



G41T-R3

V : 1.0A

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REVISION HISTORY:

Rev	Date	Notes
A	2010.03.16	Change from G41T-M4 V:A
		P06 VRD11 (RT8802) changed R140 from 3.3K-04 to 1.62K-1-04, R148 from 4.7K-04 to 11K-1-04 changed C119,C120,C131 from .1U-04 to 1U-06 changed MF1,MF2,MF5,MF6,MF8,MF9 from MN252-6MS to MN252-9MS changed high side dumping from 0 to 2.2-04 changed R151 from 820-06 to 806-1-06 added low side dumping 2.2-04 added CAP from low side to GND removed BC2
		P08 Voltage Regulator changed ER52 from 390-1-04 to 430-1-04 changed VCC_DIMM dumping from 0 to 2.2-04
		P10 HW Monitor/Fan removed BC1
		P16 DAC VGA RGB added BC102 for ESD added BC103,BC104,BC105,BC106 for VGA noise changed BC11,BC12,BC13 from 3.3P-04 to 4.7P-04
		P17 PCIE 16x/1x Slot changed AC coupling from .1U-04 to 0.1U-10VX-04
		P18 ICH7_DMI/PCIE/SATA/USB/MISC changed AC coupling from .1U-04 to 0.1U-10VX-04 changed ER59 from 23.7-1-04 to 24.9-1-04
		P19 ICH7_HDA/SPI/PCI/RTC/MISC added case open circuit
		P21 USB add EMI CAP
		P23 Super I/O (F71808E) deleted TP2,TP3,STP1,STP2 added RJ5,RJ6,RJ7 connected RSTSW-
		P26 Audio Codec (IDT92HD73C) changed C12,C16,C18,C23,C24,C26 footprint from C0603 to C0805
		P27 Audio Interface(3 Port HDA) changed C65 from .22U-04 to 220P-04-0
		P28 PCIE LAN (JMC260) changed FB16,FB20 footprint from FB0603-SHORT_1 to FB0603 changed FB19 footprint from FB0603 to FB0603-SHORT_1 swaped nets EESK/LINK & LAN_ACTIVE-

IMPORTANT NOTES ABOUT THIS SCHEMATIC

DESIGN NOTE: Example text for the design note to show the note inside the colored box.

1) DESIGN NOTES in grey are information notes.

DESIGN NOTE: Example text for the design note to show the note inside the colored box.

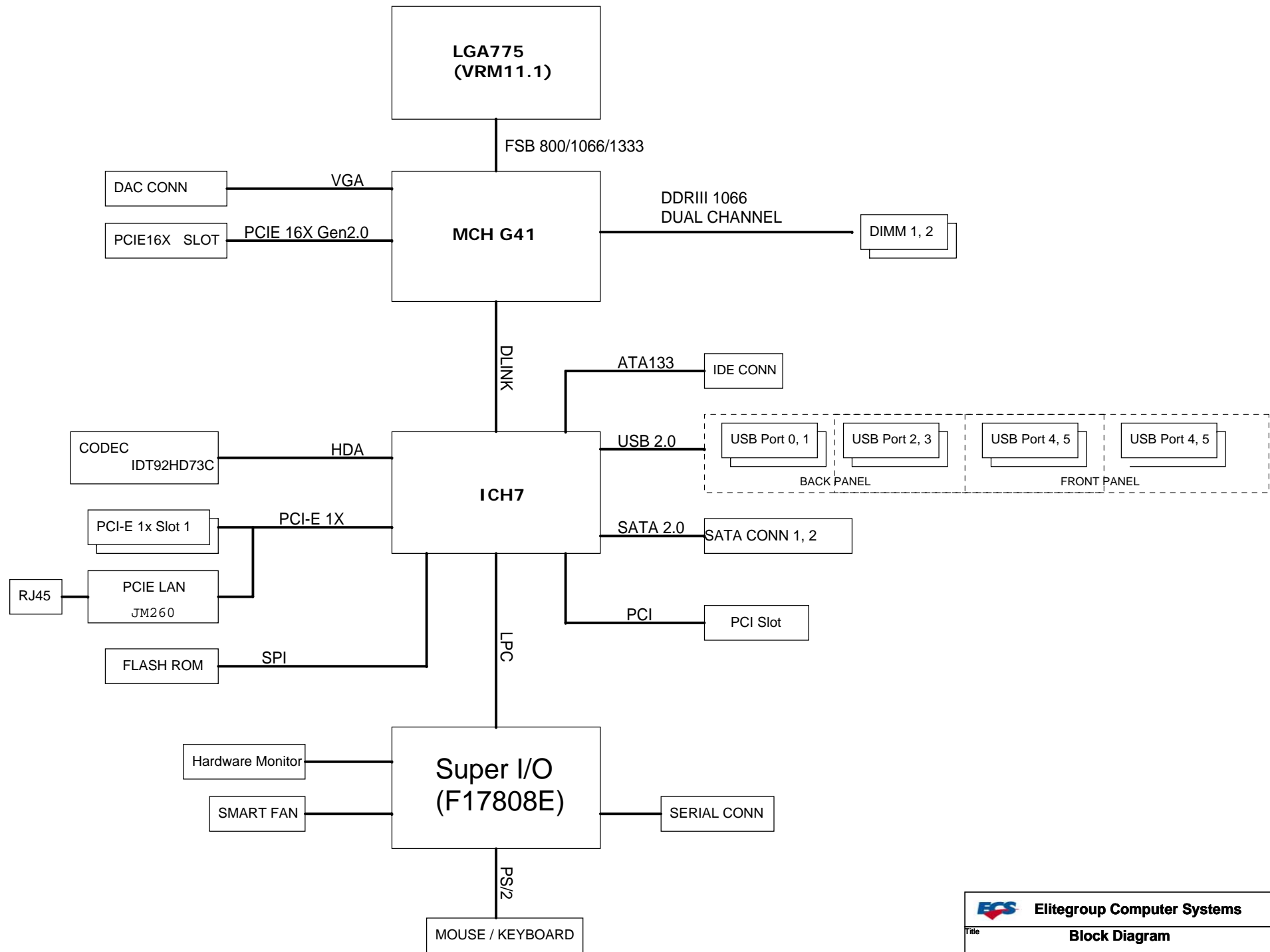
2) DESIGN NOTES in yellow are notes of caution.

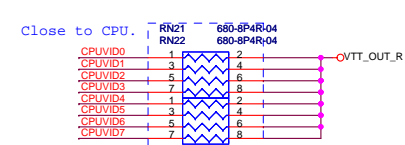
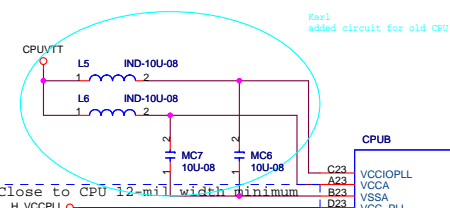
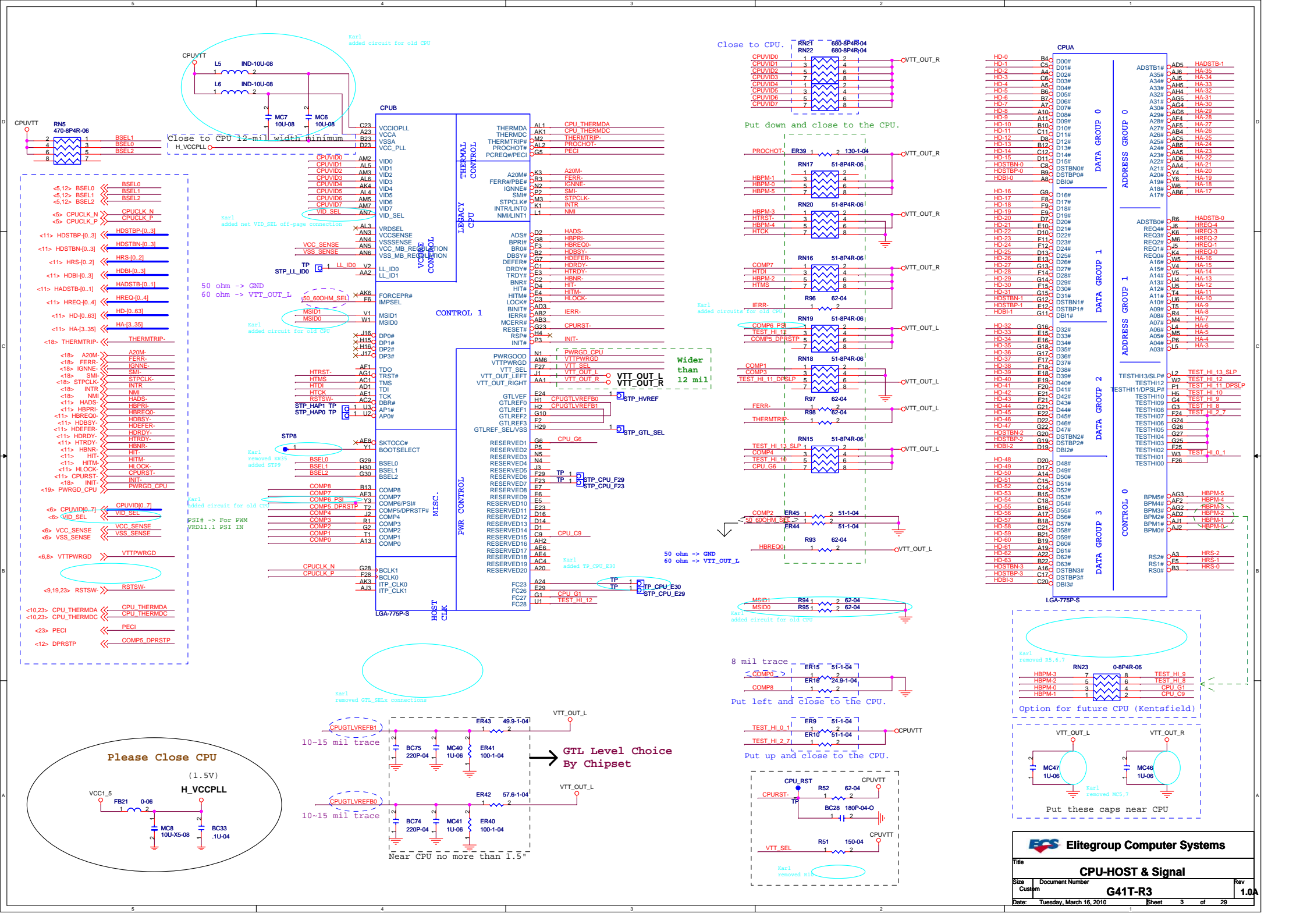
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3) DESIGN NOTES in red are critical, and must be understood and followed.

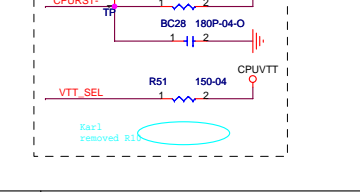
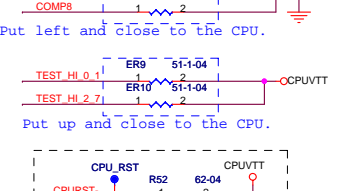
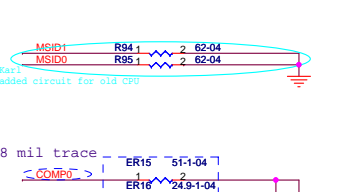
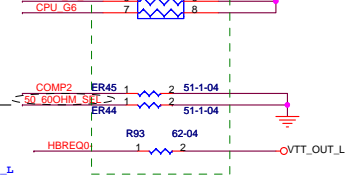
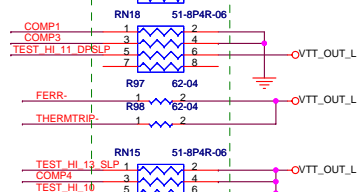
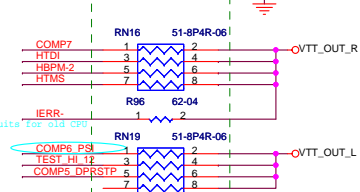
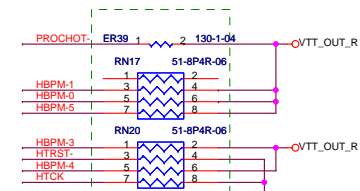
PCB STACK: L1:TOP
L2:PWR
L3:GND
L4:BOTTOM

Elitegroup Computer Systems	
Title Cover Page	
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Put down and close to the CPU.



CPUB

VCCIOPLL

VCCA

VSSA

VCC_PLL

VID0

VID1

VID2

VID3

VID4

VID5

VID6

VID7

VID_SEL

VRDSEL

VCCSENSE

VSSSENSE

VCC_MB_REG

VSS_MB_REG

FORCEPR#

IMPSSEL

DP0#

DP1#

DP2#

DP3#

TDO

TRST#

TMS

TCK

DBR#

AP1#

AP0#

SKT0CC#

BOOTSELECT

BSEL0

BSEL1

BSEL2

COMP8

COMP7

COMP6/PSI#

COMP5/DPRSTP#

COMP4

COMP3

COMP2

COMP1

CPUCLK_N

CPUCLK_P

BCLK1

BCLK0

ITP_CLK0

ITP_CLK1

LGA-775P-S

RESERVED1

RESERVED2

RESERVED3

RESERVED4

RESERVED5

RESERVED6

RESERVED7

RESERVED8

RESERVED9

RESERVED10

RESERVED11

RESERVED12

RESERVED13

RESERVED14

RESERVED15

RESERVED16

RESERVED17

RESERVED18

RESERVED19

RESERVED20

FC23

FC26

FC27

FC28

AL1 CPU THERMDA

AK1 CPU THERMDC

AL2 PROCHOT

AL3 PROCHOT

AL4 PECI

AL5 PECI

AL6 PECI

AL7 PECI

AL8 PECI

AL9 PECI

AL10 PECI

AL11 NMI

AL12 NMI

AL13 NMI

AL14 NMI

AL15 NMI

AL16 NMI

AL17 NMI

AL18 NMI

AL19 NMI

AL20 NMI

AL21 NMI

AL22 NMI

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AL91 NMI

AL92 NMI

AL93 NMI

AL94 NMI

AL95 NMI

AL96 NMI

AL97 NMI

AL98 NMI

AL99 NMI

AL100 NMI

CPUCLK_N

CPUCLK_P

HDSTBP[0..3]

HDSTBN[0..3]

HRS[0..2]

HDBI[0..3]

HADSTB[0..1]

HREQ[0..4]

HD[0..63]

HA[3..35]

THERMTRIP

A20M#

FERR#

IGNNE#

SMI#

STPCLK#

INTR#

NMI#

HADS#

HBPR#

HBRE0#

HDBSY#

HDEFER#

HTRDY#

HNBR#

HIT#

HITM#

HLOCK#

CPURST#

INIT#

PWRGD#

CPUID[0..7]

VID_SEL

VCC_SENSE

VSS_SENSE

VTPWRGD#

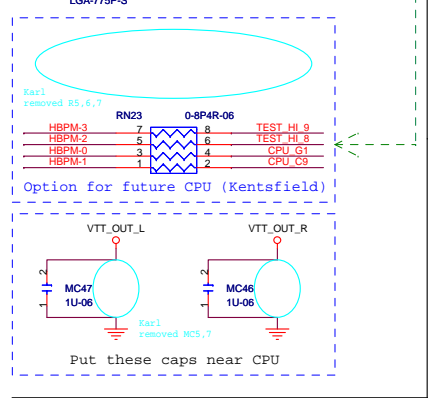
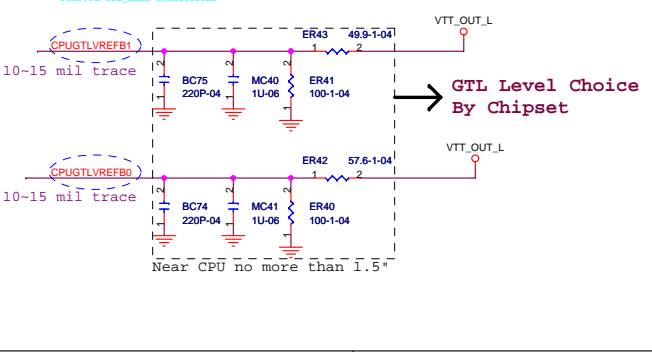
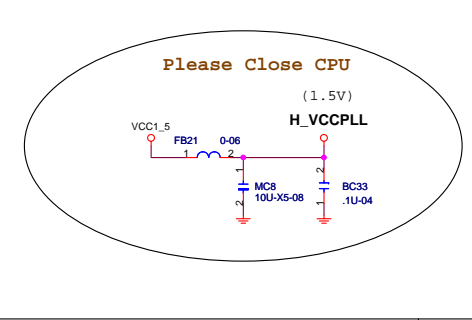
RSTS#

CPU_THERMDA

CPU_THERMDC

PECI

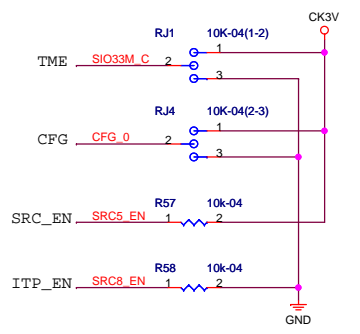
DPRSTP



- CPU & HOST**
- <3,12> BSEL0 H BSEL0
 - <3,12> BSEL1 H BSEL1
 - <3,12> BSEL2 H BSEL2
- CPU**
- <3> CPUCLK_P CK CPU P
 - <3> CPUCLK_N CK CPU N
- MCH (FSB)**
- <11> HCLK_NB_P CK MCH P
 - <11> HCLK_NB_N CK MCH N
- PCIE CLK**
- <12> PECLK_NB_P MCH100M P
 - <12> PECLK_NB_N MCH100M N
- MCH (VGA)**
- <12> DPL_CLK96_P DOT96M P
 - <12> DPL_CLK96_N DOT96M N
- LAN**
- <28> LAN_CLK KG GBE CLKP
 - <28> LAN_CLK- KG GBE CLKN
- MCH (DIGITAL VIDEO)**
- <12> DPL_CLK100_P DOTREF100M P
 - <12> DPL_CLK100_N DOTREF100M N
- ICH**
- <18> DMICLK_SB_P ICH100M P
 - <18> DMICLK_SB_N ICH100M N
- X1**
- <17> PEX1_CLK0 PEX1_100M P
 - <17> PEX1_CLK0- PEX1_100M N
- X16**
- <17> PEX16_CLK PEX16_100M P
 - <17> PEX16_CLK- PEX16_100M N
- SATA CLK**
- <18> SATA_CLK_P SATA100M P
 - <18> SATA_CLK_N SATA100M N
- ICH (SATA)**
- PCI CLK**
- <22> PCICLK0 PCIA33M
 - <23> PCICLK_SIO SIO33M
 - <19> PCICLK_SB ICH33M
- Other CLK**
- <23> SIO_CLK SIO48M
 - <18> USB_CLK48 USB48M
 - <19> REF14M_ICH ICH14M
- ACPI**
- <6,19> VCORE_PWRGD ICH_VRM_PWRGD
- SMBUS**
- <15,19,22> SMBCLK SMBCLK
 - <15,19,22> SMBDATA SMBDATA

HW Strapping

- PCI2/TME**
- | | |
|-------|-----------------------|
| Pin 4 | Trust mode selection |
| *HI | Overclocking Disabled |
| LO | Overclocking Enabled |
- PCI4/SRC_EN**
- | | |
|-------|----------------------|
| Pin 6 | Pin 29, 30 selection |
| *HI | SCR5 Enable |
| LO | CPU & PCI STOP # |
- PICF5/IPT_EN**
- | | |
|-------|----------------------|
| Pin 7 | Pin 38, 39 selection |
| HI | CPU_IPT Enable |
| *LO | SCR8 Enable |

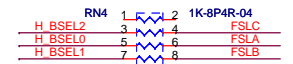
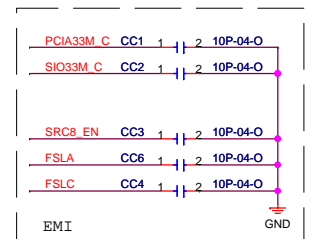
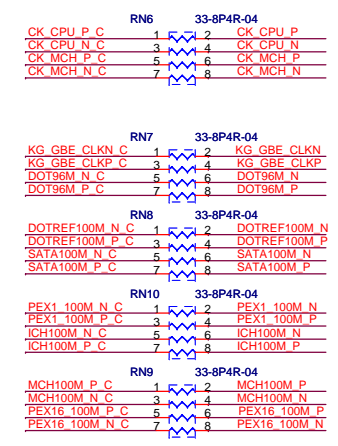
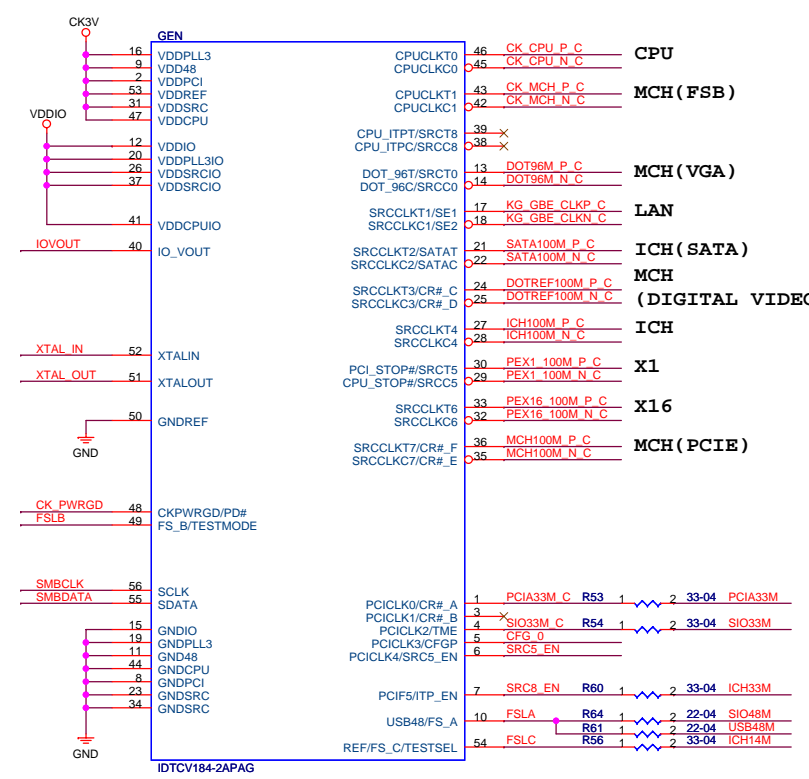
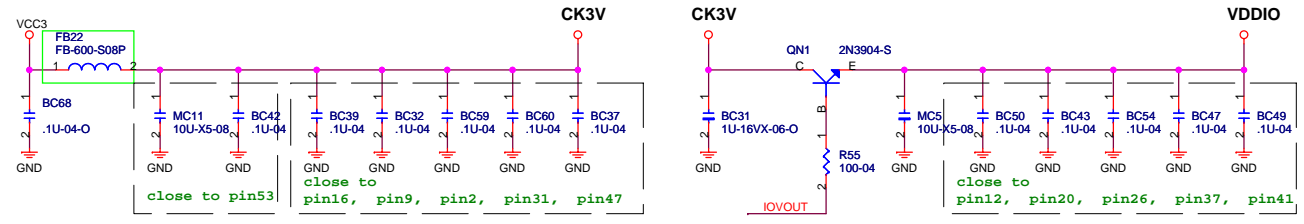


CFG Config.

Pin 5 CFGP	Pin 4 TME	SATA Pin 21,22	PCI	Pin 17,18
*LO	0 or 1	PLL4 SRC	PLL4 SRC	CFB table
MID	0 or 1	PLL3	PLL3	CFB table
HI	0	PLL3	PLL3	CFB table
HI	1	PLL2 (CV184-1) PLL4 (CV184-2)	PLL4	Pin17=25MHz PLL2 Pin18=1394A PLL3

Frequeny selection

Pin 54, 49, 10 FSLC, B, A	CPU CLOCK (MHZ)	CPU FSB CLOCK
010	200.00	FSB 800
000	266.66	FSB 1066
100	333.33	FSB 1333



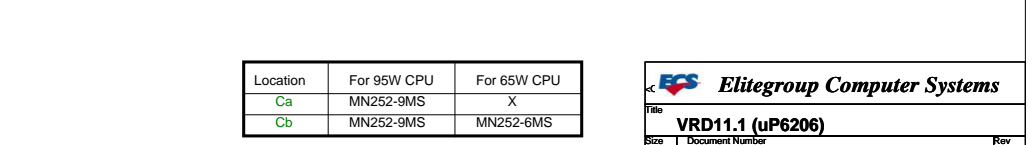
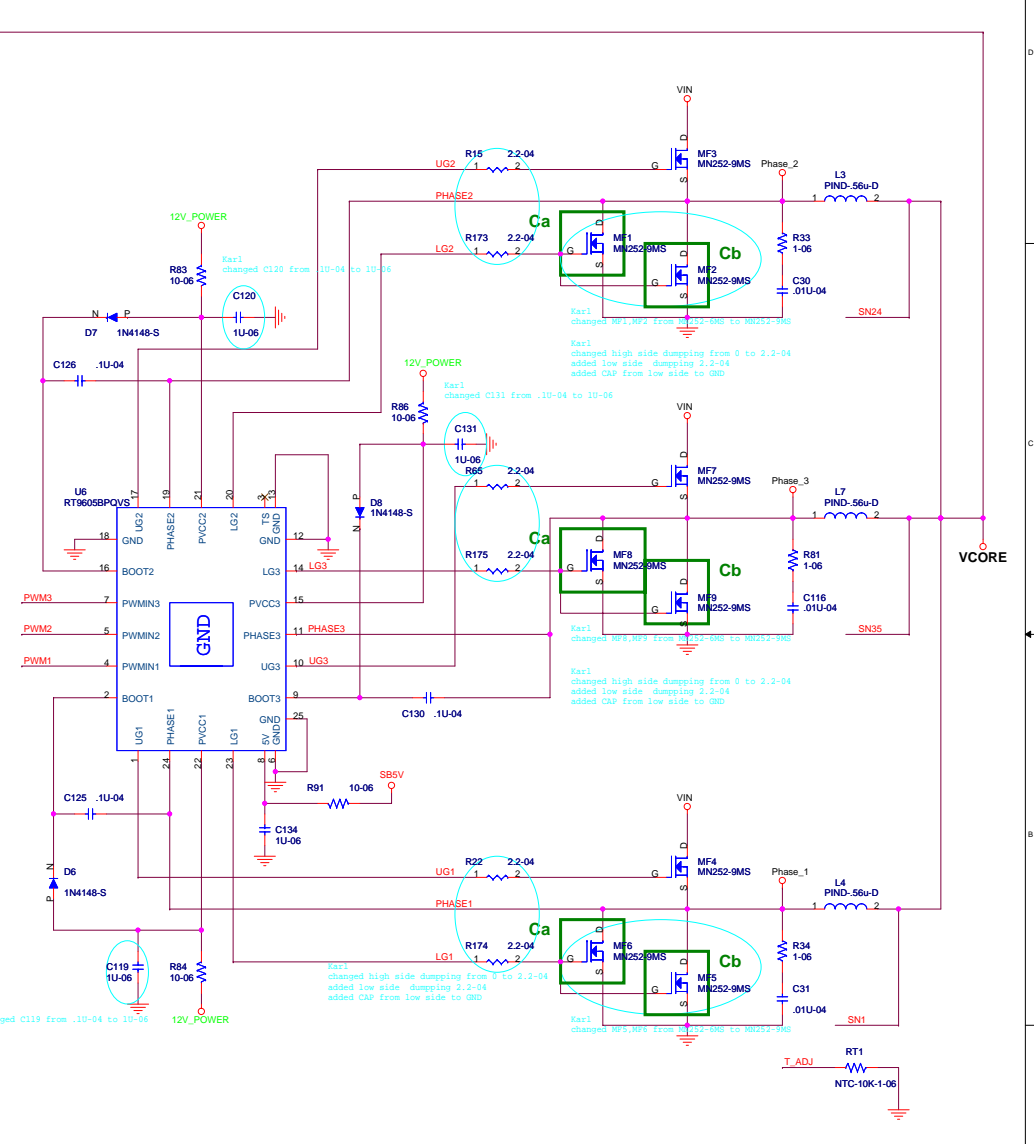
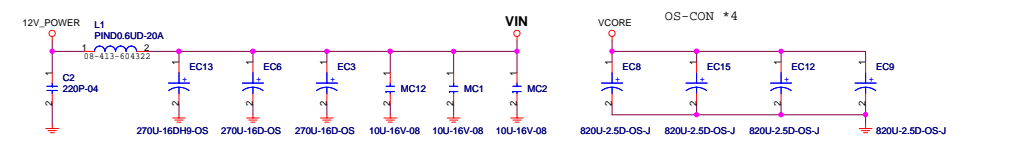
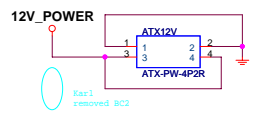
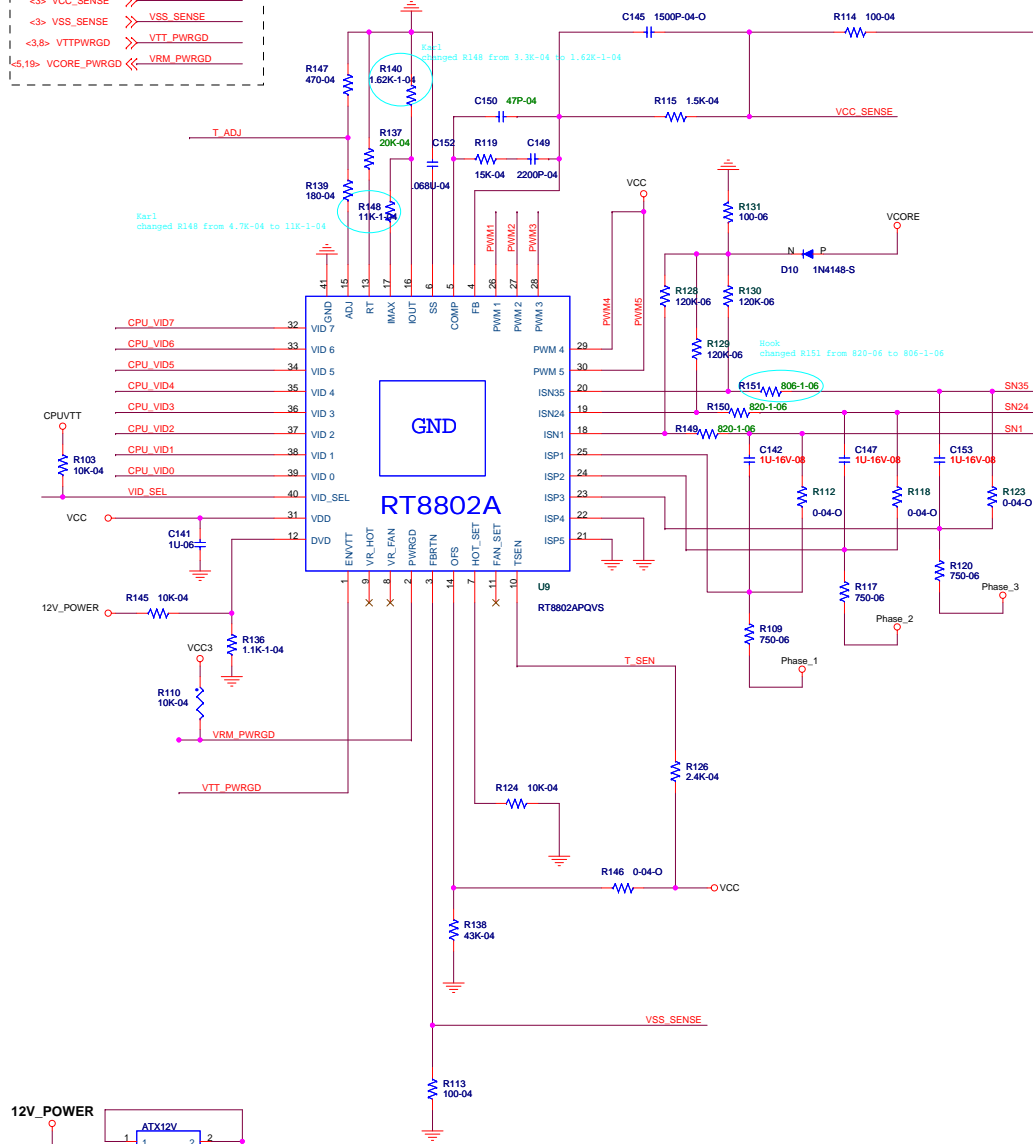
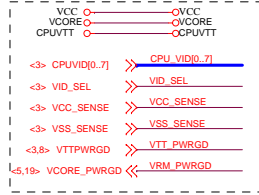
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Title: **CLK IDTCV184**

Size: Custom Document Number: **G41T-R3** Rev: **1.0A**

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External Connection



Location	For 95W CPU	For 65W CPU
Ca	MN252-9MS	X
Cb	MN252-9MS	MN252-6MS

Elitegroup Computer Systems
 File: **VRD11.1 (uP6206)**
 Size: Document Number
 Custor: **G41T-R3**
 Date: Tuesday, March 16, 2010 Sheet 6 of 29 Rev 1.0A

(3.42V)

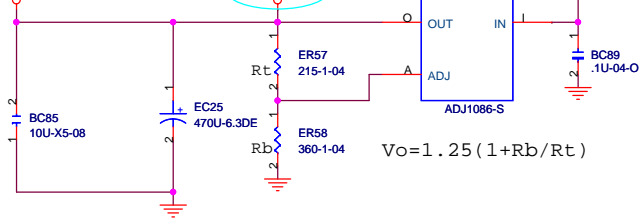
VCC3_DUAL

3VSB_IO

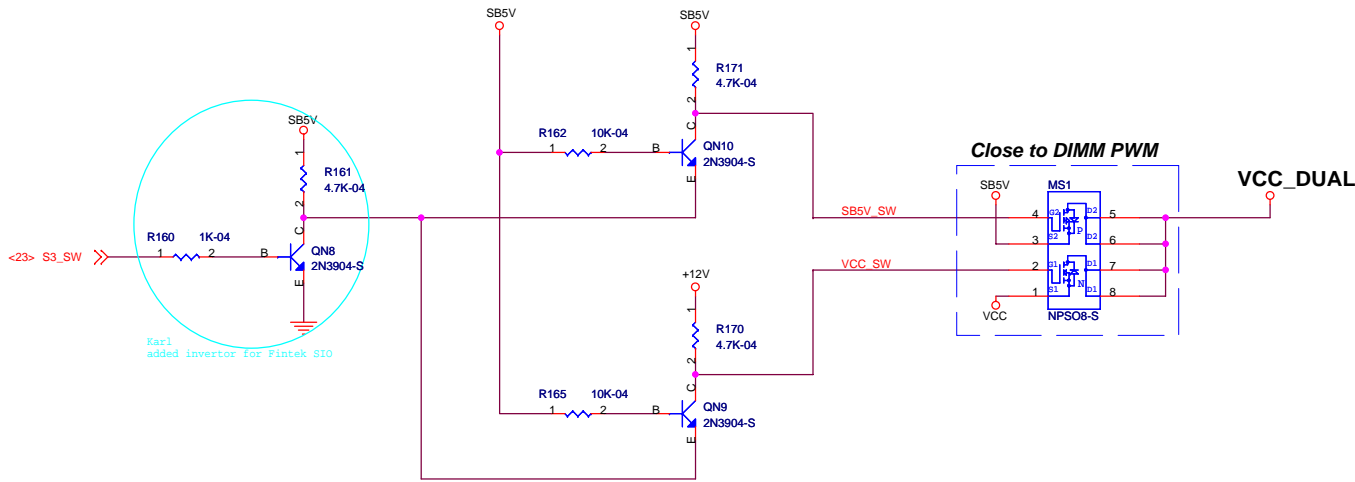
SB5V_ATX

Karl1
changed net SB5V to SB5V_ATX
changed net 3VSB to 3VSB_IO

SB5V_ATX
3VSB_IO



$$V_o = 1.25(1 + R_b/R_T)$$



Karl1
added inverter for Fintek SIO

Memory Power Output Control

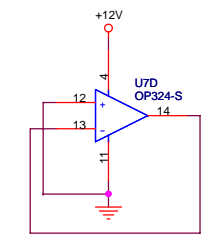
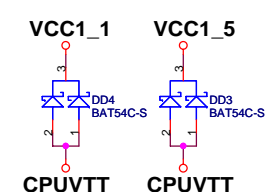
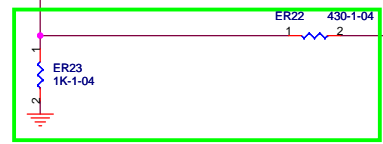
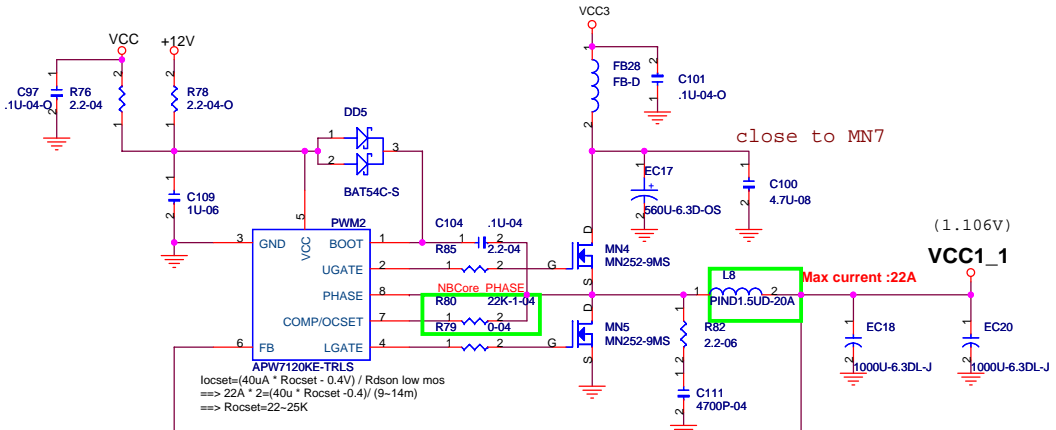
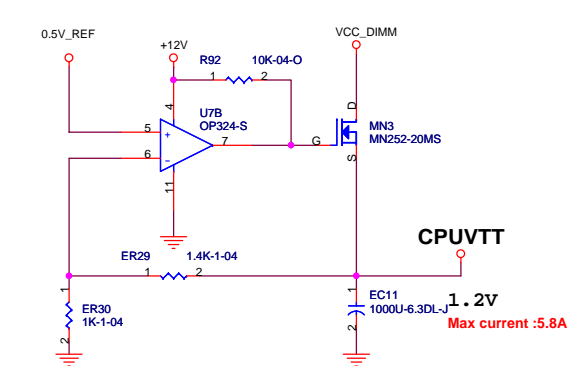
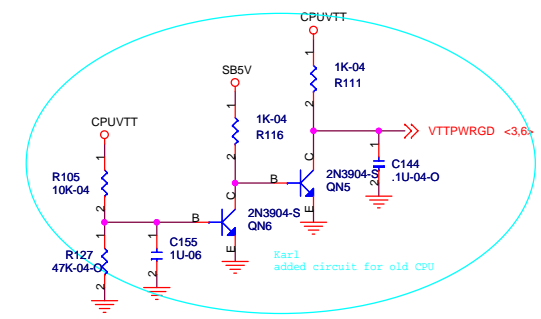
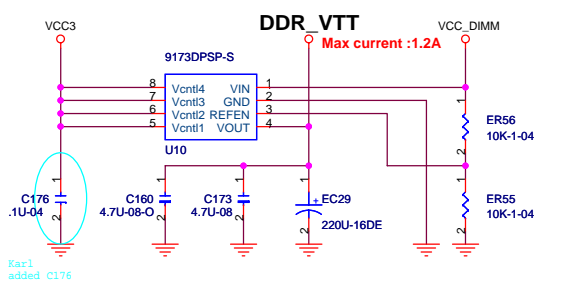
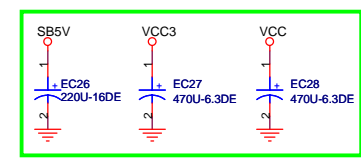
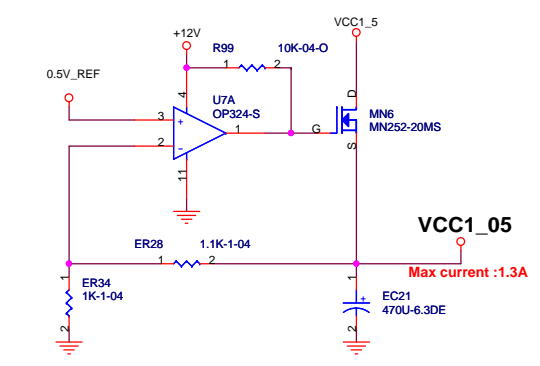
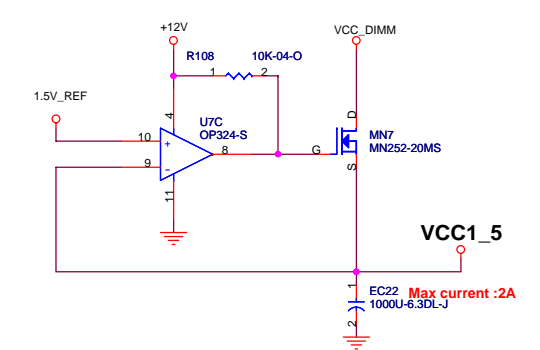
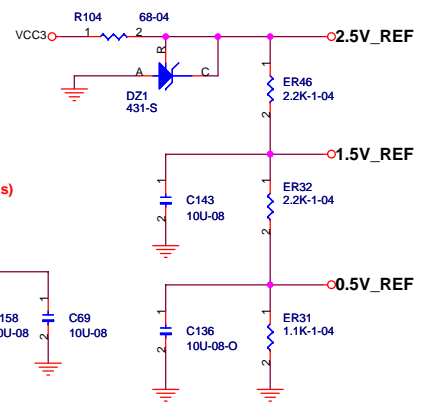
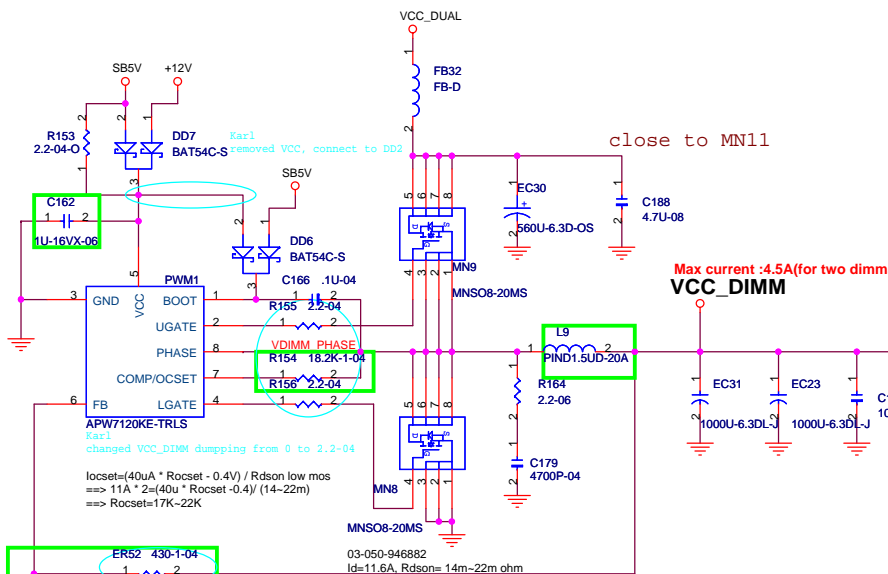
	VCC_DUAL	ATX_PWOK	SLP_S4-	SLP_S3-	S3_SW
S0	VCC	1	1	1	0
S1	VCC	1	1	1	0
S3	SB5V	0	1	0	1
S4	0	0	0	0	0
S5	0	0	0	0	0

ECS Elitegroup Computer Systems

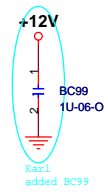
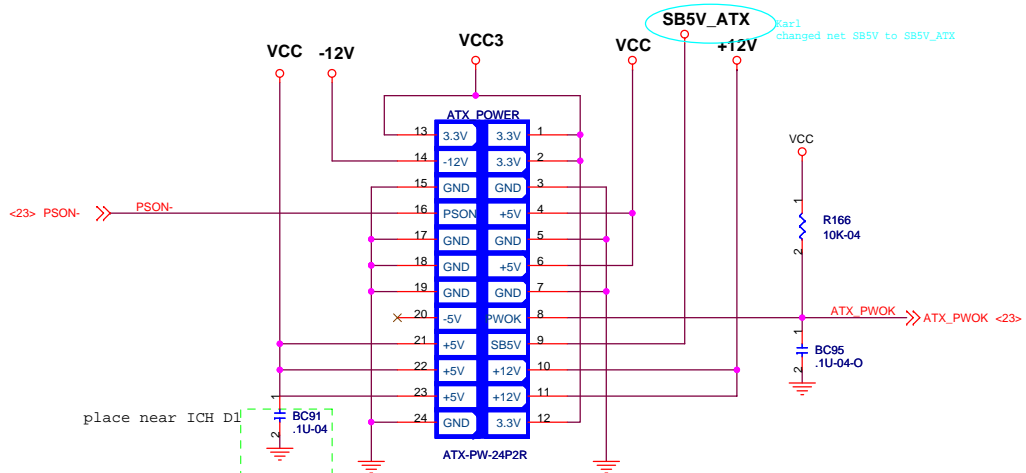
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Size: Custom Document Number: **G41T-R3** Rev: **1.0A**

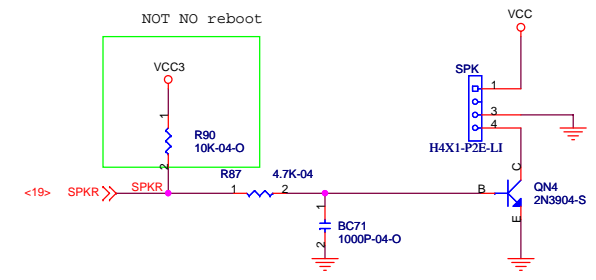
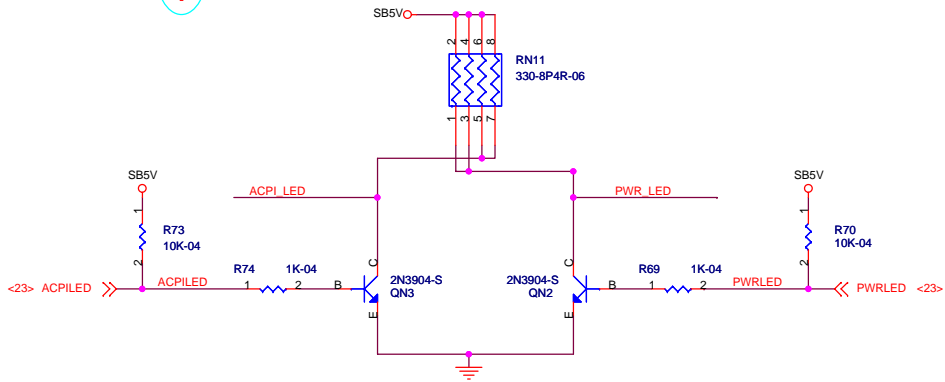
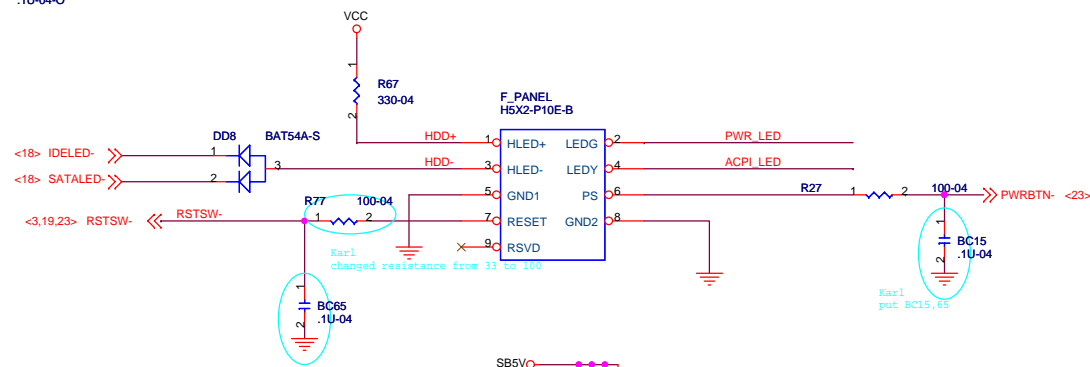
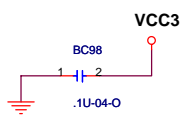
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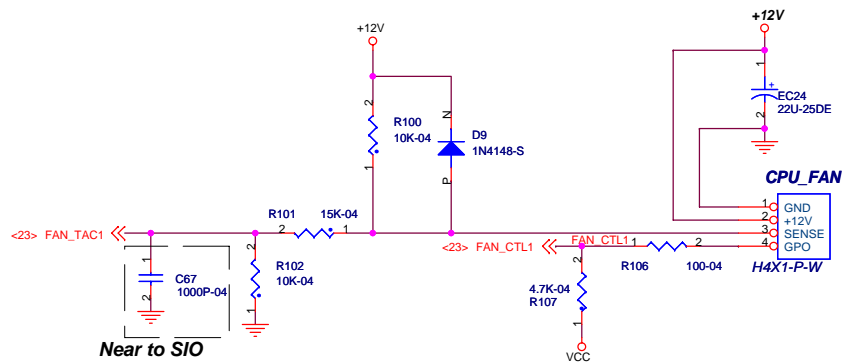


Elitegroup Computer Systems		
Title		
Voltage Regulator		
Size	Document Number	Rev
Custom	G41T-R3	1.0A
Date:	Tuesday, March 16, 2010	Sheet 8 of 29



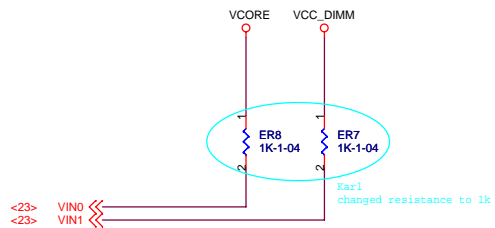
place at the lower left corner of MB
置於主板左下角





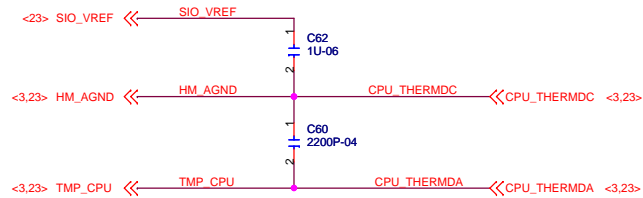
Karl
removed BCL

Voltage Monitor



Temperature Monitor

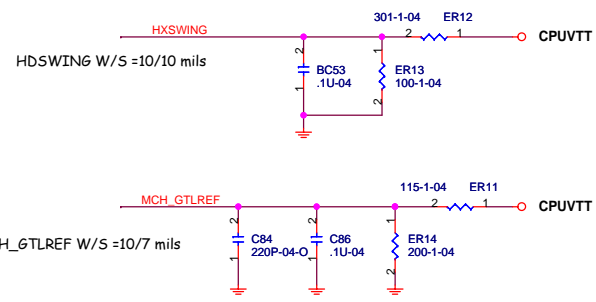
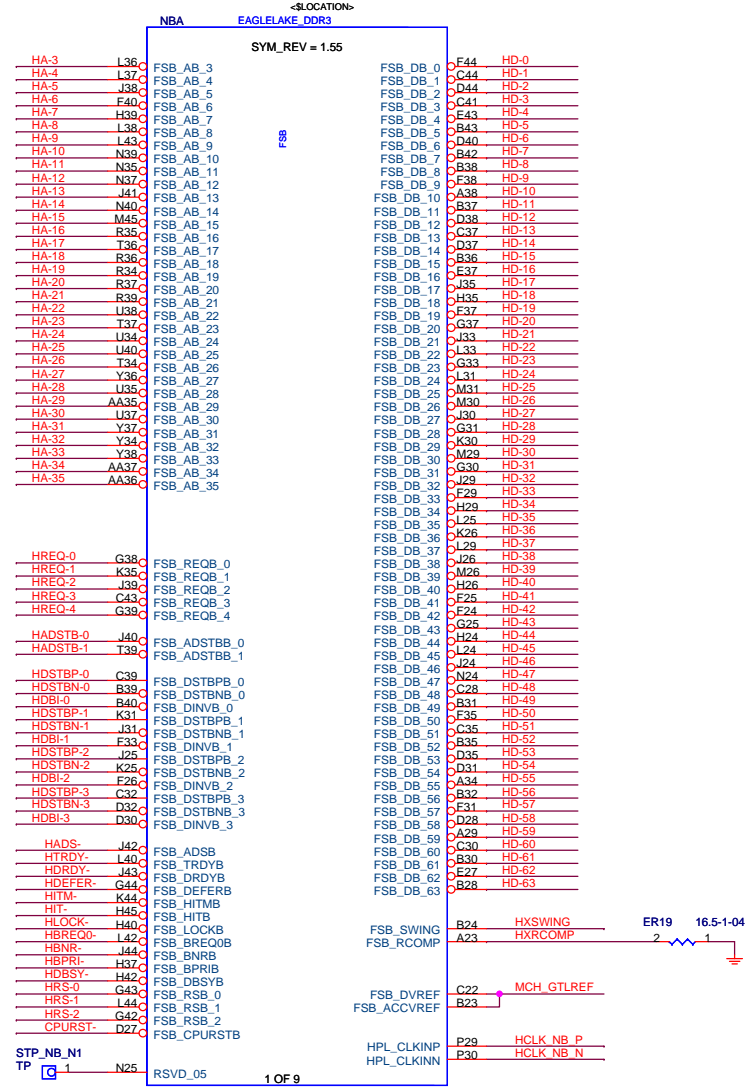
Choosing method of measuring temperature by either thermistor or diode



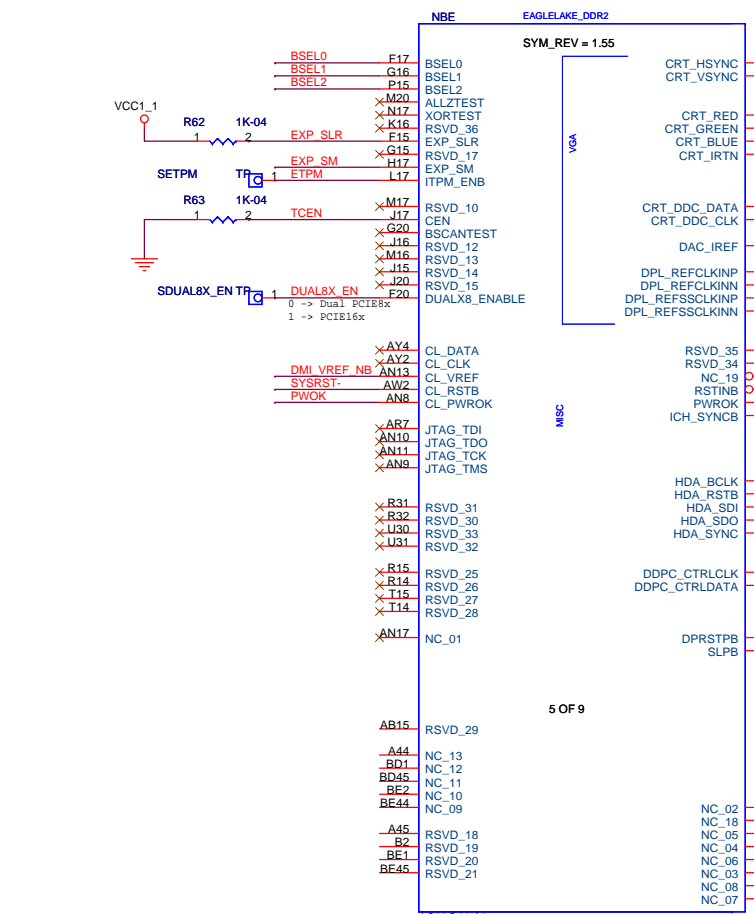
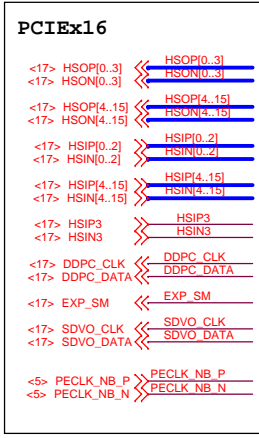
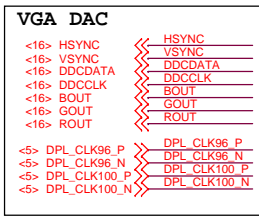
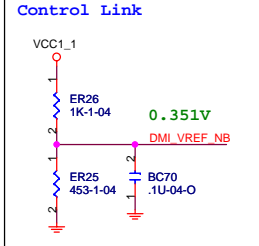
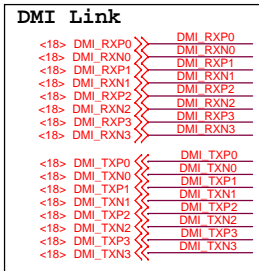
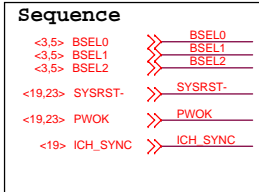
HOST

<3> HDSTBP[0..3]	>>	HDSTBP[0..3]
<3> HD[0..63]	>>	HD[0..63]
<3> HA[3..35]	>>	HA[3..35]
<3> HDSTBN[0..3]	>>	HDSTBN[0..3]
<3> HREQ[0..4]	>>	HREQ[0..4]
<3> HDBI[0..3]	>>	HDBI[0..3]
<3> HRS[0..2]	>>	HRS[0..2]
<3> HADSTB[0..1]	>>	HADSTB[0..1]
<3> HADS-	>>	HADS-
<3> HTRDY-	>>	HTRDY-
<3> HDRDY-	>>	HDRDY-
<3> HDEFER-	>>	HDEFER-
<3> HITM-	>>	HITM-
<3> HIT-	>>	HIT-
<3> HLOCK-	>>	HLOCK-
<3> HBREQ0-	>>	HBREQ0-
<3> HBNR-	>>	HBNR-
<3> HBPRI-	>>	HBPRI-
<3> HDBSY-	>>	HDBSY-
<3> CPURST-	>>	CPURST-

<5> HCLK_NB_P	>>	HCLK_NB_P
<5> HCLK_NB_N	>>	HCLK_NB_N



Elitegroup Computer Systems			
Title: G43/G41_HOST			
Size: Custom	Document Number: G41T-R3		Rev: 1.0A
Date: Tuesday, March 16, 2010	Sheet: 11	of 29	



For G41 Only :

CL_CLK and CL_DATA No Connect

CL_RST# Connect to PLTRST#

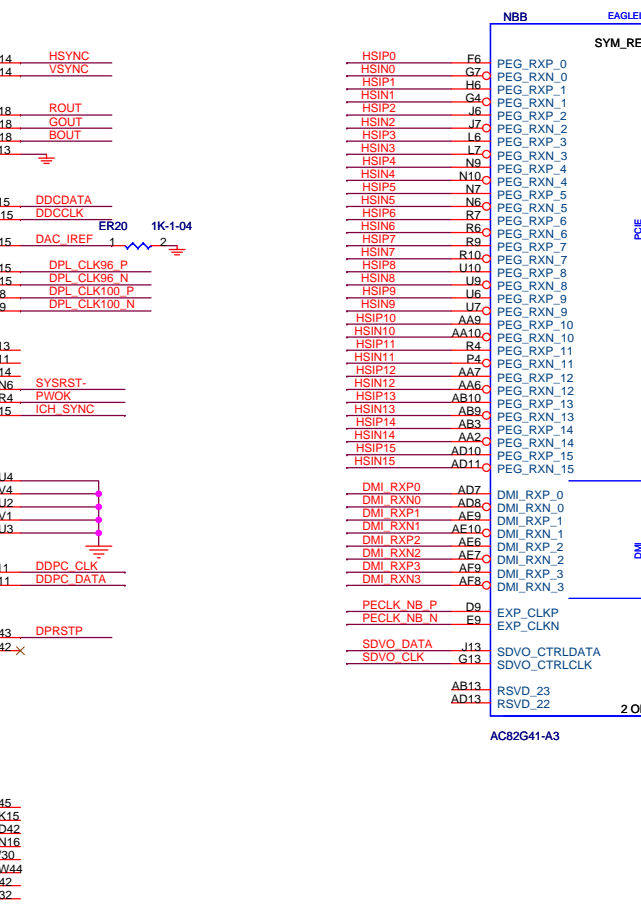
CL_VREF achieve 0.352 reference voltage

CL_PWROK Connect to PWOK

VCC_CL Connect to 1.1V GMCH core voltage

TPM1.2 STRAPS TABLE

	ENABLE	DISABLE	DESCRIPTION
ETPM	L	Floating	TPM1.2 on MCH In MCH Pin.L17
SPIDO	H	Floating	TPM1.2 on ICH10 In ICH10 Pin.C26
TPM_PP	H	L	TPM Physical Presence In ICH Pin.C12



For G41 Only :

CL_CLK and CL_DATA No Connect

CL_RST# Connect to PLTRST#

CL_VREF achieve 0.352 reference voltage

CL_PWROK Connect to PWOK

VCC_CL Connect to 1.1V GMCH core voltage

GMCH STRAPS TABLE

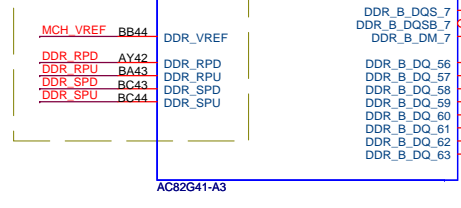
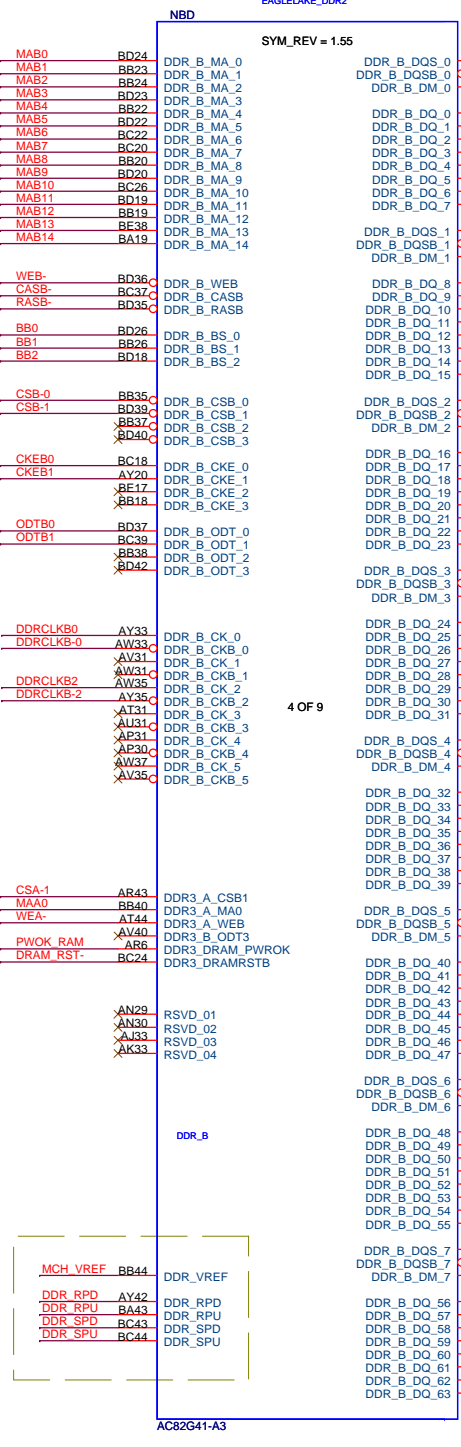
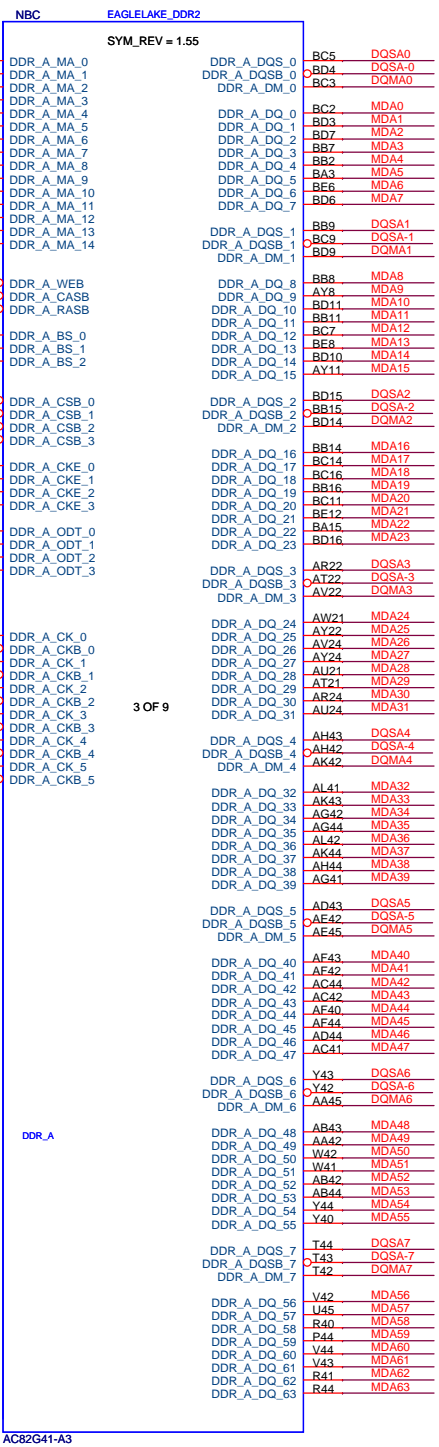
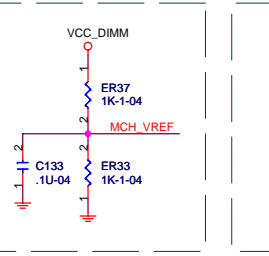
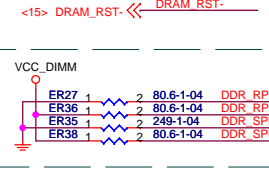
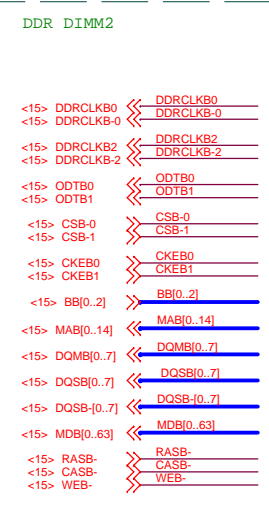
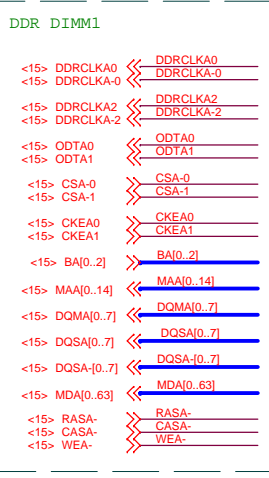
	H	L	DESCRIPTION
EXP_SLR	NORMAL/ATX	REVERSE/BTX	PCI EXPRESS STATIC LANE REVERSAL
EXP_SM	CONCURRENT	NON-CONCURRENT	PCI EXPRESS / SDVO COEXISTENCE
TCEN	ENABLE	DISABLE	TLS CONFIDENTIALITY

Elitegroup Computer Systems

Title: **G43/G41_DMI/PCIe/DAC/HDMI**

Size: Custom Document Number **G41T-R3** Rev **1.0A**

Date: Tuesday, March 16, 2010 Sheet 12 of 29

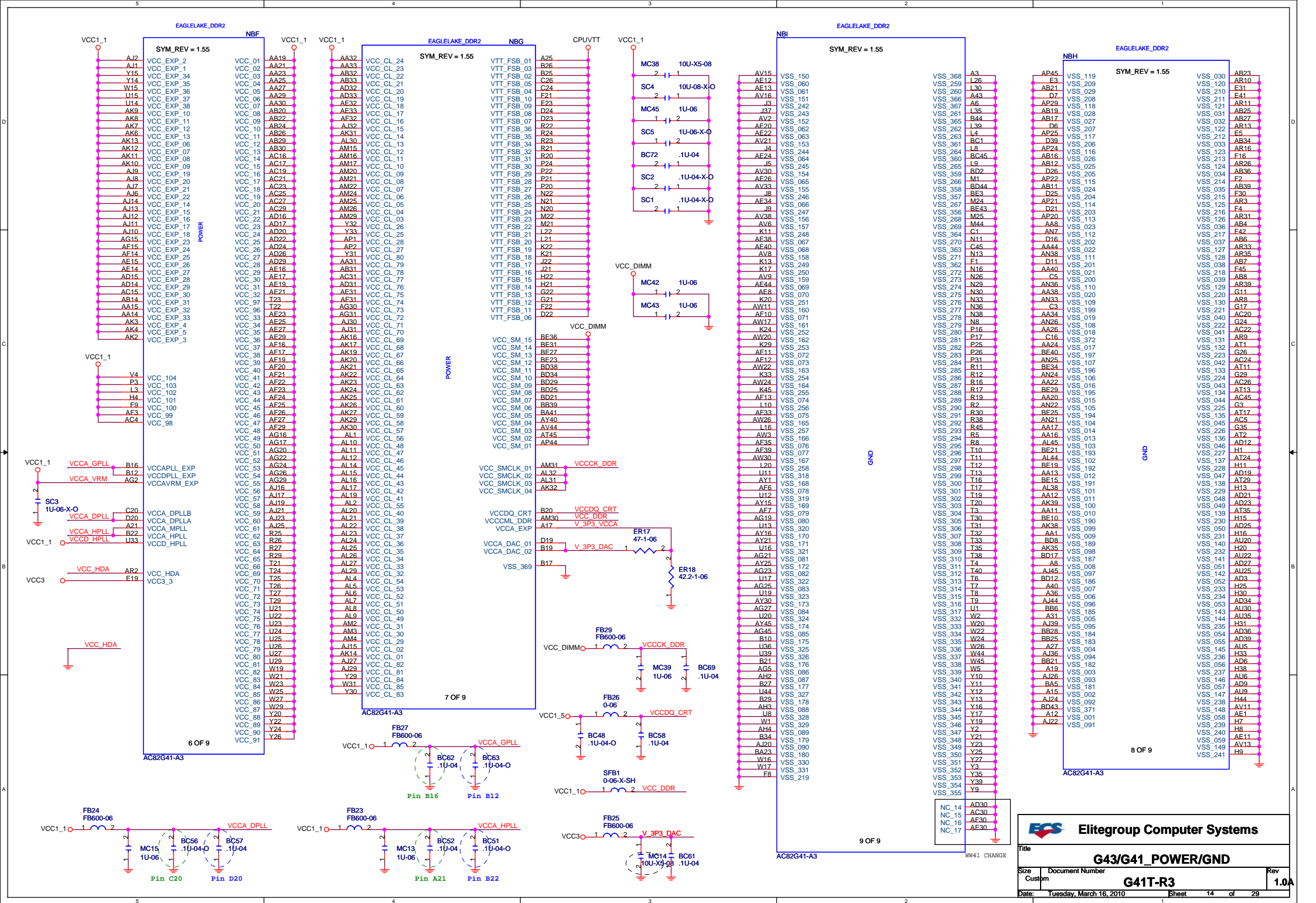


Elitegroup Computer Systems

Title: **07-G43/G41_MEMORY**

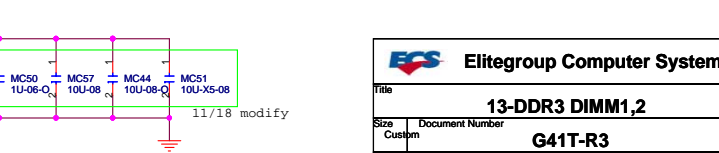
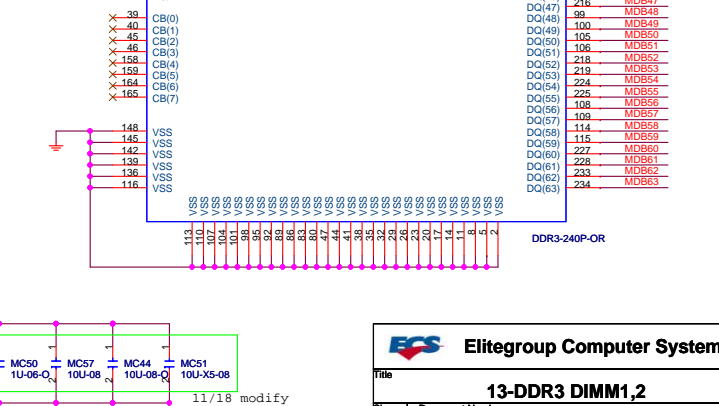
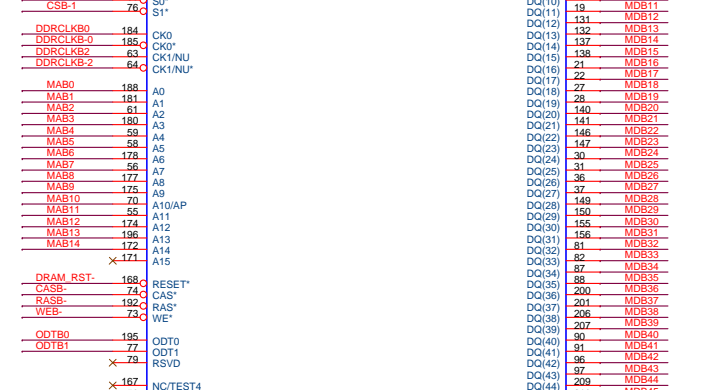
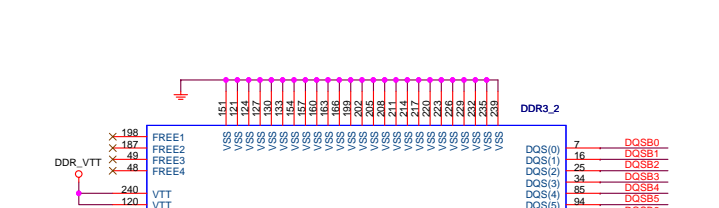
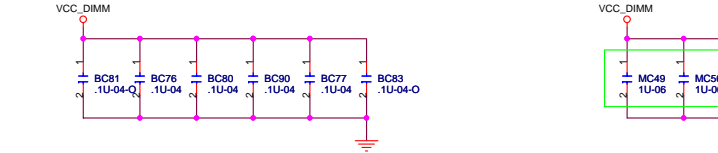
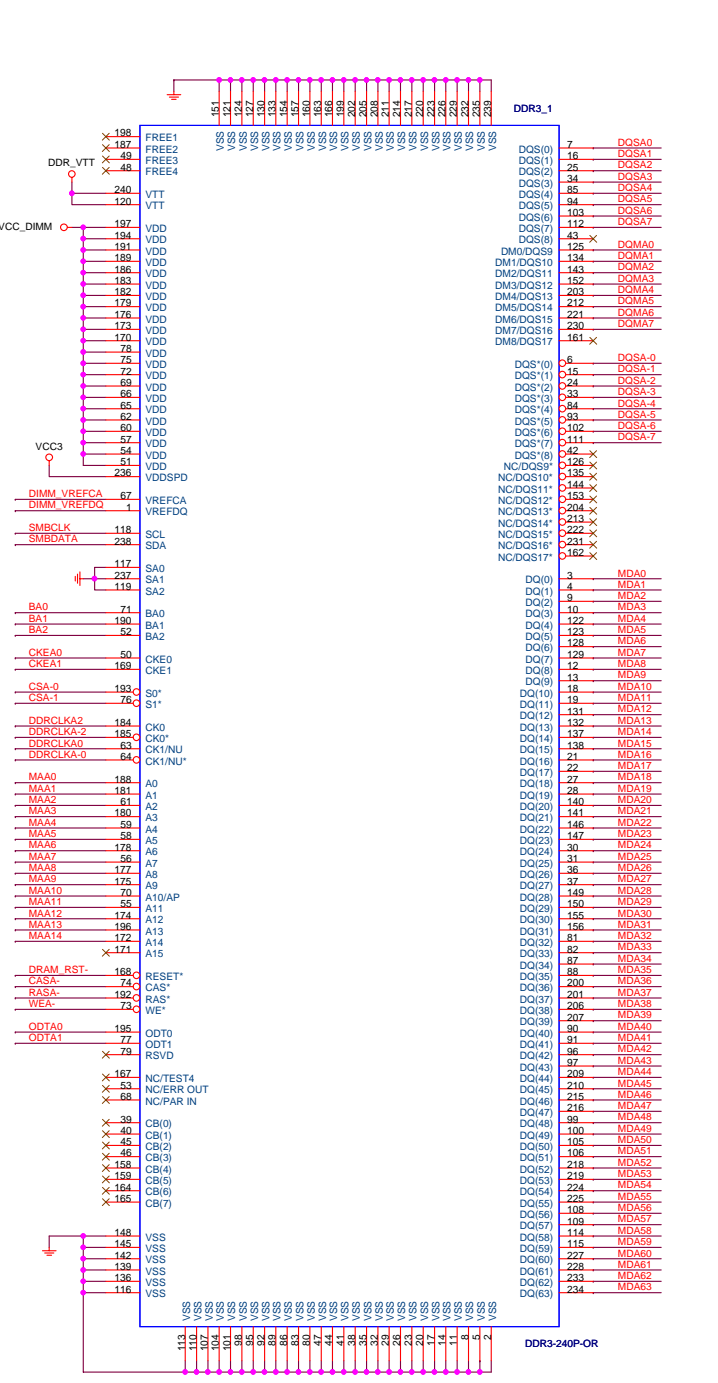
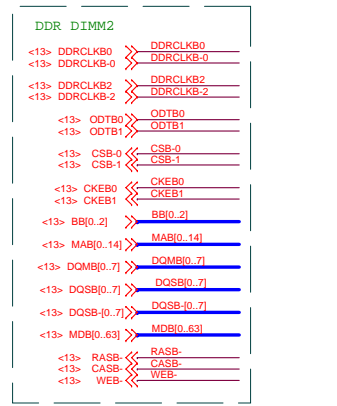
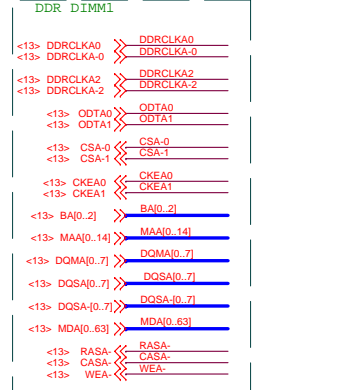
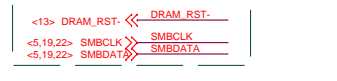
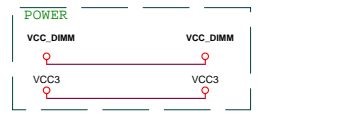
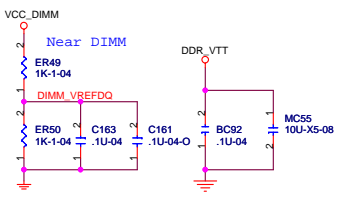
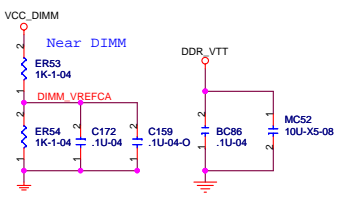
Size: Custom Document Number: **G41T-R3** Rev: **1.0A**


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IC	Pin	Value
AD30	NC_14	
AD30	NC_15	
AE30	NC_16	
AE30	NC_17	
W41		CHANGE
MC15	1U-06	
BC56	1U-04-O	
BC57	1U-04	
MC13	1U-06	
BC52	1U-04	
BC51	1U-04-O	
MC39	1U-06	
BC69	1U-04	
MC38	10U-X5-08	
SC4	10U-08-X-O	
MC45	1U-06	
SC5	1U-06-X-O	
BC72	1U-04	
SC2	1U-04-X-O	
SC1	1U-04-X-O	
MC42	1U-06	
MC43	1U-06	
FB24	FB600-06	
FB23	FB600-06	
FB25	FB600-06	
FB27	FB600-06	
FB29	FB600-06	
FB26	0-06	
FB19	V 3P3 DAC	
V3P3		VCCCA
AE7		VCCDDQ CRT
AE7		VCCDDR
AE7		V3P3 VCCCA
D19		
ER17	47*1-06	
ER18	42*2-1-06	
V3P3		VCCDAC_01
V3P3		VCCDAC_02
FB29	FB600-06	
BC48	1U-04-O	
BC58	1U-04	
SFB1	0-06-X-SH	
MC14	10U-X9-08	
BC61	1U-04	

		Elitegroup Computer Systems	
		G43/G41_POWER/GND	
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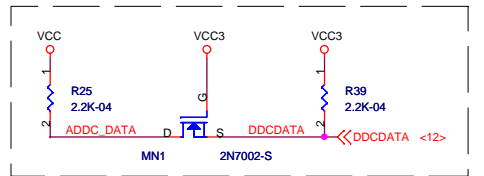
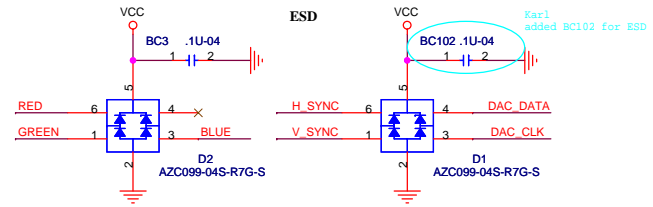
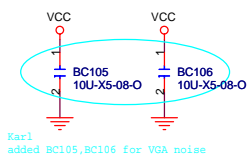
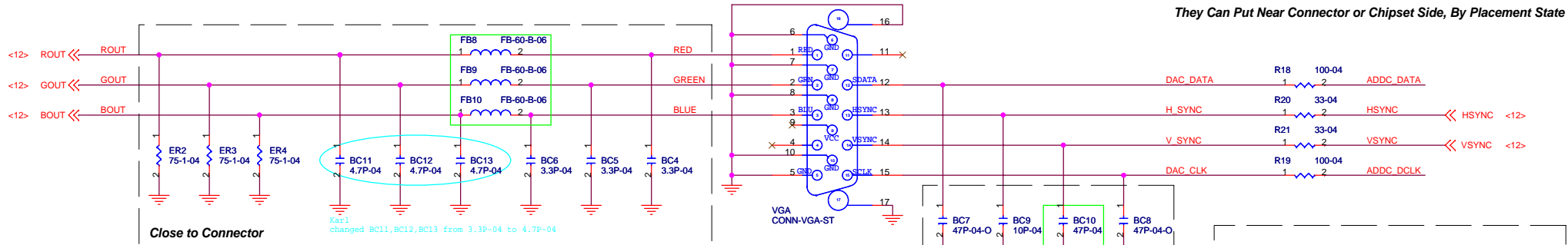


 **Elitegroup Computer Systems**

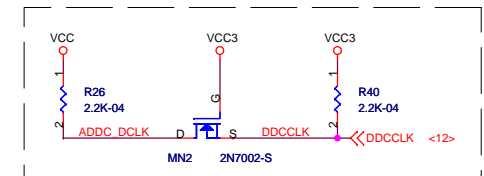
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Size: Custom Document Number: **G41T-R3** Rev: 1.0A

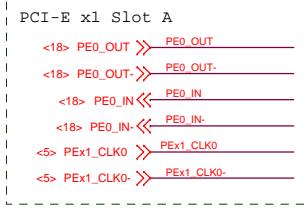
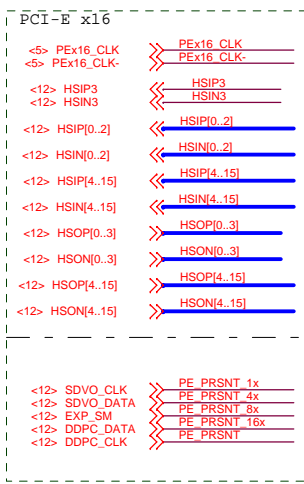
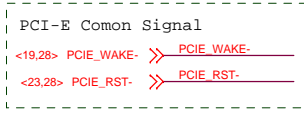
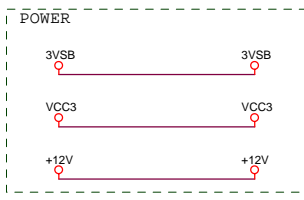
Date: Tuesday, March 16, 2010 Sheet 15 of 29



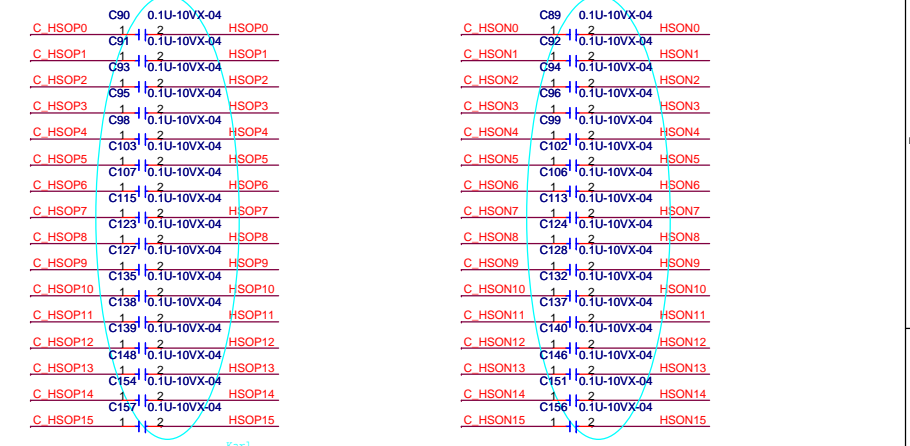
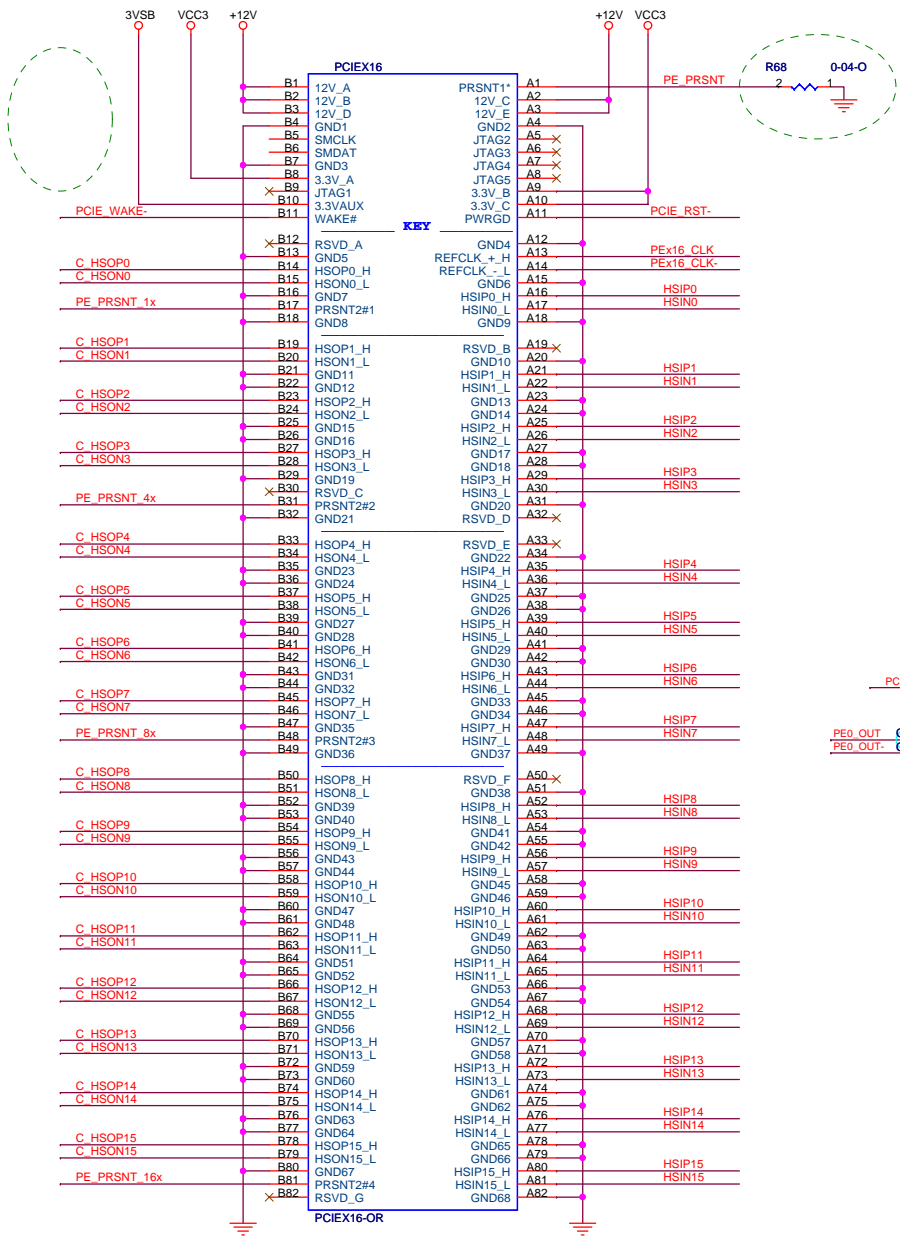
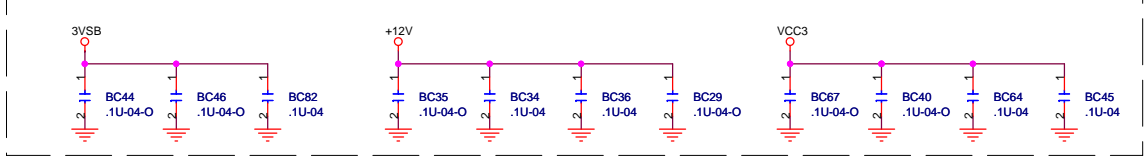
They Can Put Near Connector or Chipset Side, By Placement State



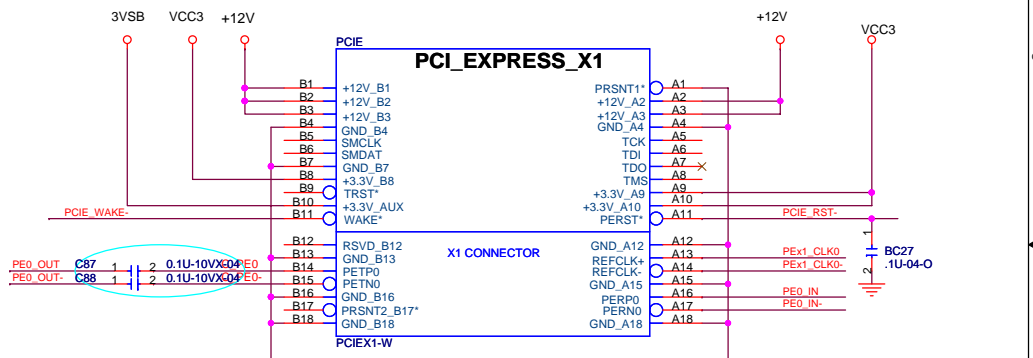
They Can Put Near Connector or Chipset Side, By Placement State



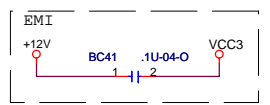
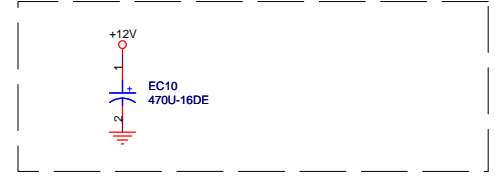
Please place the caps close to PCI-E Slot.



Karl changed AC coupling from .1U-04 to 0.1U-10VX-04



Please place the caps close to PCI-E Slot.

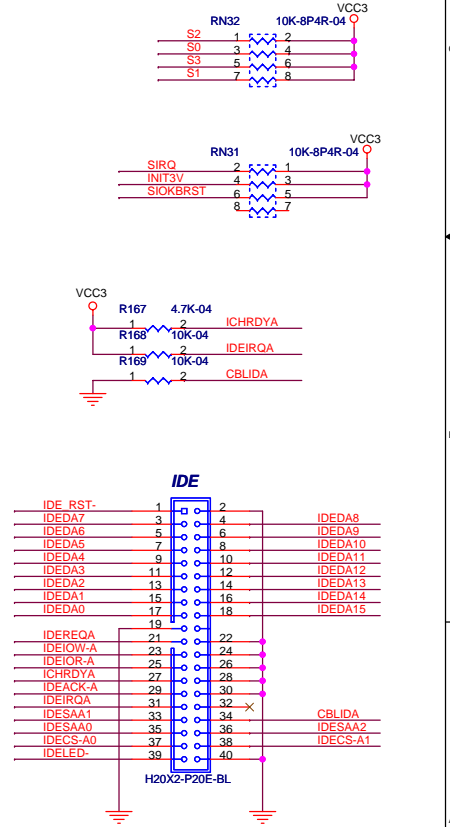
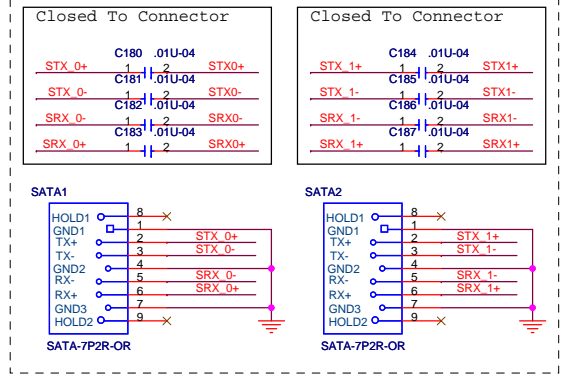
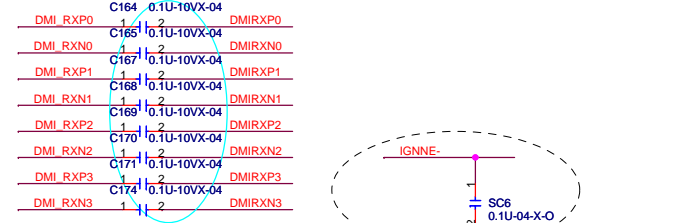
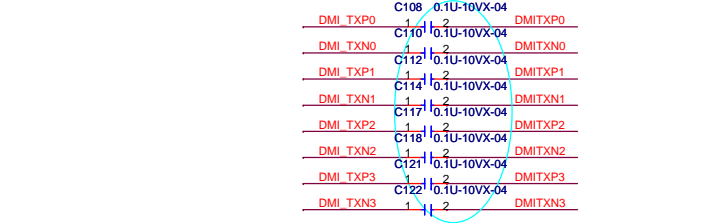
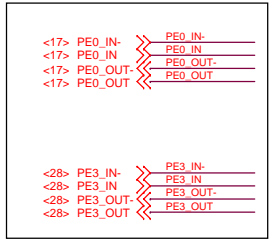
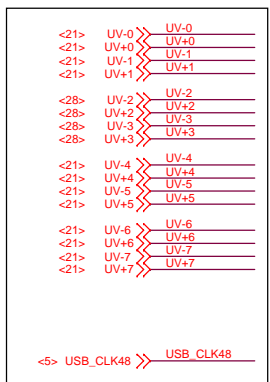
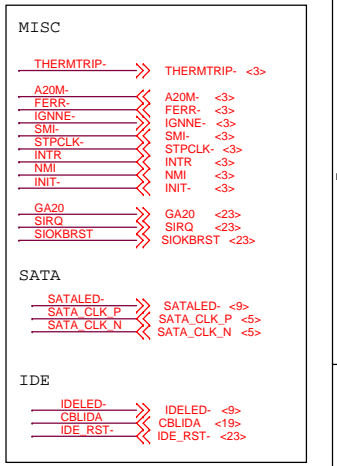
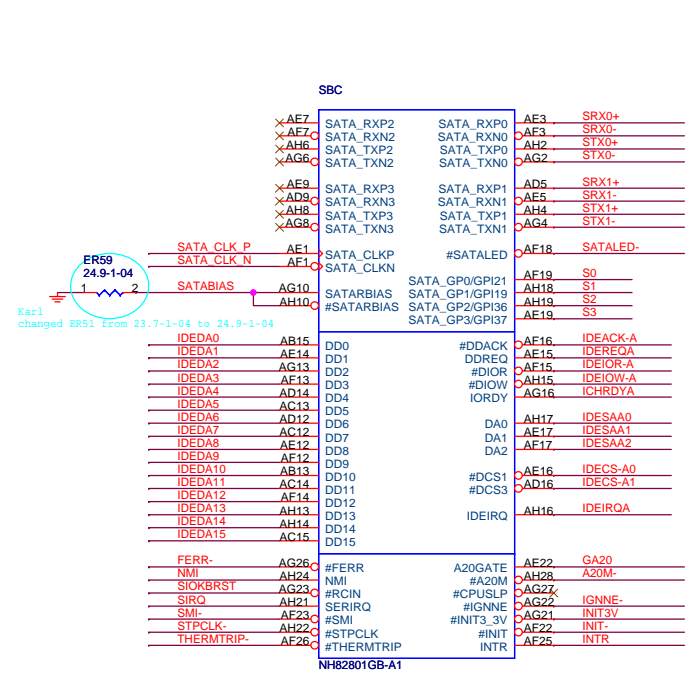
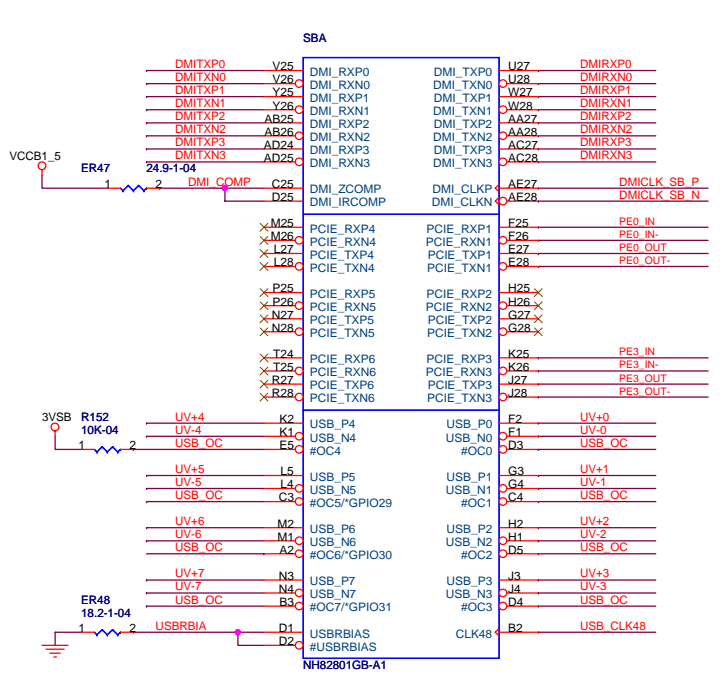
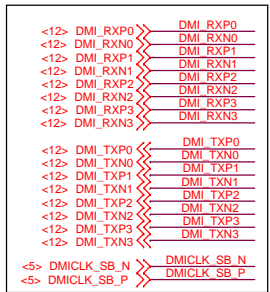


Elitegroup Computer Systems

Title: **PCI-E 16x/1x Slot**

Size: Custom Document Number: **G41T-R3** Rev: **1.0A**

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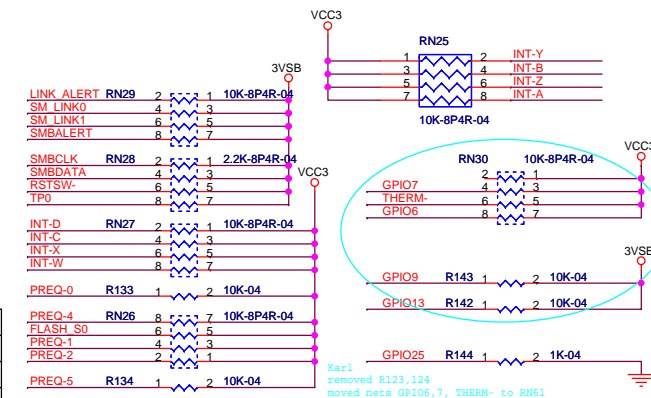
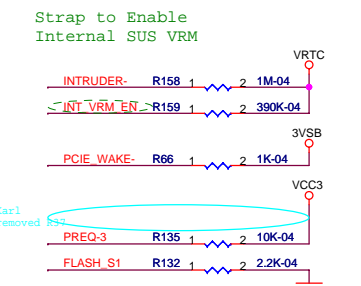
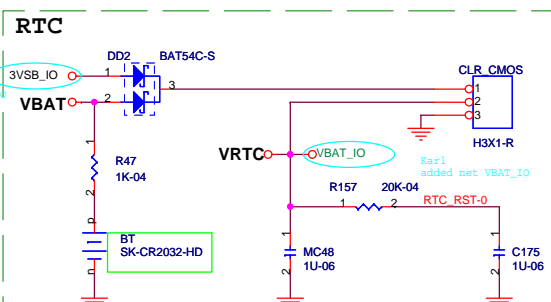
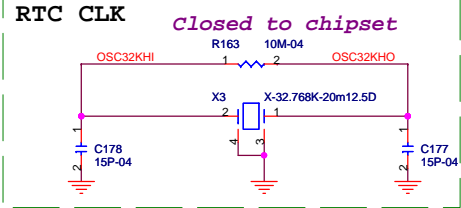
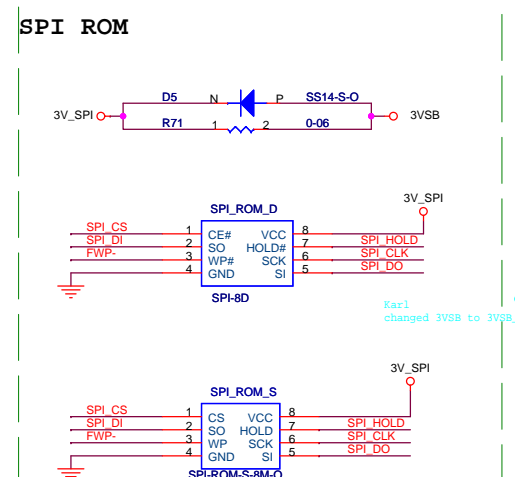
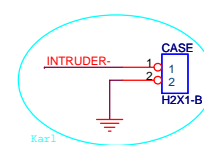
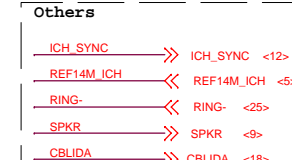
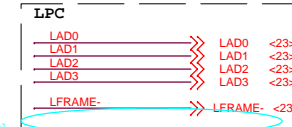
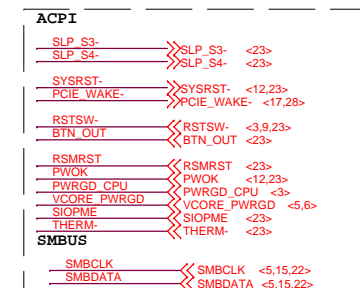
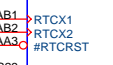
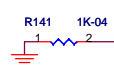
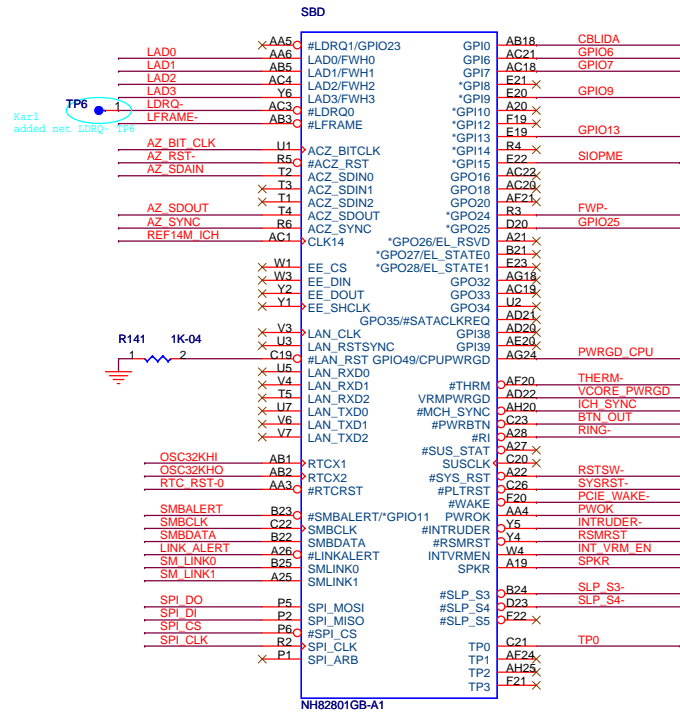
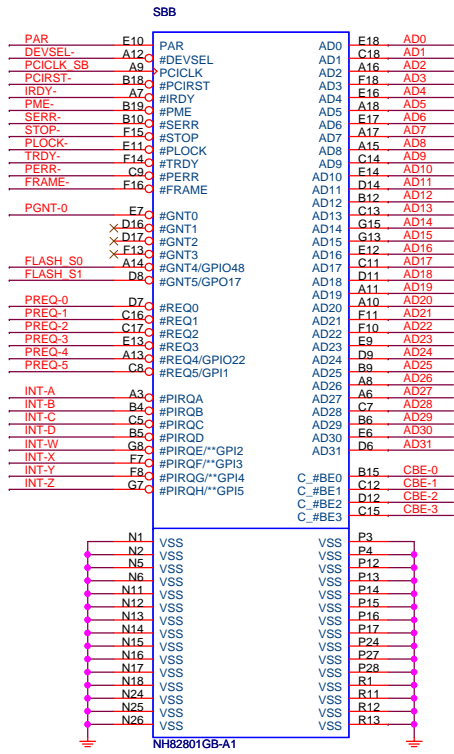
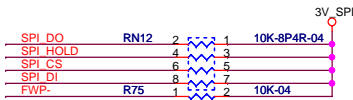
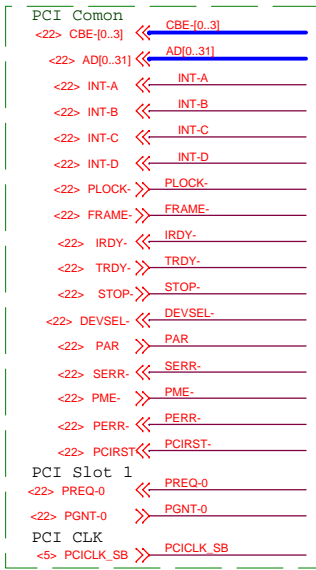


Elitegroup Computer Systems

Title: **ICH7_DMI/PCIE/SATA/USB/MISC**

Size: Document Number **G41T-R3** Rev **1.0A**

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FLASH_S1	FLASH_S0	Flash Cycle
0	1	SPI
1	0	PCI
1	1	LPC

	H	Floating	DESCRIPTION
AZ_SDOUT	PCIE 4x *1	PCIE 1x *4	PCIE 1x/4x Select
AZ_SYNC	PCIE 4x *1	PCIE 1x *4	PCIE 1x/4x Select

Elitegroup Computer Systems

Title: **ICH7_HDA/SPI/PCI/RTC/MISC**

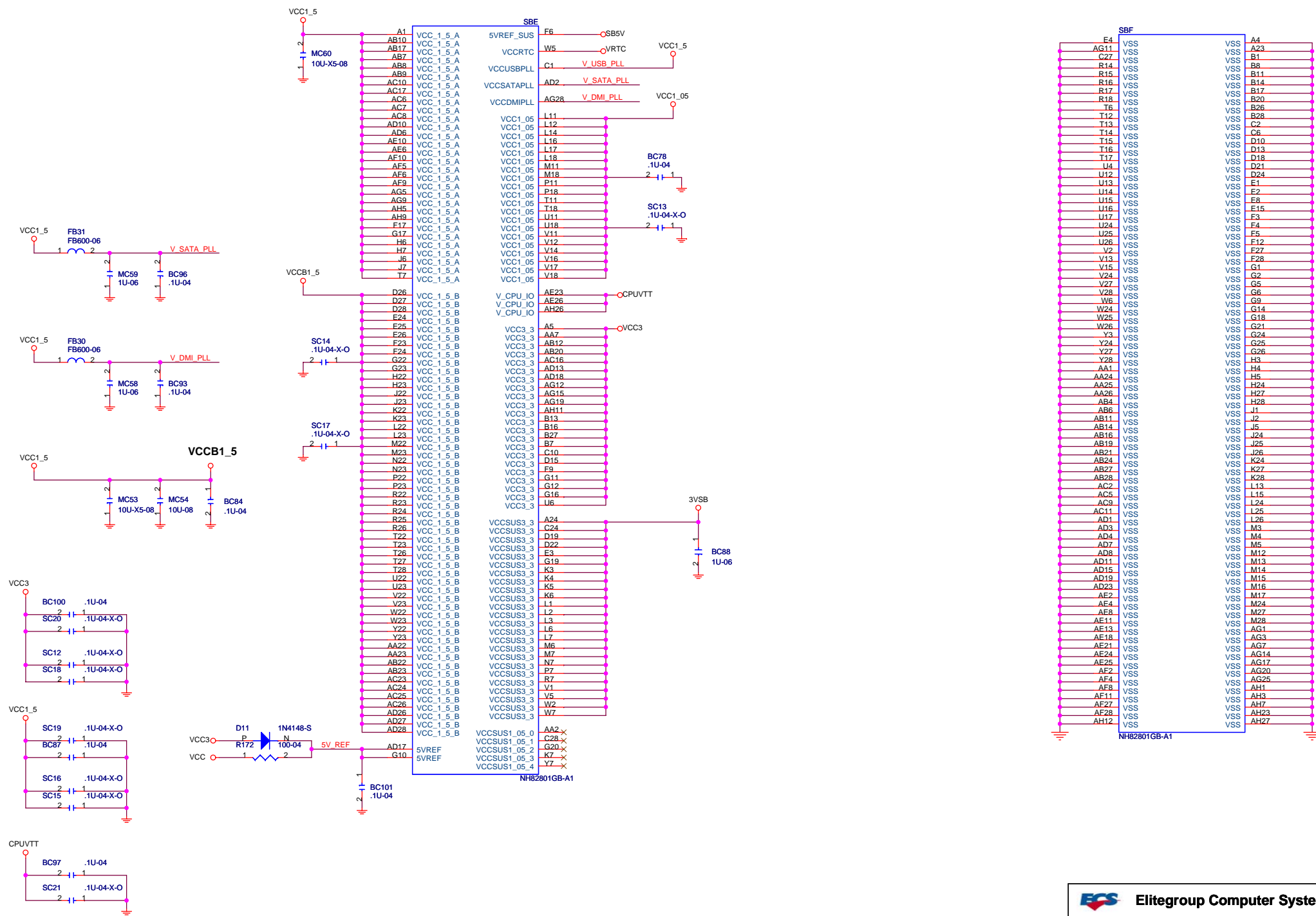
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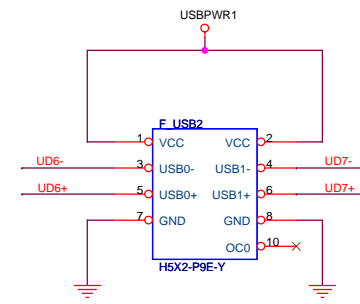
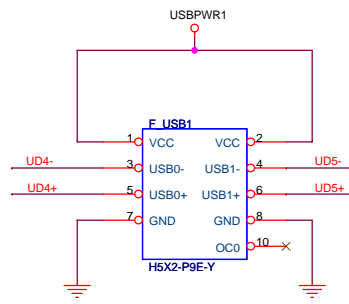
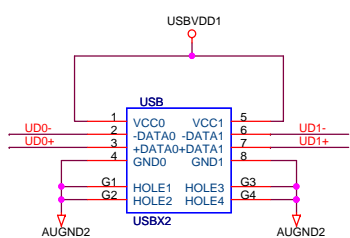
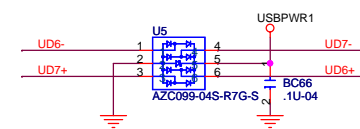
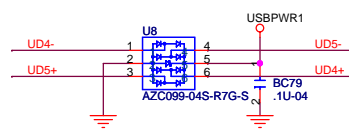
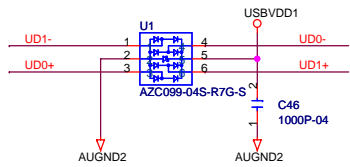
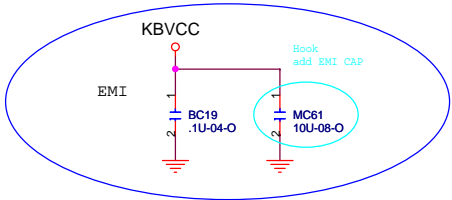
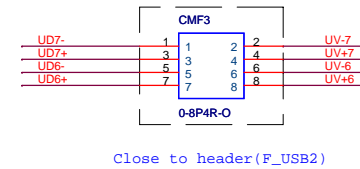
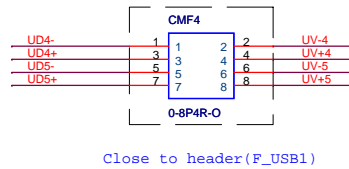
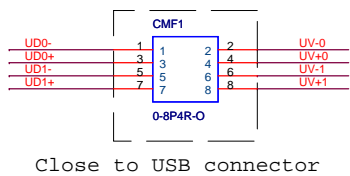
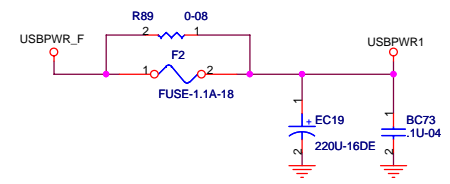
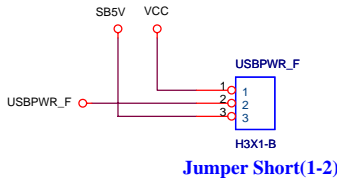
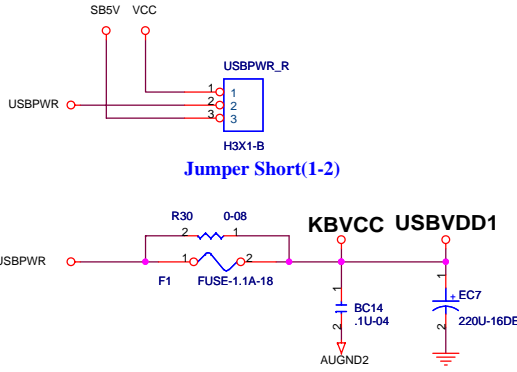
Rev: **1.0A**

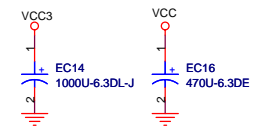
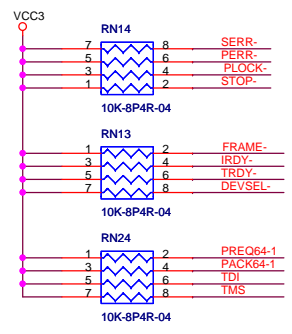
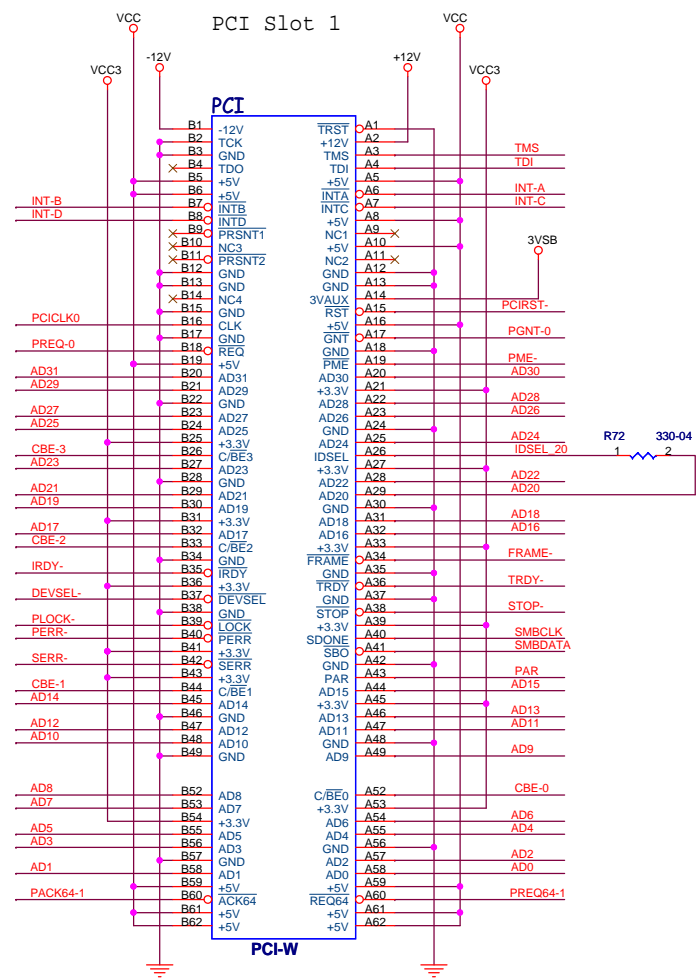
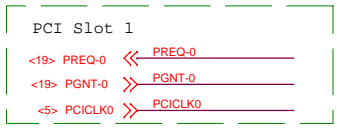
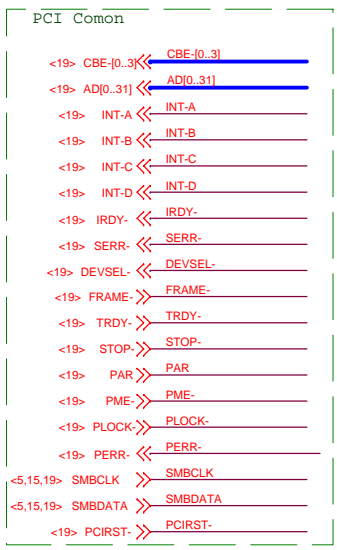
Date: Tuesday, March 16, 2010

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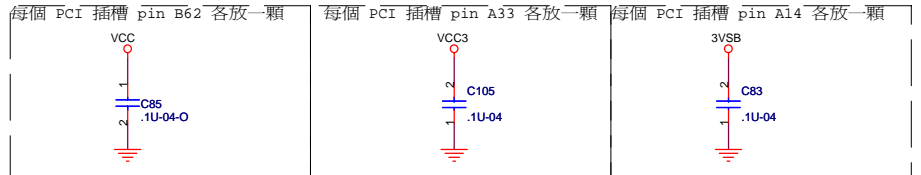
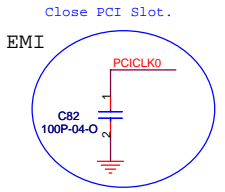


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<18>	UV+5	UV+5
<18>	UV-6	UV-6
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<18>	UV+7	UV+7





Please place close to PCI1 and PCI2 Slot.

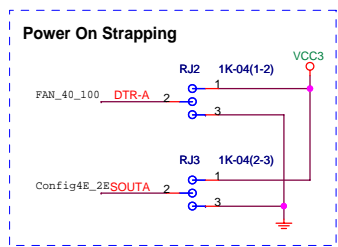
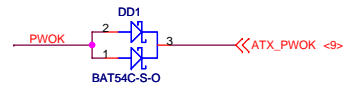
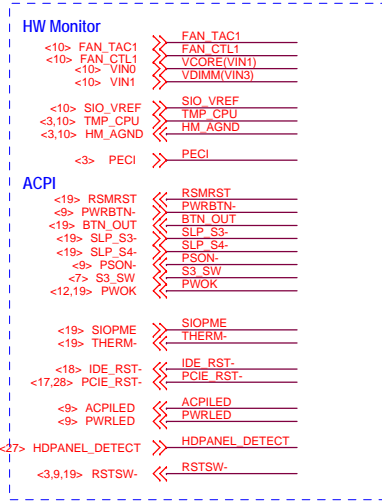


Elitegroup Computer Systems

Title: **PCI Slot**

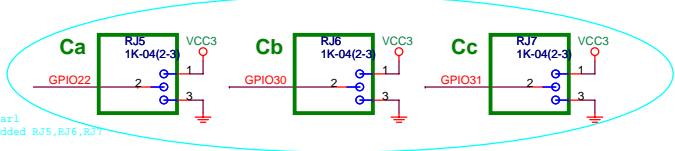
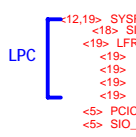
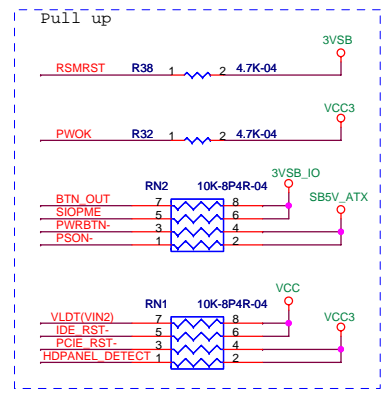
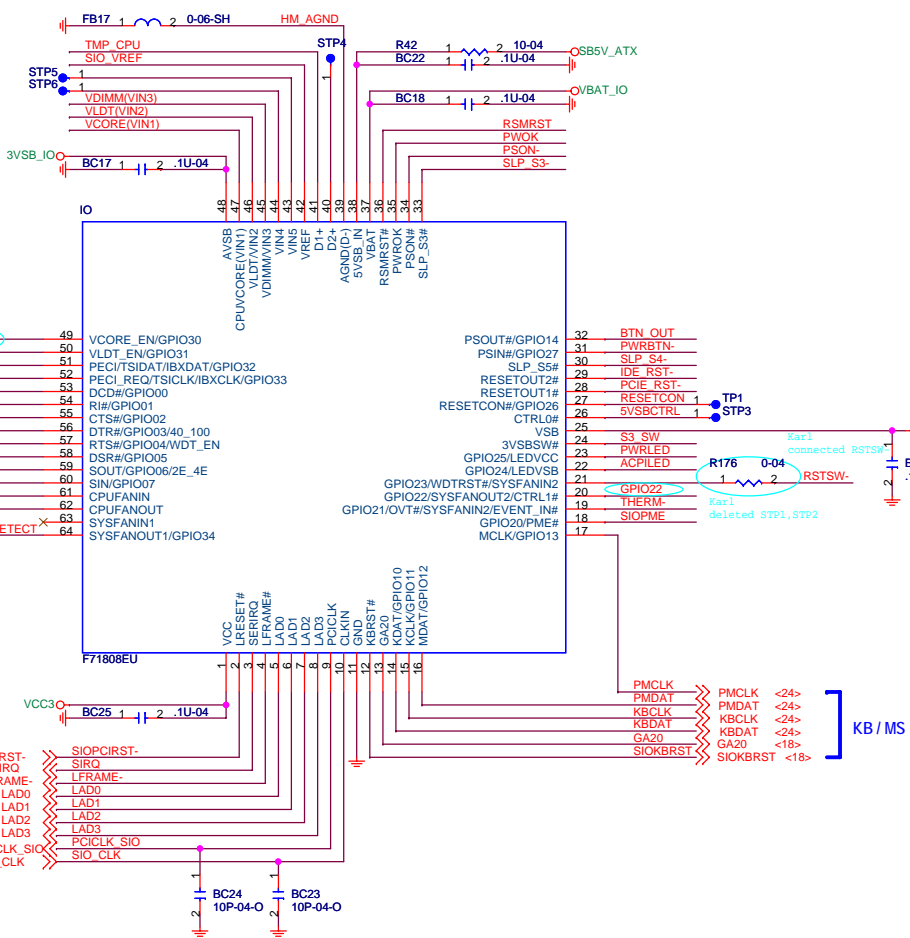
Size: Custom
Document Number: **G41T-R3**
Rev: **1.0A**

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Power On Strapping Options

PIN NO.	Symbol	value	Description
Pin 56	FAN_40_100	1	FAN power on speed is the last programmed value
		0	FAN power on speed is 100%
Pin 59	Config4E_2E	1	Configuration Register I/O port is 4E. (Default)
		0	Configuration Register I/O port is 2E.



Location	For 95W CPU	For 65W CPU
Ca	1K-04(2-3) LOW	1K-04(1-2) High
Cb	reserved	reserved
Cc	reserved	reserved

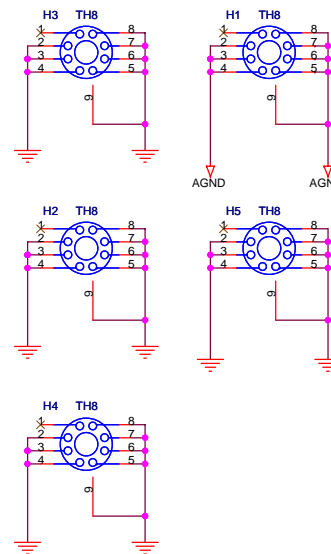
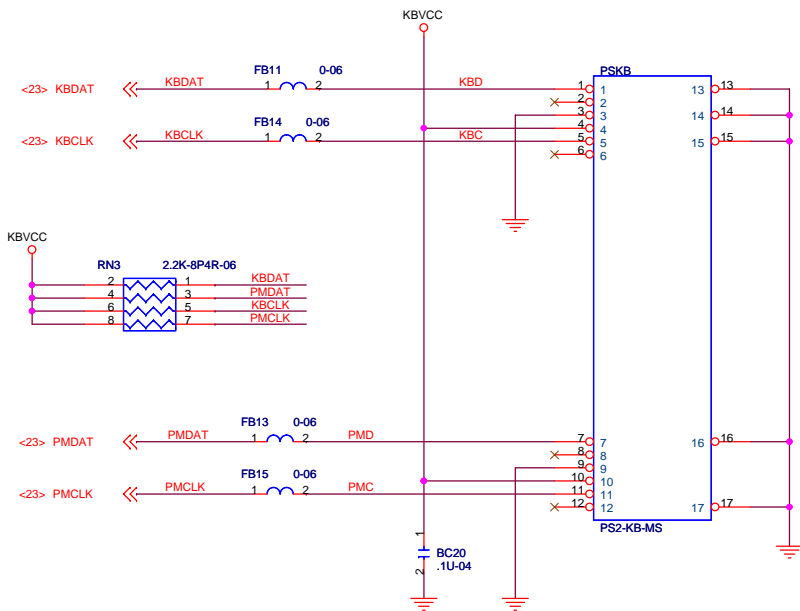
Elitegroup Computer Systems

Super I/O (IT8758)

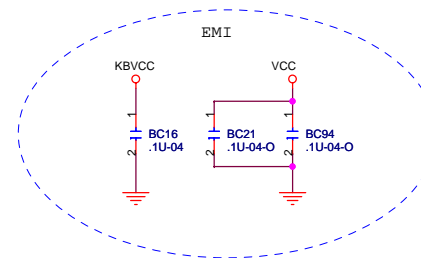
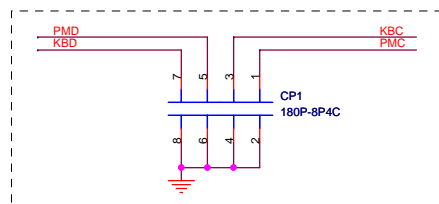
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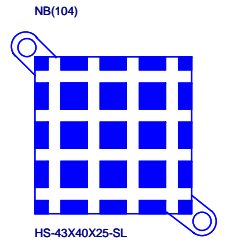
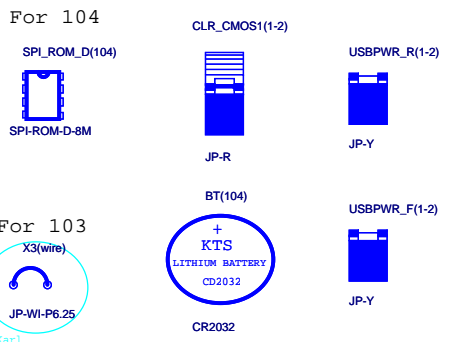
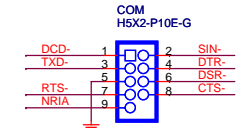
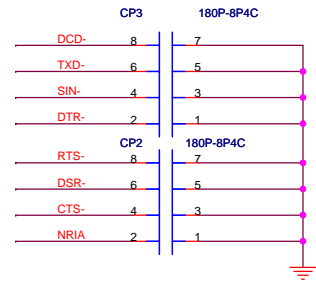
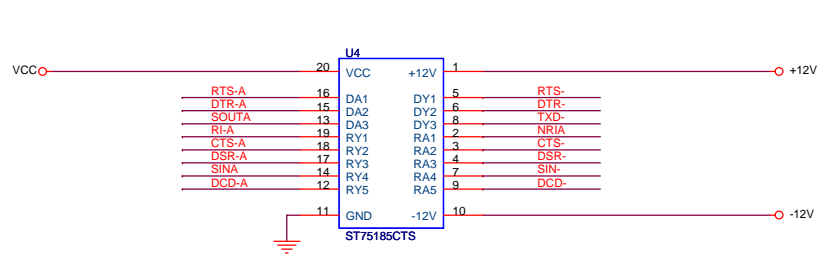
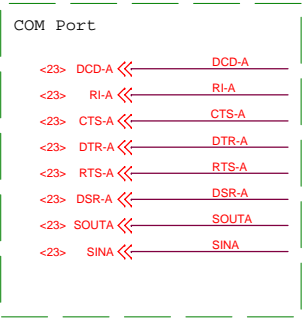
Size: Custom Document Number: G41T-R3 Rev: 1.0A

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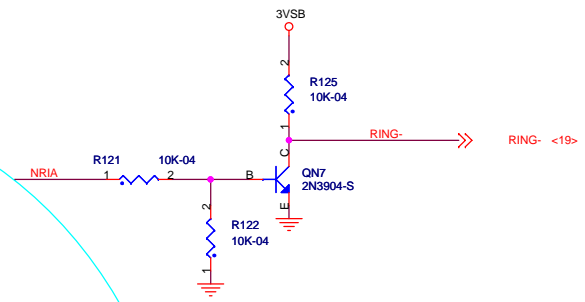


PLACE NEAR CONNECTOR





If need 13mm hight :
HS-FCBGA-L38H13-S



PCB Impedance control

Impedance (ohm)	Trace Width (mil) (S/W/S)	Trace Length (inch)	Pre-preg
60	5 (20/5/20)	6	2116
50	4 (50/4/50)	6	1080
42	6 (50/6/50)	6	1080

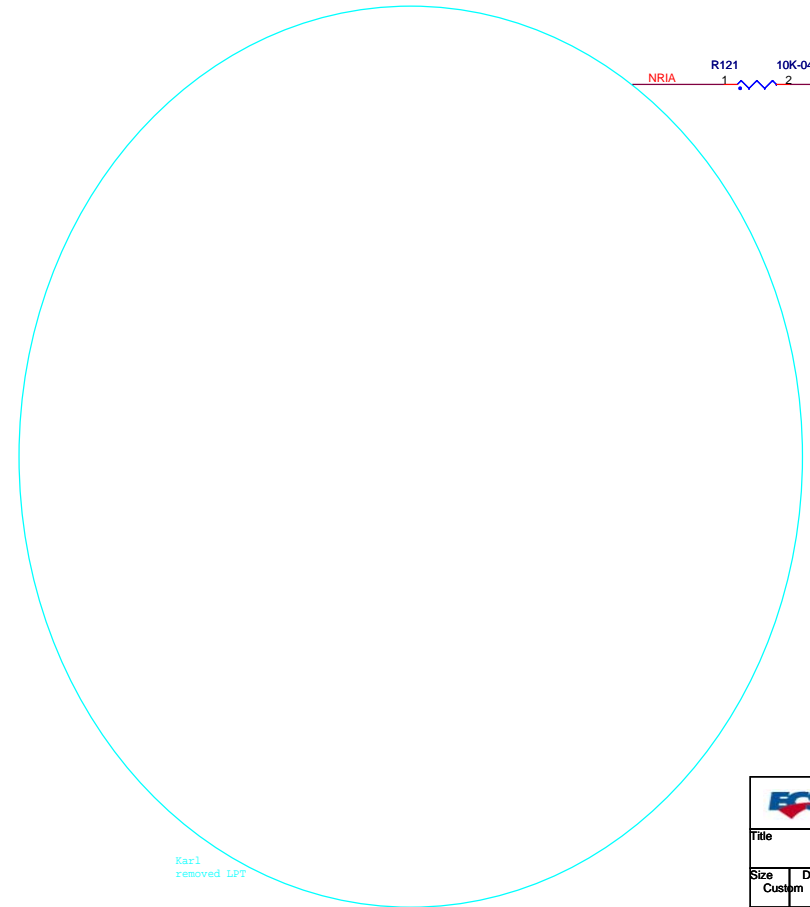
1)Circuit type 1

Layer 1:TOP

Layer 2:PWR

Layer 3:GND

Layer 4:BOTTOM



Karl removed LP1

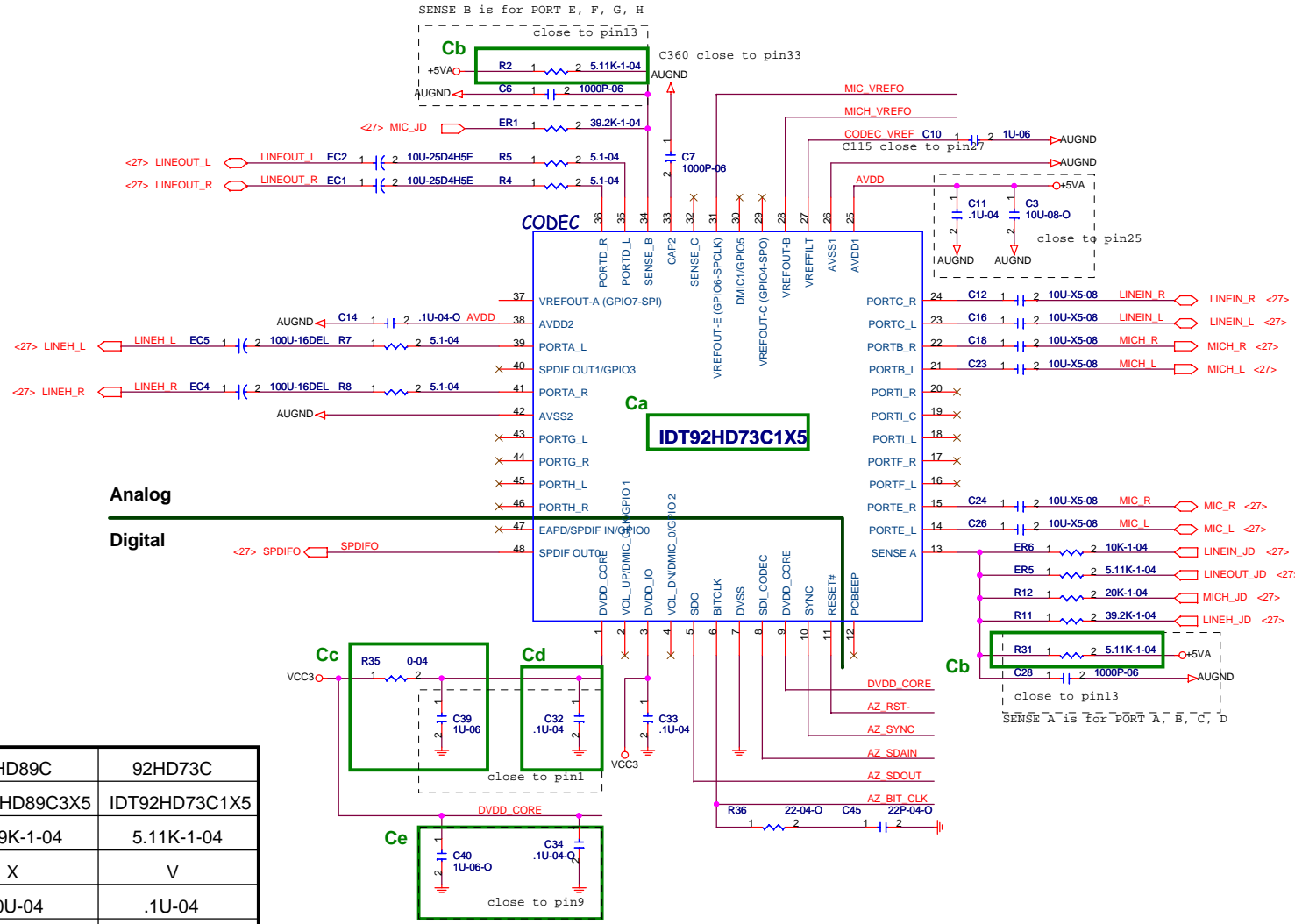
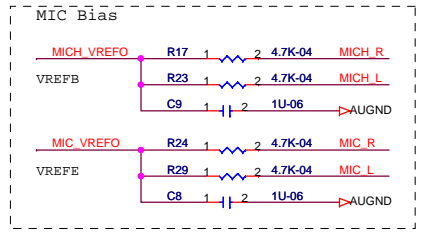
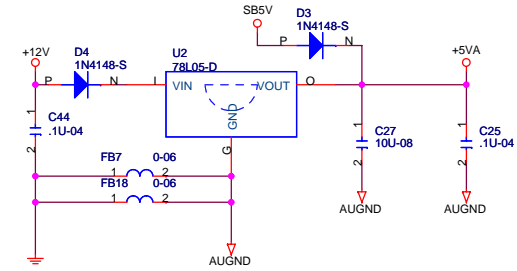
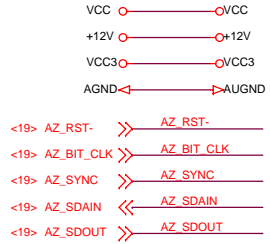
ECS Elitegroup Computer Systems

Title: **COM / Others**

Size: Custom Document Number: **G41T-R3** Rev: **1.0A**

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External Connection



Location	92HD89C	92HD73C
Ca	IDT92HD89C3X5	IDT92HD73C1X5
Cb	2.49K-1-04	5.11K-1-04
Cc	X	V
Cd	10U-04	.1U-04
Ce	V	X

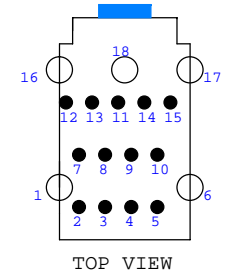
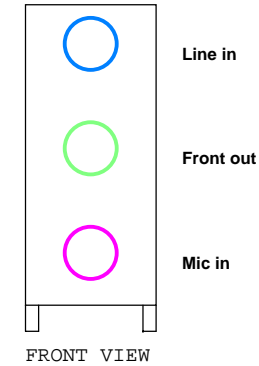
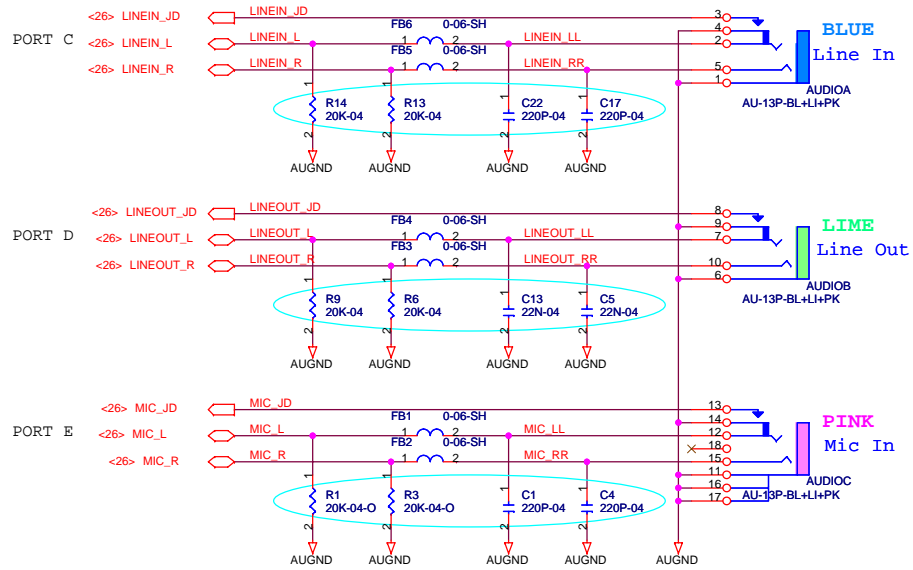
ECS Elitegroup Computer Systems

Title: **Audio Codec (IDT92HD73C)**

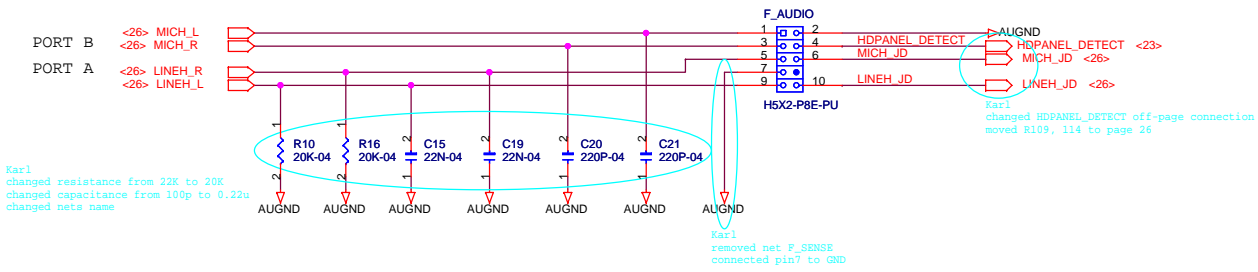
Size: Custom Document Number: **G41T-R3** Rev: **1.0A**

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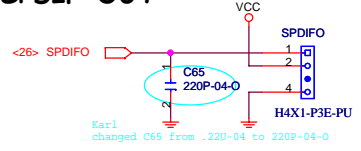
REAR-AUDIO



FRONT-AUDIO

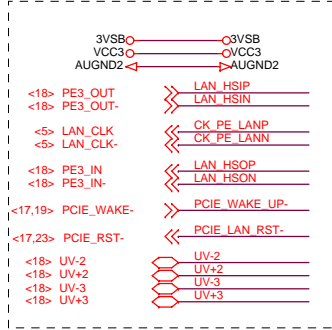


SPDIF-OUT

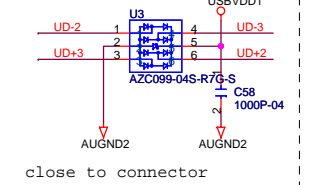
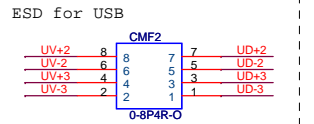
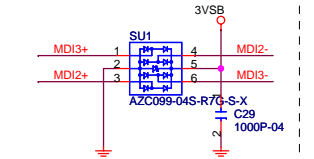
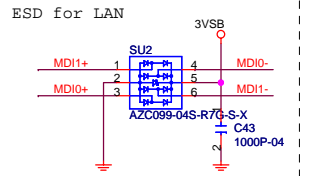
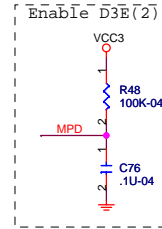
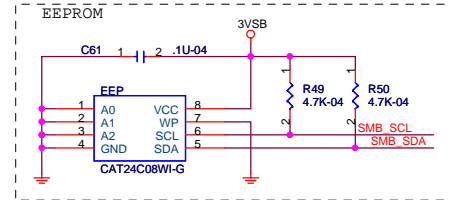
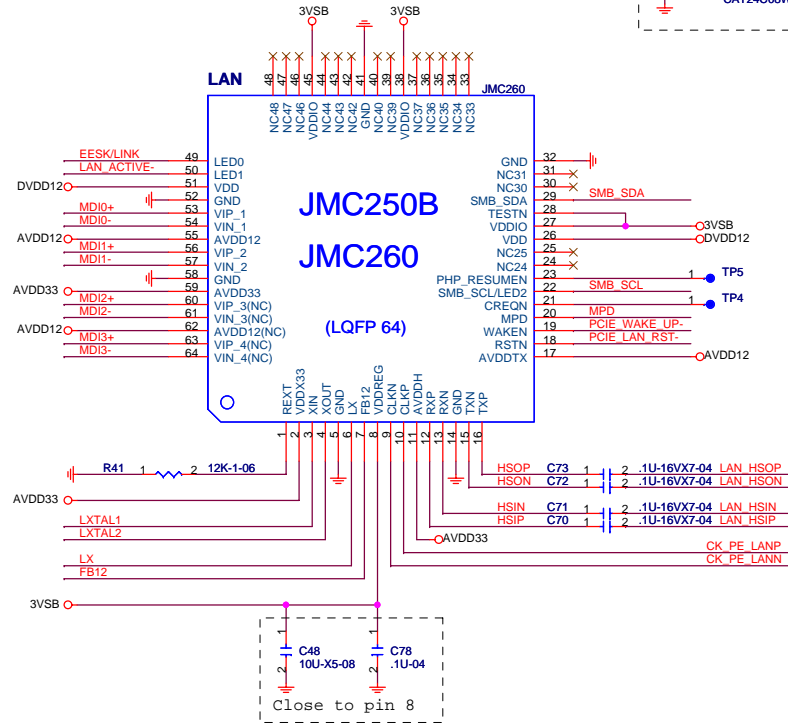
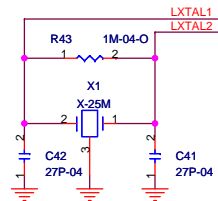
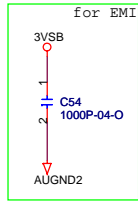


ECS Elitegroup Computer Systems			
Title: Audio Interface(3 Port HDA)			
Size: Custom	Document Number: G41T-R3		Rev: 1.0A
Date: Tuesday, March 16, 2010	Sheet: 27	of 29	

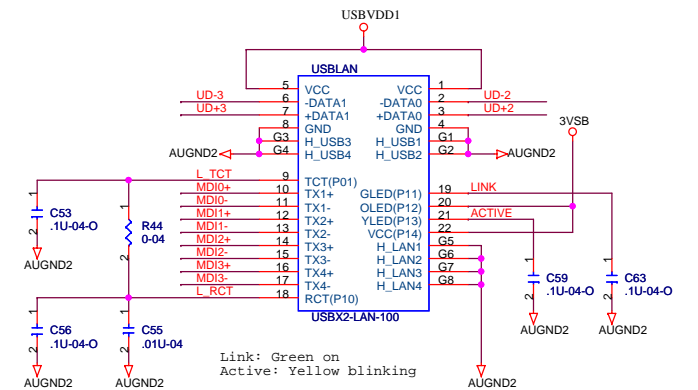
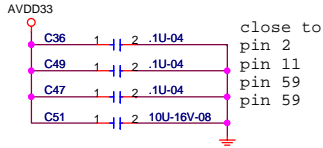
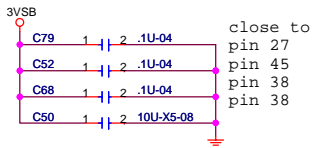
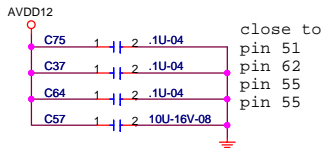
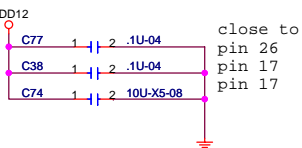
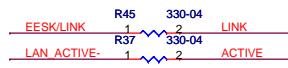
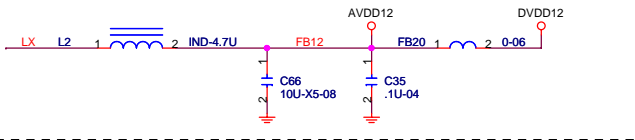
External Connection



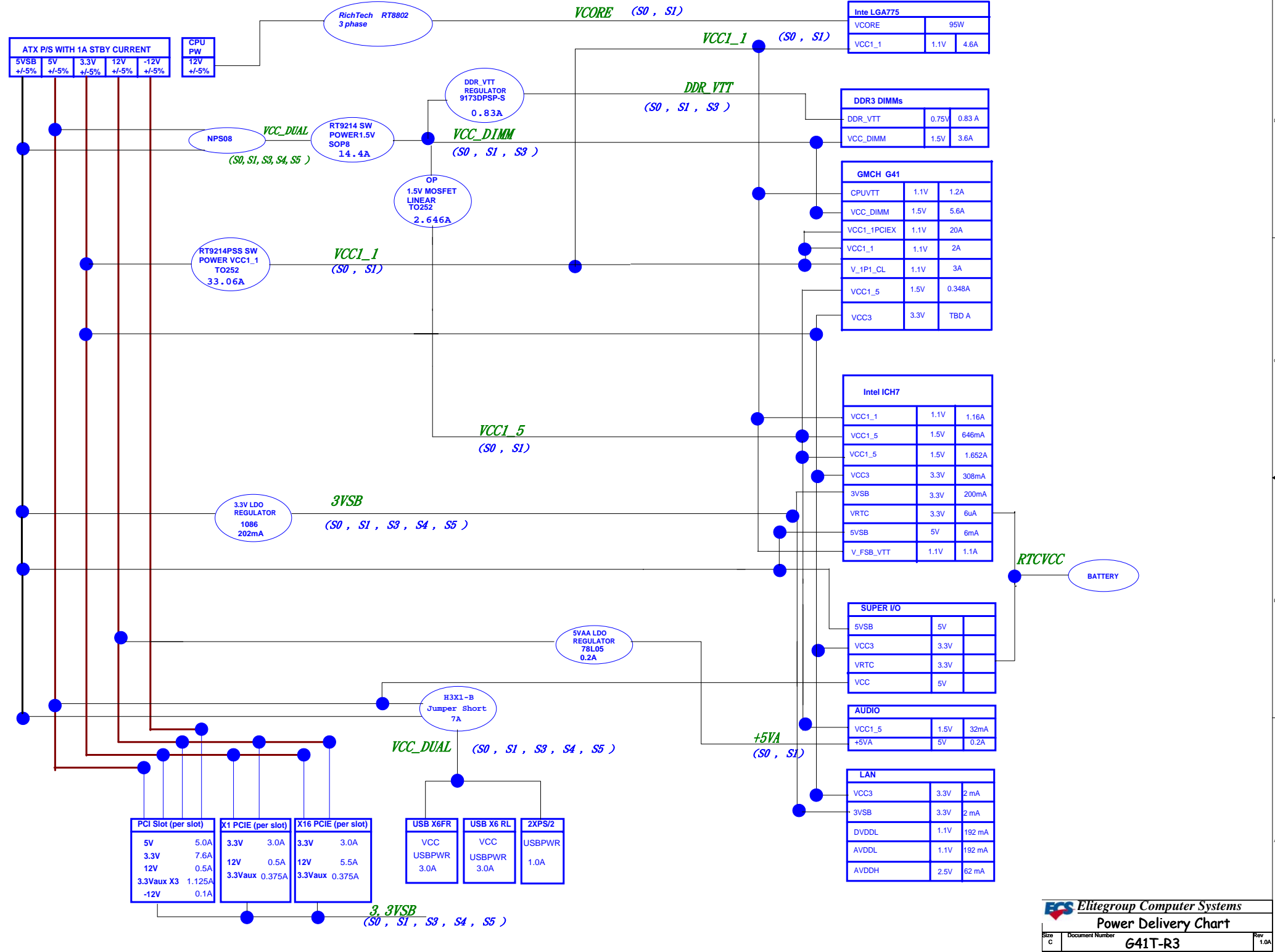
新手提醒:
LAN_HSOP/N請接到SB的PCIE RX端
LAN_HSIP/N請接到SB的PCIE TX端
LAN_HSIP/N在SB的PCIE TX端要記得放AC coupling cap



Power Regulator



Link: Green on
Active: Yellow blinking



ATX P/S WITH 1A STBY CURRENT				
5VSB	5V	3.3V	12V	-12V
+/-5%	+/-5%	+/-5%	+/-5%	+/-5%

CPU PW	
12V	+/-5%

RichTech RT8802 3 phase

NPS08
VCC_DUAL
(S0, S1, S3, S4, S5)

RT9214 SW POWER 1.5V SOP8
14.4A

DDR_VTT REGULATOR 9173DPSP-S
0.83A

VCC_DIMM
(S0, S1, S3)

OP 1.5V MOSFET LINEAR TO252
2.646A

RT9214PSS SW POWER VCC1_1 TO252
33.06A

VCC1_1
(S0, S1)

3.3V LDO REGULATOR 1086
202mA

3VSB

(S0, S1, S3, S4, S5)

5VAA LDO REGULATOR 78L05
0.2A

H3X1-B Jumper Short
7A

VCC_DUAL
(S0, S1, S3, S4, S5)

+5VA
(S0, S1)

PCI Slot (per slot)		X1 PCIE (per slot)		X16 PCIE (per slot)	
5V	5.0A	3.3V	3.0A	3.3V	3.0A
3.3V	7.6A	12V	0.5A	12V	5.5A
12V	0.5A	3.3Vaux	0.375A	3.3Vaux	0.375A
3.3Vaux X3	1.125A				
-12V	0.1A				

3.3VSB
(S0, S1, S3, S4, S5)

USB X6FR		USB X6 RL		2XPS/2	
VCC	3.0A	VCC	3.0A	USBPWR	1.0A
USBPWR	3.0A	USBPWR	3.0A		

Intel LGA775		
VCCORE		95W
VCC1_1	1.1V	4.6A

DDR3 DIMMs		
DDR_VTT	0.75V	0.83 A
VCC_DIMM	1.5V	3.6A

GMCH G41		
CPUVTT	1.1V	1.2A
VCC_DIMM	1.5V	5.6A
VCC1_PCIEX	1.1V	20A
VCC1_1	1.1V	2A
V_1P1_CL	1.1V	3A
VCC1_5	1.5V	0.348A
VCC3	3.3V	TBD A

Intel ICH7		
VCC1_1	1.1V	1.16A
VCC1_5	1.5V	646mA
VCC1_5	1.5V	1.652A
VCC3	3.3V	308mA
3VSB	3.3V	200mA
VRTC	3.3V	6uA
5VSB	5V	6mA
V_FSB_VTT	1.1V	1.1A

RTCVCC
BATTERY

SUPER I/O		
5VSB	5V	
VCC3	3.3V	
VRTC	3.3V	
VCC	5V	

AUDIO		
VCC1_5	1.5V	32mA
+5VA	5V	0.2A

LAN		
VCC3	3.3V	2 mA
3VSB	3.3V	2 mA
DVDDL	1.1V	192 mA
AVDDL	1.1V	192 mA
AVDDH	2.5V	62 mA