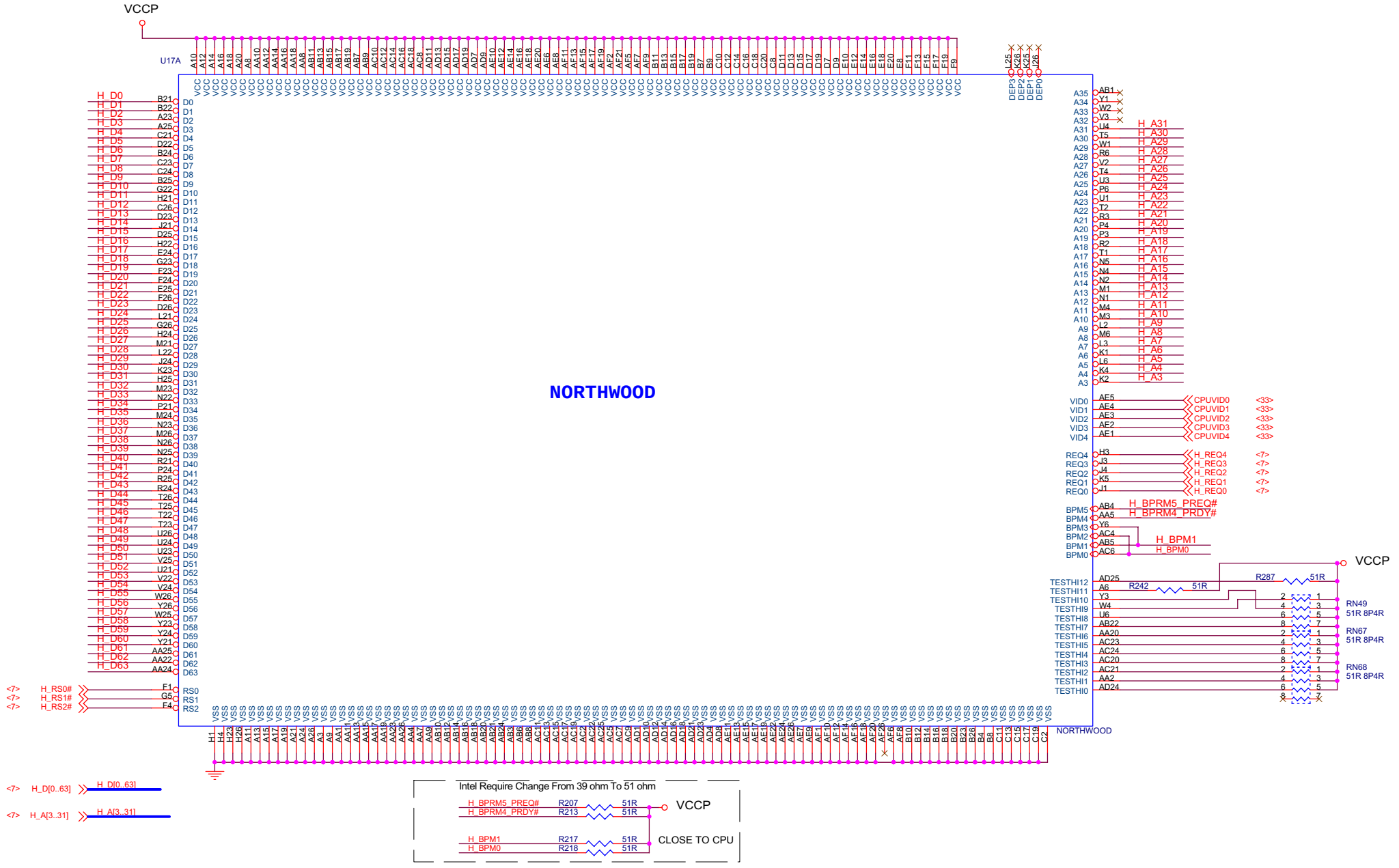
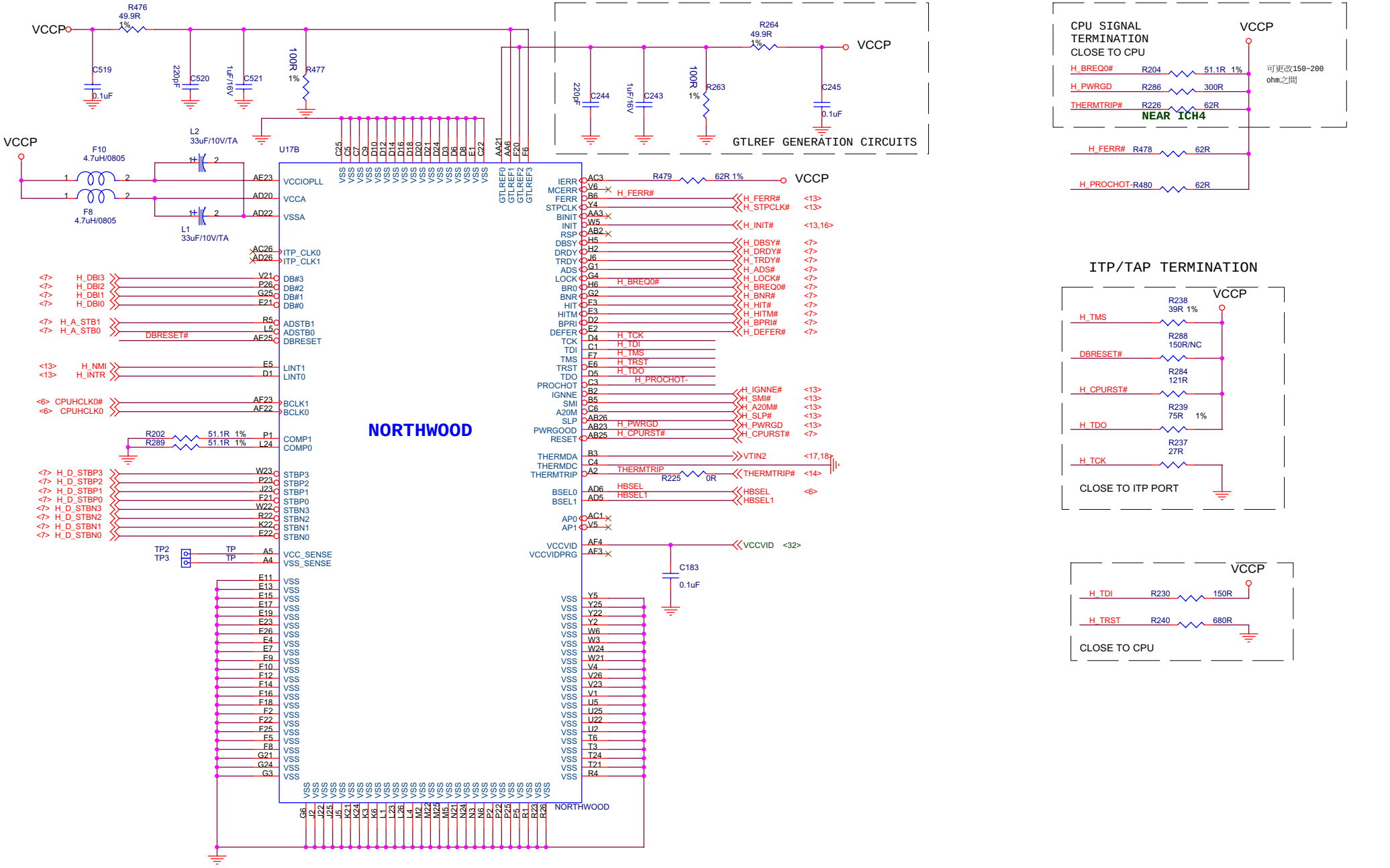


Technica House Incorporation	
Title	INTEL Brookdale_G_PE CHIPSET
Size	Document Number: 478-PIN SOCKET : PART 1
Rev	0.1
Date:	Tuesday, February 17, 2004
Sheet	3 of 34


NORTHWOOD
U17B
GTLREF GENERATION CIRCUITS
CPU SIGNAL TERMINATION
CLOSE TO CPU
NEAR ICH4
ITP/TAP TERMINATION
CLOSE TO ITP PORT
CLOSE TO CPU
VCCP
R476 49.9R 1%
R264 49.9R 1%
R263 100R 1%
R477 100R 1%
C519 0.1uF
C520 220pF
C521 1uF/16V
C244 220pF
C243 1uF/16V
C245 0.1uF
C183 0.1uF
L2 33uF/10V/TA
L1 33uF/10V/TA
F10 4.7uH/0805
F8 4.7uH/0805
R202 51.1R 1%
R289 51.1R 1%
R479 62R 1%
H_BREQ0# R204 51.1R 1%
H_PWRGD R286 300R
THERMTRIP# R226 62R
H_FERR# R478 62R
H_PROCHOT- R480 62R
可更改150~200 ohm之間
R238 39R 1%
R288 150R/NC
R284 121R
R239 75R 1%
R237 27R
H_TMS
DBRESET#
H_CPURST#
H_TDO
H_TCK
H_TDI R230 150R
H_TRST R240 680R
R225 0R
TP2
TP3
Technica House Incorporation
Title
INTEL Brookdale_G_PE CHIPSET
Size
Document Number
478-PIN SOCKET : PART 2
Rev
0.1
Date: Tuesday, February 17, 2004
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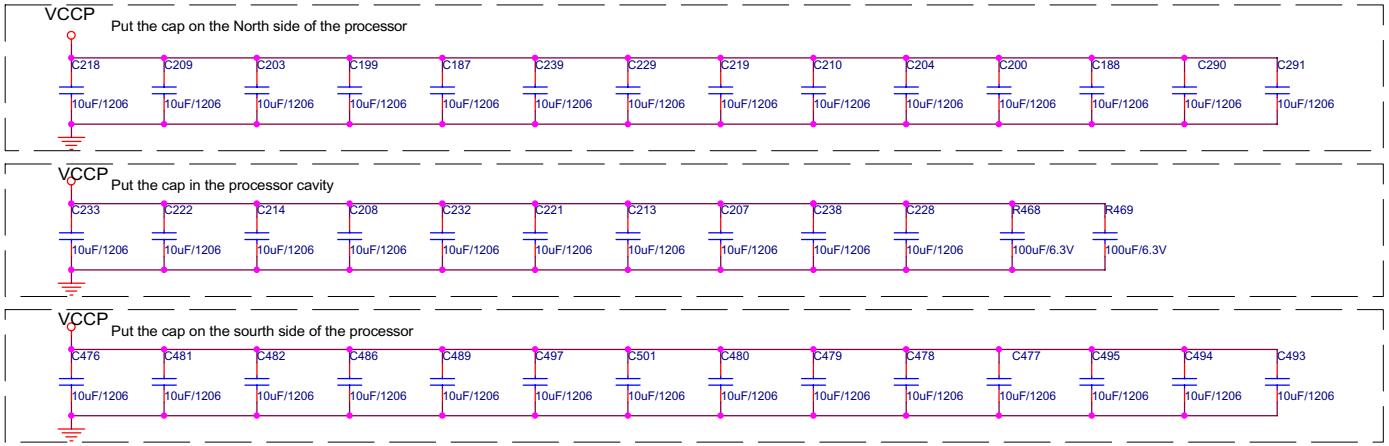
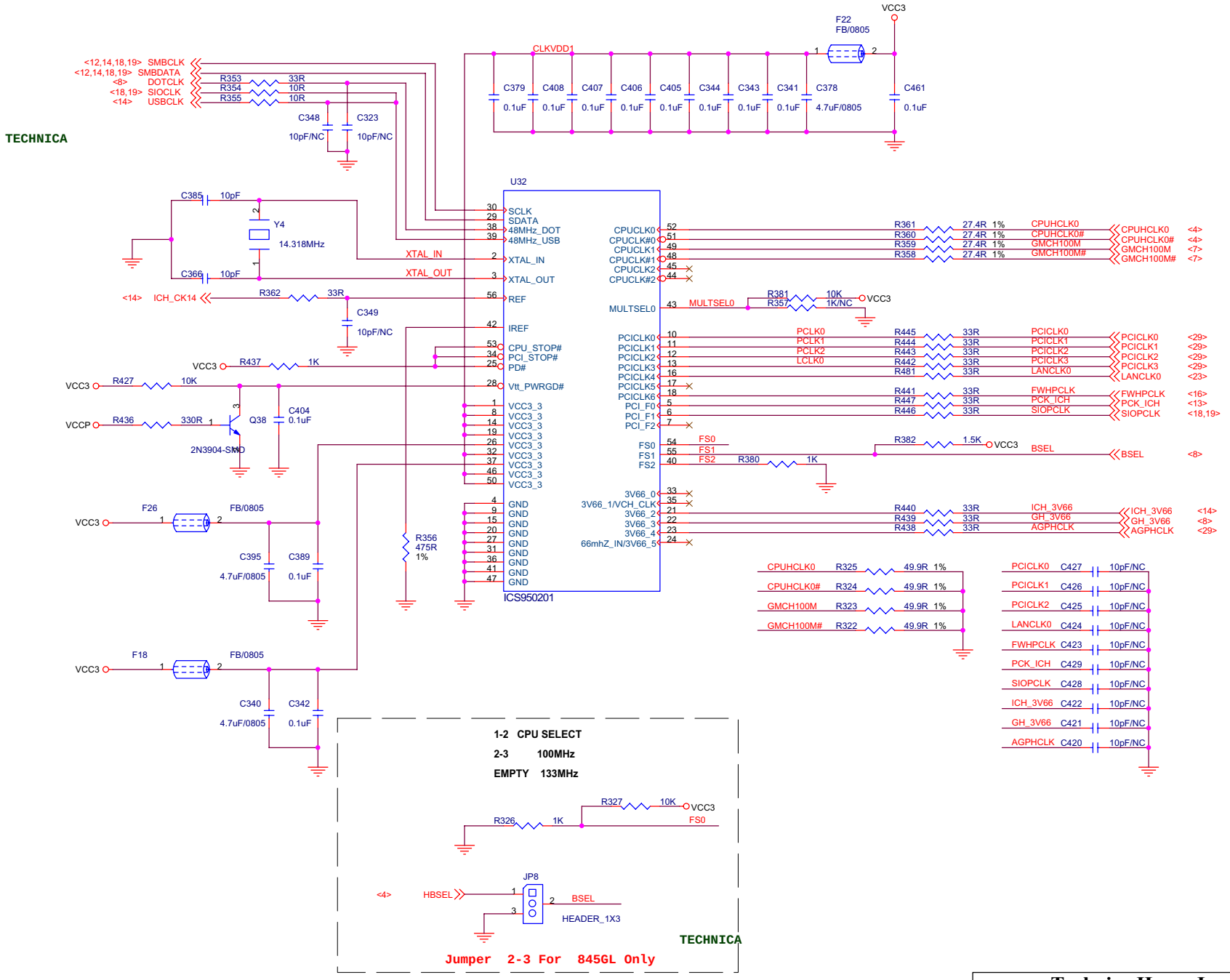


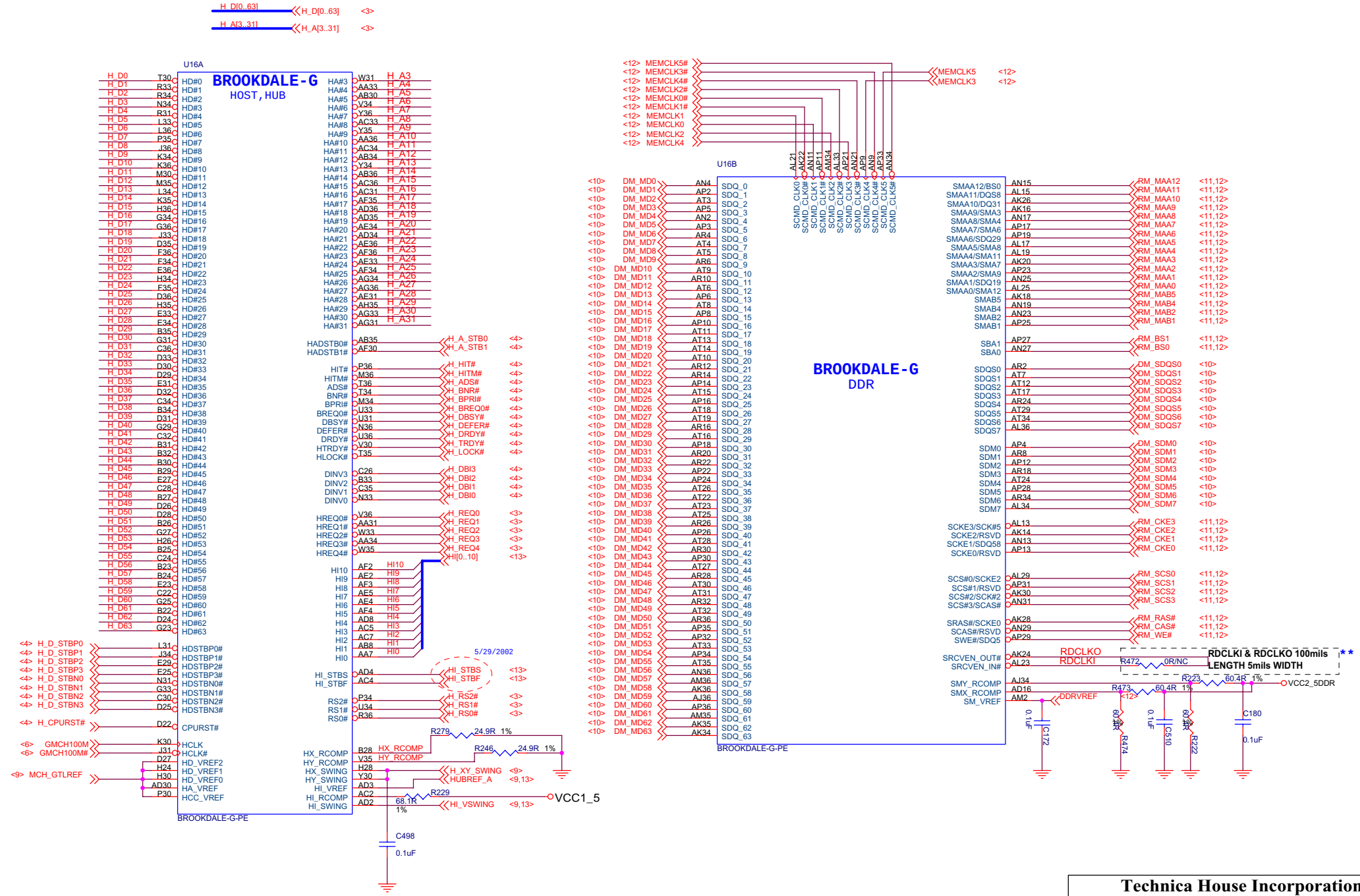
Technica House Incorporation

Title	INTEL Brookdale_G_PE CHIPSET	
Size	Document Number: P4 CAPACITORS	Rev: 0.1
Date: Tuesday, February 17, 2004	Sheet 5 of 34	

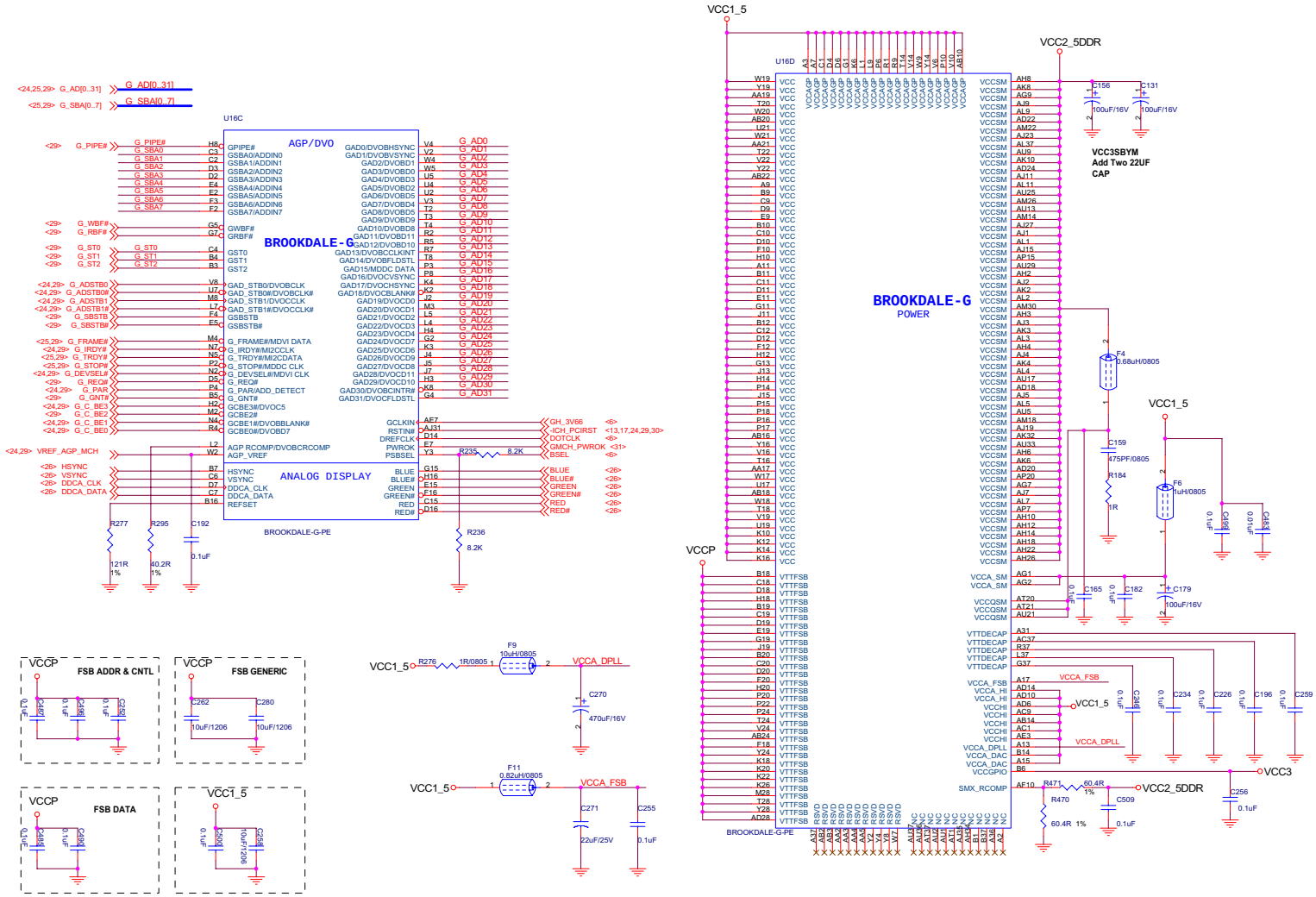
Clock Synthesizer



Technica House Incorporation	
Title	INTEL Brookdale-G CHIPSET
Size	Document Number: ICS950201_Clock Genertor - 00006
Rev	0.9
Date:	Tuesday, February 17, 2004
Sheet	6 of 34



Technica House Incorporation	
Title	INTEL Brookdale_G_PE CHIPSET
Size	Document Number: MCH : PART 1 (HOST INTERFACE) — Rev: 0.1
Date: Tuesday, February 17, 2004	Sheet 7 of 34



Title	INTEL Brookdale_G_PE CHIPSET
Size	Document Number: MCH : PART 2 — Rev: 0.1
Date:	Tuesday, February 17, 2004 — Sheet 8 of 34

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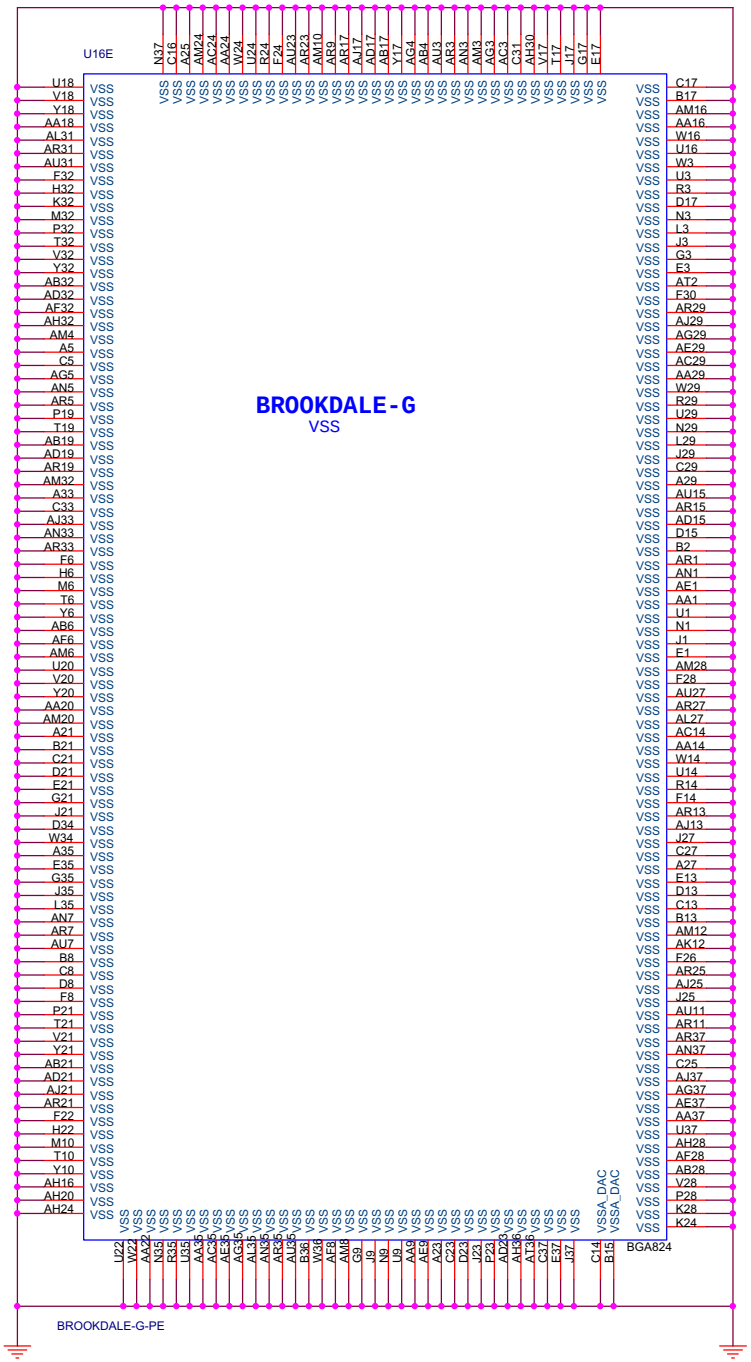

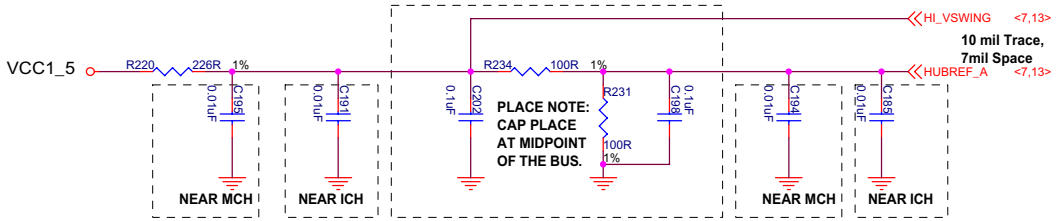

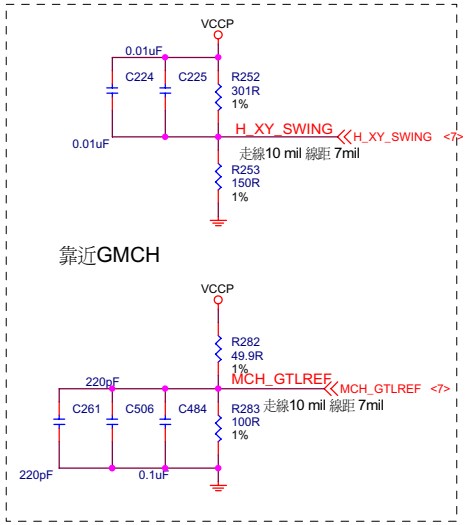

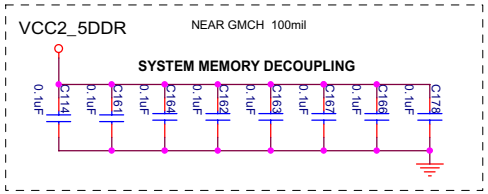

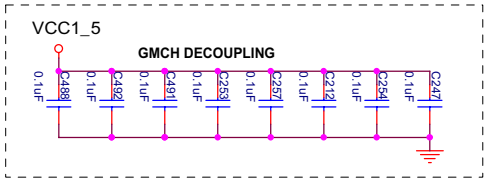

Technica House Incorporation		
Title: INTEL Brookdale_G_PE CHIPSET		
Size	Document Number: MCH : PART 3	Rev: 0.1
Date: Tuesday, February 17, 2004	Sheet 9 of 34	

RN26
10R 8P4R

<11,12> RM_MD2 — DM_MD2
<11,12> RM_MD6 — DM_MD6
<11,12> RM_MD7 — DM_MD7
<11,12> RM_MD3 — DM_MD3

RN28
10R 8P4R

<11,12> RM_MD0 — DM_MD0
<11,12> RM_MD4 — DM_MD4
<11,12> RM_MD5 — DM_MD5
<11,12> RM_MD1 — DM_MD1

RN27
10R 8P4R

<11,12> RM_MD8 — DM_MD8
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<11,12> RM_MD12 — DM_MD12
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RN31
10R 8P4R

<11,12> RM_MD14 — DM_MD14
<11,12> RM_MD15 — DM_MD15
<11,12> RM_MD10 — DM_MD10
<11,12> RM_MD11 — DM_MD11

RN32
10R 8P4R

<11,12> RM_MD20 — DM_MD20
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RN33
10R 8P4R

<11,12> RM_MD18 — DM_MD18
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RN41
10R 8P4R

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RN29
10R 8P4R

<11,12> RM_MD26 — DM_MD26
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RN30
10R 8P4R

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RN34
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RN35
10R 8P4R

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RN36
10R 8P4R

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RN38
10R 8P4R

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RN37
10R 8P4R

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RN40
10R 8P4R

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RN39
10R 8P4R

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R138
10R
<11,12> RM_SDQS0 — DM_SDQS0 <7>

R144
10R
<11,12> RM_SDQS1 — DM_SDQS1 <7>

R146
10R
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R152
10R
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R142
10R
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R141
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R149
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R151
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R139
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R145
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R147
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R153
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R143
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R140
10R
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R148
10R
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R150
10R
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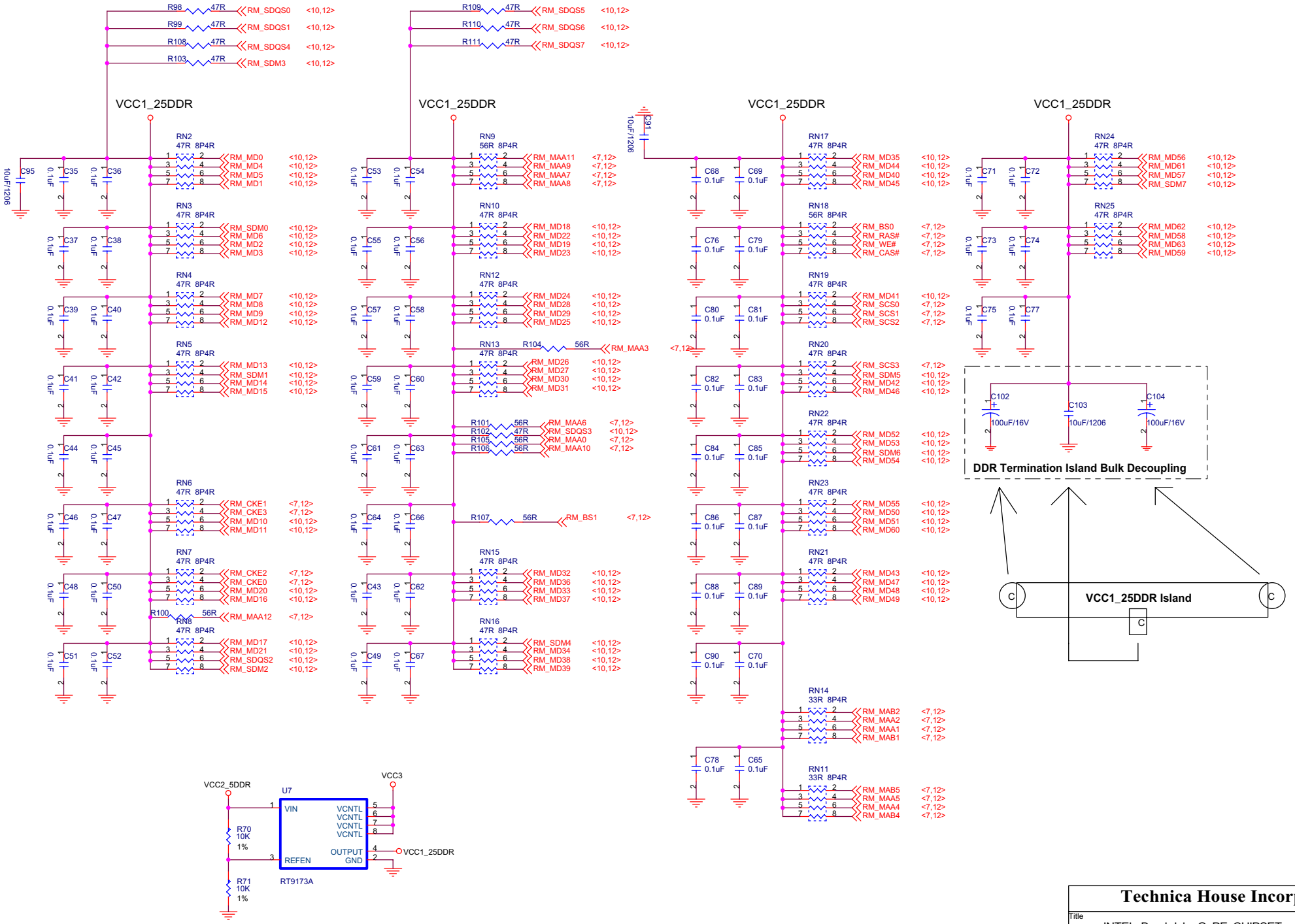
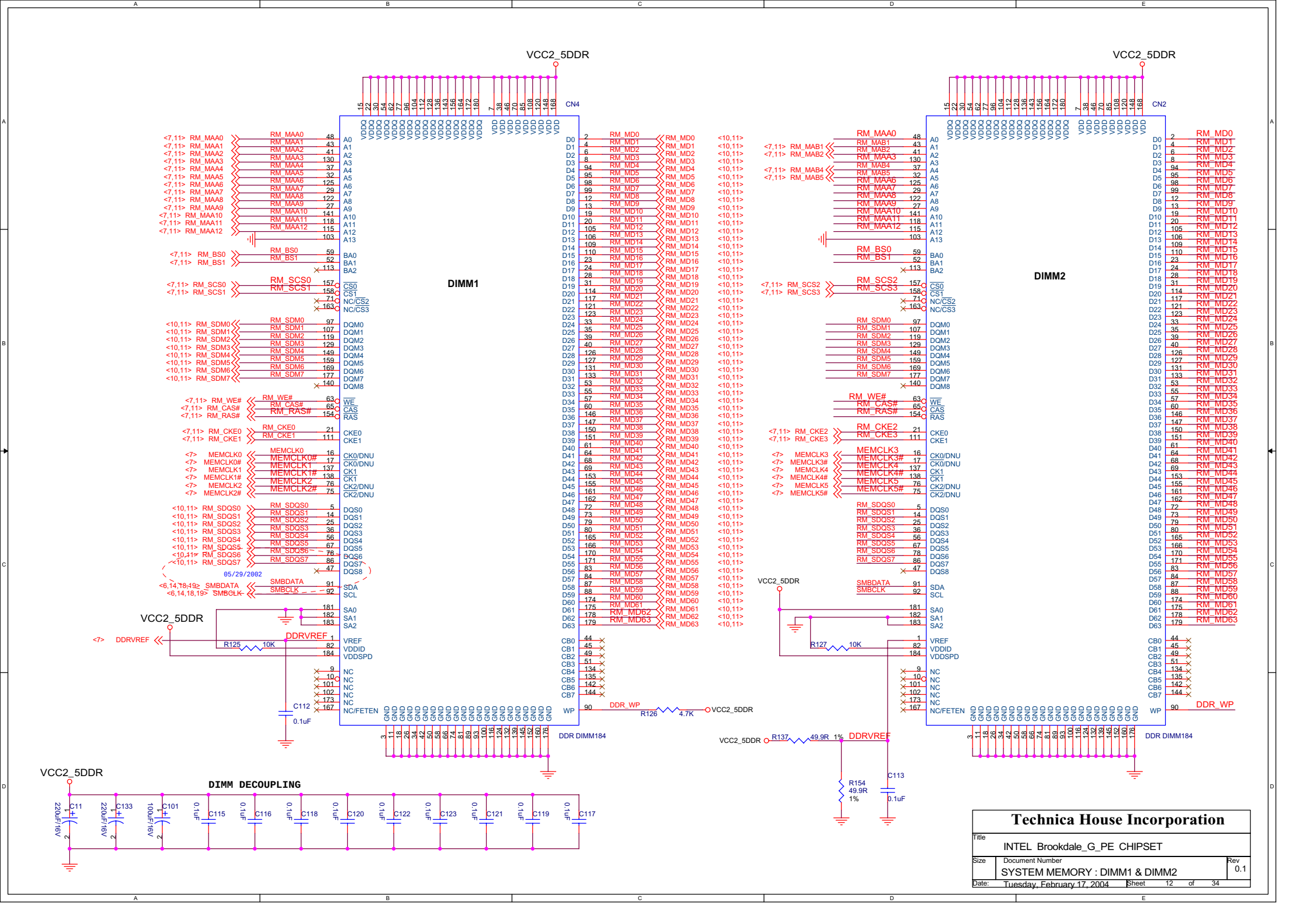
Technica House Incorporation

Title: INTEL Brookdale_G_PE CHIPSET		
Size: A3	Document Number: DIMM CLOCK TERMINATOR	Rev: 0.1
Date: Tuesday, February 17, 2004	Sheet 10 of 34	



Technica House Incorporation		
Title: INTEL Brookdale_G_PE CHIPSET		
Size	Document Number	Rev 0.1
Date: Tuesday, February 17, 2004	Sheet 11 of 34	


VCC2_5DDR
CN4
DIMM1
CN2
DIMM2
DDR DIMM184
DDRVREF
R125 10K
R127 10K
R126 4.7K
DDR_WP
R137 49.9R 1%
R154 49.9R 1%
C112 0.1uF
C113 0.1uF
DIMM DECOUPLING
C11 220uF/16V
C133 220uF/16V
C101 100uF/16V
C115 0.1uF
C116 0.1uF
C118 0.1uF
C120 0.1uF
C122 0.1uF
C123 0.1uF
C121 0.1uF
C119 0.1uF
C117 0.1uF
05/29/2002
Technica House Incorporation
Title
INTEL Brookdale_G_PE CHIPSET
Size
Document Number
SYSTEM MEMORY : DIMM1 & DIMM2
Rev
0.1
Date: Tuesday, February 17, 2004
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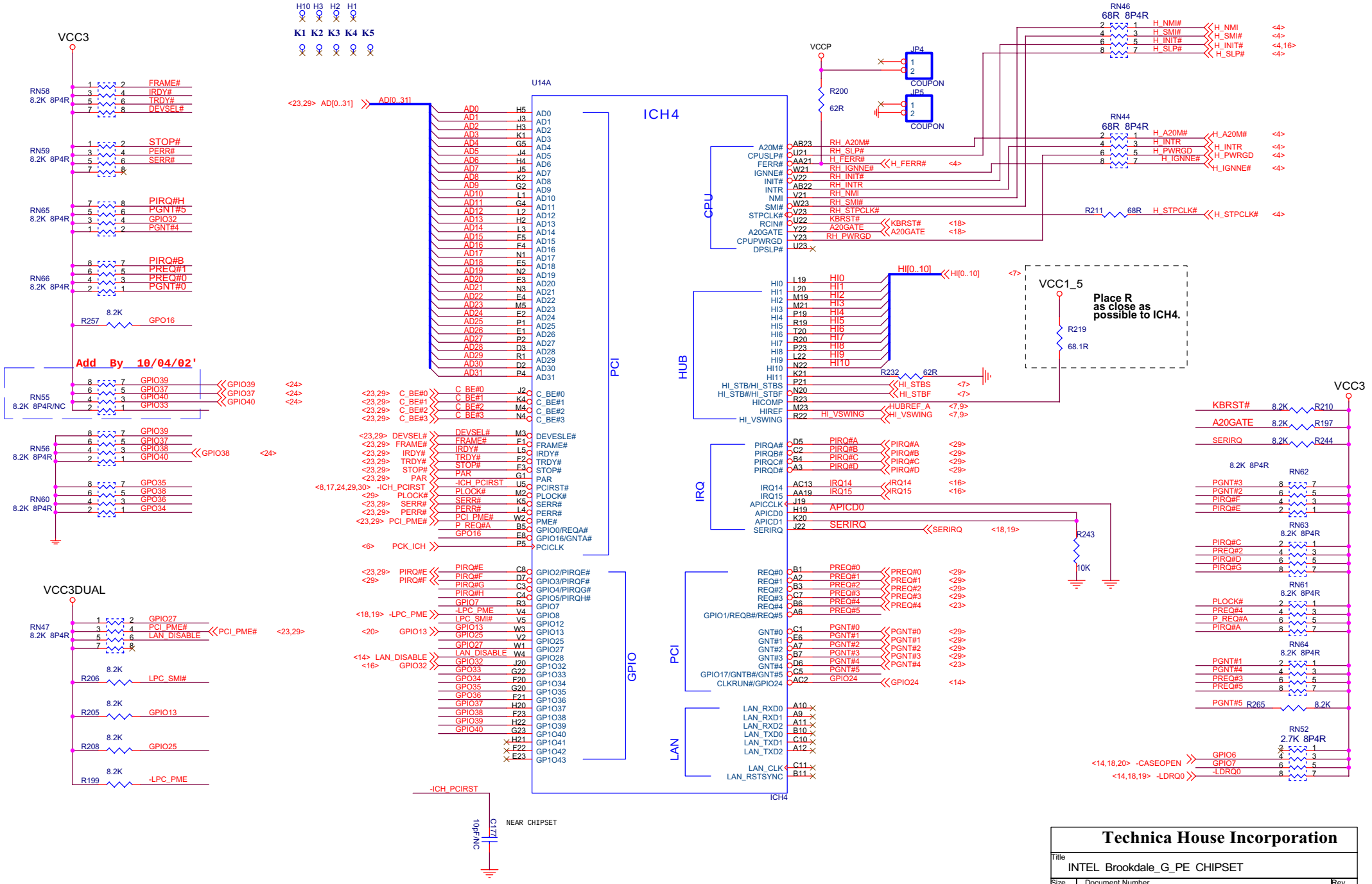
ICH4 PART1



Technica House Incorporation	
Title	INTEL Brookdale_G_PE CHIPSET
Size	Document Number: ICH4 : PART 1 — Rev: 0.1
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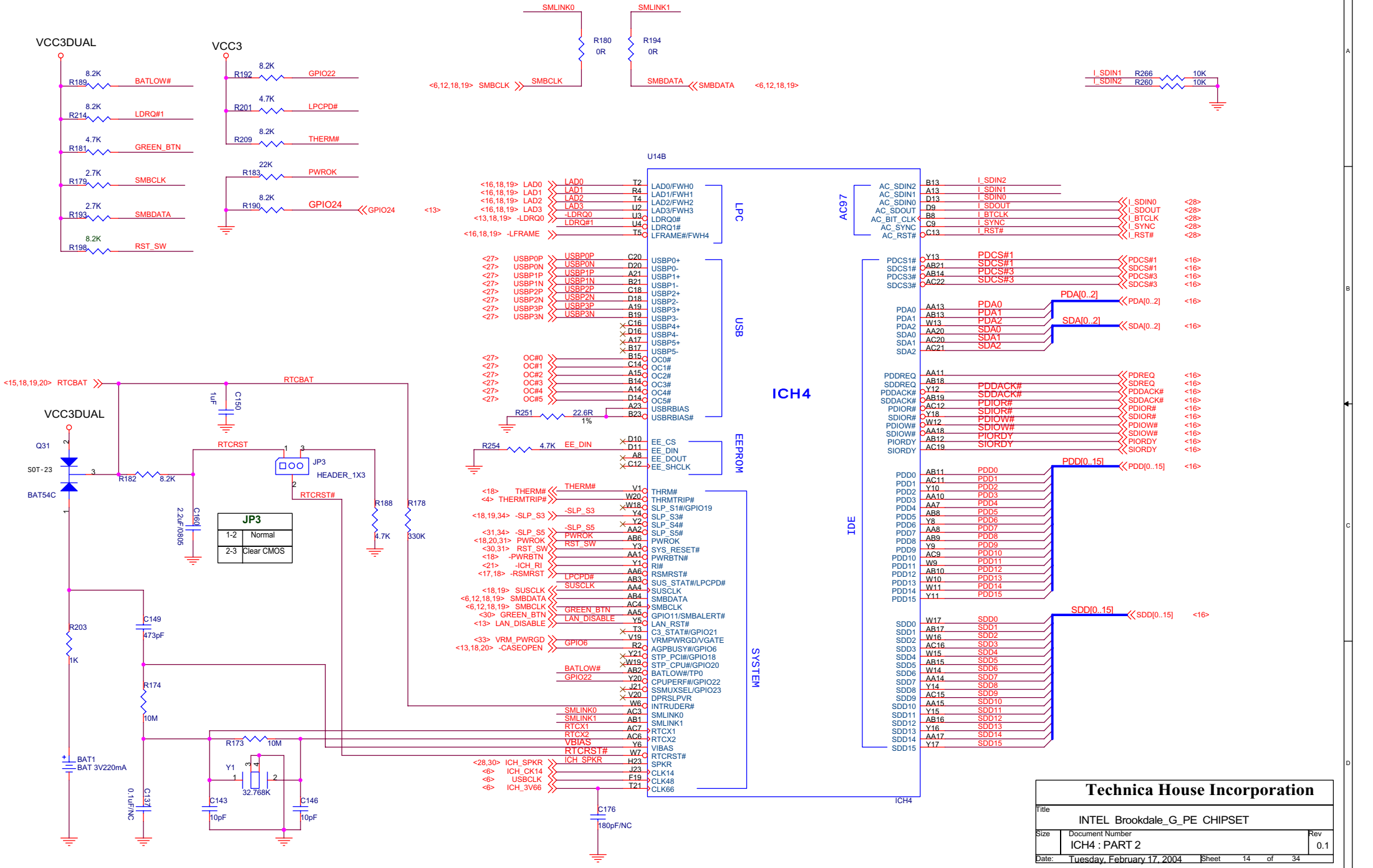
ICH4 PART2


VCC3DUAL
VCC3
R189 8.2K BATLOW#
R214 8.2K LDRQ#1
R181 4.7K GREEN_BTN
R179 2.7K SMBCLK
R193 2.7K SMBDATA
R198 8.2K RST_SW
R192 8.2K GPIO22
R201 4.7K LPCPD#
R209 8.2K THERM#
R183 22K PWROK
R190 8.2K GPIO24
SMLINK0
SMLINK1
R180 0R
R194 0R
<6,12,18,19> SMBCLK
SMBDATA
I_SDIN1 R266 10K
I_SDIN2 R260 10K
U14B
ICH4
LPC
USB
EEPROM
SYSTEM
AC97
IDE
<15,18,19,20> RTCBAT
C150 1uF
VCC3DUAL
Q31
SOT-23
BAT54C
R182 8.2K
RTCRST
JP3
HEADER_1X3
RTCRST#
C160 2.2uF/0805
R188 4.7K
R178 330K
JP3
1-2 Normal
2-3 Clear CMOS
R203 1K
C149 473pF
R174 10M
R173 10M
BAT1
BAT 3V220mA
C137 0.1uF/NC
Y1 32.768K
C143 10pF
C146 10pF
C176 180pF/NC
R251 22.6R 1%
R254 4.7K EE_DIN
PDA[0..2]
SDA[0..2]
PDD[0..15]
SDD[0..15]
Technica House Incorporation
Title
INTEL Brookdale_G_PE CHIPSET
Size
Document Number
ICH4 : PART 2
Rev
0.1
Date: Tuesday, February 17, 2004
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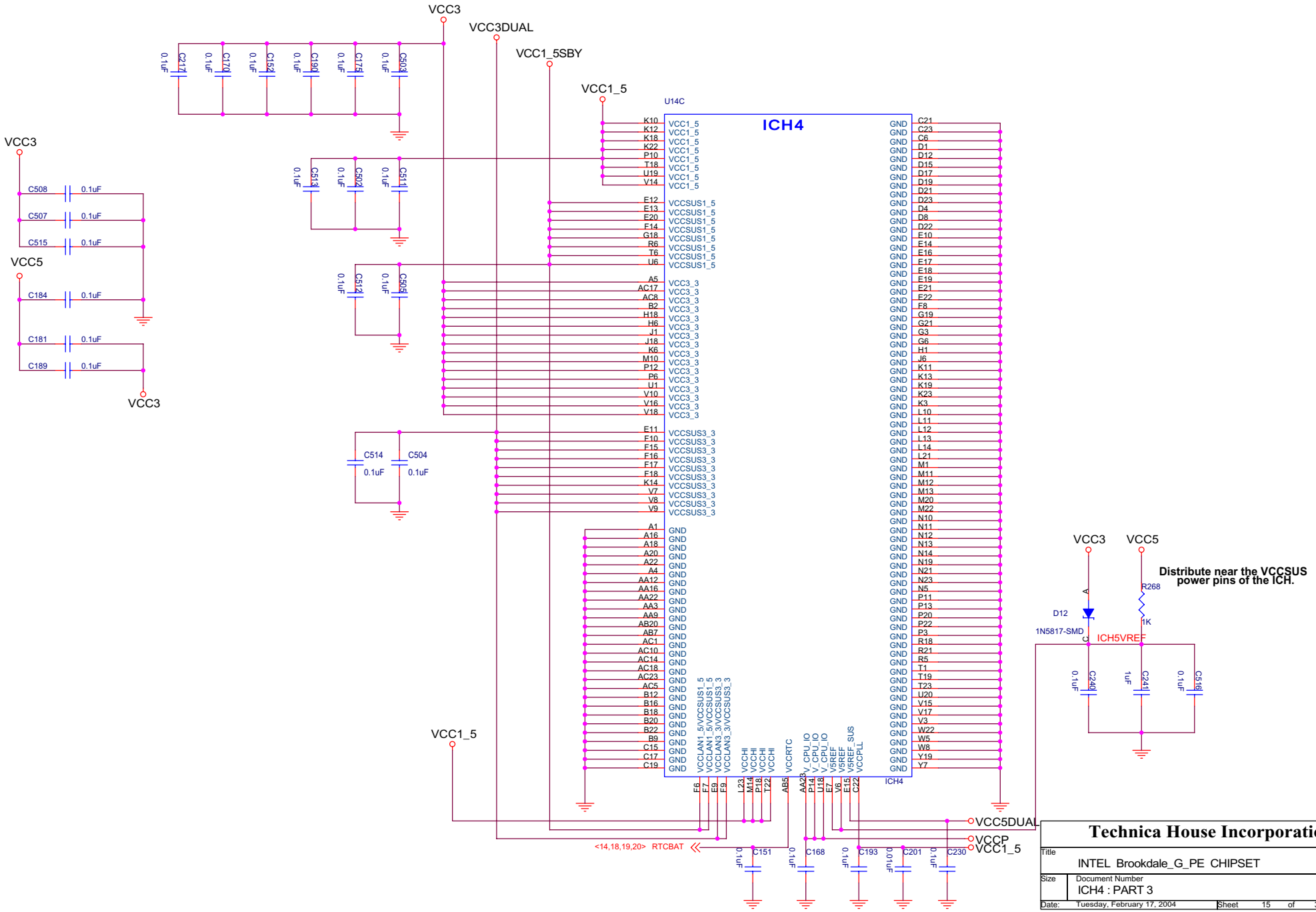
ICH4 PART3



Technica House Incorporation	
Title	INTEL Brookdale_G_PE CHIPSET
Size	Document Number: ICH4 : PART 3 — Rev: 0.1
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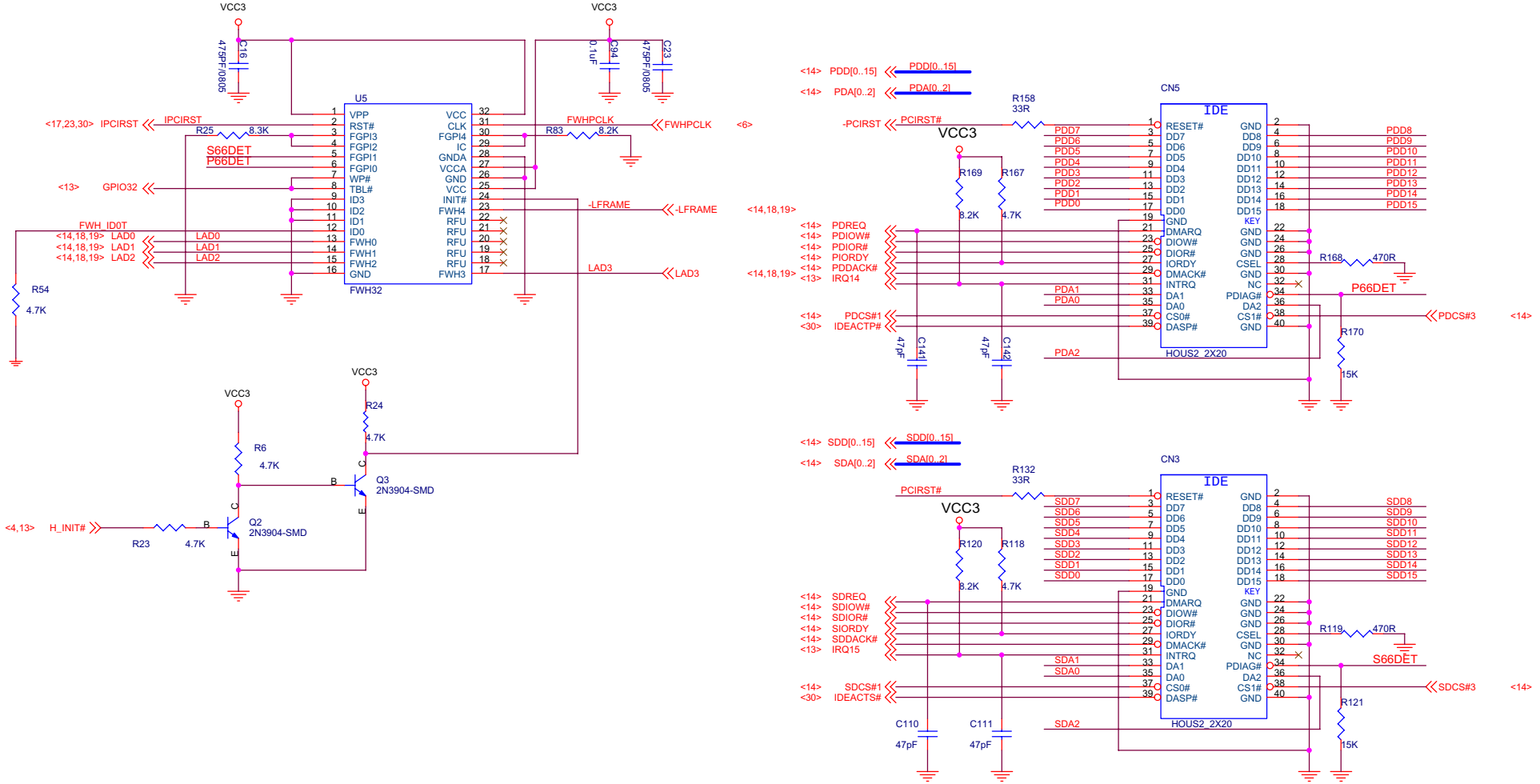
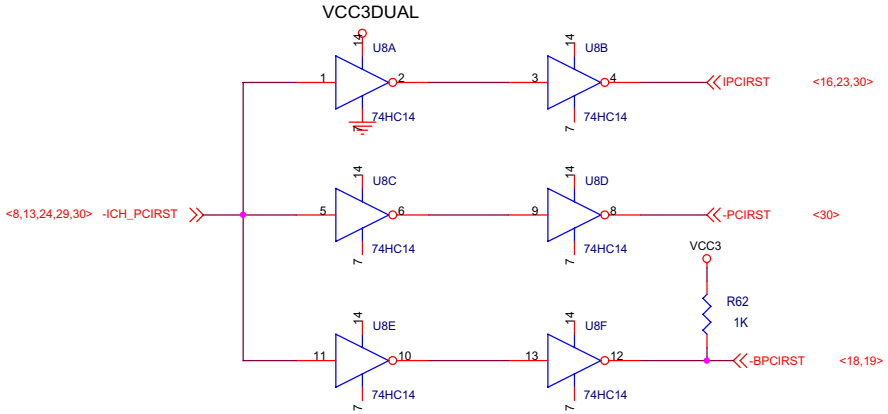
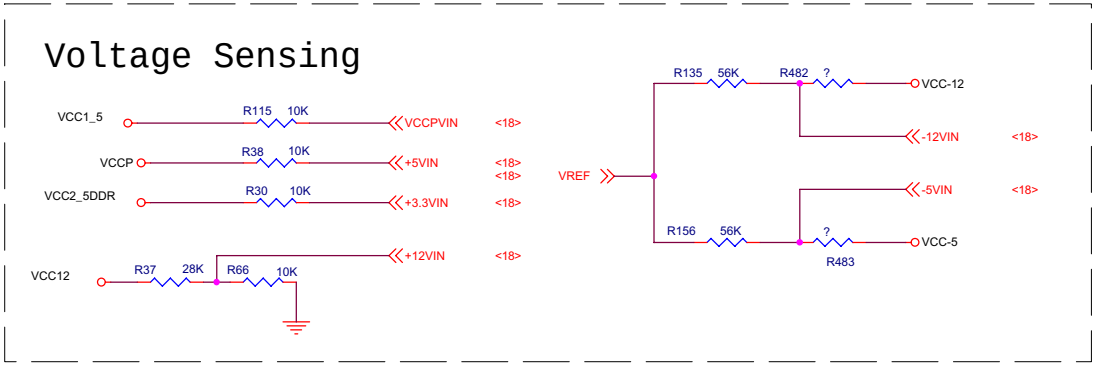
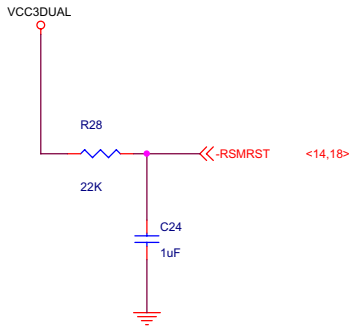
FirmWare Hub (FWH) Socket



Technica House Incorporation		
Title: INTEL Brookdale_G_PE CHIPSET		
Size	Document Number: FIRMWARE HUB (FWH) / IDE(ATA100)	Rev: 0.1
Date: Tuesday, February 17, 2004	Sheet 16 of 34	

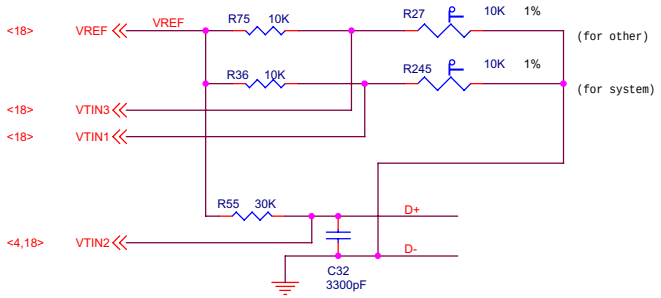




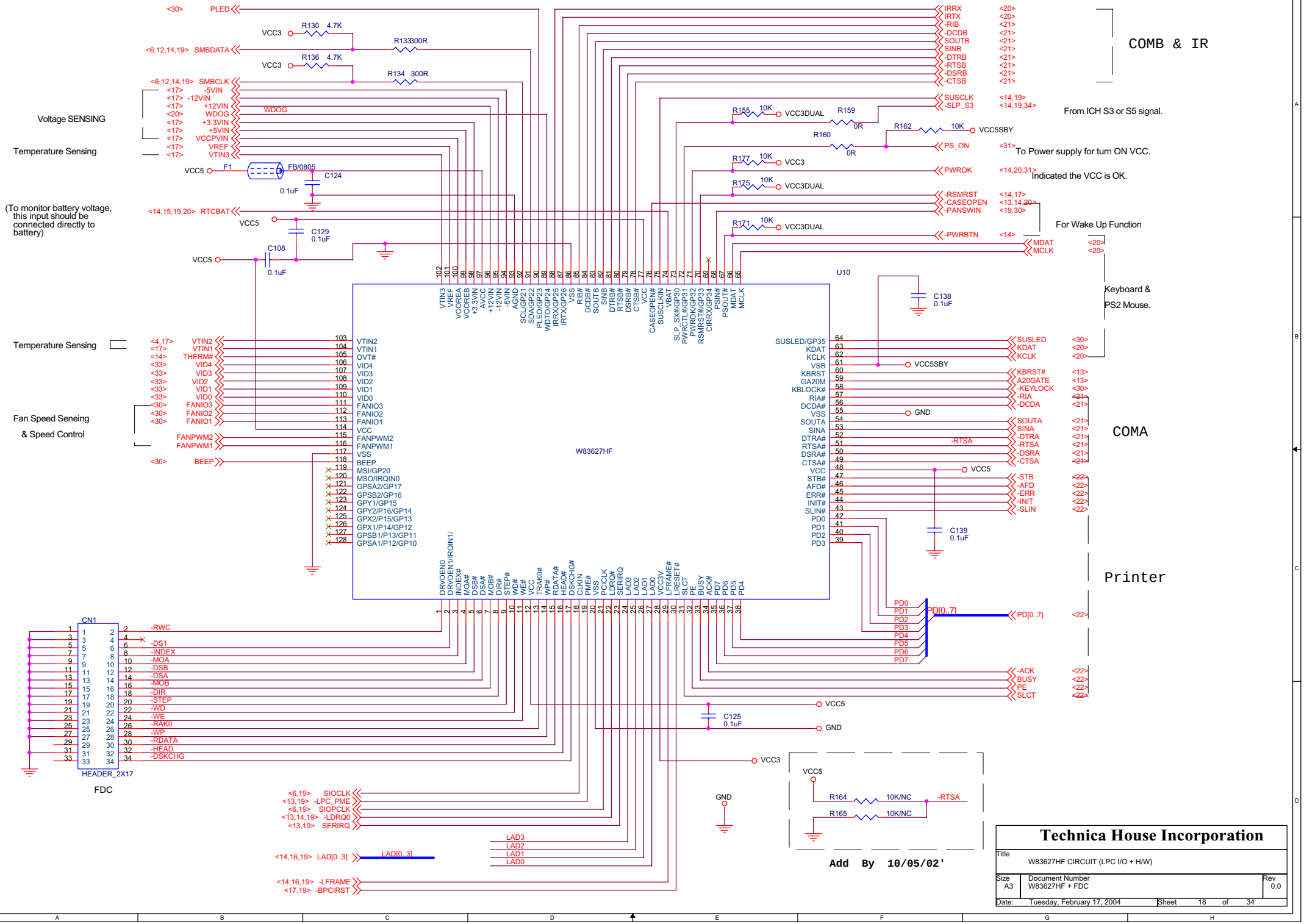


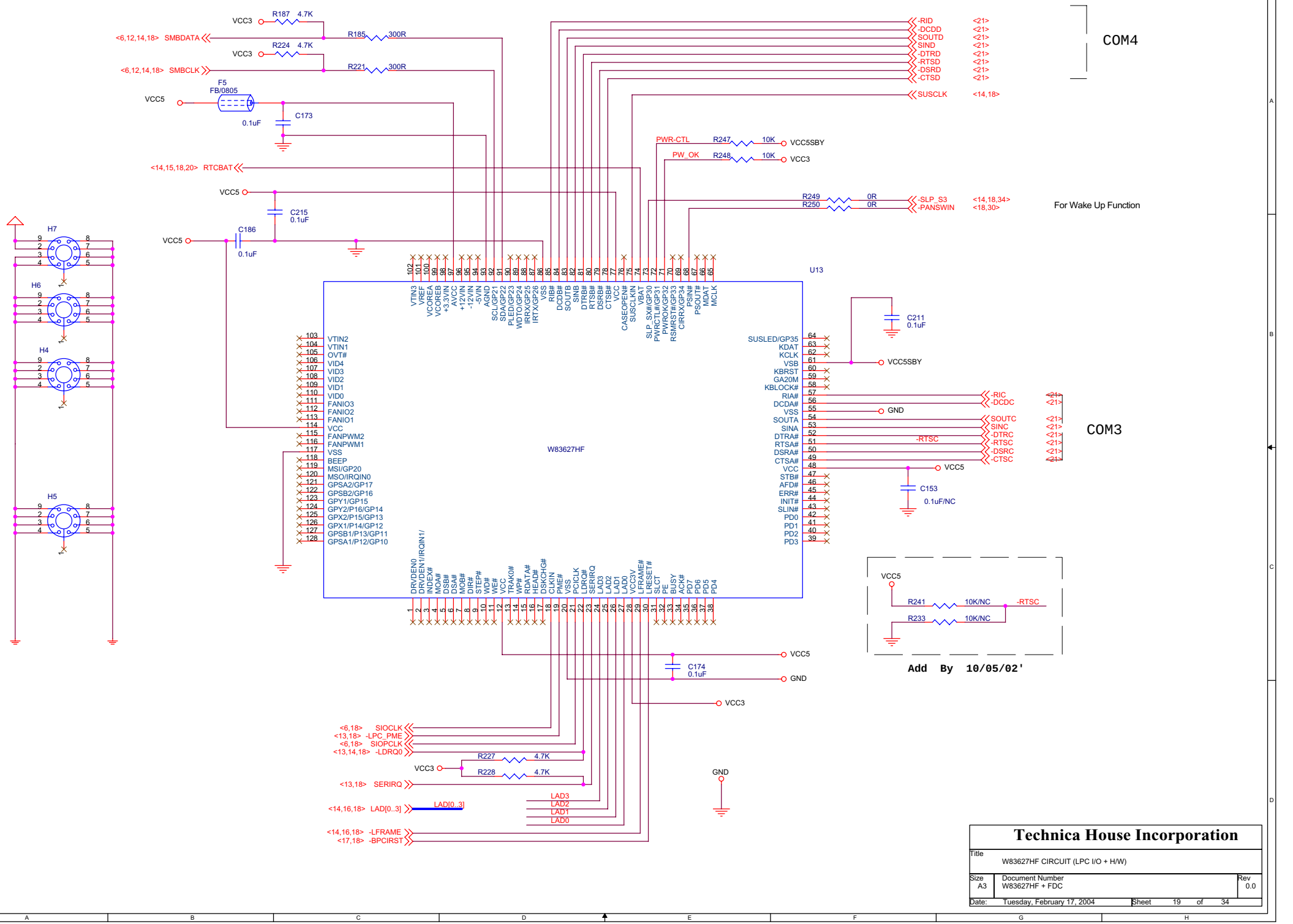
Hardware Monitor circuits

Temperature Sensing

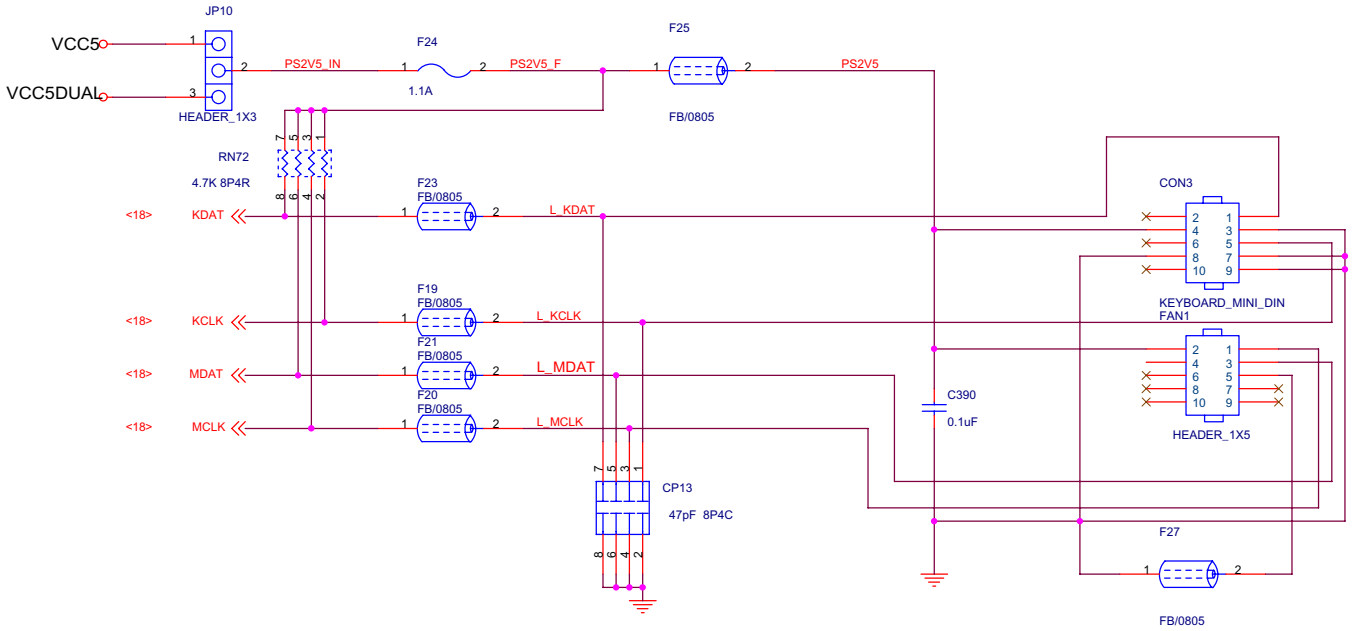


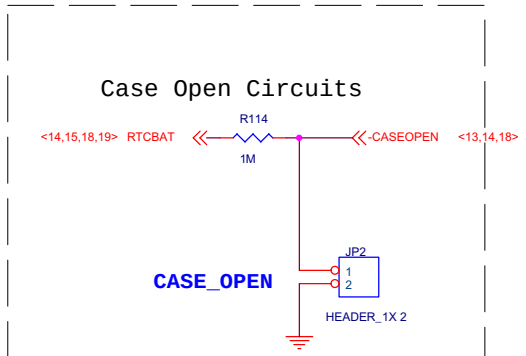
Technica House Incorporation		
Title: THERMISTOR,SMART CARD READER		
Size: A3	Document Number: ITTM-CG-99008	Rev: 0.0
Date: Tuesday, February 17, 2004	Sheet 17 of 34	


COMB & IR
From ICH S3 or S5 signal.
To Power supply for turn ON VCC.
Indicated the VCC is OK.
For Wake Up Function
Keyboard & PS2 Mouse.
COMA
Printer
Voltage SENSING
Temperature Sensing
(To monitor battery voltage, this input should be connected directly to battery)
Fan Speed Seneing & Speed Control
W83627HF
U10
FDC
CN1
HEADER_2X17
Add By 10/05/02'
Technica House Incorporation
Title W83627HF CIRCUIT (LPC I/O + H/W)
Size A3
Document Number W83627HF + FDC
Rev 0.0
Date: Tuesday, February 17, 2004
Sheet 18 of 34

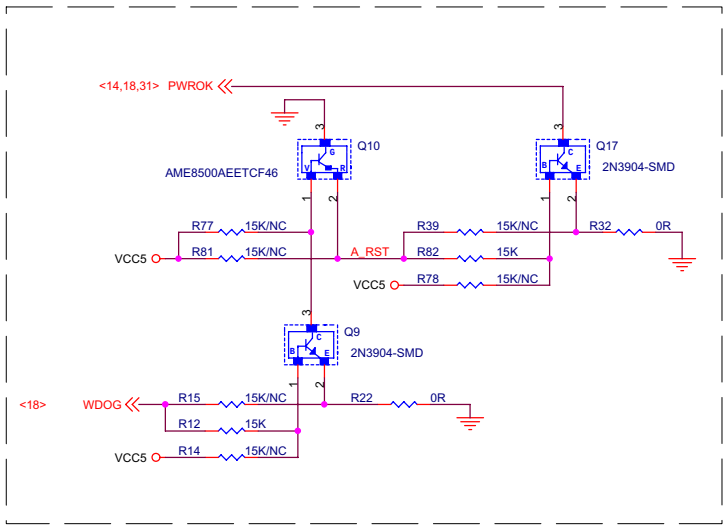

COM4
COM3
For Wake Up Function
W83627HF
U13
Add By 10/05/02'
Technica House Incorporation
W83627HF CIRCUIT (LPC I/O + H/W)
Size A3
Document Number W83627HF + FDC
Rev 0.0
Date: Tuesday, February 17, 2004
Sheet 19 of 34

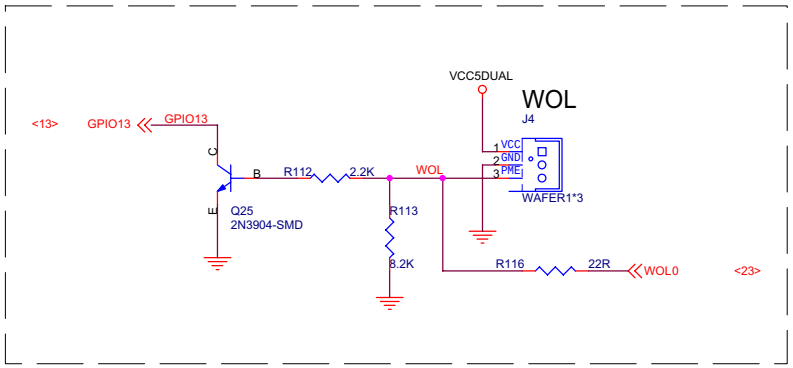
Serial Port/COM Headers

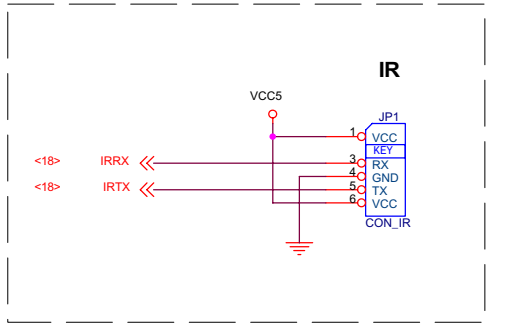




Add By 10/04/02'

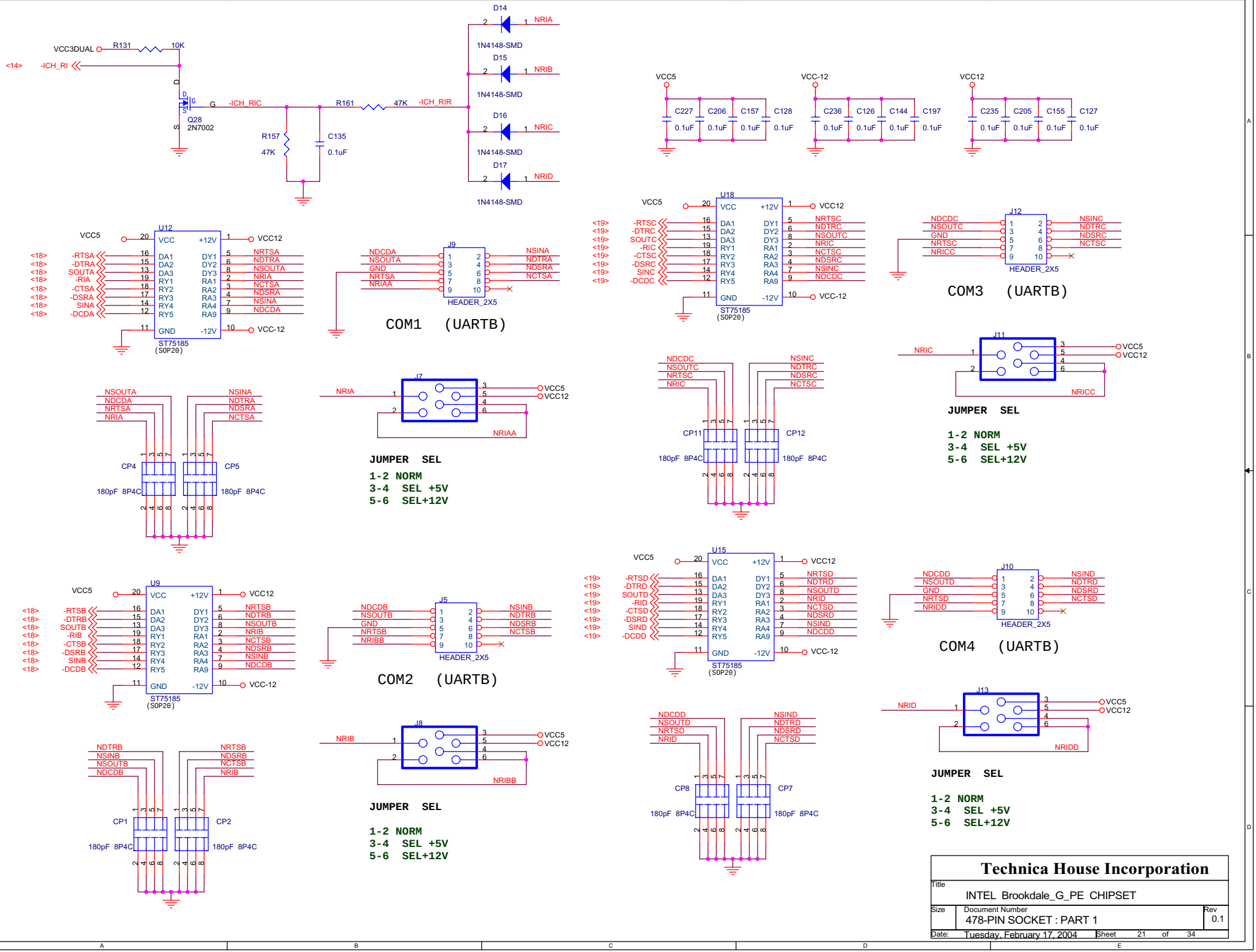






Technica House Incorporation

Title	INTEL Brookdale-G CHIPSET	
Size	Document Number: SERIAL PORT/COM/IR/CIR HEADER	Rev: 0.0
Date: Tuesday, February 17, 2004	Sheet 20 of 34	



Technica House Incorporation		
Title: INTEL Brookdale_G_PE CHIPSET		
Size	Document Number: 478-PIN SOCKET : PART 1	Rev: 0.1
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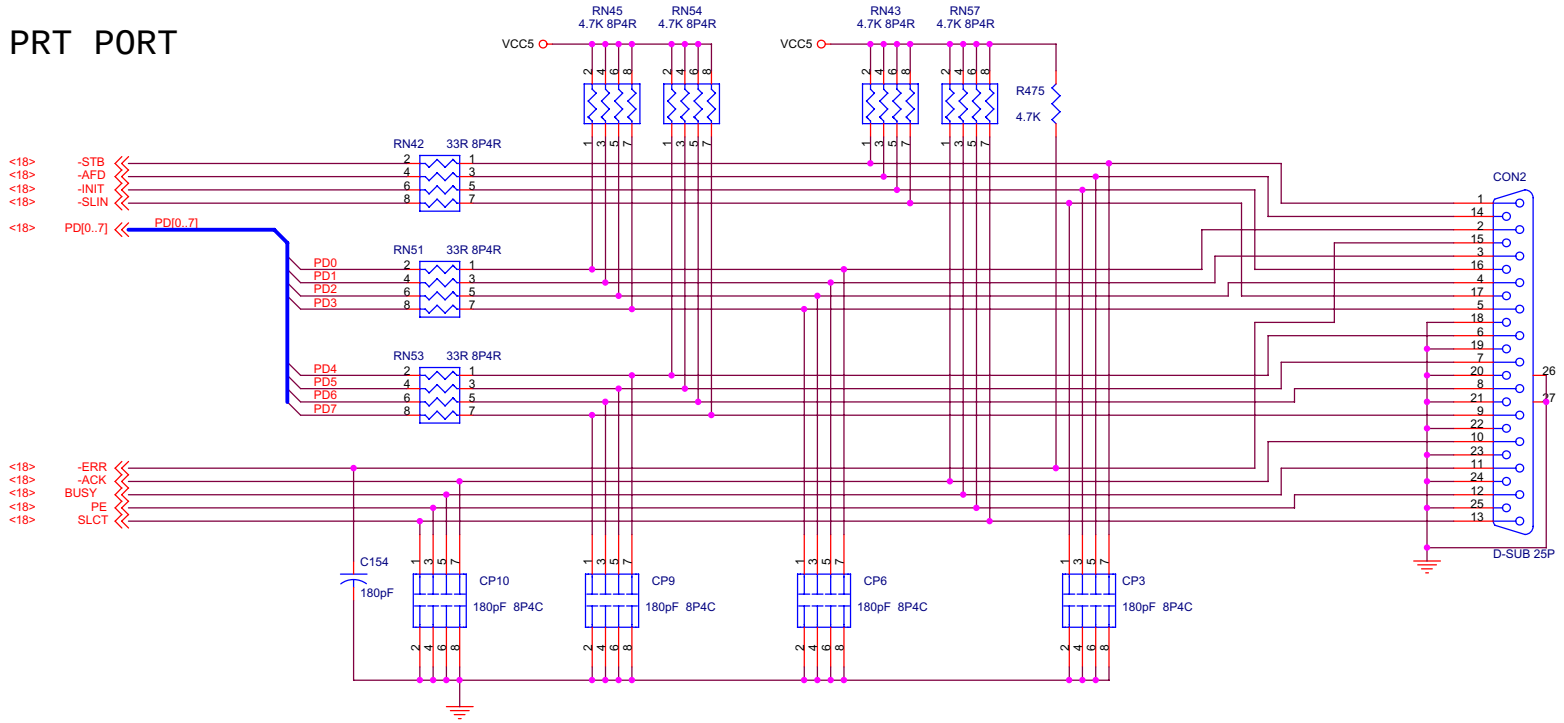
Parallel Port Header



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Title: INTEL Brookdale-G CHIPSET		
Size	Document Number: PARALLEL PORT / GAME PORT	Rev: 0.0
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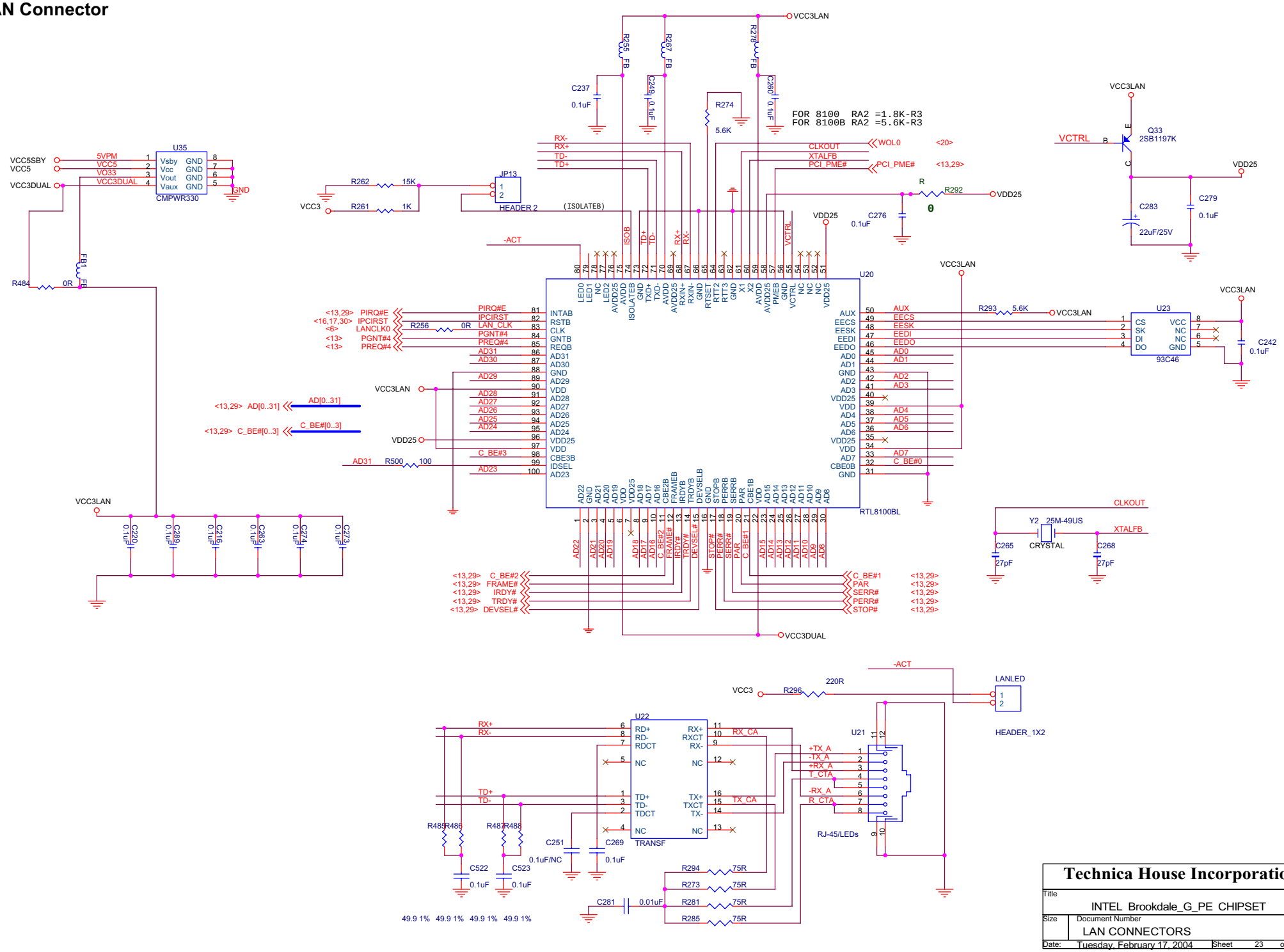
LAN Connector



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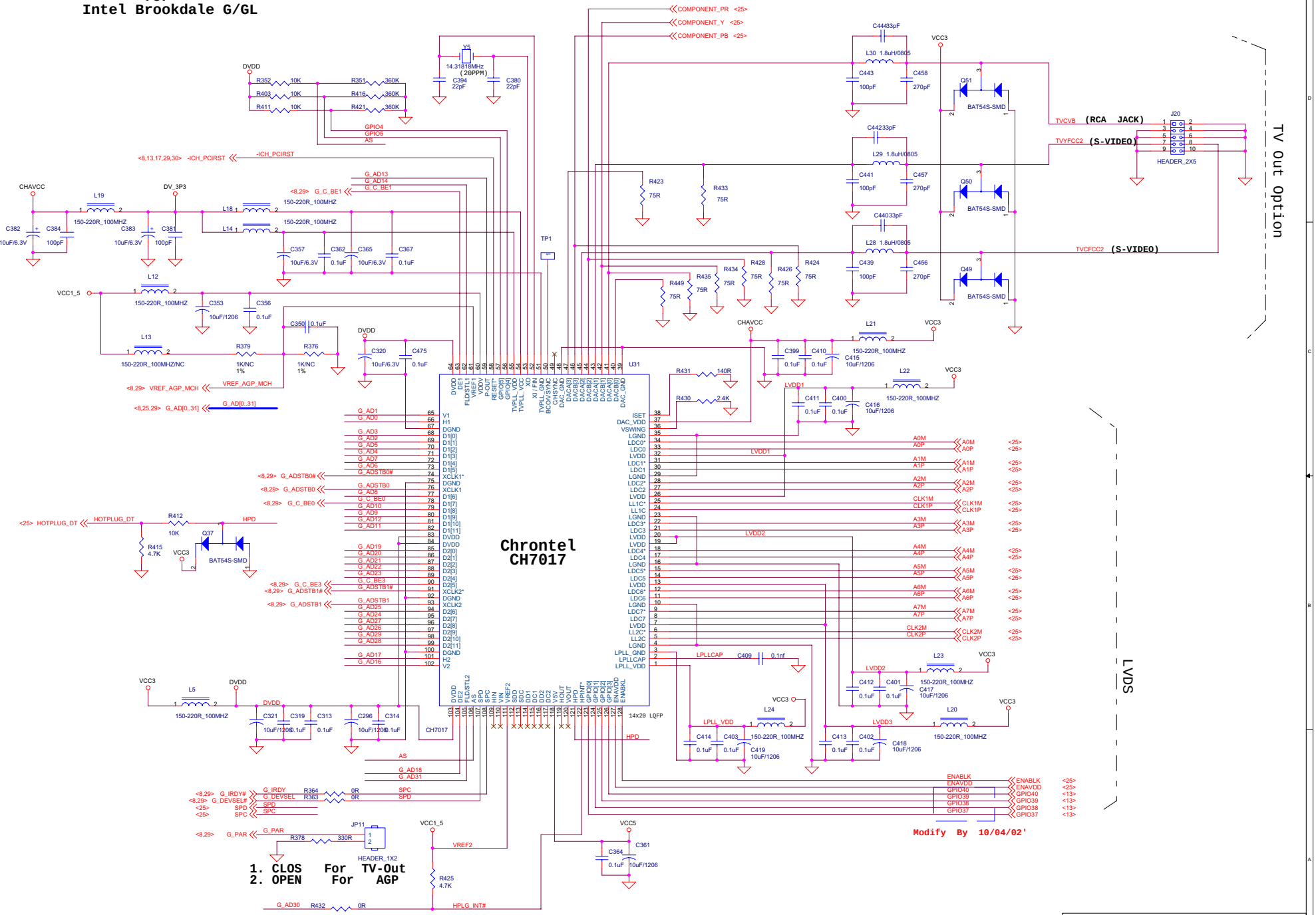
Preliminary Chrontel CH7017 reference design for Intel Brookdale G/GL



This Schematic is CHRONTEL Confidential and issue under NDA only

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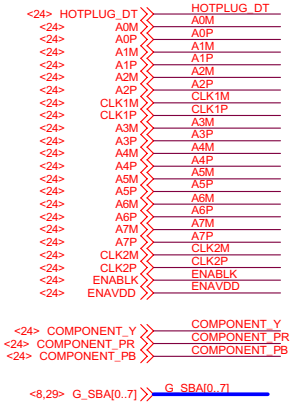
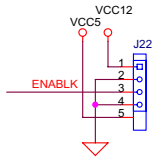
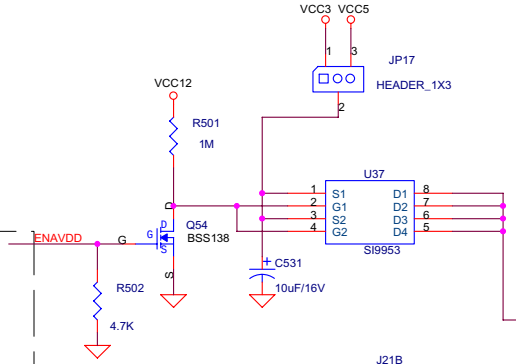
Note:
Trace for LVDS signals should be closely-coupled and layout for 100 ohm differential impedence:
LVDS signals pairs : (A0x thru A7x , CLK1x and CLK2x)

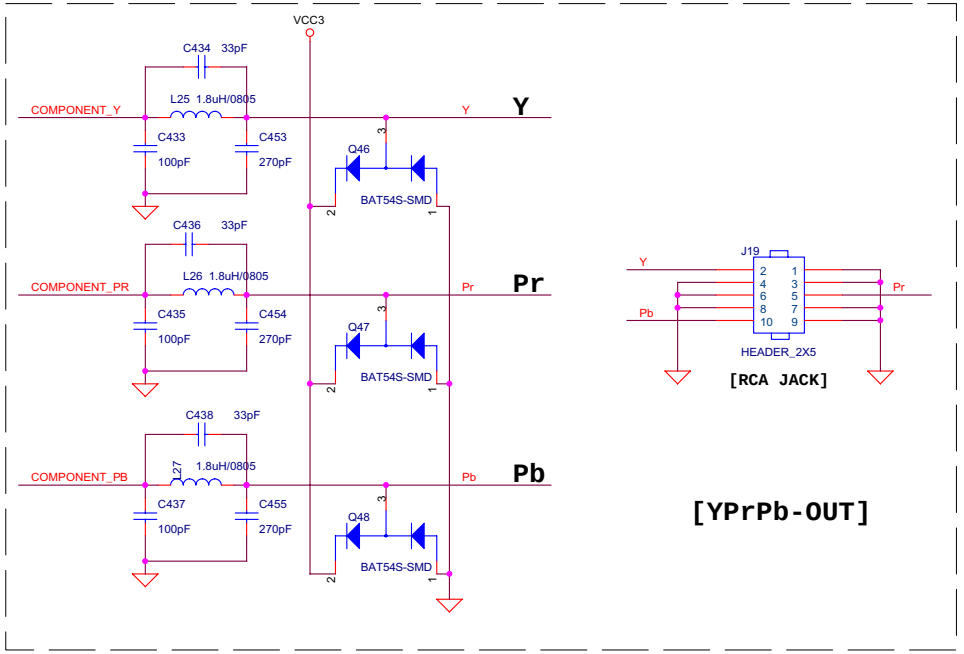
+3.3V Voltage Regulator circuit for CH7017's DAC_VDD and TVPLL

[LVDS Connector]





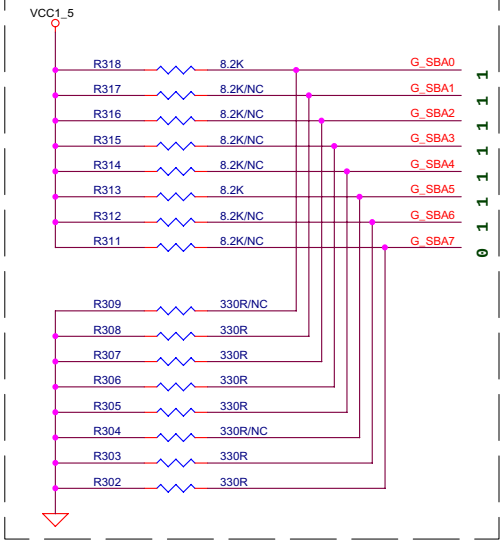


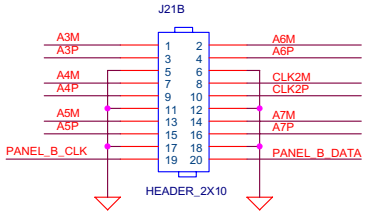


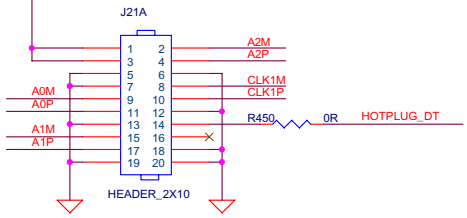
[RCA JACK]

[YPrPb-OUT]

ADD ID Selector
It will be provided by Intel regarding resistor stuffing option.







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Title	INTEL Brookdale_G_PE CHIPSET
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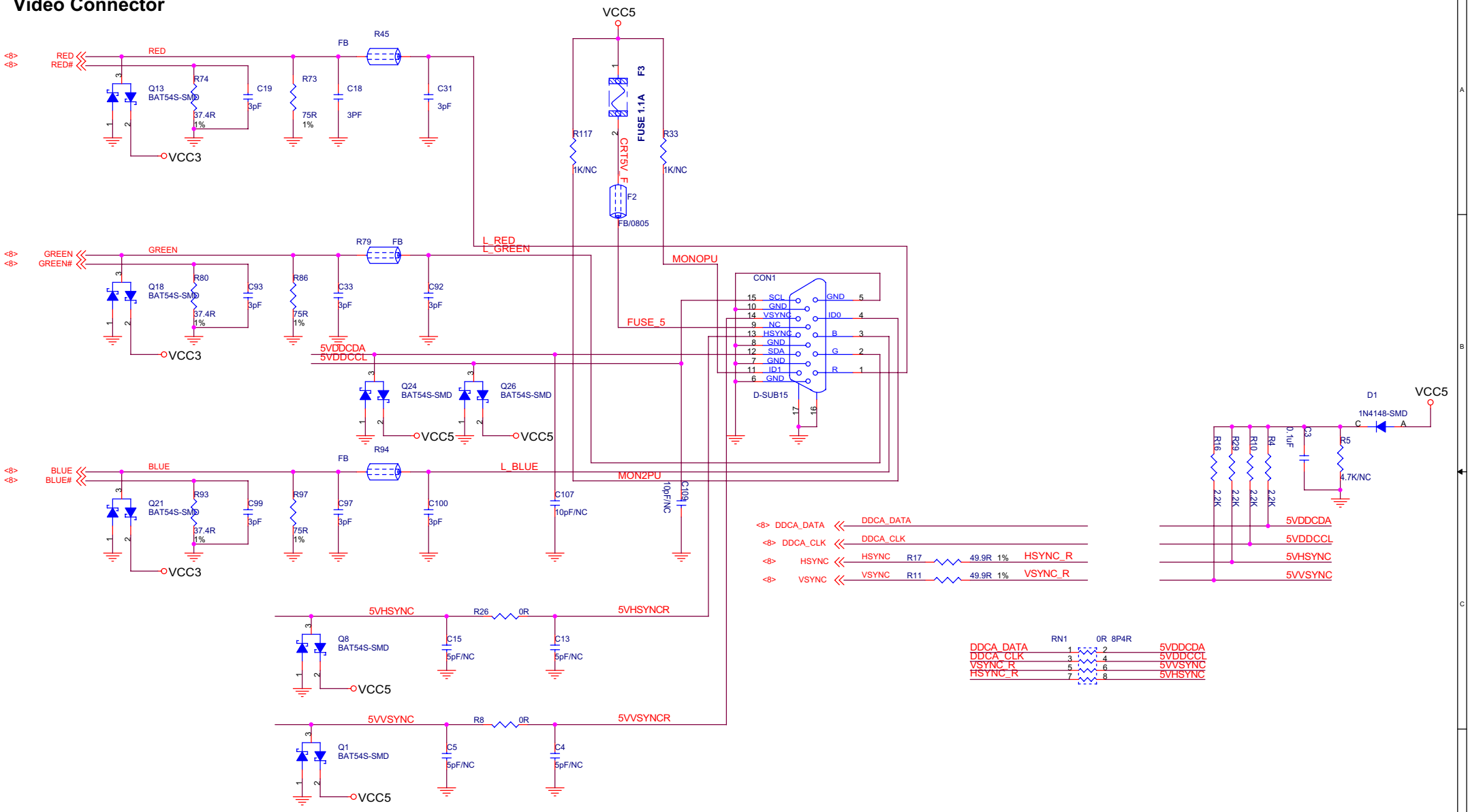
Video Connector



POPULATE WHEN NON LTI CONNECTOR

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Title	<Title>	
Size	Document Number <Doc>	Rev 0.9
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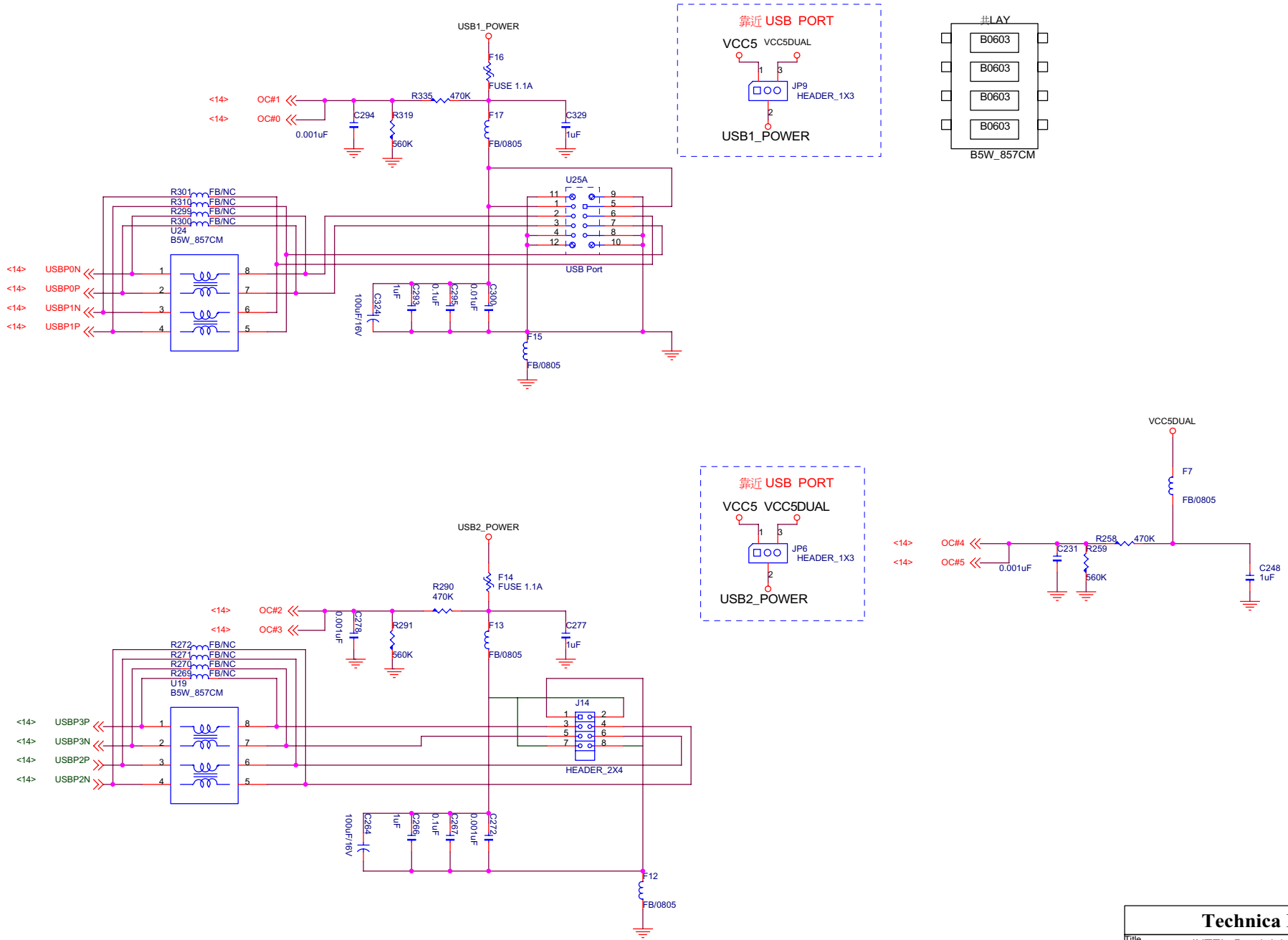
USB Connectors



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Title	INTEL Brookdale_G_PE CHIPSET	
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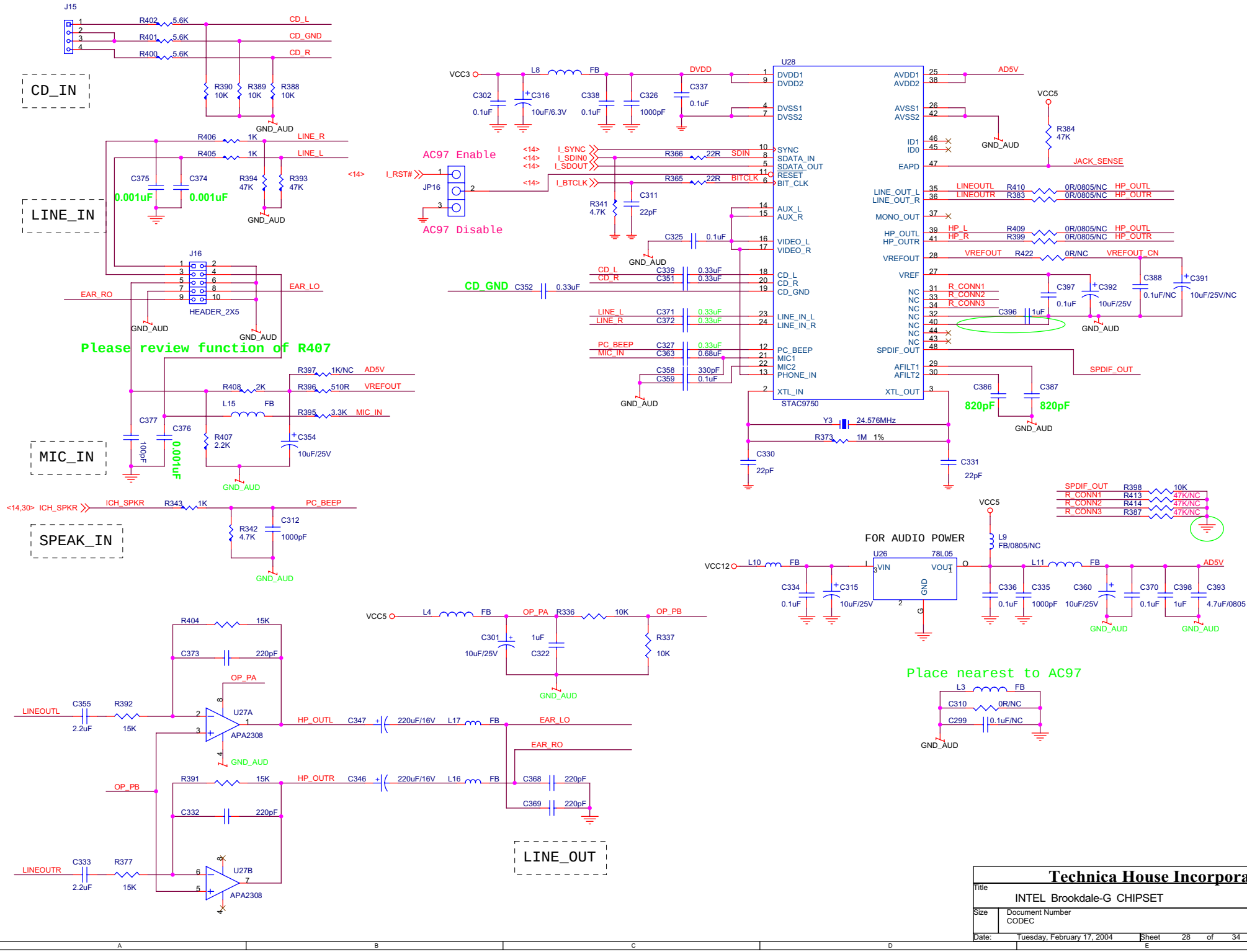
CD_IN
LINE_IN
MIC_IN
SPEAK_IN
LINE_OUT
AC97 Enable
AC97 Disable
Please review function of R407
FOR AUDIO POWER
Place nearest to AC97
U28
STAC9750
U26
78L05
U27A
U27B
APA2308
HEADER_2X5
Technica House Incorporation
INTEL Brookdale-G CHIPSET
CODEC
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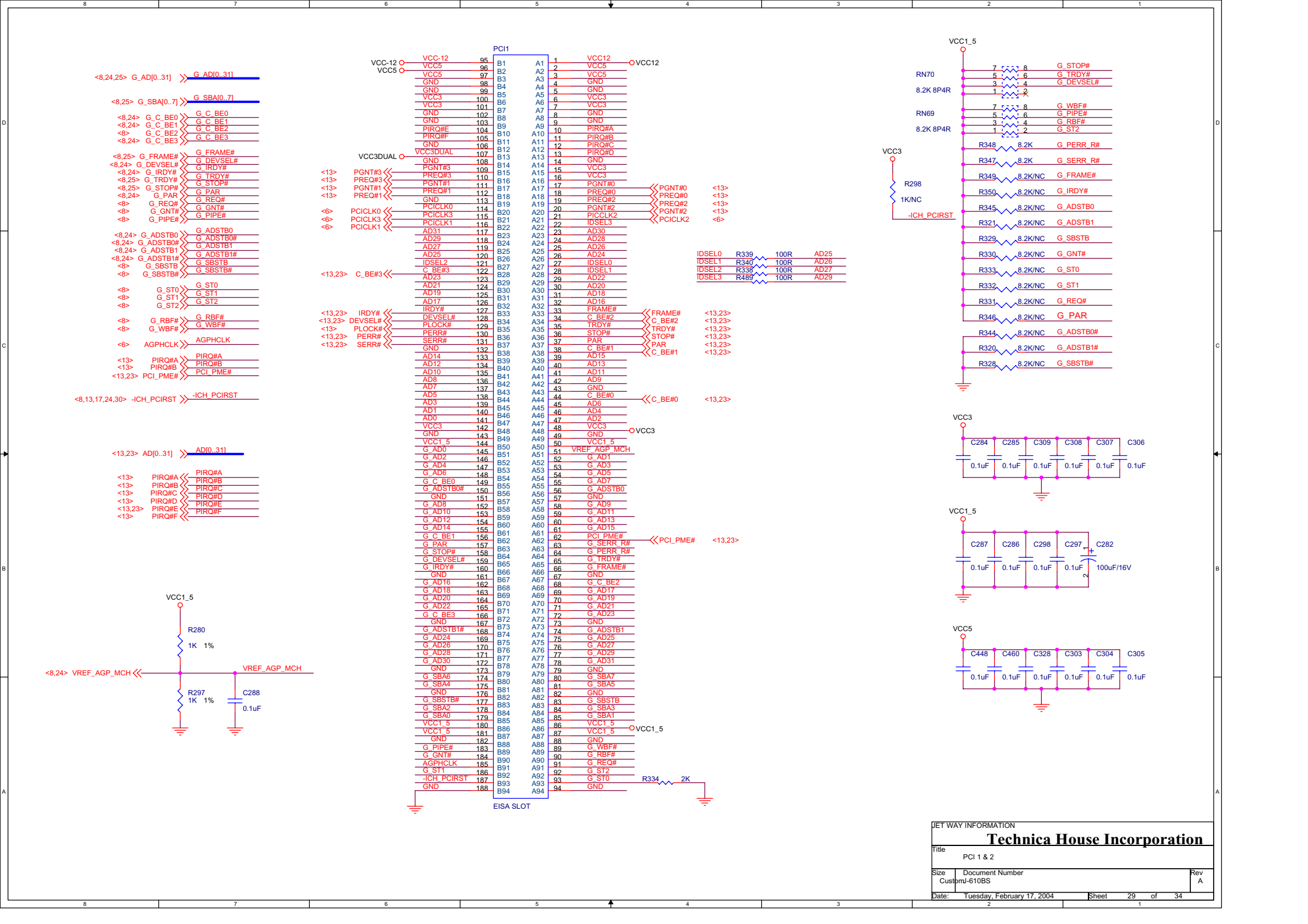
3.1


PCI1
EISA SLOT
VCC1_5
VCC3
VCC5
RN70
RN69
8.2K 8P4R
R280
1K 1%
R297
C288
0.1uF
R298
1K/NC
-ICH_PCIRST
R334
2K
C282
100uF/16V
JET WAY INFORMATION
Technica House Incorporation
Title
PCI 1 & 2
Size
Custom
Document Number
J-610BS
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A
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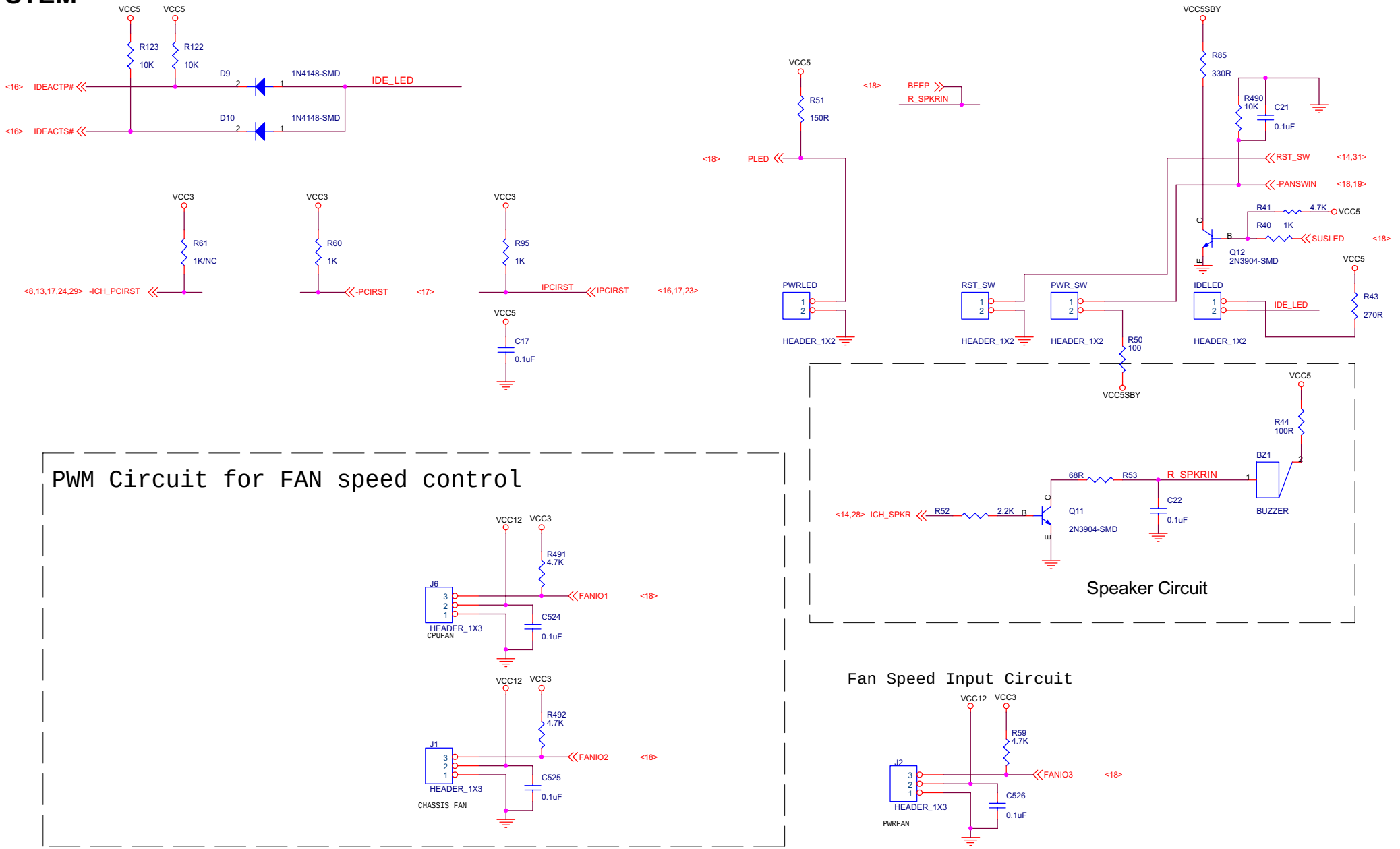
SYSTEM



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Title: INTEL Brookdale-G CHIPSET		
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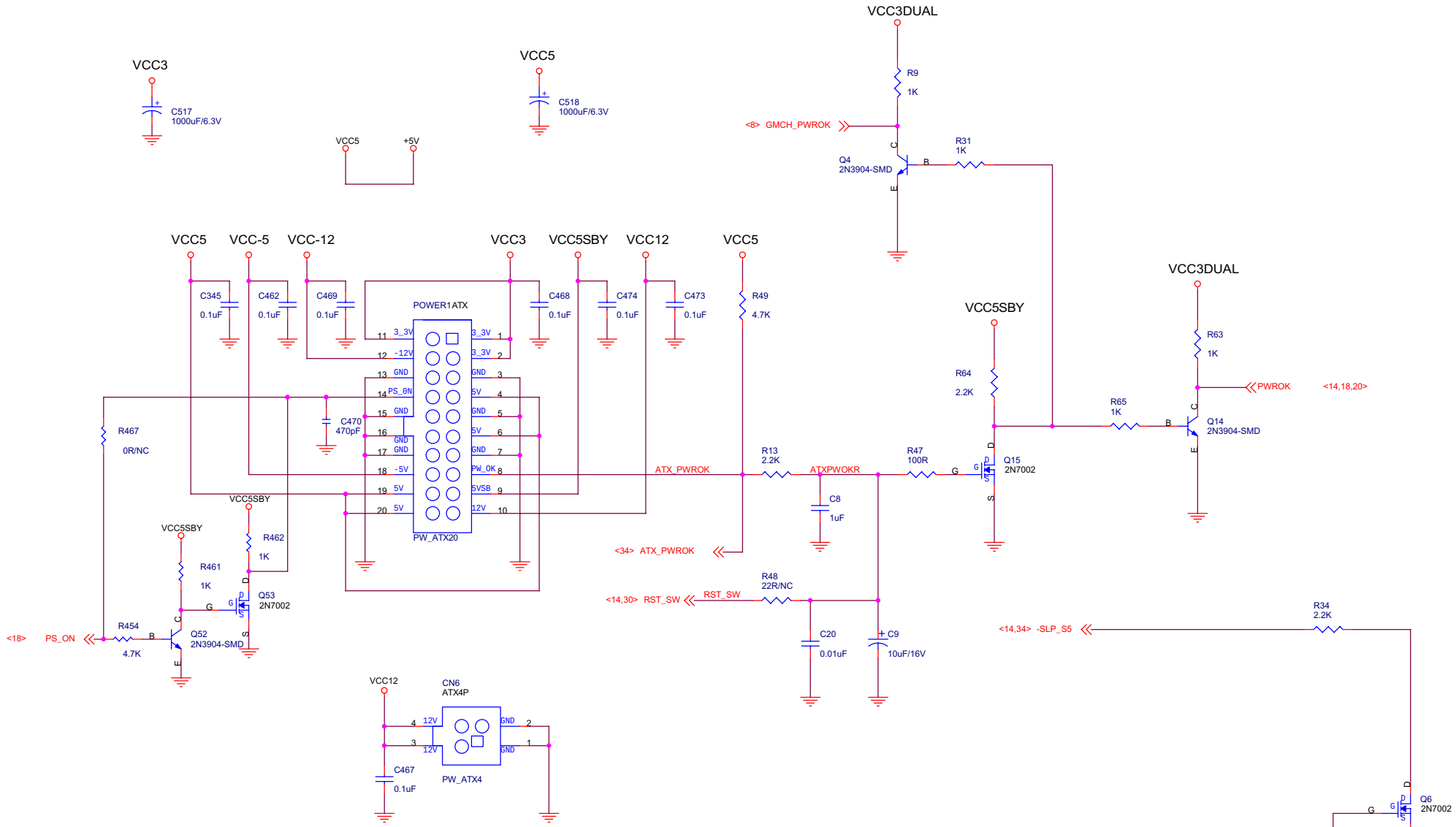

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Title: INTEL Brookdale-G CHIPSET		
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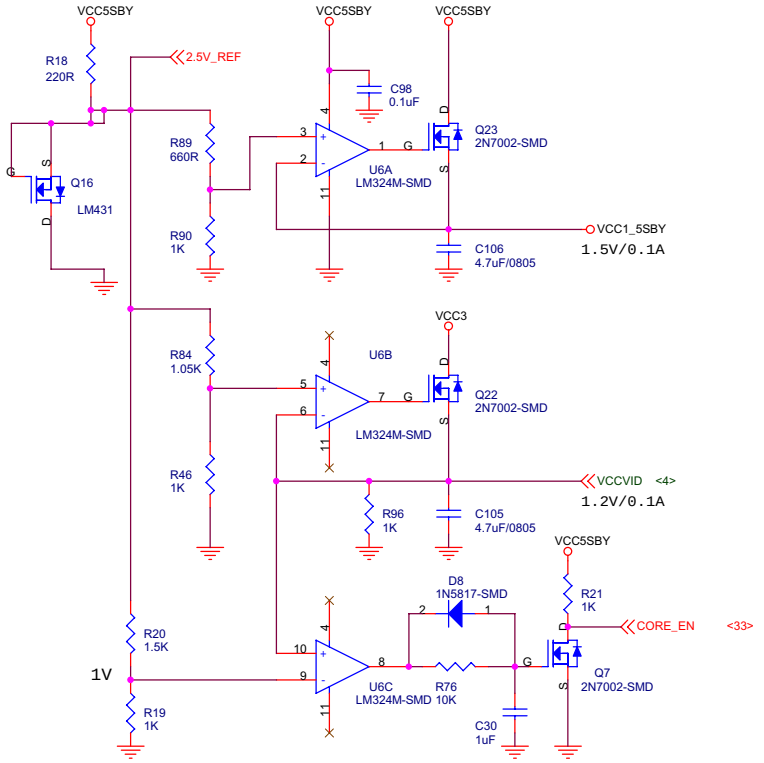
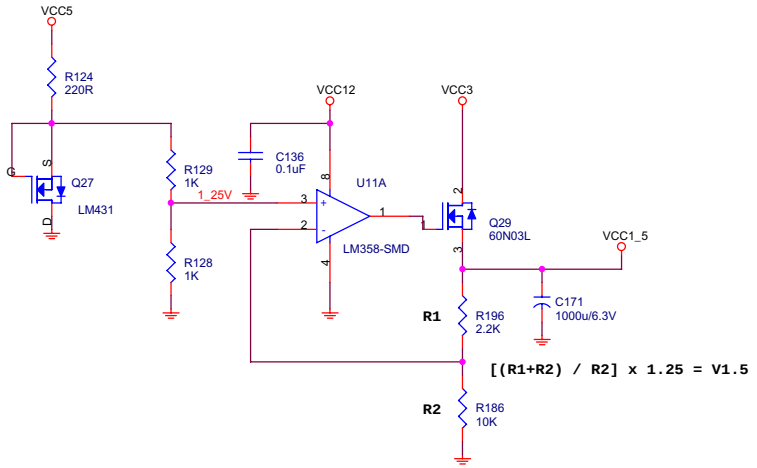
Voltage Regulators





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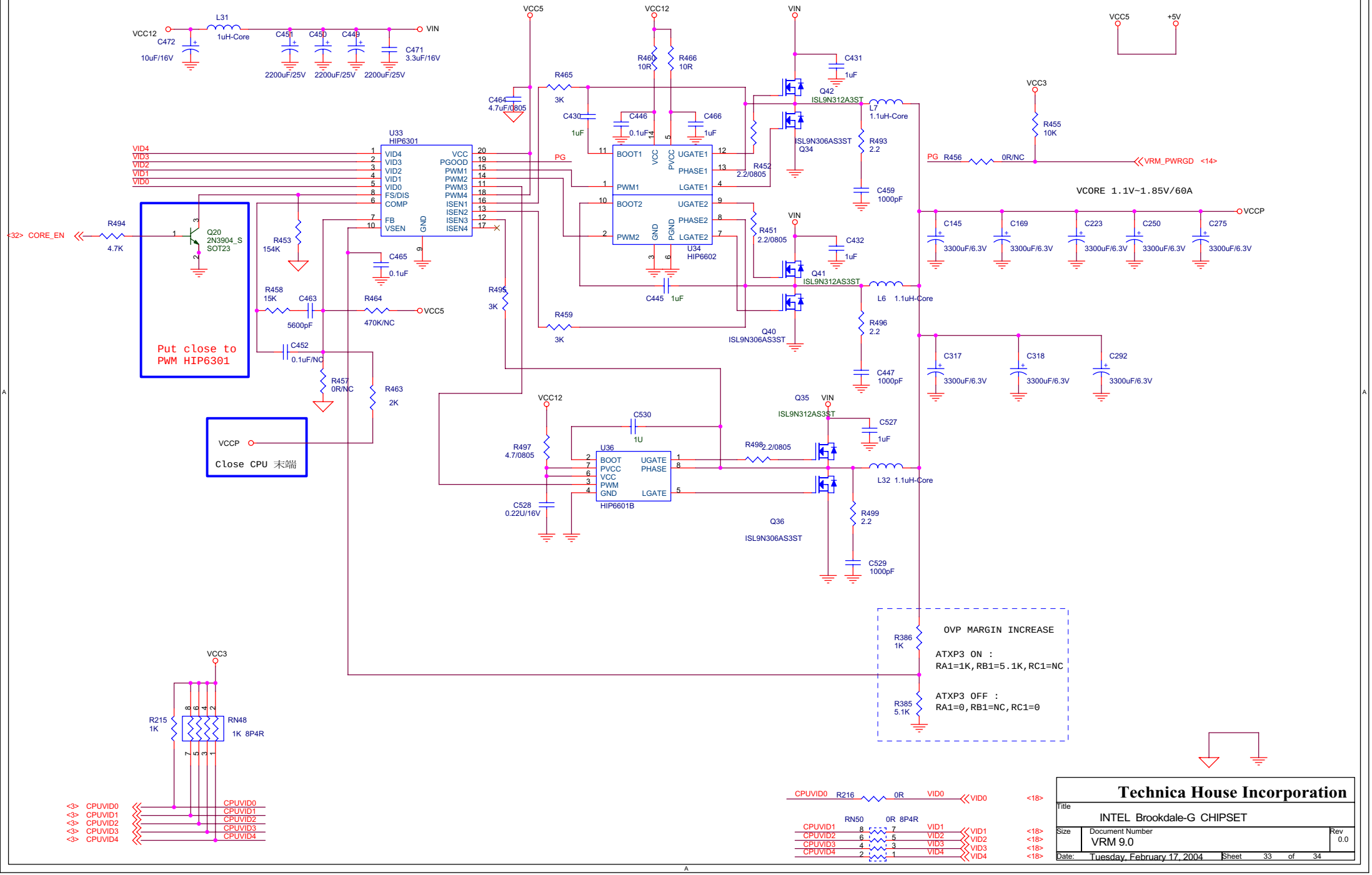
VRM 9.0

HIP6302 FOR INTEL Brookdale/Socket478 POWER CKT



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Title	INTEL Brookdale-G CHIPSET
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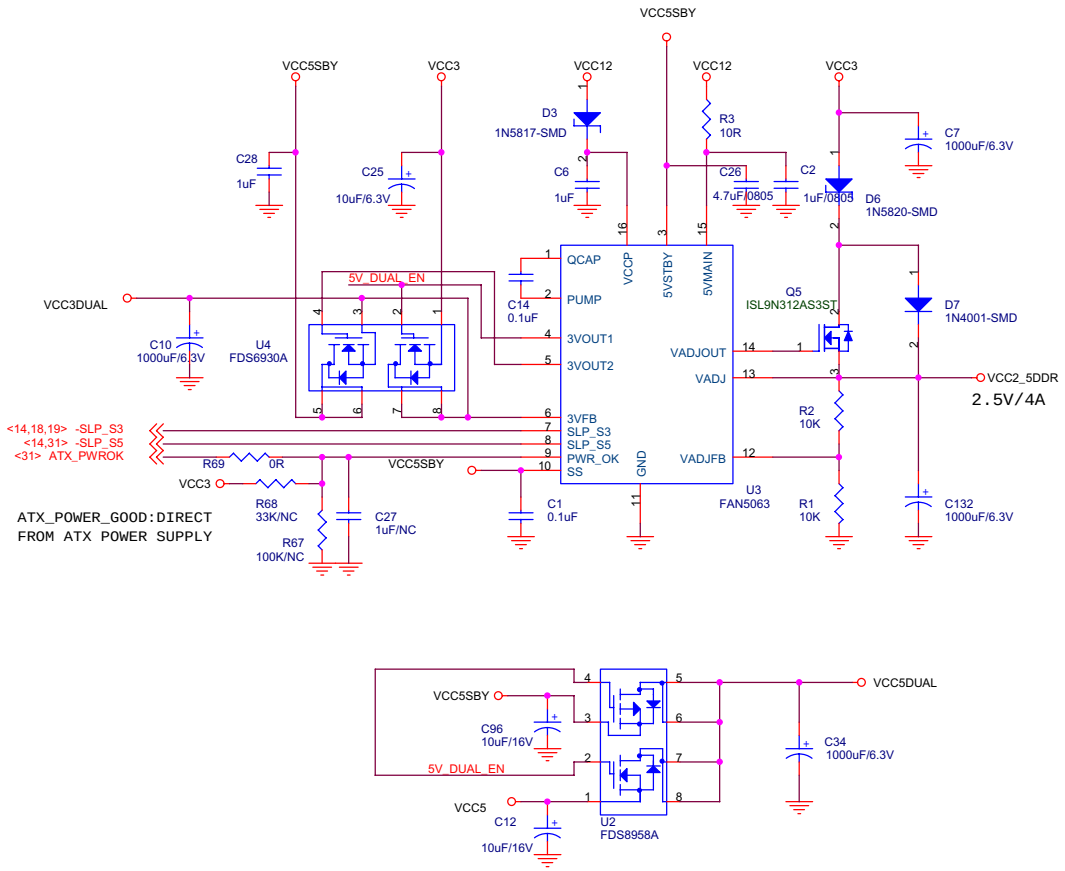

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Title: 10-DDR VOLTAGE REGULATOR		
Size: A3	Document Number	Rev: 0.0
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