


Model Name: H915G Revision 1.1

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06	P4_LGA775_C
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10	GMCH-GARNTSDALE_DDR
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21	ICH6 VCC, GND
22	FWH

SHEET	TITLE
23	CK410M CLOCK.
24	PCI SLOT 1, 2
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26	ITE8712HX
27	HWMO
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30	COM_LPT
31	FRONT USB CONNECTOR
32	CPU_FAN & SYS_FAN
33	ALC880 / ALC658
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36	ATX POWER CONN.
37	ALL POWER
38	POLY S/W
39	FRONT PANEL
40	REAR USB CONNECTOR
41	ONBOARD LAN
42	RESERVED
43	RESERVED
44	

COMPONENT SIDE  
(1 oz. Copper)  
VCC SIDE  
(1 oz. Copper)  
GND SIDE  
(1 oz. Copper)  
SOLDER SIDE  
(1 oz. Copper)

ShenZhen Topstar Inductor Co., Ltd

Page Name

Cover Sheet

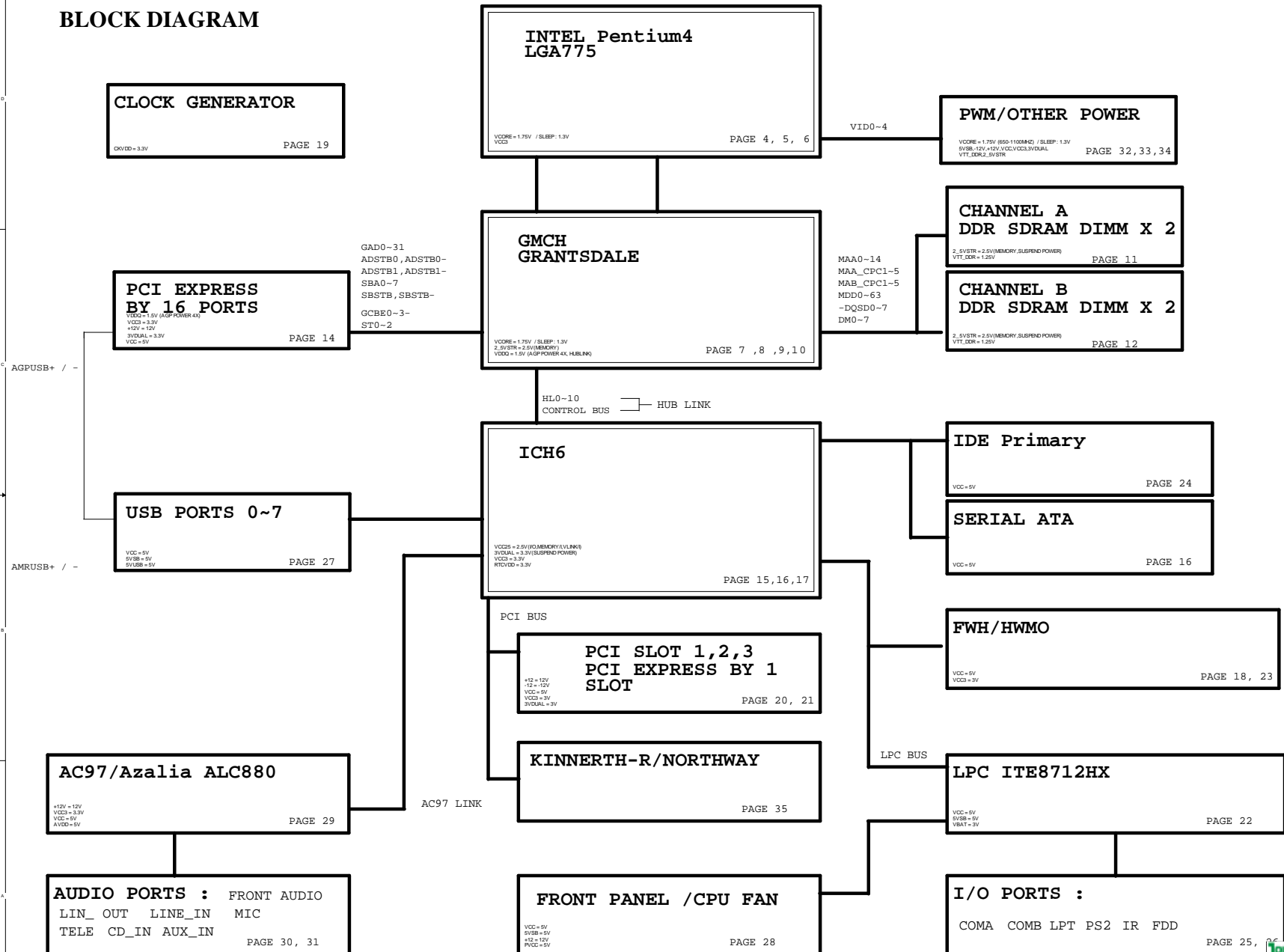
SizeProject NameRev

CustomGDDR1Sheet of1.1

Date: 28-09-2004

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# BLOCK DIAGRAM



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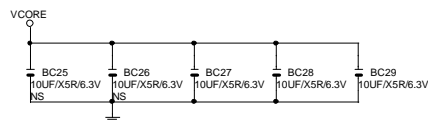
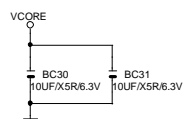
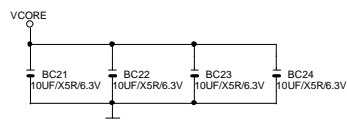
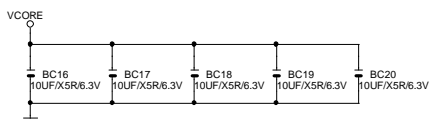
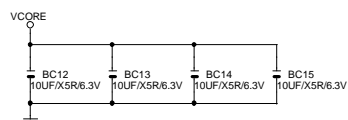
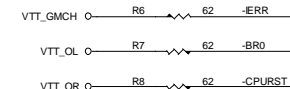
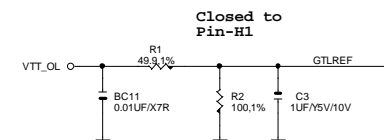
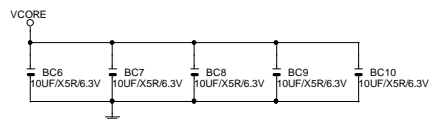
**Version: 1.1**

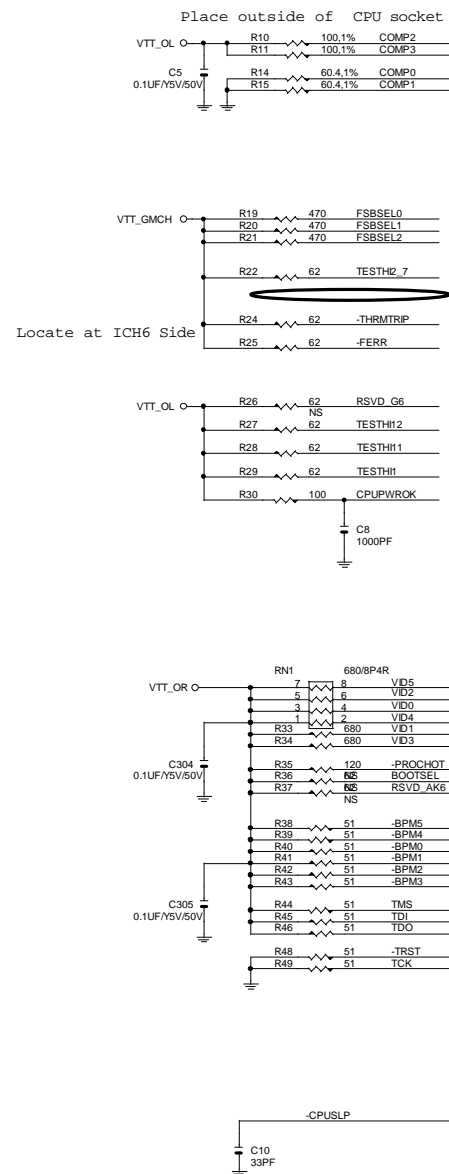
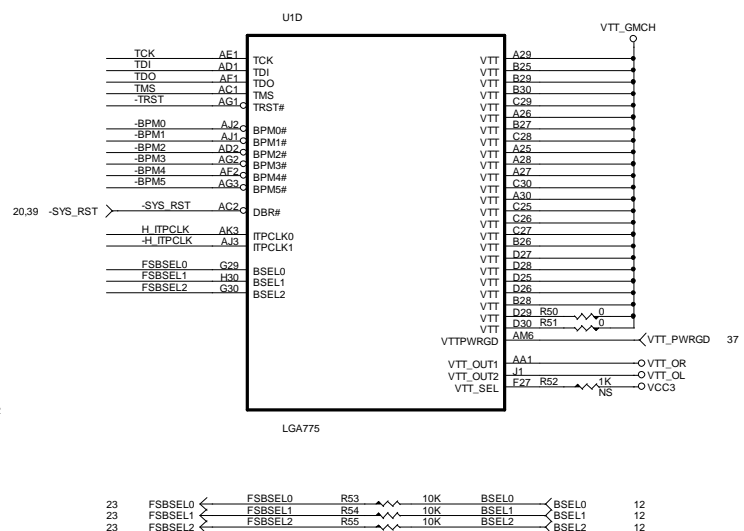
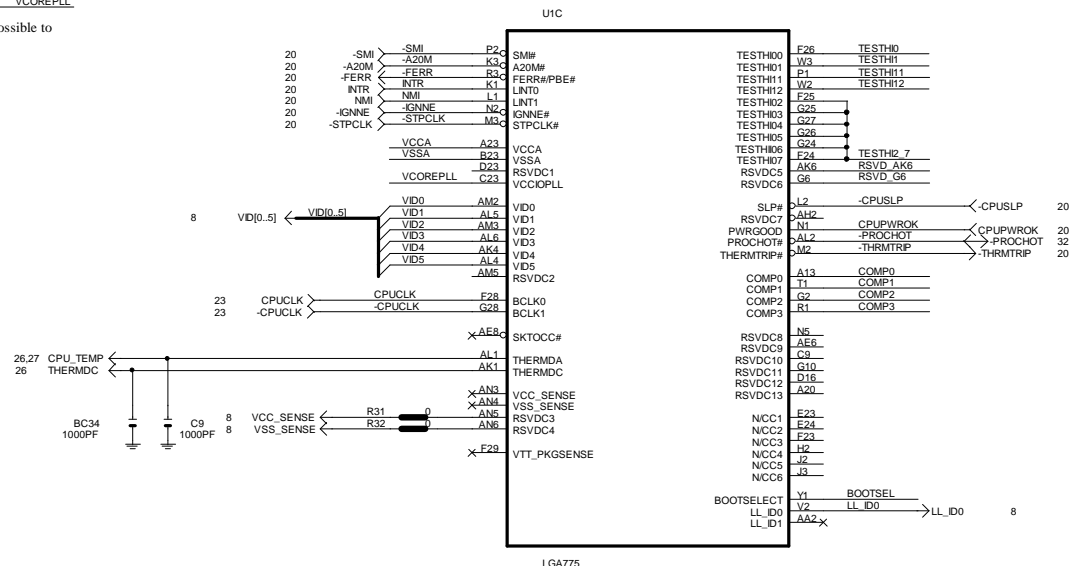
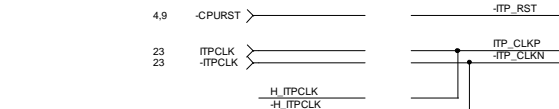
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[illegible]

Circuit or PCB layout change  
for next version

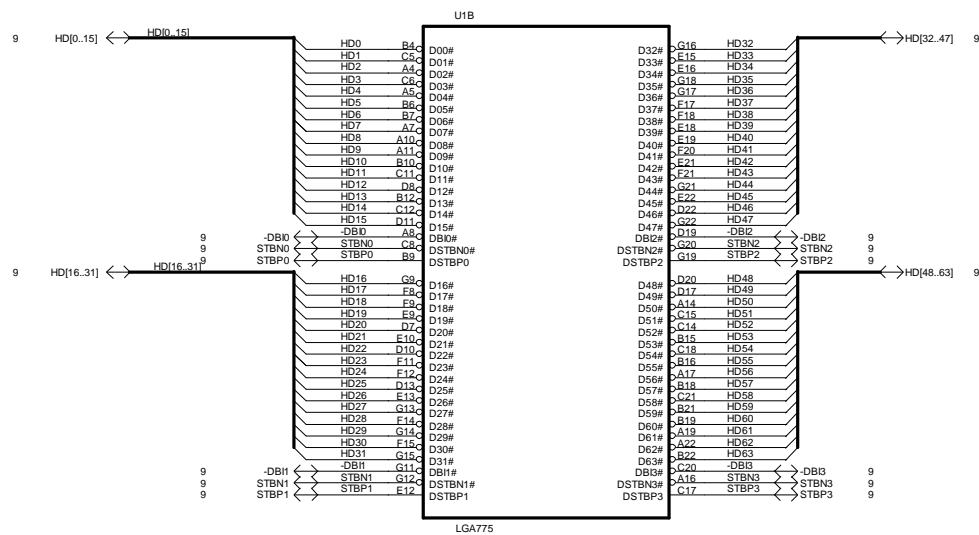
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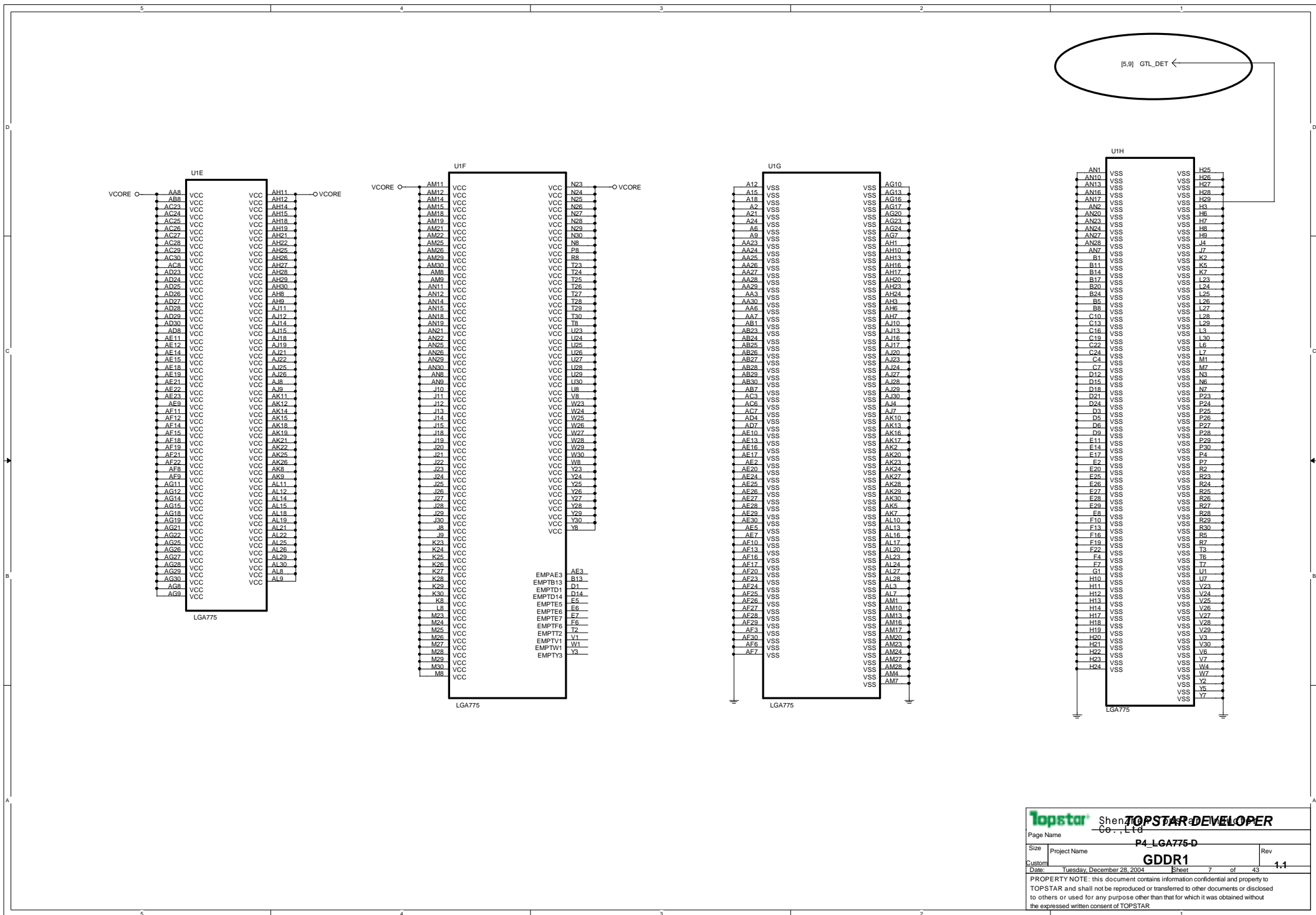




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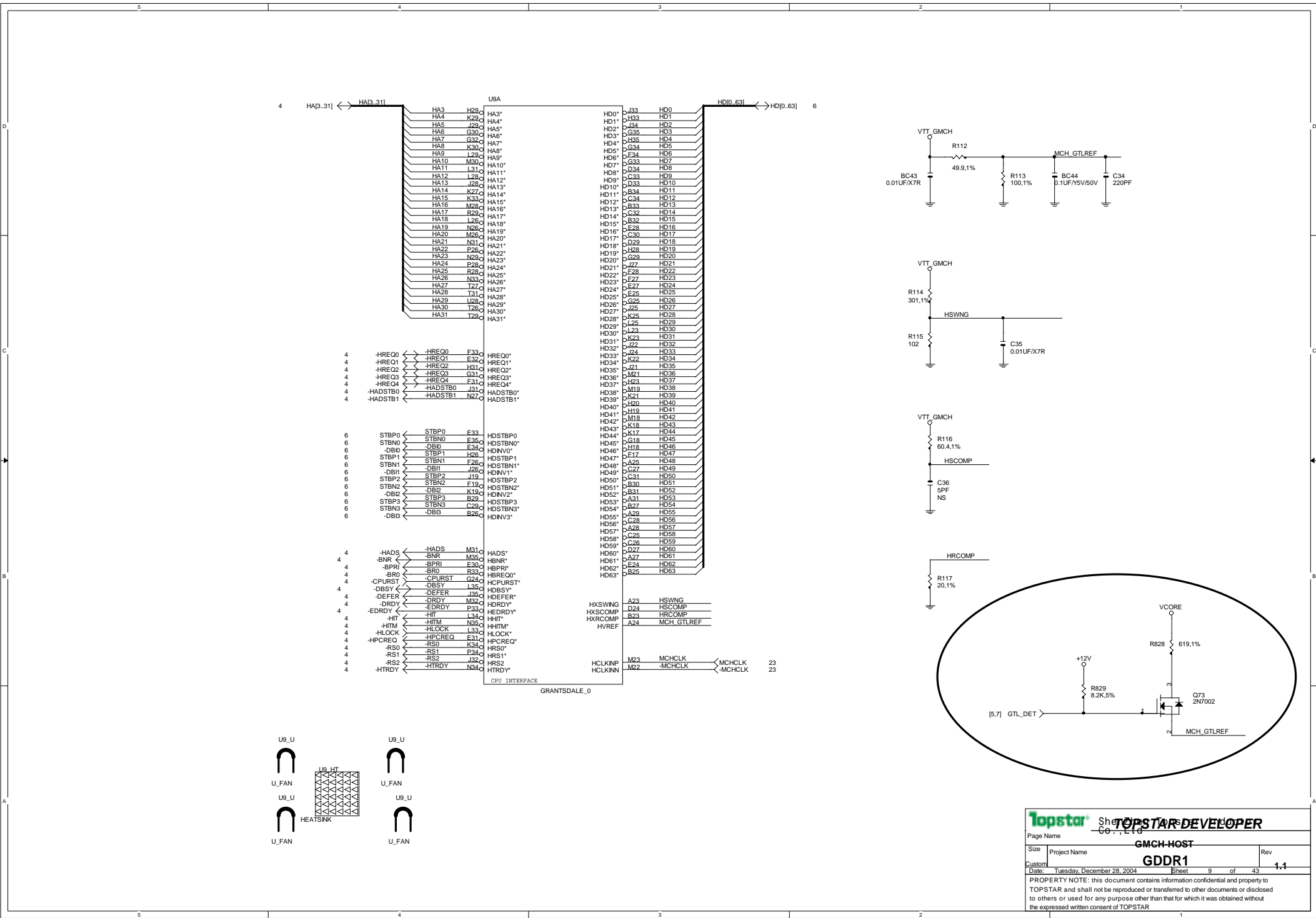
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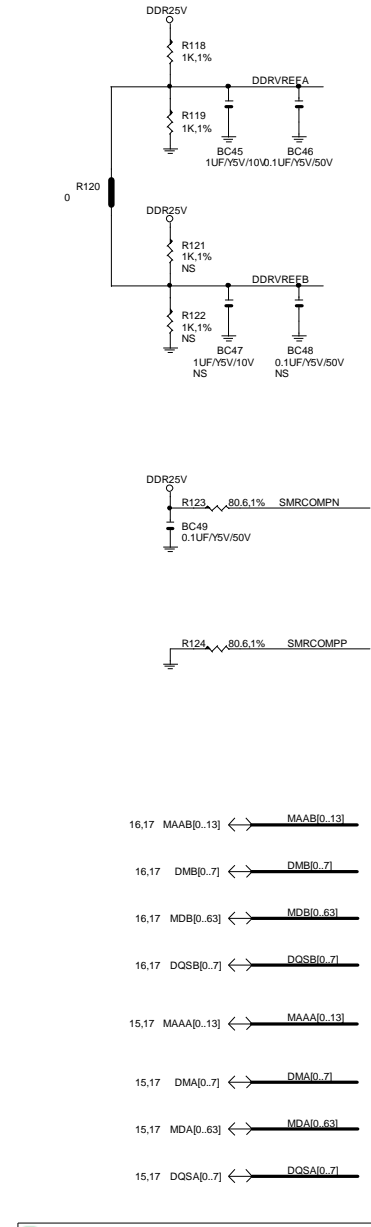
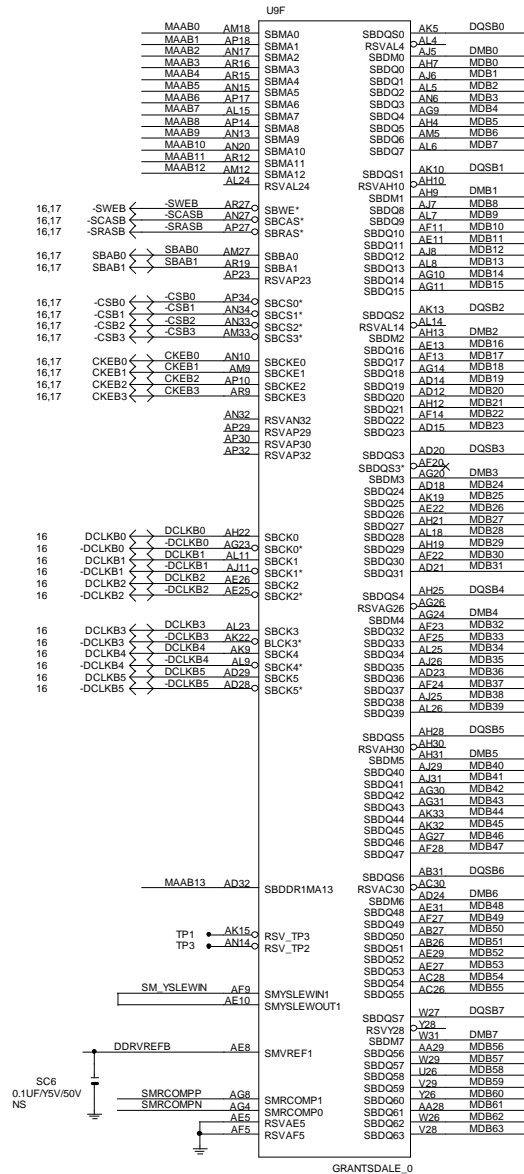
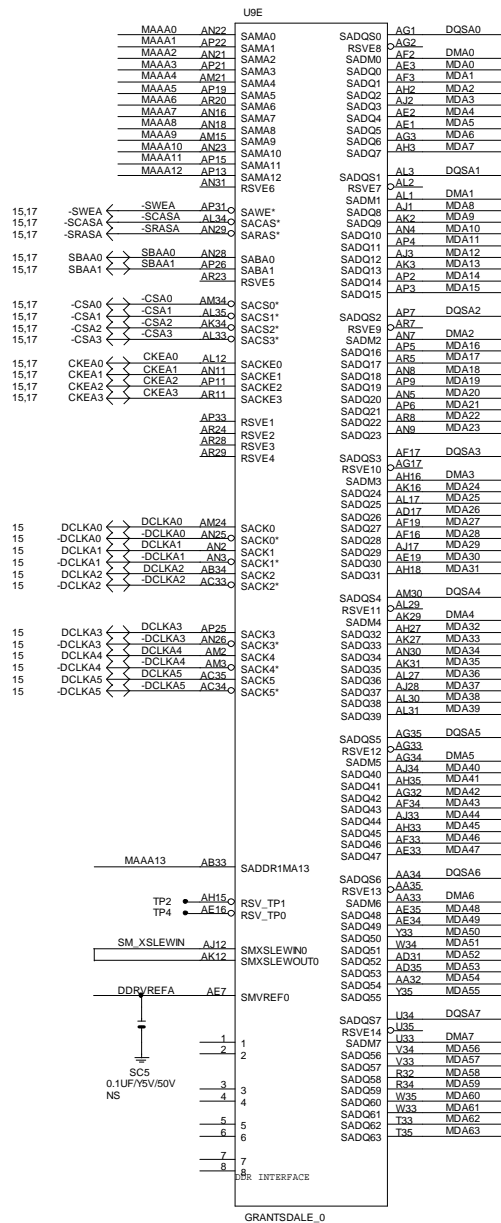




A large, empty rectangular area with a thin black border, representing a drawing or image placeholder. The area is labeled with 'A' at the bottom left and 'D' at the top left. A small, partially visible drawing or image is located in the bottom right corner, showing a technical drawing of a structure with dimensions and labels.







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U9B			
EXP A_RXP0	E11	EXPARXP0	EXPATXP0
EXP A_RXN0	F11	EXPARXN0	EXPATXN0
EXP A_RXP1	J11	EXPARXP1	EXPATXP1
EXP A_RXN1	H11	EXPARXN1	EXPATXN1
EXP A_RXP2	F9	EXPARXP2	EXPATXP2
EXP A_RXN2	E9	EXPARXN2	EXPATXN2
EXP A_RXP3	F7	EXPARXP3	EXPATXP3
EXP A_RXN3	E7	EXPARXN3	EXPATXN3
EXP A_RXP4	B3	EXPARXP4	EXPATXP4
EXP A_RXN4	B4	EXPARXN4	EXPATXN4
EXP A_RXP5	D5	EXPARXP5	EXPATXP5
EXP A_RXN5	E5	EXPARXN5	EXPATXN5
EXP A_RXP6	G6	EXPARXP6	EXPATXP6
EXP A_RXN6	G6	EXPARXN6	EXPATXN6
EXP A_RXP7	H8	EXPARXP7	EXPATXP7
EXP A_RXN7	H7	EXPARXN7	EXPATXN7
EXP A_RXP8	J6	EXPARXP8	EXPATXP8
EXP A_RXN8	J6	EXPARXN8	EXPATXN8
EXP A_RXP9	K8	EXPARXP9	EXPATXP9
EXP A_RXN9	K7	EXPARXN9	EXPATXN9
EXP A_RXP10	L6	EXPARXP10	EXPATXP10
EXP A_RXN10	L5	EXPARXN10	EXPATXN10
EXP A_RXP11	P10	EXPARXP11	EXPATXP11
EXP A_RXN11	P10	EXPARXN11	EXPATXN11
EXP A_RXP12	R10	EXPARXP12	EXPATXP12
EXP A_RXN12	M6	EXPARXN12	EXPATXN12
EXP A_RXP13	N6	EXPARXP13	EXPATXP13
EXP A_RXN13	N6	EXPARXN13	EXPATXN13
EXP A_RXP14	P7	EXPARXP14	EXPATXP14
EXP A_RXN14	P8	EXPARXN14	EXPATXN14
EXP A_RXP15	R6	EXPARXP15	EXPATXP15
EXP A_RXN15	R5	EXPARXN15	EXPATXN15

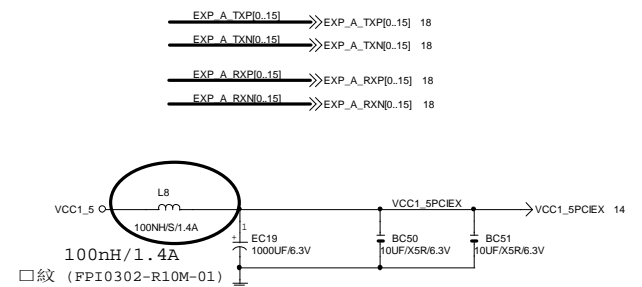
19	DMI_0RXP	DMI_0RXN	DMI_0TXP	DMI_0TXN	19
19	DMI_1RXP	DMI_1RXN	DMI_1TXP	DMI_1TXN	19
19	DMI_2RXP	DMI_2RXN	DMI_2TXP	DMI_2TXN	19
19	DMI_3RXP	DMI_3RXN	DMI_3TXP	DMI_3TXN	19
19	DMI_4RXP	DMI_4RXN	DMI_4TXP	DMI_4TXN	19
19	DMI_5RXP	DMI_5RXN	DMI_5TXP	DMI_5TXN	19
19	DMI_6RXP	DMI_6RXN	DMI_6TXP	DMI_6TXN	19
19	DMI_7RXP	DMI_7RXN	DMI_7TXP	DMI_7TXN	19
19	DMI_8RXP	DMI_8RXN	DMI_8TXP	DMI_8TXN	19
19	DMI_9RXP	DMI_9RXN	DMI_9TXP	DMI_9TXN	19
19	DMI_10RXP	DMI_10RXN	DMI_10TXP	DMI_10TXN	19
19	DMI_11RXP	DMI_11RXN	DMI_11TXP	DMI_11TXN	19
19	DMI_12RXP	DMI_12RXN	DMI_12TXP	DMI_12TXN	19
19	DMI_13RXP	DMI_13RXN	DMI_13TXP	DMI_13TXN	19
19	DMI_14RXP	DMI_14RXN	DMI_14TXP	DMI_14TXN	19
19	DMI_15RXP	DMI_15RXN	DMI_15TXP	DMI_15TXN	19

23	SRCCLK_MCH	A11	GCLKINP	Y10	GRCOMP
23	-SRCCLK_MCH	B11	GCLKINN	W10	

For DVO Function

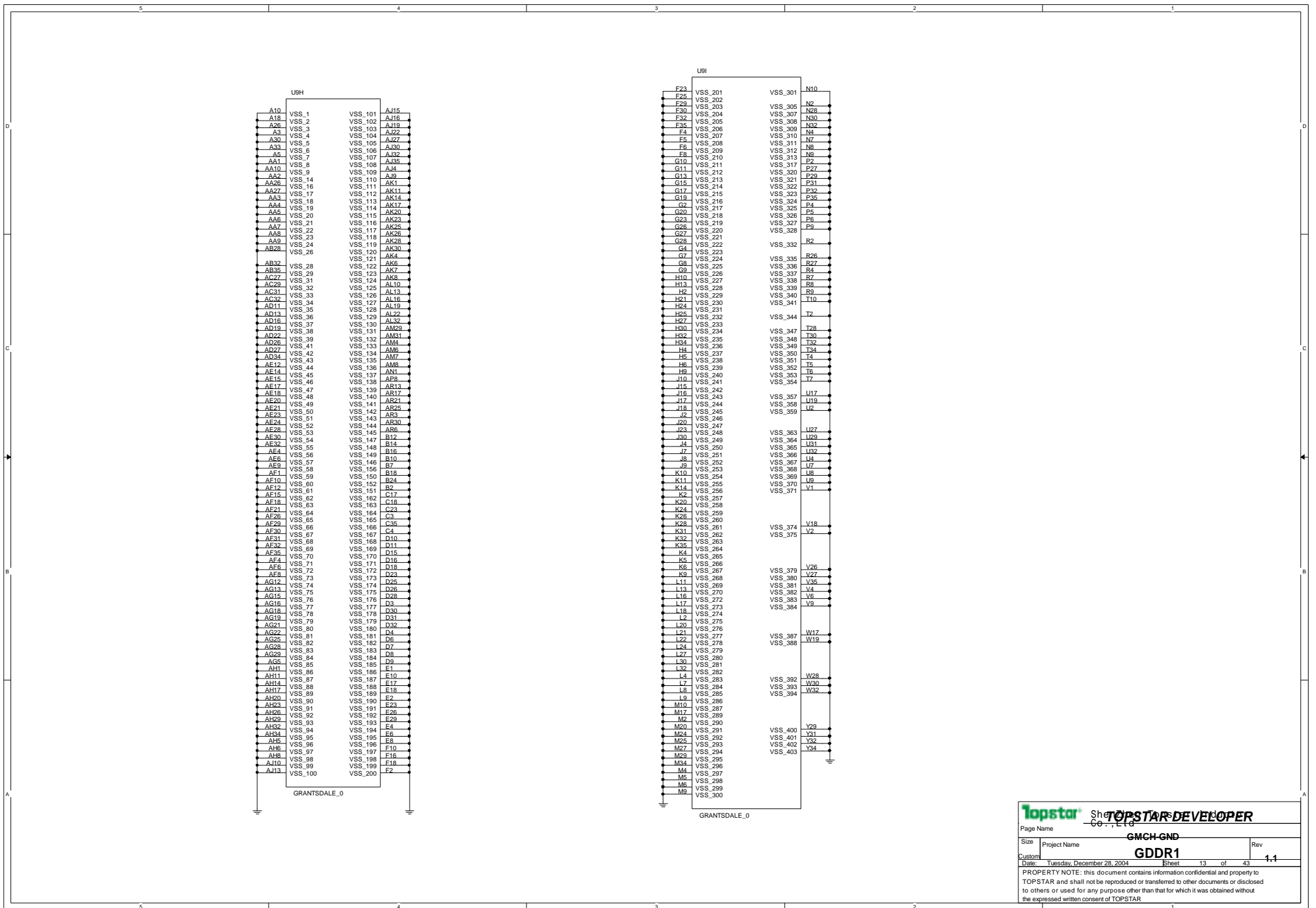
18	SDVO_CLDATA	K13	SDVOCTRLDATA
18	SDVO_CLCLK	J13	SDVOCTRLCLK

GRANTSDALE\_0



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Page Name		GMCH-PCI-E & DMI	
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Page Name: **GMCH-GND**

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## DDR TERMINATION CHANNEL A



SBAB[0:1]  $\hookleftarrow$  SBAB[0:1] 10,16 DQSB[0..7]  $\hookleftarrow$  DQSB[0..7] 10,16  
 -CSB[0:3]  $\hookleftarrow$  -CSB[0:3] 10,16 DMB[0..7]  $\hookrightarrow$  DMB[0..7] 10,16  
 CKEB[0:3]  $\hookleftarrow$  CKEB[0:3] 10,16 MDB[0..63]  $\hookrightarrow$  MDB[0..63] 10,16

MAAB[0..13] 10,16

Page Name Co., Ltd. **DDP TERMINATOR**

Size	Project Name	Rev
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B	<b>GDDR1</b>				1.1
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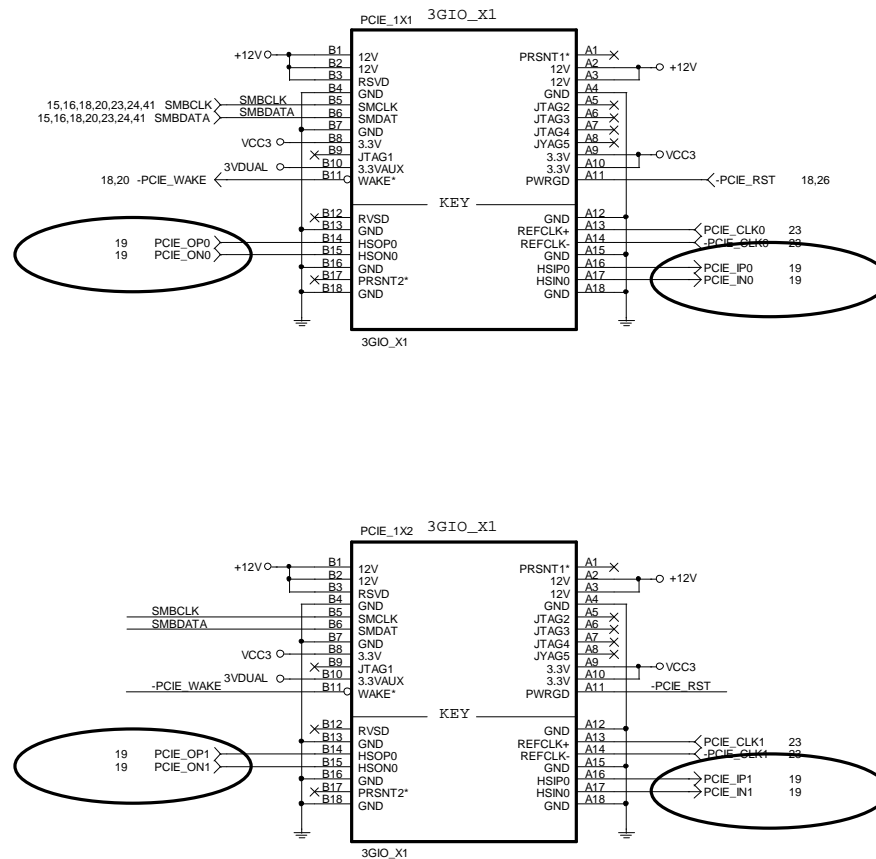




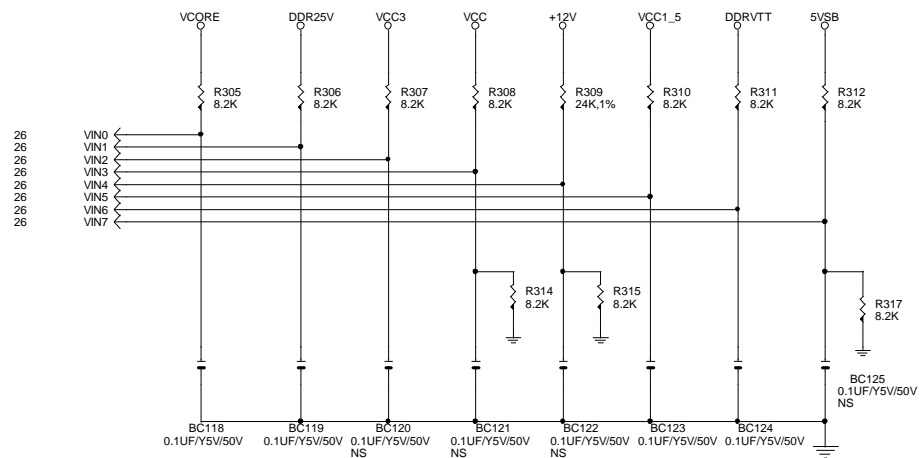
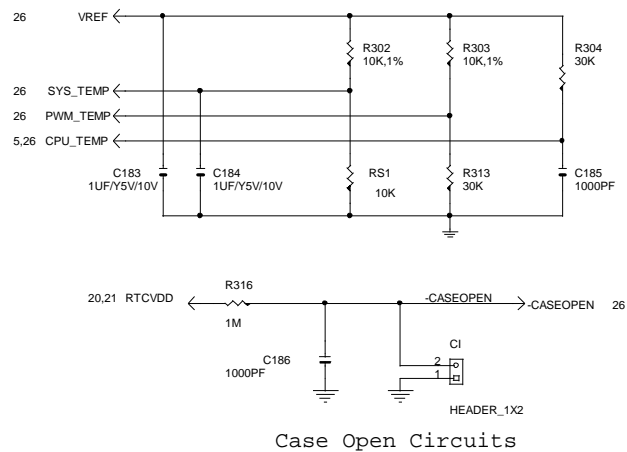


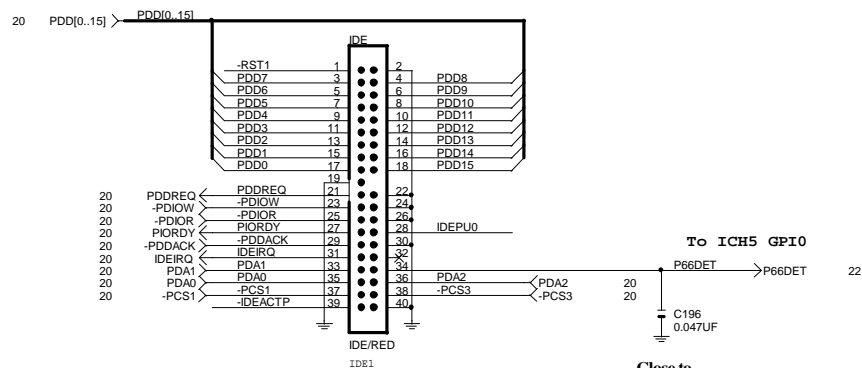
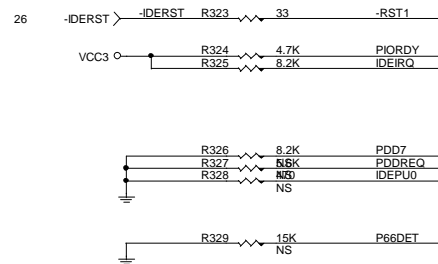
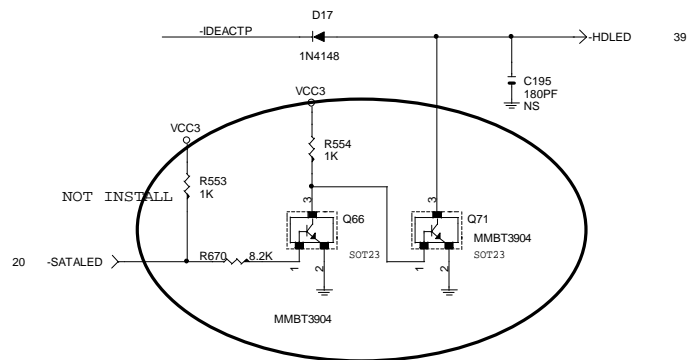






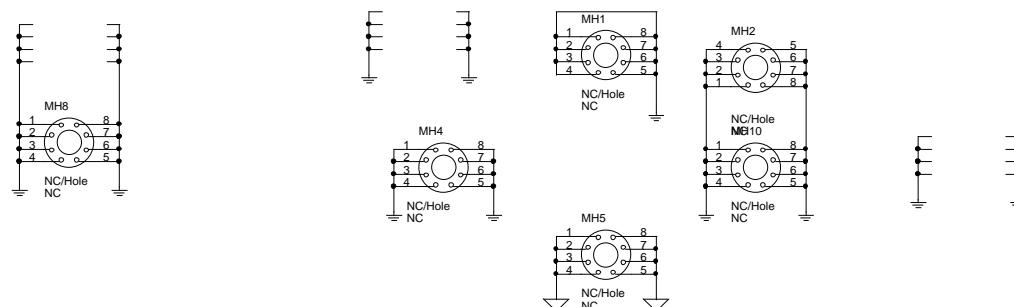
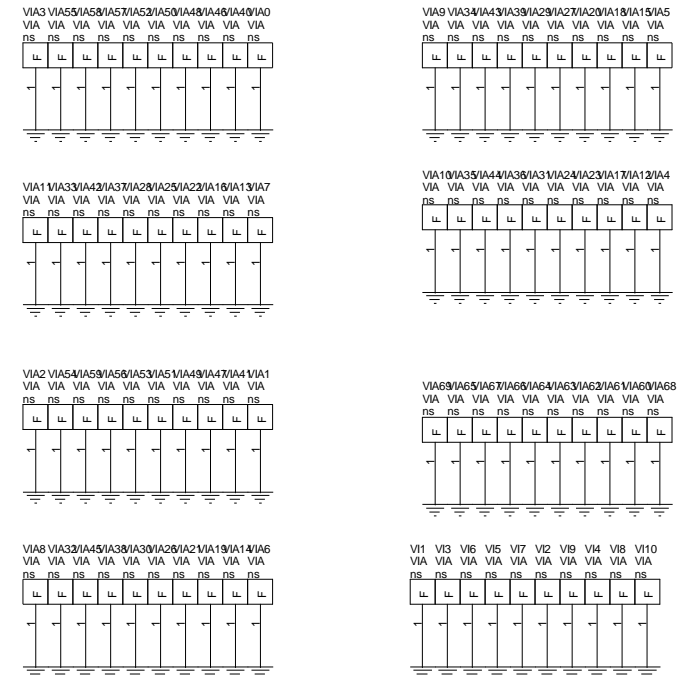




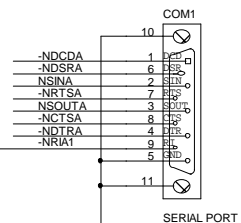
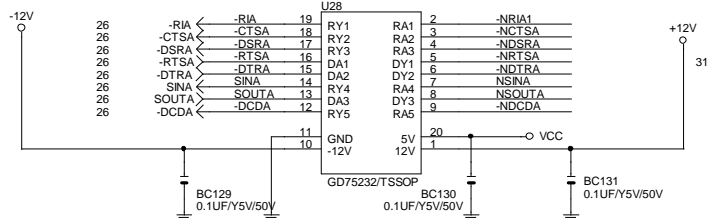


PRIMARY IDE CONNECTOR

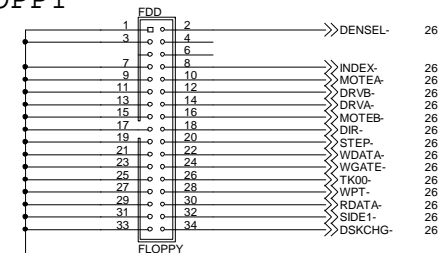
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Page Name		IDE	
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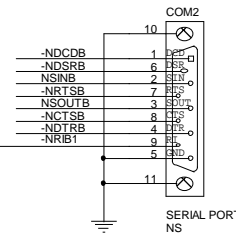
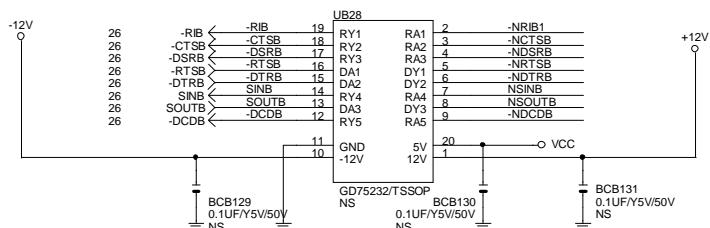
## COMA



## FLOPPY



## COMB



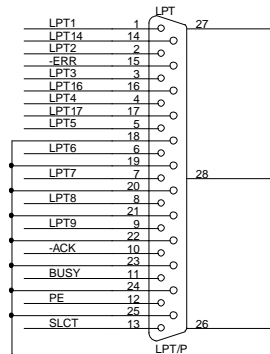
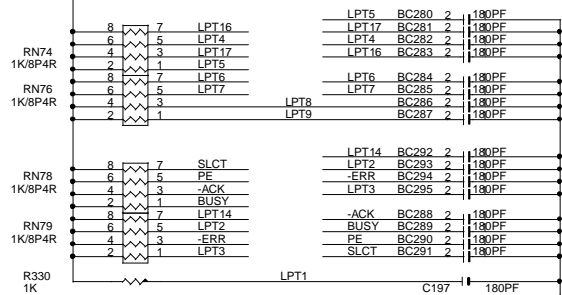
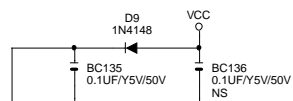
PD[0..7] &gt; PD[0..7]

-STB > LPT1  
PD1 > LPT3  
PD0 > LPT2  
-AFD > LPT14

-SLIN > LPT17  
PD2 > LPT4  
-INIT > LPT16  
PD3 > LPT5

PD6 > LPT8  
PD5 > LPT7  
PD4 > LPT6  
PD7 > LPT9

-ERR < -ERR  
-ACK < -ACK  
BUSY < BUSY  
PE < PE  
SLCT < SLCT



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Page Name: COM, LPT, FDD

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# FRONT USB

ICH6 USB2.0

19 -USBP1<-USBP1 -FUSB1

19 +USBP1<+USBP1 +FUSB1

19 -USBP0<-USBP0 -FUSB0

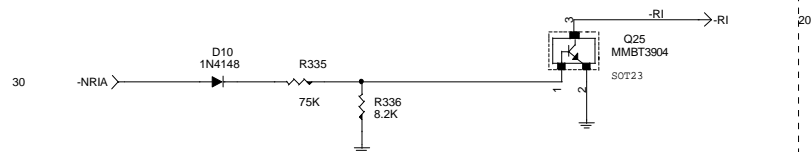
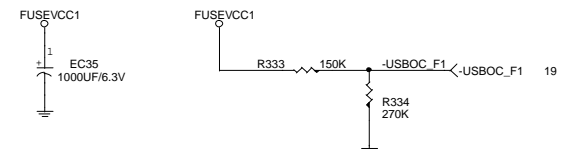
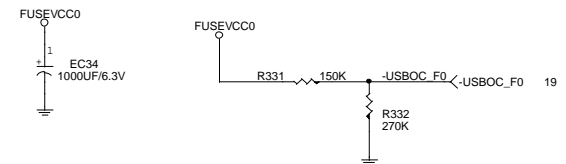
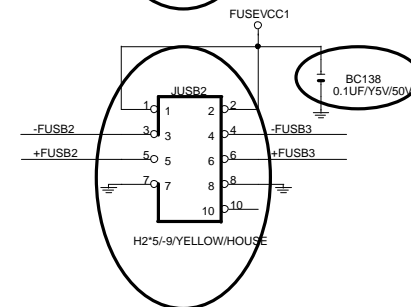
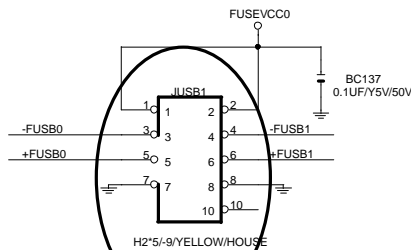
19 +USBP0<+USBP0 +FUSB0

19 +USBP3<+USBP3 +FUSB3

19 -USBP3<-USBP3 -FUSB3

19 +USBP2<+USBP2 +FUSB2

19 -USBP2<-USBP2 -FUSB2



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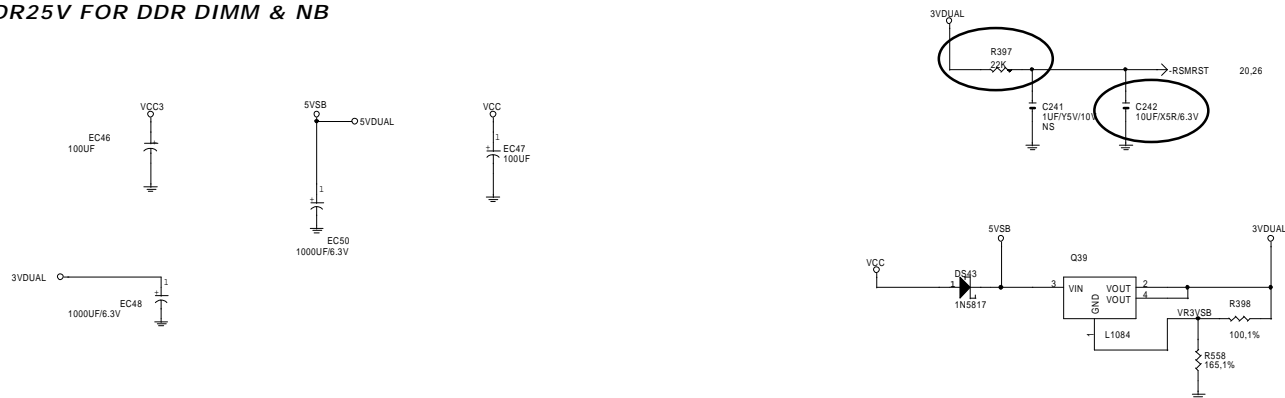




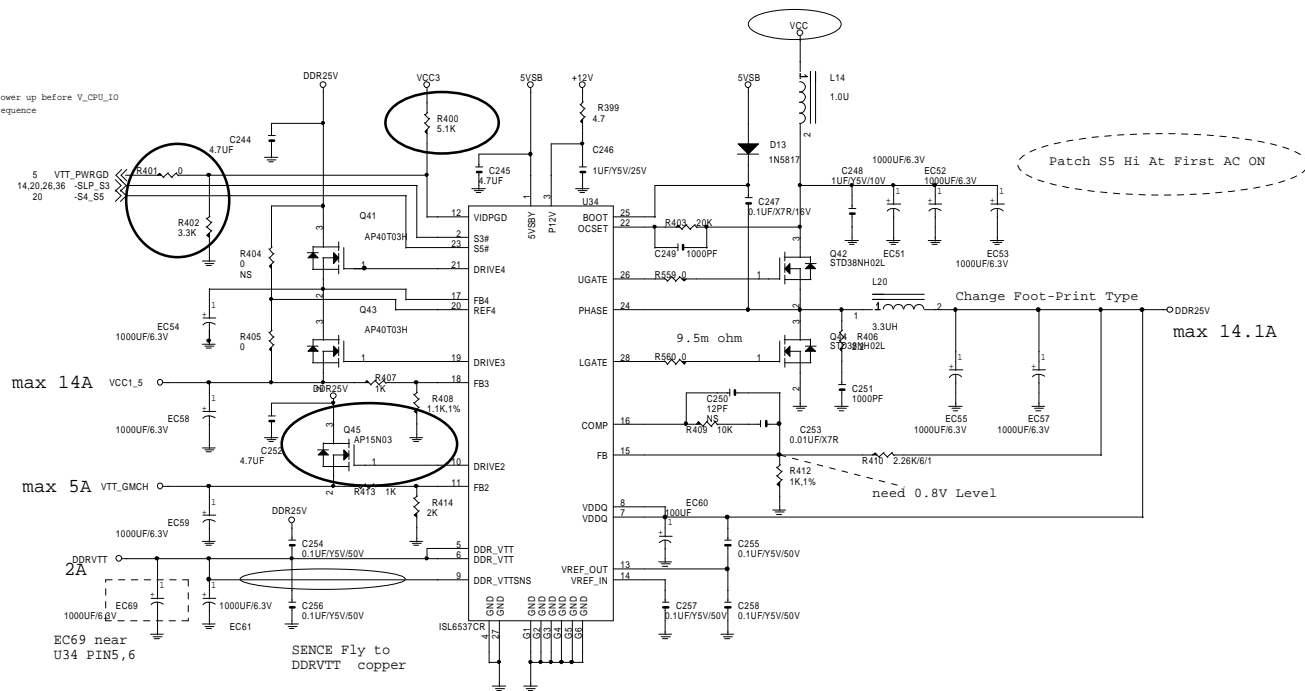




### DDR25V FOR DDR DIMM & NB



Patch S5 Hi At First AC ON



BOTTOM PAD  
USE 6 VIAs  
CONNECT TO  
GND

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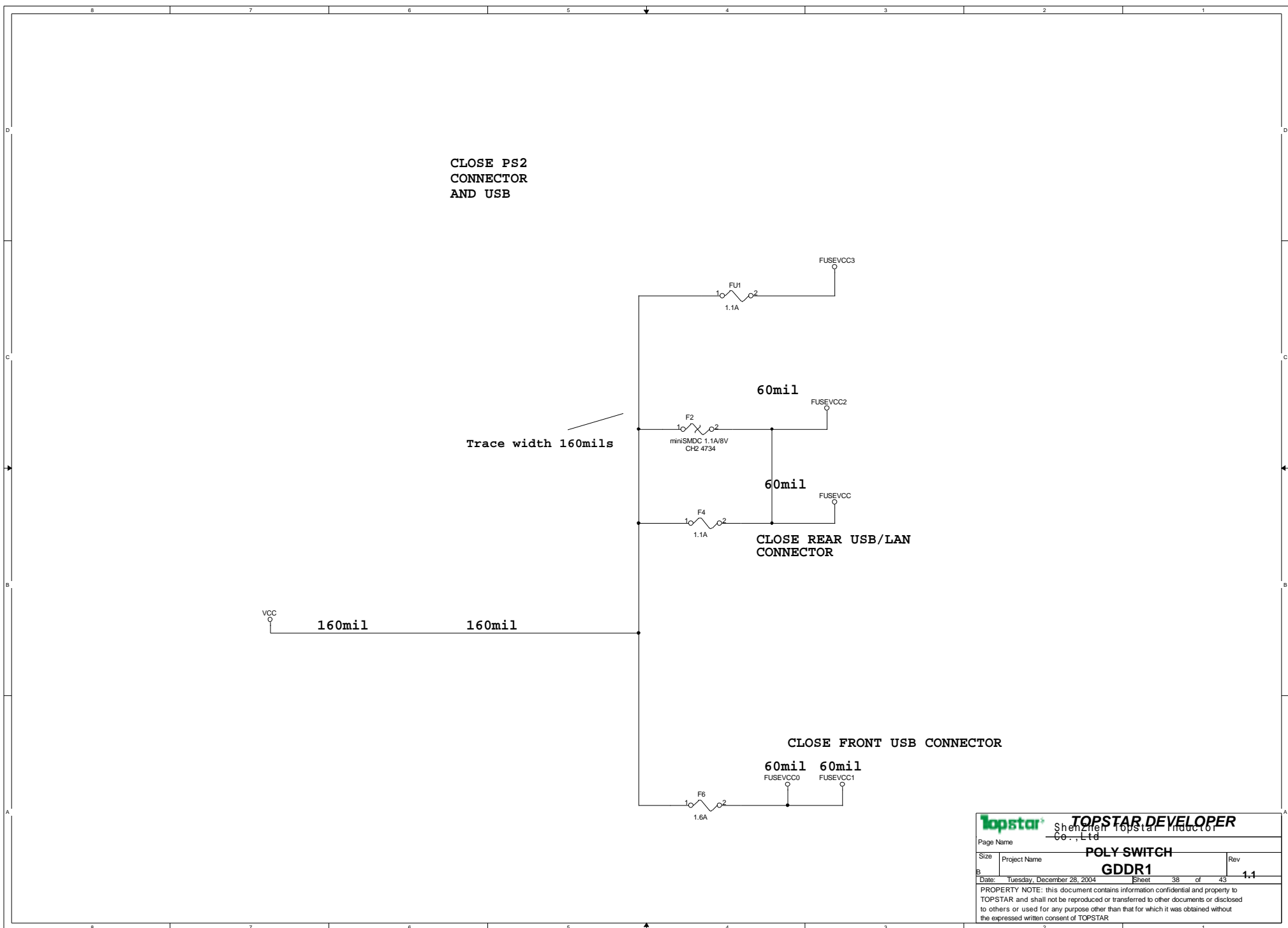
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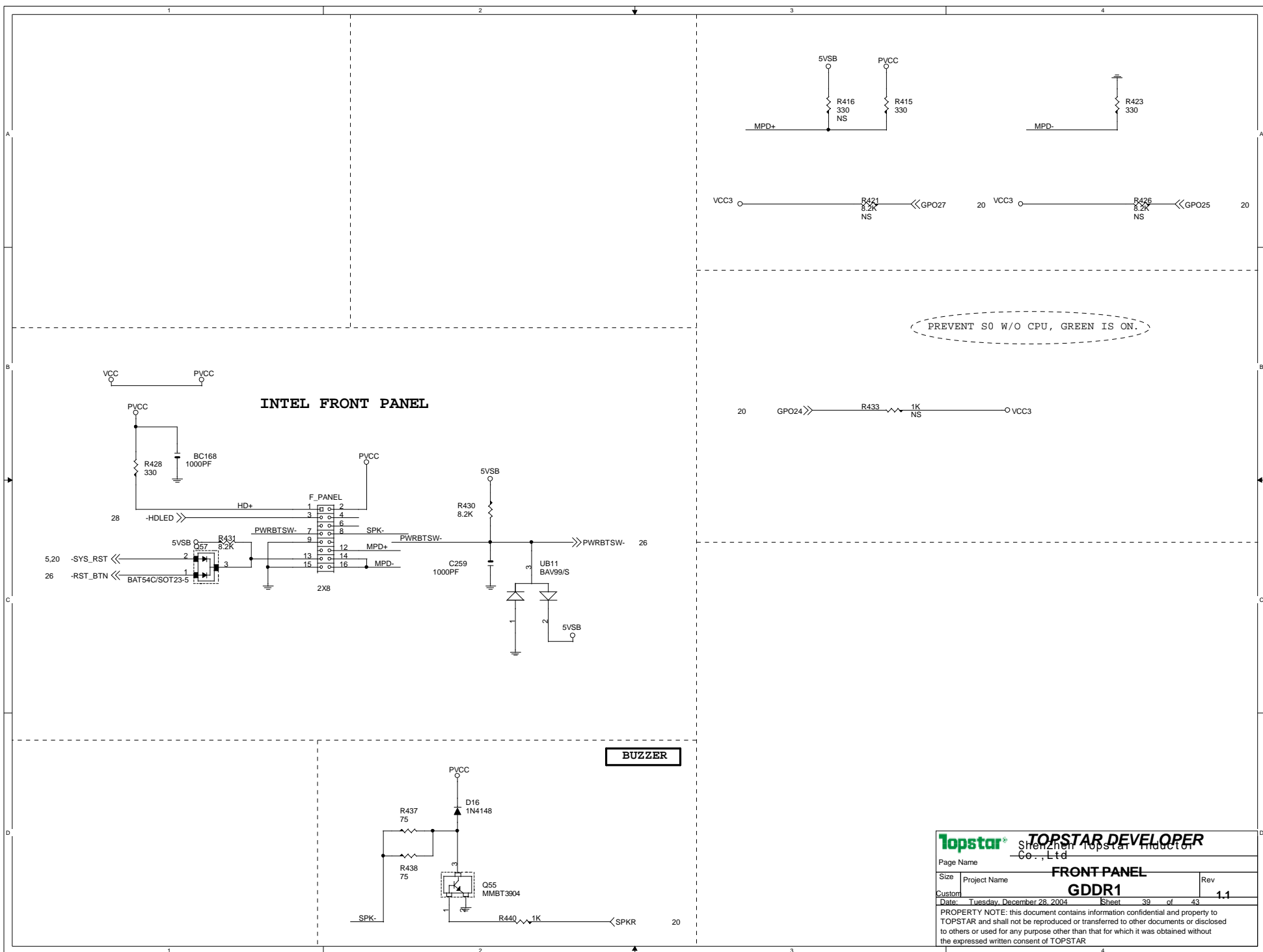
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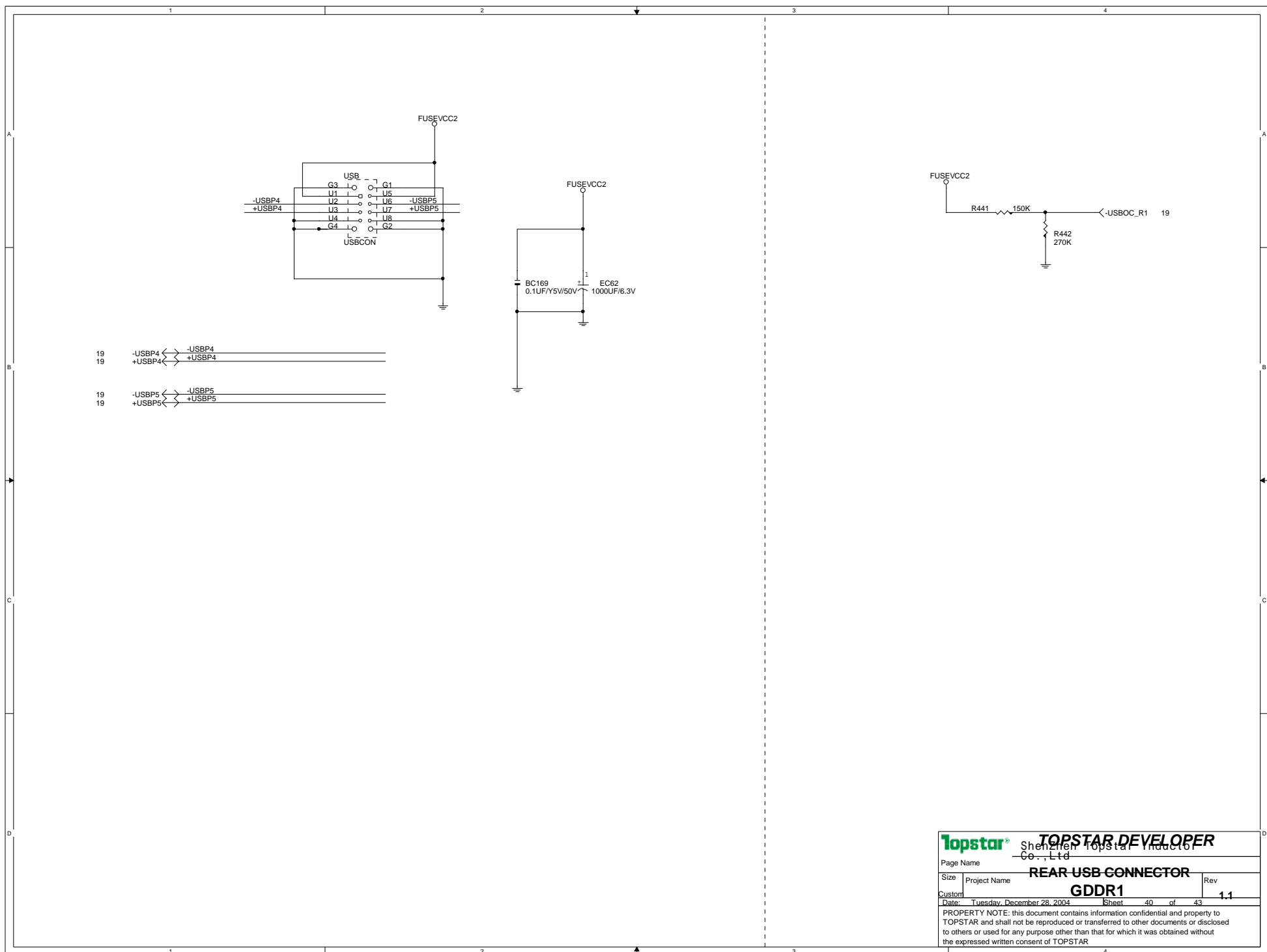
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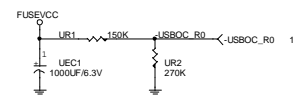
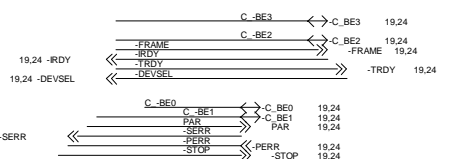









R32 value should be 5.6K (1%) at RTL8100C application, and 2.49K (1%) at RTL8110S(B) application.



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