ECS ELITEGROUP

G31T-LM

Rev: 1.0

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Title: **Cover Sheet**

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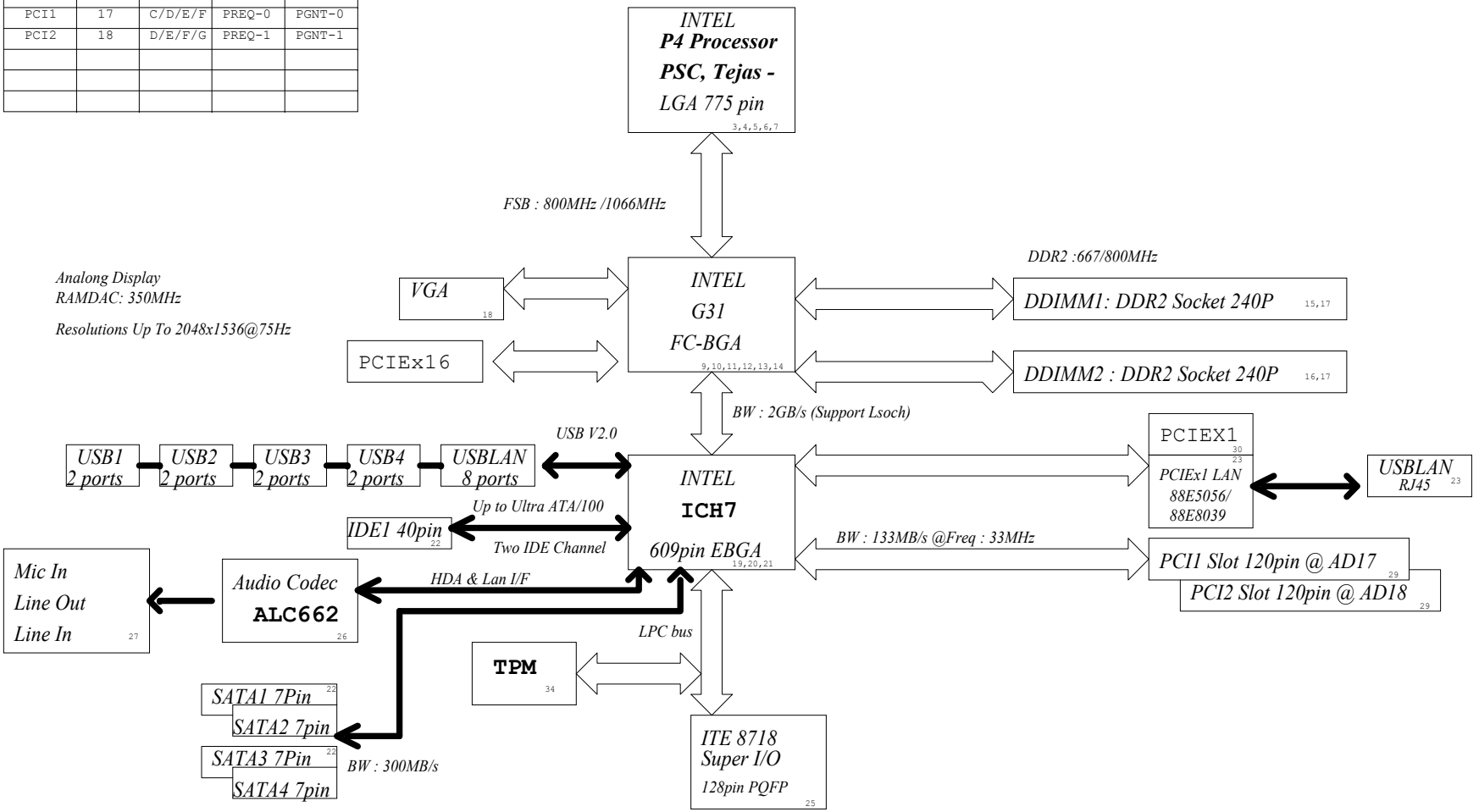
DEVICE	IDSEL	INT#	REQ#	GNT#
PCI1	17	C/D/E/F	PREQ-0	PGNT-0
PCI2	18	D/E/F/G	PREQ-1	PGNT-1



PCB : 244 x 244 mm ; 4 layers

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Title: **G31-System Block Diagram**

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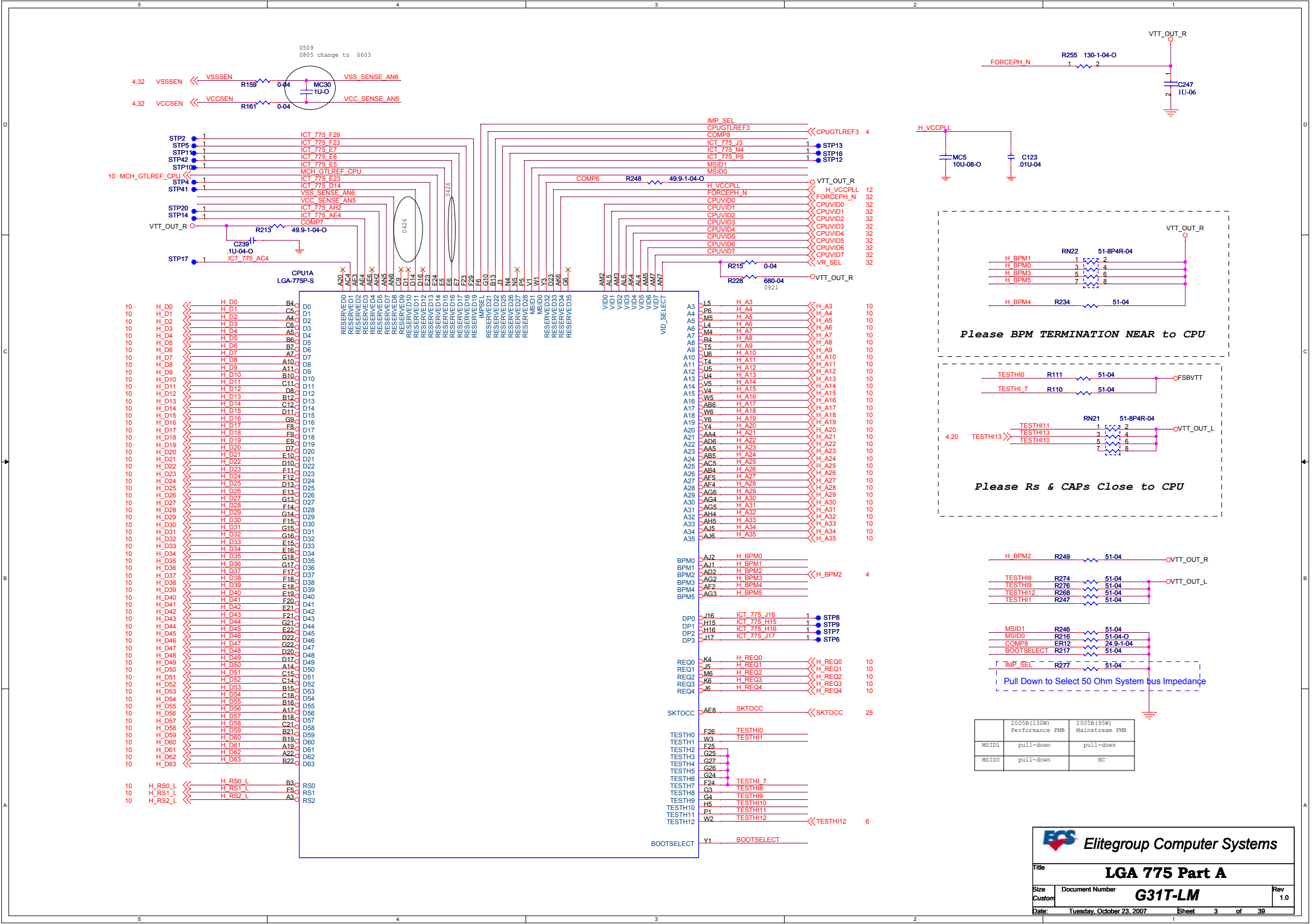

	2005B(130W) Performance FMB	2005B(95W) Mainstream FMB
MSID1	pull-down	pull-down
MSID0	pull-down	NC

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Title: LGA 775 Part A

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Place componets as close as possible to Processor socket
trace width to cap must be no smaller than 12 Mils

GTLREF= 0.67 * VTT = 0.8V
GTLREF GENERATION CIRCUITS

CPU1B

LGA-775P-S

LL= LOAD LINE for load line select

CPU SIGNAL TERMINATION CLOSE TO CPU

BSEL resistors can be removed IF ONLY TEJAS AND CEDAR MILL ARE SUPPORTED

PLACE TDO TERMINATION NEAR CONNECTOR

PLACE TCK/TDI/TMS TERMINATION NEAR CPU WITHIN 1.5" OF CPU, IDEALLY NEXT TO IT.

PLACE TRST_L TERMINATION ANYWHERE ON ROUTE

Place outside Socket Cavity

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Title: LGA 775 Part C			
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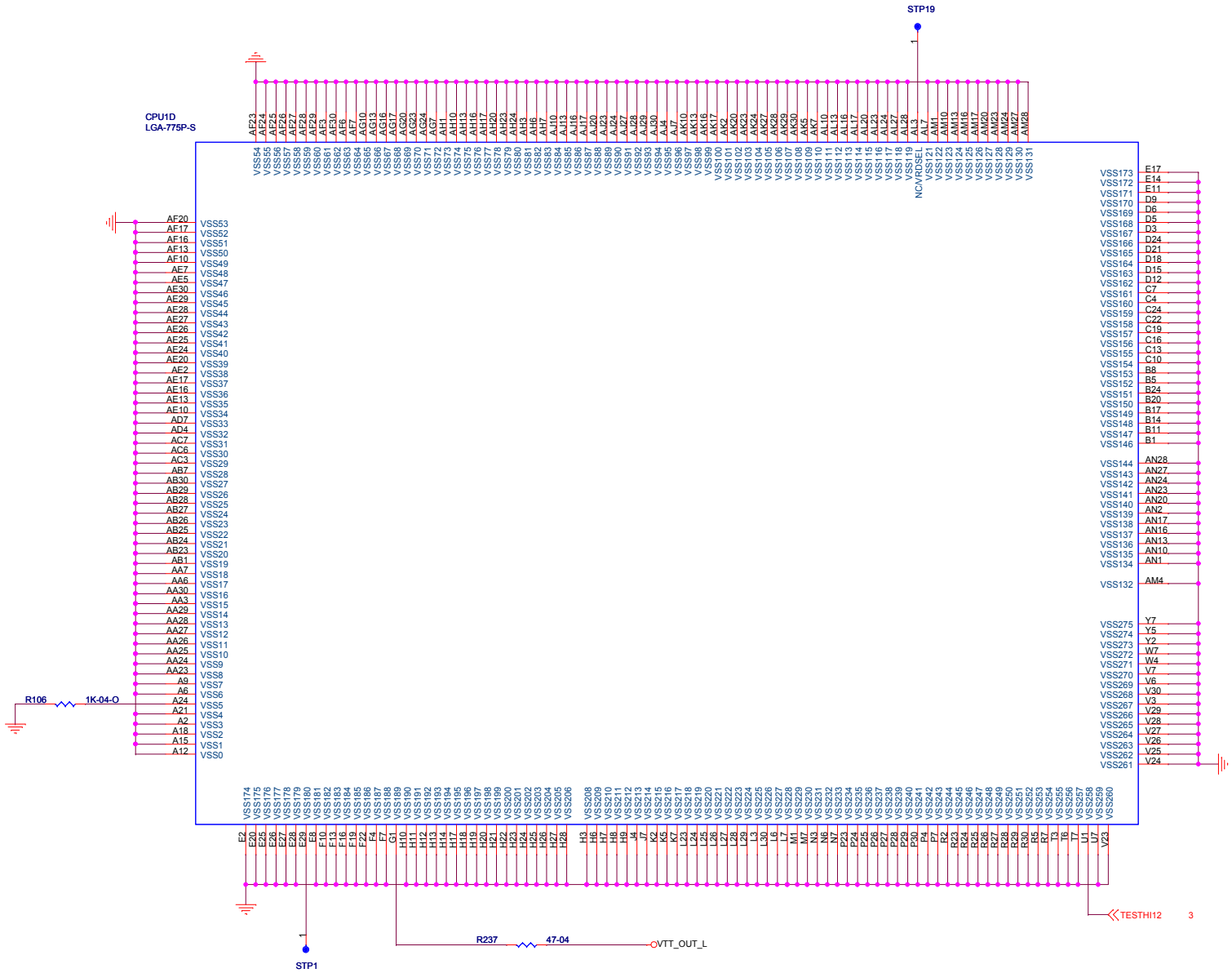

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Title: **LGA 775 Part D**

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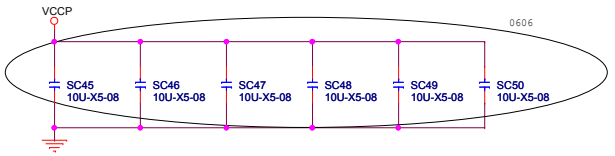
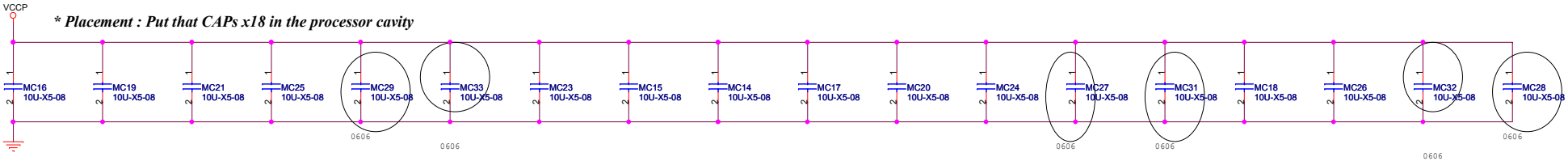
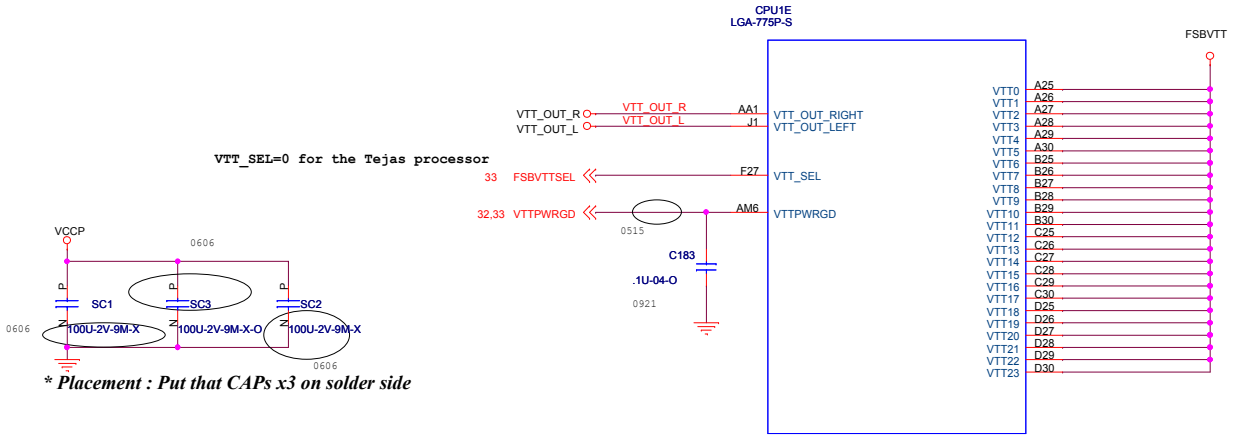


070117_change





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Title: LGA 775 Part E		
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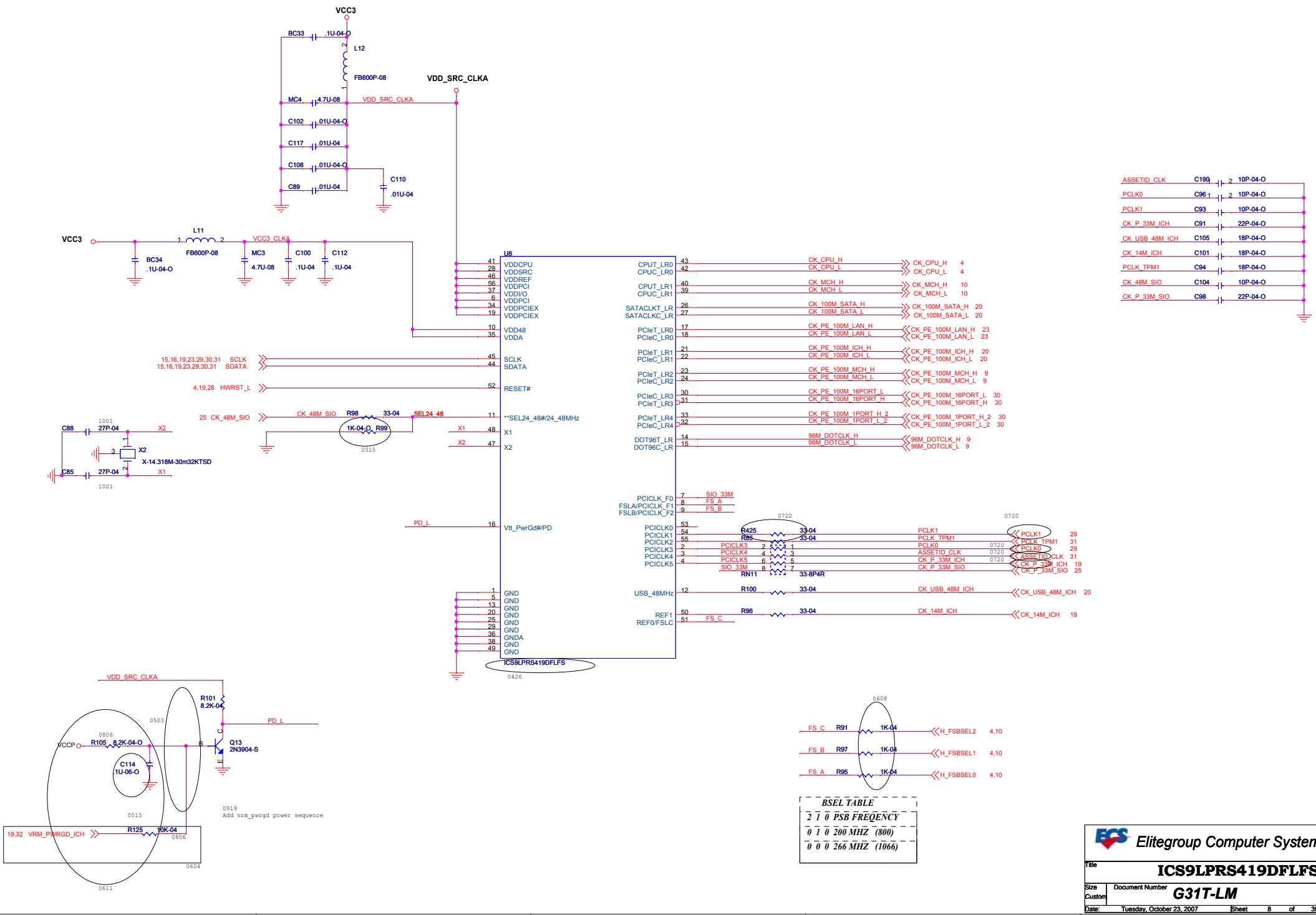
VCC3
BC33 .1U-04-O
L12
FB600P-08
VDD_SRC_CLKA
MC4 4.7U-08
C102 .01U-04-O
C117 .01U-04
C108 .01U-04-O
C89 .01U-04
C110 .01U-04
L11
FB600P-08
VCC3_CLKA
BC34 .1U-04-O
MC3 4.7U-08
C100 .1U-04
C112 .1U-04
U8
VDDCPU
VDDSRC
VDDREF
VDDPCI
VDDI/O
VDDPCI
VDDPCIEX
VDDPCIEX
VDD48
VDDA
SCLK
SDATA
RESET#
**SEL24_48#/24_48MHz
X1
X2
Vtt_PwrGd#/PD
GND
GNDA
ICS9LPRS419DFLFS
CPUT_LR0
CPUC_LR0
CPUT_LR1
CPUC_LR1
SATACLKT_LR
SATACLKC_LR
PCIeT_LR0
PCIeC_LR0
PCIeT_LR1
PCIeC_LR1
PCIeT_LR2
PCIeC_LR2
PCIeC_LR3
PCIeT_LR3
PCIeT_LR4
PCIeC_LR4
DOT96T_LR
DOT96C_LR
PCICLK_F0
FSLA/PCICLK_F1
FSLB/PCICLK_F2
PCICLK0
PCICLK1
PCICLK2
PCICLK3
PCICLK4
PCICLK5
USB_48MHz
REF1
REF0/FSLC
CK_CPU_H
CK_CPU_L
CK_MCH_H
CK_MCH_L
CK_100M_SATA_H
CK_100M_SATA_L
CK_PE_100M_LAN_H
CK_PE_100M_LAN_L
CK_PE_100M_ICH_H
CK_PE_100M_ICH_L
CK_PE_100M_MCH_H
CK_PE_100M_MCH_L
CK_PE_100M_16PORT_L
CK_PE_100M_16PORT_H
CK_PE_100M_1PORT_H_2
CK_PE_100M_1PORT_L_2
96M_DOTCLK_H
96M_DOTCLK_L
SIO_33M
FS_A
FS_B
FS_C
PCLK1
PCLK_TPM1
PCLK0
ASSETID_CLK
CK_P_33M_ICH
CK_P_33M_SIO
RN11 33-8P4R
R425 33-04
R85 33-04
R100 33-04
R96 33-04
CK_USB_48M_ICH
CK_14M_ICH
C190 10P-04-O
C96 10P-04-O
C93 10P-04-O
C91 22P-04-O
C105 18P-04-O
C101 18P-04-O
C94 18P-04-O
C104 10P-04-O
C98 22P-04-O
C88 27P-04
C85 27P-04
X2
X-14.318M-30m32KTSD
CK_48M_SIO
R98 33-04
1K-04-O R99
SEL24_48
SCLK
SDATA
HWRST_L
PD_L
R101 8.2K-04
Q13 2N3904-S
VCCP
R105 8.2K-04-O
C114 1U-06-O
VRM_PWRGD_ICH
R125 10K-04
Add vrm_pwrgd power sequence
R91 1K-04
R97 1K-04
R95 1K-04
H_FSBSEL2
H_FSBSEL1
H_FSBSEL0
BSEL TABLE
2 1 0 PSB FREQENCY
0 1 0 200 MHZ (800)
0 0 0 266 MHZ (1066)
Elitegroup Computer Systems
ICS9LPRS419DFLFS
G31T-LM
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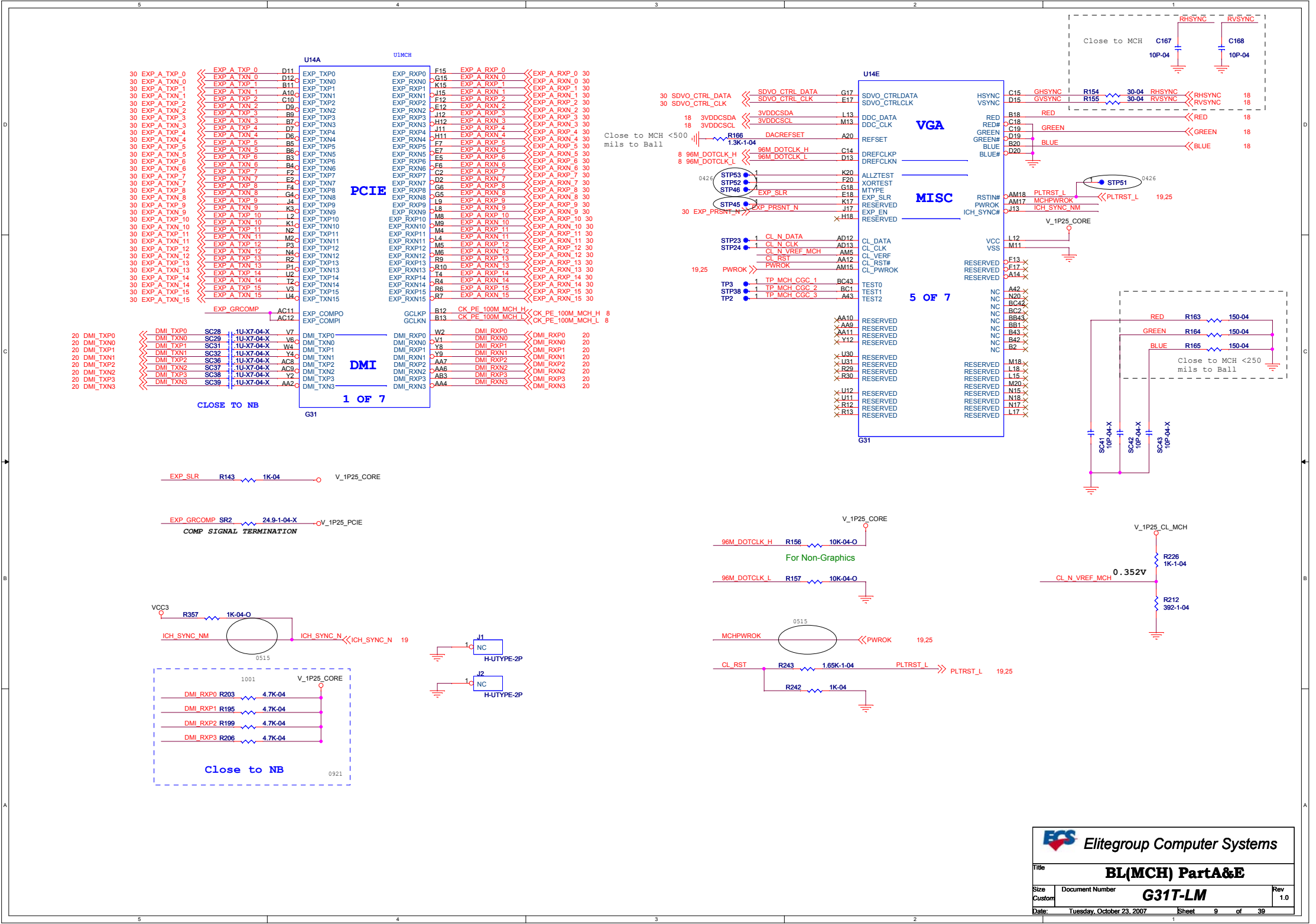
U14A
U1MCH
PCIE
DMI
1 OF 7
G31
CLOSE TO NB
U14E
VGA
MISC
5 OF 7
G31
Close to MCH <500 mils to Ball
Close to MCH C167 10P-04 C168 10P-04
Close to MCH <250 mils to Ball
For Non-Graphics
COMP SIGNAL TERMINATION
Close to NB
Elitegroup Computer Systems
BL(MCH) PartA&E
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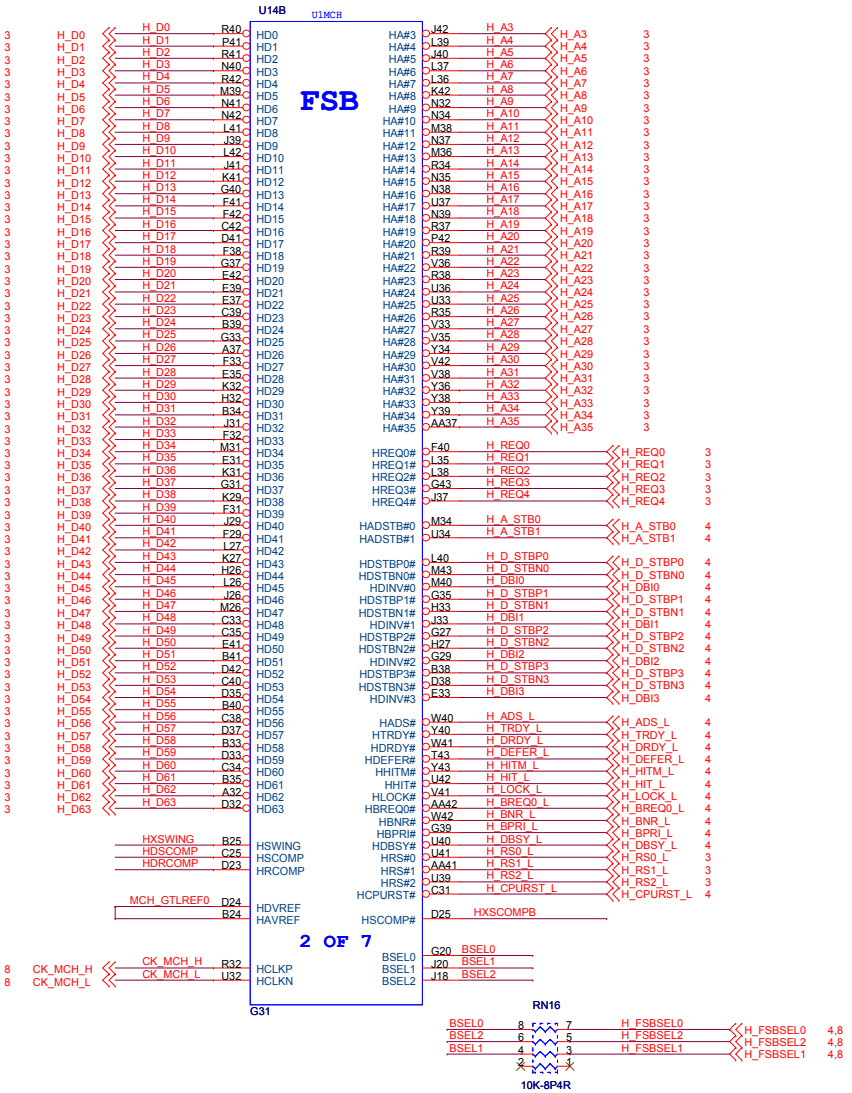

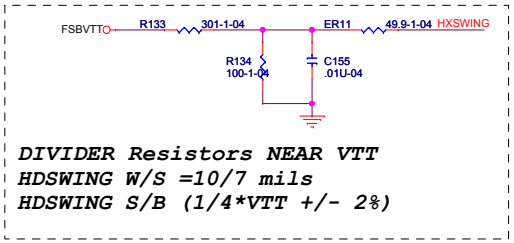

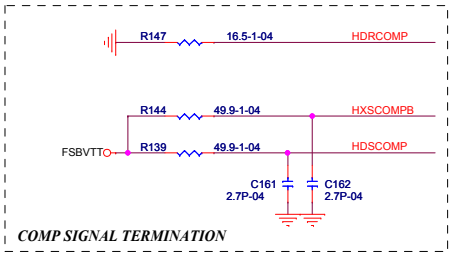

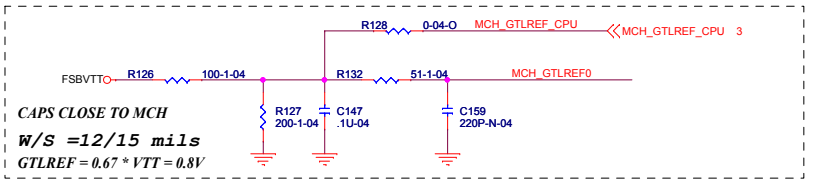

BSEL TABLE				
2	1	0	PSB	FREQUENCY
0	0	0	267	MHz (1067)
0	0	1	133	MHz (533)
0	1	0	200	MHz (800)

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Title	BL(MCH) PartB	
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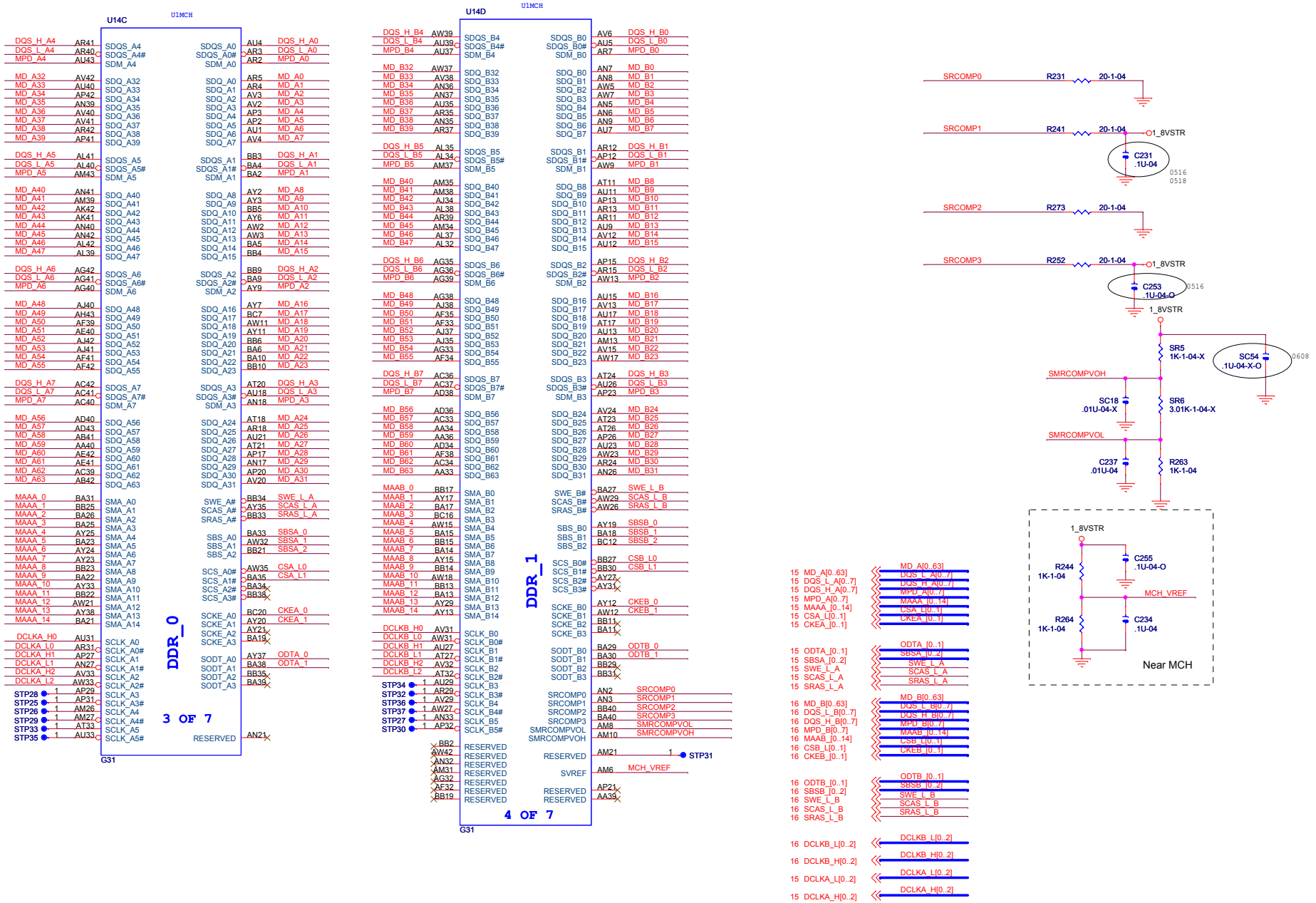

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Title	BL(MCH) PartC&D
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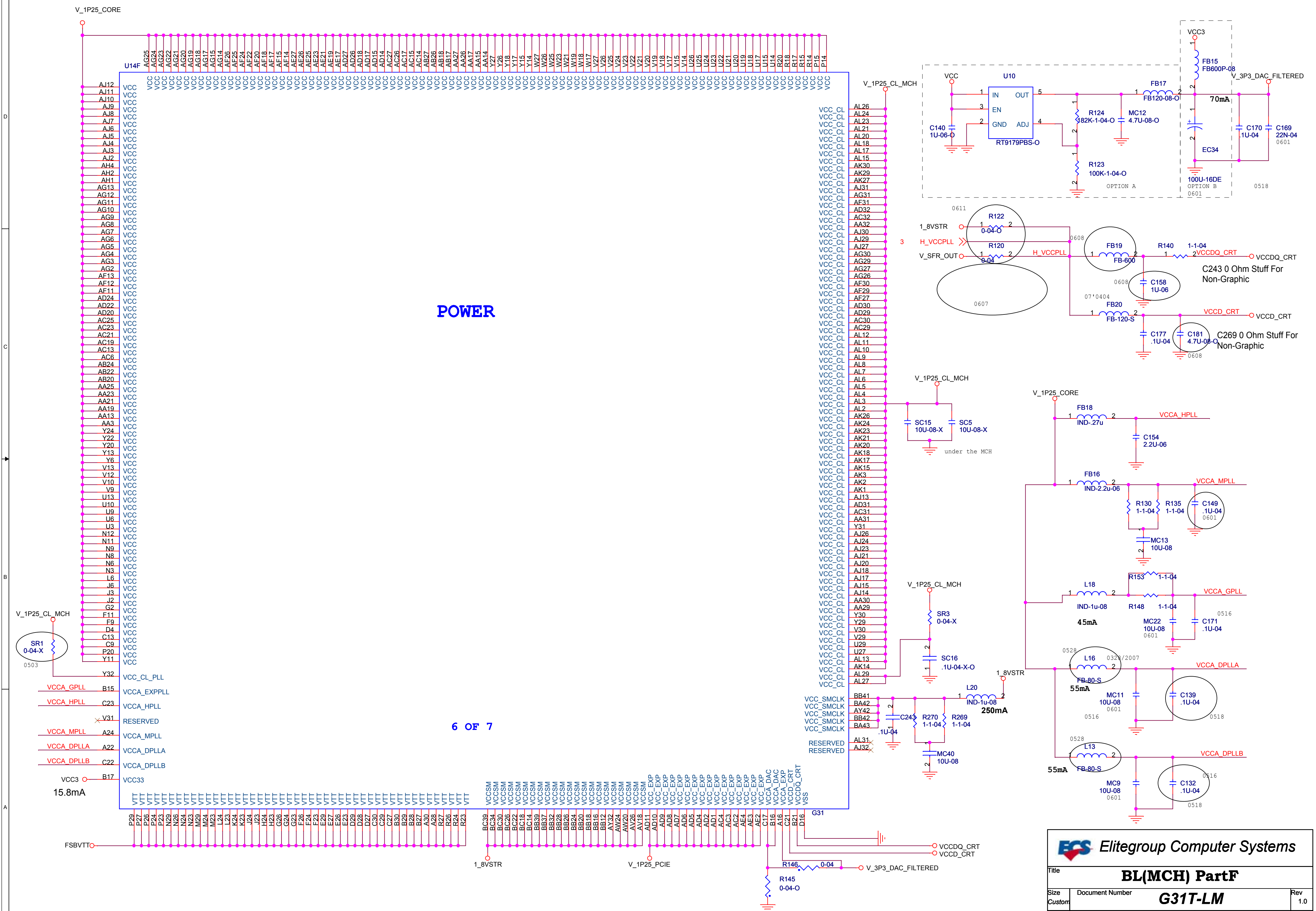

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Title	BL(MCH) PartF		
Size: Custom	Document Number: G31T-LM		Rev: 1.0
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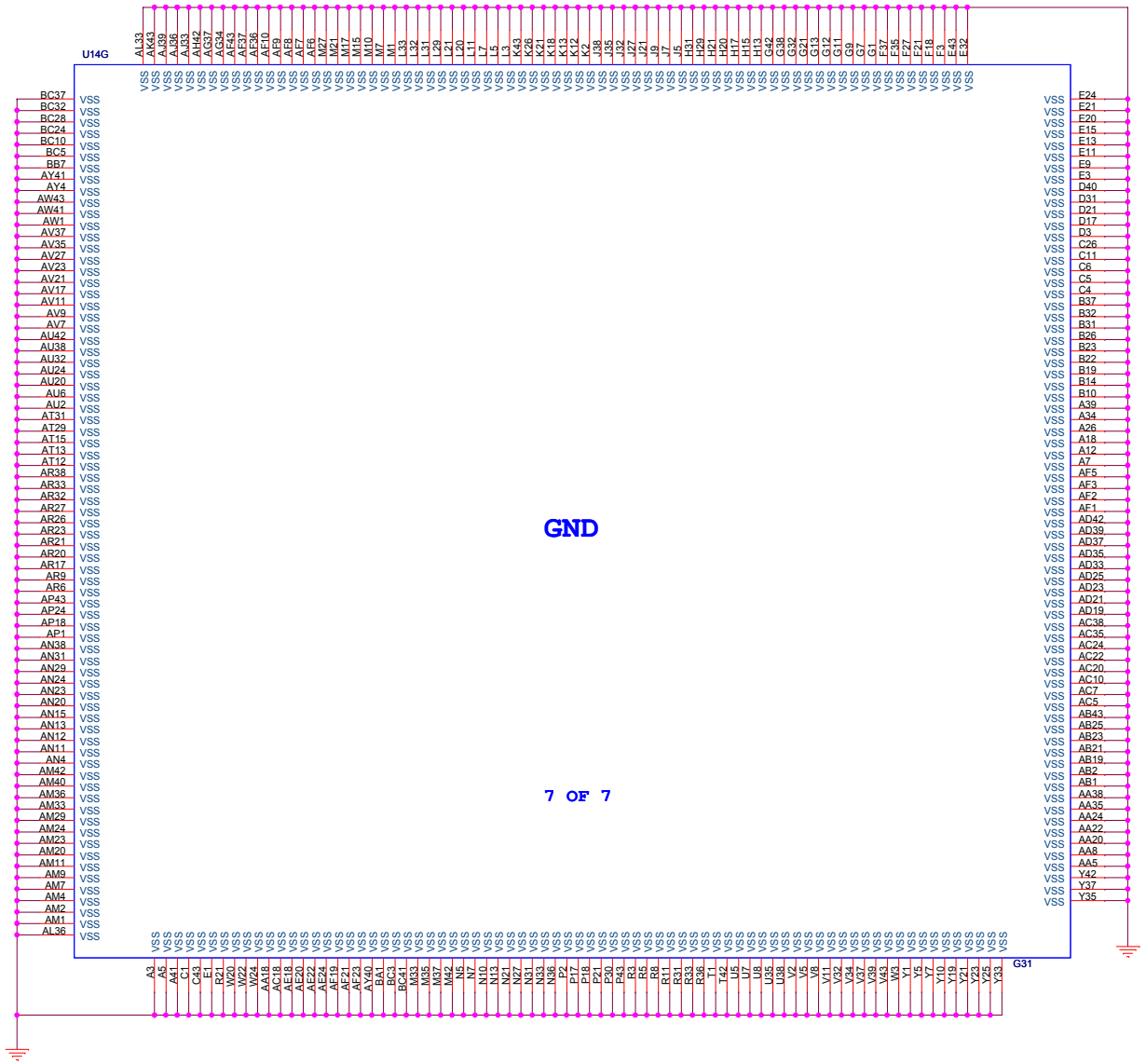

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Title	BL(MCH) PartG	
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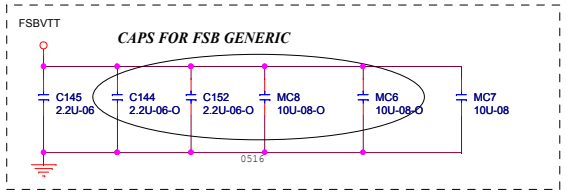

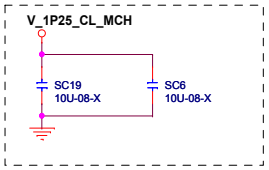

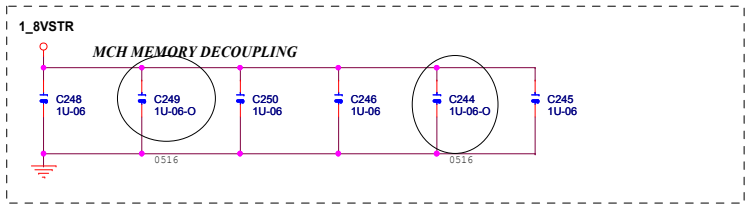

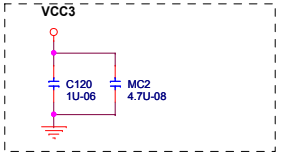

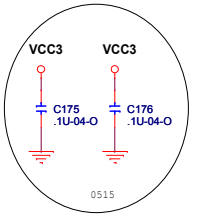

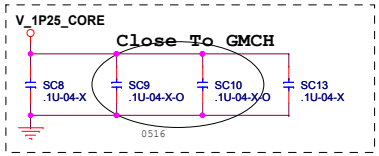

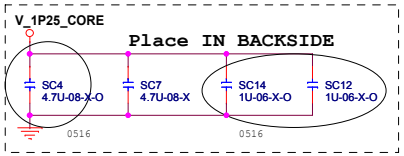

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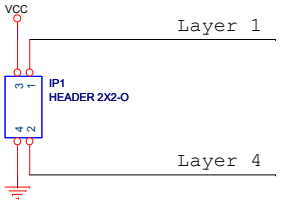
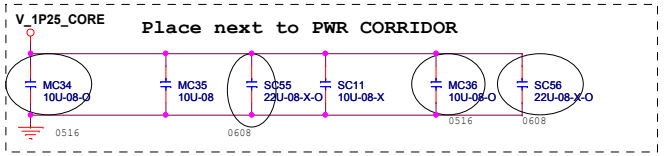
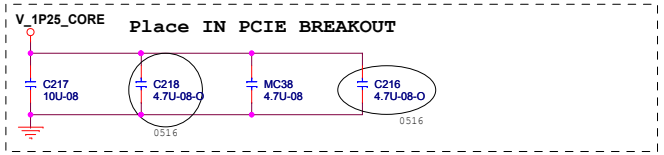
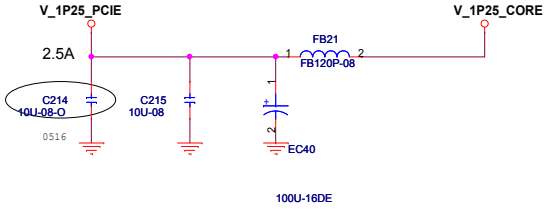






2116 : trace width 5 mil 60 ohm
Trace Length 3500 mils
Spacing: 1.clearance to itself 20/5/20(S:W:S)
2.clearance to other signal 3W

1080 : trace width 4 mil 50 ohm
Trace Length 3150 mils
Spacing: 1.clearance to itself 50/4/50(S:W:S)
2.clearance to other signal 3W



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Title: BL(MCH) CAP		
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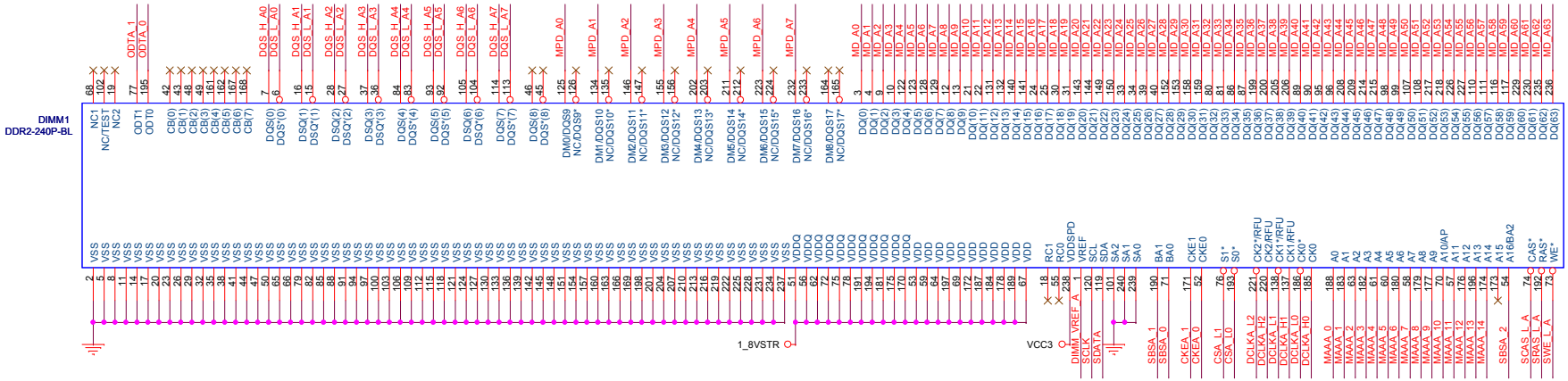

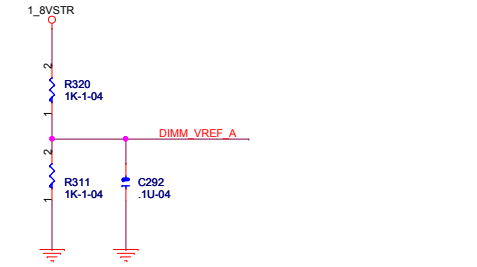

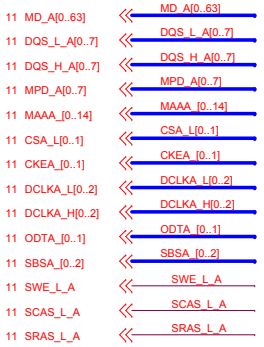

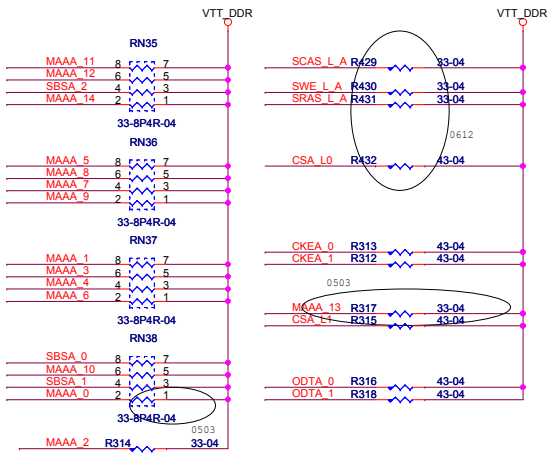

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Title	DIMM1(DDR2SDRAM)	
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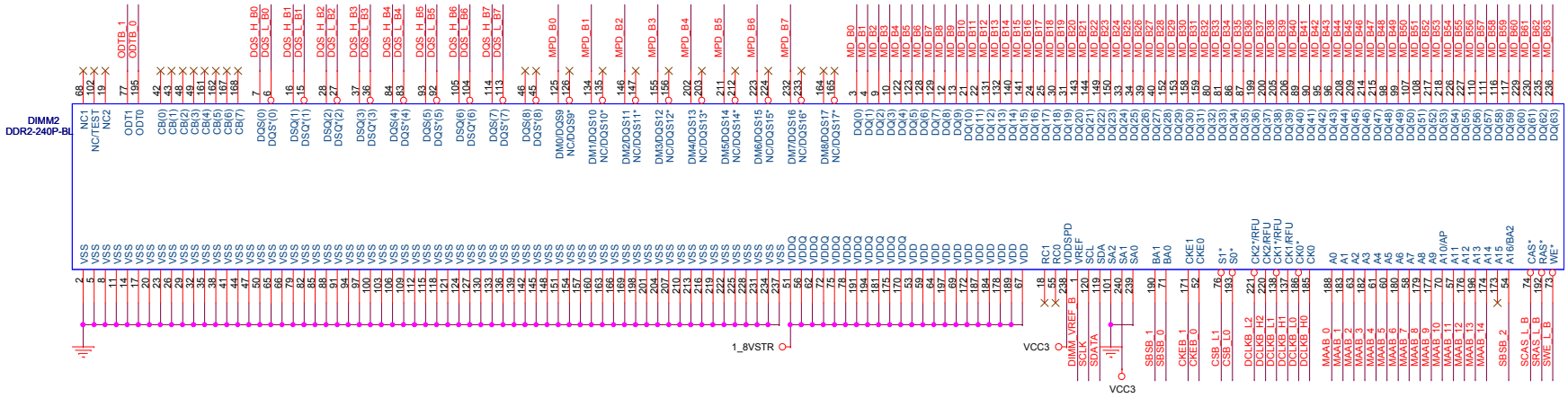

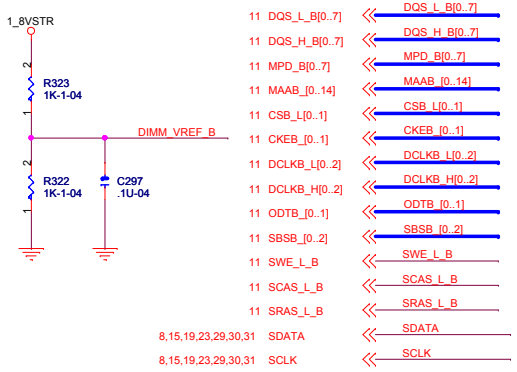

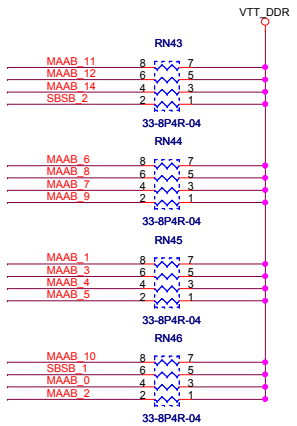

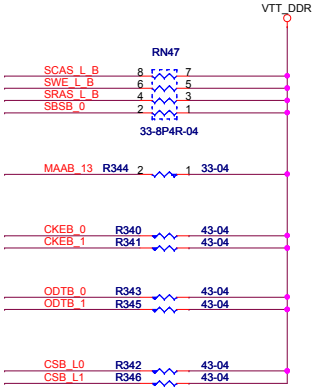

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Title	DIMM2(DDR2SDRAM)	
Size: Custom	Document Number: G31T-LM	Rev: 1.0
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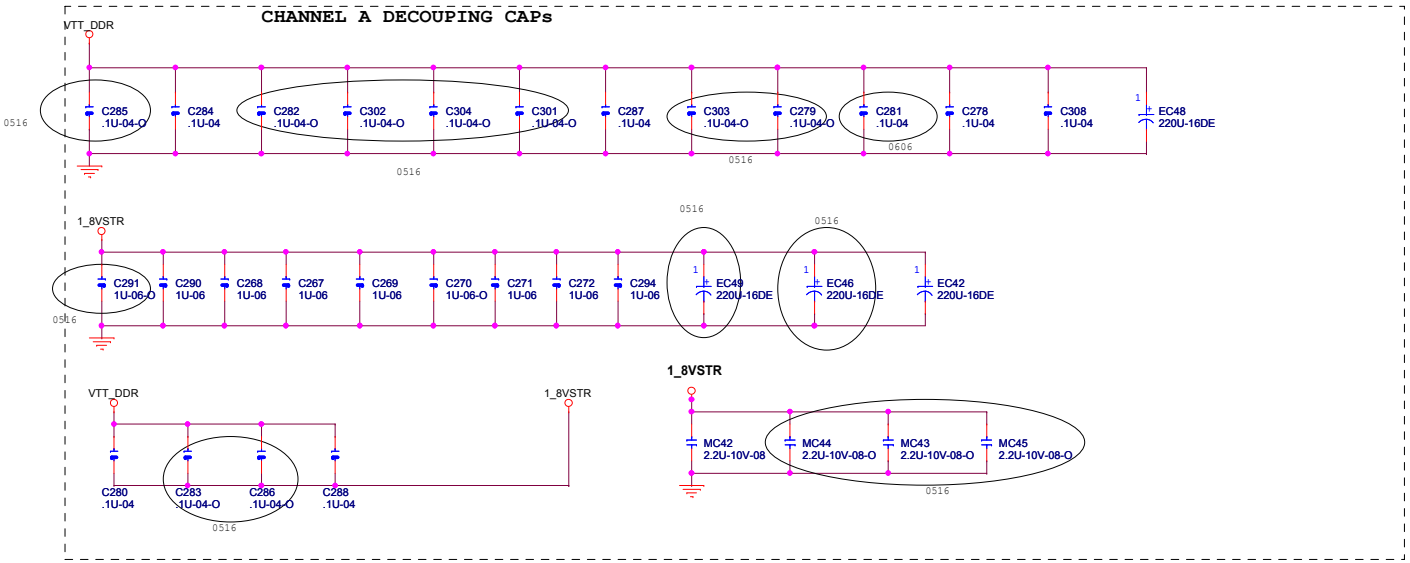

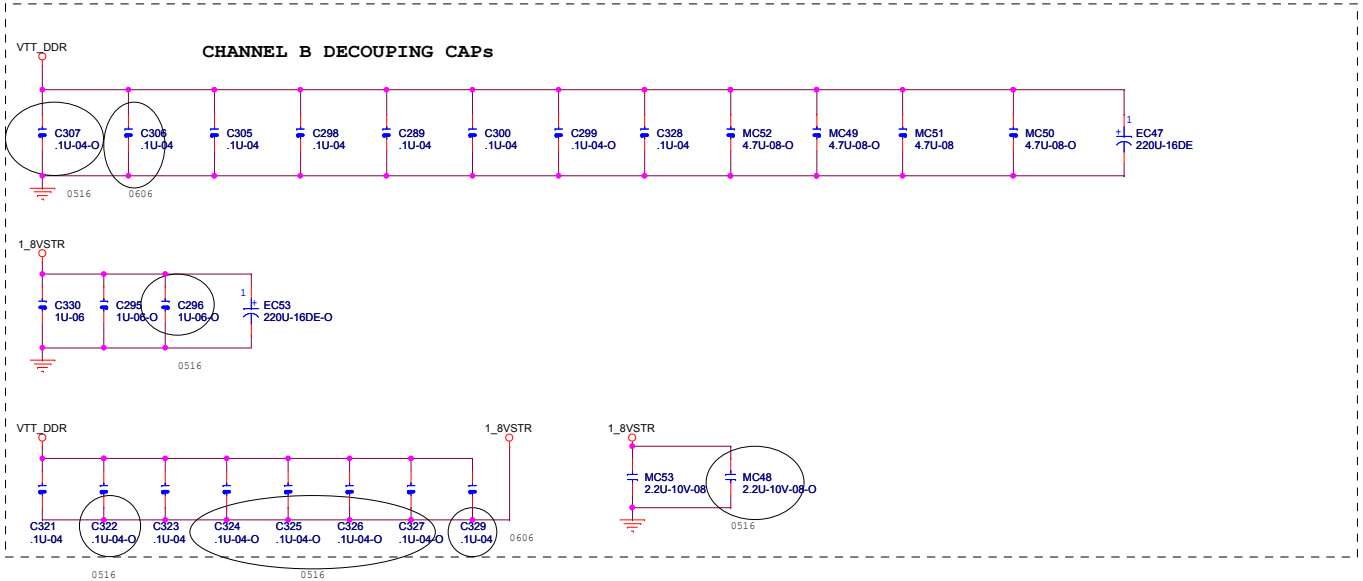

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Title	DIMM Decouping	
Size: Custom	Document Number: G31T-LM	Rev: 1.0
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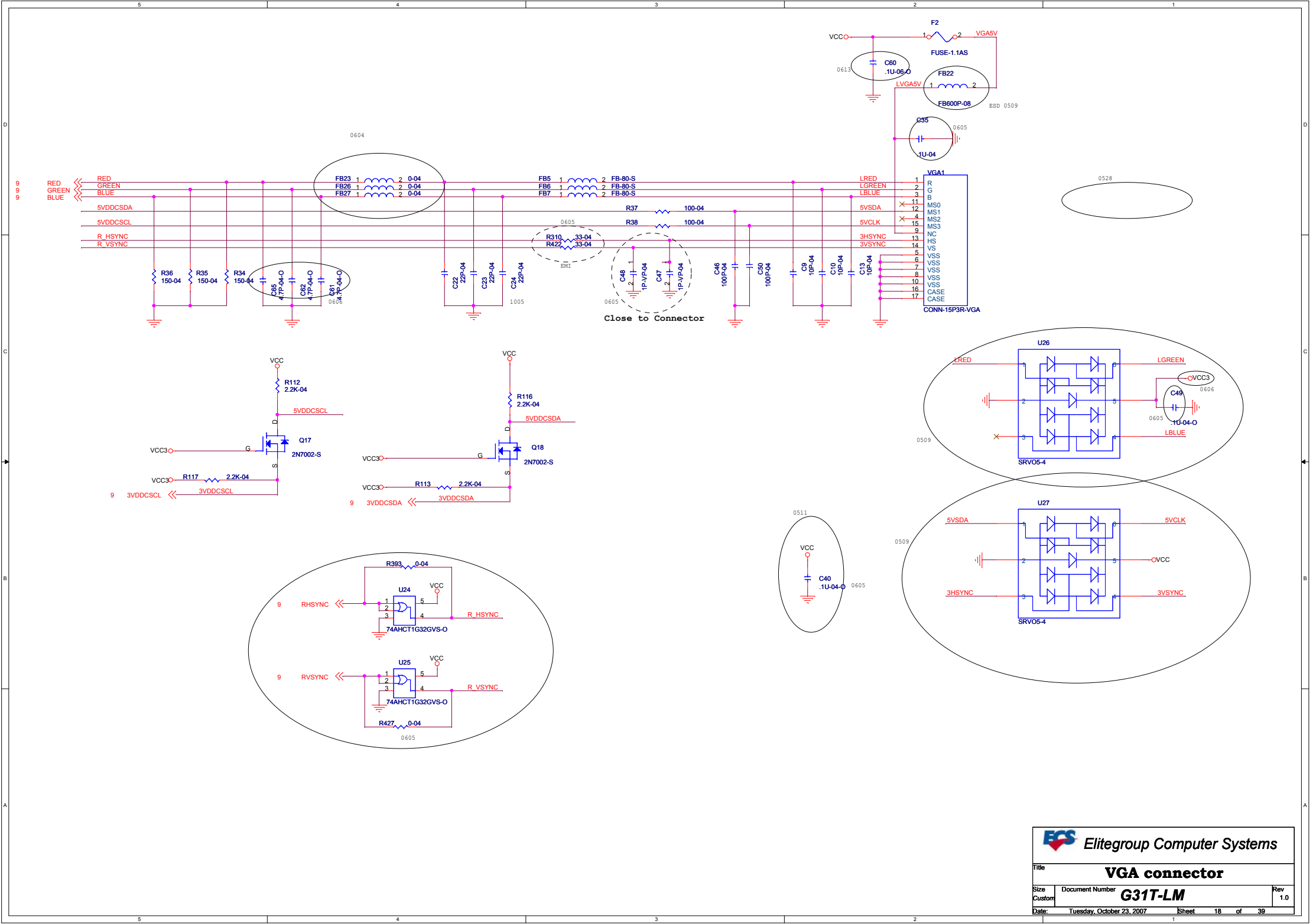

Elitegroup Computer Systems		
Title	VGA connector	
Size: Custom	Document Number: G31T-LM	Rev: 1.0
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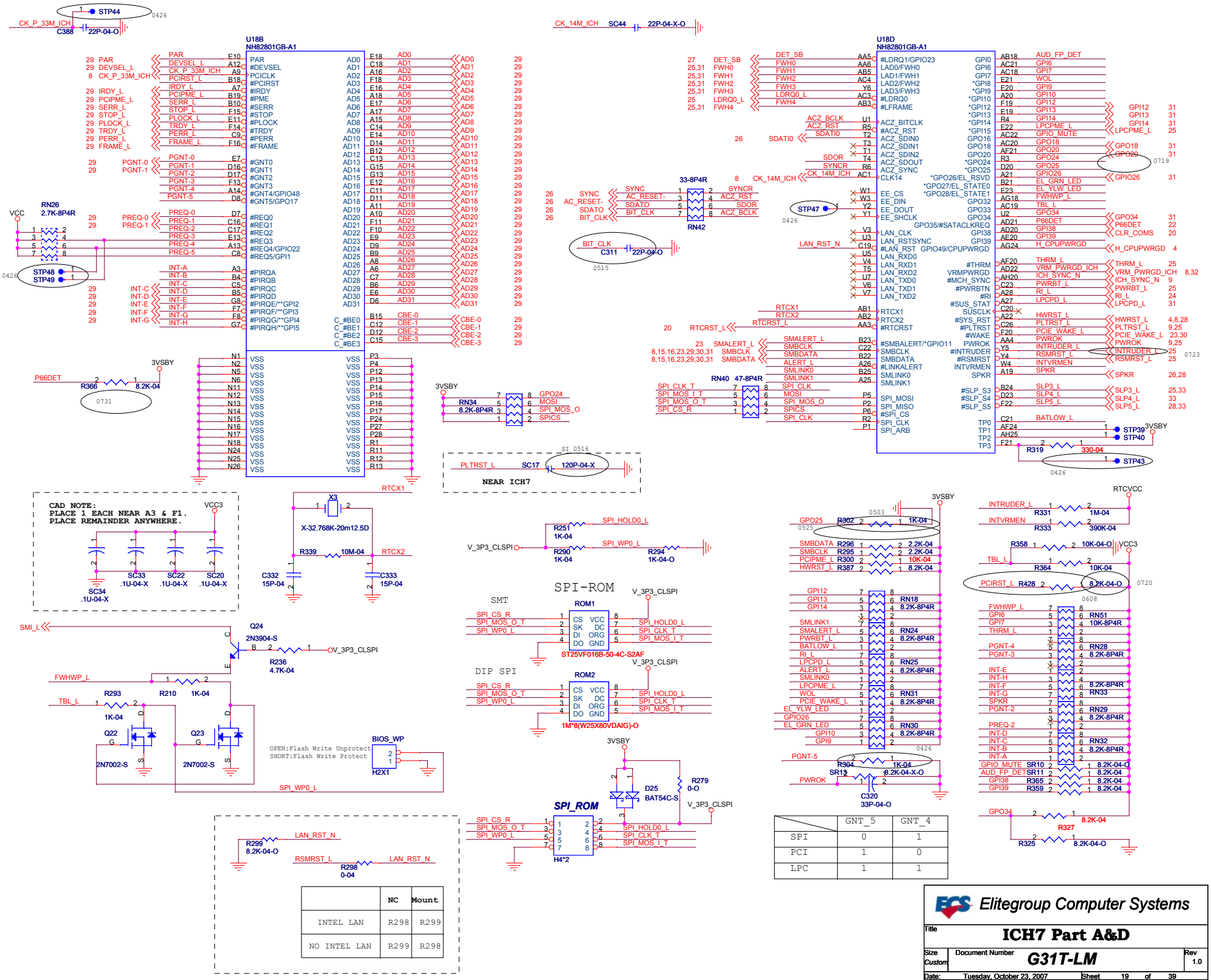

	GNT_5	GNT_4
SPI	0	1
PCI	1	0
LPC	1	1

	NC	Mount
INTEL LAN	R298	R299
NO INTEL LAN	R299	R298

Elitegroup Computer Systems

Title: **ICH7 Part A&D**

Size: Custom | Document Number: **G31T-LM** | Rev: 1.0

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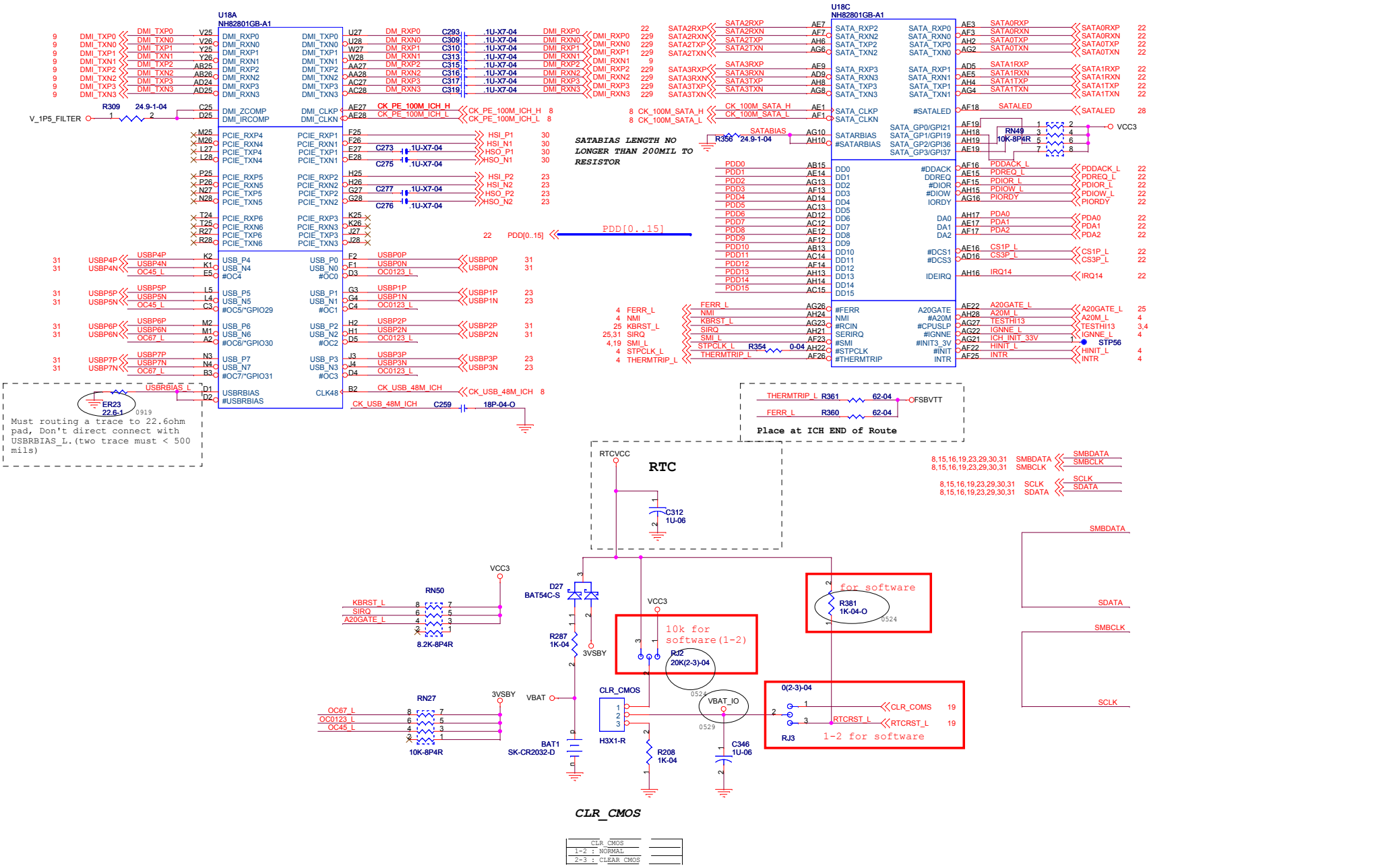
U18A
NH82801GB-A1
U18C
NH82801GB-A1
SATABIAS LENGTH NO LONGER THAN 200MIL TO RESISTOR
PDD[0..15]
Must routing a trace to 22.6ohm pad, Don't direct connect with USBRBIAS_L.(two trace must < 500 mils)
Place at ICH END of Route
RTC
RTCVCC
C312 1U-06
CLR_CMOS
10k for software(1-2)
for software
1-2 for software
0(2-3)-04
CLR_CMOS
1-2 : NORMAL
2-3 : CLEAR CMOS
Elitegroup Computer Systems
ICH7 Part B&C
G31T-LM
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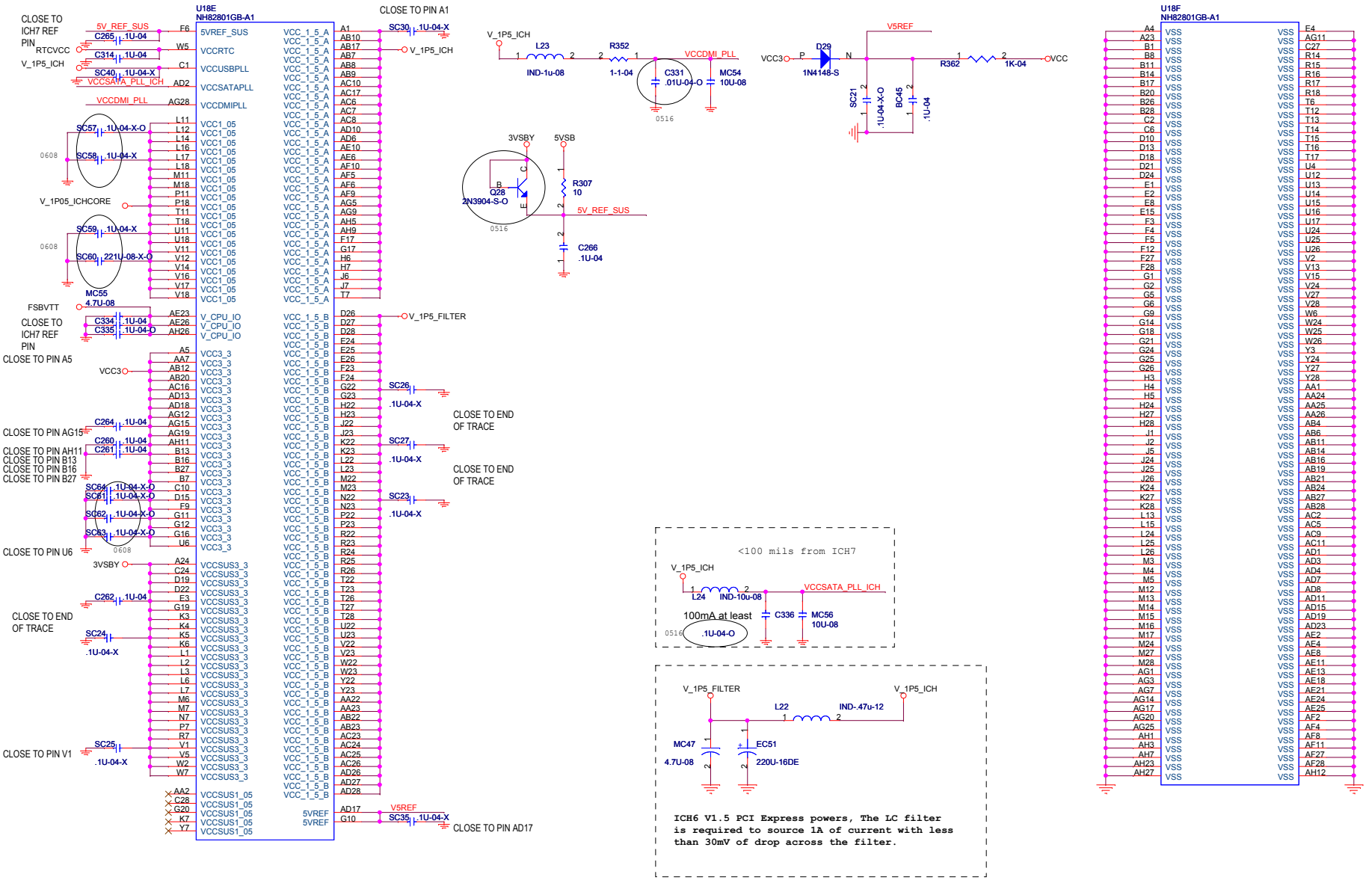
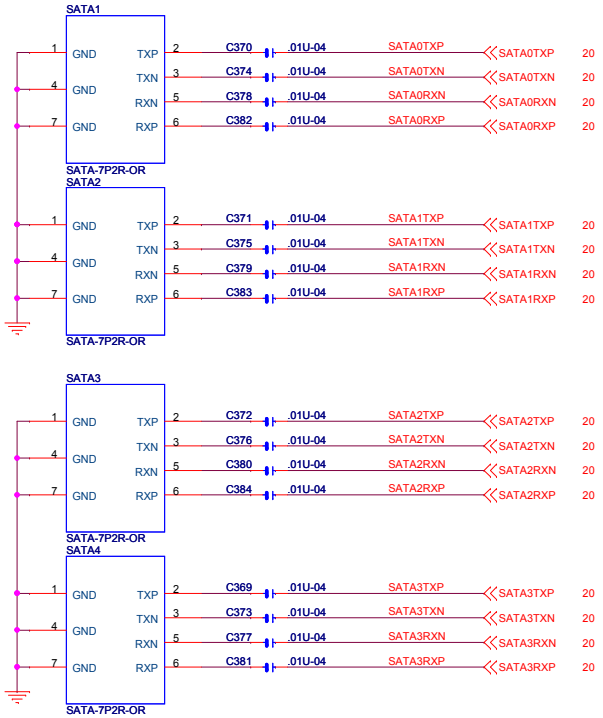
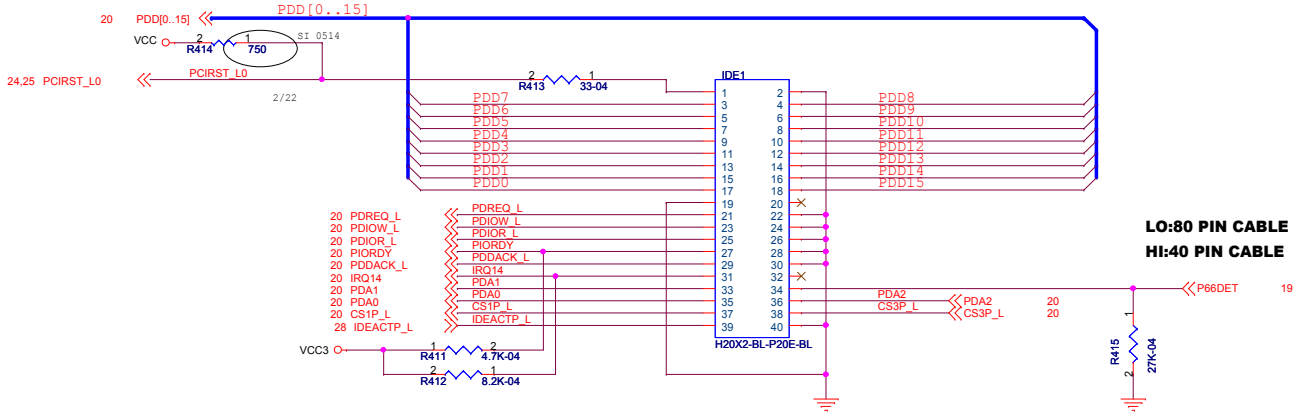
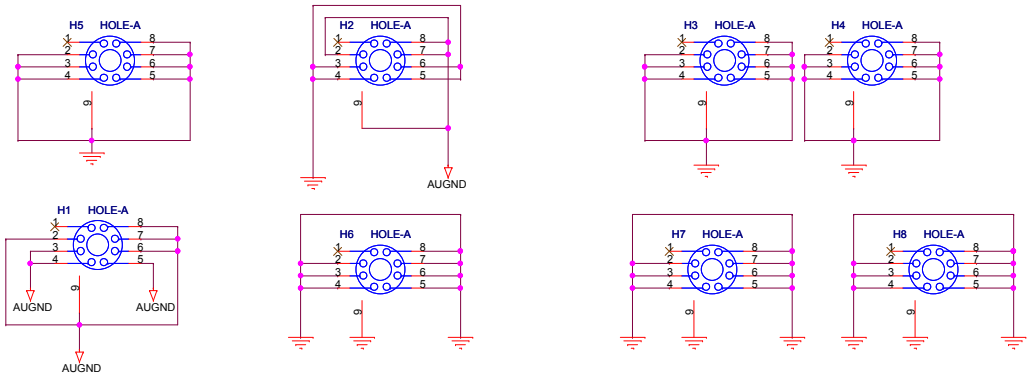
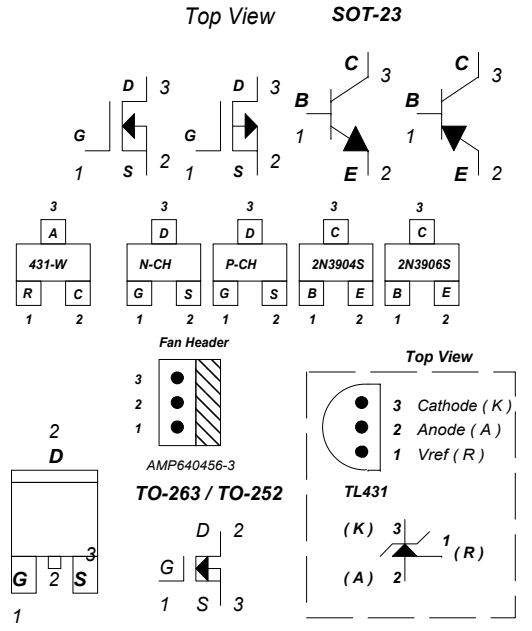


Elitegroup Computer Systems			
Title: ICH7 Part E&F			
Size: Custom	Document Number: G31T-LM		Rev: 1.0
Date: Tuesday, October 23, 2007	Sheet 21 of 39		









Elitegroup Computer Systems

Title: **SATA & IDE Connector**

Size	Document Number	Rev
Custom	G31T-LM	1.0

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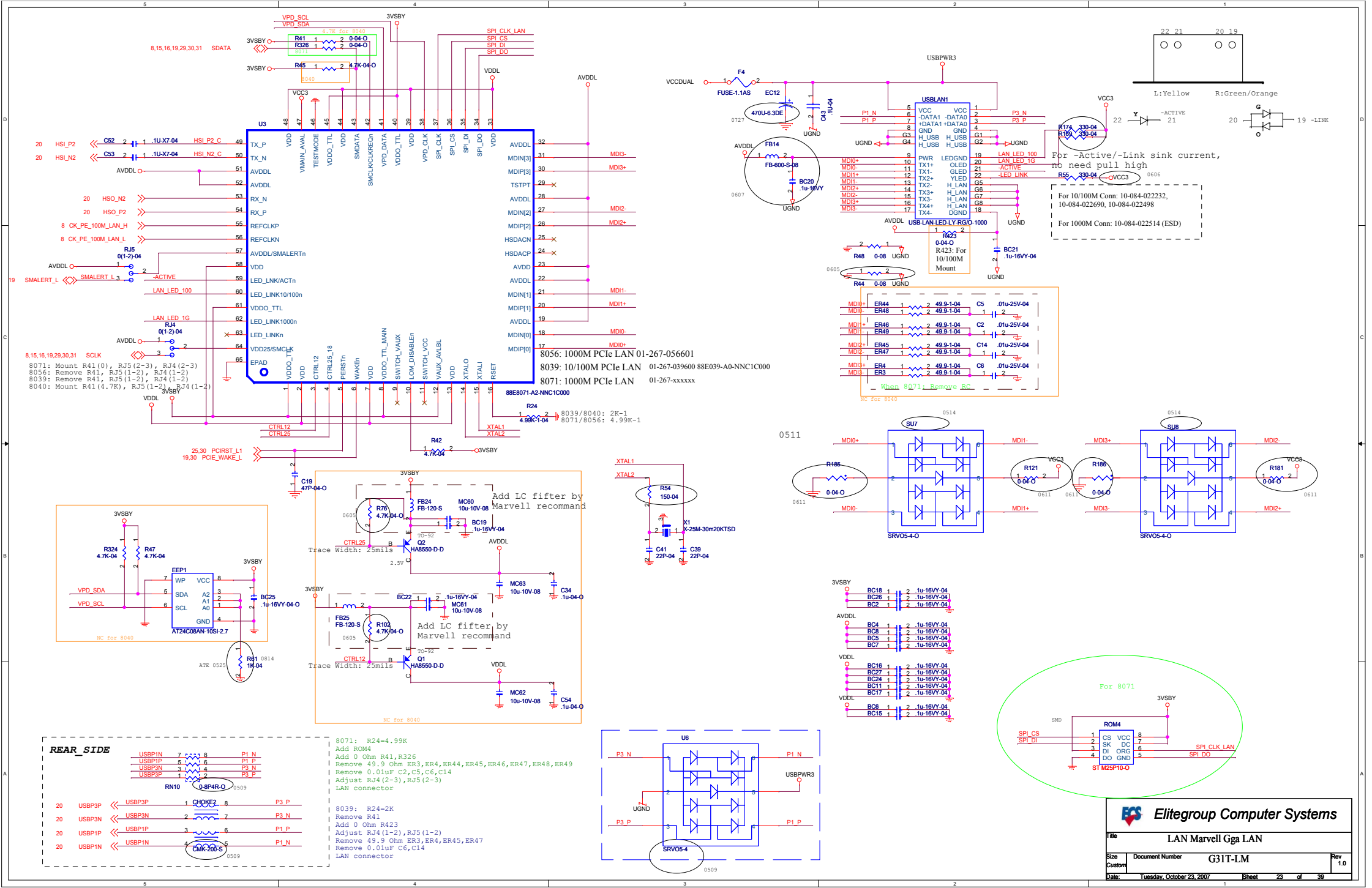
U3
88E8071-A2-NNC1C000
8056: 1000M PCIe LAN 01-267-056601
8039: 10/100M PCIe LAN 01-267-039600 88E039-A0-NNC1C000
8071: 1000M PCIe LAN 01-267-xxxxxx
8071: Mount R41(0), RJ5(2-3), RJ4(2-3)
8056: Remove R41, RJ5(1-2), RJ4(1-2)
8039: Remove R41, RJ5(1-2), RJ4(1-2)
8040: Mount R41(4.7K), RJ5(1-2), RJ4(1-2)
Add LC fifter by Marvell recommand
Trace Width: 25mils
Add LC fifter by Marvell recommand
Trace Width: 25mils
USBLAN1
USB-LAN-LED-LY-RGO-1000
SRV05-4-O
ROM4
ST M25P10-O
EEP1
AT24C08AN-10SI-2.7
REAR_SIDE
RN10
CMK-200-S
8071: R24=4.99K
Add ROM4
Add 0 Ohm R41,R326
Remove 49.9 Ohm ER3,ER4,ER44,ER45,ER46,ER47,ER48,ER49
Remove 0.01uF C2,C5,C6,C14
Adjust RJ4(2-3),RJ5(2-3)
LAN connector
8039: R24=2K
Remove R41
Add 0 Ohm R423
Adjust RJ4(1-2),RJ5(1-2)
Remove 49.9 Ohm ER3,ER4,ER45,ER47
Remove 0.01uF C6,C14
LAN connector
For -Active/-Link sink current, no need pull high
For 10/100M Conn: 10-084-022232, 10-084-022690, 10-084-022498
For 1000M Conn: 10-084-022514 (ESD)
R423: For 10/100M Mount
When 8071: Remove RC
For 8071
L:Yellow
R:Green/Orange
Elitegroup Computer Systems
LAN Marvell Gga LAN
G31T-LM
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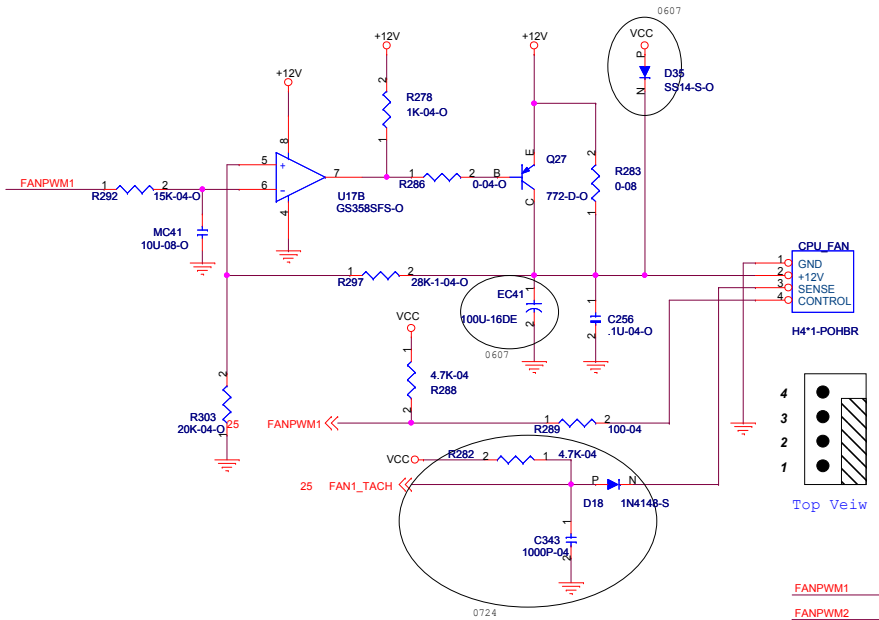
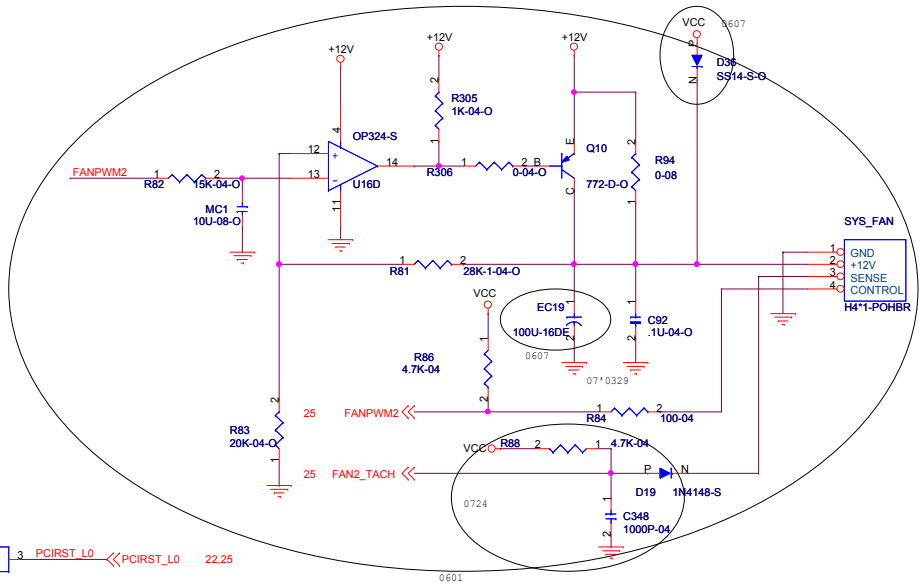
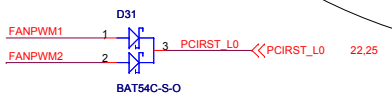
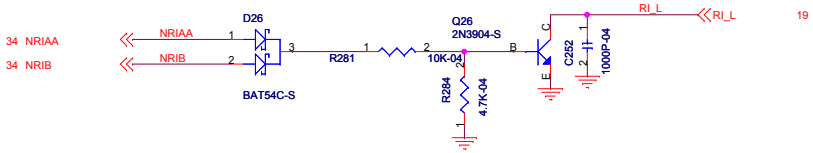
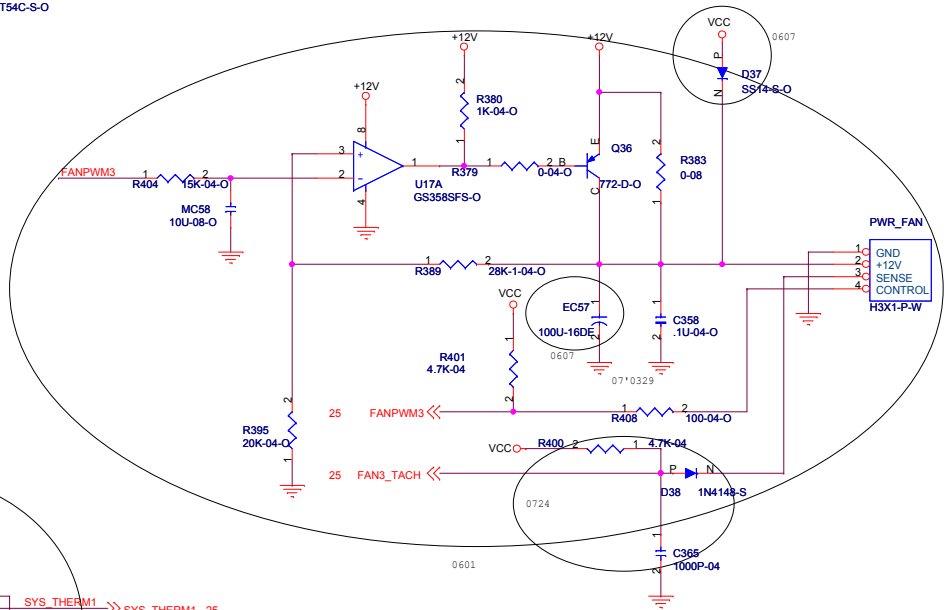


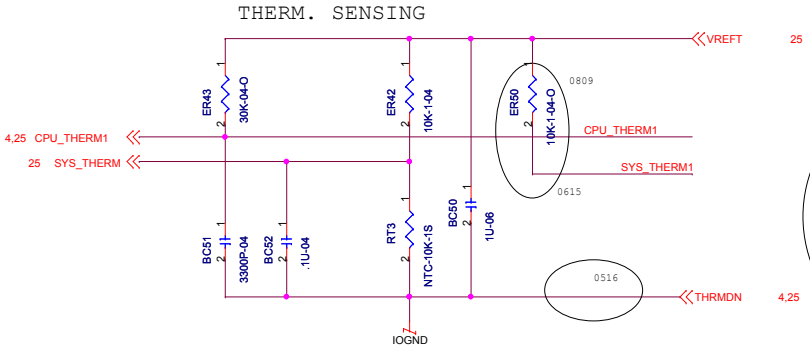


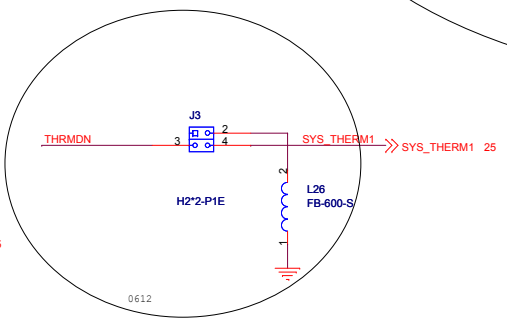


Top Veiw









Elitegroup Computer Systems

Title	H/W Monitor	
Size: Custom	Document Number: G31T-LM	Rev: 1.0
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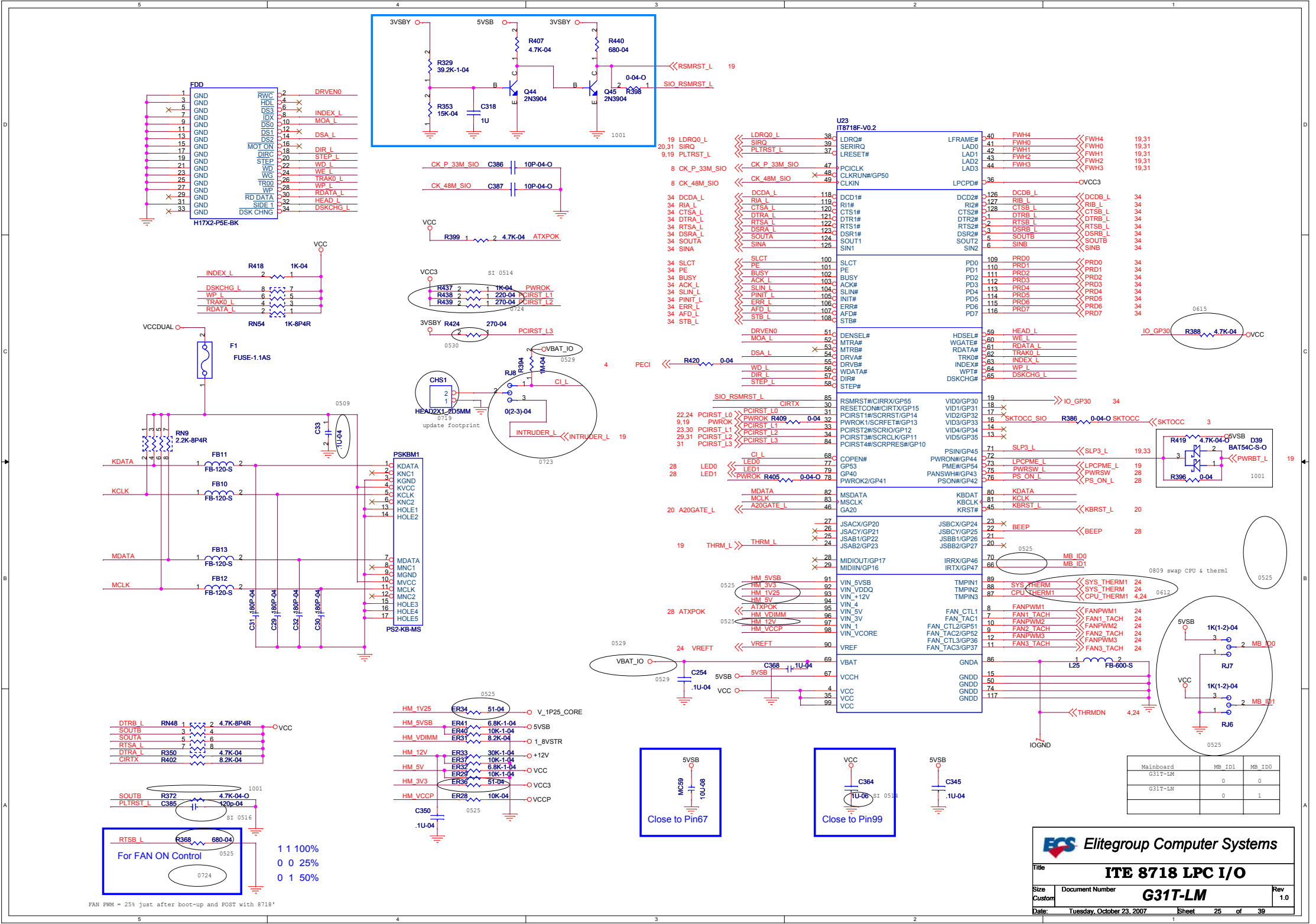
FDD
H17X2-P5E-BK
U23
IT8718F-V0.2
PSKBM1
PS2-KB-MS
F1
FUSE-1.1AS
RN9
2.2K-8P4R
RN54
1K-8P4R
RN48
4.7K-8P4R
Close to Pin67
Close to Pin99
For FAN ON Control
1 1 100%
0 0 25%
0 1 50%
FAN PWM = 25% just after boot-up and POST with 8718'
Elitegroup Computer Systems
ITE 8718 LPC I/O
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Verfout bias for stereo microphone.

Place near Chip

Resistors Networks

U4
ALC662

ALC662

Elitegroup Computer Systems

Title: ALC662 CHIPSET

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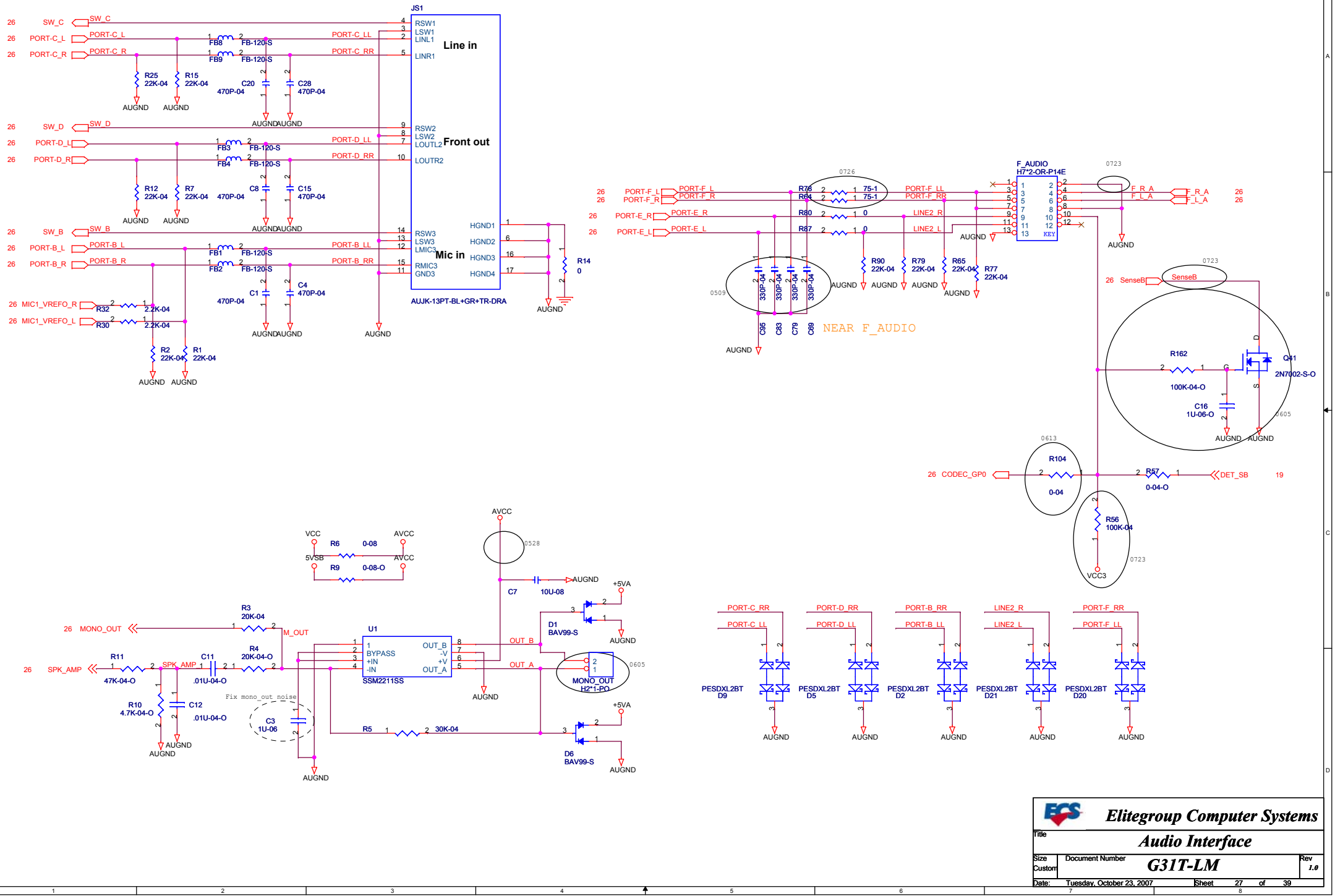

Title	Audio Interface
Size: Custom	Document Number: G31T-LM
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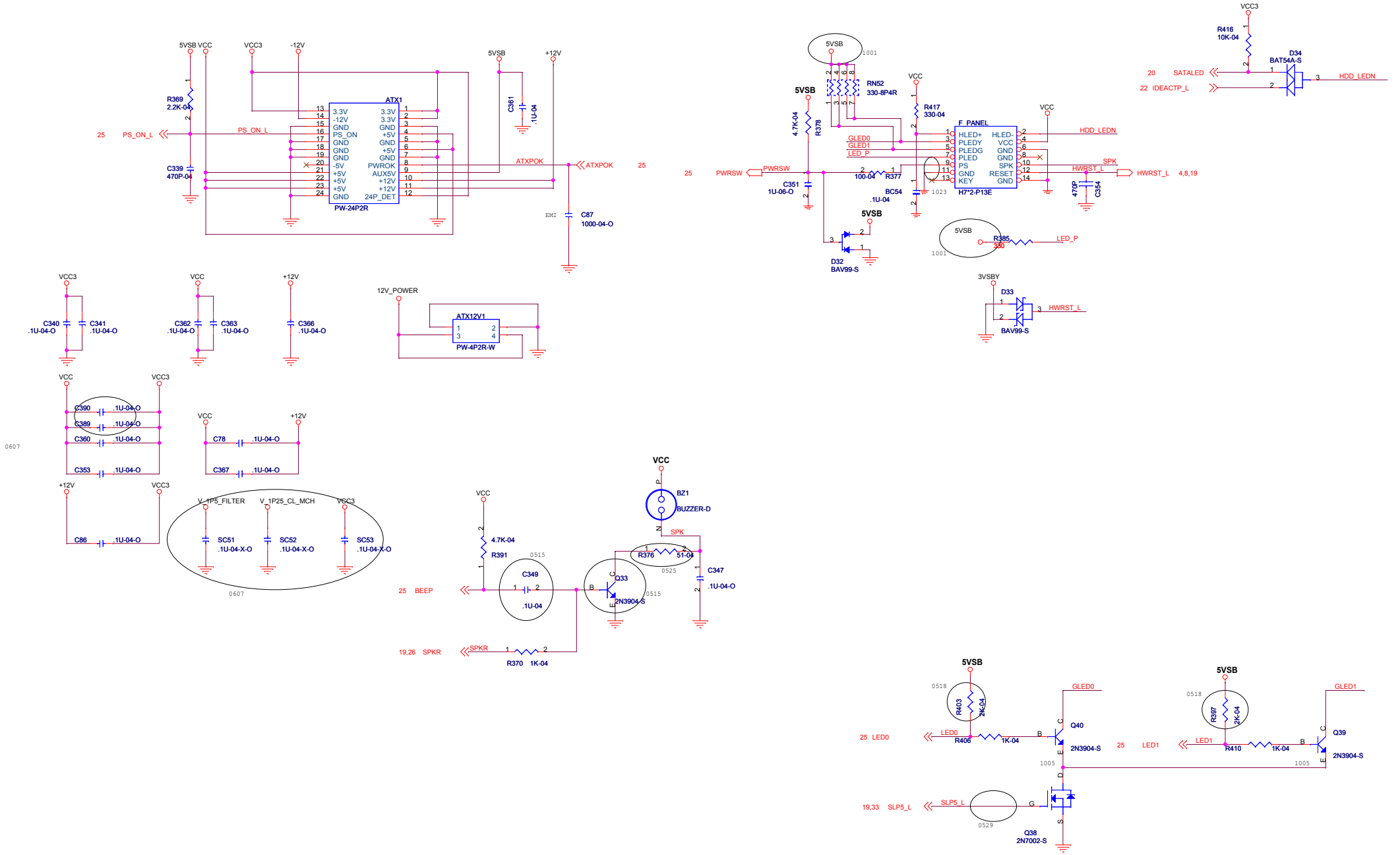

Elitegroup Computer Systems

Title: **ATX Power & Front Panel**

Size	Document Number	Rev
Custom	G31T-LM	1.0

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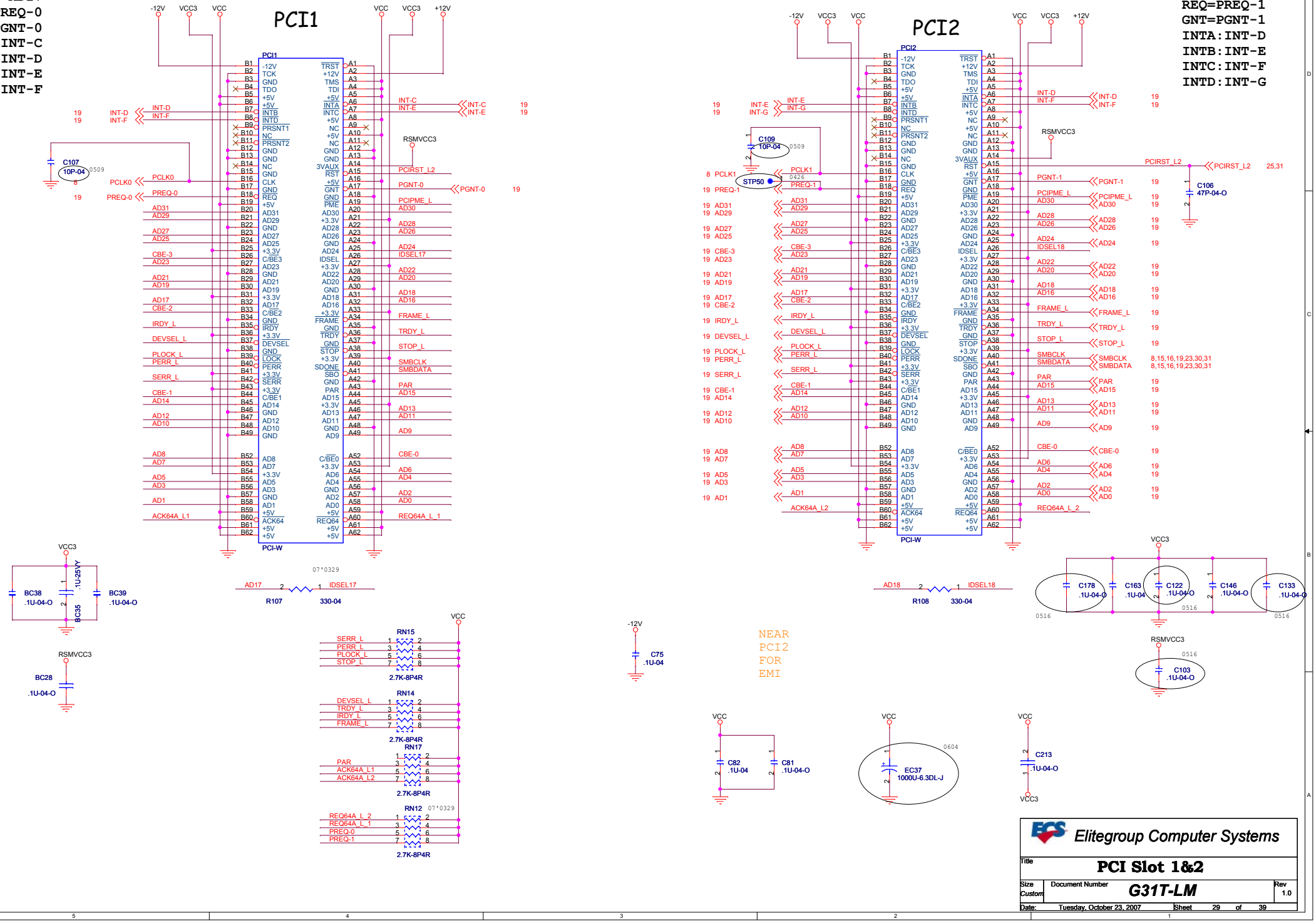
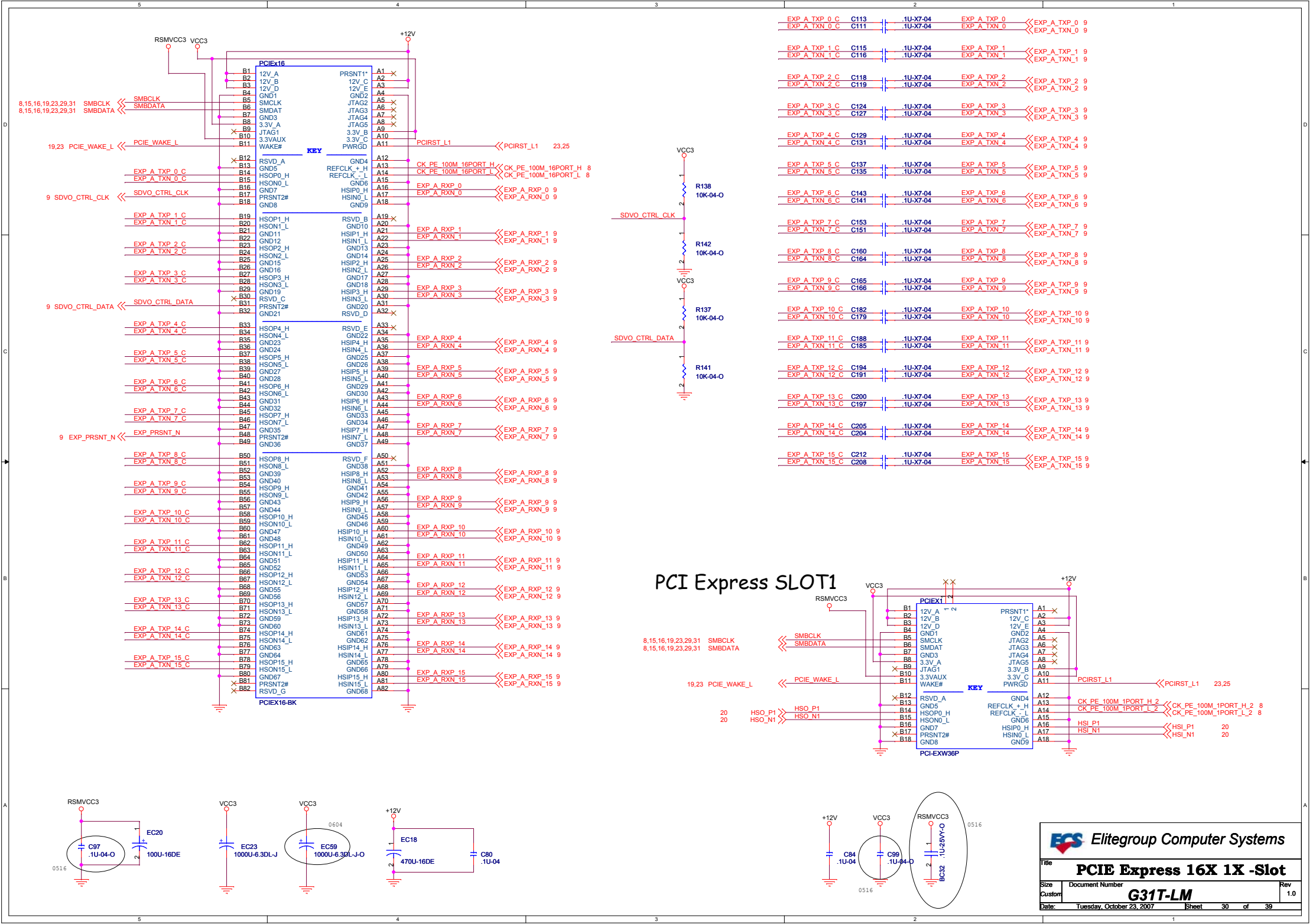
CLK=PCK0
RST=PCIRST_L2
IDSEL=AD17
REQ=PREQ-0
GNT=PGNT-0
INTA:INT-C
INTB:INT-D
INTC:INT-E
INTD:INT-F

CLK=PCK1
RST=PCIRST_L2
IDSEL=AD18
REQ=PREQ-1
GNT=PGNT-1
INTA:INT-D
INTB:INT-E
INTC:INT-F
INTD:INT-G



Elitegroup Computer Systems	
Title	PCI Slot 1&2
Size: Custom	Document Number: G31T-LM
Rev	1.0
Date: Tuesday, October 23, 2007	Sheet 29 of 39


PCIEx16
PCIEX16-BK
PCI Express SLOT1
PCIEX1
PCI-EXW36P
KEY
RSMVCC3
VCC3
+12V
SMBCLK
SMBDATA
PCIE_WAKE_L
PCIRST_L1
SDVO_CTRL_CLK
SDVO_CTRL_DATA
EXP_PRSNT_N
HSO_P1
HSO_N1
HSI_P1
HSI_N1
R138 10K-04-O
R142 10K-04-O
R137 10K-04-O
R141 10K-04-O
EC20 100U-16DE
EC23 1000U-6.3DL-J
EC59 1000U-6.3DL-J-O
EC18 470U-16DE
C80 .1U-04
C97 .1U-04-O
C84 .1U-04
C99 .1U-04-O
BC32 .1U-25VY-O
Elitegroup Computer Systems
PCIE Express 16X 1X -Slot
G31T-LM
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070117 SI_Delet_FB0805

100 Mils Width

VCCDUAL1 — F5 FUSE-2.0AS — EC43 470U-6.3DE 0727

USBPWR1 — F_USB1 — H6*2-Y-P11E

C263 .1U-04 0509 — C391 1000P-04 0720 EMI — GPO18 19

P5_N P5_P — P4_N P4_P

VCCDUAL — F3 FUSE-1.1AS — 100 Mils Width — USBPWR2

C73 .1U-04-O — EC5 470U-6.3DE 0727 — C25 .1U-04 0509 — UGND

USB1 — USB*2

P2_N P2_P — P0_N P0_P

F6 FUSE-2.0AS — EC44 470U-6.3DE 0727

USBPWR4 — F_USB2 — H6*2-Y-P11E

C274 .1U-04 0509 — C392 1000P-04 0720 EMI — GPO20 19

P7_N P7_P — P6_N P6_P

VCC — BC23 .1U-04-O — BC53 .1U-04-O — VCC3 — EMI 0723

USBPWR2 — BC14 .1U-04-O — U2 SRVO5-4 0509 — P2_N P2_P — P0_P P0_N

USBPWR3 — C69 .1U-04-O — L5 0-0B — L4 0-O

U15 SRVO5-4 0509 — P4_P P4_N P5_P P5_N

U19 SRVO5-4 0509 — P6_P P6_N P7_P P7_N

BC42 330P-04 — BC43 330P-04

FRONT_SIDE

0-8P4R-O — RN23 — CMK-70-S — CHOKE3

USBP5N USBP5P USBP4N USBP4P — P5_N P5_P P4_N P4_P

FRONT_SIDE

0-8P4R-O — RN41 — CMK-70-S — CHOKE4

USBP7N USBP7P USBP6N USBP6P — P7_N P7_P P6_N P6_P

REAR_SIDE

USB CONNECTOR

0-8P4R-O — RN8 — CMK-200-S

USBP0N USBP0P USBP2N USBP2P — P0_N P0_P P2_N P2_P

R182 0-04-O ST_CLK — R175 0-04-O — R180 100-04-O

8 PCLK_TPM1 — 19,25 FWH4 — 25 PCIRST_L3

BC40 10P-04-O — BC29 .1U-25V-O 0516

VCC3 — C201 .1U-04-O 0516 — RSMVCC3

19,25 FWH0 FWH1 FWH2 FWH3 GPI12 19 GPI13 19 GPI14

LEO_CHIP — H10*2-BK-P4E-O

LCLK LFRAME# LRESET# LAD3 VCC3.3 LAD0 RSV0 3VSB GND LPCPD# — GND KEY VCC5 LAD2 LAD1 GND RSV1 SERIRQ CLKRUN# RSV2

FWH3 FWH0 GPI12 — FWH2 FWH1 GPI13 SIRQ GPI14

SIRQ — R207 4.7K-04-O 20,25 — 08/21

19 LPCPD_L — R209 33-04-O

Assert ID 0719

EEP2 — PCA24S08D — R194 1K-04 — BC30 .1u-16VY-04-O — ASSET_RST 0719

8,15,16,19,23,29,30 SDATA — 8,15,16,19,23,29,30 SCLK

EEP3 — AT8356908_XML8T-O — R374 100-04 — R375 4.7K-04-O — BC41 .1U-04-O

8 ASSETID_CLK — PCIRST_L3 — ASSETID_RST- — SU11 Short PAD — PCIRST_L2 25,29

SDATA SCLK — JP1 — H4*1-POHBR-O

3VSBY VBAT

19 GPIO26 — R426 0-04-O GPIO

U39 — ST19WP18-O — ST & Winbown co-lay ST19WP18 WPCT200

3VSBY R355 0-04-O WINBOND — VCC3 R334 0-04-O R332 0-04-O ST — 3VSBY VBAT R363 0-04-O R371 0-04-O WINBOND

R330 10K-04-O — R328 10K-04-O

LPCPD# SERIRQ LAD0 LAD1 LFRAME# LCLK LAD2 LAD3 LRESET# CLKRUN#/GPIO — LPCPD_L SIRQ FWH0 FWH1 FWH4 ST_CLK FWH2 FWH3 PCIRST_L3

R336 0-04-O WINBOND — R373 0-04-O WINBOND — R285 0-04-O — GPO34 19

BC31 10P-04-O — R321 0-04-O

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Title: BACK I/O

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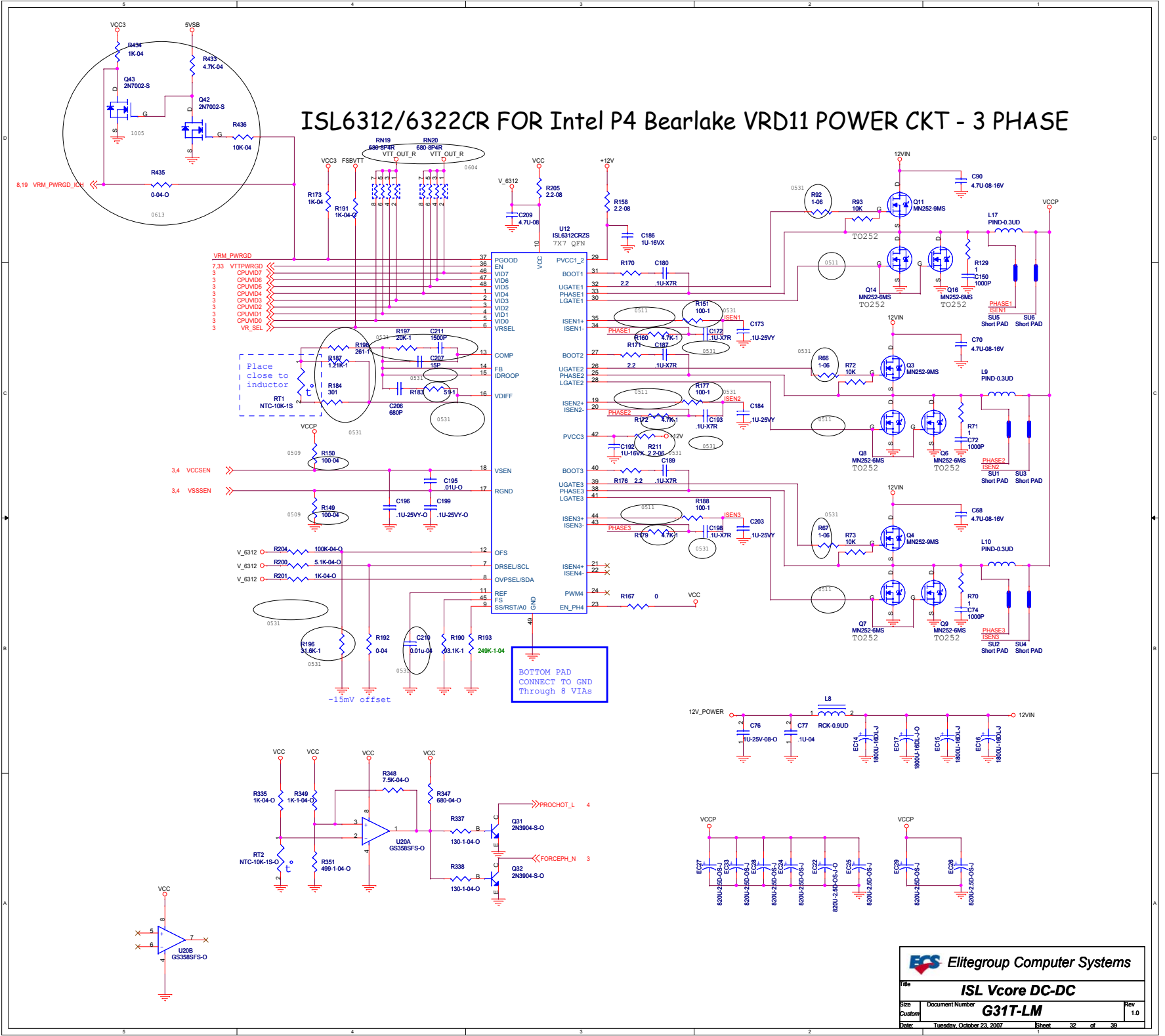
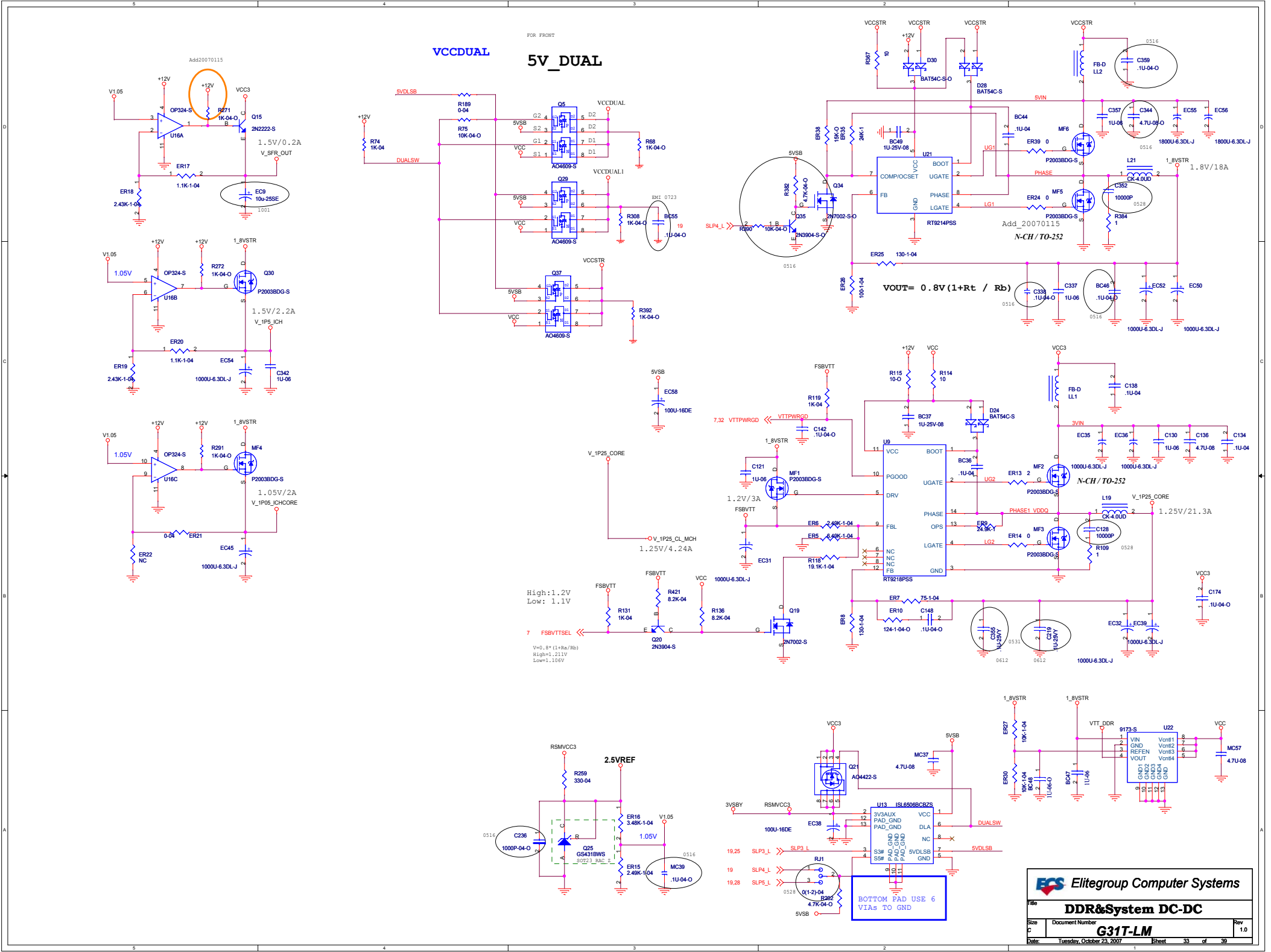
ISL6312/6322CR FOR Intel P4 Bearlake VRD11 POWER CKT - 3 PHASE



Elitegroup Computer Systems

Title	ISL Vcore DC-DC	
Size: Custom	Document Number: G31T-LM	Rev: 1.0
Date: Tuesday, October 23, 2007	Sheet 32 of 39	


VCCDUAL
5V_DUAL
FOR FRONT
Add20070115
1.5V/0.2A
V_SFR_OUT
1.05V
1.5V/2.2A
V_1P5_ICH
1.05V/2A
V_1P05_ICHCORE
VOUT= 0.8V(1+Rt / Rb)
N-CH / TO-252
1.8V/18A
1.2V/3A
1.25V/21.3A
1.25V/4.24A
High:1.2V
Low: 1.1V
V=0.8*(1+Ra/Rb)
High=1.211V
Low=1.106V
2.5VREF
1.05V
BOTTOM PAD USE 6 VIAs TO GND
Elitegroup Computer Systems
DDR&System DC-DC
G31T-LM
Tuesday, October 23, 2007
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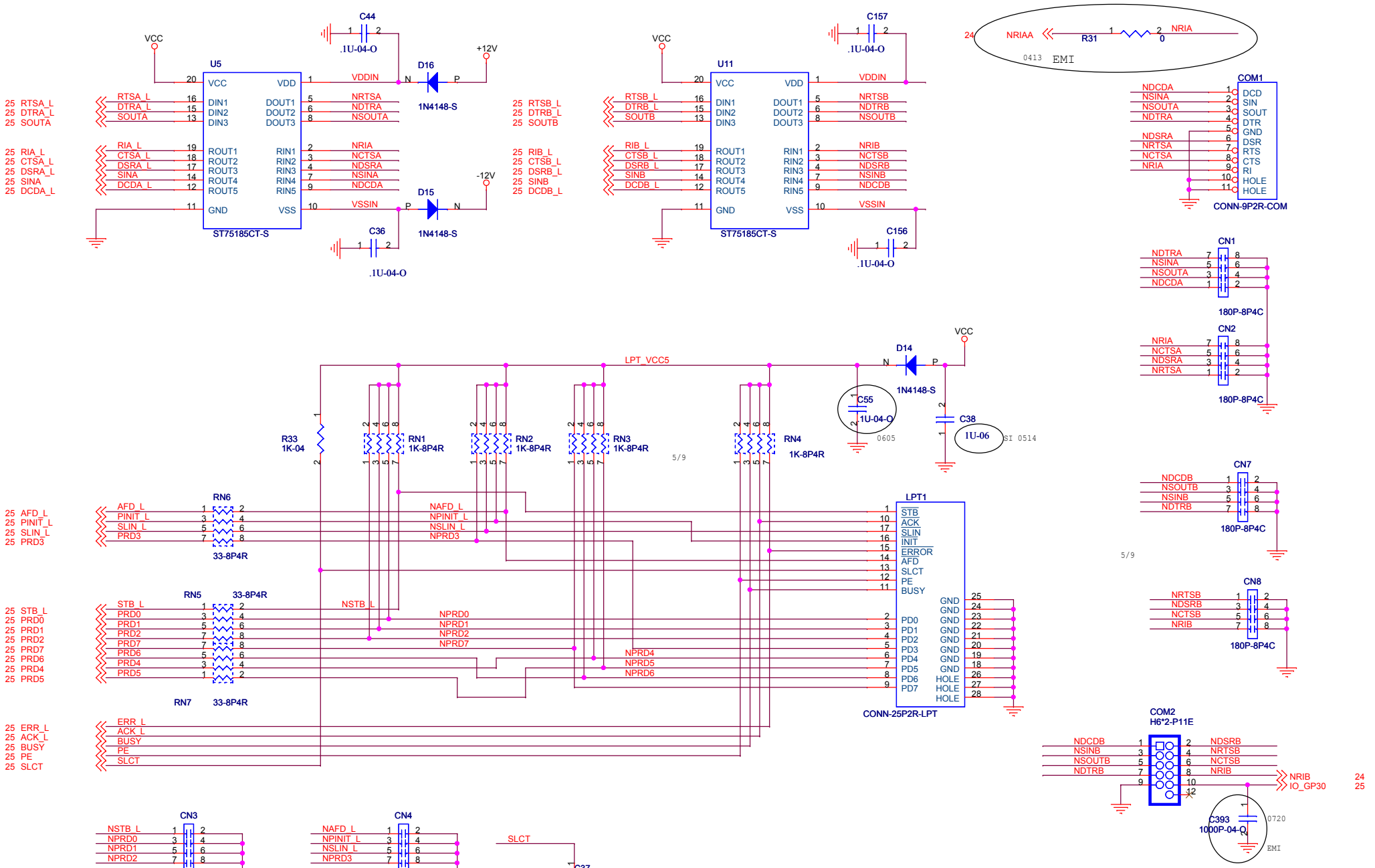

Elitegroup Computer Systems	
Title	I/O Ports
Size: Custom	Document Number: G31T-LM
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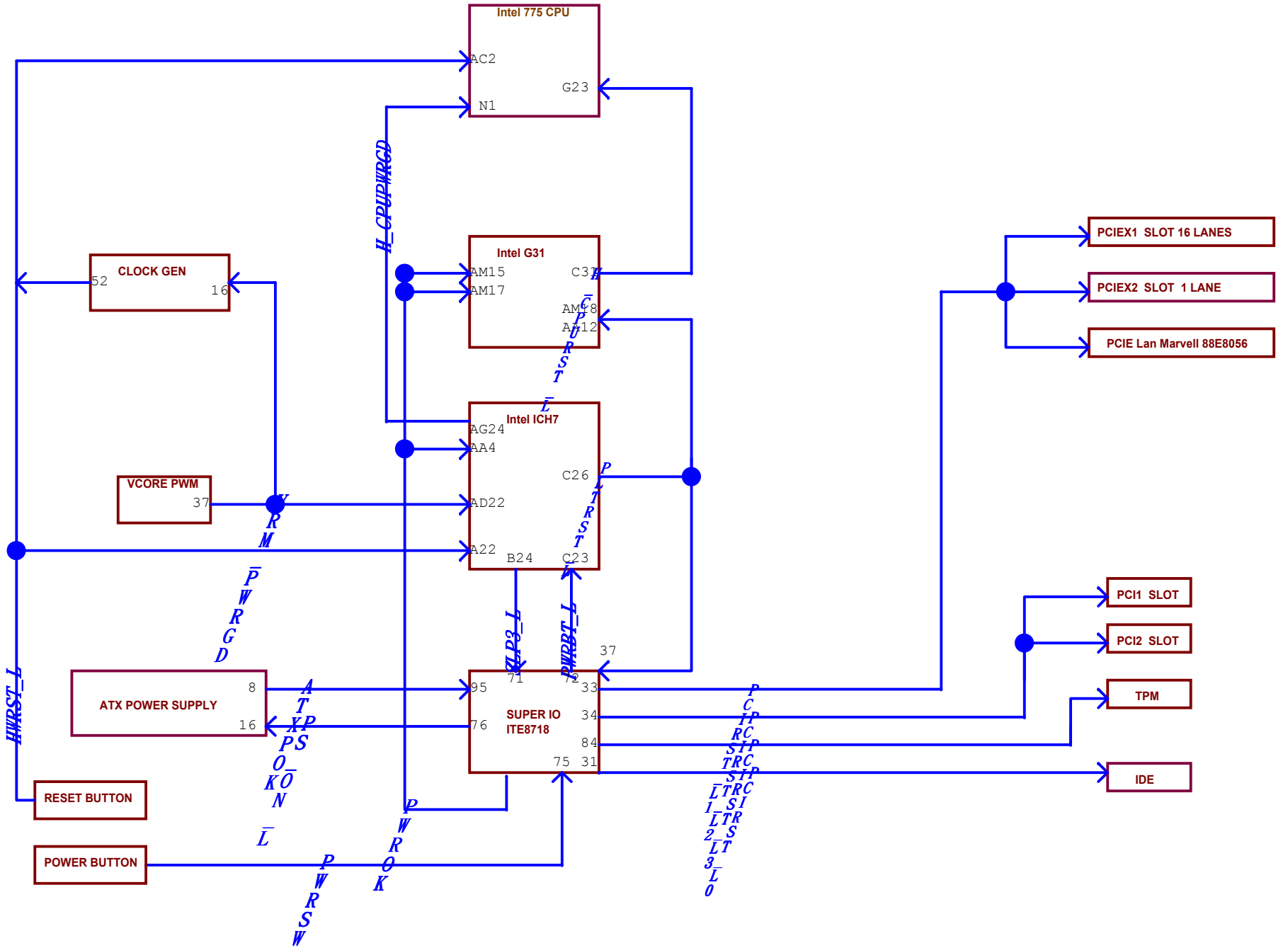
Date: Tuesday, October 23, 2007	Sheet 34 of 39



Elitegroup Computer Systems

Title: RESET Diagram

Size: Custom | Document Number: G31T-LM | Rev: 1.0

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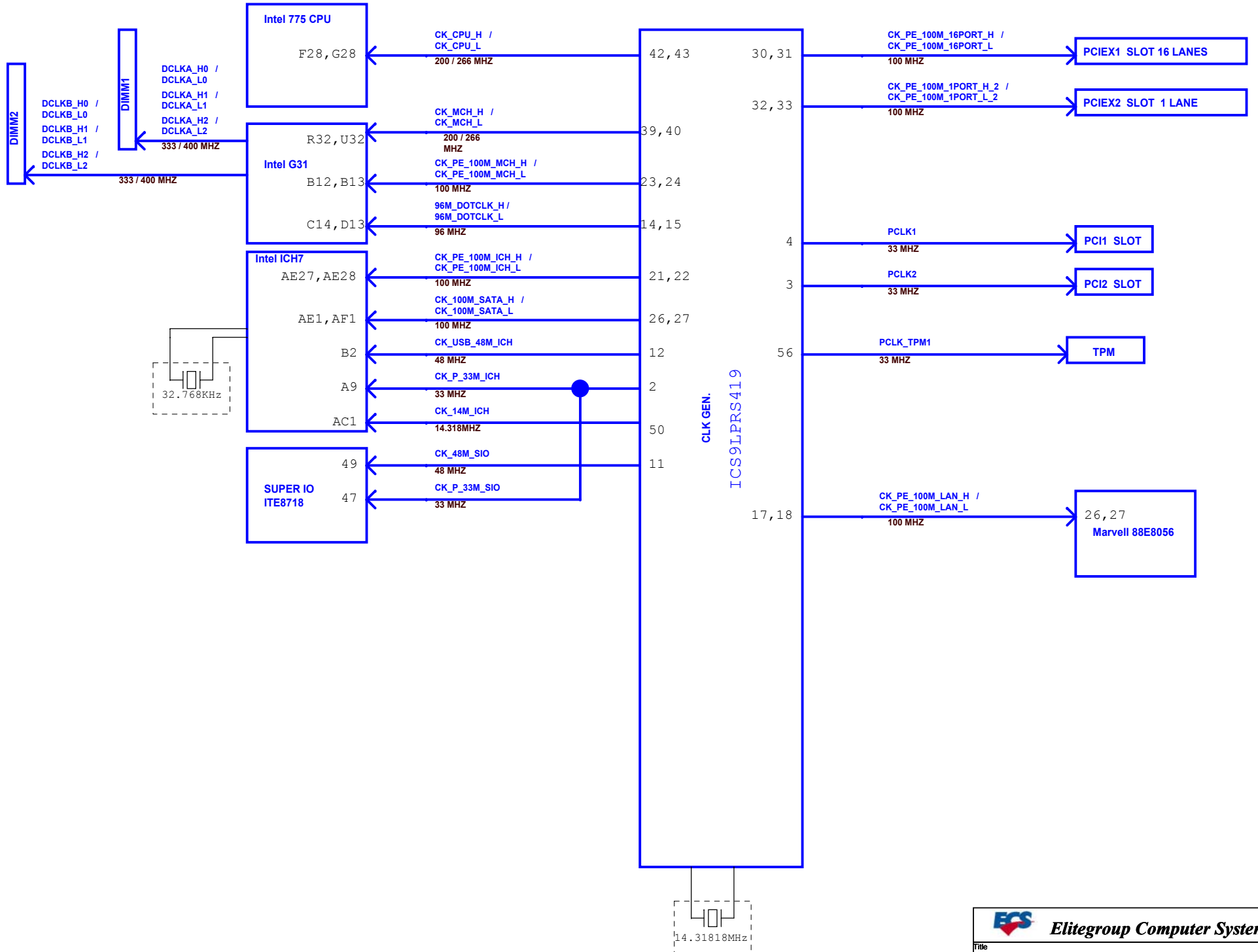

Elitegroup Computer Systems

Title: CLOCK DISTRIBUTION

Size: Custom | Document Number: G31T-LM | Rev: 1.0

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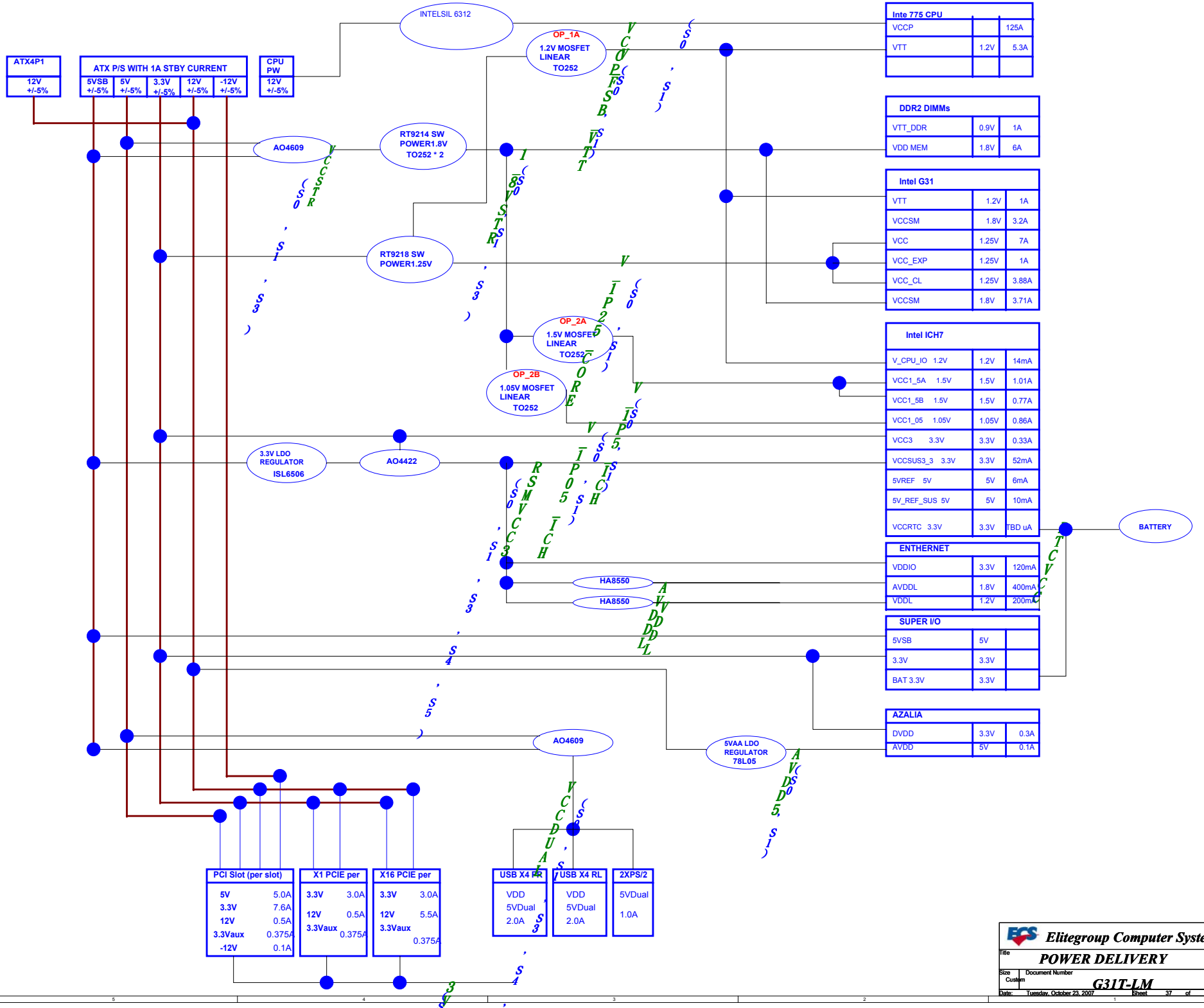
ATX4P1
12V +/-5%
ATX P/S WITH 1A STBY CURRENT
5VSB +/-5%
5V +/-5%
3.3V +/-5%
12V +/-5%
-12V +/-5%
CPU PW
12V +/-5%
INTELSIL 6312
OP_1A
1.2V MOSFET LINEAR TO252
Inte 775 CPU
VCCP 125A
VTT 1.2V 5.3A
AO4609
RT9214 SW POWER1.8V TO252 * 2
DDR2 DIMMs
VTT_DDR 0.9V 1A
VDD MEM 1.8V 6A
RT9218 SW POWER1.25V
Intel G31
VTT 1.2V 1A
VCCSM 1.8V 3.2A
VCC 1.25V 7A
VCC_EXP 1.25V 1A
VCC_CL 1.25V 3.88A
VCCSM 1.8V 3.71A
OP_2A
1.5V MOSFET LINEAR TO252
OP_2B
1.05V MOSFET LINEAR TO252
Intel ICH7
V_CPU_IO 1.2V 1.2V 14mA
VCC1_5A 1.5V 1.5V 1.01A
VCC1_5B 1.5V 1.5V 0.77A
VCC1_05 1.05V 1.05V 0.86A
VCC3 3.3V 3.3V 0.33A
VCCSUS3_3 3.3V 3.3V 52mA
5VREF 5V 5V 6mA
5V_REF_SUS 5V 5V 10mA
VCCRTC 3.3V 3.3V TBD uA
BATTERY
3.3V LDO REGULATOR ISL6506
AO4422
ENTHERNET
VDDIO 3.3V 120mA
AVDDL 1.8V 400mA
VDDL 1.2V 200mA
HA8550
HA8550
SUPER I/O
5VSB 5V
3.3V 3.3V
BAT 3.3V 3.3V
AZALIA
DVDD 3.3V 0.3A
AVDD 5V 0.1A
AO4609
5VAA LDO REGULATOR 78L05
PCI Slot (per slot)
5V 5.0A
3.3V 7.6A
12V 0.5A
3.3Vaux 0.375A
-12V 0.1A
X1 PCIE per
3.3V 3.0A
12V 0.5A
3.3Vaux 0.375A
X16 PCIE per
3.3V 3.0A
12V 5.5A
3.3Vaux 0.375A
USB X4 PR
VDD 5VDual 2.0A
USB X4 RL
VDD 5VDual 2.0A
2XPS/2
5VDual 1.0A
Elitegroup Computer Systems
POWER DELIVERY
G31T-LM
Size Custom
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Schematics Version History Table :

Circuit Ver.	PCB Ver.	Modified Page(s)	Date
B		P3 H_BPM1 disconnect from CPU.C9 pin P8 U8 change to ICS9LPRS419DFLFS P19 Rom table update,R304 8.2K change to 1K,SR10 -O,R302 -O P20 RJ2(1-2) change to RJ2(2-3) P24 EC57-O Add STP41~ STP51 for ATE test	2007/04/26
		P15 R317 change to 33-04 P12 mount SR1 P19 mount R302 P8 Del Q12,R104 P28 Del Frisw,C355,C349,R374,R375 P34 -O Leo_chip,R175,R180,R209,R207	2007/05/03
		P18 Del Bav99 D3,4,8,10,11,12,13 Add U26,U27 EMI C95,C83,C79,C69=330P U15,U19,U6,U2 choke1,choke2 C33,C25,C263,C274=0.1U remove BC42 C107,C109=10P P7 Add SC45,46,47,48,49,50 -O P3 MC30 change to 0603 P32 R149,R150 change to 0402	2007/05/09
		P18 U26 Vcc3 change to Vcc P23 Add 8111C co-lay P24 mount PWR_FAN	2007/05/10
		1.Del R168,R178,R182,R125,R76,R69 2.Del C181,C190,C202 3.C180,C187,C189,C172,C193,C198 change to X7R 4.LAN chip form RealTek change to Marvell 5.R419 change to 680 Ohm 6.Add C40 for EMI	2007/05/11
		P18 22,C23,C24 change to 4.7P P23 U24,U25 change to SU7,SU8 Add ROM3,ROM4	2007/05/14
		P28 Q33 change to 3904,R373 change to C349 P14 Add C175,C176 P25 Add R424	2007/05/15
		P28 R403,R397 4.7K change to 2k EC34 -O mount C170 C329-O mount C139 C306-O mount C132 C281-O mount C231	2007/05/18
C		P20 CLR_CMOS value change P25 remove IRDA , add GPIO for MB ID P25 H/W monitor change sensor pin for ITE suggestion	2007/05/24 2007/05/25
		P4 add CPU_GTLREF cap P12 L13,16 change to FB80 P18 remove SR14 P28 mount case open header P33 RJ1 change to (1-2),C352/C128 change to 10000P	2007/05/28
		P7 CPU top/bottom side Cap modify P32 Vcore power value modify for Intersil FAE suggestion P7 CPU top/bottom side Cap modify P24 Fan control change for Lenovo Spec.	2007/05/30 2007/05/31 2007/06/01 2007/06/01
		P8 Add clk Gen enable signal for Lenovo review P18 Add LC filter for Lenovo review P30 Add EC59 / mount EC37 for Lenovo review P32 VID pull high change to VTT_OUT_R for Lenovo review	2007/06/04
		P18 Add Hsync/Vhsyn Driver for Lenovo review P23 Add 4.7K pull high for Lenovo review P27/P26 modify mono_out/F_panel/ +12V in circuit for Lenovo review	2007/06/05
		P23 Lan LED modify P7 CPU Vcore Cap modify	2007/06/06

Circuit Ver.	PCB Ver.	Modified Page(s)	Date
C		P23 FB14/BC20 footprint change for Lenovo EMI review P24 EC19,EC41,EC57 change for Lenovo review Add D35,D36,D37 for Lenovo review P28 Add Cap for Lenovo review	2007/06/07
		P4 Add test point/TRST# value change for Intel review P8 R91,R97,R95 change 1K for intel review P11 Add SC54 for intel review P12 modify VCCDQ_RTC for intel review P14 Add NB core power CAP for intel review P19 modify net PCIRST_L for intel review P21 Add SB power CAP for intel review	2007/06/08
		P4 modify TDO / TRST#.. for intel review P23 ESD power for Lenovo review P12 H_VCCPLL reserve 1.8V for Lenovo review	2007/06/11
		P15 RN39 change to discreate resistor P24,25 Add J3 for Lenovo P33 Add C355 P27 modify R104	2007/06/12
		P32 VRD_PWRGD modify	2007/06/13
0.1		V:C change to Ver:0.1	2007/06/13
0.2		P31 remove AT97SC3203 P24 SYS_THERM1 PU to VREF P25 GP30 PU to VCC	2007/06/15
		P25:CHS1 change footprint P31:Add EEP3	2007/07/19
		P19: R428 -Open P8: Add R425 ; CLK modify P23 / P31 : Add C391,C392,C393 for EMI	2007/07/20
		P25:Add RJ8 for ICH case open P27/P26:F_AUDIO modify for Realtek comment	2007/07/23
		P24:Fan_tach modify P25:RN53 change to discreate R	2007/07/24
		P23 / P31 EC5,EC12,EC44,EC43 change to 470uF	2007/07/27
		P25 swap CPU & thermal1 net	2007/08/09
		P23 R61 from 0 change to 1K for ATE test	2007/08/14
0.3		P28 Q39,Q40 from 2N3904 change to 2N7002	2007/08/27
		P8 / P32 Add vrm_pwrgd power sequence P20 ER23 from 20.5 change to 22.6	2007/09/19
		P25 change RSMRST circuit	2007/10/01
1.0		P28 swap F_PANEL power sw	2007/10/23

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	NC	Mount
INTEL LAN	R298	R299
NO INTEL LAN	R299	R298

	GNT_5	GNT_4
SPI	0	1
PCI	1	0
LPC	1	1

BSEL TABLE
2 1 0 PSB FREQENCY
0 1 0 200 MHZ (800)
0 0 0 266 MHZ (1066)

BSEL TABLE				
2	1	0	PSB	FREQUENCY
0	0	0	267	MHz (1067)
0	0	1	133	MHz (533)
0	1	0	200	MHz (800)

FAN_CTL_SEL	
RTSB_L(H) A20GATE_L(L)	11 100%
	10 75%
	01 50%
	00 25%

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Title: **Strape**

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A	G31T-LM	1.0

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