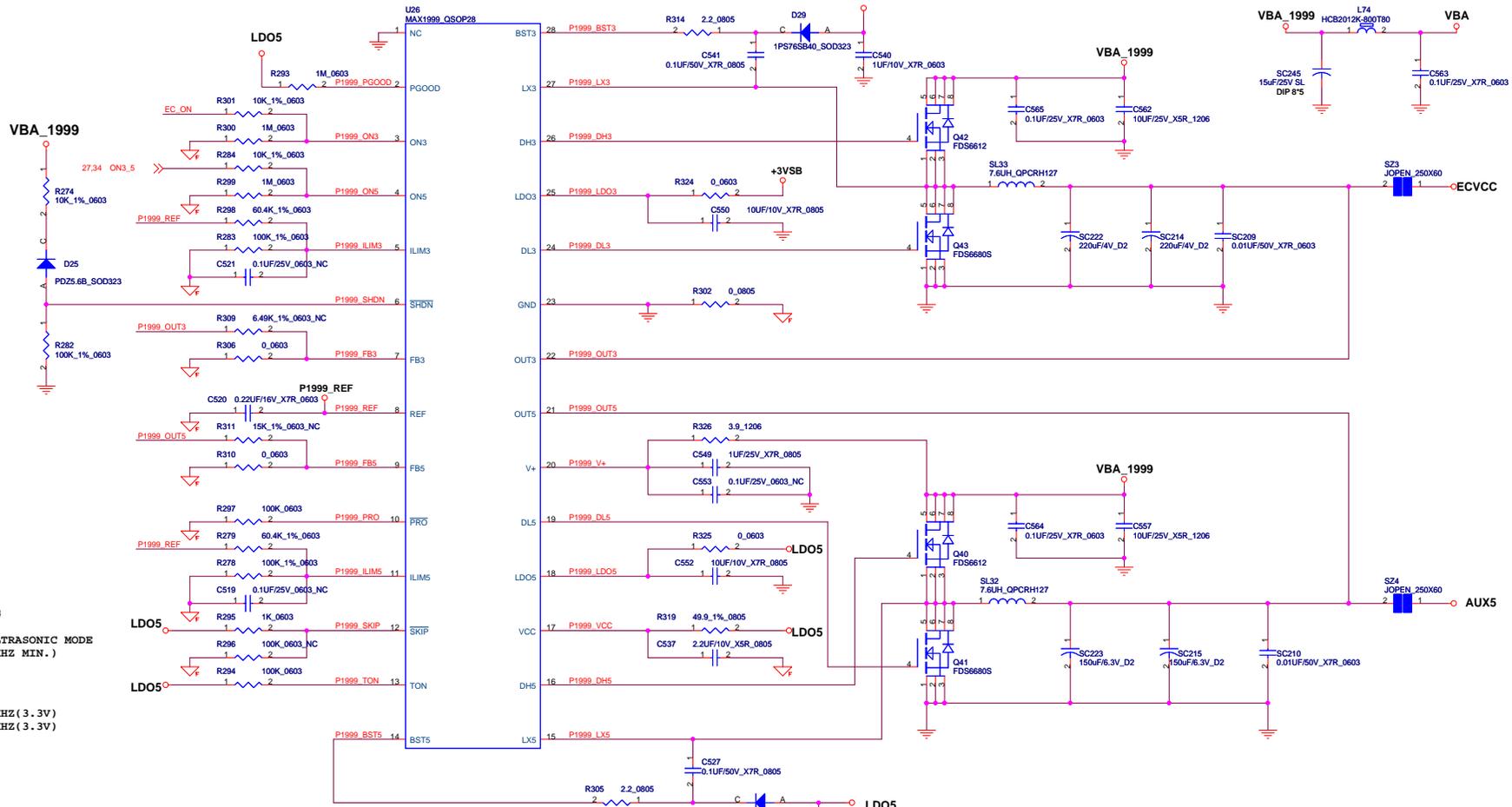
Battery BAT\_THM R=49.9K  
 BAT\_IN- 0V Battery IN  
 BAT\_IN- 2.5V 6Cell Battery IN  
 BAT\_IN- 3V Battery Not IN

**ELITEGROUP**

Title: **CHARGER AND SELECTOR**

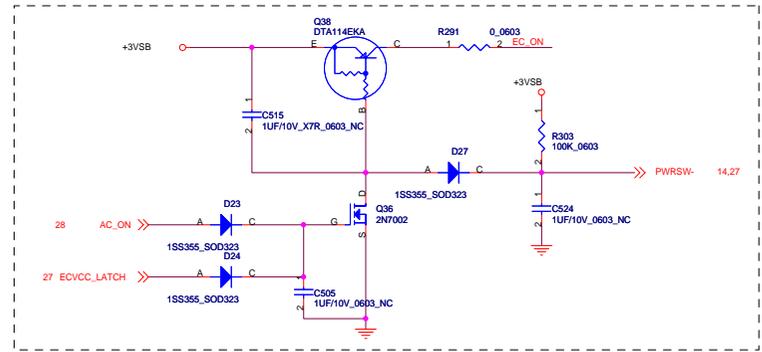
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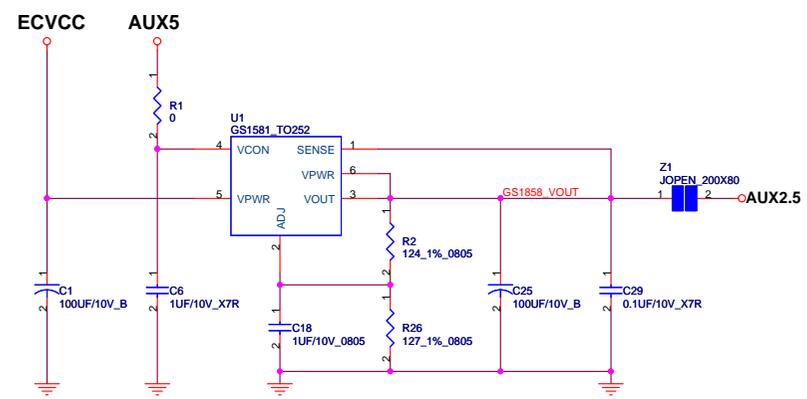
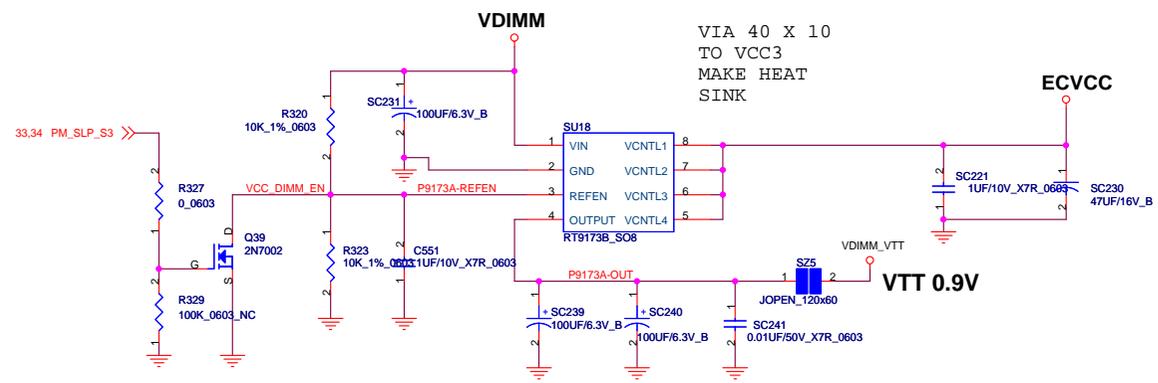
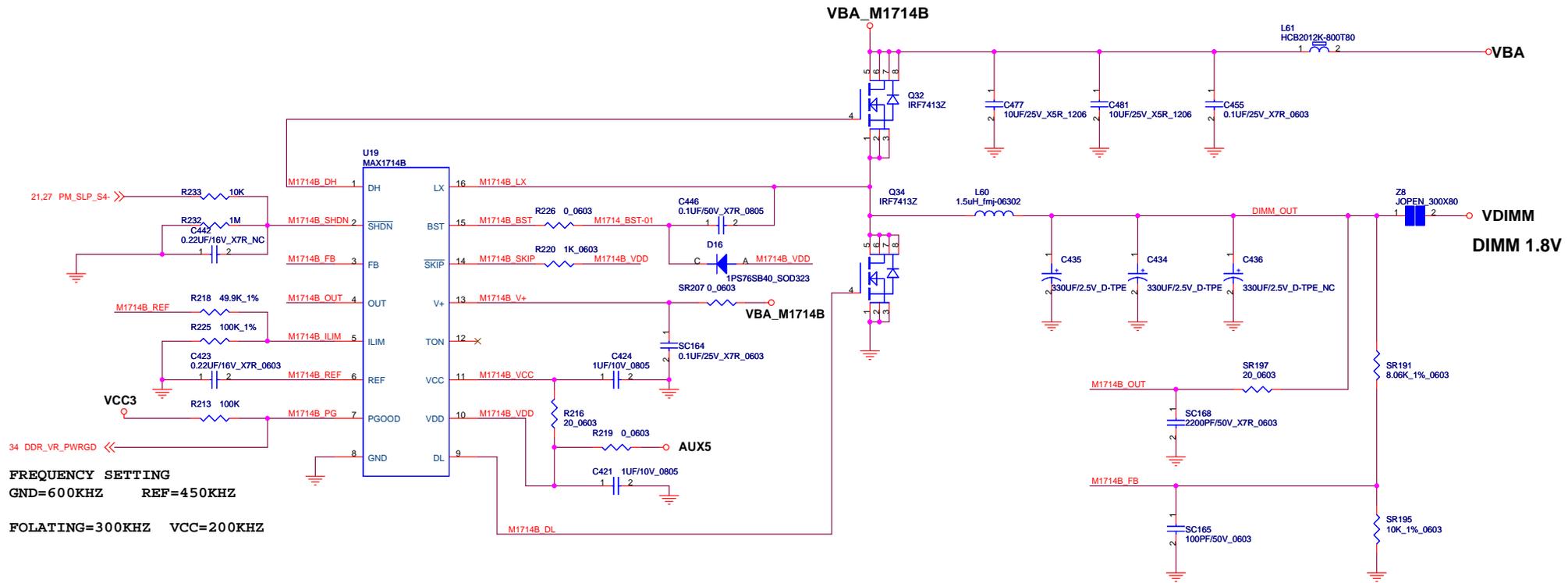
Date: Wednesday, April 19, 2006 Sheet: 28 of 37

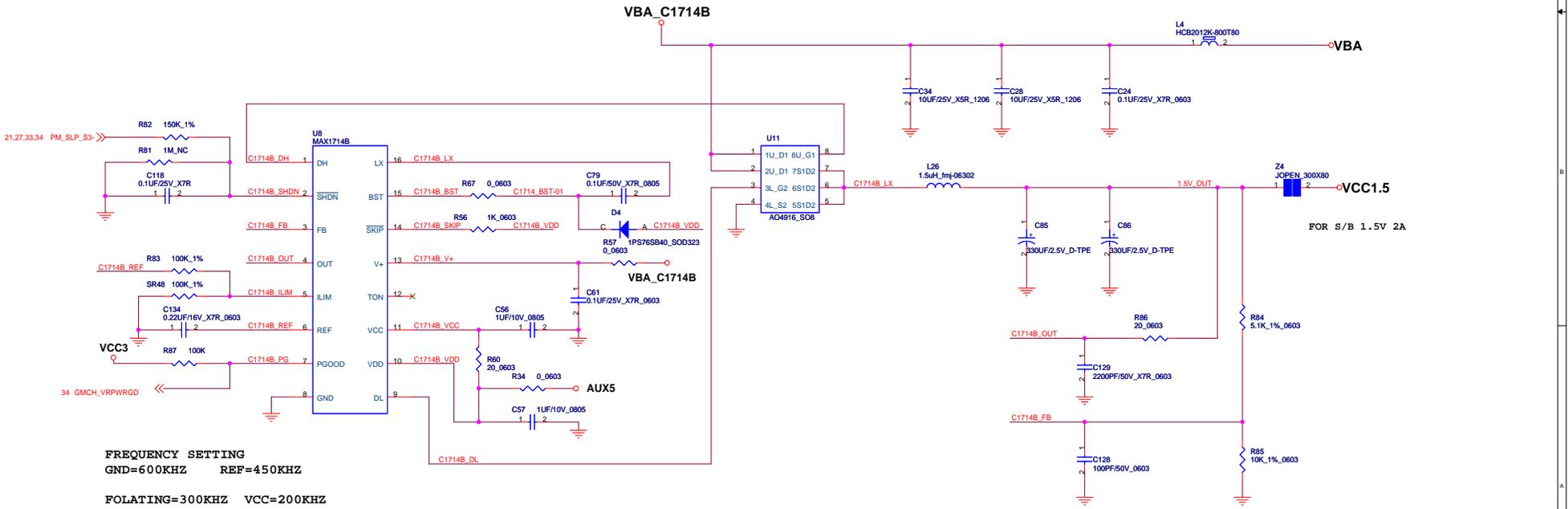
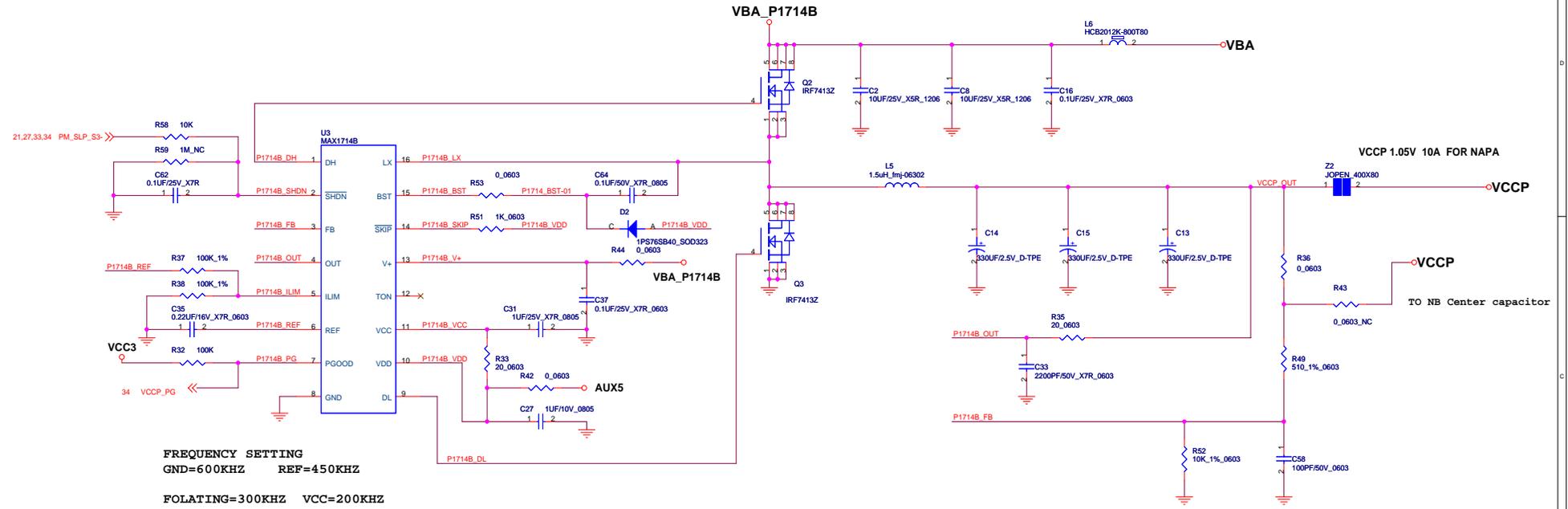


/SKIP:  
 GND: PULSE-SKIPPING  
 VCC: PWM MODE  
 REF OR FLOATING: ULTRASONIC MODE  
 (PULSE SKIPPING, 25KHZ MIN.)

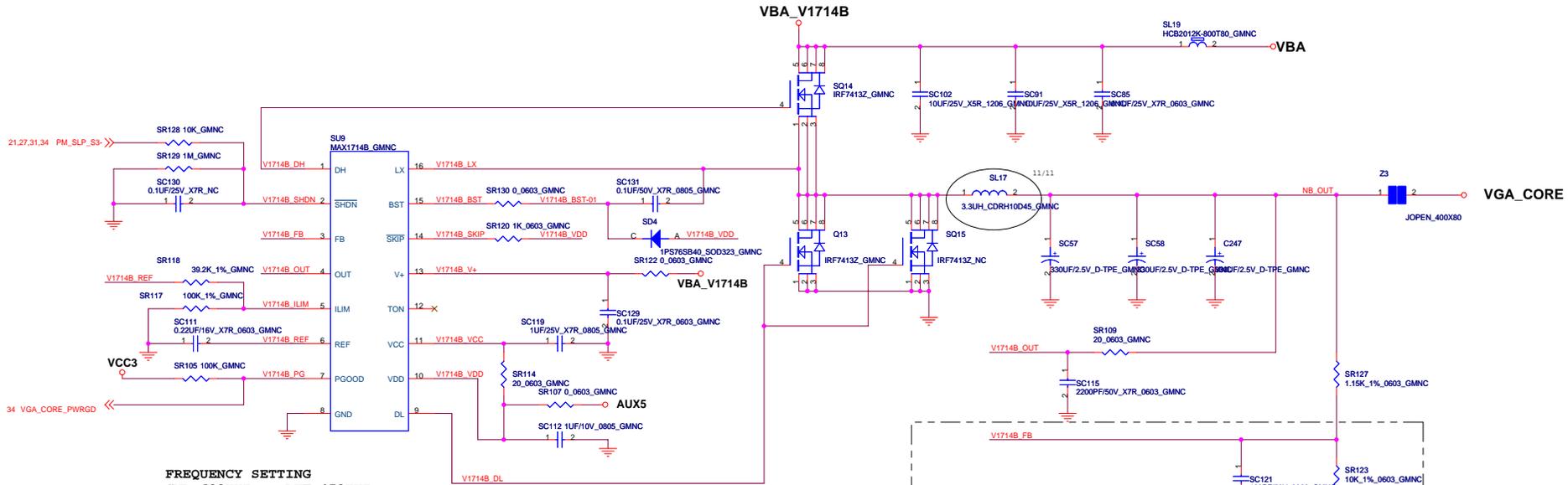
TON:  
 VCC: 200KHZ (5V), 300KHZ (3.3V)  
 GND: 400KHZ (5V), 500KHZ (3.3V)



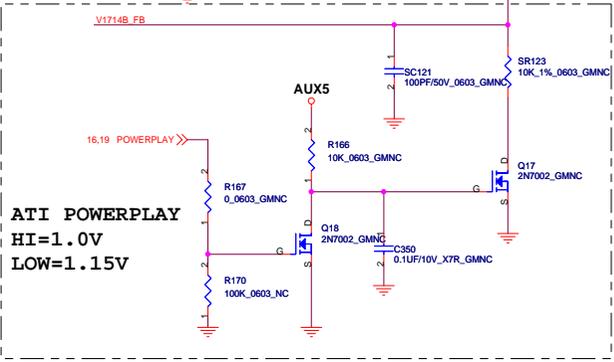




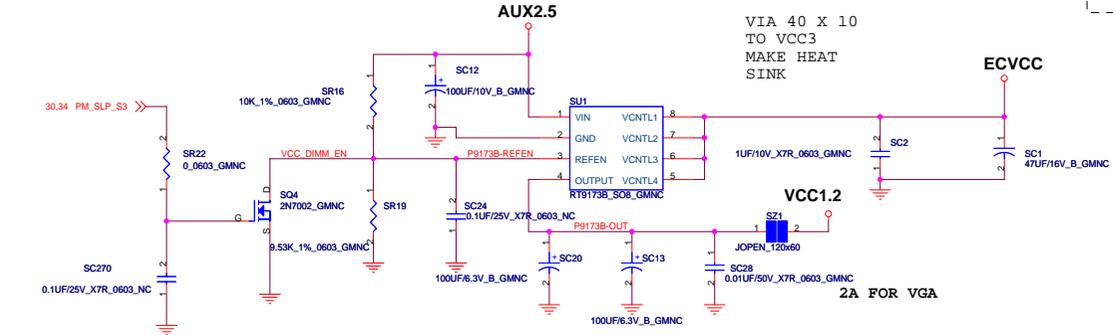




FREQUENCY SETTING  
 GND=600KHZ REF=450KHZ  
 FOLATING=300KHZ VCC=200KHZ



ATI POWERPLAY  
 HI=1.0V  
 LOW=1.15V

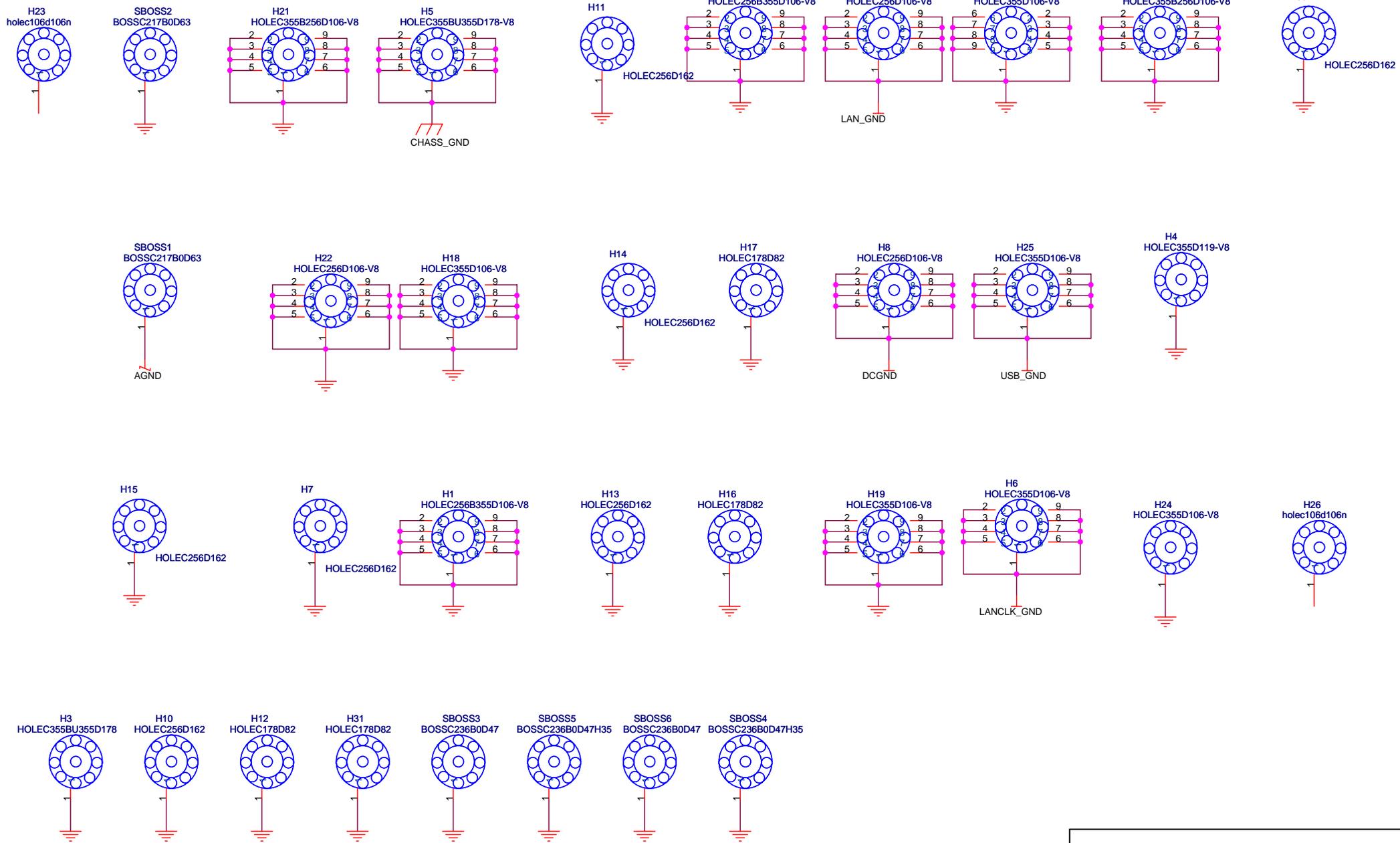


VIA 40 X 10  
 TO VCC3  
 MAKE HEAT  
 SINK

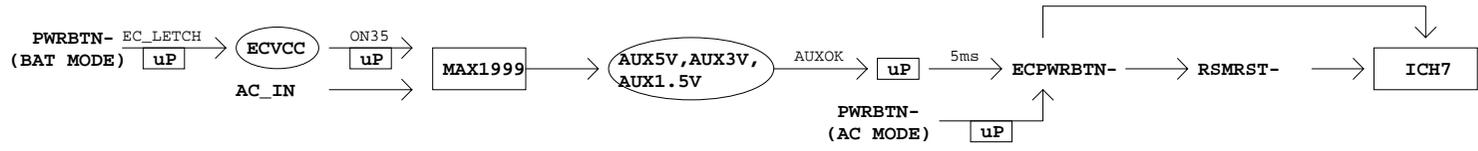
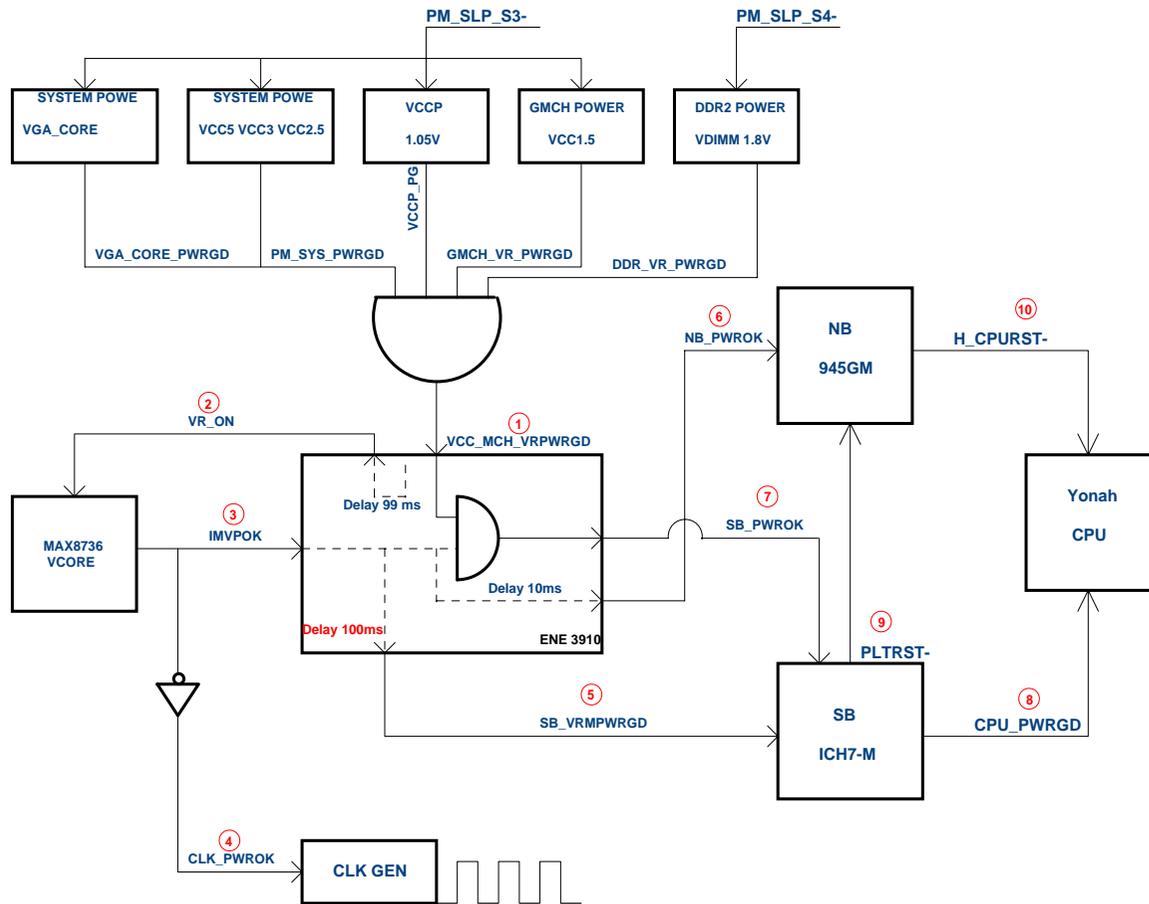
2A FOR VGA

Title		
VGA_CORE		
Size	Document Number	Rev
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Title		
<b>G336 SCREWHOLE</b>		
Size	Document Number	Rev 1.0
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**A.0 Realease Schematic**

**A.1 EE schematic v-ram update to DDR-II**

**B.0 UPDATE V\_CORE**

**C.0 UPDATE FAN CONN. & EMI Solution & RAM termination & W/L Led**

**1.0 Realease Schematic**

 <b>Elitegroup Computer Systems</b>		
Title <b>HISTORY</b>		
Size A	Document Number	Rev C.0
Date: <b>Wednesday, April 19, 2006</b> Sheet <b>37</b> of <b>37</b>		