ELITEGROUP

(P4 LGA775P Processor with DDR2 SDRAM Mainboard)

945PL-A

Rev: 1.1

Schematics Version History Table :

Circuit Ver.	PCB Ver.	Total Page	Modified Page(s)	Date
A	A	37		09/20/'05
1.0	1.0	37		10/13/05
1.1	1.1	37	Add R657	02/22/06

Page Title of Schematic :

Elitegroup Computer Systems

Title: Cover Sheet

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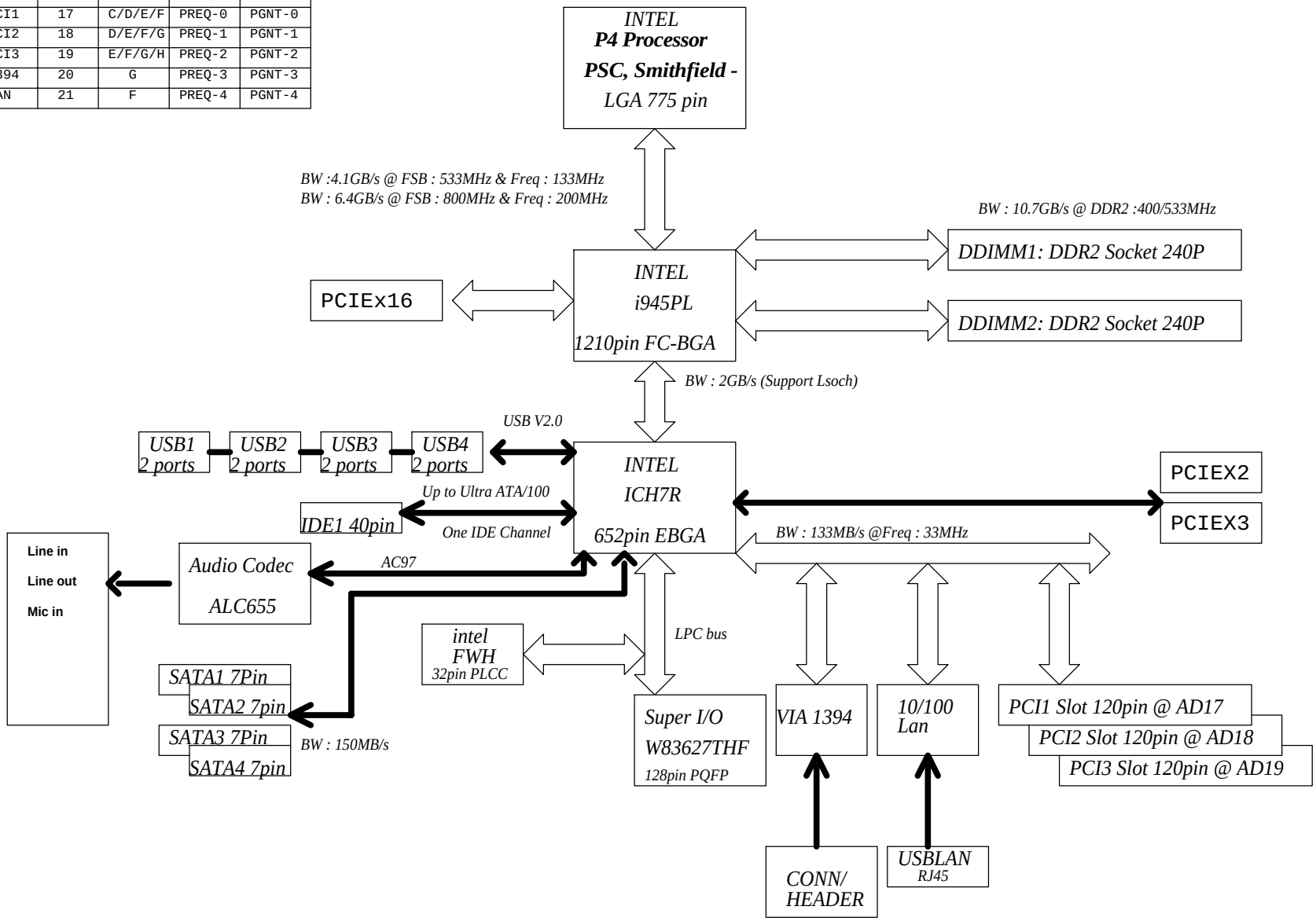
DEVICE	IDSEL	INT#	REQ#	GNT#
PCI1	17	C/D/E/F	PREQ-0	PGNT-0
PCI2	18	D/E/F/G	PREQ-1	PGNT-1
PCI3	19	E/F/G/H	PREQ-2	PGNT-2
1394	20	G	PREQ-3	PGNT-3
LAN	21	F	PREQ-4	PGNT-4

PCB : 305 x 244 mm ; 4 layers



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Title: System Block Diagram

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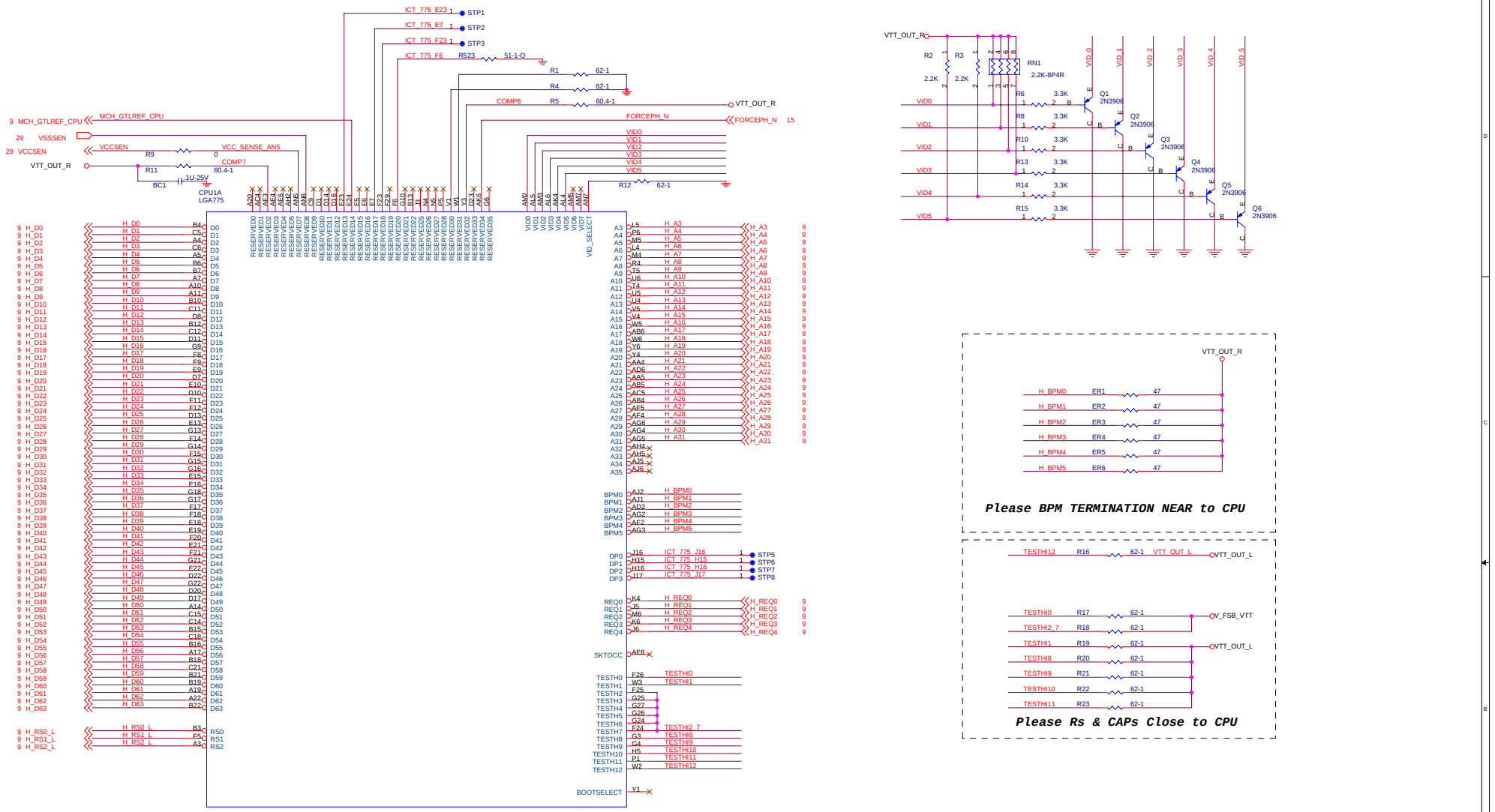

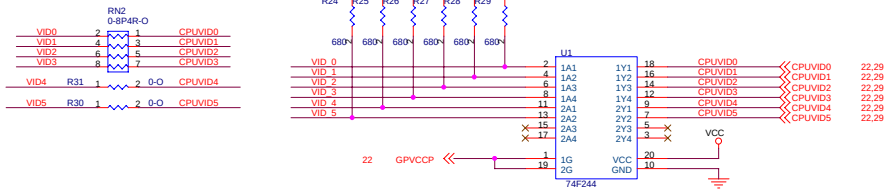

Elitegroup Computer Systems			
Title: P4 LGA775P Part A			
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Place componets as close as possible to Processor socket
trace width to cap must be no smaller than 12 Mils

GTLREF= 0.67 * VTT = 0.8V
GTLREF GENERATION CIRCUITS

CPU1B

LGA775

LL= LOAD LINE for load line select

CPU SIGNAL CLOSE TO TERMINATION CPU

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

PLACE TDO TERMINATION NEAR CONNECTOR

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

PLACE TRST_L TERMINATION ANYWHERE ON ROUTE

Place outside Socket Cavity

2N3904S

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Title	P4 LGA775P Part C
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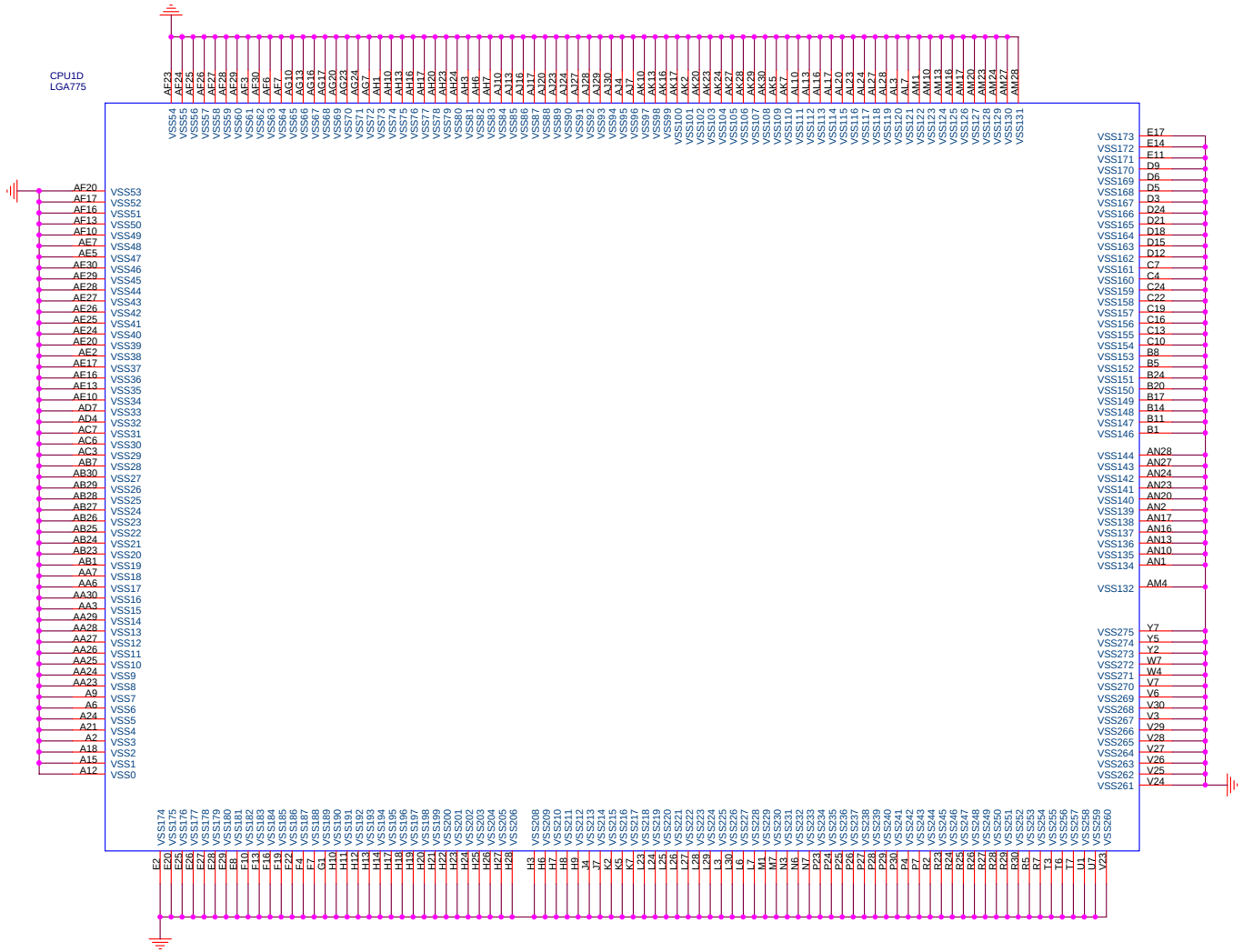

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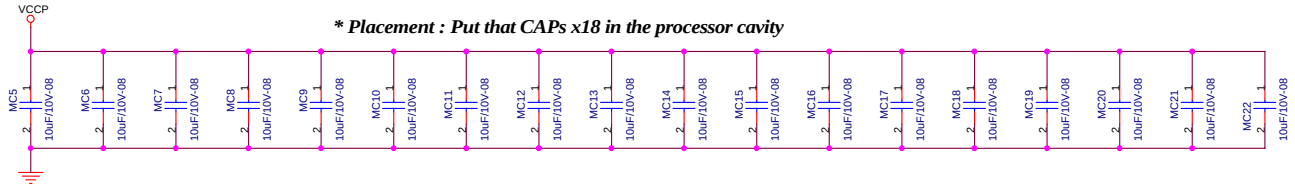
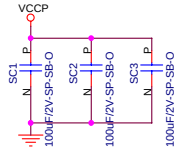
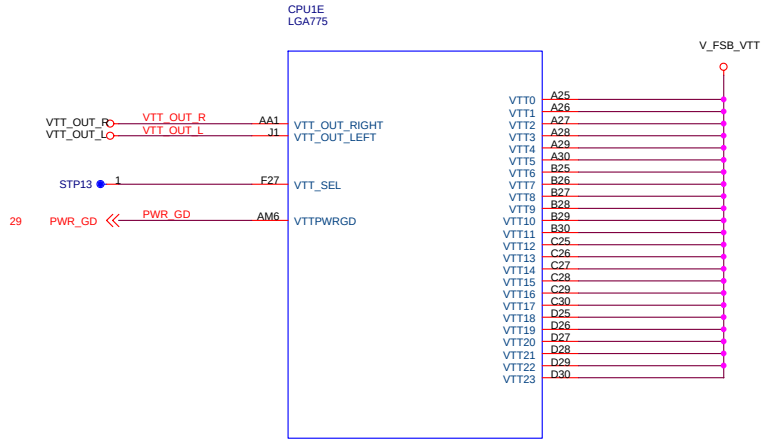
Title	*P4 LGA775P Part D*	
Size: *Custom*	Document Number: *945PL-A*	Rev: *1.1*
Date: Wednesday, February 22, 2006	Sheet 6 of 37	



*** Placement : Put that CAPs x2 on solder side***



VTT_SEL=0 for the Tejas processor



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Title: *P4 LGA775P Part E*

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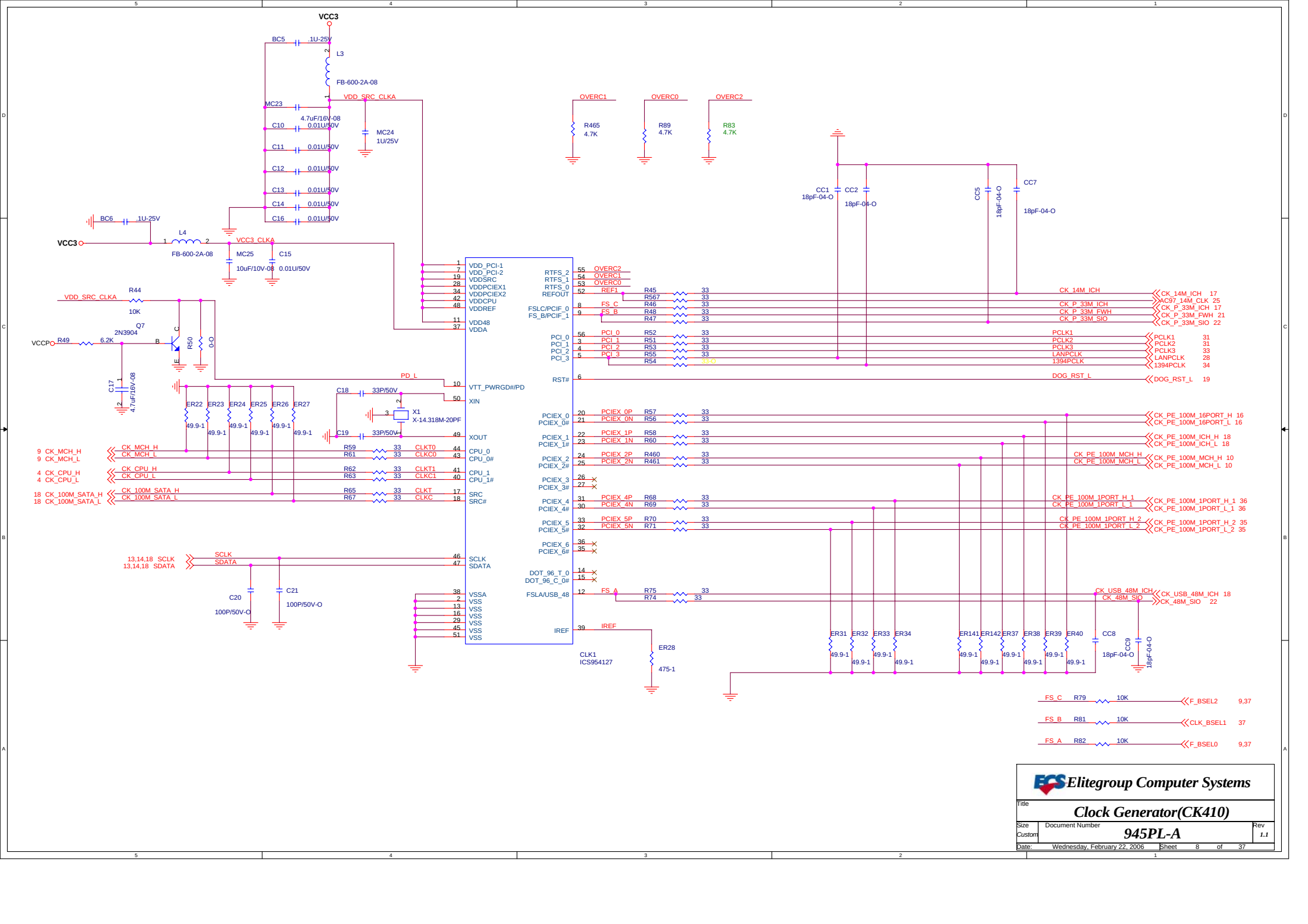
VCC3
BC5 .1U-25V
L3
FB-600-2A-08
VDD_SRC_CLKA
MC23 4.7uF/16V-08
C10 0.01U/50V
C11 0.01U/50V
C12 0.01U/50V
C13 0.01U/50V
C14 0.01U/50V
C16 0.01U/50V
MC24 1U/25V
BC6 .1U-25V
L4
FB-600-2A-08
VCC3_CLKA
MC25 10uF/10V-08
C15 0.01U/50V
R44 10K
VDD_SRC_CLKA
Q7 2N3904
VCCP
R49 6.2K
R50 0-O
C17 4.7uF/16V-08
PD_L
ER22 ER23 ER24 ER25 ER26 ER27 49.9-1
C18 33P/50V
C19 33P/50V
X1 X-14.318M-20PF
9 CK_MCH_H
9 CK_MCH_L
4 CK_CPU_H
4 CK_CPU_L
18 CK_100M_SATA_H
18 CK_100M_SATA_L
13,14,18 SCLK
13,14,18 SDATA
C20 100P/50V-O
C21 100P/50V-O
VDD_PCI-1
VDD_PCI-2
VDDSRC
VDDPCIEX1
VDDPCIEX2
VDDCPU
VDDREF
VDD48
VDDA
VTT_PWRGD#/PD
XIN
XOUT
CPU_0
CPU_0#
CPU_1
CPU_1#
SRC
SRC#
SCLK
SDATA
VSSA
VSS
CLK1
ICS954127
OVERC1
OVERC0
OVERC2
R465 4.7K
R89 4.7K
R83 4.7K
RTFS_2
RTFS_1
RTFS_0
REFOUT
FSLC/PCIF_0
FS_B/PCIF_1
PCI_0
PCI_1
PCI_2
PCI_3
RST#
PCIEX_0
PCIEX_0#
PCIEX_1
PCIEX_1#
PCIEX_2
PCIEX_2#
PCIEX_3
PCIEX_3#
PCIEX_4
PCIEX_4#
PCIEX_5
PCIEX_5#
PCIEX_6
PCIEX_6#
DOT_96_T_0
DOT_96_C_0#
FSLA/USB_48
IREF
ER28 475-1
CC1 18pF-04-O
CC2 18pF-04-O
CC5 18pF-04-O
CC7 18pF-04-O
CK_14M_ICH
CK_P_33M_ICH
CK_P_33M_FWH
CK_P_33M_SIO
PCLK1
PCLK2
PCLK3
LANPCLK
1394PCLK
DOG_RST_L
CK_PE_100M_16PORT_H
CK_PE_100M_16PORT_L
CK_PE_100M_ICH_H
CK_PE_100M_ICH_L
CK_PE_100M_MCH_H
CK_PE_100M_MCH_L
CK_PE_100M_1PORT_H_1
CK_PE_100M_1PORT_L_1
CK_PE_100M_1PORT_H_2
CK_PE_100M_1PORT_L_2
CK_USB_48M_ICH
CK_48M_SIO
ER31 ER32 ER33 ER34 ER141 ER142 ER37 ER38 ER39 ER40 49.9-1
CC8 18pF-04-O
CC9 18pF-04-O
FS_C R79 10K F_BSEL2 9,37
FS_B R81 10K CLK_BSEL1 37
FS_A R82 10K F_BSEL0 9,37
Elitegroup Computer Systems
Title
Clock Generator(CK410)
Size Custom
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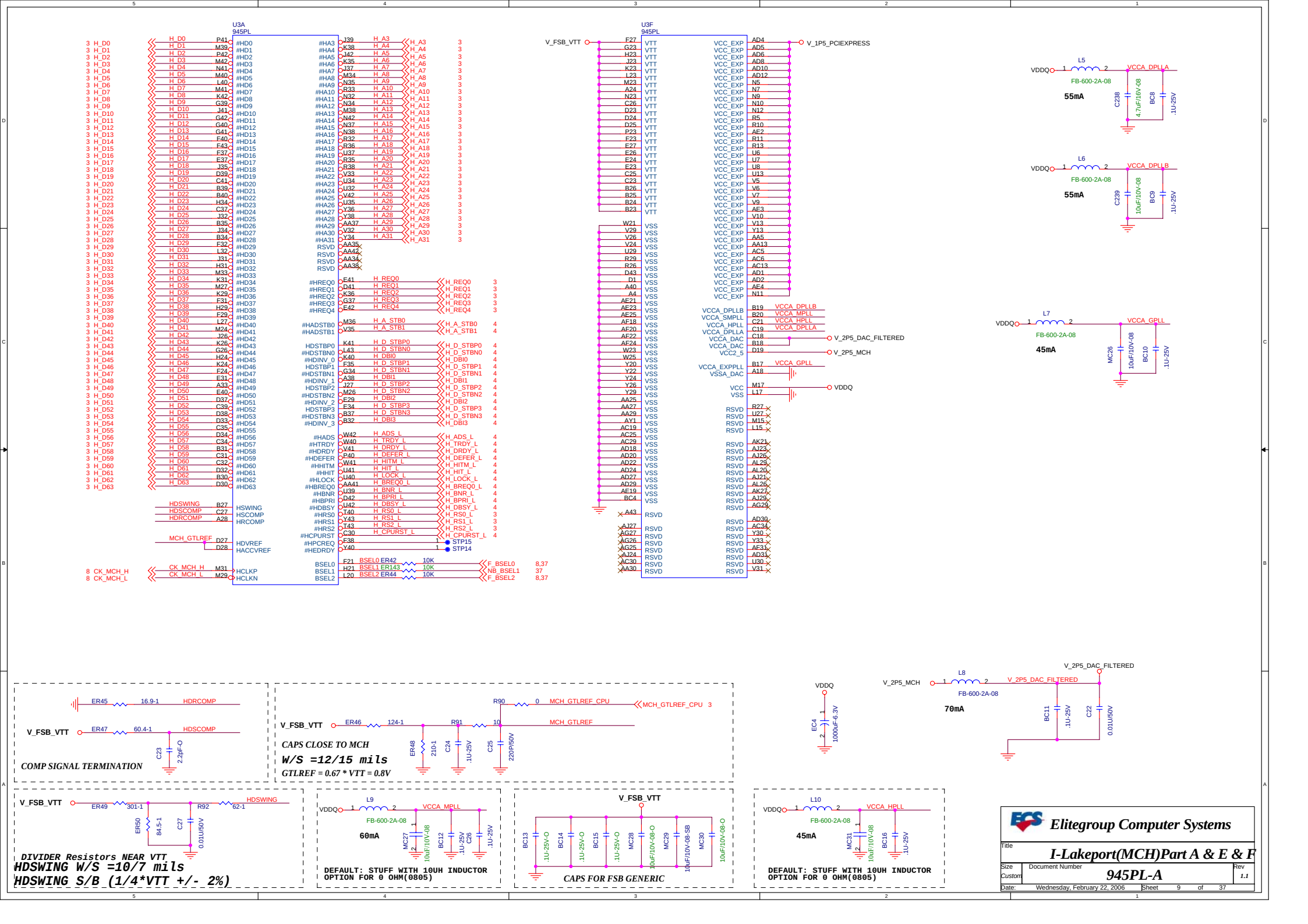
U3A
945PL
U3F
945PL
V_FSB_VTT
V_1P5_PCIEXPRESS
V_2P5_DAC_FILTERED
V_2P5_MCH
VDDQ
L5
L6
L7
L8
FB-600-2A-08
55mA
45mA
70mA
VCCA_DPLLA
VCCA_DPLLB
VCCA_GPLL
VCCA_MPLL
VCCA_HPLL
HDSWING
HDSCOMP
HDRCOMP
MCH_GTLREF
CK_MCH_H
CK_MCH_L
ER45 16.9-1 HDRCOMP
ER47 60.4-1 HDSCOMP
C23 2.2pF-O
COMP SIGNAL TERMINATION
ER46 124-1
R90 0 MCH_GTLREF_CPU
R91 10 MCH_GTLREF
ER48 210-1
C24 .1U-25V
C25 220P/50V
CAPS CLOSE TO MCH
W/S =12/15 mils
GTLREF = 0.67 * VTT = 0.8V
EC4 1000uF-6.3V
BC11 .1U-25V
C22 0.01U/50V
ER49 301-1
R92 62-1
ER50 84.5-1
C27 0.01U/50V
DIVIDER Resistors NEAR VTT
HDSWING W/S =10/7 mils
HDSWING S/B (1/4*VTT +/- 2%)
BC12 .1U-25V
C26 .1U-25V
DEFAULT: STUFF WITH 10UH INDUCTOR
OPTION FOR 0 OHM(0805)
BC13 .1U-25V-O
BC14 .1U-25V-O
BC15 .1U-25V-O
MC28 10uF/10V-08-O
MC29 10uF/10V-08-SB
MC30 10uF/10V-08-O
CAPS FOR FSB GENERIC
MC31 10uF/10V-08
BC16 .1U-25V
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I-Lakeport(MCH)Part A & E & P
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U3B
945PL

EXP_A_TXP_0 D14
EXP_A_TXN_0 C13
EXP_A_TXP_1 A13
EXP_A_TXN_1 B12
EXP_A_TXP_2 A11
EXP_A_TXN_2 B10
EXP_A_TXP_3 C10
EXP_A_TXN_3 C9
EXP_A_TXP_4 A9
EXP_A_TXN_4 B7
EXP_A_TXP_5 D7
EXP_A_TXN_5 D6
EXP_A_TXP_6 A6
EXP_A_TXN_6 B5
EXP_A_TXP_7 E2
EXP_A_TXN_7 F1
EXP_A_TXP_8 G2
EXP_A_TXN_8 J1
EXP_A_TXP_9 J3
EXP_A_TXN_9 K4
EXP_A_TXP_10 L4
EXP_A_TXN_10 M4
EXP_A_TXP_11 M2
EXP_A_TXN_11 N1
EXP_A_TXP_12 P2
EXP_A_TXN_12 T1
EXP_A_TXP_13 T4
EXP_A_TXN_13 U4
EXP_A_TXP_14 U2
EXP_A_TXN_14 V1
EXP_A_TXP_15 V3
EXP_A_TXN_15 W4

EXP_A_RXP_0 G12
EXP_A_RXN_0 F12
EXP_A_RXP_1 D11
EXP_A_RXN_1 D12
EXP_A_RXP_2 J13
EXP_A_RXN_2 H13
EXP_A_RXP_3 E10
EXP_A_RXN_3 F10
EXP_A_RXP_4 J9
EXP_A_RXN_4 H10
EXP_A_RXP_5 F7
EXP_A_RXN_5 F9
EXP_A_RXP_6 C4
EXP_A_RXN_6 D3
EXP_A_RXP_7 G6
EXP_A_RXN_7 J6
EXP_A_RXP_8 K9
EXP_A_RXN_8 K8
EXP_A_RXP_9 F4
EXP_A_RXN_9 G4
EXP_A_RXP_10 M6
EXP_A_RXN_10 M7
EXP_A_RXP_11 K2
EXP_A_RXN_11 L1
EXP_A_RXP_12 U11
EXP_A_RXN_12 U10
EXP_A_RXP_13 R8
EXP_A_RXN_13 R7
EXP_A_RXP_14 P4
EXP_A_RXN_14 N3
EXP_A_RXP_15 Y10
EXP_A_RXN_15 Y11

EXP_GRCOMP AC12
EXP_COMPO
AC11 EXP_COMPI

GCLKP B14 CK_PE_100M_MCH_H
GCLKN B16 CK_PE_100M_MCH_L

DMI_TXP0 W2
DMI_TXN0 Y1
DMI_TXP1 AA2
DMI_TXN1 AB1
DMI_TXP2 Y4
DMI_TXN2 AA4
DMI_TXP3 AB3
DMI_TXN3 AC4

DMI_RXP0 Y7
DMI_RXN0 Y8
DMI_RXP1 AA9
DMI_RXN1 AA10
DMI_RXP2 AA6
DMI_RXN2 AA7
DMI_RXP3 AC9
DMI_RXN3 AC8

F15 SDVO_CTRLDATA
E15 SDVO_CTRLCLK

HSYNC D17 GHSYNC
VSYNC C17 GVSYNC

3VDDCSDA N18
3VDDCSCL N20
DDC_DATA
DDC_CLK

RED F17 V_2P5_MCH
#RED G17
GREEN K17
#GREEN J17
BLUE H18
#BLUE J18

V_2P5_MCH A20
IREF
VDDQ J15
DREFCLKP
H15 DREFCLKN

STP17 1 K18
STP16 1 H20
ALLZTEST
XORTEST
L18 RSVD_TP5
EXP_SLR K21
L21 RSVD_TP4
EXP_EN F20
N21 RSVD_TP6

#EXTTS J20 R93 10K V_2P5_MCH
RSVD M11
RSVD V30
#RSTIN AJ12 PLTRST_L
PWROK AJ9 PWROK
#ICH_SYNC M18 ICH_SYNC_L

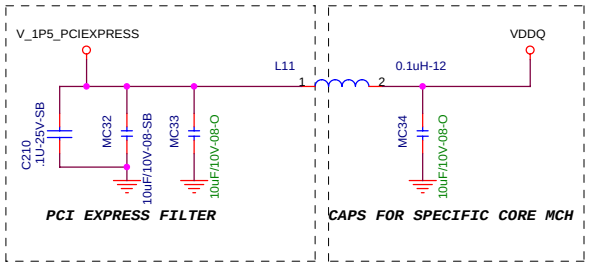
PLTRST_L 17,21
PWROK 17,19
ICH_SYNC_L 17

A42 NC
B2 NC
B3 NC
B43 NC
C2 NC
BB1 NC
BB43 NC
BC1 NC
BC2 NC
BC42 NC
BC43 NC

BB2 NC
BA2 NC
AW26 NC
AW2 NC
AV27 NC
AV26 NC
E35 NC
C42 NC
B42 NC
B41 NC

Place close to GMCH 750Mil.

100nH/S/1.4A/台慶(FPI0302-R10M-01)



The LC filter is required to source 1.4A of current with less than 30mV of drop across the filter.

EXP_SLR R94 1K-O
EXP_EN R95 0 PRSNT2_N PRSNT2_N 16
EXP_GRCOMP ER51 24.9-1-SB V_1P5_PCIEXPRESS

COMP SIGNAL TERMINATION

PWROK SC5 10P/50V-SB-O
PLTRST_L SC6 22P/50V-O
GHSYNC R96 10K
GVSYNC R101 10K

VCC R97 2.7K R98 2.7K
3VDDCSCL

VCC R99 2.7K R100 2.7K
3VDDCSDA

J1 1 NC HDR_1
J2 1 NC HDR_1

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Title: *I-Lakeport(MCH)Part D*

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1_8VSTR
ER52 1K-1
SDREFA
ER53 1K-1 C28 .1U-25V

1_8VSTR
ER54 1K-1
SDREFB
ER55 1K-1 C29 .1U-25V

1_8VSTR
ER56
SMRCOMP_N
80.6-1
BC17 .1U-25V

DESIGN NOTE:

BUFFERS CALIBRATE TO 20/80% OF V_SM. INTERNAL BUFFERS SET TO 20 OHMS

ER57
SMRCOMP_P
80.6-1

U3C
945PL

DQS_H_A4	AU35	SDQS_A4	SDQS_A0	AU4	DQS_H_A0
DQS_L_A4	AV35	#SDQS_A4	#SDQS_A0	AR2	DQS_L_A0
MPD_A4	AT34	SDM_A4	SDM_A0	AR3	MPD_A0
MD_A32	AP32	SDQ_A32	SDQ_A0	AP3	MD_A0
MD_A33	AV34	SDQ_A33	SDQ_A1	AP2	MD_A1
MD_A34	AV38	SDQ_A34	SDQ_A2	AU3	MD_A2
MD_A35	AU39	SDQ_A35	SDQ_A3	AV4	MD_A3
MD_A36	AV32	SDQ_A36	SDQ_A4	AN1	MD_A4
MD_A37	AT32	SDQ_A37	SDQ_A5	AP4	MD_A5
MD_A38	AR34	SDQ_A38	SDQ_A6	AU5	MD_A6
MD_A39	AU37	SDQ_A39	SDQ_A7	AU2	MD_A7
DQS_H_A5	AP42	SDQS_A5	SDQS_A1	BA3	DQS_H_A1
DQS_L_A5	AP40	#SDQS_A5	#SDQS_A1	BB4	DQS_L_A1
MPD_A5	AP39	SDM_A5	SDM_A1	AY2	MPD_A1
MD_A40	AR41	SDQ_A40	SDQ_A8	AW3	MD_A8
MD_A41	AR42	SDQ_A41	SDQ_A9	AY3	MD_A9
MD_A42	AN43	SDQ_A42	SDQ_A10	BA7	MD_A10
MD_A43	AM40	SDQ_A43	SDQ_A11	BB7	MD_A11
MD_A44	AU41	SDQ_A44	SDQ_A12	AV1	MD_A12
MD_A45	AU42	SDQ_A45	SDQ_A13	AW4	MD_A13
MD_A46	AP41	SDQ_A46	SDQ_A14	BC6	MD_A14
MD_A47	AN40	SDQ_A47	SDQ_A15	AY7	MD_A15
DQS_H_A6	AG42	SDQS_A6	SDQS_A2	AY11	DQS_H_A2
DQS_L_A6	AG41	#SDQS_A6	#SDQS_A2	BA10	DQS_L_A2
MPD_A6	AG40	SDM_A6	SDM_A2	BB10	MPD_A2
MD_A48	AL41	SDQ_A48	SDQ_A16	AW12	MD_A16
MD_A49	AL42	SDQ_A49	SDQ_A17	AY10	MD_A17
MD_A50	AF39	SDQ_A50	SDQ_A18	BA12	MD_A18
MD_A51	AE40	SDQ_A51	SDQ_A19	BB12	MD_A19
MD_A52	AM41	SDQ_A52	SDQ_A20	BA9	MD_A20
MD_A53	AM42	SDQ_A53	SDQ_A21	BB9	MD_A21
MD_A54	AF41	SDQ_A54	SDQ_A22	BC11	MD_A22
MD_A55	AF42	SDQ_A55	SDQ_A23	AY12	MD_A23
DQS_H_A7	AC42	SDQS_A7	SDQS_A3	AU18	DQS_H_A3
DQS_L_A7	AC41	#SDQS_A7	#SDQS_A3	AR18	DQS_L_A3
MPD_A7	AC40	SDM_A7	SDM_A3	AP18	MPD_A3
MD_A56	AD40	SDQ_A56	SDQ_A24	AM20	MD_A24
MD_A57	AD43	SDQ_A57	SDQ_A25	AM18	MD_A25
MD_A58	AA39	SDQ_A58	SDQ_A26	AV20	MD_A26
MD_A59	AA40	SDQ_A59	SDQ_A27	AM21	MD_A27
MD_A60	AE42	SDQ_A60	SDQ_A28	AP17	MD_A28
MD_A61	AE41	SDQ_A61	SDQ_A29	AR17	MD_A29
MD_A62	AB41	SDQ_A62	SDQ_A30	AP20	MD_A30
MD_A63	AB42	SDQ_A63	SDQ_A31	AT20	MD_A31
MAAA_0	BA32	SMA_A0	#SWE_A	BB35	SWE_L_A
MAAA_1	AW32	SMA_A1	#SCAS_A	BA37	SCAS_L_A
MAAA_2	BB30	SMA_A2	#SRAS_A	BA34	SRAS_L_A
MAAA_3	BA30	SMA_A3			
MAAA_4	AY30	SMA_A4	SBS_A0	BC33	SBSA_0
MAAA_5	BA27	SMA_A5	SBS_A1	AY34	SBSA_1
MAAA_6	BC28	SMA_A6	SBS_A2	BA26	SBSA_2
MAAA_7	AY27	SMA_A7			
MAAA_8	AY28	SMA_A8	#SCS_A0	BB37	CSA_L0
MAAA_9	BB27	SMA_A9	#SCS_A1	BA39	CSA_L1
MAAA_10	AY33	SMA_A10	#SCS_A2	BA35	
MAAA_11	AW27	SMA_A11	#SCS_A3	AY38	
MAAA_12	BB26	SMA_A12			
MAAA_13	BC38	SMA_A13	SCKE_A0	BB25	CKEA_0
			SCKE_A1	AY25	CKEA_1
DCLKA_H0	BB32	SCLK_A0	SCKE_A2	BC24	
DCLKA_L0	AY32	#SCLK_A0	SCKE_A3	BA25	
DCLKA_H1	AY5	SCLK_A1			
DCLKA_L1	BB5	#SCLK_A1	SODT_A0	AW37	ODTA_0
DCLKA_H2	AK42	SCLK_A2	SODT_A1	AY39	ODTA_1
DCLKA_L2	AK41	#SCLK_A2	SODT_A2	AY37	
	BA31	SCLK_A3	SODT_A3	BB40	
	BB31	#SCLK_A3			
	AY6	SCLK_A4	RSVD	BC16	
	BA5	#SCLK_A4	RSVD	AY14	
	AH40	SCLK_A5	RSVD	AW17	
	AH43	#SCLK_A5	RSVD	AW18	
STP21 1	AL17	RSVD_TP1	RSVD	AK40	
STP20 1	AK17	RSVD_TP0			
			SVREF0	AM4	SDREFA

U3D
945PL

DQS_H_B4	AT29	SDQS_B4	SDQS_B0	AM8	DQS_H_B0
DQS_L_B4	AV29	#SDQS_B4	#SDQS_B0	AM6	DQS_L_B0
MPD_B4	AR29	SDM_B4	SDM_B0	AL11	MPD_B0
MD_B32	AU27	SDQ_B32	SDQ_B0	AL6	MD_B0
MD_B33	AN29	SDQ_B33	SDQ_B1	AL8	MD_B1
MD_B34	AR31	SDQ_B34	SDQ_B2	AP8	MD_B2
MD_B35	AM31	SDQ_B35	SDQ_B3	AP9	MD_B3
MD_B36	AP27	SDQ_B36	SDQ_B4	AJ11	MD_B4
MD_B37	AR27	SDQ_B37	SDQ_B5	AL9	MD_B5
MD_B38	AP31	SDQ_B38	SDQ_B6	AM10	MD_B6
MD_B39	AU31	SDQ_B39	SDQ_B7	AP6	MD_B7
DQS_H_B5	AP36	SDQS_B5	SDQS_B1	AV7	DQS_H_B1
DQS_L_B5	AM35	#SDQS_B5	#SDQS_B1	AR9	DQS_L_B1
MPD_B5	AR38	SDM_B5	SDM_B1	AW7	MPD_B1
MD_B40	AP35	SDQ_B40	SDQ_B8	AU7	MD_B8
MD_B41	AP37	SDQ_B41	SDQ_B9	AV6	MD_B9
MD_B42	AN32	SDQ_B42	SDQ_B10	AV12	MD_B10
MD_B43	AL35	SDQ_B43	SDQ_B11	AM11	MD_B11
MD_B44	AR35	SDQ_B44	SDQ_B12	AR5	MD_B12
MD_B45	AU38	SDQ_B45	SDQ_B13	AR7	MD_B13
MD_B46	AM38	SDQ_B46	SDQ_B14	AR12	MD_B14
MD_B47	AM34	SDQ_B47	SDQ_B15	AR10	MD_B15
DQS_H_B6	AG34	SDQS_B6	SDQS_B2	AV13	DQS_H_B2
DQS_L_B6	AG32	#SDQS_B6	#SDQS_B2	AT13	DQS_L_B2
MPD_B6	AJ39	SDM_B6	SDM_B2	AP13	MPD_B2
MD_B48	AL34	SDQ_B48	SDQ_B16	AM15	MD_B16
MD_B49	AJ34	SDQ_B49	SDQ_B17	AM13	MD_B17
MD_B50	AF32	SDQ_B50	SDQ_B18	AV15	MD_B18
MD_B51	AF34	SDQ_B51	SDQ_B19	AM17	MD_B19
MD_B52	AL31	SDQ_B52	SDQ_B20	AN12	MD_B20
MD_B53	AJ32	SDQ_B53	SDQ_B21	AR13	MD_B21
MD_B54	AG35	SDQ_B54	SDQ_B22	AP15	MD_B22
MD_B55	AD32	SDQ_B55	SDQ_B23	AT15	MD_B23
DQS_H_B7	AD36	SDQS_B7	SDQS_B3	AU23	DQS_H_B3
DQS_L_B7	AD38	#SDQS_B7	#SDQS_B3	AR23	DQS_L_B3
MPD_B7	AD39	SDM_B7	SDM_B3	AP23	MPD_B3
MD_B56	AC32	SDQ_B56	SDQ_B24	AM24	MD_B24
MD_B57	AD34	SDQ_B57	SDQ_B25	AM23	MD_B25
MD_B58	Y32	SDQ_B58	SDQ_B26	AV24	MD_B26
MD_B59	AA32	SDQ_B59	SDQ_B27	AM26	MD_B27
MD_B60	AE35	SDQ_B60	SDQ_B28	AP21	MD_B28
MD_B61	AF37	SDQ_B61	SDQ_B29	AR21	MD_B29
MD_B62	AC33	SDQ_B62	SDQ_B30	AP24	MD_B30
MD_B63	AC35	SDQ_B63	SDQ_B31	AT24	MD_B31
MAAB_0	BB22	SMA_B0	#SWE_B	BB23	SWE_L_B
MAAB_1	BB21	SMA_B1	#SCAS_B	AY24	SCAS_L_B
MAAB_2	BA21	SMA_B2	#SRAS_B	BA23	SRAS_L_B
MAAB_3	AY21	SMA_B3			
MAAB_4	BC20	SMA_B4	SBS_B0	AW23	SBSB_0
MAAB_5	AY19	SMA_B5	SBS_B1	AY23	SBSB_1
MAAB_6	AY20	SMA_B6	SBS_B2	AY17	SBSB_2
MAAB_7	BA18	SMA_B7			
MAAB_8	BA19	SMA_B8	#SCS_B0	BA40	CSB_L0
MAAB_9	BB18	SMA_B9	#SCS_B1	AW41	CSB_L1
MAAB_10	BA22	SMA_B10	#SCS_B2	BA41	
MAAB_11	BB17	SMA_B11	#SCS_B3	AW40	
MAAB_12	BA17	SMA_B12			
MAAB_13	AW42	SMA_B13	SCKE_B0	BA14	CKEB_0
			SCKE_B1	AY16	CKEB_1
DCLKB_H0	AM29	SCLK_B0	SCKE_B2	BA13	
DCLKB_L0	AM27	#SCLK_B0	SCKE_B3	BB13	
DCLKB_H1	AV9	SCLK_B1			
DCLKB_L1	AW9	#SCLK_B1	SODT_B0	AY42	ODTB_0
DCLKB_H2	AL38	SCLK_B2	SODT_B1	AV40	ODTB_1
DCLKB_L2	AL36	#SCLK_B2	SODT_B2	AV43	
	AP26	SCLK_B3	SODT_B3	AU40	
	AR26	#SCLK_B3			
	AU10	SCLK_B4	SOCOMP1	AM3 1	STP18
	AT10	#SCLK_B4	SOCOMP0	AJ8 1	STP19
	AJ38	SCLK_B5	SRCOMP1	AJ6	SMRCOMP_P
	AJ36	#SCLK_B5	SRCOMP0	AL5	SMRCOMP_N
STP23 1	AK18	RSVD_TP3	RSVD	AL39	
STP22 1	AK23	RSVD_TP2			
			SVREF1	AM2	SDREFB

13 MD_A[0..63] — MD_A[0..63]
13 DQS_L_A[0..7] — DQS_L_A[0..7]
13 DQS_H_A[0..7] — DQS_H_A[0..7]
13 MPD_A[0..7] — MPD_A[0..7]
13 MAAA_[0..13] — MAAA_[0..13]
13 CSA_L[0..1] — CSA_L[0..1]
13 CKEA_[0..1] — CKEA_[0..1]
13 DCLKA_L[0..2] — DCLKA_L[0..2]
13 DCLKA_H[0..2] — DCLKA_H[0..2]
13 ODTA_[0..1] — ODTA_[0..1]
13 SBSA_[0..2] — SBSA_[0..2]
13 SWE_L_A — SWE_L_A
13 SCAS_L_A — SCAS_L_A
13 SRAS_L_A — SRAS_L_A

14 MD_B[0..63] — MD_B[0..63]
14 DQS_L_B[0..7] — DQS_L_B[0..7]
14 DQS_H_B[0..7] — DQS_H_B[0..7]
14 MPD_B[0..7] — MPD_B[0..7]
14 MAAB_[0..13] — MAAB_[0..13]
14 CSB_L[0..1] — CSB_L[0..1]
14 CKEB_[0..1] — CKEB_[0..1]
14 DCLKB_L[0..2] — DCLKB_L[0..2]
14 DCLKB_H[0..2] — DCLKB_H[0..2]
14 ODTB_[0..1] — ODTB_[0..1]
14 SBSB_[0..2] — SBSB_[0..2]
14 SWE_L_B — SWE_L_B
14 SCAS_L_B — SCAS_L_B
14 SRAS_L_B — SRAS_L_B

Elitegroup Computer Systems

Title: I-Lakeport(MCH)Part B & C

Size: B | Document Number: 945PL-A | Rev: 1.1

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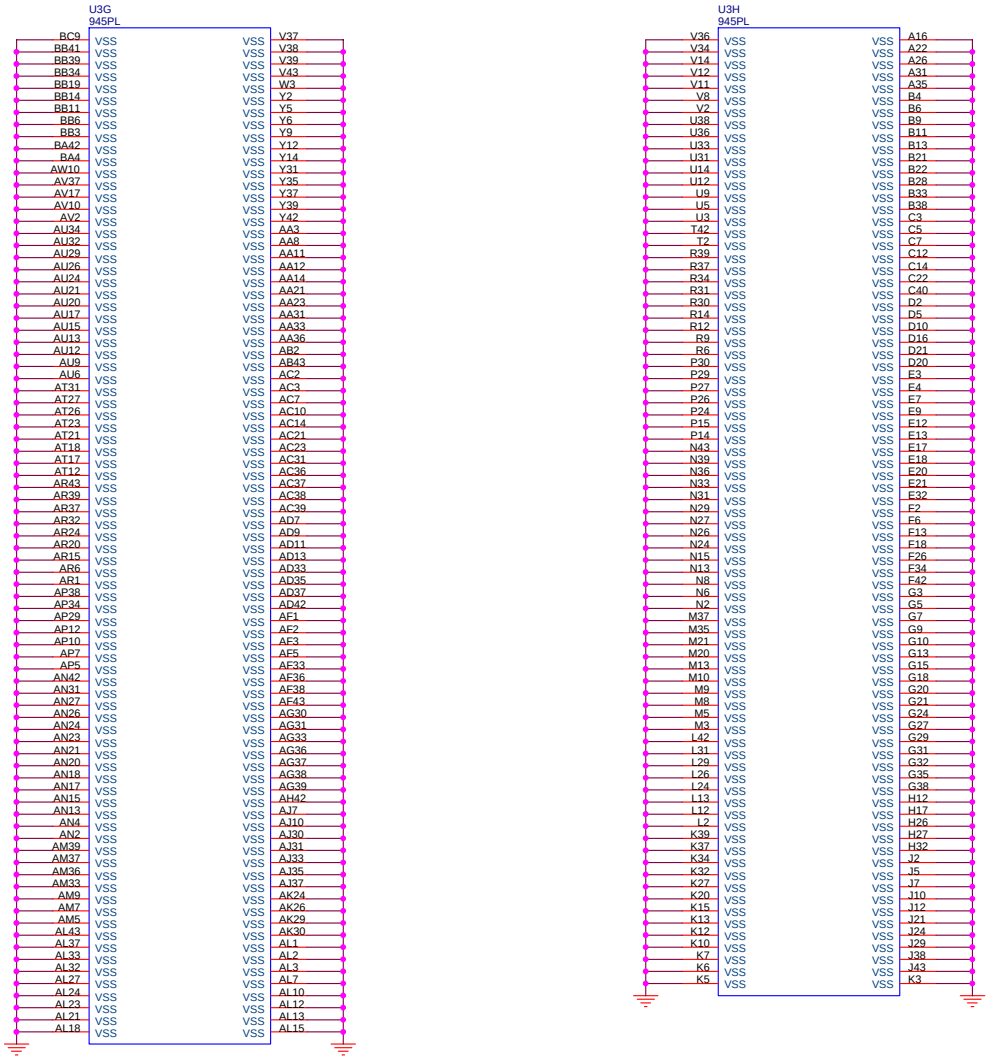

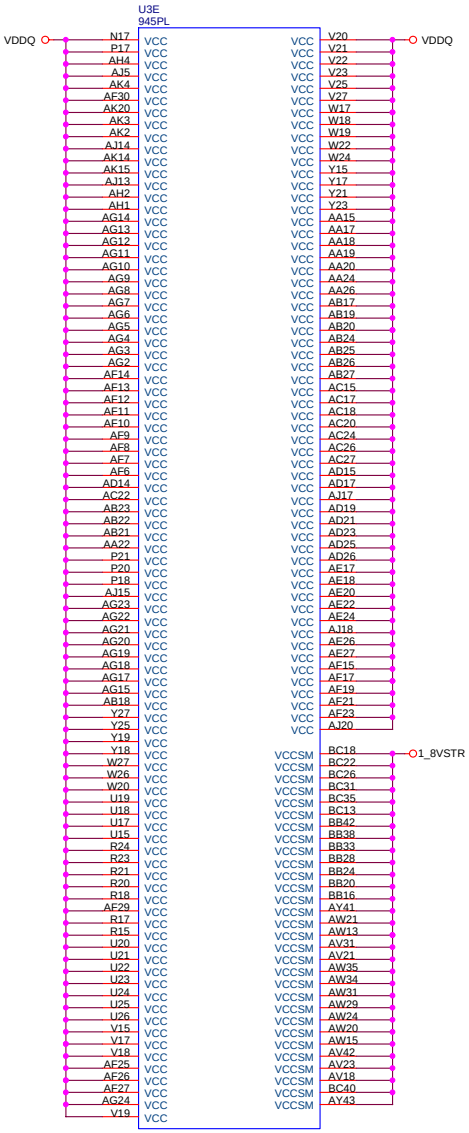

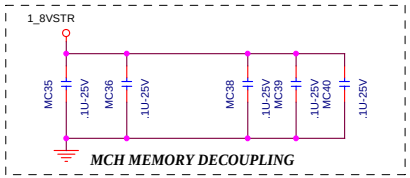

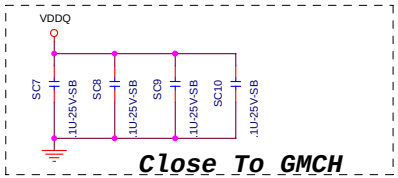

Elitegroup Computer Systems

Title: Schematic Change History

Size: Custom | Document Number: 945PL-A | Rev: 1.1

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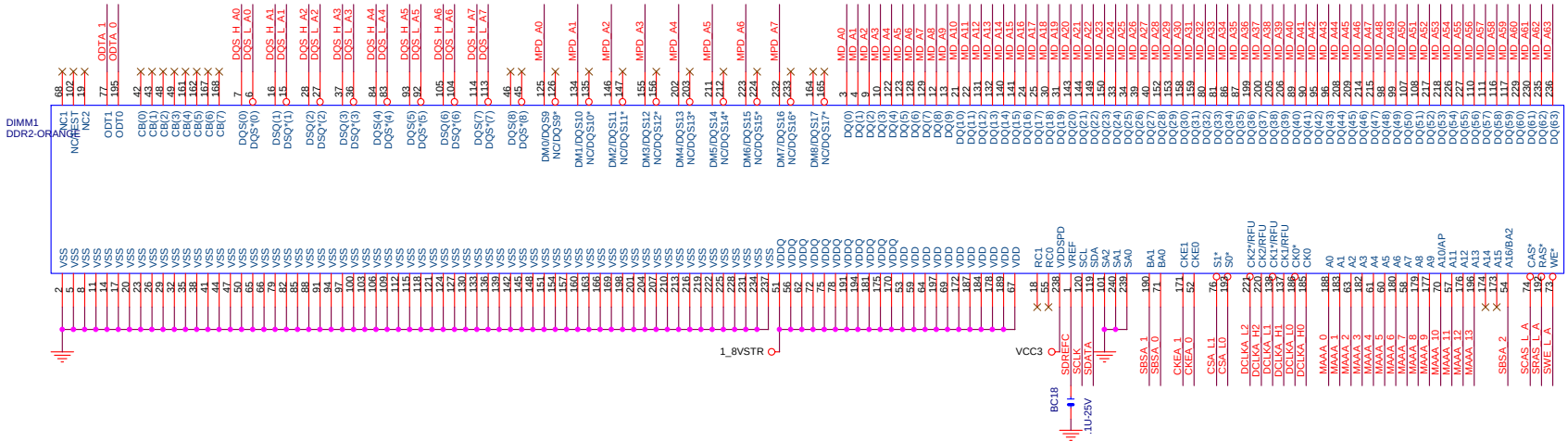

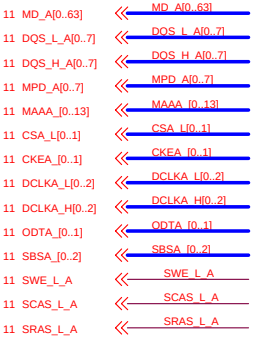

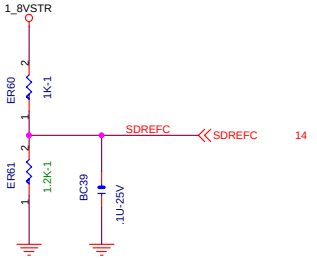

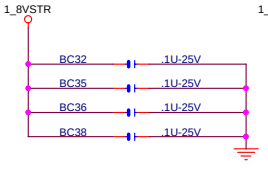

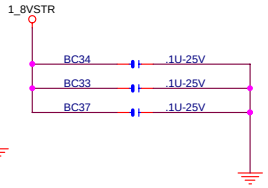

Elitegroup Computer Systems

Title: DDIMM 1 (DDR SDRAMs)

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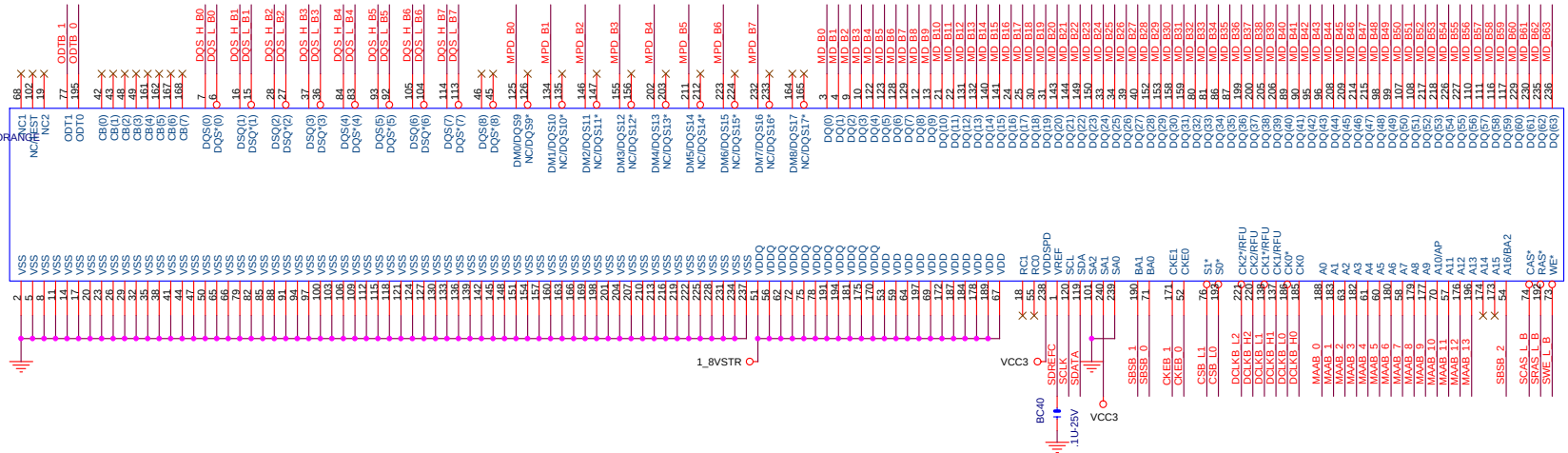
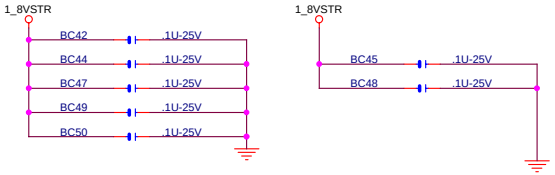




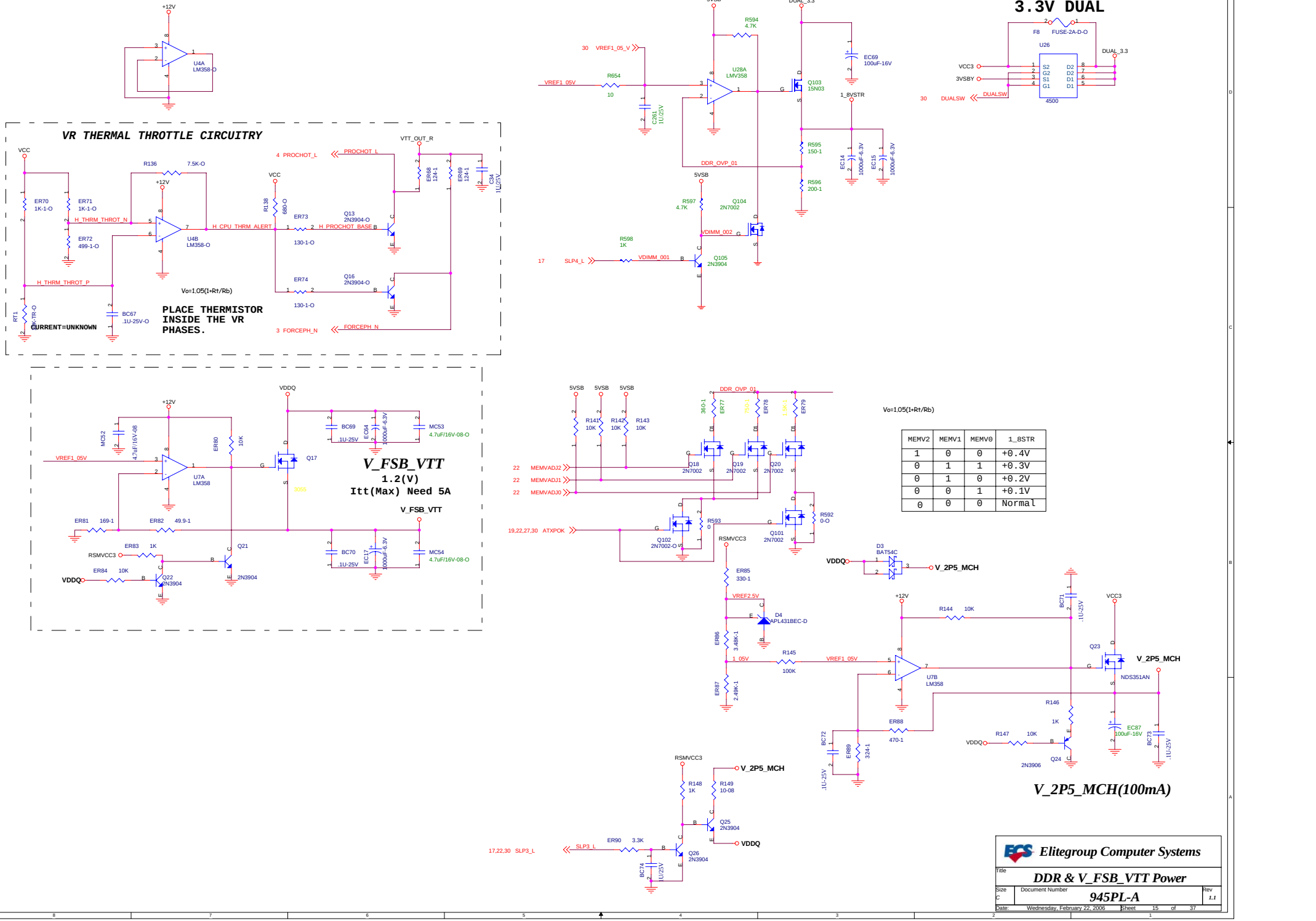
11 MD_B[0..63] MD_B[0..63]
11 DQS_L_B[0..7] DQS_L_B[0..7]
11 DQS_H_B[0..7] DQS_H_B[0..7]
11 MPD_B[0..7] MPD_B[0..7]
11 MAAB_[0..13] MAAB_[0..13]
11 CSB_L[0..1] CSB_L[0..1]
11 CKEB_[0..1] CKEB_[0..1]
11 DCLKB_L[0..2] DCLKB_L[0..2]
11 DCLKB_H[0..2] DCLKB_H[0..2]
11 ODTB_[0..1] ODTB_[0..1]
11 SBSB_[0..2] SBSB_[0..2]
11 SWE_L_B SWE_L_B
11 SCAS_L_B SCAS_L_B
11 SRAS_L_B SRAS_L_B
8,13,18 SDATA SDATA
8,13,18 SCLK SCLK

Elitegroup Computer Systems

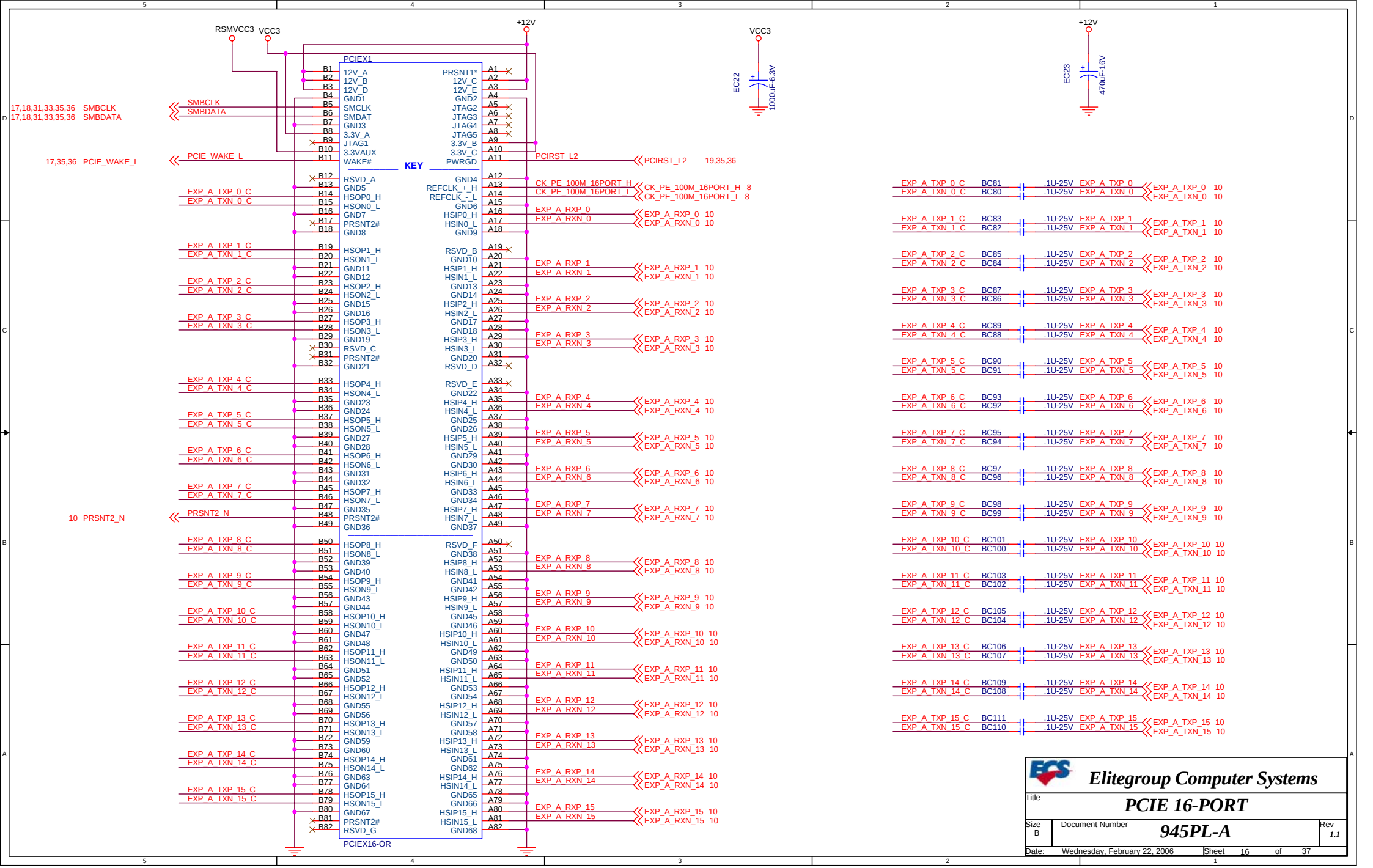
Title: DDIMM 2 (DDR SDRAMs)

Size: Custom | Document Number: 945PL-A | Rev: 1.1

Date: Wednesday, February 22, 2006 | Sheet 14 of 37



MEMV2	MEMV1	MEMV0	1_8STR
1	0	0	+0.4V
0	1	1	+0.3V
0	1	0	+0.2V
0	0	1	+0.1V
0	0	0	Normal


RSMVCC3
VCC3
+12V
PCIEX1
KEY
PCIEX16-OR
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#
B12 RSVD_A
B13 GND5
B14 HSOP0_H
B15 HSON0_L
B16 GND7
B17 PRSNT2#
B18 GND8
B19 HSOP1_H
B20 HSON1_L
B21 GND11
B22 GND12
B23 HSOP2_H
B24 HSON2_L
B25 GND15
B26 GND16
B27 HSOP3_H
B28 HSON3_L
B29 GND19
B30 RSVD_C
B31 PRSNT2#
B32 GND21
B33 HSOP4_H
B34 HSON4_L
B35 GND23
B36 GND24
B37 HSOP5_H
B38 HSON5_L
B39 GND27
B40 GND28
B41 HSOP6_H
B42 HSON6_L
B43 GND31
B44 GND32
B45 HSOP7_H
B46 HSON7_L
B47 GND35
B48 PRSNT2#
B49 GND36
B50 HSOP8_H
B51 HSON8_L
B52 GND39
B53 GND40
B54 HSOP9_H
B55 HSON9_L
B56 GND43
B57 GND44
B58 HSOP10_H
B59 HSON10_L
B60 GND47
B61 GND48
B62 HSOP11_H
B63 HSON11_L
B64 GND51
B65 GND52
B66 HSOP12_H
B67 HSON12_L
B68 GND55
B69 GND56
B70 HSOP13_H
B71 HSON13_L
B72 GND59
B73 GND60
B74 HSOP14_H
B75 HSON14_L
B76 GND63
B77 GND64
B78 HSOP15_H
B79 HSON15_L
B80 GND67
B81 PRSNT2#
B82 RSVD_G
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
A12 GND4
A13 REFCLK_+_H
A14 REFCLK_-_L
A15 GND6
A16 HSIP0_H
A17 HSIN0_L
A18 GND9
A19 RSVD_B
A20 GND10
A21 HSIP1_H
A22 HSIN1_L
A23 GND13
A24 GND14
A25 HSIP2_H
A26 HSIN2_L
A27 GND17
A28 GND18
A29 HSIP3_H
A30 HSIN3_L
A31 GND20
A32 RSVD_D
A33 RSVD_E
A34 GND22
A35 HSIP4_H
A36 HSIN4_L
A37 GND25
A38 GND26
A39 HSIP5_H
A40 HSIN5_L
A41 GND29
A42 GND30
A43 HSIP6_H
A44 HSIN6_L
A45 GND33
A46 GND34
A47 HSIP7_H
A48 HSIN7_L
A49 GND37
A50 RSVD_F
A51 GND38
A52 HSIP8_H
A53 HSIN8_L
A54 GND41
A55 GND42
A56 HSIP9_H
A57 HSIN9_L
A58 GND45
A59 GND46
A60 HSIP10_H
A61 HSIN10_L
A62 GND49
A63 GND50
A64 HSIP11_H
A65 HSIN11_L
A66 GND53
A67 GND54
A68 HSIP12_H
A69 HSIN12_L
A70 GND57
A71 GND58
A72 HSIP13_H
A73 HSIN13_L
A74 GND61
A75 GND62
A76 HSIP14_H
A77 HSIN14_L
A78 GND65
A79 GND66
A80 HSIP15_H
A81 HSIN15_L
A82 GND68
17,18,31,33,35,36 SMBCLK
17,18,31,33,35,36 SMBDATA
SMBCLK
SMBDATA
17,35,36 PCIE_WAKE_L
PCIE_WAKE_L
10 PRSNT2_N
PRSNT2_N
PCIRST_L2
PCIRST_L2 19,35,36
CK_PE_100M_16PORT_H
CK_PE_100M_16PORT_L
CK_PE_100M_16PORT_H 8
CK_PE_100M_16PORT_L 8
EXP_A_TXP_0_C
EXP_A_TXN_0_C
EXP_A_RXP_0
EXP_A_RXN_0
EXP_A_RXP_0 10
EXP_A_RXN_0 10
EXP_A_TXP_1_C
EXP_A_TXN_1_C
EXP_A_RXP_1
EXP_A_RXN_1
EXP_A_RXP_1 10
EXP_A_RXN_1 10
EXP_A_TXP_2_C
EXP_A_TXN_2_C
EXP_A_RXP_2
EXP_A_RXN_2
EXP_A_RXP_2 10
EXP_A_RXN_2 10
EXP_A_TXP_3_C
EXP_A_TXN_3_C
EXP_A_RXP_3
EXP_A_RXN_3
EXP_A_RXP_3 10
EXP_A_RXN_3 10
EXP_A_TXP_4_C
EXP_A_TXN_4_C
EXP_A_RXP_4
EXP_A_RXN_4
EXP_A_RXP_4 10
EXP_A_RXN_4 10
EXP_A_TXP_5_C
EXP_A_TXN_5_C
EXP_A_RXP_5
EXP_A_RXN_5
EXP_A_RXP_5 10
EXP_A_RXN_5 10
EXP_A_TXP_6_C
EXP_A_TXN_6_C
EXP_A_RXP_6
EXP_A_RXN_6
EXP_A_RXP_6 10
EXP_A_RXN_6 10
EXP_A_TXP_7_C
EXP_A_TXN_7_C
EXP_A_RXP_7
EXP_A_RXN_7
EXP_A_RXP_7 10
EXP_A_RXN_7 10
EXP_A_TXP_8_C
EXP_A_TXN_8_C
EXP_A_RXP_8
EXP_A_RXN_8
EXP_A_RXP_8 10
EXP_A_RXN_8 10
EXP_A_TXP_9_C
EXP_A_TXN_9_C
EXP_A_RXP_9
EXP_A_RXN_9
EXP_A_RXP_9 10
EXP_A_RXN_9 10
EXP_A_TXP_10_C
EXP_A_TXN_10_C
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EXP_A_RXN_10
EXP_A_RXP_10 10
EXP_A_RXN_10 10
EXP_A_TXP_11_C
EXP_A_TXN_11_C
EXP_A_RXP_11
EXP_A_RXN_11
EXP_A_RXP_11 10
EXP_A_RXN_11 10
EXP_A_TXP_12_C
EXP_A_TXN_12_C
EXP_A_RXP_12
EXP_A_RXN_12
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EXP_A_TXN_13_C
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EXP_A_TXP_14_C
EXP_A_TXN_14_C
EXP_A_RXP_14
EXP_A_RXN_14
EXP_A_RXP_14 10
EXP_A_RXN_14 10
EXP_A_TXP_15_C
EXP_A_TXN_15_C
EXP_A_RXP_15
EXP_A_RXN_15
EXP_A_RXP_15 10
EXP_A_RXN_15 10
VCC3
EC22
1000uF-6.3V
+12V
EC23
470uF-16V
EXP_A_TXP_0_C BC81 .1U-25V EXP_A_TXP_0
EXP_A_TXN_0_C BC80 .1U-25V EXP_A_TXN_0
EXP_A_TXP_0 10
EXP_A_TXN_0 10
EXP_A_TXP_1_C BC83 .1U-25V EXP_A_TXP_1
EXP_A_TXN_1_C BC82 .1U-25V EXP_A_TXN_1
EXP_A_TXP_1 10
EXP_A_TXN_1 10
EXP_A_TXP_2_C BC85 .1U-25V EXP_A_TXP_2
EXP_A_TXN_2_C BC84 .1U-25V EXP_A_TXN_2
EXP_A_TXP_2 10
EXP_A_TXN_2 10
EXP_A_TXP_3_C BC87 .1U-25V EXP_A_TXP_3
EXP_A_TXN_3_C BC86 .1U-25V EXP_A_TXN_3
EXP_A_TXP_3 10
EXP_A_TXN_3 10
EXP_A_TXP_4_C BC89 .1U-25V EXP_A_TXP_4
EXP_A_TXN_4_C BC88 .1U-25V EXP_A_TXN_4
EXP_A_TXP_4 10
EXP_A_TXN_4 10
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EXP_A_TXN_5_C BC91 .1U-25V EXP_A_TXN_5
EXP_A_TXP_5 10
EXP_A_TXN_5 10
EXP_A_TXP_6_C BC93 .1U-25V EXP_A_TXP_6
EXP_A_TXN_6_C BC92 .1U-25V EXP_A_TXN_6
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EXP_A_TXN_6 10
EXP_A_TXP_7_C BC95 .1U-25V EXP_A_TXP_7
EXP_A_TXN_7_C BC94 .1U-25V EXP_A_TXN_7
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EXP_A_TXN_7 10
EXP_A_TXP_8_C BC97 .1U-25V EXP_A_TXP_8
EXP_A_TXN_8_C BC96 .1U-25V EXP_A_TXN_8
EXP_A_TXP_8 10
EXP_A_TXN_8 10
EXP_A_TXP_9_C BC98 .1U-25V EXP_A_TXP_9
EXP_A_TXN_9_C BC99 .1U-25V EXP_A_TXN_9
EXP_A_TXP_9 10
EXP_A_TXN_9 10
EXP_A_TXP_10_C BC101 .1U-25V EXP_A_TXP_10
EXP_A_TXN_10_C BC100 .1U-25V EXP_A_TXN_10
EXP_A_TXP_10 10
EXP_A_TXN_10 10
EXP_A_TXP_11_C BC103 .1U-25V EXP_A_TXP_11
EXP_A_TXN_11_C BC102 .1U-25V EXP_A_TXN_11
EXP_A_TXP_11 10
EXP_A_TXN_11 10
EXP_A_TXP_12_C BC105 .1U-25V EXP_A_TXP_12
EXP_A_TXN_12_C BC104 .1U-25V EXP_A_TXN_12
EXP_A_TXP_12 10
EXP_A_TXN_12 10
EXP_A_TXP_13_C BC106 .1U-25V EXP_A_TXP_13
EXP_A_TXN_13_C BC107 .1U-25V EXP_A_TXN_13
EXP_A_TXP_13 10
EXP_A_TXN_13 10
EXP_A_TXP_14_C BC109 .1U-25V EXP_A_TXP_14
EXP_A_TXN_14_C BC108 .1U-25V EXP_A_TXN_14
EXP_A_TXP_14 10
EXP_A_TXN_14 10
EXP_A_TXP_15_C BC111 .1U-25V EXP_A_TXP_15
EXP_A_TXN_15_C BC110 .1U-25V EXP_A_TXN_15
EXP_A_TXP_15 10
EXP_A_TXN_15 10
Elitegroup Computer Systems
Title
PCIE 16-PORT
Size B
Document Number
945PL-A
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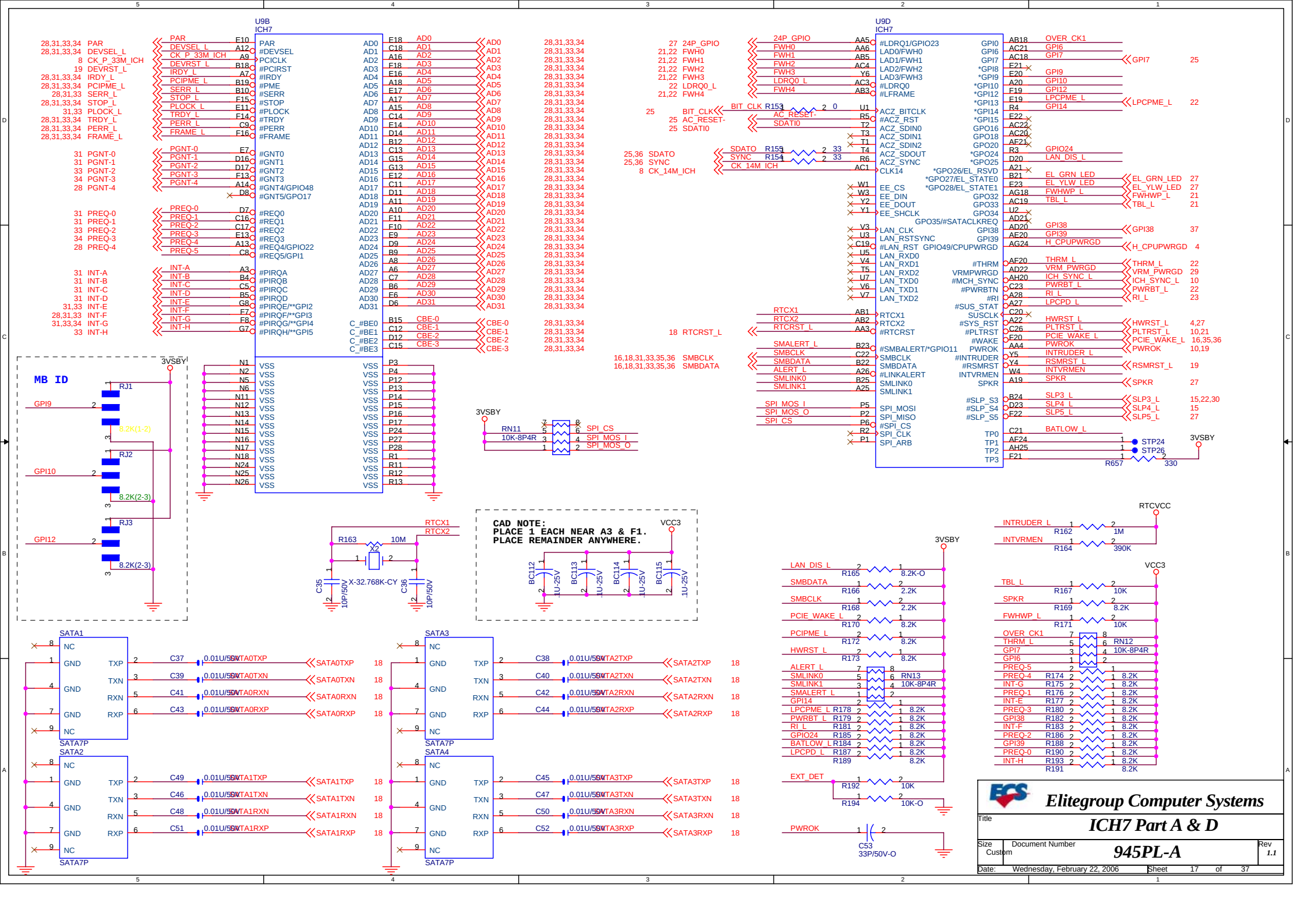
Sheet 16 of 37


U9B
ICH7
U9D
ICH7
MB ID
RJ1
RJ2
RJ3
8.2K(1-2)
8.2K(2-3)
3VSBY
RN11
10K-8P4R
SPI_CS
SPI_MOS_I
SPI_MOS_O
CAD NOTE:
PLACE 1 EACH NEAR A3 & F1.
PLACE REMAINDER ANYWHERE.
VCC3
RTCX1
RTCX2
R163
10M
X2
X-32.768K-CY
C35
C36
10P/50V
BC112
BC113
BC114
BC115
.1U-25V
RTCVCC
INTRUDER_L
INTVRMEN
R162
1M
R164
390K
SATA1
SATA2
SATA3
SATA4
SATA7P
SATA0TXP
SATA0TXN
SATA0RXN
SATA0RXP
SATA1TXP
SATA1TXN
SATA1RXN
SATA1RXP
SATA2TXP
SATA2TXN
SATA2RXN
SATA2RXP
SATA3TXP
SATA3TXN
SATA3RXN
SATA3RXP
0.01U/50V
LAN_DIS_L
SMBDATA
SMBCLK
PCIE_WAKE_L
PCIPME_L
HWRST_L
ALERT_L
SMLINK0
SMLINK1
SMALERT_L
GPI14
LPCPME_L
PWRBT_L
RI_L
GPIO24
BATLOW_L
LPCPD_L
EXT_DET
PWROK
C53
33P/50V-O
R165
8.2K-O
R166
2.2K
R167
10K
R168
R169
8.2K
R170
R171
R172
R173
R174
R175
R176
R177
R178
R179
R180
R181
R182
R183
R184
R185
R186
R187
R188
R189
R190
R191
R192
R193
R194
10K-O
RN12
10K-8P4R
RN13
Elitegroup Computer Systems
Title
ICH7 Part A & D
Size
Custom
Document Number
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1.1
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17
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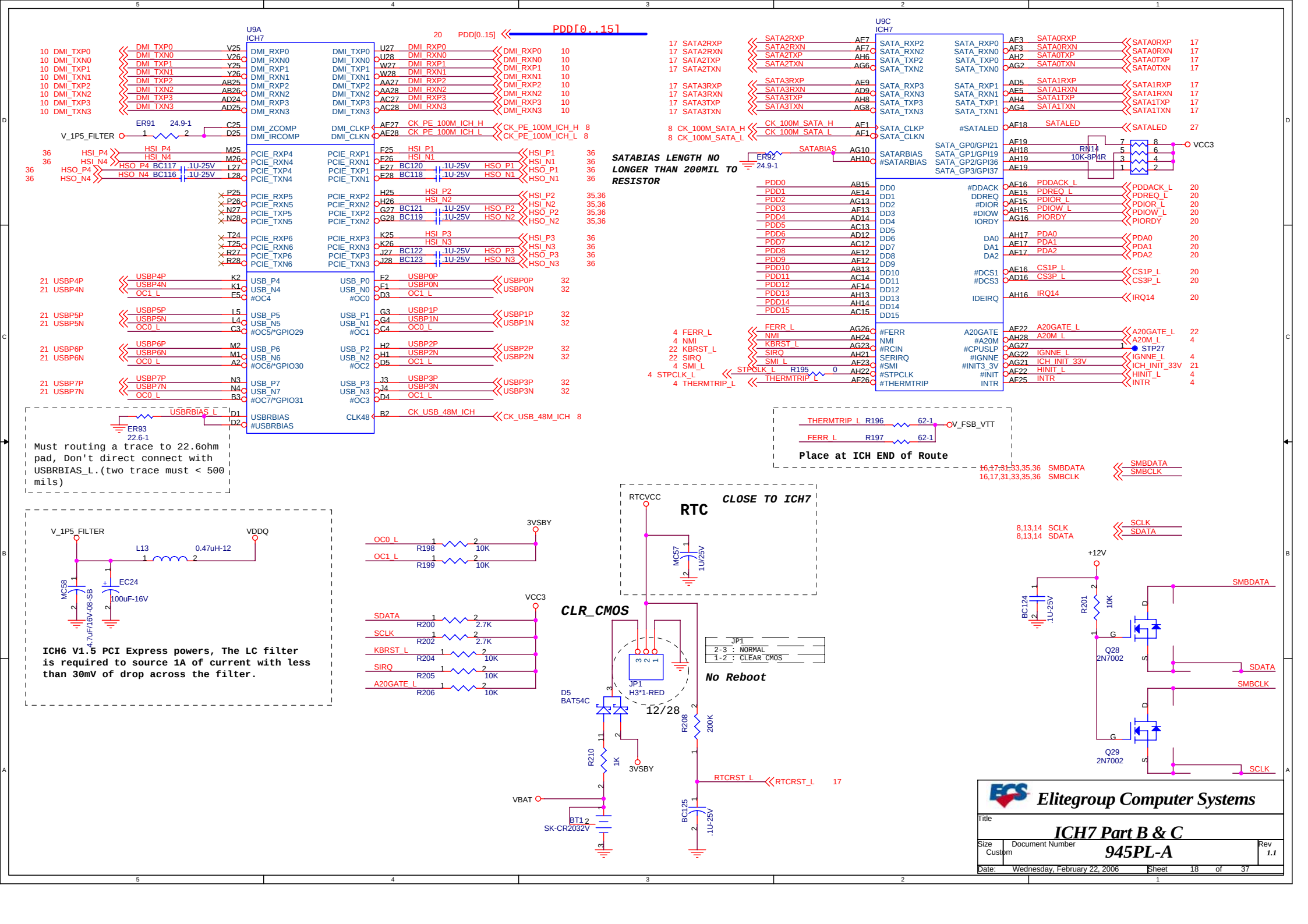
37


U9A
ICH7
PDD[0..15]
DMI_TXP0
DMI_TXN0
DMI_TXP1
DMI_TXN1
DMI_TXP2
DMI_TXN2
DMI_TXP3
DMI_TXN3
DMI_RXP0
DMI_RXN0
DMI_RXP1
DMI_RXN1
DMI_RXP2
DMI_RXN2
DMI_RXP3
DMI_RXN3
DMI_ZCOMP
DMI_IRCOMP
DMI_CLKP
DMI_CLKN
CK_PE_100M_ICH_H
CK_PE_100M_ICH_L
V_1P5_FILTER
ER91
24.9-1
C25
D25
HSI_P4
HSI_N4
HSO_P4
HSO_N4
BC117
BC116
.1U-25V
PCIE_RXP4
PCIE_RXN4
PCIE_TXP4
PCIE_TXN4
PCIE_RXP5
PCIE_RXN5
PCIE_TXP5
PCIE_TXN5
PCIE_RXP6
PCIE_RXN6
PCIE_TXP6
PCIE_TXN6
HSI_P1
HSI_N1
HSO_P1
HSO_N1
BC120
BC118
HSI_P2
HSI_N2
HSO_P2
HSO_N2
BC121
BC119
HSI_P3
HSI_N3
HSO_P3
HSO_N3
BC122
BC123
USBP4P
USBP4N
OC1_L
USBP5P
USBP5N
OC0_L
USBP6P
USBP6N
USBP7P
USBP7N
USB_P4
USB_N4
#OC4
USB_P5
USB_N5
#OC5/*GPIO29
USB_P6
USB_N6
#OC6/*GPIO30
USB_P7
USB_N7
#OC7/*GPIO31
USBRBIAS
#USBRBIAS
USB_P0
USB_N0
#OC0
USB_P1
USB_N1
#OC1
USB_P2
USB_N2
#OC2
USB_P3
USB_N3
#OC3
CLK48
USBP0P
USBP0N
USBP1P
USBP1N
USBP2P
USBP2N
USBP3P
USBP3N
CK_USB_48M_ICH
USBRBIAS_L
ER93
22.6-1
Must routing a trace to 22.6ohm pad, Don't direct connect with USBRBIAS_L.(two trace must < 500 mils)
U9C
ICH7
SATA2RXP
SATA2RXN
SATA2TXP
SATA2TXN
SATA3RXP
SATA3RXN
SATA3TXP
SATA3TXN
CK_100M_SATA_H
CK_100M_SATA_L
SATABIAS
ER92
24.9-1
SATA_RXP2
SATA_RXN2
SATA_TXP2
SATA_TXN2
SATA_RXP3
SATA_RXN3
SATA_TXP3
SATA_TXN3
SATA_CLKP
SATA_CLKN
SATARBIAS
#SATARBIAS
SATA_RXP0
SATA_RXN0
SATA_TXP0
SATA_TXN0
SATA_RXP1
SATA_RXN1
SATA_TXP1
SATA_TXN1
#SATALED
SATA_GP0/GPI21
SATA_GP1/GPI19
SATA_GP2/GPI36
SATA_GP3/GPI37
SATA0RXP
SATA0RXN
SATA0TXP
SATA0TXN
SATA1RXP
SATA1RXN
SATA1TXP
SATA1TXN
SATALED
RN14
10K-8P4R
VCC3
SATABIAS LENGTH NO LONGER THAN 200MIL TO RESISTOR
PDD0
PDD1
PDD2
PDD3
PDD4
PDD5
PDD6
PDD7
PDD8
PDD9
PDD10
PDD11
PDD12
PDD13
PDD14
PDD15
DD0
DD1
DD2
DD3
DD4
DD5
DD6
DD7
DD8
DD9
DD10
DD11
DD12
DD13
DD14
DD15
#DDACK
DDREQ
#DIOR
#DIOW
IORDY
DA0
DA1
DA2
#DCS1
#DCS3
IDEIRQ
PDDACK_L
PDREQ_L
PDIOR_L
PDIOW_L
PIORDY
PDA0
PDA1
PDA2
CS1P_L
CS3P_L
IRQ14
FERR_L
NMI
KBRST_L
SIRQ
SMI_L
STPCLK_L
THERMTRIP_L
#FERR
#RCIN
SERIRQ
#SMI
#STPCLK
#THERMTRIP
A20GATE
#A20M
#CPUSLP
#IGNNE
#INIT3_3V
#INIT
INTR
A20GATE_L
A20M_L
IGNNE_L
ICH_INIT_33V
HINIT_L
R195
0
THERMTRIP_L R196
62-1
V_FSB_VTT
FERR_L R197
62-1
Place at ICH END of Route
SMBDATA
SMBCLK
V_1P5_FILTER
VDDQ
L13
0.47uH-12
MC58
4.7uF/16V-08-SB
EC24
100uF-16V
ICH6 V1.5 PCI Express powers, The LC filter is required to source 1A of current with less than 30mV of drop across the filter.
3VSBY
OC0_L
OC1_L
R198
R199
10K
VCC3
SDATA
SCLK
KBRST_L
SIRQ
A20GATE_L
R200
R202
R204
R205
R206
2.7K
10K
RTCVCC
RTC
CLOSE TO ICH7
MC57
1U/25V
CLR_CMOS
JP1
2-3 : NORMAL
1-2 : CLEAR CMOS
No Reboot
JP1
H3*1-RED
D5
BAT54C
12/28
R208
200K
R210
1K
3VSBY
VBAT
BT1
SK-CR2032V
RTCRST_L
BC125
.1U-25V
+12V
BC124
.1U-25V
R201
10K
Q28
2N7002
Q29
2N7002
SMBDATA
SMBCLK
SDATA
SCLK
Elitegroup Computer Systems
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ICH7 Part B & C
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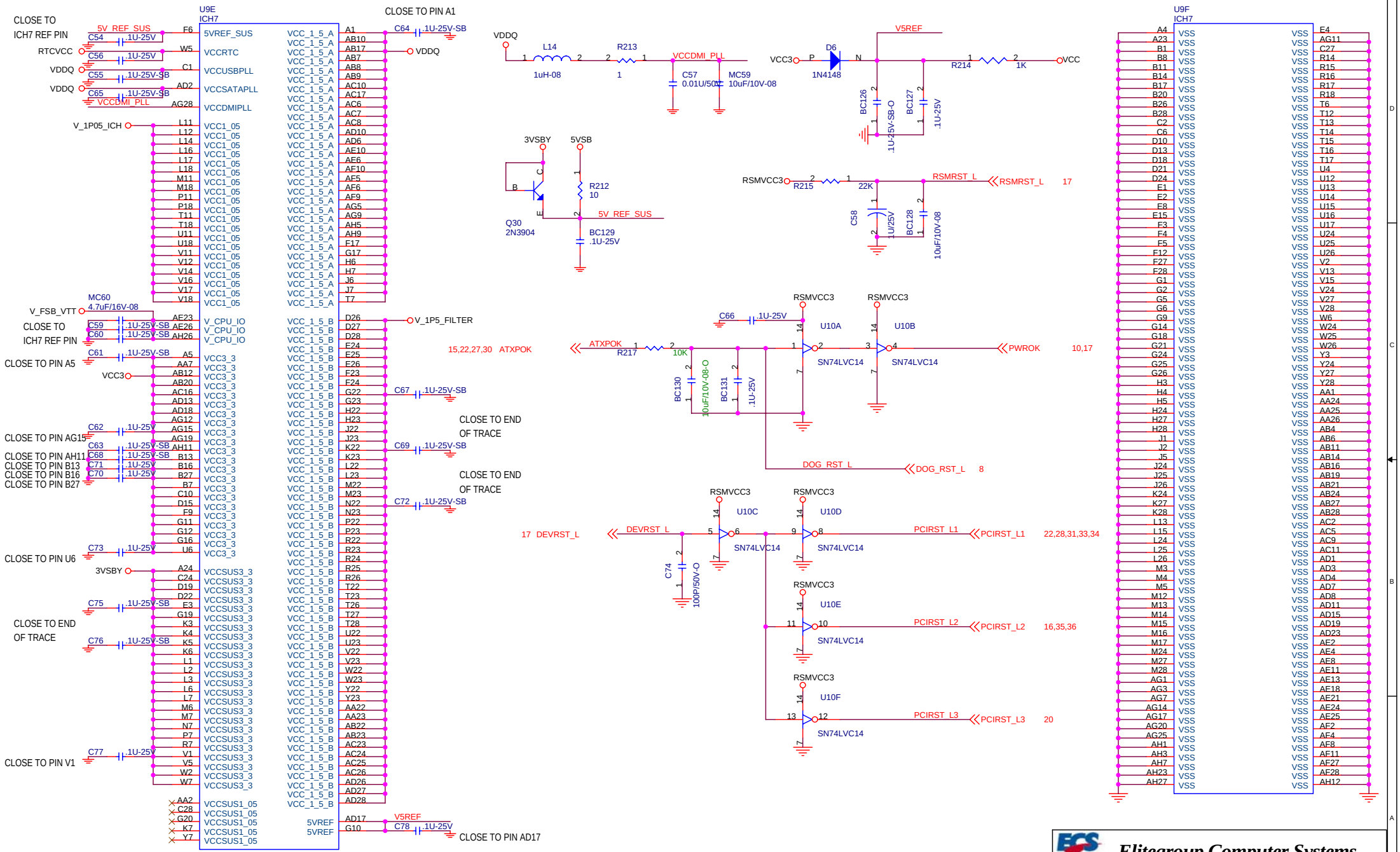

Elitegroup Computer Systems		
Title	ICH7 Part E & F	
Size: Custom	Document Number: 945PL-A	Rev: 1.1
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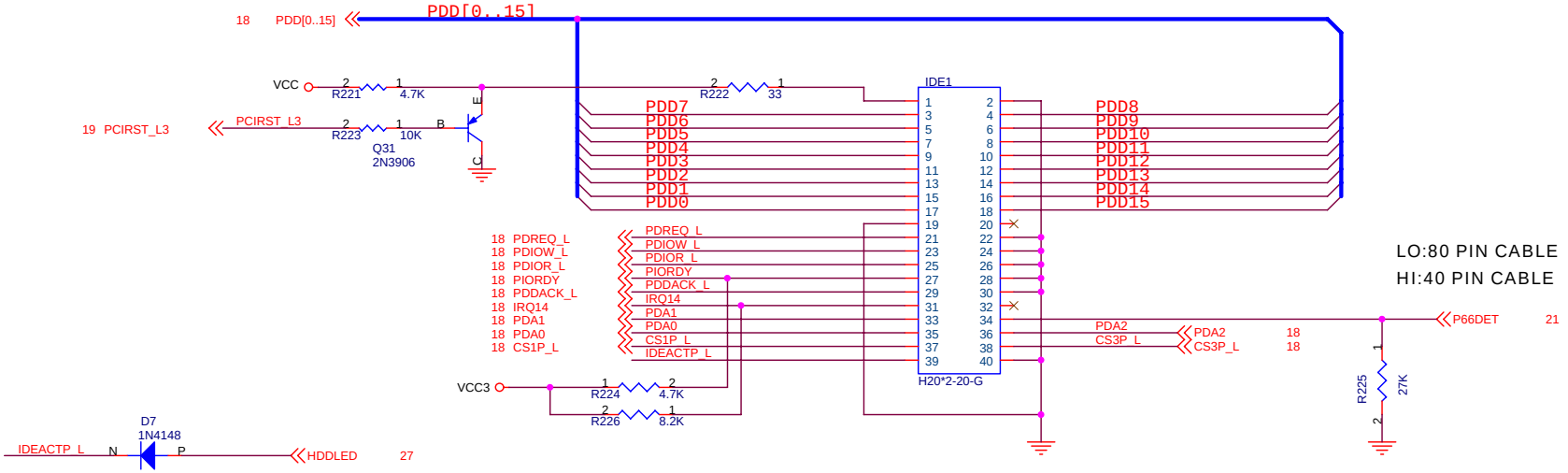
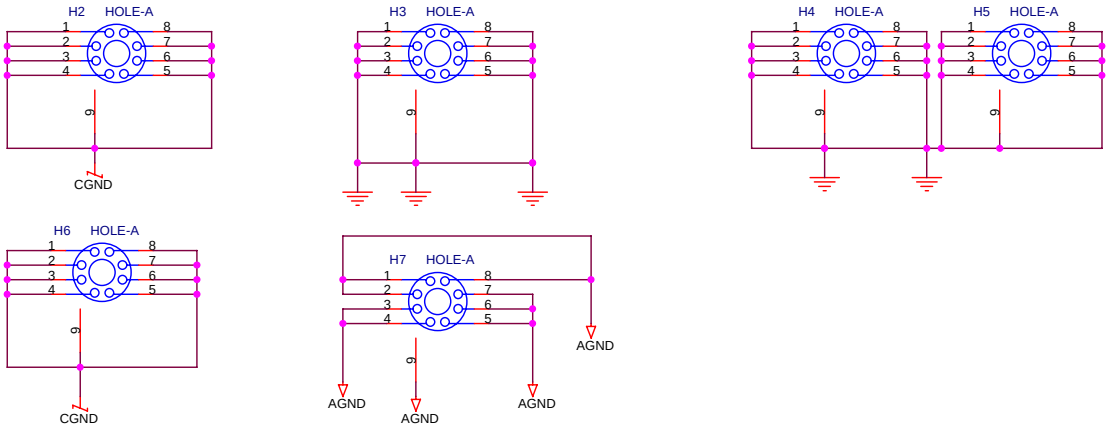
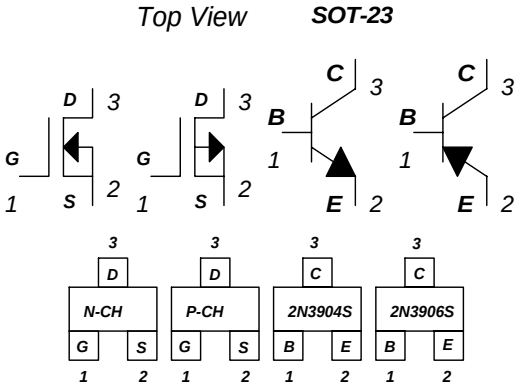
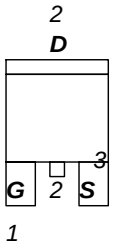


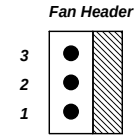
MAX TRACE LENGTH IS 8"

DATA LINES SHOULD BE MATCHED TO STROBES (XDIOR_L , XIORDY_L) WITHIN +/- 250 MIL, STROBES SHOULD BE MATCHED TO THEIR COMPLEMENT WITHIN +/- 10MIL.

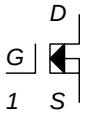


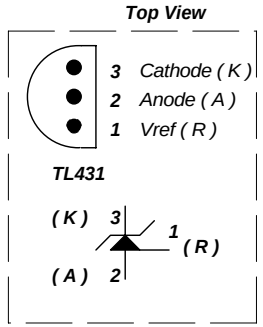






TO-263 / TO-252





Elitegroup Computer Systems		
Title: IDE Connector		
Size: Custom	Document Number: 945PL-A	Rev: 1.1
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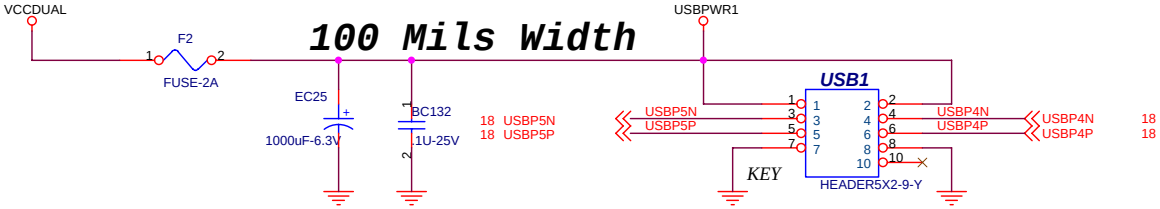
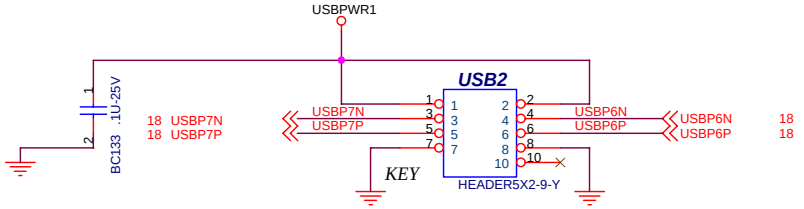
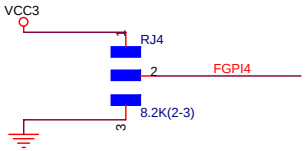
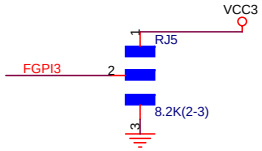
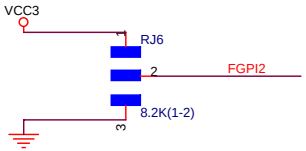
USB PORT INTERFACE

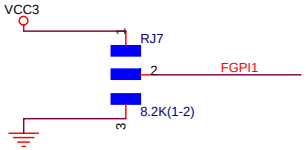












FGPI1:

High : SMART FAN Support

Low: Not Support SMART FAn

FGPI2:

High: Deatect Adjust Voltage

Low: Not Support ADJ voltage

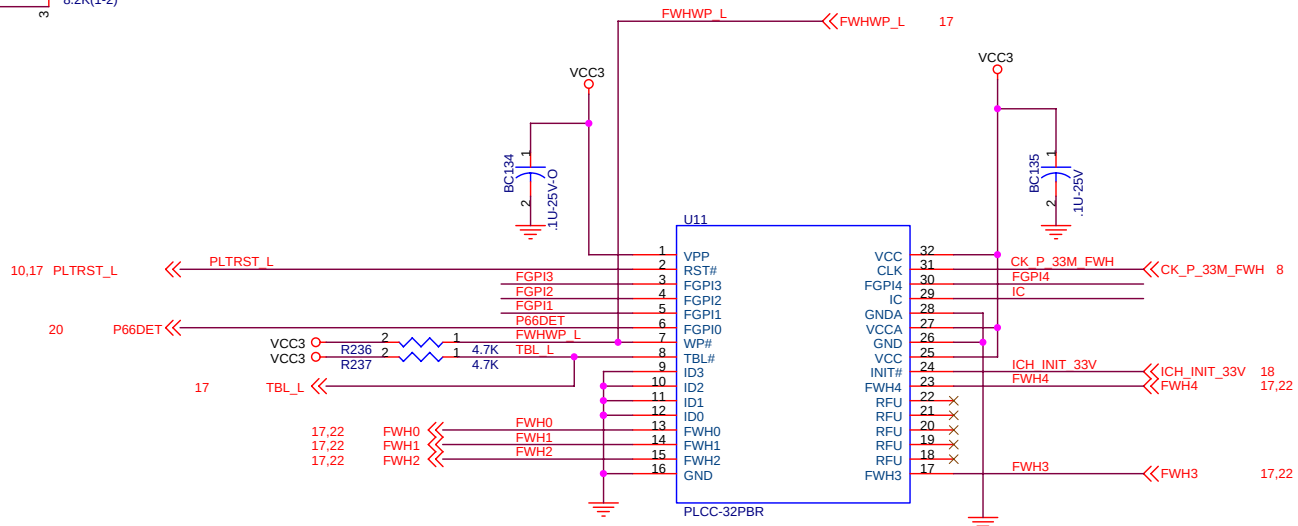
FGPI3:

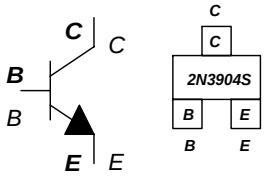
High : Not Support STR
Low: STR Support

FGPI4:

High: Support COM2

Low: Not Support COM2





Elitegroup Computer Systems		
Title: USB/FWH		
Size: Custom	Document Number: 945PL-A	Rev: 1.1
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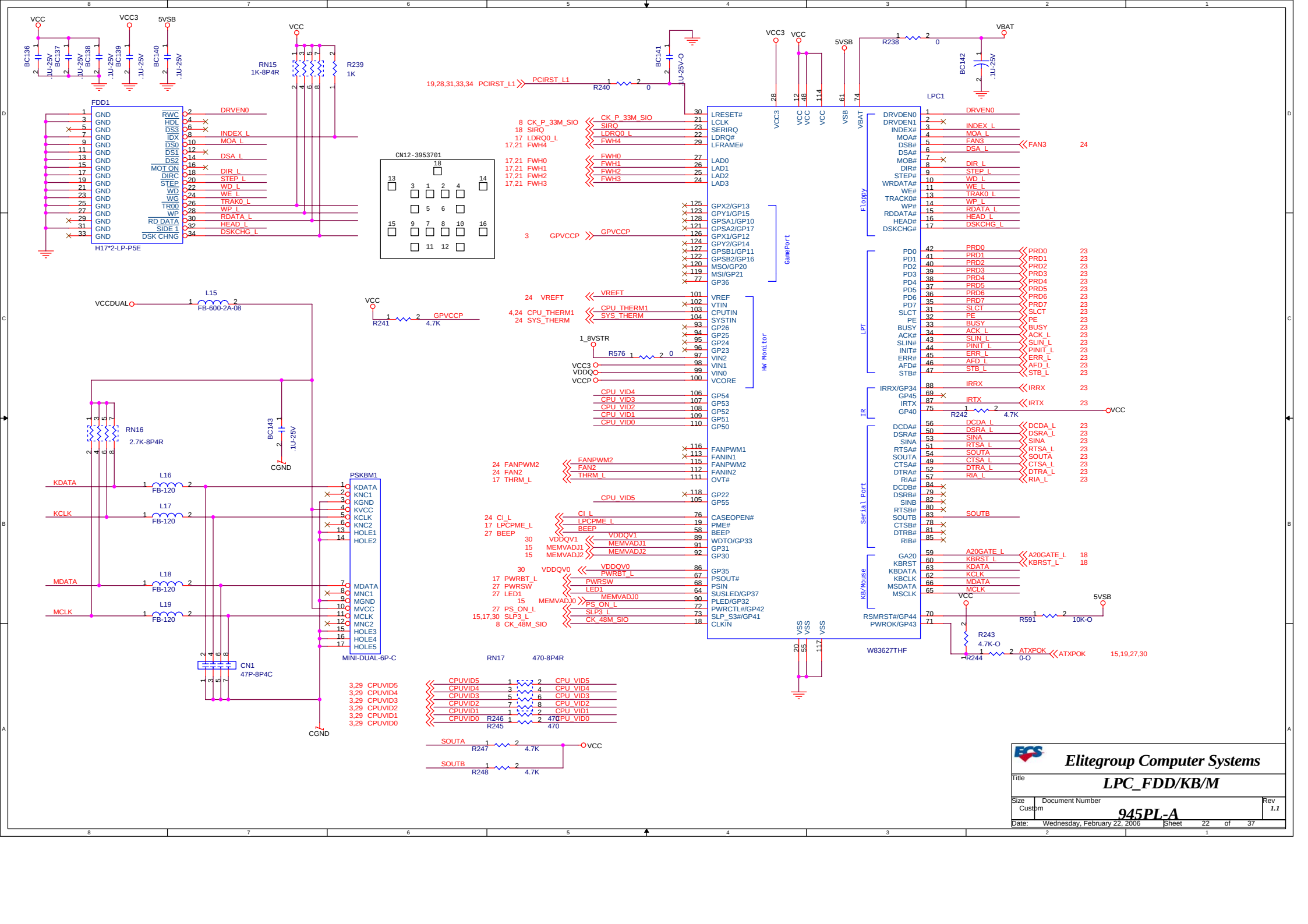
VCC
VCC3
5VSB
VBAT
BC136
BC137
BC138
BC139
BC140
BC141
BC142
.1U-25V
.1U-25V-O
RN15
1K-8P4R
R239
1K
R238
0
FDD1
H17*2-LP-P5E
DRVEN0
INDEX_L
MOA_L
DSA_L
DIR_L
STEP_L
WD_L
WE_L
TRAK0_L
WP_L
RDATA_L
HEAD_L
DSKCHG_L
CN12-3953701
PCIRST_L1
R240
LPC1
W83627THF
LRESET#
LCLK
SERIRQ
LDRQ#
LFRAME#
LAD0
LAD1
LAD2
LAD3
CK_P_33M_SIO
SIRQ
LDRQ0_L
FWH4
FWH0
FWH1
FWH2
FWH3
GPVCCP
GPX2/GP13
GPY1/GP15
GPSA1/GP10
GPSA2/GP17
GPX1/GP12
GPY2/GP14
GPSB1/GP11
GPSB2/GP16
MSO/GP20
MSI/GP21
GP36
GamePort
Floppy
VREFT
VREF
VTIN
CPUTIN
SYSTIN
CPU_THERM1
SYS_THERM
GP26
GP25
GP24
GP23
VIN2
VIN1
VIN0
VCORE
1_8VSTR
R576
R241
4.7K
HW Monitor
GP54
GP53
GP52
GP51
GP50
CPU_VID4
CPU_VID3
CPU_VID2
CPU_VID1
CPU_VID0
FANPWM1
FANIN1
FANPWM2
FANIN2
OVT#
FANPWM2
FAN2
THRM_L
GP22
GP55
CPU_VID5
CASEOPEN#
PME#
BEEP
WDTO/GP33
GP31
GP30
CI_L
LPCPME_L
BEEP
VDDQV1
MEMVADJ1
MEMVADJ2
GP35
PSOUT#
PSIN
SUSLED/GP37
PLED/GP32
PWRCTL#/GP42
SLP_S3#/GP41
CLKIN
VDDQV0
PWRBT_L
PWRSW
LED1
MEMVADJ0
PS_ON_L
SLP3_L
CK_48M_SIO
VSS
RSMRST#/GP44
PWROK/GP43
DRVDEN0
DRVDEN1
INDEX#
MOA#
DSB#
DSA#
MOB#
DIR#
STEP#
WRDATA#
WE#
TRACK0#
WP#
RDDATA#
HEAD#
DSKCHG#
FAN3
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
SLCT
PE
BUSY
ACK#
SLIN#
INIT#
ERR#
AFD#
STB#
LPT
PRD0
PRD1
PRD2
PRD3
PRD4
PRD5
PRD6
PRD7
SLCT
PE
BUSY
ACK_L
SLIN_L
PINIT_L
ERR_L
AFD_L
STB_L
IR
IRRX/GP34
GP45
IRTX
GP40
IRRX
IRTX
R242
4.7K
Serial Port
DCDA#
DSRA#
SINA
RTSA#
SOUTA
CTSA#
DTRA#
RIA#
DCDB#
DSRB#
SINB
RTSB#
SOUTB
CTSB#
DTRB#
RIB#
DCDA_L
DSRA_L
SINA
RTSA_L
SOUTA
CTSA_L
DTRA_L
RIA_L
KB/Mouse
GA20
KBRST
KBDATA
KBCLK
MSDATA
MSCLK
A20GATE_L
KBRST_L
KDATA
KCLK
MDATA
MCLK
R591
10K-O
R243
4.7K-O
R244
ATXPOK
0-O
ATXPOK
15,19,27,30
VCCDUAL
L15
FB-600-2A-08
RN16
2.7K-8P4R
BC143
CGND
KDATA
KCLK
MDATA
MCLK
L16
L17
L18
L19
FB-120
PSKBM1
MINI-DUAL-6P-C
KNC1
KGND
KVCC
KNC2
HOLE1
HOLE2
MNC1
MGND
MVCC
MNC2
HOLE3
HOLE4
HOLE5
CN1
47P-8P4C
RN17
470-8P4R
CPUVID5
CPUVID4
CPUVID3
CPUVID2
CPUVID1
CPUVID0
R246
R245
470
SOUTA
SOUTB
R247
R248
4.7K
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LPC_FDD/KB/M
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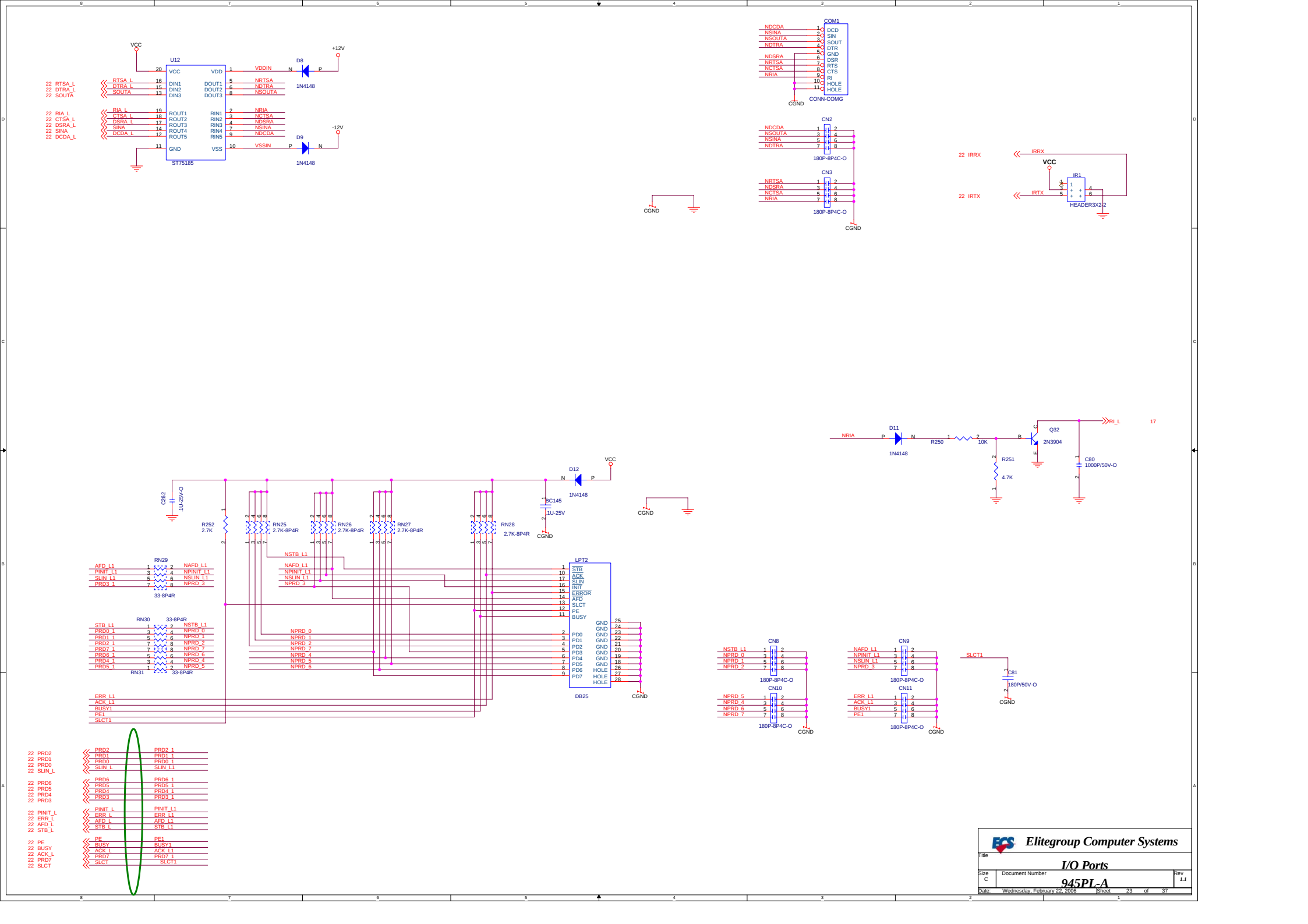

Elitegroup Computer Systems	
Title	I/O Ports
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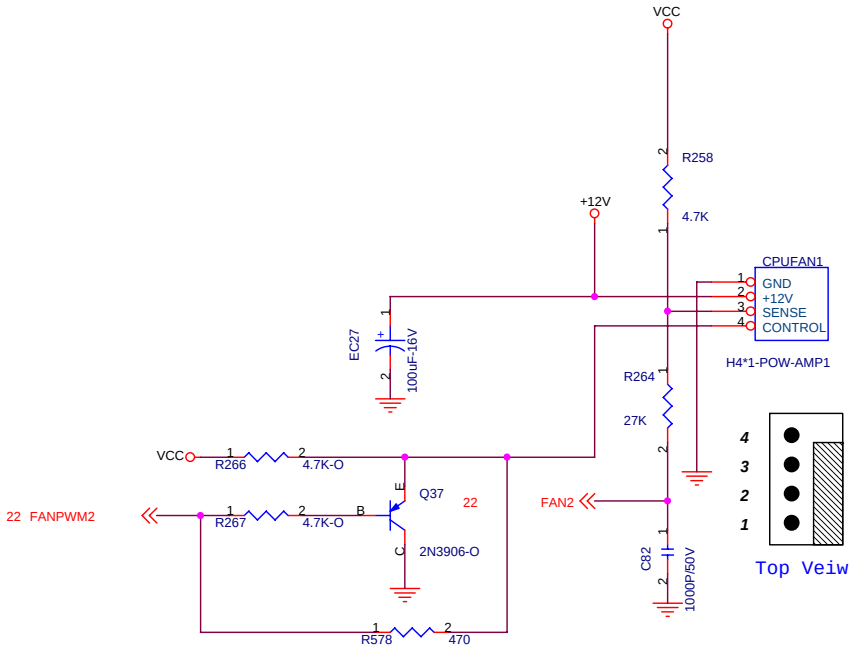
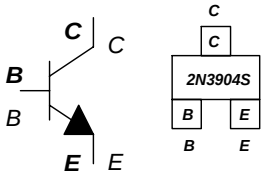
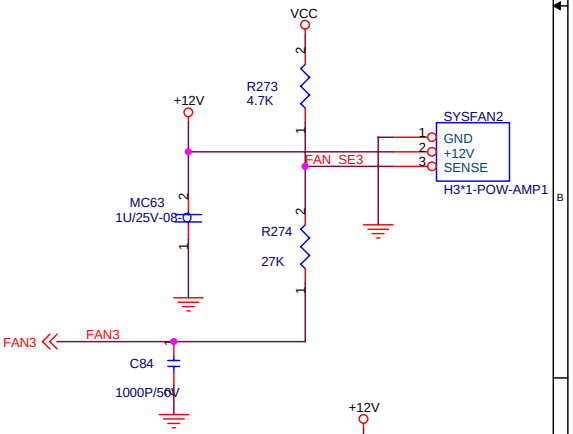
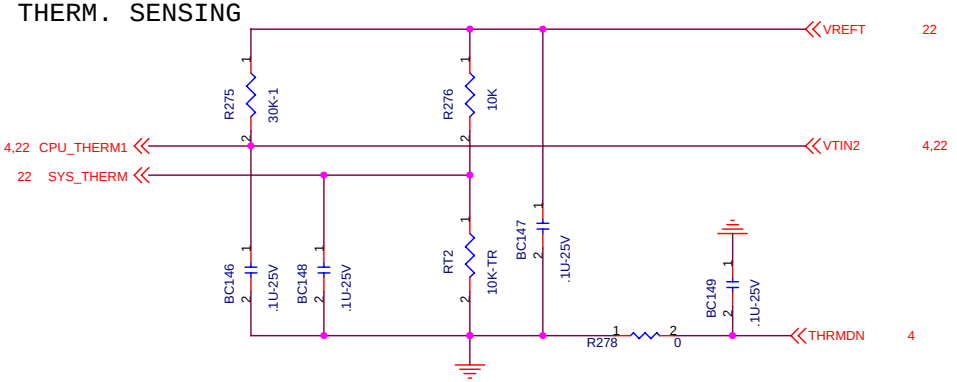
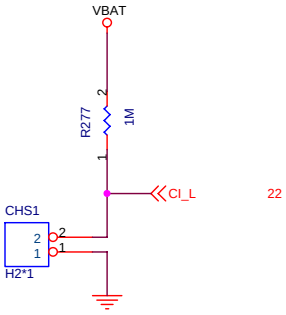






THERM. SENSING





Elitegroup Computer Systems		
Title: H/W Monitor		
Size: Custom	Document Number: 945PL-A	Rev: 1.1
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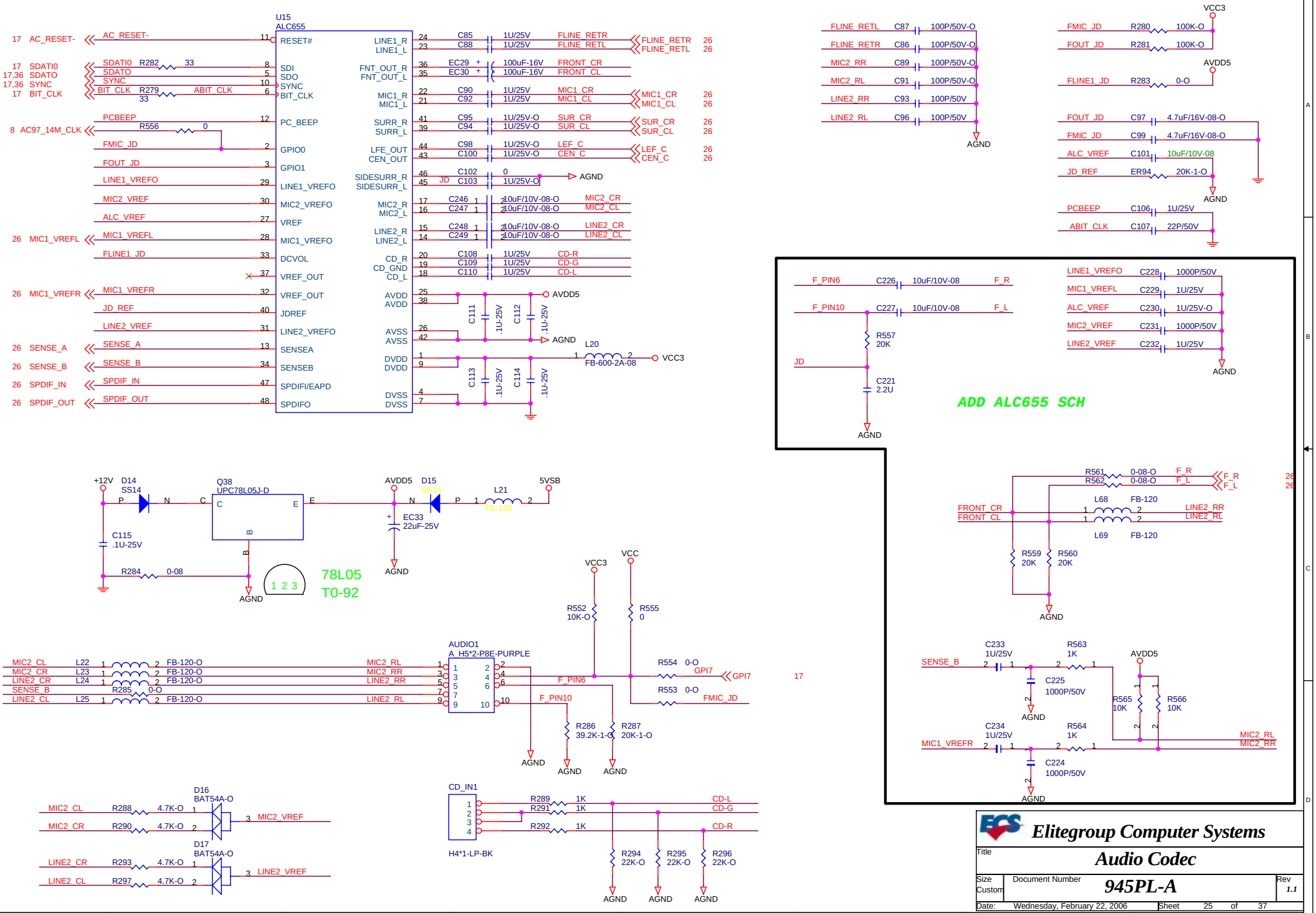

Elitegroup Computer Systems

Title: Audio Codec

Size: Custom | Document Number: 945PL-A | Rev: 1.1

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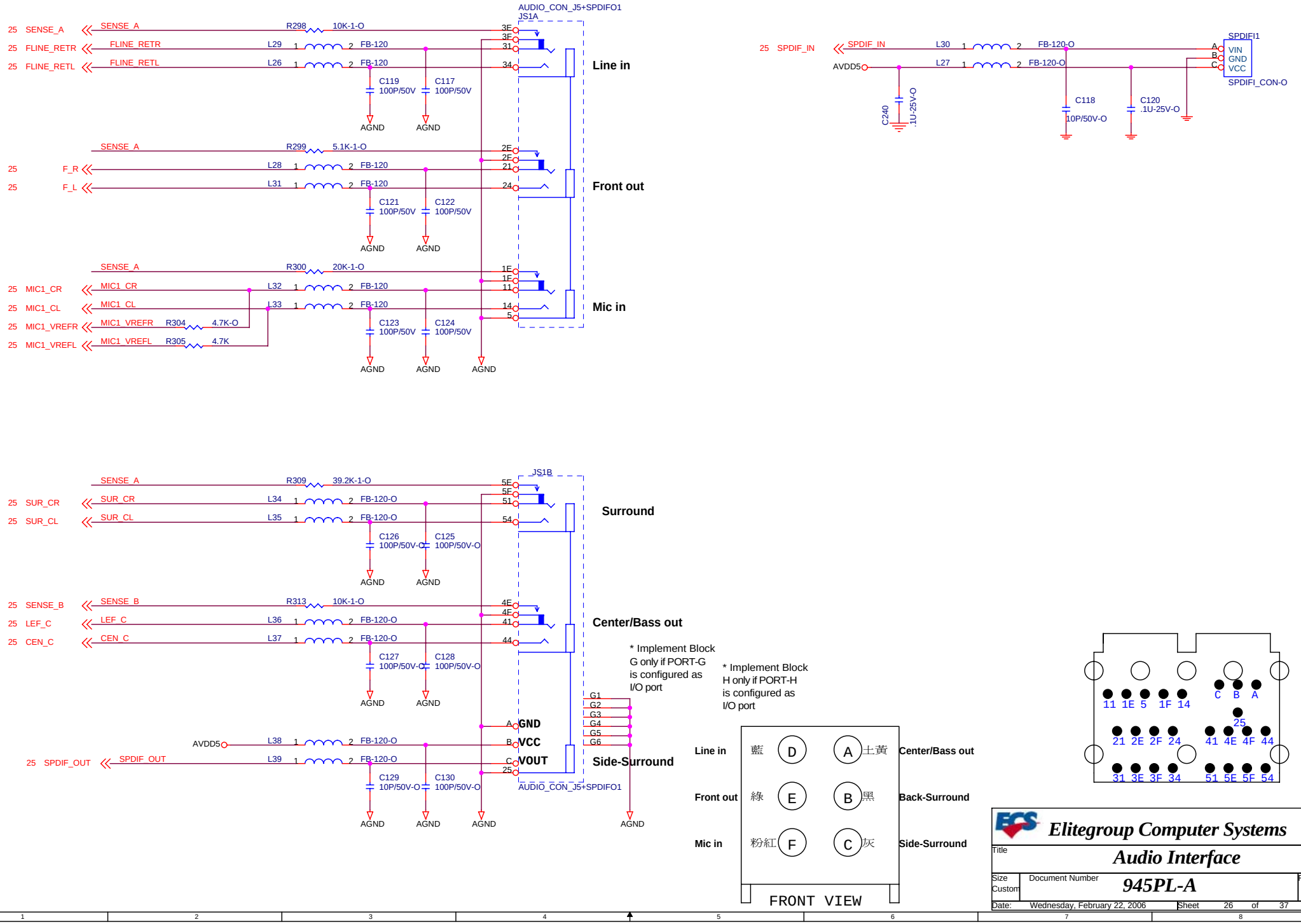

Elitegroup Computer Systems

Title: Audio Interface

Size: Custom | Document Number: 945PL-A | Rev: 1.1

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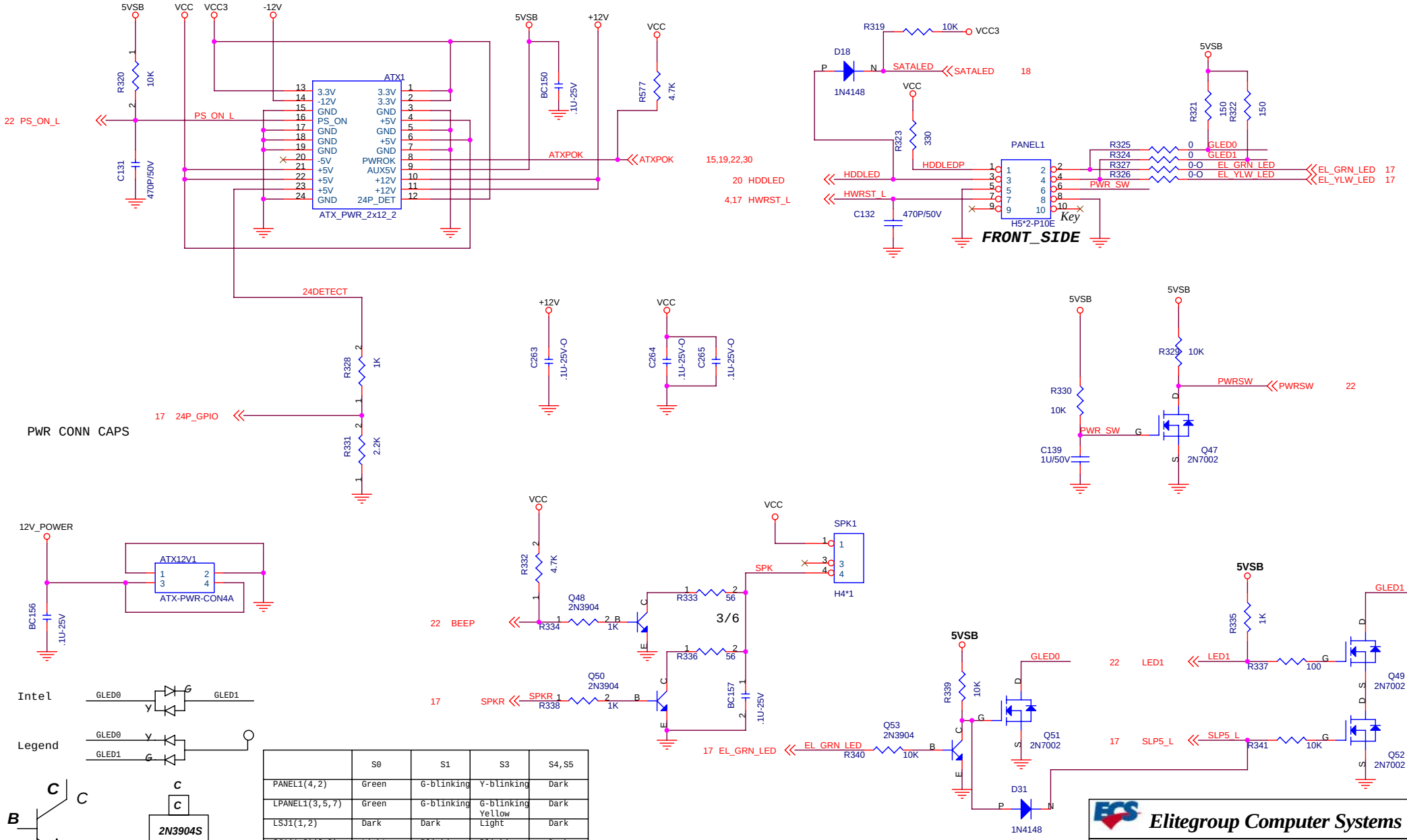

	S0	S1	S3	S4,S5
PANEL1(4,2)	Green	G-blinking	Y-blinking	Dark
LPANEL1(3,5,7)	Green	G-blinking	G-blinking Yellow	Dark
LSJ1(1,2)	Dark	Dark	Light	Dark
SJ1(1,3)(2,3)	Light	Blinking	Blinking	Dark
GLED0 GLED1	HIGH LOW	HIGH SWITCH	LOW SWITCH	HIGH HIGH

Elitegroup Computer Systems

Title: ATX Power & Front Panel

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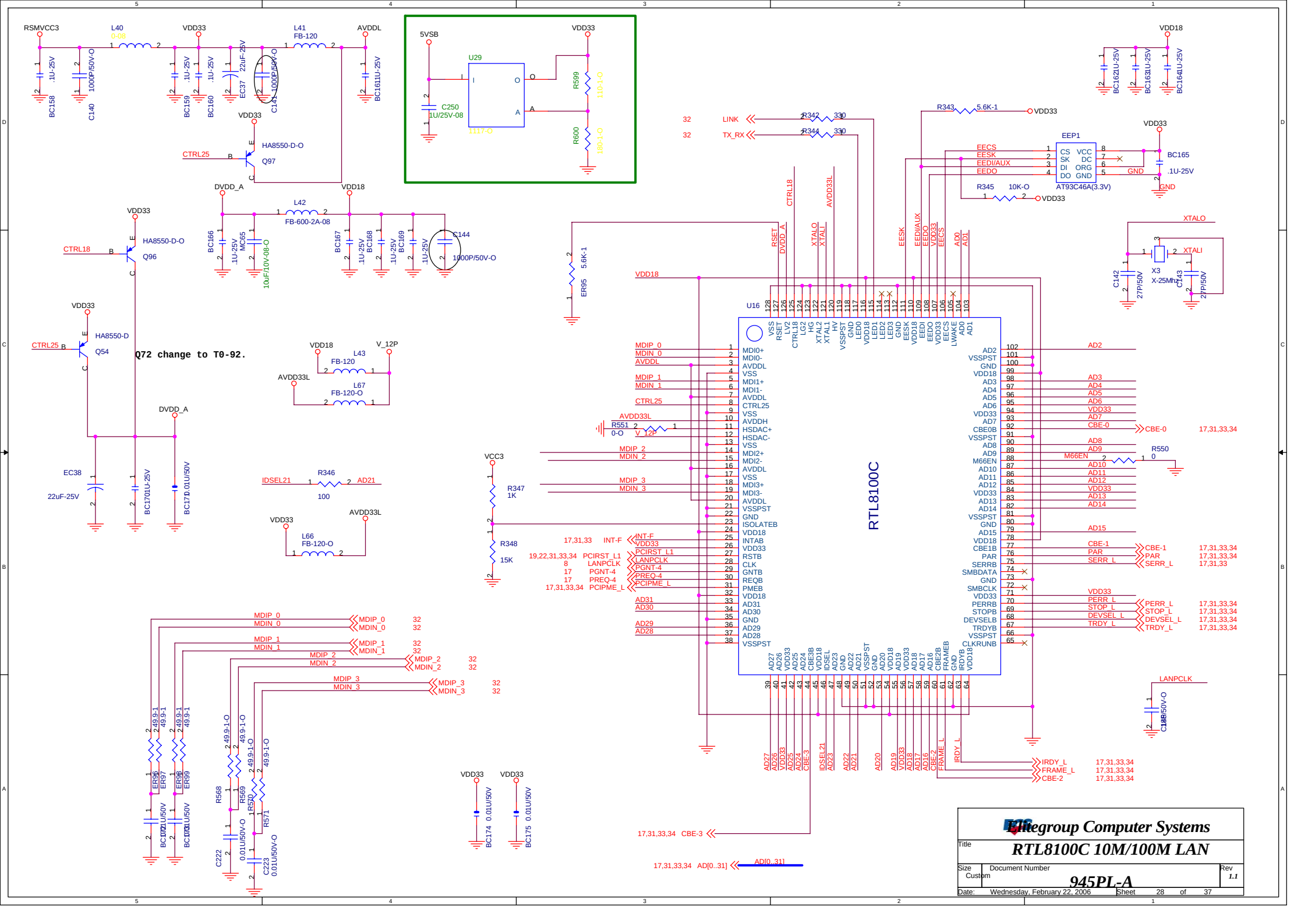
RSMVCC3
L40
0-08
VDD33
L41
FB-120
AVDDL
5VSB
U29
C250
1U/25V-08
1117-O
R599
110-1-O
R600
180-1-O
VDD18
LINK
TX_RX
R342
330
R344
330
R343
5.6K-1
EEP1
AT93C46A(3.3V)
BC165
.1U-25V
R345
10K-O
XTALO
XTALI
X3
X-25Mhz
C142
27P/50V
C143
27P/50V
HA8550-D-O
Q96
CTRL18
HA8550-D
Q54
CTRL25
Q72 change to T0-92.
HA8550-D-O
Q97
DVDD_A
L42
FB-600-2A-08
C144
1000P/50V-O
10uF/10V-08-O
VDD18
V_12P
L43
FB-120
L67
FB-120-O
AVDD33L
IDSEL21
R346
100
AD21
L66
FB-120-O
R551
0-O
ER95
5.6K-1
RSET
U16
RTL8100C
VCC3
R347
1K
R348
15K
R550
0
M66EN
LANPCLK
MDIP_0
MDIN_0
MDIP_1
MDIN_1
MDIP_2
MDIN_2
MDIP_3
MDIN_3
R568
R569
R570
R571
C222
C223
BC174
BC175
CBE-3
AD[0..31]
IRDY_L
FRAME_L
CBE-2
PERR_L
STOP_L
DEVSEL_L
TRDY_L
SERR_L
PAR
CBE-1
CBE-0
AD2
AD3
AD4
AD5
AD6
AD7
AD8
AD9
AD10
AD11
AD12
AD13
AD14
AD15
INT-F
PCIRST_L1
LANPCLK
PGNT-4
PREQ-4
PCIPME_L
Integroup Computer Systems
RTL8100C 10M/100M LAN
945PL-A
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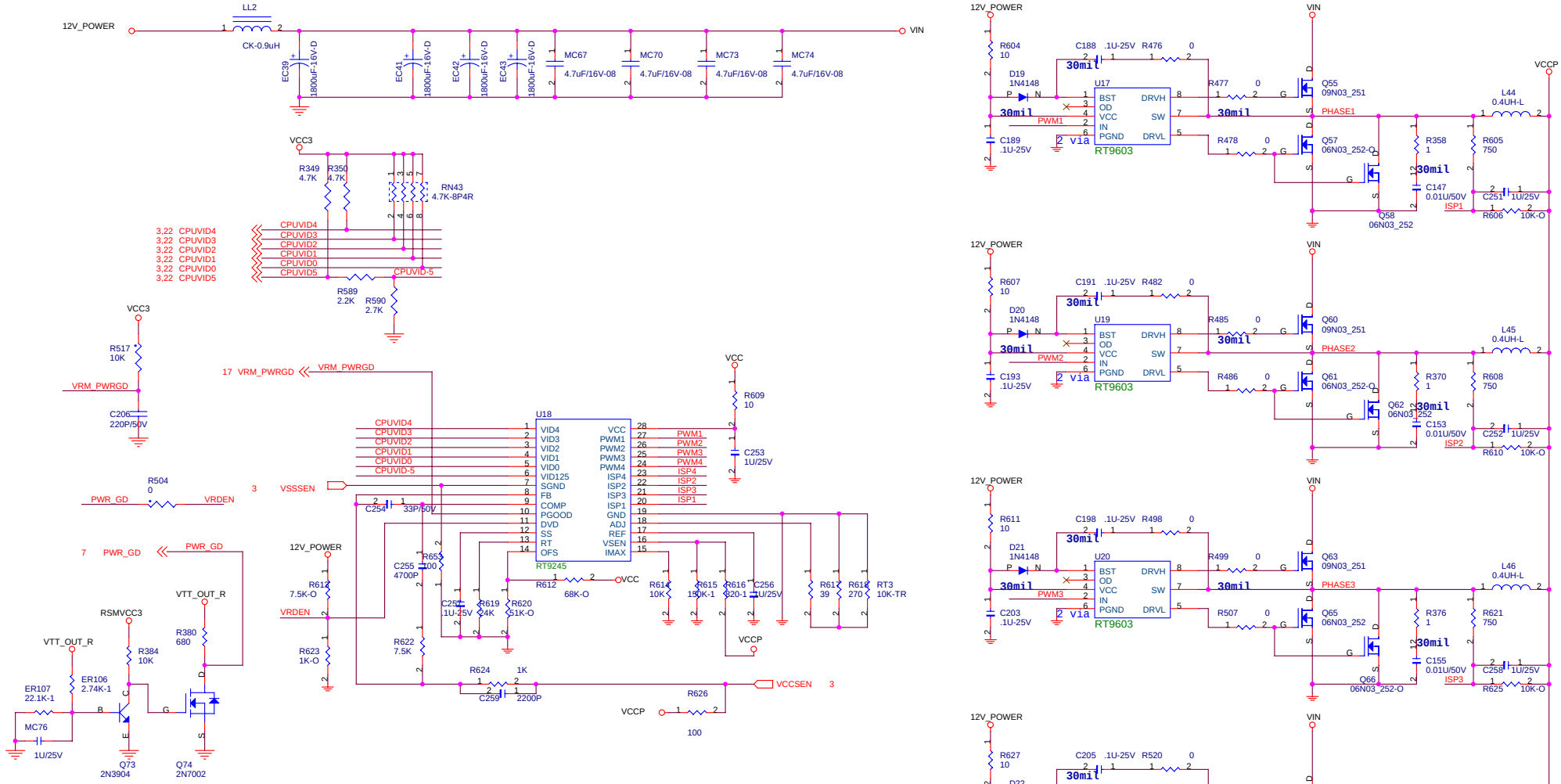
Rev 1.1



VID Codes

VID[4:0]	VCC_CORE	VID[4:0]	VCC_CORE
00000	1.075	10000	1.450
00001	1.050	10001	1.425
00010	1.025	10010	1.400
00011	1.000	10011	1.375
00100	0.975	10100	1.350
00101	0.950	10101	1.325
00110	0.925	10110	1.300
00111	0.900	10111	1.275
01000	0.875	11000	1.250
01001	0.850	11001	1.225
01010	1.600	11010	1.200
01011	1.575	11011	1.175
01100	1.550	11100	1.150
01101	1.525	11101	1.125
01110	1.500	11110	1.100
01111	1.475	11111	No CPU

Elitegroup Computer Systems

Title: VOCRE DC-DC

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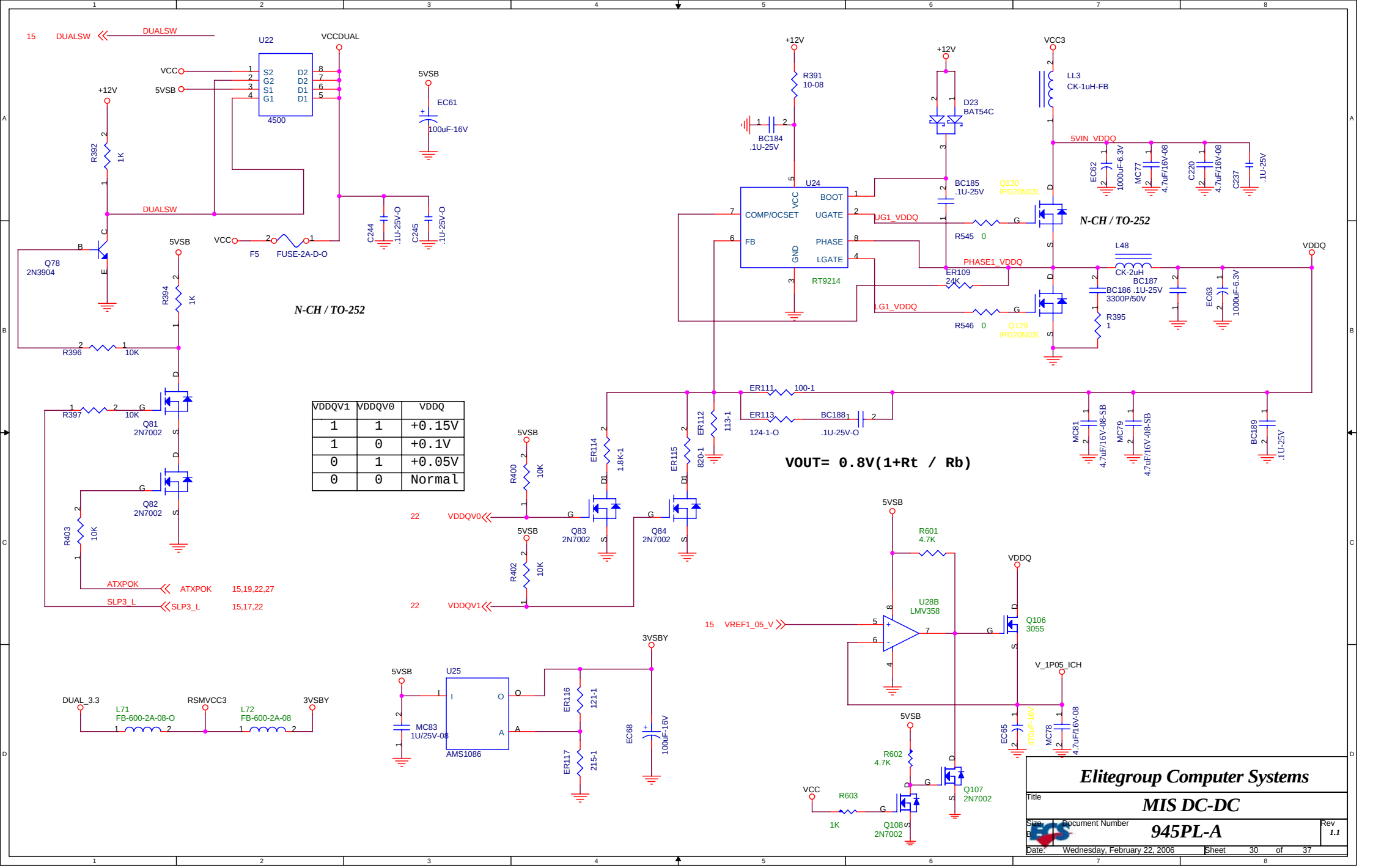

Elitegroup Computer Systems		
Title	MIS DC-DC	
Size: B	Document Number 945PL-A	Rev 1.1
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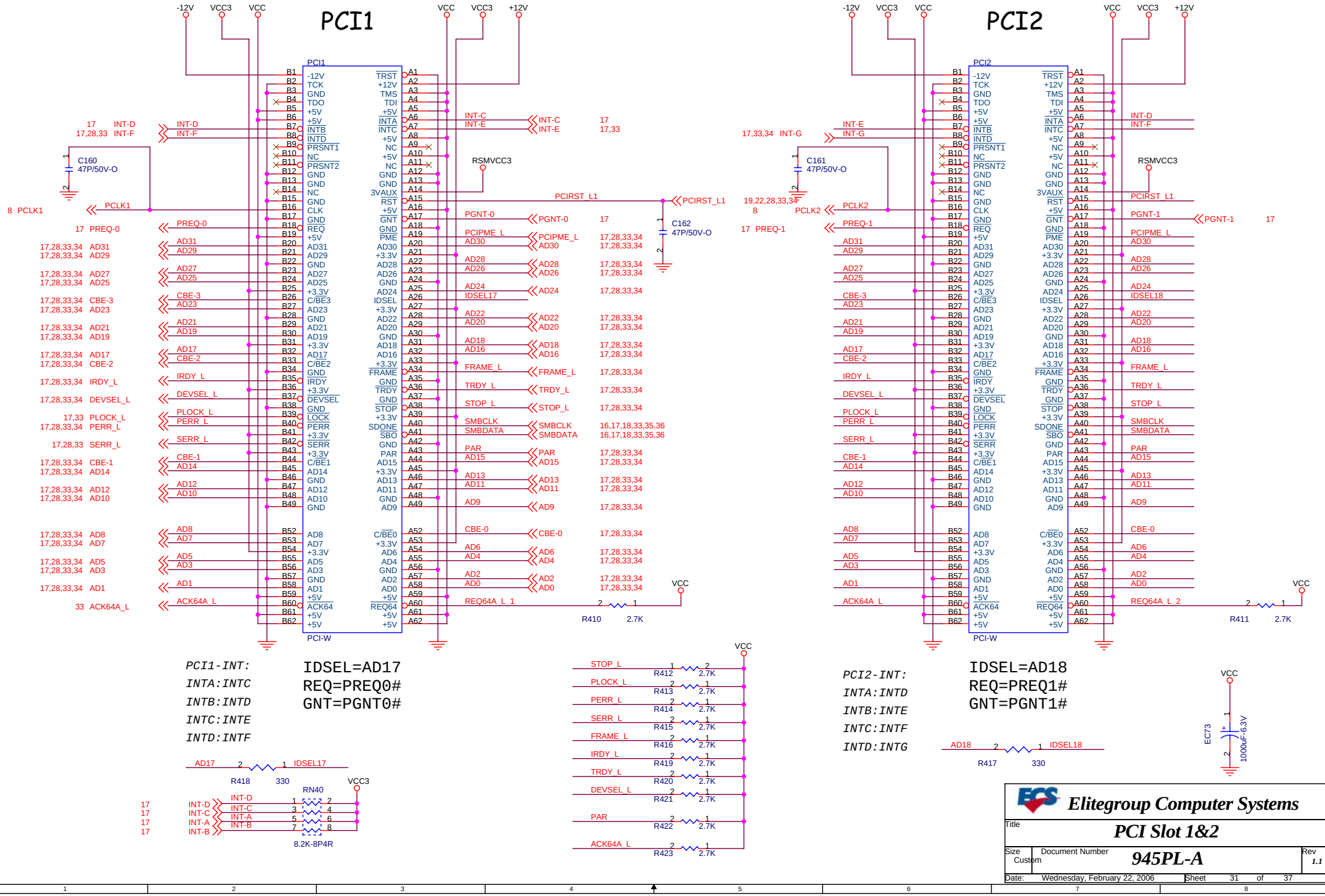
PCI1
PCI2
PCI1-INT:
INTA:INTC
INTB:INTD
INTC:INTE
INTD:INTF
IDSEL=AD17
REQ=PREQ0#
GNT=PGNT0#
PCI2-INT:
INTA:INTD
INTB:INTE
INTC:INTF
INTD:INTG
IDSEL=AD18
REQ=PREQ1#
GNT=PGNT1#
8.2K-8P4R
Elitegroup Computer Systems
PCI Slot 1&2
945PL-A
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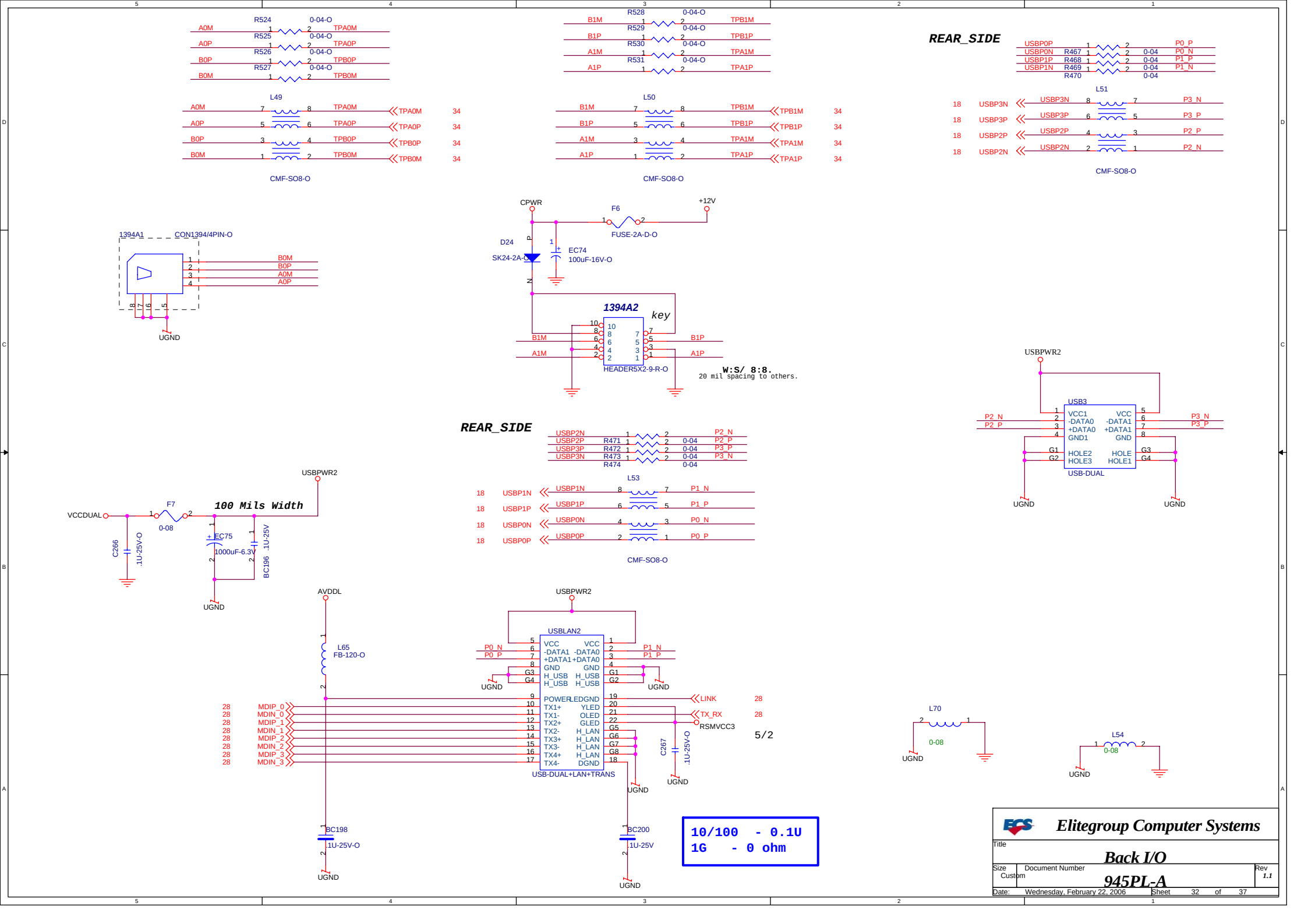
R524 0-04-O A0M TPA0M
R525 0-04-O A0P TPA0P
R526 0-04-O B0P TPB0P
R527 0-04-O B0M TPB0M
L49
CMF-SO8-O
R528 0-04-O B1M TPB1M
R529 0-04-O B1P TPB1P
R530 0-04-O A1M TPA1M
R531 0-04-O A1P TPA1P
L50
CMF-SO8-O
REAR_SIDE
USBP0P P0_P
USBP0N R467 0-04 P0_N
USBP1P R468 0-04 P1_P
USBP1N R469 0-04 P1_N
R470 0-04
L51
USBP3N P3_N
USBP3P P3_P
USBP2P P2_P
USBP2N P2_N
CMF-SO8-O
1394A1 CON1394/4PIN-O
B0M B0P A0M A0P
UGND
CPWR F6 FUSE-2A-D-O +12V
D24 SK24-2A-O EC74 100uF-16V-O
1394A2 key
B1M B1P A1M A1P
HEADER5X2-9-R-O
W:S/ 8:8.
20 mil spacing to others.
USBPWR2
USB3
VCC1 -DATA0 +DATA0 GND1 VCC -DATA1 +DATA1 GND
HOLE2 HOLE3 HOLE HOLE1
USB-DUAL
UGND
REAR_SIDE
USBP2N P2_N
USBP2P R471 0-04 P2_P
USBP3P R472 0-04 P3_P
USBP3N R473 0-04 P3_N
R474 0-04
L53
USBP1N P1_N
USBP1P P1_P
USBP0N P0_N
USBP0P P0_P
CMF-SO8-O
VCCDUAL F7 0-08 100 Mils Width USBPWR2
C266 .1U-25V-O
EC75 1000uF-6.3V
BC196 .1U-25V
UGND
AVDDL L65 FB-120-O
USBLAN2
P0_N P0_P P1_N P1_P
H_USB H_USB G3 G4 G1 G2
POWER_LED TX1+ TX1- TX2+ TX2- TX3+ TX3- TX4+ TX4- GND YLED OLED GLED H_LAN H_LAN H_LAN H_LAN DGND
LINK TX_RX RSMVCC3
MDIP_0 MDIN_0 MDIP_1 MDIN_1 MDIP_2 MDIN_2 MDIP_3 MDIN_3
USB-DUAL+LAN+TRANS
C267 .1U-25V-O
BC198 1U-25V-O
BC200 1U-25V
5/2
10/100 - 0.1U
1G - 0 ohm
L70 0-08
L54 0-08
Elitegroup Computer Systems
Title
Back I/O
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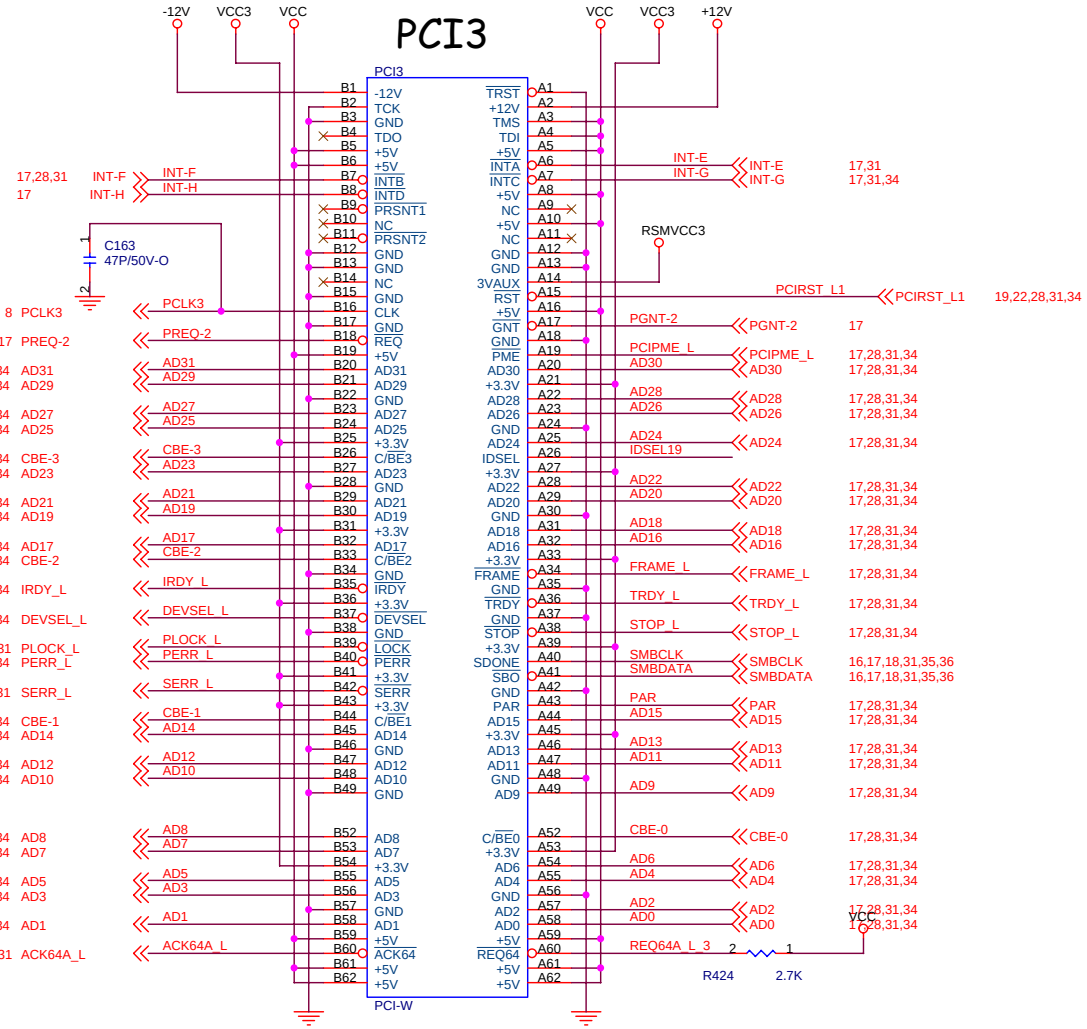
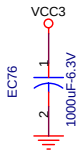


PCI3-INT:
INTA:INTE
INTB:INTF
INTC:INTG
INTD:INTH

IDSEL=AD19
REQ=PREQ2#
GNT=PGNT2#



Elitegroup Computer Systems

Title: **PCI Slot 3**

Size	Document Number	Rev
Custom	**945PL-A**	*1.1*

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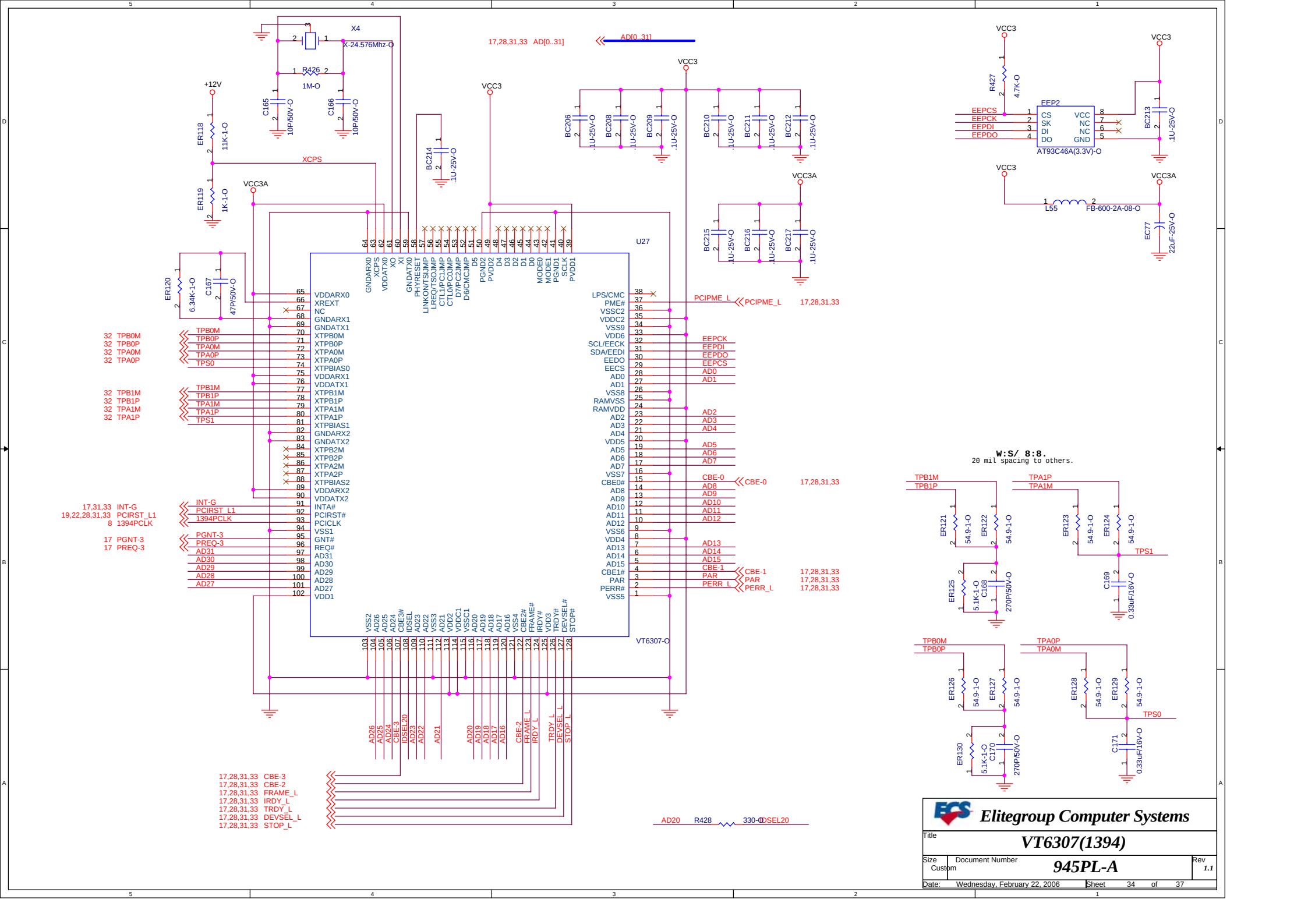
X4
X-24.576Mhz-O
R426
1M-O
+12V
C165
10P/50V-O
C166
10P/50V-O
ER118
11K-1-O
XCPS
ER119
1K-1-O
VCC3A
ER120
6.34K-1-O
C167
47P/50V-O
BC214
.1U-25V-O
17,28,31,33 AD[0..31]
AD[0..31]
VCC3
BC206
BC208
BC209
BC210
BC211
BC212
.1U-25V-O
VCC3A
BC215
BC216
BC217
U27
VT6307-O
VDDARX0
XREXT
NC
GNDARX1
GNDATX1
XTPB0M
XTPB0P
XTPA0M
XTPA0P
XTPBIAS0
VDDARX1
VDDATX1
XTPB1M
XTPB1P
XTPA1M
XTPA1P
XTPBIAS1
GNDARX2
GNDATX2
XTPB2M
XTPB2P
XTPA2M
XTPA2P
XTPBIAS2
VDDARX2
VDDATX2
INTA#
PCIRST#
PCICLK
VSS1
GNT#
REQ#
AD31
AD30
AD29
AD28
AD27
VDD1
LPS/CMC
PME#
VSSC2
VDDC2
VSS9
VDD6
SCL/EECK
SDA/EEDI
EEDO
EECS
AD0
AD1
VSS8
RAMVSS
RAMVDD
AD2
AD3
AD4
VDD5
AD5
AD6
AD7
VSS7
CBE0#
AD8
AD9
AD10
AD11
AD12
VSS6
VDD4
AD13
AD14
AD15
CBE1#
PAR
PERR#
VSS5
PCIPME_L
EEPCK
EEPDI
EEPDO
EEPCS
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
CBE-0
AD8
AD9
AD10
AD11
AD12
AD13
AD14
AD15
CBE-1
PAR
PERR_L
GNDARX0
XCPS
VDDATX0
XO
XI
GNDATX0
PHYRESET
LINKON/TSUMP
LREQ/TSOJMP
CTL1/PC1JMP
CTL0/PC0JMP
D7/PC2JMP
D6/CMCJMP
D5
PGND2
PVDD2
D4
D3
D2
D1
D0
MODE0
MODE1
PGND1
SCLK
PVDD1
VSS2
AD26
AD25
AD24
CBE3#
IDSEL
AD23
AD22
VSS3
AD21
VDD2
VDDC1
VSSC1
AD20
AD19
AD18
AD17
AD16
VSS4
CBE2#
FRAME#
IRDY#
VDD3
TRDY#
DEVSEL#
STOP#
TPB0M
TPB0P
TPA0M
TPA0P
TPS0
TPB1M
TPB1P
TPA1M
TPA1P
TPS1
INT-G
PCIRST_L1
1394PCLK
PGNT-3
PREQ-3
AD31
AD30
AD29
AD28
AD27
32 TPB0M
32 TPB0P
32 TPA0M
32 TPA0P
32 TPB1M
32 TPB1P
32 TPA1M
32 TPA1P
17,31,33 INT-G
19,22,28,31,33 PCIRST_L1
8 1394PCLK
17 PGNT-3
17 PREQ-3
17,28,31,33 CBE-3
17,28,31,33 CBE-2
17,28,31,33 FRAME_L
17,28,31,33 IRDY_L
17,28,31,33 TRDY_L
17,28,31,33 DEVSEL_L
17,28,31,33 STOP_L
AD20
R428
330-O
IDSEL20
PCIPME_L
17,28,31,33
CBE-0
17,28,31,33
CBE-1
17,28,31,33
PAR
17,28,31,33
PERR_L
17,28,31,33
VCC3
R427
4.7K-O
EEP2
EEPCS
EEPCK
EEPDI
EEPDO
CS
SK
DI
DO
VCC
NC
NC
GND
AT93C46A(3.3V)-O
BC213
.1U-25V-O
L55
FB-600-2A-08-O
EC77
22uF-25V-O
W:S/ 8:8.
20 mil spacing to others.
TPB1M
TPB1P
TPA1P
TPA1M
ER121
ER122
ER123
ER124
54.9-1-O
TPS1
ER125
5.1K-1-O
C168
270P/50V-O
C169
0.33uF/16V-O
TPB0M
TPB0P
TPA0P
TPA0M
ER126
ER127
ER128
ER129
TPS0
ER130
C170
C171
Elitegroup Computer Systems
Title
VT6307(1394)
Size
Custom
Document Number
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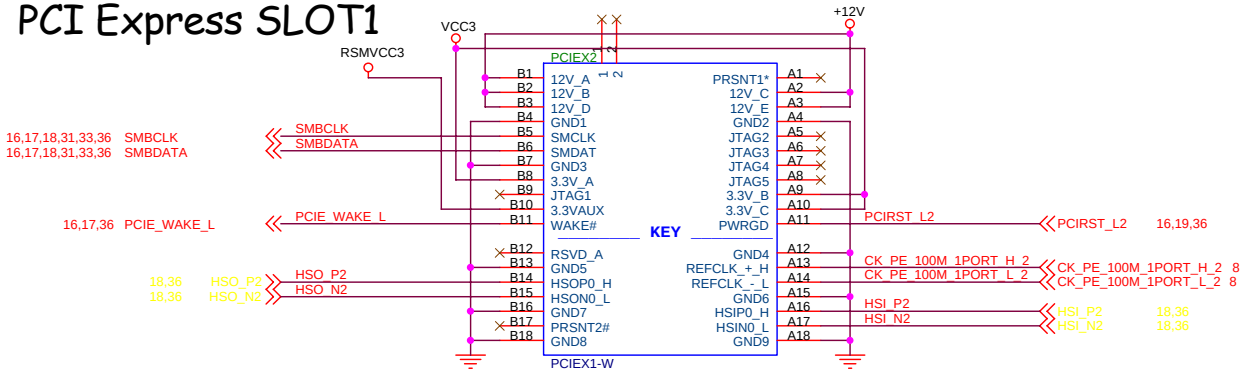
PCI Express SLOT1



Elitegroup Computer Systems		
Title: PCIE X1		
Size: Custom	Document Number: 945PL-A	Rev: 1.1
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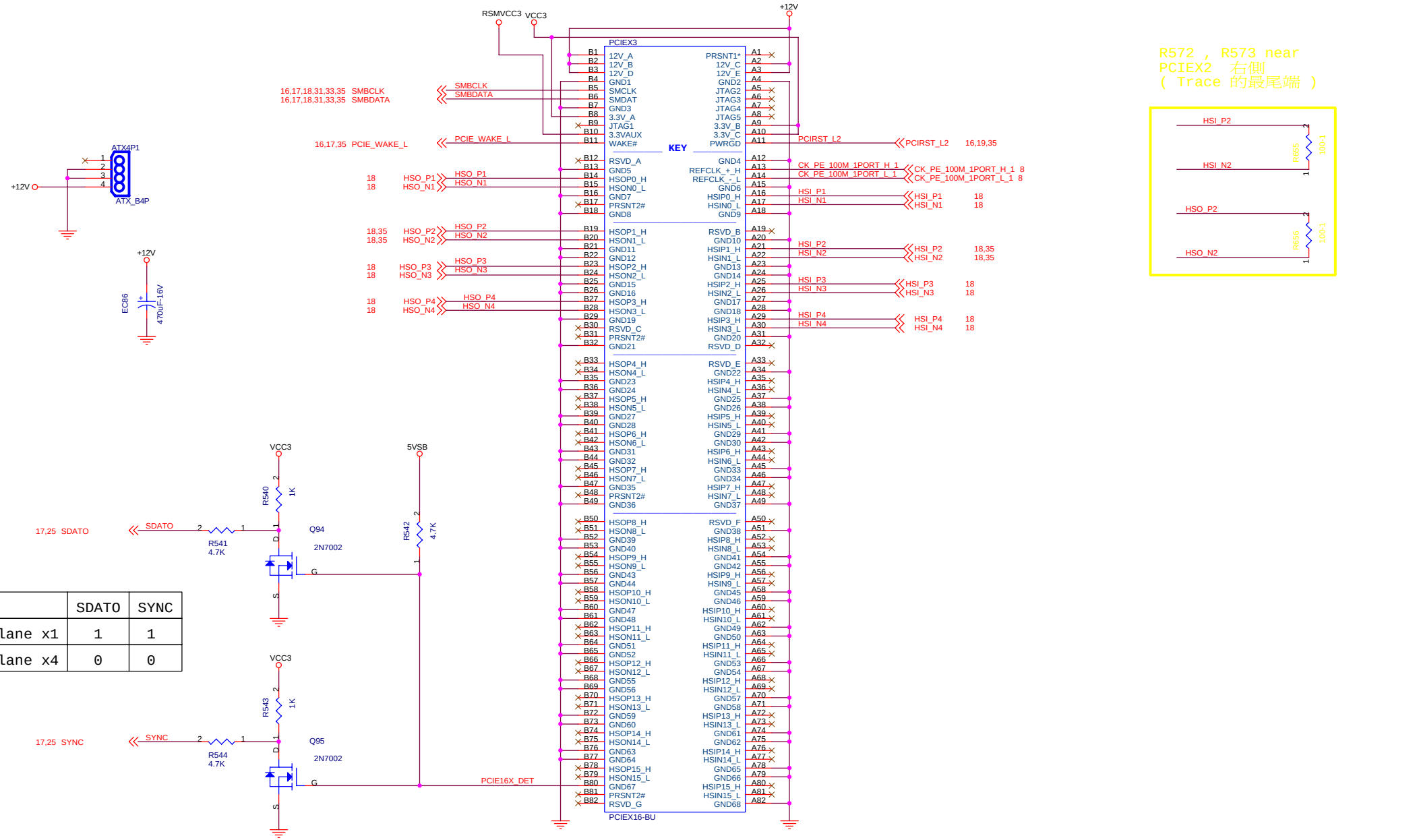

	SDATO	SYNC
4lane x1	1	1
1lane x4	0	0

Elitegroup Computer Systems		
Title: PCIEX2		
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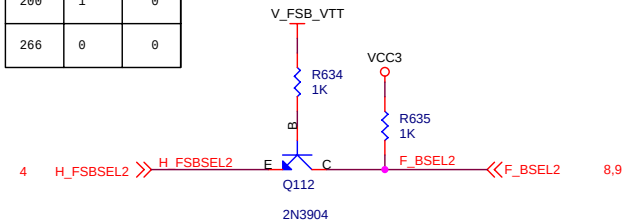
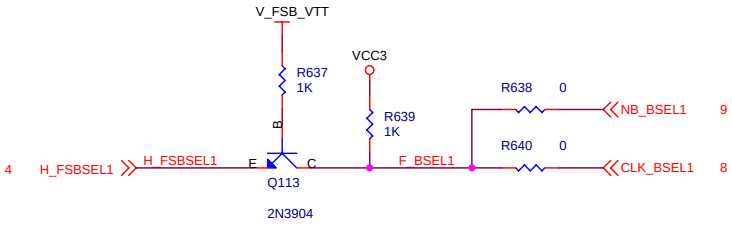
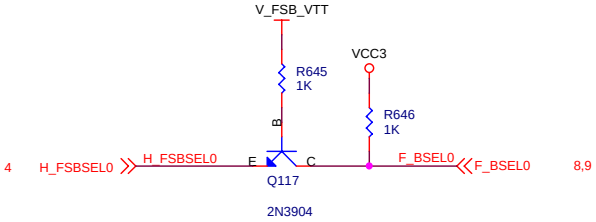
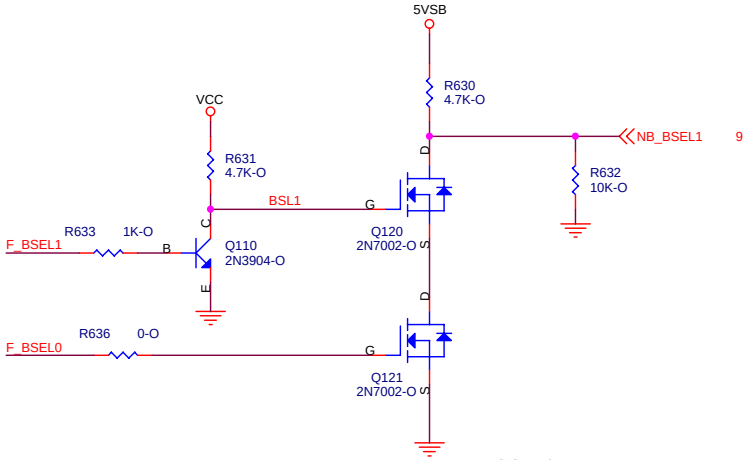
CPU FSB BSEL

CPU	BSEL0	BSEL1
133	0	1
200	1	0
266	0	0





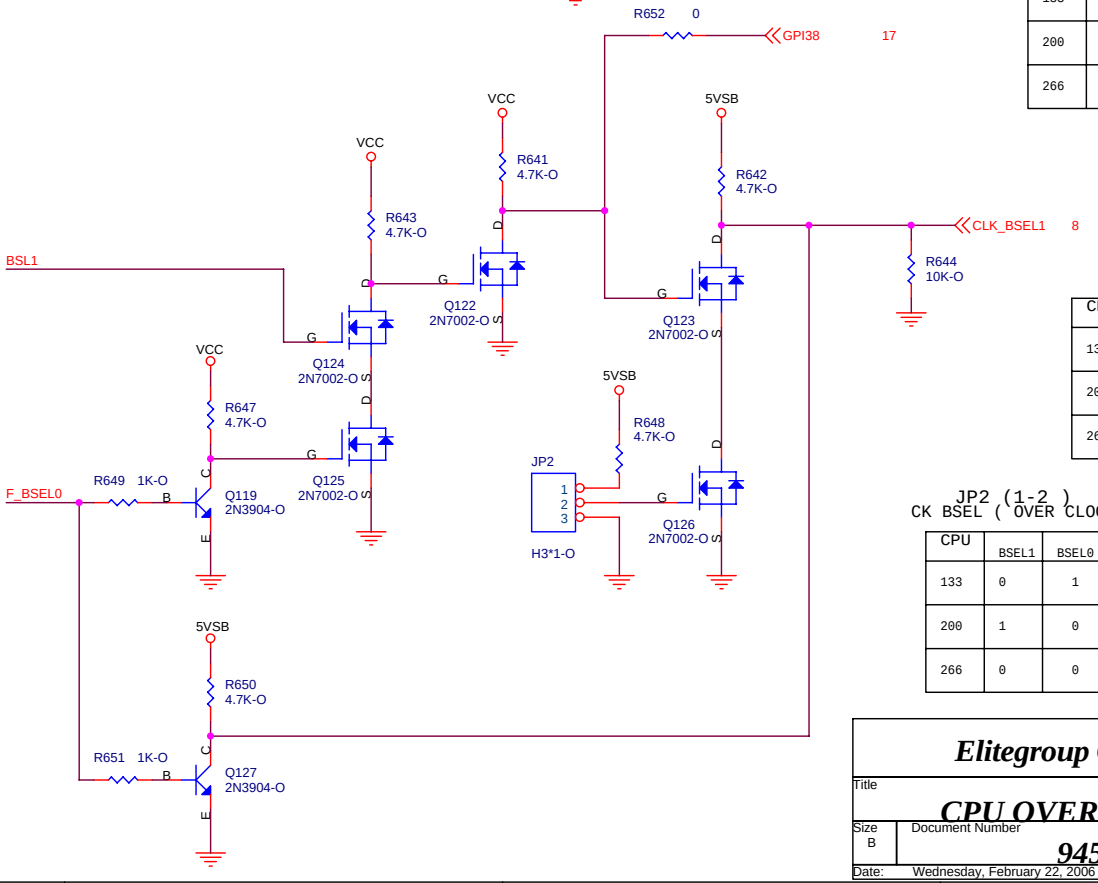




NB BSEL

CPU	BSEL1	BSEL0
133	0	1
200	1	0
266	1	0

CPU	GPI38
133	0
200	0
266	1



JP2

CPU	JP2 (1-2)	JP2 (2-3)
133	133 MHz	133 MHz
200	200 MHz	200 MHz
266	266 MHz	200 MHz

JP2 (1-2)
CK BSEL (OVER CLOCK)

CPU	BSEL1	BSEL0
133	0	1
200	1	0
266	0	0

JP2 (2-3)
CK BSEL (NORMAL)

CPU	BSEL1	BSEL0
133	0	1
200	1	0
266	1	0

Elitegroup Computer Systems

Title: CPU OVER CLOCKING

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