Q57H-AM V : 1.0

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REVISION HISTORY:

Rev	Date	Notes

@ ECS
CONFIDENTIAL @

Elitegroup Computer Systems

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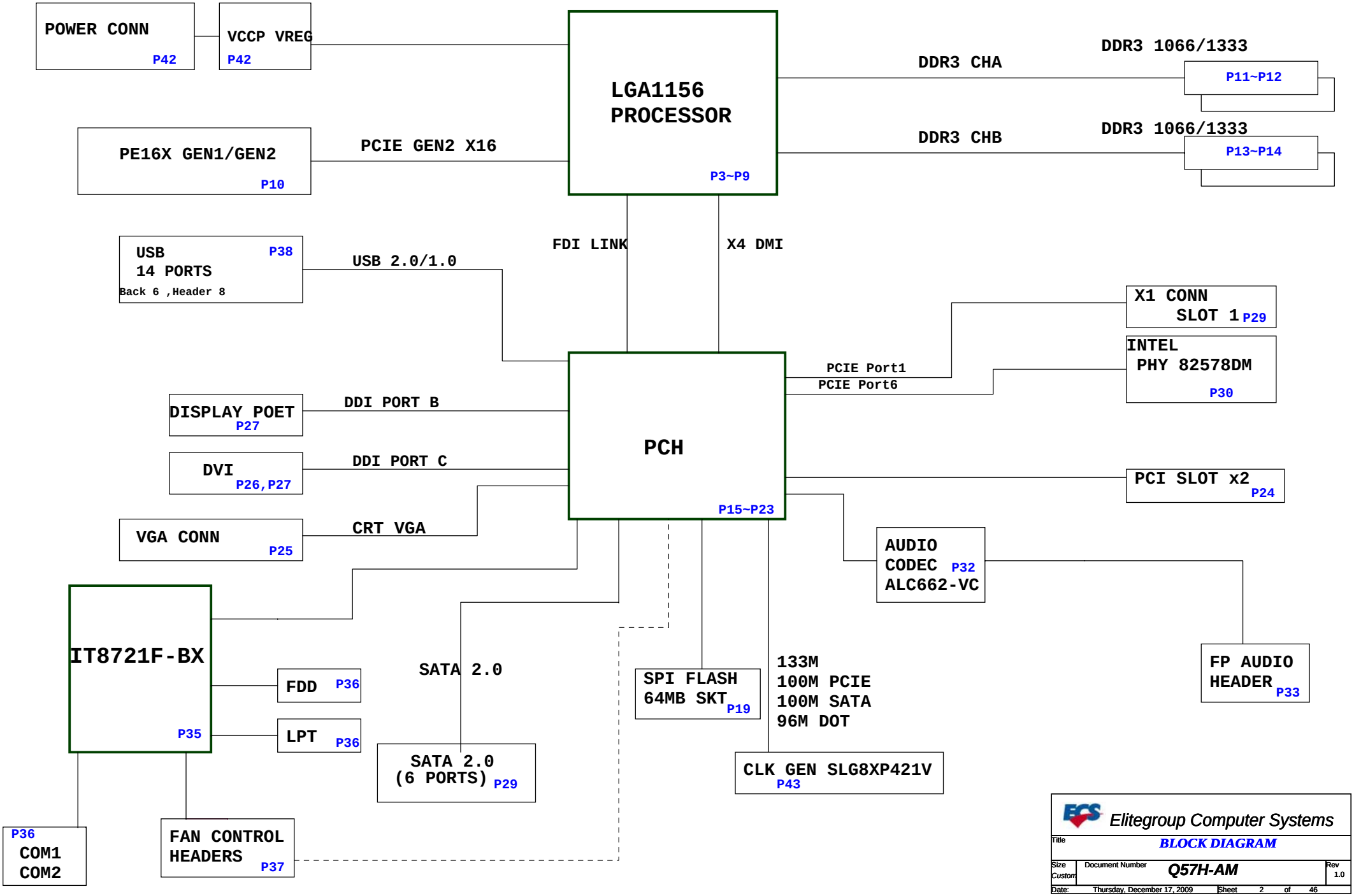

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Title	BLOCK DIAGRAM		
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CPU_VTT
Power

GND
GND

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

WW23 TO GND

CLK GEN
23 CK_CPU_P
23 CK_CPU_N
23 CK_PE_100M_DMI_DP
23 CK_PE_100M_DMI_DN

DC-DC VTT
34,39,42 VTT_PWRGD
39 VTT_SEL
39 VTT_SEN

PCH
17 H_DRAMPWRGD

PCH,SIO
16,35 H_PECI

PCH
16 H_THERMTRIP_L
16 H_PM_SYNC_0
16 H_SKTOCC_L

PCH
19 FDI_FSYNC_0
19 FDI_LSYNC_0
19 FDI_FSYNC_1
19 FDI_LSYNC_1
19 FDI_INT

PCH
19 FDI_TX_0_DP
19 FDI_TX_0_DN
19 FDI_TX_1_DP
19 FDI_TX_1_DN
19 FDI_TX_2_DP
19 FDI_TX_2_DN
19 FDI_TX_3_DP
19 FDI_TX_3_DN

PCH
19 FDI_TX_4_DP
19 FDI_TX_4_DN
19 FDI_TX_5_DP
19 FDI_TX_5_DN
19 FDI_TX_6_DP
19 FDI_TX_6_DN
19 FDI_TX_7_DP
19 FDI_TX_7_DN

PCH,XDP
17,28,35 P_PCIRST_L
17,28 H_PWRGD

XDP
28 H_RSTOUT_L

DC-DC Vcore
42 EPSI-
42 VCC_SENSE
42 VSS_SENSE

DC-DC Vaxg
40 DFGT_VR_EN
40 VCCAXG_SENSE
40 VSSAXG_SENSE
40 AXG_VID0
40 AXG_VID1
40 AXG_VID2
40 AXG_VID3
40 AXG_VID4
40 AXG_VID5
40 AXG_VID6

XDP
28 H_TDO
28 H_TDI
28 H_TCK
28 H_TMS
28 H_TRST_L
28 H_PRDY_L
28 H_PREQ_L
28 XDP_DBRESET_L
28 XDP_CLKOUT_DN
28 XDP_CLKOUT_DP
28 H_TAPPWRGOOD
42 IMON

7 H_MCP_CFG15

CPUE SKT_H1_1156_CRB
REV = 1.2

CK_CPU_P AA7 BCLK_0
CK_CPU_N AA6 BCLK#_0
CK_PE_100M_DMI_DP AA3 PEG_CLK
CK_PE_100M_DMI_DN AA4 PEG_CLK#
Y8 BCLK#_1
AA8 BCLK_1

STP4 1 H_TDO_TDI_M AE37 TDI_M
AE38 TDO_M

H_CPURST_L AE34 RSTIN#
H_PWROK AH36 VCCPWRGOOD_1
H_VCCPWRGD AH35 VCCPWRGOOD_0
VTT_PWRGD AG37 VTTPWRGOOD
H_DRAMPWRGD AH37 SM_DRAMPWROK

H_PECI AG35 PECI
H_CATERR_L AG39 CATERR#
STP6 1 H_PROCHOT_L AH34 PROCHOT#
H_THERMTRIP_L AE35 THERMTRIP#
H_PM_SYNC_0 AH39 PM_SYNC
CPU_VTT
AB5 PM_EXT_TS#_0
MCP_QPI0_CMP0 AB4 PM_EXT_TS#_1
MCP_QPI0_CMP1 B11 COMP2
C11 COMP3

MCP_DDR_COMP0 AG1 SM_RCOMP_0
MCP_DDR_COMP1 AD1 SM_RCOMP_1
MCP_DDR_COMP2 AE1 SM_RCOMP_2

MCP_COMP_NORTH AF2 COMP1
MCP_COMP_SOUTH AF36 COMP0
H_SKTOCC_L AK38 SKTOCC#

STP1 1 TP_DFGT_DPRSLPVR J10 GFX_DPRSLPVR

7 H_MCP_CFG[7..0] H_MCP_CFG[7..0]
H_MCP_CFG0 E8 CFG_0
H_MCP_CFG1 G8 CFG_1
H_MCP_CFG2 E10 CFG_2
H_MCP_CFG3 F10 CFG_3
H_MCP_CFG4 H10 CFG_4
H_MCP_CFG5 H9 CFG_5
H_MCP_CFG6 F9 CFG_6
H_MCP_CFG7 F9 CFG_7
G12 CFG_8
H12 CFG_9
CRS1.1
K10 CFG_10
K8 CFG_11
J12 CFG_12
L8 CFG_13
K9 CFG_14
H_MCP_CFG15 K12 CFG_15
H7 CFG_16
L11 CFG_17

MISC

VID_0/MSID_0 U40 H_VID0
VID_1/MSID_1 U39 H_VID1
VID_2/MSID_2 U38 H_VID2
VID_3/CSC_0 U37 H_VID3
VID_4/CSC_1 U36 H_VID4
VID_5/CSC_2 U35 H_VID5
VID_6 U34 H_VID6
VID_7 U33 H_VID7
PSI# AG38 EPSI-
H_VID[7..0] H_VID[7..0] 7,42

GFX_VR_EN F12 DFGT_VR_EN
GFX_IMON F6
GFX_VID_0 G10 AXG_VID0
GFX_VID_1 B12 AXG_VID1
GFX_VID_2 E12 AXG_VID2
GFX_VID_3 E11 AXG_VID3
GFX_VID_4 C12 AXG_VID4
GFX_VID_5 G11 AXG_VID5
GFX_VID_6 J11 AXG_VID6
CRS 1.0

FC_AE38 AE38 TP_MCP_VCCVTT_VID0 1 STP3
VTT_SELECT AE39 VTT_SEL
FC_AG40 AG40 TP_MCP_VCCVTT_VID2 1 STP5

VCC_SENSE T35 VCC_SENSE
VSS_SENSE T34 VSS_SENSE
VTT_SENSE AE35 VTT_SEN
VSS_SENSE_VTT AE36
R621 1 2 0-04

VAXG_SENSE A13 VCCAXG_SENSE
VSSAXG_SENSE B13 VSSAXG_SENSE

ISENSE T40 IMON

TDO AM38 H_TDO
TDI AM37 H_TDI
TCK AN37 H_TCK
TMS AN40 H_TMS
TRST# AM39 H_TRST_L

PRDY# AJ38 H_PRDY_L
PREQ# AK37 H_PREQ_L
DBR# AL40 XDP_DBRESET_L
BCLK_ITP# AK40 XDP_CLKOUT_DN
BCLK_ITP AK39 XDP_CLKOUT_DP
TAPPWRGOOD AK34 H_TAPPWRGOOD
RESET_OBS# AL39 H_RSTOUT_L

BPM#_0 AL33 BPM0 1 STP10
BPM#_1 AL32 BPM1 1 STP21
BPM#_2 AK33 BPM2 1 STP11
BPM#_3 AK32 BPM3 1 STP17
BPM#_4 AM31 BPM4 1 STP20
BPM#_5 AL30 BPM5 1 STP18
BPM#_6 AK30 BPM6 1 STP8
BPM#_7 AK31 BPM7 1 STP9

CPUD SKT_H1_1156_CRB
REV = 1.2

FDI_FSYNC_0 AC4 FDI_FSYNC_0
FDI_LSYNC_0 AD4 FDI_LSYNC_0
Pipe A

FDI_FSYNC_1 AC3 FDI_FSYNC_1
FDI_LSYNC_1 AD3 FDI_LSYNC_1
Pipe B

FDI_INT AC2 FDI_INT

LINK

FDI_TX_0 U6 FDI_TX_0_DP
FDI_TX#_0 U5 FDI_TX_0_DN
FDI_TX_1 V4 FDI_TX_1_DP
FDI_TX#_1 V3 FDI_TX_1_DN
FDI_TX_2 U8 FDI_TX_2_DP
FDI_TX#_2 U7 FDI_TX_2_DN
FDI_TX_3 W8 FDI_TX_3_DP
FDI_TX#_3 W7 FDI_TX_3_DN
Pipe A

FDI_TX_4 W5 FDI_TX_4_DP
FDI_TX#_4 W4 FDI_TX_4_DN
FDI_TX_5 R8 FDI_TX_5_DP
FDI_TX#_5 R7 FDI_TX_5_DN
FDI_TX_6 Y4 FDI_TX_6_DP
FDI_TX#_6 Y3 FDI_TX_6_DN
FDI_TX_7 Y6 FDI_TX_7_DP
FDI_TX#_7 Y5 FDI_TX_7_DN
Pipe B

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09' WW04

CPU_VTT
3VSB
R618 150-04-O
R619 10K-04-O
H_CPURST_L
Q83 2N3904-S-O
Q84 2N3904-S-O
P_PCIRST_L
R620 10K-04-O

Divide to VTT(1.1v) Level

P_PCIRST_L R243 1.3K-1-04 H_CPURST_L
C277 .1U-04
R246 665-1-04
CRS1.1

CPU_VTT
R276 49.9-1-04-O
H_PWRGD
R275 0-04 H_PWROK
R274 0-04 H_VCCPWRGD
R212 20-1-04 MCP_QPI0_CMP0
R211 20-1-04 MCP_QPI0_CMP1
R257 100-1-04 MCP_DDR_COMP0
R236 24.9-1-04 MCP_DDR_COMP1
R238 130-1-04 MCP_DDR_COMP2
R241 49.9-1-04 MCP_COMP_NORTH
R255 49.9-1-04 MCP_COMP_SOUTH

CPU_VTT
R261 1K-04 H_PROCHOT_L
R244 51-04-O H_CPURST_L
R256 51-04-O H_PM_SYNC_0
R258 51-04-O H_PECI
R242 51-04 H_THERMTRIP_L
R247 51-04 H_CATERR_L
R264 51-04-O H_PRDY_L
R269 51-04-O H_RSTOUT_L
Ra

Ra for PRDY emptied

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Power

GND

GND

10 PEG_RX_P[0..15]
10 PEG_RX_N[0..15]

10 PEG_TX_P[0..15]
10 PEG_TX_N[0..15]

15 DMI_MT_IR_0_DP
15 DMI_MT_IR_0_DN
15 DMI_MT_IR_1_DP
15 DMI_MT_IR_1_DN
15 DMI_MT_IR_2_DP
15 DMI_MT_IR_2_DN
15 DMI_MT_IR_3_DP
15 DMI_MT_IR_3_DN
PCH

15 DMI_IT_MR_0_DP
15 DMI_IT_MR_0_DN
15 DMI_IT_MR_1_DP
15 DMI_IT_MR_1_DN
15 DMI_IT_MR_2_DP
15 DMI_IT_MR_2_DN
15 DMI_IT_MR_3_DP
15 DMI_IT_MR_3_DN
PCH

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CPUC

REV = 1.2

PEG_RX_P0 C9 PEG_RX_0
PEG_RX_N0 D9 PEG_RX#_0
PEG_RX_P1 B8 PEG_RX_1
PEG_RX_N1 C8 PEG_RX#_1
PEG_RX_P2 A7 PEG_RX_2
PEG_RX_N2 A6 PEG_RX#_2
PEG_RX_P3 B6 PEG_RX_3
PEG_RX_N3 C6 PEG_RX#_3
PEG_RX_P4 A5 PEG_RX_4
PEG_RX_N4 B5 PEG_RX#_4
PEG_RX_P5 B4 PEG_RX_5
PEG_RX_N5 C4 PEG_RX#_5
PEG_RX_P6 C3 PEG_RX_6
PEG_RX_N6 D3 PEG_RX#_6
PEG_RX_P7 D2 PEG_RX_7
PEG_RX_N7 E2 PEG_RX#_7
PEG_RX_P8 E1 PEG_RX_8
PEG_RX_N8 F1 PEG_RX#_8
PEG_RX_P9 G3 PEG_RX_9
PEG_RX_N9 G2 PEG_RX#_9
PEG_RX_P10 G1 PEG_RX_10
PEG_RX_N10 H1 PEG_RX#_10
PEG_RX_P11 J3 PEG_RX_11
PEG_RX_N11 J2 PEG_RX#_11
PEG_RX_P12 J1 PEG_RX_12
PEG_RX_N12 K1 PEG_RX#_12
PEG_RX_P13 L2 PEG_RX_13
PEG_RX_N13 L3 PEG_RX#_13
PEG_RX_P14 P3 PEG_RX_14
PEG_RX_N14 P4 PEG_RX#_14
PEG_RX_P15 T3 PEG_RX_15
PEG_RX_N15 T4 PEG_RX#_15

PEG

PEG_TX_0 C7 PEG_TX_P0
PEG_TX#_0 D7 PEG_TX_N0
PEG_TX_1 E7 PEG_TX_P1
PEG_TX#_1 E6 PEG_TX_N1
PEG_TX_2 E5 PEG_TX_P2
PEG_TX#_2 E5 PEG_TX_N2
PEG_TX_3 F3 PEG_TX_P3
PEG_TX#_3 F4 PEG_TX_N3
PEG_TX_4 G6 PEG_TX_P4
PEG_TX#_4 G5 PEG_TX_N4
PEG_TX_5 H4 PEG_TX_P5
PEG_TX#_5 H3 PEG_TX_N5
PEG_TX_6 E7 PEG_TX_P6
PEG_TX#_6 G7 PEG_TX_N6
PEG_TX_7 J6 PEG_TX_P7
PEG_TX#_7 J5 PEG_TX_N7
PEG_TX_8 K3 PEG_TX_P8
PEG_TX#_8 K4 PEG_TX_N8
PEG_TX_9 H8 PEG_TX_P9
PEG_TX#_9 J8 PEG_TX_N9
PEG_TX_10 L6 PEG_TX_P10
PEG_TX#_10 L5 PEG_TX_N10
PEG_TX_11 M4 PEG_TX_P11
PEG_TX#_11 M3 PEG_TX_N11
PEG_TX_12 K7 PEG_TX_P12
PEG_TX#_12 L7 PEG_TX_N12
PEG_TX_13 N6 PEG_TX_P13
PEG_TX#_13 N5 PEG_TX_N13
PEG_TX_14 M8 PEG_TX_P14
PEG_TX#_14 N8 PEG_TX_N14
PEG_TX_15 R5 PEG_TX_P15
PEG_TX#_15 R6 PEG_TX_N15

DMI_IT_MR_0_DP R1 DMI_RX_0
DMI_IT_MR_0_DN T1 DMI_RX#_0
DMI_IT_MR_1_DP U3 DMI_RX_1
DMI_IT_MR_1_DN U2 DMI_RX#_1
DMI_IT_MR_2_DP U1 DMI_RX_2
DMI_IT_MR_2_DN V1 DMI_RX#_2
DMI_IT_MR_3_DP W3 DMI_RX_3
DMI_IT_MR_3_DN W2 DMI_RX#_3

DMI

DMI_TX_0 L1 DMI_MT_IR_0_DP
DMI_TX#_0 M1 DMI_MT_IR_0_DN
DMI_TX_1 N3 DMI_MT_IR_1_DP
DMI_TX#_1 N2 DMI_MT_IR_1_DN
DMI_TX_2 N1 DMI_MT_IR_2_DP
DMI_TX#_2 P1 DMI_MT_IR_2_DN
DMI_TX_3 R2 DMI_MT_IR_3_DP
DMI_TX#_3 R3 DMI_MT_IR_3_DN

PEG_ICOMPI
PEG_ICOMPO
PEG_RCOMPO
PEG_RBIAS

D11 PEG_COMP R204 1 2 49.9-1-04
C10
B10
A11 GRBIAS R207 1 2 750-1-04

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SKT_H1_1156_PAE

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GND

GND

11,12 M3A_MA[15..0] — M3A_MA[15..0]
11,12 M3A_BS[2..0] — M3A_BS[2..0]
11,12 M3A_CSB[3..0] — M3A_CSB[3..0]
11,12 M3A_CKE[3..0] — M3A_CKE[3..0]
11,12 M3A_ODT[3..0] — M3A_ODT[3..0]
11,12 M3A_DM[7..0] — M3A_DM[7..0]
11,12 M3A_D[63..0] — M3A_D[63..0]

To DDR3 Channel A

11,12,13,14 DDR3_DRAMRST_L

SKT_H1_1156_CRB

CPUA

REV = 1.2

M3A_MA0	AW18	SA_MA_0	SA_DQS_0	AK3	M3A_DQS0_P 11,12
M3A_MA1	AY15	SA_MA_1	SA_DQS#_0	AJ3	M3A_DQS0_N 11,12
M3A_MA2	AV15	SA_MA_2	SA_DM_0	AJ2	M3A_DM0
M3A_MA3	AU15	SA_MA_3			
M3A_MA4	AW14	SA_MA_4	SA_DQ_0	AH1	M3A_D0
M3A_MA5	AY13	SA_MA_5	SA_DQ_1	AJ4	M3A_D1
M3A_MA6	AV14	SA_MA_6	SA_DQ_2	AL2	M3A_D2
M3A_MA7	AW13	SA_MA_7	SA_DQ_3	AL1	M3A_D3
M3A_MA8	AU14	SA_MA_8	SA_DQ_4	AG2	M3A_D4
M3A_MA9	AW12	SA_MA_9	SA_DQ_5	AH2	M3A_D5
M3A_MA10	AT19	SA_MA_10	SA_DQ_6	AK1	M3A_D6
M3A_MA11	AU13	SA_MA_11	SA_DQ_7	AK2	M3A_D7
M3A_MA12	AW11	SA_MA_12			
M3A_MA13	AU24	SA_MA_13	SA_DQS_1	AP2	M3A_DQS1_P 11,12
M3A_MA14	AT11	SA_MA_14	SA_DQS#_1	AP3	M3A_DQS1_N 11,12
M3A_MA15	AR10	SA_MA_15	SA_DM_1	AN1	M3A_DM1
11,12 M3A_WEB	AT22	SA_WE#	SA_DQ_8	AN3	M3A_D8
11,12 M3A_CASB	AU22	SA_CAS#	SA_DQ_9	AN2	M3A_D9
11,12 M3A_RASB	AT20	SA_RAS#	SA_DQ_10	AR3	M3A_D10
			SA_DQ_11	AR2	M3A_D11
M3A_BS0	AV20	SA_BS_0	SA_DQ_12	AM3	M3A_D12
M3A_BS1	AU19	SA_BS_1	SA_DQ_13	AM2	M3A_D13
M3A_BS2	AU12	SA_BS_2	SA_DQ_14	AP1	M3A_D14
			SA_DQ_15	AR4	M3A_D15
M3A_CSB0	AV21	SA_CS#_0	SA_DQS_2	AU4	M3A_DQS2_P 11,12
M3A_CSB1	AW24	SA_CS#_1	SA_DQS#_2	AU3	M3A_DQS2_N 11,12
M3A_CSB2	AU21	SA_CS#_2	SA_DM_2	AU1	M3A_DM2
M3A_CSB3	AU23	SA_CS#_3			
M3A_CKE0	AU10	SA_CKE_0	SA_DQ_16	AT4	M3A_D16
M3A_CKE1	AW10	SA_CKE_1	SA_DQ_17	AU2	M3A_D17
M3A_CKE2	AV10	SA_CKE_2	SA_DQ_18	AW3	M3A_D18
M3A_CKE3	AY10	SA_CKE_3	SA_DQ_19	AW4	M3A_D19
			SA_DQ_20	AT3	M3A_D20
M3A_ODT0	AV23	SA_ODT_0	SA_DQ_21	AT1	M3A_D21
M3A_ODT1	AV24	SA_ODT_1	SA_DQ_22	AV2	M3A_D22
M3A_ODT2	AW23	SA_ODT_2	SA_DQ_23	AV4	M3A_D23
M3A_ODT3	AY24	SA_ODT_3			
			SA_DQS_3	AY6	M3A_DQS3_P 11,12
			SA_DQS#_3	AW6	M3A_DQS3_N 11,12
			SA_DM_3	AV6	M3A_DM3
11 M3A_CK0_P	AR22	SA_CK_0			
11 M3A_CK0_N	AR21	SA_CK#_0	SA_DQ_24	AW5	M3A_D24
11 M3A_CK1_P	AP18	SA_CK_1	SA_DQ_25	AY5	M3A_D25
11 M3A_CK1_N	AN18	SA_CK#_1	SA_DQ_26	AU8	M3A_D26
12 M3A_CK2_P	AN21	SA_CK_2	SA_DQ_27	AY8	M3A_D27
12 M3A_CK2_N	AP21	SA_CK#_2	SA_DQ_28	AU5	M3A_D28
12 M3A_CK3_P	AP19	SA_CK_3	SA_DQ_29	AV5	M3A_D29
12 M3A_CK3_N	AN19	SA_CK#_3	SA_DQ_30	AV7	M3A_D30
			SA_DQ_31	AW7	M3A_D31
			SA_DQS_4	AR28	M3A_DQS4_P 11,12
			SA_DQS#_4	AT29	M3A_DQS4_N 11,12
			SA_DM_4	AN29	M3A_DM4
DDR3_DRAMRST_L	AV8	SM_DRAMRST#			
			SA_DQ_32	AN27	M3A_D32
			SA_DQ_33	AT28	M3A_D33
STP14 1 TP_DDR0_CS4	AK22	SA_CS#_4	SA_DQ_34	AP28	M3A_D34
STP13 1 TP_DDR0_CS5	AM22	SA_CS#_5	SA_DQ_35	AP30	M3A_D35
STP12 1 TP_DDR0_CS6	AL23	SA_CS#_6	SA_DQ_36	AN26	M3A_D36
STP7 1 TP_DDR0_CS7	AK23	SA_CS#_7	SA_DQ_37	AR27	M3A_D37
			SA_DQ_38	AR29	M3A_D38
			SA_DQ_39	AN30	M3A_D39
AL10		SA_DQS_8	SA_DQS_5	AV32	M3A_DQS5_P 11,12
AM10		SA_DQS#_8	SA_DQS#_5	AW32	M3A_DQS5_N 11,12
			SA_DM_5	AW31	M3A_DM5
AP10		SA_ECC_CB_0	SA_DQ_40	AU30	M3A_D40
AN10		SA_ECC_CB_1	SA_DQ_41	AU31	M3A_D41
AR11		SA_ECC_CB_2	SA_DQ_42	AV33	M3A_D42
AP11		SA_ECC_CB_3	SA_DQ_43	AU34	M3A_D43
AK9		SA_ECC_CB_4	SA_DQ_44	AV30	M3A_D44
AL9		SA_ECC_CB_5	SA_DQ_45	AW30	M3A_D45
AK11		SA_ECC_CB_6	SA_DQ_46	AU33	M3A_D46
AM11		SA_ECC_CB_7	SA_DQ_47	AW33	M3A_D47
			SA_DQS_6	AW36	M3A_DQS6_P 11,12
			SA_DQS#_6	AV35	M3A_DQS6_N 11,12
			SA_DM_6	AU35	M3A_DM6
			SA_DQ_48	AW35	M3A_D48
			SA_DQ_49	AY35	M3A_D49
			SA_DQ_50	AV37	M3A_D50
			SA_DQ_51	AU37	M3A_D51
			SA_DQ_52	AY34	M3A_D52
			SA_DQ_53	AW34	M3A_D53
			SA_DQ_54	AV36	M3A_D54
			SA_DQ_55	AW37	M3A_D55
			SA_DQS_7	AR39	M3A_DQS7_P 11,12
			SA_DQS#_7	AR38	M3A_DQS7_N 11,12
			SA_DM_7	AT38	M3A_DM7
			SA_DQ_56	AT39	M3A_D56
			SA_DQ_57	AT40	M3A_D57
			SA_DQ_58	AN38	M3A_D58
			SA_DQ_59	AN39	M3A_D59
			SA_DQ_60	AU38	M3A_D60
			SA_DQ_61	AU39	M3A_D61
			SA_DQ_62	AP39	M3A_D62
			SA_DQ_63	AP40	M3A_D63

DDR_A

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SKT_H1_1156_PAE

Elitegroup Computer Systems

Title: CPU DDR3-A

Size: Custom | Document Number: Q57H-AM | Rev: 1.0

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GND

GND

13,14 M3B_MA[15..0] — M3B_MA[15..0]
13,14 M3B_BS[2..0] — M3B_BS[2..0]
13,14 M3B_CSB[3..0] — M3B_CSB[3..0]
13,14 M3B_CKE[3..0] — M3B_CKE[3..0]
13,14 M3B_ODT[3..0] — M3B_ODT[3..0]

13,14 M3B_DM[7..0] — M3B_DM[7..0]
13,14 M3B_D[63..0] — M3B_D[63..0]

To DDR3 Channel B

CPUB

SKT_H1_1156_CRB

REV = 1.2

M3B_MA0	AU20	SB_MA_0	
M3B_MA1	AU18	SB_MA_1	
M3B_MA2	AV18	SB_MA_2	
M3B_MA3	AU17	SB_MA_3	
M3B_MA4	AY18	SB_MA_4	
M3B_MA5	AV17	SB_MA_5	
M3B_MA6	AW17	SB_MA_6	
M3B_MA7	AU16	SB_MA_7	
M3B_MA8	AT17	SB_MA_8	
M3B_MA9	AY16	SB_MA_9	
M3B_MA10	AY25	SB_MA_10	
M3B_MA11	AW16	SB_MA_11	
M3B_MA12	AW15	SB_MA_12	
M3B_MA13	AW28	SB_MA_13	
M3B_MA14	AY12	SB_MA_14	
M3B_MA15	AV11	SB_MA_15	

13,14 M3B_WEB	AU26	SB_WE#	
13,14 M3B_CASB	AW27	SB_CAS#	
13,14 M3B_RASB	AW26	SB_RAS#	

M3B_BS0	AU25	SB_BS_0	
M3B_BS1	AW25	SB_BS_1	
M3B_BS2	AV12	SB_BS_2	

M3B_CSB0	AY27	SB_CS#_0	
M3B_CSB1	AW29	SB_CS#_1	
M3B_CSB2	AV26	SB_CS#_2	
M3B_CSB3	AV29	SB_CS#_3	

M3B_CKE0	AW8	SB_CKE_0	
M3B_CKE1	AY9	SB_CKE_1	
M3B_CKE2	AU9	SB_CKE_2	
M3B_CKE3	AV9	SB_CKE_3	

M3B_ODT0	AU27	SB_ODT_0	
M3B_ODT1	AU29	SB_ODT_1	
M3B_ODT2	AV27	SB_ODT_2	
M3B_ODT3	AU28	SB_ODT_3	

13 M3B_CK0_P	AR17	SB_CK_0	
13 M3B_CK0_N	AR16	SB_CK#_0	
13 M3B_CK1_P	AT15	SB_CK_1	
13 M3B_CK1_N	AR15	SB_CK#_1	
14 M3B_CK2_P	AN17	SB_CK_2	
14 M3B_CK2_N	AN16	SB_CK#_2	
14 M3B_CK3_P	AR19	SB_CK_3	
14 M3B_CK3_N	AR18	SB_CK#_3	

STP22 1	TP_DDR1_CS4	AM23	SB_CS#_4	
STP19 1	TP_DDR1_CS5	AM24	SB_CS#_5	
STP12 1	TP_DDR1_CS6	AL24	SB_CS#_6	
STP1 1	TP_DDR1_CS7	AK24	SB_CS#_7	

AR14		SB_DQS_8	
AR13		SB_DQS#_8	

AR12		SB_ECC_CB_0	
AT13		SB_ECC_CB_1	
AN15		SB_ECC_CB_2	
AP14		SB_ECC_CB_3	
AM12		SB_ECC_CB_4	
AN12		SB_ECC_CB_5	
AN14		SB_ECC_CB_6	
AP13		SB_ECC_CB_7	

DDR_B

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SKT_H1_1156_PAE

SB_DQS_0	AF4	M3B_DQS0_P	13,14
SB_DQS#_0	AF5	M3B_DQS0_N	13,14
SB_DM_0	AF4	M3B_DM0	
SB_DQ_0	AD7	M3B_D0	
SB_DQ_1	AD6	M3B_D1	
SB_DQ_2	AH8	M3B_D2	
SB_DQ_3	AJ8	M3B_D3	
SB_DQ_4	AC7	M3B_D4	
SB_DQ_5	AC6	M3B_D5	
SB_DQ_6	AF5	M3B_D6	
SB_DQ_7	AF6	M3B_D7	
SB_DQS_1	AH6	M3B_DQS1_P	13,14
SB_DQS#_1	AJ5	M3B_DQS1_N	13,14
SB_DM_1	AH4	M3B_DM1	
SB_DQ_8	AG5	M3B_D8	
SB_DQ_9	AH7	M3B_D9	
SB_DQ_10	AK6	M3B_D10	
SB_DQ_11	AL4	M3B_D11	
SB_DQ_12	AG6	M3B_D12	
SB_DQ_13	AG4	M3B_D13	
SB_DQ_14	AJ7	M3B_D14	
SB_DQ_15	AK7	M3B_D15	
SB_DQS_2	AN6	M3B_DQS2_P	13,14
SB_DQS#_2	AM6	M3B_DQS2_N	13,14
SB_DM_2	AM7	M3B_DM2	
SB_DQ_16	AL6	M3B_D16	
SB_DQ_17	AN5	M3B_D17	
SB_DQ_18	AP6	M3B_D18	
SB_DQ_19	AR5	M3B_D19	
SB_DQ_20	AL5	M3B_D20	
SB_DQ_21	AM4	M3B_D21	
SB_DQ_22	AN7	M3B_D22	
SB_DQ_23	AP5	M3B_D23	
SB_DQS_3	AR8	M3B_DQS3_P	13,14
SB_DQS#_3	AP8	M3B_DQS3_N	13,14
SB_DM_3	AT7	M3B_DM3	
SB_DQ_24	AT6	M3B_D24	
SB_DQ_25	AR7	M3B_D25	
SB_DQ_26	AR9	M3B_D26	
SB_DQ_27	AM8	M3B_D27	
SB_DQ_28	AN8	M3B_D28	
SB_DQ_29	AR6	M3B_D29	
SB_DQ_30	AL8	M3B_D30	
SB_DQ_31	AT9	M3B_D31	
SB_DQS_4	AT25	M3B_DQS4_P	13,14
SB_DQS#_4	AR24	M3B_DQS4_N	13,14
SB_DM_4	AN24	M3B_DM4	
SB_DQ_32	AN23	M3B_D32	
SB_DQ_33	AP23	M3B_D33	
SB_DQ_34	AR25	M3B_D34	
SB_DQ_35	AR26	M3B_D35	
SB_DQ_36	AT23	M3B_D36	
SB_DQ_37	AP22	M3B_D37	
SB_DQ_38	AP25	M3B_D38	
SB_DQ_39	AT26	M3B_D39	
SB_DQS_5	AP32	M3B_DQS5_P	13,14
SB_DQS#_5	AR32	M3B_DQS5_N	13,14
SB_DM_5	AN32	M3B_DM5	
SB_DQ_40	AT32	M3B_D40	
SB_DQ_41	AP31	M3B_D41	
SB_DQ_42	AR33	M3B_D42	
SB_DQ_43	AM32	M3B_D43	
SB_DQ_44	AT31	M3B_D44	
SB_DQ_45	AR31	M3B_D45	
SB_DQ_46	AR34	M3B_D46	
SB_DQ_47	AT33	M3B_D47	
SB_DQS_6	AR36	M3B_DQS6_P	13,14
SB_DQS#_6	AR37	M3B_DQS6_N	13,14
SB_DM_6	AM33	M3B_DM6	
SB_DQ_48	AR35	M3B_D48	
SB_DQ_49	AT36	M3B_D49	
SB_DQ_50	AN33	M3B_D50	
SB_DQ_51	AP36	M3B_D51	
SB_DQ_52	AP34	M3B_D52	
SB_DQ_53	AT35	M3B_D53	
SB_DQ_54	AN34	M3B_D54	
SB_DQ_55	AP37	M3B_D55	
SB_DQS_7	AL37	M3B_DQS7_P	13,14
SB_DQS#_7	AM36	M3B_DQS7_N	13,14
SB_DM_7	AK35	M3B_DM7	
SB_DQ_56	AL35	M3B_D56	
SB_DQ_57	AM35	M3B_D57	
SB_DQ_58	AJ36	M3B_D58	
SB_DQ_59	AJ37	M3B_D59	
SB_DQ_60	AN35	M3B_D60	
SB_DQ_61	AM34	M3B_D61	
SB_DQ_62	AJ35	M3B_D62	
SB_DQ_63	AL36	M3B_D63	

Elitegroup Computer Systems

Title: CPU DDR3-B

Size: Custom | Document Number: Q57H-AM | Rev: 1.0

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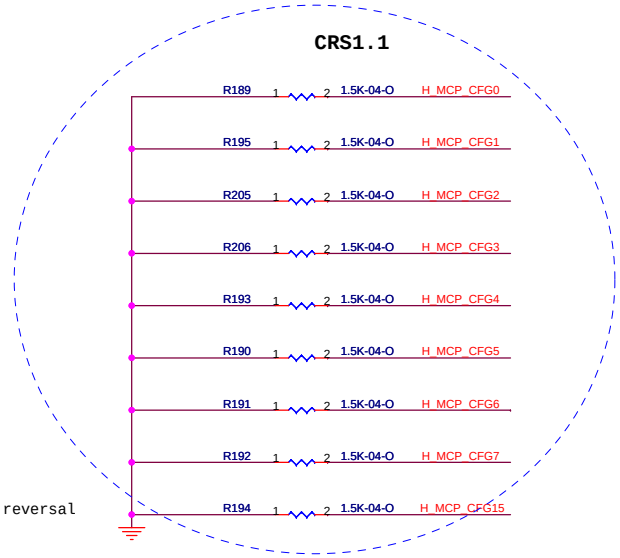
CPU_VTT — Power

GND — GND

3 H_MCP_CFG[7..0] → H_MCP_CFG[7..0] CPU

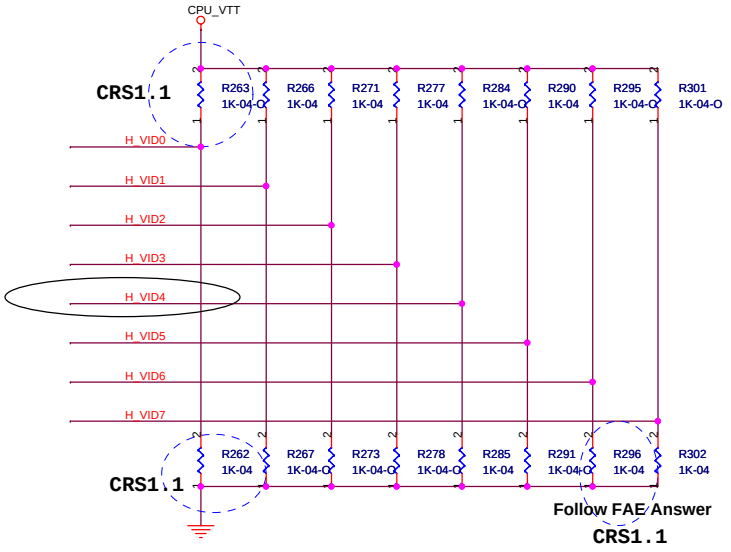
3 H_MCP_CFG15 → H_MCP_CFG15

3,42 H_VID[7..0] ← H_VID[7..0] CPU,DC-DC Vcore



CFG(1:0)
Desktop
11 PCIE16X
10 PCIE18X
CFG2,4,5,6,7~17
Reserved configuration land
CFG3
Havendale PCIE static Lan Numbering reversal

CFG	Havendale	Lynnfield			
0	REVERSED	1	11=1*16X	0	10=2*8X
1	REVERSED	1		1	
2	REVERSED			REVERSED	
3	Static Lane Number Reversal			REVERSED	
4	REVERSED			REVERSED	
6	REVERSED				
7	REVERSED				
15	REVERSED				
0,1,2,3,4,5 ALL HAVE INTERNAL PULL-UPS					



POWER ON CONFIGURATION (POC)TABLE

	FUNCTION	Setting	Havendale	Lynnfield
VID0	MIS0	0	Support	Support
VID1	MIS1	1		
VID2	MIS2	1		
VID3	IMON CONFIG CSC0	1	Icc(MAX)=120A	Icc(MAX)=120A
VID4	IMON CONFIG CSC1	0		
VID5	IMON CONFIG CSC2	1		
VID6	RESERVED	0		
VID7	VID SELECT	0		
PSI#	RESERVED	LOW		

*MSID(2:0)
110 Lynnfield and Havendale support
*CSC(0:2)
Iout Gain and POC setting
100 ICC(max) 80A~100A
101 ICC(max) 100A~120A
110 ICC(max) 120A~140A

Elitegroup Computer Systems

Title: CPU CFG

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CPU_VTT
VCORE
V_AXG
VDIMM
Power

GND
GND

CPU_VCORE
REV = 1.2
CPUF SKT_H1_1156_CRB
POWER
SKT_H1_1156_PAE 6 OF 11

CPU_VTT
CPUH SKT_H1_1156_CRB
REV = 1.2
CPU
POWER
8 OF 11
SKT_H1_1156_PAE

CPU_VTT
V_AXG
VDIMM
CPUI SKT_H1_1156_CRB
REV = 1.2
POWER
9 OF 11
SKT_H1_1156_PAE

CPU_VCORE
CPUG SKT_H1_1156_CRB
REV = 1.2
POWER
SKT_H1_1156_PAE 7 OF 11

CPU_VCORE
C269 C274 SC2 SC1 SC3 C256 C262
C270 C272 SC4 SC16 SC5 C268 C258
0706 ADD
C263 C264 C259 SC40 SC41
22U-X5-08

CPU_VTT
C279 C282 SC26 C285 C284 C283 C271
C287 C286 C278 SC37

V_AXG
C267 C260 C257 C261 SC34

VDIMM
SC9 SC10

VCC1.8
VCCPLL
SC8
1U-X7R-X

Elitegroup Computer Systems

Title	CPU Power(VCCP,V_AXG,VTT)		
Size: Custom	Document Number: Q57H-AM		Rev: 1.0
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Power

GND GND

CPUJ

SKT_H1_1156_CRB

REV = 1.2

A16	VSS_001	VSS_091	AP35
A25	VSS_002	VSS_092	AP38
A28	VSS_003	VSS_093	AP4
A34	VSS_004	VSS_094	AP7
A37	VSS_005	VSS_095	AP9
AA5	VSS_006	VSS_096	AR1
AB3	VSS_007	VSS_097	AR20
AB33	VSS_008	VSS_098	AR23
AB34	VSS_009	VSS_099	AR30
AB35	VSS_010	VSS_100	AR40
AB36	VSS_011	VSS_101	AT12
AB37	VSS_012	VSS_102	AT14
AB38	VSS_013	VSS_103	AT16
AB39	VSS_014	VSS_104	AT2
AB40	VSS_015	VSS_105	AT24
AB6	VSS_016	VSS_106	AT27
AB8	VSS_017	VSS_107	AT30
AC1	VSS_018	VSS_108	AT34
AD5	VSS_019	VSS_109	AT37
AD8	VSS_020	VSS_110	AT5
AE3	VSS_021	VSS_111	AT8
AE37	VSS_022	VSS_112	AU32
AE7	VSS_023	VSS_113	AU36
AF1	VSS_024	VSS_114	AU6
AF40	VSS_025	VSS_115	AU7
AF6	VSS_026	VSS_116	AV3
AG34	VSS_027	VSS_117	AV31
AG36	VSS_028	VSS_118	AV34
AG7	VSS_029	VSS_119	AV38
AH3	VSS_030	VSS_120	AY33
AH33	VSS_031	VSS_121	AY36
AH38	VSS_032	VSS_122	AY4
AH5	VSS_033	VSS_123	AY7
AJ1	VSS_034	VSS_124	B16
AJ12	VSS_035	VSS_125	B24
AJ14	VSS_036	VSS_126	B27
AJ16	VSS_037	VSS_127	B30
AJ18	VSS_038	VSS_128	B33
AJ20	VSS_039	VSS_129	B36
AJ22	VSS_040	VSS_130	B7
AJ24	VSS_041	VSS_131	B9
AJ26	VSS_042	VSS_132	C13
AJ28	VSS_043	VSS_133	C16
AJ30	VSS_044	VSS_134	C19
AJ33	VSS_045	VSS_135	C22
AJ34	VSS_046	VSS_136	C26
AJ40	VSS_047	VSS_137	C29
AJ6	VSS_048	VSS_138	C32
AJ9	VSS_049	VSS_139	C35
AK10	VSS_050	VSS_140	C38
AK17	VSS_051	VSS_141	C5
AK36	VSS_052	VSS_142	D10
AK4	VSS_053	VSS_143	D12
AK5	VSS_054	VSS_144	D13
AK8	VSS_055	VSS_145	D16
AL11	VSS_056	VSS_146	D19
AL13	VSS_057	VSS_147	D22
AL16	VSS_058	VSS_148	D25
AL19	VSS_059	VSS_149	D28
AL22	VSS_060	VSS_150	D31
AL25	VSS_061	VSS_151	D34
AL28	VSS_062	VSS_152	D37
AL3	VSS_063	VSS_153	D4
AL31	VSS_064	VSS_154	D40
AL34	VSS_065	VSS_155	D5
AL38	VSS_066	VSS_156	D6
AL7	VSS_067	VSS_157	D8
AM1	VSS_068	VSS_158	E13
AM40	VSS_069	VSS_159	E16
AM5	VSS_070	VSS_160	E19
AM9	VSS_071	VSS_161	E21
AN13	VSS_072	VSS_162	E24
AN20	VSS_073	VSS_163	E27
AN22	VSS_074	VSS_164	E3
AN25	VSS_075	VSS_165	E30
AN28	VSS_076	VSS_166	E33
AN31	VSS_077	VSS_167	E36
AN36	VSS_078	VSS_168	E39
AN4	VSS_079	VSS_169	E4
AN9	VSS_080	VSS_170	F11
AP12	VSS_081	VSS_171	F13
AP15	VSS_082	VSS_172	F16
AP16	VSS_083	VSS_173	F2
AP17	VSS_084	VSS_174	F20
AP20	VSS_085	VSS_175	F23
AP24	VSS_086	VSS_176	F26
AP26	VSS_087	VSS_177	F29
AP27	VSS_088	VSS_178	F32
AP29	VSS_089	VSS_179	F35
AP33	VSS_090	VSS_180	F38

GND

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CPUK

SKT_H1_1156_CRB

REV = 1.2

E8	VSS_181		
G13	VSS_182	VSS_271	W33
G16	VSS_183	VSS_272	W34
G19	VSS_184	VSS_273	W35
G22	VSS_185	VSS_274	W36
G25	VSS_186	VSS_275	W37
G28	VSS_187	CGC_TP_NCTF	B39
G31	VSS_188	VSS_276	W38
G34	VSS_189	VSS_277	Y7
G37	VSS_190		
G4	VSS_191	SA_DIMM_VREFDQ	AF3
G40	VSS_192	SB_DIMM_VREFDQ	AG3
G9	VSS_193		
H11	VSS_194		
H13	VSS_195	RSVD_A12	A12
H16	VSS_196	RSVD_AD2	AD2
H18	VSS_197	RSVD_AE2	AE2
H2	VSS_198	RSVD_AH40	AH40
H21	VSS_199	RSVD_AJ39	AJ39
H24	VSS_200		
H27	VSS_201		
H30	VSS_202		
H33	VSS_203		
H36	VSS_204	RSVD_AM14	AM14
H39	VSS_205	RSVD_AM13	AM13
H5	VSS_206	RSVD_AK15	AK15
H6	VSS_207	RSVD_AK16	AK16
J13	VSS_208		
J17	VSS_209	RSVD_AM25	AM25
J20	VSS_210	RSVD_AL29	AL29
J23	VSS_211		
J26	VSS_212		
J29	VSS_213	RSVD_AM30	AM30
J32	VSS_214	RSVD_AK29	AK29
J35	VSS_215	RSVD_AK28	AK28
J38	VSS_216	RSVD_AM29	AM29
J4	VSS_217	RSVD_AM28	AM28
J7	VSS_218	RSVD_AL27	AL27
J9	VSS_219	RSVD_AK27	AK27
K11	VSS_220	RSVD_AM26	AM26
K13	VSS_221	RSVD_AM27	AM27
K19	VSS_222	RSVD_AL26	AL26
K2	VSS_223	RSVD_AK26	AK26
K22	VSS_224		
K25	VSS_225		
K28	VSS_226	RSVD_AK25	AK25
K31	VSS_227	RSVD_TP	AN11
K34	VSS_228		
K37	VSS_229	RSVD_L12	L12
K40	VSS_230	RSVD_M12	M12
K5	VSS_231		
K6	VSS_232	RSVD_AM21	AM21
L13	VSS_233	RSVD_AM20	AM20
L18	VSS_234	RSVD_AM18	AM18
L21	VSS_235	RSVD_AM19	AM19
L24	VSS_236	VSS_T39	T39
L27	VSS_237		
L30	VSS_238	RSVD_AL18	AL18
L33	VSS_239	RSVD_AK18	AK18
L36	VSS_240		
L39	VSS_241	RSVD_AM15	AM15
L4	VSS_242	RSVD_AM16	AM16
L9	VSS_243	RSVD_AL15	AL15
M13	VSS_244	RSVD_AL14	AL14
M18	VSS_245		
M2	VSS_246	RSVD_AL17	AL17
M20	VSS_247	RSVD_AM17	AM17
M23	VSS_248	RSVD_AK14	AK14
M26	VSS_249	RSVD_AK13	AK13
M29	VSS_250	RSVD_AL12	AL12
M32	VSS_251	RSVD_AK12	AK12
M35	VSS_252		
M38	VSS_253		
M5	VSS_254	RSVD_NCTF_AY3	AY3
M6	VSS_255		
M7	VSS_256		
N34	VSS_257	RSVD_NCTF_C2	C2
N37	VSS_258	RSVD_NCTF_D1	D1
N4	VSS_259	RSVD_NCTF_AY37	AY37
N40	VSS_260	RSVD_NCTF_AW38	AW38
P2	VSS_261	RSVD_NCTF_AV1	AV1
P5	VSS_262	RSVD_NCTF_AW2	AW2
R4	VSS_263	RSVD_NCTF_AV39	AV39
T33	VSS_264	RSVD_NCTF_AU40	AU40
T36	VSS_265		
T37	VSS_266		
T38	VSS_267	RSVD_NCTF_A4	A4
T5	VSS_268	RSVD_NCTF_B3	B3
U4	VSS_269		
V5	VSS_270		

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TP_CGC 1 STP2

CPUDRV_DIMM_REFA CPUDRV_DIMM_REFA 11

CPUDRV_DIMM_REFB CPUDRV_DIMM_REFB 13

Intel WW32 WW41 Delete lands AB1,AB2,W39,W40

1 STP55

SU11 Short pad 1 2

Intel FAE

Elitegroup Computer Systems

Title: CPU GND&RSVD

Size: Custom | Document Number: Q57H-AM | Rev: 1.0

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+12V
VCC3
3VSB
Power

GND
GND

23 PEX16_100M_P
23 PEX16_100M_N
From Clock

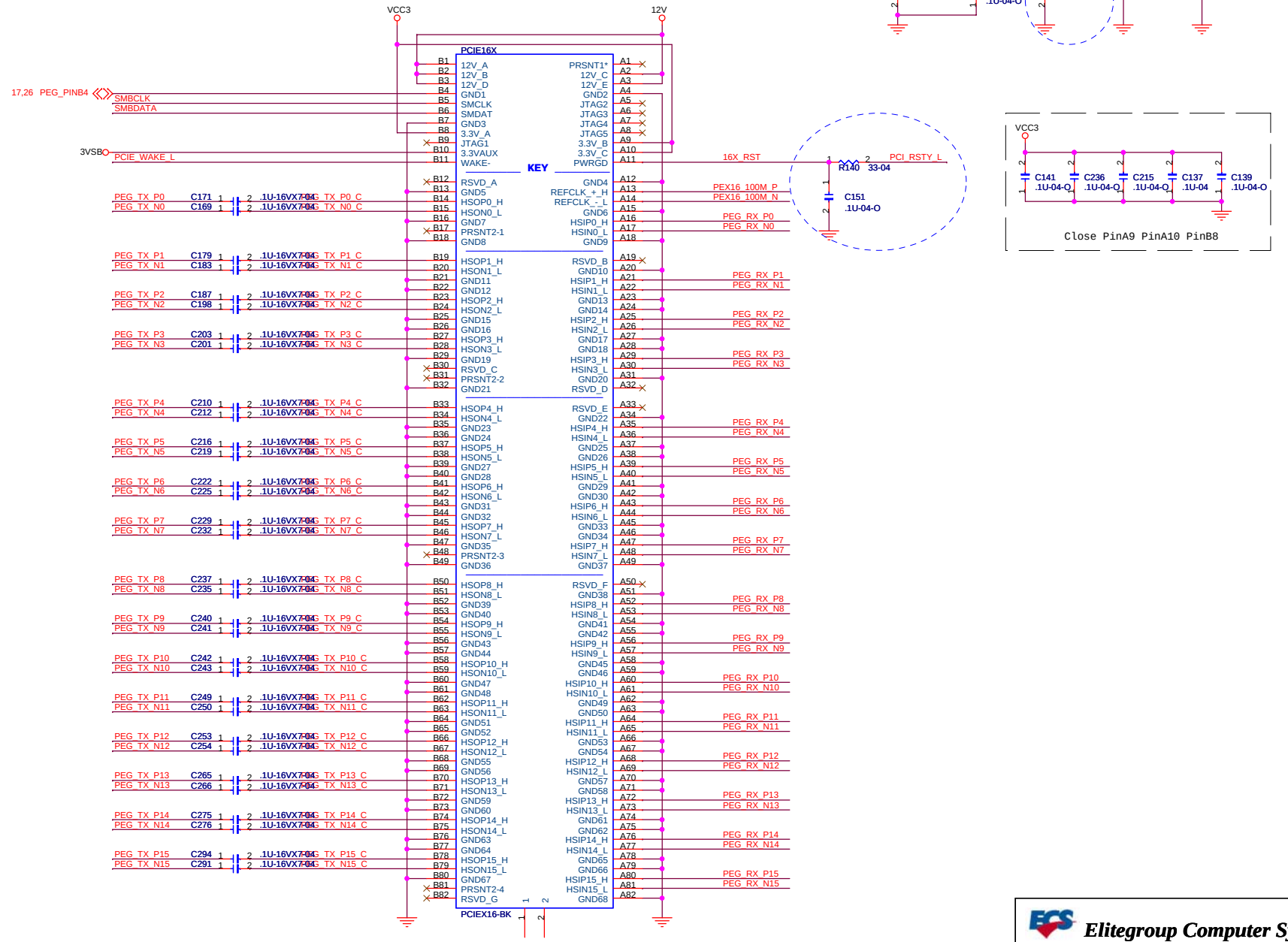
29,35 PCI_RSTY_L
From SB & SIO

17,29 PCIE_WAKE_L

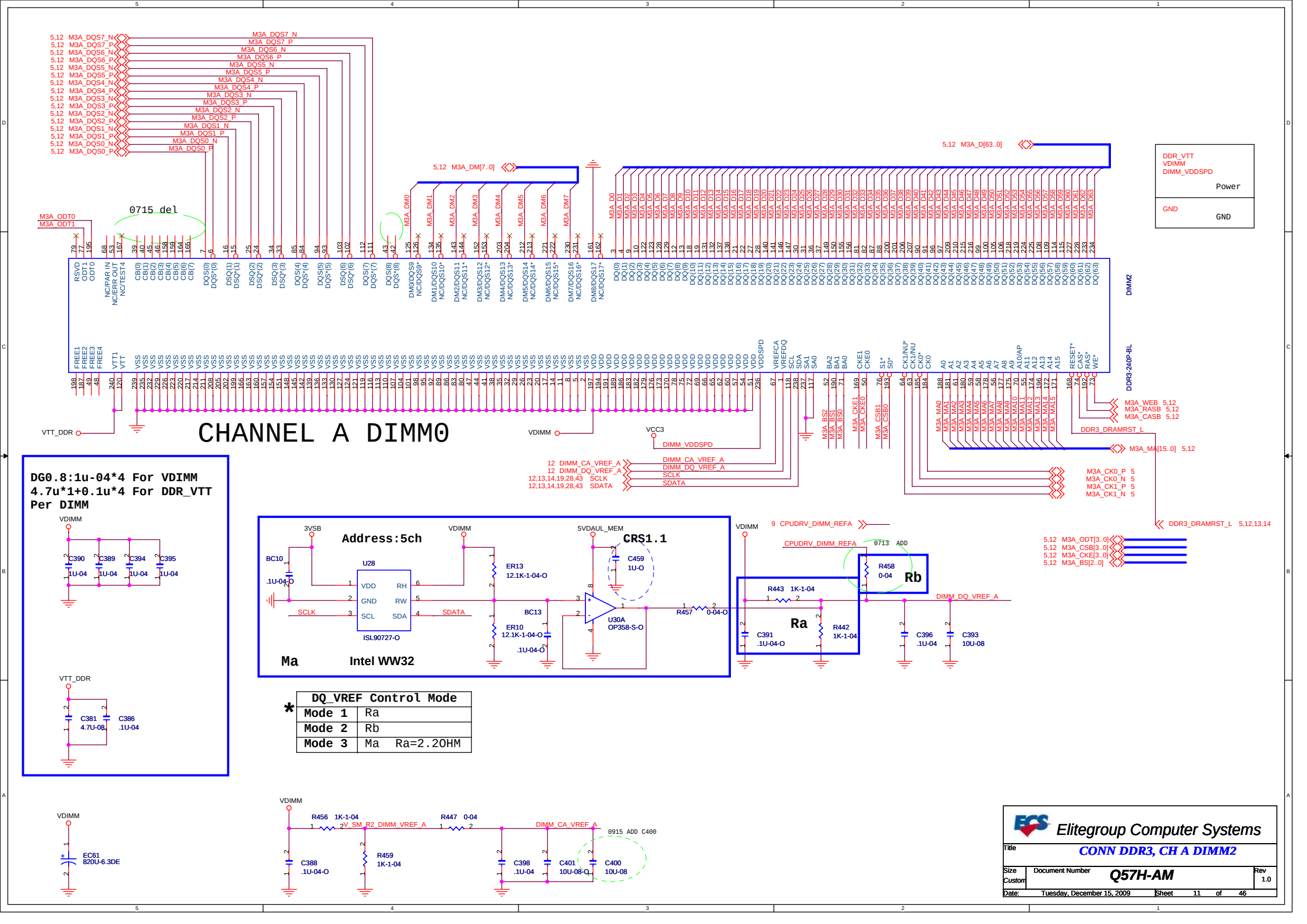
17,19,24,29,31 SMBCLK
17,19,24,29,31 SMBDATA
Connect Clock SATA
PCIEX16 PCIEX1 PCI

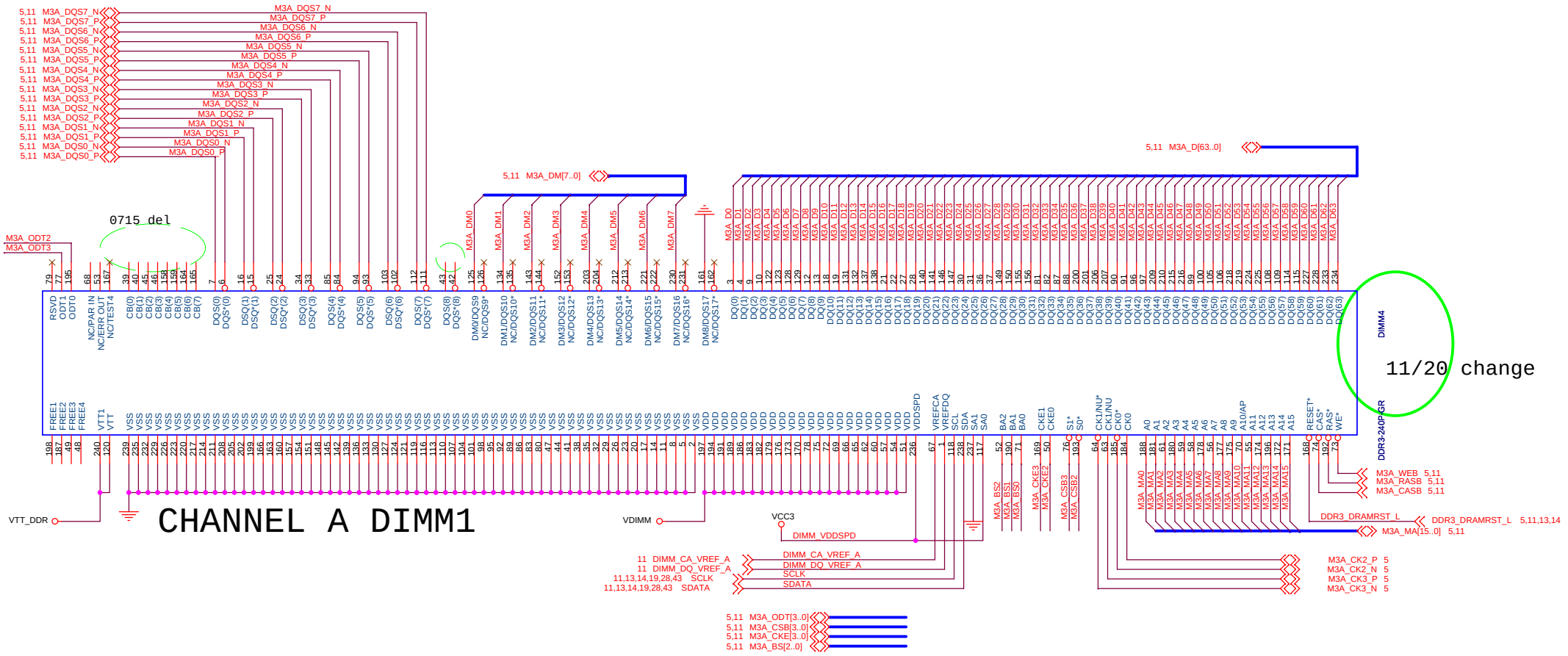
4 PEG_RX_P[0..15]
4 PEG_RX_N[0..15]
To NB

4 PEG_TX_P[0..15]
4 PEG_TX_N[0..15]
From NB



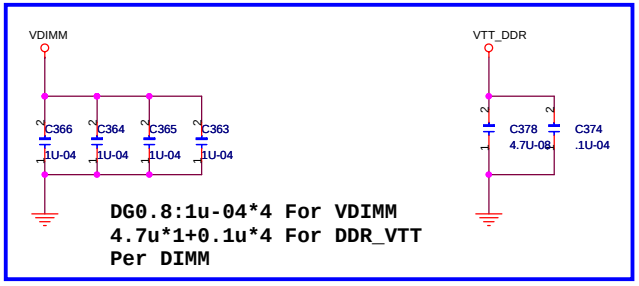
Elitegroup Computer Systems			
Title: PCI-E 16X			
Size: Custom	Document Number: Q57H-AM		Rev: 1.0
Date: Monday, December 14, 2009	Sheet 10 of 46		


CHANNEL A DIMM0
DIMM2
DDR3-240P-BL
0715_del
DG0.8:1u-04*4 For VDIMM
4.7u*1+0.1u*4 For DDR_VTT
Per DIMM
Address:5ch
CRS1.1
Ma
Intel WW32
Ra
Rb
0713 ADD
0915 ADD C400
DDR_VTT
VDIMM
DIMM_VDDSPD
Power
GND
DQ_VREF Control Mode
Mode 1 Ra
Mode 2 Rb
Mode 3 Ma Ra=2.2OHM
Elitegroup Computer Systems
CONN DDR3, CH A DIMM2
Q57H-AM
Tuesday, December 15, 2009



DDR_VTT
VDIMM
DIMM_VDDSPD
Power

GND
GND



Elitegroup Computer Systems

Title	CONN DDR3, CH A DIMM1		
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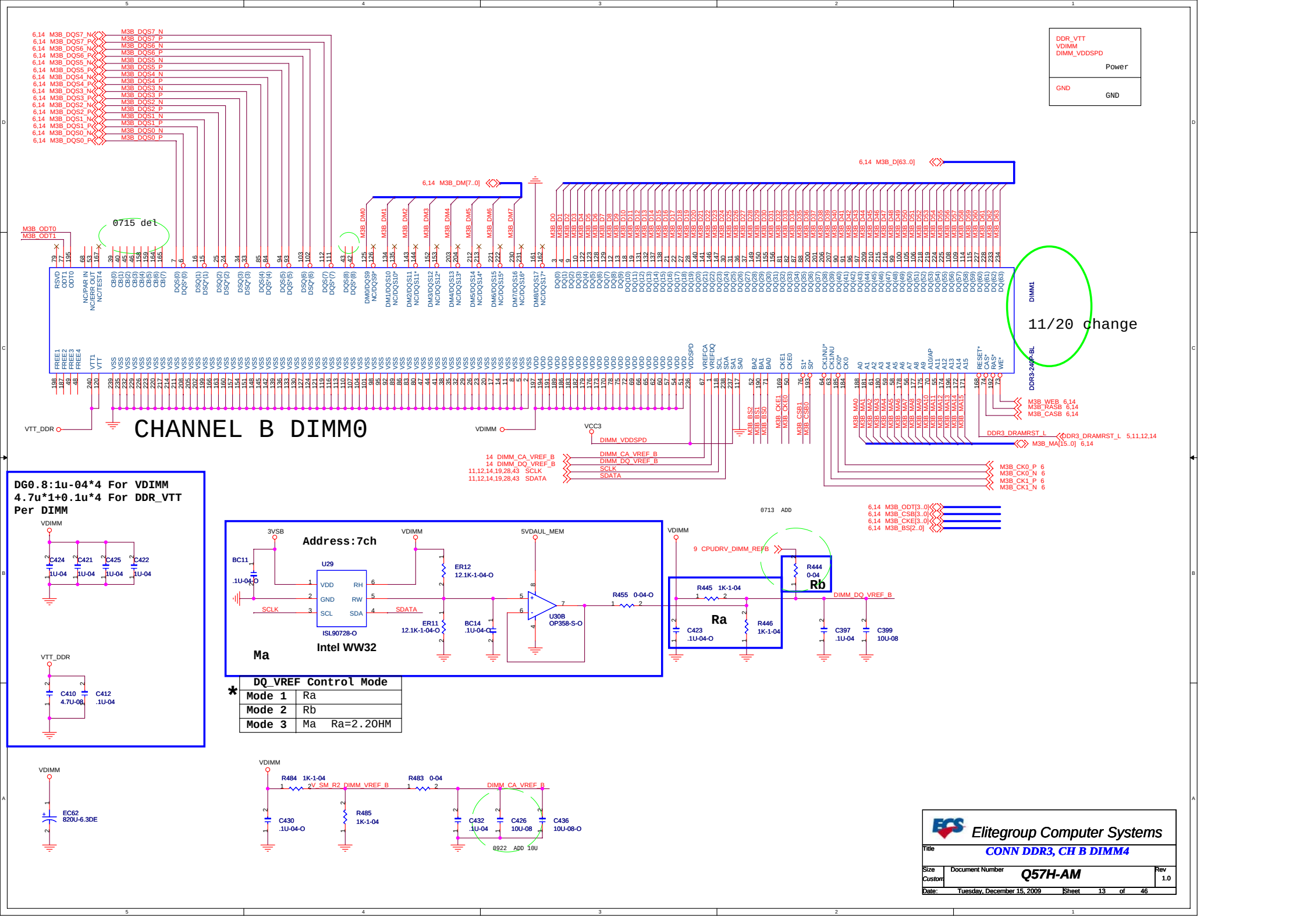
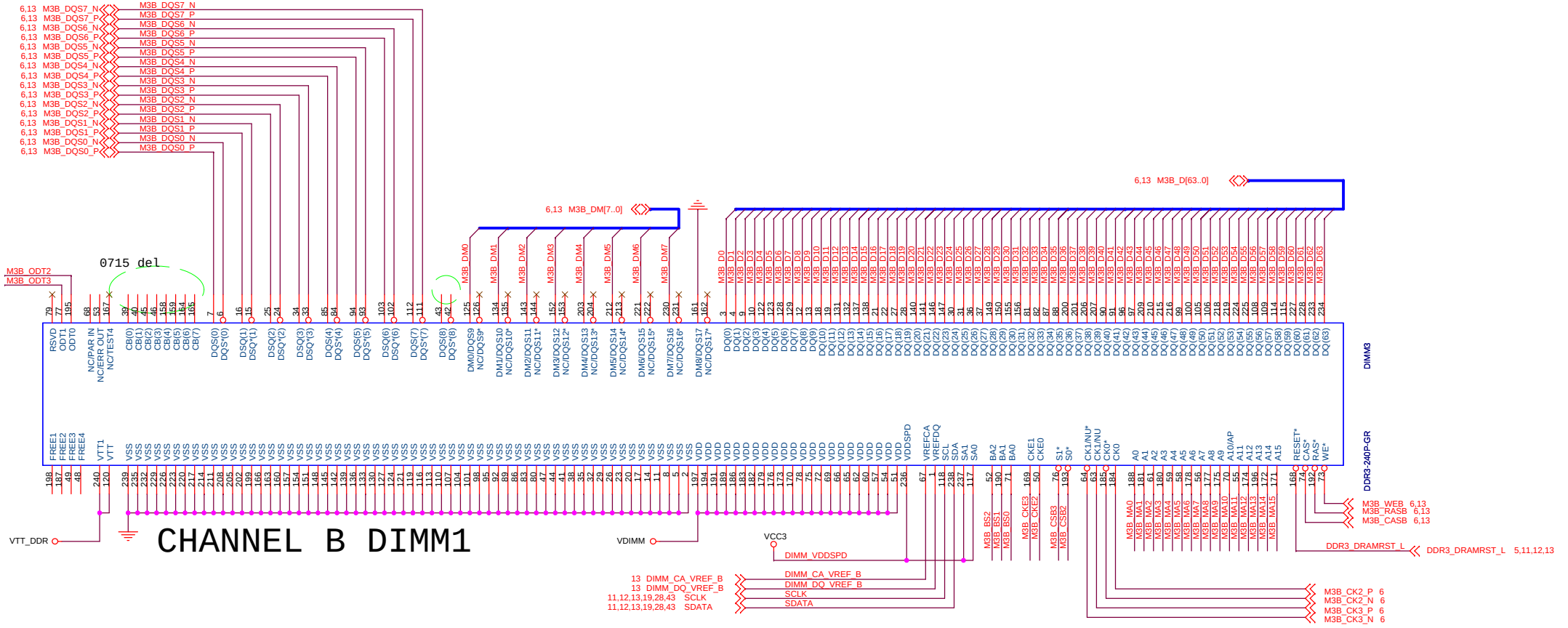
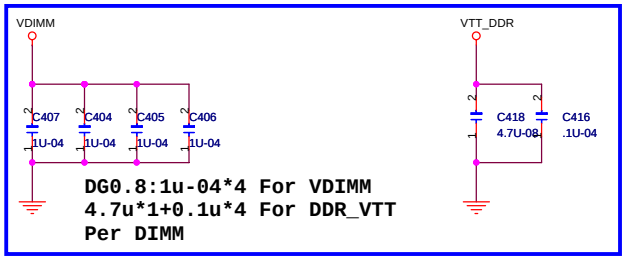

CHANNEL B DIMM0
0715 del
11/20 change
0713 ADD
0922 ADD 10U
DDR_VTT
VDIMM
DIMM_VDDSPD
Power
GND
GND
DIMM1
DDR3-240P-BL
Address:7ch
Intel WW32
ISL90728-O
U29
U30B
OP358-S-O
Ma
Ra
Rb
DG0.8:1u-04*4 For VDIMM
4.7u*1+0.1u*4 For DDR_VTT
Per DIMM
DQ_VREF Control Mode
Mode 1 Ra
Mode 2 Rb
Mode 3 Ma Ra=2.20HM
Elitegroup Computer Systems
CONN DDR3, CH B DIMM4
Q57H-AM
Tuesday, December 15, 2009





DDR_VTT
VDIMM
DIMM_VDDSPD
Power

GND
GND

Elitegroup Computer Systems

Title: CONN DDR3, CH B DIMM3

Size	Document Number	Rev
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V_1P05_FILTER
Power

GND
GND

4 DMI_MT_IR_0_DN
4 DMI_MT_IR_0_DP
4 DMI_IT_MR_0_DN
4 DMI_IT_MR_0_DP
4 DMI_MT_IR_1_DN
4 DMI_MT_IR_1_DP
4 DMI_IT_MR_1_DN
4 DMI_IT_MR_1_DP
4 DMI_MT_IR_2_DN
4 DMI_MT_IR_2_DP
4 DMI_IT_MR_2_DN
4 DMI_IT_MR_2_DP
4 DMI_MT_IR_3_DN
4 DMI_MT_IR_3_DP
4 DMI_IT_MR_3_DN
4 DMI_IT_MR_3_DP
CPU

29 HS1_RX_N
29 HS1_RX_P
29 HS1_TX_N_C
29 HS1_TX_P_C
PCIE1X

30 PCH_GLAN_RX_N
30 PCH_GLAN_RX_P
30 PCH_GLAN_TX_N
30 PCH_GLAN_TX_P
GLAN

43 KG_DMI100M_P
43 KG_DMI100M_N
CLK GEN

43 KG_DOT96M_P
43 KG_DOT96M_N
CLK GEN

38 USB_P[13..0]
USB_P[13..0]
38 USB_N[13..0]
USB_N[13..0]
USB

PCIE1X

PCH-2

CPU

DMI_MT_IR_0_DN A19
DMI_MT_IR_0_DP B18
DMI_IT_MR_0_DN J22
DMI_IT_MR_0_DP H22
DMI_MT_IR_1_DN B20
DMI_MT_IR_1_DP C19
DMI_IT_MR_1_DN G22
DMI_IT_MR_1_DP F22
DMI_MT_IR_2_DN E20
DMI_MT_IR_2_DP D20
DMI_IT_MR_2_DN H24
DMI_IT_MR_2_DP G24
DMI_MT_IR_3_DN G18
DMI_MT_IR_3_DP H18
DMI_IT_MR_3_DN L24
DMI_IT_MR_3_DP K24

DMI0RXN
DMI0RXP
DMI0TXN
DMI0TXP
DMI1RXN
DMI1RXP
DMI1TXN
DMI1TXP
DMI2RXN
DMI2RXP
DMI2TXN
DMI2TXP
DMI3RXN
DMI3RXP
DMI3TXN
DMI3TXP

DMI

V_1P05_FILTER R358 1 2 49.9-1-04 500 mils DMICOMP D21
DMI_IRCOMP C21
DMI_ZCOMP

CLK GEN

KG_DMI100M_N H20
KG_DMI100M_P G20
CLKIN_DMI_N
CLKIN_DMI_P

PCI-E 1X

HS1_RX_N D15
HS1_RX_P C16
HS1_TX_N_C D18
HS1_TX_P_C D17

PERN_1 B17
PERP_1 A16
PETN_1 H16
PETP_1 G16
PERN_2 B15
PERP_2 C14
PETN_2 H14
PETP_2 G14
PERN_3 D14
PERP_3 D13
PETN_3 K14
PETP_3 L14
PERN_4 C12
PERP_4 B13
PETN_4 H12
PETP_4 G12
PERN_5 D8
PERP_5 C9
PETN_5 G11
PETP_5 H11
PERN_6 A12
PERP_6 B11
PETN_6 D11
PETP_6 D10
PERN_7 C7
PERP_7 B8
PETN_7 K12
PETP_7 J12
PERN_8
PERP_8
PETN_8
PETP_8

PCI-E

GLAN

PCH_GLAN_RX_N
PCH_GLAN_RX_P
PCH_GLAN_TX_N
PCH_GLAN_TX_P

USB

USBP0N AW25 USB_N0
USBP0P AY25 USB_P0
USBP1N BA23 USB_N1
USBP1P AY24 USB_P1
USBP2N AW23 USB_N2
USBP2P AY22 USB_P2
USBP3N AR22 USB_N3
USBP3P AP22 USB_P3
USBP4N AV21 USB_N4
USBP4P AV22 USB_P4
USBP5N AY20 USB_N5
USBP5P AW21 USB_P5
USBP6N AK20 USB_N6
USBP6P AL20 USB_P6
USBP7N AV20 USB_N7
USBP7P AW19 USB_P7
USBP8N BA19 USB_N8
USBP8P AY18 USB_P8
USBP9N AM20 USB_N9
USBP9P AN20 USB_P9
USBP10N AV17 USB_N10
USBP10P AV18 USB_P10
USBP11N AR20 USB_N11
USBP11P AT20 USB_P11
USBP12P AL18 USB_P12
USBP12N AK18 USB_N12
USBP13P BA16 USB_P13
USBP13N AY17 USB_N13

GLAN
BACK
BACK
HEADER
HEADER
HEADER
HEADER
04-09

OC0#/GPIO59 AT31 PCH_XDP_DATA_A0
OC1#/GPIO40 AT30 PCH_XDP_DATA_A1
OC2#/GPIO41 AK28 PCH_XDP_DATA_A2
OC3#/GPIO42 AP30 PCH_XDP_DATA_A3
OC4#/GPIO43 AP31 PCH_XDP_DATA_B0
OC5#/GPIO9 AL28 PCH_XDP_DATA_B1
OC6#/GPIO10 AL30 PCH_XDP_DATA_B2
OC7#/GPIO14 AM30 PCH_XDP_DATA_B3

XDP

USBRBIAS# AY15 USBRBIAS_PCH 500 mils R356 1 2 22.6-1-04
USBRBIAS AV15

CLKIN_DOT_96N AM22 KG_DOT96M_N
CLKIN_DOT_96P AL22 KG_DOT96M_P
CLK GEN

2 OF 12

PCH_PAE

WW50 P9

30,37 PCH_XDP_DATA_A0

RN41
PCH_XDP_DATA_A0 1 2 XDP_DATA_A0 28
PCH_XDP_DATA_A1 3 4 XDP_DATA_A1 28
PCH_XDP_DATA_A2 5 6 XDP_DATA_A2 28
PCH_XDP_DATA_A3 7 8 XDP_DATA_A3 28
330-8P4R-O

1000 mils

RN42
PCH_XDP_DATA_B0 1 2 XDP_DATA_B0 28
PCH_XDP_DATA_B1 3 4 XDP_DATA_B1 28
PCH_XDP_DATA_B2 5 6 XDP_DATA_B2 28
PCH_XDP_DATA_B3 7 8 XDP_DATA_B3 28
330-8P4R-O

SB_3VSB

RN35
PCH_XDP_DATA_A3 1 2
PCH_XDP_DATA_A2 3 4
PCH_XDP_DATA_A1 5 6
PCH_XDP_DATA_A0 7 8
10K-8P4R

RN34
PCH_XDP_DATA_B3 1 2
PCH_XDP_DATA_B2 3 4
PCH_XDP_DATA_B1 5 6
PCH_XDP_DATA_B0 7 8
10K-8P4R

Elitegroup Computer Systems

Title: PCH USB&PCIE&DMI

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V_1P05_FILTER
V_3P3_EPW
VCC3
Power

GND
GND

ME_PWROK	
AMT	Ra
Non-AMT	Rb

Ra
R419 0-04
PCH_MEPWROK
PCH_MEPWROK_R
PWROK
R401 0-04-O
Rb
V_1P05_FILTER
500 mils
R399 37.4-1-04
SATARBIAS_PCH
C339 4700P-04-O SB_TAC1
SC35 4700P-04-X-O SB_TAC2

VCC3
RN24
INTC_L REQ2_L
INTD_L REQ1_L
8.2K-8P4R
RN25
REQ3_L INTA_L
REQ0_L INTB_L
8.2K-8P4R
RN15
INTE_L INTF_L
INTG_L INTH_L
8.2K-8P4R
R341 10K-04 Over_temp
R404 10K-04 PCH_PU_GP49
R402 10K-04 GPIO21
R406 10K-04 OBR

PCH_1P05V
RN22
GPIO22 GPIO38
GPIO39 GPIO48
8.2K-8P4R-O
R426 100K-04-O PWROK
090116 ADD

Stuff Rc for ME on
CPU present detection
SB_3VSB
R412 10K-04-O
H_SKTOCC_R_L
P7
SHORT PAD
Rc
H_SKTOCC_L
R403 10K-04-O
DESIGN NOTE:
A16 Swap override
Override if sampled low
BIOS
R307 GNT3_L
R338 GNT2_L
1K-04-O
Server Only
DESIGN NOTE:
DMI AC COUPLING
FULL VOLTAGE MODE WHEN SAMPLED LOW
Desttop Platform do't pull low
VCC3
RJ1 1K-04-O
GNT0_L
VCC3
RJ3 1K-04-O
GNT1_L
R413 1K-04-O INIT3_3VB

BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	1	0
SPI	1	1

WW 11 PCI CHANGE TO 10

37 SB_PWM1
37 SB_PWM2
FAN
37 SB_TAC1
37 SB_TAC2

24 GNT1_L
24 REQ1_L
24 PAR
24 DEVSEL_L
23 PCH_PCI33M
24 PCIRST_L
24 IRDY_L
24 PME_L
24 SERR_L
24 STOP_L
24 PLOCK_L
24 TRDY_L
24 PERR_L
24 FRAME_L
24 GNT0_L
24 REQ0_L
24 INTE_L
24 INTF_L
24 INTG_L
24 INTH_L
PCI

29 SATA0_RX_N
29 SATA0_RX_P
29 SATA0_TX_N
29 SATA0_TX_P
29 SATA1_RX_N
29 SATA1_RX_P
29 SATA1_TX_N
29 SATA1_TX_P
29 SATA2_RX_N
29 SATA2_RX_P
29 SATA2_TX_N
29 SATA2_TX_P
29 SATA3_RX_N
29 SATA3_RX_P
29 SATA3_TX_N
29 SATA3_TX_P
29 SATA4_RX_N
29 SATA4_RX_P
29 SATA4_TX_N
29 SATA4_TX_P
29 SATA5_RX_N
29 SATA5_RX_P
29 SATA5_TX_N
29 SATA5_TX_P
SATA

43 KG_SATA100M_P
43 KG_SATA100M_N
CLK GEN
37 SATA_LED_L
Front Panel

17 GPIO19
17 GPIO36

35 A20GATE
35 KB_RST_L
19,35 SERIRQ
35_SST_CTL
3,35 H_PECI
SIO

3 H_PM_SYNC_0
3 H_THERMTRIP_L
39 PCH_MEPWROK
17,28,31,34,35 PWROK
3 H_SKTOCC_L
17 PCH_GPI37_45_46_47_PD

PCH-3
STP47 TP_TP_18_AK35 AK35 TP18
STP43 TP_TP19_AN36 AN36 TP19
STP45 TP_TP20_AU39 AU39 TP20
31 PCH_MEPWROK_R PCH_MEPWROK_R AL33 MEPWROK
CLINK

SB_PWM1 BA12 PWM0
SB_PWM2 AR12 PWM1
AW12 PWM2
AY13 PWM3
SB_TAC1 AW11 TACH0/GPIO17
SB_TAC2 AL14 TACH1/GPIO1
OBR AV11 TACH2/GPIO6
35 OBR Over_temp AY11 TACH3/GPIO7
35 Over_temp
FAN
0706 CHANGE
SST_CTL AN31 SST
C361
220PF-04-O
GPIO22 AN41 SCLOCK/GPIO22
GPIO38 AM38 SLOAD/GPIO38
GPIO39 AL39 SDATAOUT0/GPIO39
GPIO48 AG38 SDATAOUT1/GPIO48
AF15 NC_AF15
GPIO

SATA0RXN W41 SATA0_RX_N
SATA0RXP V40 SATA0_RX_P
SATA0TXN U38 SATA0_TX_N
SATA0TXP V38 SATA0_TX_P
SATA1RXN Y38 SATA1_RX_N
SATA1RXP Y37 SATA1_RX_P
SATA1TXN AB36 SATA1_TX_N
SATA1TXP AB35 SATA1_TX_P
SATA2RXN AD36 SATA2_RX_N
SATA2RXP AD35 SATA2_RX_P
SATA2TXN AB31 SATA2_TX_N
SATA2TXP AB32 SATA2_TX_P
SATA3RXN AC41 SATA3_RX_N
SATA3RXP AC39 SATA3_RX_P
SATA3TXN AB37 SATA3_TX_N
SATA3TXP AB38 SATA3_TX_P
SATA

SATA4RXN AF41 SATA4_RX_N
SATA4RXP AE40 SATA4_RX_P
SATA4TXN AD38 SATA4_TX_N
SATA4TXP AE38 SATA4_TX_P
SATA

SATA5RXN AE35 SATA5_RX_N
SATA5RXP AF34 SATA5_RX_P
SATA5TXN AD33 SATA5_TX_N
SATA5TXP AD32 SATA5_TX_P
ESATA

CLKIN_SATA_N/CKSSCD# Y34 KG_SATA100M_N
CLKIN_SATA_P/CKSSCD_P Y35 KG_SATA100M_P
CLK GEN

SATALED# AN39 SATA_LED_L
SATAICOMPI T39 SATARBIAS_PCH
SATAICOMPO T41
SATA0GP/GPIO21 AJ37 GPIO21
SATA1GP/GPIO19 AH38 GPIO19
SATA2GP/GPIO36 AK39 GPIO36
SATA3GP/GPIO37 AR38 PCH_GPI37_45_46_47_PD
SATA4GP/GPIO16 AH39 H_SKTOCC_R_L
SATA5GP/GPIO49 AG40 PCH_PU_GP49
NOT USE
NOT USE
TP8 V34 TP_TP8_V34 STP42
A20GATE AG37 A20GATE
INIT3_3V# AG39 INIT3_3VB
RCIN# AM40 KB_RST_L
SERIRQ AL40 SERIRQ
THRMTRIP# AC38 H_THERMTRIP_L
PECI D36 R376 0-04 H_PECI
PMSYNCH C37 H_PM_SYNC_0
HOST
3 OF 12
PCH_PAE
USE SIO FAN RESERVE

PCH-1
PAR AP6 PAR
DEVSEL_L AT6 DEVSEL#
PCH_PCI33M AL11 CLKIN_PCILOOPBACK
PCIRST_L AH10 PCIRST#
IRDY_L AP7 IRDY#
PME_L AH11 PME#
SERR_L AV6 SERR#
STOP_L AN8 STOP#
PLOCK_L AK12 PLOCK#
TRDY_L AL6 TRDY#
PERR_L AT4 PERR#
FRAME_L AL7 FRAME#

PULL UP
GNT0_L AK11 GNT0#
GNT1_L AK6 GNT1#/GPIO51
GNT2_L BA9 GNT2#/GPIO53
GNT3_L AM3 GNT3#/GPIO55

PULL UP
REQ0_L AP4 REQ0#
REQ1_L AW5 REQ1#/GPIO50
REQ2_L AY4 REQ2#/GPIO52
REQ3_L AH8 REQ3#/GPIO54

INTA_L AT8 PIRQA#
INTB_L AR4 PIRQB#
INTC_L AT11 PIRQC#
INTD_L BA5 PIRQD#
INTE_L AU8 PIRQE#/GPIO2
INTF_L AH7 PIRQF#/GPIO3
INTG_L AP12 PIRQG#/GPIO4
INTH_L AW4 PIRQH#/GPIO5

AD0 AT9 AD0
AD1 AP11 AD1
AD2 AU6 AD2
AD3 AY10 AD3
AD4 AP9 AD4
AD5 AV8 AD5
AD6 AR9 AD6
AD7 AV7 AD7
AD8 AW9 AD8
AD9 AR3 AD9
AD10 AW7 AD10
AD11 AR8 AD11
AD12 AU3 AD12
AD13 AP2 AD13
AD14 AU1 AD14
AD15 AN3 AD15
AD16 AM2 AD16
AD17 AM11 AD17
AD18 AM4 AD18
AD19 AY8 AD19
AD20 AL10 AD20
AD21 AT5 AD21
AD22 AL2 AD22
AD23 AT2 AD23
AD24 AL4 AD24
AD25 AV10 AD25
AD26 AL9 AD26
AD27 AN7 AD27
AD28 AK7 AD28
AD29 AN6 AD29
AD30 AH12 AD30
AD31 AN11 AD31
AD[31..0] AD[31..0] 24

C/BE0# AV3 C_BE_L0
C/BE1# AY6 C_BE_L1
C/BE2# AP5 C_BE_L2
C/BE3# AW10 C_BE_L3
C_BE_L[3..0] C_BE_L[3..0] 24
PCI
1 OF 12
PCH_PAE

Elitegroup Computer Systems

Title	PCH:SATA,HOST,CLINK,PCI	
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3VSB
VCC3
VDIMM
V_3P3_EPW
RTCVCC
Power

GND GND

33 AUDIO_DET_SB
32 SDIN0
39 LAN_PWROK
10,19,24,29,31 SMBCLK
10,19,24,29,31 SMBDATA
19 SPI_XMOSI
19 SPI_XMISO
19 SPI_XCS0
19 SPI_XCLK
SPI ROM
19 SPI_XCS1
30 LAN_DISABLE_L
10,29 PCIE_WAKE_L
01'06
36 PCH_RI
19 LPC_PWRDWN-
16 GPIO19
16 GPIO36
35 SML1CLK_PCH
35 SML1DATA_PCH
31,39 SLP_LAN_L
LAN
01'06
35 LPC_DRQ_L
35 LPC_PME_L
28,35 PCH_PWRBTN_L
19,35 LPC_FRAME_L
SIO
30 CLKREQ_L
COM
TPM,SPI
28,37 SYS_RST_L
3,28,35 P_PCIRST_L
35 PCH_RSMRST
37 PCH_SPKR
16,28,31,34,35 PWROK
1,34,35,36,38,39 SLP3B_SUSB_L
31,35,37,41 SLPS4-
31,39,40 PCH_SLP_M_L
3,28 H_PWRGD
3 H_DRAMPWRGD
CPU
28 PCH_JTAG_RST
28 PCH_JTAG_TCK_FILTER
28 PCH_JTAG_TDI
28 PCH_JTAG_TDO
28 PCH_JTAG_TMS
28 XDP_GP28
28 XDP_DETECT_R
28 XDP_DETECT_R
16 PCH_GPI37_45_46_47_PD
30 SMB0CLK_PCH
30 SMB0DATA_PCH
32 BIT_CLK
32 SDOUT
32 AZRST-
32 SYNC
42,43 VR_READY
35 COPEN_L
Audio

SB_3VSB
R389 10K-04 GPIO15
R408 10K-04 PEG_A_CLKRQ-
0915 ADD R389
0714 ADD
DESIGN NOTE:
TLS CONFIDENTIALITY DISABLE
DISABLED WHEN SAMPLED LOW
RTCVCC
R374 330K-04
PCH_INTVRMEN
1K-04-O R373
DESIGN NOTE:
IINTEGRATED 1.05V SUS VRM ENABLE
SUS VRM ENABLED WHEN SAMPLED HIGH

SB_3VSB
R410 1K-04 PCIE_WAKE_L
R330 10K-04 PCH_RI
R353 10K-04 SPI_WPSW
ADD SPI_WPSW
WW49
R371 10K-04 SML0ALERT_PCH
R384 2.2K-04 SMB0CLK_PCH
R396 2.2K-04 SMB0DATA_PCH
R83 1K-04 PCH_PU_GP28
R646 10K-04 LPC_PWRDWN-
R647 2.7K-04 SML1CLK_PCH
R648 2.7K-04 SML1DATA_PCH
R649 10K-04 SML1ALERT_PCH
R393 10K-04 CP_PCH_GP11
R329 10K-04 LPC_PME_L

SB_3VSB
R430 2.7K-04 SMBCLK
R434 2.7K-04 SMBDATA
EUP_6
VCC3 R466 10K-04
WW51 3VSB>>VCC3
RN30 10K-8P4R-04
CLKREQ_L
GPIO34
PCH_GP18_PU
GPIO35
0626 GP35_3VSB TO VCC3
XDP_DETECT
GPIO36
GPIO19
RN32 10K-8P4R-04

SB_3VSB
04-09
R510 10K-04 GPIO72
R386 10K-04
R387 10K-04 PCH_GPI26_45_56_PD
R395 10K-04 PCH_GPI37_45_46_47_PD
CRS1.1
0624 del pull-up res
R397 1K-04-O VCCVRM_EN

V:A
Internal VccVRM
HI Enable
LOW Disable

R460 1K-04-O IGC_EN_L
04-09
Low to Enable Internal CLK GEN

SB_3VSB
R390 10K-04 GPIO44
R418 10K-04 PCH_GPI73_PD
CRS1.1
FAE:For A0 IBX, pull up GPIO44 and GPIO73 to 3VSB

SB_3VSB
Reserved
R351 1K-04-O SDOR
DESIGN NOTE:OD PLL VR SUPPLY SEL
1.8V SUPPLY WHEN SAMPLED LOW
1.5V SUPPLY WHEN SAMPLED HIGH
SB_3VSB
R355 1K-04-O SYNCR
VCC3
DESIGN NOTE:
DO NOT STUFF CIRCUIT. INTERNAL PULL-UP EXIST IN PCH.
R317 10K-04-O LPC_DRQ_L
VDIMM
R381 1.1K-1-04
H_DRAMPWRGD
1.05 V / 1.1 V
R380 3K-1-04

33-8P4R
SDOUT SDOR
AZRST- ACZ_RST
BIT_CLK ACZ_BCLK
SYNC SYNCR
VR_READY R398 RN27 0-04 PCH_SYSPWROK
C370 0.1U-04-O

V_3P3_EPW
Design Note:
Sampled low to disable iTPM
(Internal weak pull down)
R424 1K-04-O SPI_XMOSI
PCH_RTCX1 R372 PCH_RTCX2
XTAL
10M
X4 Y-32.768
XTAL-JW
C354 12P-04
C355 12P-04

Crystal Spec:+/-5ppm,CL=12.5pF
Ce=2*CL-(Cs+Ci)

AUDIO DET AUDIO_DET_SB
19,35 LPC_AD[3..0]
LPC_AD[3..0]
LPC_AD0
LPC_AD1
LPC_AD2
LPC_AD3
LPC_DRQ_L
LPC_FRAME_L
ACZ_BCLK
ACZ_RST
SDIN0
SDOR
SYNCR
LAN_PWROK
PCH_RTCX1
PCH_RTCX2
RTCRST_L
SRTCRST_L
31 SRTCRST_L
CP_PCH_GP11
SMBCLK
SMBDATA
SML0ALERT_PCH
SMB0CLK_PCH
SMB0DATA_PCH
SML1ALERT_PCH
SML1CLK_PCH
SML1DATA_PCH
ME

R488
SPI_XMOSI 33-04 SPIMOSI
SPI_XMISO R552 0-04 SPIMISO
SPI_XCS0 R635 33-04
SPI_XCLK R634 33-04 SPICLK
SPI_XCS1
SPI_MOSI
SPI_MISO
SPI_CS0#
SPI_CLK
SPI_CS1#

0706 intel review change

PCH-4
LPC
AUDIO
RTC
SMB
SPI
4 OF 12
PCH_PAE

LDRQ1#/GPIO23
FWH0/LAD0
FWH1/LAD1
FWH2/LAD2
FWH3/LAD3
LDRQ0#
FWH4/LFRAME#
HDA_BCLK
HDA_RST#
HDA_SDIN0
HDA_SDIN1
HDA_SDIN2
HDA_SDIN3
HDA_SDO
HDA_SYNC
RTCX1
RTCX2
RTCRST#
SRTCRST#
SMBALERT#/GPIO11
SMBCLK
SMBDATA
SML0ALERT#/GPIO60
SML0CLK
SML0DATA
SML1ALERT#/GPIO74
SML1CLK/GPIO58
SML1DATA/GPIO75
SPI_MOSI
SPI_MISO
SPI_CS0#
SPI_CLK
SPI_CS1#

BMBUSY#/GPIO0
GPIO8
SLP_LAN#/GPIO29
SUS_PWR_ACK/GPIO30
LAN_PHY_PWR_CTRL/GPIO12
GPIO13
GPIO15
PCIECLKRQ1#/GPIO18
PCIECLKRQ2#/GPIO20
MEM_LED/GPIO24
PCIECLKRQ3#/GPIO25
PCIECLKRQ4#/GPIO26
GPIO27
GPIO28
ACPRESENT/GPIO31
GPIO32
GPIO33
STP_PCI#/GPIO34
SATACLKREQ#/GPIO35
PCIECLKRQ5#/GPIO44
PCIECLKRQ6#/GPIO45
PCIECLKRQ7#/GPIO46
PEG_A_CLKRQ#/GPIO47
PEG_B_CLKRQ#/GPIO56
GPIO57
PCIECLKRQ0#/GPIO73
PROCPWRGD
SLP_DSW#
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
JTAG_RST#
JTAG_TCK
JTAG_TDI
JTAG_TDO
JTAG_TMS

AK41 XDP_DETECT R509 2 XDP_DETECT_R 330-04-O
AK30 IGC_EN_L
BA35 SLP_LAN_L
AT37 SPI_WPSW 19 WW50 P9
AU34 LAN_DISABLE_L
AR16 LPC_PME_L
AY36 GPIO15
AM39 PCH_GP18_PU
AP38 CLKREQ_L
AR34 AMT_LED
AP33 EUP_6
AW37 PCH_GPI26_45_56_PD
AP37 VCCVRM_EN
AV40 PCH_PU_GP28 R425 2 XDP_GP28 330-04-O
AP40 SPI_WP0_L SPI_WP0_L
AJ40 0624 del 0630 ADD WP WW50 P9
AT16 ME_EN
AT40 GPIO34
AR41 GPIO35
AW38 GPIO44
AV36 PCH_GPI26_45_56_PD
AP36 PCH_GPI37_45_46_47_PD
AV39 PEG_A_CLKRQ-
AW35 PCH_GPI26_45_56_PD
AL32 LPC_PWRDWN-
AN35 PCH_GPI73_PD
B38 H_PWRGD
AH35 TP_SLP_DSW 1 STP49
AT38 PCH_SYSPWROK
AK36 PCH_PWRBTN_L
AT33 PCH_RI
AK31 1 STP51
AH31 DOLBY_L DOLBY_L 33
AL38 SYS_RST_L
AV34 P_PCIRST_L
AR33 PCIE_WAKE_L
AN24 INTRUDER_L
AM24 PWROK
AL24 RSMRST RSMRST 31
AW31 PCH_INTVRMEN
AJ38 PCH_SPKR
AV35 SLP3B_SUSB_L SLP3B_SUSB_L 31,34,35,36,38,39
AP35 SLPS4- SLPS4- 31,35,37,41
AU36 SLP5_L SLP5_L 31,34
AT36 PCH_SLP_M_L PCH_SLP_M_L 31,39,40
AY34 GPIO72
AW32 H_DRAMPWRGD
AL35 PCH_JTAG_RST
AK33 PCH_JTAG_TCK_FILTER
AL36 PCH_JTAG_TDI
AN34 PCH_JTAG_TDO
AL34 PCH_JTAG_TMS

R597 1 2 0-04
PCH_RSMRST E Q81 C RSMRST
2N3906-S-O
SB_3VSB R599 4.7K-04-O B R598 100K-04
D35 D36
BAV99-S-O BAV99-S-O
R600 2.2K-04-O
R601 0-04-O
04-09

GPIO15
RJ7 0-04(2-3)-O
04-09
PEG_A_CLKRQ-
R518 0-04 PEG_PINB4 PEG_PINB4 10,26
GPIO35
RJ6 0-04(2-3)-O
PCH_GPI73_PD
R519 0-04 PEG_PCIE PEG_PCIE 29

Case Open
D11 CP_PCH_GP11
VBAT_IO
BAT54C-S-O
R531 1M-04
COPEN_L
VBAT_IO
C_INTRUSION
RJ14
H(F)-2P1R
R596 1M-04
INTRUDER_L
0-04(1-2)
0915 CHANGE TO SIO & FOOTPRINT
DG0.8:Page383

ATX_5VSB
R423 6.19K-1-04
1111 CHANGE 6.19K
R422 1.1K-1-04
C380 1U-O
ATX_5VSB
R405 10K-04
Q44 2N3904-S
SB_3VSB
R407 560-04
RSMRST
Q45 2N3904-S
0706 intel review CHANGE
RTC Power-Well Isolation Control (PDG 1.1 Page329)

Clear CMOS
RTCVCC
CLR_CMOS(1-2)
JP-R
D15 BAT54C-S
R130 1K-04
SB_3VSB
CLR_CMOS
H3X1-R
VBAT_IO
R379 20K-04
C360 1U
VBAT
BT2
SK-CR2032-D
R392 4.7K-04
RTCRST_L
C357 1U-16VX X7R

*	CLR_CMOS
1-2	NORMAL
2-3	CLEAR

BT1
KTS LITHIUM BATTERY CD2032
CR2032

Elitegroup Computer Systems
Title: PCH:GPIO,AUDIO,LPC,LPC,SPI
Size: Custom | Document Number: Q57H-AM | Rev: 1.0
Date: Tuesday, December 15, 2009 | Sheet 17 of 46

VCC3
V_1P8_SFR
V_NAND_IO
Power

GND
GND

PCH-5

NVR_ALE J34
NVR_CLE L35
NVR_RB_L M32
NVR_RE_RB0_L J36
NVR_RE_RB1_L J35
NVR_WE_CK0_L M31
NVR_WE_CK1_L F38

NV_ALE
NV_CLE
NV_RB#
NV_WR#0_RE#
NV_WR#1_RE#
NV_WE#_CK0
NV_WE#_CK1

NV_DQ0/NV_IO0 T33 NVR_DATA0
NV_DQ1/NV_IO1 P35 NVR_DATA1
NV_DQ2/NV_IO2 T31 NVR_DATA2
NV_DQ3/NV_IO3 P33 NVR_DATA3
NV_DQ4/NV_IO4 M35 NVR_DATA4
NV_DQ5/NV_IO5 L33 NVR_DATA5
NV_DQ6/NV_IO6 M36 NVR_DATA6
NV_DQ7/NV_IO7 M34 NVR_DATA7
NV_DQ8/NV_IO8 M30 NVR_DATA8
NV_DQ9/NV_IO9 F36 NVR_DATA9
NV_DQ10/NV_IO10 H33 NVR_DATA10
NV_DQ11/NV_IO11 F37 NVR_DATA11
NV_DQ12/NV_IO12 E39 NVR_DATA12
NV_DQ13/NV_IO13 G33 NVR_DATA13
NV_DQ14/NV_IO14 D40 NVR_DATA14
NV_DQ15/NV_IO15 F33 NVR_DATA15

NVRAM

NV_CE#0 H36 NVR_CE_N0
NV_CE#1 H35 NVR_CE_N1
NV_CE#2 P32 NVR_CE_N2
NV_CE#3 F41 NVR_CE_N3

NV_DQS0 P36 NVR_RDSTRBI0
NV_DQS1 F40 NVR_RDSTRBI1

NV_RCOMP L36 NV_RCOMP_R2GND 2 SR4 1 32.4-1-04-X-O

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PCH_PAE

Intel Anti-Theft Technology(防盜技術)

DESIGN NOTE:
High:Enable Intel AT-d
Low:Disable Intel AT-d

CRS1.1

V_NAND_IO
R497 1 2 10K-04
NVR_ALE

V_NAND_IO
R496 1 2 10K-04-O
NVR_CLE

FOR DMI

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

CON1

NVR_DATA0 6 DQ0
NVR_DATA1 7 DQ1
NVR_DATA2 45 DQ2
NVR_DATA3 46 DQ3
NVR_RDSTRBI0 10 DQS_0
9 DQS_0*
NVR_DATA4 12 DQ4
NVR_DATA5 13 DQ5
NVR_DATA6 51 DQ6
NVR_DATA7 52 DQ7
15 RFU1
16 RFU2
NVR_DATA8 28 DQ8
NVR_DATA9 29 DQ9
NVR_DATA10 67 DQ10
NVR_DATA11 68 DQ11
63 RFU3
64 RFU4
NVR_DATA12 34 DQ12
NVR_DATA13 35 DQ13
NVR_DATA14 73 DQ14
NVR_DATA15 74 DQ15
NVR_RDSTRBI1 32 DQS_1
31 DQS_1*

NVR_CE_N0 24 CE_0*
NVR_CE_N1 22 CE_1*
NVR_CE_N0 25 CE_2*
NVR_CE_N1 61 CE_3*
NVR_CE_N2 4 CE_4*
NVR_CE_N3 37 CE_5*
NVR_CE_N2 43 CE_6*
NVR_CE_N3 76 CE_7*

NVR_RE_RB0_L 21 W/R_0*
NVR_RE_RB1_L 60 W/R_1*
NVR_RB_L 54 R/B*

NVR_ALE 19 ALE_0
NVR_CLE 18 CLE_0
58 ALE_1
57 CLE_1

NVR_WE_CK0_L 49 CK_0/WE_0*
48 CK_0*
NVR_WE_CK1_L 71 CK_1/WE_1*
70 CK_1*

V_NAND_IO 1 R108 2 10K-04-O 55 WP*

VCC 1
VCC 2
VCC 3
VCC 40
VCC 41
VCC 42
VCCQ 38
VCCQ 39
VCCQ 78
VREF 77 VREF_NAND

GND 5
GND 8
GND 11
GND 14
GND 17
GND 20
GND 23
GND 26
GND 27
GND 30
GND 33
GND 36
GND 44
GND 47
GND 50
GND 53
GND 56
GND 59
GND 62
GND 65
GND 66
GND 69
GND 72
GND 75

CON_NVRAM_78P-O

VCC3
VCC1.8
R117 0-O
R116 0
V_NAND_IO
R104 10K-1-04-O
R107 10K-1-04-O
11/13 DEL

Elitegroup Computer Systems

Title: PCH & NVRAM

Size: Custom
Document Number: Q57H-AM
Rev: 1.0

Date: Thursday, December 17, 2009
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PCH FDI Link

V_3P3_EPW — Power
GND — GND

CPU:
3 FDI_TX_0_DN
3 FDI_TX_0_DP
3 FDI_TX_1_DN
3 FDI_TX_1_DP
3 FDI_TX_2_DN
3 FDI_TX_2_DP
3 FDI_TX_3_DN
3 FDI_TX_3_DP
3 FDI_TX_4_DN
3 FDI_TX_4_DP
3 FDI_TX_5_DN
3 FDI_TX_5_DP
3 FDI_TX_6_DN
3 FDI_TX_6_DP
3 FDI_TX_7_DN
3 FDI_TX_7_DP

3 FDI_FSYNC_0
3 FDI_LSYNC_0
3 FDI_FSYNC_1
3 FDI_LSYNC_1

3 FDI_INT

17 SPI_XMISO
17 SPI_XMOSI
17 SPI_XCS0
17 SPI_XCLK

30,35 PCI_RSTW_L

PCH-7

FDILINK

FDI_RXN0	K30	FDI_TX_0_DN	Pipe A
FDI_RXP0	J30	FDI_TX_0_DP	
FDI_RXN1	H30	FDI_TX_1_DN	
FDI_RXP1	G30	FDI_TX_1_DP	
FDI_RXN2	D31	FDI_TX_2_DN	
FDI_RXP2	D32	FDI_TX_2_DP	
FDI_RXN3	F31	FDI_TX_3_DN	
FDI_RXP3	G31	FDI_TX_3_DP	
FDI_RXN4	K31	FDI_TX_4_DN	Pipe B
FDI_RXP4	J31	FDI_TX_4_DP	
FDI_RXN5	C30	FDI_TX_5_DN	
FDI_RXP5	B31	FDI_TX_5_DP	
FDI_RXN6	A33	FDI_TX_6_DN	
FDI_RXP6	B32	FDI_TX_6_DP	
FDI_RXN7	C33	FDI_TX_7_DN	
FDI_RXP7	B34	FDI_TX_7_DP	
FDI_FSYNC0	E34	FDI_FSYNC_0	Pipe A
FDI_LSYNC0	C35	FDI_LSYNC_0	
FDI_FSYNC1	E36	FDI_FSYNC_1	Pipe B
FDI_LSYNC1	D35	FDI_LSYNC_1	
FDI_INT	B36	FDI_INT	

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PCH_PAE

FDI_FSYNC_0 R565 1K-04-O
FDI_FSYNC_1 R566 1K-04-O
FDI_LSYNC_0 R567 1K-04-O
FDI_LSYNC_1 R568 1K-04-O
FDI_INT R569 1K-04-O

Stuff for Disable FDI

SPI ROM

SPI_XCS0 R428 0-04 ROM_CS0

close to SPI ROM

0703 change RN TO RES

SPI_XMISO R604 33-04 SPI_MISO
SPI_XMOSI R587 33-04 SPI_XMOSI
SPI_XCLK R603 33-04 SPIM_XCLK

close to PCH

SPI_DEBUG — H4X2-B-O

ROM_CS0
SPI_MISO
SPI_WP0_L

SPI_3P3V
SPI_HOLD0_L
SPIM_XCLK
SPIM_XMOSI

FOR DEBUG USE

ROM1 — SPI-32M-S-64M

CS VCC
DO HOLD
WP CLK
GND DI

SPI_3P3V
SPI_HOLD0_L
SPIM_XCLK
SPIM_XMOSI

SMD TYPE

0720 CHANGE LIB

SPI_3P3V
R571 10K-04-O
BIOS_WP — H3X1-R
SPI_WP0_L — SPI_WP0_L 17
Q79 2N3906-S
SPI_WPSW 17

ADD SPI ROM WP

17 SPI_XCS1 — STP50

BIOS_WP(1-2) — JP-R

V_3P3_EPW
SPI_3P3V
D23 BAT54C-S-O
R608 0
C382 10U-08
C383 .1U-04

0710 ADD FOR MP

SPI_3P3V
R454 10K-04 SPI_WP0_L
R461 1K-04 SPI_HOLD0_L
R579 1K-04 ROM_CS0

23 TPM33M
17,35 LPC_FRAME_L
30,35 PCI_RSTW_L
16,35 SERIRQ

17,35 LPC_AD[3..0]
17 LPC_PWRDWN-
LPC_AD[3..0]

LPC_PWRDWN- R542 33-04 LPC_PWD_R

VCC3
C349 .1U-04
C454 .1U-04
C273 .1U-04-O

VCC3 VCC3
RJ26 — 4.7K-04 (1-2)-O
PENABLE

U37 — ST19NP18 — 02D440-918000

GPIO1		LPCPD#	
GPIO2		SERIRQ	SERIRQ 16,35
VNC		LAD0	LPC_AD0 17,35
GND1		NC6	
NC1		VPS2	
GPIO3		LAD1	LPC_AD1 17,35
PP		LFRAME#	LPC_FRAME_L 17,35
NC2		LCLK	TPM33M 23
GPIO4		LAD2	LPC_AD2 17,35
VPS1		NC7	
GND2		GND3	
NC3		LAD3	LPC_AD3 17,35
NC4		LRESET#	PCI_RSTW_L 30,35
NC5		GPIO5	

VCC3 VCC3
R572 4.7K-04
LPC_PWD_R
LPC_AD1
-LPC_FRAME
TPM33M
LPC_AD2
LPC_AD3
-PCI_RSTZ
TPM33M
C414 10P-04
C377 10P-04-O

C189 .1U-04-O
KD 11/06
TPM — H10*2-BK-P4E-O

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

23 TCM33M
-LPC_FRAME
LPC_AD3
LPC_AD0
LPC_PWD_R
VCC3
3VSB
R221 0-04-O
C190 .1U-04-O

GND
TPM_PIN6
LPC_AD2
LPC_AD1
SERIRQ
R197 0-04-O
R196 0-04-O
R292 4.7K-04-O
R283 0-04-O
VCC
SMBDATA 10,17,24,29,31
SMBCLK 10,17,24,29,31
C180 .1U-04-Q

0713 ADD TCM

12V
C43 .1U-04-O
R56 10K-04

09'0617

SMBDATA
Q87 2N7002-S
R43 0-04-O
R44 8.2K-04
VCC3
SDATA
SDATA 11,12,13,14,28,43

SMBCLK
Q88 2N7002-S
R70 0-04-O
R68 8.2K-04
VCC3
SCLK
SCLK 11,12,13,14,28,43

ECS Elitegroup Computer Systems

Title: Flexible Display Interface & SPI ROM

Size	Document Number	Rev
Custom	Q57H-AM	1.0

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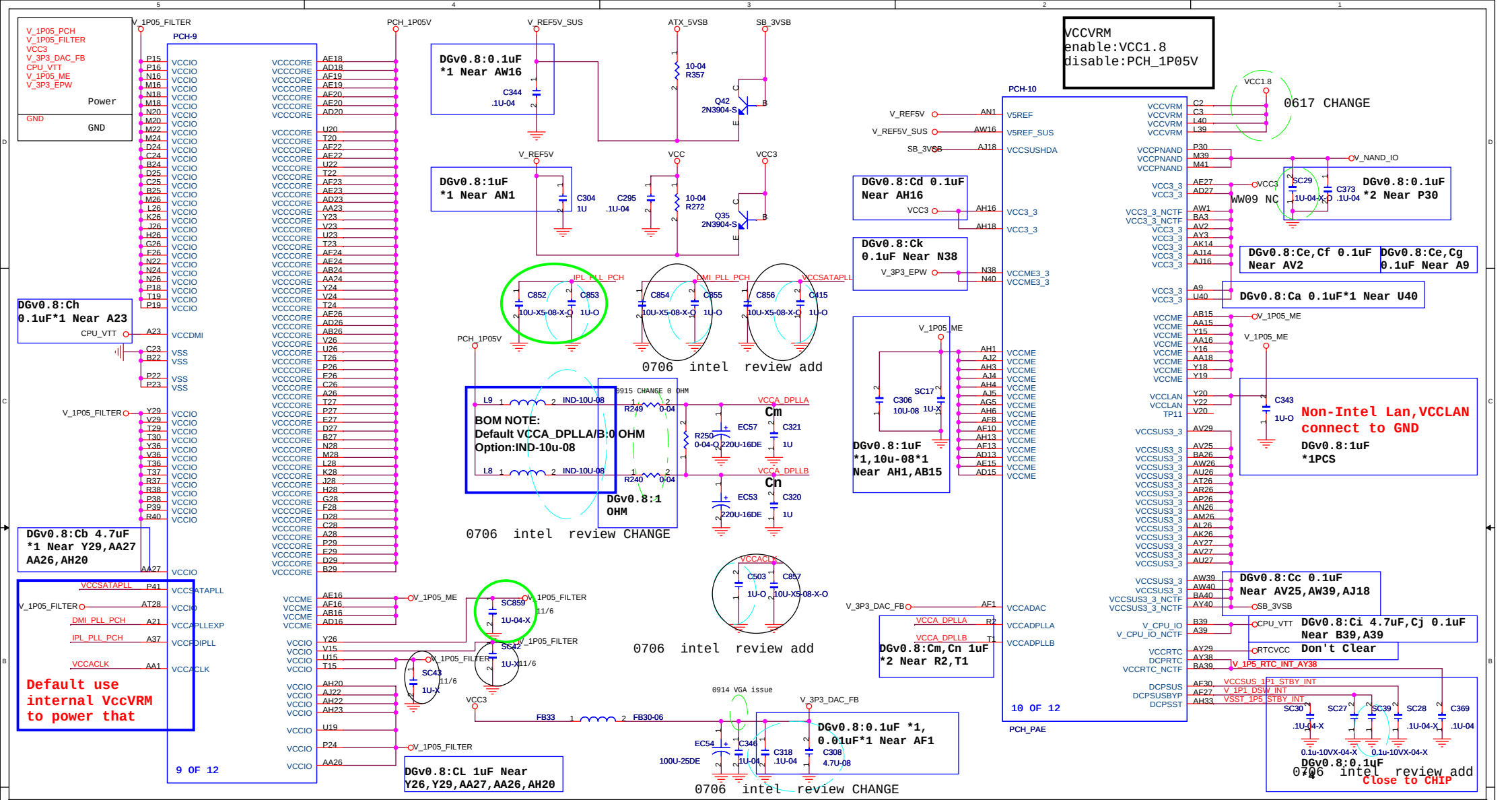
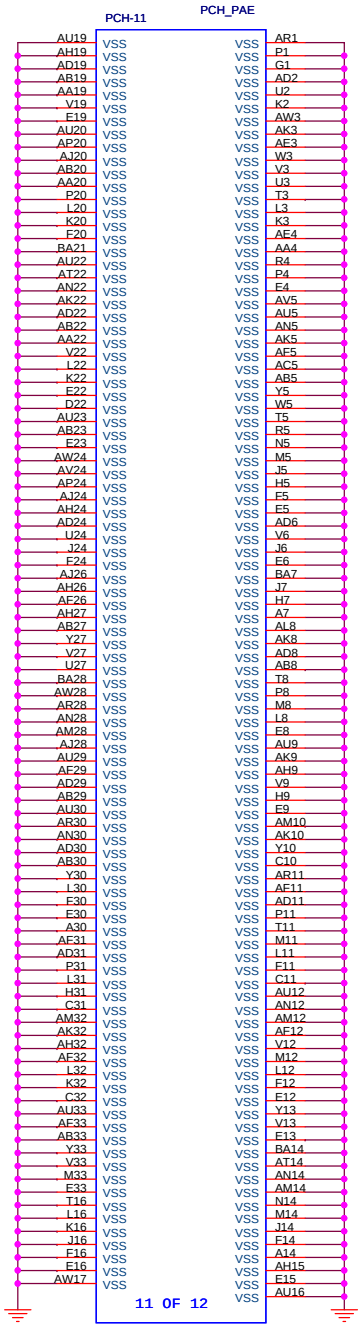
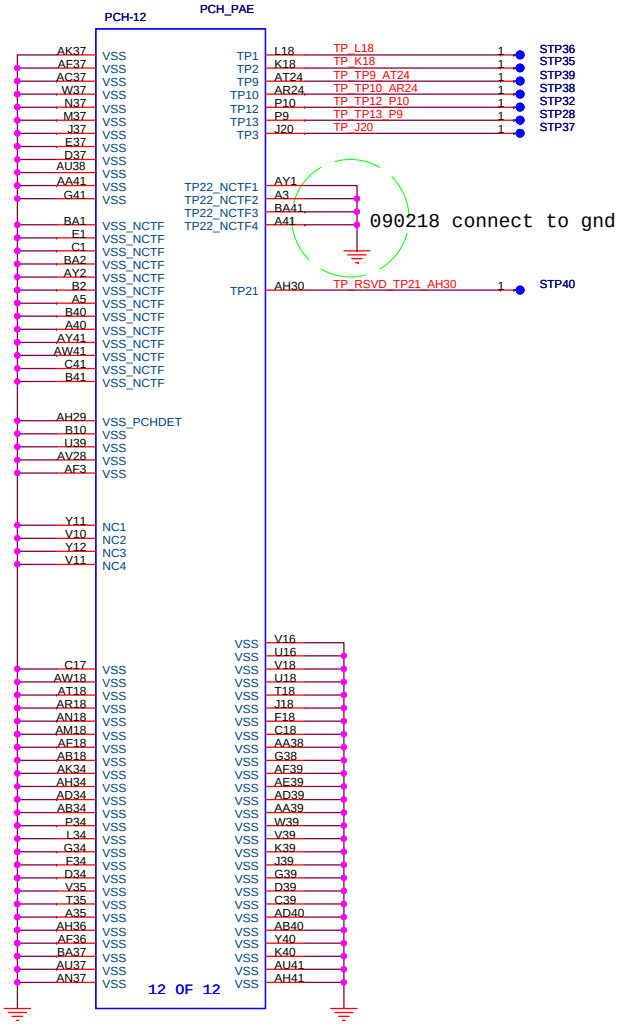

V_1P05_PCH
V_1P05_FILTER
VCC3
V_3P3_DAC_FB
CPU_VTT
V_1P05_ME
V_3P3_EPW
Power
GND
PCH-9
PCH-10
VCCVRM enable:VCC1.8 disable:PCH_1P05V
0617 CHANGE
DGv0.8:0.1uF *1 Near AW16
DGv0.8:1uF *1 Near AN1
DGv0.8:Cd 0.1uF Near AH16
DGv0.8:Ck 0.1uF Near N38
DGv0.8:Ch 0.1uF*1 Near A23
DGv0.8:Cb 4.7uF *1 Near Y29,AA27 AA26,AH20
DGv0.8:Ce,Cf 0.1uF Near AV2
DGv0.8:Ce,Cg 0.1uF Near A9
DGv0.8:Ca 0.1uF*1 Near U40
DGv0.8:0.1uF *2 Near P30
WW09 NC
DGv0.8:1uF *1,10u-08*1 Near AH1,AB15
Non-Intel Lan,VCCLAN connect to GND
DGv0.8:1uF *1PCS
DGv0.8:Cc 0.1uF Near AV25,AW39,AJ18
DGv0.8:Ci 4.7uF,Cj 0.1uF Near B39,A39
Don't Clear
DGv0.8:Cm,Cn 1uF *2 Near R2,T1
0706 intel review add
BOM NOTE: Default VCCA_DPLLA/B:0 OHM Option:IND-10u-08
0915 CHANGE 0 OHM
DGv0.8:1 OHM
0706 intel review CHANGE
0914 VGA issue
DGv0.8:0.1uF *1, 0.01uF*1 Near AF1
DGv0.8:CL 1uF Near Y26,Y29,AA27,AA26,AH20
Default use internal VccVRM to power that
9 OF 12
10 OF 12
PCH_PAE
Close to CHIP
VCCAUPLL (USB)
DGv0.8:10uF*2 Near N22,P18,P15,Y26
CRS1.1:VCC3 9PCS
DGv0.8:10uF*2,4.7uF *1,1uF*1 Near AE18
11/14 Deleted 4pcs stitching Caps
3.4A
Decoupling
DGv0.8:0.1uF*1 1uF*1 Near AY29
Elitegroup Computer Systems
PCH PWR RAILS&Decoupling
Q57H-AM
Tuesday, December 15, 2009
Sheet 20 of 46





Elitegroup Computer Systems

Title: PCH GND PINS

Size	Document Number	Rev
Custom	Q57H-AM	1.0

Date: Monday, December 14, 2009 Sheet 21 of 46

VCC
VCC3
Power

GND
GND

(WW07 DVI-I ONLY PORT B)

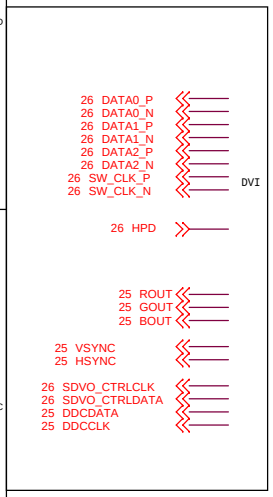
Port B:Capable of SDVO/HDMI/DVI/DP
Port C:Capable of HDMI/DVI/DP
Port D:Capable of HDMI/DVI/DP

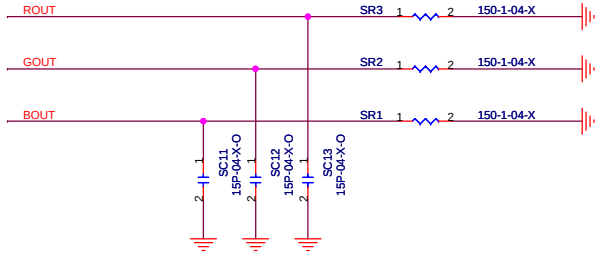
ADD 0617

PCH-6

Port B DP

Port C DVI





Elitegroup Computer Systems			
Title	PCH VIDEO AND DDSP		
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Date: Monday, December 14, 2009	Sheet 22 of 46		

Power

GND GND

43 CK_PCH_N
43 CK_PCH_P
3 CK_CPU_N
3 CK_CPU_P
43 CK_PCH_14M_REF
16 PCH_PCI33M
24 PCIA33M
24 PCIB33M
3 CK_PE_100M_DMI_DN
3 CK_PE_100M_DMI_DP
29 PEX1_1_100M_N
29 PEX1_1_100M_P
30 KG_GBE_CLKN
30 KG_GBE_CLKP
10 PEX16_100M_N
10 PEX16_100M_P
35 SIO_33M
35 SIO_48M
19 TCM33M
19 TPM33M

SIO(33M)
PCI(Slot)
PCI(PCH LB)
PCI(Slot)
TPM(33M)
TCM(33M)

0703 change 39 ohm

SIO_33M — R309 39-04 — SIO_33M_R — AF6
PCIB33M — R280 39-04 — PCIB33M_R — AD7
PCH_PCI33M — R308 39-04 — PCH_PCI33M_R — AF9
PCIA33M — R310 39-04 — PCIA33M_R — AD9
TPM33M — R325 39-04 — TPM33M_R — AD12
TCM33M — R369 51-04-O

0713 ADD TCM

STP31 TP_CLKOUTFLEX0 AD10
TP33 TP_CLKOUTFLEX1 AK1
STP25 TP_CLKOUTFLEX2 AB6
SIO_48M — R304 33-04 — SIO_48M_R AL3

PCH_1P05V — R312 90.9-1-04 — XCLK_RCOMP AA3

Follow FAE Answer

CK_PCH_14M_REF AF7

PCH-8

CLKOUT_PCI0
CLKOUT_PCI1
CLKOUT_PCI2
CLKOUT_PCI3
CLKOUT_PCI4
CLKOUTFLEX0/GPIO64
CLKOUTFLEX1/GPIO65
CLKOUTFLEX2/GPIO66
CLKOUTFLEX3/GPIO67
XCLK_RCOMP
REFCLK14IN

CLKIN_BCLK_N Y32 — CK_PCH_N
CLKIN_BCLK_P Y31 — CK_PCH_P
CLKOUT_BCLK0_N/CLKOUT_PCIE8N L38 — CK_CPU_N
CLKOUT_BCLK0_P/CLKOUT_PCIE8P K38 — CK_CPU_P
CLKOUT_PCIE7N T7
CLKOUT_PCIE7P T6
CLKOUT_DMI_N H40 — CK_PE_100M_DMI_DN
CLKOUT_DMI_P J41 — CK_PE_100M_DMI_DP
CLKOUT_DP_N/CLKOUT_BCLK1* H37
CLKOUT_DP_P/CLKOUT_BCLK1_P H36
CLKOUT_PICE0N V2 — PEX1_1_100M_N
CLKOUT_PICE0P W1 — PEX1_1_100M_P
CLKOUT_PCIE1N T10
CLKOUT_PCIE1P T9
CLKOUT_PCIE2N M6 — KG_GBE_CLKN
CLKOUT_PCIE2P M7 — KG_GBE_CLKP
CLKOUT_PCIE3N M9
CLKOUT_PCIE3P M10
CLKOUT_PCIE4N P7
CLKOUT_PCIE4P P6
CLKOUT_PCIE5N Y8
CLKOUT_PCIE5P Y9
CLKOUT_PCIE6N U4
CLKOUT_PCIE6P V4
CLKOUT_PEG_A_N Y6 — PEX16_100M_N
CLKOUT_PEG_A_P Y7 — PEX16_100M_P
CLKOUT_PEG_B_N V7
CLKOUT_PEG_B_P V8

PCH_PAE
XTAL25_OUT Y2 — XTAL_25M_PCH_OUT
XTAL25_IN Y4 — PCH_IN

8 OF 12

0617 DEL 120M

From CLK GEN
CPU(133M)
CPU(DMI)
PCIE (X1)
Giga LAN
PCIE(16X)

DESIGN NOTE:
STUFF ALWAYS

R265 1M-06 XTAL_25M_PCH_IN
X3 X-25M
C297 27P-04
C292 27P-04

Crystal Spec:+/-30ppm,CL=20pF
Ce=2*CL-(Cs+Ci)

DESIGN NOTE:
R128 DAMPING RESISTOR
DO NOT CHANGE TO 0402

PCIA33M C312 22P-04-O
PCH_PCI33M C310 22P-04-O
SIO_33M C311 22P-04-O
SIO_48M C317 22P-04-O
PCIB33M C296 22P-04-O
TPM33M C309 22P-04-O

30,43 KG_LAN_25M
RJ31 0-04(1-2)
PCH_IN
XTAL_25M_PCH_IN

VCC
IMPEDANCE_T
Layer 1
IP1 HEADER 2X2
IMPEDANCE_B
Layer 4

PCH1
HEAKSINK

Main Part:20-120-010772

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

Elitegroup Computer Systems

Title: PCH CLOCKS,STRAPS

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+12V
VCC3
3VSB
Power

GND
GND

16 AD[31..0]
16 C_BE_L[3..0]
16 DEVSEL_L
16 PLOCK_L
16 PERR_L
16 SERR_L
16 PME_L
16 FRAME_L
16 TRDY_L
16 STOP_L
16 PAR

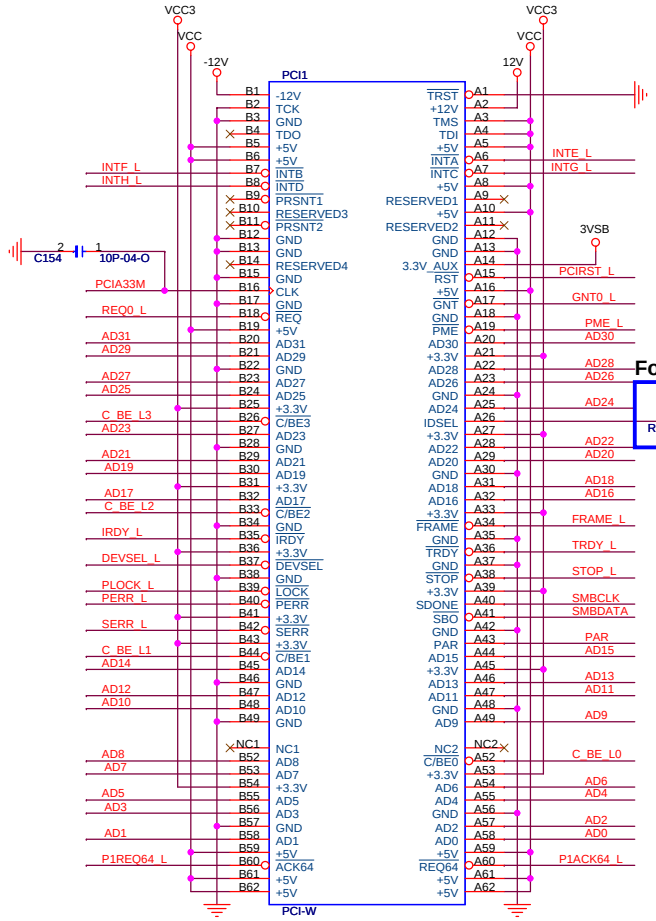
16 INTE_L
16 INTF_L
16 INTG_L
16 INTH_L
16 IRDY_L

16 REQ0_L
16 REQ1_L
16 PCIRST_L
16 GNT1_L
16 GNT0_L

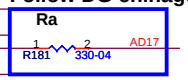
23 PCIA33M
23 PCIB33M

10,17,19,29,31 SMBCLK
10,17,19,29,31 SMBDATA

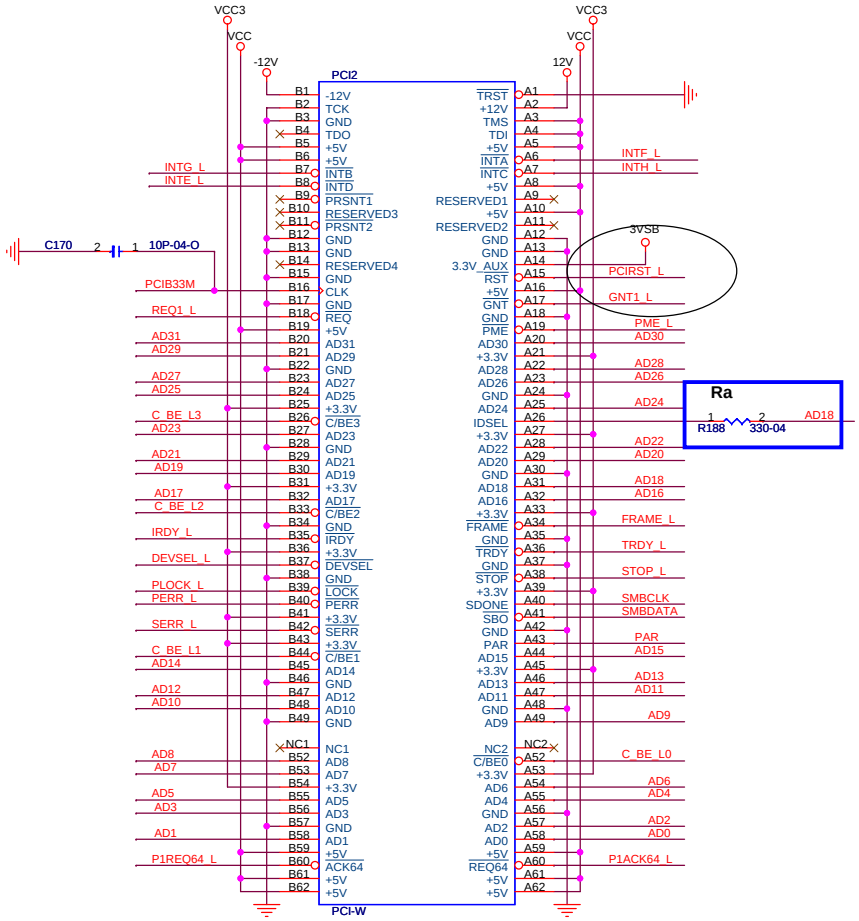
	PCI1	PCI2
INT	E	F
IDSEL	AD17	AD18
Ra	330-04	



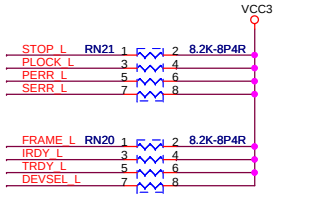
Follow DG chinage to 300~900 ohm

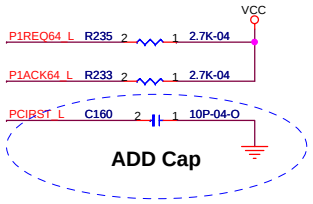


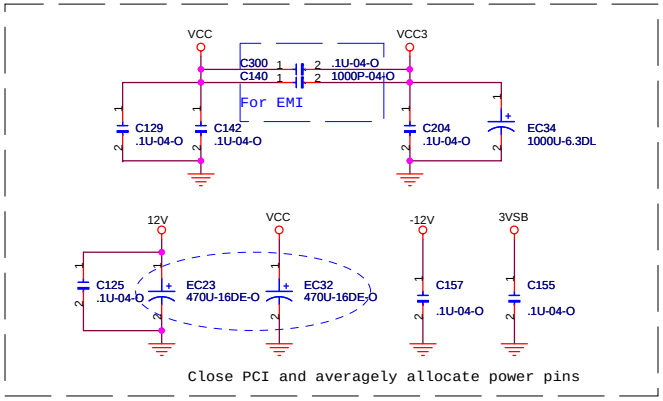
INT:E
IDSEL:AD17



INT:F
IDSEL:AD18







Elitegroup Computer Systems

Title	PCI	
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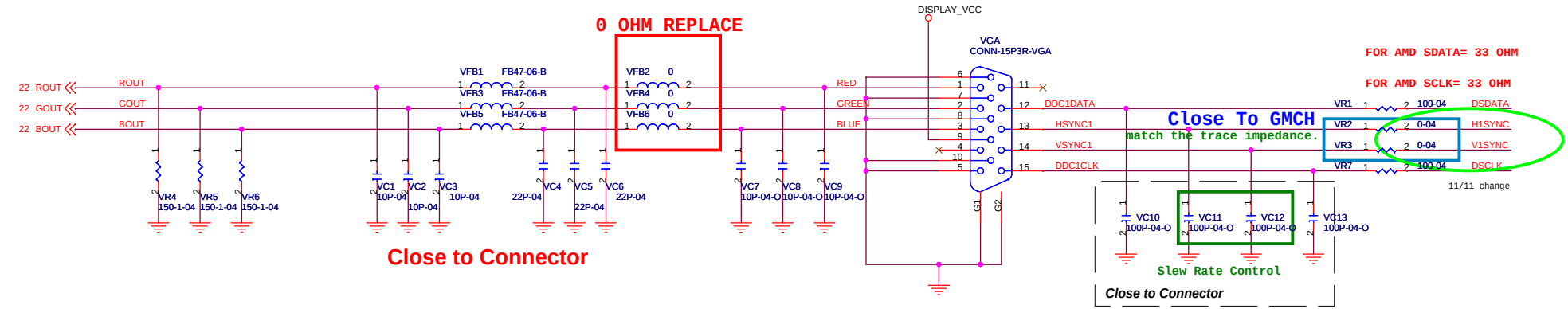
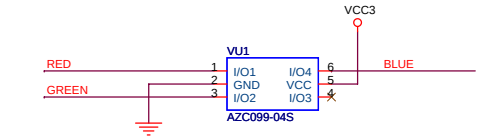
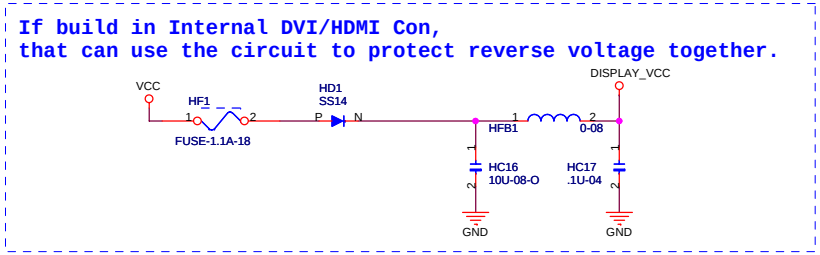
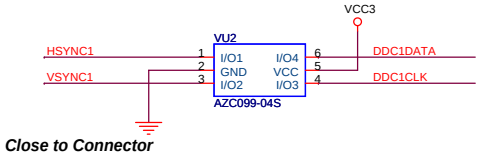
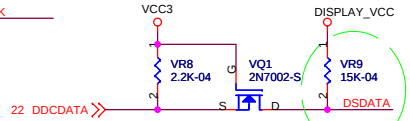
VGA Connector

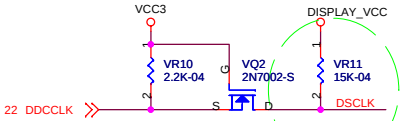


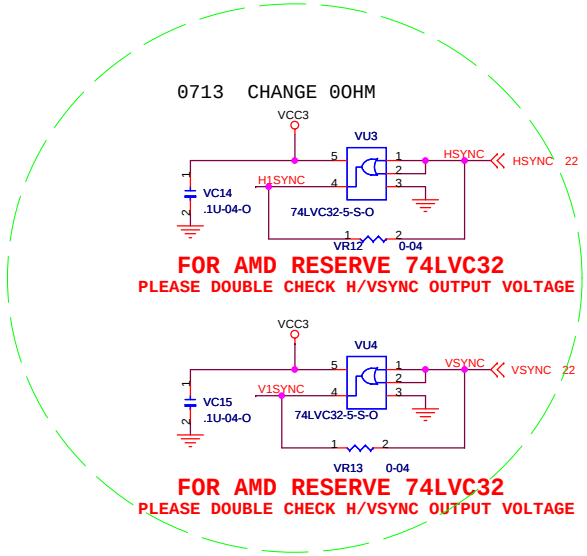












Elitegroup Computer Systems

Title	VGA,DVI,HDMI CONNECTOR		
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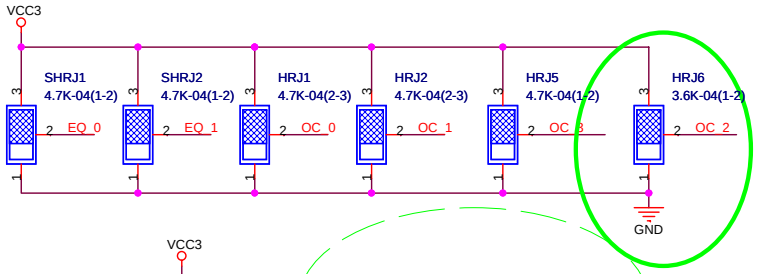
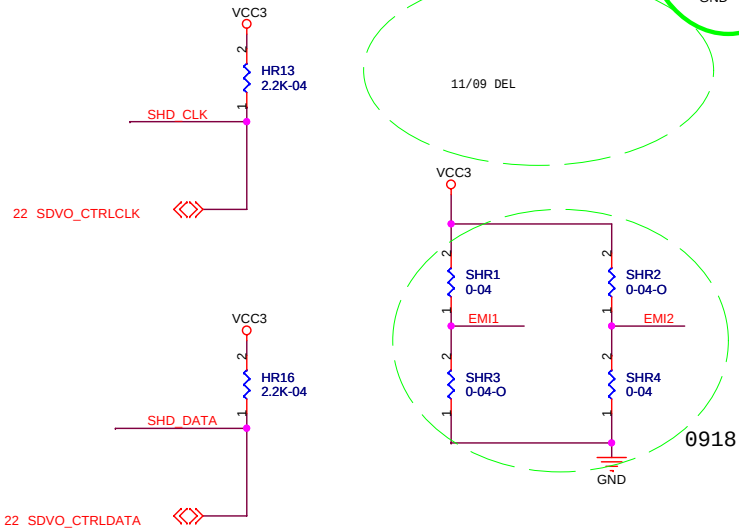
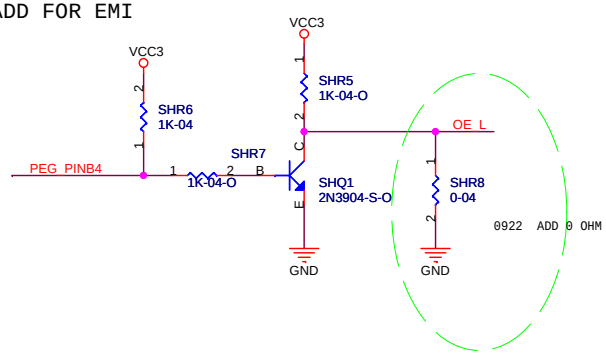
1111 CHANGE

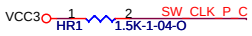




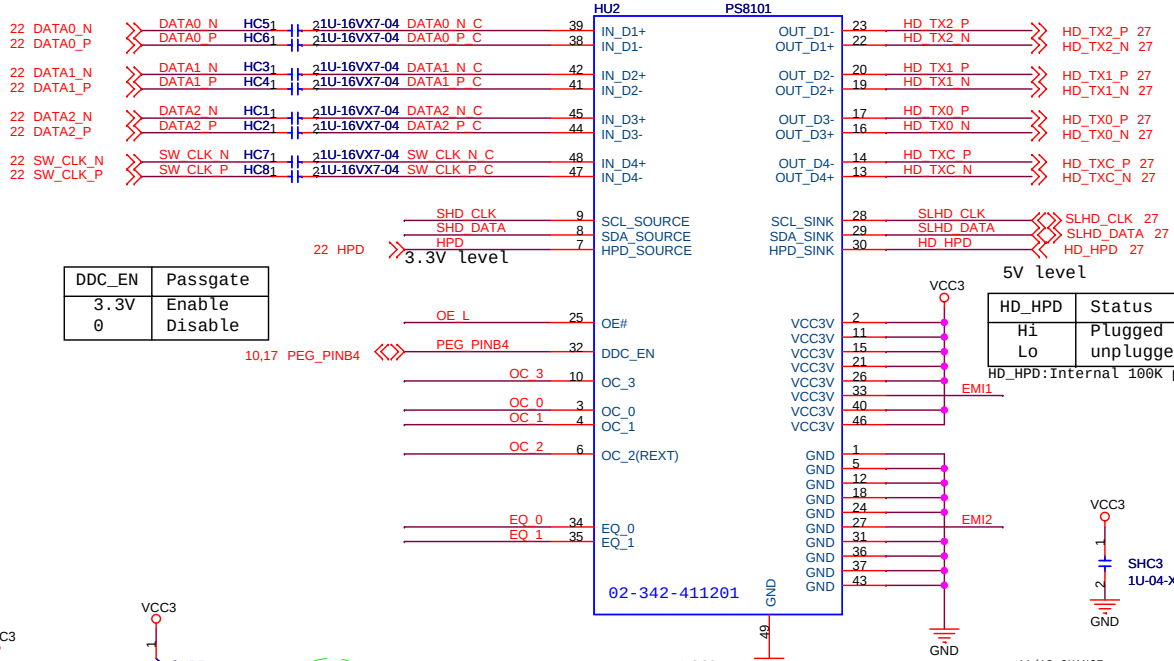
0918 ADD FOR EMI



Level shifter nosie issue



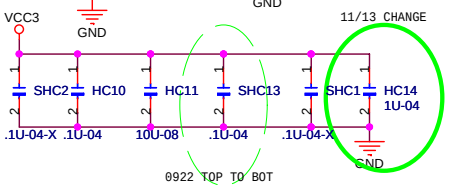
Level Shifter

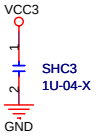


DDC_EN	Passgate
3.3V	Enable
0	Disable

HD_HPD	Status
Hi	Plugged
Lo	unplugged

HD_HPD:Internal 100K pull low





	PS8101	PI3VDP411LSTZDES
EQ_0	RESERVE 4.7K PULL UP	RESERVE 4.7K PULL DOWN
EQ_1	RESERVE 4.7K PULL UP	RESERVE 4.7K PULL DOWN
OC_0	4.7K PULL UP	RESERVE 4.7K PULL DOWN
OC_1	RESERVE 4.7K PULL UP	RESERVE 4.7K PULL DOWN
OC_2	499 1% OHM PULL DOWN	
OC_3	NC	

	OC_3	OC_2	OC_1	OC_0	Vswing(mV)	Pre/De-emphasis
*	0	0	0	0	500	0
	0	0	0	1	600	0
	0	0	1	0	750	0
	.	.	.	.		

	EQ_0	EQ_1	Equalization(dB)
*	0	0	3
	0	1	7.2
	1	0	10
	1	1	20

Elitegroup Computer Systems

Title: DVI Interface (Switch, Level shifter)

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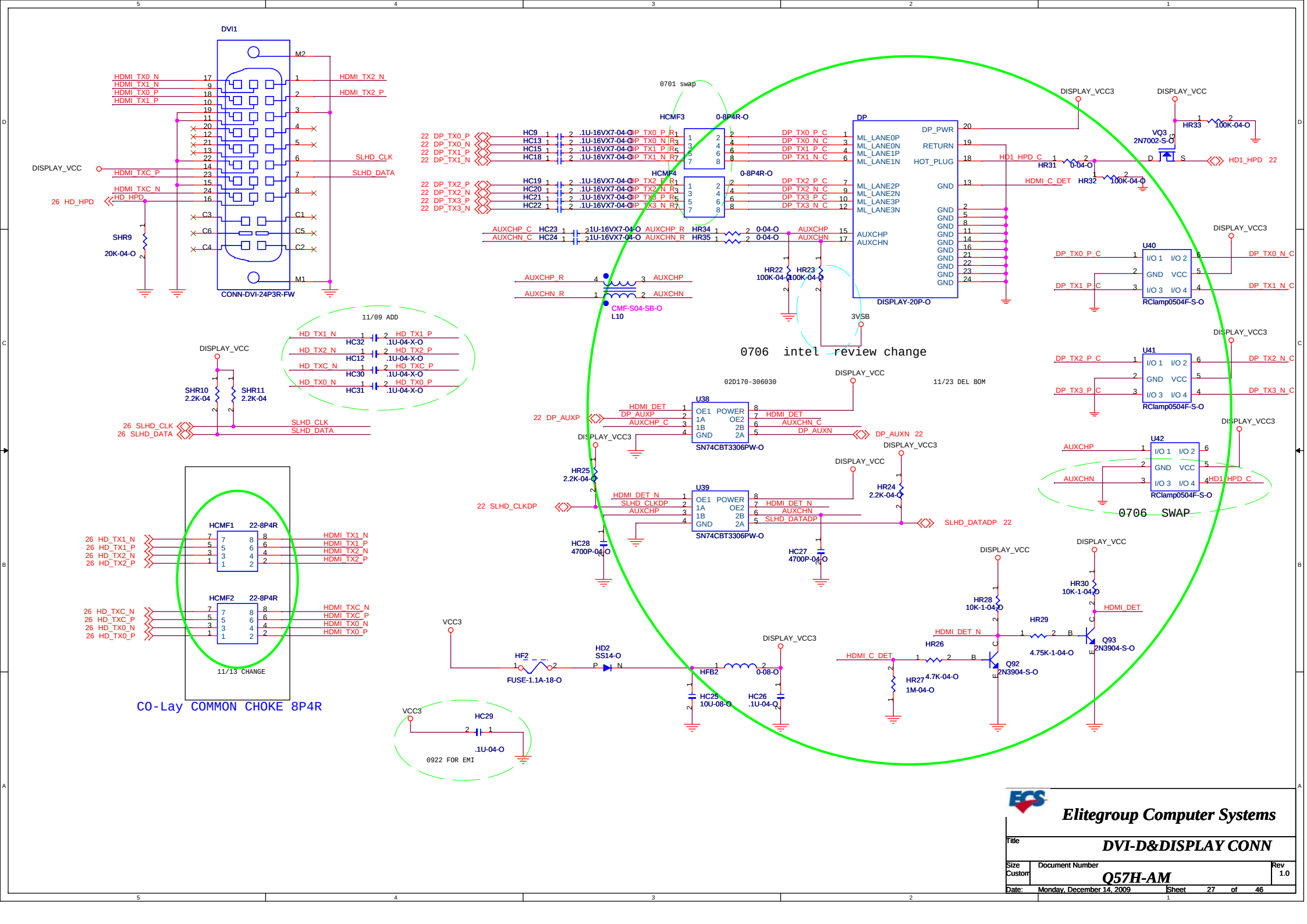
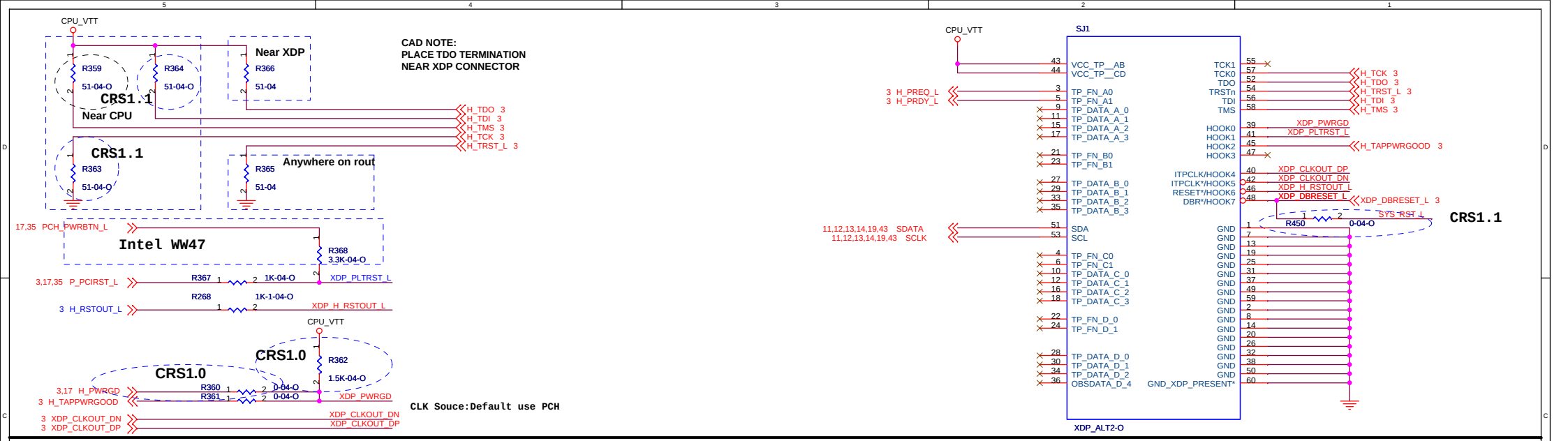
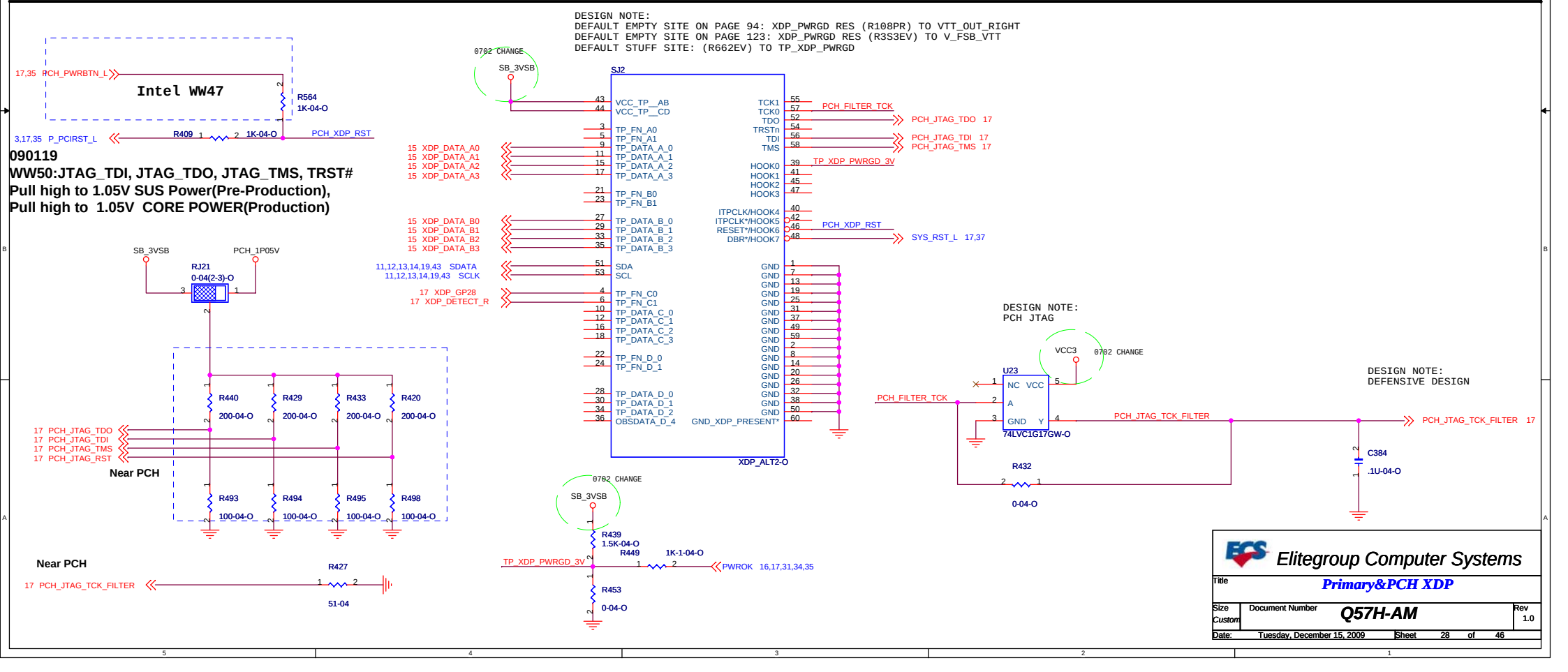


Elitegroup Computer Systems

Title	DVI-D&DISPLAY CONN	
Size: Custom	Document Number: Q57H-AM	Rev: 1.0
Date: Monday, December 14, 2009	Sheet 27 of 46	


CPU_VTT
Near XDP
R359 51-04-O
R364 51-04-O
R366 51-04
CRS1.1
Near CPU
CAD NOTE:
PLACE TDO TERMINATION
NEAR XDP CONNECTOR
H_TDO 3
H_TDI 3
H_TMS 3
H_TCK 3
H_TRST_L 3
CRS1.1
R363 51-04-O
R365 51-04
Anywhere on rout
17,35 PCH_PWRBTN_L
Intel WW47
R368 3.3K-04-O
3,17,35 P_PCIRST_L
R367 1K-04-O
XDP_PLTRST_L
R268 1K-1-04-O
3 H_RSTOUT_L
XDP_H_RSTOUT_L
CPU_VTT
CRS1.0
R362 1.5K-04-O
3,17 H_PWRGD
3 H_TAPPWRGOOD
R360 0-04-O
R361 0-04-O
XDP_PWRGD
3 XDP_CLKOUT_DN
3 XDP_CLKOUT_DP
XDP_CLKOUT_DN
XDP_CLKOUT_DP
CLK Souce:Default use PCH
CPU_VTT
SJ1
3 H_PREQ_L
3 H_PRDY_L
11,12,13,14,19,43 SDATA
11,12,13,14,19,43 SCLK
VCC_TP__AB
VCC_TP__CD
TP_FN_A0
TP_FN_A1
TP_DATA_A_0
TP_DATA_A_1
TP_DATA_A_2
TP_DATA_A_3
TP_FN_B0
TP_FN_B1
TP_DATA_B_0
TP_DATA_B_1
TP_DATA_B_2
TP_DATA_B_3
SDA
SCL
TP_FN_C0
TP_FN_C1
TP_DATA_C_0
TP_DATA_C_1
TP_DATA_C_2
TP_DATA_C_3
TP_FN_D_0
TP_FN_D_1
TP_DATA_D_0
TP_DATA_D_1
TP_DATA_D_2
OBSDATA_D_4
TCK1
TCK0
TDO
TRSTn
TDI
TMS
HOOK0
HOOK1
HOOK2
HOOK3
ITPCLK/HOOK4
ITPCLK*/HOOK5
RESET*/HOOK6
DBR*/HOOK7
GND_XDP_PRESENT*
H_TCK 3
H_TDO 3
H_TRST_L 3
H_TDI 3
H_TMS 3
XDP_PWRGD
XDP_PLTRST_L
H_TAPPWRGOOD 3
XDP_CLKOUT_DP
XDP_CLKOUT_DN
XDP_H_RSTOUT_L
XDP_DBRESET_L
XDP_DBRESET_L 3
SYS_RST_L
R450 0-04-O
GND
XDP_ALT2-O
CRS1.1


DESIGN NOTE:
DEFAULT EMPTY SITE ON PAGE 94: XDP_PWRGD RES (R108PR) TO VTT_OUT_RIGHT
DEFAULT EMPTY SITE ON PAGE 123: XDP_PWRGD RES (R3S3EV) TO V_FSB_VTT
DEFAULT STUFF SITE: (R662EV) TO TP_XDP_PWRGD
17,35 PCH_PWRBTN_L
Intel WW47
R564 1K-04-O
3,17,35 P_PCIRST_L
R409 1K-04-O
PCH_XDP_RST
090119
WW50:JTAG_TDI, JTAG_TDO, JTAG_TMS, TRST#
Pull high to 1.05V SUS Power(Pre-Production),
Pull high to 1.05V CORE POWER(Production)
0702 CHANGE
SB_3VSB
SJ2
15 XDP_DATA_A0
15 XDP_DATA_A1
15 XDP_DATA_A2
15 XDP_DATA_A3
15 XDP_DATA_B0
15 XDP_DATA_B1
15 XDP_DATA_B2
15 XDP_DATA_B3
11,12,13,14,19,43 SDATA
11,12,13,14,19,43 SCLK
17 XDP_GP28
17 XDP_DETECT_R
PCH_FILTER_TCK
PCH_JTAG_TDO 17
PCH_JTAG_TDI 17
PCH_JTAG_TMS 17
TP_XDP_PWRGD_3V
PCH_XDP_RST
SYS_RST_L 17,37
XDP_ALT2-O
SB_3VSB
PCH_1P05V
RJ21 0-04(2-3)-O
R440 200-04-O
R429 200-04-O
R433 200-04-O
R420 200-04-O
17 PCH_JTAG_TDO
17 PCH_JTAG_TDI
17 PCH_JTAG_TMS
17 PCH_JTAG_RST
Near PCH
R493 100-04-O
R494 100-04-O
R495 100-04-O
R498 100-04-O
Near PCH
17 PCH_JTAG_TCK_FILTER
R427 51-04
0702 CHANGE
SB_3VSB
R439 1.5K-04-O
R449 1K-1-04-O
TP_XDP_PWRGD_3V
PWROK 16,17,31,34,35
R453 0-04-O
DESIGN NOTE:
PCH JTAG
VCC3
0702 CHANGE
U23
NC VCC
A
GND Y
74LVC1G17GW-O
PCH_FILTER_TCK
PCH_JTAG_TCK_FILTER
R432 0-04-O
C384 .1U-04-O
PCH_JTAG_TCK_FILTER 17
DESIGN NOTE:
DEFENSIVE DESIGN
Elitegroup Computer Systems
Title
Primary&PCH XDP
Size
Custom
Document Number
Q57H-AM
Rev
1.0
Date:
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16 SATA0_TX_P
16 SATA0_TX_N
16 SATA1_TX_P
16 SATA1_TX_N
16 SATA2_TX_P
16 SATA2_TX_N
16 SATA3_TX_P
16 SATA3_TX_N
16 SATA4_TX_P
16 SATA4_TX_N
16 SATA5_TX_P
16 SATA5_TX_N

16 SATA0_RX_N
16 SATA0_RX_P
16 SATA1_RX_N
16 SATA1_RX_P
16 SATA2_RX_N
16 SATA2_RX_P
16 SATA3_RX_N
16 SATA3_RX_P
16 SATA4_RX_N
16 SATA4_RX_P
16 SATA5_RX_N
16 SATA5_RX_P

SATA1

SATA0_TX_P — C448 .01U-04 — SATA0_TX_P_C
SATA0_TX_N — C443 .01U-04 — SATA0_TX_N_C
SATA0_RX_N — C438 .01U-04 — SATA0_RX_N_C
SATA0_RX_P — C429 .01U-04 — SATA0_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

SATA2

SATA1_TX_P — C483 .01U-04 — SATA1_TX_P_C
SATA1_TX_N — C480 .01U-04 — SATA1_TX_N_C
SATA1_RX_N — C477 .01U-04 — SATA1_RX_N_C
SATA1_RX_P — C473 .01U-04 — SATA1_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

SATA3

SATA2_TX_P — C446 .01U-04 — SATA2_TX_P_C
SATA2_TX_N — C441 .01U-04 — SATA2_TX_N_C
SATA2_RX_N — C435 .01U-04 — SATA2_RX_N_C
SATA2_RX_P — C427 .01U-04 — SATA2_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

SATA4

SATA3_TX_P — C481 .01U-04 — SATA3_TX_P_C
SATA3_TX_N — C479 .01U-04 — SATA3_TX_N_C
SATA3_RX_N — C476 .01U-04 — SATA3_RX_N_C
SATA3_RX_P — C474 .01U-04 — SATA3_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

SATA5

SATA4_TX_P — C447 .01U-04 — SATA4_TX_P_C
SATA4_TX_N — C442 .01U-04 — SATA4_TX_N_C
SATA4_RX_N — C437 .01U-04 — SATA4_RX_N_C
SATA4_RX_P — C428 .01U-04 — SATA4_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

SATA6

SATA5_TX_P — C482 .01U-04 — SATA5_TX_P_C
SATA5_TX_N — C478 .01U-04 — SATA5_TX_N_C
SATA5_RX_N — C475 .01U-04 — SATA5_RX_N_C
SATA5_RX_P — C472 .01U-04 — SATA5_RX_P_C

TXP TXN RXN RXP GND GND GND GND

SATA-7P2R

+12V
VCC3
3VSB
Power

GND
GND

10,17 PCIE_WAKE_L
To PCIE device

15 HS1_TX_P_C
15 HS1_TX_N_C
17 PEG_PCIE
From SB

15 HS1_RX_P
15 HS1_RX_N
To SB

10,35 PCI_RSTY_L
From SIO

23 PEX1_1_100M_P
23 PEX1_1_100M_N
From Clock

10,17,19,24,31 SMBCLK
10,17,19,24,31 SMBDATA

3VSB VCC3 12V

PCIE1X-1

PEG_PCIE
SMBCLK
SMBDATA
PCIE_WAKE_L

B1 12V_A
B2 12V_B
B3 12V_D
B4 GND1
B5 SMCLK
B6 SMDAT
B7 GND3
B8 3.3V_A
B9 JTAG1
B10 3.3VAUX
B11 WAKE#
2 NC2
B12 RSVD_A
B13 GND5
B14 HSOP0_H
B15 HSON0_L
B16 GND7
B17 PRSNT2#
B18 GND8

KEY

A1 PRSNT1*
A2 12V_C
A3 12V_E
A4 GND2
A5 JTAG2
A6 JTAG3
A7 JTAG4
A8 JTAG5
A9 3.3V_B
A10 3.3V_C
A11 PWRGD
1 NC1
A12 GND4
A13 REFCLK+_H
A14 REFCLK-_L
A15 GND6
A16 HSIP0_H
A17 HSIN0_L
A18 GND9

PCIEX1-W

12V VCC3

R139 1 2 33-04 PCI_RSTY_L

C153 .1U-04-O

PEX1_1_100M_P
PEX1_1_100M_N
HS1_RX_P
HS1_RX_N

C178 .1U-16VX7-04
HS1_TX_P_C — HS1_TX_P
HS1_TX_N_C — HS1_TX_N
C177 .1U-16VX7-04

AC Coupling Caps close to Slot

12V C143 VCC
.1U-04-O
0918 ADD FOR EMI

	PC_RST
INTEL	SIO:PCI REST
AMD	NB:PCIE REST

NV?

3VSB VCC3 12V

C150 .1U-04
C186 .1U-04-O
C247 .1U-04-O
C136 .1U-04-O
C134 10U-08-O
C127 .1U-04

For EMI

Close PCIEX1

Elitegroup Computer Systems

Title: SATA, PCI-E 1X

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WOL	Status	Yellow	Gre/Ora
Don't Care	No link	OFF	OFF
OFF	S3/S4/S5	OFF	OFF
ON	10M,Inactive	OFF	OFF
ON	10M,Active	YB	OFF
ON	100M/Inactive	OFF	G
ON	100M/Active	YB	G
ON	1G,Inactive	OFF	O
ON	1G/Active	YB	O

Remark:Y/G/O-->Color,B-->Blinking

0507 ACER LAN DIS

CAD NOTE:
PLACE R50LN NEAR U1LN

0505 SWAP

Close to 82578

Follow checklist

Crystal Spec:+/-30ppm,CL=20pF
Ce=2*CL-(Cs+Ci)

1.8V@465mA(181+284)

1.2V@284mA

Regulator

L:Yellow R:Green/Orange

Elitegroup Computer Systems	
Title	Hanksville(82578DM/DC)
Size: Custom	Document Number: Q57H-AM
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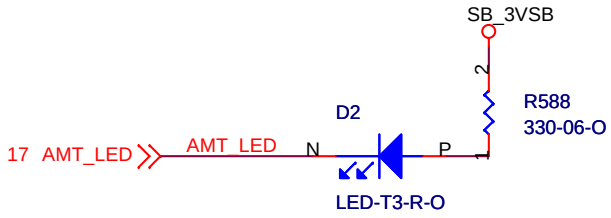
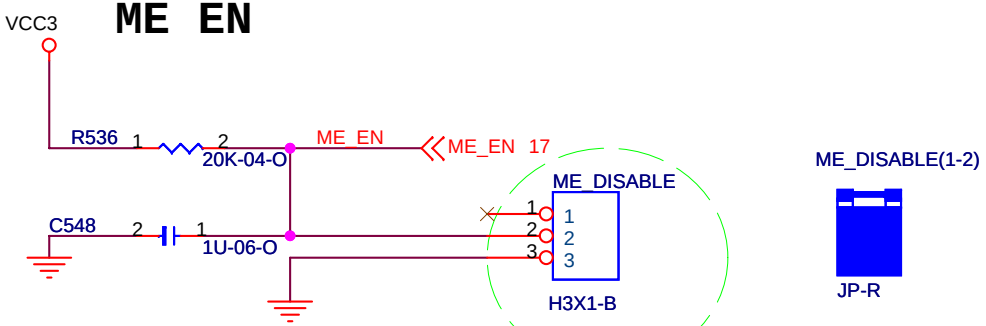
AMT_LED



ME EN

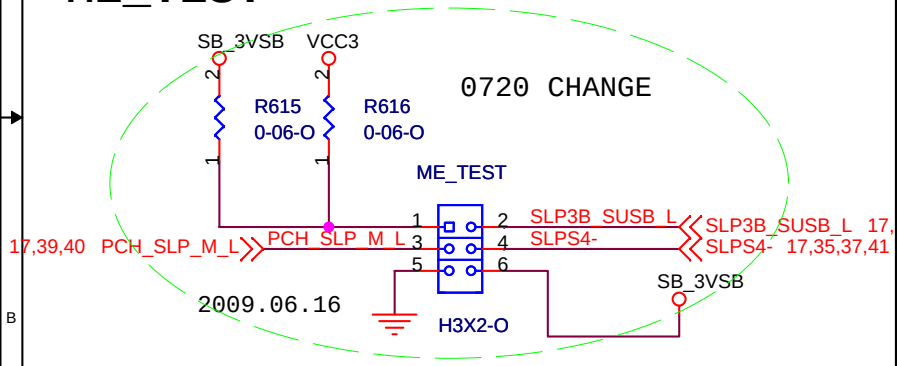


ME EN Clear Header

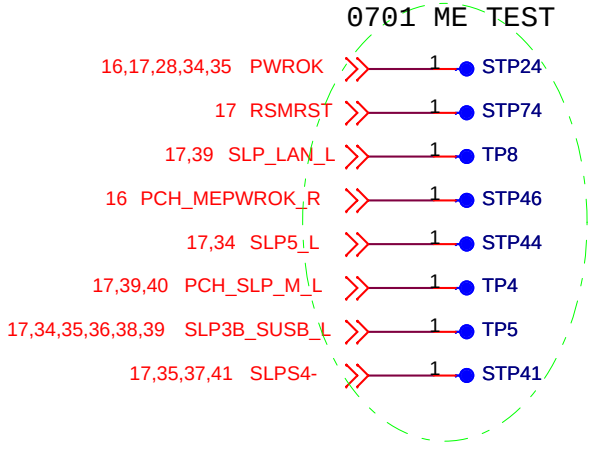
	ME EN
* 1-2	NORMAL
2-3	ME_DI

0702 change to header

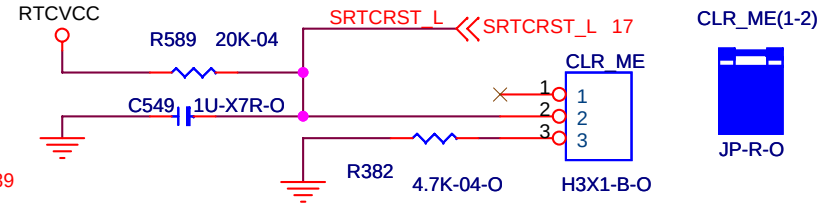
ME_TEST



0701 ME TEST

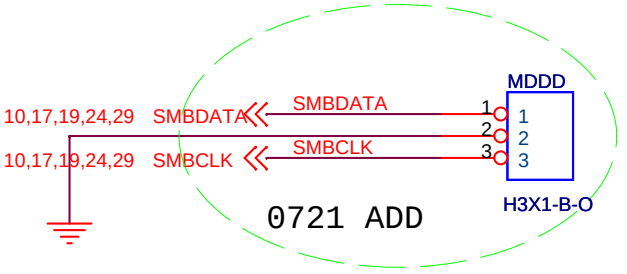


Clear ME



ME Clear Header

	CLR_ME
* 1-2	NORMAL
2-3	CLEAR ME



Elitegroup Computer Systems

Title	AMT6.0	
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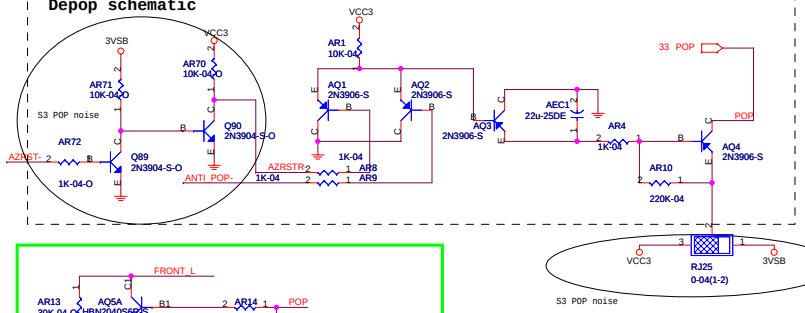
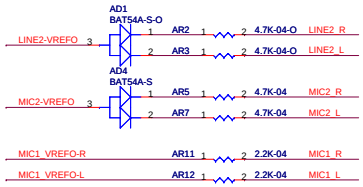
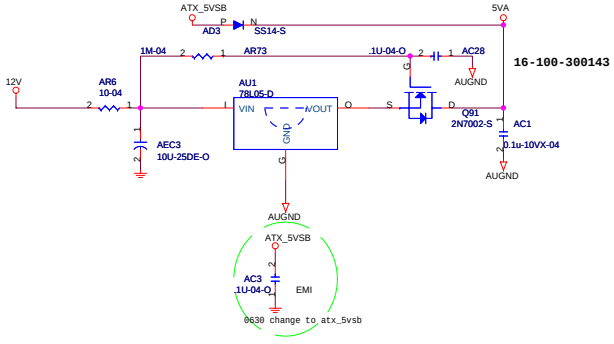
Improve the background noise of MIC boost

Depop schematic



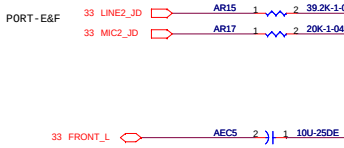
MIC Bias

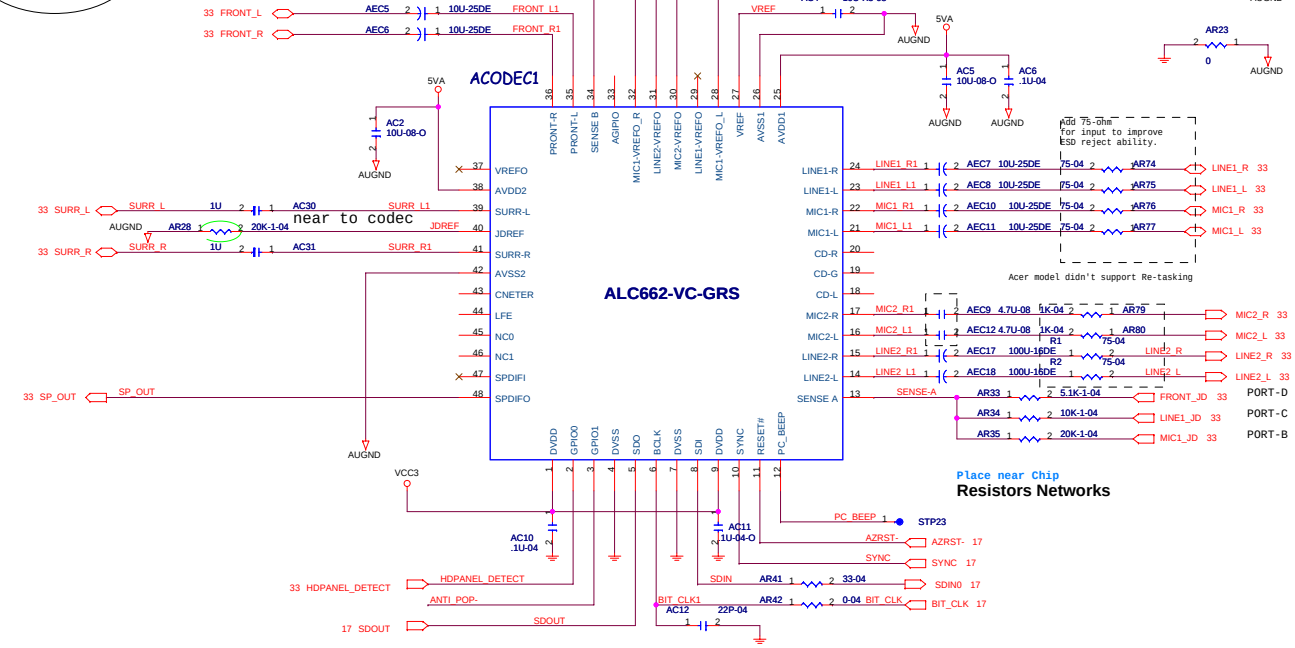




Resistors Networks

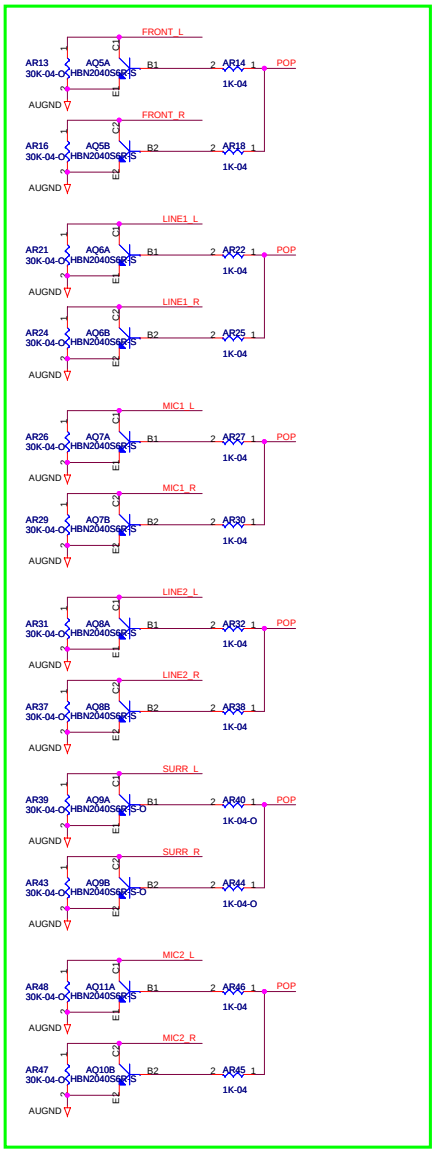
Place near Chip





Place near Chip

Resistors Networks



Elitegroup Computer Systems			
Title: AUDIO ALC662 (CHIP)			
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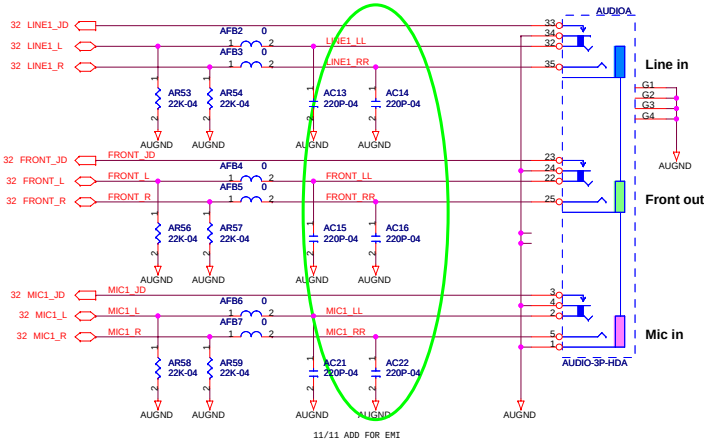
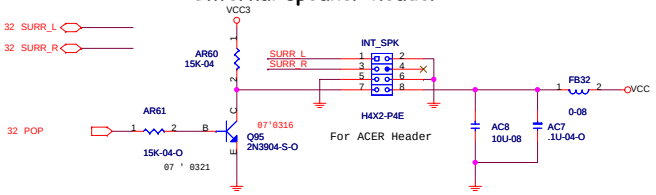
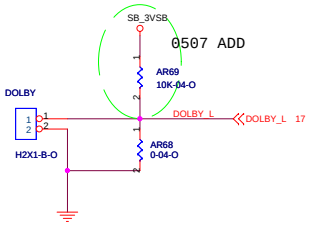
REAR-AUDIO

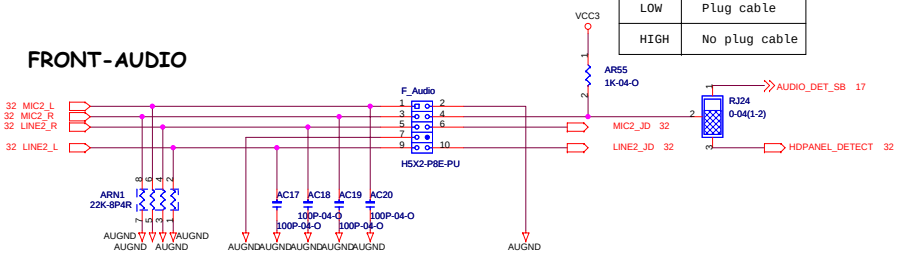


Internal speaker header





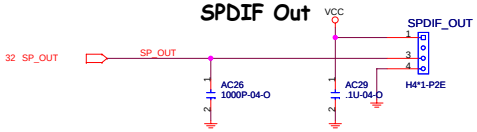
FRONT-AUDIO

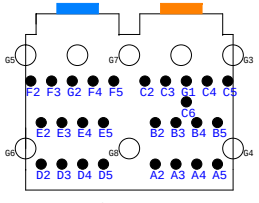


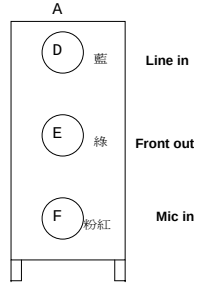
GPI: cable detection	
LOW	Plug cable
HIGH	No plug cable

SPDIF IN/OUT

SPDIF Out







Elitegroup Computer Systems

Title: AUDIO ALC662 (PANEL)

Size: C | Document Number: Q57H-AM | Rev: 1.0

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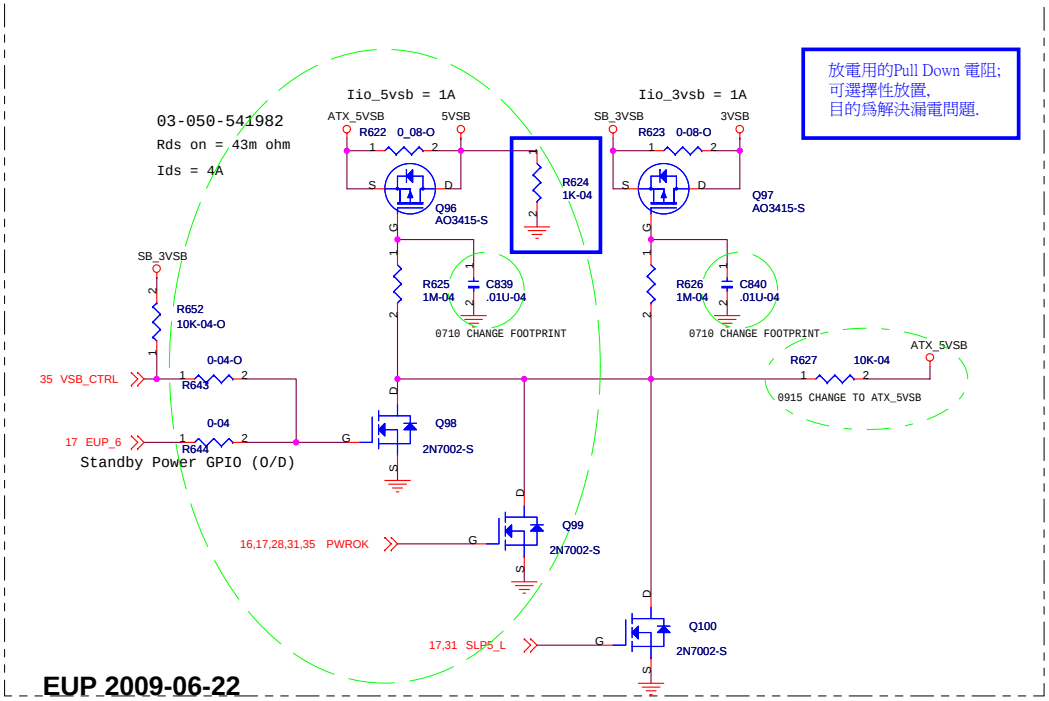
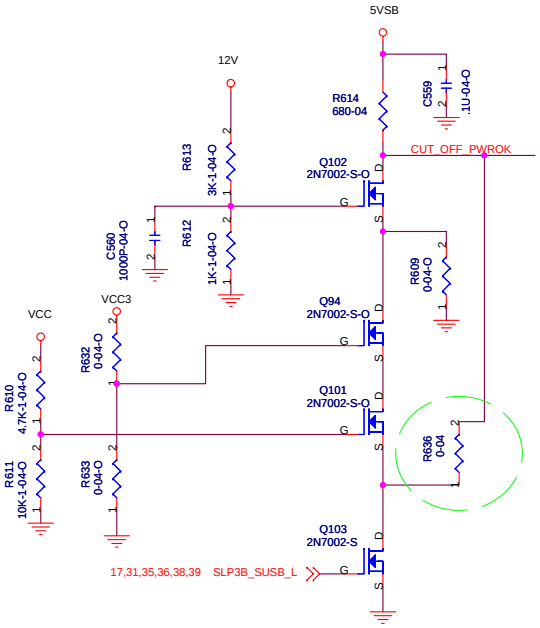
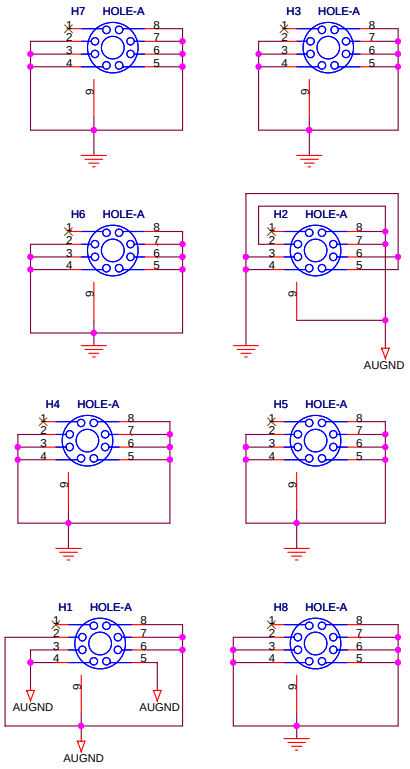
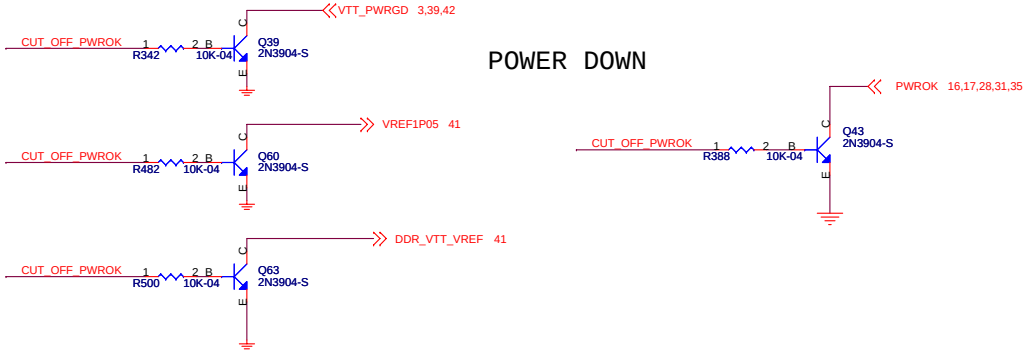




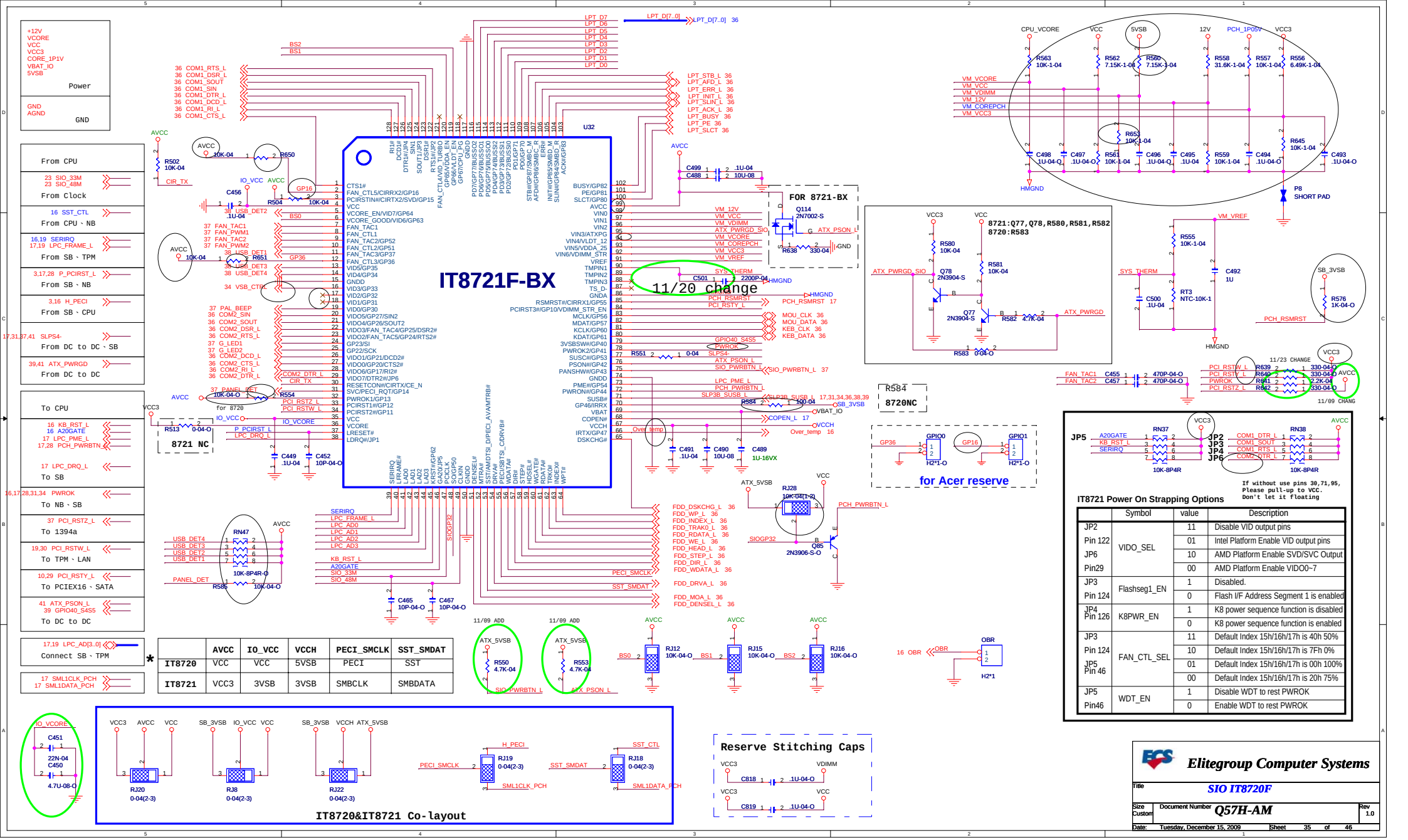
PWROK low to VCC falling
IBEX PEAK 40ns requirement



POWER DOWN



Elitegroup Computer Systems		
Title: EUP LOT6		
Size: Custom	Document Number: Q57H-AM	Rev: 1.0
Date: Wednesday, December 16, 2009	Sheet 34 of 46	



	AVCC	IO_VCC	VCCH	PECI_SMCLK	SST_SMDAT
IT8720	VCC	VCC	5VSB	PECI	SST
IT8721	VCC3	3VSB	3VSB	SMBCLK	SMBDATA

	Symbol	value	Description
JP2	VIDO_SEL	11	Disable VID output pins
Pin 122		01	Intel Platform Enable VID output pins
JP6		10	AMD Platform Enable SVD/SVC Output
Pin29		00	AMD Platform Enable VIDO0~7
JP3	Flashseg1_EN	1	Disabled.
Pin 124		0	Flash I/F Address Segment 1 is enabled
JP4 Pin 126	K8PWR_EN	1	K8 power sequence function is disabled
		0	K8 power sequence function is enabled
JP3	FAN_CTL_SEL	11	Default Index 15h/16h/17h is 40h 50%
Pin 124		10	Default Index 15h/16h/17h is 7Fh 0%
JP5 Pin 46		01	Default Index 15h/16h/17h is 00h 100%
		00	Default Index 15h/16h/17h is 20h 75%
JP5	WDT_EN	1	Disable WDT to rest PWROK
Pin46		0	Enable WDT to PWROK

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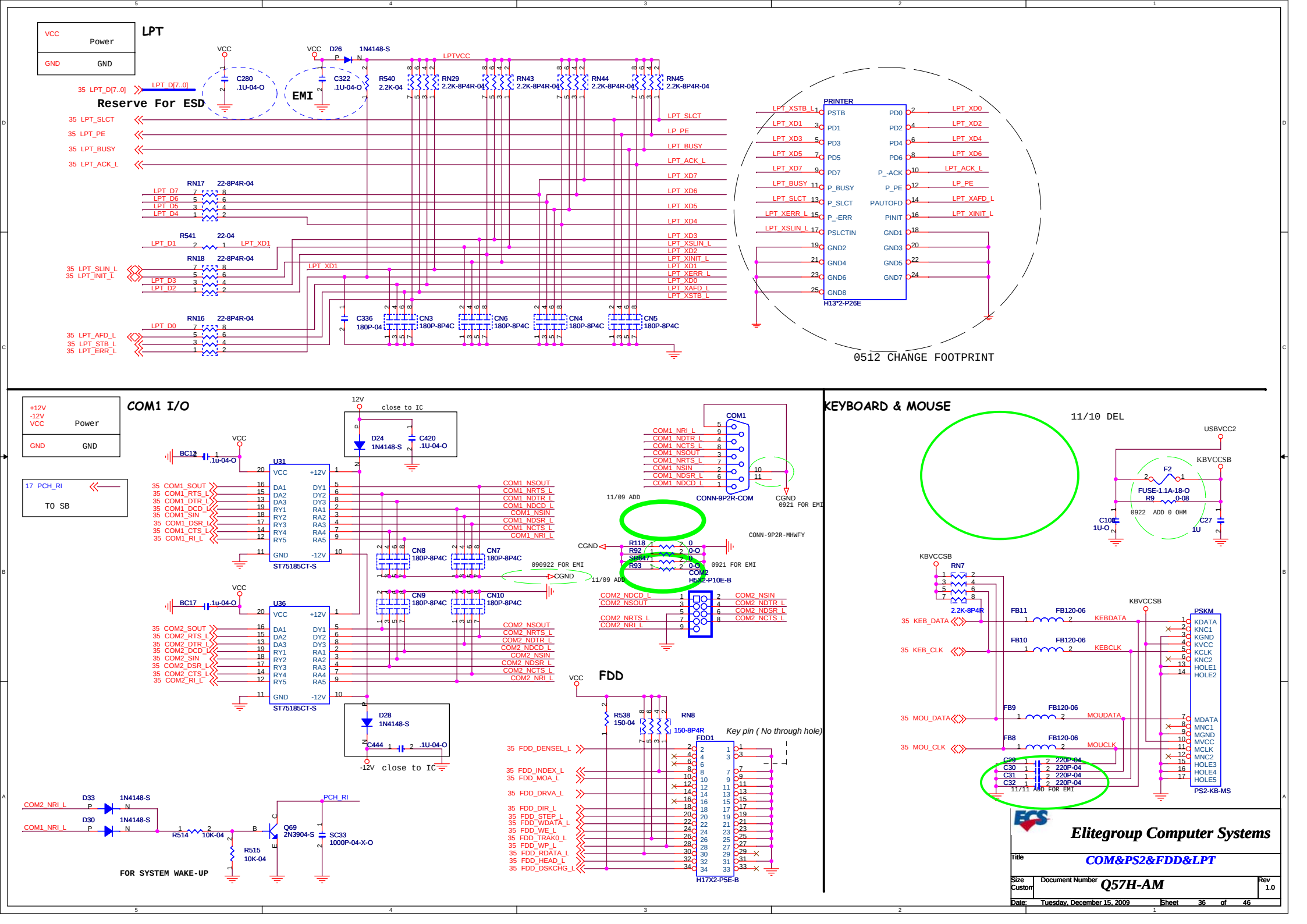
LPT
Power
VCC
GND
Reserve For ESD
EMI
C280 .1U-04-O
C322 .1U-04-O
D26 1N4148-S
LPTVCC
R540 2.2K-04
RN29 2.2K-8P4R-04
RN43 2.2K-8P4R-04
RN44 2.2K-8P4R-04
RN45 2.2K-8P4R-04
35 LPT_D[7..0]
LPT_D[7..0]
35 LPT_SLCT
35 LPT_PE
35 LPT_BUSY
35 LPT_ACK_L
LPT_SLCT
LP_PE
LPT_BUSY
LPT_ACK_L
LPT_XD7
LPT_XD6
LPT_XD5
LPT_XD4
LPT_XD3
LPT_XSLIN_L
LPT_XD2
LPT_XINIT_L
LPT_XD1
LPT_XERR_L
LPT_XD0
LPT_XAFD_L
LPT_XSTB_L
RN17 22-8P4R-04
LPT_D7
LPT_D6
LPT_D5
LPT_D4
R541 22-04
LPT_D1
LPT_XD1
RN18 22-8P4R-04
35 LPT_SLIN_L
35 LPT_INIT_L
LPT_D3
LPT_D2
RN16 22-8P4R-04
LPT_D0
35 LPT_AFD_L
35 LPT_STB_L
35 LPT_ERR_L
C336 180P-04
CN3 180P-8P4C
CN6 180P-8P4C
CN4 180P-8P4C
CN5 180P-8P4C
PRINTER
PSTB
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
P_-ACK
P_BUSY
P_PE
P_SLCT
PAUTOFD
P_-ERR
PINIT
PSLCTIN
GND1
GND2
GND3
GND4
GND5
GND6
GND7
GND8
H13*2-P26E
0512 CHANGE FOOTPRINT
COM1 I/O
+12V
-12V
VCC
Power
GND
GND
17 PCH_RI
TO SB
12V
close to IC
D24 1N4148-S
C420 .1U-04-O
BC13 1u-04-O
BC17 1u-04-O
U31
U36
ST75185CT-S
35 COM1_SOUT
35 COM1_RTS_L
35 COM1_DTR_L
35 COM1_DCD_L
35 COM1_SIN
35 COM1_DSR_L
35 COM1_CTS_L
35 COM1_RI_L
35 COM2_SOUT
35 COM2_RTS_L
35 COM2_DTR_L
35 COM2_DCD_L
35 COM2_SIN
35 COM2_DSR_L
35 COM2_CTS_L
35 COM2_RI_L
CN8 180P-8P4C
CN7 180P-8P4C
CN9 180P-8P4C
CN10 180P-8P4C
090922 FOR EMI
D28 1N4148-S
C444 .1U-04-O
-12V
close to IC
COM1
CONN-9P2R-COM
CONN-9P2R-MHWFY
11/09 ADD
0921 FOR EMI
R118 0
R92 0-O
SR647 0
R93 0-O
COM2
H5X2-P10E-B
FDD
R538 150-04
RN8 150-8P4R
Key pin (No through hole)
FDD1
H17X2-P5E-B
35 FDD_DENSEL_L
35 FDD_INDEX_L
35 FDD_MOA_L
35 FDD_DRVA_L
35 FDD_DIR_L
35 FDD_STEP_L
35 FDD_WDATA_L
35 FDD_WE_L
35 FDD_TRAK0_L
35 FDD_WP_L
35 FDD_RDATA_L
35 FDD_HEAD_L
35 FDD_DSKCHG_L
D33 1N4148-S
D30 1N4148-S
R514 10K-04
R515 10K-04
Q69 2N3904-S
SC33 1000P-04-X-O
FOR SYSTEM WAKE-UP
KEYBOARD & MOUSE
11/10 DEL
USBVCC2
KBVCCSB
F2 FUSE-1.1A-18-O
R9 0-08
0922 ADD 0 OHM
C108 1U-O
C27 1U
RN7 2.2K-8P4R
FB11 FB120-06
FB10 FB120-06
FB9 FB120-06
FB8 FB120-06
35 KEB_DATA
35 KEB_CLK
35 MOU_DATA
35 MOU_CLK
KEBDATA
KEBCLK
MOUDATA
MOUCLK
PSKM
KDATA
KNC1
KGND
KVCC
KCLK
KNC2
HOLE1
HOLE2
MDATA
MNC1
MGND
MVCC
MCLK
MNC2
HOLE3
HOLE4
HOLE5
PS2-KB-MS
C29 220P-04
C30 220P-04
C31 220P-04
C32 220P-04
11/11 ADD FOR EMI
Elitegroup Computer Systems
Title
COM&PS2&FDD&LPT
Size Custom
Document Number Q57H-AM
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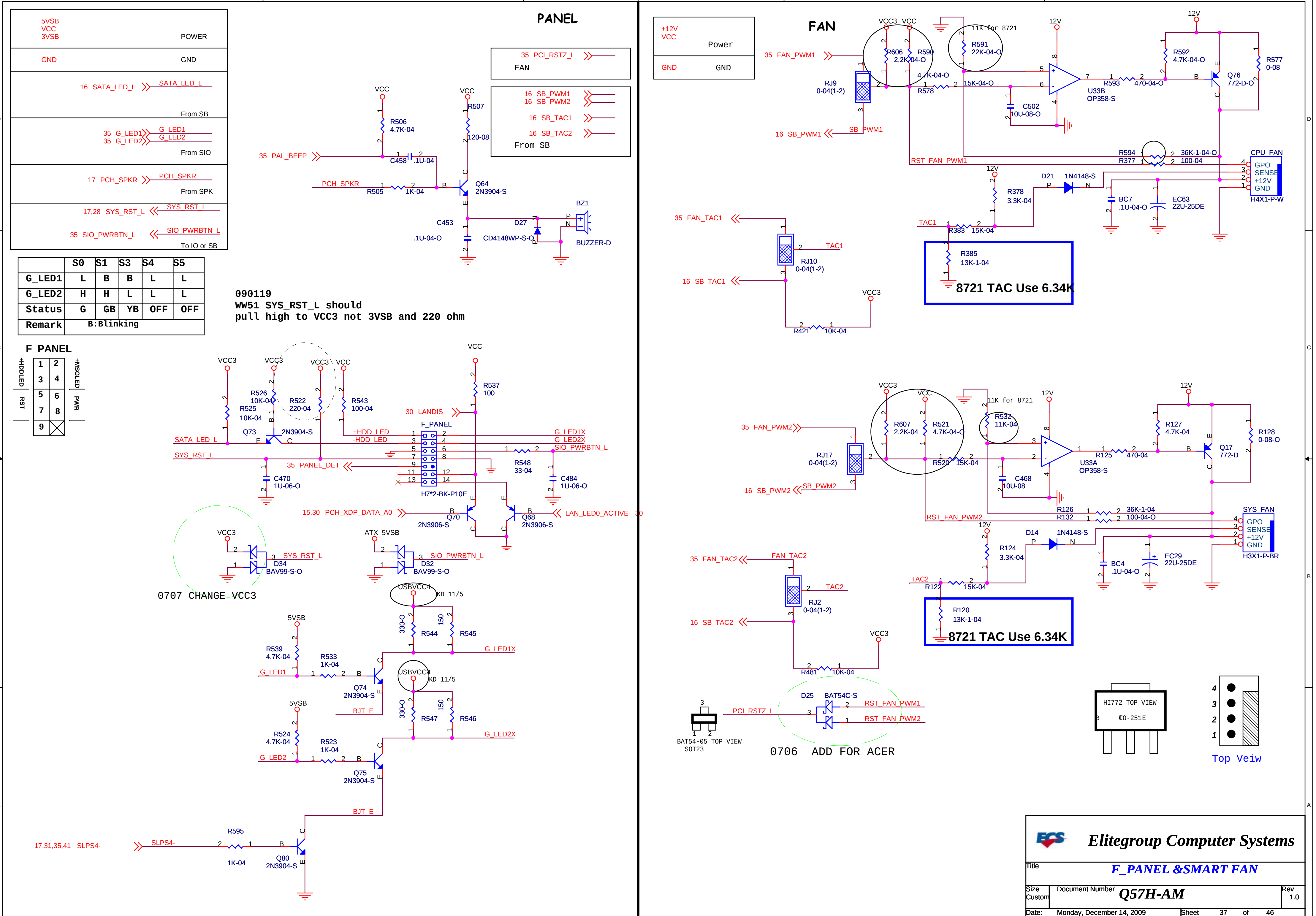

	S0	S1	S3	S4	S5
G_LED1	L	B	B	L	L
G_LED2	H	H	L	L	L
Status	G	GB	YB	OFF	OFF
Remark	B:Blinking				

Elitegroup Computer Systems

Title: F_PANEL &SMART FAN

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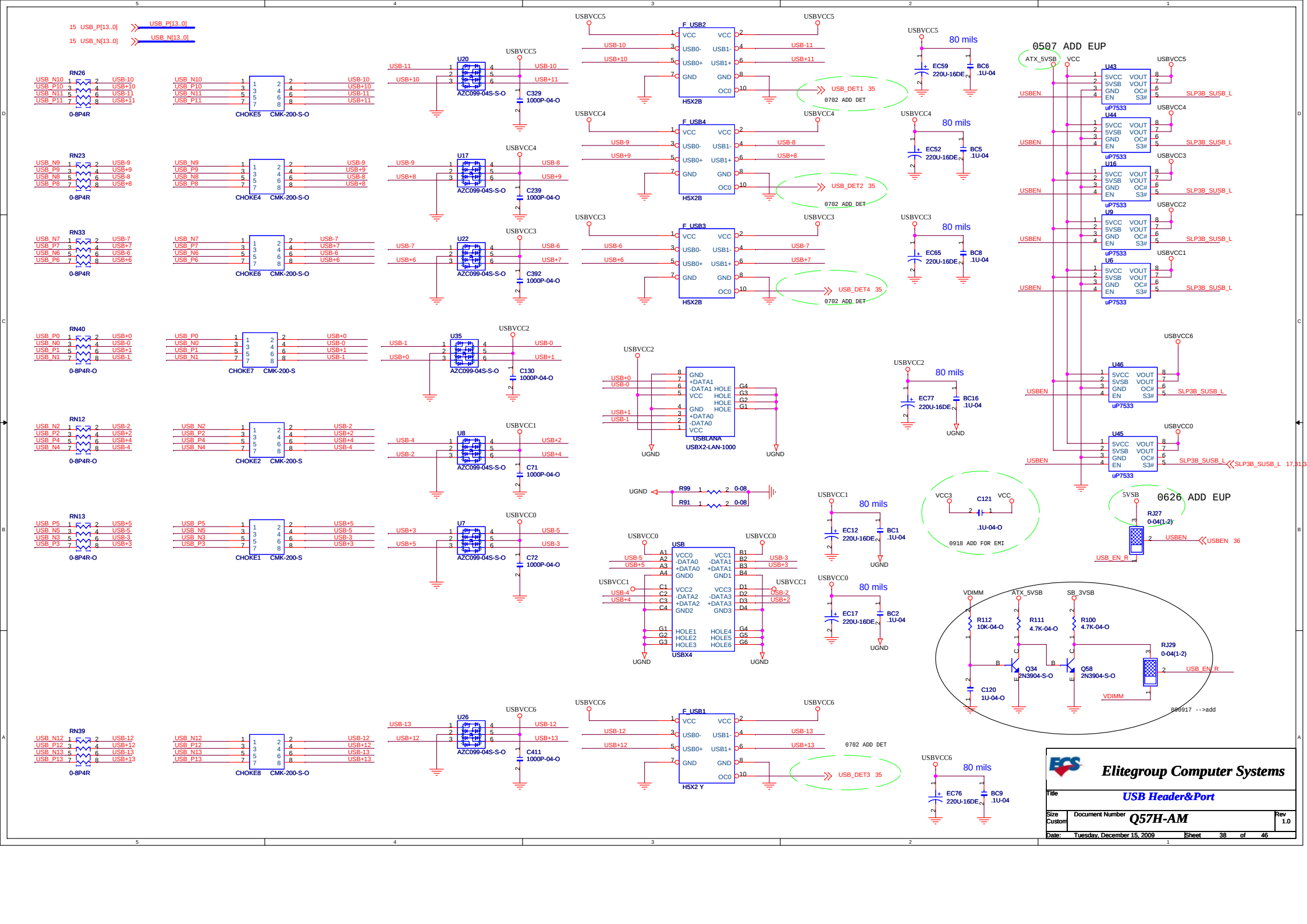
15 USB_P[13..0]
USB_P[13..0]
15 USB_N[13..0]
USB_N[13..0]
RN26
0-8P4R
CHOKE5 CMK-200-S-O
U20
AZC099-04S-S-O
C329 1000P-04-O
RN23
CHOKE4 CMK-200-S-O
U17
C239 1000P-04-O
RN33
CHOKE6 CMK-200-S-O
U22
C392 1000P-04-O
RN40
0-8P4R-O
CHOKE7 CMK-200-S
U35
C130 1000P-04-O
RN12
CHOKE2 CMK-200-S
U8
C71 1000P-04-O
RN13
CHOKE1 CMK-200-S
U7
C72 1000P-04-O
RN39
CHOKE8 CMK-200-S-O
U26
C411 1000P-04-O
F_USB2
F_USB4
F_USB3
F_USB1
H5X2B
H5X2 Y
USB_DET1 35
USB_DET2 35
USB_DET4 35
USB_DET3 35
0702 ADD DET
USBLANA
USBX2-LAN-1000
USB
USBX4
80 mils
EC59 220U-16DE
BC6 .1U-04
EC52 220U-16DE
BC5 .1U-04
EC65 220U-16DE
BC8 .1U-04
EC77 220U-16DE
BC16 .1U-04
EC12 220U-16DE
BC1 .1U-04
EC17 220U-16DE
BC2 .1U-04
EC76 220U-16DE
BC9 .1U-04
0507 ADD EUP
uP7533
SLP3B_SUSB_L
C121 .1U-04-O
0918 ADD FOR EMI
0626 ADD EUP
RJ27 0-04(1-2)
USB_EN_R
USBEN 36
R112 10K-04-O
R111 4.7K-04-O
R100 4.7K-04-O
Q34 2N3904-S-O
Q58 2N3904-S-O
RJ29 0-04(1-2)
C120 1U-04-O
090917 -->add
Elitegroup Computer Systems
USB Header&Port
Q57H-AM
Rev 1.0
Tuesday, December 15, 2009
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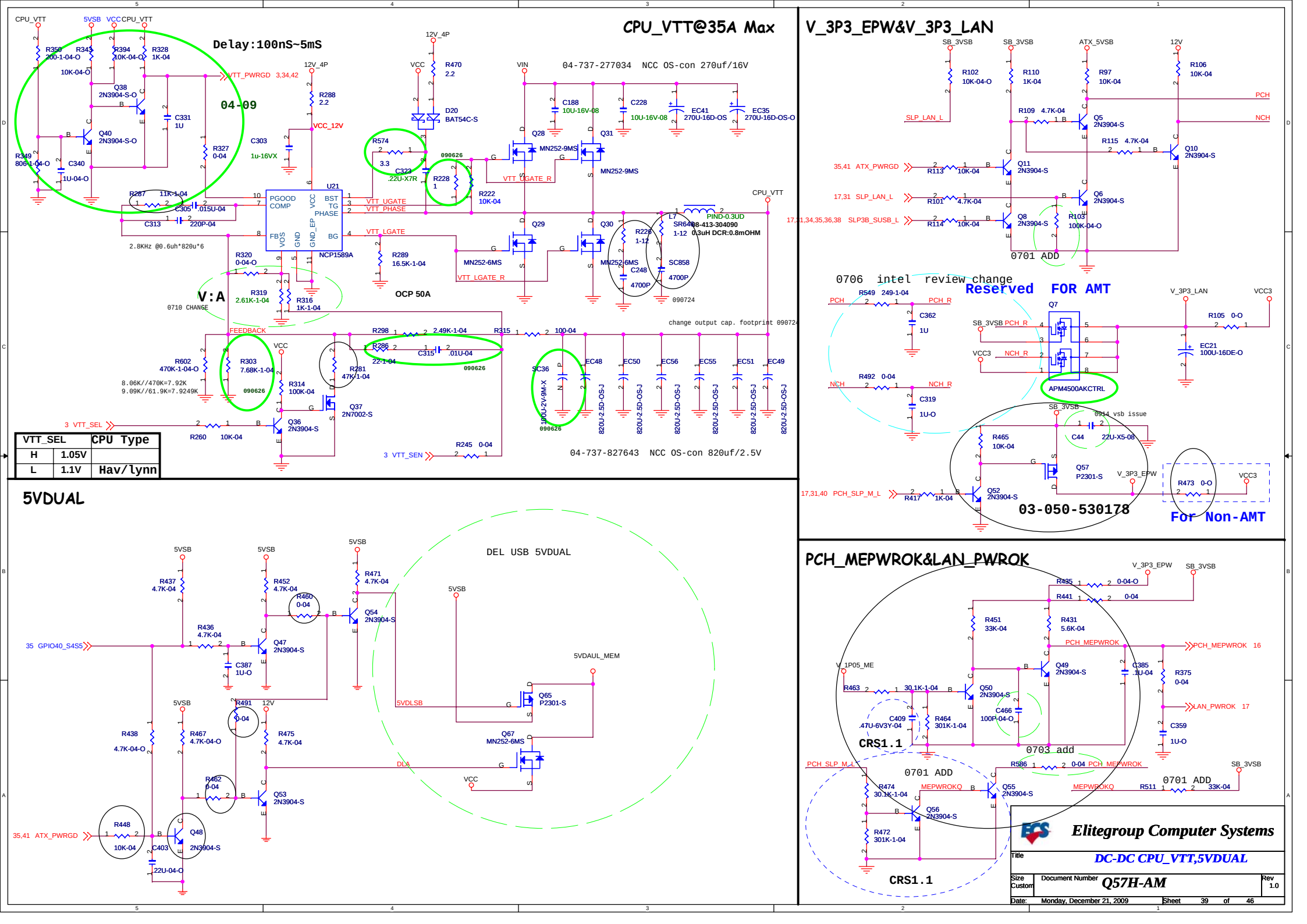
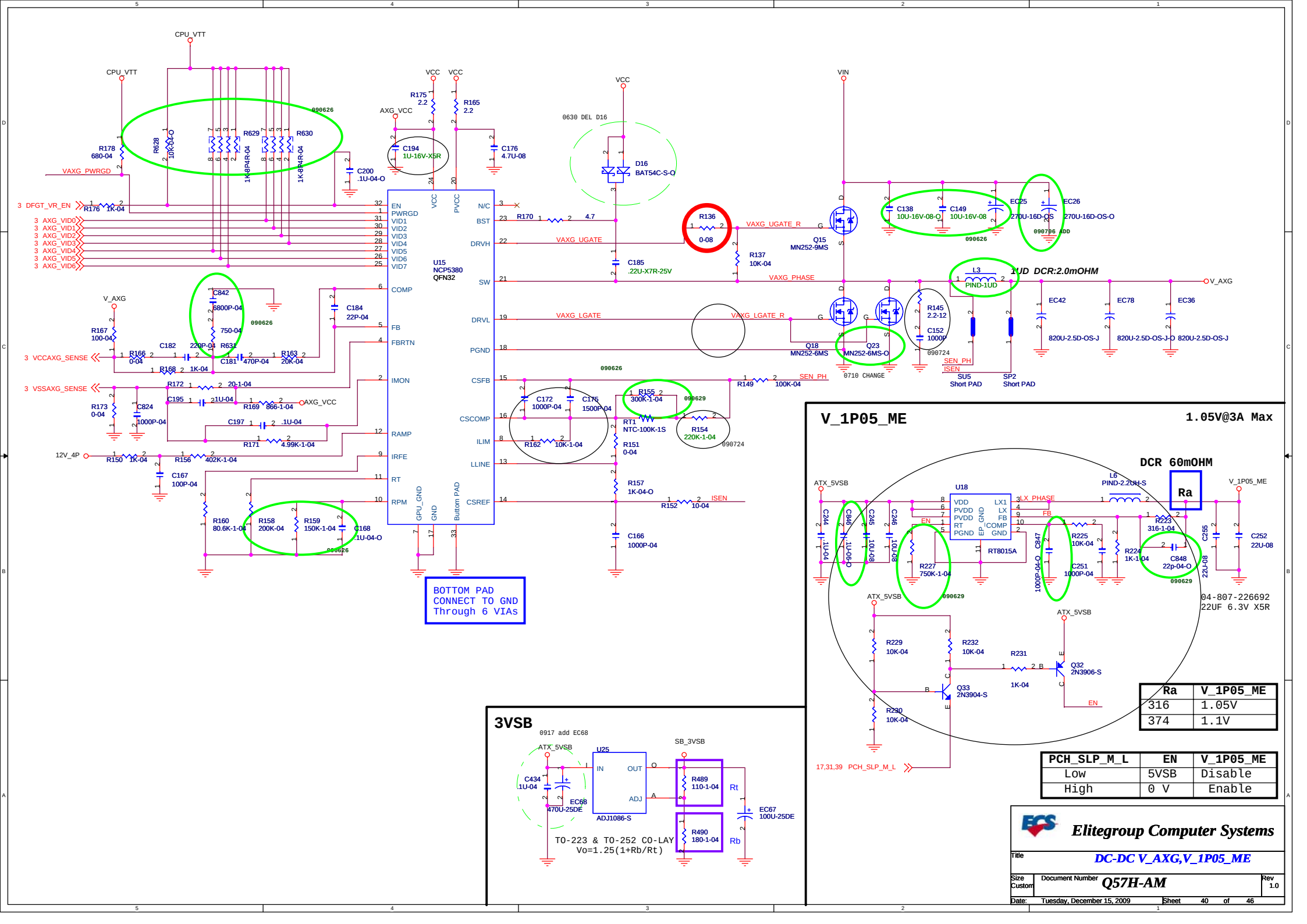

CPU_VTT@35A Max
Delay:100nS~5mS
04-09
04-737-277034 NCC OS-con 270uf/16V
04-737-827643 NCC OS-con 820uf/2.5V
NCP1589A
OCP 50A
V:A
0710 CHANGE
change output cap. footprint 090724
VTT_SEL | CPU Type
H | 1.05V
L | 1.1V | Hav/lynn
V_3P3_EPW&V_3P3_LAN
0701 ADD
0706 intel review change
Reserved FOR AMT
APM4500AKCTRL
0914 vsb issue
03-050-530178
For Non-AMT
5VDUAL
DEL USB 5VDUAL
PCH_MEPWROK&LAN_PWROK
0703 add
CRS1.1
Elitegroup Computer Systems
DC-DC CPU_VTT,5VDUAL
Q57H-AM
Monday, December 21, 2009



Ra	V_1P05_ME
316	1.05V
374	1.1V

PCH_SLP_M_L	EN	V_1P05_ME
Low	5VSB	Disable
High	0 V	Enable

+12V
-12V
VCC
VCC3
5VSB
CORE_1P1V
ICH_1P5V
3VSB

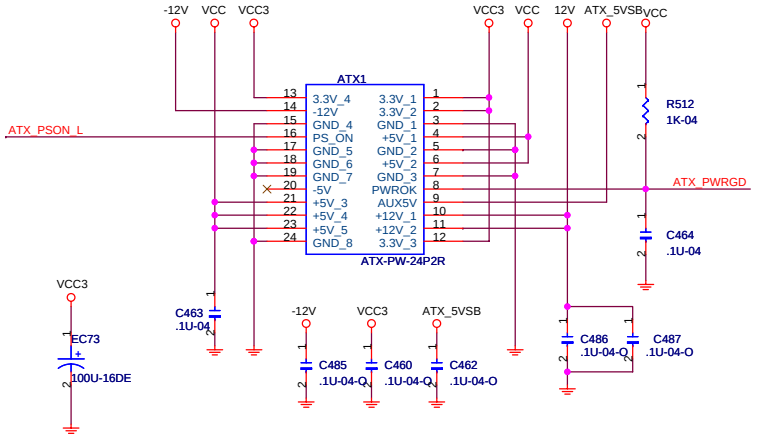
VDIMM
DDR_VTT
FSB_VTT

GND

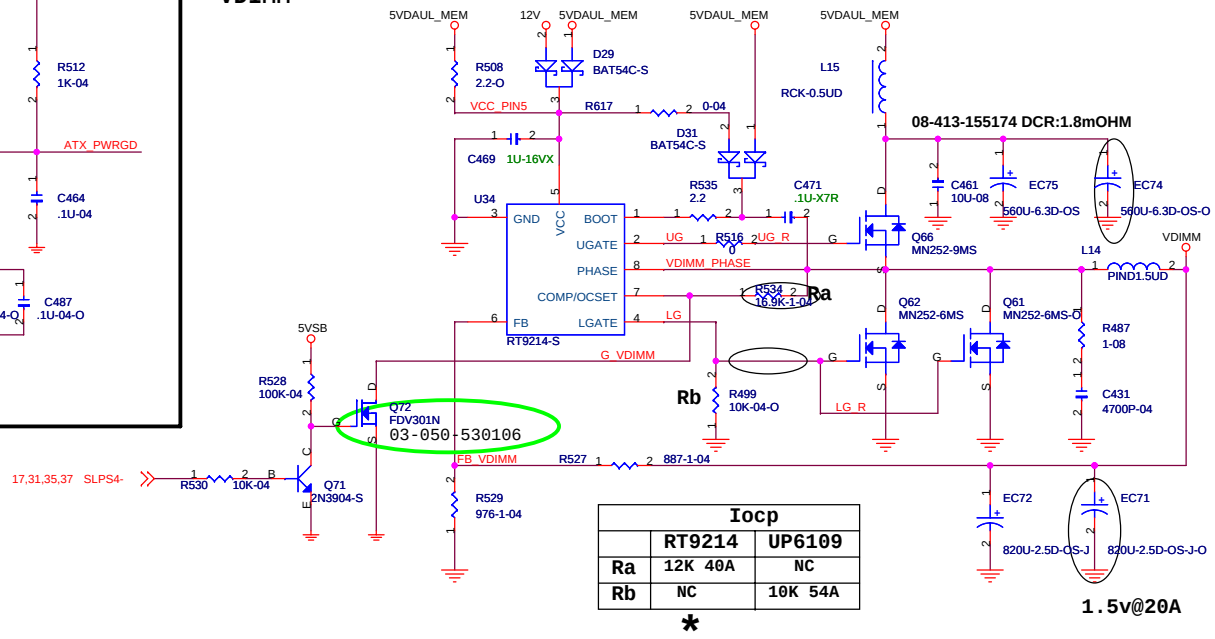
35 ATX_PSON_L >> From SUPER I/O

3,39 VTT_SEL >> From CPU

35,39 ATX_PWRGD << to SUPER I/O



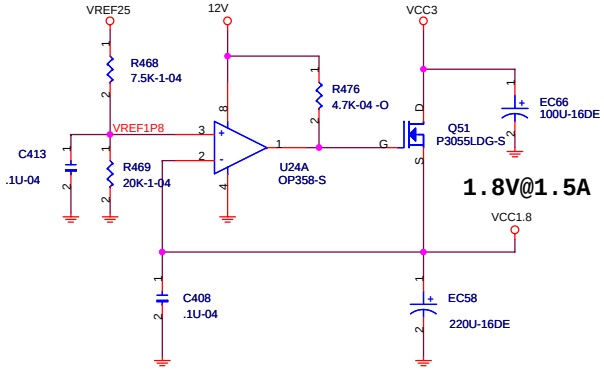
VDIMM



Iocp		
	RT9214	UP6109
Ra	12K 40A	NC
Rb	NC	10K 54A

*

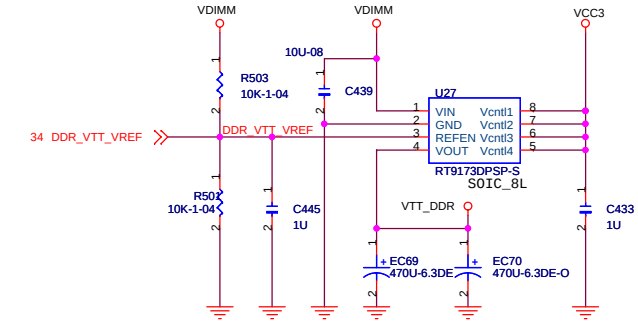
VCC1.8



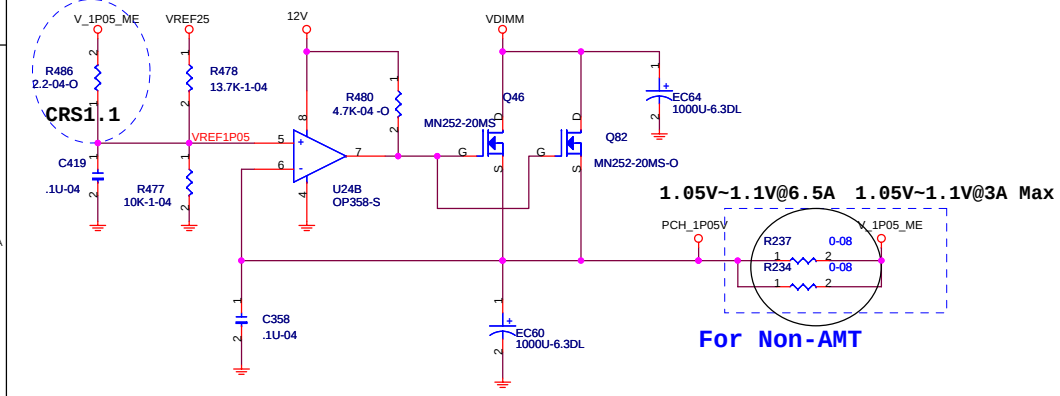
DDR_VTT

34 VREF1P05 >>

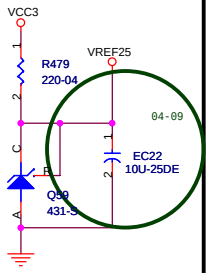
DDR VTT~0.83A (DDR3)



PCH_1P05V



VREF25



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Title: DC-DC PCH Core,VDIMM,V_1P8_SFR

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External Connection

VCORE
VCC
CPU_VTT
POWER

GND
GND

3,7 H_VID7
3,7 H_VID6
3,7 H_VID5
3,7 H_VID4
3,7 H_VID3
3,7 H_VID2
3,7 H_VID1
3,7 H_VID0
3 VCC_SENSE
3 VSS_SENSE
3 IMON

From CPU
17,43 VR_READY
To CK505

3 EPSI-
3,34,39 VTT_PWRGD

U19
NCP5395
48L 7X7 QFN

Place close to inductor

0706 CHANGE

Disable Phase 3

BOTTOM PAD CONNECT TO GND Through 8 VIAs

OCP :160A
Work F:250Khz @33.6Kohm

>300us FILTER

Ra
Rb
Ca

	Ra	Rb	Ca
NCP5395	Open	0 ohm	Open
* NCP5395T	10K	1K	Reserve

PS:NCP5395T is new IC for PSI transient improvement

0710 CHANGE

090725 change footprint

Title	DC_DC Vcore(NCP5395)
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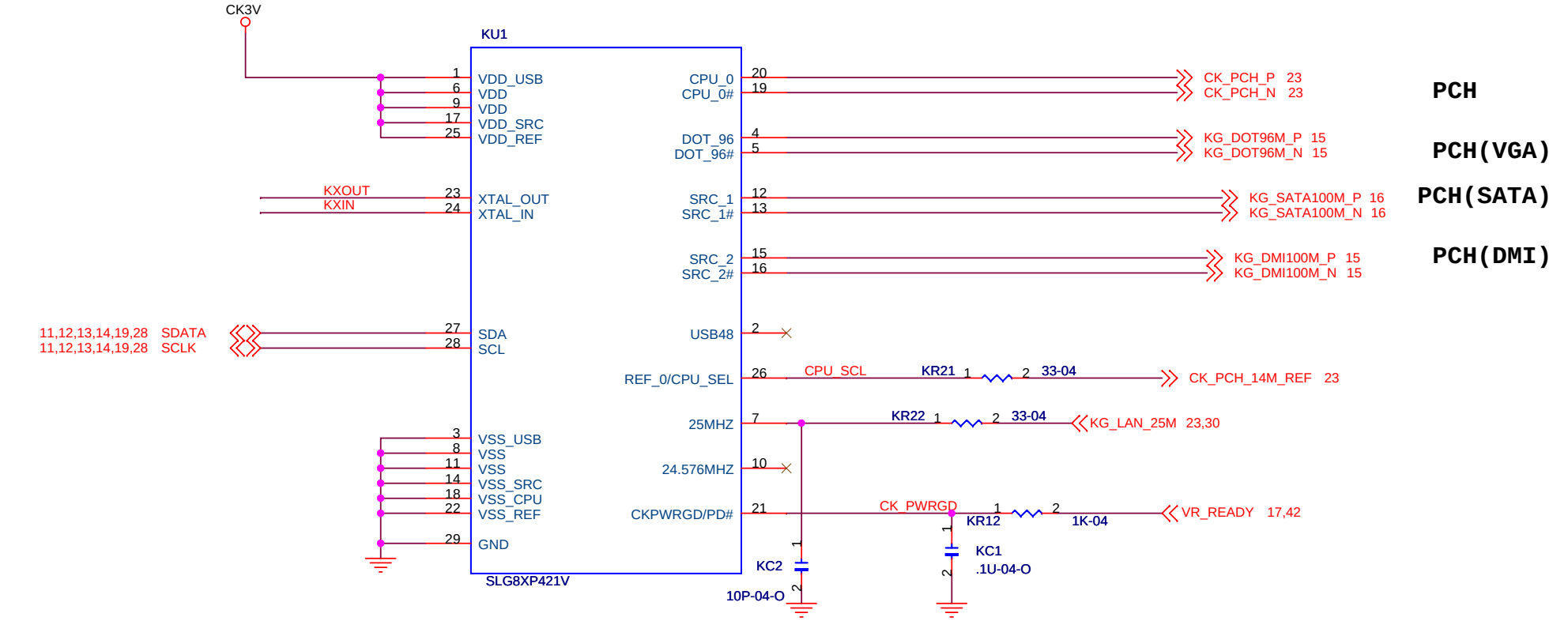

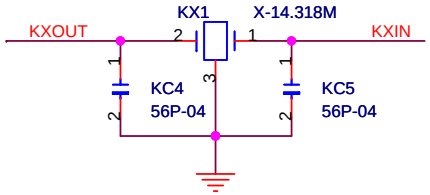

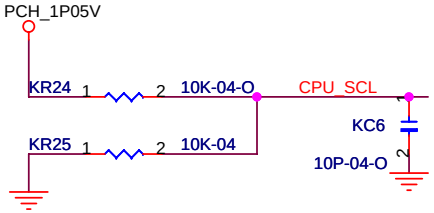

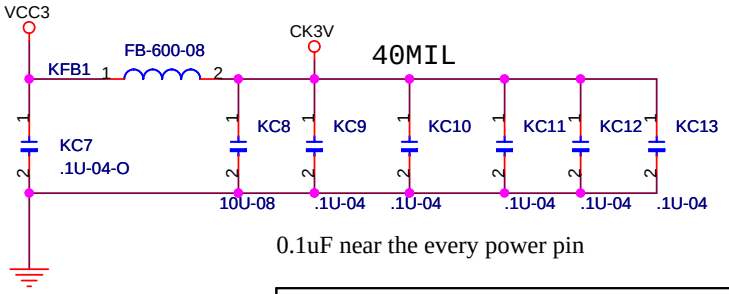

0.1uF near the every power pin

PIN 26	CPU_0
0 (default)	133MHz
1 (0.7-1.5V)	100MHz

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Title: SLG8XP421V

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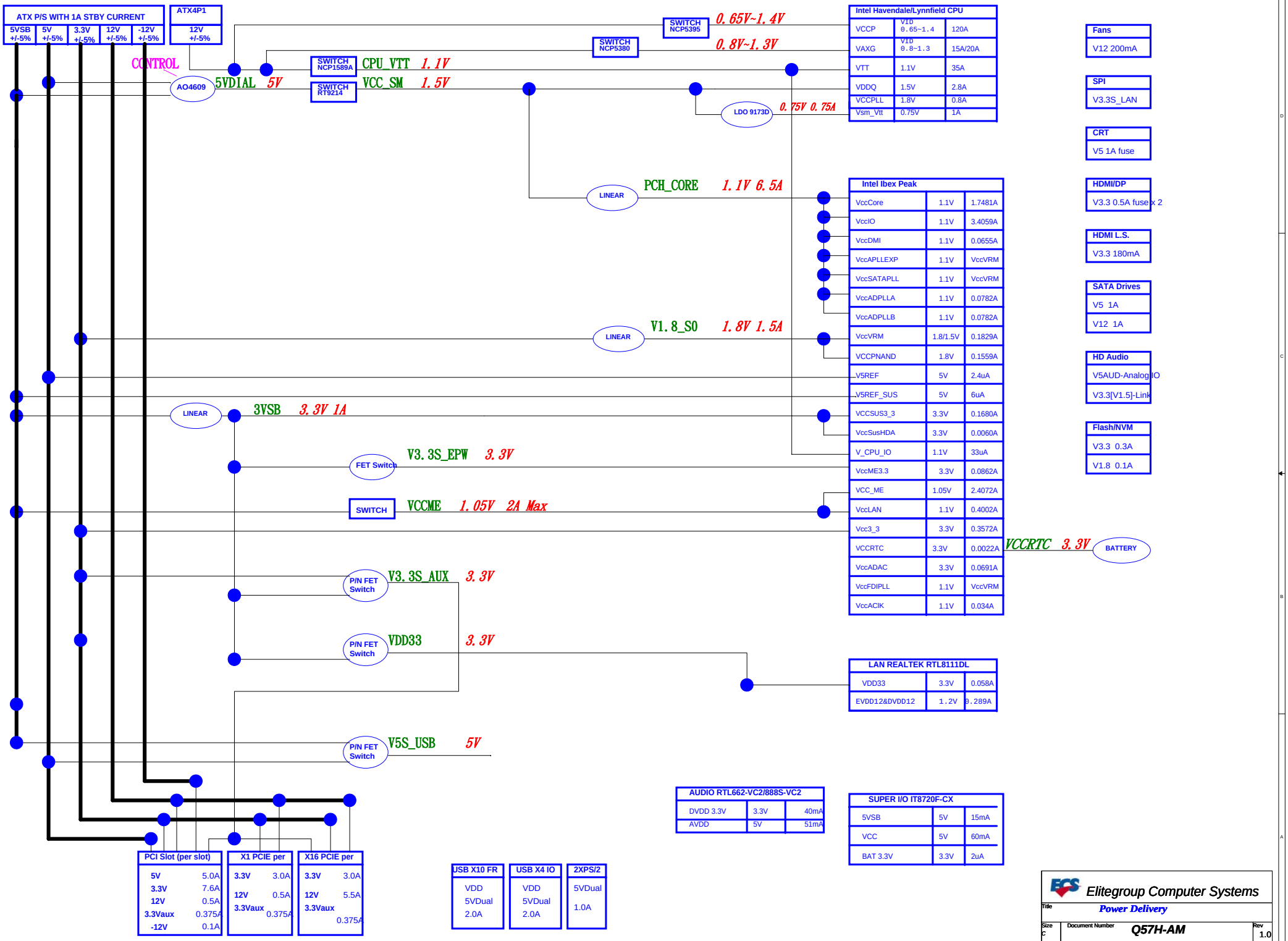
ATX P/S WITH 1A STBY CURRENT
5VSB +/-5%
5V +/-5%
3.3V +/-5%
12V +/-5%
-12V +/-5%
ATX4P1
12V +/-5%
CONTROL
AO4609
5VDIAL 5V
SWITCH NCP1589A
CPU_VTT 1.1V
SWITCH RT9214
VCC_SM 1.5V
SWITCH NCP5395
0.65V~1.4V
SWITCH NCP5380
0.8V~1.3V
LDO 9173D
0.75V 0.75A
Intel Havendale/Lynnfield CPU
VCCP VID 0.65~1.4 120A
VAXG VID 0.8~1.3 15A/20A
VTT 1.1V 35A
VDDQ 1.5V 2.8A
VCCPLL 1.8V 0.8A
Vsm_Vtt 0.75V 1A
LINEAR
PCH_CORE 1.1V 6.5A
Intel Ibex Peak
VccCore 1.1V 1.7481A
VccIO 1.1V 3.4059A
VccDMI 1.1V 0.0655A
VccAPLLEXP 1.1V VccVRM
VccSATAPLL 1.1V VccVRM
VccADPLLA 1.1V 0.0782A
VccADPLLB 1.1V 0.0782A
LINEAR
V1.8_S0 1.8V 1.5A
VccVRM 1.8/1.5V 0.1829A
VCCPNAND 1.8V 0.1559A
_V5REF 5V 2.4uA
_V5REF_SUS 5V 6uA
LINEAR
3VSB 3.3V 1A
VCCSUS3_3 3.3V 0.1680A
VccSusHDA 3.3V 0.0060A
V_CPU_IO 1.1V 33uA
FET Switch
V3.3S_EPW 3.3V
VccME3.3 3.3V 0.0862A
SWITCH
VCCME 1.05V 2A Max
VCC_ME 1.05V 2.4072A
VccLAN 1.1V 0.4002A
Vcc3_3 3.3V 0.3572A
VCCRTC 3.3V 0.0022A
VCCRTC 3.3V
BATTERY
VccADAC 3.3V 0.0691A
VccFDIPLL 1.1V VccVRM
VccACIK 1.1V 0.034A
P/N FET Switch
V3.3S_AUX 3.3V
P/N FET Switch
VDD33 3.3V
LAN REALTEK RTL8111DL
VDD33 3.3V 0.058A
EVDD12&DVDD12 1.2V 0.289A
P/N FET Switch
V5S_USB 5V
AUDIO RTL662-VC2/888S-VC2
DVDD 3.3V 3.3V 40mA
AVDD 5V 51mA
SUPER I/O IT8720F-CX
5VSB 5V 15mA
VCC 5V 60mA
BAT 3.3V 3.3V 2uA
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 X10 FR
VDD
5VDual
2.0A
USB X4 IO
VDD
5VDual
2.0A
2XPS/2
5VDual
1.0A
Fans
V12 200mA
SPI
V3.3S_LAN
CRT
V5 1A fuse
HDMI/DP
V3.3 0.5A fuse x 2
HDMI L.S.
V3.3 180mA
SATA Drives
V5 1A
V12 1A
HD Audio
V5AUD-AnalogIO
V3.3[V1.5]-Link
Flash/NVM
V3.3 0.3A
V1.8 0.1A
Elitegroup Computer Systems
Power Delivery
Q57H-AM
Size C
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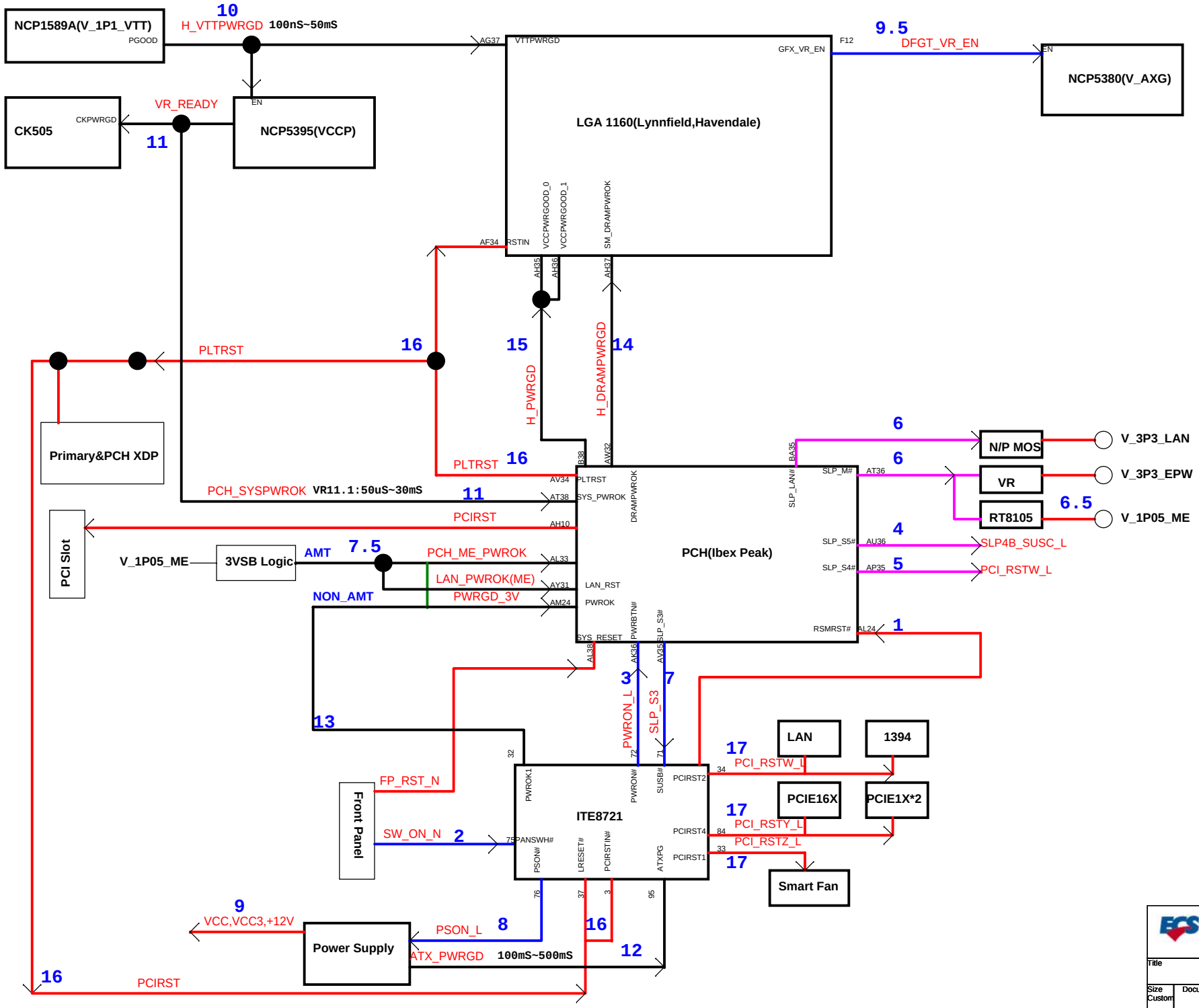

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Title: PWRGD&RST Tree

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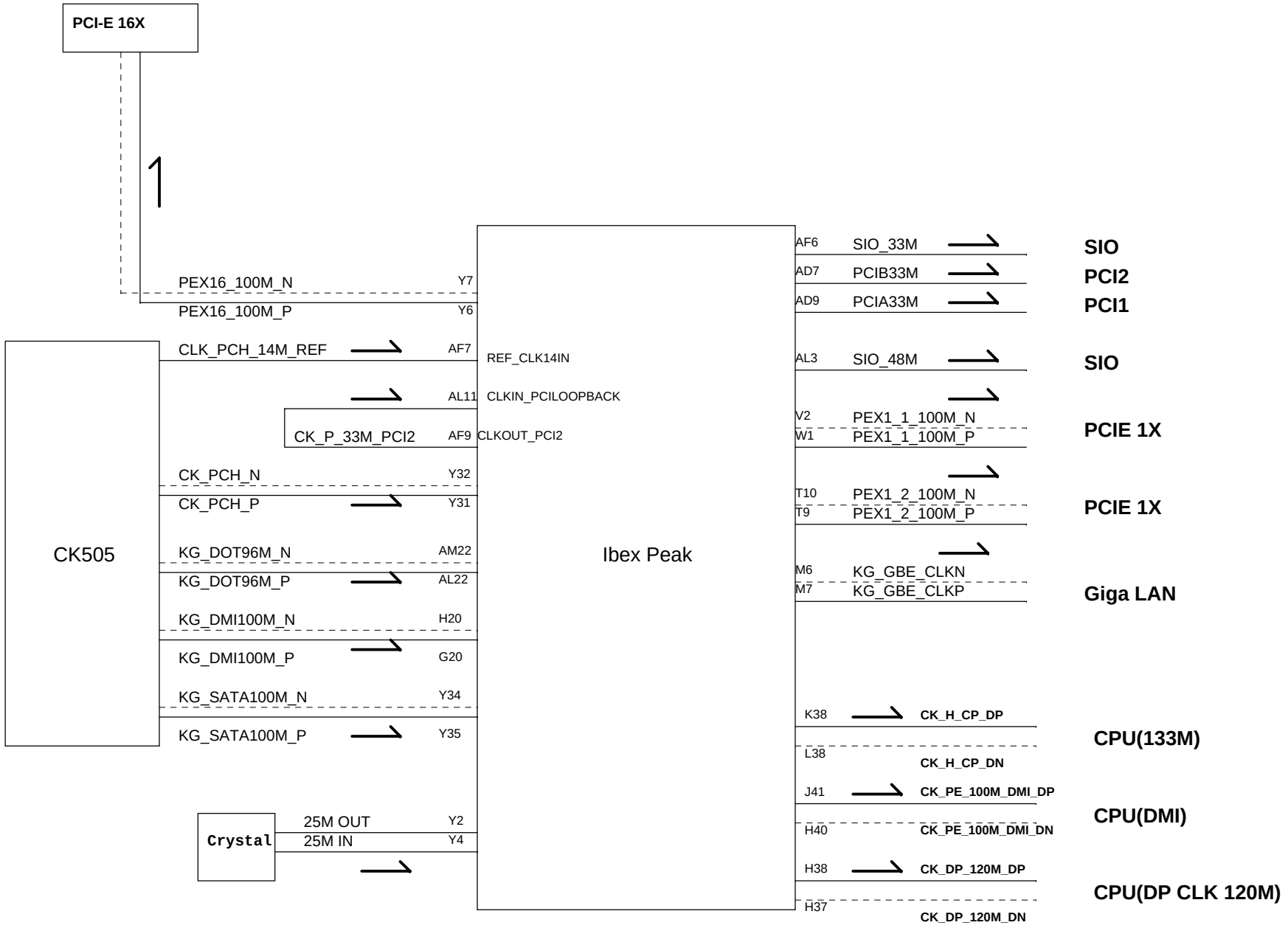

Elitegroup Computer Systems		
Title: Clock Map		
Size: Custom	Document Number: Q57H-AM	Rev: 1.0
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