Nozomi-4 UMA SOVP LOGIC SCHEMATICS

NZM4I-7
VER 7.53
MAR/19/2012

BASE LOGIC :Nozomi-4 UMA SVT
VER 7.02
Jan/17/2012

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Project Name : NZM-4 UMA SOVP	Title : TITLE PAGE	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 1 of 97	

EC HISTORY

Nozomi-4 UMA MFVT (BASE LOGIC :Nozomi-4 SWG MFVT VER 2.06 May/31/2011)
VER.2.00 06/01/2011 APPLIED UMA MFVT_EC001-006
VER.2.01 06/02/2011 APPLIED UMA MFVT_EC007-011
VER.2.02 06/03/2011 APPLIED UMA MFVT_EC012
VER.2.03 06/06/2011 APPLIED UMA MFVT_EC013-015
VER.2.04 06/07/2011 APPLIED UMA MFVT_EC016,019,020
VER.2.05 06/08/2011 APPLIED UMA MFVT_EC027
VER.2.06 06/09/2011 APPLIED UMA MFVT_EC030,032,033,036,037
VER.2.07 06/14/2011 APPLIED UMA MFVT_EC039
VER.2.08 06/21/2011 APPLIED UMA MFVT_EC042

Nozomi-4 UMA FVT (BASE LOGIC :Nozomi-4 UMA MFVT VER 2.08 Jun/21/2011)
VER.3.00 06/23/2011 APPLIED UMA FVT_EC001-003
VER.3.01 07/01/2011 APPLIED UMA FVT_EC007
VER.3.02 07/04/2011 APPLIED UMA FVT_EC004,008-010
VER.3.03 07/05/2011 APPLIED UMA FVT_EC011-014
VER.3.04 07/06/2011 APPLIED UMA FVT_EC015-021
VER.3.05 07/08/2011 APPLIED UMA FVT_EC024-029
VER.3.06 07/11/2011 APPLIED UMA FVT_EC030
VER.3.07 07/12/2011 APPLIED UMA FVT_EC034,036
VER.3.08 07/13/2011 APPLIED UMA FVT_EC037,038
VER.3.09 07/14/2011 APPLIED UMA FVT_EC040-043,046,047,049,050,053
VER.3.10 07/15/2011 APPLIED UMA FVT_EC054
VER.3.11 07/19/2011 APPLIED UMA FVT_EC042,055-058
VER.3.12 07/21/2011 APPLIED UMA FVT_EC059-062
VER.3.13 07/22/2011 APPLIED UMA FVT_EC063
VER.3.14 07/26/2011 APPLIED UMA FVT_EC064,065

Nozomi-4 UMA SIT (BASE LOGIC :Nozomi-4 UMA FVT VER 3.14 Jul/26/2011)
VER.4.00 08/01/2011 APPLIED UMA SIT_EC001-007
VER.4.01 08/02/2011 APPLIED UMA SIT_EC008-010
VER.4.02 08/03/2011 APPLIED UMA SIT_EC011
VER.4.03 08/04/2011 APPLIED UMA SIT_EC012-014
VER.4.04 08/05/2011 APPLIED UMA SIT_EC015-017
VER.4.05 08/17/2011 APPLIED UMA SIT_EC018-025,027
VER.4.06 08/22/2011 APPLIED UMA SIT_EC028,031-033
VER.4.07 08/23/2011 APPLIED UMA SIT_EC035,037
VER.4.08 08/24/2011 APPLIED UMA SIT_EC038-042
VER.4.09 08/25/2011 APPLIED UMA SIT_EC030,044-046
VER.4.10 08/26/2011 APPLIED UMA SIT_EC047,048
VER.4.11 08/29/2011 APPLIED UMA SIT_EC049
VER.4.12 09/01/2011 APPLIED UMA SIT_EC051-053
VER.4.13 09/05/2011 APPLIED UMA SIT_EC054,055
VER.4.14 09/07/2011 APPLIED UMA SIT_EC056,061-070
VER.4.15 09/08/2011 APPLIED UMA SIT_EC071-079
VER.4.16 09/09/2011 APPLIED UMA SIT_EC082,084,085
VER.4.17 09/12/2011 APPLIED UMA SIT_EC088,089
VER.4.18 09/13/2011 APPLIED UMA SIT_EC090
VER.4.19 09/15/2011 APPLIED UMA SIT_EC092,093
VER.4.20 09/21/2011 APPLIED UMA SIT_EC094

Nozomi-4 UMA SIT-R1 (BASE LOGIC :Nozomi-4 UMA SIT VER 4.20 Sep/21/2011)
VER.5.00 09/27/2011 APPLIED UMA SITR_EC001-003
VER.5.01 10/11/2011 APPLIED UMA SITR_EC004,005
VER.5.02 10/28/2011 APPLIED UMA SITR_EC006
VER.5.03 10/31/2011 APPLIED UMA SITR_EC007-010
VER.5.04 11/01/2011 APPLIED UMA SITR_EC012
VER.5.05 11/02/2011 APPLIED UMA SITR_EC013
VER.5.06 11/04/2011 APPLIED UMA SITR_EC015,016,018
VER.5.07 11/07/2011 APPLIED UMA SITR_EC019
VER.5.08 11/09/2011 APPLIED UMA SITR_EC014
VER.5.09 11/10/2011 APPLIED UMA SITR_EC020
VER.5.10 11/15/2011 APPLIED UMA SITR_EC021

Nozomi-4 UMA SIT-R2 (BASE LOGIC :Nozomi-4 UMA SIT -R1 VER 5.10 Nov/15/2011)
VER.6.00 11/18/2011 APPLIED UMA SITR2_EC001-003
VER.6.01 11/22/2011 APPLIED UMA SITR2_EC006
VER.6.02 11/25/2011 APPLIED UMA SITR2_EC007
VER.6.03 11/28/2011 APPLIED UMA SITR2_EC008
VER.6.04 11/29/2011 APPLIED UMA SITR2_EC009,010
VER.6.05 11/30/2011 APPLIED UMA SITR2_EC011,012
VER.6.06 12/01/2011 APPLIED UMA SITR2_EC015
VER.6.07 12/05/2011 APPLIED UMA SITR2_EC017

Nozomi-4 UMA SVT (BASE LOGIC :Nozomi-4 UMA SIT-R2 VER 6.07 Dec/05/2011)
VER.7.00 12/13/2011 APPLIED UMA SVT_EC001-005
VER.7.01 12/15/2011 APPLIED UMA SVT_EC006-008
VER.7.02 01/17/2012 APPLIED UMA SVT_EC012

Nozomi-4 UMA SOVP (BASE LOGIC :Nozomi-4 UMA SVT VER 7.02 Jan/17/2011)
VER.7.50 02/24/2012 APPLIED UMA SOVP_EC001-003
VER.7.51 03/05/2012 APPLIED UMA SOVP_EC004
VER.7.52 03/08/2012 APPLIED UMA SOVP_EC005
VER.7.53 03/19/2012 APPLIED UMA SOVP_EC006

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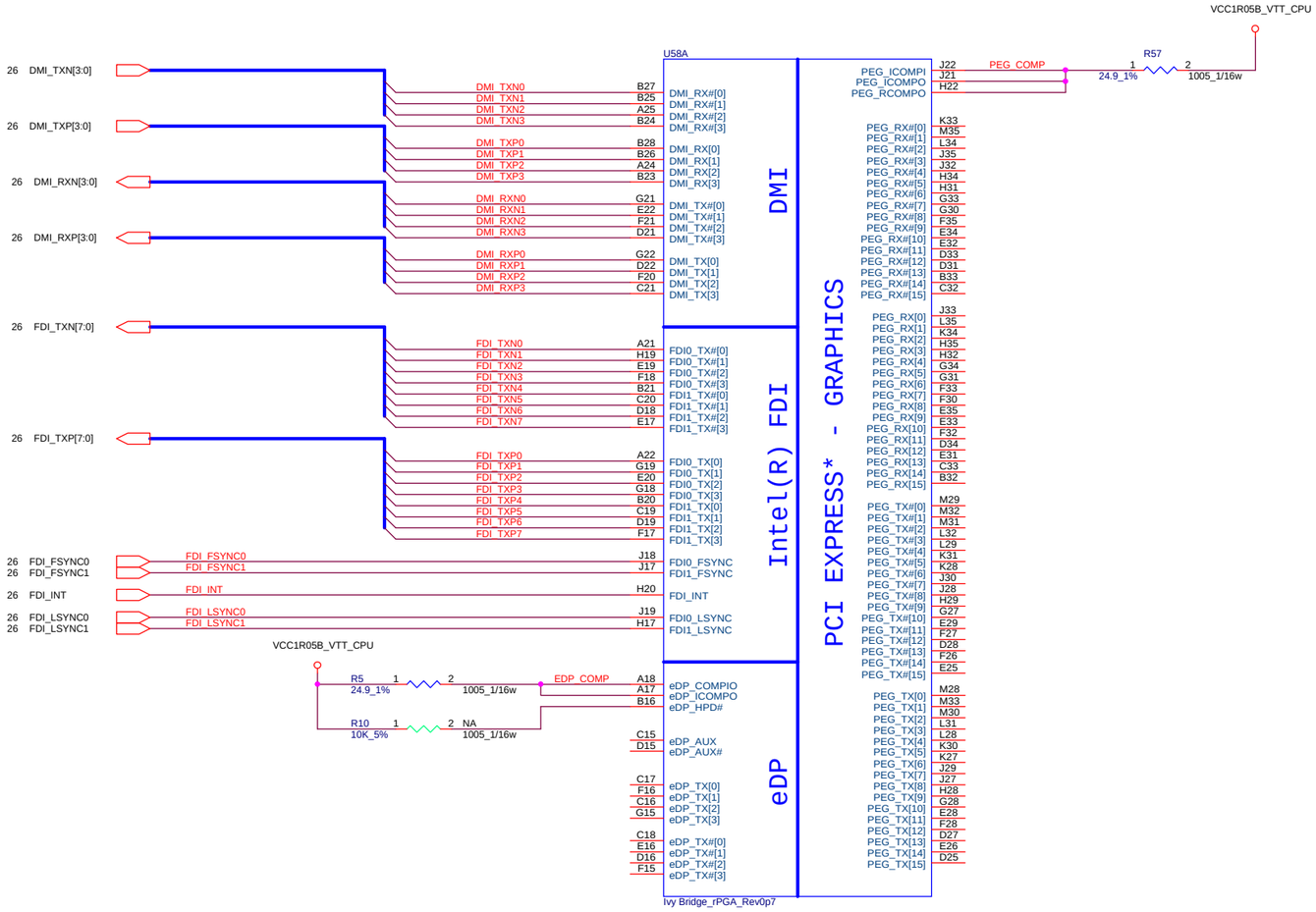
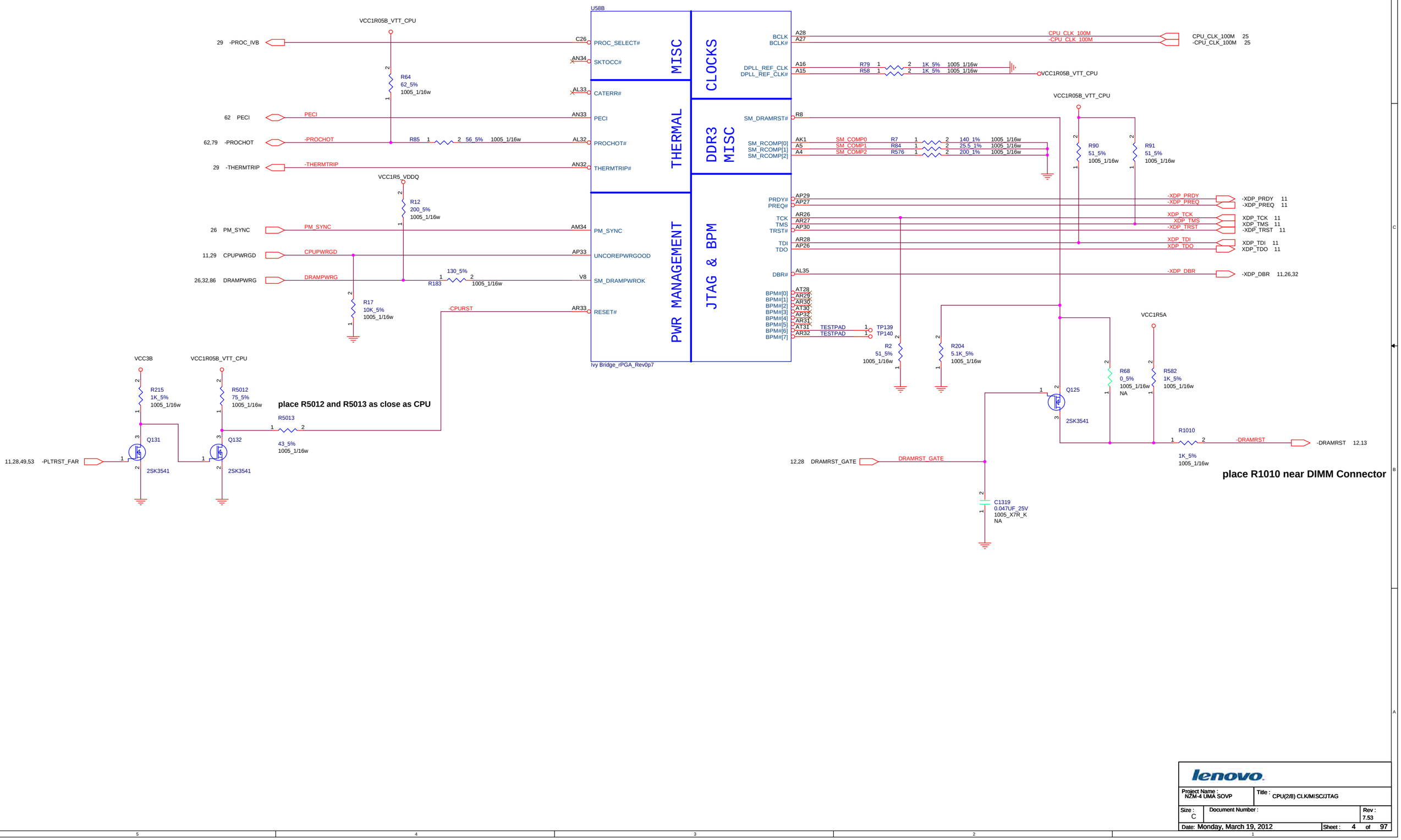
Project Name : NZM-4 UMA SOVP	Title : EC HISTORY	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 2 of 97	



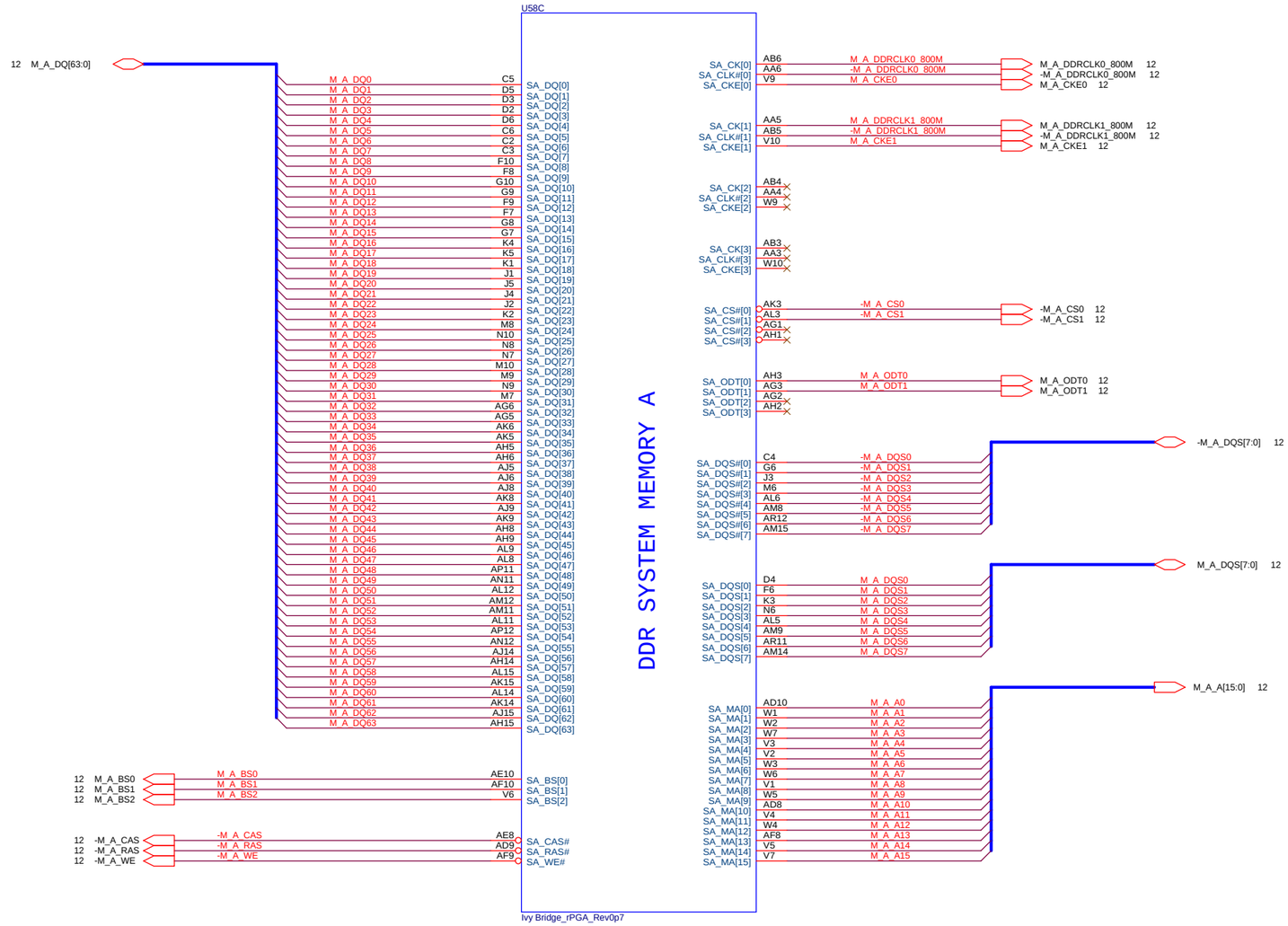
Project Name : NZM-4 UMA SOVP	Title : CPU(1/8) DMI/EDP/PEG/FDI	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 3 of 97	

TABLE PROC_SELECT#(-PROC_IVB)

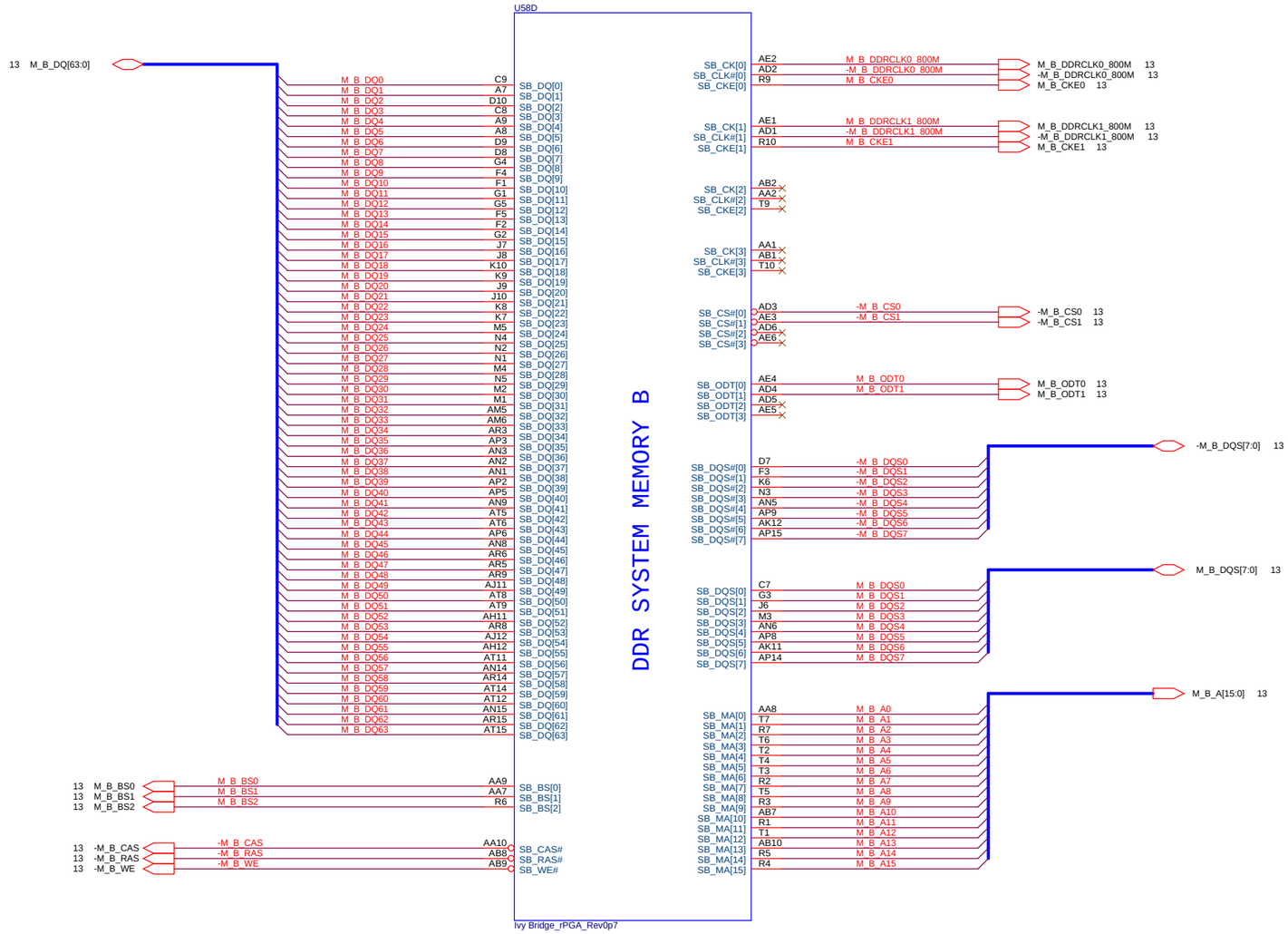
Sandy Bridge	**High**
Ivy Bridge	**Low**



Project Name : NZM-4 UMA SOVP		Title : CPU(2/8) CLK/MISC/JTAG	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 4 of 97	



Project Name : NZM-4 UMA SOVP		Title : CPU(3/8) DDR3 CH- A	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 5 of 97	



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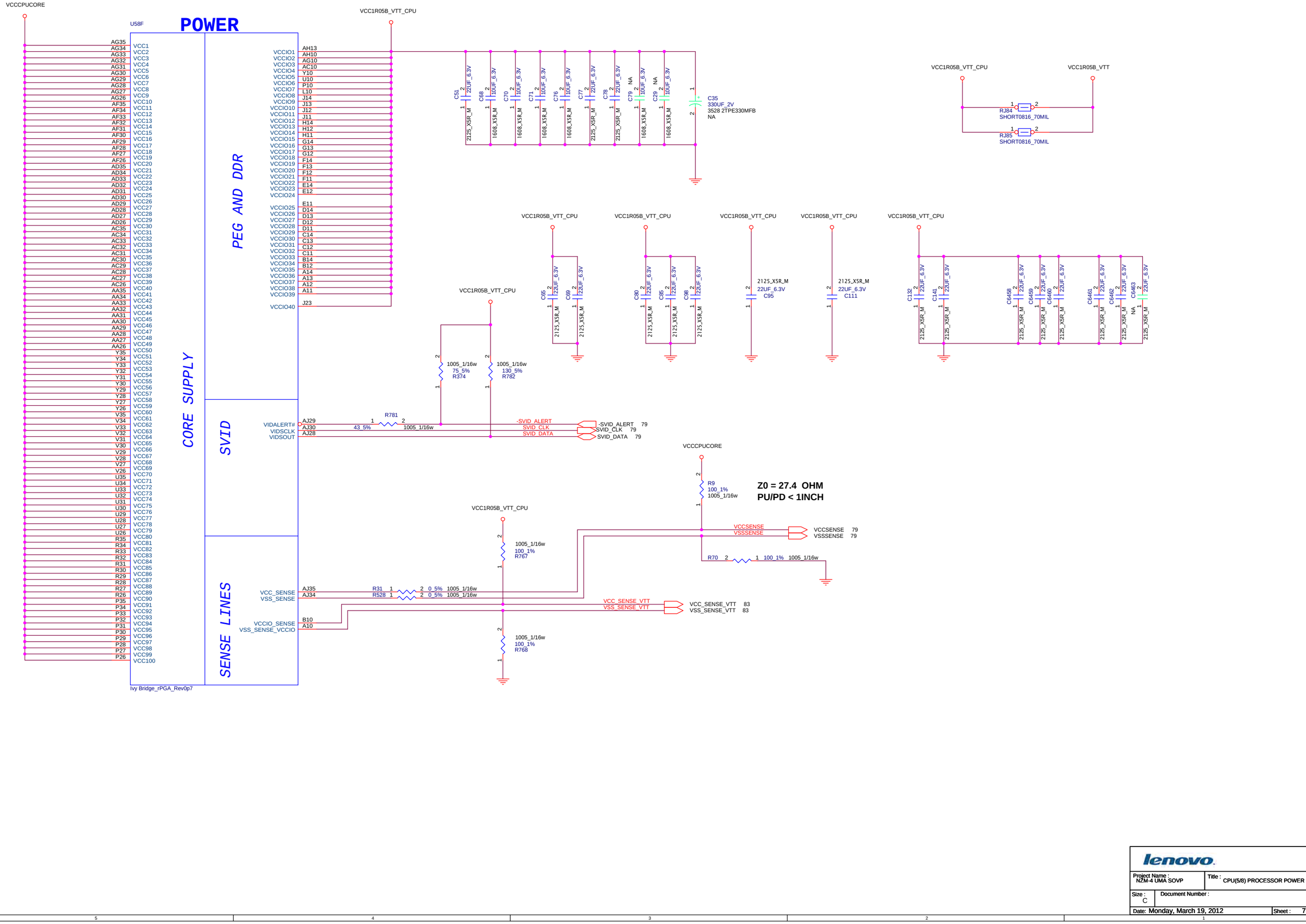
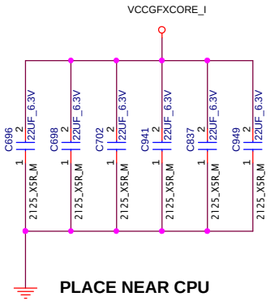
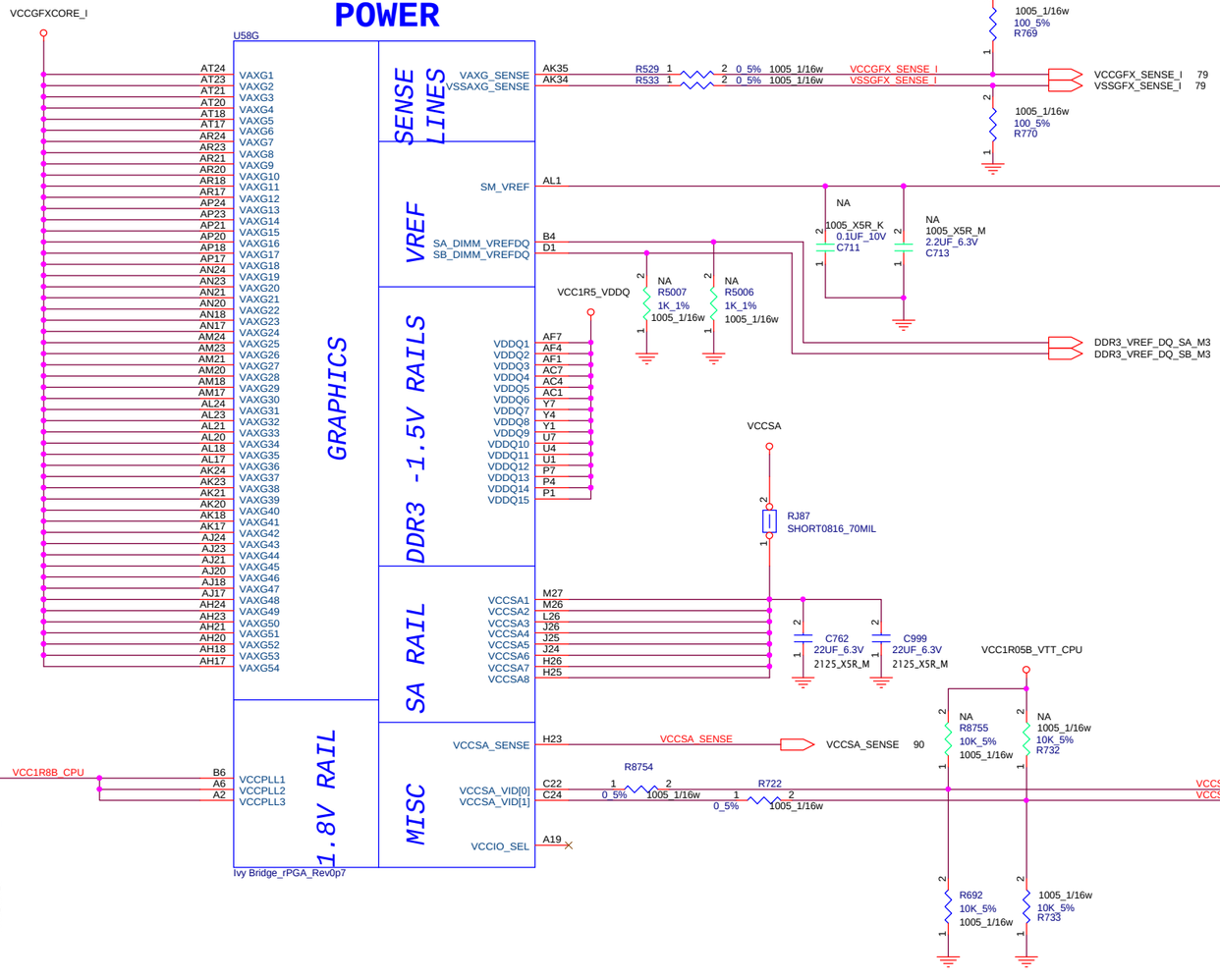
Project Name : NZM-4 UMA SOVP	Title : CPU(4/8) DDR3 CH- B	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 6 of 97	



Project Name : NZM-4 UMA SOVP	Title : CPU(5/8) PROCESSOR POWER	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 7 of 97	

POWER





TABLE

VCCSA_SEL0	VCCSA_SEL1	VCCSA
Low	0	0.90V
	1	0.80V
High	0	0.725V
	1	0.675V

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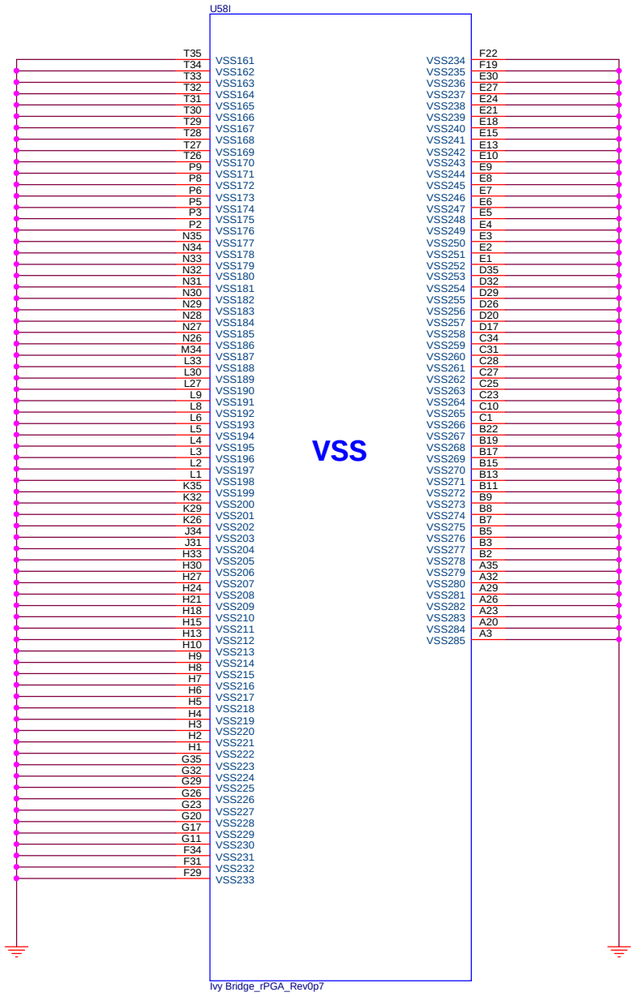
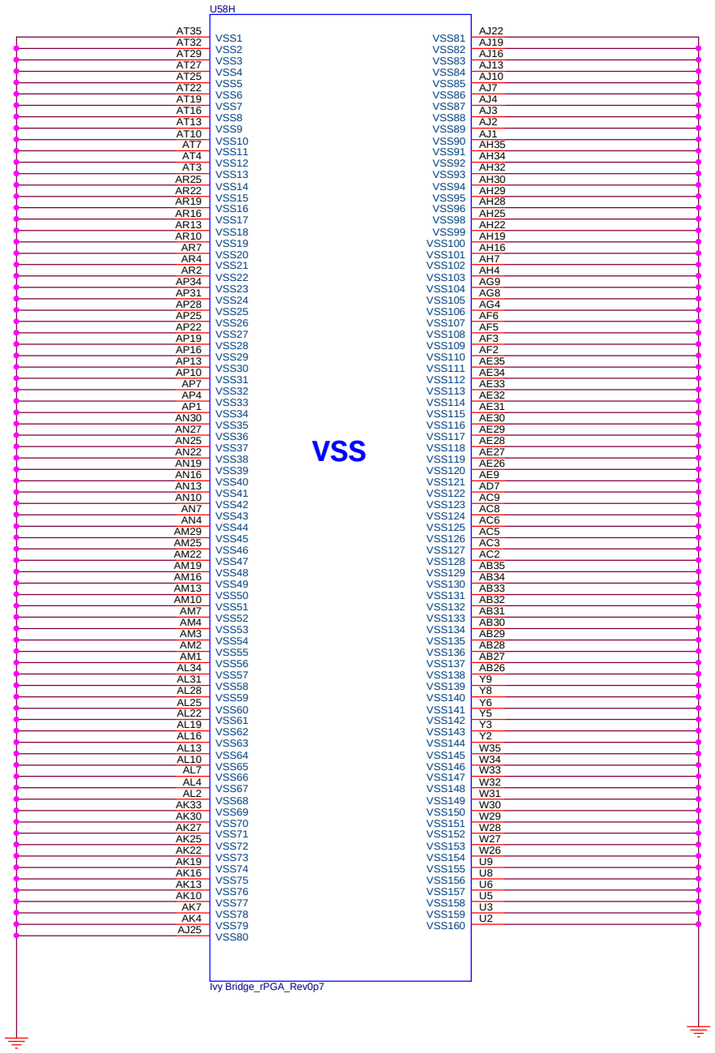
Project Name : NZM-4 UMA SOVP	Title : CPU(6/8) GRAPHICS POWER	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 8 of 97	





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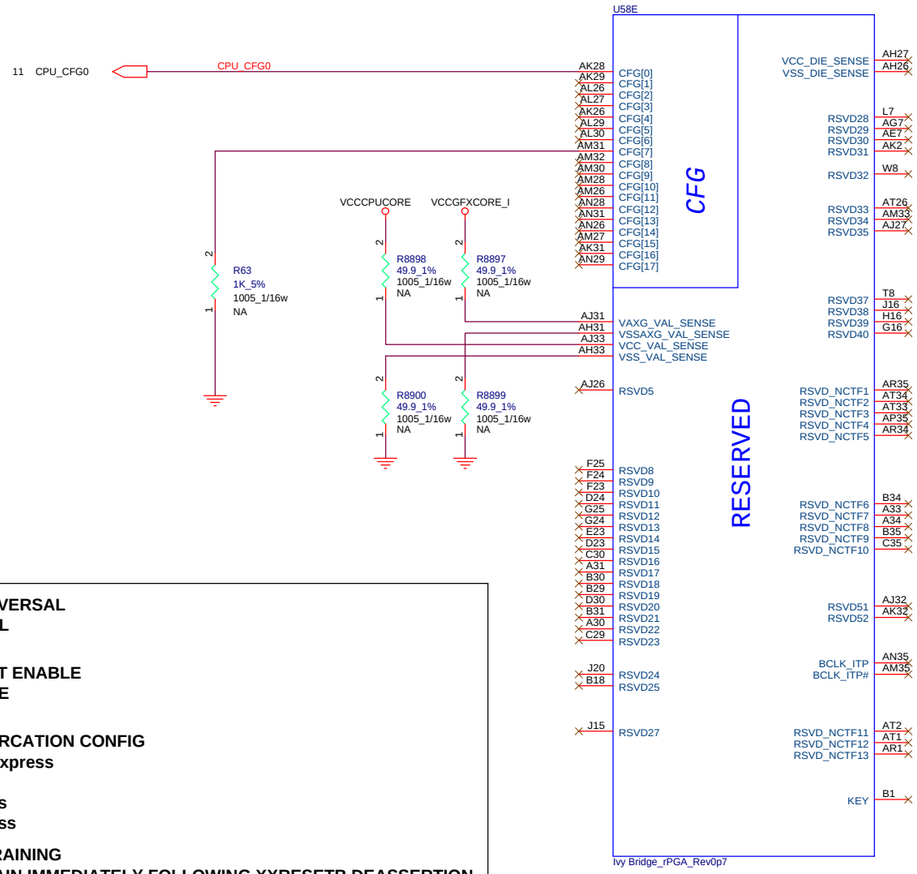
Project Name : NZM-4 UMA SOVP		Title : CPU(7/8) GND	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 9 of 97	



TABLE

CFG2 PEG LANE REVERSAL
1 -NO ASM : NORMAL
0 -ASM : RESVERSE

CFG4 DISPLAY PORT ENABLE
1 -NO ASM : DISABLE
0 -ASM : ENABLE

CFG[6 : 5] PEG BIFURCATION CONFIG
00 = 1 x 8, 2 x 4 PCI Express
01 = reserved
10 = 2 x 8 PCI Express
11 = 1 x 16 PCI Express

CFG7 PEG DEFER TRAINING
1 -NO ASM :PEG TRAIN IMMEDIATELY FOLLOWING XXRESETB DEASSERTION
0 -ASM : PEG WAIT FOR BIOS FOR TRAINING

Project Name : NZM-4 UMA SOVP	Title : CPU(8/8) CFG/RESERVED	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 10 of 97	

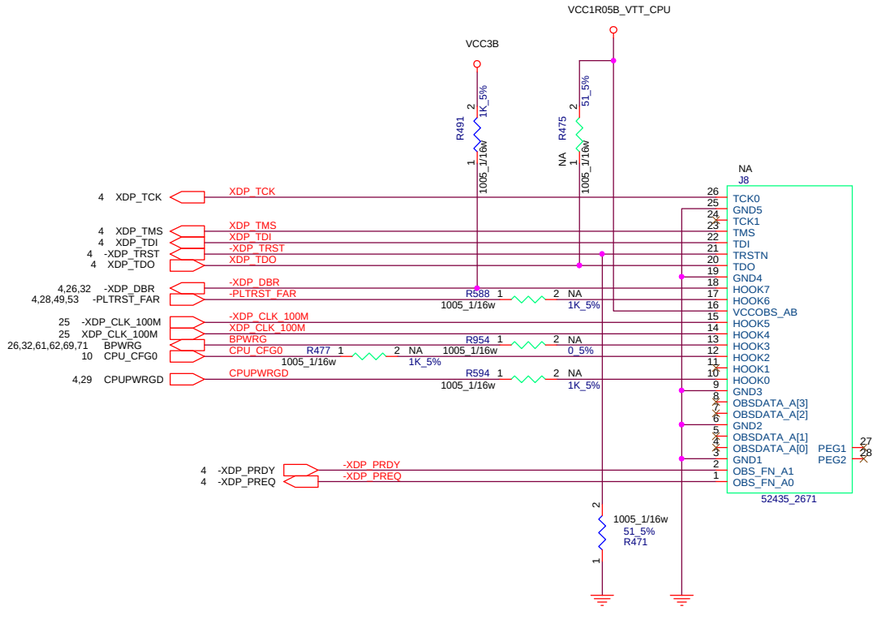


TABLE NOTE: J8 "ASM" FOR PDV/SDV ONLY.

SIGNAL	REF DES	ENABLE	DISABLE
TDO	R475	ASM	NO ASM
TRST#	R471	ASM	ASM
DBRST#	R491	ASM	ASM
RESET#	R588	ASM	NO ASM
CFG0	R477	ASM	NO ASM
PWRGD	R594	ASM	NO ASM
BPWRG	R954	ASM	NO ASM
	J8	ASM	NO ASM

LOGIC

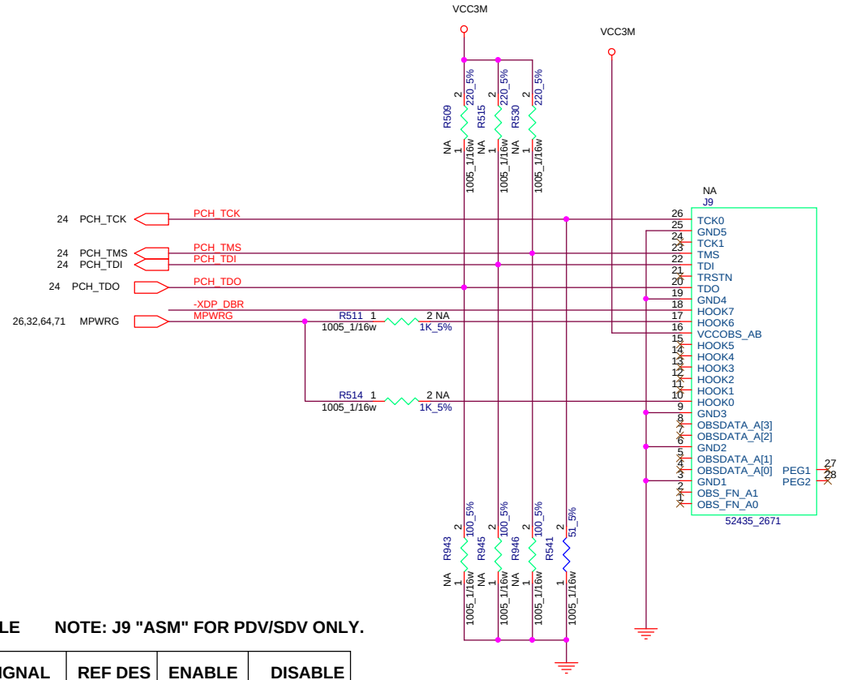


TABLE NOTE: J9 "ASM" FOR PDV/SDV ONLY.

SIGNAL	REF DES	ENABLE	DISABLE
TDO	R509 R943	220 100	NO ASM NO ASM
TMS	R530 R946	220 100	NO ASM NO ASM
TDI	R515 R945	220 100	NO ASM NO ASM
TCK	R541	51	51
MPWRG	R511 R514	ASM ASM	NO ASM NO ASM
	J9	ASM	NO ASM

LOGIC

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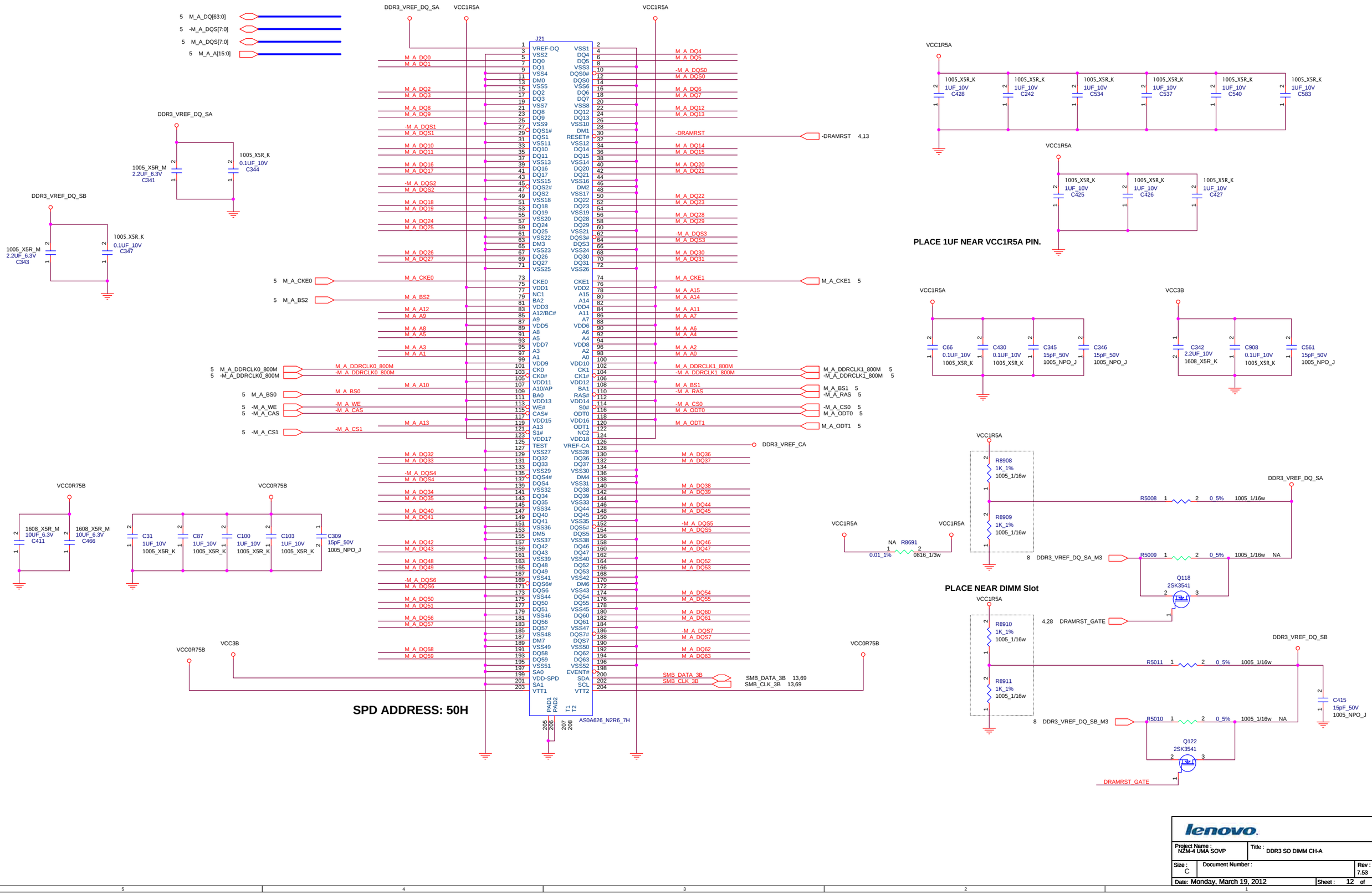
Project Name : NZM-4 UMA SOVP	Title : XDP CONNECTOR
Size : C	Document Number :
Rev : 7.53	
Date: Monday, March 19, 2012	Sheet : 11 of 97



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Project Name : NZM-4 UMA SOVP		Title : DDR3 SO DIMM CH-A	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 12 of 97	

6 M_B_DQ[63:0]
6 -M_B_DQS[7:0]
6 M_B_DQS[7:0]
6 M_B_A[15:0]

DDR3_VREF_DQ_SB
VCC1R5A
VCC1R5A

J30

1	VREF-DQ	VSS1	2		
3	VSS2	DQ4	4	M_B_DQ4	
5	DQ0	DQ5	6	M_B_DQ5	
7	DQ1	VSS3	8		
9	VSS4	DQS0#	10	-M_B_DQS0	
11	DM0	DQS0	12	M_B_DQS0	
13	VSS5	VSS6	14		
15	DQ2	DQ6	16	M_B_DQ6	
17	DQ3	DQ7	18	M_B_DQ7	
19	VSS7	VSS8	20		
21	DQ8	DQ12	22	M_B_DQ12	
23	DQ9	DQ13	24	M_B_DQ13	
25	VSS9	VSS10	26		
27	DQS1#	DM1	28		
29	DQS1	RESET#	30	-DRAMRST	-DRAMRST 4,12
31	VSS11	VSS12	32		
33	DQ10	DQ14	34	M_B_DQ14	
35	DQ11	DQ15	36	M_B_DQ15	
37	VSS13	VSS14	38		
39	DQ16	DQ20	40	M_B_DQ20	
41	DQ17	DQ21	42	M_B_DQ21	
43	VSS15	VSS16	44		
45	DQS2#	DM2	46		
47	DQS2	VSS17	48		
49	VSS18	DQ22	50	M_B_DQ22	
51	DQ18	DQ23	52	M_B_DQ23	
53	DQ19	VSS19	54		
55	VSS20	DQ28	56	M_B_DQ28	
57	DQ24	DQ29	58	M_B_DQ29	
59	DQ25	VSS21	60		
61	VSS22	DQS3#	62	-M_B_DQS3	
63	DM3	DQS3	64	M_B_DQS3	
65	VSS23	VSS24	66		
67	DQ26	DQ30	68	M_B_DQ30	
69	DQ27	DQ31	70	M_B_DQ31	
71	VSS25	VSS26	72		
73	CKE0	CKE1	74	M_B_CKE1	M_B_CKE1 6
75	VDD1	VDD2	76		
77	NC1	A15	78	M_B_A15	
79	BA2	A14	80	M_B_A14	
81	VDD3	VDD4	82		
83	A12/BC#	A11	84	M_B_A11	
85	A9	A7	86	M_B_A7	
87	VDD5	VDD6	88		
89	A8	A6	90	M_B_A6	
91	A5	A4	92	M_B_A4	
93	VDD7	VDD8	94		
95	A3	A2	96	M_B_A2	
97	A1	A0	98	M_B_A0	
99	VDD9	VDD10	100		
101	CK0	CK1	102	M_B_DDRCLK1_800M	M_B_DDRCLK1_800M 6
103	CK0#	CK1#	104	-M_B_DDRCLK1_800M	-M_B_DDRCLK1_800M 6
105	VDD11	VDD12	106		
107	A10/AP	BA1	108	M_B_BS1	M_B_BS1 6
109	BA0	RAS#	110	-M_B_RAS	-M_B_RAS 6
111	VDD13	VDD14	112		
113	WE#	S0#	114	-M_B_CS0	-M_B_CS0 6
115	CAS#	ODT0	116	M_B_ODT0	M_B_ODT0 6
117	VDD15	VDD16	118		
119	A13	ODT1	120	M_B_ODT1	M_B_ODT1 6
121	S1#	NC2	122		
123	VDD17	VDD18	124		
125	TEST	VREF-CA	126		DDR3_VREF_CA
127	VSS27	VSS28	128		
129	DQ32	DQ36	130	M_B_DQ36	
131	DQ33	DQ37	132	M_B_DQ37	
133	VSS29	VSS30	134		
135	DQS4#	DM4	136		
137	DQS4	VSS31	138		
139	VSS32	DQ38	140	M_B_DQ38	
141	DQ34	DQ39	142	M_B_DQ39	
143	DQ35	VSS33	144		
145	VSS34	DQ44	146	M_B_DQ44	
147	DQ40	DQ45	148	M_B_DQ45	
149	DQ41	VSS35	150		
151	VSS36	DQS5#	152	-M_B_DQS5	
153	DM5	DQS5	154	M_B_DQS5	
155	VSS37	VSS38	156		
157	DQ42	DQ46	158	M_B_DQ46	
159	DQ43	DQ47	160	M_B_DQ47	
161	VSS39	VSS40	162		
163	DQ48	DQ52	164	M_B_DQ52	
165	DQ49	DQ53	166	M_B_DQ53	
167	VSS41	VSS42	168		
169	DQS6#	DM6	170		
171	DQS6	VSS43	172		
173	VSS44	DQ54	174	M_B_DQ54	
175	DQ50	DQ55	176	M_B_DQ55	
177	DQ51	VSS45	178		
179	VSS46	DQ60	180	M_B_DQ60	
181	DQ56	DQ61	182	M_B_DQ61	
183	DQ57	VSS47	184		
185	VSS48	DQS7#	186	-M_B_DQS7	
187	DM7	DQS7	188	M_B_DQS7	
189	VSS49	VSS50	190		
191	DQ58	DQ62	192	M_B_DQ62	
193	DQ59	DQ63	194	M_B_DQ63	
195	VSS51	VSS52	196		
197	SA0	EVENT#	198		
199	VDD-SPD	SDA	200	SMB_DATA_3B	SMB_DATA_3B 12,69
201	SA1	SCL	202	SMB_CLK_3B	SMB_CLK_3B 12,69
203	VTT1	VTT2	204		
205	GND1	GND2	206		
207	NC3	NC4	208		

AS0A626_U4R6_7H

6 M_B_CKE0
6 M_B_BS2
6 M_B_DDRCLK0_800M
6 -M_B_DDRCLK0_800M
6 M_B_BS0
6 -M_B_WE
6 -M_B_CAS
6 -M_B_CS1

M_B_DQ0 M_B_DQ1
M_B_DQ2 M_B_DQ3
M_B_DQ8 M_B_DQ9
-M_B_DQS1 M_B_DQS1
M_B_DQ10 M_B_DQ11
M_B_DQ16 M_B_DQ17
-M_B_DQS2 M_B_DQS2
M_B_DQ18 M_B_DQ19
M_B_DQ24 M_B_DQ25
M_B_DQ26 M_B_DQ27
M_B_CKE0
M_B_BS2
M_B_A12 M_B_A9
M_B_A8 M_B_A5
M_B_A3 M_B_A1
M_B_DDRCLK0_800M
-M_B_DDRCLK0_800M
M_B_A10
M_B_BS0
-M_B_WE
-M_B_CAS
M_B_A13
-M_B_CS1
M_B_DQ32 M_B_DQ33
-M_B_DQS4 M_B_DQS4
M_B_DQ34 M_B_DQ35
M_B_DQ40 M_B_DQ41
M_B_DQ42 M_B_DQ43
M_B_DQ48 M_B_DQ49
-M_B_DQS6 M_B_DQS6
M_B_DQ50 M_B_DQ51
M_B_DQ56 M_B_DQ57
M_B_DQ58 M_B_DQ59

DDR3_VREF_CA
1005_X5R_M 2.2UF_6.3V C400
1005_X5R_K 0.1UF_10V C555

Place near Slot-B(J30) pin126

DDR3_VREF_CA
1005_X5R_M 2.2UF_6.3V C403
1005_X5R_K 0.1UF_10V C556

Place near Slot-A(J21) pin126

VCC1R5A
1005_X5R_K 1UF_10V C680
1005_X5R_K 1UF_10V C129
1005_X5R_K 1UF_10V C128
1005_X5R_K 1UF_10V C180
1005_X5R_K 1UF_10V C181
1005_X5R_K 1UF_10V C57

VCC1R5A
1005_X5R_K 1UF_10V C160
1005_X5R_K 1UF_10V C159
1005_X5R_K 1UF_10V C58

PLACE 1UF NEAR VCC1R5A PIN.

VCC0R75B
1608_X5R_M 10UF_6.3V C682
1608_X5R_M 10UF_6.3V C104

VCC0R75B
1005_X5R_K 1UF_10V C108
1005_X5R_K 1UF_10V C189
1005_X5R_K 1UF_10V C213
1005_X5R_K 1UF_10V C214

VCC3B
1005_1/16w 10K_5% R187

VCC0R75B

SPD ADDRESS: 51H

VCC1R5A
1005_X5R_K 0.1UF_10V C97
1005_X5R_K 0.1UF_10V C410

VCC3B
C910 2.2UF_10V 1608_X5R_K
1005_X5R_K 0.1UF_10V C944

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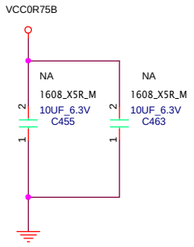
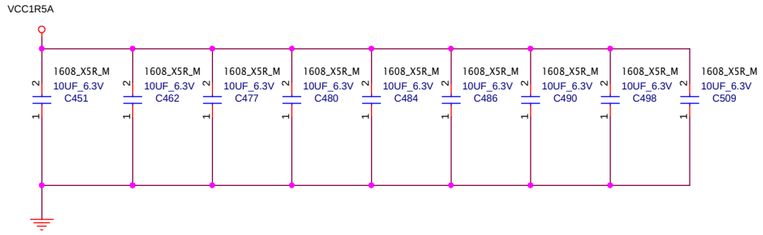
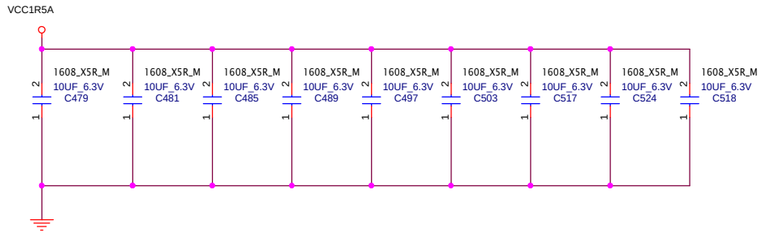
Project Name : NZM-4 UMA SOVP		Title : DDR3 SO DIMM CH-B	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 13 of 97	







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Project Name : NZM-4 UMA SOVP	Title : DDR3 DECOUPLING	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 14 of 97	

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Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 15 of 97	

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Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 16 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 17 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 18 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 19 of 97	

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Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 20 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 21 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 22 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 23 of 97	

P/N 41U6143
KDS DST310S-32.768KHz-20PPM-9PF
RIVER TFX-02-32.768KJ80862

C348 10PF_50V 1005_NPO_J
C326 10PF_50V 1005_NPO_J
Y6 DST310S_32R768K
R351 10M_5% 1005_1/16w

VCC3M
R1009 1K_5% 1005_1/16w
RTCVCC
R408 330K_5% 1005_1/16w
VCC3SW
R646 1M_5% 1005_1/16w
VCC3B
R65 1K_5% 1005_1/16w NA
R860 8.2K_5% 1005_1/16w

TABLE

U5	QM77

TABLE

SPKR TCO TIMER SYSTEM REBOOT	
HIGH	DISABLED (NO REBOOT)
LOW	ENABLED

U5A

RTC
RTCX1 A20
RTCX2 C20
RTCRST# D20 ← 32,39 -RTCRST
SRTCRST# G22 ← 39 -SRTCRST
INTRUDER# K22 ← -INTRUDER
INTVRMEN C17

LPC
FWH0 / LAD0 C38 ↔ LPC_AD0
FWH1 / LAD1 A38 ↔ LPC_AD1
FWH2 / LAD2 B37 ↔ LPC_AD2
FWH3 / LAD3 C37 ↔ LPC_AD3
FWH4 / LFRAME# D36 → -LPC_FRAME 60,68,69
LDRQ0# E36 → -LPC_DREQ0 69
LDRQ1# / GPIO23 K36
SERIRQ V5 → IRQSER 60,68,69
LPC_AD[3:0] 60,68,69

IHDA
HDA_BCLK N34 ← 43 HDA_BCLK (R60 1 2 33_5% 1005_1/16w)
HDA_SYNC L34 ← 43 HDA_SYNC (R423 1 2 33_5% 1005_1/16w)
SPKR T10 ← 48 PCH_SPKR
HDA_RST# K34 ← 43 -HDA_RST (R456 1 2 33_5% 1005_1/16w)
HDA_SDIN0 E34 ← 43 HDA_SDIN0
HDA_SDIN1 G34
HDA_SDIN2 C34
HDA_SDIN3 A34
HDA_SDO A36 ← 43 HDA_SDO (R74 1 2 33_5% 1005_1/16w)
HDA_DOCK_EN# / GPIO33 C36 ← 29 SATA_DOCK_DTCT
HDA_DOCK_RST# / GPIO13 N32 ← 60 -EC_WAKE

VCC3M R846 1 2 1K_5% 1005_1/16w
VCC3M NA R566 1 2 0_5% 1608_1/10w
PLACE ON TOP SIDE
TP901 TESTPAD_1P0
TP900 TESTPAD_1P0

TEST PAD
BOTTOM SIDE
DO NOT MOVE AFTER FIX

JTAG
JTAG_TCK J3 ← 11 PCH_TCK
JTAG_TMS H7 ← 11 PCH_TMS
JTAG_TDI K5 ← 11 PCH_TDI
JTAG_TDO H1 → 11 PCH_TDO

SPI
SPI_CLK T3 ← 58 SPI_CLK
SPI_CS0# Y14 ← 58 -SPI_CS0
SPI_CS1# T1 ← 58 -SPI_CS1
SPI_MOSI V4 ← 58 SPI_MOSI
SPI_MISO U3 → 58 SPI_MISO

SATA
SATA0RXN AM3 ↔ SATA0_RXN_C C803 1 2 0.01UF_10V 0603_X7R_K ↔ SATA0_RXN 40
SATA0RXP AM1 ↔ SATA0_RXP_C C804 1 2 0.01UF_10V 0603_X7R_K ↔ SATA0_RXP 40
SATA0TXN AP7 ↔ SATA0_TXN_C C805 1 2 0.01UF_10V 0603_X7R_K → SATA0_TXN 40
SATA0TXP AP5 ↔ SATA0_TXP_C C827 1 2 0.01UF_10V 0603_X7R_K → SATA0_TXP 40
SATA1RXN AM10 ↔ SATA1_RXN_C C272 1 2 0.01UF_10V 0603_X7R_K ↔ SATA1_RXN 41
SATA1RXP AM8 ↔ SATA1_RXP_C C280 1 2 0.01UF_10V 0603_X7R_K ↔ SATA1_RXP 41
SATA1TXN AP11 ↔ SATA1_TXN_C C284 1 2 0.01UF_10V 0603_X7R_K → SATA1_TXN 41
SATA1TXP AP10 ↔ SATA1_TXP_C C374 1 2 0.01UF_10V 0603_X7R_K → SATA1_TXP 41
SATA2RXN AD7 ↔ SATA2_RXN_C C794 1 2 0.01UF_10V 0603_X7R_K ↔ SATA2_RXN 53
SATA2RXP AD5 ↔ SATA2_RXP_C C784 1 2 0.01UF_10V 0603_X7R_K ↔ SATA2_RXP 53
SATA2TXN AH5 ↔ SATA2_TXN_C C770 1 2 0.01UF_10V 0603_X7R_K → SATA2_TXN 53
SATA2TXP AH4 ↔ SATA2_TXP_C C765 1 2 0.01UF_10V 0603_X7R_K → SATA2_TXP 53
SATA3RXN AB8
SATA3RXP AB10
SATA3TXN AF3
SATA3TXP AF1
SATA4RXN Y7 ↔ SATA4_RXN 59
SATA4RXP Y5 ↔ SATA4_RXP 59
SATA4TXN AD3 ↔ SATA4_TXN_C C893 1 2 0.01UF_10V 0603_X7R_K → SATA4_TXN 59
SATA4TXP AD1 ↔ SATA4_TXP_C C892 1 2 0.01UF_10V 0603_X7R_K → SATA4_TXP 59
SATA5RXN Y3
SATA5RXP Y1
SATA5TXN AB3
SATA5TXP AB1
SATAICOMPO Y11
SATAICOMPI Y10 ↔ SATAICOMP 1 R602 2 37.4_1% 1005_1/16w
SATA3RCOMPO AB12
SATA3COMPI AB13 ↔ SATA3RCOMP 1 R604 2 49.9_1% 1005_1/16w
SATA3RBIAS AH1 ↔ R116 1 2 750_1% 1005_1/16w
SATALED# P3 → -DASPHDD 70
SATA0GP / GPIO21 V14 ← -DISCRETE_PRESENCE
SATA1GP / GPIO19 P1 → SATA_BAY_DTCT 29

VCC1R05B
VCC3B R996 10K_5% 1005_1/16w
VCC3B R99 100K_5% 1005_1/16w

CPT_PPT_Rev_0p7

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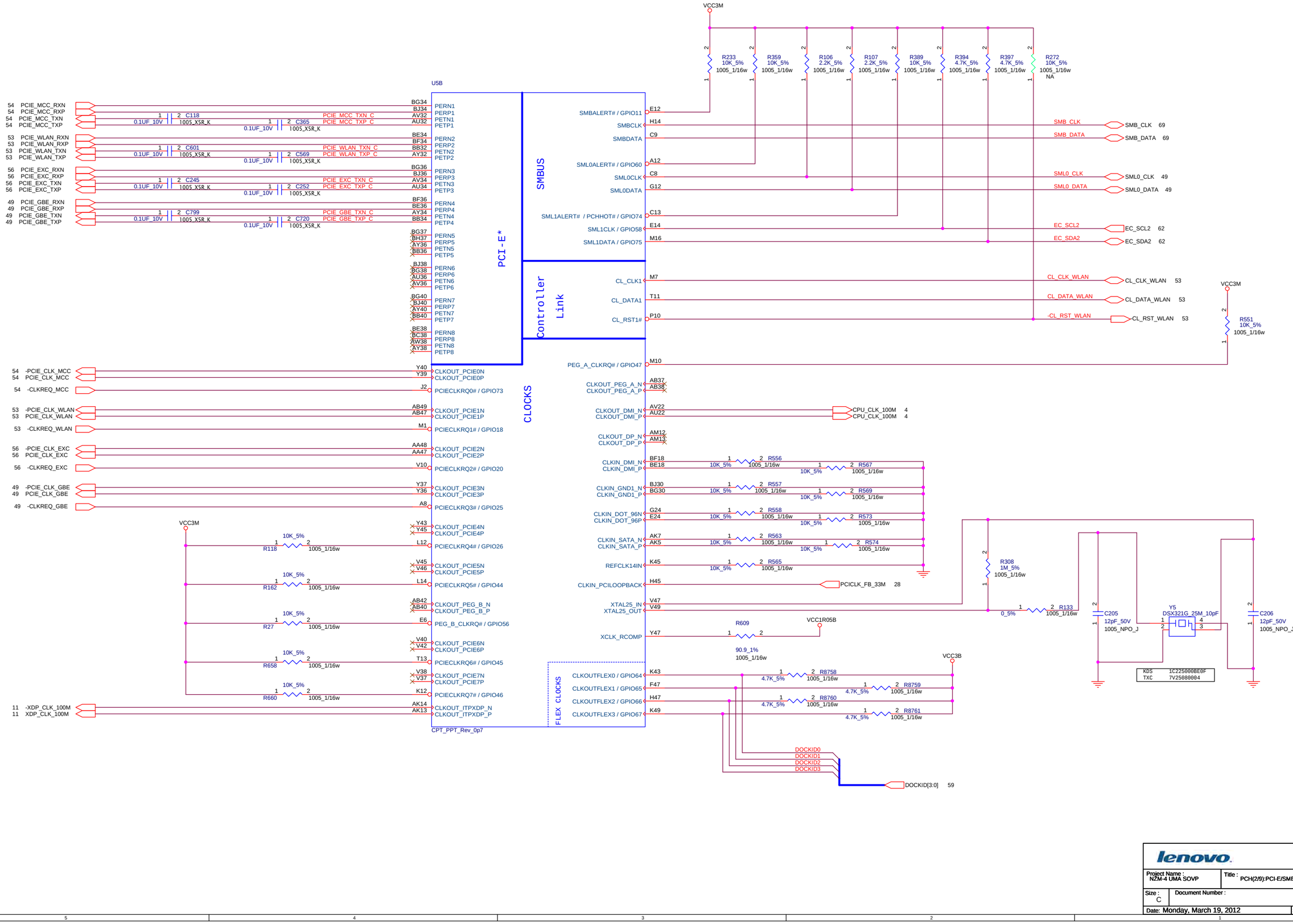
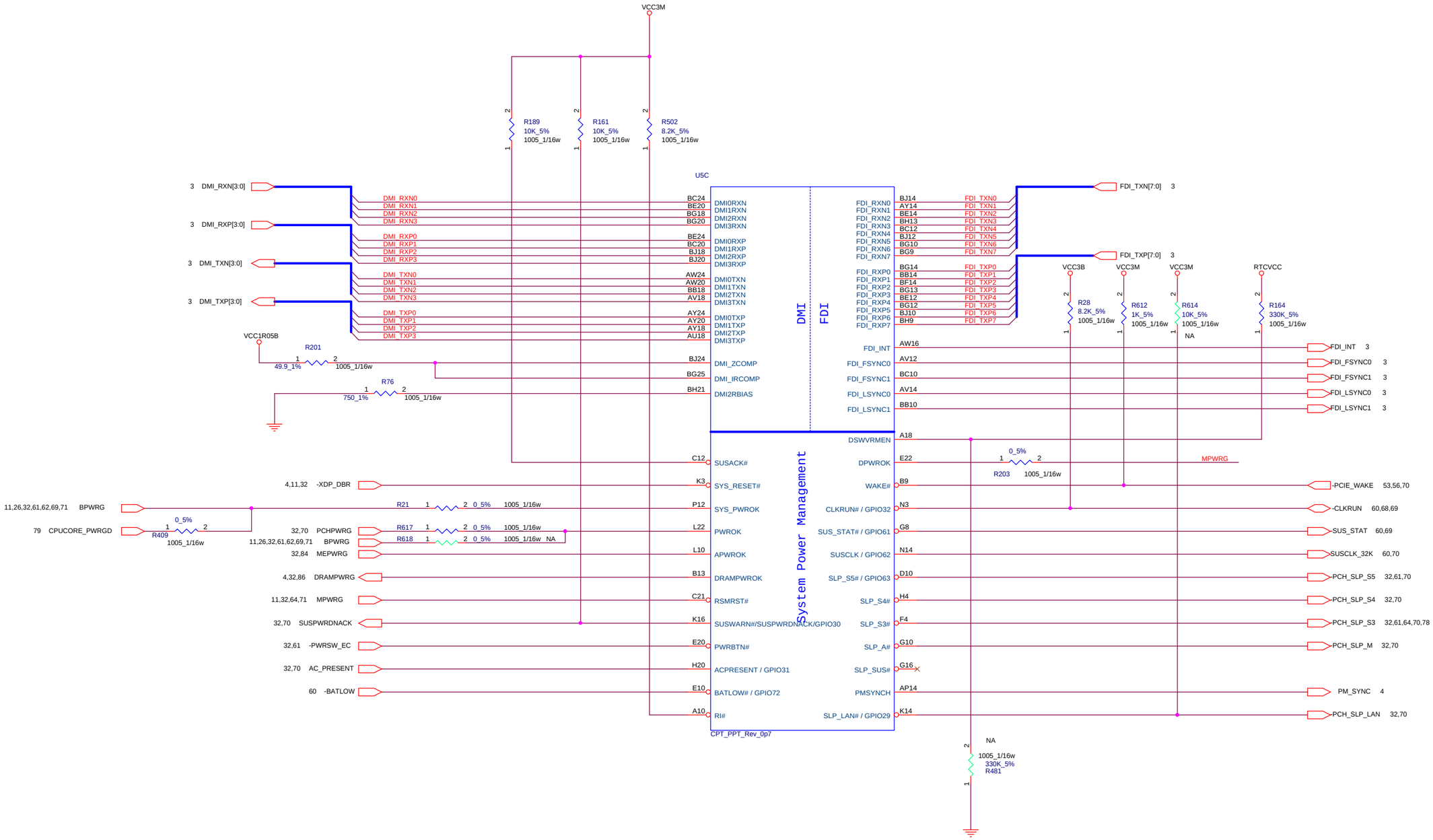
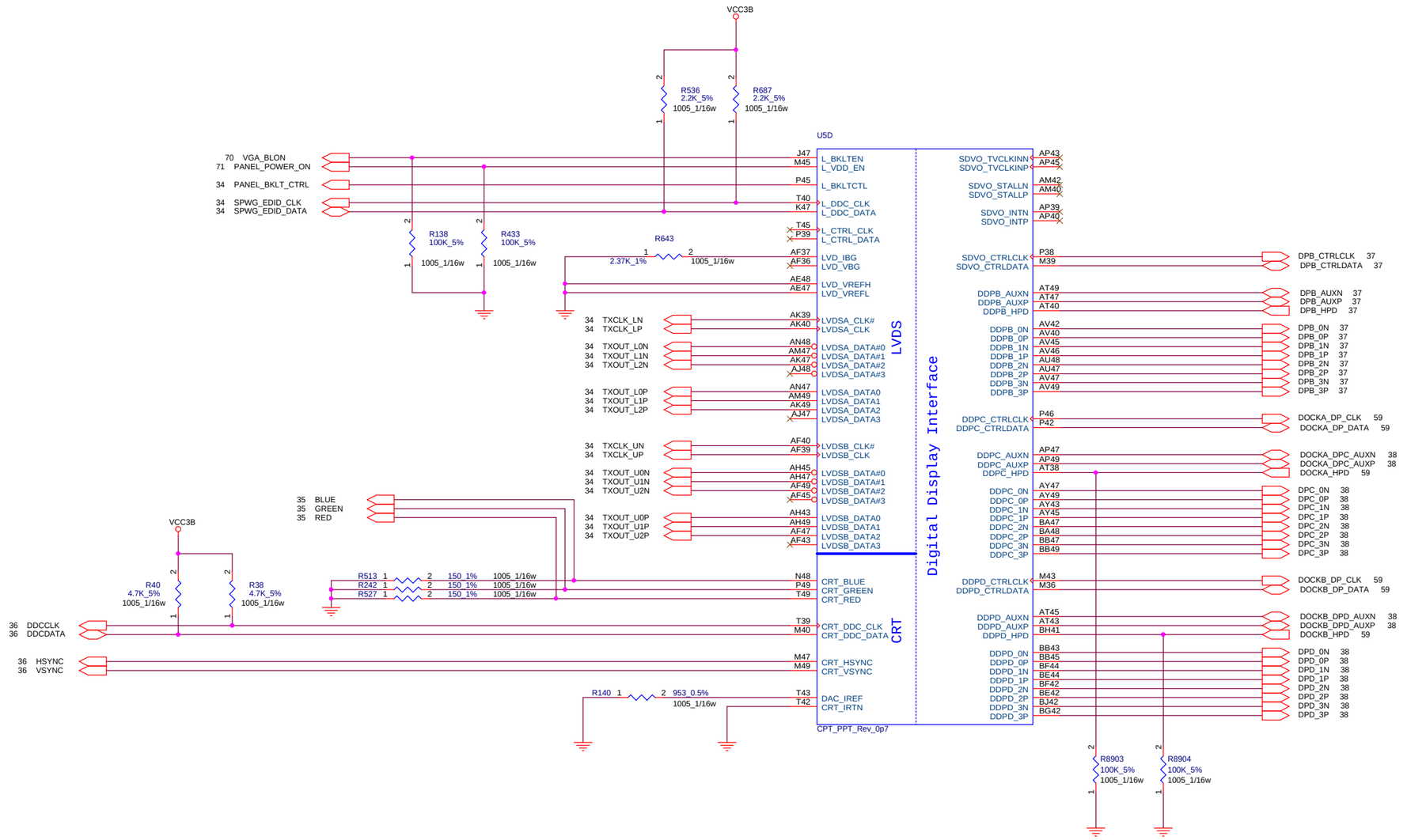
Project Name : NZM-4 UMA SOVP	Title : PCH(1/9):HDA/JTAG/SPI/SATA	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 24 of 97	



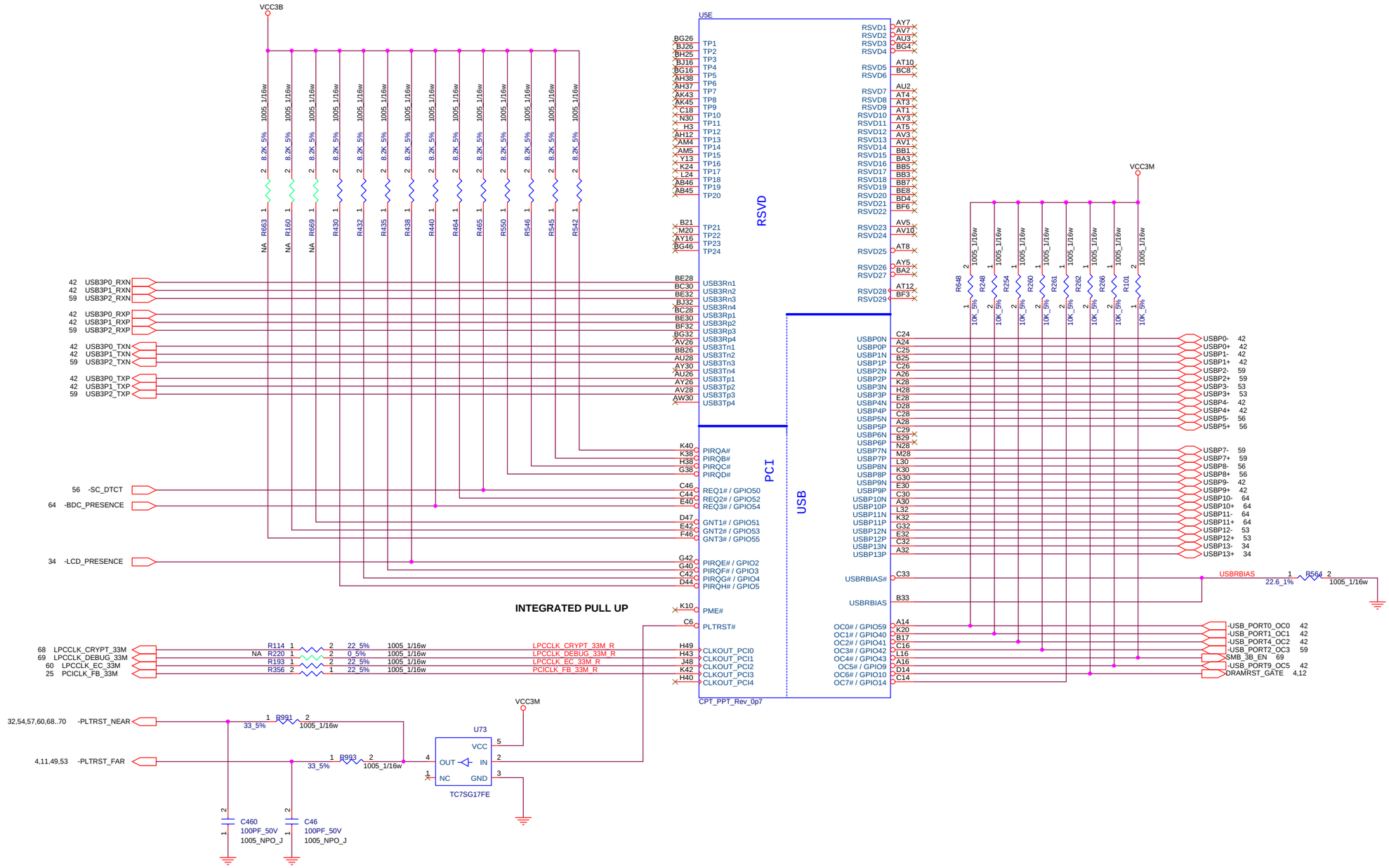
lenovo			
Project Name : NZM-4 UMA SOVP		Title : PCH(2/9):PCI-E/SMBUS/CLK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 25 of 97	



Project Name : NZM-4 UMA SOVP		Title : PCH(3/9):DMI/FDI/PM	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 26 of 97	



lenovo		
Project Name : NZM-4 UMA SOVP	Title : PCH(4/9):LVDS/CRT/DDI	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 27 of 97	


VCC3B
U5E
RSVD
PCI
USB
CPT_PPT_Rev_0p7
INTEGRATED PULL UP
VCC3M
USB PORT TO
0 USB 3.0 SYSTEM PORT 0
1 USB 3.0 SYSTEM PORT 1
2 USB 3.0 DOCKING
3 FULL MINICARD (WWAN)
4 USB 2.0 SYSTEM PORT (AOU)
5 EXPRESS CARD SLOT
6 RESERVED
7 USB 2.0 DOCKING
8 SMART CARD SLOT
9 USB 2.0 SYSTEM PORT (DEBUG)
10 FPR (TOUCH PAD)
11 BLUETOOTH (TOUCH PAD)
12 HALF MINICARD (WLAN)
13 USB CAMERA (LCD)

TABLE

GPIO15	ME CRYPTO STRAP
HIGH	WITH CONFIDENTIALITY
LOW	NO CONFIDENTIALITY

TABLE

GPIO8	INTEGRATED CLOCKING
HIGH	DISABLED(BTM)
LOW	ENABLED(FCIM)

VCC3M R226 1K_5% 1005_1/16w

VCC3B R610 10K_5% 1005_1/16w; R360 10K_5% 1005_1/16w; R280 10K_5% 1005_1/16w NA; R934 10K_5% 1005_1/16w; R485 10K_5% 1005_1/16w; R544 10K_5% 1005_1/16w

VCC3M R684 10K_5% 1005_1/16w NA

VCC3B R685 10K_5% 1005_1/16w; R686 10K_5% 1005_1/16w NA; R689 10K_5% 1005_1/16w; R690 10K_5% 1005_1/16w

U5F

60 -EC_SCI	T7	BMBUSY# / GPIO0	TACH4 / GPIO68 C40 → -INT_MIC_DTCT 34
	A42	TACH1 / GPIO1	TACH5 / GPIO69 B41 → -MIC_HW_EN
	H36	TACH2 / GPIO6	TACH6 / GPIO70 C41 → -WWAN_DTCT 53
	E38	TACH3 / GPIO7	TACH7 / GPIO71 A40
	C10	GPIO8 (R543 1K_5% 1005_1/16w)	
49 LANPHYPC	C4	LAN_PHY_PWR_CTRL / GPIO12	
	G2	GPIO15	
24 SATA_DOCK_DTCT	U2	SATA4GP / GPIO16	
	D40	TACH0 / GPIO17	
24 SATA_BAY_DTCT	T5	SCLOCK / GPIO22	
	E8	GPIO24	
53 -MSATA_DTCT	E16	GPIO27	
	P8	GPIO28	
DGFX_VRAM_ID0	K1	STP_PCI# / GPIO34	
DGFX_VRAM_ID1	K4	GPIO35	
R320 10K_5% 1005_1/16w	V8	SATA2GP / GPIO36	
R547 10K_5% 1005_1/16w	M5	SATA3GP / GPIO37	
PLANARID2	N2	SLOAD / GPIO38	
PLANARID3	M3	SDATAOUT0 / GPIO39	
PLANARID0	V13	SDATAOUT1 / GPIO48	
PLANARID1	V3	SATA5GP / GPIO49 / TEMP_ALERT#	
	D6	GPIO57	

GPIO

CPU/MISC

A20GATE	P4	KBGA20 60
PECI	AU16	
RCIN#	P5	-KBRC 60
PROCPWRGD	AY11	CPUPWRGD 4,11
THRMTRIP#	AY10	R357 390_5% 1005_1/16w → -THERMTRIP 4
INIT3_3V#	T14	
DF_TVS	AY1	R8753 1K_5% 1005_1/16w → -PROC_IVB 4
TS_VSS1	AH8	R77 0_5% 1005_1/16w
TS_VSS2	AK11	R696 0_5% 1005_1/16w
TS_VSS3	AH10	R165 0_5% 1005_1/16w
TS_VSS4	AK10	R704 0_5% 1005_1/16w
NC_1	P37	

VCC1R8B R961 10K_5%; R80 2.2k_5% 1005_1/16w

VCC3B R353 10K_5% 1005_1/16w NA; R81 10K_5% 1005_1/16w NA

DGFX_VRAM_ID0

DGFX_VRAM_ID1

R198 10K_5% 1005_1/16w; R196 10K_5% 1005_1/16w

TABLE

DGFX_VRAM_ID[1..0]	
00B	1GB
01B	2GB
10B	4GB
11B	8GB

LOGIC

R933 1K_5% 1005_1/16w NA

VCC3M R212 10K_5% 1005_1/16w

VCC3B R39 10K_5% 1005_1/16w; NA R505 10K_5% 1005_1/16w; NA R37 10K_5% 1005_1/16w; R671 10K_5% 1005_1/16w

PLANARID0

PLANARID1

PLANARID2

PLANARID3

NA R43 10K_5% 1005_1/16w; R47 10K_5% 1005_1/16w; R113 10K_5% 1005_1/16w; NA R48 10K_5% 1005_1/16w

TABLE

LEVEL	PLANAR ID			
	3	2	1	0
1	R39	R505	R37	R671
0	R43	R47	R113	R48

TABLE

LEVEL	PLANARID[3..0]
PDV	0000B
SDV	0001B
MFVT	0010B
FVT	0011B
SW SIT-1	0100B
SIT	0101B
SIT-R1	0110B
SIT-R2	0111B
SVT	1000B
SOVP	1001B

FOR SOLDER CRACK DETECTION

NCTF

TP108 TESTPAD	A4	VSS_NCTF_1	VSS_NCTF_15 BG2 TESTPAD TP122
TP109 TESTPAD	A44	VSS_NCTF_2	VSS_NCTF_16 BG48 TESTPAD TP123
TP110 TESTPAD	A45	VSS_NCTF_3	VSS_NCTF_17 BH3 TESTPAD TP124
TP111 TESTPAD	A46	VSS_NCTF_4	VSS_NCTF_18 BH47 TESTPAD TP125
TP112 TESTPAD	A5	VSS_NCTF_5	VSS_NCTF_19 BJ4 TESTPAD TP126
TP113 TESTPAD	A6	VSS_NCTF_6	VSS_NCTF_20 BJ44 TESTPAD TP127
TP114 TESTPAD	B3	VSS_NCTF_7	VSS_NCTF_21 BJ45 TESTPAD TP128
TP115 TESTPAD	B47	VSS_NCTF_8	VSS_NCTF_22 BJ46 TESTPAD TP129
TP116 TESTPAD	BD1	VSS_NCTF_9	VSS_NCTF_23 BJ5 TESTPAD TP130
TP117 TESTPAD	BD49	VSS_NCTF_10	VSS_NCTF_24 BJ6 TESTPAD TP131
TP118 TESTPAD	BE1	VSS_NCTF_11	VSS_NCTF_25 C2 TESTPAD TP132
TP119 TESTPAD	BE49	VSS_NCTF_12	VSS_NCTF_26 C48 TESTPAD TP133
TP120 TESTPAD	BF1	VSS_NCTF_13	VSS_NCTF_27 D1 TESTPAD TP134
TP121 TESTPAD	BF49	VSS_NCTF_14	VSS_NCTF_28 D49 TESTPAD TP135
			VSS_NCTF_29 E1 TESTPAD TP136
			VSS_NCTF_30 E49 TESTPAD TP137
			VSS_NCTF_31 F1 TESTPAD TP2
			VSS_NCTF_32 F49 TESTPAD TP138

CPT_PPT_Rev_0p7

FOR SOLDER CRACK DETECTION

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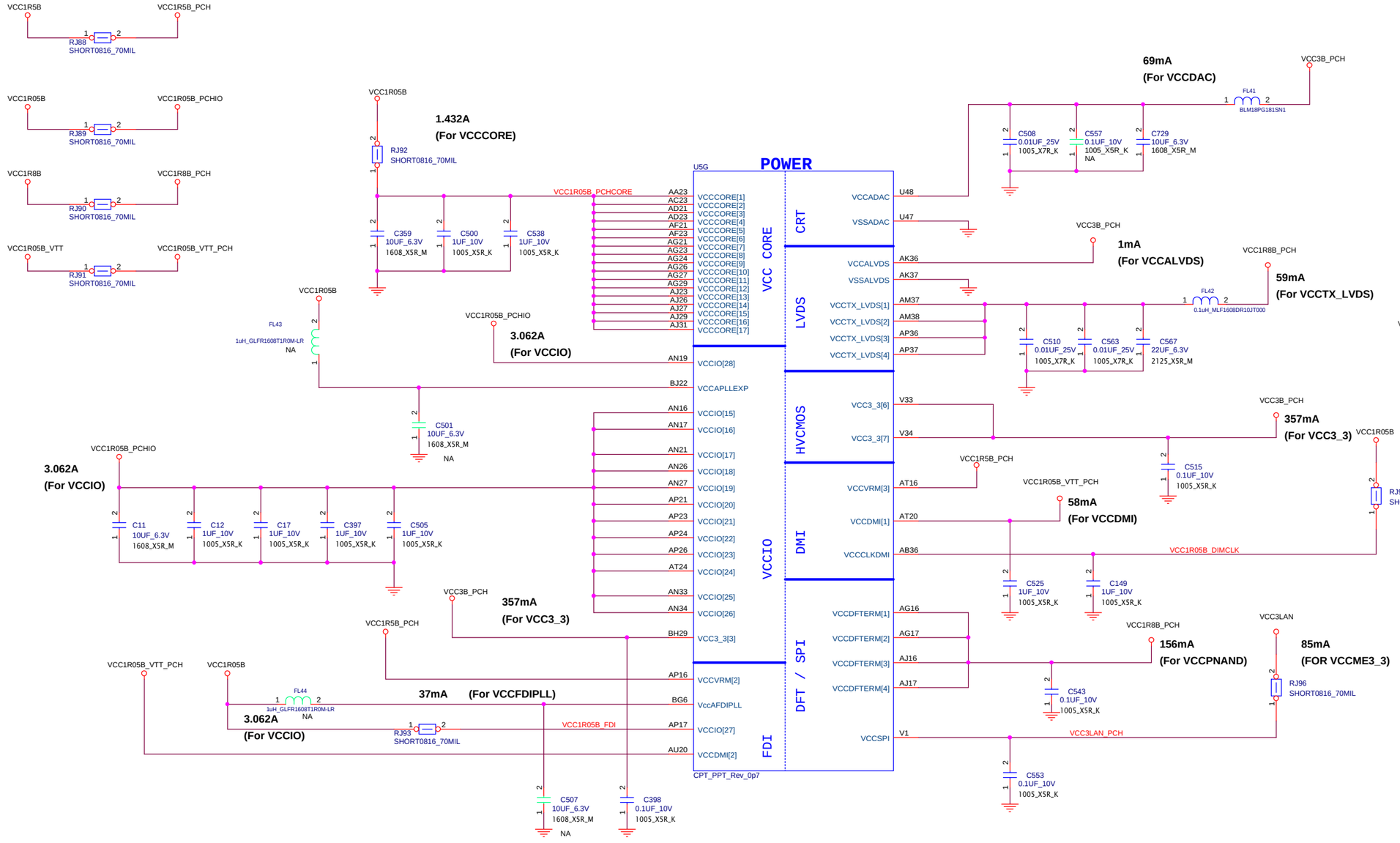
Project Name : NZM-4 UMA SOVP	Title : PCH(6/9):GPIO/NCTF/RSVD	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 29 of 97	



lenovo			
Project Name : NZM-4 UMA SOVP		Title : PCH(7/9):POWER	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 30 of 97	

POWER

U5J

USB

N26	VCCIO[29]	VCC1R05B_USB
P26	VCCIO[30]	
P28	VCCIO[31]	
T27	VCCIO[32]	
T29	VCCIO[33]	
T23	VCCSUS3_3[7]	
T24	VCCSUS3_3[8]	
V23	VCCSUS3_3[9]	
V24	VCCSUS3_3[10]	
P24	VCCSUS3_3[6]	
T26	VCCIO[34]	
M26	V5REF_SUS	
AN23	DCPSUS[4]	
AN24	VCCSUS3_3[1]	

Clock and Miscellaneous

AD49	VCCACLK	
T16	VCCDSW3_3	
V12	DCPSUSBYP	
T38	VCC3_3[5]	
BH23	VCCAPLLDMI2	
AL29	VCCIO[14]	
AL24	DCPSUS[3]	
AA19	VCCASW[1]	
AA21	VCCASW[2]	
AA24	VCCASW[3]	
AA26	VCCASW[4]	
AA27	VCCASW[5]	
AA29	VCCASW[6]	
AA31	VCCASW[7]	
AC26	VCCASW[8]	
AC27	VCCASW[9]	
AC29	VCCASW[10]	
AC31	VCCASW[11]	
AD29	VCCASW[12]	
AD31	VCCASW[13]	
W21	VCCASW[14]	
W23	VCCASW[15]	
W24	VCCASW[16]	
W26	VCCASW[17]	
W29	VCCASW[18]	
W31	VCCASW[19]	
W33	VCCASW[20]	
N16	DCPRTC	
Y49	VCCVRM[4]	
BD47	VCCADPLLA	
BF47	VCCADPLLB	
AF17	VCCIO[7]	
AF33	VCCDIFFCLKN[1]	
AF34	VCCDIFFCLKN[2]	
AG34	VCCDIFFCLKN[3]	
AG33	VCCSSC	
V16	DCPSST	
T17	DCPSUS[1]	
V19	DCPSUS[2]	
BJ8	V_PROC_IO	
A22	VCCRTC	

PCI/GPIO/LPC

P34	V5REF	
N20	VCCSUS3_3[2]	
N22	VCCSUS3_3[3]	
P20	VCCSUS3_3[4]	
P22	VCCSUS3_3[5]	
AA16	VCC3_3[1]	
W16	VCC3_3[8]	
T34	VCC3_3[4]	
AJ2	VCC3_3[2]	

SATA

AF13	VCCIO[5]	
AH13	VCCIO[12]	
AH14	VCCIO[13]	VCC1R05B_SATA
AF14	VCCIO[6]	
AK1	VCCAPLLSATA	
AF11	VCCVRM[1]	VCC1R5B_PCH
AC16	VCCIO[2]	
AC17	VCCIO[3]	
AD17	VCCIO[4]	

MISC

T21	VCCASW[22]	VCC1R05AMT_PCH
V21	VCCASW[23]	
T19	VCCASW[21]	
P32	VCCSUSHDA	

CPU

CPT_PPT_Rev_0p7

RTC

HDA

VCC1R05B → R707 0_5% NA 1005_1/16w → U5J AD49 VCCACLK

VCC3M_PCH → R705 0_5% 1005_1/16w → T16 VCCDSW3_3

VCC3B_PCH → VCC1R05B_CLKGEN → C620 0.1UF_10V 1005_X5R_K → V12 DCPSUSBYP

C759 NA 0.1UF_10V 1005_X5R_K

T38 VCC3_3[5]

VCC1R05B → FL32 10uH_GLFR1608T100M-LR NA → BH23 VCCAPLLDMI2

C619 10UF_6.3V 1608_X5R_M NA

C822 0.1UF_10V 1005_X5R_K

AL29 VCCIO[14]

C621 1UF_10V 1005_X5R_K NA → AL24 DCPSUS[3]

1.849A
(For VCCME)

VCC1R05AMT_PCH → AA19 VCCASW[1] … AC31 VCCASW[11]

C749 22UF_6.3V 2125_X5R_M
C757 22UF_6.3V 2125_X5R_M
C785 1UF_10V 1005_X5R_K
C801 1UF_10V 1005_X5R_K
C818 1UF_10V 1005_X5R_K

VCC1R05AMT_PCH → RJ97 SHORT0816_70MIL → VCC1R05AMT

AD29 VCCASW[12] … W33 VCCASW[20]

VCC1R5B_PCH → C795 0.1UF_10V 1005_X5R_K → N16 DCPRTC

Y49 VCCVRM[4]

68mA
(For VCCADPLLA)

VCC1R05B_CLKGEN → BD47 VCCADPLLA

VCC1R05B_DPLL → FL33 10uH_GLFR1608T100M-LR → C701 1UF_10V 1005_X5R_K → C721 220UF_2.5V 2R5TPE220MLB_3528_M

69mA
(For VCCADPLLB)

FL35 10uH_GLFR1608T100M-LR → C726 1UF_10V 1005_X5R_K → C700 220UF_2.5V 2R5TPE220MLB_3528_M → BF47 VCCADPLLB

3.062A (For VCCIO)

C760 1UF_10V 1005_X5R_K
C796 1UF_10V 1005_X5R_K
C833 1UF_10V 1005_X5R_K

AF17 VCCIO[7]
AF33 VCCDIFFCLKN[1]
AF34 VCCDIFFCLKN[2]
AG34 VCCDIFFCLKN[3]
AG33 VCCSSC

C731 0.1UF_10V 1005_X5R_K → V16 DCPSST

C748 1UF_10V 1005_X5R_K NA → T17 DCPSUS[1]
V19 DCPSUS[2]

VCC3M_PCH → C821 0.1UF_10V 1005_X5R_K

VCC1R05B_VTT_PCH → C756 4.7UF_6.3V 1608_X5R_K → C761 0.1UF_10V 1005_X5R_K → C831 0.1UF_10V 1005_X5R_K

1mA
(For V_CPU_IO)

BJ8 V_PROC_IO

RTCVCC → C763 0.1UF_10V 1005_X5R_K → C832 0.1UF_10V 1005_X5R_K → C380 1UF_10V 1005_X5R_K

(For VCCRTC)

A22 VCCRTC

VCC1R05B → RJ98 SHORT0816_70MIL

VCC1R05B → RJ99 SHORT0816_70MIL

C848 1UF_10V 1005_X5R_K

3.062A
(For VCCIO)

VCC3M → RJ100 SHORT0816_70MIL → VCC3M_PCH

VCC1R05B → RJ101 SHORT0816_70MIL → VCC1R05B_CLKGEN

VCC3M_PCH → C849 0.1UF_10V 1005_X5R_K
C850 0.1UF_10V 1005_X5R_K

163mA
(For VCCSUS3_3)

VCC3M_PCH → D17 RB461F → R655 100_5% 1005_1/16w → VCC5M

1mA
(FOR V5REFSUS)

C855 1UF_10V 1005_X5R_K

C638 NA 1UF_10V 1005_X5R_K

VCC3B_PCH → D46 RB461F → R656 100_5% 1005_1/16w → VCC5B

1mA
(For V5REF)

C860 1UF_10V 1005_X5R_K

VCC3B_PCH → **357mA** **(For VCC3_3)**

C851 0.1UF_10V 1005_X5R_K
C852 0.1UF_10V 1005_X5R_K

VCC1R05B → RJ102 SHORT0816_70MIL

3.062A
(For VCCIO)

C853 1UF_10V 1005_X5R_K

31mA
(For VCCSATAPLL)

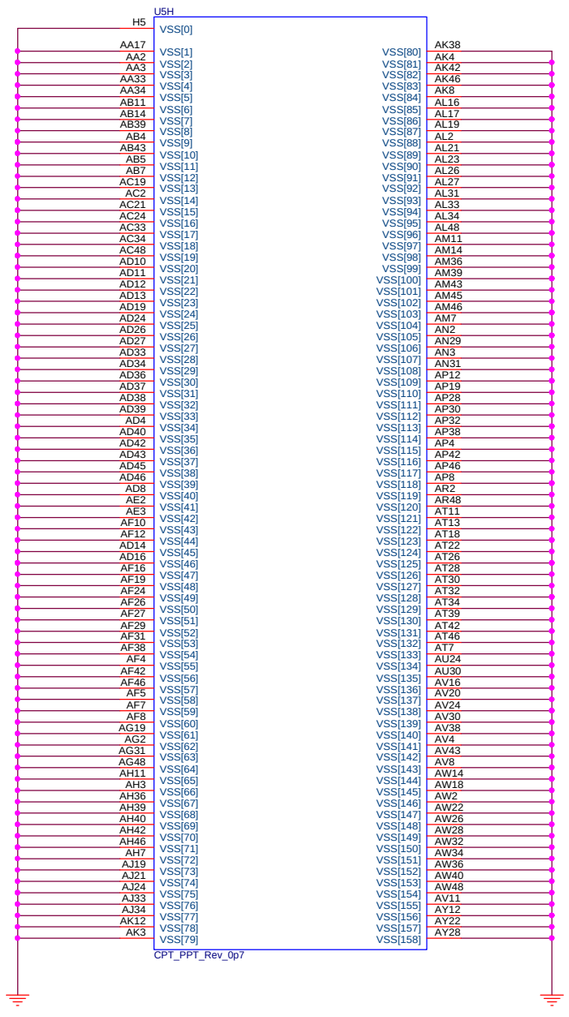
VCC1R05B → FL34 10uH_GLFR1608T100M-LR NA

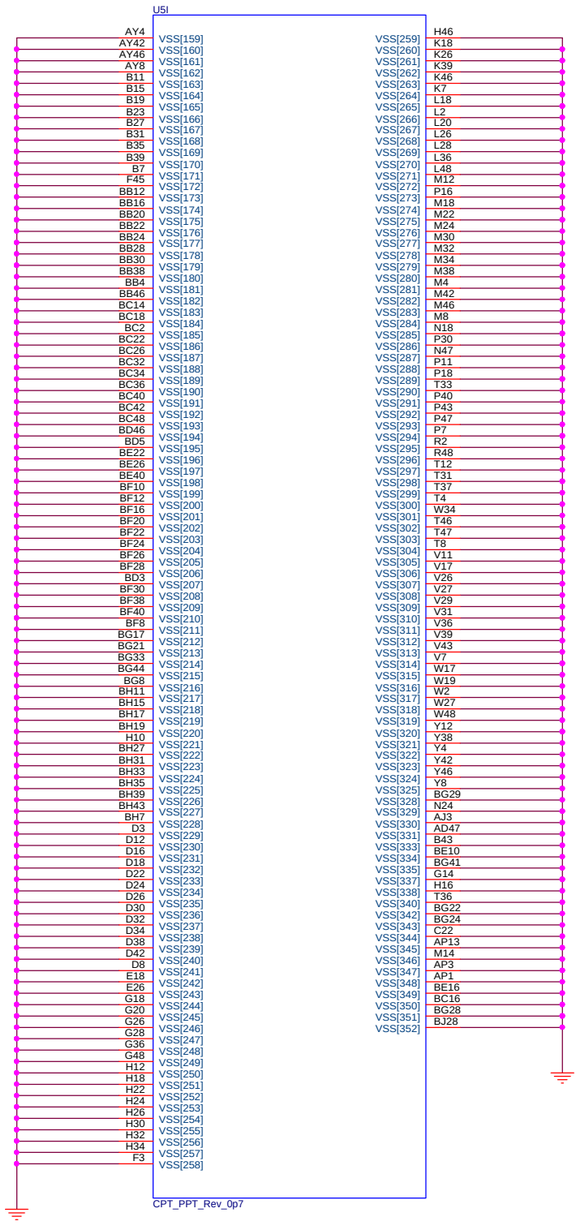
C854 1UF_10V 1005_X5R_K NA
C856 10UF_6.3V 1608_X5R_M NA

VCC1R05AMT_PCH → **1.849A** **(For VCCME)**

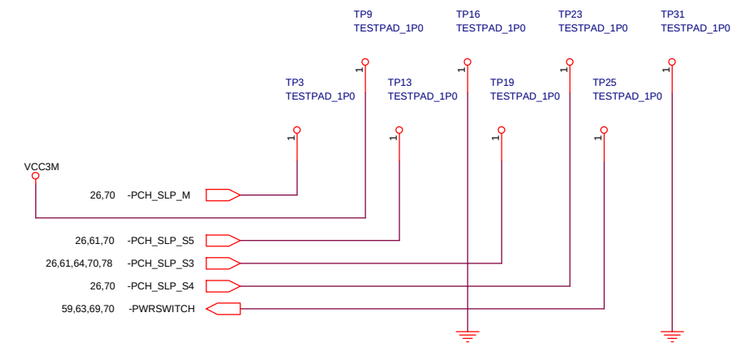
VCC3M_PCH → C834 1UF_10V 1005_X5R_K → **6mA** **(For VCCSUSHDA)**

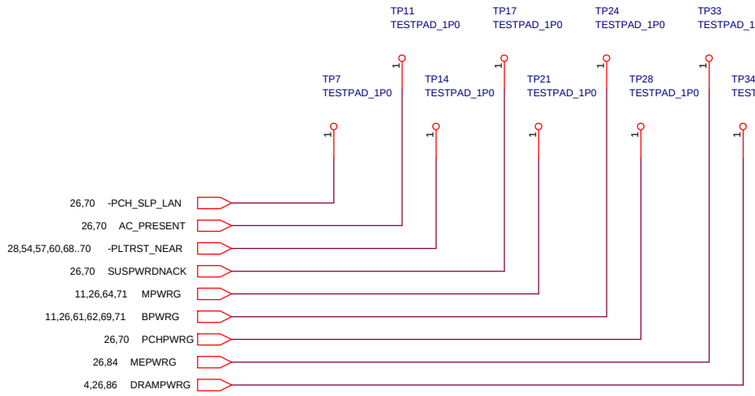
Project Name : NZM-4 UMA SOVP	Title : PCH(8/9):POWER
Size : C	Document Number :
Date: Monday, March 19, 2012	Sheet : 31 of 97

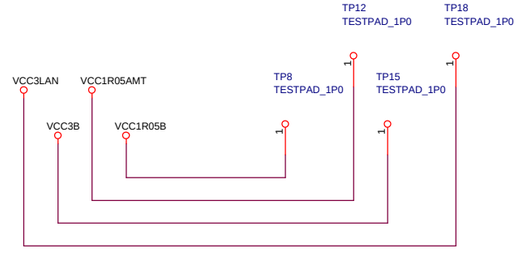


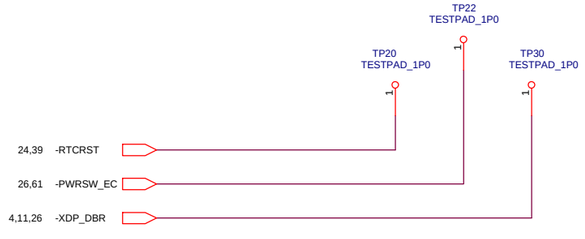


TEST PAD FOR METS/APS







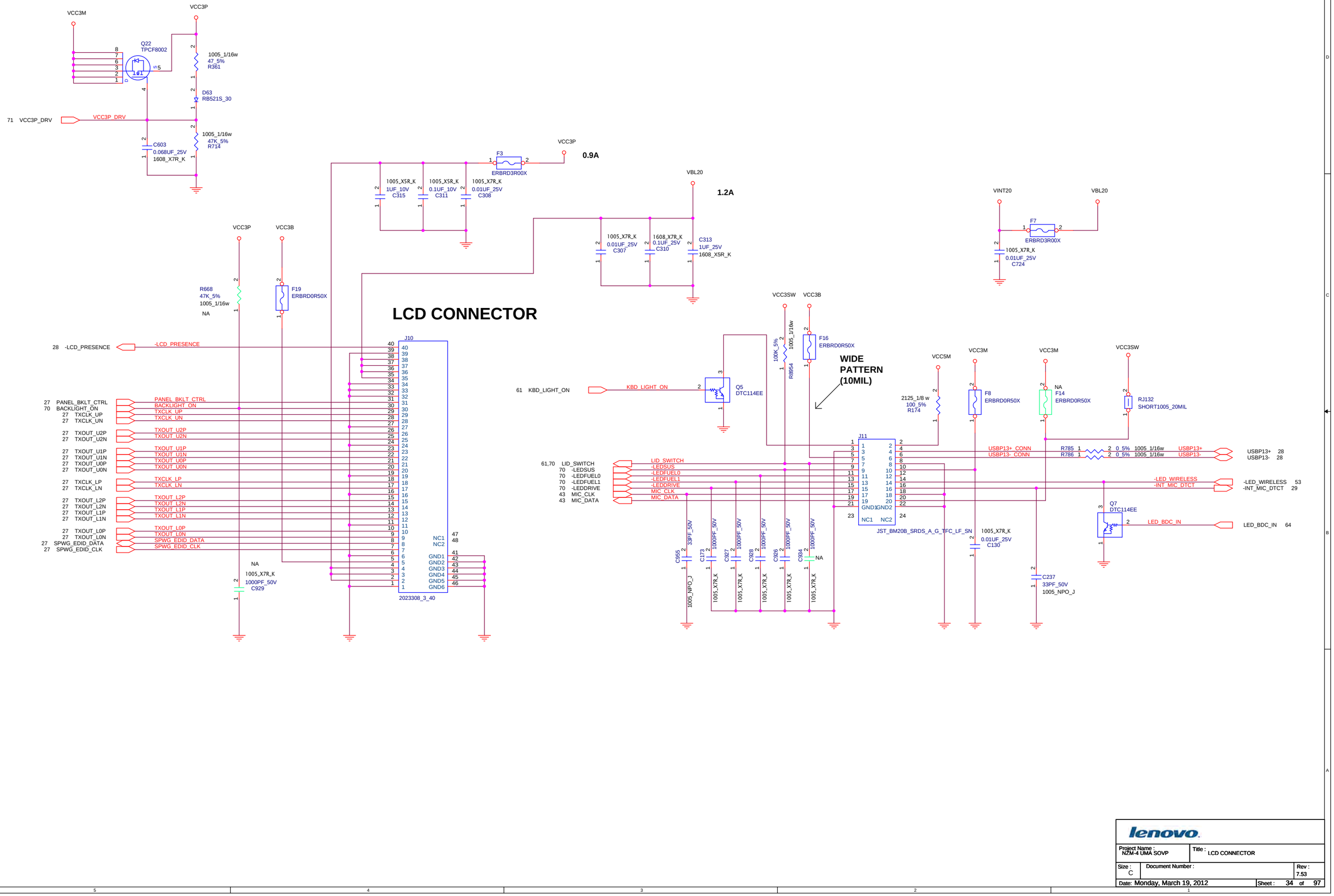


Project Name : NZM-4 UMA SOVP	Title : PCH(9/9):GND	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 32 of 97	

BLANK

lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 33 of 97	

LCD CONNECTOR



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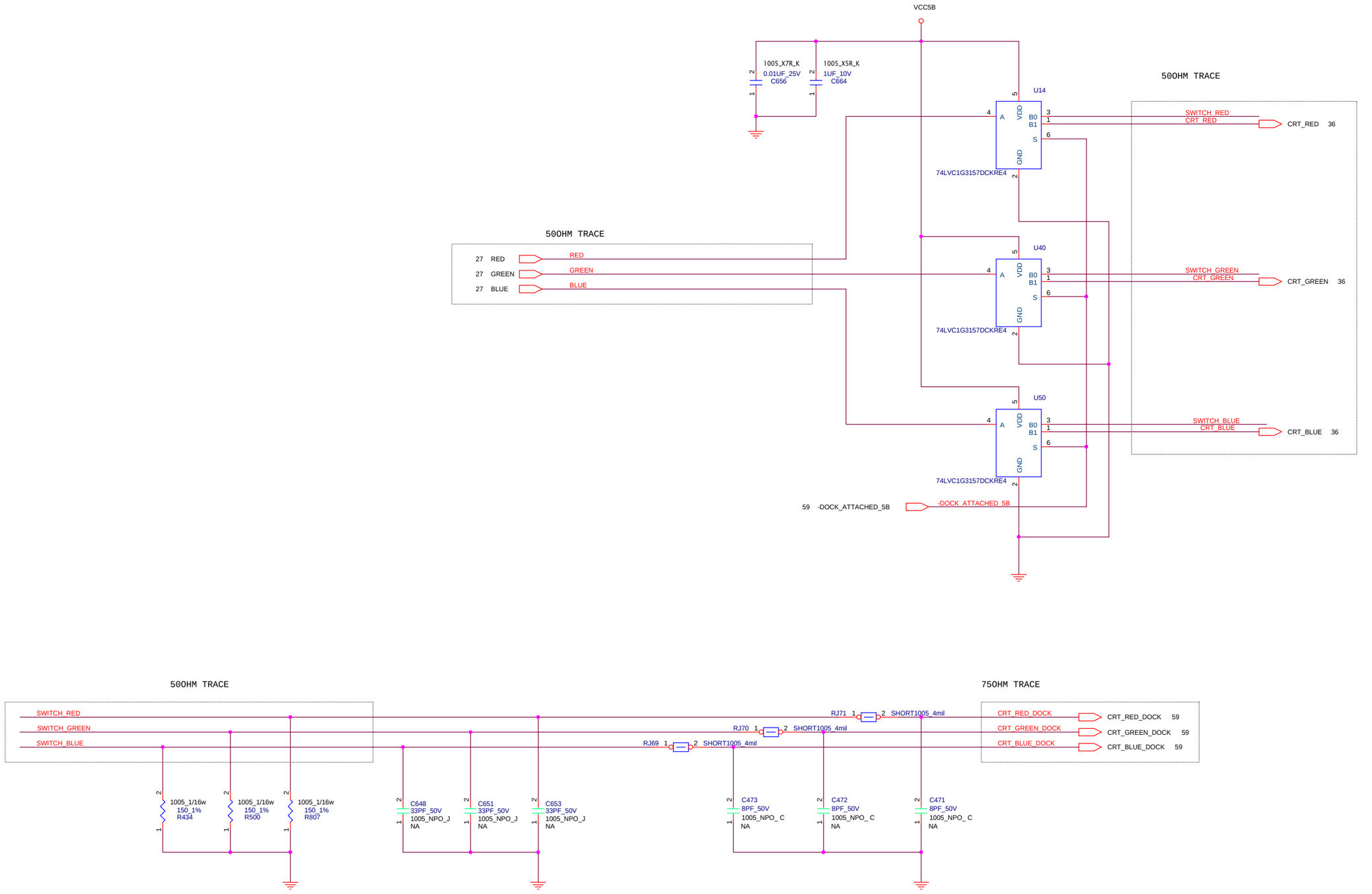
Project Name : NZM-4 UMA SOVP		Title : LCD CONNECTOR	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 34 of 97	



Project Name : NZM-4 UMA SOVP	Title : RGB SWITCH	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 35 of 97	

CRT CONN

NA
D233
CRT_RED 1
2
3
6 CRT_GREEN
5
4 CRT_BLUE
VCC3B
RCLAMP0504S

NEAR CRT CONN

D234
CRT_HSYNC_DOCK 1
2
DDCDATA_CONN 3
6 CRT_VSYNC_DOCK
5
4 DDCCLK_CONN
VCCCRT
RCLAMP0504S

NEAR CRT CONN

50OHM TRACE

35 CRT_RED — CRT_RED — 1005_1/16w 150_1% R55
35 CRT_GREEN — CRT_GREEN — 1005_1/16w 150_1% R61
35 CRT_BLUE — CRT_BLUE — 1005_1/16w 150_1% R72

FL15 BLM15BB220SN1
FL16 BLM15BB220SN1
FL17 BLM15BB220SN1

C542 33PF_50V 1005_NPO_J NA
C433 33PF_50V 1005_NPO_J NA
C469 33PF_50V 1005_NPO_J NA

C487 8PF_50V 1005_NPO_C
C499 8PF_50V 1005_NPO_C
C506 8PF_50V 1005_NPO_C

750HM TRACE

CRT_RED_CONN
CRT_GREEN_CONN
CRT_BLUE_CONN

J31
NORTHSTAR 71441530311

1005_X5R_K 0.1UF_10V C522

VCC5B
F22 NANOSMDC150F

VCCCRT
1005_1/16w 4.7K_5% R370
1005_1/16w 4.7K_5% R372

C527 100PF_50V 1005_NPO_J NA
C528 100PF_50V 1005_NPO_J NA

DDCDATA_CONN
DDCCLK_CONN

VCCCRT
1005_X5R_K 1UF_10V C1293

U38
27 VSYNC — CRT_VSYNC — R154 27_5% 1005_1/16w
27 HSYNC — CRT_HSYNC — R92 27_5% 1005_1/16w
TC7WT125FU

FL18 BLM15BB220SN1
C512 100PF_50V 1005_NPO_J NA

CRT_VSYNC_CONN
CRT_HSYNC_CONN

FL19 BLM15BB220SN1
C516 100PF_50V 1005_NPO_J NA

CRT_VSYNC_DOCK — CRT_VSYNC_DOCK 59
CRT_HSYNC_DOCK — CRT_HSYNC_DOCK 59

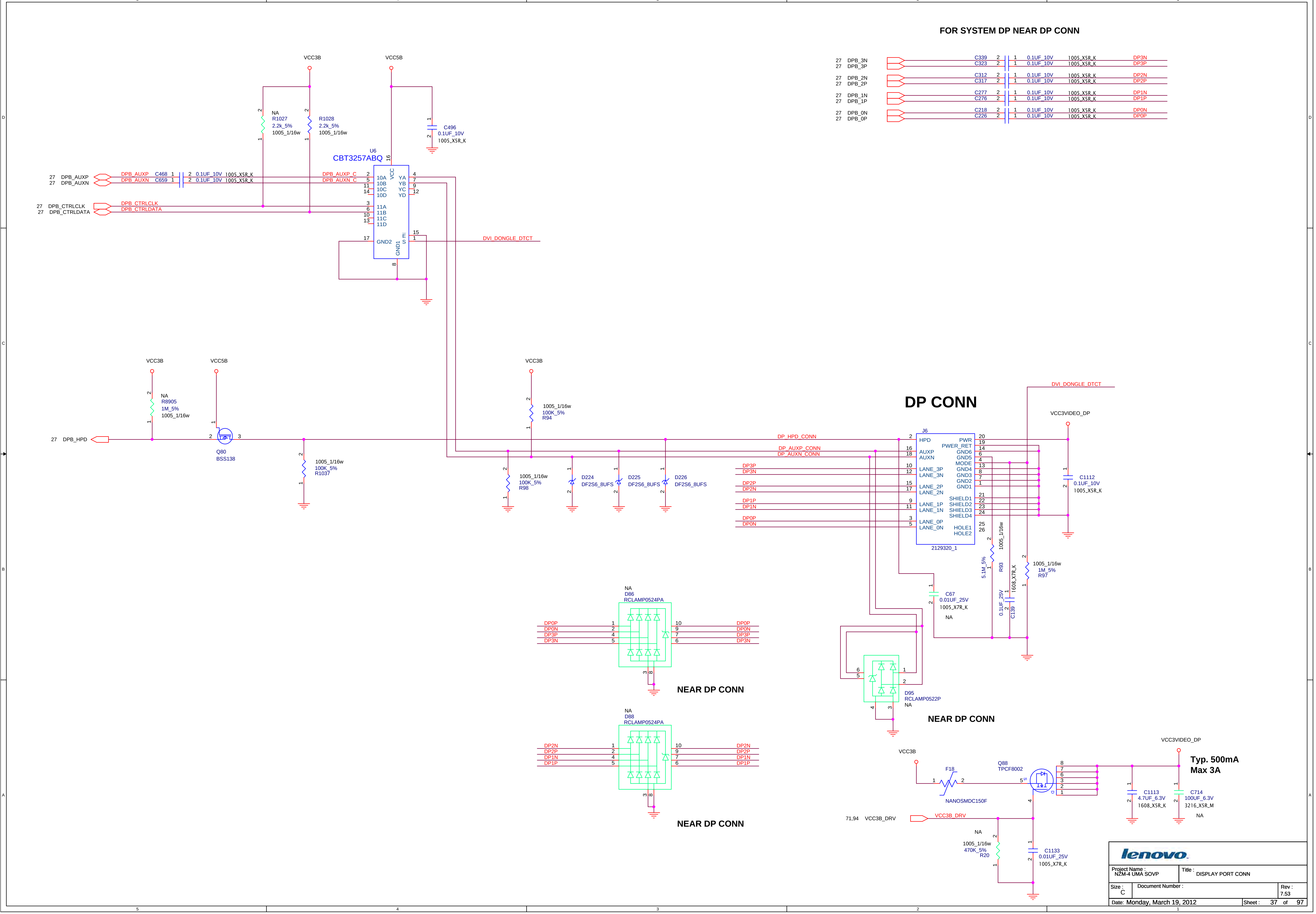
VCC3B

NA 1005_1/16w 4.7K_5% R771
Q47
27 DDCCLK — DDCCLK — DDCCLK_CONN — DDCCLK_CONN 59
2SK3541

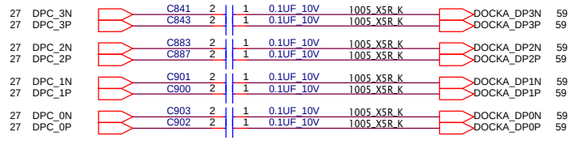
NA 1005_1/16w 4.7K_5% R772
Q48
27 DDCDATA — DDCDATA — DDCDATA_CONN — DDCDATA_CONN 59
2SK3541

VCC5B
D35 RB461F
VCCCRT
1005_X7R_K 0.01UF_25V C470
1005_X5R_K 1UF_10V C474

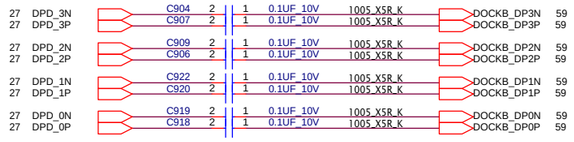
Project Name : NZM-4 UMA SOVP	Title : EXT CRT I/F	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 36 of 97	

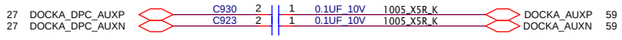

FOR SYSTEM DP NEAR DP CONN
27 DPB_3N
27 DPB_3P
27 DPB_2N
27 DPB_2P
27 DPB_1N
27 DPB_1P
27 DPB_0N
27 DPB_0P
C339 C323 C312 C317 C277 C276 C218 C226
0.1UF_10V
1005_X5R_K
DP3N DP3P DP2N DP2P DP1N DP1P DP0N DP0P
VCC3B
VCC5B
NA
R1027
2.2k_5%
1005_1/16w
R1028
2.2k_5%
1005_1/16w
C496
0.1UF_10V
1005_X5R_K
U6
CBT3257ABQ
27 DPB_AUXP
27 DPB_AUXN
DPB_AUXP C468
DPB_AUXN C659
DPB_AUXP_C
DPB_AUXN_C
27 DPB_CTRLCLK
27 DPB_CTRLDATA
DPB_CTRLCLK
DPB_CTRLDATA
10A 10B 10C 10D 11A 11B 11C 11D GND2 GND1 VCC YA YB YC YD E S
DVI_DONGLE_DTCT
VCC3B
VCC5B
NA
R8905
1M_5%
1005_1/16w
27 DPB_HPD
Q80
BSS138
1005_1/16w
100K_5%
R1037
VCC3B
1005_1/16w
100K_5%
R94
1005_1/16w
100K_5%
R98
D224
DF2S6.8UFS
D225
DF2S6.8UFS
D226
DF2S6.8UFS
DP CONN
DP_HPD_CONN
DP_AUXP_CONN
DP_AUXN_CONN
J6
HPD AUXP AUXN LANE_3P LANE_3N LANE_2P LANE_2N LANE_1P LANE_1N LANE_0P LANE_0N
PWR PWER_RET GND6 GND5 MODE GND4 GND3 GND2 GND1 SHIELD1 SHIELD2 SHIELD3 SHIELD4 HOLE1 HOLE2
2129320_1
VCC3VIDEO_DP
C1112
0.1UF_10V
1005_X5R_K
R93
5.1M_5%
1005_1/16w
C139
0.1UF_25V
1608_X7R_K
R97
1M_5%
1005_1/16w
C67
0.01UF_25V
1005_X7R_K
NA
NA
D86
RCLAMP0524PA
NEAR DP CONN
NA
D88
RCLAMP0524PA
NEAR DP CONN
D95
RCLAMP0522P
NA
NEAR DP CONN
VCC3B
F18
NANOSMDC150F
Q88
TPCF8002
VCC3VIDEO_DP
Typ. 500mA
Max 3A
C1113
4.7UF_6.3V
1608_X5R_K
C714
100UF_6.3V
3216_X5R_M
NA
71,94 VCC3B_DRV
VCC3B_DRV
NA
1005_1/16w
470K_5%
R20
C1133
0.01UF_25V
1005_X7R_K
lenovo
Project Name : NZM-4 UMA SOVP
Title : DISPLAY PORT CONN
Size : C
Document Number :
Rev : 7.53
Date: Monday, March 19, 2012
Sheet : 37 of 97

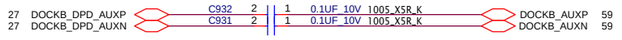
NEAR DOCK CONN



NEAR DOCK CONN







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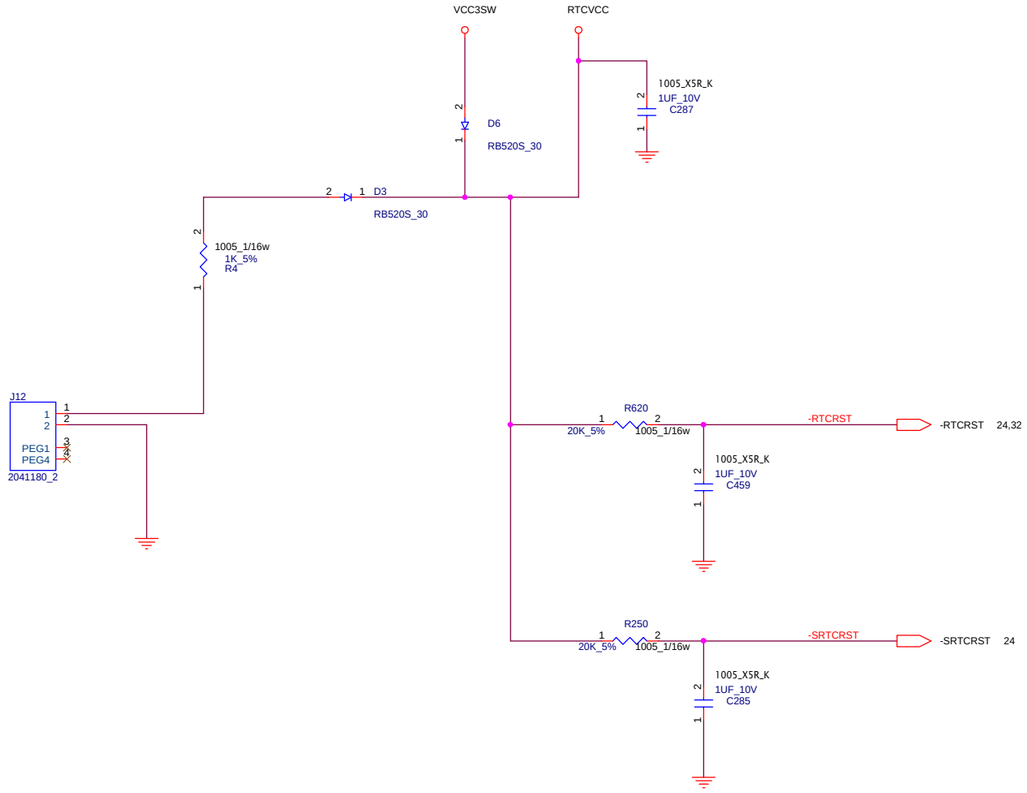
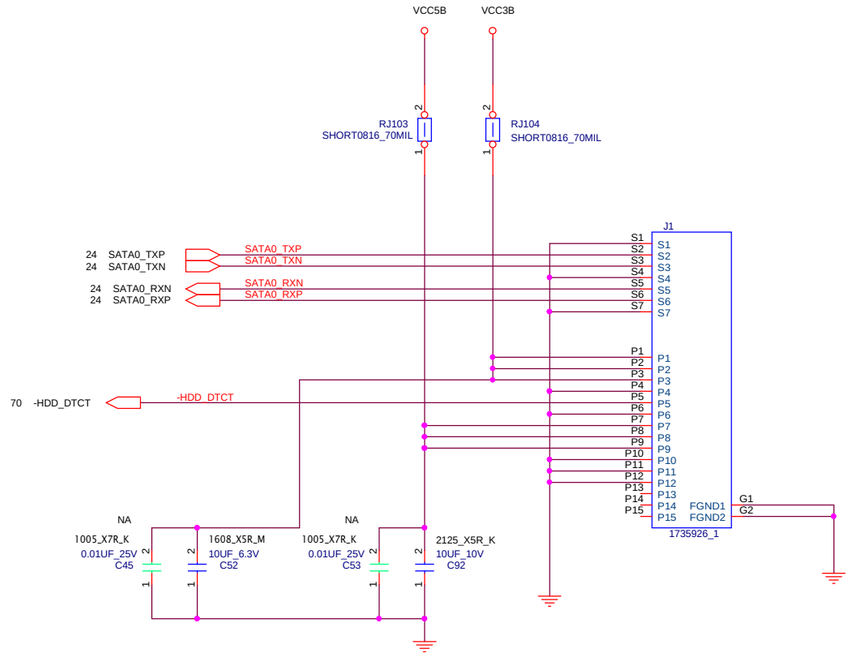
Project Name : NZM-4 UMA SOVP	Title : DISPLAY PORT MUX
Size : C / Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 38 of 97



Project Name : NZM-4 UMA SOVP	Title : RTC BATTERY	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 39 of 97	



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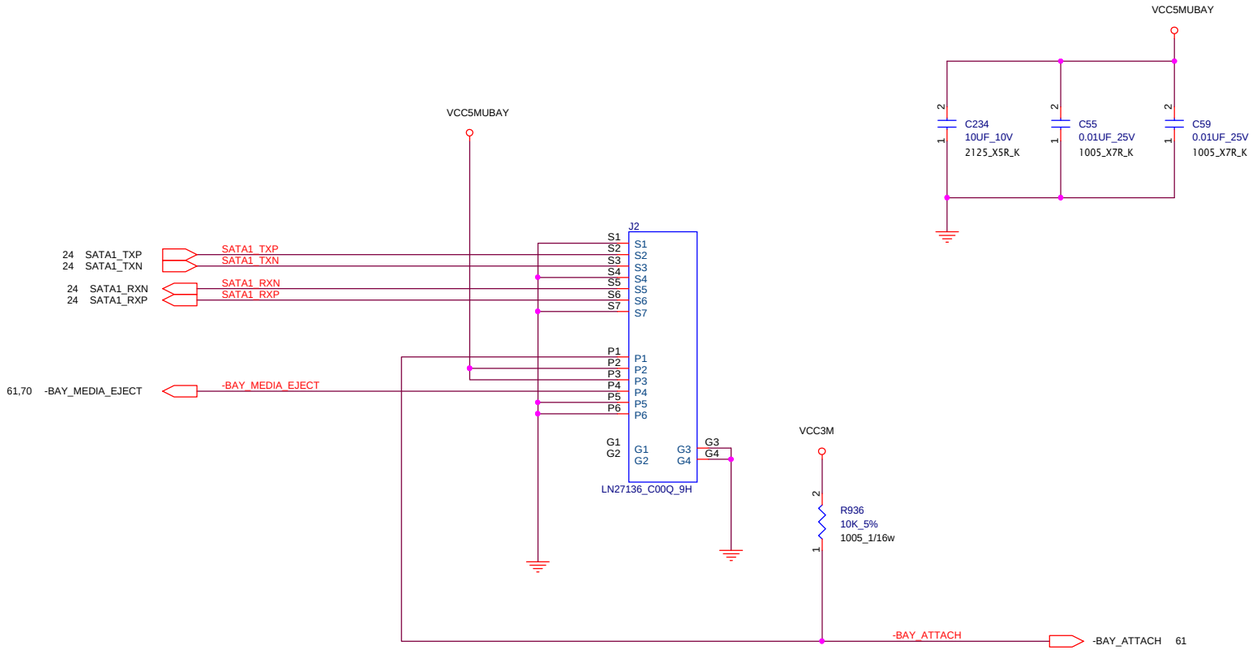
Project Name : NZM-4 UMA SOVP	Title : SATA HDD CONN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 40 of 97	



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Project Name : NZM-4 UMA SOVP	Title : SATA BAY I/F CONN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 41 of 97	

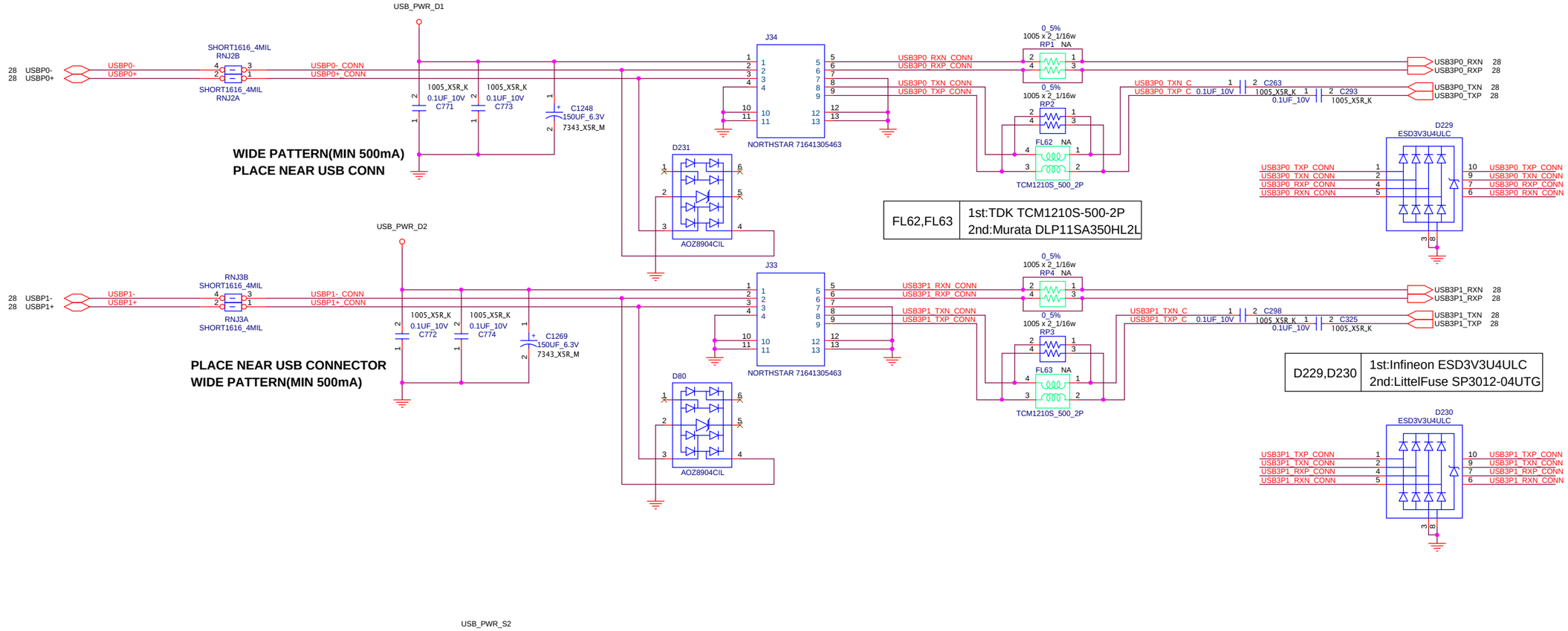

USB_PWR_D1
28 USBP0-
28 USBP0+
USBP0-
USBP0+
SHORT1616_4MIL
RNJ2B
SHORT1616_4MIL
RNJ2A
USBP0- CONN
USBP0+ CONN
1005_X5R_K
0.1UF_10V
C771
1005_X5R_K
0.1UF_10V
C773
C1248
150UF_6.3V
7343_X5R_M
J34
NORTHSTAR 71641305463
USB3P0_RXN_CONN
USB3P0_RXP_CONN
USB3P0_TXN_CONN
USB3P0_TXP_CONN
0_5%
1005 x 2_1/16w
RP1 NA
RP2
FL62 NA
TCM1210S_500_2P
USB3P0_TXN_C
USB3P0_TXP_C
0.1UF_10V
C263
C293
USB3P0_RXN 28
USB3P0_RXP 28
USB3P0_TXN 28
USB3P0_TXP 28
D229
ESD3V3U4ULC
WIDE PATTERN(MIN 500mA)
PLACE NEAR USB CONN
D231
AOZ8904CIL
FL62,FL63
1st:TDK TCM1210S-500-2P
2nd:Murata DLP11SA350HL2L
USB_PWR_D2
28 USBP1-
28 USBP1+
USBP1-
USBP1+
RNJ3B
SHORT1616_4MIL
RNJ3A
SHORT1616_4MIL
USBP1- CONN
USBP1+ CONN
1005_X5R_K
0.1UF_10V
C772
1005_X5R_K
0.1UF_10V
C774
C1269
150UF_6.3V
7343_X5R_M
J33
NORTHSTAR 71641305463
USB3P1_RXN_CONN
USB3P1_RXP_CONN
USB3P1_TXN_CONN
USB3P1_TXP_CONN
RP4 NA
RP3
FL63 NA
TCM1210S_500_2P
USB3P1_TXN_C
USB3P1_TXP_C
C298
C325
USB3P1_RXN 28
USB3P1_RXP 28
USB3P1_TXN 28
USB3P1_TXP 28
D230
ESD3V3U4ULC
PLACE NEAR USB CONNECTOR
WIDE PATTERN(MIN 500mA)
D80
AOZ8904CIL
D229,D230
1st:Infineon ESD3V3U4ULC
2nd:LittelFuse SP3012-04UTG
USB_PWR_S2
28 USBP9-
28 USBP9+
USBP9-
USBP9+
RNJ1A
SHORT1616_4MIL
RNJ1B
SHORT1616_4MIL
USBP9- CONN
USBP9+ CONN
1005_X5R_K
0.1UF_10V
C351
1005_X5R_K
0.1UF_10V
C364
C395
150UF_6.3V
7343_X5R_M
J29
1932854_1
D5
AOZ8904CIL
PLACE NEAR USB CONNECTOR
WIDE PATTERN(MIN 500mA)
VCC5M
C1291
4.7UF_10V
1608_X5R_K
NA
C257
0.1UF_10V
1005_X5R_K
R1104
37.4K_1%
1005_1/16w
Current Limit Target: 1.6A
U88
TPS2541A
USB_PWR_S1
28 USBP4-
28 USBP4+
IN
DM_OUT
DP_OUT
ILIM_SEL
OUT
DM_IN
DP_IN
NC
GND2
ILIM0
ILIM1
GND1
FAULT#
DSC
CTL1
CTL2
CTL3
USBP4- CONN
USBP4+ CONN
USBP4-_CONN 52
USBP4+_CONN 52
-USB_PORT4_OC2 28
70 USB_ON2
70 AO_USB_SEL
TABLE of AOU port
TI TPS2541A
Pericom PI5USB2541
VCC5M
4.7UF_10V
NA
C1290
1608_X5R_K
0.1UF_10V
C239
1005_X5R_K
USB_PWR_D2
USB_PWR_D1
U52
TPS2064DGN
GND1OC1#
IN
EN1
EN2
OUT1
OUT2
OC2#
GND2
USB_ON1
-USB_PORT0_OC0
-USB_PORT1_OC1
-USB_PORT0_OC0 28
-USB_PORT1_OC1 28
TABLE of USB3.0 Dual
TI TPS2064DGN
GMT G546A1F51U
FOR ON BOARD DUAL USB 3.0 CONNECTOR
VCC5M
4.7UF_10V
NA
C3
1608_X5R_K
0.1UF_10V
C179
1005_X5R_K
USB_PWR_S2
U53
TPS2065DGN
GND1OUT3
IN1
IN2
EN
OUT1
OUT2
OC#
GND2
70 USB_ON1
USB_ON1
-USB_PORT9_OC5
-USB_PORT9_OC5 28
TABLE of USB2.0 Single
TI TPS2065DGN
Rohm BD8012FVJ
FOR ON BOARD SINGLE USB 2.0 CONNECTOR
lenovo
Project Name : NZM-4 UMA SOVP
Title : USB POWER/CONN
Size : C
Document Number :
Rev : 7.53
Date: Monday, March 19, 2012
Sheet : 42 of 97

TABLE MIC HW ENABLE/DISABLE

	ENABLE	DISABLE
R686	NO ASM	ASM
R961	ASM	NO ASM
R119	ASM	NO ASM
FL9	ASM	NO ASM
R22	ASM	NO ASM

LOGIC

USE SHAPE

U8 ALC3202_GR

DVDD-IO, DVDD, AVDD2, AVDD1, PVDD2, PVDD1, VREF, LDO-CAP, JDREF

SDO, BCLK, SDI, SYNC, RST#, DMIC-DATA, DMIC-CLK, PD#, PCBEEP, SPDIF-OUT, SENSEA, SENSEB, COMBO-JACK, PAD

MIC1-VREF-L, MIC1-VREF-R, MIC2-VREF, HPOUT-R, HPOUT-L, LINE1-R, LINE1-L, MIC1-R, MIC1-L, MONO-OUT, MIC2-R, MIC2-L, LINE2-R, LINE2-L, CPVEE

DVSS, PVSS2, PVSS1, AVSS2, AVSS1, SPK-OUT-L+, SPK-OUT-L-, SPK-OUT-R-, SPK-OUT-R+, CBN, CBP

HDA_SDO, HDA_BCLK, HDA_SDIN0, HDA_SYNC, -HDA_RST, MIC_DATA, MIC_CLK, -SPK_MUTE, BEEP_MIX_ATT, SENSE_A, SENSE_B, MIC_GPI

HDA_SDIN0_ALC

HP_R_OUT, HP_L_OUT, HP_R_JACK, HP_L_JACK, EXT_MIC_IN, DOCK_MIC_R, DOCK_MIC_L, DOCK_HP_OUT_R, DOCK_HP_OUT_L

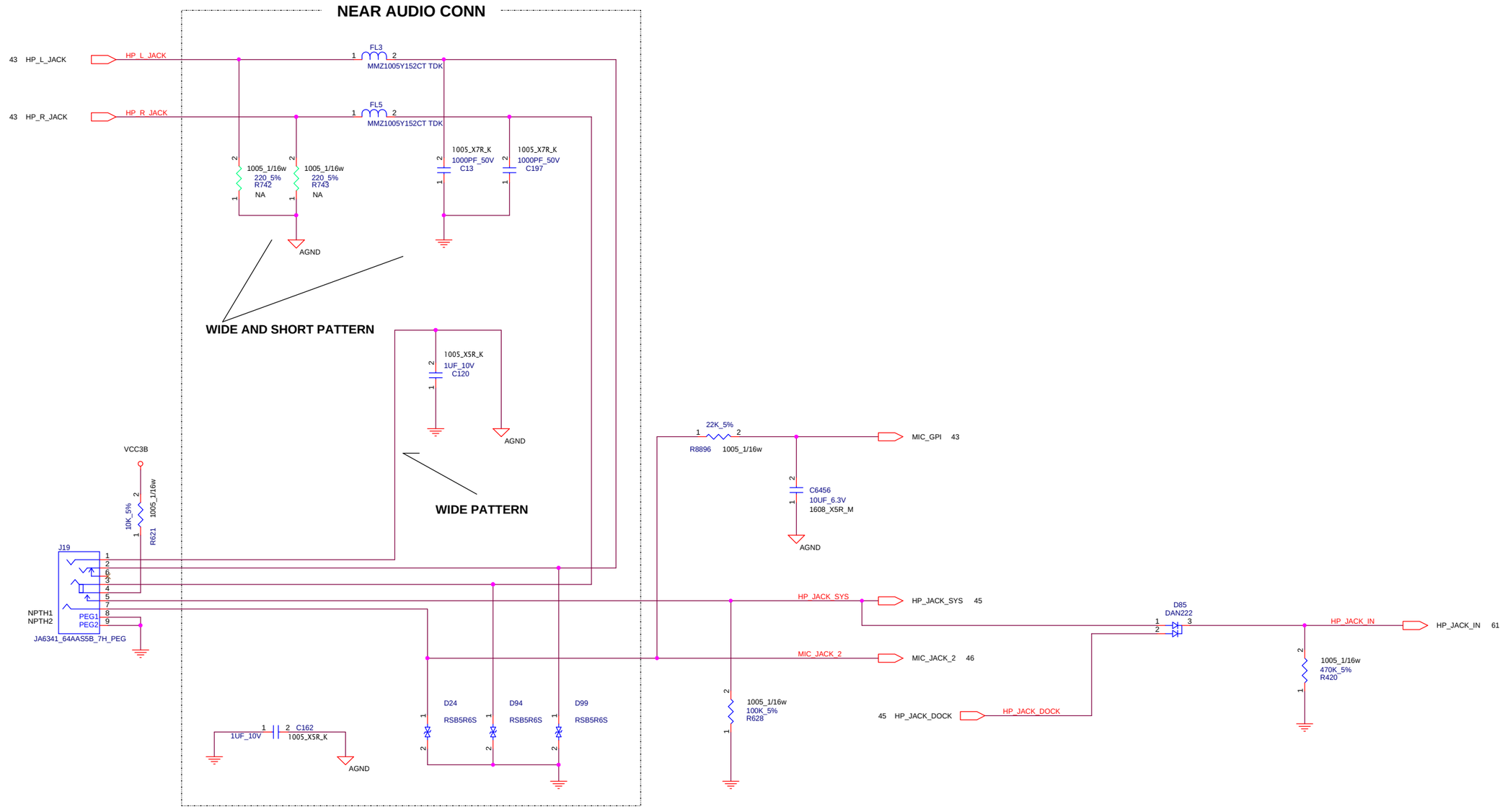
SP_OUTR+, SP_OUTR-, SP_OUTL+, SP_OUTL-

Layout Note: place R631 and R632 near dock conn

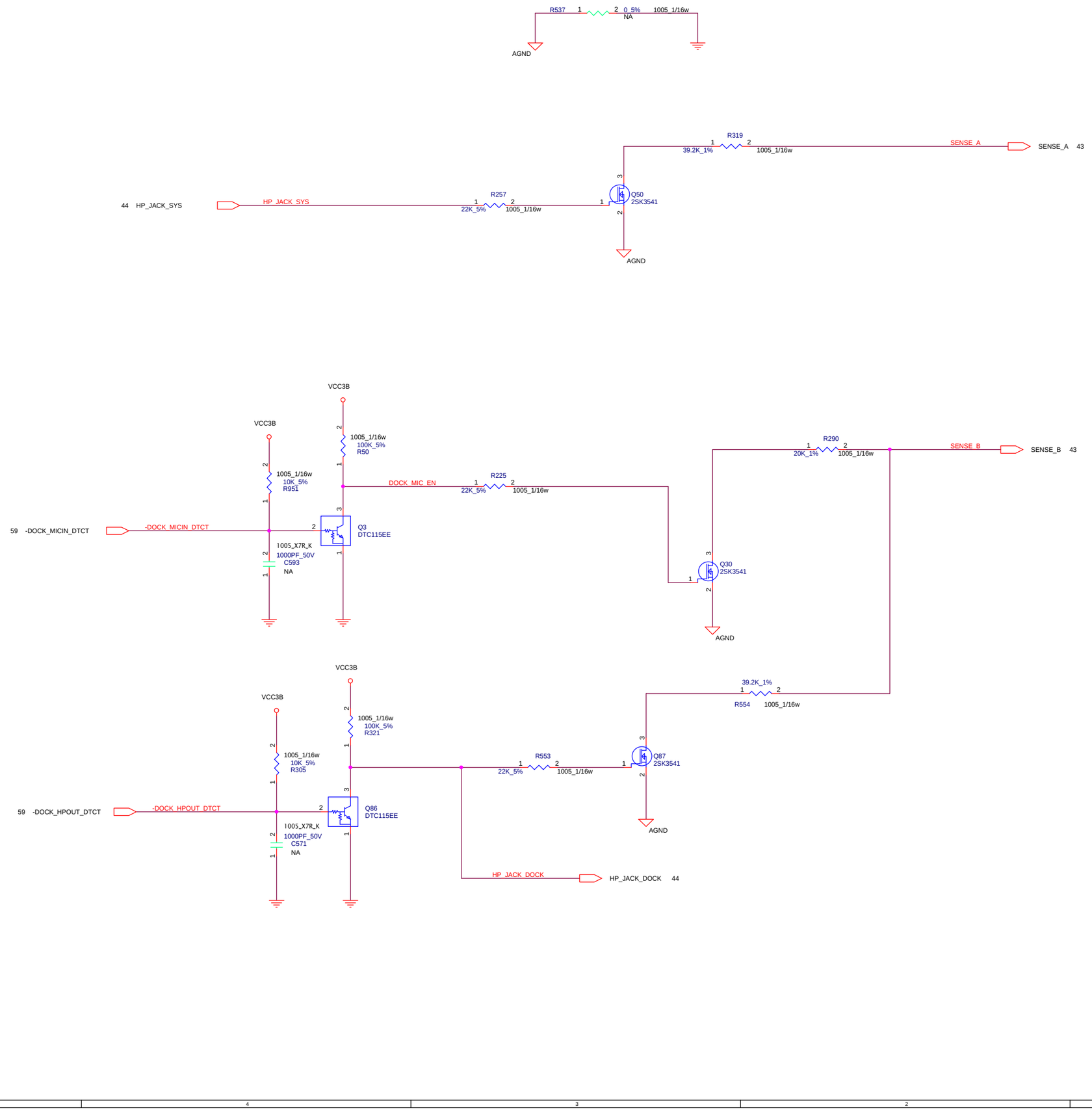
PLACE UNDER CX20561

PLACE NEAR U8

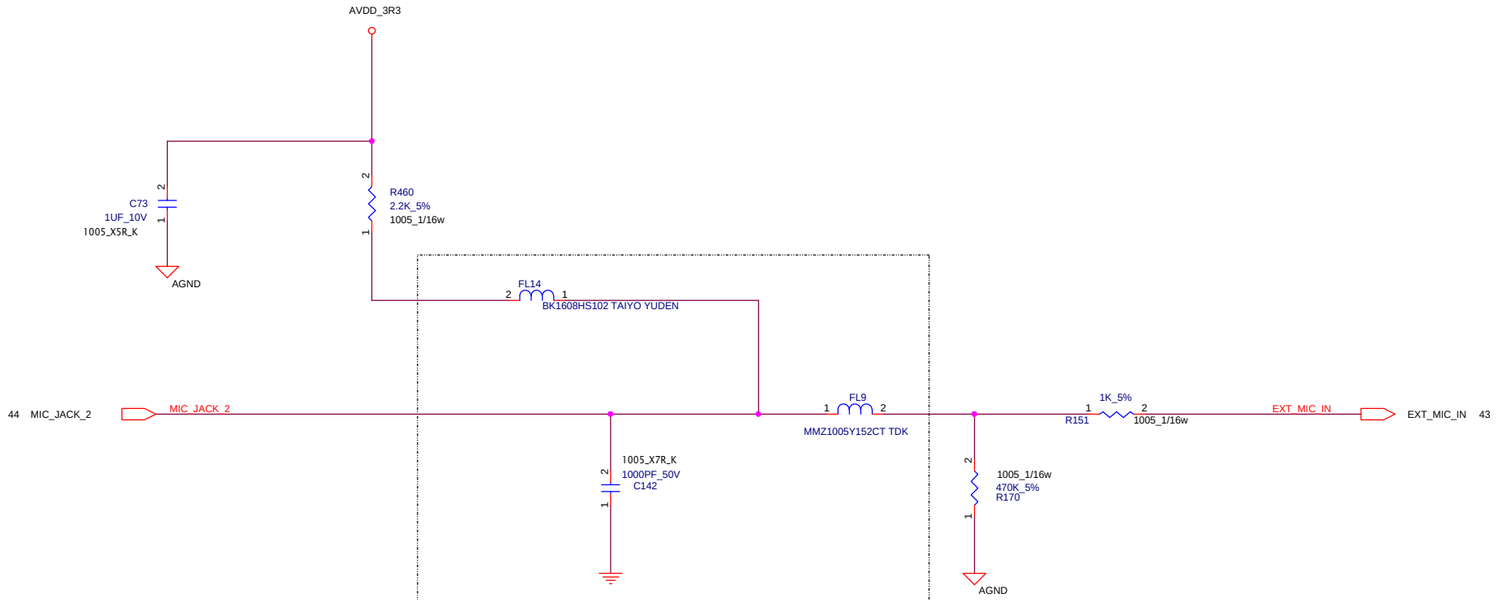
Project Name : NZM-4 UMA SOVP	Title : AUDIO ALC3202-GR	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 43 of 97	



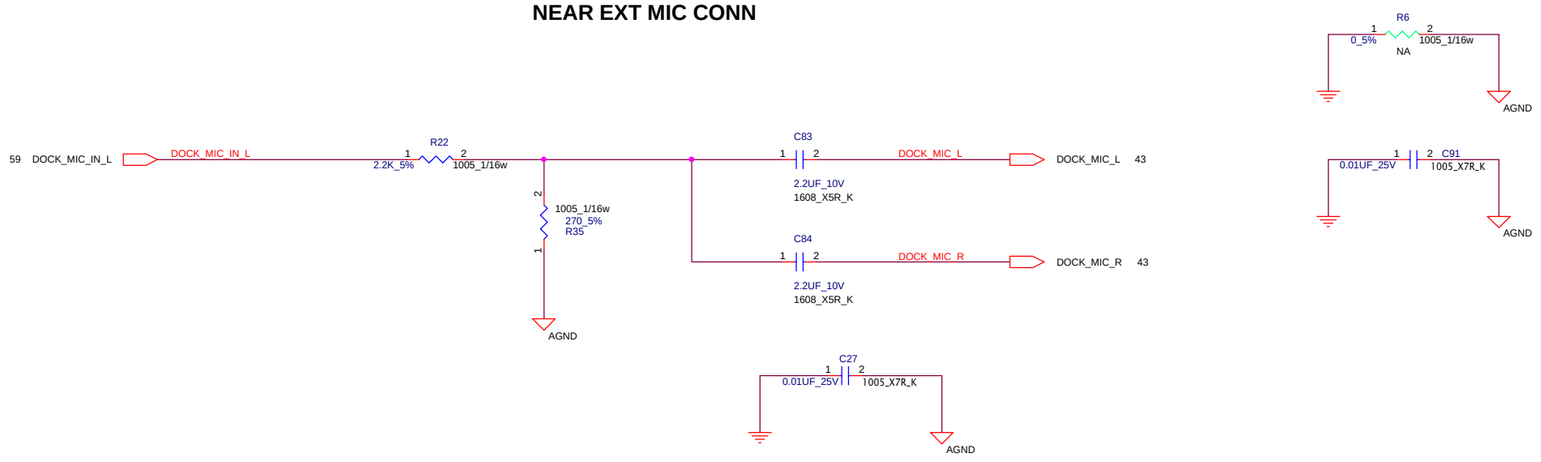
lenovo		
Project Name : NZM-4 UMA SOVP	Title : AUDIO CONN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 44 of 97	



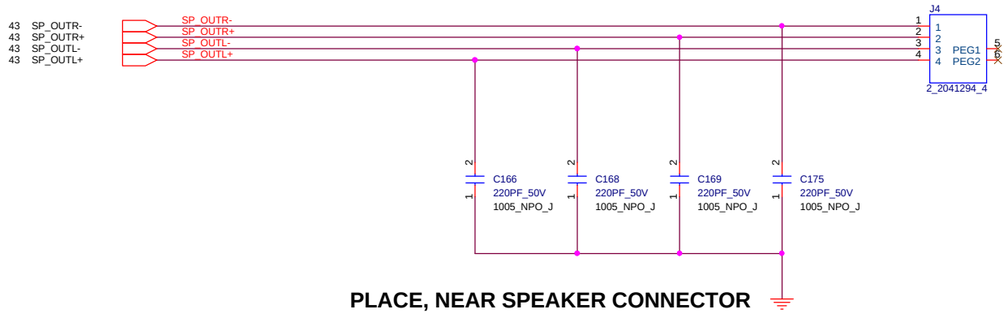
Project Name : NZM-4 UMA SOVP	Title : AUDIO JACK SENSE	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 45 of 97	



NEAR EXT MIC CONN

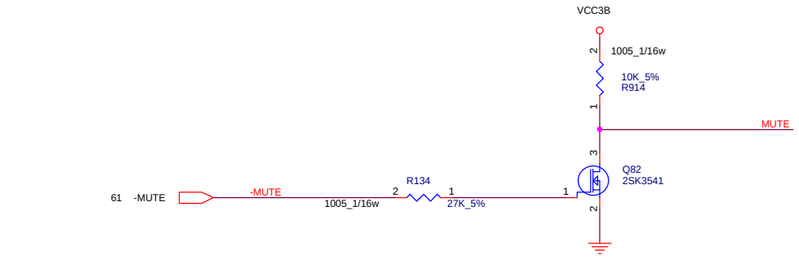


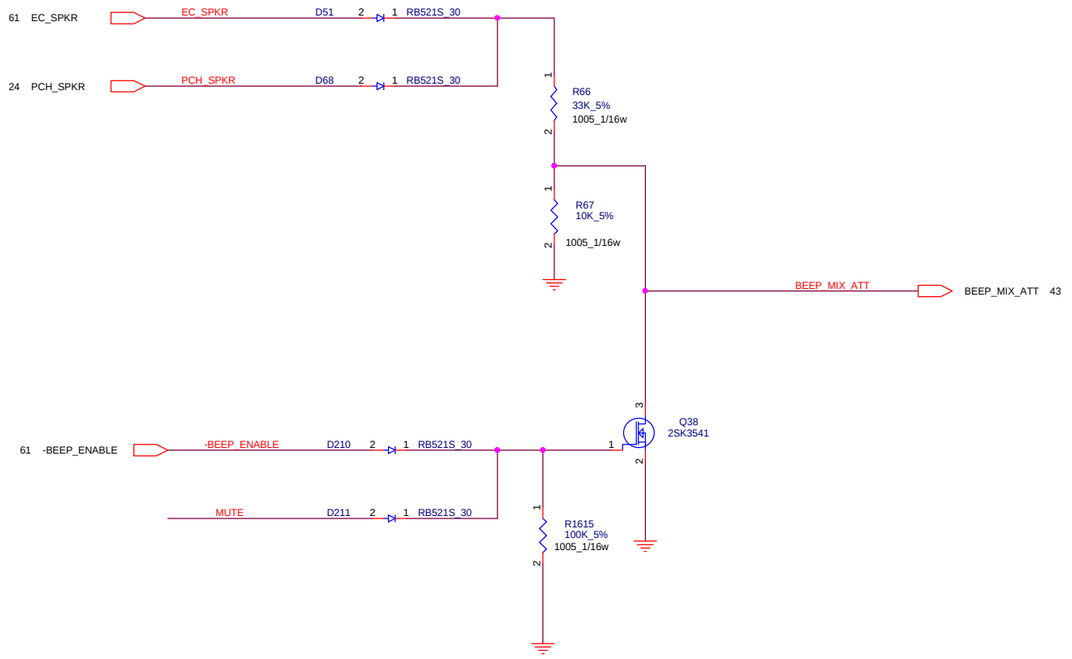
Project Name : NZM-4 UMA SOVP	Title : AUDIO EXT MIC I/F	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 46 of 97	



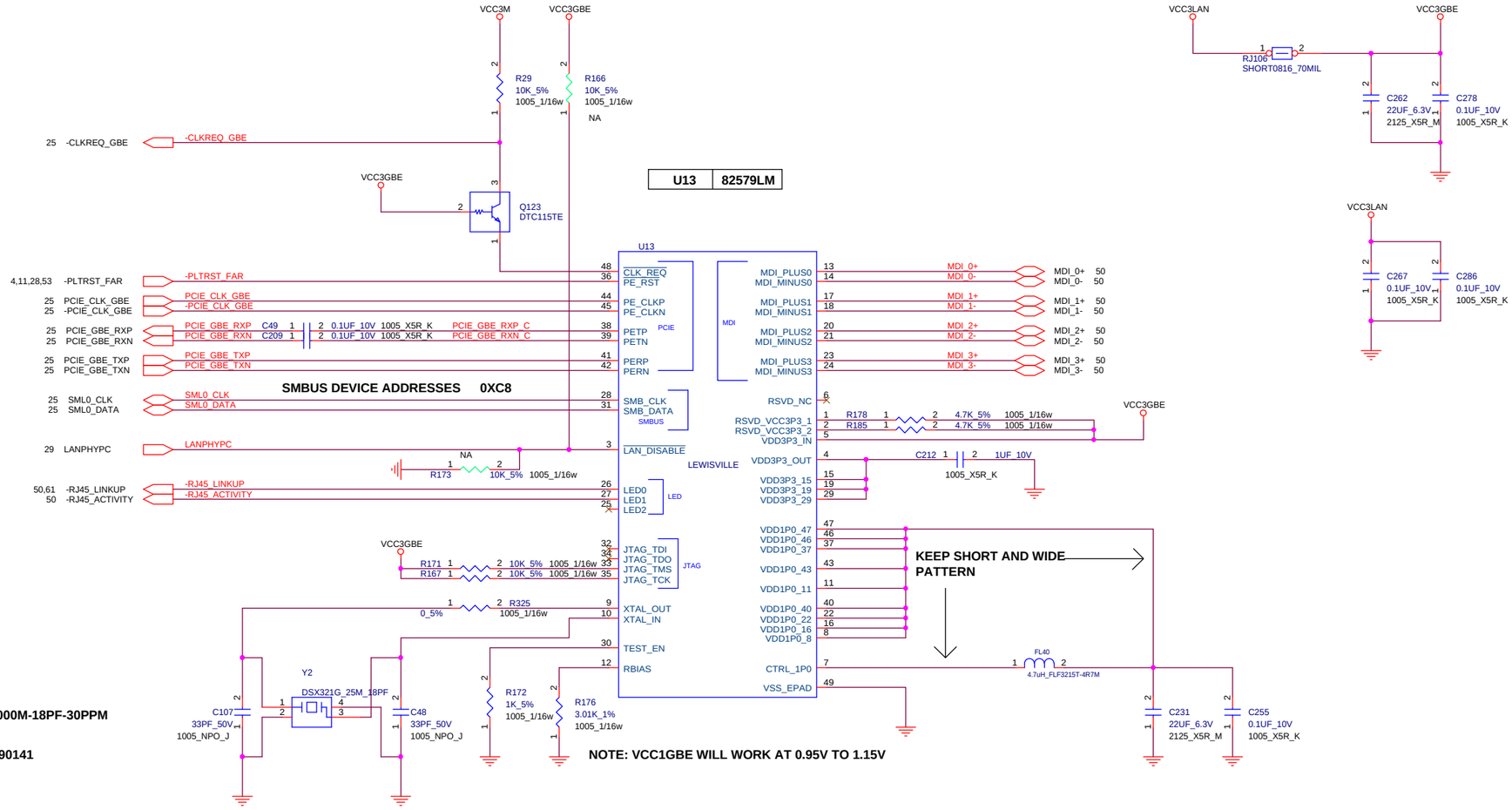
PLACE, NEAR SPEAKER CONNECTOR

lenovo		
Project Name : NZM-4 UMA SOVP	Title : AUDIO SPEAKER	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 47 of 97	





lenovo		
Project Name : NZM-4 UMA SOVP	Title : AUDIO BEEP	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 48 of 97	



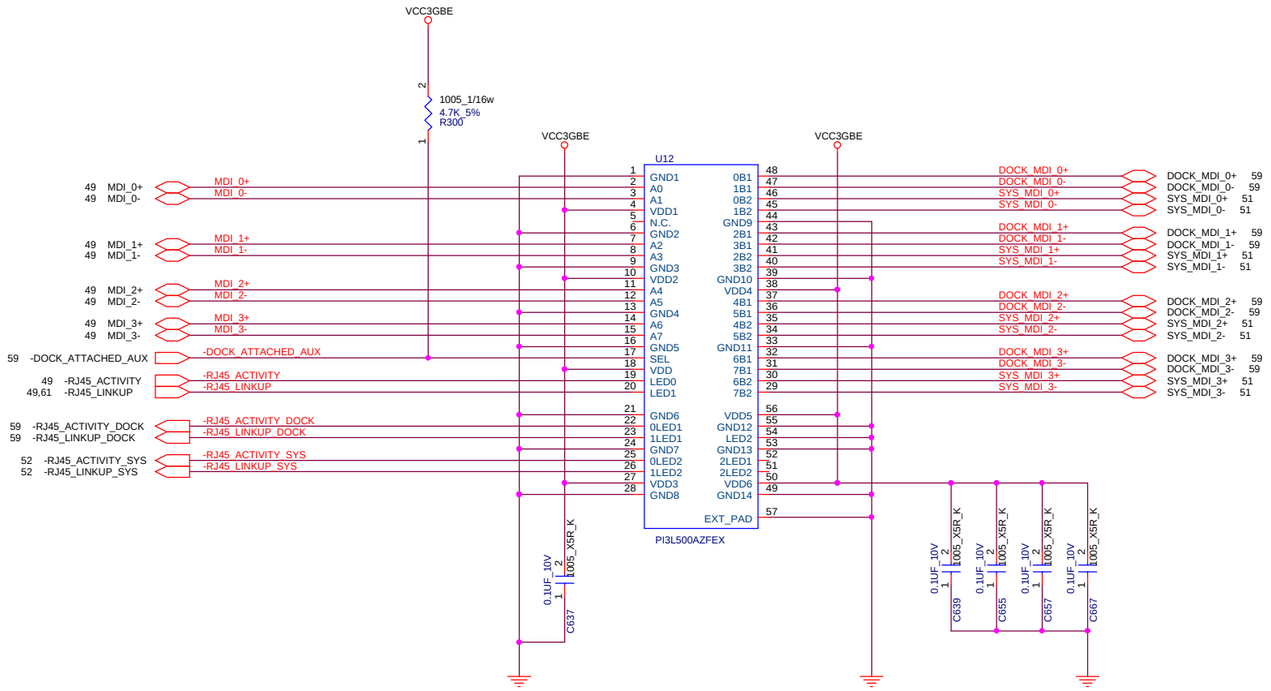
P/N 41U6141

KDS DSX321G-25.000M-18PF-30PPM

TXC 7V25020001

RIVER FCX-04-25MJ90141

Project Name : NZM-4 UMA SOVP	Title : GBE LEWISVILLE
Size : C	Document Number :
Rev : 7.53	
Date: Monday, March 19, 2012	Sheet : 49 of 97



Project Name : NZM-4 UMA SOVP		Title : GBE LAN SWITCH	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 50 of 97	

THE WIDTH OF THESE TRACE SHOULD BE WIDER THAN 35MIL TO PREVENT VOLTAGE DROP.

C303
SHOULD BE PLACED AS CLOSE TO MAGNETICS AS POSSIBLE.

PULSE H0068A(NL) OR MIDCOM 000-7219-35R

T1

1	RD+	RX+	16
2	RD-	RX-	15
3	RDCT	RXCT	14
4	NC1	NC4	13
5	NC2	NC3	12
6	TDCT	TXCT	11
7	TD+	TX+	10
8	TD-	TX-	9

000_7219_35R

SYS_MDI_0+ → SYS_MDI_0+ 50
SYS_MDI_0- → SYS_MDI_0- 50

SYS_MDI_2+ → SYS_MDI_2+ 50
SYS_MDI_2- → SYS_MDI_2- 50

RJ45_TXD0N → RJ45_TXD0N 52
RJ45_TXD0P → RJ45_TXD0P 52

RJ45_TXD2N → RJ45_TXD2N 52
RJ45_TXD2P → RJ45_TXD2P 52

PULSE H0068A(NL) OR MIDCOM 000-7219-35R

T2

1	RD+	RX+	16
2	RD-	RX-	15
3	RDCT	RXCT	14
4	NC1	NC4	13
5	NC2	NC3	12
6	TDCT	TXCT	11
7	TD+	TX+	10
8	TD-	TX-	9

000_7219_35R

SYS_MDI_3+ → SYS_MDI_3+ 50
SYS_MDI_3- → SYS_MDI_3- 50

SYS_MDI_1- → SYS_MDI_1- 50
SYS_MDI_1+ → SYS_MDI_1+ 50

RJ45_TXD3N → RJ45_TXD3N 52
RJ45_TXD3P → RJ45_TXD3P 52

RJ45_TXD1N → RJ45_TXD1N 52
RJ45_TXD1P → RJ45_TXD1P 52

C503 1UF_10V 1005_X5R_K

C626 NA 0.1UF_10V 1005_X5R_K
C627 NA 0.1UF_10V 1005_X5R_K
C533 0.1UF_10V 1005_X5R_K
C554 0.1UF_10V 1005_X5R_K
C558 0.1UF_10V 1005_X5R_K
C560 0.1UF_10V 1005_X5R_K

ESD REASON

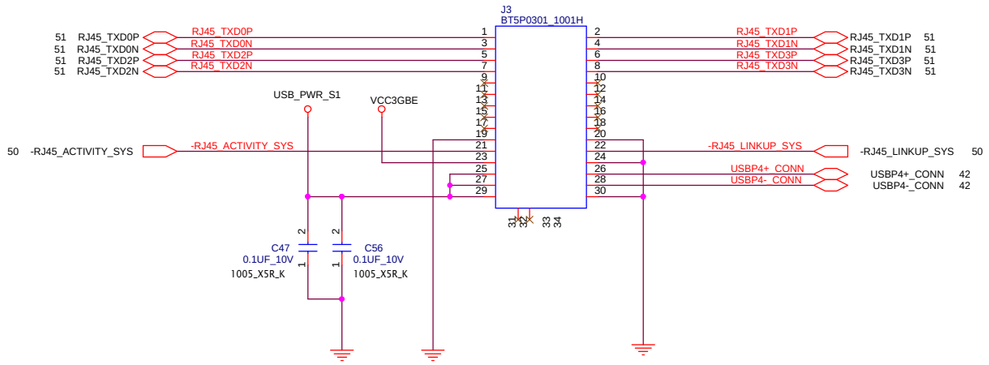
R664 75_5% 2125_1/8 w
R665 75_5% 2125_1/8 w
R666 75_5% 2125_1/8 w
R667 75_5% 2125_1/8 w

PATTERN MUST BE SHORT AND WIDE.

HIGH VOLTAGE
1500PF CAP
IS OPTIONAL

R960 2125_1/8 w 1M_5%
C562 1500PF_2000V 4520_X7R_K

Project Name : NZM-4 UMA SOVP		Title : GBE MAGNETICS	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 51 of 97	

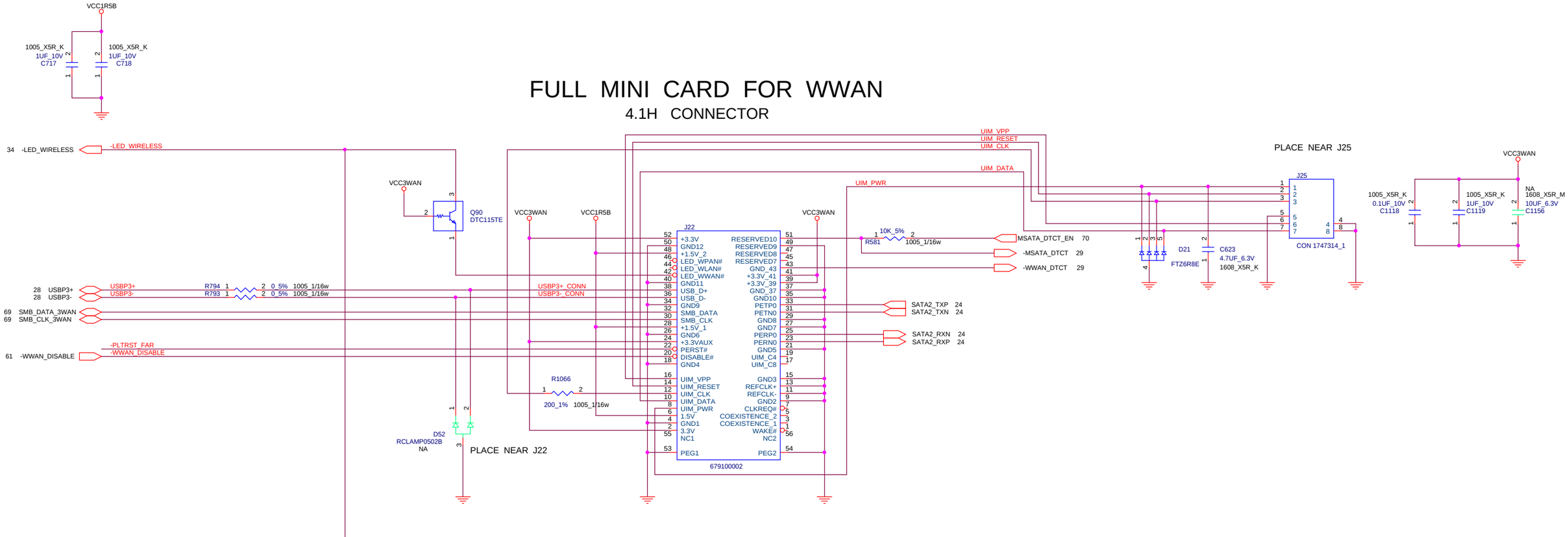


PLACE NEAR SUB CARD CONNECTOR
WIDE PATTERN(MIN 500mA)

lenovo		
Project Name : NZM-4 UMA SOVP	Title : I/O SUB CARD I/F	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 52 of 97	

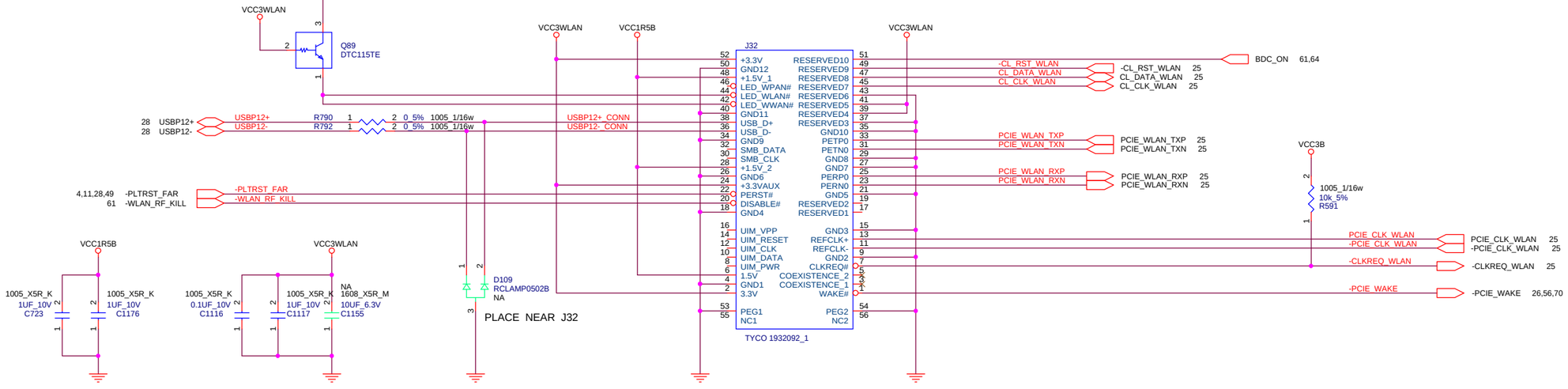
FULL MINI CARD FOR WWAN

4.1H CONNECTOR

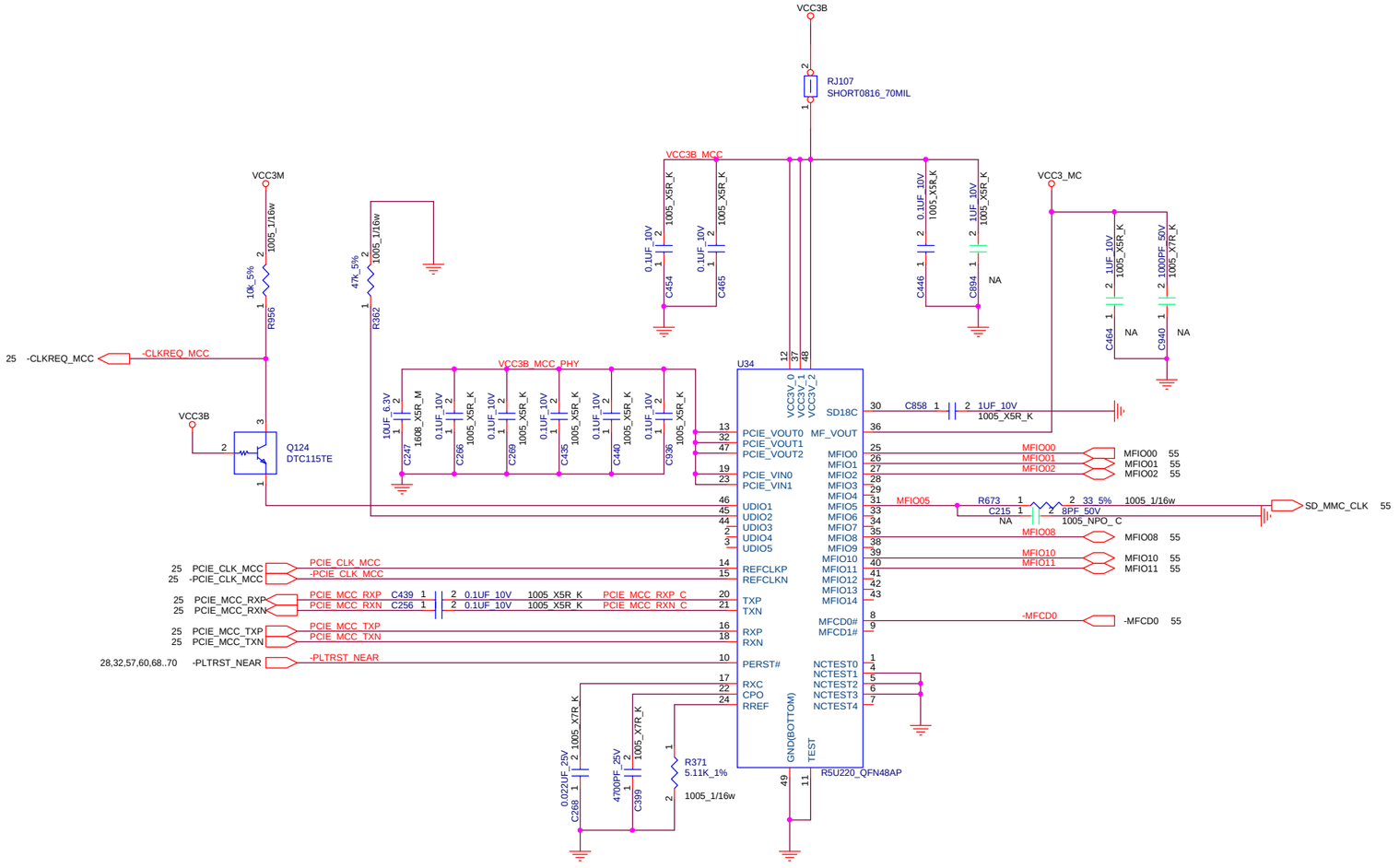


HALF MINI CARD FOR WLAN

7.0H CONNECTOR



lenovo		
Project Name : NZM-4 UMA SOVP	Title : PCIE MINI CARD SLOT	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 53 of 97	



TABLE

MEDIA I/F	SD/MMC	MEMORSTICK	XD
MFIO00	SDWP#	MSBS	XD_D7
MFIO01	SD_D1		XD_D6
MFIO02	SD_D0	MS_D1	XD_D5
MFIO03	(SD_D7)		XD_D4
MFIO04	(SD_D6)	(MS_D5)	XD_D3
MFIO05	SD_CLK	MS_D0	XD_D2
MFIO06			XD_D1
MFIO07	(SD_D5)	(MS_D4)	XD_D0
MFIO08	SD_CMD	MS_D2	XD_WP#
MFIO09	(SD_D4)	(MS_D6)	XD_WE#
MFIO10	SD_D3	MS_D3	XD_ALE
MFIO11	SD_D2		XD_CLE
MFIO12			XD_CE#
MFIO13		(MS_D7)	XD_RE#
MFIO14		MS_CLK	XD_R/B#
MFCD0#	SDCD#		XDCD0#
MFCD1#		MSINS#	XDCD1#

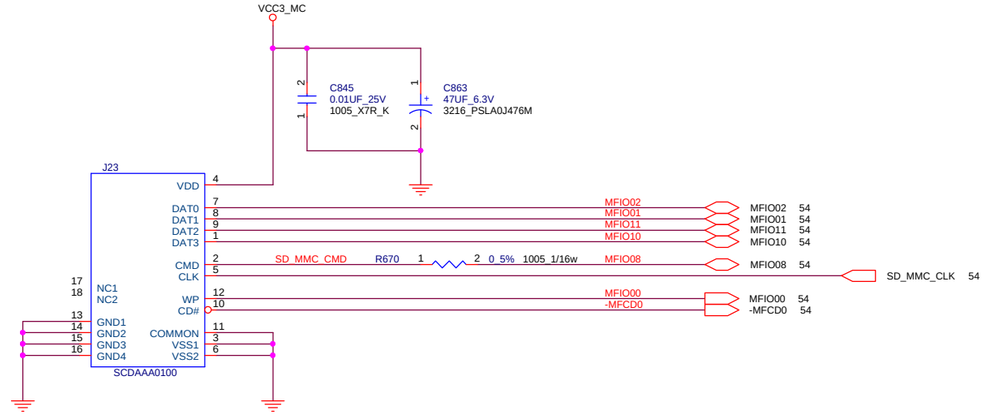
UDIO Pin Assignment Table

UDIO	Default
01	CLKREQ#
02	SCL/SROM_EN
03	SDA

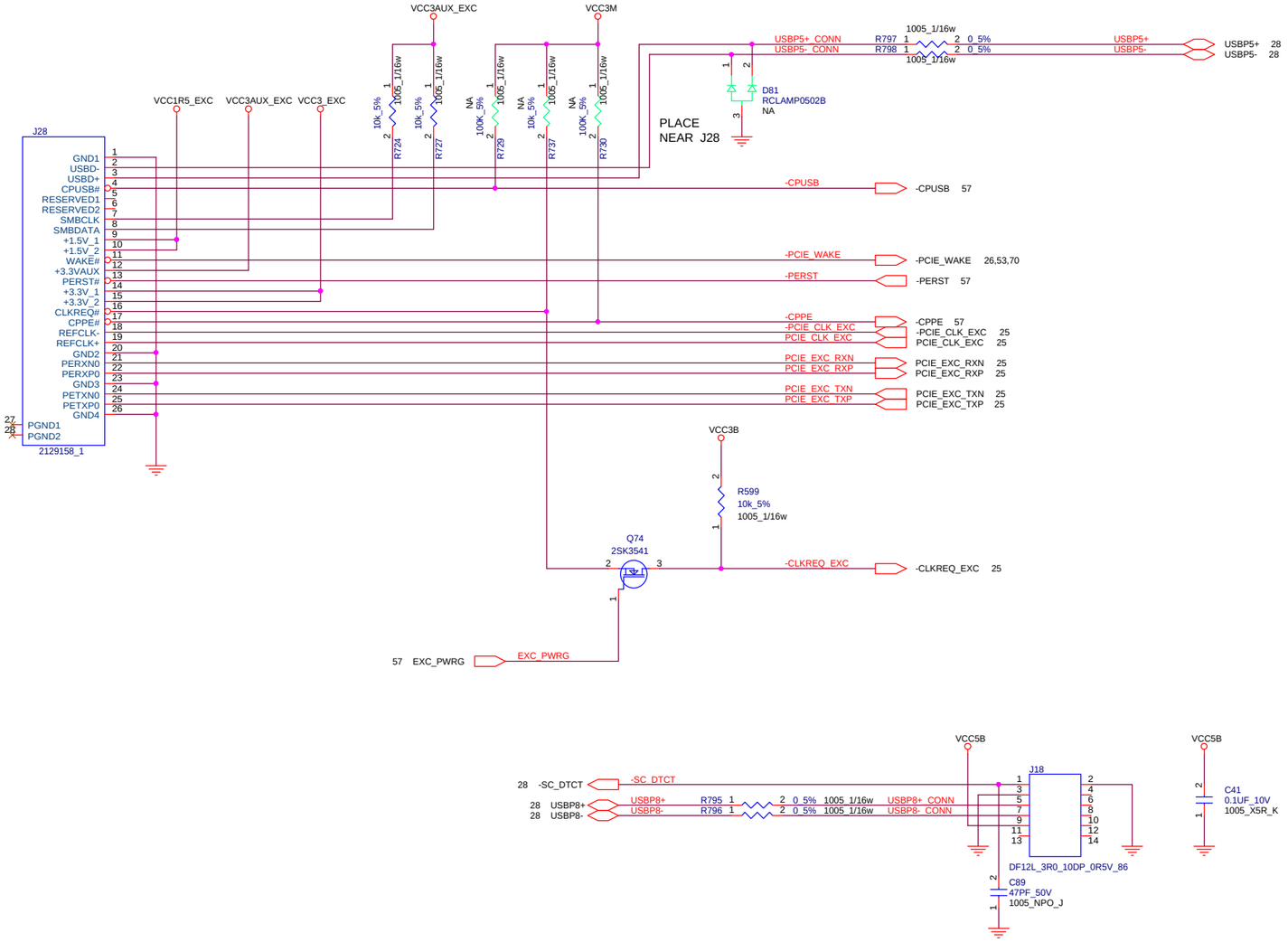
MFCDxN Detection Table

MFCDxN		Card Type
1	0	
H	H	(No Card)
H	L	SD Card/MMC
L	H	MemoryStick
L	L	XD Card

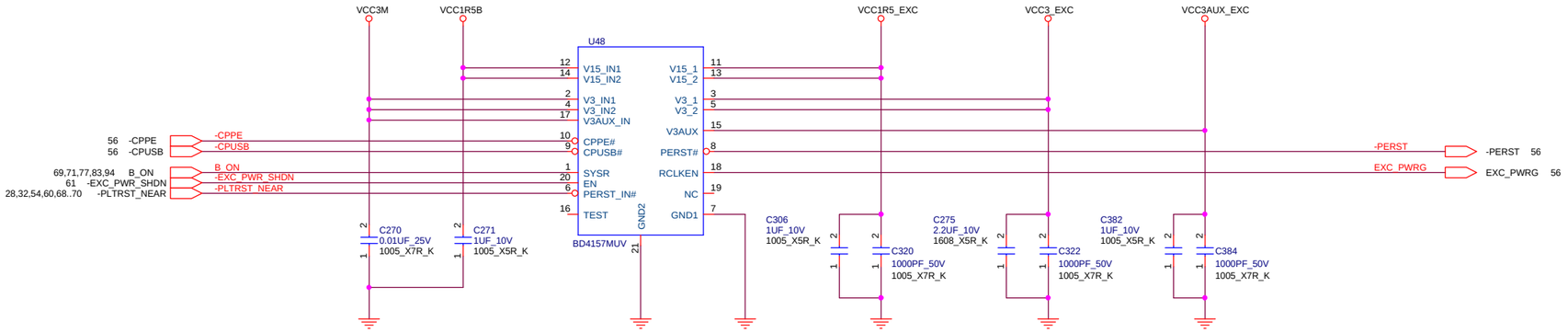
Project Name : NZM-4 UMA SOVP	Title : MEDIA CARD CONTROLLER	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 54 of 97	



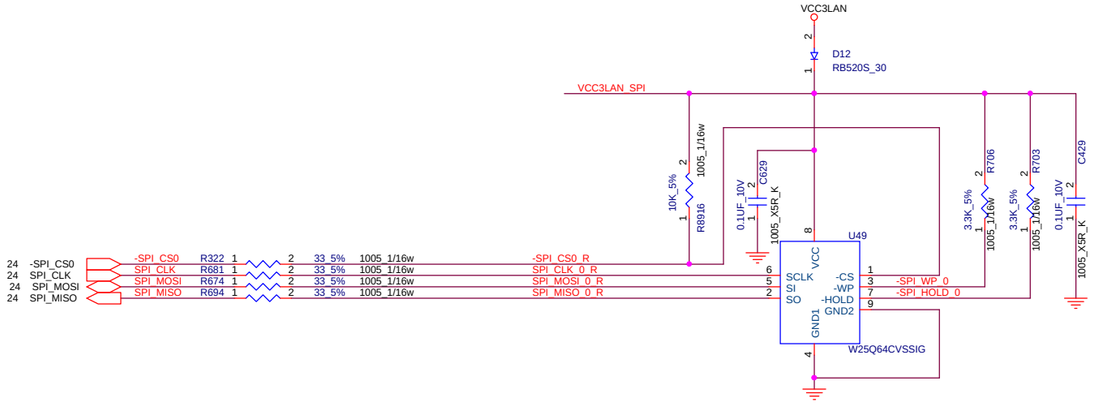
Project Name : NZM-4 UMA SOVP		Title : MEDIA CARD INTERFACE	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 55 of 97	



Project Name : NZM-4 UMA SOVP	Title : EXPRESS CARD/SMART CARD I/F	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 56 of 97	

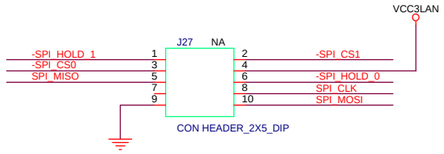


lenovo		
Project Name : NZM-4 UMA SOVP	Title : SLOT POWER CONTROL	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 57 of 97	



8MB SOIC8
MACRONIX MX25L6406EM2I-12G
WINBOND W25Q64CVSSIG

16MB WSON8
MACRONIX MX25L12835EZNI-10G
WINBOND W25Q128BVEIG



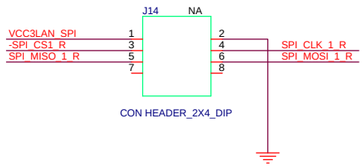
TABLE

EM100 PIN HEADER INTERFACE (TOP VIEW)			
1	(HOLD1#)	(CS1#)	2
3	CS0#	VCC	4
5	MISO	HOLD0#	6
7	WP0#	CLK	8
9	GND	MOSI	10

TABLE

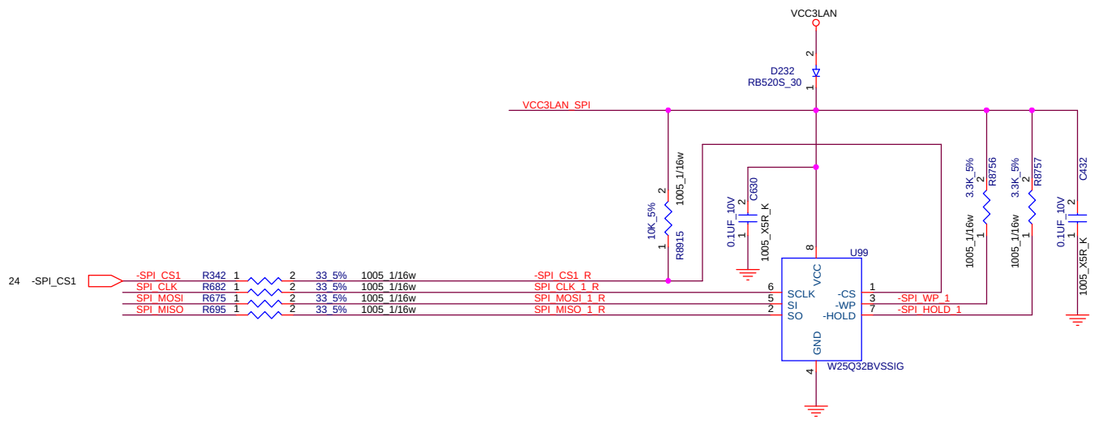
	CONFIG-1 16MB	CONFIG-2 12MB	CONFIG-3 8MB
U49	16MB	8MB	8MB
U99	NO_ASM	4MB	NO_ASM
D232	NO_ASM	ASM	NO_ASM
R8756	NO_ASM	ASM	NO_ASM
R8757	NO_ASM	ASM	NO_ASM
R8915	NO_ASM	ASM	NO_ASM
C432	NO_ASM	ASM	NO_ASM
C630	NO_ASM	ASM	NO_ASM
R342	NO_ASM	ASM	NO_ASM
R682	NO_ASM	ASM	NO_ASM
R675	NO_ASM	ASM	NO_ASM
R695	NO_ASM	ASM	NO_ASM

LOGIC



TABLE

SF100 PIN HEADER INTERFACE (TOP VIEW)					
1	VCC	D232.1	GND	GND	2
3	CS#	R342.2	R682.2	CLK	4
5	MISO	R695.2	R675.2	MOSI	6
7	(KEY)	N/A	N/A	(RESET)	8



4MB SOIC8
MACRONIX MX25L3206EM2I-12G
WINBOND W25Q32BVSSIG

Project Name : NZM-4 UMA SOVP		Title : SPI FLASH	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 58 of 97	

J17 WD3M148UQ-6
5.9H CONNECTOR

VCC3B
VCC5B
VCC3GBE
S-BAT-PWR
DOCKID[3:0] 25
DOCK_DCIN20
-DOCKED0

DOCKA_DP_CLK
DOCKB_DP_CLK
DOCKA_DP_DATA
DOCKB_DP_DATA

R375 2.2K_5% 1005_1/16w
R429 2.2K_5% 1005_1/16w
R245 2.2K_5% 1005_1/16w
R279 2.2K_5% 1005_1/16w
R302 10k_5% 1005_1/16w
R236 47k_5% 1005_1/16w
Q71 DTC115EE
-DOCK_ATTACHED_5B
-DOCK_ATTACHED_5B 35

J17A
WD3M148UQ_6

50	DOCK_MDI_0+	DOCK_MDI_0+	3	DOCK_MDI_0P	
50	DOCK_MDI_0-	DOCK_MDI_0-	5	DOCK_MDI_0N	
50	DOCK_MDI_1+	DOCK_MDI_1+	9	DOCK_MDI_1P	
50	DOCK_MDI_1-	DOCK_MDI_1-	11	DOCK_MDI_1N	
50	DOCK_MDI_2+	DOCK_MDI_2+	15	DOCK_MDI_2P	
50	DOCK_MDI_2-	DOCK_MDI_2-	17	DOCK_MDI_2N	
50	DOCK_MDI_3+	DOCK_MDI_3+	21	DOCK_MDI_3P	
50	DOCK_MDI_3-	DOCK_MDI_3-	23	DOCK_MDI_3N	
45	-DOCK_HPOUT_DTCT	-DOCK_HPOUT_DTCT	37	AGND1	
45	-DOCK_MICIN_DTCT	-DOCK_MICIN_DTCT	39	DOCK_HPOUT_DTCT#	
			41	DOCK_MICIN_DTCT#	
			43	DOCK_SPDIF_RTN	
			45	DOCK_SPDIF_DATA	
			47	DOCK_SPK_MUTE	
			49	AGND2	
			51	DOCK_SPKOUT_R	
			53	DOCK_SPKOUT_R	
			55	DOCK_SPKOUT_L	
			57	AGND3	
			59	DOCK_DP_DGL_DIS#	
46	DOCK_MIC_IN_L	DOCK_MIC_IN_L	61	DOCK_MICIN	
			63	AGND4	
43	DOCK_HP_OUT_R	DOCK_HP_OUT_R	65	DOCK_HPOUT_R	
43	DOCK_HP_OUT_L	DOCK_HP_OUT_L	67	DOCK_HPOUT_L	
			69	AGND5	
38	DOCKB_AUXN	DOCKB_AUXN	71	DOCK_DP1_AUXN	
38	DOCKB_AUXP	DOCKB_AUXP	73	DOCK_DP1_AUXP	
				GND1	

			2	DOCKED0#	
		-PWRON_DOCK	4	DOCK_PWRON#	-PWRON_DOCK 70
		EXTPWRG	6	DOCK_PWRGOOD	EXTPWRG 70
			8	GND2	
		-SLICE_EJECT_LEVER	10	DOCK_EJECT_LEVER#	-SLICE_EJECT_LEVER 61
			12	RESERVE7	
		S_TEMP_DOCK	14	DOCK_S_TEMP	S_TEMP_DOCK 73
		I2C_CLK_BT1_DOCK	16	DOCK_I2C_CLK_BT_R	I2C_CLK_BT1_DOCK 73
		I2C_DATA_BT1_DOCK	18	DOCK_I2C_DATA_BT_R	I2C_DATA_BT1_DOCK 73
			20	DOCK_SBAT_PWR	
		S1_DRV	22	DOCK_BAT_GATE_ON1	S1_DRV 71
		S2_DRV	24	DOCK_BAT_GATE_ON2	S2_DRV 71
			26	DOCK_VCC5MUBAY_DRV	
			28	DOCK_BAYLED	
			30	DOCK_BAT_MEDIA_EJECT#	
			32	DOCK_BAY_EJECT#	
			34	DOCK_BAY_ATTACH#	
			36	DOCK_MICROP_FLASHUP#	
		-RJ45_LINKUP_DOCK	38	DOCK_RJ45_LINK_LED#	-RJ45_LINKUP_DOCK 50
		-RJ45_ACTIVITY_DOCK	40	DOCK_RJ45_ACT_LED#	-RJ45_ACTIVITY_DOCK 50
			42	DOCK_RJ45_LED_EN	
			44	DOCK_RK45_CENTER_TAP	
			46	CRT_GND1	
		CRT_RED_DOCK	48	DOCK_VGA_RED	CRT_RED_DOCK 35
			50	CRT_GND2	
		CRT_GREEN_DOCK	52	DOCK_VGA_GREEN	CRT_GREEN_DOCK 35
			54	CRT_GND3	
		CRT_BLUE_DOCK	56	DOCK_VGA_BLUE	CRT_BLUE_DOCK 35
			58	CRT_GND4	
		CRT_HSYNC_DOCK	60	DOCK_CRT_HSYNC	CRT_HSYNC_DOCK 36
		CRT_VSYNC_DOCK	62	DOCK_CRT_VSYNC	CRT_VSYNC_DOCK 36
		DDCCLK_CONN	64	DOCK_CRT_DDCCLK	DDCCLK_CONN 36
		DDCDATA_CONN	66	DOCK_CRT_DDCDATA	DDCDATA_CONN 36
		ACDC_ID	68	DOCK_ACDC_ID	ACDC_ID 61,72
		DOCKID0	70	DOCK_ID0	
		DOCKID1	72	DOCK_ID1	
		DOCKID2	74	DOCK_ID2	

R1137 1K_5% 1005_1/16w
R1138 1K_5% 1005_1/16w
R881 0_5% 1005_1/16w
R858 0_5% 1005_1/16w NA
C666 1000PF 50V 1005_X7R_K
C764 1000PF 50V 1005_X7R_K
C1087 1000PF 50V 1005_X7R_K
AGND

C550 4.7UF_6.3V 1608_X5R_K NA
C566 0.1UF_25V 1608_X7R_K NA

J17B
WD3M148UQ_6

38	DOCKB_DP3N	DOCKB_DP3N	75	DOCK_DP1_LANE3N	
38	DOCKB_DP3P	DOCKB_DP3P	77	DOCK_DP1_LANE3P	
			79	GND1	
38	DOCKB_DP2N	DOCKB_DP2N	81	DOCK_DP1_LANE2N	
38	DOCKB_DP2P	DOCKB_DP2P	83	DOCK_DP1_LANE2P	
			85	GND2	
38	DOCKB_DP1N	DOCKB_DP1N	87	DOCK_DP1_LANE1N	
38	DOCKB_DP1P	DOCKB_DP1P	89	DOCK_DP1_LANE1P	
			91	GND3	
38	DOCKB_DP0N	DOCKB_DP0N	93	DOCK_DP1_LANE0N	
38	DOCKB_DP0P	DOCKB_DP0P	95	DOCK_DP1_LANE0P	
			97	GND4	
			99	DOCK_DP1_DGL_DCT	
27	DOCKB_HPD	DOCKB_HPD	101	DOCK_DP1_HPD	
27	DOCKB_DP_DATA	DOCKB_DP_DATA	103	DOCK_DP1_DDC_DATA	
27	DOCKB_DP_CLK	DOCKB_DP_CLK	105	DOCK_DP1_DDC_CLK	
			107	DOCK_DP0_DGL_DCT	
27	DOCKA_HPD	DOCKA_HPD	109	DOCK_DP0_HPD	
27	DOCKA_DP_DATA	DOCKA_DP_DATA	111	DOCK_DP0_DDC_DATA	
27	DOCKA_DP_CLK	DOCKA_DP_CLK	113	DOCK_DP0_DDC_CLK	
			115	GND5	
38	DOCKA_AUXN	DOCKA_AUXN	117	DOCK_DP0_AUXN	
38	DOCKA_AUXP	DOCKA_AUXP	119	DOCK_DP0_AUXP	
			121	GND6	
38	DOCKA_DP3N	DOCKA_DP3N	123	DOCK_DP0_LANE3N	
38	DOCKA_DP3P	DOCKA_DP3P	125	DOCK_DP0_LANE3P	
			127	GND7	
38	DOCKA_DP2N	DOCKA_DP2N	129	DOCK_DP0_LANE2N	
38	DOCKA_DP2P	DOCKA_DP2P	131	DOCK_DP0_LANE2P	
			133	GND8	
38	DOCKA_DP1N	DOCKA_DP1N	135	DOCK_DP0_LANE1N	
38	DOCKA_DP1P	DOCKA_DP1P	137	DOCK_DP0_LANE1P	
			139	GND9	
38	DOCKA_DP0N	DOCKA_DP0N	141	DOCK_DP0_LANE0N	
38	DOCKA_DP0P	DOCKA_DP0P	143	DOCK_DP0_LANE0P	
			145	DOCKED2#	
			147	RESERVE1	

			76	RESERVE8	
			78	RESERVE9	
			80	DOCK_STATUS_LED	
			82	RESERVE10	
			86	DOCK_DCIN20	
			90	DOCK_PWRSHUTDOWN#	-PWRSHUTDOWN 71,72,74,78
			94	DOCK_PWRDCT#	-DOCK_PWRDCT 73
			96	RESERVE2	
		-PWRSWITCH	100	DOCK_PWR_SW#	-PWRSWITCH 32,63,69,70
		DISCHARGE	102	DOCK_DISCHARGE	DISCHARGE 60,71
			104	GND10	
		USBP2-	106	DOCK_USB2N_PT	USBP2- 28
		USBP2+	108	DOCK_USB2P_PT	USBP2+ 28
			110	GND11	
			112	-CRV_ID	
		-USB_PORT2_OC3	114	RESERVE6	-USB_PORT2_OC3 28
			116	GND12	
		USB3P2_RXN	118	DOCK_USB_SS_RXN	USB3P2_RXN 28
		USB3P2_RXP	120	DOCK_USB_SS_RXP	USB3P2_RXP 28
			122	GND13	
		USB3P2_TXN	124	DOCK_USB_SS_TXN	USB3P2_TXN 28
		USB3P2_TXP	126	DOCK_USB_SS_TXP	USB3P2_TXP 28
			128	GND14	
		USBP7-	130	DOCK_USB_HS	
		USBP7+	132	DOCK_USB_HS_P	
			134	GND15	
		SATA4_RXN	136	DOCK_SATA_RXN	SATA4_RXN 24
		SATA4_RXP	138	DOCK_SATA_RXP	SATA4_RXP 24
			140	GND16	
		SATA4_TXN	142	DOCK_SATA_TXN	SATA4_TXN 24
		SATA4_TXP	144	DOCK_SATA_TXP	SATA4_TXP 24
			146	DOCKED1#	
		DOCK_CONSUMP	148	DOCK_CONSUMP	DOCK_CONSUMP 74

DOCKID3
D101 1SS400G
USBP7- CONN R777 0_5% 1005_1/16w USBP7+ CONN R779 0_5% 1005_1/16w

D2 1SS400G -DOCK_ATTACHED_20
DAN222 R603 100K_5% 1005_1/16w VCC3M
-DOCK_ATTACHED_3M 61
-DOCK_ATTACHED_AUX 50
D61 DCIN_PWR20_F
R230 NA 1M_5% 1005_1/16w
D26 -DOCK_ATTACHED_BAT_OP -DOCK_ATTACHED_BAT_OP 72,74
RB520S_30 NA
R232 NA 1M_5% 1005_1/16w

DCIN_PWR20_F
R519 1M_5% 1005_1/16w NA
R738 1M_5% 1005_1/16w NA
VCC3SW
R228 100K_5% 1005_1/16w NA
DISCHARGE2
DISCHARGE2 72
-DOCK_ATTACHED_BAT_OP
Q114 NA 2SK3541
R736 NA 1005_1/16w 1M_5%
Q115 NA 2SK3541
R739 NA 1005_1/16w 1M_5%
Q44 NA 2SK3541
R229 1005_1/16w 0_5%
DISCHARGE
Q14 NA 2SK3541

DOCK_PWR20
DOCK_PWR20_IN
Q85 SI7121DN
R731 200K_5% 1005_1/16w
C24 0.1UF_25V 1608_X7R_K
-DOCK_ATTACHED_20
R657 100K_5% 1005_1/16w

S_BAT_IN
DOCK_PWR20_IN
J17C
WD3M148UQ_6

149	PWR20_1		157	FGND1	
150	PWR20_2		158	FGND2	
151	GND1		159	FGND3	
152	GND2		160	FGND4	
153	SBAT1		161	FGND5	
154	SBAT2		162	FGND6	
155	VCC3M		163	NC1	
156	VCC5M		164	NC2	

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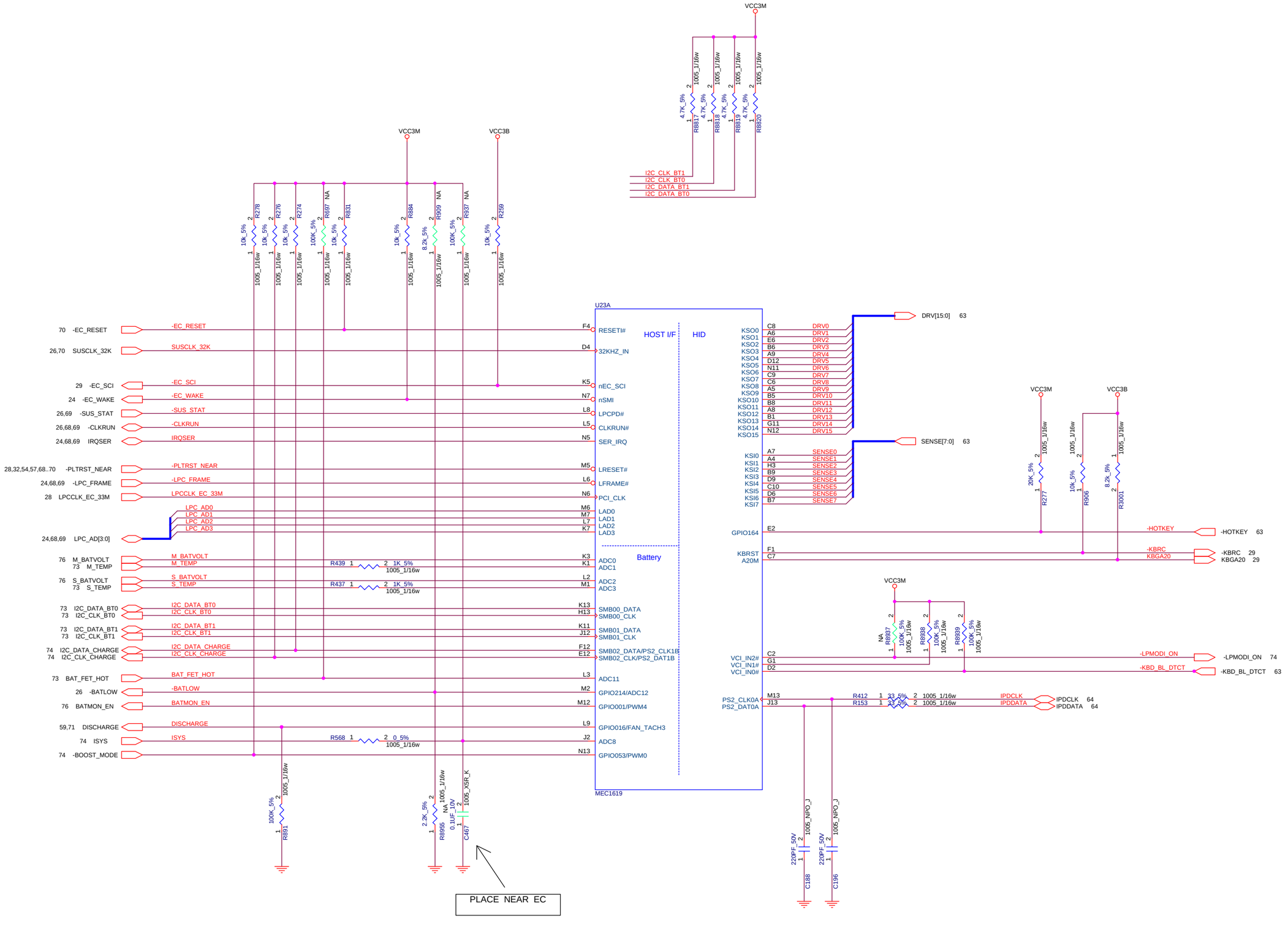
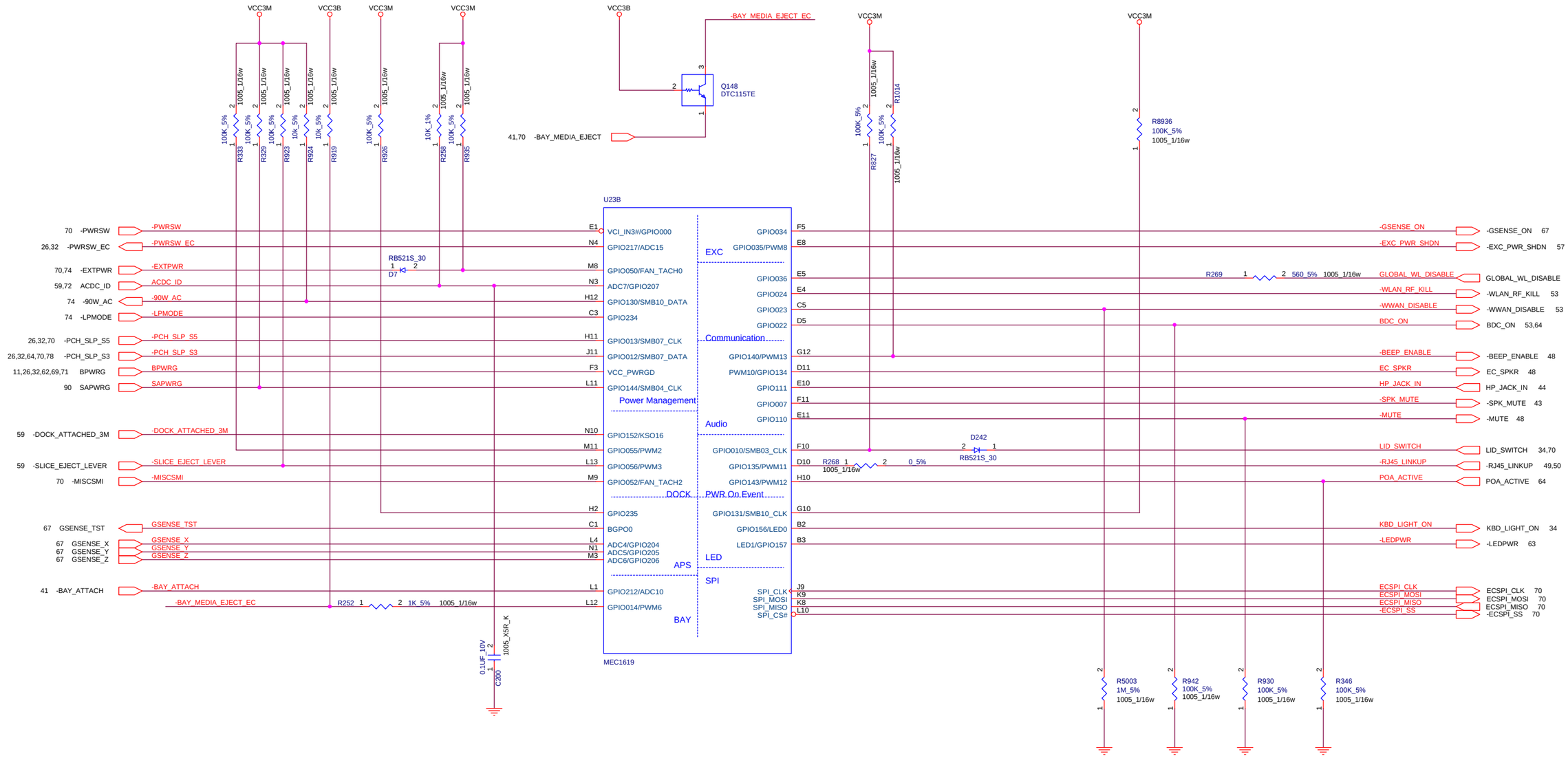
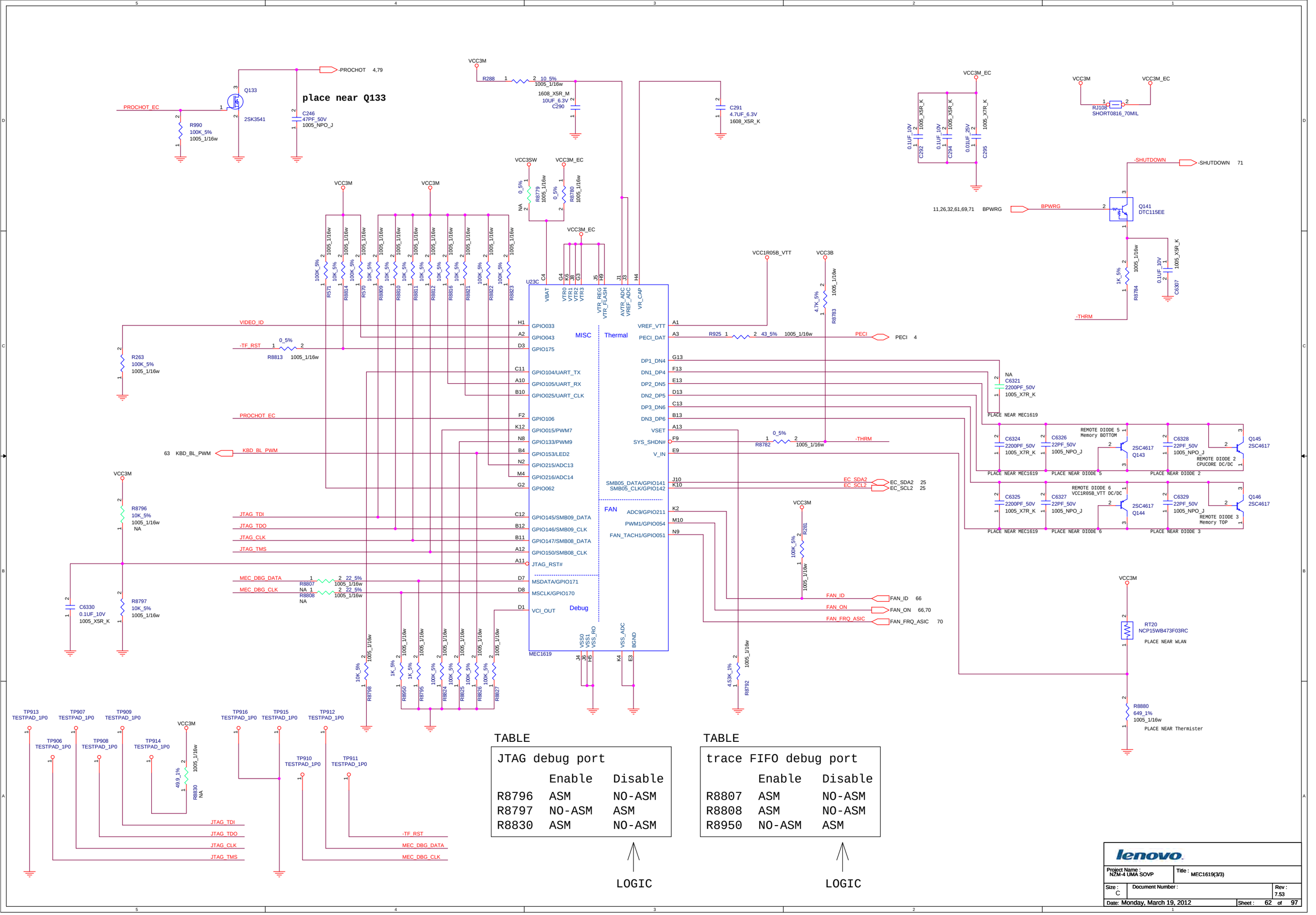
Project Name : NZM-4 UMA SOVP		Title : DOCKING CONNECTOR	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 59 of 97	

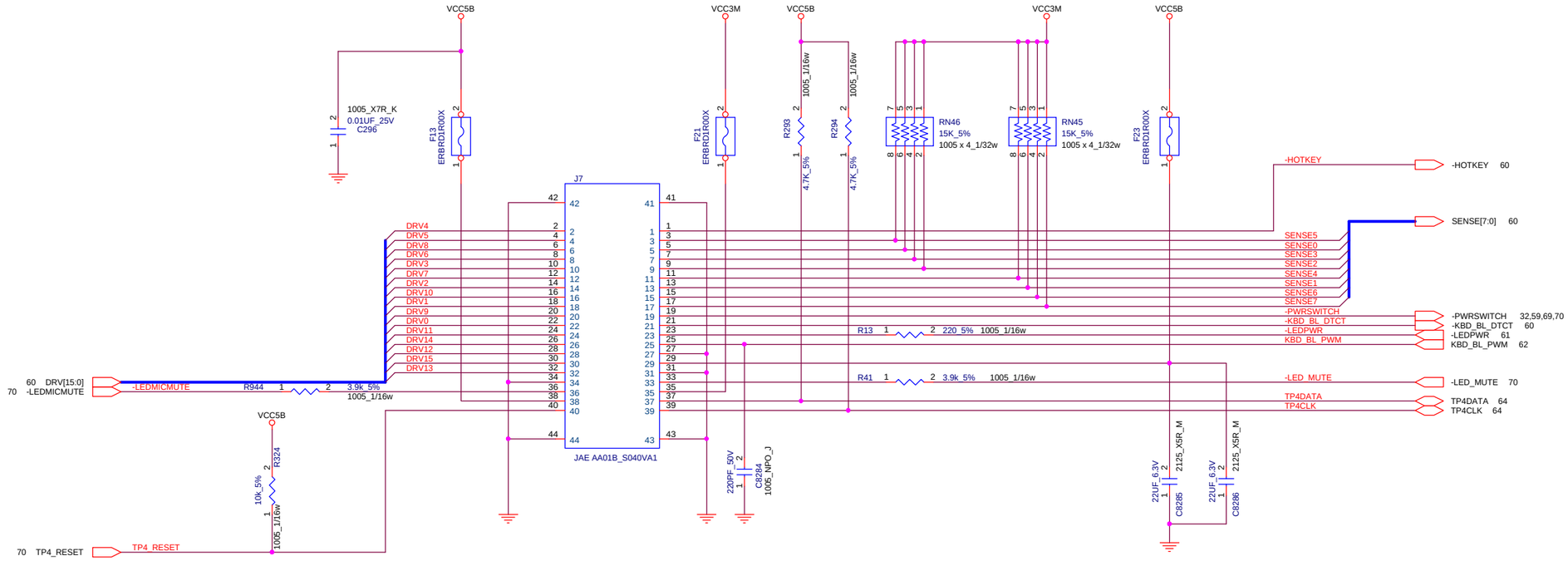


lenovo			
Project Name : NZM-4 UMA SOVP		Title : MEC1619(1/3)	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 60 of 97	

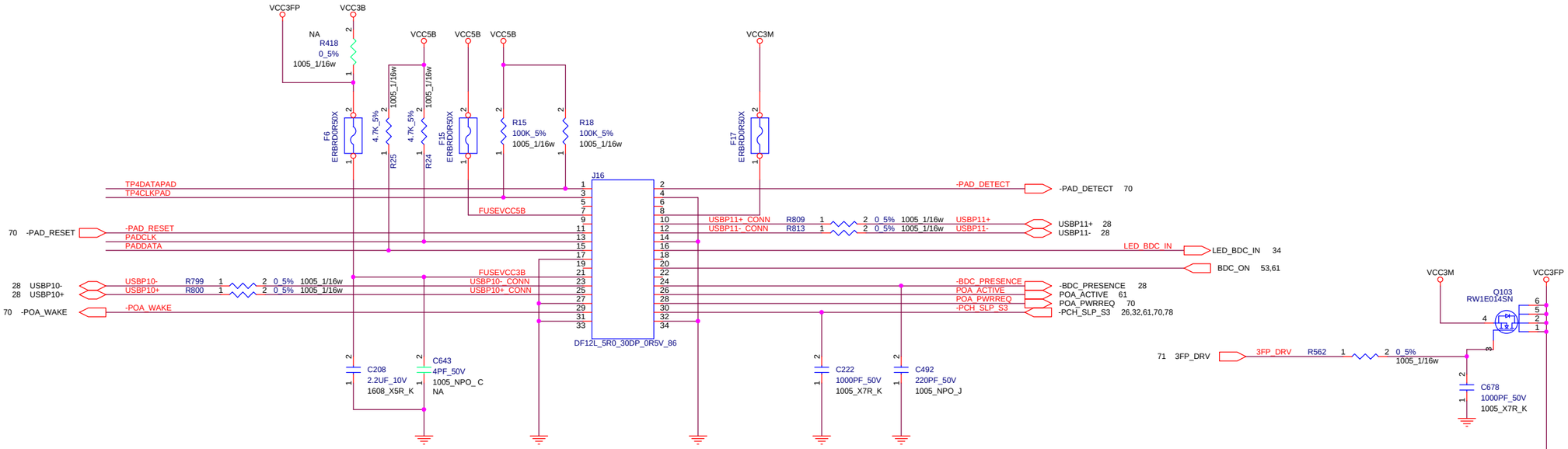


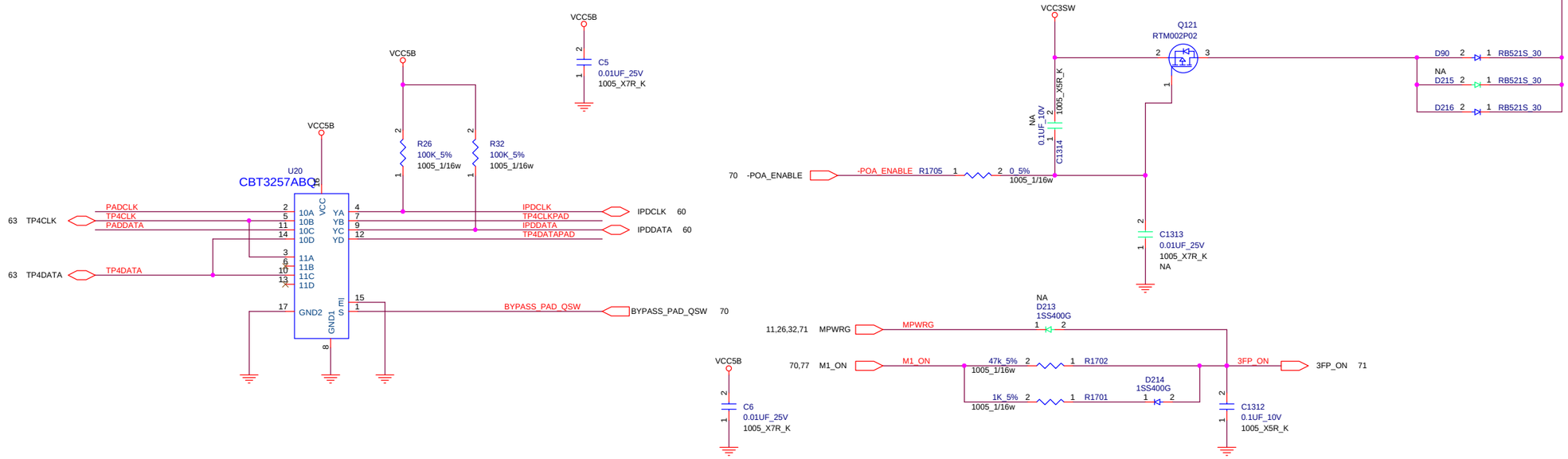
lenovo			
Project Name : NZM-4 UMA SOVP		Title : MEC1619(2/3)	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 61 of 97	


place near Q133
Q133
2SK3541
R990
100K_5%
1005_1/16w
C246
47PF_50V
1005_NPO_J
-PROCHOT 4,79
PROCHOT_EC
VCC3M
R288
10_5%
1005_1/16w
1608_X5R_M
10UF_6.3V
C290
C291
4.7UF_6.3V
1608_X5R_K
VCC3M_EC
0.1UF_10V
C292
0.1UF_10V
C294
0.01UF_25V
C295
1005_X5R_K
1005_X7R_K
VCC3M
VCC3M_EC
RJ108
SHORT0816_70MIL
-SHUTDOWN
-SHUTDOWN 71
BPWRG
11,26,32,61,69,71 BPWRG
Q141
DTC115EE
1K_5%
R8784
0.1UF_10V
C6307
-THRM
VCC3SW
VCC3M_EC
R8779
R8780
1005_1/16w
VCC3M
VCC3M_EC
R571
R8814
R570
R8809
R8810
R8811
R8812
R8816
R8821
R8822
R8823
100K_5%
10K_5%
1K_5%
U23C
MEC1619
VBAT
VTR0
VTR1
VTR2
VTR3
VTR_REG
VTR_FLASH
AVTR_ADC
VREF_ADC
VR_CAP
VCC1R05B_VTT
VCC3B
4.7K_5%
R8783
VIDEO_ID
R263
100K_5%
-TF_RST
R8813
0_5%
PROCHOT_EC
KBD_BL_PWM
63 KBD_BL_PWM
JTAG_TDI
JTAG_TDO
JTAG_CLK
JTAG_TMS
MEC_DBG_DATA
MEC_DBG_CLK
R8807
R8808
22_5%
R8796
10K_5%
NA
R8797
10K_5%
C6330
0.1UF_10V
1005_X5R_K
R8798
R8950
R8795
R8824
R8825
R8826
R8827
GPIO033
GPIO043
GPIO175
GPIO104/UART_TX
GPIO105/UART_RX
GPIO025/UART_CLK
GPIO106
GPIO015/PWM7
GPIO133/PWM9
GPIO153/LED2
GPIO215/ADC13
GPIO216/ADC14
GPIO062
GPIO145/SMB09_DATA
GPIO146/SMB09_CLK
GPIO147/SMB08_DATA
GPIO150/SMB08_CLK
JTAG_RST#
MSDATA/GPIO171
MSCLK/GPIO170
VCI_OUT
MISC
Thermal
Debug
VREF_VTT
PECI_DAT
R925
43_5%
PECI
PECI 4
DP1_DN4
DN1_DP4
DP2_DN5
DN2_DP5
DP3_DN6
DN3_DP6
VSET
SYS_SHDN#
V_IN
R8782
-THRM
SMB05_DATA/GPIO141
SMB05_CLK/GPIO142
EC_SDA2
EC_SCL2
EC_SDA2 25
EC_SCL2 25
FAN
ADC9/GPIO211
PWM1/GPIO054
FAN_TACH1/GPIO051
FAN_ID
FAN_ON
FAN_FRQ_ASIC
FAN_ID 66
FAN_ON 66,70
FAN_FRQ_ASIC 70
R281
100K_5%
1005_1/16w
4.53K_1%
R8792
VSS0
VSS1
VSS_HO
VSS_ADC
BGND
NA
C6321
2200PF_50V
1005_X7R_K
PLACE NEAR MEC1619
C6324
C6326
22PF_50V
1005_NPO_J
REMOTE DIODE 5
Memory BOTTOM
2SC4617
Q143
C6328
Q145
REMOTE DIODE 2
CPUCORE DC/DC
PLACE NEAR DIODE 5
PLACE NEAR DIODE 2
C6325
C6327
REMOTE DIODE 6
VCC1R05B_VTT DC/DC
Q144
C6329
Q146
REMOTE DIODE 3
Memory TOP
PLACE NEAR DIODE 6
PLACE NEAR DIODE 3
RT20
NCP15WB473F03RC
PLACE NEAR WLAN
R8880
649_1%
PLACE NEAR Thermister
TP913
TESTPAD_1P0
TP907
TP909
TP906
TP908
TP914
TP916
TP915
TP912
TP910
TP911
49.9_1%
R8830
NA
TABLE
JTAG debug port
Enable Disable
R8796 ASM NO-ASM
R8797 NO-ASM ASM
R8830 ASM NO-ASM
TABLE
trace FIFO debug port
Enable Disable
R8807 ASM NO-ASM
R8808 ASM NO-ASM
R8950 NO-ASM ASM
LOGIC
LOGIC
lenovo
Project Name : NZM-4 UMA SOVP
Title : MEC1619(3/3)
Size : C
Document Number :
Rev : 7.53
Date: Monday, March 19, 2012
Sheet : 62 of 97



Project Name : NZM-4 UMA SOVP		Title : KEYBOARD CONNECTOR	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 63 of 97	





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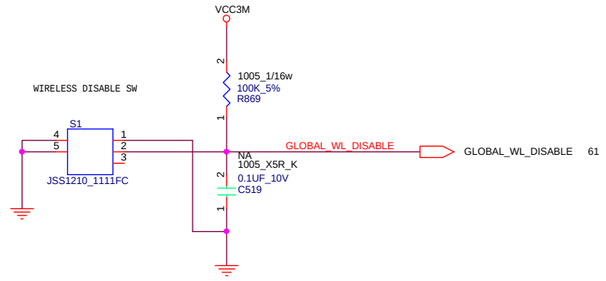
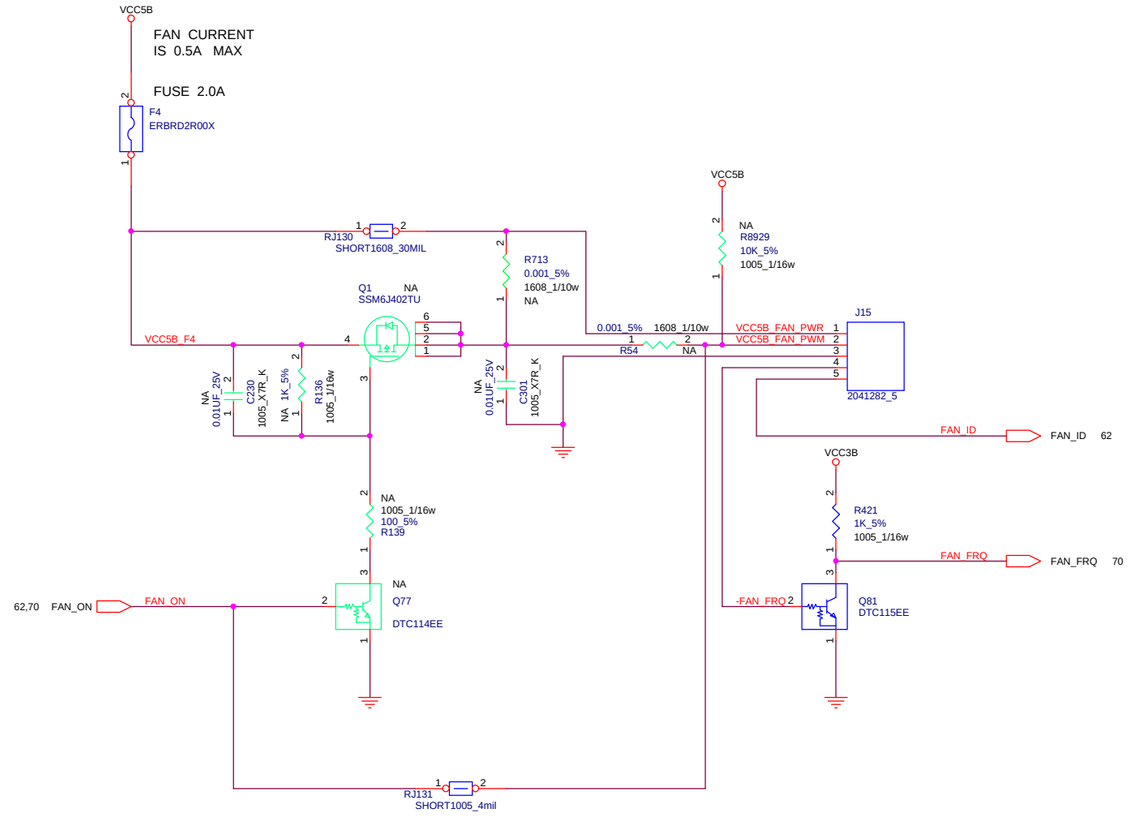
Project Name : NZM-4 UMA SOVP		Title : TOUCH PAD CONNECTOR	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 64 of 97	



Project Name : NZM-4 UMA SOVP	Title : WIRELESS DISABLE SW	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 65 of 97	



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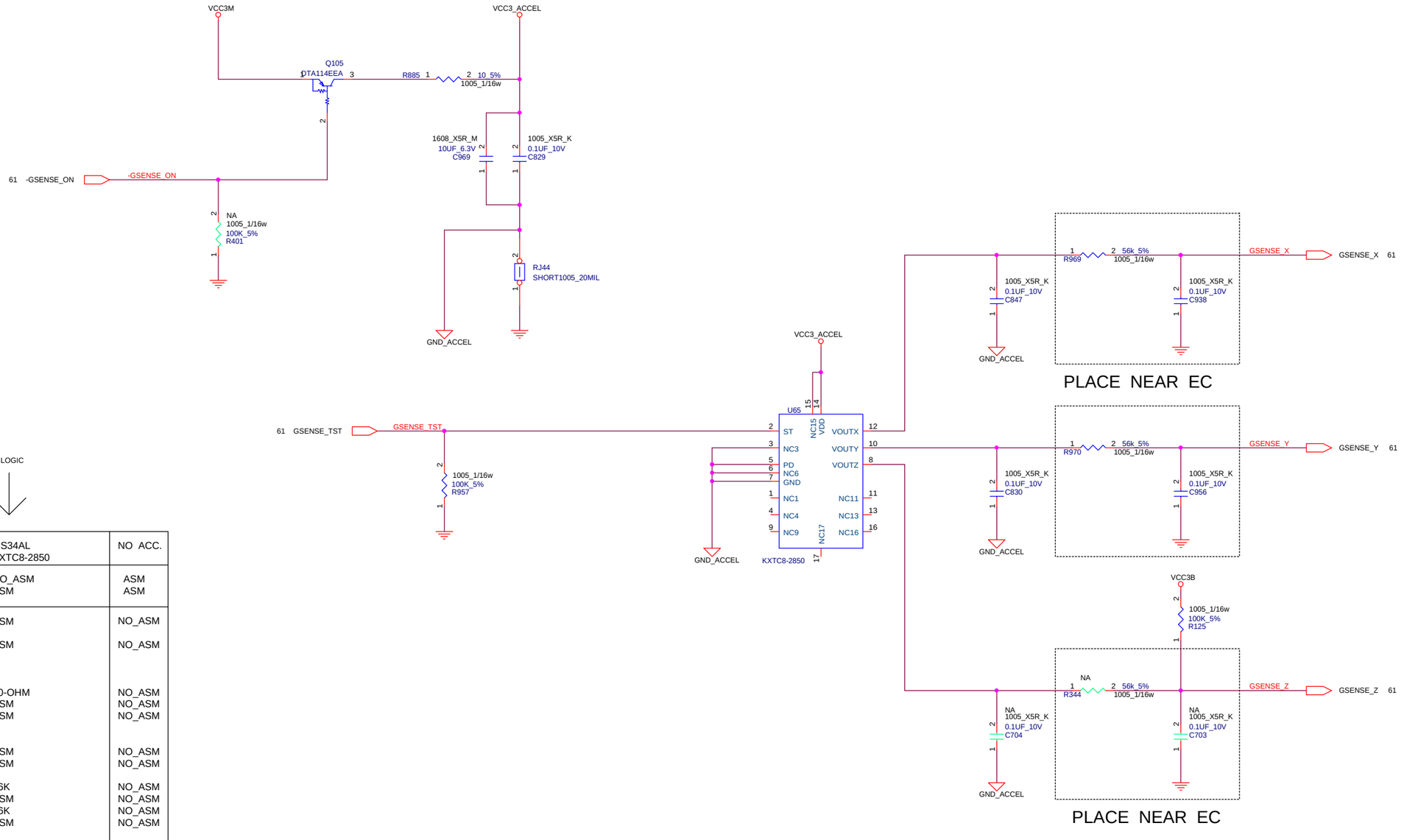
Project Name : NZM-4 UMA SOVP	Title : FAN CONNECTOR	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 66 of 97	



LOGIC

TABLE

	LIS34AL KXTC8-2850	NO ACC.
R401 R957	NO_ASM ASM	ASM ASM
U65 Q105	ASM ASM	NO_ASM NO_ASM
R885 C829 C969	10-OHM ASM ASM	NO_ASM NO_ASM NO_ASM
C830 C847	ASM ASM	NO_ASM NO_ASM
R969 C938 R970 C956	56K ASM 56K ASM	NO_ASM NO_ASM NO_ASM NO_ASM
C704 R344 C703 R125	NO_ASM NO_ASM NO_ASM ASM	NO_ASM NO_ASM NO_ASM ASM

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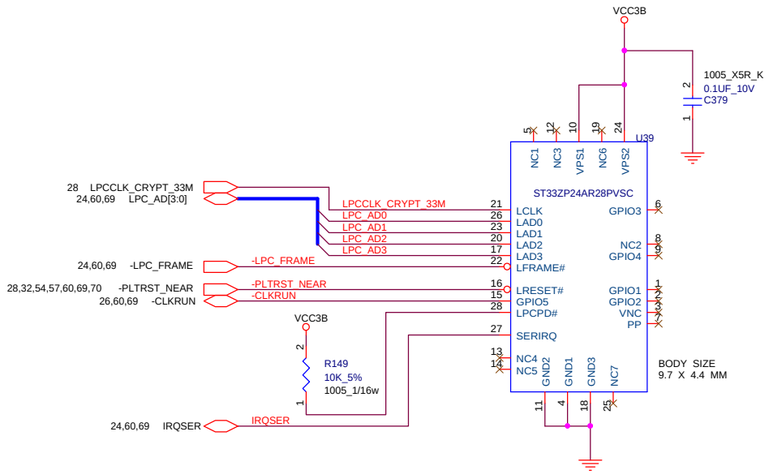
Project Name : NZM-4 UMA SOVP	Title : G-SENSOR	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 67 of 97	



TABLE

SDV and Mech FVT	ST19NP18ER28PVMO	1.2.8.20
FVT	ST33ZP24AR28PVOG	1.2.A.C
SW SIT-1,SIT, and SIT-R1	ST33ZP24AR28PVRC	1.2.C.0
SIT-R2 and SVT	ST33ZP24AR28PVSC Rev.I	1.2.D.0
SOVP	ST33ZP24AR28PVSC Rev.J	(1.2.D.0) 1.2.D.8 by FW Update
MP	ST33ZP24AR28PVSH	1.2.D.8

Project Name : NZM-4 UMA SOVP	Title : TPM	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 68 of 97	

TABLE

EEPROM	U22	U23
U22	ASM	NO_ASM
C1005	ASM	NO_ASM
R577	ASM	NO_ASM
Q97	ASM	NO_ASM

LOGIC

PHILIPS 1024 X 8 EEPROM W/ACCESS PROTECTION

VCC3M
1005_1/16w
4.7K_5%
R577
U22
PCA24S08DP
VDD
-PROT NC1
WP NC2
SCL
SDA
GND
1005_X5R_K
0.1UF_10V
C1005
SMB_CLK
SMB_DATA
VCC3B
Q97
DTC115TE
-PLTRST_NEAR

TABLE

REF DES	ENABLE	DISABLE
J5	ASM	NO_ASM
R220	ASM	NO_ASM

LOGIC

NA
J5
JST_BM20B_SRDS_A_G_TFC_LF_SN
28 LPCCLK_DEBUG_33M
24,60,68 -LPC_FRAME
24 -LPC_DREQ0
26,60,68 -CLKRUN
26,60 -SUS_STAT
24,60,68 IRQSER
57,71,77,83,94 B_ON
32,59,63,70 -PWRSWITCH
LPCCLK_DEBUG_33M
-LPC_FRAME
-LPC_DREQ0
-CLKRUN
-SUS_STAT
IRQSER
B_ON
-PWRSWITCH
VCC3B
VCC5B
-PLTRST_NEAR
LPC_AD0
LPC_AD1
LPC_AD2
LPC_AD3
-PLTRST_NEAR 28,32,54,57,60,68,70
LPC_AD[3:0] 24,60,68

VCC3B
R150 10k_5% 1005_1/16w
R177 10k_5% 1005_1/16w
R291 47K_5% 1005_1/16w
-PLTRST_NEAR

0_5% NA R8940 1005_1/16w
0_5% NA R8941 1005_1/16w
VCC5M
U21
VCC
A B
OE
GND
TC7SB385FU
U31
1005_X7R_K
0.01UF_25V
C25
1005_1/16w 10k_5% R30
1005_1/16w 10k_5% R45
VCC3M
12,13 SMB_CLK_3B
12,13 SMB_DATA_3B
11,26,32,61,62,71 BPWRG
28 SMB_3B_EN
SMB_CLK_3B
SMB_DATA_3B
BPWRG
SMB_3B_EN
Q84
DTC115TE
SMB_CLK
SMB_DATA
SMB_CLK 25
SMB_DATA 25

VCC3WAN
R454 0_5% 1005_1/16w NA
R482 0_5% 1005_1/16w NA
R395 10k_5% 1005_1/16w NA
R396 10k_5% 1005_1/16w NA
R8917 47K_5% 1005_1/16w NA
0_5% NA R8942 1005_1/16w
0_5% NA R8943 1005_1/16w
VCC5M
NA U27
NA U33
53 SMB_CLK_3WAN
53 SMB_DATA_3WAN
BPWRG
SMB_3B_EN
NA Q151 DTC115TE
NA C297 0.01UF_25V 1005_X7R_K

TABLE

AOAC	YES	YES	YES	YES	NO	NO	NO	NO
Anti Theft	YES	YES	NO	NO	YES	YES	NO	NO
EEPROM	U22	U23	U22	U23	U22	U23	U22	U23
U27	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
U33	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
C297	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
R395	ASM	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
R396	ASM	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
R8917	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
Q151	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
U21	ASM	ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
U31	ASM	ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
C25	ASM	ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
R291	ASM	ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
Q84	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
R454	NO_ASM	NO_ASM	NO_ASM	NO_ASM	ASM	ASM	NO_ASM	NO_ASM
R482	NO_ASM	NO_ASM	NO_ASM	NO_ASM	ASM	ASM	NO_ASM	NO_ASM
R8943	NO_ASM	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
R8942	NO_ASM	ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM	NO_ASM
R8941	NO_ASM	NO_ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM	ASM
R8940	NO_ASM	NO_ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM	ASM
R30	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM
R45	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM	ASM	NO_ASM

LOGIC

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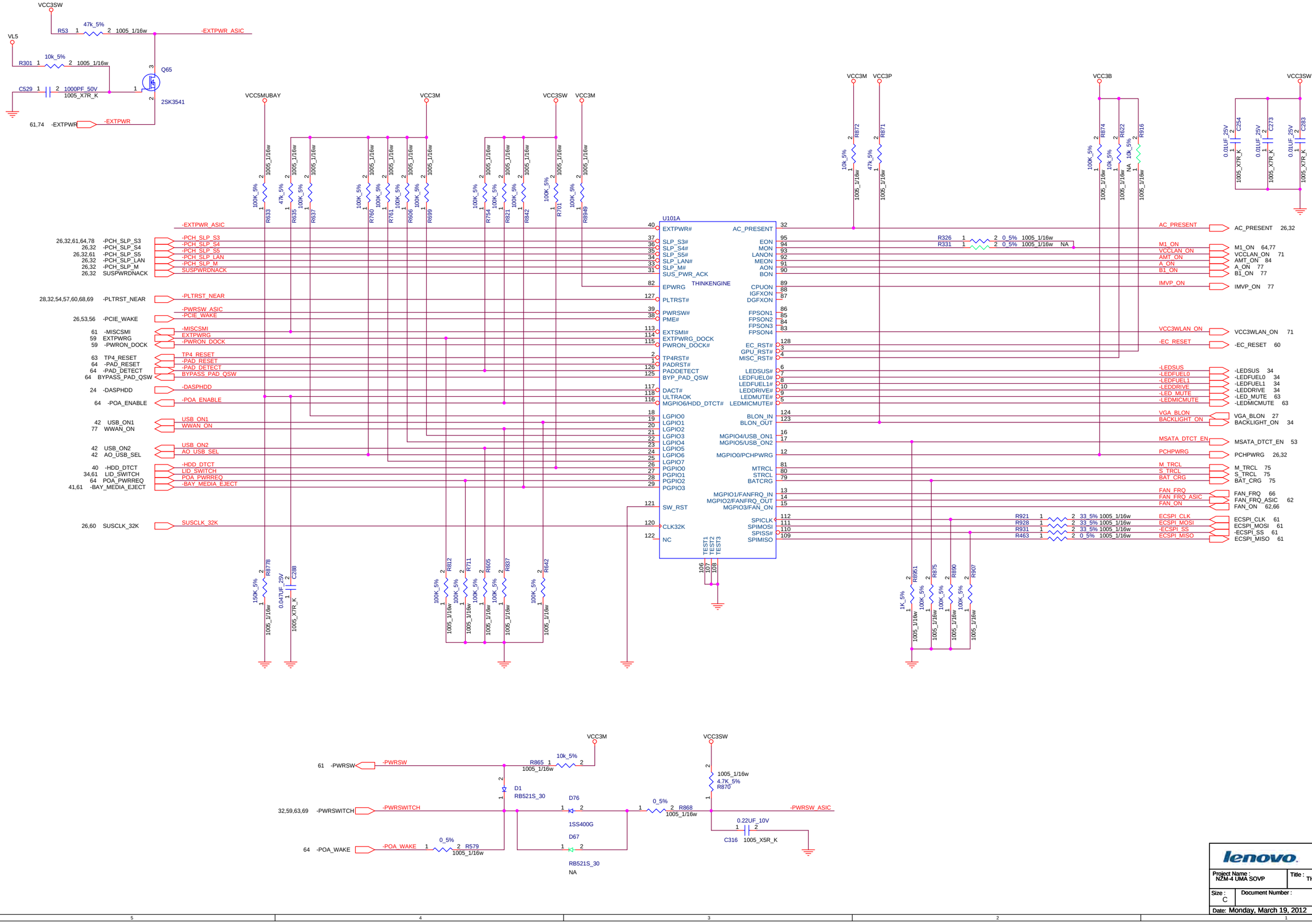
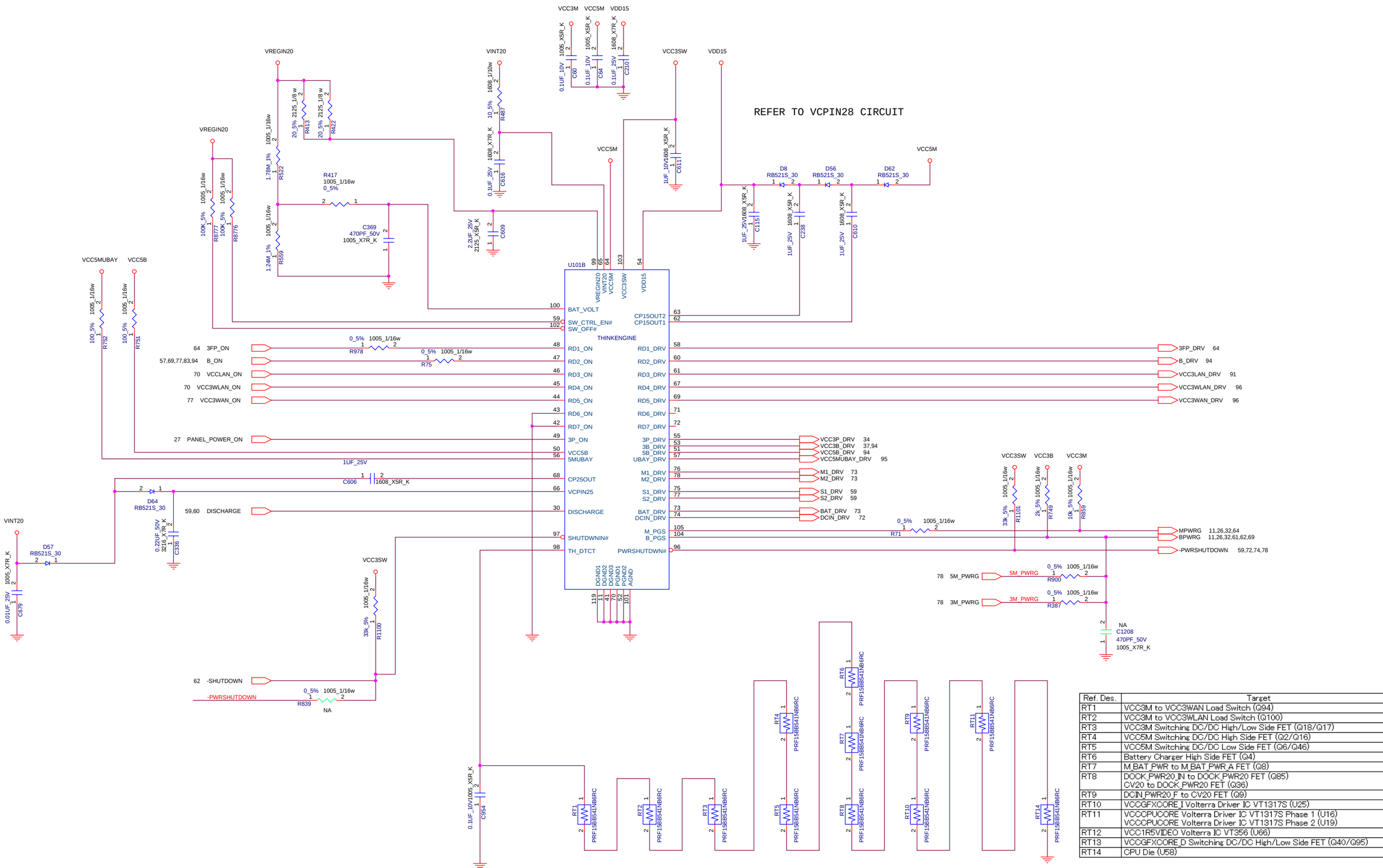
Project Name : NZM-4 UMA SOVP	Title : EEPROM/SMBUS SW	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 69 of 97	



Project Name : NZM-4 UMA SOVP	Title : THINK ENGINE(1/2)
Size : C	Document Number :
Date: Monday, March 19, 2012	Sheet : 70 of 97



Ref. Des.	Target
RT1	VCC3M to VCC3WAN Load Switch (Q94)
RT2	VCC3M to VCC3WLAN Load Switch (Q100)
RT3	VCC3M Switching DC/DC High/Low Side FET (Q18/Q17)
RT4	VCC5M Switching DC/DC High Side FET (Q2/Q16)
RT5	VCC5M Switching DC/DC Low Side FET (Q6/Q46)
RT6	Battery Charger High Side FET (Q4)
RT7	M_BAT_PWR to M_BAT_PWR_A FET (Q8)
RT8	DOCK_PWR20_IN to DOCK_PWR20 FET (Q85) CV20 to DOCK_PWR20 FET (Q36)
RT9	DCIN_PWR20_F to CV20 FET (Q9)
RT10	VCCGFXCORE_I Volterra Driver IC VT1317S (U25)
RT11	VCCGPUCORE Volterra Driver IC VT1317S Phase 1 (U16) VCCGPUCORE Volterra Driver IC VT1317S Phase 2 (U19)
RT12	VCC1R5VIDEO Volterra IC VT356 (U66)
RT13	VCCGFXCORE_D Switching DC/DC High/Low Side FET (Q40/Q95)
RT14	CPU Die (U58)

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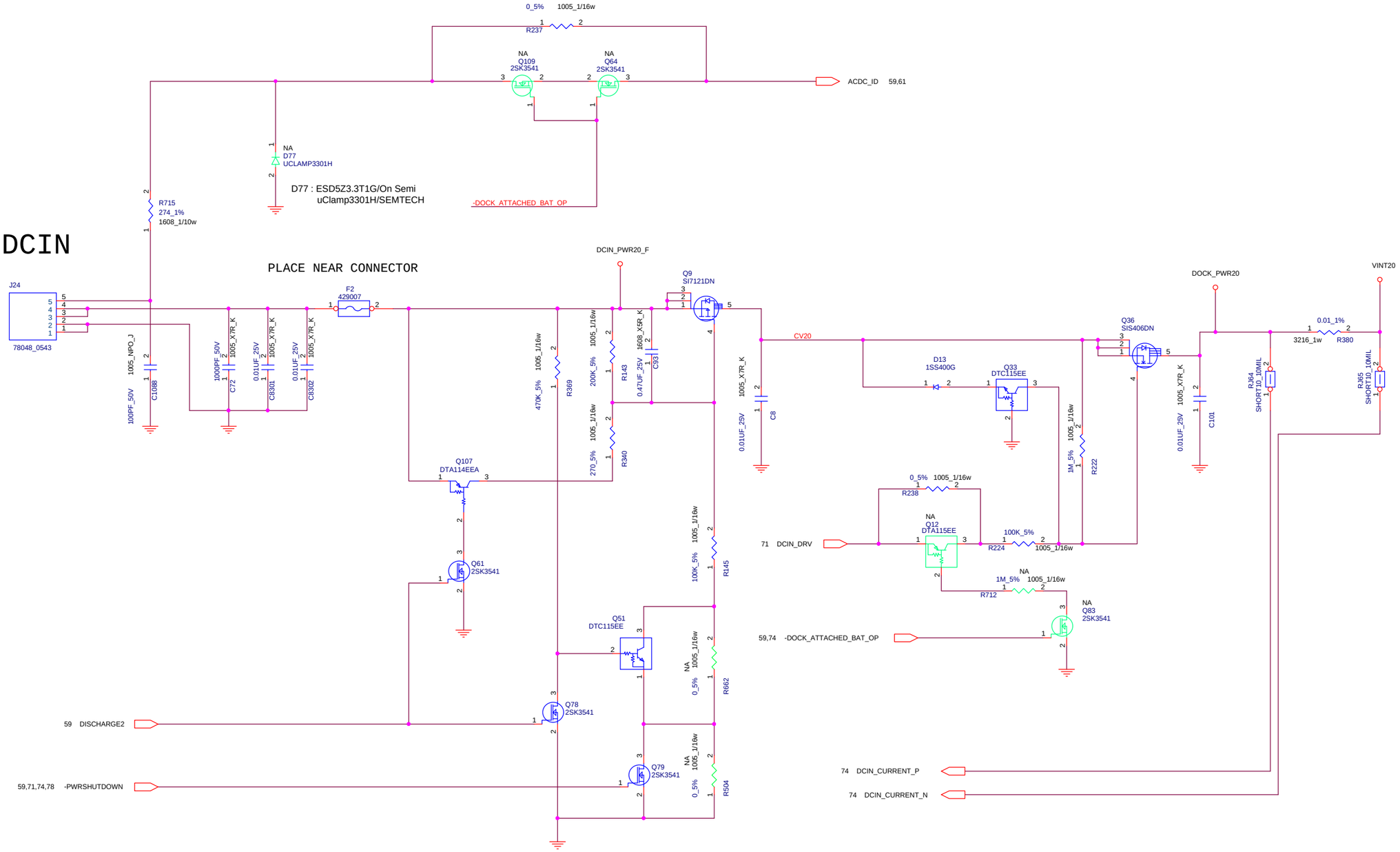
Project Name : NZM-4 UMA SOVP	Title : THINK ENGINE(2/2)
Size : C	Document Number :
Rev : 7.53	
Date: Monday, March 19, 2012	Sheet : 71 of 97

DCIN

PLACE NEAR CONNECTOR



TABLE

PEAK SHIFT	YES	NO
R662	NO-ASM	ASM
R369	ASM	NO-ASM
Q78	ASM	NO-ASM
Q51	ASM	NO-ASM

LOGIC

lenovo		
Project Name : NZM-4 UMA SOVP	Title : DC-IN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 72 of 97	

MAIN BAT CONN

WIDE PATTERN

VCC3M

6.19K_1% 1005_1/16w R328

J13 CON 1827654_1

M_BAT_IN

F12 458010

M-BAT-PWR

Q8 SIS406DN

M_BAT_PWR_A

Q34 SI7129DN

BAT-PWR12

Q13 SIS406DN

VINT20

I2C_CLK_BT0 60

I2C_DATA_BT0 60

M_TEMP 60

100_5% 1005_1/16w R273

100_5% 1005_1/16w R271

390PF_50V 1005_X7R_K C407 NA

2200PF_50V 1005_X7R_K C199

390PF_50V 1005_X7R_K C203 NA

2200PF_50V 1005_X7R_K C207

71 M1_DRV

100K_5% 1005_1/16w R634

510k_5% 1005_1/16w R483

71 M2_DRV

150k_5% 1005_1/16w R638

27K_5% 1005_1/16w R8912

750K_5% 1005_1/16w R639

1SS400G D235

0_5% 1005_1/16w R755

NA

71 BAT_DRV

Q111 DTA115EE

1500PF_50V 1005_X7R_K C6457

0.01UF_25V 1005_X7R_K C722

VCC3M

R292 6.19k_1% 1005_1/16w

S_BAT_IN

F11 458010

S_BAT_PWR_A

Q10 SI7129DN

BAT-PWR12

1M_5% 1005_1/16w R741

1M_5% 1005_1/16w R753

Q110 2SK3541

59 I2C_CLK_BT1_DOCK

59 I2C_DATA_BT1_DOCK

59 S_TEMP_DOCK

SHORT1005_4mil RJ35

100_5% 1005_1/16w R265

100_5% 1005_1/16w R332

I2C_CLK_BT1 60

I2C_DATA_BT1 60

S_TEMP 60

510k_5% 1005_1/16w R284

59 -DOCK_PWRDCT

1M_5% 1005_1/16w R744

59 -DOCK_ATTACHED_S_BAT

150k_5% 1005_1/16w R636

2200PF_50V 1005_X7R_K C193

390PF_50V 1005_X7R_K C195 NA

2200PF_50V 1005_X7R_K C198

390PF_50V 1005_X7R_K C201 NA

VREGIN20

DOCK_DCIN20

DOCK_DCIN20_F

F20 ERBRD0R50X

D60 DAN222

DCIN_PWR20_F

F5 ERBRD0R50X

D10 DAN222

M-BAT-PWR

M-BAT-TRCL

F9 ERBRD0R50X

D19 DAN222

S-BAT-PWR

S-BAT-TRCL

F10 ERBRD0R50X

D23 DAN222

VCC3B

0.1UF_10V 1005_X5R_K C683

4.7K_5% 1005_1/16w R445

BAT_FET_HOT 60

RT15 PRF15BB541NB6RC

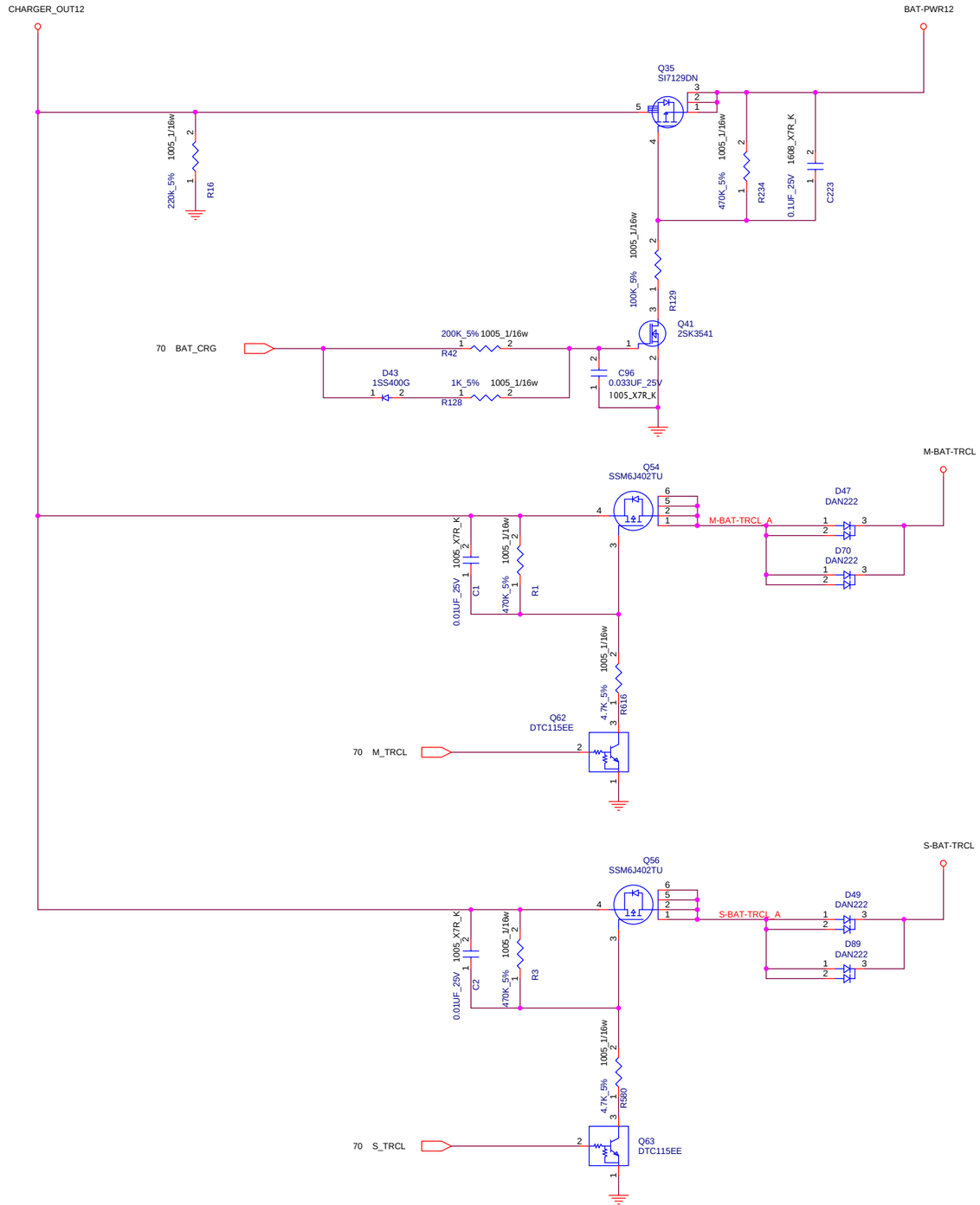
NEAR TO Q13

Project Name : NZM-4 UMA SOVP		Title : BATTERY INPUT	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 73 of 97	

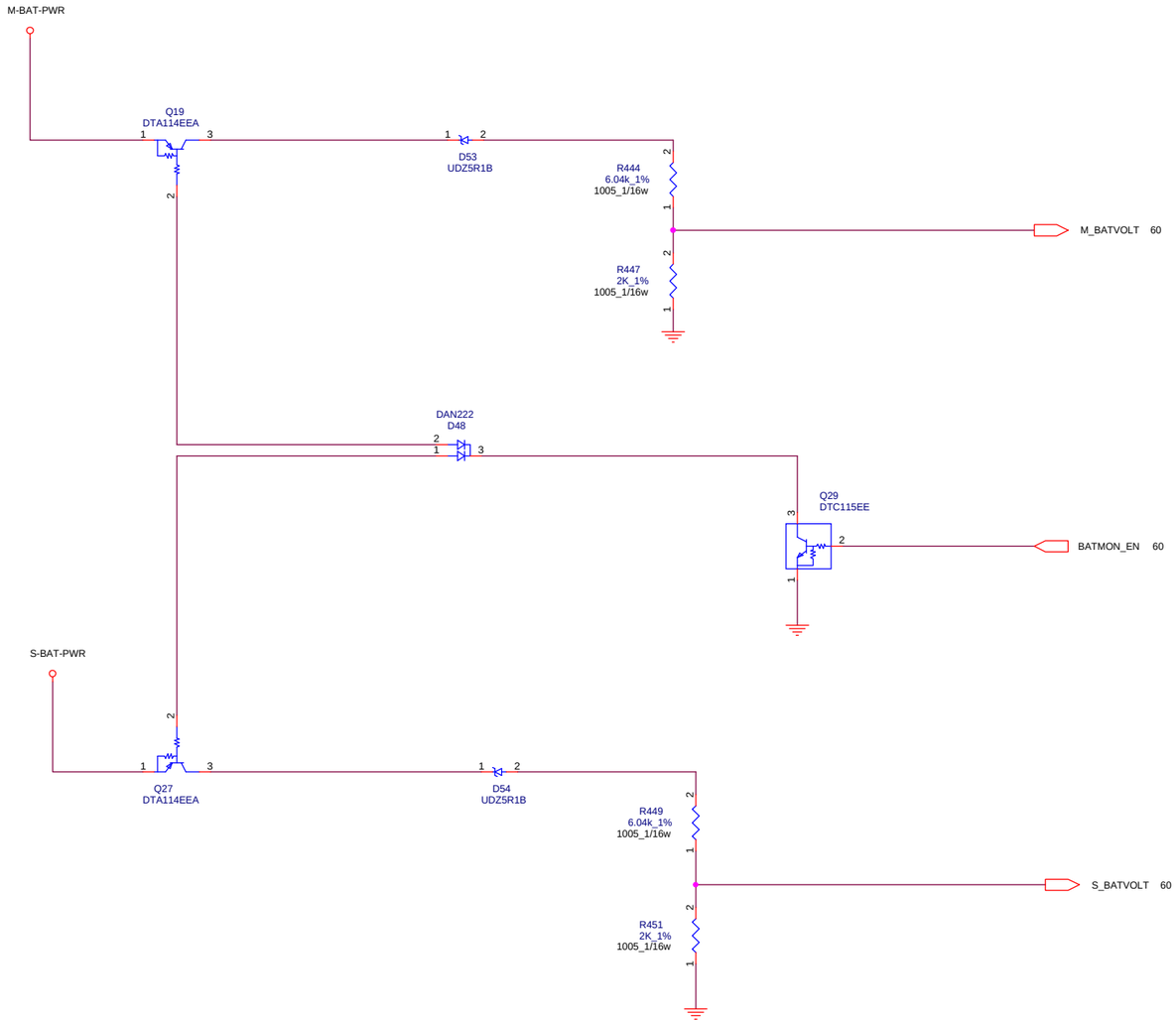
DOCK_DCIN20_F
DCIN_PWR20_F
D78 1SS400G
D87 1SS400G
R363 20_5% 1608_1/10w
R688 20_5% 1608_1/10w
C460 0.1UF_25V 1608_X7R_K
CHARGER_AGND
R11 0_5% 1005_1/16w
DCIN_CURRENT_P 72
R264 10_1% 1005_1/16w
DCIN_CURRENT_N 72
R180 1K_1% 1005_1/16w
DOCK_CONSUMP 59
VINT20
C447 1UF_25V 1608_X5R_K
C8303 470PF_50V 1005_X7R_K
C174 0.01UF_25V 1005_X7R_K
C745 10UF_25V 3216_X5R_K
C22 10UF_25V 3216_X5R_K
C253 10UF_25V 3216_X5R_K
C289 10UF_25V 3216_X5R_K
All the input MLCCs on 20V must be placed symmetrically on Top and Bottom.
CHARGER_OUT12
C746 0.01UF_25V 1005_X7R_K
DCIN_PWR20_F
R759 0_5% 1005_1/16w NA
Q113 RSM002P03
R756 1M_5% 1005_1/16w NA
DOCK_DCIN20_F
D82 RB520S_30
D84 RB520S_30
R584 432k_1% 1005_1/16w
R757 1M_5% 1005_1/16w NA
Q112 2SK3541 NA
59,72 -DOCK_ATTACHED_BAT_OP
R227 64.9K_1% 1005_1/16w
CHARGER_AGND
C444 0.01UF_50V 1608_X7R_K
C138 0.01UF_50V 1608_X7R_K
CHARGER_AGND
CHARGER_AGND
L5 L 4.7uH SPM6530T-4R7M TDK
R728 0.01_1% 3216_1w
C99 1UF_10V 1005_X5R_K
RB521S_30 D38
C8304 470PF_50V 1005_X7R_K
C436 470PF_50V 1005_X7R_K
R8956 2.2_5% 1608_1/10w
R869 2.2_5% 2125_1/8 w
R52 SHORT10_10MIL
R53 SHORT10_10MIL
C26 10UF_25V 3216_X5R_K
C184 10UF_25V 3216_X5R_K
C221 10UF_25V 3216_X5R_K
C424 10UF_25V 3216_X5R_K
C390 0.1UF_10V 1005_X5R_K
C806 0.1UF_25V 1608_X7R_K
C16 0.1UF_25V 1608_X7R_K
CHARGER_AGND
CHARGER_AGND
U7
BQ24760_PG1.1
PVCC1 PVCC2 PVCC3 PVCC4 PVCC5 PVCC6 REGN
AVCC ACN ACP ACDET SDA SCL LPREF ILIM
BTST SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8 SW9 SW10 SW11
CSP CSN BM# EXTPWR# LPMODV# LPMODI# IOUT
AGND1 AGND2 AGND3 AGND4 AGND5 AGND6
PGND1 PGND2 PGND3
R213 23.7_1% 1608_1/10w
C192 0.047UF_25V 1608_X7R_K
CHG_SW
CHARGER_OUT12_CSENSE
-BOOST_MODE 60,74
LPMODV# R8944 0_5% 1005_1/16w
ISYS 60
C155 1005_NPO_J 100PF_50V
CHARGER_AGND
EXTPWR#
LPMODI#
to connect lines of I2C_DATA and I2C_CLK in parallel
60 I2C_DATA_CHARGE
60 I2C_CLK_CHARGE
VCC3M
R484 0_5% 1005_1/16w
R426 73.2K_1% 1005_1/16w
R8947 162K_1% 1005_1/16w
R720 316K_1% 1005_1/16w
R211 178K_1% 1005_1/16w
R918 49.9K_1% 1005_1/16w
R864 31.6K_1% 1005_1/16w
Q6 2SK3541
61 -90W_AC
CHARGER_AGND
CHARGER_AGND
VCC3SW
R8806 1M_5% 1005_1/16w
Q42 2SK3541
Q147 2SK3541
59,71,72,78 -PWRSHUTDOWN
CHARGER_AGND
VCC3M
R8928 100K_1% 1005_1/16w
R8927 232K_1% 1005_1/16w
2SK3541 Q152
60,74 -BOOST_MODE
SHORT10_20MIL RJ48
CHARGER_AGND
VCC3M
R8946 100K_1% 1005_1/16w
2SK3541 Q154
1M_5% R8948 1005_1/16w
60 -LPMODI_ON
I_limit:
In charging=>4A
In boosting=>6A
R763 0_5% NA 1005_1/16w
Q153 2SK3541
VCC3M
R693 10K_5% 1005_1/16w
3.24K_1% R8945 1005_1/16w
806_1% R735 1005_1/16w
-LPMODE 61
C299 1UF_10V 1005_X5R_K
place R735 and C299 near EC
VCC3SW
R721 100K_1% 1005_1/16w
R19 0_5% 1005_1/16w
-EXTPWR 61,70

lenovo

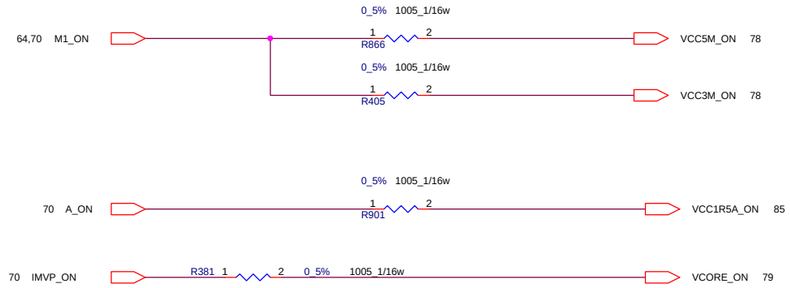
Project Name : NZM-4 UMA SOVP	Title : BATTERY CHARGER	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 74 of 97	

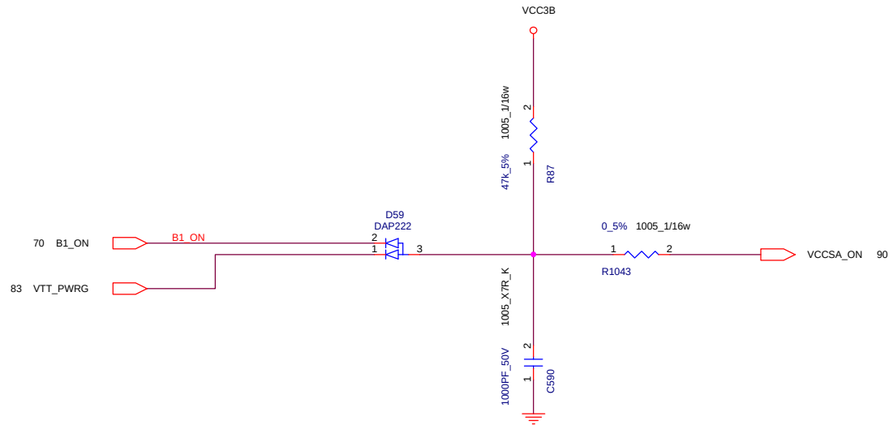


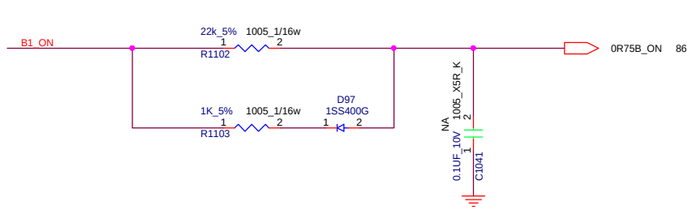
lenovo		
Project Name : NZM-4 UMA SOVP	Title : CHARGER SELECTOR	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 75 of 97	

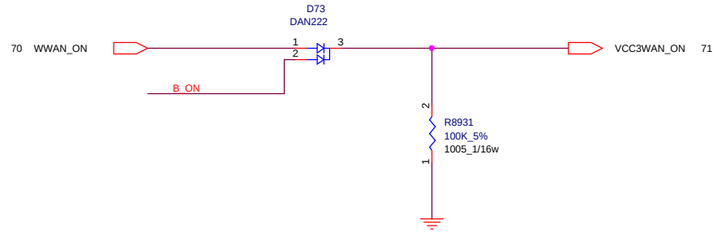


Project Name : NZM-4 UMA SOVP		Title : BATTERY MONITOR	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 76 of 97	









TABLE

AOAC	YES	NO
D73	ASM	NO-ASM
R8931	ASM	ASM
	100K-ohm	0-ohm

LOGIC

lenovo		
Project Name : NZM-4 UMA SOVP	Title : POWER SEQUENCE	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 77 of 97	

All the input MLCCs on 20V must be placed symmetrically on Top and Bottom.

All the input MLCCs on 20V must be placed symmetrically on Top and Bottom.

16A

9A

ESR = 18mOHM

ESR = 12mOHM

ESR = 18mOHM

U41 TPS51220ARSNR

Q2 RJK03M6DNS

Q16 RJK03M6DNS

Q6 RJK03L2DNS

Q46 RJK03L2DNS

Q18 RJK03M6DNS

Q17 RJK03L2DNS

Q28 2SK3541 NA

Q37 2SK3541 NA

L3 1.3uH_MPCH1055L1R3_FDU1050D

L4 L 2.2uH_MPLCH0740L_SPM6540T

VCC5M_OUT

VCC3M

VINT20

VL5

VCC5M

VREF2

VCC3SW

S_AGND

VCC5M_DH

VCC5M_DL

VCC3EC_DH

VCC3EC_DL

-PCH_SLP_S3

-PWRSHUTDOWN

3M_PWRG

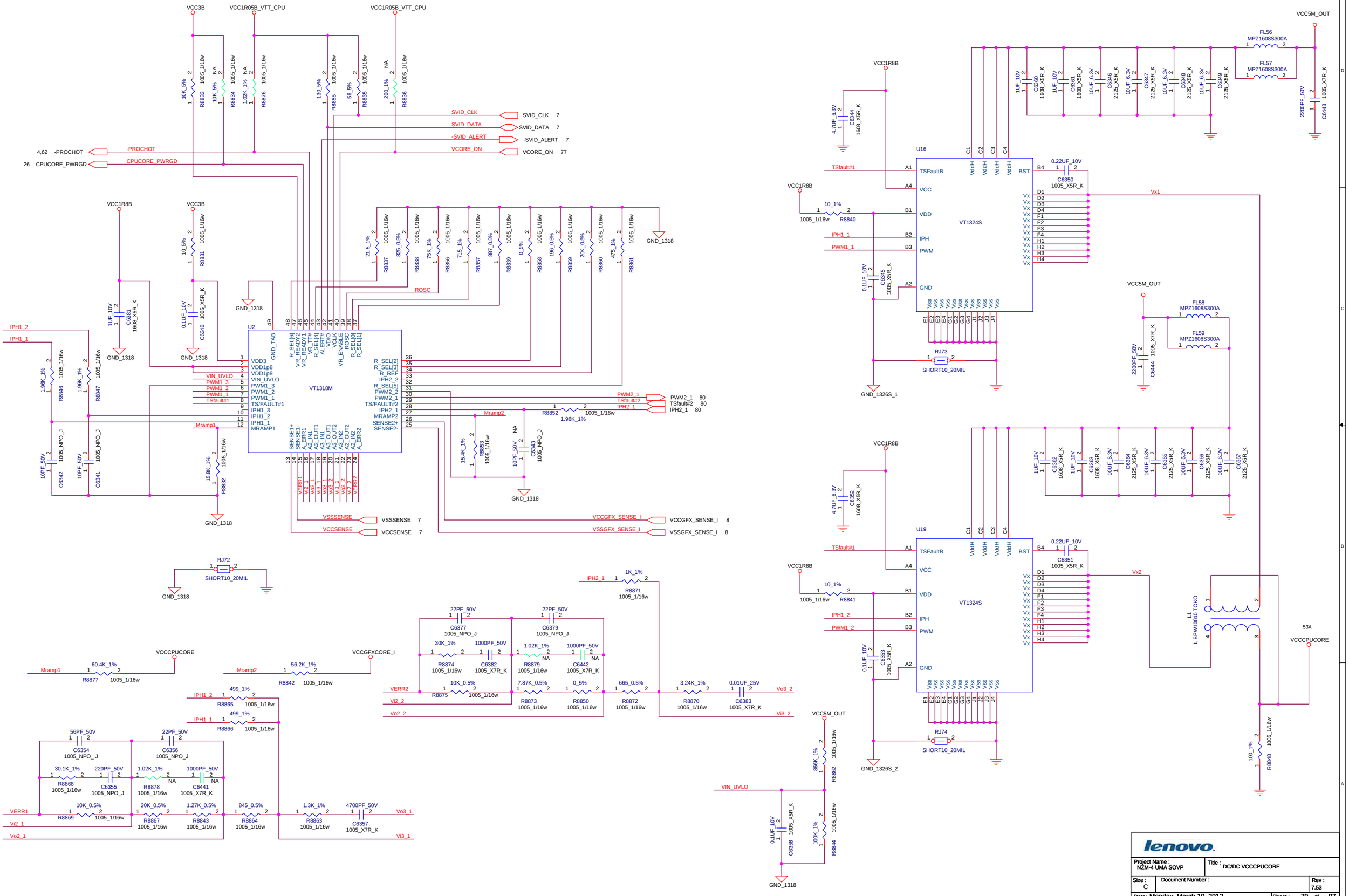
VCC3M_ON

5M_PWRG

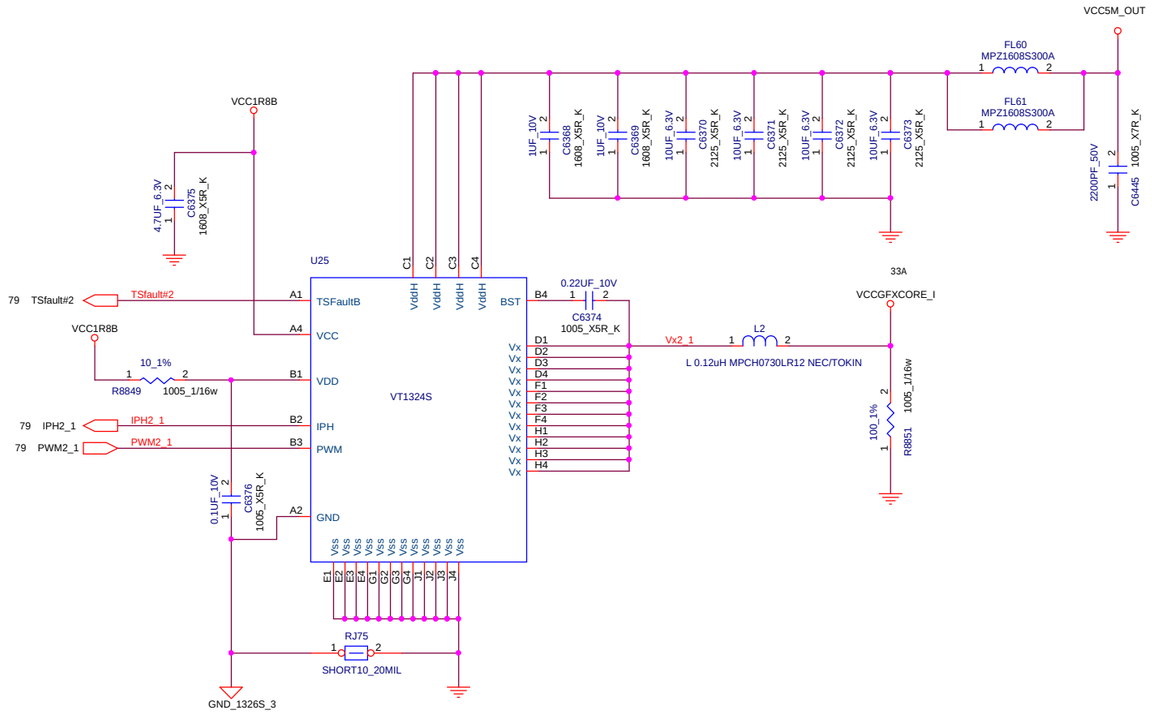
VCC5M_ON

RJ28 SHORT10_20MIL

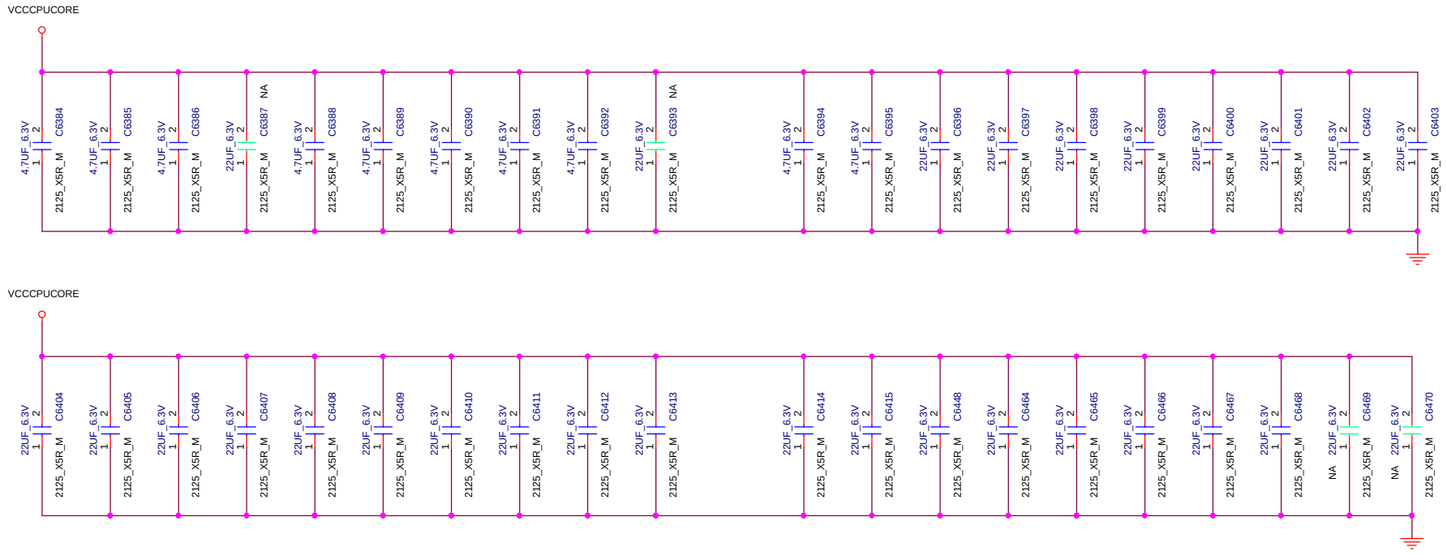
Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC5M/VCC3M
Size : C	Document Number :
Rev : 7.53	
Date: Monday, March 19, 2012	Sheet : 78 of 97



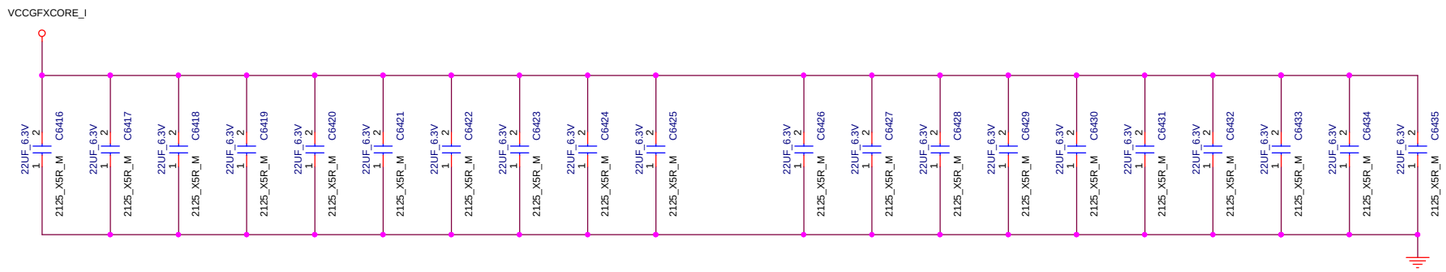
Project Name : NZM-4 UMA SOVP		Title : DC/DC VCCCPUCORE	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 79 of 97	



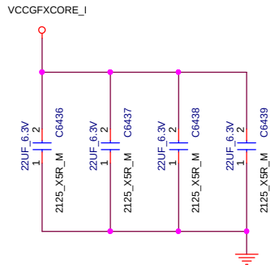
Project Name : NZM-4 UMA SOVP		Title : DC/DC VCCGFXCORE_I	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 80 of 97	



26pcs 22uF and 10pcs 4.7uF for VCCCPUCORE



24 x 22uF MLCC for VCCGFXCORE_I



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Project Name : NZM-4 UMA SOVP	Title : VCCCPUCORE DECOUPLING	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 81 of 97	

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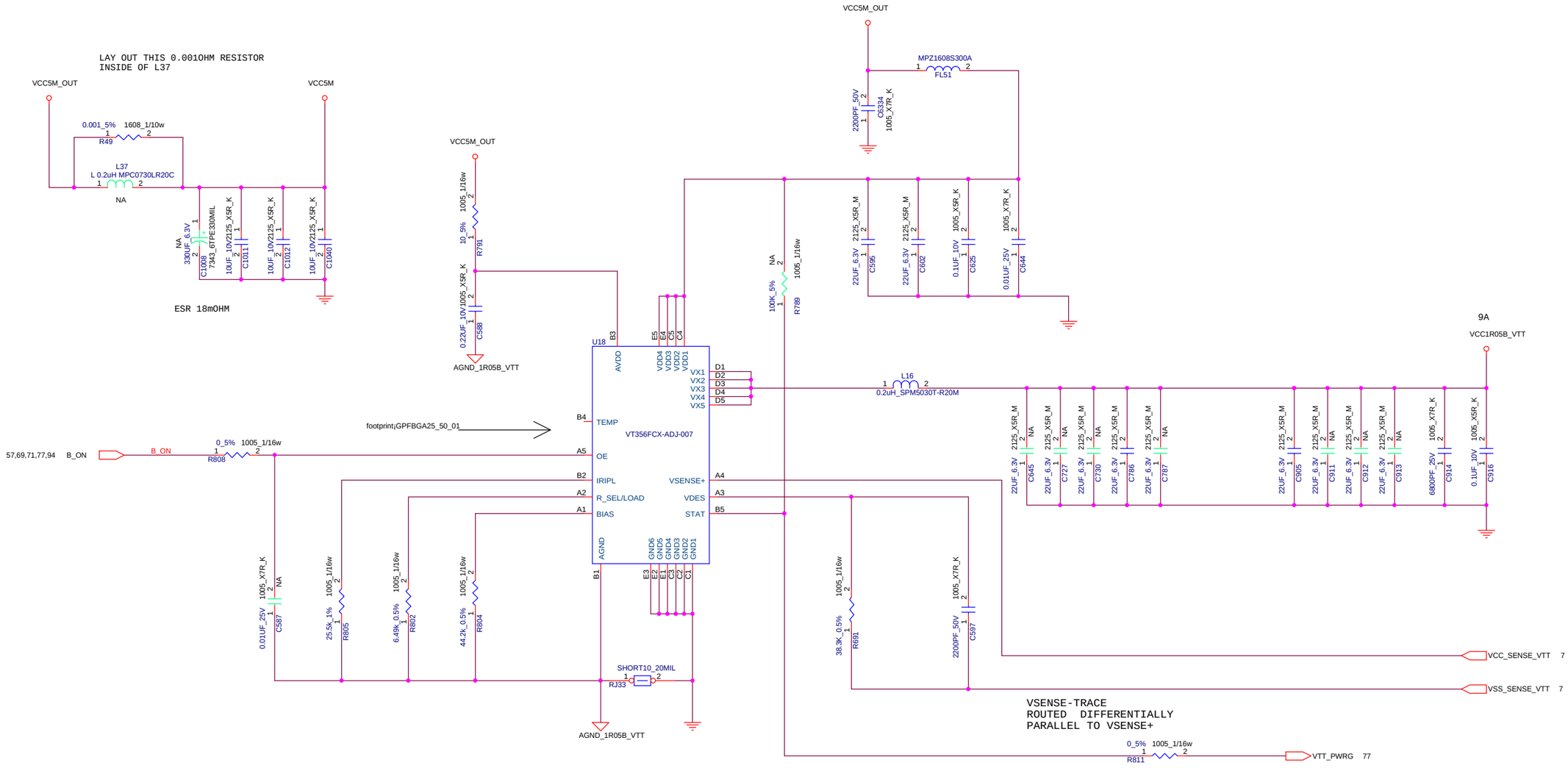
lenovo		
Project Name : NZM-4 UMA SOVP	Title : BLANK	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 82 of 97	



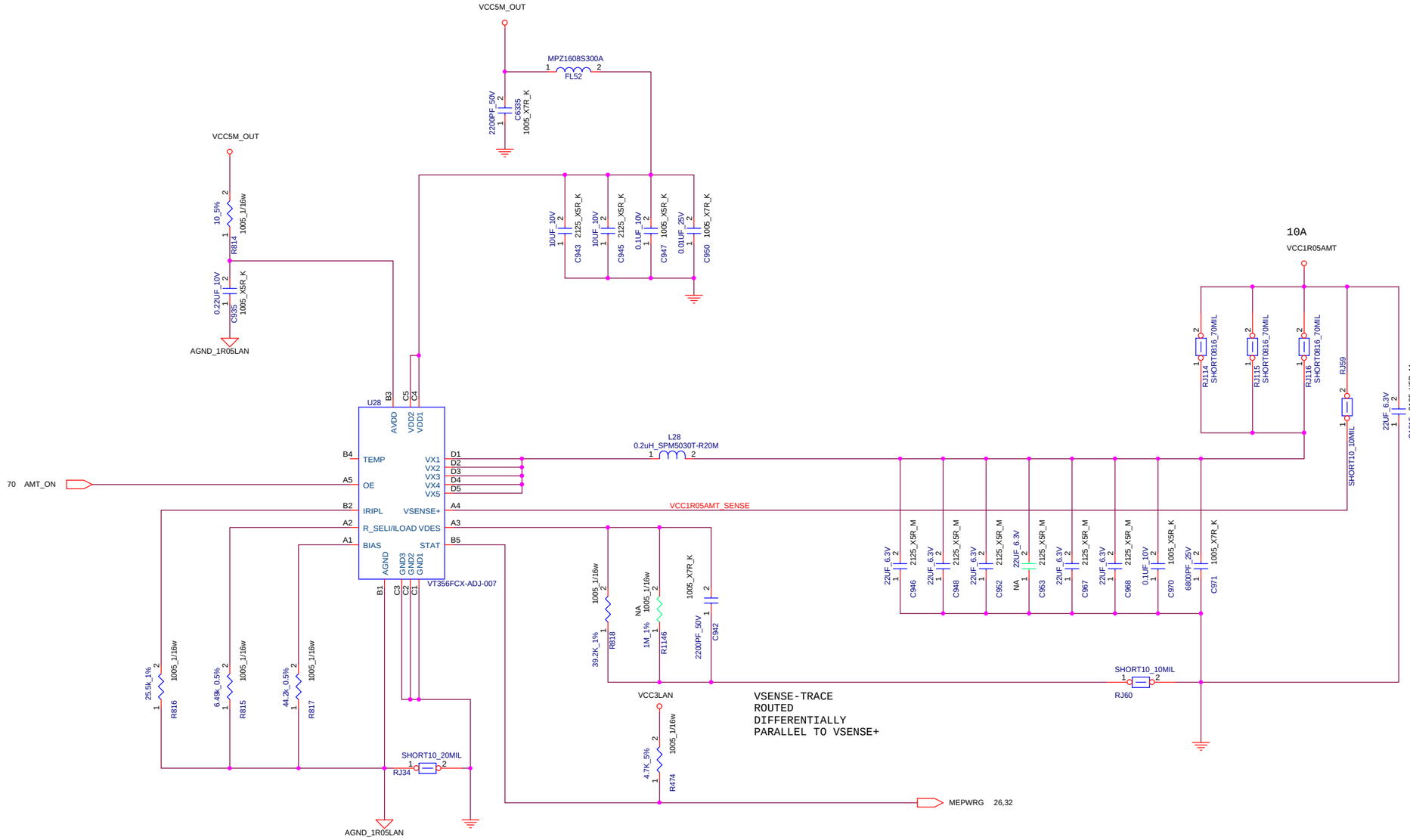
TO ASSIGN VT356 IN BOM

```
1.10V R691 = 40.2K
1.05V R691 = 38.3K
1.00V R691 = 36.5K
VOUT = 1.212*R691/44.2K
```

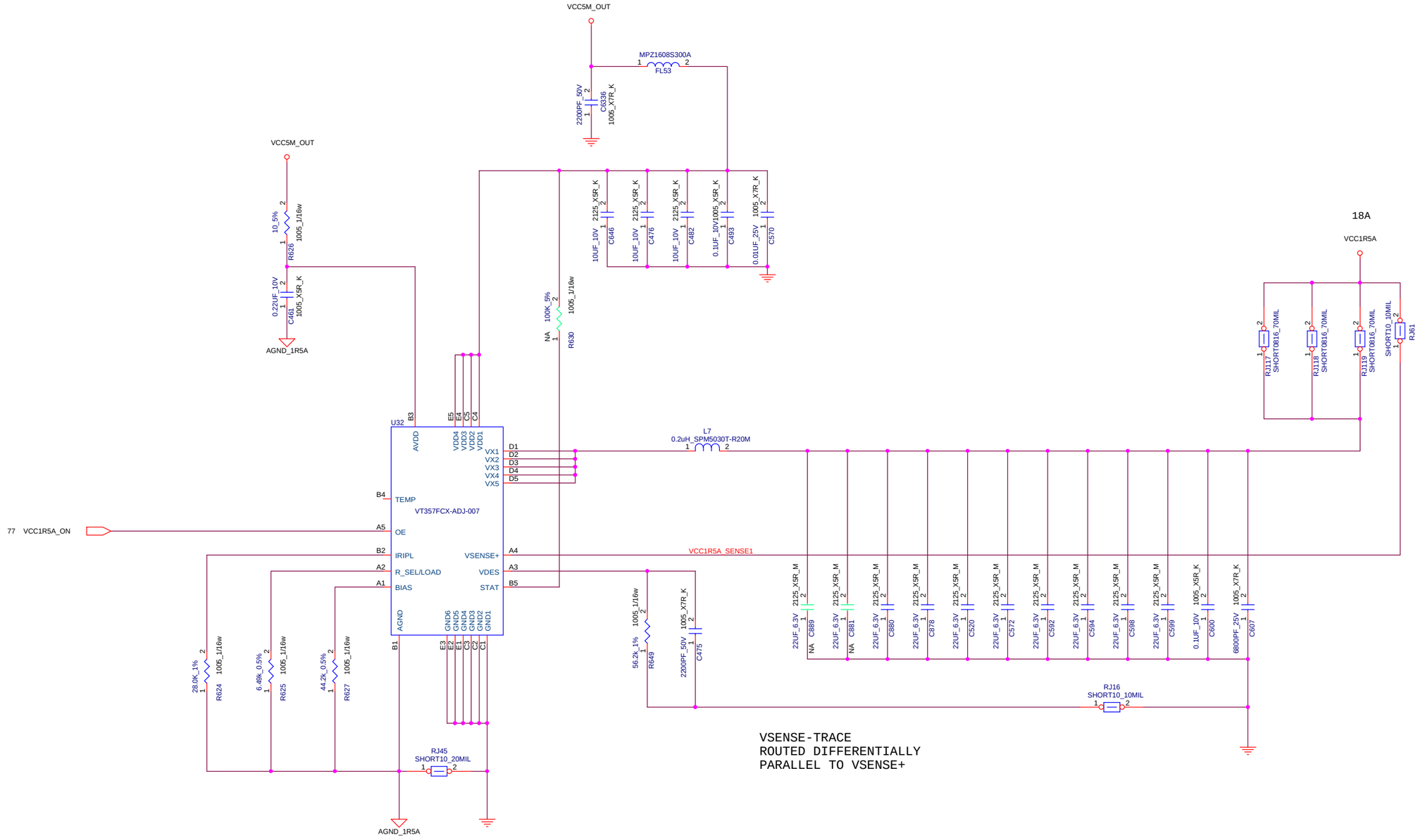
TABLE

Processor	VCC1R05B_VTT
Sandy Bridge	1.05V
Ivy Bridge ES2	1.05V
Ivy Bridge ES1	1.00V

Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC1R05B_VTT	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 83 of 97	

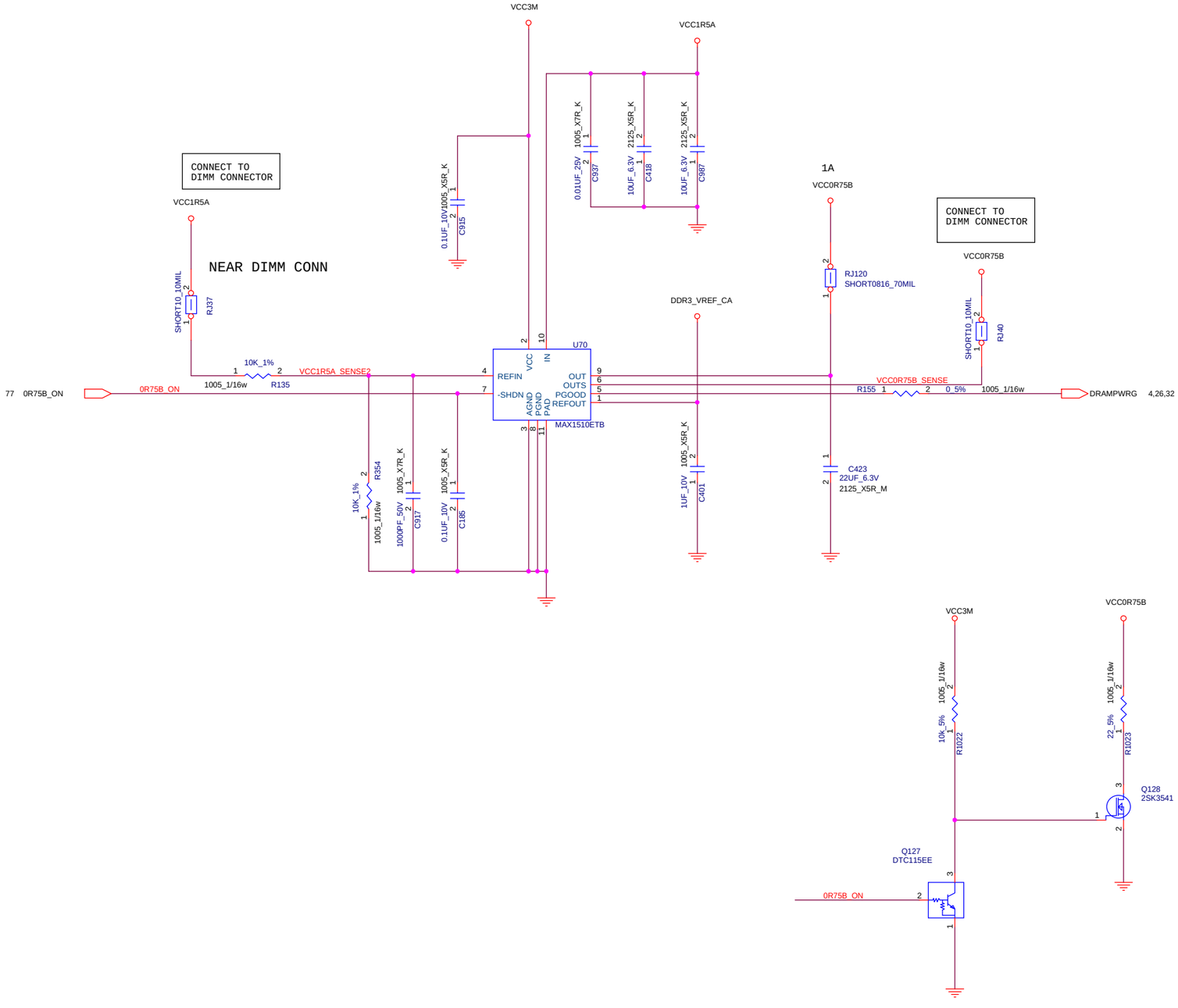


Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC1R05AMT	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 84 of 97	



VSENSE-TRACE
ROUTED DIFFERENTIALLY
PARALLEL TO VSENSE+

lenovo		
Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC1R5A	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 85 of 97	



lenovo		
Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC0R75B	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 86 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP	Title : BLANK		
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 87 of 97	

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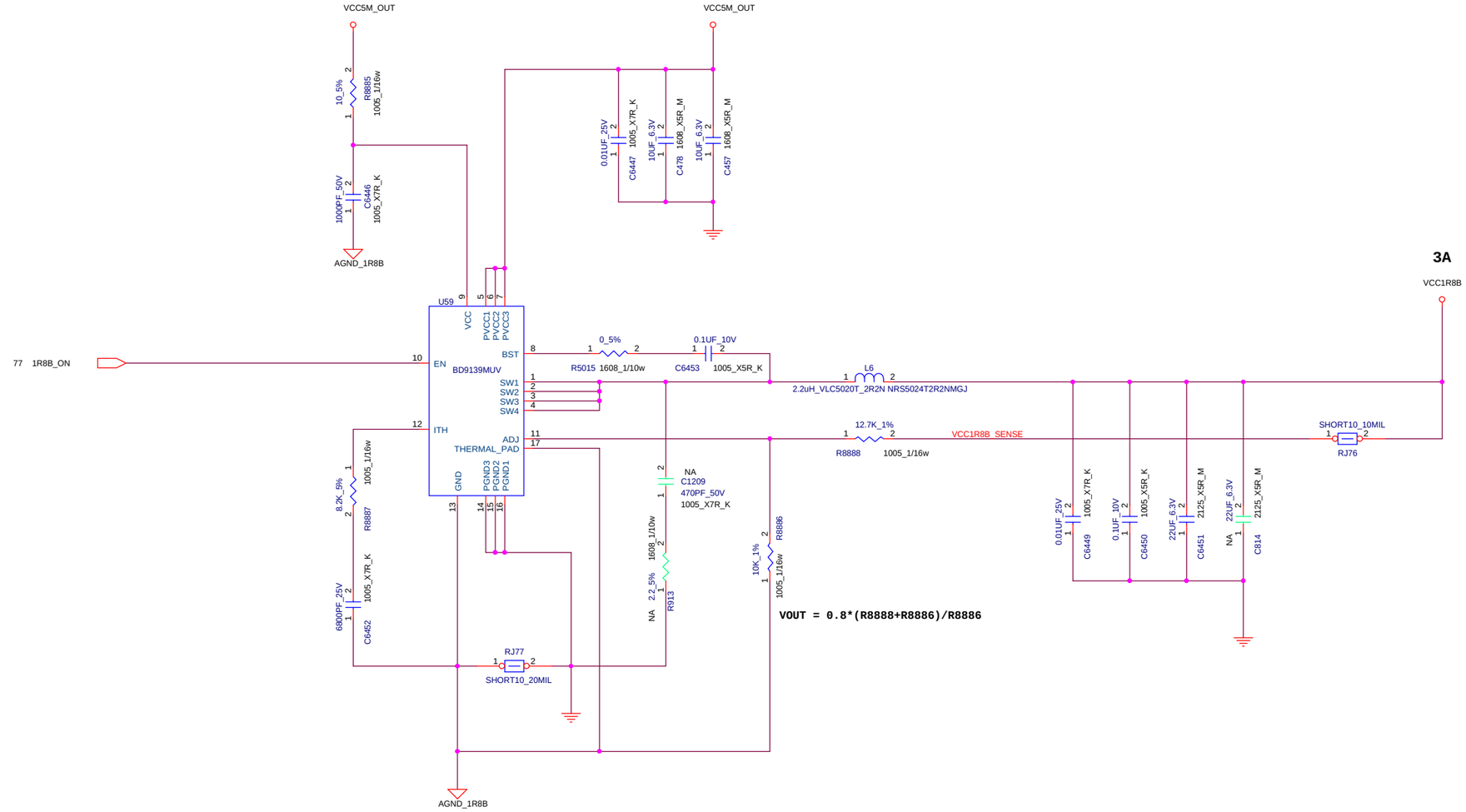
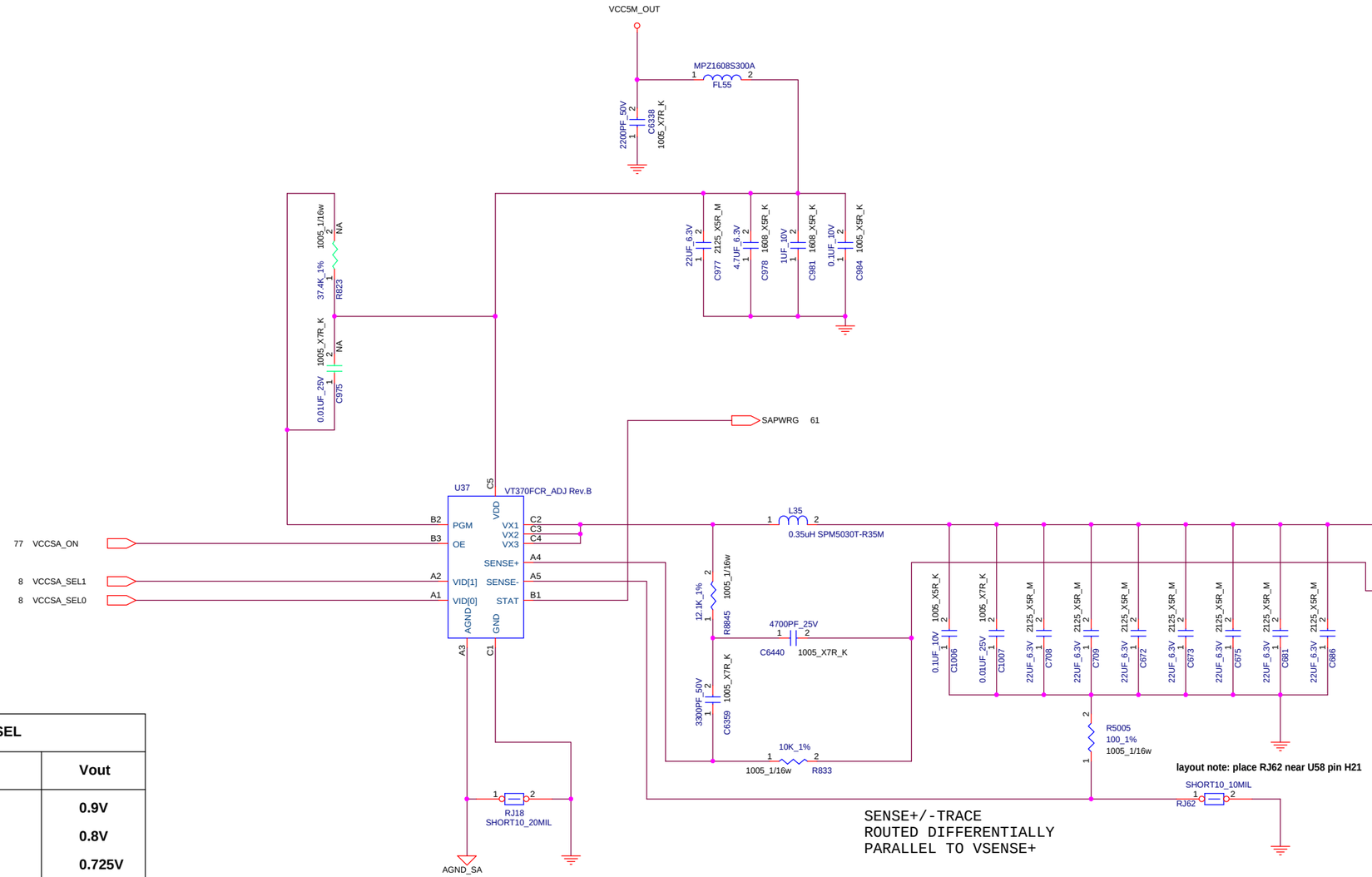
lenovo		
Project Name : NZM-4 UMA SOVP	Title : BLANK	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 88 of 97	

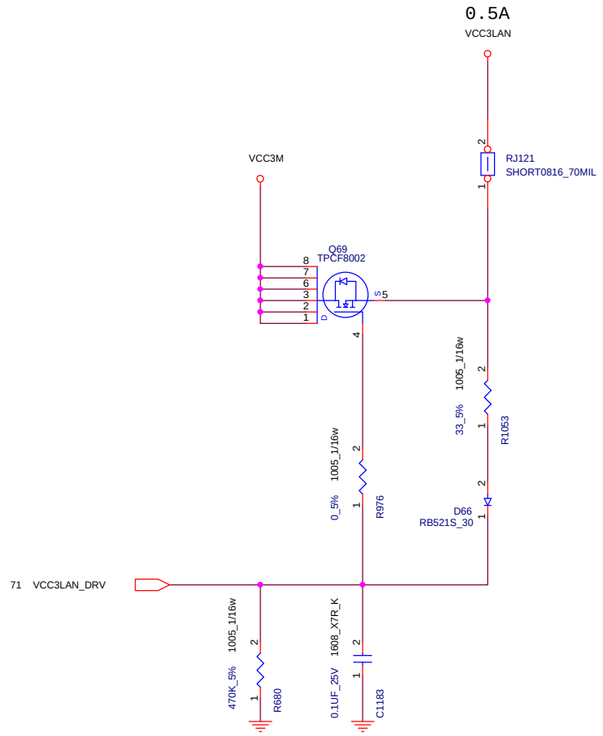


Project Name : NZM-4 UMA SOVP	Title : DC/DC VCC1R8B	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 89 of 97	



VCCSA_SEL		
VID0	**VID1**	**Vout**
L	**L**	**0.9V**
L	**H**	**0.8V**
H	**L**	**0.725V**
H	**H**	**0.675V**

lenovo		
Project Name : NZM-4 UMA SOVP	Title : DC/DC VCCSA	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 90 of 97	



lenovo		
Project Name : NZM-4 UMA SOVP	Title : LOAD SW LAN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 91 of 97	

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lenovo			
Project Name : NZM-4 UMA SOVP		Title : BLANK	
Size : C	Document Number :		Rev : 7.53
Date: Monday, March 19, 2012		Sheet : 92 of 97	

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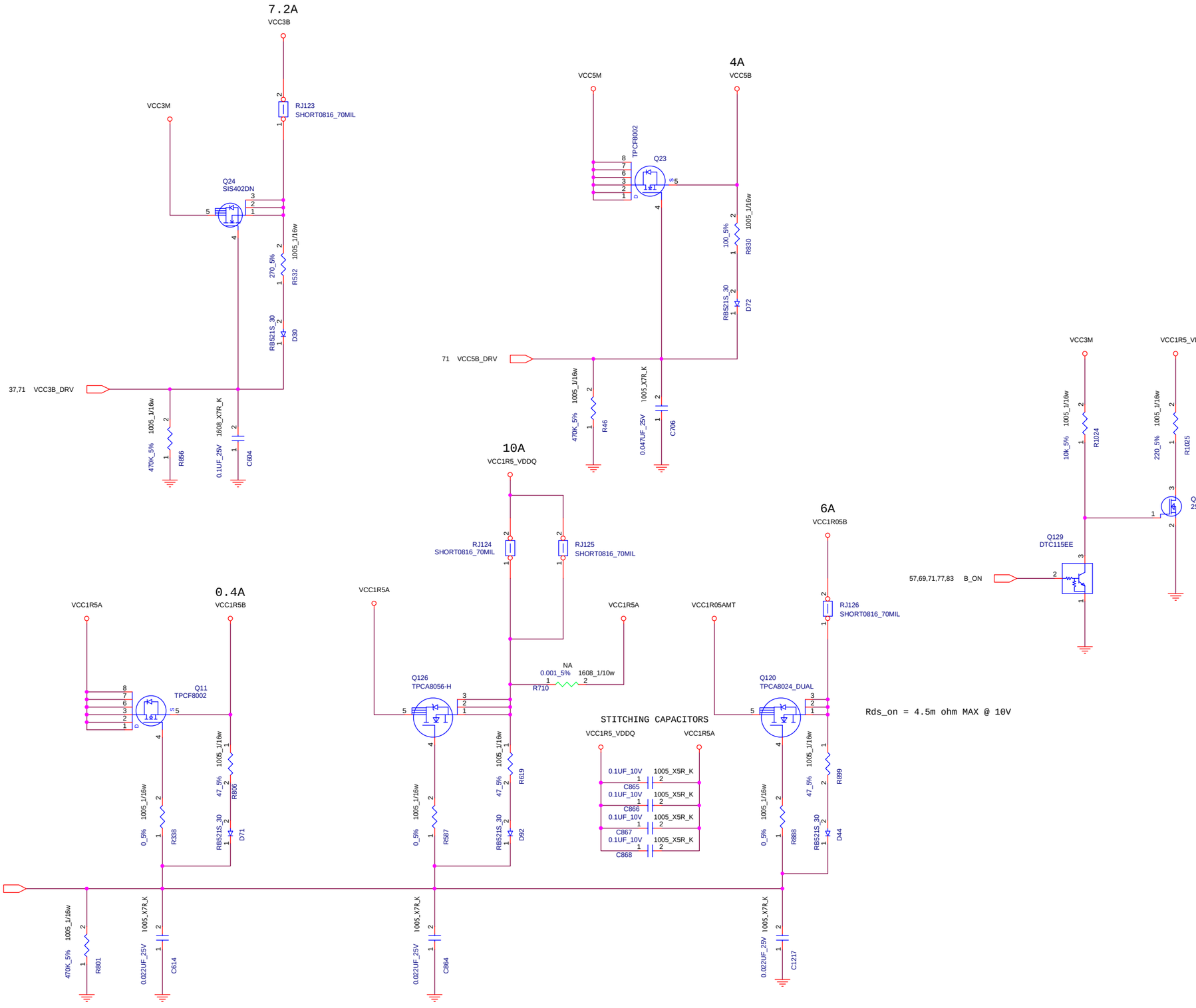
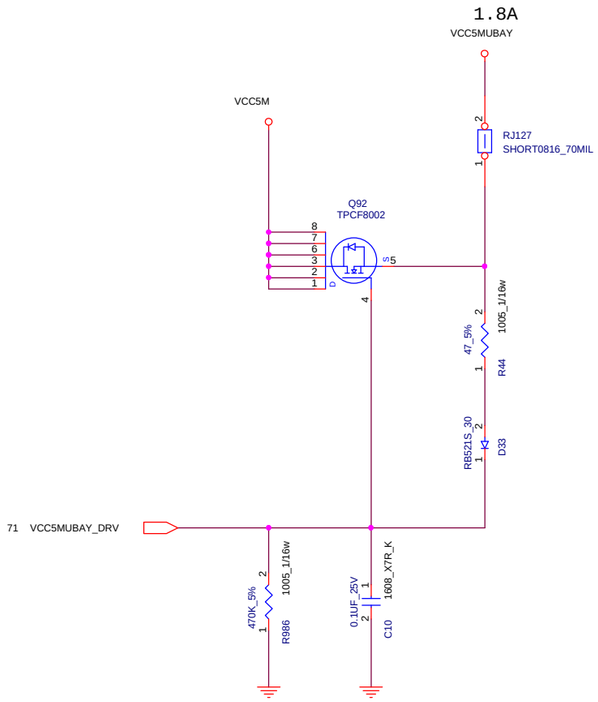
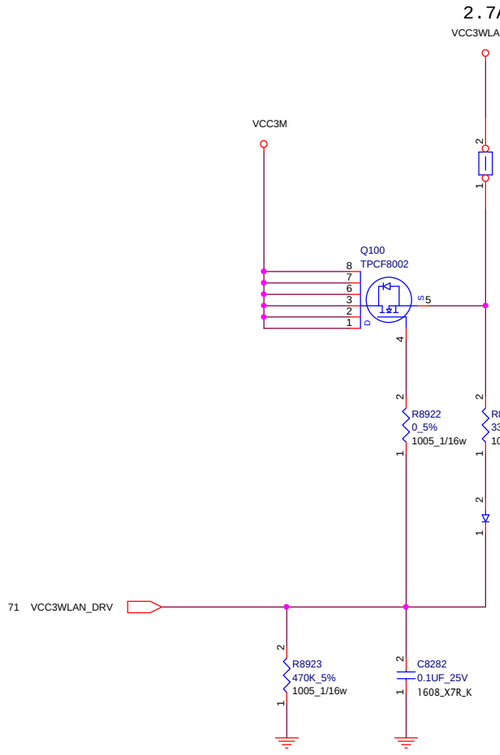
lenovo		
Project Name : NZM-4 UMA SOVP	Title : BLANK	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 93 of 97	

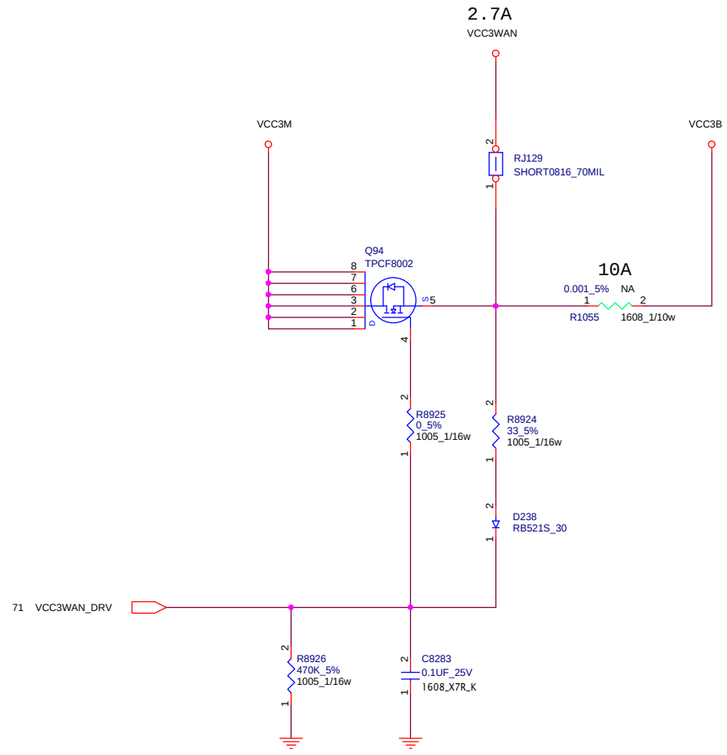


lenovo		
Project Name : NZM-4 UMA SOVP	Title : LOAD SW B	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 94 of 97	



lenovo		
Project Name : NZM-4 UMA SOVP	Title : LOAD SW VCC5MUBAY	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 95 of 97	





TABLE

AOAC	YES	NO
R1055	NO-ASM	ASM
Q94	ASM	NO-ASM
R8924	ASM	NO-ASM
R8925	ASM	NO-ASM
R8926	ASM	NO-ASM
C8283	ASM	NO-ASM
D238	ASM	NO-ASM

LOGIC

Project Name : NZM-4 UMA SOVP	Title : LOAD SW WAN & WLAN	
Size : C	Document Number :	Rev : 7.53
Date: Monday, March 19, 2012	Sheet : 96 of 97	

PTH FOR SCREW HOLE

TP935
TESTPIN_2P5

TP4 TESTPIN_2P6
TP5 TESTPIN_2P6
TP6 TESTPIN_2P6
TP10 TESTPIN_2P6
TP37 TESTPIN_2P6

TP32 TESTPIN_2P8
TP48 TESTPIN_2P8
TP51 TESTPIN_2P8
TP54 TESTPIN_2P8
TP56 TESTPIN_2P8
TP61 TESTPIN_2P8
TP27 TESTPIN_2P8
TP68 TESTPIN_2P8
TP71 TESTPIN_2P8
TP73 TESTPIN_2P8
TP26 TESTPIN_2P8

TP29 TESTPIN_3P4
TP52 TESTPIN_3P4
TP57 TESTPIN_3P4
TP63 TESTPIN_3P4
NUT1 M2_H2R6_D5
NUT2 STANDOFF_OD4_H3R9

TP35 TESTPIN_2P8
TP36 TESTPIN_2P8

NPTH

NPTH1 BBH78
NPTH2 BBH78
NPTH3 BBH78
NPTH4 BBH78

NPTH8 BBH275 NA
NPTH9 BBH283 NA
NPTH10 BBH196R85X275R6 NA
NPTH11 BBH748X275R6 NA

FID
Board Area

FD1 NC, NO CONNECT TO ANY.
FD2 NC, NO CONNECT TO ANY.
FD3 NC, NO CONNECT TO ANY.
FD4 NC, NO CONNECT TO ANY.
FD5 NC, NO CONNECT TO ANY.
FD6 NC, NO CONNECT TO ANY.

CF25 NC, NO CONNECT TO ANY.
CF26 NC, NO CONNECT TO ANY.

FID
Component Area

CF1 NC, NO CONNECT TO ANY.
CF2 NC, NO CONNECT TO ANY.
CF3 NC, NO CONNECT TO ANY.
CF4 NC, NO CONNECT TO ANY.
CF5 NC, NO CONNECT TO ANY.
CF6 NC, NO CONNECT TO ANY.
CF7 NC, NO CONNECT TO ANY.
CF8 NC, NO CONNECT TO ANY.
CF9 NC, NO CONNECT TO ANY.
CF10 NC, NO CONNECT TO ANY.
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Date: Monday, March 19, 2012	Sheet : 97 of 97	