H55H-I V1.0A

SCHEMATICS TABLE:

REVISION HISTORY:

Rev	Date	Notes
A	2009/10/15	First release
1.0	2009/12/15	1. modify EC18 to small CAP 2. swap EC26 and EC27, change EC26 to lower CAP 3. modify H_VTTPWRGD 4. remove C36, C40 5. add LPC_DEBUG header 6. keep SPI ROM far away L8 7. SPI_DEBUG signal add damping 8. change Memory DIMM2 SMB address 9. add VAXG switching MOS damping 10. V_3P3_DAC_FB add 10U CAP 11. add CPU SKTOCC 12. Super I/O pin14 remove 10U CAP, add 22n CAP(follow ITE
1.0A	2010/01/19	1. SWAP SU11 pin3.4, fix front USB loss power in S3 state

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.

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

PCB STACK:

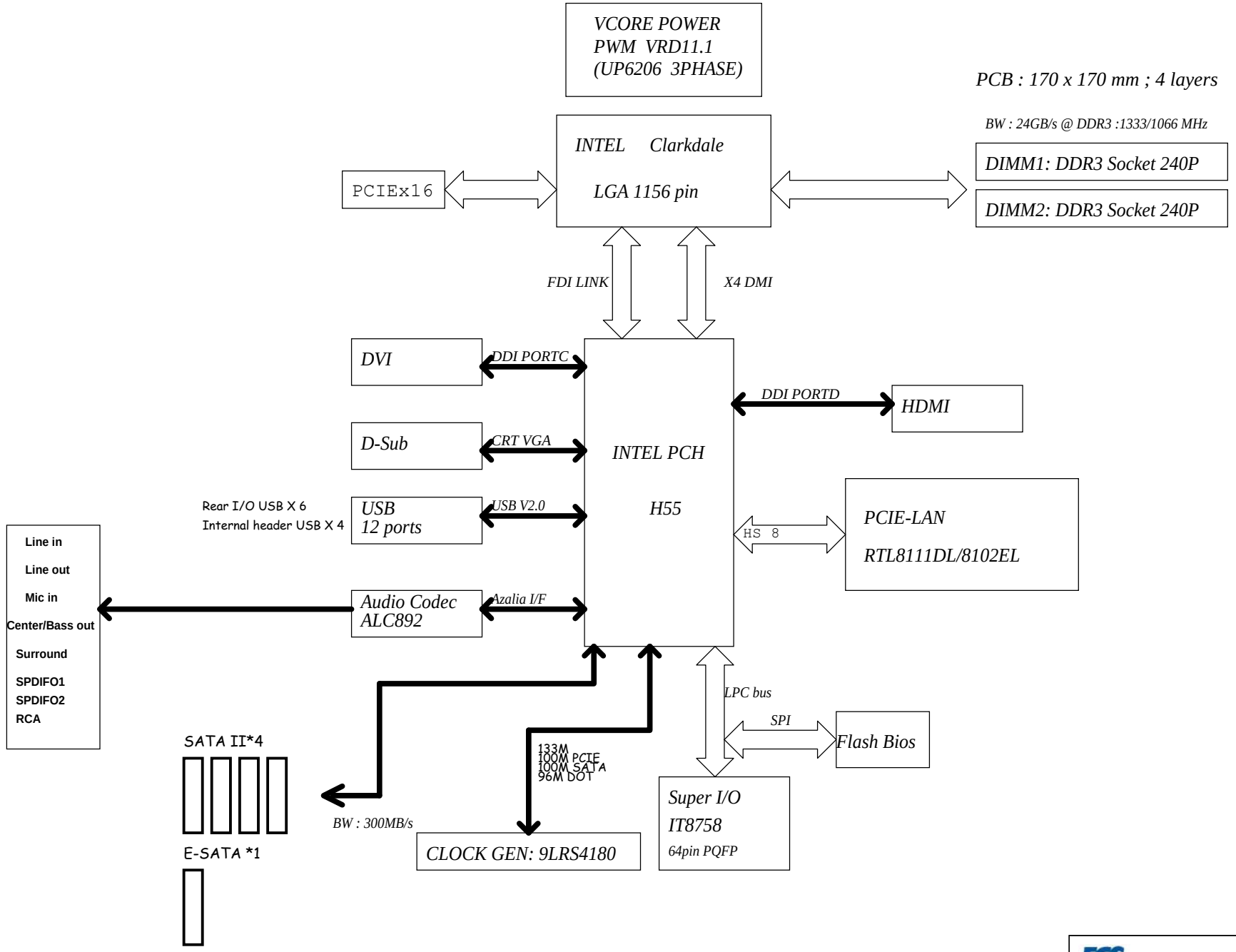
L1:TOP
L2:POWER
L3:IN1
L4:IN2
L5:GND
L6:BOTTOM

Elitegroup Computer Systems

Title: Cover Page

Size: Custom | Document Number: H55H-I | Rev: 1.0A

Date: Friday, January 29, 2010 | Sheet 1 of 28



Elitegroup Computer Systems		
Title: Block Diagram		
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Date: Friday, January 29, 2010	Sheet 2 of 28	

BCLK(133MHz) for CPU/MEM/GPU
PEG_CLK(100MHz) for PCIE/DMI/FDI

CPUVTT

CLOCK

15 CK_H_CPU_DP
15 CK_H_CPU_DN
15 CK_PE_100M_MCP_DP
15 CK_PE_100M_MCP_DN

VR

8 H_VID[0..7]
10 H_GFX_VID[0..6]
10 H_GFX_VR_EN
9 VTT_SEL
8 VCC_SENSE
8 VSS_SENSE
9 VTT_SENSE
10 VCCAXG_SENSE
10 VSSAXG_SENSE
8 H_ISENSE

DISPLAY LINK

14 FDI_FSYNC_0
14 FDI_FSYNC_1
14 FDI_LSYNC_0
14 FDI_LSYNC_1
14 FDI_INIT
14 FDI_TX_DP[0..7]
14 FDI_TX_DN[0..7]

PCI EXPRESS 16X

13 EXP_A_RX_DP[0..15]
13 EXP_A_RX_DN[0..15]
13 EXP_A_TX_DP[0..15]
13 EXP_A_TX_DN[0..15]

DMI INTERFACE

14 DMI_RX_DP[0..3]
14 DMI_RX_DN[0..3]
14 DMI_TX_DP[0..3]
14 DMI_TX_DN[0..3]

8 H_PROCHOT_N

7,12,15 HWRST_N

BC115 .1U-04-O

PLTRST_N ER40 1.3K-1-04 H_CPURST_N

C127 .1U-04-O ER36 665-1-04

CPUD

LGA1156

CK_H_CPU_DP AA7
CK_H_CPU_DN AA6
SP11 AA8
SP10 Y8
AK39
AK40
CK_PE_100M_MCP_DP AA3
CK_PE_100M_MCP_DN AA4
H_ISENSE T40
VCC_SENSE T35
VSS_SENSE T34
VTT_SENSE AE35
VTT_SEL AE39

BCLK0
BCLK0*
BCLK1
BCLK1*
BCLK_ITP
BCLK_ITP*
PEG_CLK
PEG_CLK*
ISENSE
VCC_SENSE
VSS_SENSE
VTT_SENSE
VSS_SENSE_VTT
VTT_SELECT

CLOCKS

PWM

VID0/MSID0 U40 H_VID0
VID1/MSID1 U39 H_VID1
VID2/MSID2 U38 H_VID2
VID3/CSC0 U37 H_VID3
VID4/CSC1 U36 H_VID4
VID5/CSC2 U35 H_VID5
VID6 U34 H_VID6
VID7 U33 H_VID7

STP71 H_PREQ_N AK37
STP59 H_PRDY_N AJ38
HWRST_N SP3 AL40
STP58 TDO_TDI_M AF38
AF37
H_TDO AM38
STP78 H_TCK AM37
STP81 H_TMS AN40
STP80 H_TRST_N AM39

PREQ*
PRDY*
DBR*
TDO_M
TDI_M
TDO
TDI
TCK
TMS
TRST*

ITP

BPM0* AL33 STP66
BPM1* AL32 STP75
BPM2* AK33 STP63
BPM3* AK32 STP68
BPM4* AM31 STP77
BPM5* AL30 STP72
BPM6* AK30 STP62
BPM7* AK31 STP69

STP56 AE38
STP57 AG40
CPU_COMP_0 AF36
CPU_COMP_1 AF2
CPU_COMP_2 B11
CPU_COMP_3 C11
CPUVTT AB5
AB4
H_PM_SYNC_0 AH39
H_CATERR_N AG39
H_THERMTRIP_N AF35
H_PROCHOT_N AH34
PSI AG38
H_PECI AG35

FC_AE38
FC_AG40
COMP0
COMP1
COMP2
COMP3
PM_EXT_TS0*
PM_EXT_TS1*
PM_SYNC
CATERR*
THERMTRIP*
PROCHOT*
PSI*
PECI

MISC

CFG<0> E8
CFG<1> G8
CFG<2> E10 H_CFG2 STP50
CFG<3> F10
CFG<4> H10 H_CFG4 STP54
CFG<5> H9 H_CFG5 STP53
CFG<6> E9 H_CFG6 STP51
CFG<7> F9
CFG<8> G12
CFG<9> H12
CFG<10> K10
CFG<11> K8
CFG<12> J12
CFG<13> L8
CFG<14> K9
CFG<15> K12
CFG<16> H7
CFG<17> L11

RSTIN* AF34 H_CPURST_N
RESET_OBS* AL39 H_RSTOUT_N STP64

FDI_TX0 U6
FDI_TX0* U5
FDI_TX1 V4
FDI_TX1* V3
FDI_TX2 U8
FDI_TX2* U7
FDI_TX3 W8
FDI_TX3* W7
FDI_TX4 W5
FDI_TX4* W4
FDI_TX5 R8
FDI_TX5* R7
FDI_TX6 Y4
FDI_TX6* Y3
FDI_TX7 Y6
FDI_TX7* Y5
VCCAXG_SENSE A13
VSSAXG_SENSE B13

FDI_TX0
FDI_TX0*
FDI_TX1
FDI_TX1*
FDI_TX2
FDI_TX2*
FDI_TX3
FDI_TX3*
FDI_TX4
FDI_TX4*
FDI_TX5
FDI_TX5*
FDI_TX6
FDI_TX6*
FDI_TX7
FDI_TX7*
VAXG_SENSE
VSSAXG_SENSE

DISPLAY

FDI_INT AC2 FDI_INT
FDI_FSYNC0 AC4 FDI_FSYNC_0
FDI_LSYNC0 AD4 FDI_LSYNC_0
FDI_FSYNC1 AC3 FDI_FSYNC_1
FDI_LSYNC1 AD3 FDI_LSYNC_1
GFX_VR_EN F12 H_GFX_VR_EN
GFX_VID0 G10 H_GFX_VID0
GFX_VID1 B12 H_GFX_VID1
GFX_VID2 E12 H_GFX_VID2
GFX_VID3 E11 H_GFX_VID3
GFX_VID4 C12 H_GFX_VID4
GFX_VID5 G11 H_GFX_VID5
GFX_VID6 J11 H_GFX_VID6
GFX_IMON F6
GFX_DPRSLPVR J10 STP55

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LGA1156_H

SKTOCC* AK38 SKTOC
VCCPWRGD_0 AH35 H_PWRGD
VCCPWRGD_1 AH36 H_PWRGD
VTTPWRGOOD AG37 H_VTTPWRGD
TAPPWRGOOD AK34
SM_DRAMPWROK AH37 DRAMPWRGD

PWROK 15,20
QN16 2N3904-S
CPUVTT
R165 1K-04 SKTOC
R161 51-04-O H_CPURST_N
R155 51-04-O H_PM_SYNC_0
R159 51-04-O H_PECI
R154 51-04 H_THERMTRIP_N
R158 51-04 H_CATERR_N
R177 51-04 PSI

RJ9 1K(2-3)-04 CPUVTT H_VID0
RJ5 1K(2-3)-04 CPUVTT H_VID4
RJ10 1K(1-2)-04 CPUVTT H_VID1
RJ6 1K(1-2)-04 CPUVTT H_VID5
RJ7 1K(1-2)-04 CPUVTT H_VID2
RJ4 1K(1-2)-04 CPUVTT H_VID6
RJ8 1K(1-2)-04 CPUVTT H_VID3
RJ3 1K(2-3)-04 CPUVTT H_VID7

POWER ON CONFIG (POC) TABLE

	FUNCTION	DEFAULT
VID0	MSI0	
VID1	MSI1	011:Supprot CKD& LFT
VID2	MSI2	
VID3	IMON CONFIG2	
VID4	IMON CONFIG1	101, Icc(MAX)=120A
VID5	IMON CONFIG3	
VID6	RESERVED	
VID7	VRD SELECT	LOW
PSI#	RESERVED	LOW

CPUVTT
R182 51-04 H_TDO

R183 51-04 H_TRST_N
ER35 49.9-1-04 CPU_COMP_0
ER33 49.9-1-04 CPU_COMP_1
ER26 20-1-04 CPU_COMP_2
ER25 20-1-04 CPU_COMP_3

CPUC

LGA1156

EXP_A_RX_DP0 C9
EXP_A_RX_DN0 D9
EXP_A_RX_DP1 B8
EXP_A_RX_DN1 C8
EXP_A_RX_DP2 A7
EXP_A_RX_DN2 A6
EXP_A_RX_DP3 B6
EXP_A_RX_DN3 C6
EXP_A_RX_DP4 A5
EXP_A_RX_DN4 B5
EXP_A_RX_DP5 B4
EXP_A_RX_DN5 C4
EXP_A_RX_DP6 C3
EXP_A_RX_DN6 D3
EXP_A_RX_DP7 D2
EXP_A_RX_DN7 E2
EXP_A_RX_DP8 E1
EXP_A_RX_DN8 F1
EXP_A_RX_DP9 G3
EXP_A_RX_DN9 G2
EXP_A_RX_DP10 G1
EXP_A_RX_DN10 H1
EXP_A_RX_DP11 J3
EXP_A_RX_DN11 J2
EXP_A_RX_DP12 J1
EXP_A_RX_DN12 K1
EXP_A_RX_DP13 L2
EXP_A_RX_DN13 L3
EXP_A_RX_DP14 P3
EXP_A_RX_DN14 P4
EXP_A_RX_DP15 T3
EXP_A_RX_DN15 T4

PEG_RX0
PEG_RX0*
PEG_RX1
PEG_RX1*
PEG_RX2
PEG_RX2*
PEG_RX3
PEG_RX3*
PEG_RX4
PEG_RX4*
PEG_RX5
PEG_RX5*
PEG_RX6
PEG_RX6*
PEG_RX7
PEG_RX7*
PEG_RX8
PEG_RX8*
PEG_RX9
PEG_RX9*
PEG_RX10
PEG_RX10*
PEG_RX11
PEG_RX11*
PEG_RX12
PEG_RX12*
PEG_RX13
PEG_RX13*
PEG_RX14
PEG_RX14*
PEG_RX15
PEG_RX15*

PEG

PEG_TX0 C7 EXP_A_TX_DP0
PEG_TX0* D7 EXP_A_TX_DN0
PEG_TX1 E7 EXP_A_TX_DP1
PEG_TX1* E6 EXP_A_TX_DN1
PEG_TX2 E5 EXP_A_TX_DP2
PEG_TX2* F5 EXP_A_TX_DN2
PEG_TX3 F3 EXP_A_TX_DP3
PEG_TX3* F4 EXP_A_TX_DN3
PEG_TX4 G6 EXP_A_TX_DP4
PEG_TX4* G5 EXP_A_TX_DN4
PEG_TX5 H4 EXP_A_TX_DP5
PEG_TX5* H3 EXP_A_TX_DN5
PEG_TX6 F7 EXP_A_TX_DP6
PEG_TX6* G7 EXP_A_TX_DN6
PEG_TX7 J6 EXP_A_TX_DP7
PEG_TX7* J5 EXP_A_TX_DN7
PEG_TX8 K3 EXP_A_TX_DP8
PEG_TX8* K4 EXP_A_TX_DN8
PEG_TX9 J8 EXP_A_TX_DP9
PEG_TX9* L6 EXP_A_TX_DN9
PEG_TX10 L5 EXP_A_TX_DP10
PEG_TX10* M4 EXP_A_TX_DN10
PEG_TX11 M3 EXP_A_TX_DP11
PEG_TX11* K7 EXP_A_TX_DN11
PEG_TX12 L7 EXP_A_TX_DP12
PEG_TX12* N6 EXP_A_TX_DN12
PEG_TX13 N5 EXP_A_TX_DP13
PEG_TX13* M8 EXP_A_TX_DN13
PEG_TX14 N8 EXP_A_TX_DP14
PEG_TX14* R5 EXP_A_TX_DN14
PEG_TX15 R6 EXP_A_TX_DP15
PEG_TX15* EXP_A_TX_DN15

PEG_RBIAS A11
ER21 750-1-04

PEG_RCOMPO B10
PEG_ICOMPO C10
PEG_ICOMPI D11
ER23 49.9-1-04

DMI_RX_DP0 R1
DMI_RX_DN0 T1
DMI_RX_DP1 U3
DMI_RX_DN1 U2
DMI_RX_DP2 U1
DMI_RX_DN2 V1
DMI_RX_DP3 W3
DMI_RX_DN3 W2

DMI_RX0
DMI_RX0*
DMI_RX1
DMI_RX1*
DMI_RX2
DMI_RX2*
DMI_RX3
DMI_RX3*

DMI

DMI_TX0 L1 DMI_TX_DP0
DMI_TX0* M1 DMI_TX_DN0
DMI_TX1 N3 DMI_TX_DP1
DMI_TX1* N2 DMI_TX_DN1
DMI_TX2 N1 DMI_TX_DP2
DMI_TX2* P1 DMI_TX_DN2
DMI_TX3 R2 DMI_TX_DP3
DMI_TX3* R3 DMI_TX_DN3

RSVD_A4
RSVD_A12
RSVD_B3
CGC_TP_NCTF
RSVD_C2
RSVD_D1
RSVD_L12
RSVD_M12
RSVD_AD2
RSVD_AE2
RSVD_AH40
RSVD_AJ39
RSVD_AK12
RSVD_AK13
RSVD_AK14
RSVD_AK15
RSVD_AK16
RSVD_AK18
RSVD_AK25
RSVD_AK26
RSVD_AK27
RSVD_AK28
RSVD_AK29

RSVD

RSVD_AL12 AL12
RSVD_AL14 AL14
RSVD_AL15 AL15
RSVD_AL17 AL17
RSVD_AL18 AL18
RSVD_AL26 AL26
RSVD_AL27 AL27
RSVD_AL29 AL29
RSVD_AM13 AM13
RSVD_AM14 AM14
RSVD_AM15 AM15
RSVD_AM16 AM16
RSVD_AM17 AM17
RSVD_AM18 AM18
RSVD_AM19 AM19
RSVD_AM20 AM20
RSVD_AM21 AM21
RSVD_AM25 AM25
RSVD_AM26 AM26
RSVD_AM27 AM27
RSVD_AM28 AM28
RSVD_AM29 AM29
RSVD_AM30 AM30
RSVD_AN11 AN11
RSVD_AU40 AU40
RSVD_AV1 AV1
RSVD_AV39 AV39
RSVD_AW2 AW2
RSVD_AW38 AW38
RSVD_AY3 AY3
RSVD_AY37 AY37

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LGA1156_H

PEG CONFIG TABLE

SEL2	SEL1	SEL0	PCIE CONFIG
1	1	1	1 X 16
1	1	0	2 X 8

CFG	H	L	DESCRIPTION
0	RSVD		PEG SEL0
1	RSVD		PEG SEL1
2	RSVD		PEG SEL2
3	NORM	REVERSED	PEG LANE REVERSAL
4	DISABLE	ENABLE	DP PRESENCE
5	RSVD		
6	RSVD		
7	RSVD		ENGINEERING EXPERIMENT
15	RSVD		ENGINEERING EXPERIMENT

0-5 HAVE INTERNAL PULL-UP

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Title: LGA1156 CPU/GPU/PEG/DMI

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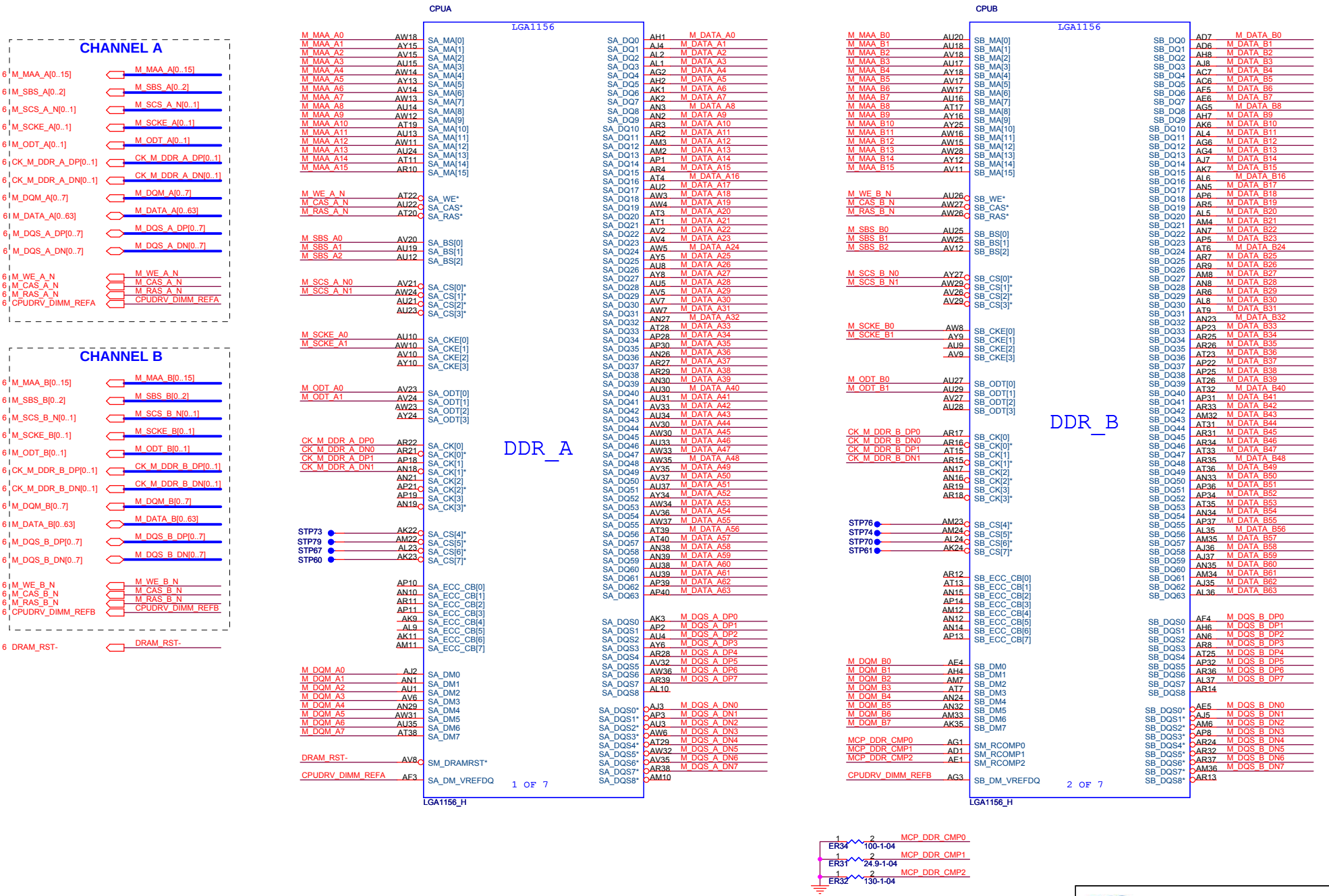

Company	Elitegroup Computer Systems
Title	LGA1156 DDR3 MEMORY
Size	Custom
Document Number	H55H-I
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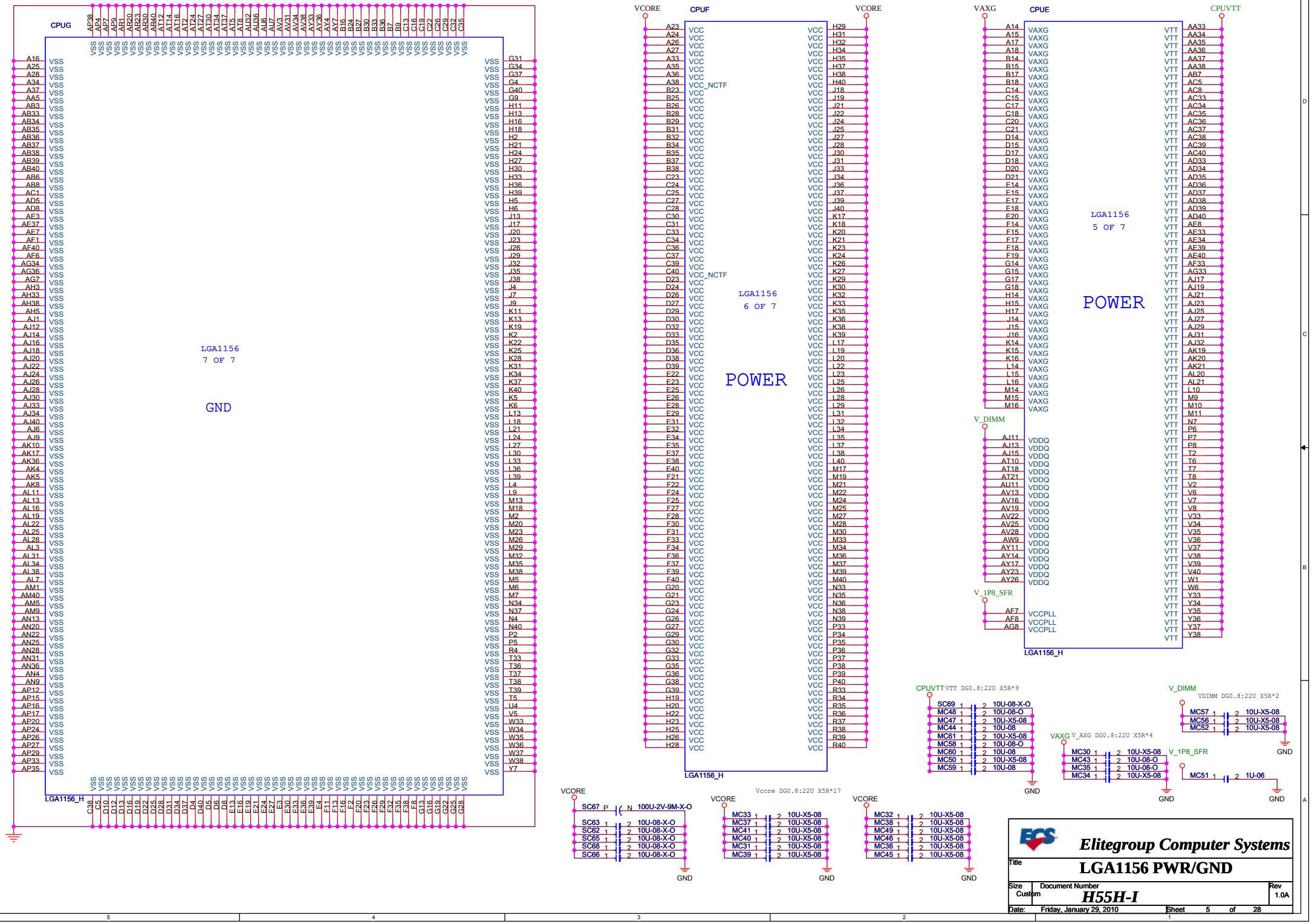

Elitegroup Computer Systems			
Title: LGA1156 PWR/GND			
Size: Custom	Document Number: H55H-I		Rev: 1.0A
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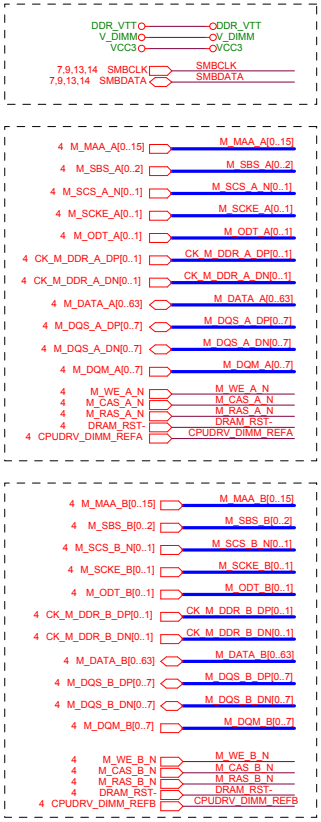
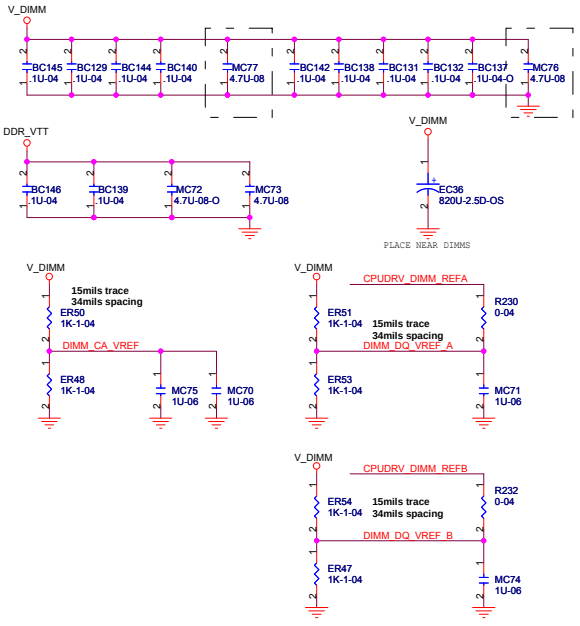
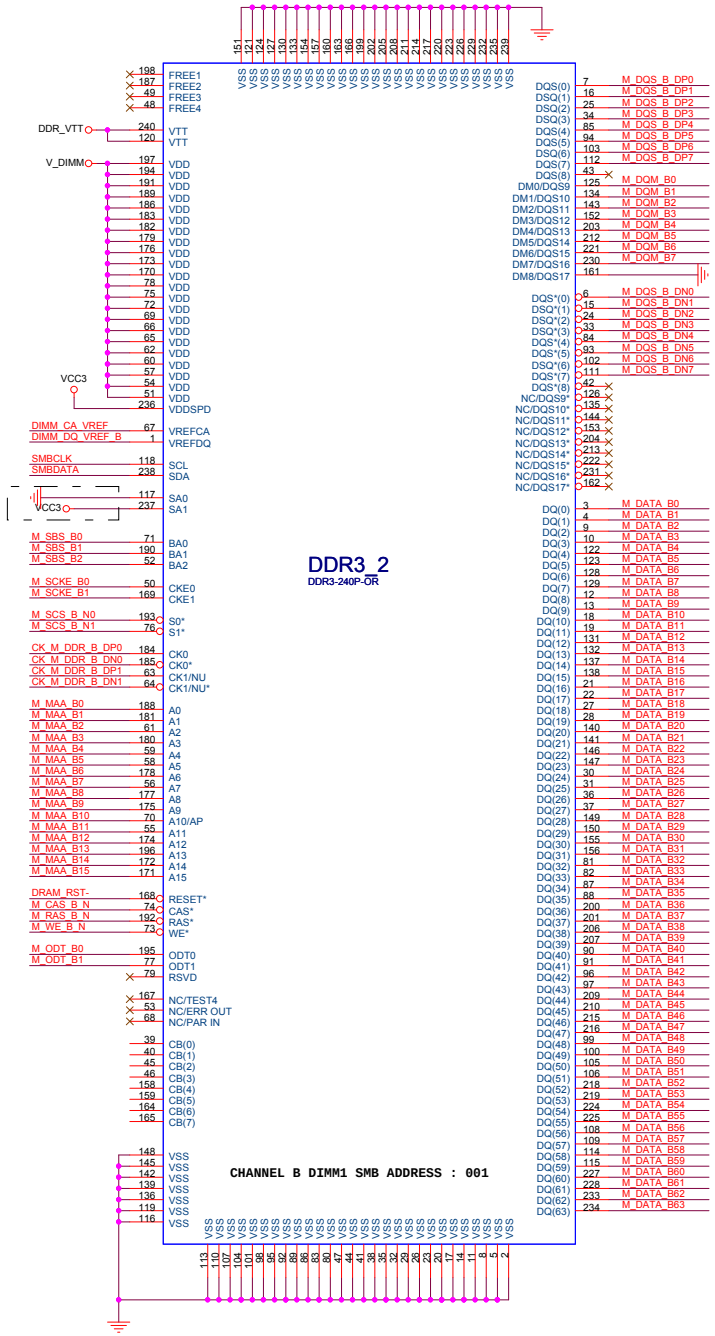
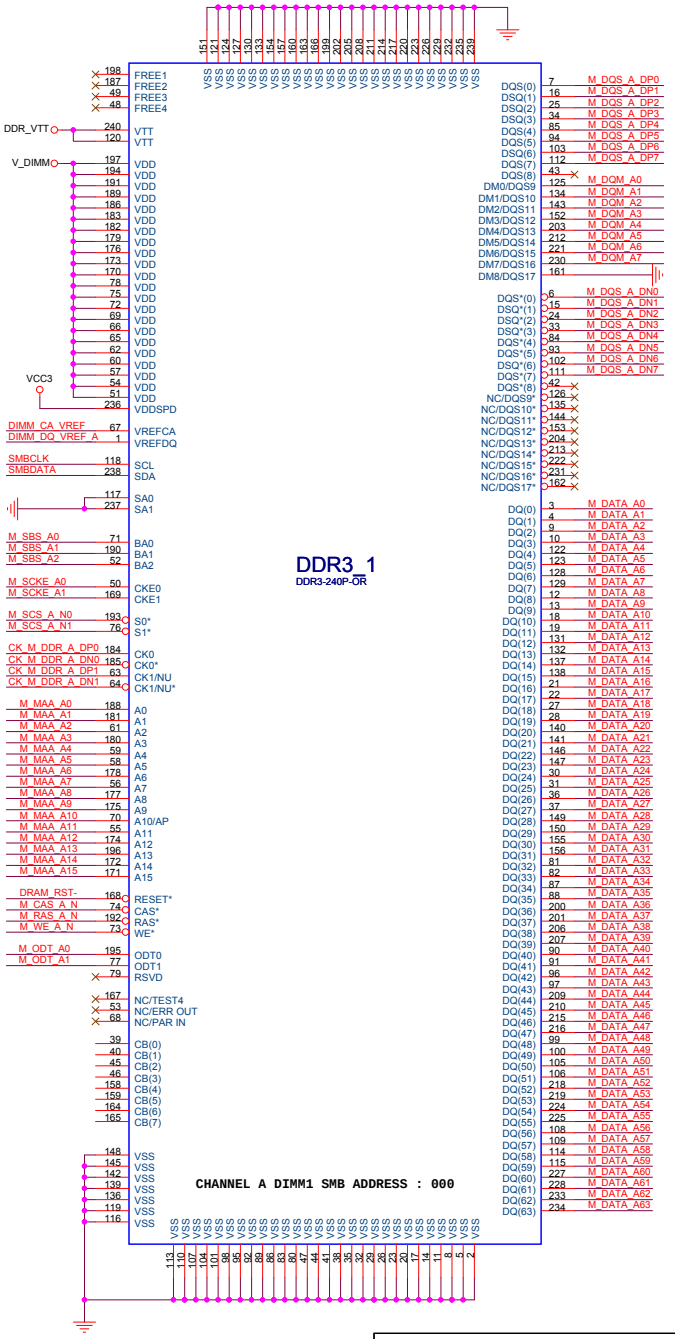
External Connection









ECS	Elitegroup Computer Systems	
Title	DDR3 ChannalA DIMM1	
Size: Custom	Document Number: H55H-I	Rev: 1.0A
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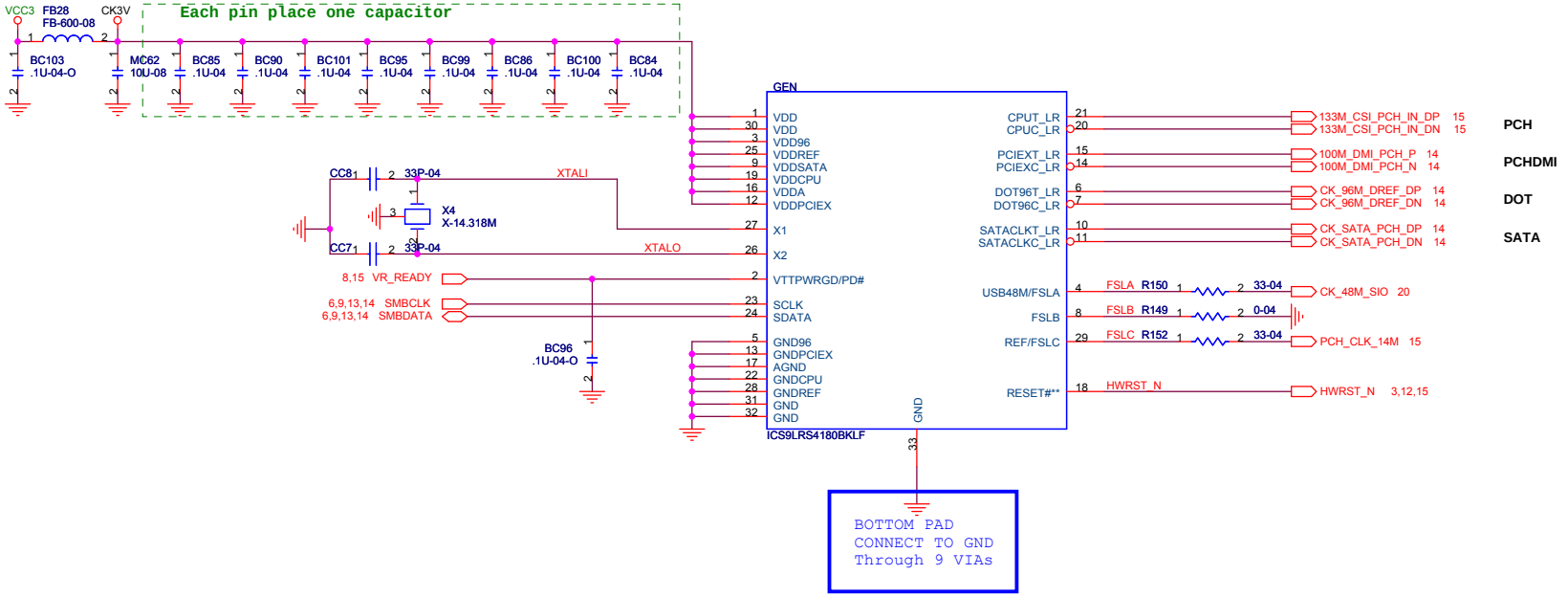
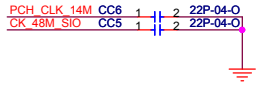
External Connection





FSLC,FSLB,FSLA = 001, CPU_CLK = 133MHz

FSLC (B0b2)	FSLB (B0b1)	FSLA (B0b0)	CPU MHz	PCIE MHz	SATA MHz	DOT96 MHz
0	0	1	133.33	100	100	96.00
1	0	1	100.00	100	100	96.00

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Title: CLK 9LRS4200

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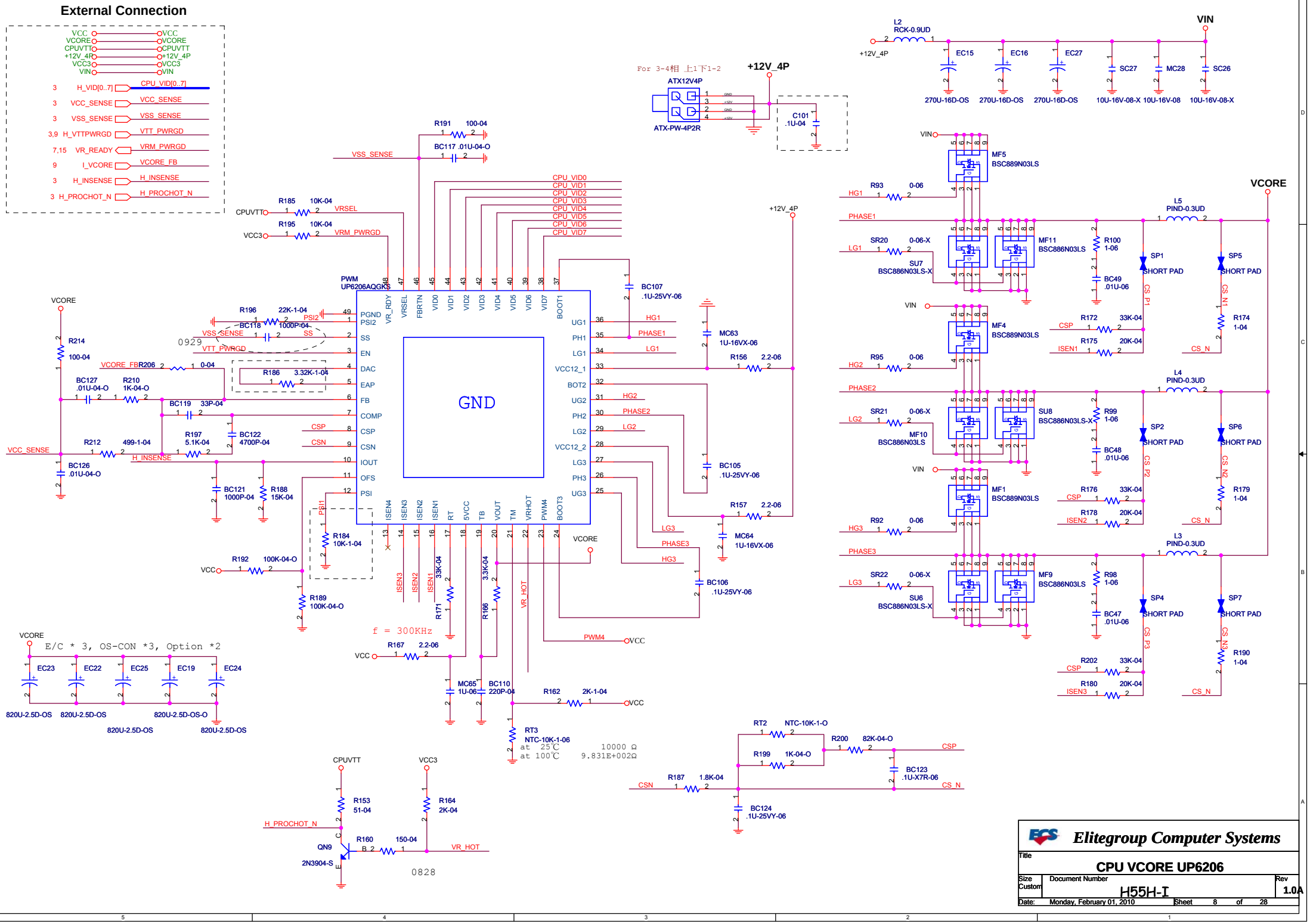
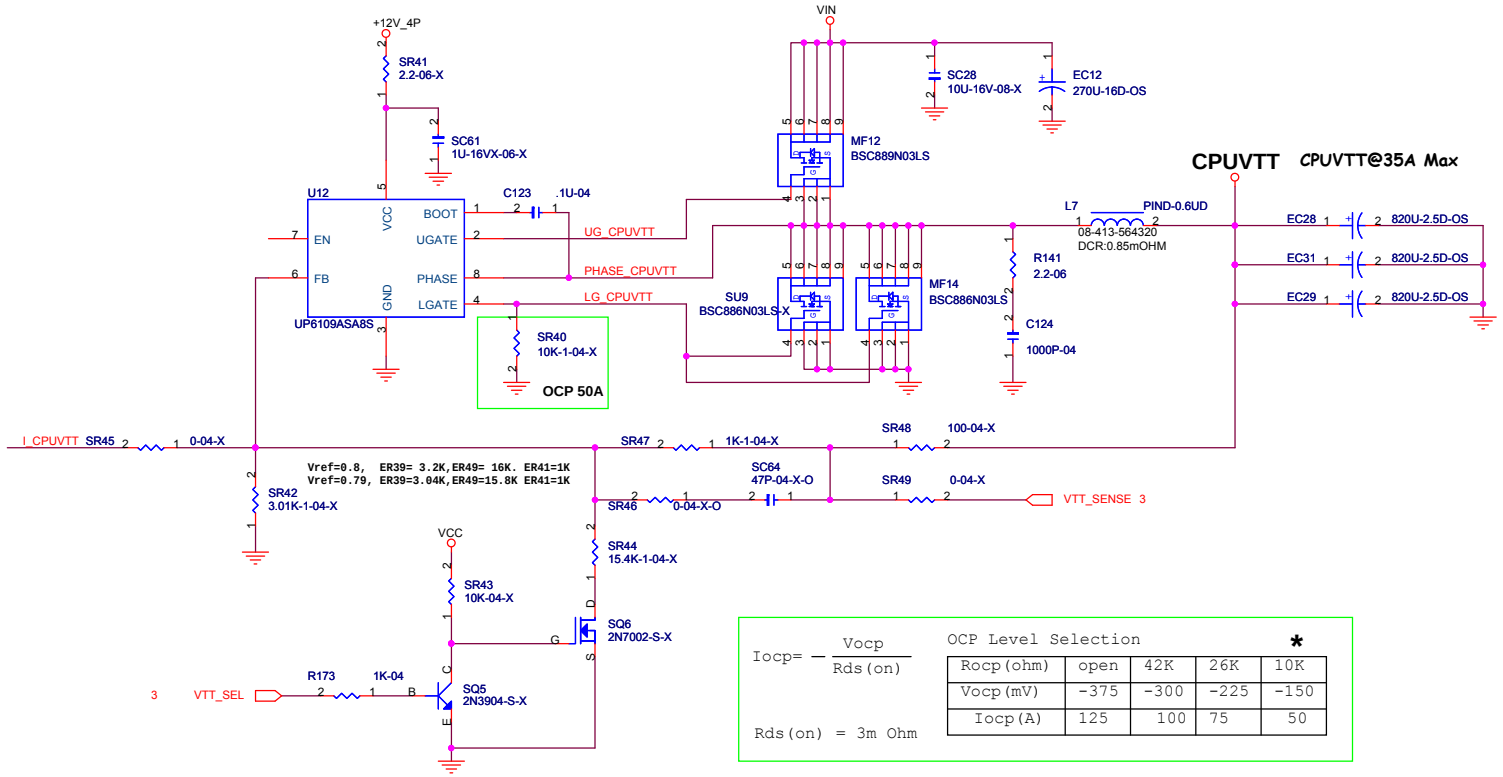

External Connection
VCC
VCORE
CPUVTT
+12V_4P
VCC3
VIN
3 H_VID[0..7] CPU_VID[0..7]
3 VCC_SENSE VCC_SENSE
3 VSS_SENSE VSS_SENSE
3,9 H_VTTPWRGD VTT_PWRGD
7,15 VR_READY VRM_PWRGD
9 I_VCORE VCORE_FB
3 H_INSENSE H_INSENSE
3 H_PROCHOT_N H_PROCHOT_N
For 3-4相 上1下1-2
+12V_4P
ATX12V4P
ATX-PW-4P2R
C101 .1U-04
L2 RCK-0.9UD
VIN
EC15 EC16 EC27 SC27 MC28 SC26
270U-16D-OS 270U-16D-OS 270U-16D-OS 10U-16V-08-X 10U-16V-08 10U-16V-08-X
R191 100-04
BC117 .01U-04-O
VSS_SENSE
CPU_VID0 CPU_VID1 CPU_VID2 CPU_VID3 CPU_VID4 CPU_VID5 CPU_VID6 CPU_VID7
R185 10K-04
CPUVTT
VRSEL
R195 10K-04
VCC3
VRM_PWRGD
PWM UP6206AQGKS
PGND PSI2 SS EN DAC EAP FB COMP CSP CSN IOUT OFS PSI
VR_RDY VRSEL FBRTN VID0 VID1 VID2 VID3 VID4 VID5 VID6 VID7 BOOT1
UG1 PH1 LG1 VCC12_1 BOT2 UG2 PH2 LG2 VCC12_2 LG3 PH3 UG3
ISEN4 ISEN3 ISEN2 ISEN1 RT 5VCC TB VOUT TM VRHOT PWM4 BOOT3
GND
VCORE
R196 22K-1-04
BC118 1000P-04
0929
R214 100-04
VCORE_FB R206 0-04
R186 3.32K-1-04
BC127 .01U-04-O
R210 1K-04-O
BC119 33P-04
R212 499-1-04
R197 5.1K-04
BC122 4700P-04
VCC_SENSE
H_INSENSE
BC126 .01U-04-O
BC121 1000P-04
R188 15K-04
R184 10K-1-04
R192 100K-04-O
R189 100K-04-O
BC107 .1U-25VY-06
HG1 PHASE1 LG1
MC63 1U-16VX-06
R156 2.2-06
HG2 PHASE2 LG2
BC105 .1U-25VY-06
R157 2.2-06
LG3 PHASE3 HG3
MC64 1U-16VX-06
BC106 .1U-25VY-06
PWM4
VCC
f = 300KHz
R167 2.2-06
MC65 1U-06
BC110 220P-04
R162 2K-1-04
RT3 NTC-10K-1-06
at 25℃ 10000 Ω
at 100℃ 9.831E+002Ω
R171 33K-04
R166 3.3K-04
VR_HOT
ISEN3 ISEN2 ISEN1
PSI1
VCORE
E/C * 3, OS-CON *3, Option *2
EC23 EC22 EC25 EC19 EC24
820U-2.5D-OS 820U-2.5D-OS 820U-2.5D-OS-O 820U-2.5D-OS 820U-2.5D-OS
CPUVTT VCC3
R153 51-04
R164 2K-04
H_PROCHOT_N
QN9 2N3904-S
R160 150-04
VR_HOT
0828
RT2 NTC-10K-1-O
R200 82K-04-O
R199 1K-04-O
CSP
BC123 .1U-X7R-06
CS_N
R187 1.8K-04
CSN
BC124 .1U-25VY-06
VIN
MF5 BSC889N03LS
MF11 BSC886N03LS
SU7 BSC886N03LS-X
MF4 BSC889N03LS
MF10 BSC886N03LS
SU8 BSC886N03LS-X
MF1 BSC889N03LS
MF9 BSC886N03LS
SU6 BSC886N03LS-X
SR20 0-06-X
SR21 0-06-X
SR22 0-06-X
R93 0-06
R95 0-06
R92 0-06
R100 1-06
R99 1-06
R98 1-06
BC49 .01U-06
BC48 .01U-06
BC47 .01U-06
SP1 SHORT PAD
SP2 SHORT PAD
SP4 SHORT PAD
SP5 SHORT PAD
SP6 SHORT PAD
SP7 SHORT PAD
L5 PIND-0.3UD
L4 PIND-0.3UD
L3 PIND-0.3UD
VCORE
R172 33K-04
R175 20K-04
R174 1-04
R176 33K-04
R178 20K-04
R179 1-04
R202 33K-04
R180 20K-04
R190 1-04
CS_P1 CS_N1
CS_P2 CS_N2
CS_P3 CS_N3
Elitegroup Computer Systems
Title
CPU VCORE UP6206
Size Custom
Document Number H55H-I
Rev 1.0A
Date: Monday, February 01, 2010
Sheet 8 of 28

External Connection

+12V_4P, VIN, VCC, CPUVTT, 3VSB, 5VSB

VTT_SEL	CPUVTT
1	1.05V
0	1.10V

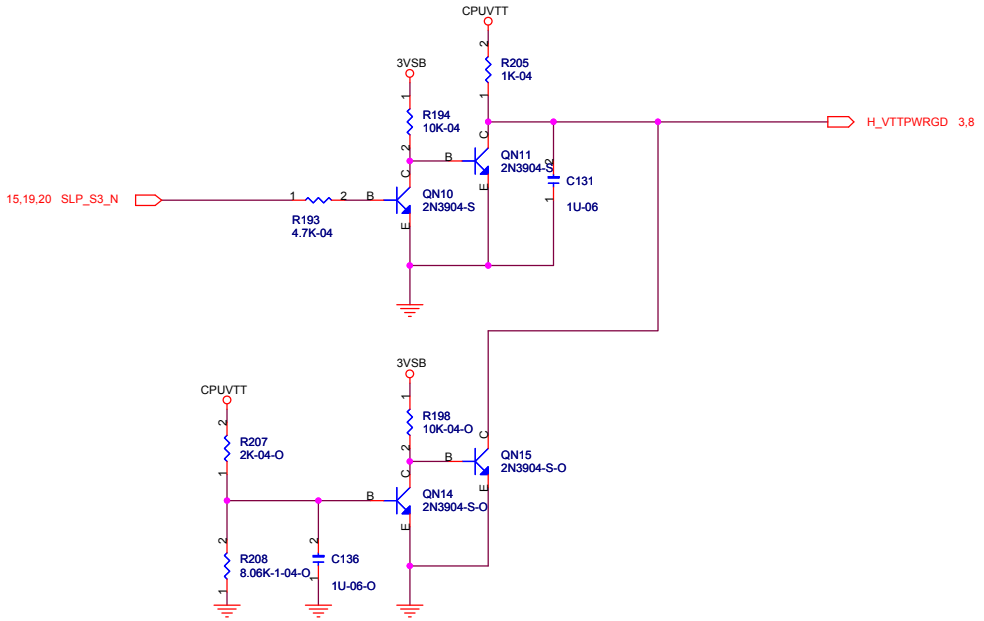


Iocp = Vocp / Rds(on)

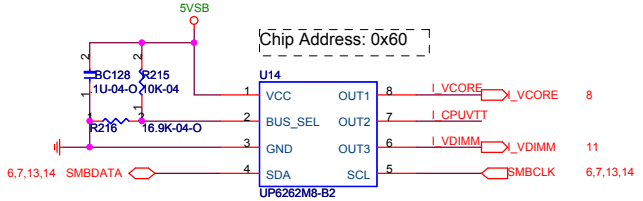
Rds(on) = 3m Ohm

OCP Level Selection *

Rocp(ohm)	open	42K	26K	10K
Vocp(mV)	-375	-300	-225	-150
Iocp(A)	125	100	75	50



uP6262的電流輸出與ΔVout的關系如下:
選取從uP6262輸出的方向爲正, 則,VCORECPUVTT 的ΔVout爲:
ΔVout = -Ic * RFB;
RFB爲:
1. For VCORE, RFB = Rvcore =499 OHM;
2. For CPUVTT, RFB = Rb = 1K;
3. For VDIMM, RFB=Rvdimm=1K

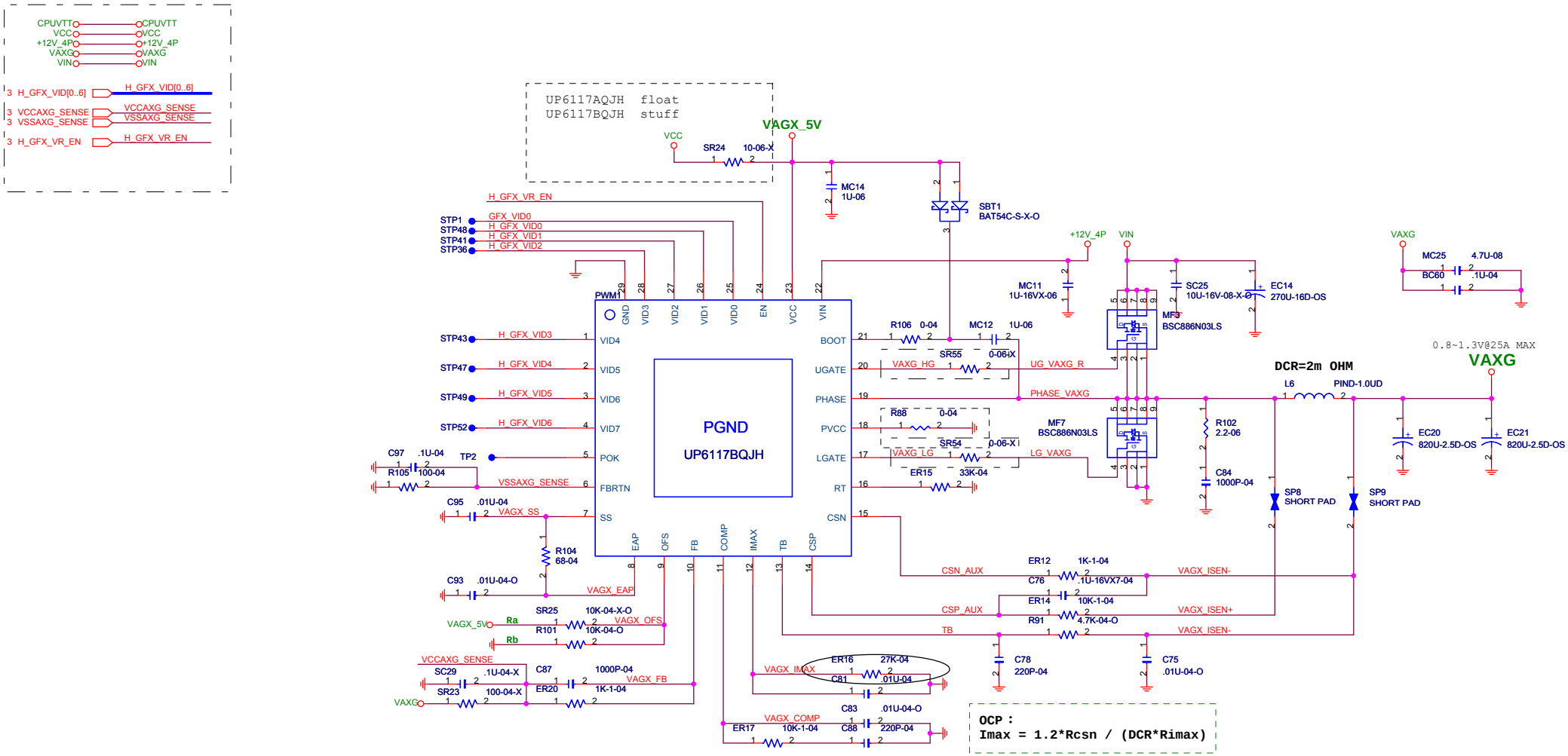


Elitegroup Computer Systems

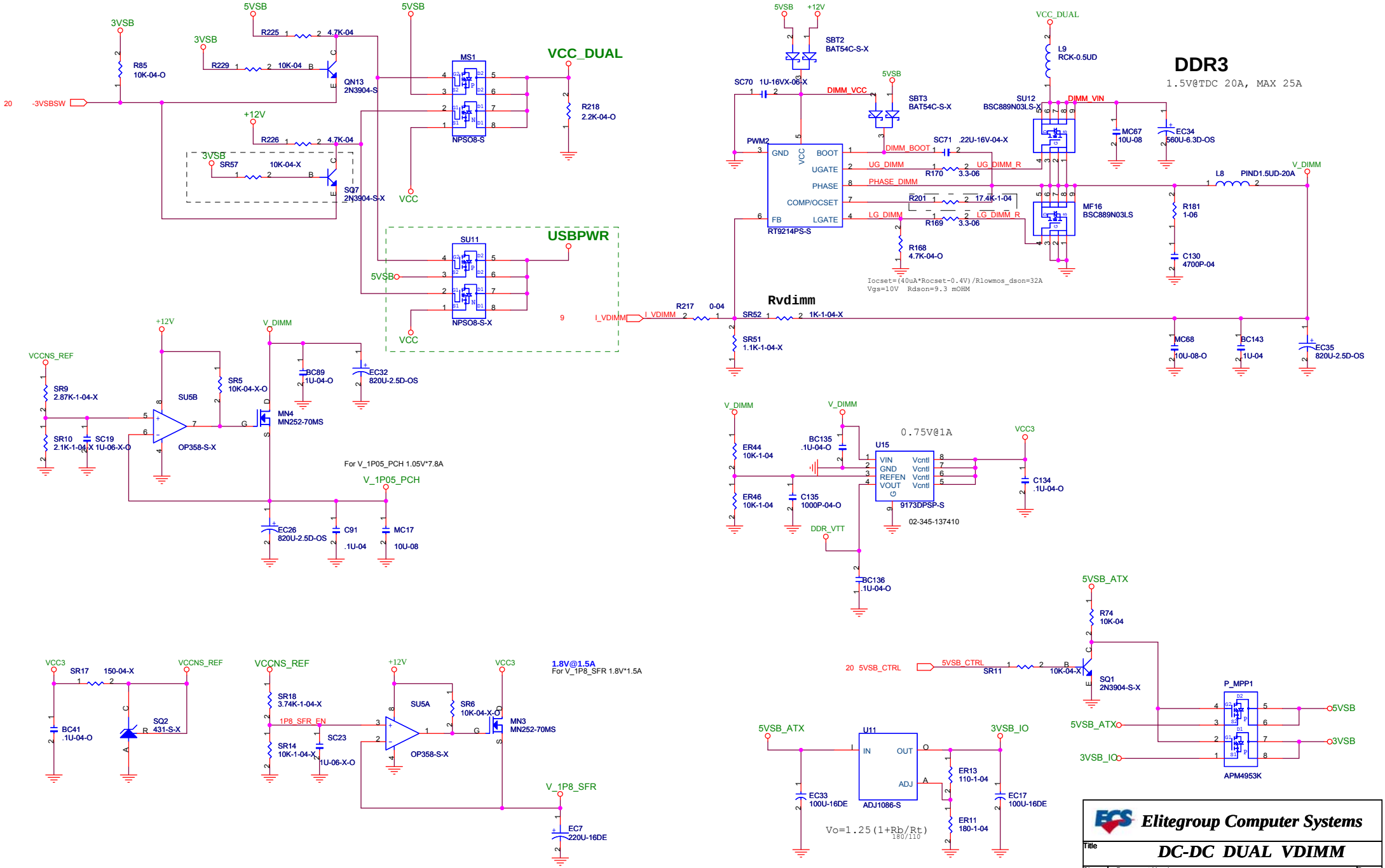
Title: CPUVTT UP6109ASA8S

Size: Custom | Document Number: H55H-I | Rev: 1.0A

Date: Friday, January 29, 2010 | Sheet 9 of 28

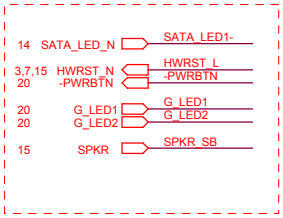


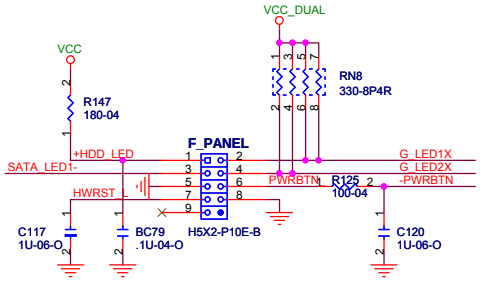
Elitegroup Computer Systems	
Title	CPU VAXG POWER UP6117A
Size: Custom	Document Number: H55H-I
Rev: 1.0A	
Date: Friday, January 29, 2010	Sheet 10 of 28

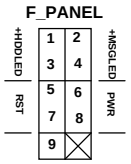

DDR3
1.5V@TDC 20A, MAX 25A
VCC_DUAL
USBPWR
Rvdimm
0.75V@1A
1.8V@1.5A
For V_1P8_SFR 1.8V*1.5A
For V_1P05_PCH 1.05V*7.8A
V_1P05_PCH
V_1P8_SFR
Elitegroup Computer Systems
DC-DC DUAL VDIMM
H55H-I
Monday, February 01, 2010

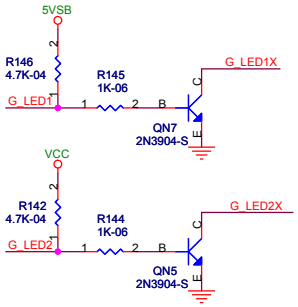
FRONT PANEL

External Connection





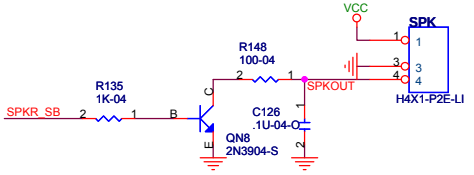




	S0	S1	S3	S4	S5
G_LED1	L	B	B	L	L
G_LED2	H	H	L	L	L
	G	GB	YB	OFF	OFF

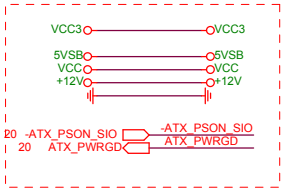
B:Blinking

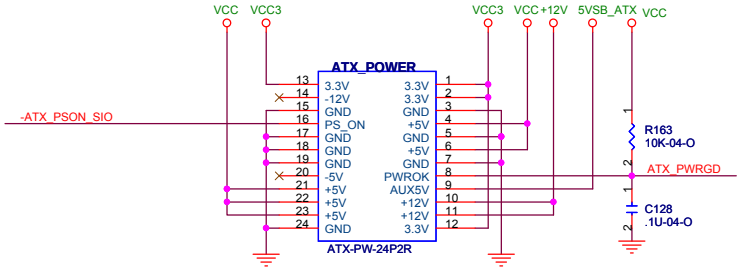
BUZZER SPK Colay

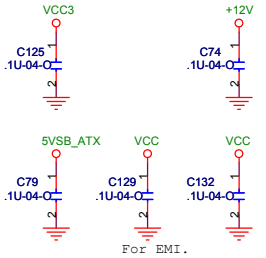


POWER CONNECTOR

External Connection

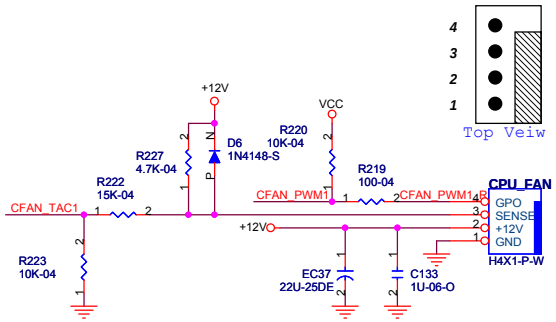


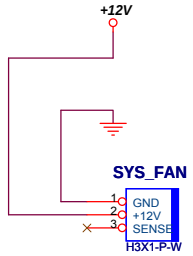


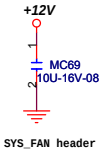


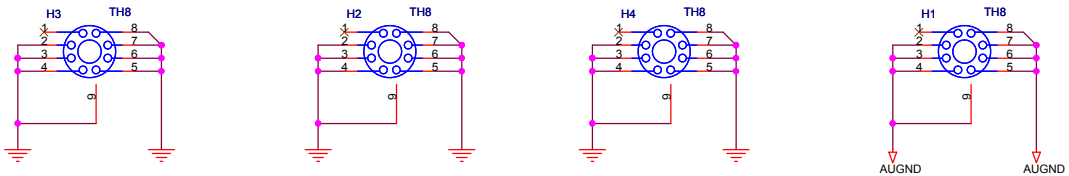
FAN

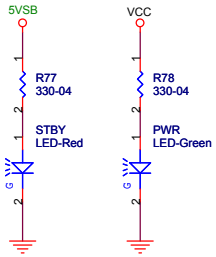
External Connection











Elitegroup Computer Systems

Title: Front Panel,FAN,PowerConn

Size	Document Number	Rev
Custom	H55H-I	1.0A

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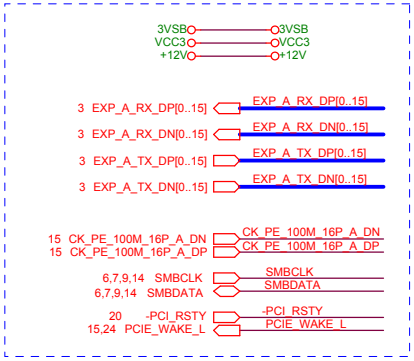
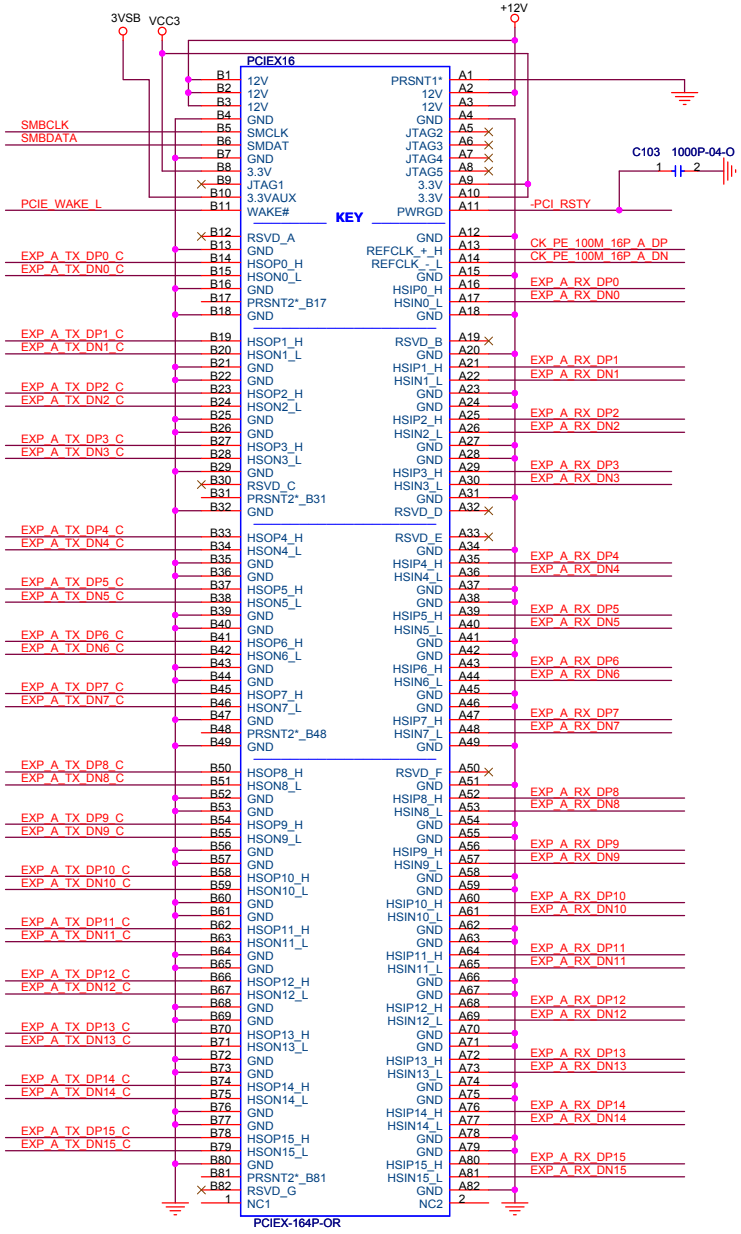
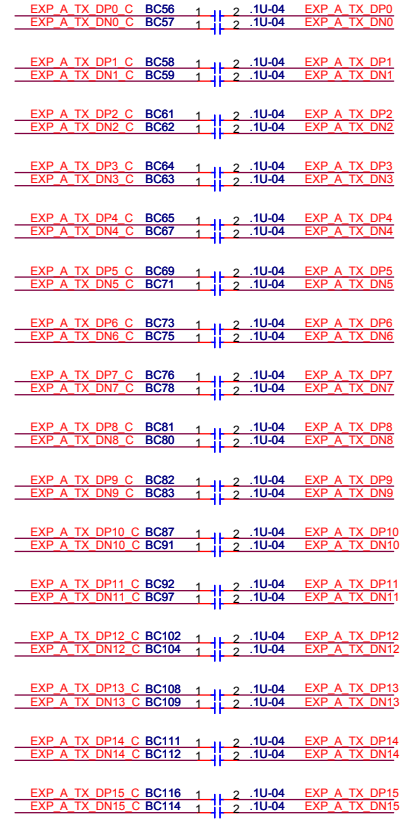
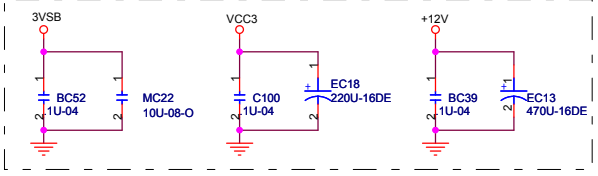
PCIEX16
External Connection







Please place the caps close to PCI-EX16 Slot.



Elitegroup Computer Systems

Title	PCIEX16 slot	
Size: Custom	Document Number: H55H-I	Rev: 1.0A
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PCH RX CONNECT WITH CPU TX

EDS1.0 P209:USB Port 6 and 7 may not be available in all Ibex Peak SKUs.

PCH-1

PCH-2

DISPLAY LINK

DMI INTERFACE

SATA

SPI_MOSI # Low : TPM disable

EDS_SU_1_17 P20
H55 PCIe* ports 7 and 8 are disabled

CRB V1.1 EDS1.1 P279
High: Enable Intel AT-d
Low: Disable Intel AT-d

High: DC Coup TX/RX to VCC
Low: DMI Termination Voltage

Width 20 mils

Boot Select Straps
(Weak Internal PullUps)

Boot Device	GNT1	GNT0
LPC	0	0
PCI	0	1
NAND	1	0
*SPI	1	1

IBEXPEAK_PCH

1 OF 6

2 OF 6

PDG1.1 427

Elitegroup Computer Systems

Title: PCH PCI/USB/SATA/PCIE/DMI

Size: Custom | Document Number: H55H-I | Rev: 1.0A

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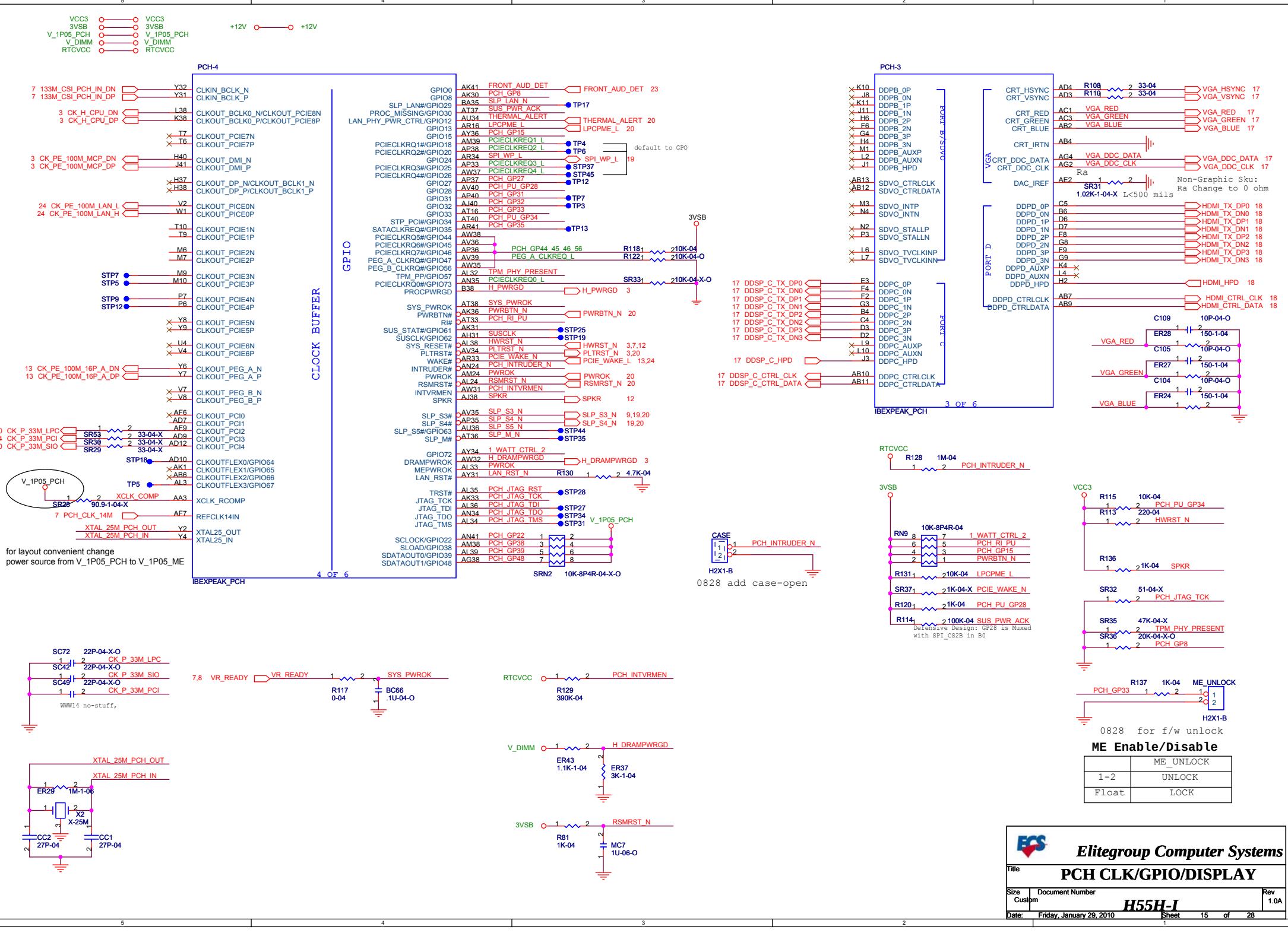
VCC3
3VSB
V_1P05_PCH
V_DIMM
RTCVCC
+12V
PCH-4
CLOCK BUFFER
GPIO
IBEXPEAK_PCH
4 OF 6
PCH-3
IBEXPEAK_PCH
3 OF 6
PORT B/SDVO
PORT C
PORT D
VGA
CLKIN_BCLK_N
CLKIN_BCLK_P
CLKOUT_BCLK0_N/CLKOUT_PCIE8N
CLKOUT_BCLK0_P/CLKOUT_PCIE8P
CLKOUT_PCIE7N
CLKOUT_PCIE7P
CLKOUT_DMI_N
CLKOUT_DMI_P
CLKOUT_DP_N/CLKOUT_BCLK1_N
CLKOUT_DP_P/CLKOUT_BCLK1_P
CLKOUT_PICE0N
CLKOUT_PICE0P
CLKOUT_PCIE1N
CLKOUT_PCIE1P
CLKOUT_PCIE2N
CLKOUT_PCIE2P
CLKOUT_PCIE3N
CLKOUT_PCIE3P
CLKOUT_PCIE4N
CLKOUT_PCIE4P
CLKOUT_PCIE5N
CLKOUT_PCIE5P
CLKOUT_PCIE6N
CLKOUT_PCIE6P
CLKOUT_PEG_A_N
CLKOUT_PEG_A_P
CLKOUT_PEG_B_N
CLKOUT_PEG_B_P
CLKOUT_PCI0
CLKOUT_PCI1
CLKOUT_PCI2
CLKOUT_PCI3
CLKOUT_PCI4
CLKOUTFLEX0/GPIO64
CLKOUTFLEX1/GPIO65
CLKOUTFLEX2/GPIO66
CLKOUTFLEX3/GPIO67
XCLK_RCOMP
REFCLK14IN
XTAL25_OUT
XTAL25_IN
GPIO0
GPIO8
SLP_LAN#/GPIO29
PROC_MISSING/GPIO30
LAN_PHY_PWR_CTRL/GPIO12
GPIO13
GPIO15
PCIECLKRQ1#/GPIO18
PCIECLKRQ2#/GPIO20
GPIO24
PCIECLKRQ3#/GPIO25
PCIECLKRQ4#/GPIO26
GPIO27
GPIO28
GPIO31
GPIO32
GPIO33
STP_PCI#/GPIO34
SATACLKREQ#/GPIO35
PCIECLKRQ5#/GPIO44
PCIECLKRQ6#/GPIO45
PCIECLKRQ7#/GPIO46
PEG_A_CLKRQ#/GPIO47
PEG_B_CLKRQ#/GPIO56
TPM_PP/GPIO57
PCIECLKRQ0#/GPIO73
PROCPWRGD
SYS_PWROK
PWRBTN#
RI#
SUS_STAT#/GPIO61
SUSCLK/GPIO62
SYS_RESET#
PLTRST#
WAKE#
INTRUDER#
PWROK
RSMRST#
INTVRMEN
SPKR
SLP_S3#
SLP_S4#
SLP_S5#/GPIO63
SLP_M#
GPIO72
DRAMPWROK
MEPWROK
LAN_RST#
TRST#
JTAG_TCK
JTAG_TDI
JTAG_TDO
JTAG_TMS
SCLOCK/GPIO22
SLOAD/GPIO38
SDATAOUT0/GPIO39
SDATAOUT1/GPIO48
FRONT_AUD_DET
PCH_GP8
SLP_LAN_N
SUS_PWR_ACK
THERMAL_ALERT
LPCPME_L
PCH_GP15
PCH_GP27
PCH_PU_GP28
PCH_GP31
PCH_GP32
PCH_GP33
PCH_PU_GP34
PCH_GP35
SYS_PWROK
PWRBTN_N
PCH_RI_PU
SUSCLK
HWRST_N
PLTRST_N
PCIE_WAKE_N
PCH_INTRUDER_N
PWROK
RSMRST_N
PCH_INTVRMEN
SPKR
SLP_S3_N
SLP_S4_N
SLP_S5_N
SLP_M_N
1_WATT_CTRL_2
H_DRAMPWRGD
PWROK
LAN_RST_N
PCH_JTAG_RST
PCH_JTAG_TCK
PCH_JTAG_TDI
PCH_JTAG_TDO
PCH_JTAG_TMS
PCH_GP22
PCH_GP38
PCH_GP39
PCH_GP48
PCH_GP44_45_46_56
PEG_A_CLKREQ_L
TPM_PHY_PRESENT
H_PWRGD
SRN2
10K-8P4R-04-X-O
DDPB_0P
DDPB_0N
DDPB_1P
DDPB_1N
DDPB_2P
DDPB_2N
DDPB_3P
DDPB_3N
DDPB_AUXP
DDPB_AUXN
DDPB_HPD
SDVO_CTRLCLK
SDVO_CTRLDATA
SDVO_INTP
SDVO_INTN
SDVO_STALLP
SDVO_STALLN
SDVO_TVCLKINP
SDVO_TVCLKINN
DDPC_0P
DDPC_0N
DDPC_1P
DDPC_1N
DDPC_2P
DDPC_2N
DDPC_3P
DDPC_3N
DDPC_AUXP
DDPC_AUXN
DDPC_HPD
DDPC_CTRLCLK
DDPC_CTRLDATA
DDSP_C_TX_DP0
DDSP_C_TX_DN0
DDSP_C_TX_DP1
DDSP_C_TX_DN1
DDSP_C_TX_DP2
DDSP_C_TX_DN2
DDSP_C_TX_DP3
DDSP_C_TX_DN3
DDSP_C_HPD
DDSP_C_CTRL_CLK
DDSP_C_CTRL_DATA
CRT_HSYNC
CRT_VSYNC
CRT_RED
CRT_GREEN
CRT_BLUE
CRT_IRTN
CRT_DDC_DATA
CRT_DDC_CLK
DAC_IREF
DDPD_0P
DDPD_0N
DDPD_1P
DDPD_1N
DDPD_2P
DDPD_2N
DDPD_3P
DDPD_3N
DDPD_AUXP
DDPD_AUXN
DDPD_HPD
DDPD_CTRLCLK
DDPD_CTRLDATA
VGA_HSYNC
VGA_VSYNC
VGA_RED
VGA_GREEN
VGA_BLUE
VGA_DDC_DATA
VGA_DDC_CLK
HDMI_TX_DP0
HDMI_TX_DN0
HDMI_TX_DP1
HDMI_TX_DN1
HDMI_TX_DP2
HDMI_TX_DN2
HDMI_TX_DP3
HDMI_TX_DN3
HDMI_HPD
HDMI_CTRL_CLK
HDMI_CTRL_DATA
Non-Graphic Sku:
Ra Change to 0 ohm
L<500 mils
for layout convenient change
power source from V_1P05_PCH to V_1P05_ME
CASE
H2X1-B
0828 add case-open
RTCVCC
3VSB
VCC3
RN9
10K-8P4R-04
Defensive Design: GP28 is Muxed with SPI_CS2B in B0
WWW14 no-stuff,
0828 for f/w unlock
ME Enable/Disable
ME_UNLOCK
1-2
UNLOCK
Float
LOCK
Elitegroup Computer Systems
PCH CLK/GPIO/DISPLAY
Size
Custom
Document Number
H55H-I
Rev
1.0A
Date: Friday, January 29, 2010
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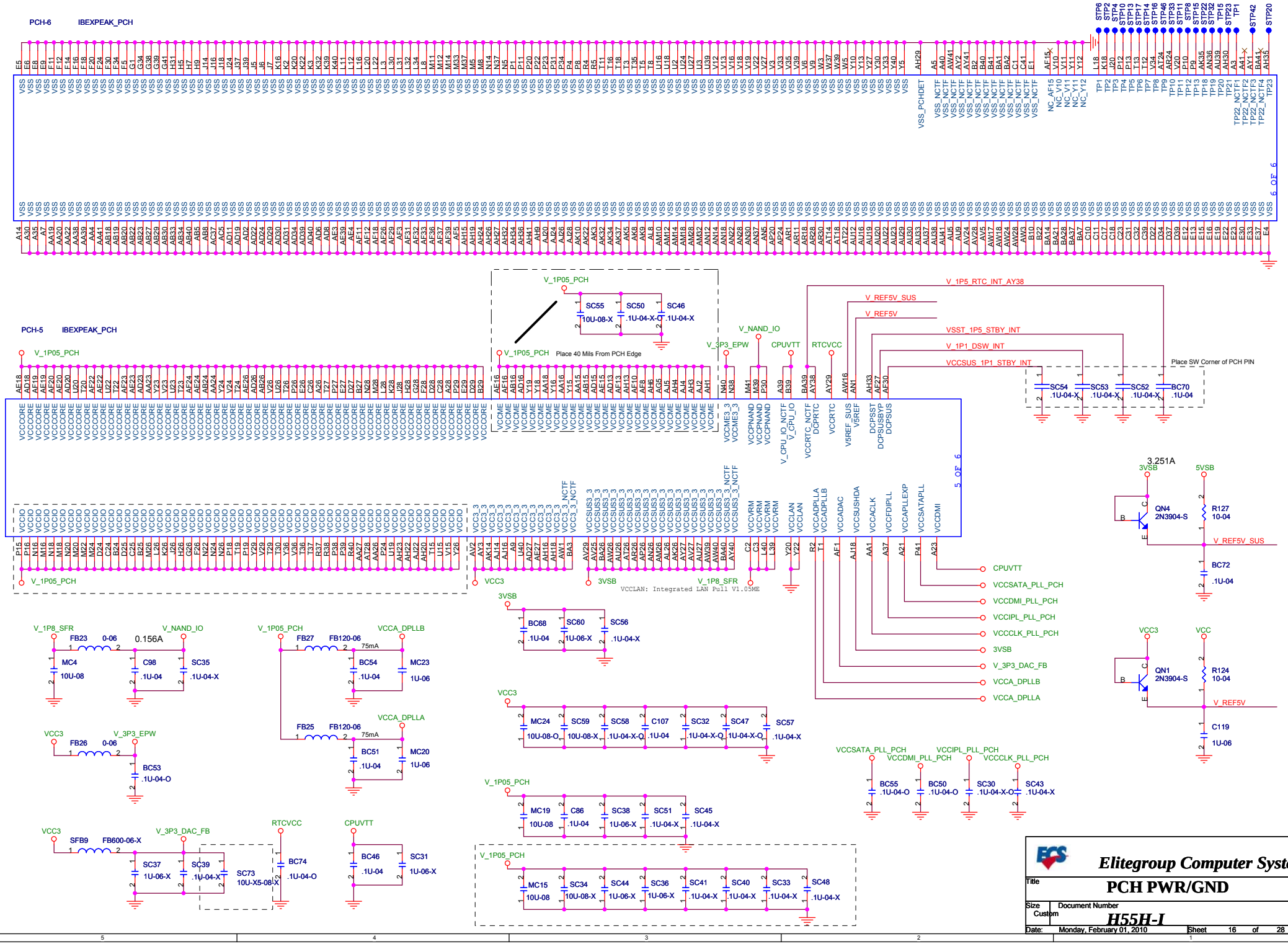

Elitegroup Computer Systems

Title: PCH PWR/GND

Size: Custom | Document Number: H55H-I | Rev: 1.0A

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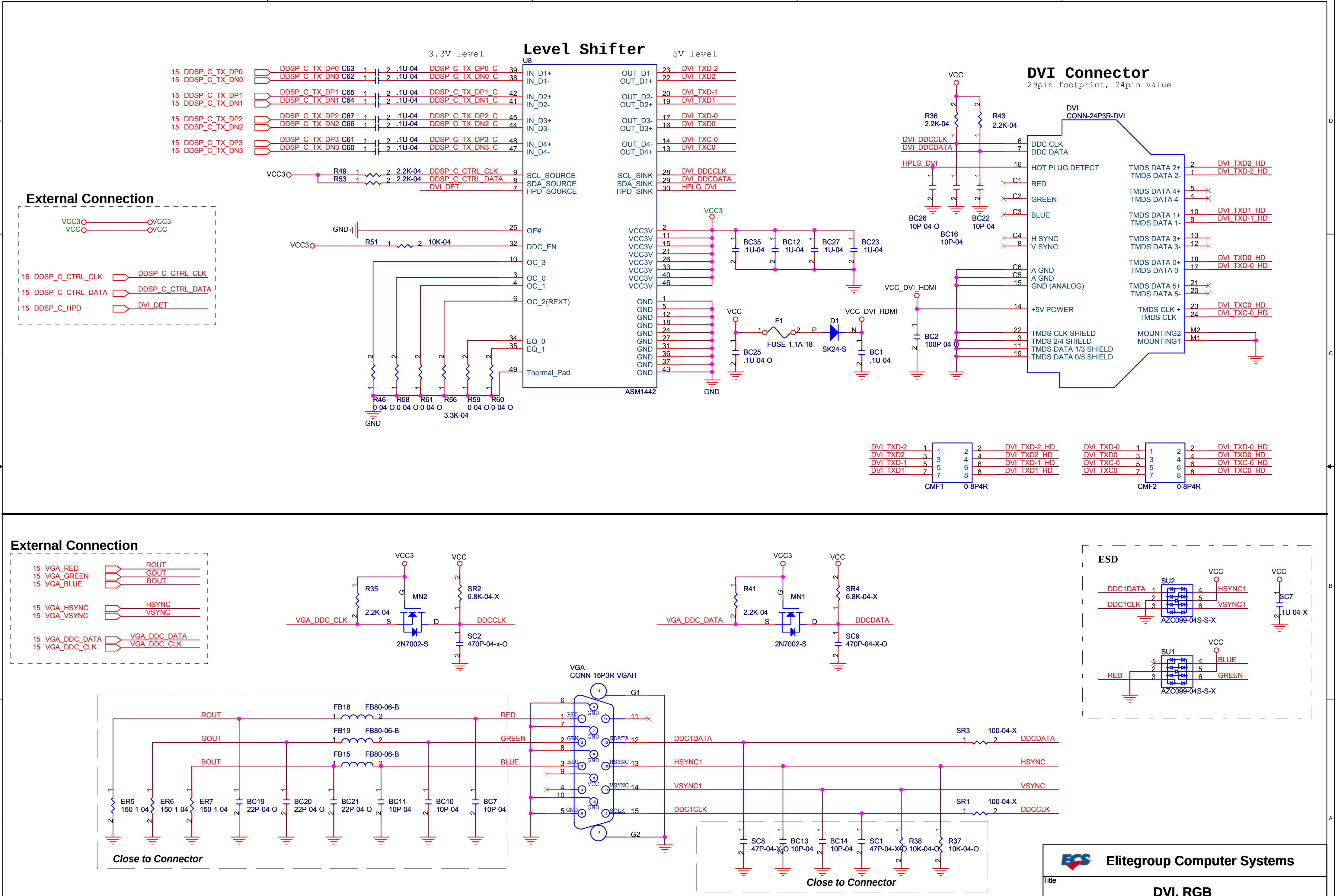

Level Shifter
3.3V level
5V level
U8
ASM1442
IN_D1+ IN_D1- IN_D2+ IN_D2- IN_D3+ IN_D3- IN_D4+ IN_D4-
OUT_D1- OUT_D1+ OUT_D2- OUT_D2+ OUT_D3- OUT_D3+ OUT_D4- OUT_D4+
SCL_SOURCE SDA_SOURCE HPD_SOURCE
SCL_SINK SDA_SINK HPD_SINK
OE# DDC_EN OC_3 OC_0 OC_1 OC_2(REXT) EQ_0 EQ_1 Thermal_Pad
15 DDSP_C_TX_DP0
15 DDSP_C_TX_DN0
15 DDSP_C_TX_DP1
15 DDSP_C_TX_DN1
15 DDSP_C_TX_DP2
15 DDSP_C_TX_DN2
15 DDSP_C_TX_DP3
15 DDSP_C_TX_DN3
DVI_TXD-2 DVI_TXD2 DVI_TXD-1 DVI_TXD1 DVI_TXD-0 DVI_TXD0 DVI_TXC-0 DVI_TXC0
DVI_DDCCLK DVI_DDCDATA HPLG_DVI
R49 R53 2.2K-04
R51 10K-04
R46 R68 R61 R56 R59 R60
0-04-O 3.3K-04
BC35 BC12 BC27 BC23 .1U-04
F1 FUSE-1.1A-18
D1 SK24-S
BC25 .1U-04-O
BC1 .1U-04
VCC_DVI_HDMI
External Connection
15 DDSP_C_CTRL_CLK
15 DDSP_C_CTRL_DATA
15 DDSP_C_HPD
DVI_DET
DVI Connector
29pin footprint, 24pin value
DVI CONN-24P3R-DVI
DDC CLK
DDC DATA
HOT PLUG DETECT
RED GREEN BLUE
H SYNC V SYNC
A GND A GND GND (ANALOG)
+5V POWER
TMDS CLK SHIELD
TMDS 2/4 SHIELD
TMDS DATA 1/3 SHIELD
TMDS DATA 0/5 SHIELD
TMDS DATA 2+ TMDS DATA 2-
TMDS DATA 4+ TMDS DATA 4-
TMDS DATA 1+ TMDS DATA 1-
TMDS DATA 3+ TMDS DATA 3-
TMDS DATA 0+ TMDS DATA 0-
TMDS DATA 5+ TMDS DATA 5-
TMDS CLK + TMDS CLK -
MOUNTING2 MOUNTING1
R36 2.2K-04
R43 2.2K-04
BC26 10P-04-O
BC16 10P-04
BC22 10P-04
BC2 100P-04-O
DVI_TXD2_HD DVI_TXD-2_HD DVI_TXD1_HD DVI_TXD-1_HD DVI_TXD0_HD DVI_TXD-0_HD DVI_TXC0_HD DVI_TXC-0_HD
CMF1 0-8P4R
CMF2 0-8P4R
External Connection
15 VGA_RED
15 VGA_GREEN
15 VGA_BLUE
15 VGA_HSYNC
15 VGA_VSYNC
15 VGA_DDC_DATA
15 VGA_DDC_CLK
ROUT GOUT BOUT HSYNC VSYNC
R35 2.2K-04
MN2 2N7002-S
SR2 6.8K-04-X
SC2 470P-04-x-O
R41 2.2K-04
MN1 2N7002-S
SR4 6.8K-04-X
SC9 470P-04-X-O
VGA_DDC_CLK DDCCLK
VGA_DDC_DATA DDCDATA
ESD
SU2 AZC099-04S-S-X
SU1 AZC099-04S-S-X
DDC1DATA DDC1CLK HSYNC1 VSYNC1
SC7 1U-04-X
VGA CONN-15P3R-VGAH
FB18 FB19 FB15 FB80-06-B
ER5 ER6 ER7 150-1-04
BC19 BC20 BC21 22P-04-O
BC11 BC10 BC7 10P-04
Close to Connector
SR3 100-04-X
SR1 100-04-X
SC8 47P-04-X-O
BC13 10P-04
BC14 10P-04
SC1 47P-04-X-O
R38 10K-04-O
R37 10K-04-O
Close to Connector

Elitegroup Computer Systems

Title: DVI, RGB

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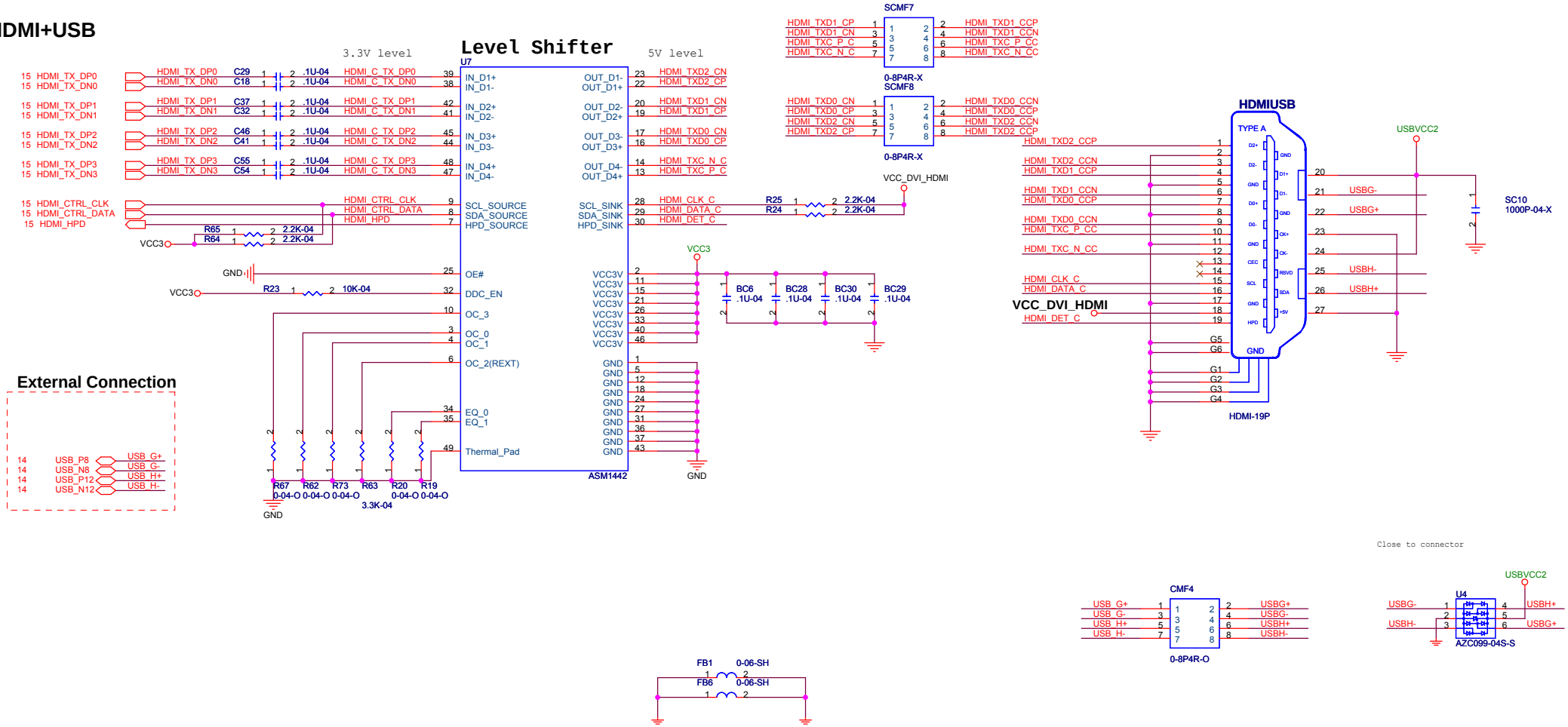
HDMI+USB



Title	HDMI+USB
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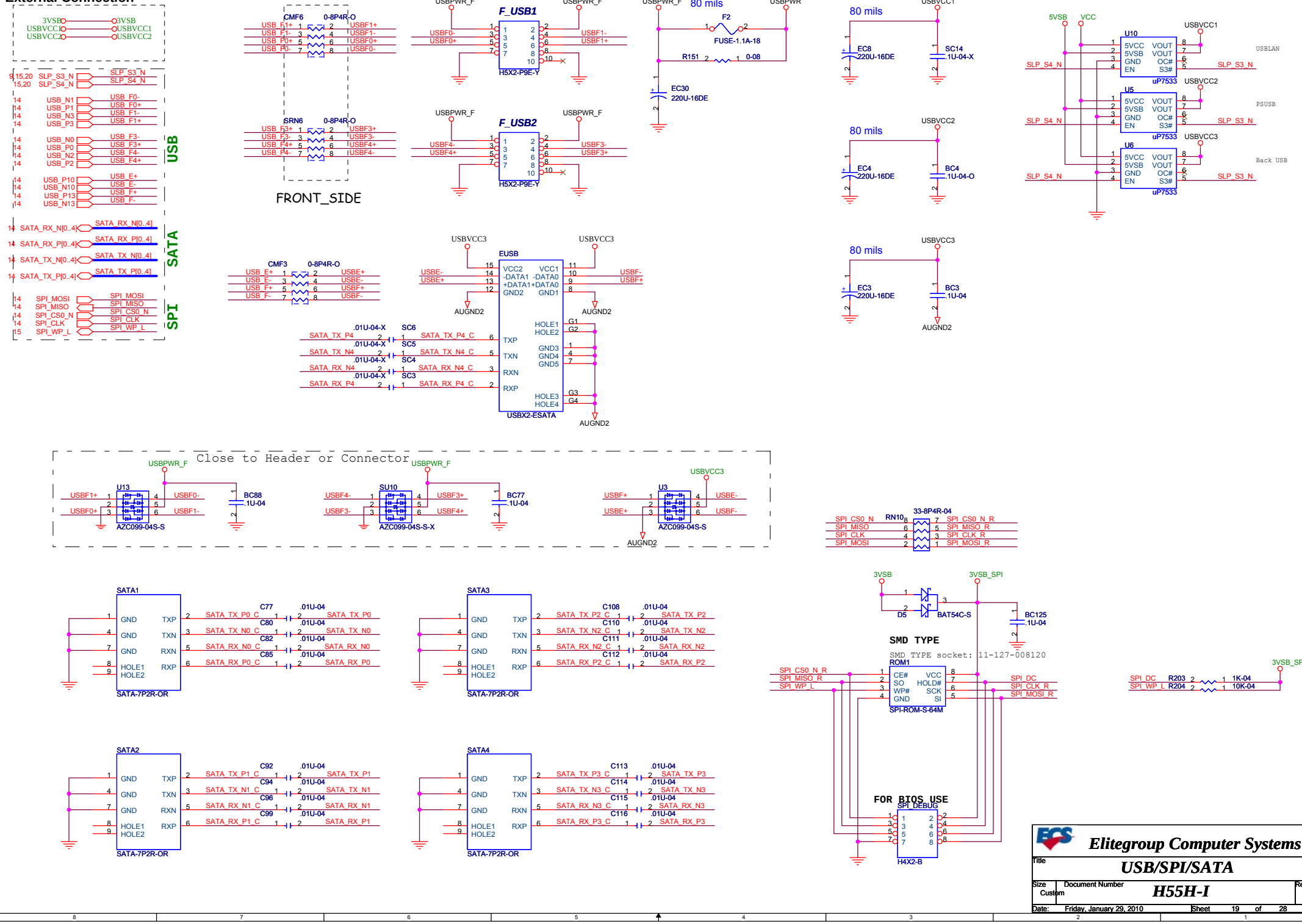
External Connection



Elitegroup Computer Systems			
Title: USB/SPI/SATA			
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External Connection

3VSB 3VSB
5VSB 5VSB
VCC3 VCC3
VBAT_IO VBAT_IO
VCC VCC

15 LPCPME_L — LPCPME_L
14 L_FRAME_N — -LPC_FRAME
14 L_AD[0..3] — L_AD[0..3]
LPC

15 RSMRST_N — RSMRST_N
12 -PWRBTN — -PWRBTN
15 PWRBTN_N — PWRBTN_N
9,15,19 SLP_S3_N — -SLP3
15,19 SLP_S4_N — SLP4_L

12 -ATX_PSON_SIO — -ATX_PSON_SIO
12 ATX_PWRGD — ATX_PWRGD
15 PWROK — PWROK
3,15 PLTRST_N — PLTRST_N
13 -PCI_RSTY — -PCI_RSTY
24 -PCIE_RSTY — -PCIE_RSTY

14 KBRST_N — -KB_RST
14 A20GATE — A20GATE_L
14 SER_IRQ — SERIRQ
11 -3VSBSW — -3VSBSW
3,14 H_PECI — PECI
12 CFAN_TAC1 — CFAN_TAC1
12 CFAN_PWM1 — CFAN_PWM1

15 CK_P_33M_SIO — SIO_PCLK
7 CK_48M_SIO — SIO_CLK48

12 G_LED1 — G_LED1
12 G_LED2 — G_LED2

14 SML1CLK — SML1CLK
14 SML1DATA — SML1DATA

11 5VSB_CTRL — 5VSB_CTRL

15 THERMAL_ALERT — THERMAL_ALERT

VCC3 — SFB8 FB120-06-X — SC22 10U-08-X — SC21 .1U-04-X

HW_VCC
ATXPG
HW_VIN0
HW_VIN1
HW_VIN2

RTS1
SOUT1
DTR1

R80 10K-1-04
BC37 .1U-04
RT1 NTC-10K-1-06

IO

3VSB_IO — BC45 .1U-04
CFAN_TAC1
CFAN_PWM1
THERMAL_ALERT
5VSB_CTRL
G_LED1
G_LED2
-PCI_RSTY

3VSB_IO — BC38 .1U-04 — BC43 22N-04

SC24 .1U-04-X-O

PLTRST_N
SERIRQ
-LPC_FRAME
L_AD0
L_AD1
L_AD2
L_AD3
-KB_RST
A20GATE_L
SIO_PCLK
SIO_CLK48

BC42 10P-04-O
BC44 10P-04-O

IT8758E
64-LQFP

CTS1# 1
3VSB 2
FAN_TAC1 3
FAN_CTL1 4
FAN_TAC2/GP52 5
FAN_CTL2/GP51 6
GNDD 7
5VSB_CTRL 8
GP21 9
GP20 10
CIRTX1 11
PCIRST2#/GP11 12
3VSB 13
VCORE 14
LRESET 15
SERIRQ 16

TMPIN2 48
TSD- 47
GNDA 46
RSMRST#/CIRRX1/GP55 45
PCIRST3#/GP10 44
MCLK/GP56 43
MDAT/GP57 42
KCLK/GP60 41
KDAT/GP61 40
3VSBSW#/GP40 39
PWRGD3_150ms 38
SUSC#/GP53 37
PSON#/GP42 36
PANSHW#/GP43 35
PME#/GP54 34
PWRON#/GP44 33

HM_AGND
RSMRST_N
-PCIE_RSTY
MCLK
MDAT
KCLK
KDATA
-3VSBSW
PWROK
SLP4_L
-ATX_PSON_SIO
-PWRBTN
LPCPME_L
PWRBTN_N

-SLP3
3VSB
VBAT_IO
3VSB_IO
SML1CLK
SML1DATA

MC5 10U-08
BC40 .1U-04
MC18 .1U-08

Place Close to SIO

VCC — BC113 .1U-04 — FOR EMI

VCC — SR19 10K-04-X — SQ3 2N3904-S-X
VCC3 — SR16 10K-04-X — SQ4 2N3904-S-X
ATXPG
ATX_PWRGD — SR15 4.7K-04-X

VCC3 — LPC_DEBUG
L_AD3 — LAD3
L_AD2 — LAD2
L_AD1 — LAD1
L_AD0 — LAD0
GND
VCC3
LFRAME- — -LPC_FRAME
PCIRST- — PCIRST_L — PCIRST_L 14
CLK_DEBUG — CK_P_33M_LPC — CK_P_33M_LPC 15
H5X2-P10E

HW_VCC — SR12 7.15K-1-04-X — SR13 10K-1-04-X — SC20 1U-04-X — VCC

H/W Monitor

HW_VIN0 — R69 10K-04 — BC31 .1U-04-O — VCORE
HW_VIN1 — R72 10K-04 — BC34 .1U-04-O — V_DIMM
HW_VIN2 — R75 10K-04 — BC36 .1U-04-O — VAXG

LPC Pull-ups

Note:
Most pull-ups are provided

VCC3
PWROK — R86 10K-04
A20GATE_L — R96 1K-04

3VSB_IO
-ATX_PSON_SIO — R89 4.7K-04
-PWRBTN — R94 4.7K-04
5VSB_CTRL — R84 4.7K-04

VCC
RTS1
SOUT1
DTR1
SRN1 10K-8P4R-04-X

MCLK
MDAT
KCLK
KDATA
RN1 10K-8P4R-04

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Title: SIO-IT8758E		
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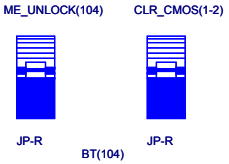
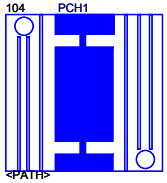
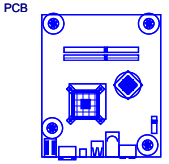
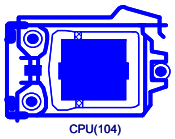
1080 : trace width 4 mil 50 ohm
Trace Length 3150 mils
Spacing: 1.clearance to itself 50/4/50(S:W:S)
2.clearance to other signal 3W





Main Part:20-120-010991





Elitegroup Computer Systems		
Title: 104, COM, PSUSB		
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External Connection

5VSB — 5VSB
VCC — VCC
+12V — +12V
VCC3 — VCC3

14 HDA_RST_N — AZ_RST-
14 HDA_BCLK — AZ_BIT_CLK
14 HDA_SYNC — AZ_SYNC
14 HDA_SDIN0 — AZ_SDAIN
14 HDA_SDO — AZ_SDOUT
15,23 FRONT_AUD_DET — FRONT_AUD_DET 15,23

AGND AGND

FB9 0-06-SH
FB22 0-06-SH
AGND

Verfout bias for stereo microphone.

MIC1_VREFO-R — R40 2.2K-04 — MIC1_R
MIC1_VREFO-L — R39 2.2K-04 — MIC1_L

D3 BAT54A-S
MIC2-VREFO — R6 4.7K-04 — MIC2_R
R5 4.7K-04 — MIC2_L

D2 BAT54A-S
LINE2-VREFO — R4 4.7K-04 — LINE2_R
R3 4.7K-04 — LINE2_L

5VSB — FB4 FB120-06 — MC2 10U-08 — AUGND

23 CEN_JD — ER3 10K-1-04
23 SIDE_SURR_JD — ER1 5.1K-1-04
23 MIC2_JD — ER8 20K-1-04
23 LINE2_JD — ER4 39.2K-1-04 — F_SENSE

23 FRONT_L — EC2 100U-16DEL
23 FRONT_R — EC1 100U-16DEL

MIC1_VREFO-R
LINE2-VREFO
MIC2-VREFO
MIC1_VREFO-L
MC1 10U-X5-08

+5VA — AUGND
MC3 10U-08 — C31 .1U-04 — AUGND AUGND

+5VA — SC11 10U-08-X — C34 .1U-04 — AUGND AUGND

CODEC

ALC892

37	VREF-R	36	PORT-D_R
38	AVDD2	35	PORT-D_L
39	SURR-OUT-L	34	SENSE B
40	JDREF	33	Sense-C
41	SURR-OUT-R	32	MIC1-VREF-R
42	AVSS2	31	Line2-VREFO
43	CEN-PORT-G_L	30	MIC2-VREFO
44	LFE-PORT-G_R	29	LINE1-VREF/LDOVDD*
45	SIDESURR-OUT-L	28	MIC1-VREF-L
46	SIDESURR-OUT-R	27	VREF
47	S/PDIF IN / EAPD	26	AVSS1
48	S/PDIF-OUT	25	AVDD1

1	DVDD_CORE	12	PC_BEEP
2	GPIO0/SPDIF02	11	RESET#
3	GPIO1	10	SYNC
4	DVSS	9	DVDD-IO
5	SDO	8	SDI
6	BCLK	7	DVSS

24	LINE1-R	C39	10U-X5-08 — LINE1_R — LINE1_R 23
23	LINE1-L	C47	10U-X5-08 — LINE1_L — LINE1_L 23
22	MIC1-R	C49	10U-X5-08 — MIC1_R — MIC1_R 23
21	MIC1-L	C56	10U-X5-08 — MIC1_L — MIC1_L 23
20	CD-R		
19	CD-G		
18	CD-L		
17	MIC2-R	EC5	100U-16DEL — MIC2_R — MIC2_R 23
16	MIC2-L	EC6	100U-16DEL — MIC2_L — MIC2_L 23
15	LINE2-R	EC9	100U-16DEL — LINE2_R — LINE2_R 23
14	LINE2-L	EC10	100U-16DEL — LINE2_L — LINE2_L 23
13	SENSE A	SENSE-A	ER10 5.1K-1-04 — FRONT_JD 23
			SR8 10K-1-04-X — LINE1_JD 23
			ER9 20K-1-04 — MIC1_JD 23
			SR7 39.2K-1-04-X — SURR_JD 23

AGND
GND
close to CODEC

23 SURR_L — SC12 10U-X5-08-X
AUGND — ER2 20K-1-04 — VOHR
23 SURR_R — SC17 10U-X5-08-X
AUGND
23 CEN_OUT — SC13 10U-X5-08-X
23 LFE_OUT — SC18 10U-X5-08-X
23 SIDE_SURR_L — SC15 10U-X5-08-X
23 SIDE_SURR_R — SC16 10U-X5-08-X
23 SPDIF_OUT1 — SPDIF_OUT1

VCC3
C70 .1U-04 — MC9 10U-X5-08 — R82 0-04-O
C72 .1U-04
R83 22-04
C71 22P-04-O

23 SPDIF_OUT2
AZ_SDOUT
AZ_RST-
AZ_SYNC
AZ_SDAIN
AZ_BIT_CLK

Elitegroup Computer Systems	
Title	AUDIO VT1705 (CHIP)
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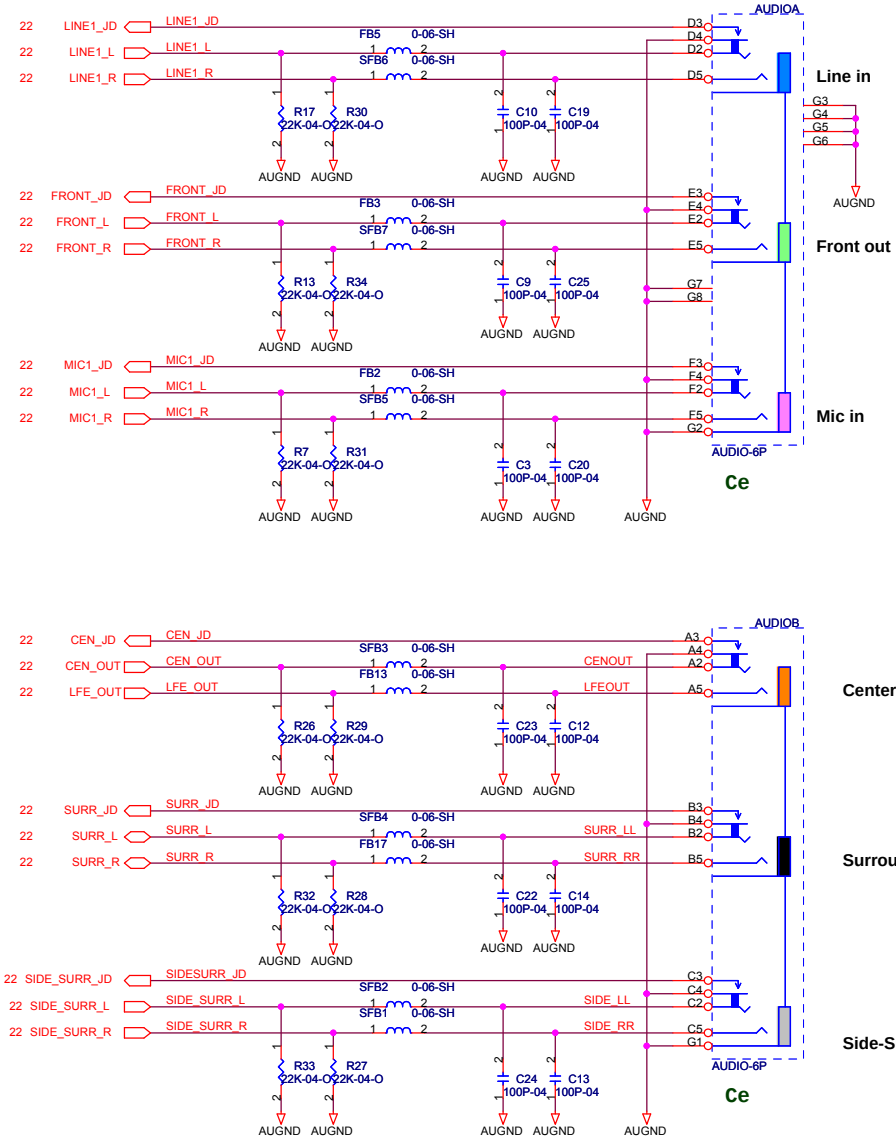
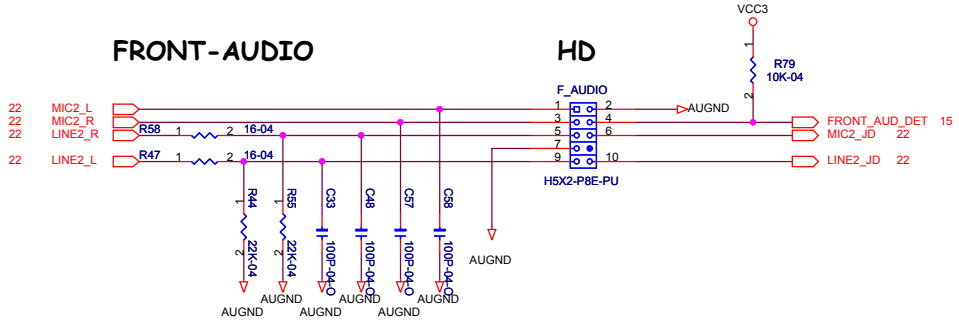
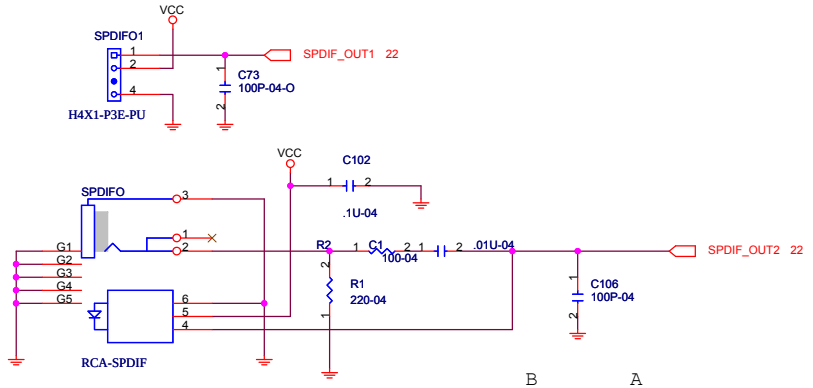
Rear Panel Onboard Analog I/O

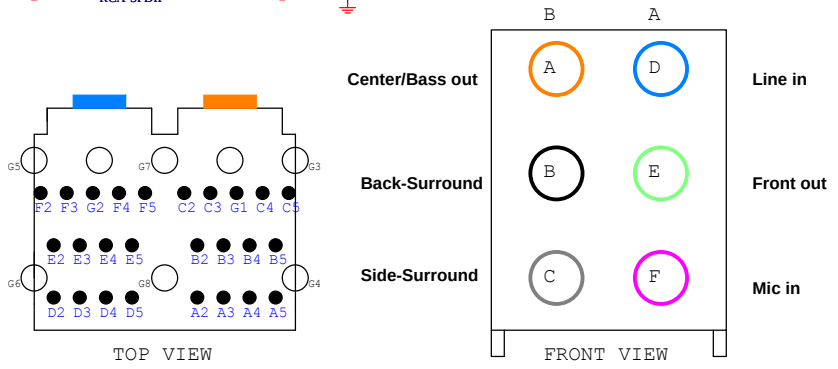


FRONT-AUDIO HD



SPDIF1-OUT





Elitegroup Computer Systems	
Title: Audio Connector	
Size: Custom	Document Number: H55H-I
Rev: 1.0A	
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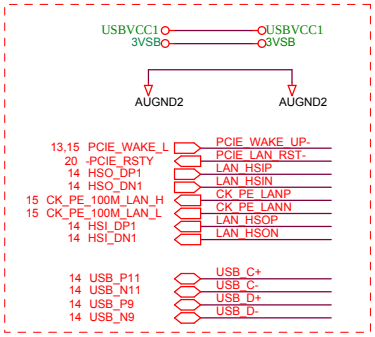
External Connection



When you found some bug, please inform Ren(ext:665) to update circuit.

新手提醒:

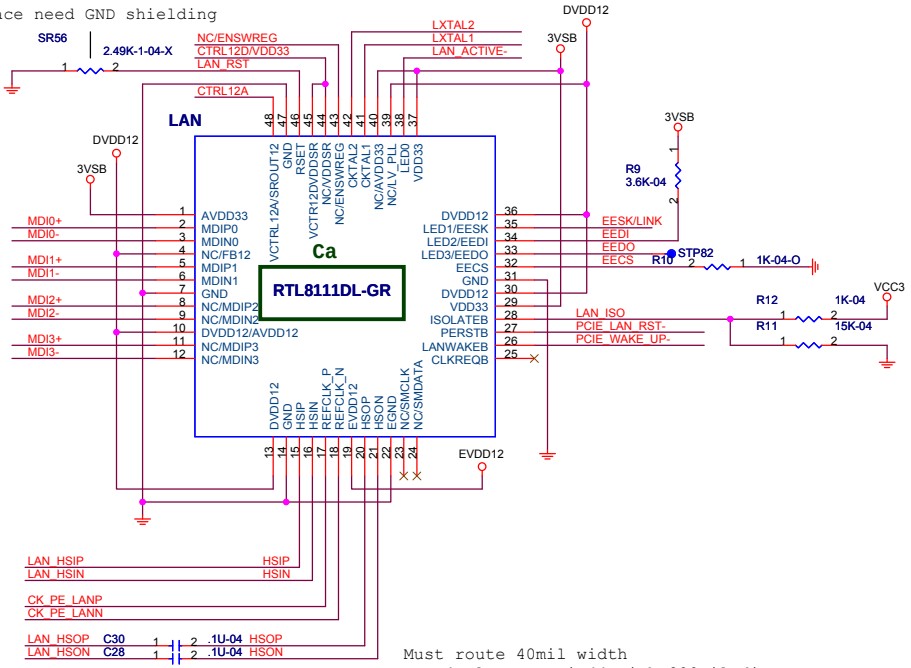
LAN_HSOP/N請接到SB的PCIE RX端

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

RSET電阻需close to LAN

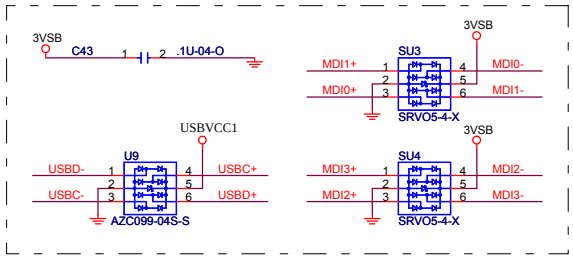
Trace need GND shielding

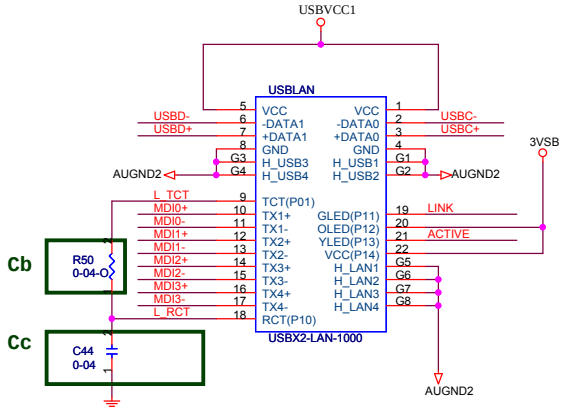


Must route 40mil width

La_C4 place at pin44 with 200mil distance

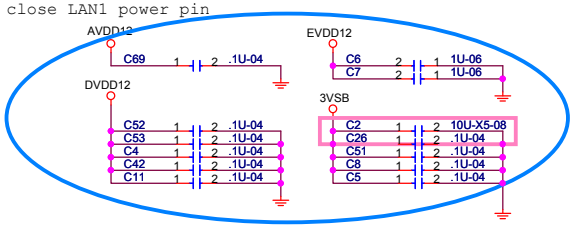
Close to connector

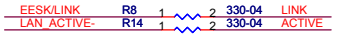


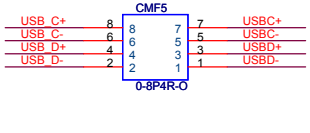


Link: Green on
Active: Yellow blinking
Link 10/100/1000: Green on
Active: Yellow blinking

close LAN1 power pin



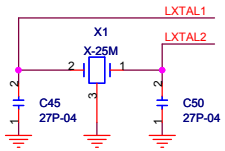


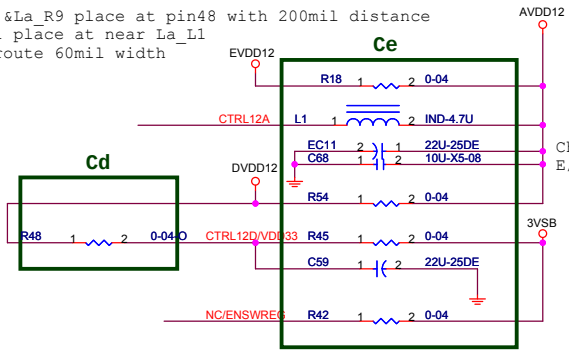


La_L1 &La_R9 place at pin48 with 200mil distance

La_EC1 place at near La_L1

Must route 60mil width





Choke near pin48,
E/C cap near Choke

BOM Difference

	RTL8111DL-GR 1000M	RTL8102EL-GR 10/100M
Ca	RTL8111DL-GR	RTL8102EL-GR
Cb	X	V
Cc	0-04	.01U-04
Cd	X	V
Ce	V	X(L1改0805 0 ohm)
Cf	USBX2-LAN-1000	USBX2-LAN-100

Power Difference

	RTL8111D	RTL8102E
AVDD33 VDD33	3.3V 3VSB供應	3.3V 3VSB供應
CTRL12A	SWitching Output	1.2V pinself 供應
DVDD12	1.2V CTRL12A供應	1.2V pinself 供應
EVDD12	1.2V CTRL12A供應	1.2V pinself 供應

Elitegroup Computer Systems

Title: PCIE LAN RTL8111DL&8102EL

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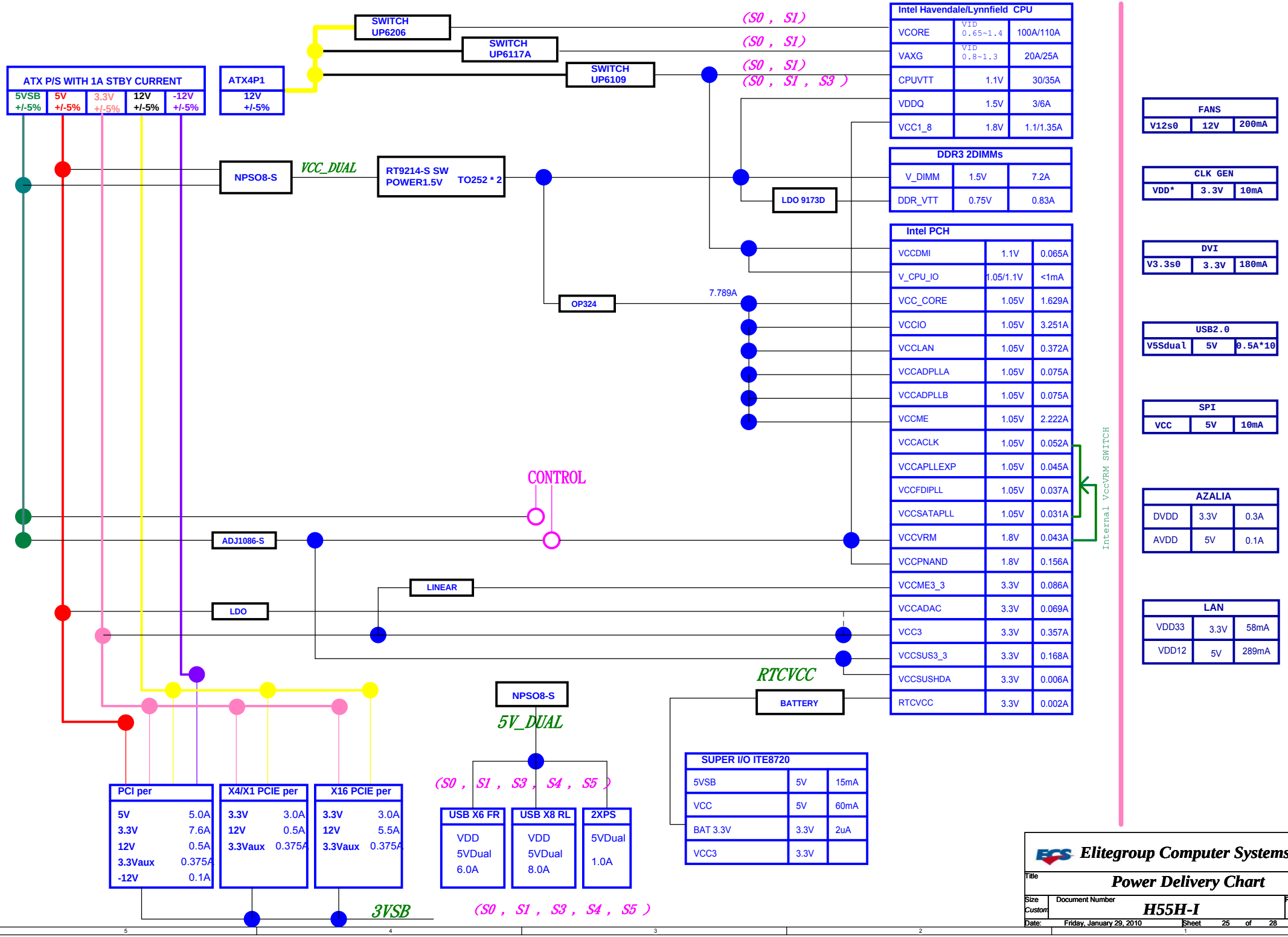
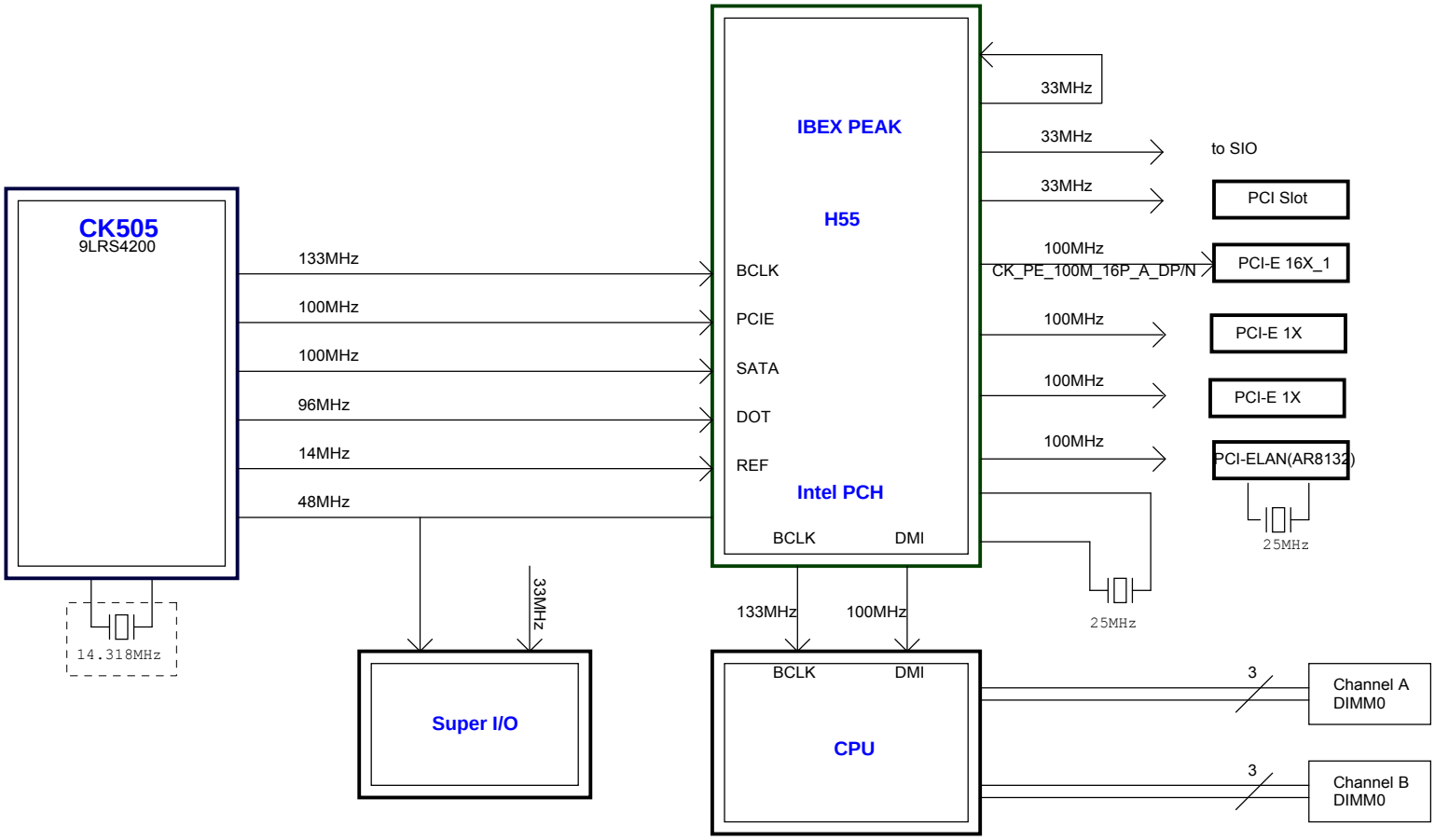


Elitegroup Computer Systems

Title: Power Delivery Chart

Size: Custom | Document Number: H55H-I | Rev: 1.0A

Date: Friday, January 29, 2010 | Sheet 25 of 28



Elitegroup Computer Systems

Title: Clock Distribution

Size	Document Number	Rev
Custom	H55H-I	1.0A

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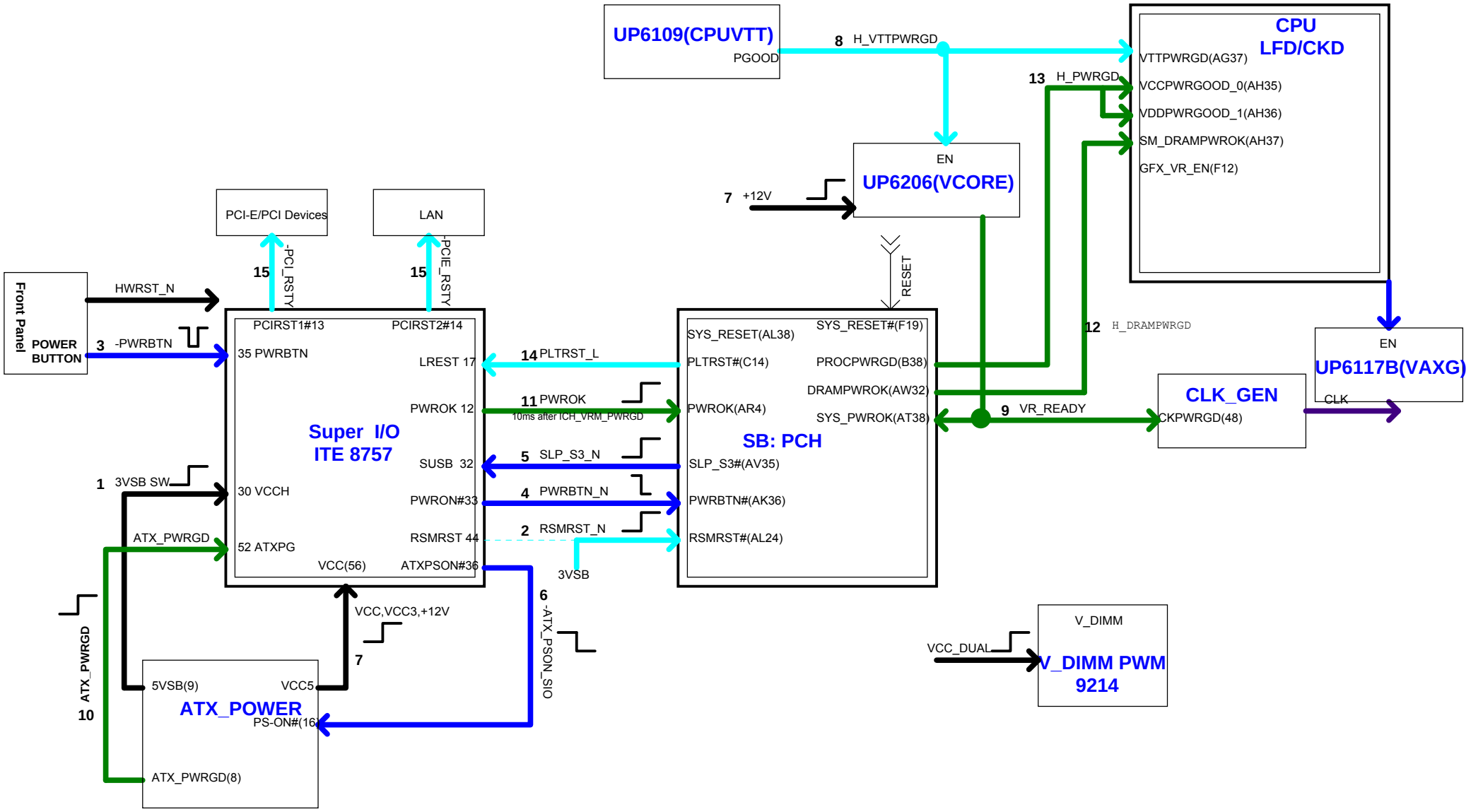

Elitegroup Computer Systems

Title: Power Sequencing Diagram

Size	Document Number	Rev
Custom	H55H-I	1.0A

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PCH STRAPS TABLE				
	H	L	DESCRIPTION	Default
PGNT-3	(inter pu)	*Top Boot Block(-O)	A16 SWAP OVERRIDE Low: OVERRIDE	TestPoint
PGNT-1, PGNT-0	BOOT_DEVICE / GNT0 / GNT1 LPC / 0 / 0 PCI / 0 / 1 *SPI / 1 / 1		Inter Pu Hi	SPI
PGNT-2	(inter pu)	*(-O),Desktop not pull low	DMI AC Coupling Low: Full Voltage Mode	TestPoint
HDA_SDO	*POWERED BY EPW(-O)	POWERED BY CORE(inter pu)	NAND VCCQ PWR WELL SEL	
HDA_SYNC	*1.5V(-O)	1.8V	OD PLL VR SUPPLY SEL	
SPI_MOSI	*EN(-O)	DIS(inter pu)	TPM FUNCTIONALITY TPM DISABLED WHEN SAMPLED LOW	
NVR_ALE	*(10K)		DANBURY Technology Enable Enable When Sampled High	
NVR_CLE	*(-O)		DMI Termination Voltage DC Coup: TX/RX To VCC Is Sampled High	
INIT3_3V_N		*(-O)	Configurable CPU Output, Stronger If Low	
SPKR	*EN(1K)	DIS	STUFF TO ENABLE NO-REBOOT OPTION AT POWER-UP (CONFIGURATION STRAPPING).	
PCH_INTVRMEN	*EN(390K)		ENABLE INTERGRATED 1.05V SUS VRM.	
PCH_PU_GP33				
IGC_EN_N		*EN	INTEGRATED CLOCK CHIP ENABLE, Stuff Low For Full Clock Integration Enable.	
VCCVRM_EN	*EN(inter pu)	DIS(-O)	OD PLL VR(VccCLK,VccapllEXP, VccFDIPLL,VccSATAPLL; DG P383)	
PCH_GP15	*EN(10K)	DIS	INTEL ME CRYPTO TRANSPORT LAYER SECURITY (TLS) WITH CONFIDENTIALITY	

PCI ROUTING

PCI1	AD17	INTA,B,C,D	PREQ-1	PGNT-0

FAN_TAC1	CPU_FAN
FAN_CTL1	CPU_FAN
TMPIN1	SYS_Temp
VIN0	VCORE
VIN1	V_DIMM

Elitegroup Computer Systems

Title: GPIO, IRQ, IDSEL MAP

Size: Custom | Document Number: H55H-I | Rev: 1.0A

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