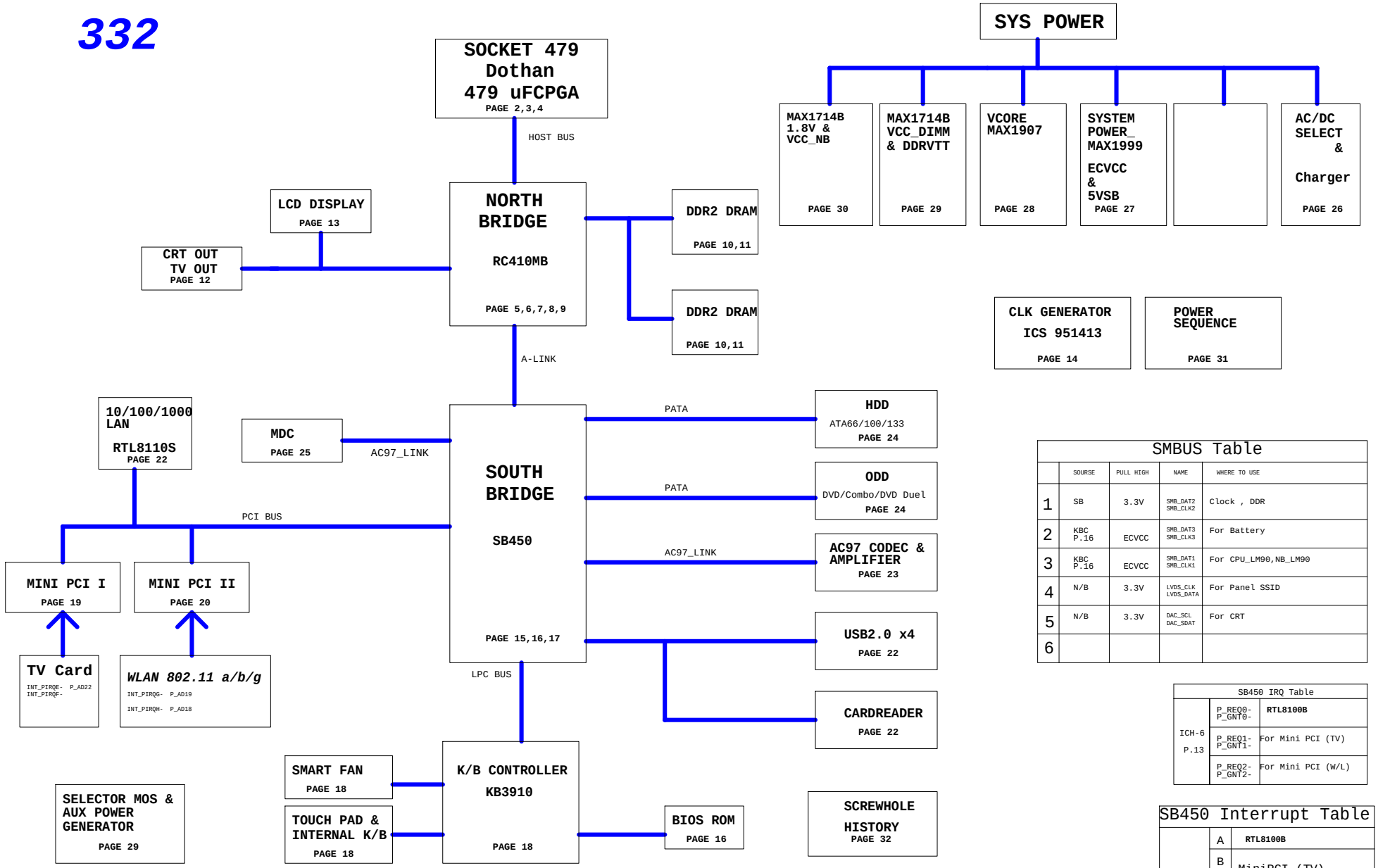
332



SMBUS Table

	SOURSE	PULL HIGH	NAME	WHERE TO USE
1	SB	3.3V	SMB_DAT2 SMB_CLK2	Clock , DDR
2	KBC P.16	ECVCC	SMB_DAT3 SMB_CLK3	For Battery
3	KBC P.16	ECVCC	SMB_DAT1 SMB_CLK1	For CPU_LM90,NB_LM90
4	N/B	3.3V	LVDS_CLK LVDS_DATA	For Panel SSID
5	N/B	3.3V	DAC_SCL DAC_SDAT	For CRT
6				

SB450 IRQ Table

ICH-6 P.13	P_REQ0- P_GNT0-	**RTL8100B**
	P_REQ1- P_GNT1-	For Mini PCI (TV)
	P_REQ2- P_GNT2-	For Mini PCI (W/L)

SB450 Interrupt Table

ICH-6 P.13	A	**RTL8100B**
	B C	MiniPCI (TV)
	D E	MiniPCI (W/L)
	F	
	G	
	H	

PAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
REV	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
DATE	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005

PAGE	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
REV	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
DATE	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005	9/29/2005

P/N: 15-F67-012000

Title	G332 Schematic Block		
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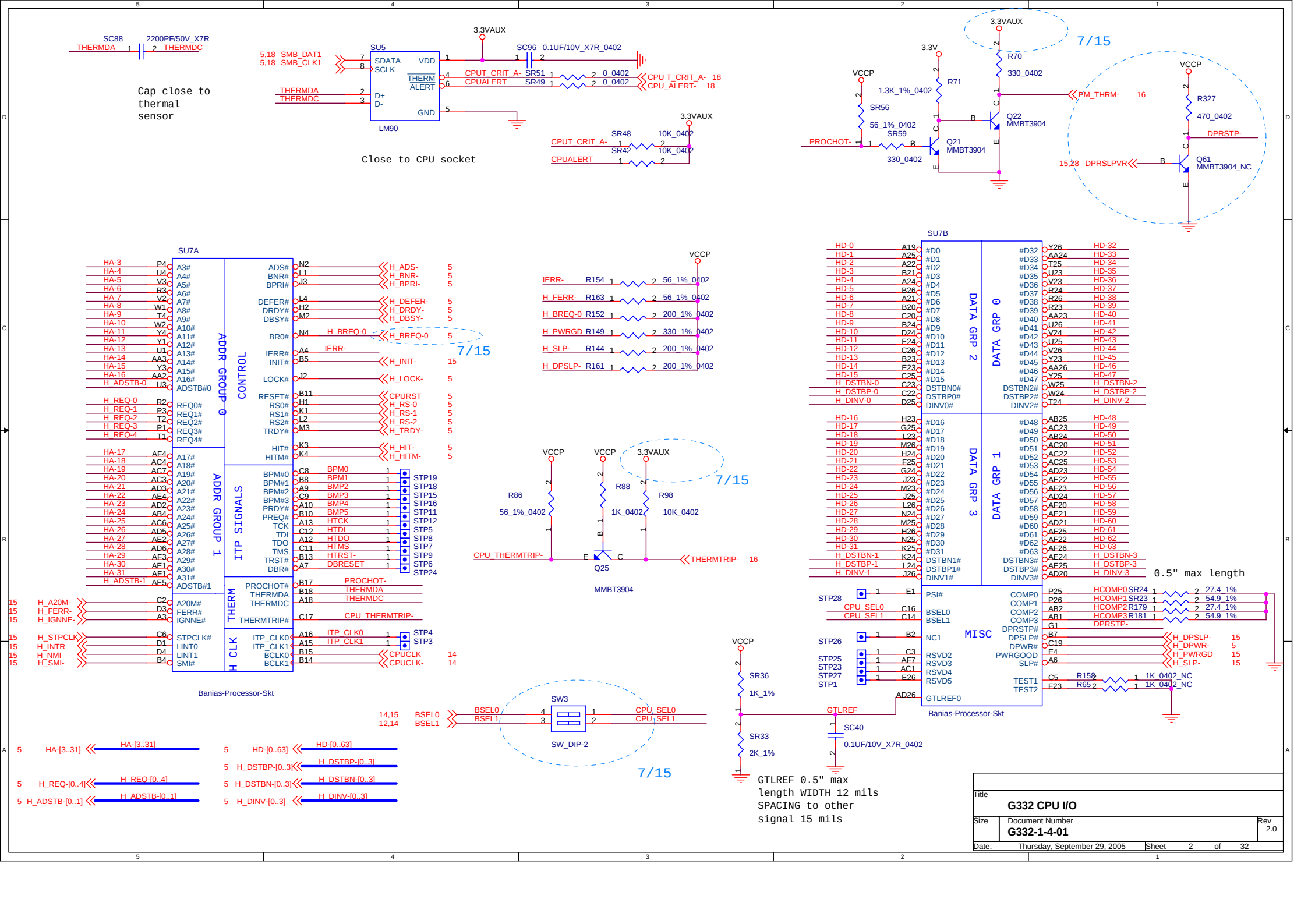
SC88 2200PF/50V_X7R
THERMDA 1 2 THERMDC
Cap close to thermal sensor
SU5
5,18 SMB_DAT1
5,18 SMB_CLK1
SDATA
SCLK
VDD
THERM
ALERT
D+
D-
GND
LM90
3.3VAUX
SC96 0.1UF/10V_X7R_0402
CPUT_CRIT_A- SR51 0_0402
CPUALERT SR49 0_0402
CPU T_CRIT_A- 18
CPU_ALERT- 18
THERMDA
THERMDC
Close to CPU socket
SR48 10K_0402
SR42 10K_0402
CPUT_CRIT_A-
CPUALERT
3.3VAUX
3.3V
VCCP
R70 330_0402
R71 1.3K_1%_0402
SR56 56_1%_0402
SR59 330_0402
Q22 MMBT3904
Q21 MMBT3904
PROCHOT-
PM_THRM- 16
7/15
R327 470_0402
DPRSTP-
15,28 DPRSLPVR
Q61 MMBT3904_NC
SU7A
ADDR GROUP 0
ADDR GROUP 1
CONTROL
ITP SIGNALS
THERM
H CLK
HA-3 HA-4 HA-5 HA-6 HA-7 HA-8 HA-9 HA-10 HA-11 HA-12 HA-13 HA-14 HA-15 HA-16 H_ADSTB-0
H_REQ-0 H_REQ-1 H_REQ-2 H_REQ-3 H_REQ-4
HA-17 HA-18 HA-19 HA-20 HA-21 HA-22 HA-23 HA-24 HA-25 HA-26 HA-27 HA-28 HA-29 HA-30 HA-31 H_ADSTB-1
ADS# BNR# BPRI# DEFER# DRDY# DBSY# BR0# IERR# INIT# LOCK# RESET# RS0# RS1# RS2# TRDY# HIT# HITM#
H_ADS- H_BNR- H_BPRI- H_DEFER- H_DRDY- H_DBSY- H_BREQ-0 IERR- H_INIT- H_LOCK- CPURST H_RS-0 H_RS-1 H_RS-2 H_TRDY- H_HIT- H_HITM-
7/15
BPM#0 BPM#1 BPM#2 BPM#3 PRDY# PREQ# TCK TDI TDO TMS TRST# DBR#
BPM0 BPM1 BPM2 BPM3 BPM4 BPM5 HTCK HTDI HTDO HTMS HTRST- DBRESET
STP19 STP18 STP15 STP16 STP11 STP12 STP5 STP8 STP7 STP9 STP6 STP24
PROCHOT# THERMDA THERMDC THERMTRIP#
PROCHOT- THERMDA THERMDC CPU_THERMTRIP-
ITP_CLK0 ITP_CLK1 BCLK0 BCLK1
ITP_CLK0 ITP_CLK1 CPUCLK CPUCLK-
STP4 STP3
15 H_A20M- H_FERR- H_IGNNE-
15 H_STPCLK- H_INTR H_NMI H_SMI-
A20M# FERR# IGNNE# STPCLK# LINT0 LINT1 SMI#
Banias-Processor-Skt
IERR- R154 56_1%_0402
H_FERR- R163 56_1%_0402
H_BREQ-0 R152 200_1%_0402
H_PWRGD R149 330_1%_0402
H_SLP- R144 200_1%_0402
H_DPSLP- R161 200_1%_0402
VCCP
R86 56_1%_0402
R88 1K_0402
R98 10K_0402
Q25 MMBT3904
CPU_THERMTRIP-
THERMTRIP- 16
SU7B
DATA GRP 0
DATA GRP 1
DATA GRP 2
DATA GRP 3
MISC
HD-0 HD-1 HD-2 HD-3 HD-4 HD-5 HD-6 HD-7 HD-8 HD-9 HD-10 HD-11 HD-12 HD-13 HD-14 HD-15
H_DSTBN-0 H_DSTBP-0 H_DINV-0
HD-16 HD-17 HD-18 HD-19 HD-20 HD-21 HD-22 HD-23 HD-24 HD-25 HD-26 HD-27 HD-28 HD-29 HD-30 HD-31
H_DSTBN-1 H_DSTBP-1 H_DINV-1
#D0 #D1 #D2 #D3 #D4 #D5 #D6 #D7 #D8 #D9 #D10 #D11 #D12 #D13 #D14 #D15
DSTBN0# DSTBP0# DINV0#
#D16 #D17 #D18 #D19 #D20 #D21 #D22 #D23 #D24 #D25 #D26 #D27 #D28 #D29 #D30 #D31
DSTBN1# DSTBP1# DINV1#
#D32 #D33 #D34 #D35 #D36 #D37 #D38 #D39 #D40 #D41 #D42 #D43 #D44 #D45 #D46 #D47
DSTBN2# DSTBP2# DINV2#
#D48 #D49 #D50 #D51 #D52 #D53 #D54 #D55 #D56 #D57 #D58 #D59 #D60 #D61 #D62 #D63
DSTBN3# DSTBP3# DINV3#
HD-32 HD-33 HD-34 HD-35 HD-36 HD-37 HD-38 HD-39 HD-40 HD-41 HD-42 HD-43 HD-44 HD-45 HD-46 HD-47
H_DSTBN-2 H_DSTBP-2 H_DINV-2
HD-48 HD-49 HD-50 HD-51 HD-52 HD-53 HD-54 HD-55 HD-56 HD-57 HD-58 HD-59 HD-60 HD-61 HD-62 HD-63
H_DSTBN-3 H_DSTBP-3 H_DINV-3
0.5" max length
PSI# BSEL0 BSEL1 NC1 RSVD2 RSVD3 RSVD4 RSVD5 GTLREF0
STP28 CPU_SEL0 CPU_SEL1 STP26 STP25 STP23 STP27 STP1
COMP0 COMP1 COMP2 COMP3 DPRSTP# DPSLP# DPWR# PWRGOOD SLP# TEST1 TEST2
HCOMP0 SR24 27.4_1%
HCOMP1 SR23 54.9_1%
HCOMP2 R179 27.4_1%
HCOMP3 R181 54.9_1%
DPRSTP-
H_DPSLP- H_DPWR- H_PWRGD H_SLP-
15 5 15 15
C5 R159 1K_0402_NC
F23 R65 1K_0402_NC
Banias-Processor-Skt
SW3 SW_DIP-2
14,15 BSEL0
12,14 BSEL1
CPU_SEL0
CPU_SEL1
7/15
VCCP
SR36 1K_1%
SR33 2K_1%
GTLREF
SC40 0.1UF/10V_X7R_0402
GTLREF 0.5" max length WIDTH 12 mils SPACING to other signal 15 mils
HA-[3..31]
HD-[0..63]
H_DSTBP-[0..3]
H_DSTBN-[0..3]
H_DINV-[0..3]
H_REQ-[0..4]
H_ADSTB-[0..1]
Title
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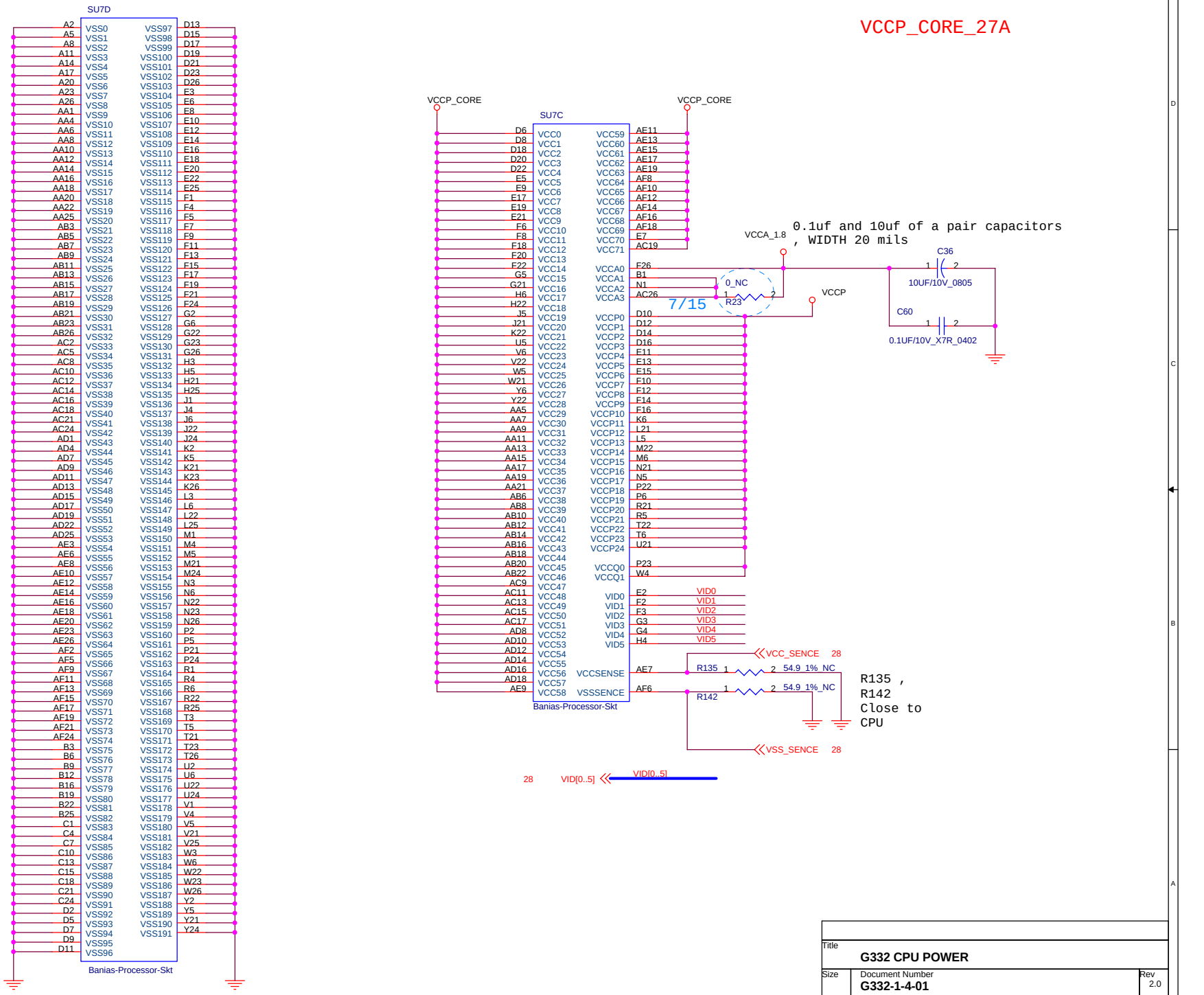
SU7D
Banias-Processor-Skt
SU7C
Banias-Processor-Skt
VCCP_CORE_27A
VCCP_CORE
VCCP_CORE
VCCA_1.8
0.1uf and 10uf of a pair capacitors
, WIDTH 20 mils
C36
10UF/10V_0805
C60
0.1UF/10V_X7R_0402
0_NC
R23
7/15
VCCP
VCC_SENCE 28
VSS_SENCE 28
R135
R142
54.9 1% NC
R135 ,
R142
Close to
CPU
28 VID[0..5]
VID[0..5]
VID0
VID1
VID2
VID3
VID4
VID5
Title
G332 CPU POWER
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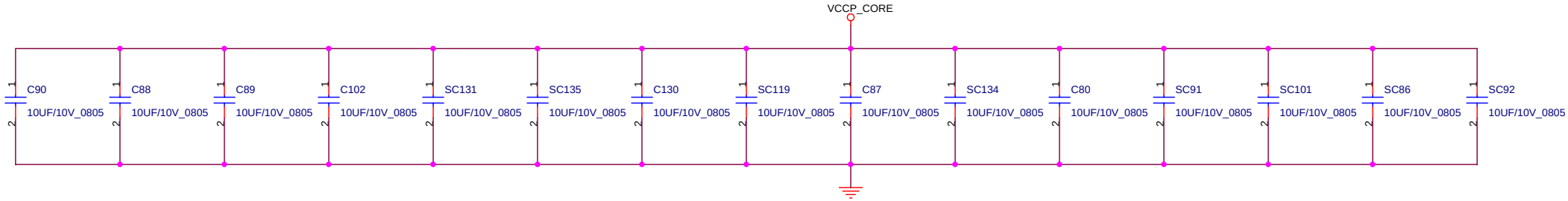
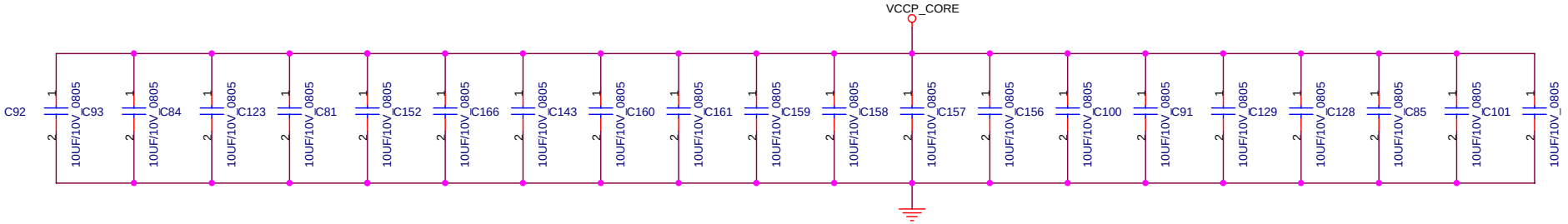
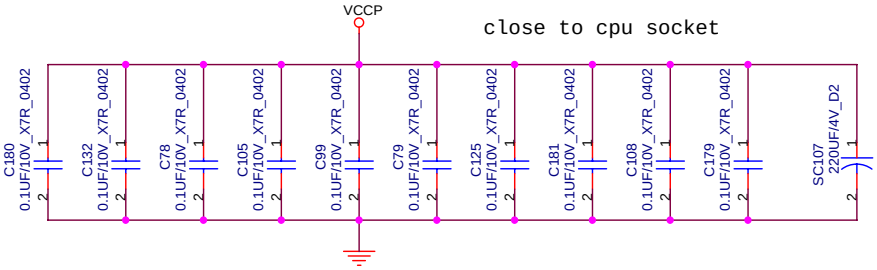




IMVP4 VID TABLE

VID[5..0]	Voltage	VID[5..0]	Voltage
0 0 0 0 0 0	1.708V	1 0 0 0 0 0	1.196V
0 0 0 0 0 1	1.692V	1 0 0 0 0 1	1.180V
0 0 0 0 1 0	1.676V	1 0 0 0 1 0	1.164V
0 0 0 0 1 1	1.660V	1 0 0 0 1 1	1.148V
0 0 0 1 0 0	1.644V	1 0 0 1 0 0	1.132V
0 0 0 1 0 1	1.628V	1 0 0 1 0 1	1.116V
0 0 0 1 1 0	1.612V	1 0 0 1 1 0	1.100V
0 0 0 1 1 1	1.596V	1 0 0 1 1 1	1.084V
0 0 1 0 0 0	1.580V	1 0 1 0 0 0	1.068V
0 0 1 0 0 1	1.564V	1 0 1 0 0 1	1.052V
0 0 1 0 1 0	1.548V	1 0 1 0 1 0	1.036V
0 0 1 0 1 1	1.532V	1 0 1 0 1 1	1.020V
0 0 1 1 0 0	1.516V	1 0 1 1 0 0	1.004V
0 0 1 1 0 1	1.500V	1 0 1 1 0 1	0.988V
0 0 1 1 1 0	1.484V	1 0 1 1 1 0	0.972V
0 0 1 1 1 1	1.468V	1 0 1 1 1 1	0.956V
0 1 0 0 0 0	1.452V	1 1 0 0 0 0	0.940V
0 1 0 0 0 1	1.436V	1 1 0 0 0 1	0.924V
0 1 0 0 1 0	1.420V	1 1 0 0 1 0	0.908V
0 1 0 0 1 1	1.404V	1 1 0 0 1 1	0.892V
0 1 0 1 0 0	1.388V	1 1 0 1 0 0	0.876V
0 1 0 1 0 1	1.372V	1 1 0 1 0 1	0.860V
0 1 0 1 1 0	1.356V	1 1 0 1 1 0	0.844V
0 1 0 1 1 1	1.340V	1 1 0 1 1 1	0.828V
0 1 1 0 0 0	1.324V	1 1 1 0 0 0	0.812V
0 1 1 0 0 1	1.308V	1 1 1 0 0 1	0.796V
0 1 1 0 1 0	1.292V	1 1 1 0 1 0	0.780V
0 1 1 0 1 1	1.276V	1 1 1 0 1 1	0.764V
0 1 1 1 0 0	1.260V	1 1 1 1 0 0	0.748V
0 1 1 1 0 1	1.244V	1 1 1 1 0 1	0.732V
0 1 1 1 1 0	1.228V	1 1 1 1 1 0	0.716V
0 1 1 1 1 1	1.212V	1 1 1 1 1 1	0.700V



Title	G332 CPU VCCP_CORE CAP		
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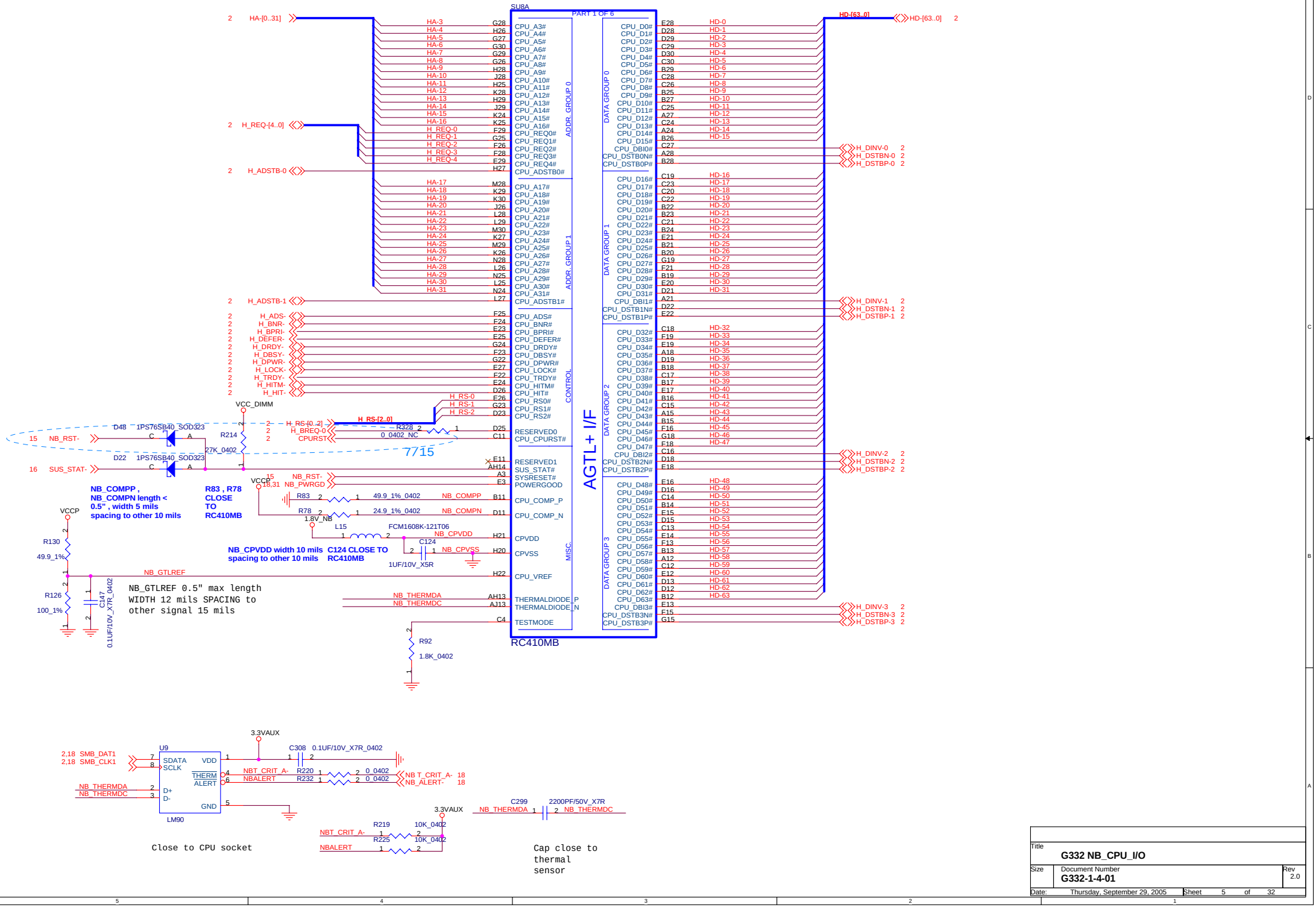
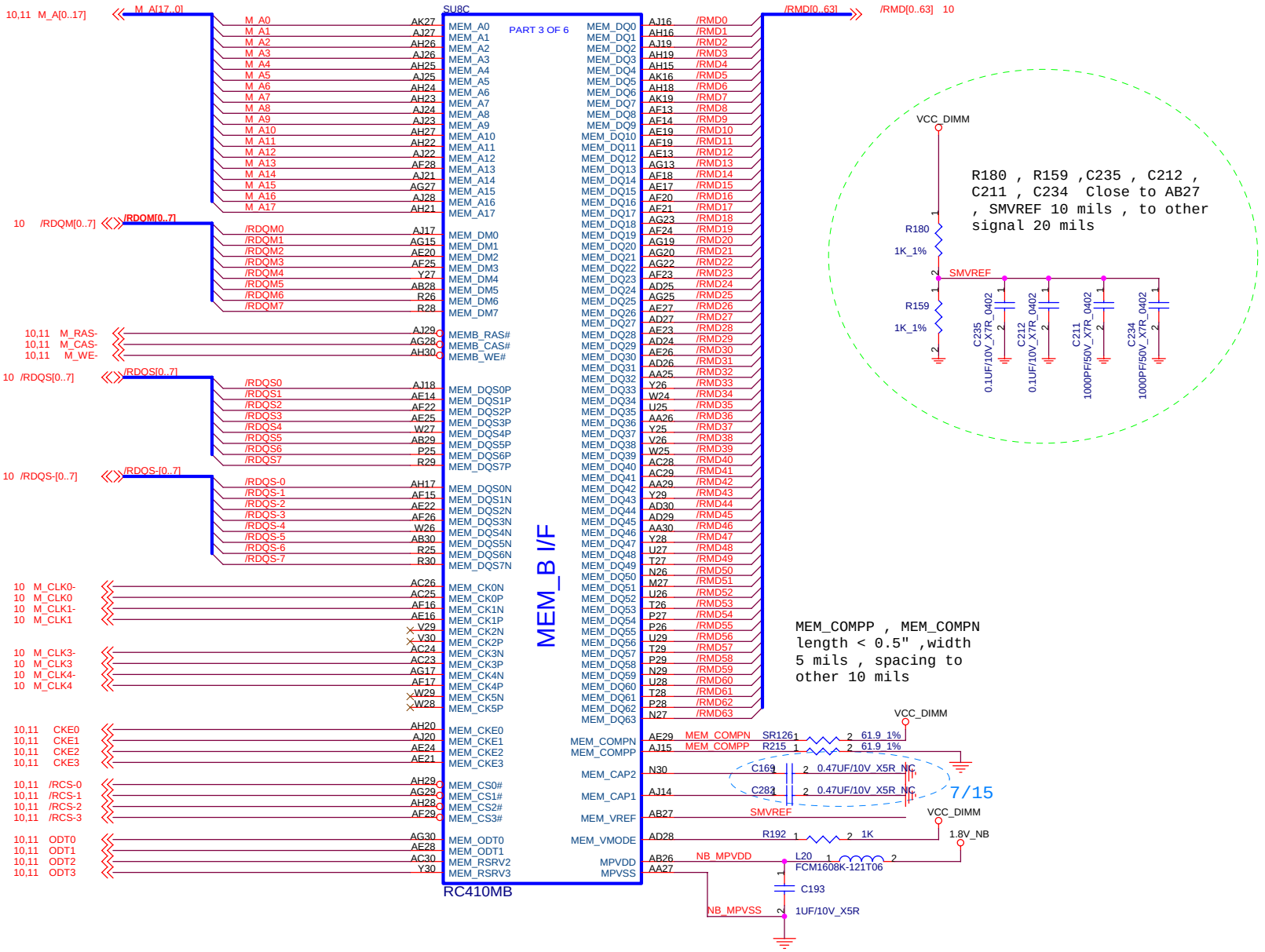
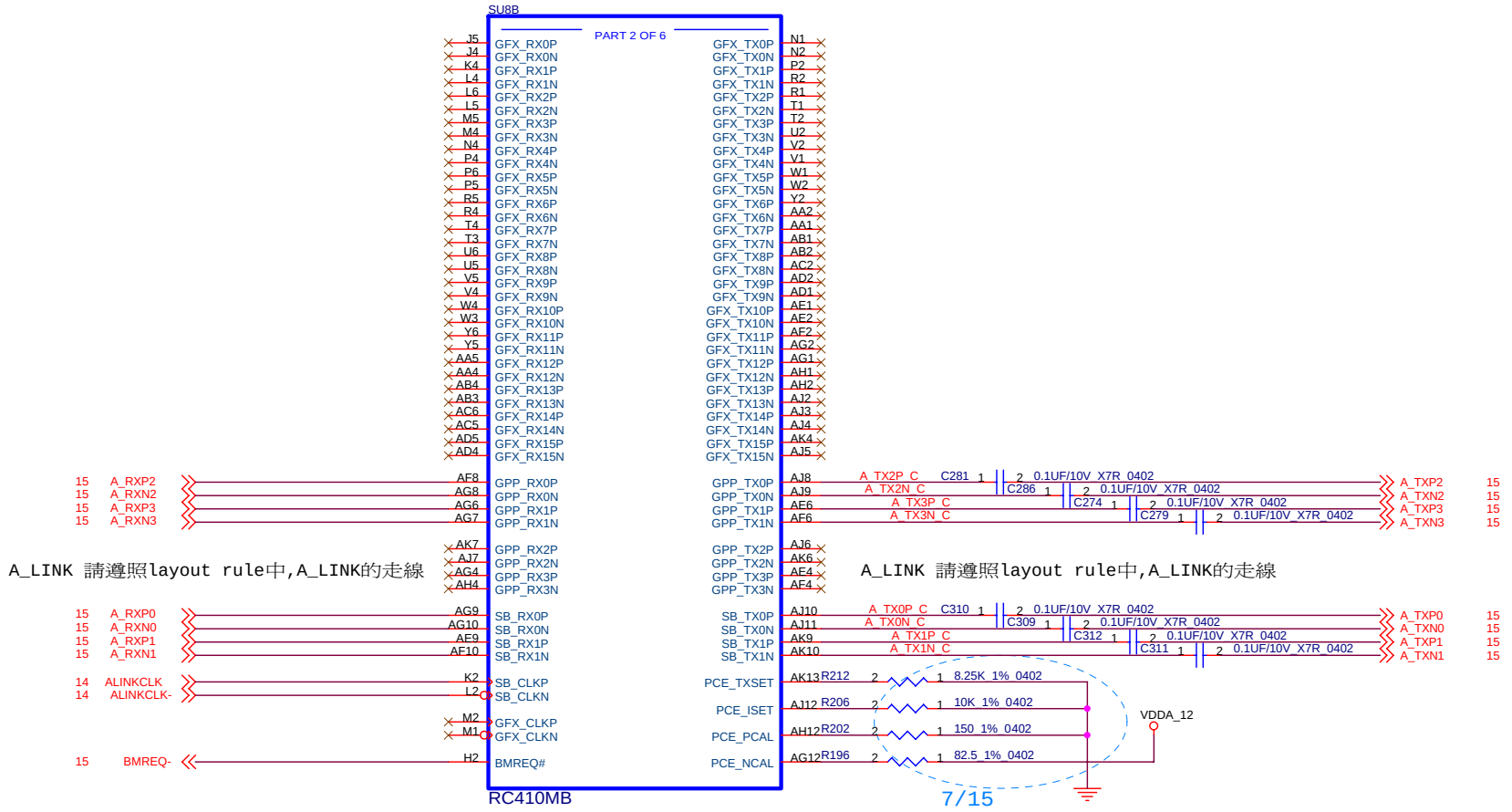


Title	G332 NB_CPU_I/O	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 5 of 32	



Title	G332 NB_MEM_I/O	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 6 of 32	



Title	G332 NB_SB_LINK
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C127 close to G4,G5 — NB_VDDR3 width 10 mils , spacing to other signals 10 mils

C63 close to C9 — NB_AVDD width 10 mils , spacing to other signals 10 mils

C70 close to D8 — 1.8V_NB width 10 mils , spacing to other signals 10 mils

C69 close to B8 — AVDD1 width 10 mils , spacing to other signals 10 mils

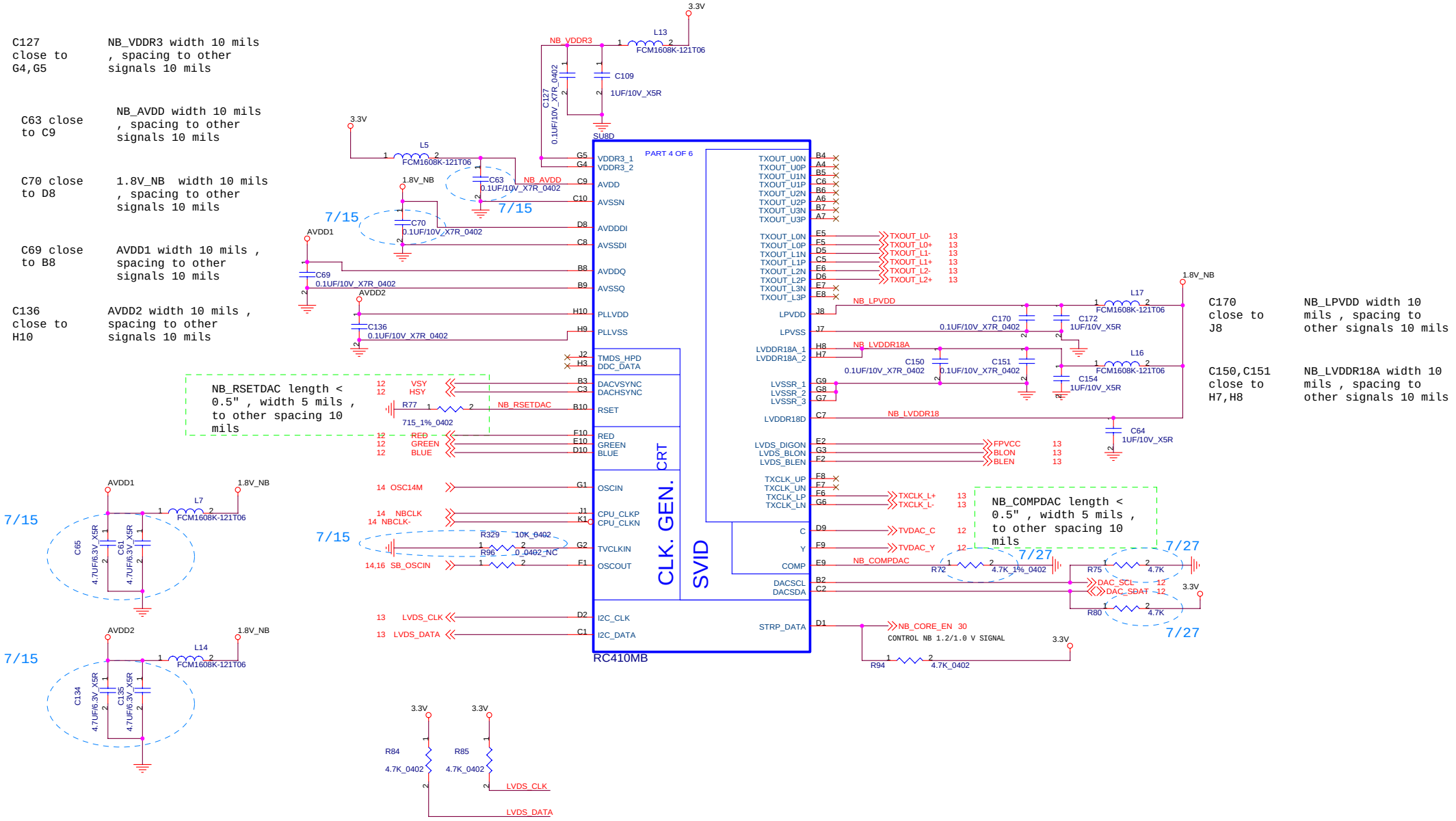
C136 close to H10 — AVDD2 width 10 mils , spacing to other signals 10 mils

C170 close to J8 — NB_LPVDD width 10 mils , spacing to other signals 10 mils

C150,C151 close to H7,H8 — NB_LVDDR18A width 10 mils , spacing to other signals 10 mils

NB_RSETDAC length < 0.5" , width 5 mils , to other spacing 10 mils

NB_COMPDAC length < 0.5" , width 5 mils , to other spacing 10 mils



Title	G332 NB_VEDIO_LINK		
Size	Document Number G332-1-4-01		Rev 2.0
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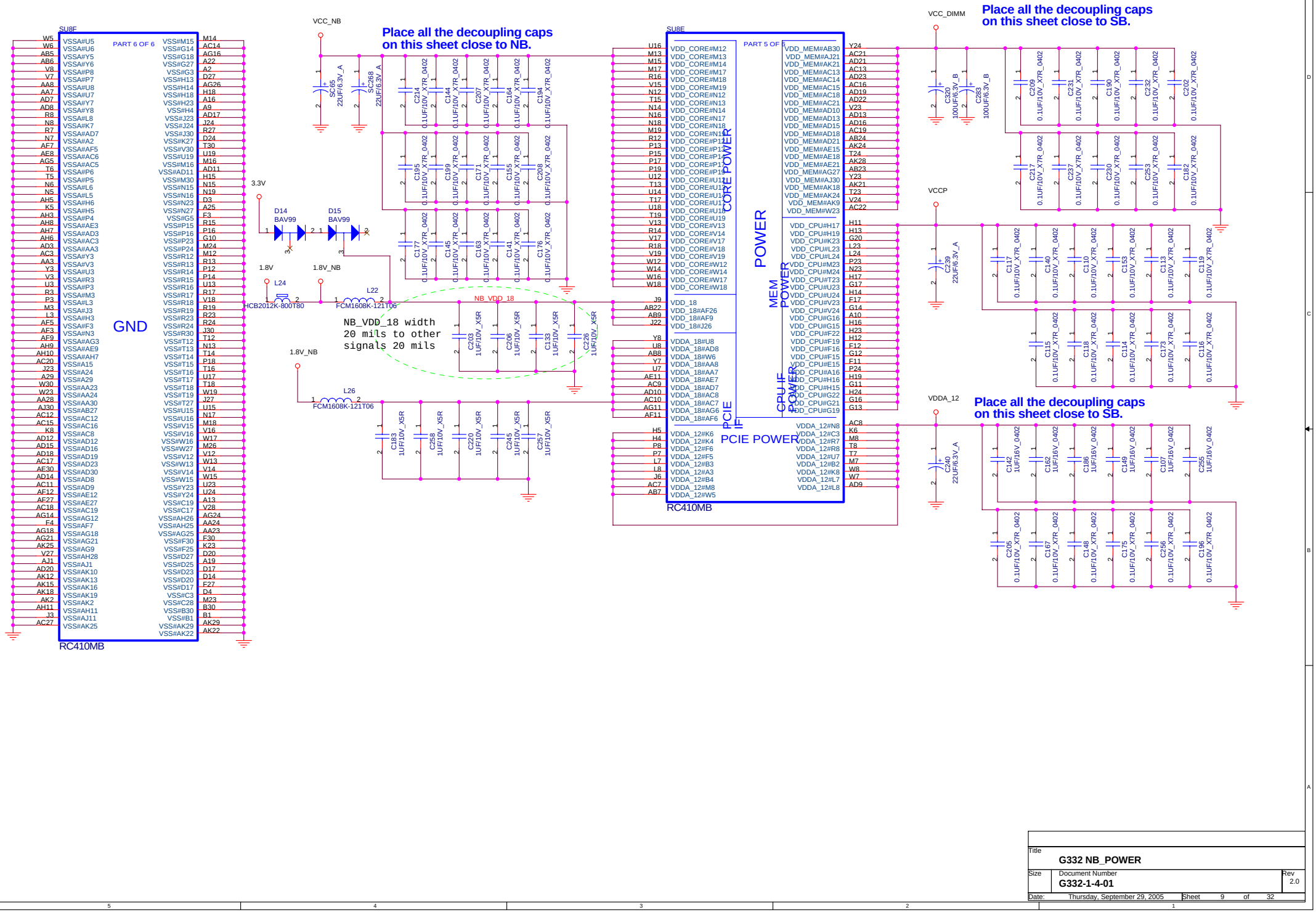

Title	G332 NB_POWER	
Size	Document Number G332-1-4-01	Rev 2.0
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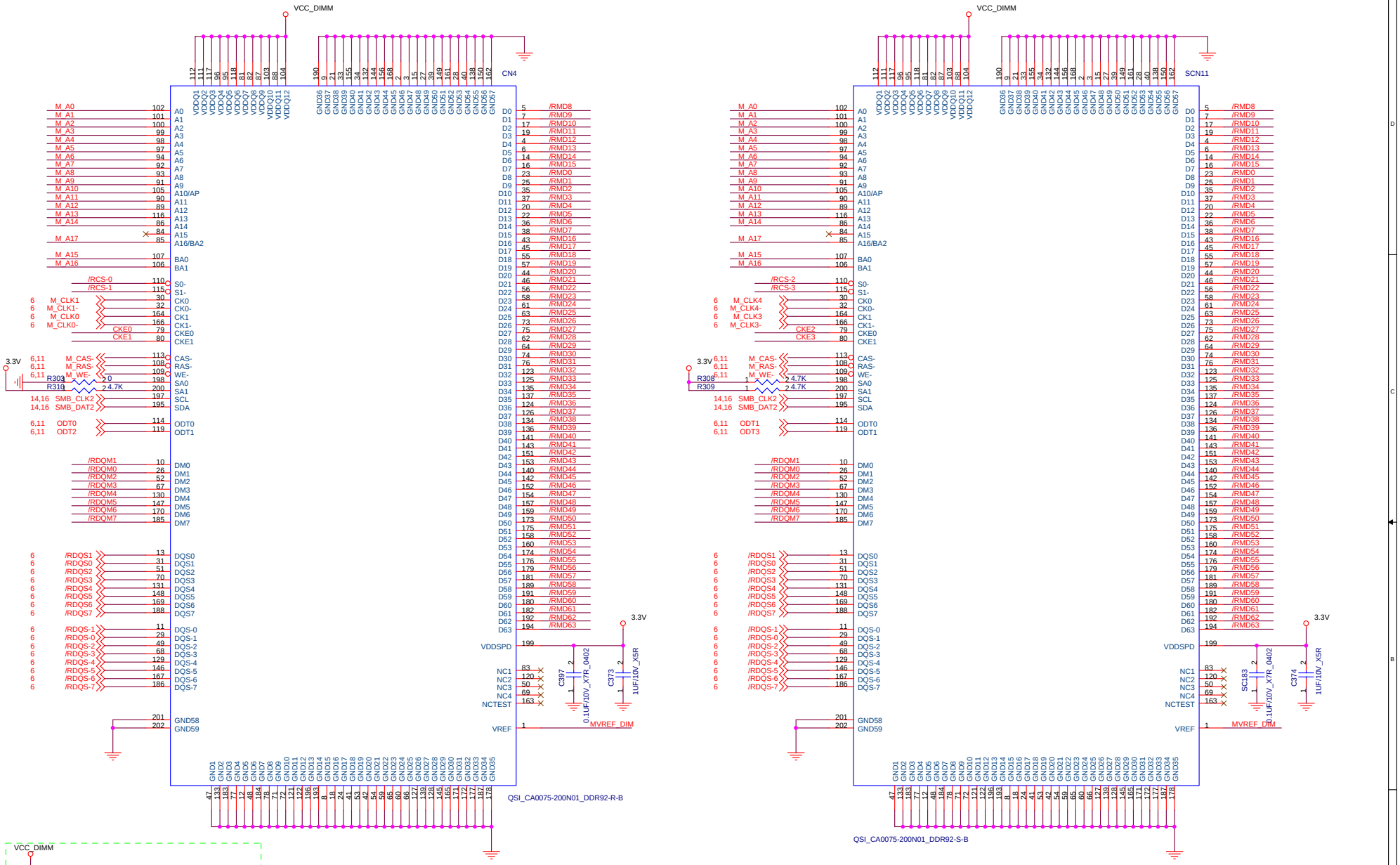
VCC_DIMM
CN4
SCN11
QSI_CA0075-200N01_DDR92-R-B
QSI_CA0075-200N01_DDR92-S-B
3.3V
MVREF_DIM
R62,R64,C123,SC27,C124,C125 place close SCN1.1 SCN2.1 , MVREF 10 mils , to other signal 20 mils
AS CLOSE AS POSSIBLE TO DIMM
Title
G332 SO-DIMM
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Document Number
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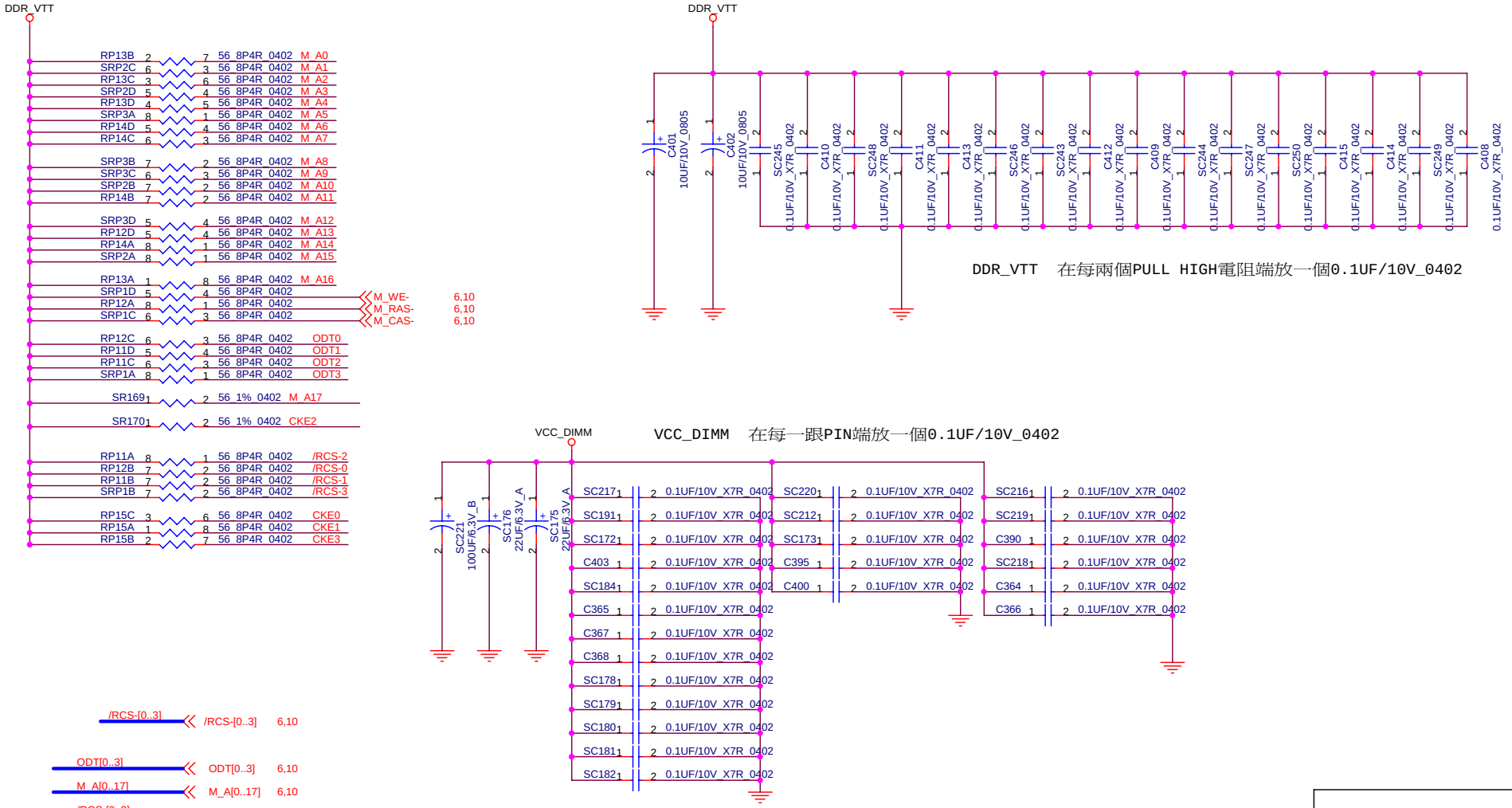
DDR_VTT
RP13B 2 7 56_8P4R_0402 M_A0
SRP2C 6 3 56_8P4R_0402 M_A1
RP13C 3 6 56_8P4R_0402 M_A2
SRP2D 5 4 56_8P4R_0402 M_A3
RP13D 4 5 56_8P4R_0402 M_A4
SRP3A 8 1 56_8P4R_0402 M_A5
RP14D 5 4 56_8P4R_0402 M_A6
RP14C 6 3 56_8P4R_0402 M_A7
SRP3B 7 2 56_8P4R_0402 M_A8
SRP3C 6 3 56_8P4R_0402 M_A9
SRP2B 7 2 56_8P4R_0402 M_A10
RP14B 7 2 56_8P4R_0402 M_A11
SRP3D 5 4 56_8P4R_0402 M_A12
RP12D 5 4 56_8P4R_0402 M_A13
RP14A 8 1 56_8P4R_0402 M_A14
SRP2A 8 1 56_8P4R_0402 M_A15
RP13A 1 8 56_8P4R_0402 M_A16
SRP1D 5 4 56_8P4R_0402
RP12A 8 1 56_8P4R_0402
SRP1C 6 3 56_8P4R_0402
M_WE- 6,10
M_RAS- 6,10
M_CAS- 6,10
RP12C 6 3 56_8P4R_0402 ODT0
RP11D 5 4 56_8P4R_0402 ODT1
RP11C 6 3 56_8P4R_0402 ODT2
SRP1A 8 1 56_8P4R_0402 ODT3
SR169 1 2 56_1%_0402 M_A17
SR170 1 2 56_1%_0402 CKE2
RP11A 8 1 56_8P4R_0402 /RCS-2
RP12B 7 2 56_8P4R_0402 /RCS-0
RP11B 7 2 56_8P4R_0402 /RCS-1
SRP1B 7 2 56_8P4R_0402 /RCS-3
RP15C 3 6 56_8P4R_0402 CKE0
RP15A 1 8 56_8P4R_0402 CKE1
RP15B 2 7 56_8P4R_0402 CKE3
/RCS-[0..3]
/RCS-[0..3] 6,10
ODT[0..3]
ODT[0..3] 6,10
M_A[0..17]
M_A[0..17] 6,10
/RCS-[0..3]
/RCS-[0..3] 6,10
CKE[0..3]
CKE[0..3] 6,10
DDR_VTT
C401 10UF/10V_0805
C402 10UF/10V_0805
SC245 0.1UF/10V_X7R_0402
C410 0.1UF/10V_X7R_0402
SC248 0.1UF/10V_X7R_0402
C411 0.1UF/10V_X7R_0402
C413 0.1UF/10V_X7R_0402
SC246 0.1UF/10V_X7R_0402
SC243 0.1UF/10V_X7R_0402
C412 0.1UF/10V_X7R_0402
C409 0.1UF/10V_X7R_0402
SC244 0.1UF/10V_X7R_0402
SC247 0.1UF/10V_X7R_0402
SC250 0.1UF/10V_X7R_0402
C415 0.1UF/10V_X7R_0402
C414 0.1UF/10V_X7R_0402
SC249 0.1UF/10V_X7R_0402
C408 0.1UF/10V_X7R_0402
DDR_VTT 在每兩個PULL HIGH電阻端放一個0.1UF/10V_0402
VCC_DIMM
VCC_DIMM 在每一跟PIN端放一個0.1UF/10V_0402
SC221 100UF/6.3V_B
SC176 22UF/6.3V_A
SC175 22UF/6.3V_A
SC217 SC220 SC216
SC191 SC212 SC219
SC172 SC173 C390
C403 C395 SC218
SC184 C400 C364
C365 C366
C367
C368
SC178
SC179
SC180
SC181
SC182
0.1UF/10V_X7R_0402
Title
G332 DDR_VTT CAP
Size
Document Number
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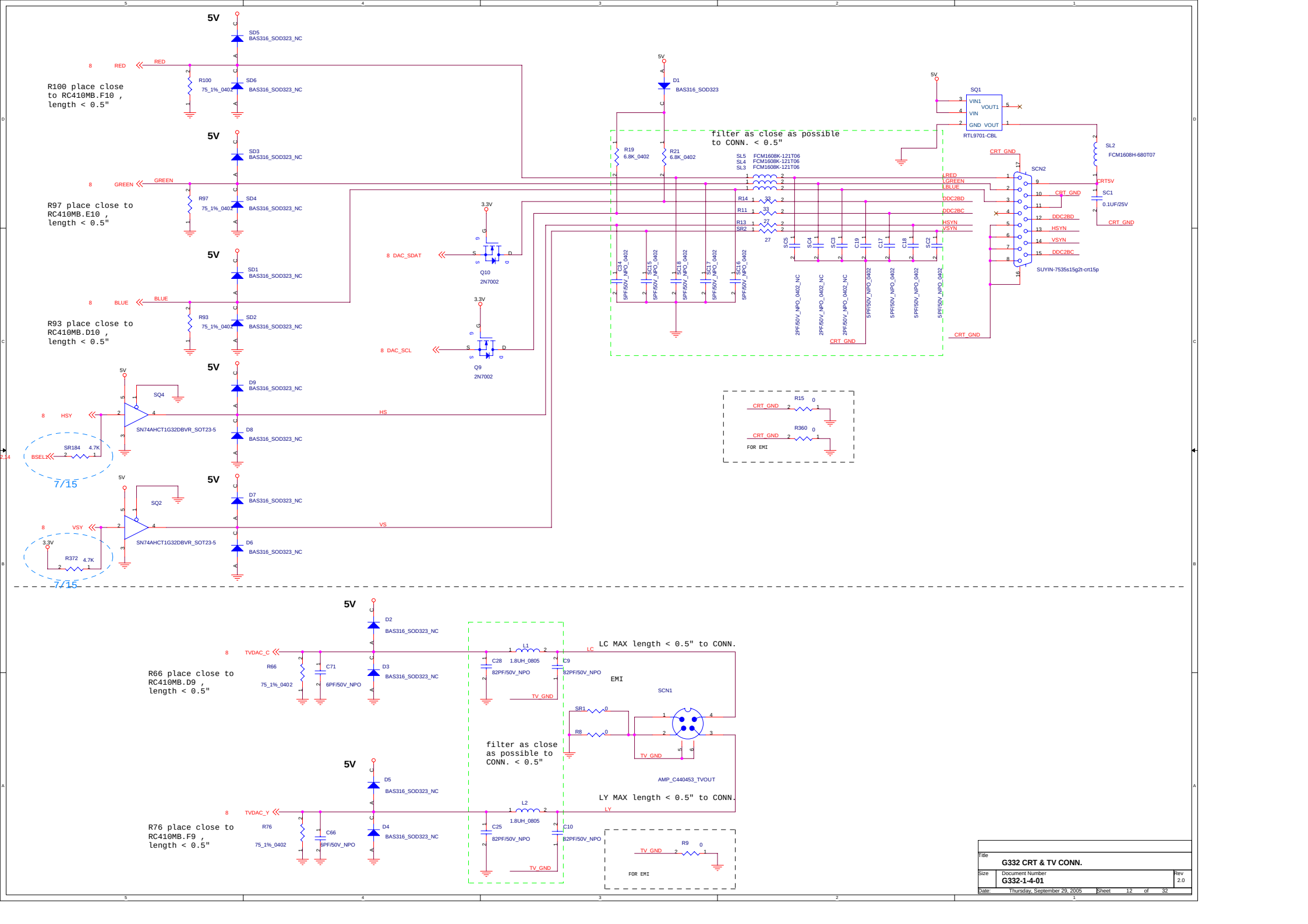
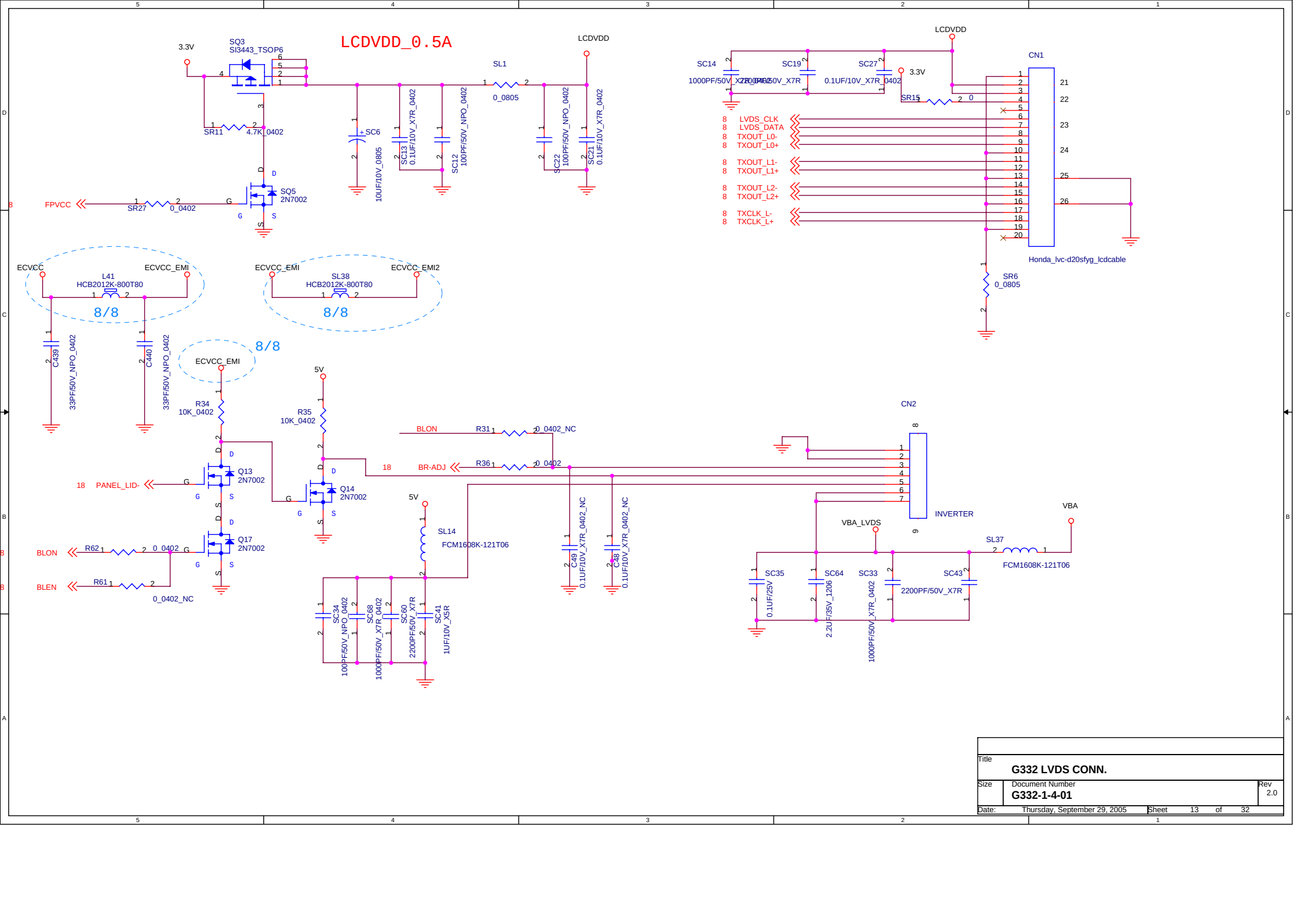

5V
SD5
BAS316_SOD323_NC
8 RED
RED
R100
75_1%_0402
SD6
BAS316_SOD323_NC
R100 place close to RC410MB.F10 , length < 0.5"
SD3
BAS316_SOD323_NC
8 GREEN
GREEN
R97
75_1%_0402
SD4
BAS316_SOD323_NC
R97 place close to RC410MB.E10 , length < 0.5"
SD1
BAS316_SOD323_NC
8 BLUE
BLUE
R93
75_1%_0402
SD2
BAS316_SOD323_NC
R93 place close to RC410MB.D10 , length < 0.5"
D9
BAS316_SOD323_NC
SQ4
SN74AHCT1G32DBVR_SOT23-5
8 HSY
HS
D8
BAS316_SOD323_NC
SR184 4.7K
BSEL1
7/15
D7
BAS316_SOD323_NC
SQ2
SN74AHCT1G32DBVR_SOT23-5
8 VSY
VS
3.3V
R372 4.7K
D6
BAS316_SOD323_NC
7/15
D1
BAS316_SOD323
R19 6.8K_0402
R21 6.8K_0402
filter as close as possible to CONN. < 0.5"
SL5 FCM1608K-121T06
SL4 FCM1608K-121T06
SL3 FCM1608K-121T06
R14 33
R11 33
R13 27
SR2 27
LRED
LGREEN
LBLUE
DDC2BD
DDC2BC
HSYN
VSYN
SC5 SC4 SC3 C19 C17 C18 SC2
SC14 SC15 SC18 SC17 SC16
5PF/50V_NPO_0402
2PF/50V_NPO_0402_NC
CRT_GND
SQ1
VIN1
VOUT1
VIN
GND VOUT
RTL9701-CBL
SCN2
SUYIN-7535s15g2t-crt15p
SL2
FCM1608H-680T07
CRTSV
SC1
0.1UF/25V
8 DAC_SDAT
8 DAC_SCL
Q10
Q9
2N7002
R15 0
R360 0
FOR EMI
D2
D3
D5
D4
BAS316_SOD323_NC
8 TVDAC_C
8 TVDAC_Y
R66
R76
75_1%_0402
C71
C66
6PF/50V_NPO
R66 place close to RC410MB.D9 , length < 0.5"
R76 place close to RC410MB.F9 , length < 0.5"
L1
L2
1.8UH_0805
C28
C25
C9
C10
82PF/50V_NPO
TV_GND
LC
LY
LC MAX length < 0.5" to CONN.
LY MAX length < 0.5" to CONN.
filter as close as possible to CONN. < 0.5"
EMI
SCN1
SR1
R8
AMP_C440453_TVOUT
R9
Title
G332 CRT & TV CONN.
Size
Document Number
G332-1-4-01
Rev
2.0
Date: Thursday, September 29, 2005
Sheet 12 of 32


LCDVDD_0.5A
3.3V
SQ3
SI3443_TSOP6
SR11
4.7K_0402
SC6
10UF/10V_0805
SC13
0.1UF/10V_X7R_0402
SC12
100PF/50V_NPO_0402
SL1
0_0805
SC22
100PF/50V_NPO_0402
SC21
0.1UF/10V_X7R_0402
LCDVDD
FPVCC
SR27
0_0402
SQ5
2N7002
SC14
1000PF/50V_X7R_0402
SC19
0.1UF/10V_X7R_0402
SC27
0.1UF/10V_X7R_0402
SR15
0
CN1
LVDS_CLK
LVDS_DATA
TXOUT_L0-
TXOUT_L0+
TXOUT_L1-
TXOUT_L1+
TXOUT_L2-
TXOUT_L2+
TXCLK_L-
TXCLK_L+
Honda_lvc-d20sfyg_lcdcable
SR6
0_0805
ECVCC
L41
HCB2012K-800T80
ECVCC_EMI
8/8
SL38
HCB2012K-800T80
ECVCC_EMI2
C439
33PF/50V_NPO_0402
C440
33PF/50V_NPO_0402
R34
10K_0402
R35
10K_0402
5V
BLON
R31
0_0402_NC
18
BR-ADJ
R36
0_0402
CN2
INVERTER
VBA
VBA_LVDS
SL37
FCM1608K-121T06
18
PANEL_LID-
Q13
2N7002
Q14
2N7002
Q17
2N7002
R62
0_0402
BLEN
R61
0_0402_NC
SL14
FCM1608K-121T06
C49
0.1UF/10V_X7R_0402_NC
C48
0.1UF/10V_X7R_0402_NC
SC34
100PF/50V_NPO_0402
SC68
1000PF/50V_X7R_0402
SC60
2200PF/50V_X7R
SC41
1UF/10V_X5R
SC35
0.1UF/25V
SC64
2.2UF/35V_1206
SC33
1000PF/50V_X7R_0402
SC43
2200PF/50V_X7R
Title
G332 LVDS CONN.
Size
Document Number
G332-1-4-01
Rev
2.0
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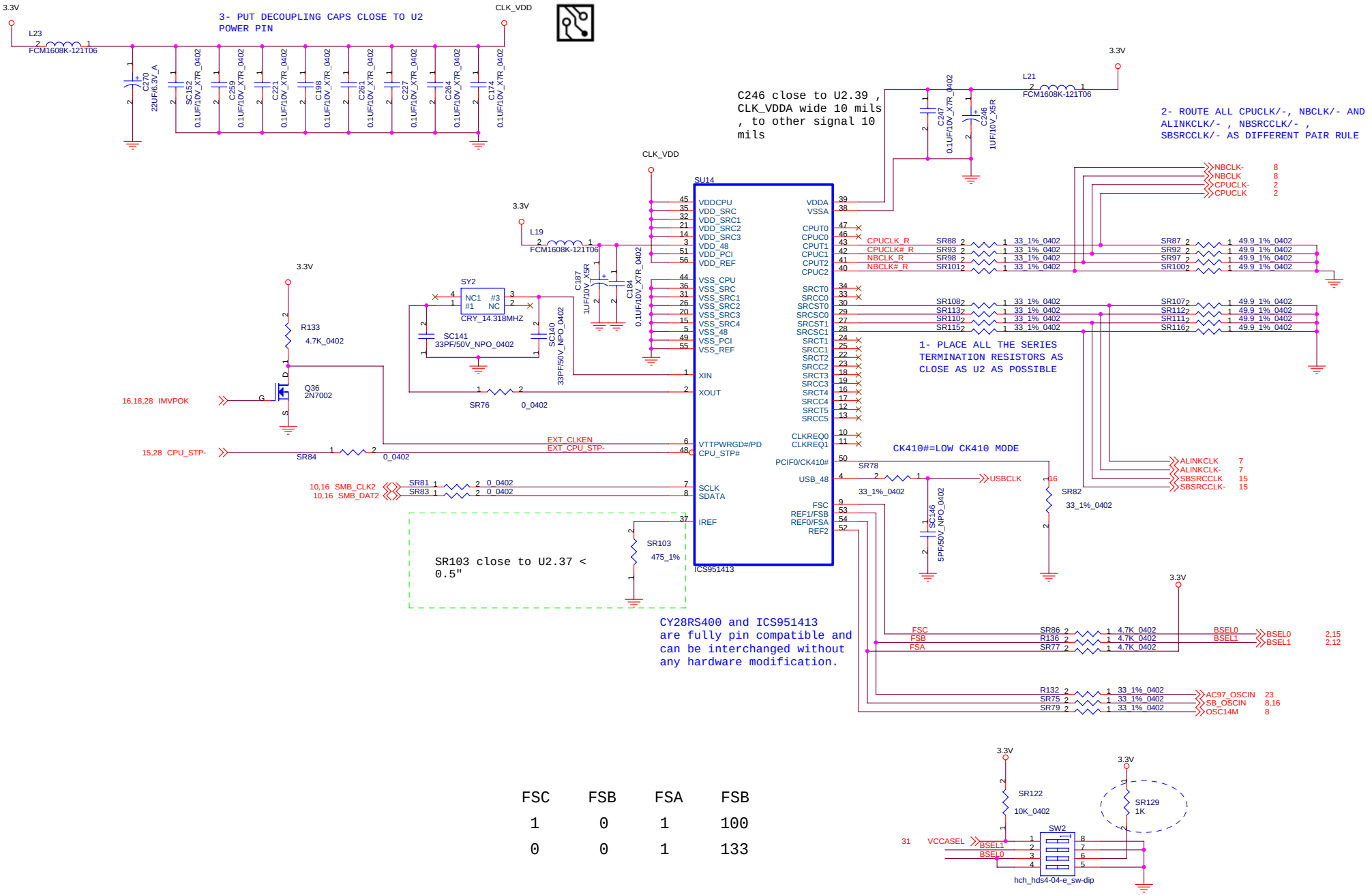
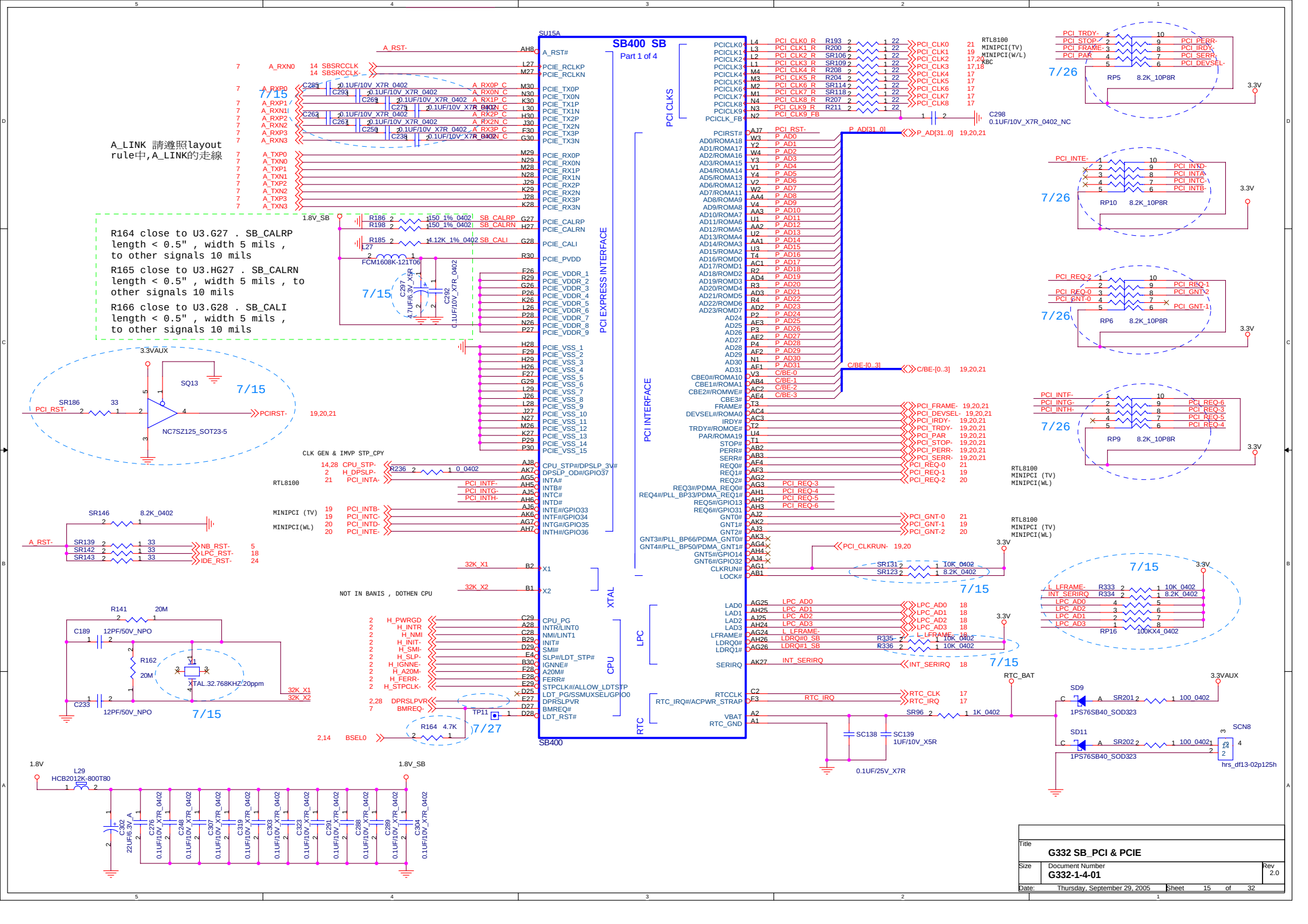
of
32



FSC	FSB	FSA	FSB
1	0	1	100
0	0	1	133

Title	G332 CLK_GEN	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 14 of 32	


SB400 SB
Part 1 of 4
SB400
A_LINK 請遵照layout rule中,A_LINK的走線
R164 close to U3.G27 . SB_CALRP length < 0.5" , width 5 mils , to other signals 10 mils
R165 close to U3.HG27 . SB_CALRN length < 0.5" , width 5 mils , to other signals 10 mils
R166 close to U3.G28 . SB_CALI length < 0.5" , width 5 mils , to other signals 10 mils
PCI EXPRESS INTERFACE
PCI INTERFACE
PCI CLKS
LPC
CPU
RTC
XTAL
NOT IN BANIS , DOTHEN CPU
CLK GEN & IMVP STP_CPY
RTL8100
MINIPCI (TV)
MINIPCI(WL)
XTAL.32.768KHZ/20ppm
NC7SZ125_SOT23-5
SC138
SC139
1PS76SB40_SOD323
hrs_df13-02p125h
Title
G332 SB_PCI & PCIE
Size
Document Number
G332-1-4-01
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2.0
Date: Thursday, September 29, 2005
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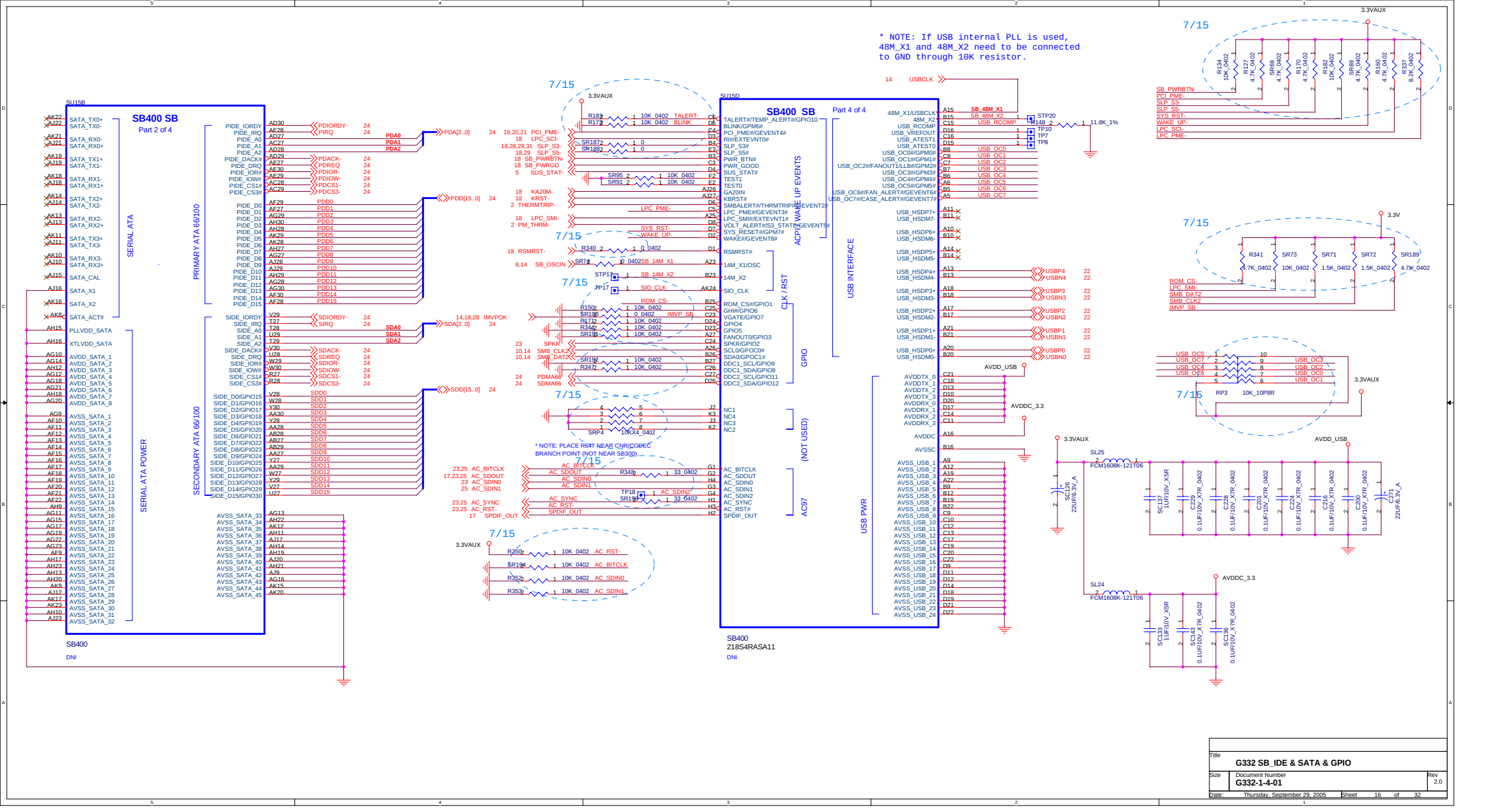
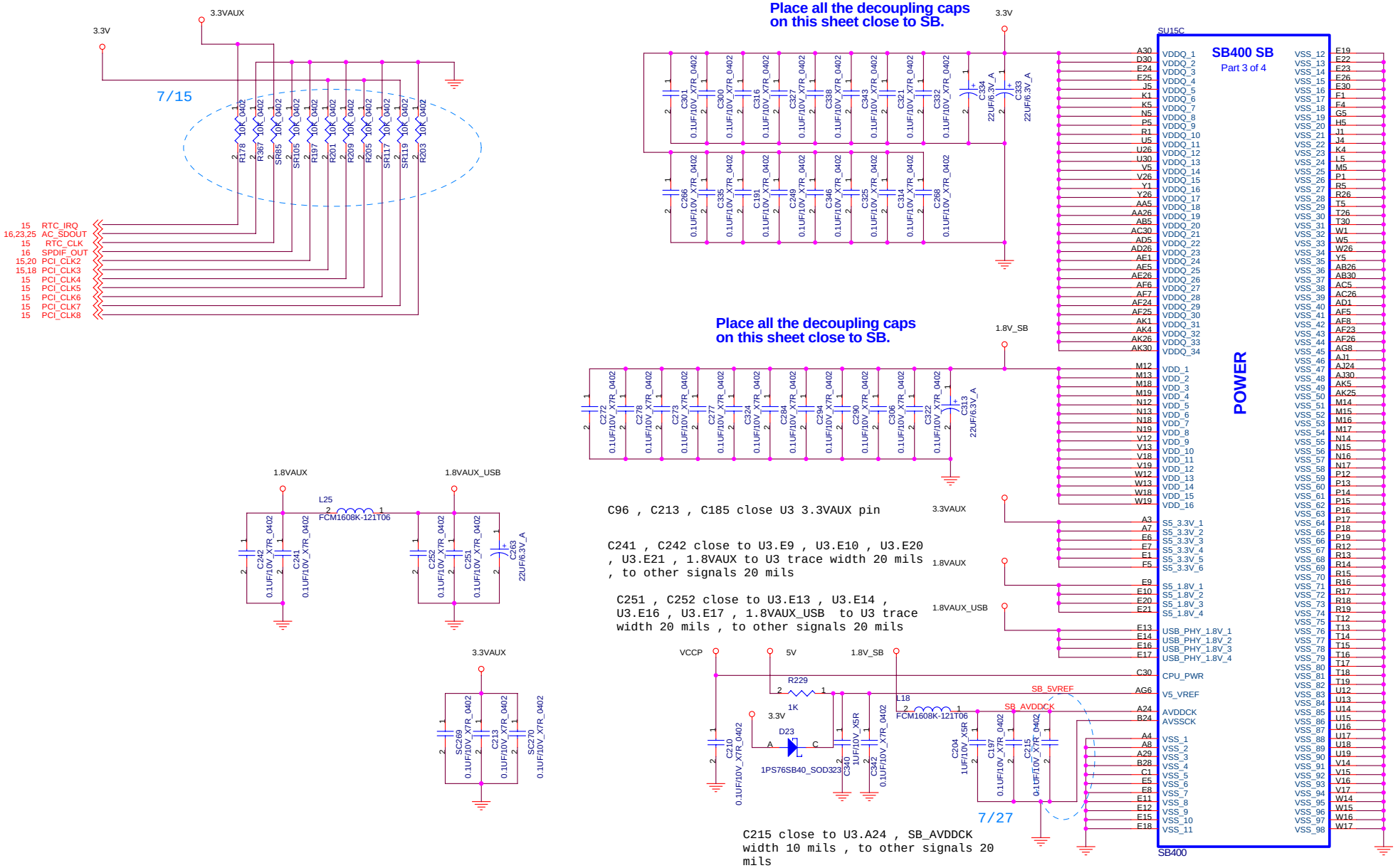
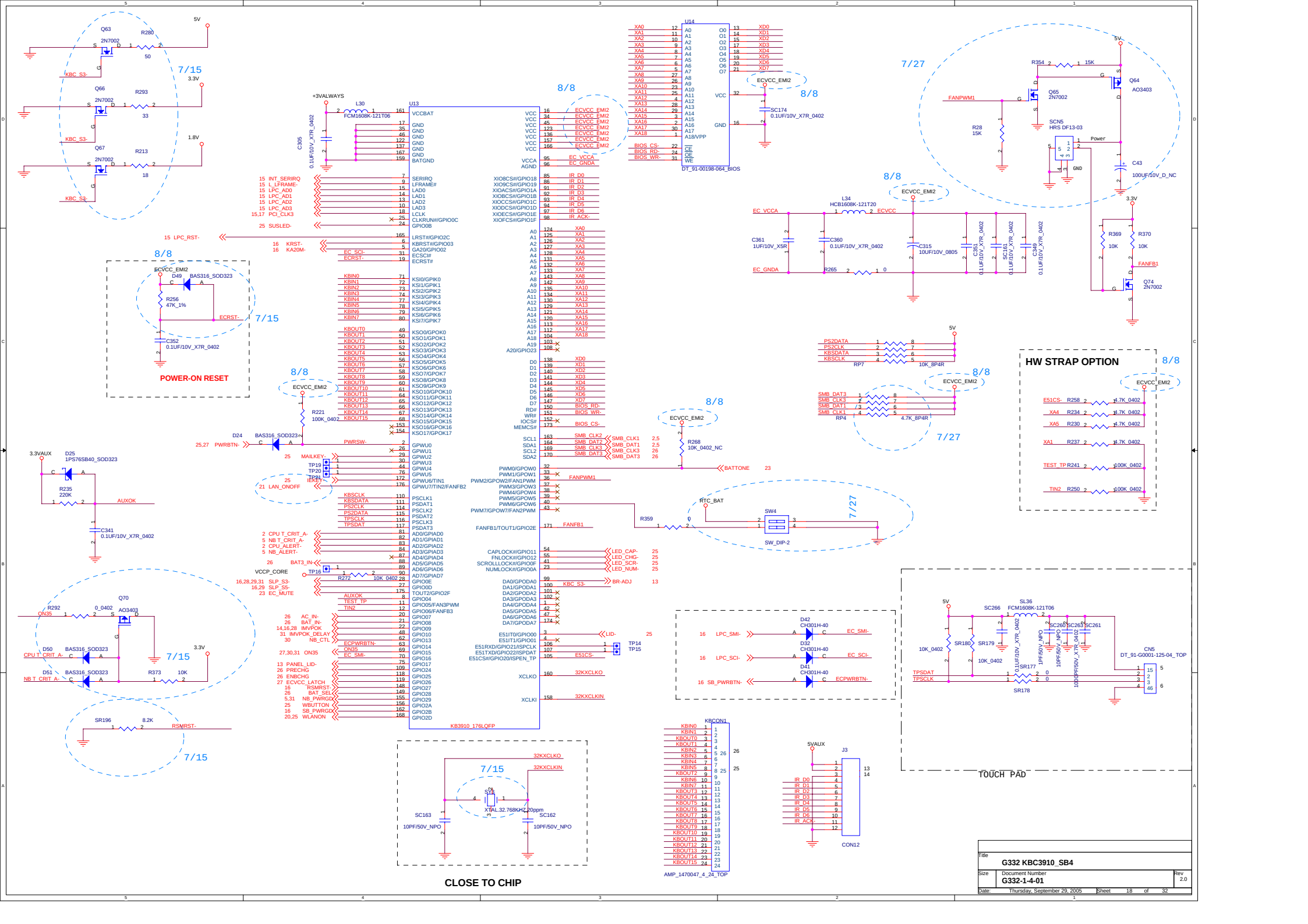

* NOTE: If USB internal PLL is used, 48M_X1 and 48M_X2 need to be connected to GND through 10K resistor.
SB400 SB
Part 2 of 4
SERIAL ATA
PRIMARY ATA 66/100
SECONDARY ATA 66/100
SERIAL ATA POWER
SB400
DNI
SB400 SB
Part 4 of 4
ACPI WAKE UP EVENTS
USB INTERFACE
CLK / RST
GPIO
(NOT USED)
AC97
USB PWR
SB400
218S4RASA11
DNI
3.3VAUX
AVDD_USB
AVDDC_3.3
Title
G332 SB_IDE & SATA & GPIO
Size
Document Number
G332-1-4-01
Rev
2.0
Date: Thursday, September 29, 2005
Sheet 16 of 32



Title	G332 SB_POWER	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 17 of 32	



Title	G332 KBC3910_SB4
Size	Document Number G332-1-4-01
Rev	2.0
Date:	Thursday, September 29, 2005
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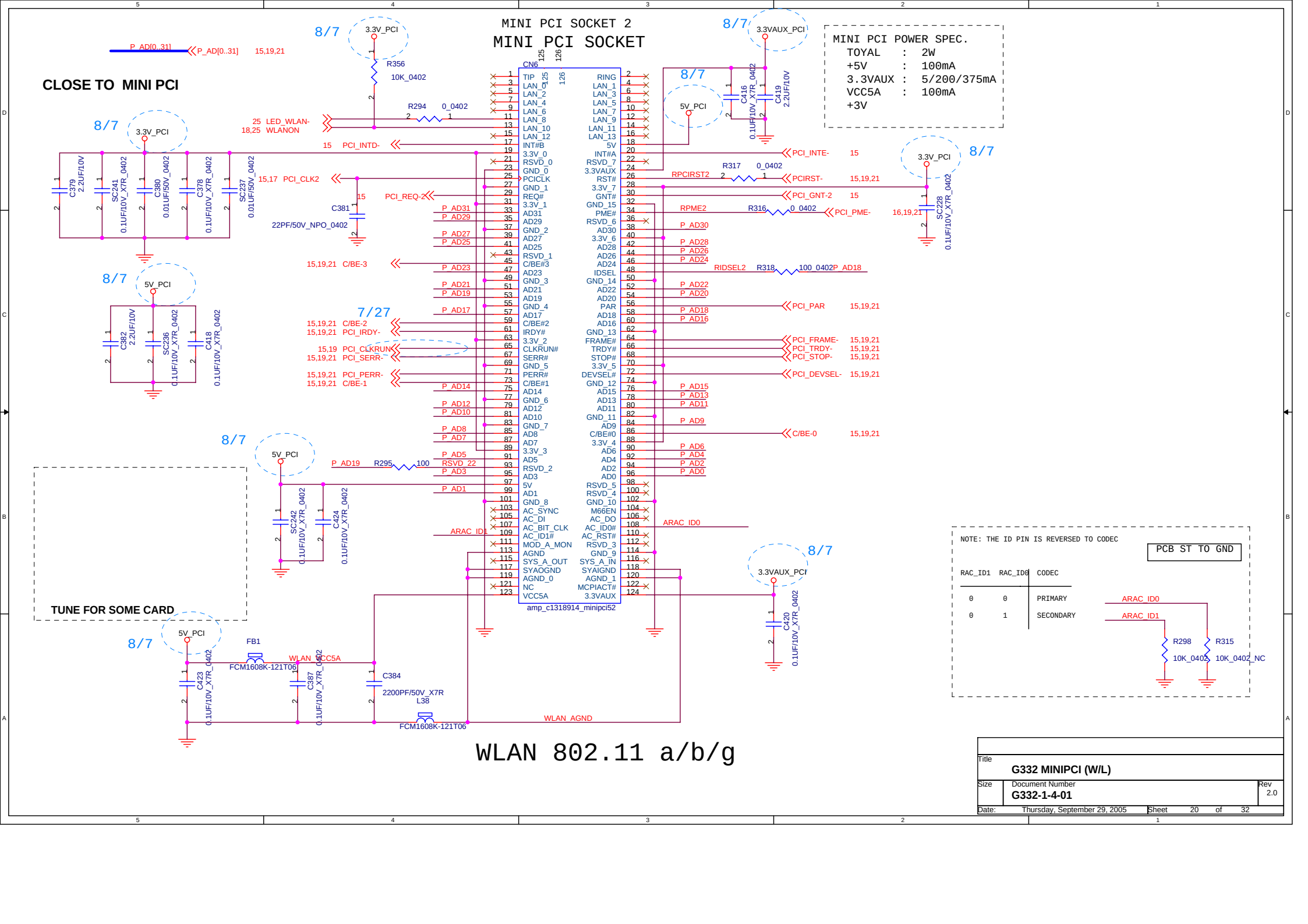
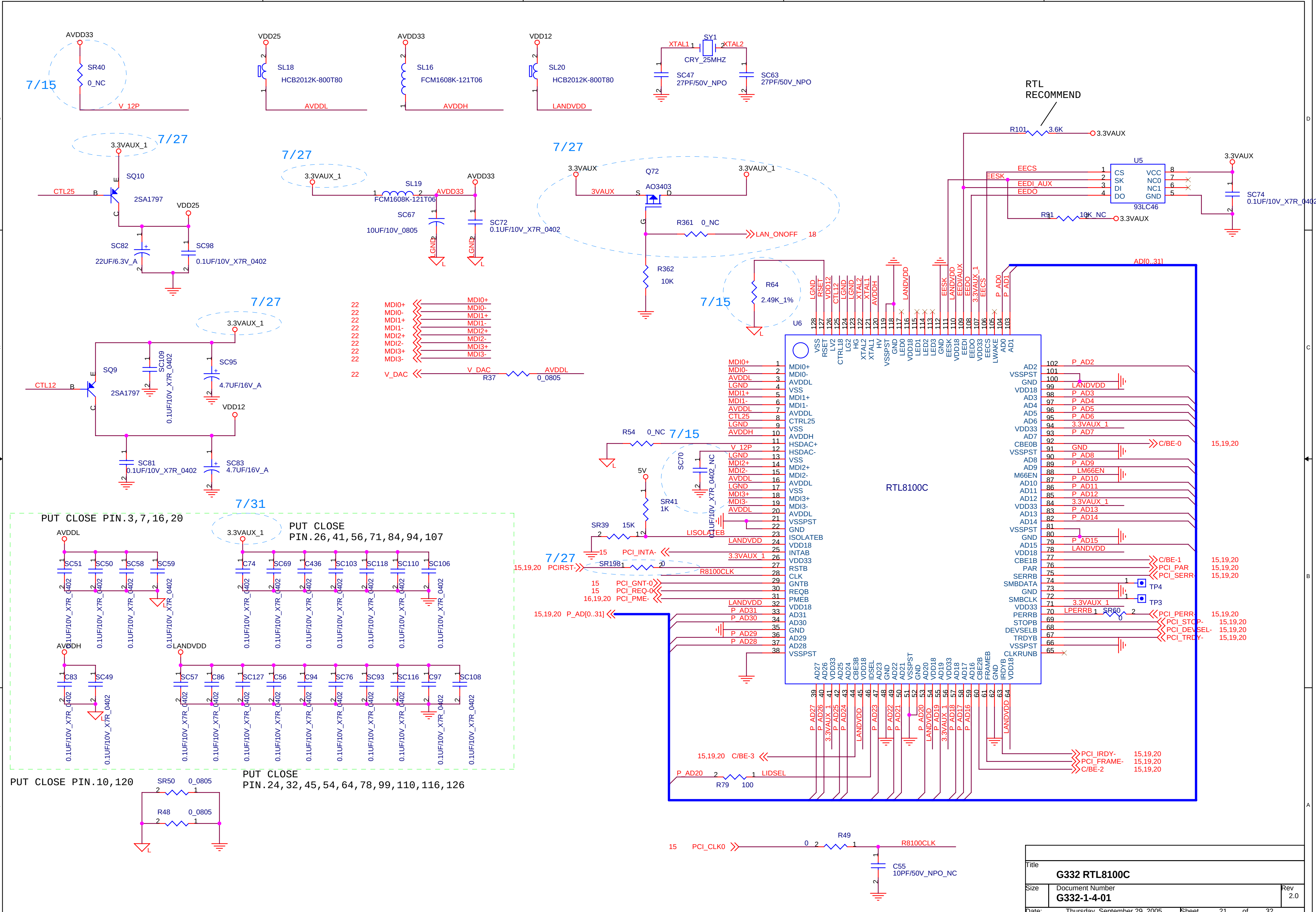
MINI PCI SOCKET 1

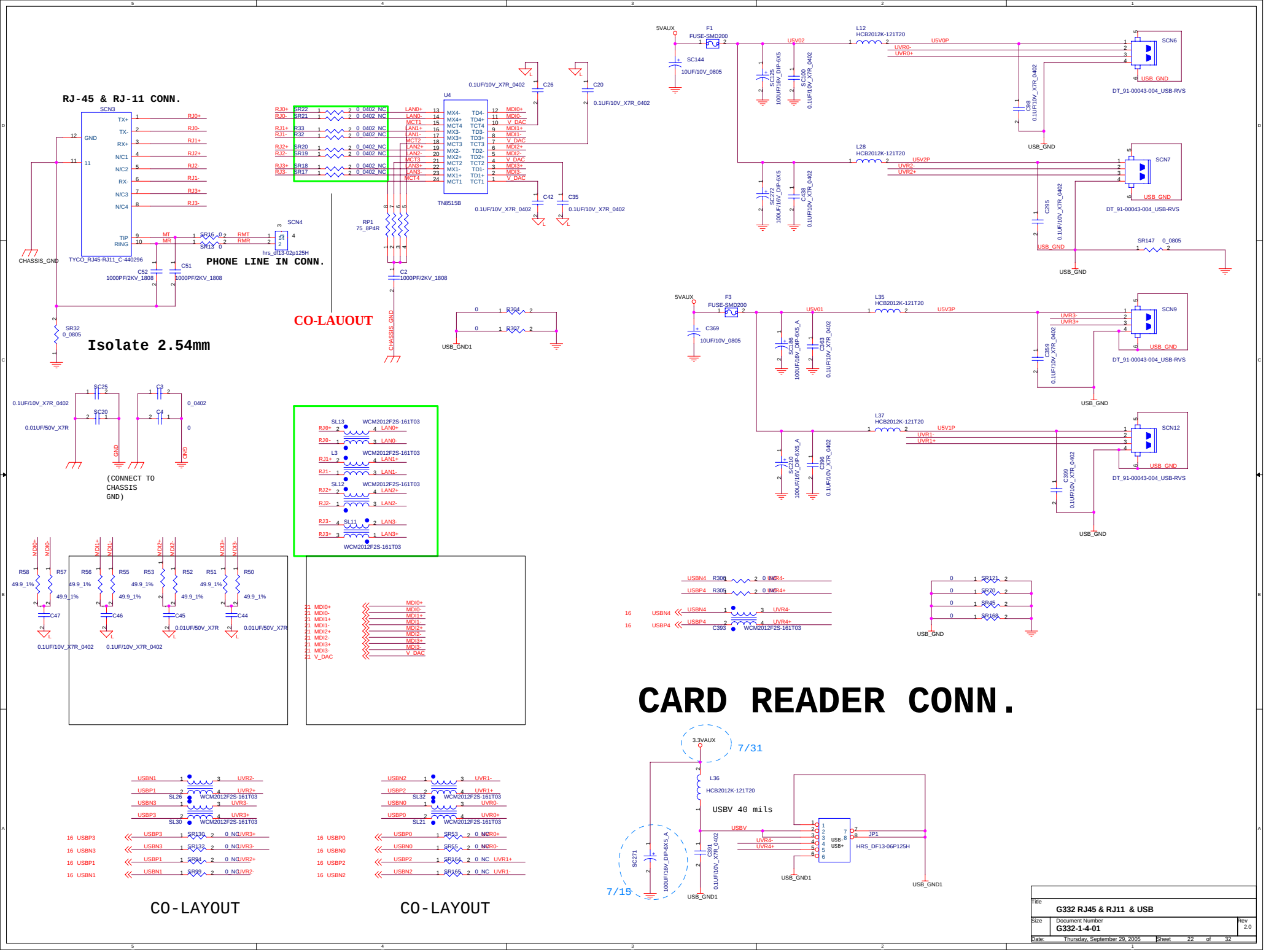

MINI PCI SOCKET 2
MINI PCI SOCKET
CLOSE TO MINI PCI
MINI PCI POWER SPEC.
TOYAL : 2W
+5V : 100mA
3.3VAUX : 5/200/375mA
VCC5A : 100mA
+3V
CN6
amp_c1318914_minipci52
TUNE FOR SOME CARD
NOTE: THE ID PIN IS REVERSED TO CODEC
PCB ST TO GND
RAC_ID1 RAC_ID0 CODEC
0 0 PRIMARY
0 1 SECONDARY
WLAN 802.11 a/b/g
Title
G332 MINIPCI (W/L)
Size
Document Number
G332-1-4-01
Rev
2.0
Date: Thursday, September 29, 2005
Sheet 20 of 32



Title
G332 RTL8100C

Size	Document Number	Rev
	G332-1-4-01	2.0

Date: Thursday, September 29, 2005 Sheet 21 of 32


RJ-45 & RJ-11 CONN.
PHONE LINE IN CONN.
CO-LAUOUT
Isolate 2.54mm
(CONNECT TO CHASSIS GND)
CARD READER CONN.
CO-LAYOUT
CO-LAYOUT
USBV 40 mils
7/31
7/15
TYCO_RJ45-RJ11_C-440296
hrs_df13-02p125H
TN8515B
HRS_DF13-06P125H
DT_91-00043-004_USB-RVS
WCM2012F2S-161T03
HCB2012K-121T20
FUSE-SMD200
CHASSIS_GND
USB_GND
USB_GND1
5VAUX
3.3VAUX
Title
G332 RJ45 & RJ11 & USB
Size
Document Number
G332-1-4-01
Rev
2.0
Date:
Thursday, September 29, 2005
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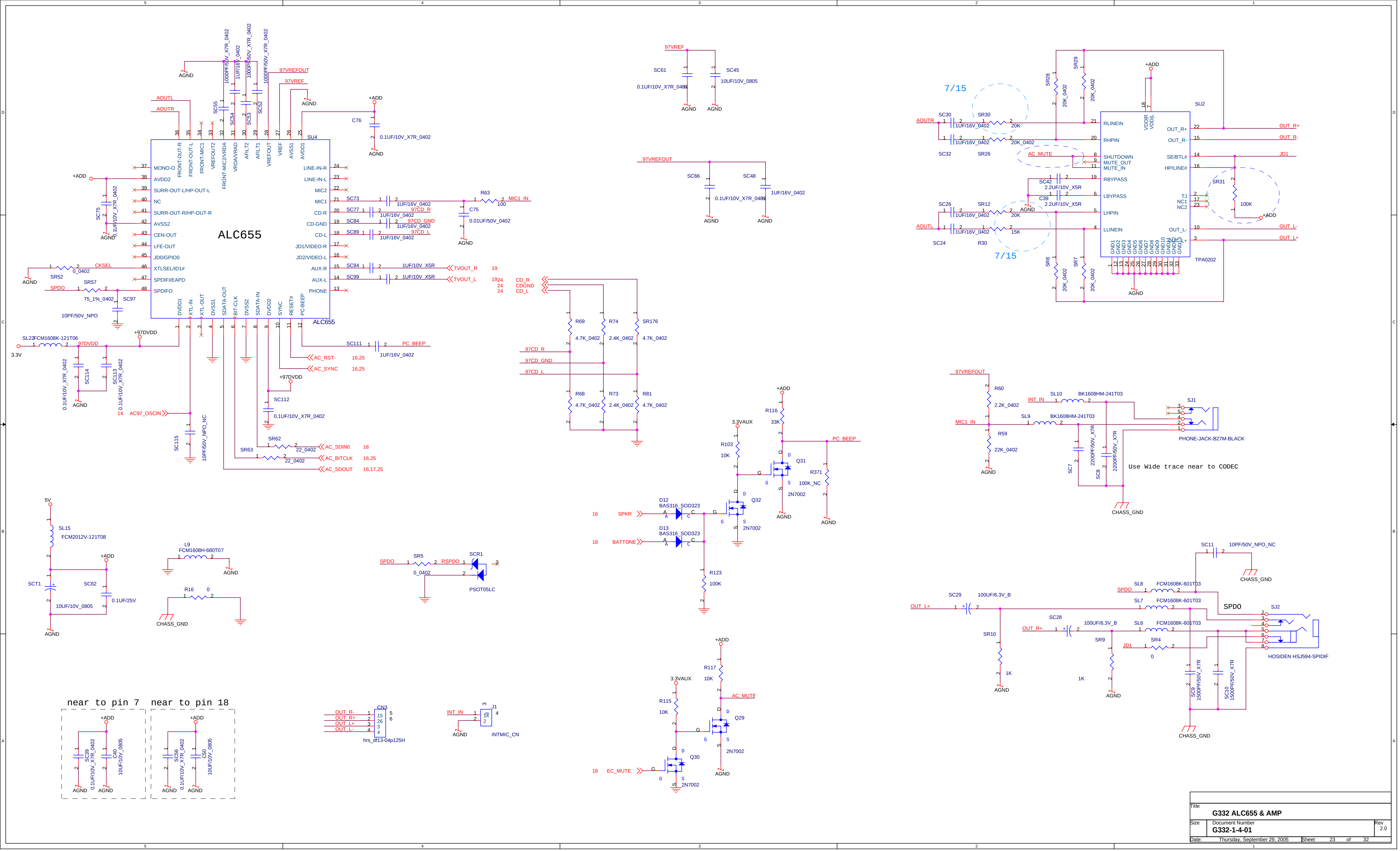
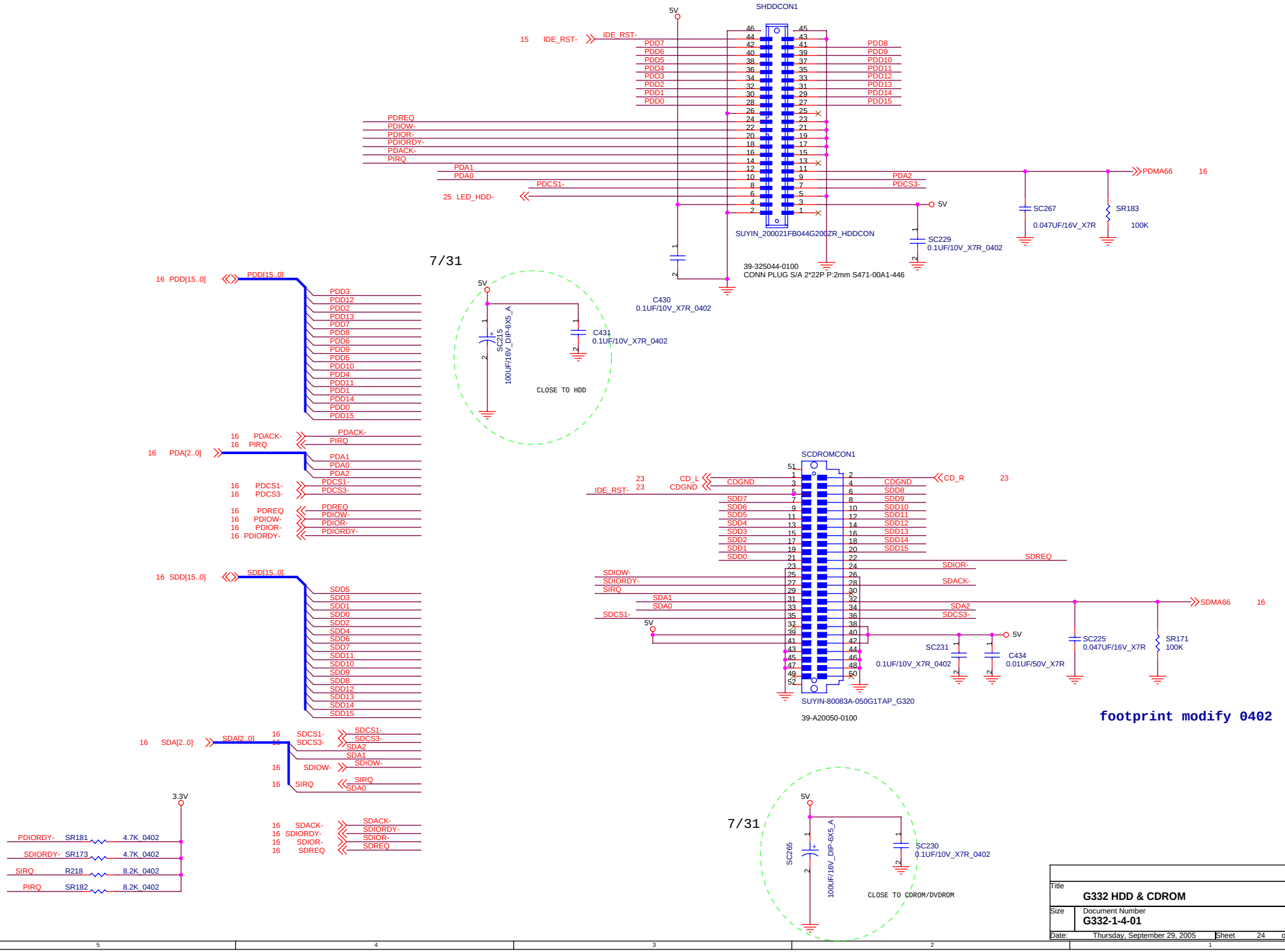
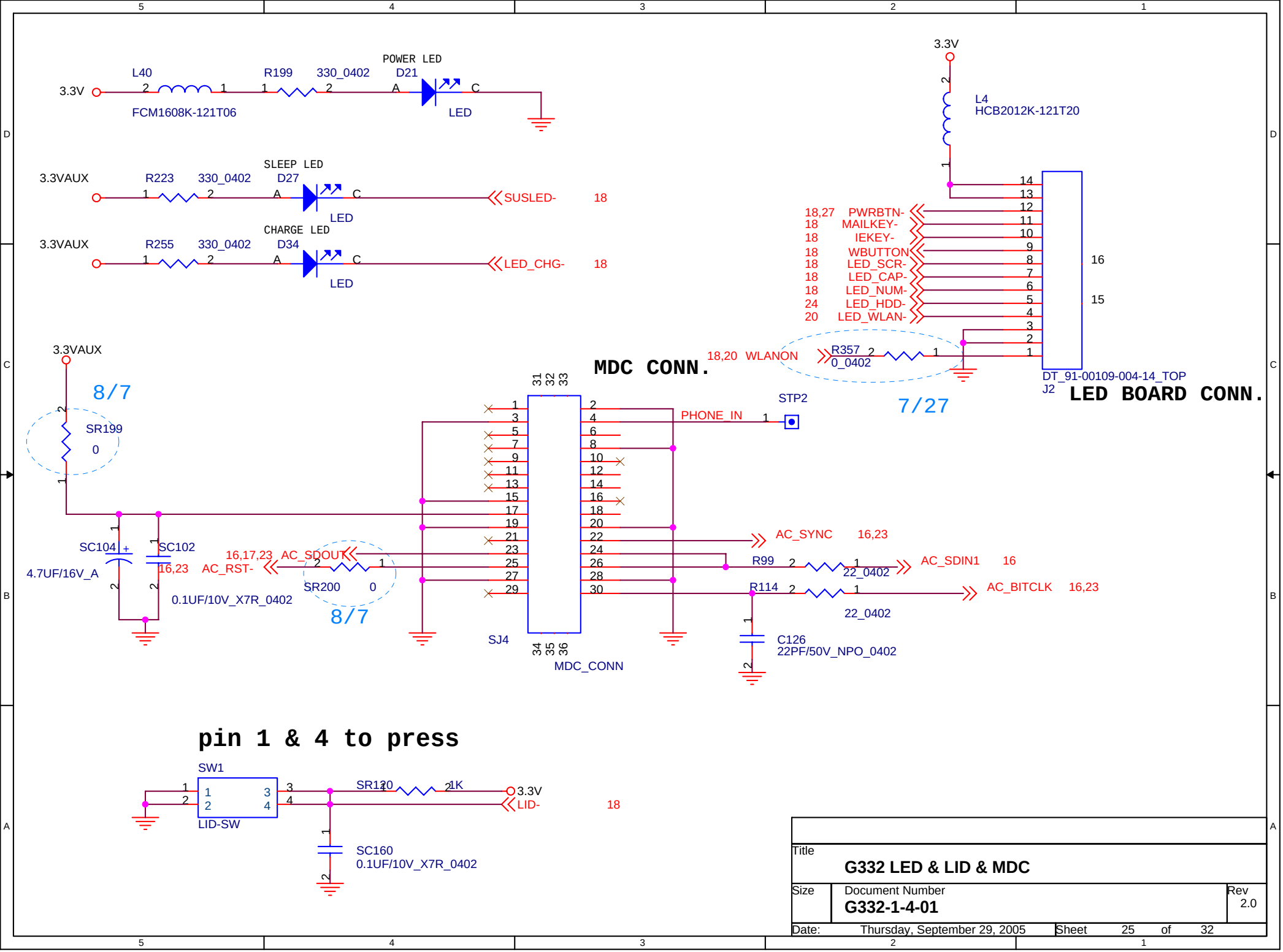
22
of
32

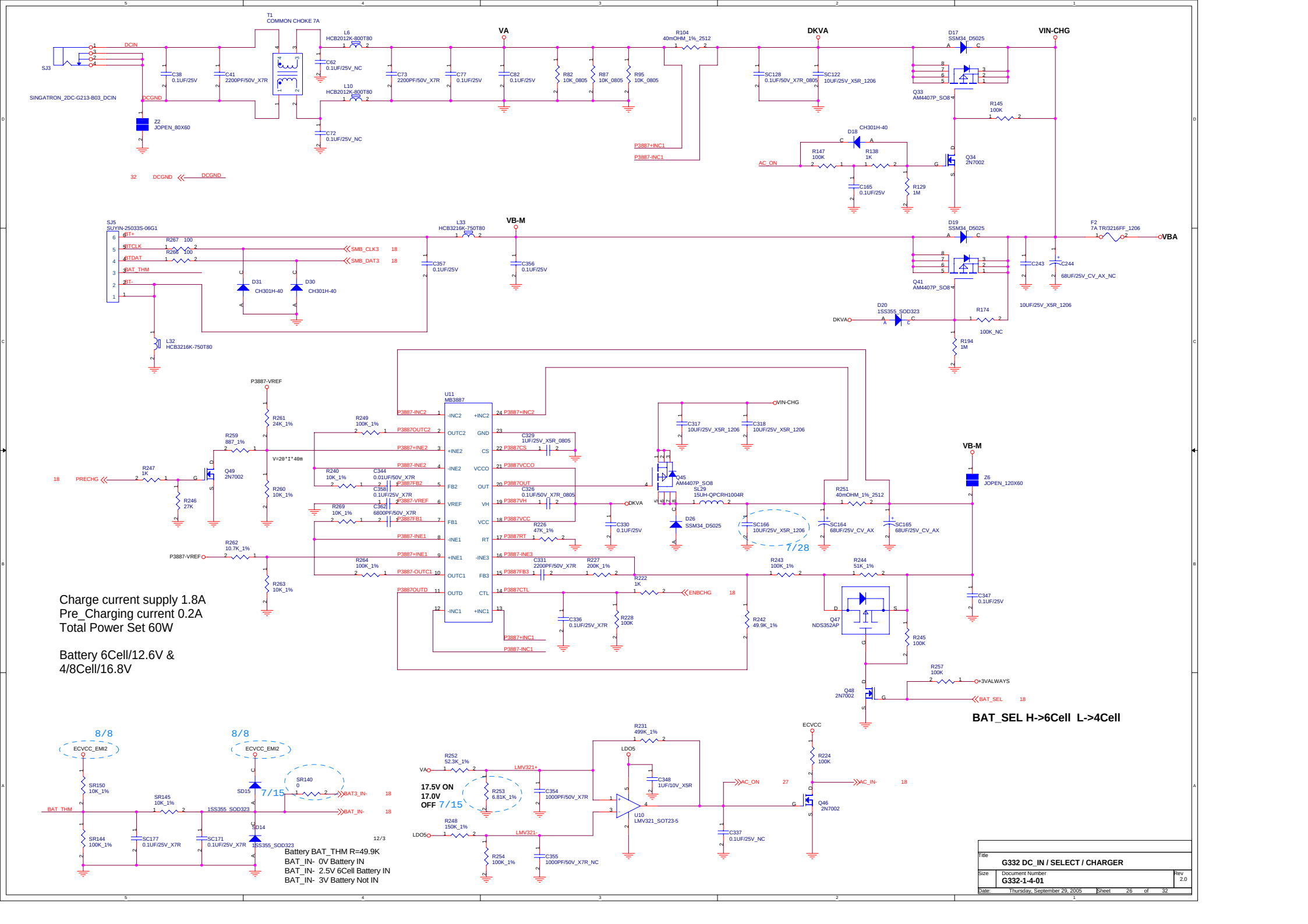

ALC655
SU4
TPA0202
SU2
7/15
near to pin 7
near to pin 18
Use Wide trace near to CODEC
PHONE-JACK-B27M-BLACK
HOSIDEN HSJ594-SPIDIF
SPDO
hrs_df13-04p125H
INTMIC_CN
PSOT05LC
2N7002
BAS316_SOD323
AC_MUTE
97VREFOUT
97VREF
AOUTL
AOUTR
PC_BEEP
AC_RST-
AC_SYNC
AC_SDIN0
AC_BITCLK
AC_SDOUT
AC97_OSCIN
TVOUT_R
TVOUT_L
CD_R
CDGND
CD_L
MIC1_IN
INT_IN
SPKR
BATTONE
EC_MUTE
OUT_R+
OUT_R-
OUT_L+
OUT_L-
JD1
CHASS_GND
AGND
+ADD
+97DVDD
3.3VAUX
Title
G332 ALC655 & AMP
Size
Document Number
G332-1-4-01
Rev
2.0
Date: Thursday, September 29, 2005
Sheet 23 of 32


SHDDCON1
5V
15 IDE_RST-
IDE_RST-
PDD7 PDD6 PDD5 PDD4 PDD3 PDD2 PDD1 PDD0
PDD8 PDD9 PDD10 PDD11 PDD12 PDD13 PDD14 PDD15
PDREQ
PDIOW-
PDIOR-
PDIORDY-
PDACK-
PIRQ
PDA1
PDA0
PDCS1-
25 LED_HDD-
PDA2
PDCS3-
PDMA66 16
SC267
0.047UF/16V_X7R
SR183
100K
SC229
0.1UF/10V_X7R_0402
SUYIN_200021FB044G200ZR_HDDCON
39-325044-0100
CONN PLUG S/A 2*22P P:2mm S471-00A1-446
C430
0.1UF/10V_X7R_0402
7/31
C431
0.1UF/10V_X7R_0402
SC215
100UF/16V_DIP-6X5_A
CLOSE TO HDD
16 PDD[15..0]
PDD[15..0]
PDD3 PDD12 PDD2 PDD13 PDD7 PDD8 PDD6 PDD9 PDD5 PDD10 PDD4 PDD11 PDD1 PDD14 PDD0 PDD15
16 PDACK-
16 PIRQ
PDACK-
PIRQ
16 PDA[2..0]
PDA1
PDA0
PDA2
16 PDCS1-
16 PDCS3-
PDCS1-
PDCS3-
16 PDREQ
16 PDIOW-
16 PDIOR-
16 PDIORDY-
PDREQ
PDIOW-
PDIOR-
PDIORDY-
SCDROMCON1
23 CD_L
CDGND
IDE_RST- 23
CD_R 23
SDD7 SDD6 SDD5 SDD4 SDD3 SDD2 SDD1 SDD0
SDD8 SDD9 SDD10 SDD11 SDD12 SDD13 SDD14 SDD15
SDREQ
SDIOR-
SDIOW-
SDIORDY-
SIRQ
SDACK-
SDA1
SDA0
SDA2
SDCS3-
SDCS1-
SDMA66 16
SC231
0.1UF/10V_X7R_0402
C434
0.01UF/50V_X7R
SC225
0.047UF/16V_X7R
SR171
100K
SUYIN-80083A-050G1TAP_G320
39-A20050-0100
footprint modify 0402
16 SDD[15..0]
SDD[15..0]
SDD5 SDD3 SDD1 SDD0 SDD2 SDD4 SDD6 SDD7 SDD11 SDD10 SDD9 SDD8 SDD12 SDD13 SDD14 SDD15
16 SDA[2..0]
SDA[2..0]
16 SDCS1-
16 SDCS3-
SDCS1-
SDCS3-
SDA2
SDA1
16 SDIOW-
SDIOW-
16 SIRQ
SIRQ
SDA0
3.3V
PDIORDY- SR181 4.7K_0402
SDIORDY- SR173 4.7K_0402
SIRQ R218 8.2K_0402
PIRQ SR182 8.2K_0402
16 SDACK-
16 SDIORDY-
16 SDIOR-
16 SDREQ
SDACK-
SDIORDY-
SDIOR-
SDREQ
7/31
SC265
100UF/16V_DIP-6X5_A
SC230
0.1UF/10V_X7R_0402
CLOSE TO CDROM/DVDROM
Title
G332 HDD & CDROM
Size
Document Number
G332-1-4-01
Rev
2.0
Date: Thursday, September 29, 2005
Sheet 24 of 32



pin 1 & 4 to press

Title	G332 LED & LID & MDC	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 25 of 32	


SJ3
SINGATRON_2DC-G213-B03_DCIN
DCIN
DCGND
T1
COMMON CHOKE 7A
L6
HCB2012K-800T80
L10
HCB2012K-800T80
C38 0.1UF/25V
C41 2200PF/50V_X7R
C62 0.1UF/25V_NC
C72 0.1UF/25V_NC
C73 2200PF/50V_X7R
C77 0.1UF/25V
C82 0.1UF/25V
R82 10K_0805
R87 10K_0805
R95 10K_0805
Z2 JOPEN_80X60
VA
R104 40mOHM_1%_2512
P3887+INC1
DKVA
SC128 0.1UF/50V_X7R_0805
SC122 10UF/25V_X5R_1206
D17 SSM34_D5025
VIN-CHG
Q33 AM4407P_SO8
R145 100K
D18 CH301H-40
AC_ON
R147 100K
R138 1K
Q34 2N7002
C165 0.1UF/25V
R129 1M
SJ5 SUYIN-25033S-06G1
BT+
BTCLK
BTDAT
BAT_THM
BT-
R267 100
R268 100
SMB_CLK3
SMB_DAT3
D31 CH301H-40
D30 CH301H-40
L33 HCB3216K-750T80
VB-M
C357 0.1UF/25V
C356 0.1UF/25V
L32 HCB3216K-750T80
D19 SSM34_D5025
F2 7A TR/3216FF_1206
VBA
C243
C244 68UF/25V_CV_AX_NC
10UF/25V_X5R_1206
Q41 AM4407P_SO8
D20 1SS355_SOD323
R174 100K_NC
R194 1M
P3887-VREF
U11 MB3887
-INC2
+INC2
OUTC2
GND
+INE2
CS
-INE2
VCCO
FB2
OUT
VREF
VH
FB1
VCC
-INE1
RT
+INE1
-INE3
OUTC1
FB3
OUTD
CTL
-INC1
+INC1
R261 24K_1%
R259 887_1%
R247 1K
Q49 2N7002
R246 27K
R260 10K_1%
R262 10.7K_1%
R263 10K_1%
R249 100K_1%
R240 10K_1%
C344 0.01UF/50V_X7R
C358 0.1UF/25V_X7R
R269 10K_1%
C362 6800PF/50V_X7R
R264 100K_1%
C329 1UF/25V_X5R_0805
C326 0.1UF/50V_X7R_0805
R226 47K_1%
C331 2200PF/50V_X7R
R227 200K_1%
R222 1K
C336 0.1UF/25V_X7R
R228 100K
C317 10UF/25V_X5R_1206
C318 10UF/25V_X5R_1206
Q45 AM4407P_SO8
SL29 15UH-QPCRH1004R
D26 SSM34_D5025
C330 0.1UF/25V
R251 40mOHM_1%_2512
SC166 10UF/25V_X5R_1206
SC164 68UF/25V_CV_AX
SC165 68UF/25V_CV_AX
R243 100K_1%
R244 51K_1%
R242 49.9K_1%
Q47 NDS352AP
R245 100K
C347 0.1UF/25V
Z6 JOPEN_120X60
R257 100K
Q48 2N7002
+3VALWAYS
BAT_SEL
PRECHG
ENBCHG
Charge current supply 1.8A
Pre_Charging current 0.2A
Total Power Set 60W
Battery 6Cell/12.6V &
4/8Cell/16.8V
BAT_SEL H->6Cell L->4Cell
8/8
ECVCC_EMI2
SR150 10K_1%
SR145 10K_1%
SR144 100K_1%
SC177 0.1UF/25V_X7R
SC171 0.1UF/25V_X7R
SD15 1SS355_SOD323
SD14 1SS355_SOD323
SR140 0
BAT3_IN-
BAT_IN-
7/15
12/3
Battery BAT_THM R=49.9K
BAT_IN- 0V Battery IN
BAT_IN- 2.5V 6Cell Battery IN
BAT_IN- 3V Battery Not IN
R231 499K_1%
R252 52.3K_1%
R253 6.81K_1%
R248 150K_1%
R254 100K_1%
LMV321+
LMV321-
LDO5
U10 LMV321_SOT23-5
C354 1000PF/50V_X7R
C355 1000PF/50V_X7R_NC
C348 1UF/10V_X5R
C337 0.1UF/25V_NC
R224 100K
Q46 2N7002
AC_IN-
17.5V ON
17.0V
OFF 7/15
7/28
Title
G332 DC_IN / SELECT / CHARGER
Size
Document Number
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Rev 2.0
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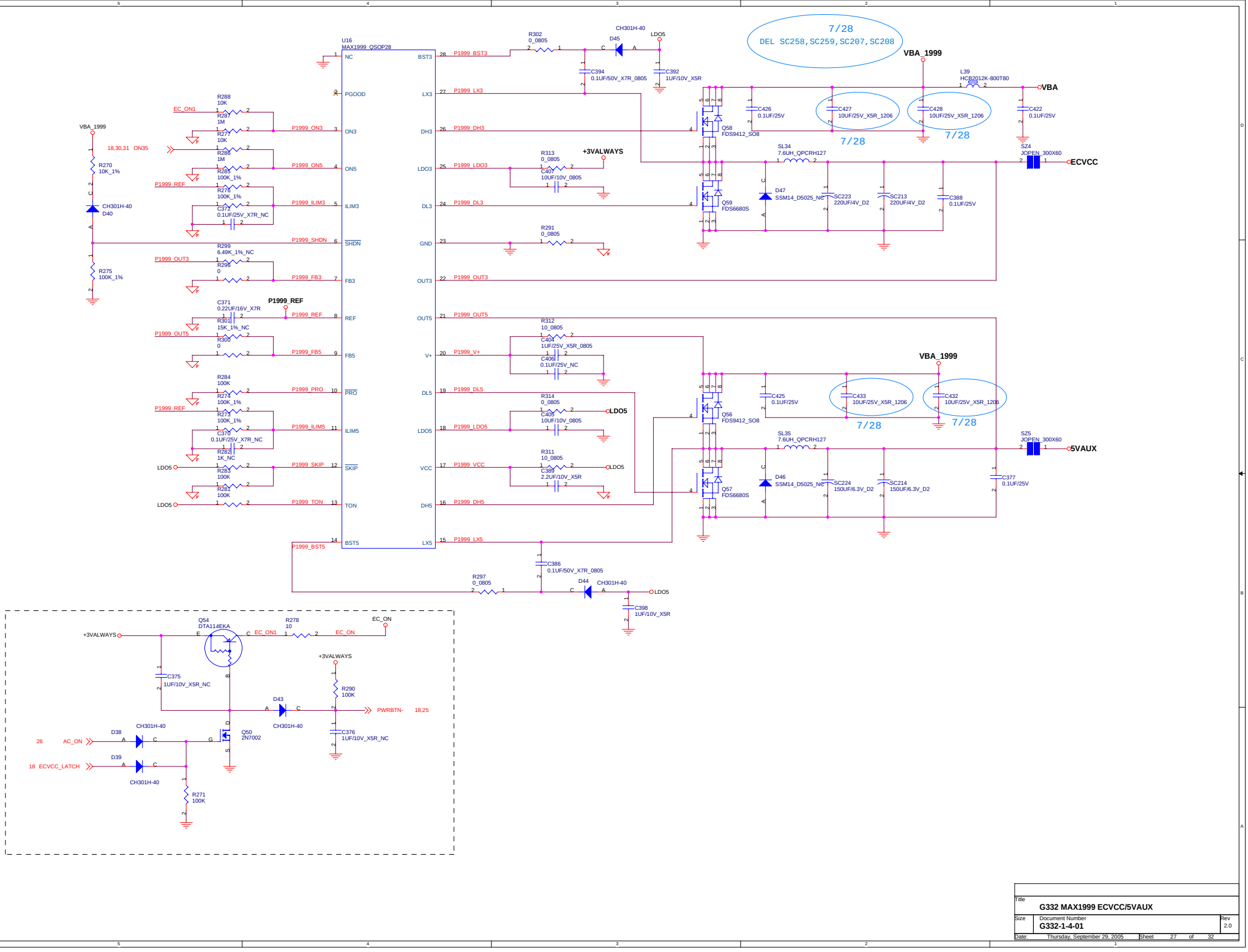
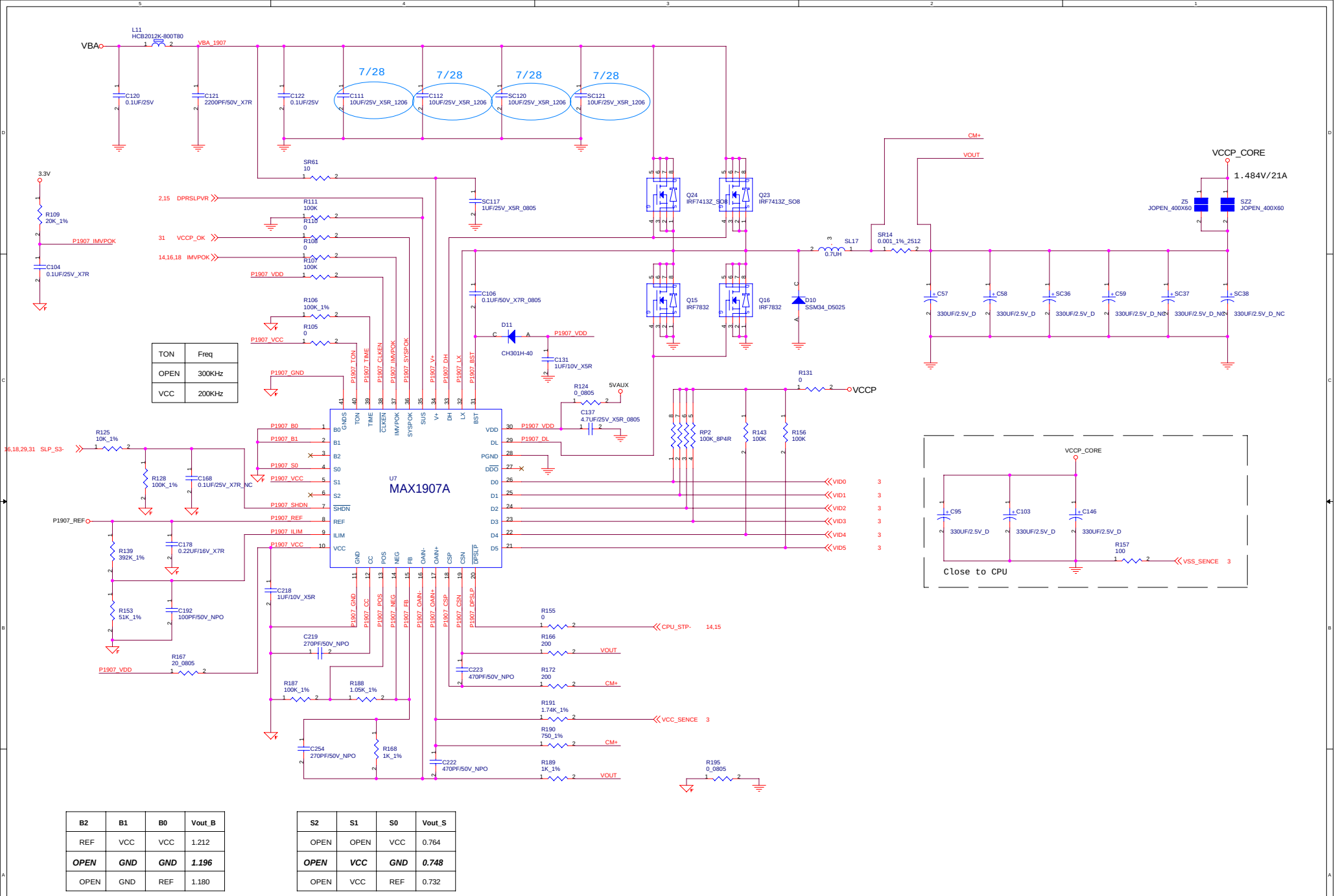


Title	G332 MAX1999 ECVCC/5VAUX	
Size	Document Number G332-1-4-01	Rev 2.0
Date: Thursday, September 29, 2005	Sheet 27 of 32	



TON	Freq
OPEN	300KHz
VCC	200KHz

B2	B1	B0	Vout_B
REF	VCC	VCC	1.212
OPEN	***GND***	***GND***	***1.196***
OPEN	GND	REF	1.180

S2	S1	S0	Vout_S
OPEN	OPEN	VCC	0.764
OPEN	***VCC***	***GND***	***0.748***
OPEN	VCC	REF	0.732

Title	G332 MAX1907A VCORE	
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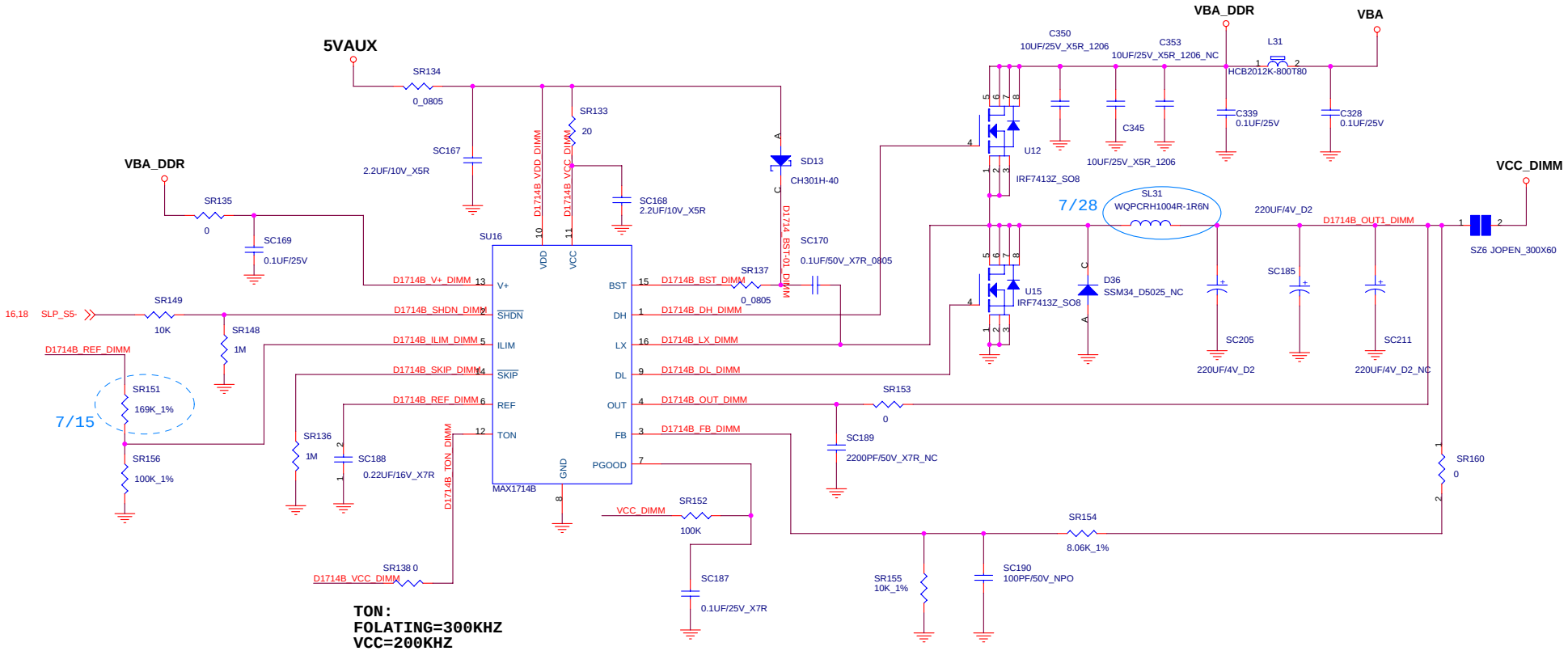

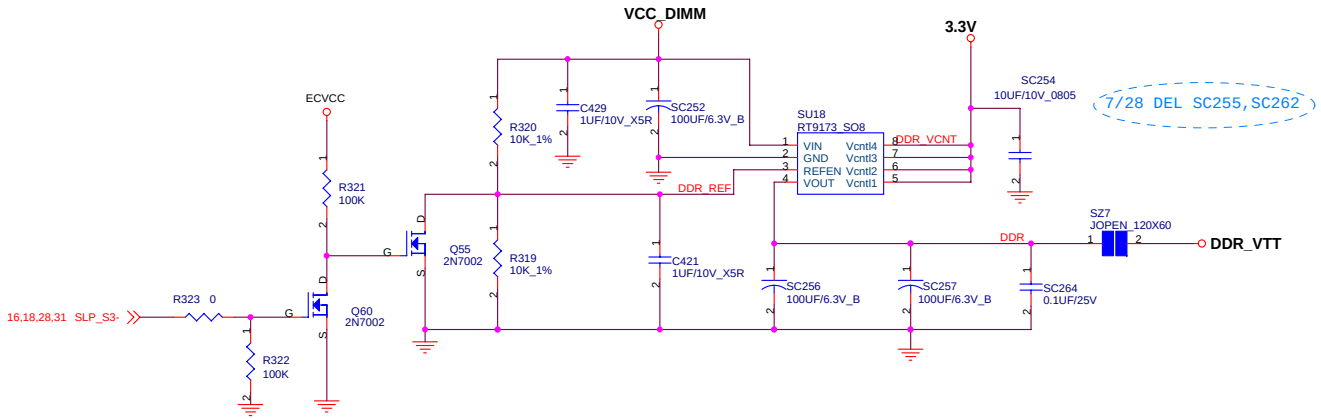

Title	G332 MAX1714B DIMM / DDR	
Size	Document Number G332-1-4-01	Rev 2.0
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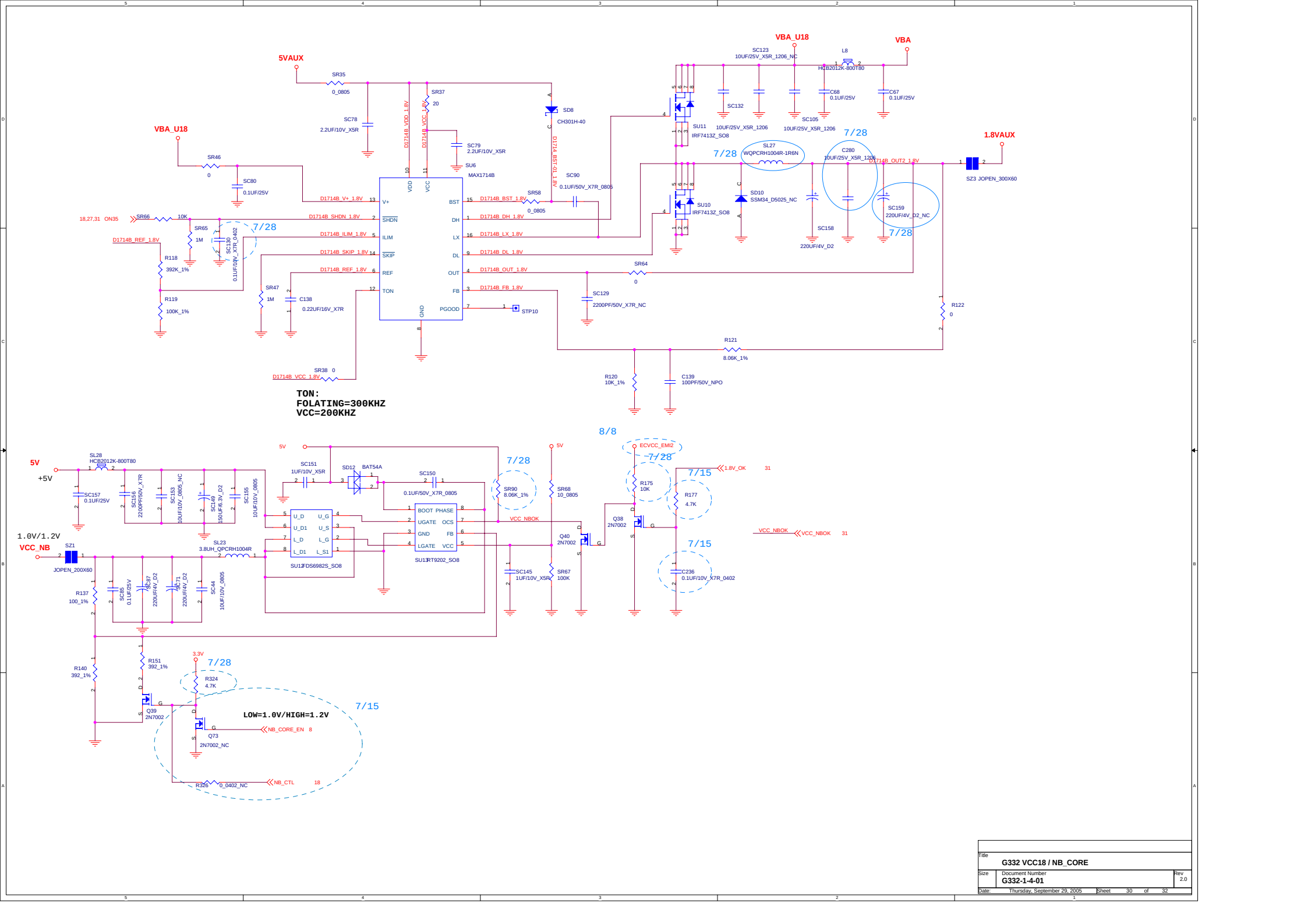

Title	G332 VCC18 / NB_CORE	
Size	Document Number G332-1-4-01	Rev 2.0
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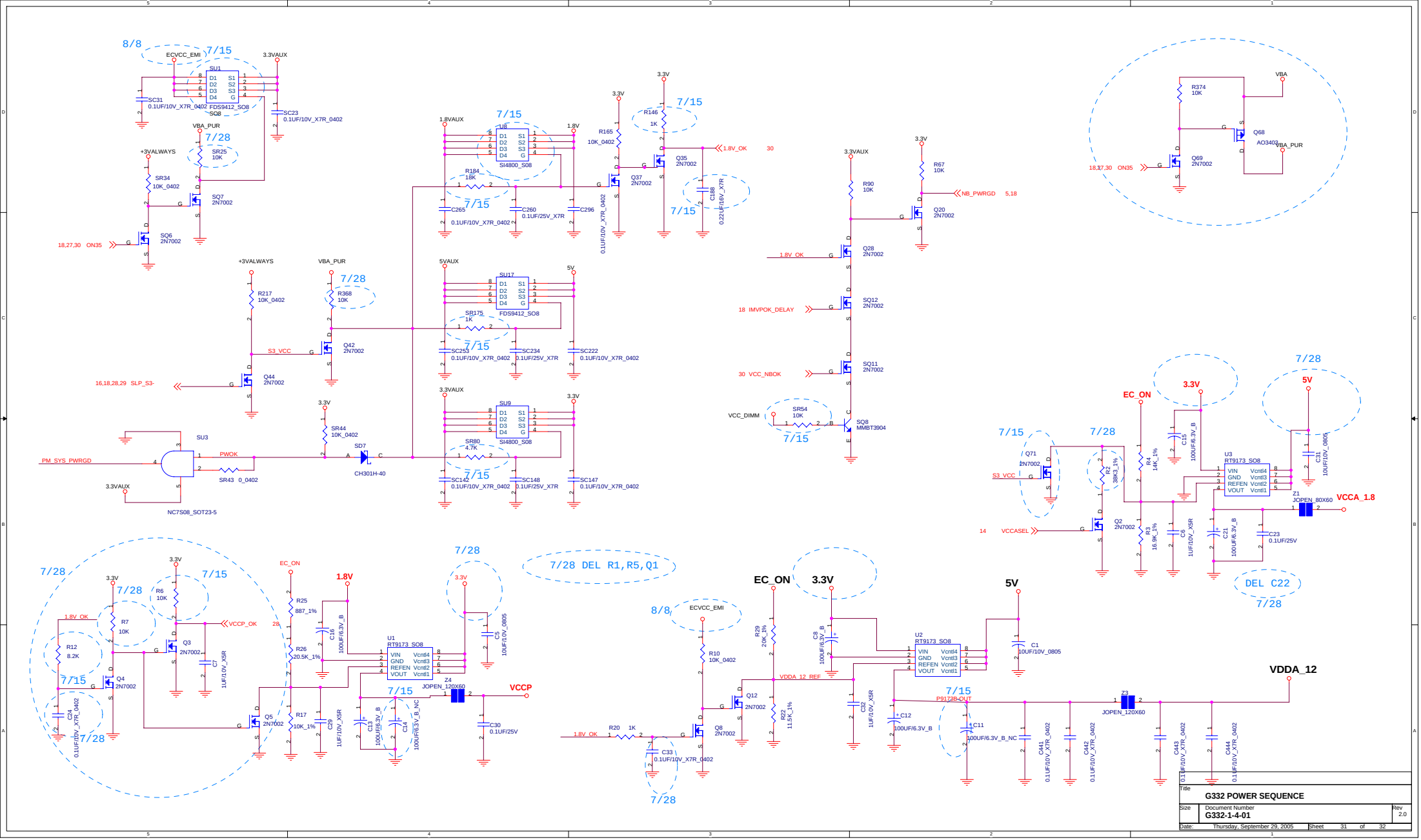
8/8
ECVCC_EMI
7/15
3.3VAUX
SU1
FDS9412_SO8
SC31 0.1UF/10V_X7R_0402
SC23 0.1UF/10V_X7R_0402
VBA_PUR
7/28
SR25 10K
+3VALWAYS
SR34 10K_0402
SQ7 2N7002
SQ6 2N7002
18,27,30 ON35
1.8VAUX
SU8
SI4800_S08
1.8V
R184 18K
C265 0.1UF/10V_X7R_0402
C260 0.1UF/25V_X7R
C296
3.3V
R165 10K_0402
R146 1K
Q37 2N7002
Q35 2N7002
1.8V_OK
30
0.1UF/10V_X7R_0402
C188 0.22UF/10V_X7R
R374 10K
VBA
Q68 AO3402
Q69 2N7002
18,27,30 ON35
R90 10K
R67 10K
NB_PWRGD
5,18
Q20 2N7002
Q28 2N7002
1.8V_OK
SQ12 2N7002
18 IMVPOK_DELAY
SQ11 2N7002
30 VCC_NBOK
VCC_DIMM
SR54 10K
SQ8 MMBT3904
R217 10K_0402
R368 10K
S3_VCC
Q42 2N7002
Q44 2N7002
16,18,28,29 SLP_S3-
5VAUX
SU17
5V
SR175 1K
SC253 0.1UF/10V_X7R_0402
SC234 0.1UF/25V_X7R
SC222 0.1UF/10V_X7R_0402
SU3
PM_SYS_PWRGD
PWOK
SR43 0_0402
3.3VAUX
NC7S08_SOT23-5
SR44 10K_0402
SD7
CH301H-40
SU9
SI4800_S08
SR80 4.7K
SC142 0.1UF/10V_X7R_0402
SC148 0.1UF/25V_X7R
SC147 0.1UF/10V_X7R_0402
7/28 DEL R1,R5,Q1
EC_ON
3.3V
5V
VCCA_1.8
Q71 2N7002
S3_VCC
Q2 2N7002
14 VCCASEL
R2 38K3_1%
R4 14K_1%
R3 16.9K_1%
U3 RT9173_SO8
Z1 JOPEN_80X60
C15 100UF/6.3V_B
C16 1UF/10V_X5R
C21 100UF/6.3V_B
C23 0.1UF/25V
C31 10UF/10V_0805
DEL C22
R6 10K
1.8V_OK
R7 10K
VCCP_OK
28
Q3 2N7002
R12 8.2K
Q4 2N7002
C24 0.1UF/10V_X7R_0402
C7 1UF/10V_X5R
R25 887_1%
R26 20.5K_1%
R17 10K_1%
C29 1UF/10V_X5R
U1 RT9173_SO8
C13 100UF/6.3V_B
C14 100UF/6.3V_B_NC
Z4 JOPEN_120X60
VCCP
C30 0.1UF/25V
C5 10UF/10V_0805
R10 10K_0402
R20 1K
C33 0.1UF/10V_X7R_0402
Q8 2N7002
Q12 2N7002
R29 20K_1%
R22 11.5K_1%
VDDA_12_REF
C8 100UF/6.3V_B
U2 RT9173_SO8
C32 1UF/10V_X5R
C1 10UF/10V_0805
C12 100UF/6.3V_B
C11 100UF/6.3V_B_NC
P9172B-OUT
Z3 JOPEN_120X60
VDDA_12
C41 0.1UF/10V_X7R_0402
C42 0.1UF/10V_X7R_0402
C43 0.1UF/10V_X7R_0402
C44 0.1UF/10V_X7R_0402
Title
G332 POWER SEQUENCE
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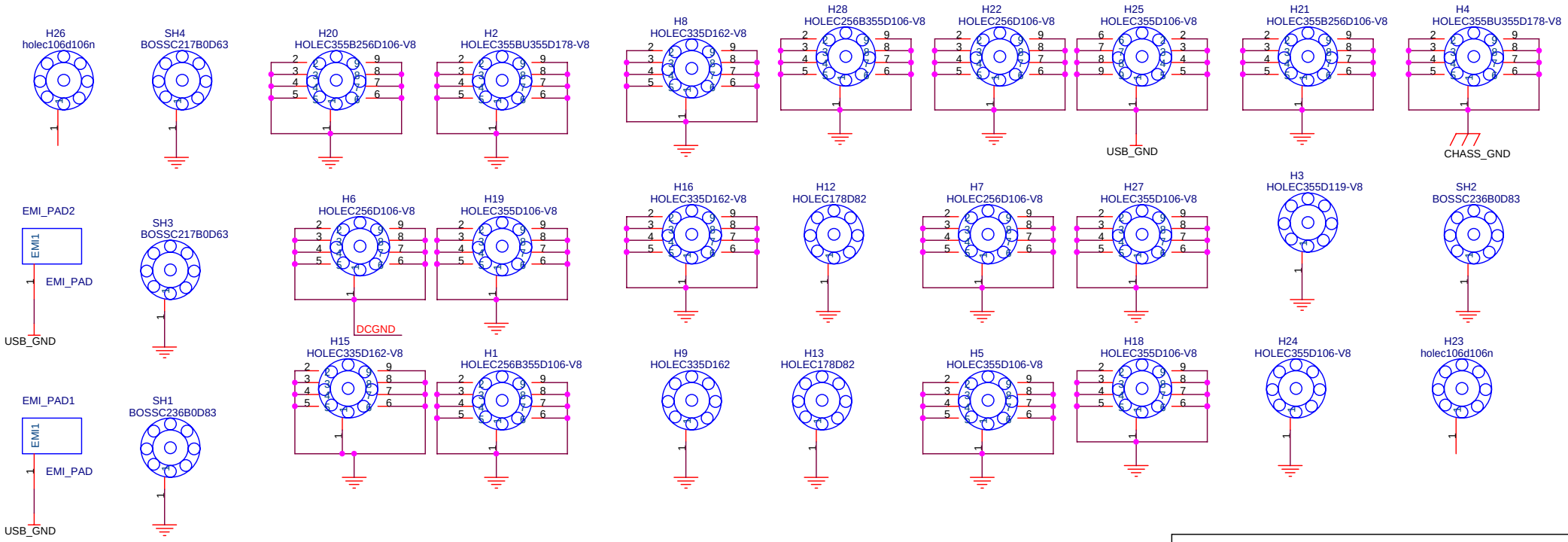
332 HISTORY

A.0 RELEASE CIRCUIT SCH.

B.0 RELEASE CIRCUIT SCH.

1.0 RELEASE CIRCUIT SCH.

2.0 RELEASE CIRCUIT SCH.



Title	G332 SCREWHOLE & HISTORY	
Size	Document Number G332-1-4-01	Rev 2.0
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