661FX-M

REV:1.0

Revision History :

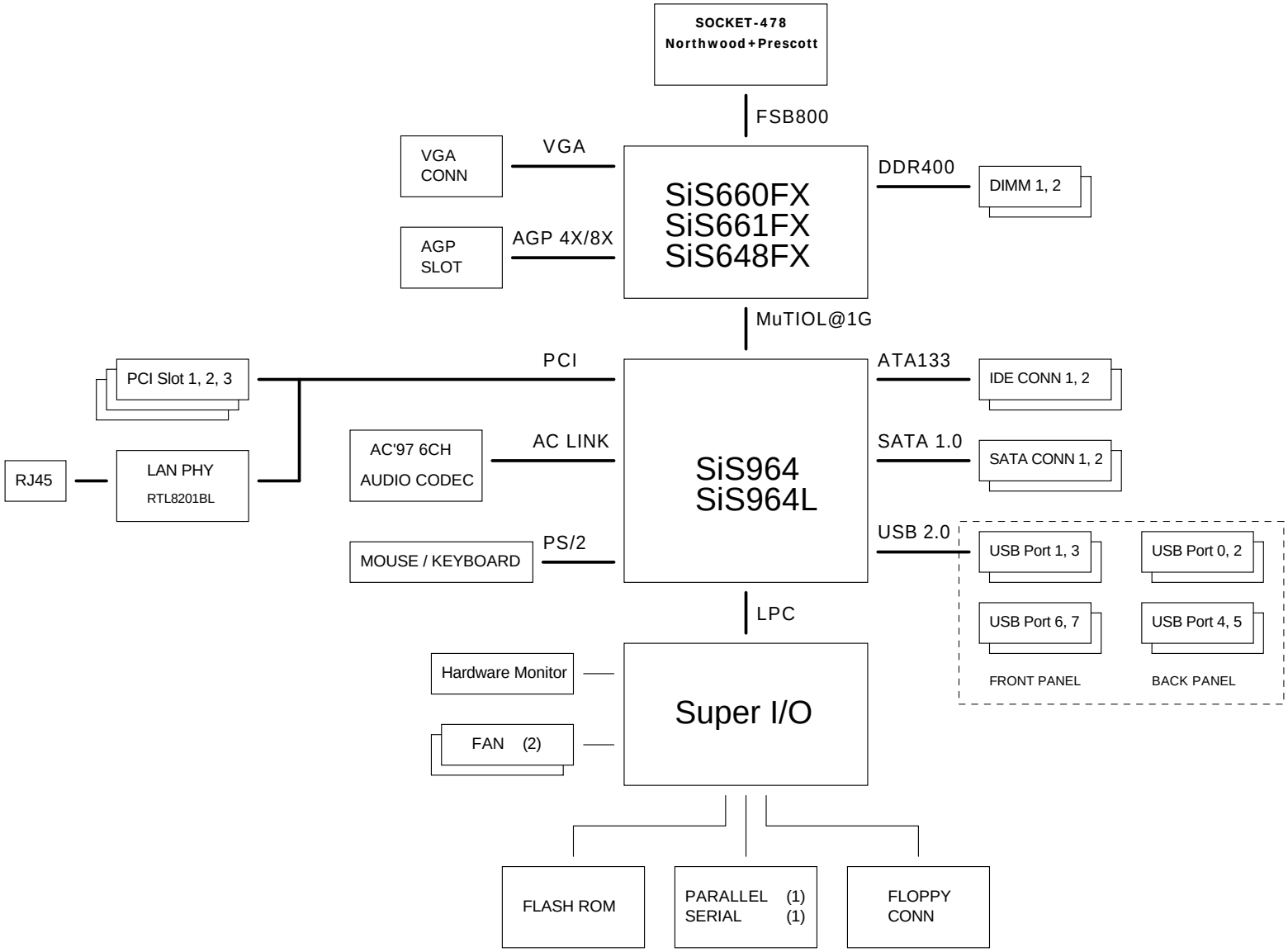
1. Ver A: Initial
2. Ver 1.0: Change AUDIO1 header location

Page Index

	SIGNATURE	DATE
DESIGNER	Jacy	10/10/2003
LAYOUT		
CHECK		
APPROVAL		

Elitegroup Computer Systems

Title: 661FX-M		
Size: Custom	Document Number: Cover Sheet	Rev: A
Date: Monday, December 08, 2003	Sheet 1 of 34	



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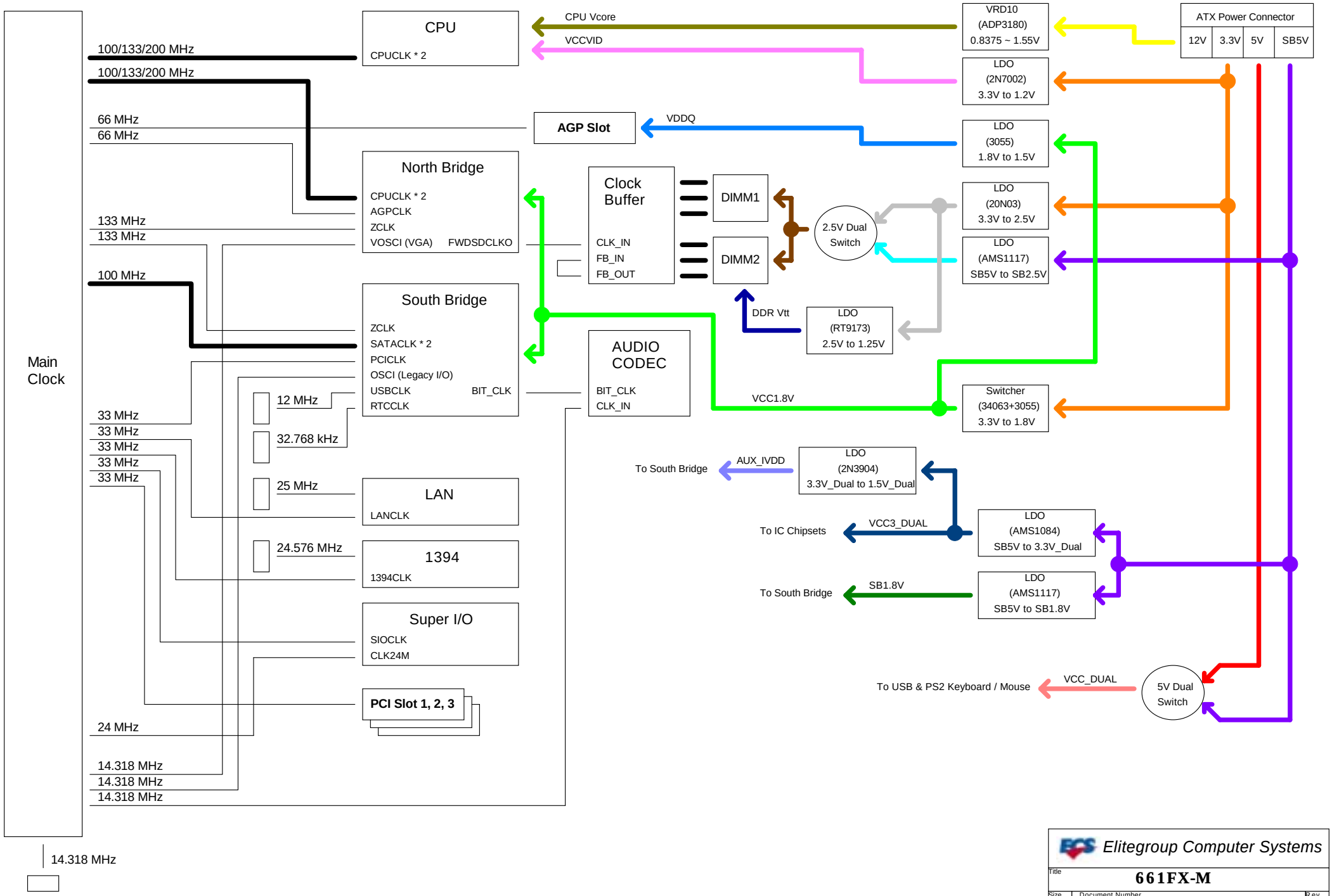
Title: **661FX-M**

Size: Custom | Document Number: Block Diagram | Rev: A

Date: Monday, December 08, 2003 | Sheet 2 of 34

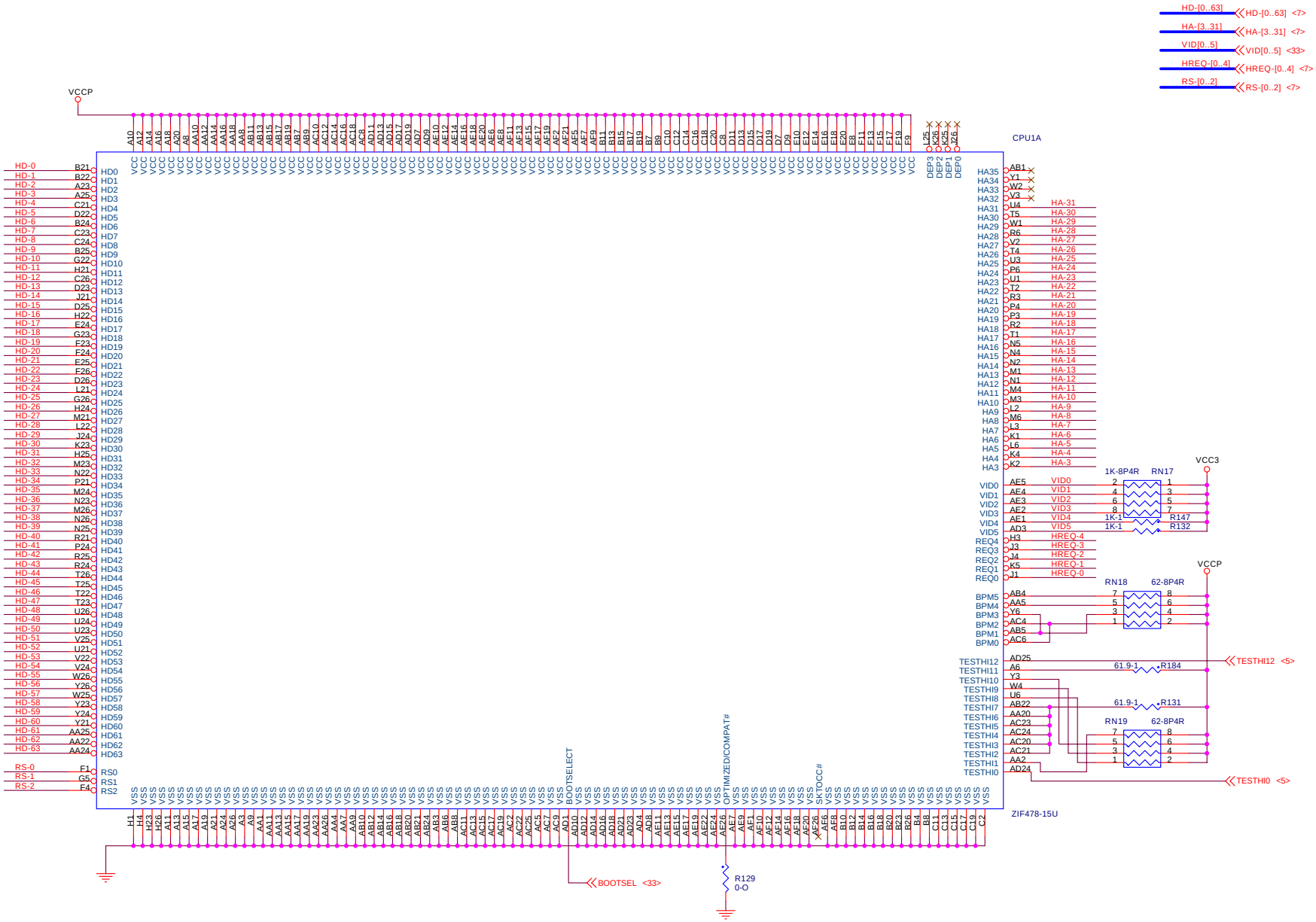


Elitegroup Computer Systems

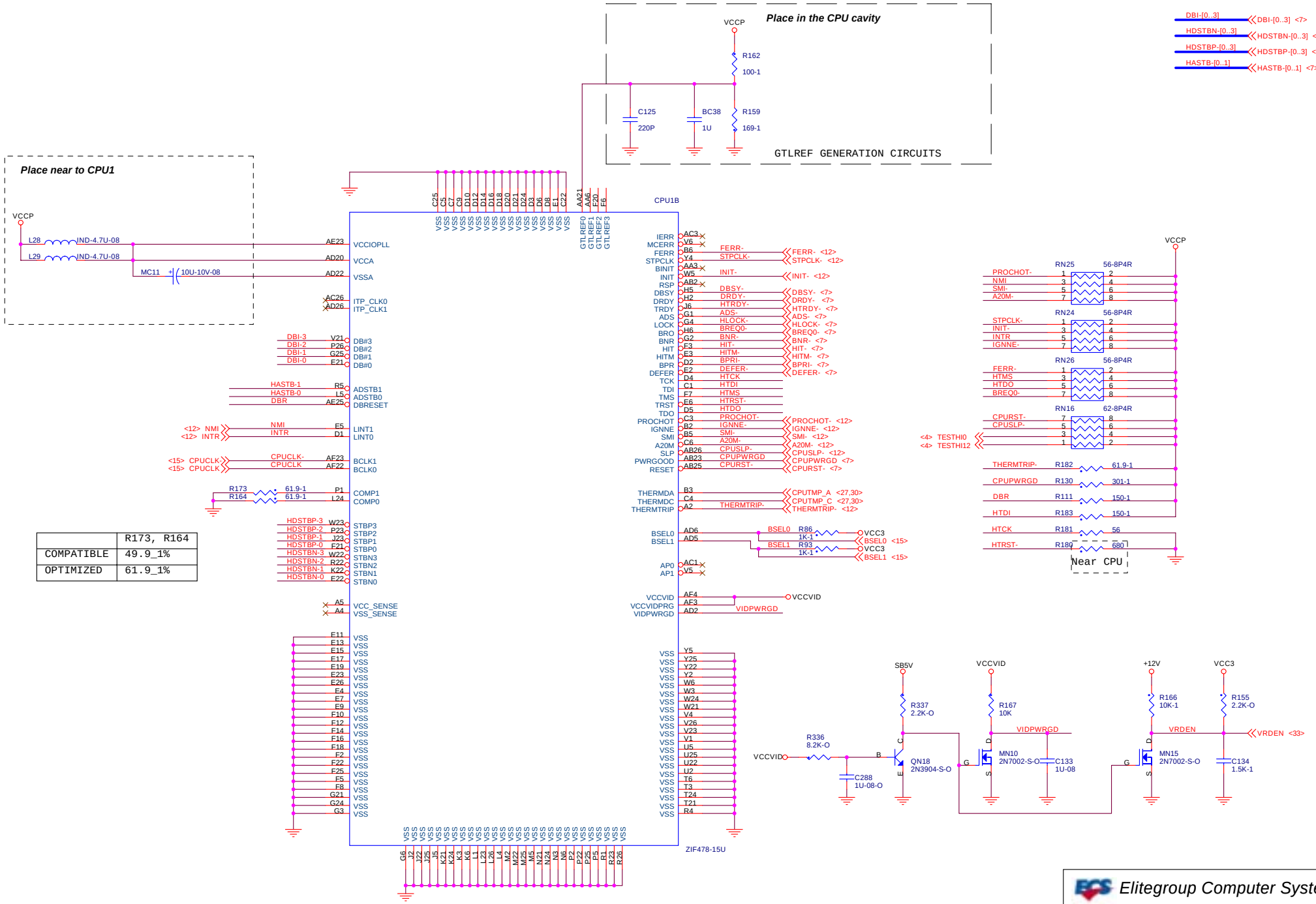
Title: 661FX-M

Size: Custom | Document Number: Clock & Power Distribution | Rev: A

Date: Tuesday, October 14, 2003 | Sheet 3 of 34



Elitegroup Computer Systems			
Title	661FX-M		
Size: Custom	Document Number: Socket478-1		Rev: A
Date: Tuesday, October 14, 2003	Sheet 4 of 34		


Place in the CPU cavity
VCCP
R162
100-1
C125
220P
BC38
1U
R159
169-1
GTLREF GENERATION CIRCUITS
Place near to CPU1
CPU1B
ZIF478-15U
Near CPU
DBI-[0..3]
HDSTBN-[0..3]
HDSTBP-[0..3]
HASTB-[0..1]
R173, R164
COMPATIBLE 49.9_1%
OPTIMIZED 61.9_1%
SB5V
VCCVID
+12V
VCC3
R337 2.2K-O
R167 10K
R166 10K-1
R155 2.2K-O
R336 8.2K-O
C288 1U-08-O
QN18 2N3904-S-O
MN10 2N7002-S-O
MN15 2N7002-S-O
C133 1U-08
C134 1.5K-1
VIDPWRGD
VRDEN
VRDEN <33>
Elitegroup Computer Systems
661FX-M
Socket478-2
Rev A
Tuesday, October 14, 2003
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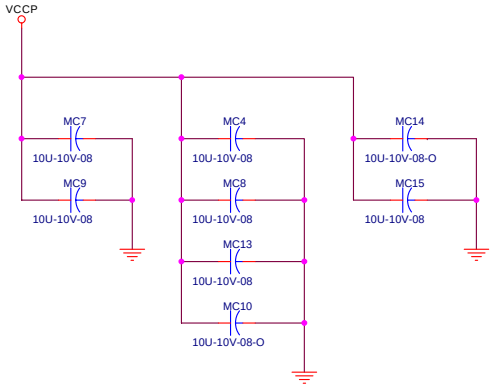
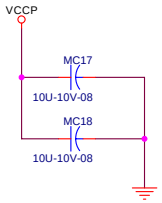
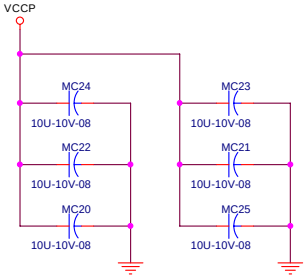
Put these capacitors at processor NORTH SIDE



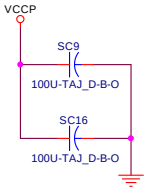
Put these capacitors INSIDE PROCESSOR CAVITY



Put these capacitors at processor SOUTH SIDE



Put these capacitors at processor SOLDER SIDE



P.S. Choose X7R/X5R components instead of Y5V for all 10uF_1206 capacitors on this page.

Elitegroup Computer Systems

Title	**661FX-M**	
Size: Custom	Document Number: *Decoupling Circuit*	Rev: A
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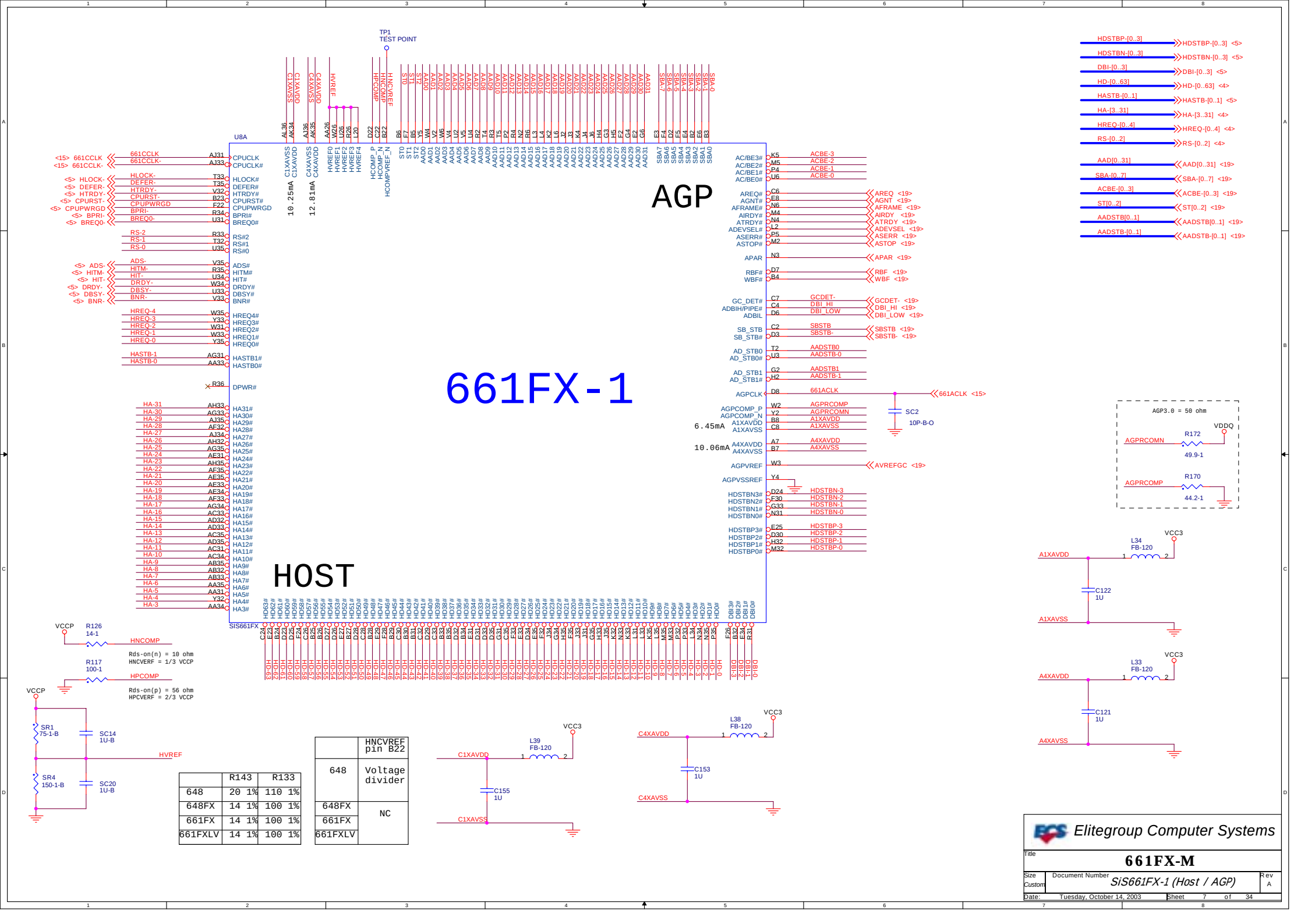

	R143	R133
648	20 1%	110 1%
648FX	14 1%	100 1%
661FX	14 1%	100 1%
661FXLV	14 1%	100 1%

	HNCVREF pin B22
648	Voltage divider
648FX	NC
661FX	
661FXLV	

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: SiS661FX-1 (Host / AGP)	Rev: A
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DMD[0..63] DMD[0..63] <17,18>
DDQM[0..7] DDQM[0..7] <17,18>
DDQS[0..7] DDQS[0..7] <17,18>
DMA[0..14] DMA[0..14] <17,18>
DCS-[0..3] DCS-[0..3] <17,18>
CKE[0..3] CKE[0..3] <17>

U8B

661FX-2

SIS661FX

DMD0	AN35	MD0	
DMD1	AP36	MD1	
DMD2	AK33	MD2	
DMD3	AM33	MD3	
DMD4	AN34	MD4	
DMD5	AK32	MD5	
DMD6	AR34	MD6	
DMD7	AN33	MD7	
DDQM0	AR35	DQM0	
DDQS0	AP34	DQS0/CSB0#	
DMD8	AM32	MD8	
DMD9	AL31	MD9	
DMD10	AR31	MD10	
DMD11	AL30	MD11	
DMD12	AN32	MD12	
DMD13	AR33	MD13	
DMD14	AN31	MD14	
DMD15	AM31	MD15	
DDQM1	AR32	DQM1	
DDQS1	AP32	DQS1/CSB1#	
DMD16	AP30	MD16	
DMD17	AR30	MD17	
DMD18	AM29	MD18	
DMD19	AL27	MD19	
DMD20	AN30	MD20	
DMD21	AN29	MD21	
DMD22	AL28	MD22	
DMD23	AN28	MD23	
DDQM2	AL29	DQM2	
DDQS2	AR29	DQS2/CSB2#	
DMD24	AP26	MD24	
DMD25	AN25	MD25	
DMD26	AR24	MD26	
DMD27	AL24	MD27	
DMD28	AL25	MD28	
DMD29	AR26	MD29	
DMD30	AM25	MD30	
DMD31	AN24	MD31	
DDQM3	AP24	DQM3	
DDQS3	AR25	DQS3/CSB3#	
DMD32	AN21	MD32	
DMD33	AP20	MD33	
DMD34	AN20	MD34	
DMD35	AL18	MD35	
DMD36	AM21	MD36	
DMD37	AR21	MD37	
DMD38	AL19	MD38	
DMD39	AM19	MD39	
DDQM4	AL20	DQM4	
DDQS4	AR20	DQS4/CSB4#	
DMD40	AL15	MD40	
DMD41	AL14	MD41	
DMD42	AN15	MD42	
DMD43	AR15	MD43	
DMD44	AN16	MD44	
DMD45	AM15	MD45	
DMD46	AN14	MD46	
DMD47	AL13	MD47	
DDQM5	AP16	DQM5	
DDQS5	AR16	DQS5/CSB5#	
DMD48	AM13	MD48	
DMD49	AL12	MD49	
DMD50	AL11	MD50	
DMD51	AR12	MD51	
DMD52	AP14	MD52	
DMD53	AR14	MD53	
DMD54	AN13	MD54	
DMD55	AP12	MD55	
DDQM6	AN12	DQM6	
DDQS6	AR13	DQS6/CSB6#	
DMD56	AL10	MD56	
DMD57	AR11	MD57	
DMD58	AM9	MD58	
DMD59	AR9	MD59	
DMD60	AM11	MD60	
DMD61	AN11	MD61	
DMD62	AP10	MD62	
DMD63	AN9	MD63	
DDQM7	AN10	DQM7	
DDQS7	AR10	DQS7/CSB7#	

MA0	AR23	DMA0	
MA1	AN23	DMA1	
MA2	AN22	DMA2	
MA3	AM23	DMA3	
MA4	AL23	DMA4	
MA5	AL26	DMA5	
MA6	AN26	DMA6	
MA7	AN27	DMA7	
MA8	AR27	DMA8	
MA9	AR28	DMA9	
MA10	AP22	DMA10	
MA11	AN18	DMA11	
MA12	AR22	DMA12	
MA13	AP28	DMA13	
MA14	AM27	DMA14	
MA15	AT14		
SRAS#	AL17	DRAS-	DRAS- <17,18>
SCAS#	AR19	DCAS-	DCAS- <17,18>
SWE#	AN19	DWE-	DWE- <17,18>
CS0#	AM17	DCS-0	
CS1#	AL16	DCS-1	
CS2#	AN17	DCS-2	
CS3#	AR17	DCS-3	
CS4#	AP18		
CS5#	AR18		
CKE0	AP4	CKE0	
CKE1	AT3	CKE1	
CKE2	AR3	CKE2	
CKE3	AP3	CKE3	
CKE4	AR2		
CKE5	AN4		
S3AUXSW#	AP2	S3AUXSW-	S3AUXSW- <32>
FWDSDCLKO	AL21	FWDSDCLKO	FWDSDCLKO <16>
DRAMTEST	AL22		
10.15mA DLLAVDD	AL35	DLLAVDD	
DLLAVSS	AL34	DLLAVSS	
24.86mA DDRAVDD	AM35	DDRAVDD	
DDRAVSS	AN36	DDRAVSS	
DDRVREFB	AF16	DDRVREFA	
DDRVREFA	AF23	DDRVREFB	
TRAP2	AP1		
DDRCOMP_P	AR8	DDRCOMP	
DDRCOMP_N	AP8	DDRCOMN	

SC39 10P-B-O

VCC_DIMM
SC34 1U-B
SR5 150-1-B
DDRVREFA
SC38 1U-B
SR8 150-1-B

VCC_DIMM
SC36 1U-B
SR6 150-1-B
DDRVREFB
SC37 1U-B
SR7 150-1-B

VCC3
L42 FB-120
DLLAVDD
C161 1U
DLLAVSS

VCC3
L44 FB-120
DDRAVDD
C173 1U
DDRAVSS

VCC_DIMM
R195 40.2-1
DDRCOMN
R189 40.2-1
DDRCOMP

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Title: 661FX-M

Size: Custom | Document Number: SiS661FX-2 (Memory) | Rev: A

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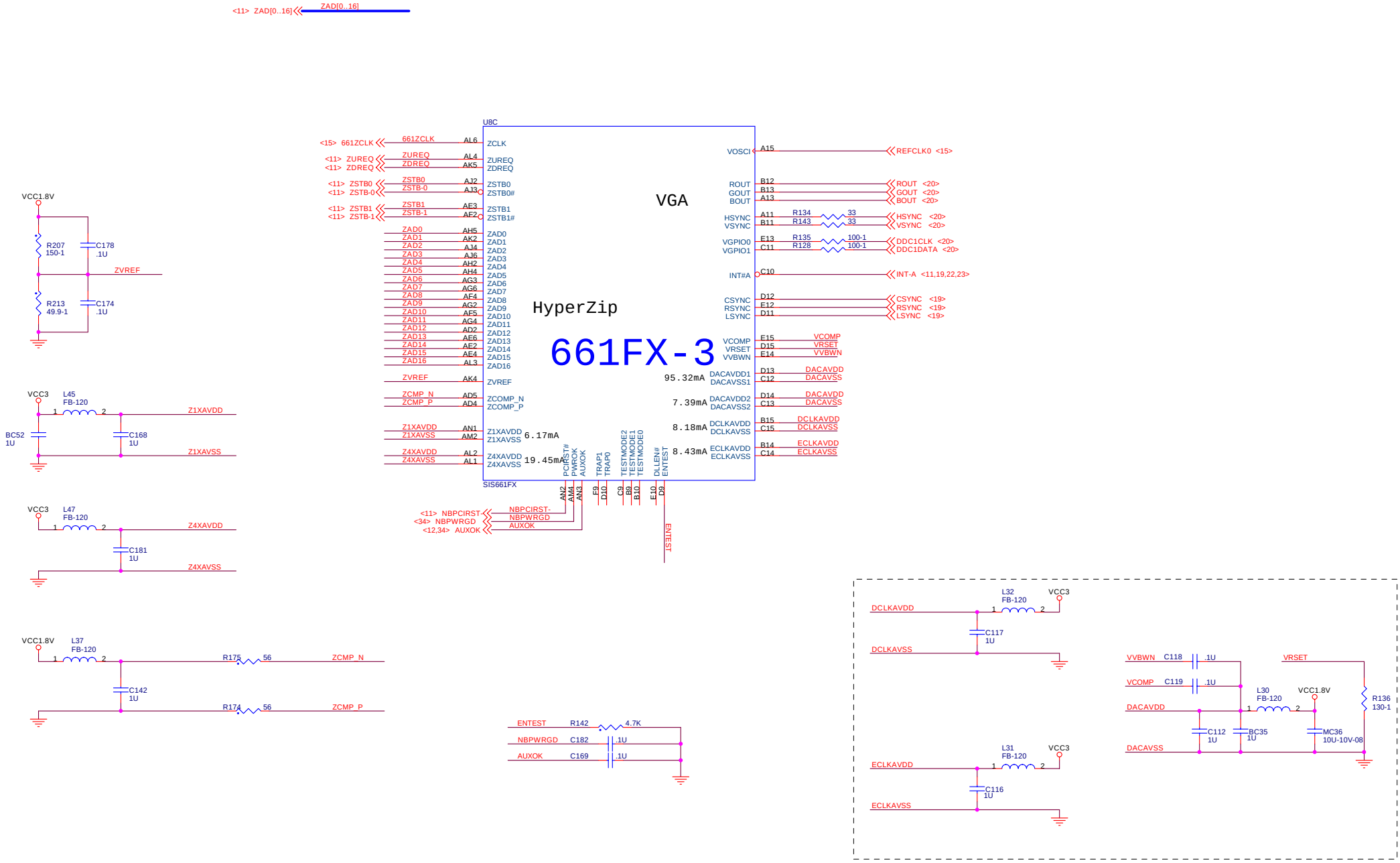

Elitegroup Computer Systems			
Title: 661FX-M			
Size: Custom	Document Number: SiS661FX-3 (HyperZip)		Rev: A
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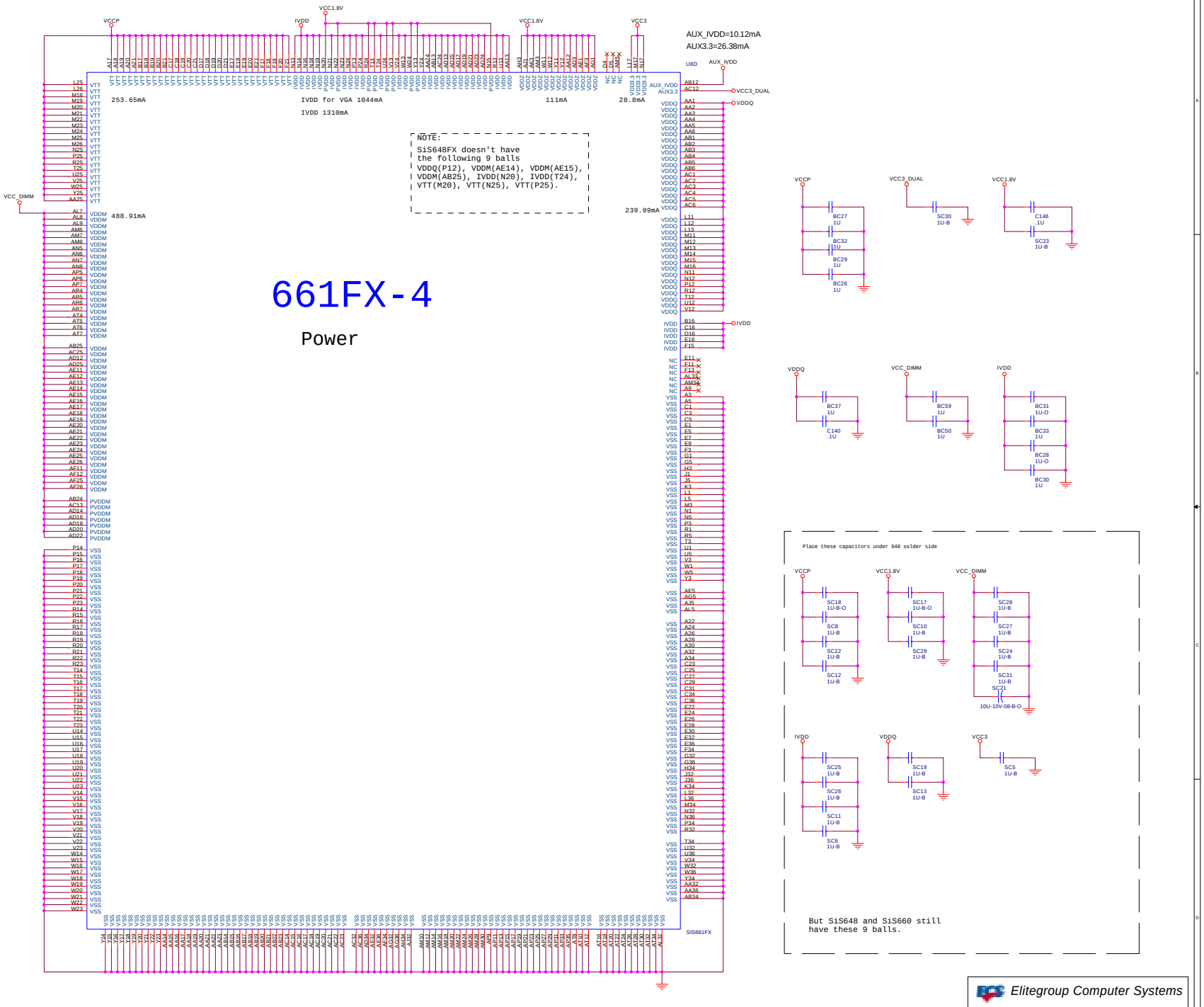

Elitegroup Computer Systems	
Title	661FX-M
Size: Custom	Document Number: SiS661FX-4 (Power)
Rev	A
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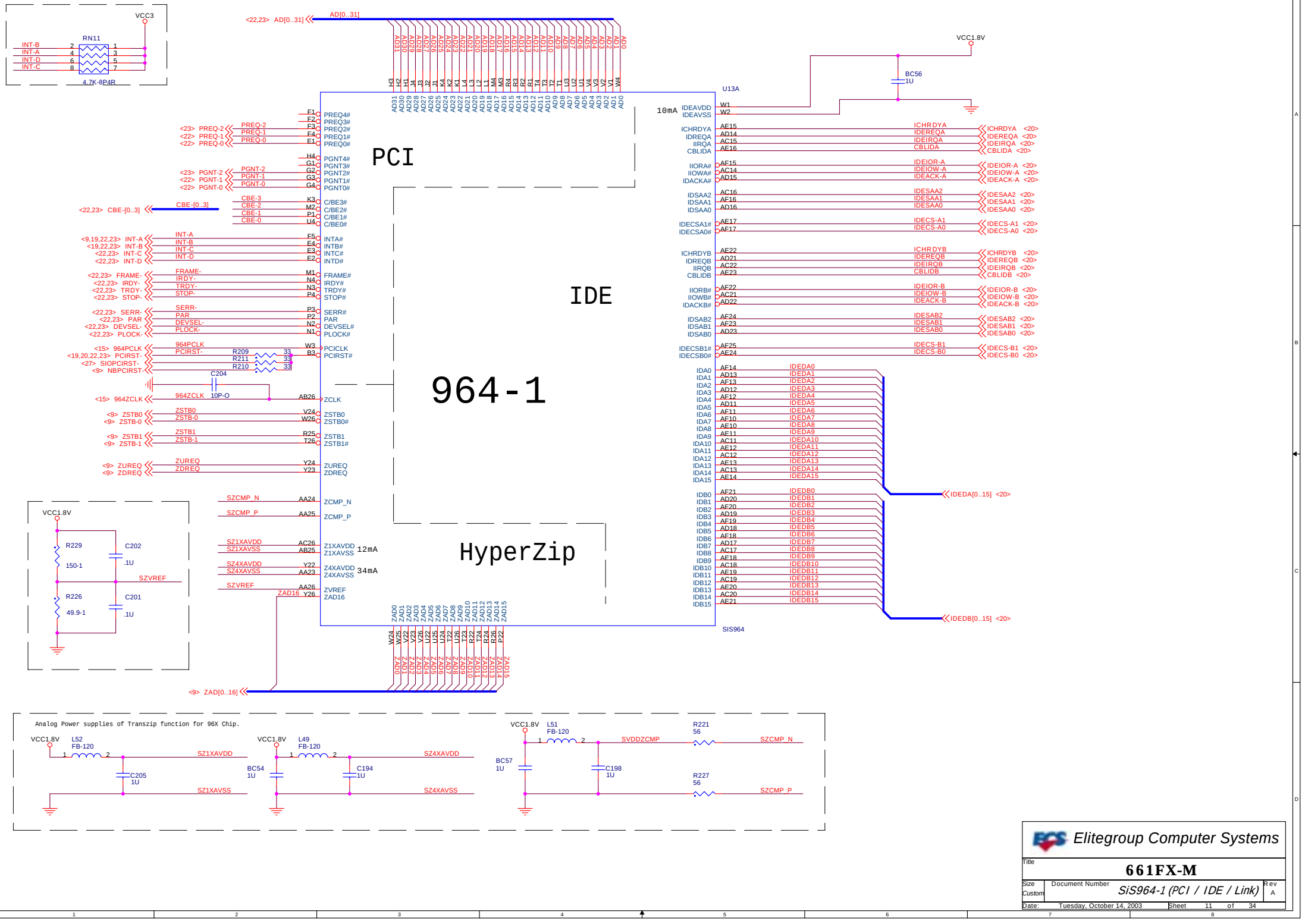

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: SiS964-1 (PCI / IDE / Link)	Rev: A
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Programable on-die pull-high strength for CPU_S:
(Infinite, 150, 110, 56 Ohm)

U13B

964-2

CPU_S
APIC
LPC
RTC
GPIO
AC97
ACPI /others
KBC /geyserville
MII
GPIO

SIS964

<5> INIT- — INIT# AB23
<5> A20M- — A20M# AB26
<5> SMI- — SMI# AE25
<5> INTR — INTR AC24
<5> NMI — NMI AD25
<5> IGNNE- — IGNNE# AD24
<5> FERR- — FERR# AE26
<5> STPCLK- — STPCLK# AB22
<5> CPUSLP- — CPUSLP# AC23

VCC3 — R233 10K — APICCK/LDTREQ# AF26
<5> PROCHOT- — APICD0/THERM2# AC25
<5> THERMTRIP- — R228 GPOFF FB-120 — APICD1/GPIOFF# AB24

<27> LAD[0..3] — LAD0 AC4, LAD1 AC3, LAD2 AE1, LAD3 AE1

<27> LFRAME- — LFRAME# AD3
<27> LDRQ- — LDRQ# AE2
<27> SIRQ — SIRQ AE2

OSC32KHI — OSC32KHI C2
OSC32KHO — OSC32KHO C1
<34> BATOK — BATOK D4
<15,34> SBPWRGD — PWROK D2
RTCVDD — C163 .1U — RTCVDD C3
RTCVSS D3

<15,16,17,23> SMBDAT — SMBDAT AB1 — GPIO20
<15,16,17,23> SMBCLK — SMBCLK AB2 — GPIO19

<23,25> SDATI0 — AC_SDIN0 E6
<23> SDATI1 — AC_SDIN1 B4
<23,25> SDATO — AC_SDOUT AB3
<23,25> SYNC — AC_SYNC AC1
<23,25> AC97_RST- — AC_RESET# B5
<23,25> BIT_CLK — AC_BIT_CLK AC2

<15> REFCLK1 — OSCI AD2
ENTEST D1
<34> SPKR — SPK AD1
<34> PWRBTN- — PWRBTN# D5
<19,22,23,27> PME- — PME# A7
<34> PSON- — PSON# D8
<9,34> AUXOK — AUXOK A3
<34> ACPILED — ACPILED B6
C167 .1U-O
GPIO13 B2
<34> GLED — GLED — GPIO14 A5
<28> KBDAT — KBDAT — GPIO15/KBDAT B8
<28> KBCLK — KBCLK — GPIO16/KBCLK A8
<28> PMDAT — PMDAT — GPIO17/PMDAT C8
<28> PMCLK — PMCLK — GPIO18/PMCLK D6

OSC25MHI D7 — MCLK25I
OSC25MHO C7 — MCLK25O
TXCLK D10 — TXCLK — TXCLK <24>
TXEN E10 — R346 22 — TXEN — TXEN <24>
TXD0 E11, TXD1 D12, TXD2 C12, TXD3 E13 — RN62 22-8P4R — TXD3 <24>, TXD1 <24>, TXD0 <24>, TXD2 <24>
NC34 D13, NC31 E14, NC32 C14, NC30 D15

RXCLK C13 — RXCLK — RXCLK <24>
RXDV A12 — RXDV — RXDV <24>
RXER A13 — RXER — RXER <24>
RXD0 B12, RXD1 A11, RXD2 B11, RXD3 C11 — RXD0 <24>, RXD1 <24>, RXD2 <24>, RXD3 <24>
NC36 A10, NC35 C10, NC38 A9, NC37 B9
NC33 A14

COL B14 — COL — COL <24>
CRS C15 — CRS — CRS <24>
MDC C9 — R348 22 — MDC — MDC <24>
MDIO E9 — R349 22 — MDIO — MDIO <24>
1mA MIIAVDD B7 — MIIAVDD — L43 FB-120 — SB1.8V
MIIAVSS A6 — MIIAVSS

GPIO0/SPDIF Y3
GPIO1/LDRQ1# AE3
GPIO2/THERM# Y4 — THERM- — THERM- <27>
GPIO3/EXTSMI# AA1 — RECOVERY- — RECOVERY- <34>
GPIO4/CLKRUN# AA2
GPIO5/PREQ5# AA3
GPIO6/PGNT5# AA4
GPIO7 A4 — GPIO7
GPIO8/RING C6 — RING — RING <30>
GPIO9/AC_SDIN2 C5 — PS2PWR_S5OFF — PS2PWR_S5OFF- <32>
GPIO10/AC_SDIN3 C4 — DDRVJ — DDRVJ <31>
GPIO11/OSC25M/STP_PCI# F6 — GPIO11
GPIO12/CPUSTP# E5 — CPUSTP-

OSC32KHO
OSC32KHI
R214 10M
Y5 X-32.768K-CY
C188 15P
C189 22P

SiS963, 964 GPIO 0~7 internal pull up

SiS963, 964 GPIO 9,10 internal pull down

Put closed to 96X CHIP
MCLK25O
MCLK25I
R347
Y6 R_OPEN 25M
C290 15P
C291 20P

VCC3_DUAL
PME- — R188 4.7K

NEED NOT to place close to 964

VCC3
SMBDAT
SMBCLK
CPUSTP-
RN28 4.7K-8P4R

VCC3_DUAL
DELUXE
R345 4.7K
GPIO11
DISTY
R231 4.7K-O

VCC3
R191 4.7K
GPIO7
R190 4.7K-O

Elitegroup Computer Systems

Title: 661FX-M

Size: Custom | Document Number: SIS964-2 (Misc. Signals) | Rev: A

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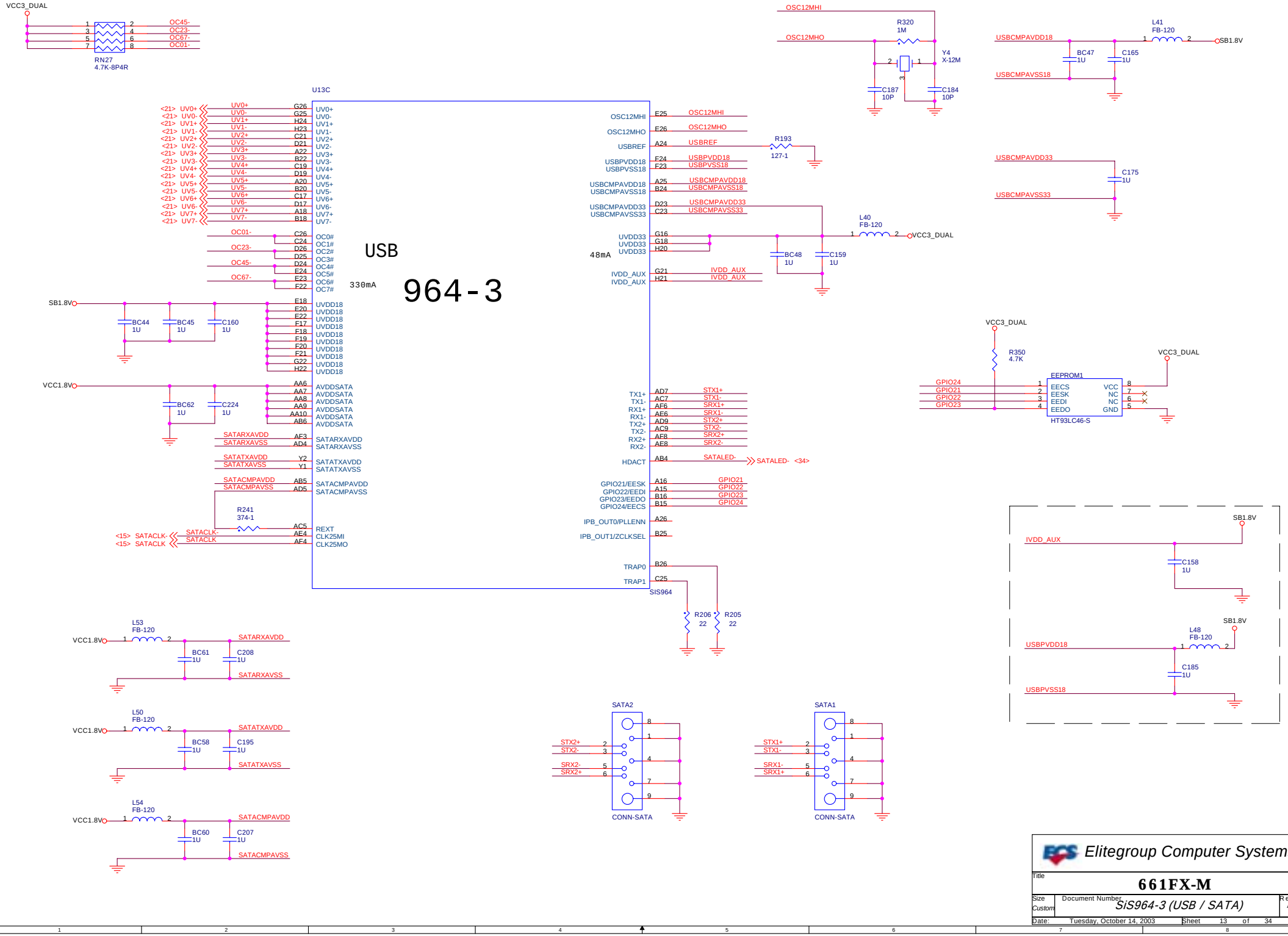

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: SiS964-3 (USB / SATA)	Rev A
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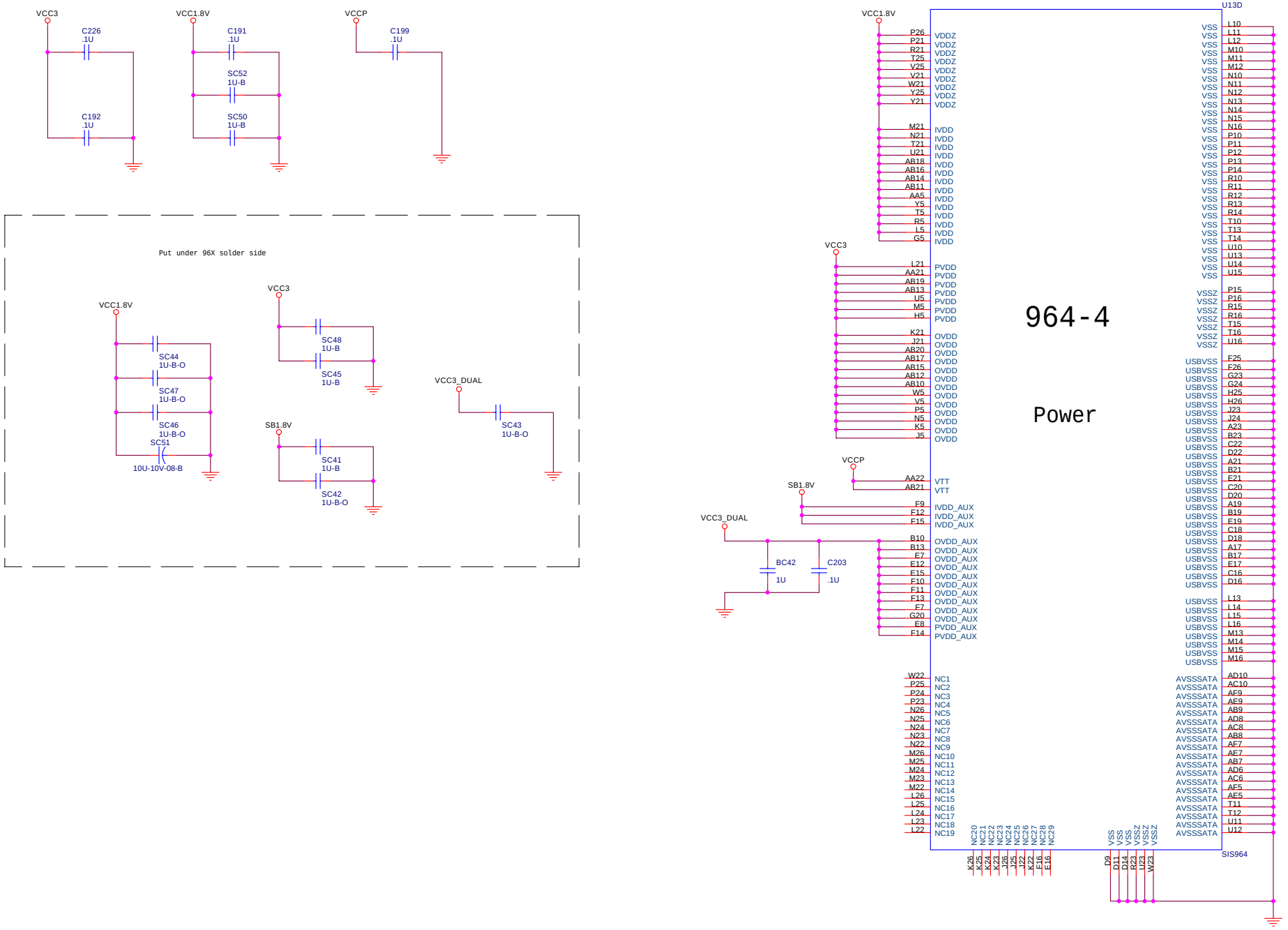
VCC3
C226
.1U
C192
.1U
VCC1.8V
C191
.1U
SC52
1U-B
SC50
1U-B
VCCP
C199
.1U
Put under 96X solder side
VCC1.8V
SC44
1U-B-O
SC47
1U-B-O
SC46
1U-B-O
SC51
10U-10V-08-B
VCC3
SC48
1U-B
SC45
1U-B
SB1.8V
SC41
1U-B
SC42
1U-B-O
VCC3_DUAL
SC43
1U-B-O
U13D
964-4
Power
SIS964
BC42
1U
C203
.1U
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Size
Custom
Document Number
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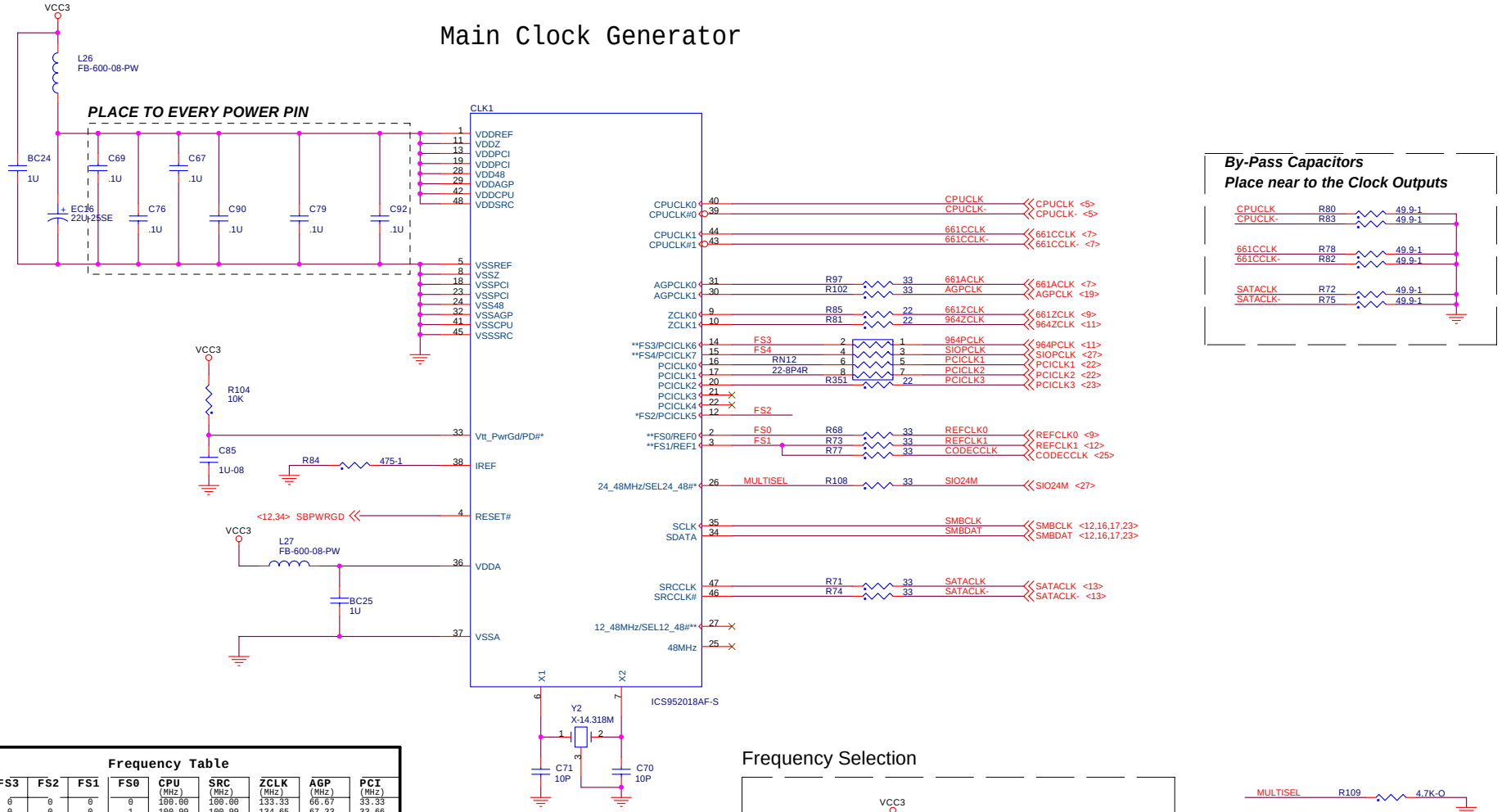
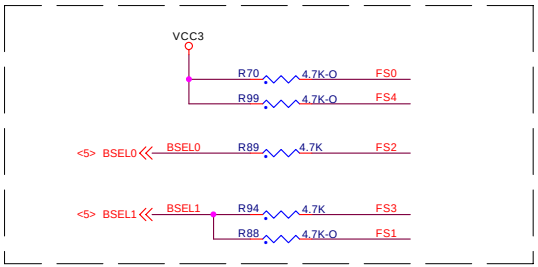
Main Clock Generator



Frequency Selection



FSB400

FSB533

FSB800

Frequency Table

FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SRC (MHz)	ZCLK (MHz)	AGP (MHz)	PCI (MHz)
0	0	0	0	0	100.00	100.00	133.33	66.67	33.33
0	0	0	0	1	100.99	100.99	134.65	67.33	33.66
0	0	0	1	0	103.00	103.00	137.33	68.67	34.33
0	0	0	1	1	100.00	100.00	133.33	66.67	33.33
0	0	1	0	0	133.33	100.00	133.33	66.66	33.33
0	0	1	0	1	134.65	100.99	134.65	67.32	33.66
0	0	1	1	0	137.33	103.00	137.33	68.66	34.33
0	0	1	1	1	133.33	100.00	133.33	66.67	33.33
0	1	0	0	0	200.00	100.00	133.33	66.67	33.33
0	1	0	0	1	201.98	100.99	134.65	67.33	33.66
0	1	0	1	0	206.00	103.00	137.33	68.67	34.33
0	1	0	1	1	200.00	100.00	133.33	66.67	33.33
0	1	1	0	0	166.66	125.00	125.00	66.66	33.33
0	1	1	0	1	168.31	126.23	126.23	67.32	33.66
0	1	1	1	0	171.66	128.74	128.74	68.66	34.33
0	1	1	1	1	166.66	125.00	125.00	66.66	33.33

Frequency Table

FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SRC (MHz)	ZCLK (MHz)	AGP (MHz)	PCI (MHz)
1	0	0	0	0	105.00	105.00	140.00	70.00	35.00
1	0	0	0	1	107.00	107.00	142.67	71.33	35.67
1	0	0	1	0	109.00	109.00	145.33	72.67	36.33
1	0	0	1	1	110.00	110.00	146.67	73.33	36.67
1	0	1	0	0	140.00	105.00	140.00	70.00	35.00
1	0	1	0	1	142.66	107.00	142.67	71.33	35.67
1	0	1	1	0	145.33	109.00	145.33	72.66	36.33
1	0	1	1	1	146.66	110.00	146.66	73.33	36.67
1	1	0	0	0	210.00	105.00	140.00	70.00	35.00
1	1	0	0	1	214.00	107.00	142.67	71.33	35.67
1	1	0	1	0	218.00	109.00	145.33	72.67	36.33
1	1	0	1	1	220.00	110.00	146.67	73.33	36.67
1	1	1	0	0	266.66	100.00	133.33	66.67	33.33
1	1	1	0	1	269.33	101.00	134.67	67.33	33.67
1	1	1	1	0	274.66	103.00	137.33	68.67	34.33
1	1	1	1	1	266.66	100.00	133.33	66.67	33.33

Clock Generator Table / Hardware Traping	FS4 Low	FS3 BSEL1	FS2 BSEL0	FS1 Low	FS0 Low
CPU=100 (BSEL[1:0]=00)	0	0	0	0	0
CPU=133 (BSEL[1:0]=01)	0	0	1	0	0
CPU=200 (BSEL[1:0]=10)	0	1	0	0	0

Elitegroup Computer Systems

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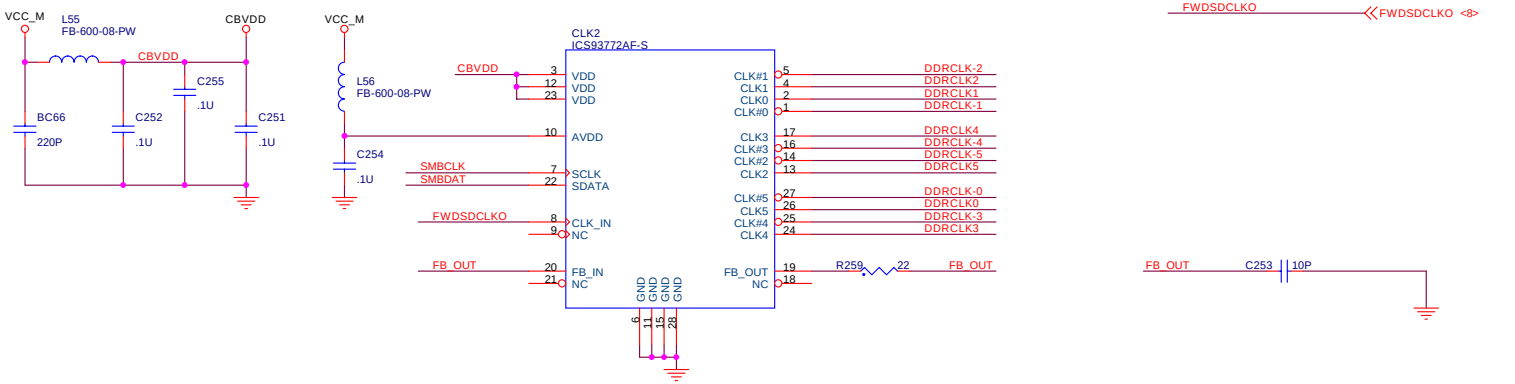
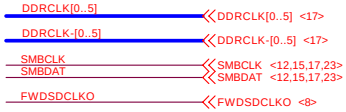
Clock Buffer (DDR)

(5 OPTIONS)
1: (ICS) ICS93716
2: (Winbond)
3: (ICWorks)
4: (IMI)
5: (AMI)

By-Pass Capacitors
Place near to the Clock Buffer





Elitegroup Computer Systems

Title: 661FX-M

Size: Custom | Document Number: Clock Buffer | Rev: A

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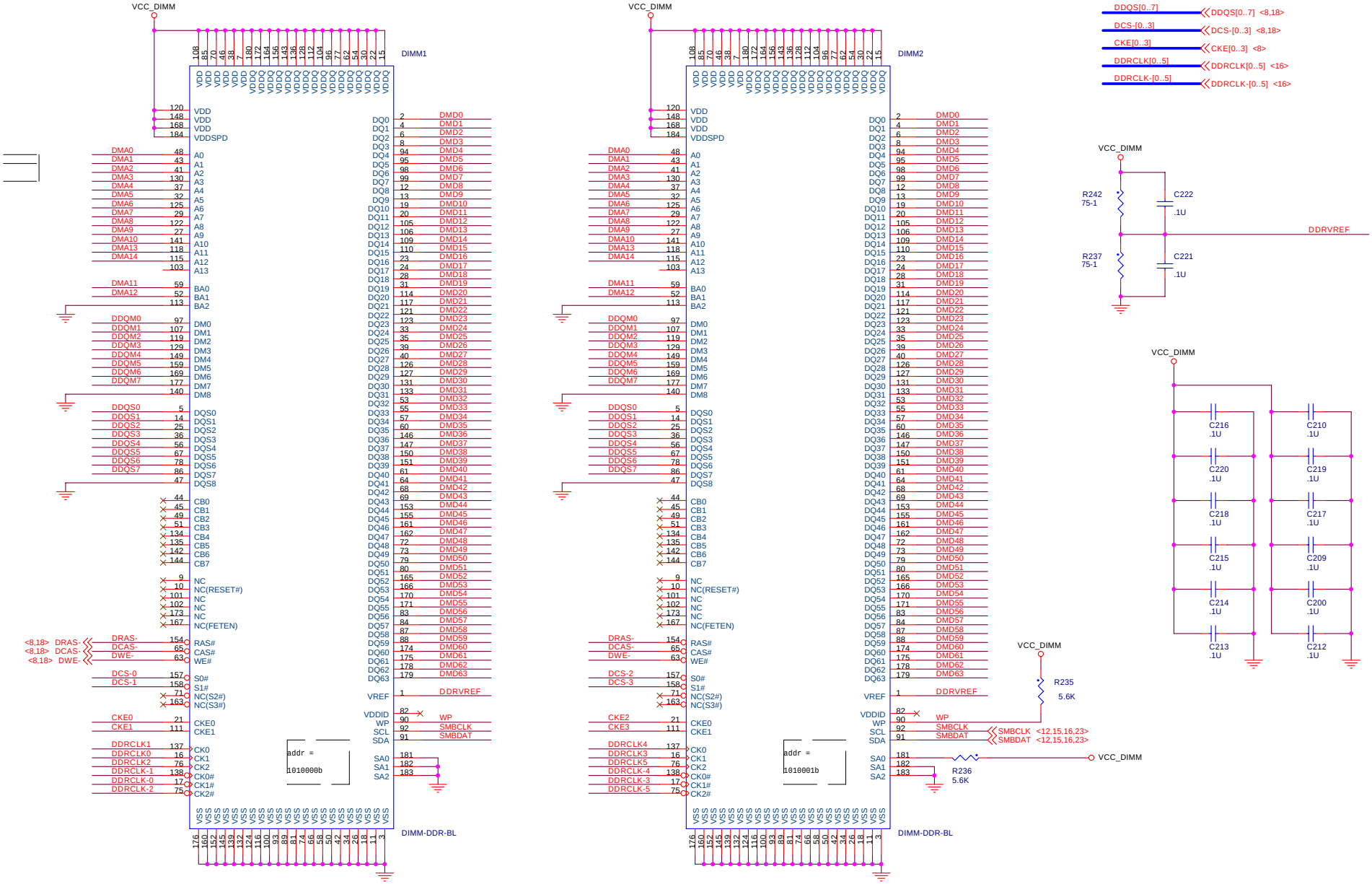
NOTE:

VDDID IS A TRAP ON THE DIMM
MODULE TO INDICATE:

VDDID	REQUIRED POWER
OPEN	VDD=VDDQ
GND	VDD!=VDDQ

MEMORY MUX TABLE:

SDR	DDR
CS0	CS0
CS1	CS1
CS2	CS2
CS3	CS3
CS4	CS4
CS5	CS5
CSB0	DQS0
CSB1	DQS1
CSB2	DQS2
CSB3	DQS3
CSB4	DQS4
CSB5	DQS5
CSB6	DQS6
CSB7	DQS7



Elitegroup Computer Systems		
Title	661FX-M	
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SSTL-2 Termination Resistors

	SDR		DDR		
		Rs		Rs	Rtt
MD/DQM(/DQS)	LV-CMOS	0/10/-	SSTL-2	10	33
MA/Control	LV-CMOS	10	SSTL-2	0	33
CS	LV-CMOS	0	SSTL-2	0	47
CKE	OD 3.3V		OD 2.5V		

DMD[0..63] → DMD[0..63] <8,17>
DMA[0..14] → DMA[0..14] <8,17>
DDQM[0..7] → DDQM[0..7] <8,17>
DDQS[0..7] → DDQS[0..7] <8,17>
DCS-[0..3] → DCS-[0..3] <8,17>

DDR_VTT

RN30 56-8P4R: DMD1, DMD5, DMD0, DMD4
RN29 56-8P4R: DMD6, DMD2, DDQS0, DDQM0
RN42 56-8P4R: DMD9, DMD8, DMD3, DMD7
RN41 56-8P4R: DDQM1, DDQS1, DMD13, DMD12
RN40 56-8P4R: DMD11, DMD10, DMD15, DMD14
RN37 56-8P4R: DMA7, DMD22, DMD18, DMA9
RN39 56-8P4R: DMD17, DMA14, DMD16, DMD20
RN36 56-8P4R: DMA5, DMD19, DMD23, DMA8
RN33 56-8P4R: DMD26, DMD27, DMD30, DMA3
RN34 56-8P4R: DDQM3, DMA4, DDQS3, DMD25

RN52 56-8P4R: DMD34, DMD37, DDQS4, DMD33
RN51 56-8P4R: DMD39, DMA11, DMD38, DDQM4
<8,17> DRAS- → DRAS-
RN50 56-8P4R: DRAS-, DMD44, DMD40, DMD35
RN46 56-8P4R: DMD42, DMD46, DDQS5, DDQM5
RN49 56-8P4R: DCS-0, DMD41, DMD45, DWE-
<8,17> DWE- → DWE-
RN45 56-8P4R: DMD52, DMD48, DMD47, DMD43
RN44 56-8P4R: DMD50, DDQS6, DMD54, DDQM6
RN48 56-8P4R: DMD56, DMD60, DMD51, DMD55
RN43 56-8P4R: DMD62, DDQM7, DMD57, DMD61
RN53 56-8P4R: DMD59, DMD63, DMD58, DDQS7
RN47 56-8P4R: DCS-3, DCS-1, DCS-2, DCAS-
<8,17> DCAS- → DCAS-

DDR_VTT

RN32 56-8P4R: DMA0, DMA1, DMD31, DMA2
RN35 56-8P4R: DMD29, DMD28, DMA6, DMD24
RN31 56-8P4R: DMD36, DMD32, DMA12, DMA10
RN38 56-8P4R: DDQM2, DMA13, DMD21, DDQS2

R250 56: DMD49
R249 56: DMD53

DECOUPLING CAPACITOR FOR SSTL-2 END TERMIANTION VTT ISLAND
0603 Package placed within 200mils of VTT Termination R-packs

DDR_VTT

C248 .1U, C247 .1U, C246 .1U
C244 .1U, C243 .1U, C242 .1U
C240 .1U, C239 .1U, C238 .1U
C236 .1U, C235 .1U, C234 .1U

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: DDR Termination	Rev: A
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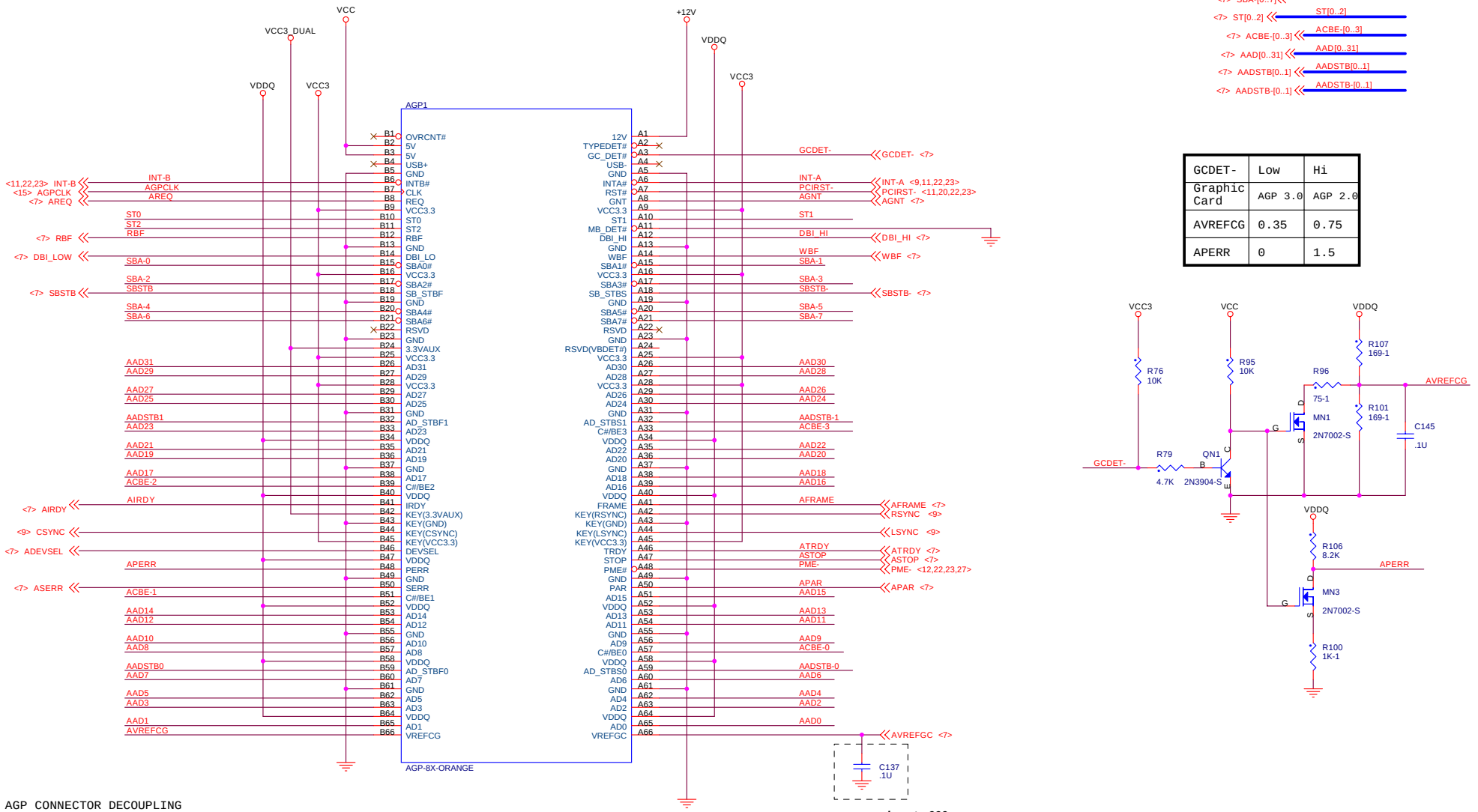
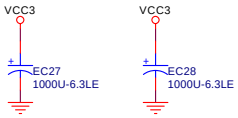


GCDET-	Low	Hi
Graphic Card	AGP 3.0	AGP 2.0
AVREFCG	0.35	0.75
APERR	0	1.5

AGP CONNECTOR DECOUPLING

put CAP close to AGP slot each POWER PIN

close to 660

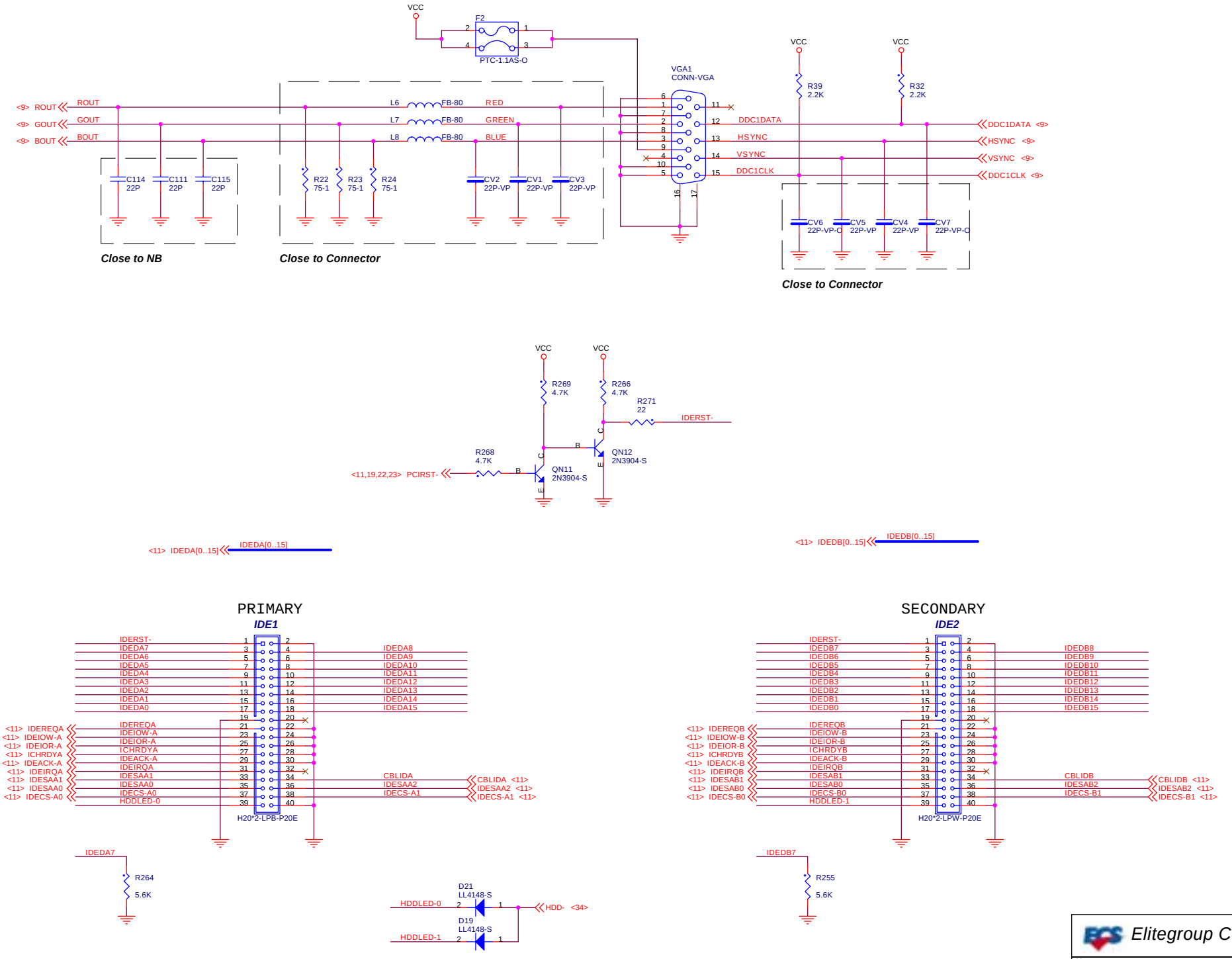


Elitegroup Computer Systems

Title: **661FX-M**

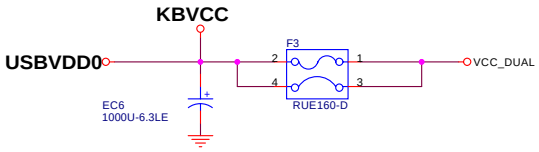
Size: Custom | Document Number: *AGP Slot* | Rev: A

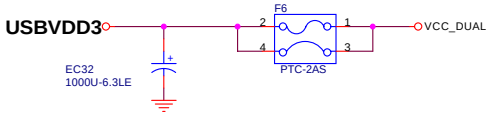
Date: Tuesday, October 14, 2003 | Sheet 19 of 34

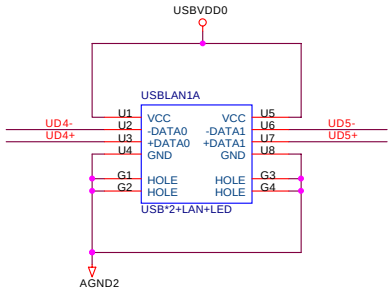


Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: VGA / IDE	Rev: A
Date: Monday, December 08, 2003	Sheet 20 of 34	

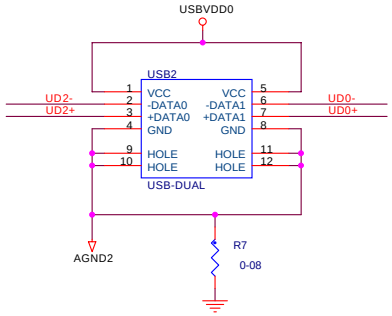


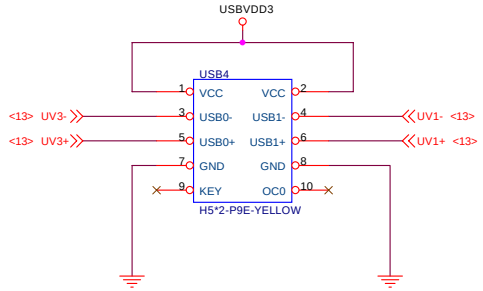


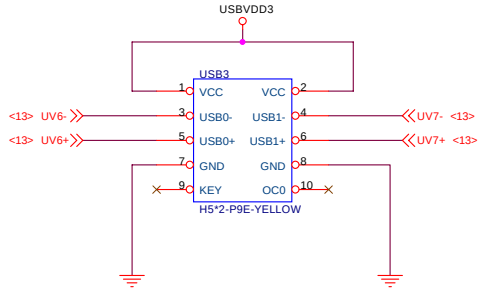


Close to USBLAN1 connector

Close to USB1394A_J1 connector

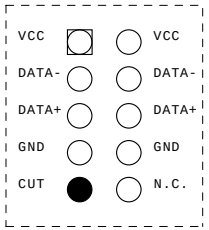




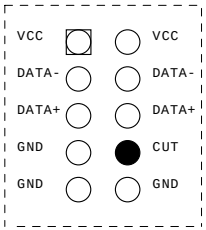


	USB port
Control 0	0, 3, 6
Control 1	1, 4, 7
Control 2	2, 5

Intel USB Header



ACER USB Header



Elitegroup Computer Systems

Title: 661FX-M

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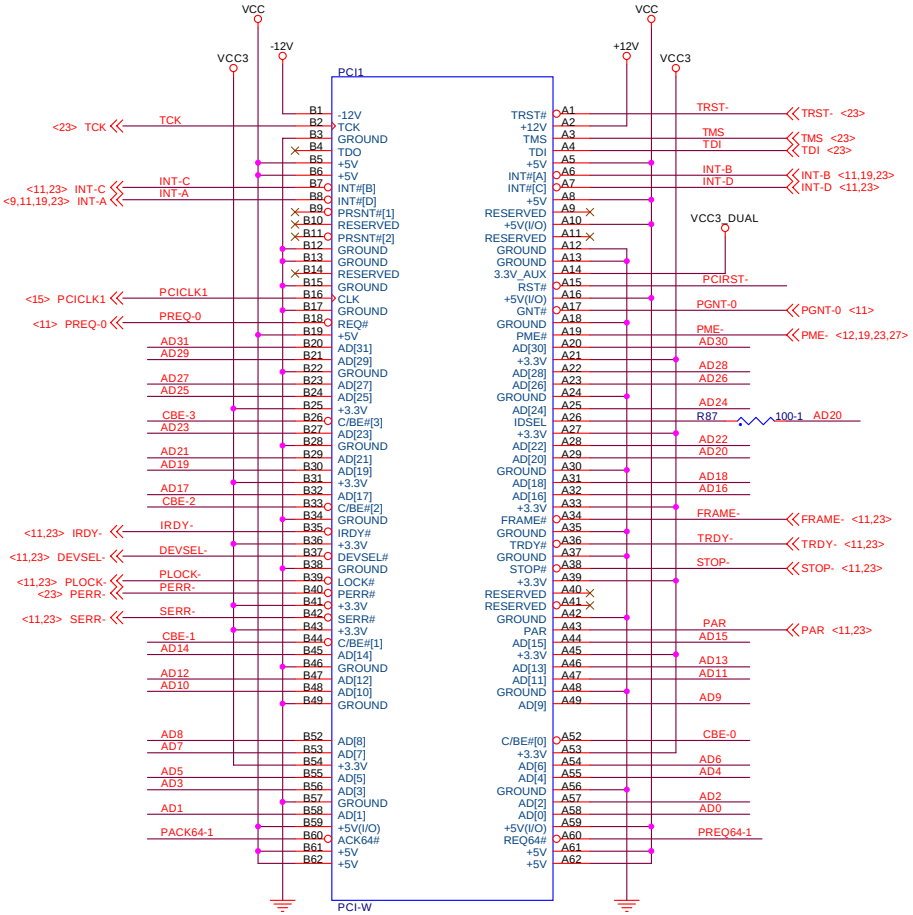
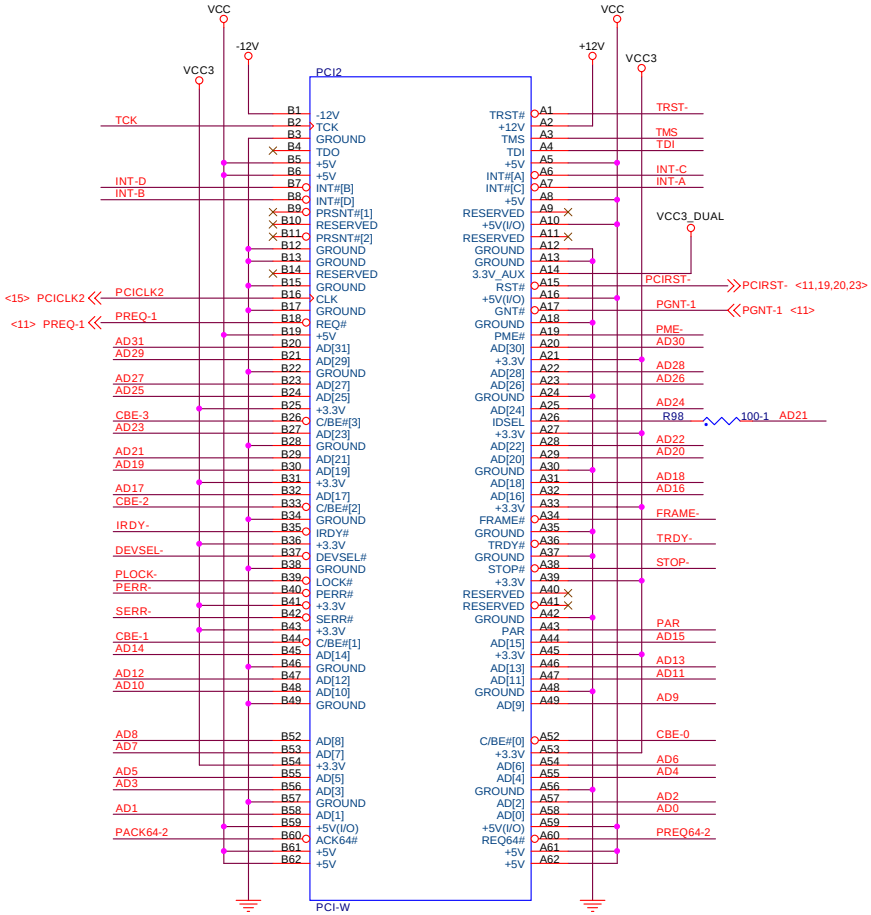
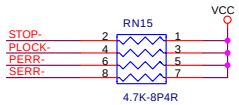
PCI Slot 1 & 2

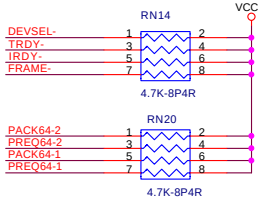


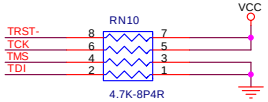
IDSEL=AD20
INT[B,C,D,A]

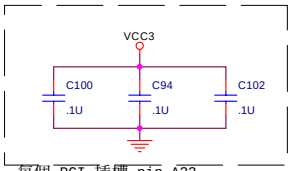


IDSEL=AD21
INT[C,D,A,B]









每個 PCI 插槽 pin A33
各放一顆

Elitegroup Computer Systems

Title	661FX-M	
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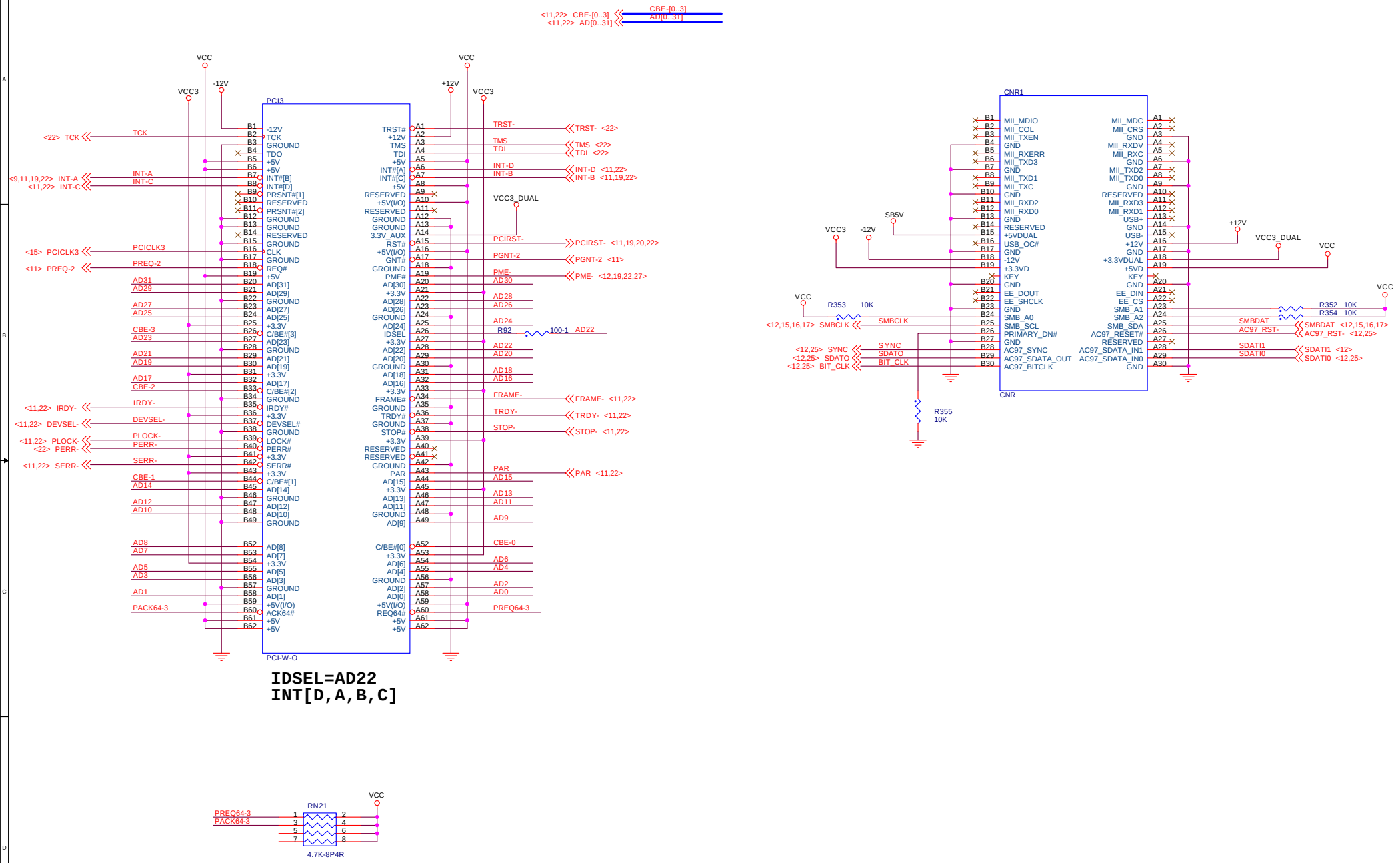

Elitegroup Computer Systems		
Title	661FX-M	
Size: Custom	Document Number: PCI Slot3	Rev: A
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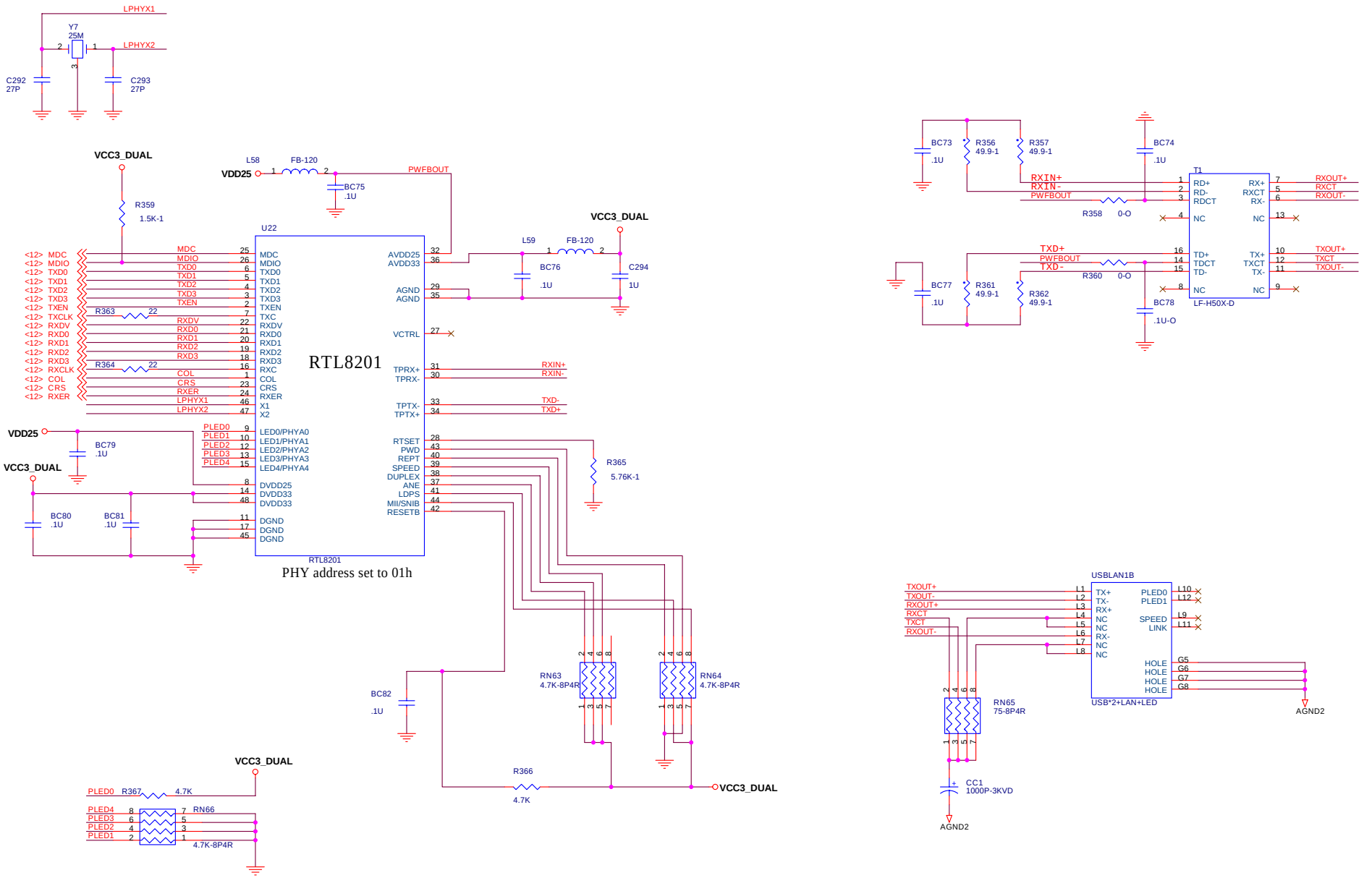

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: LAN PHY	Rev: A
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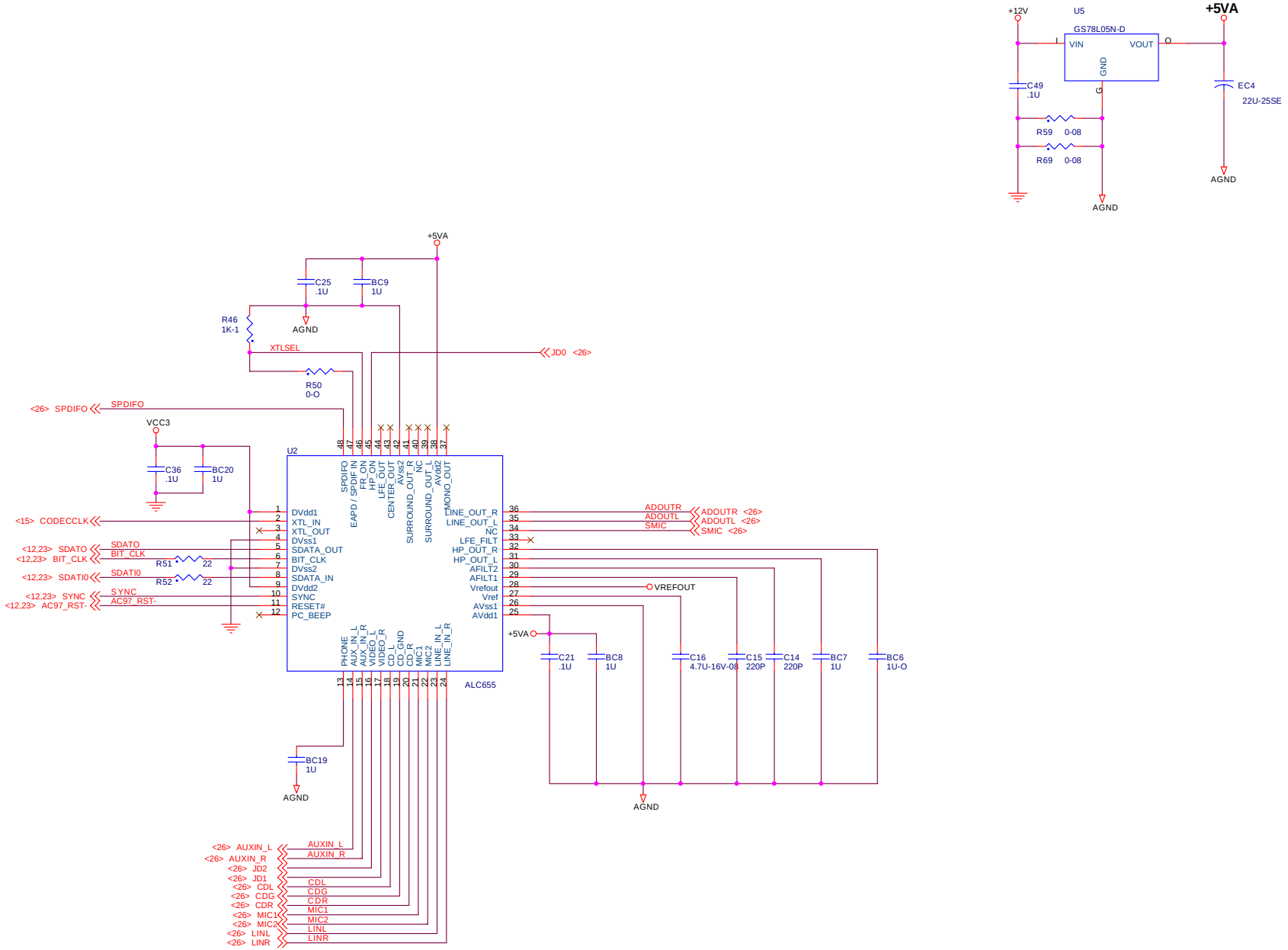

Elitegroup Computer Systems

Title: 661FX-M

Size: Custom | Document Number: Audio Codec | Rev: A

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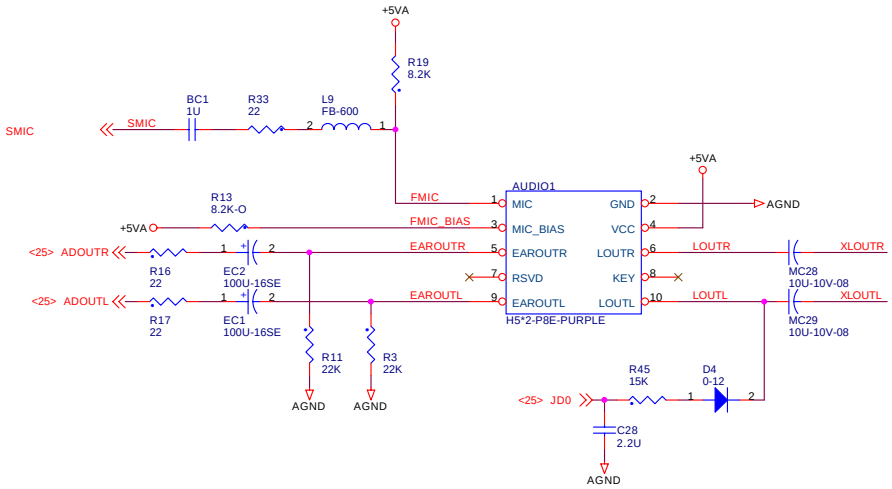

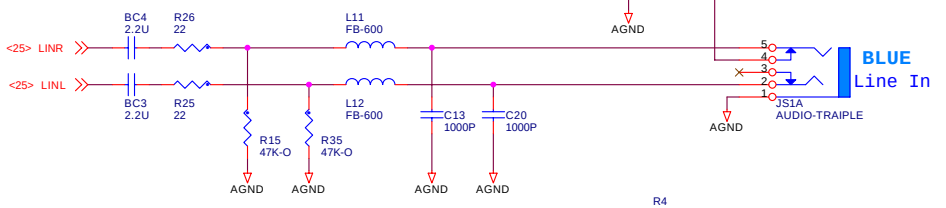

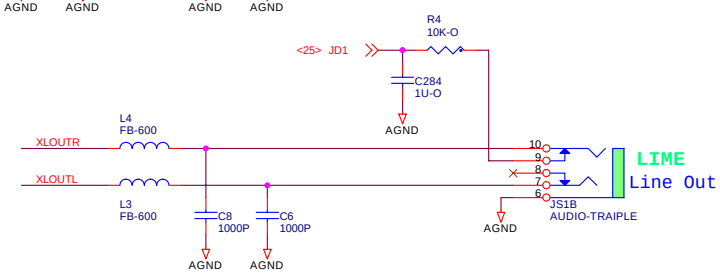

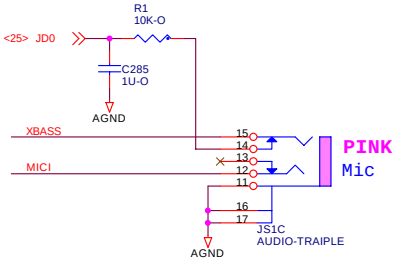

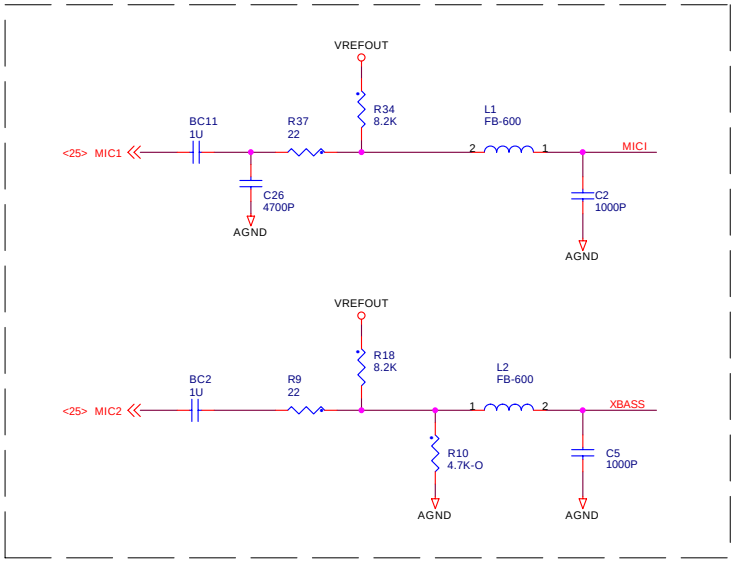

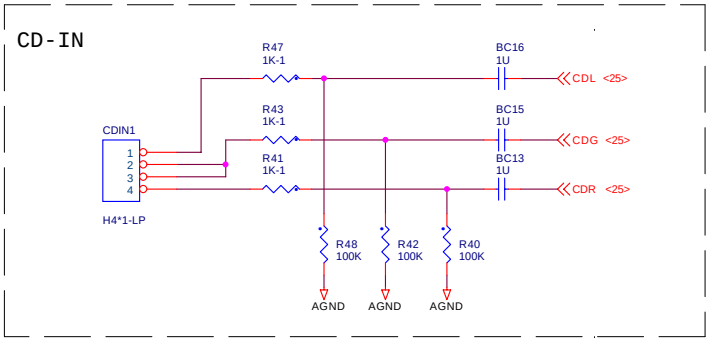

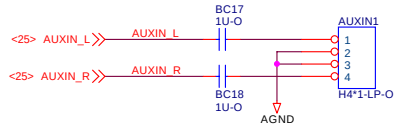

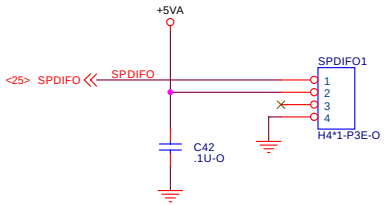

Elitegroup Computer Systems

Title: 661FX-M

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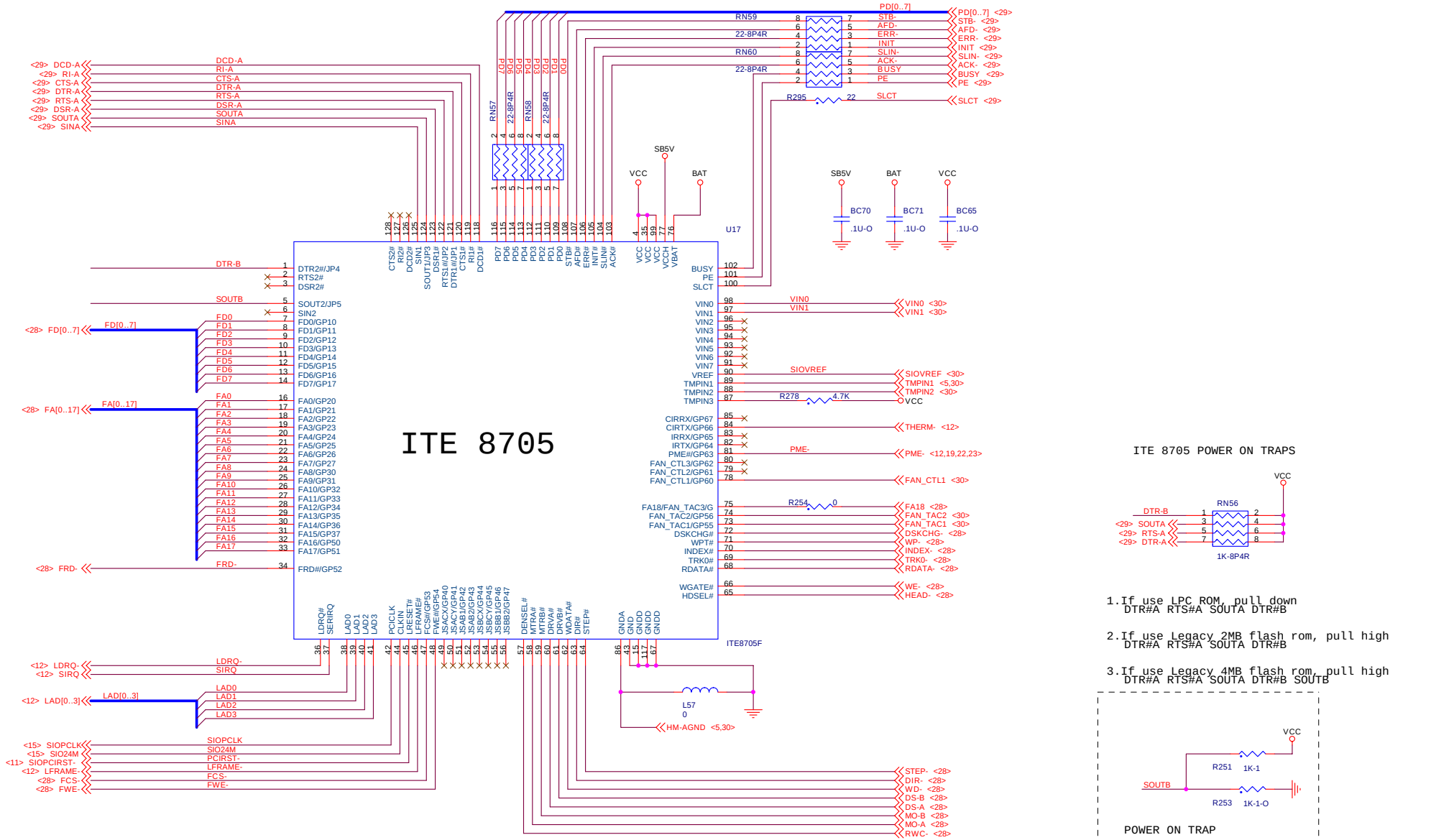

ITE 8705 POWER ON TRAPS

1.If use LPC ROM, pull down
DTR#A RTS#A SOUTA DTR#B

2.If use Legacy 2MB flash rom, pull high
DTR#A RTS#A SOUTA DTR#B

3.If use Legacy 4MB flash rom, pull high
DTR#A RTS#A SOUTA DTR#B SOUTB

POWER ON TRAP

SOUTB

HIGH: 4M FLASH ROM ENABLE
(PIN 75 IS FA18)

LOW : PIN 75 IS FAN_TAC3

Elitegroup Computer Systems

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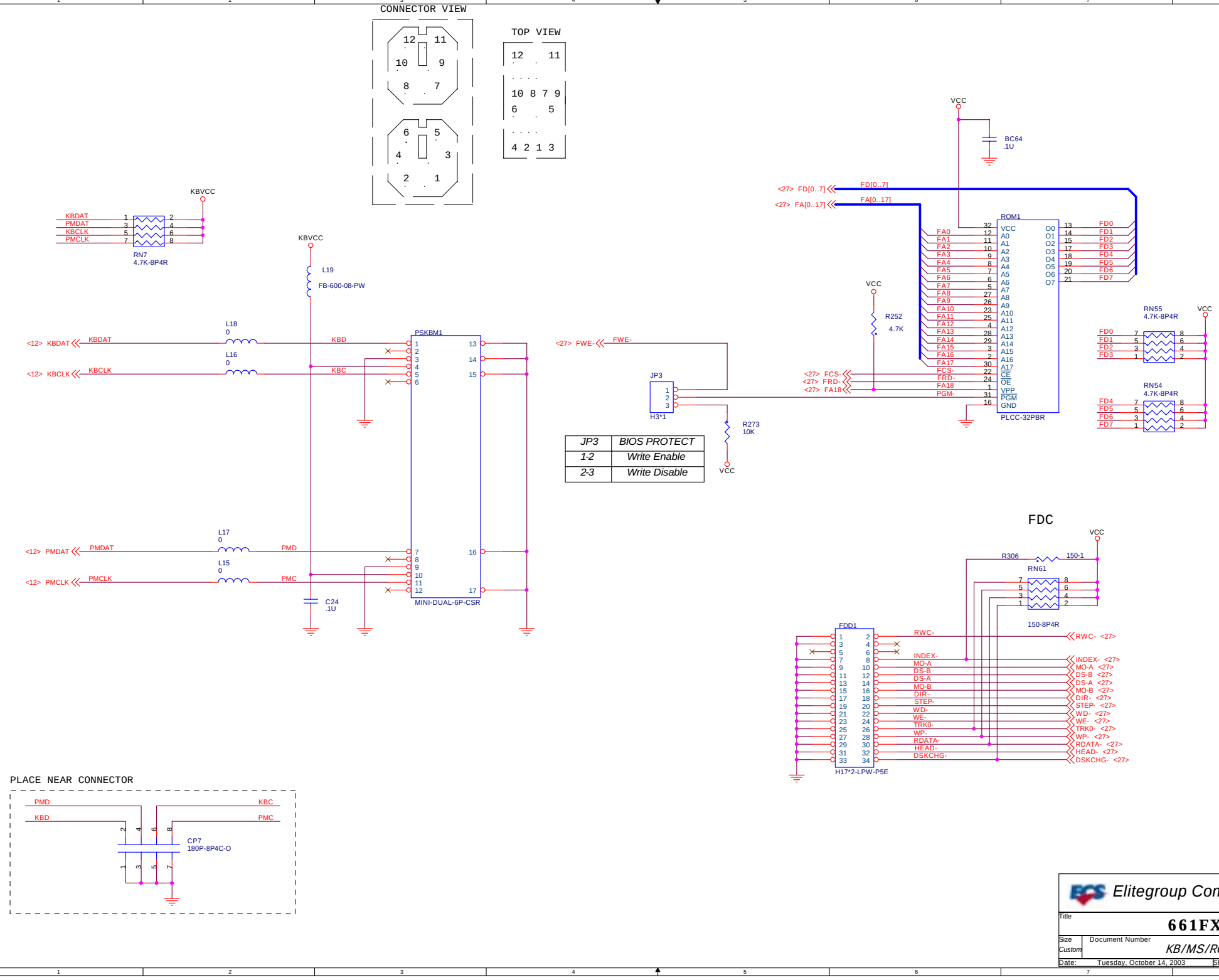

JP3	BIOS PROTECT
1-2	Write Enable
2-3	Write Disable

Elitegroup Computer Systems

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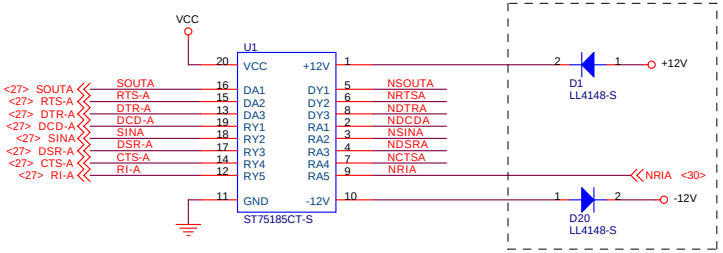
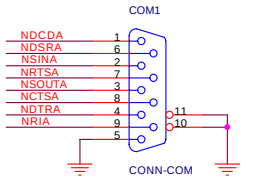
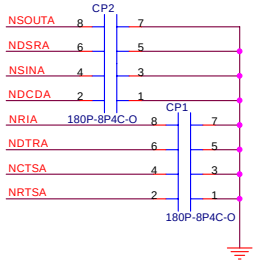
COM

close to IC

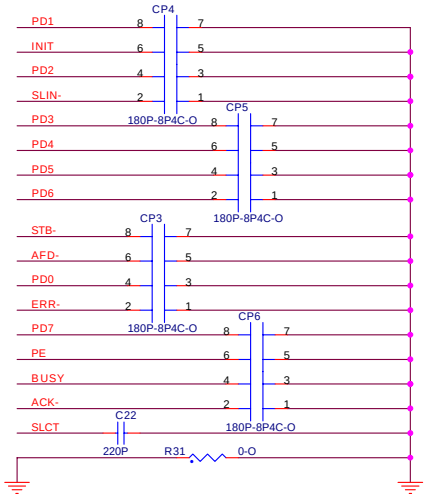


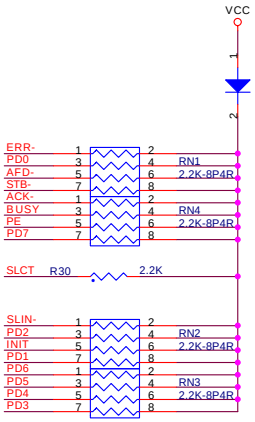
COM1 USE CONNECTOR

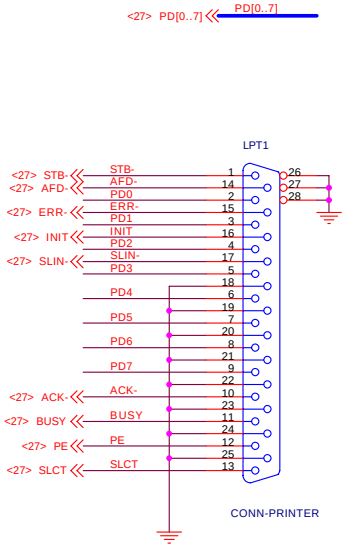


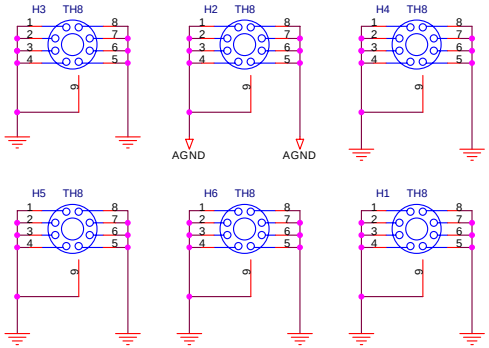


PRT









Elitegroup Computer Systems

Title	**661FX-M**	
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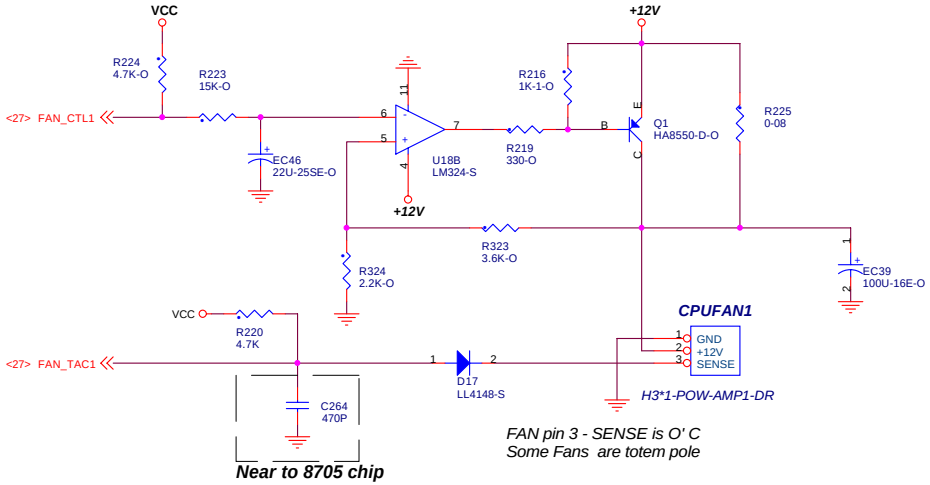
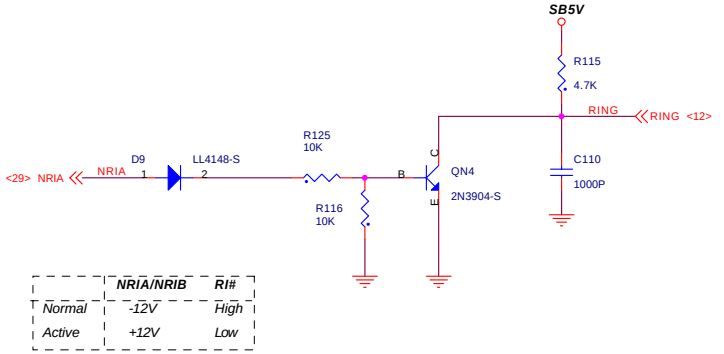
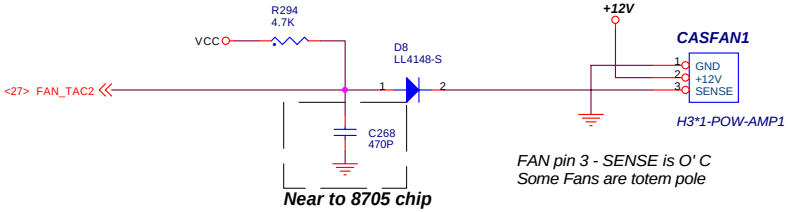
Layout :

Power Signals : CPUFAN, CASEFAN, PWRFAN trace width should > 20 mil with current 200 mA .



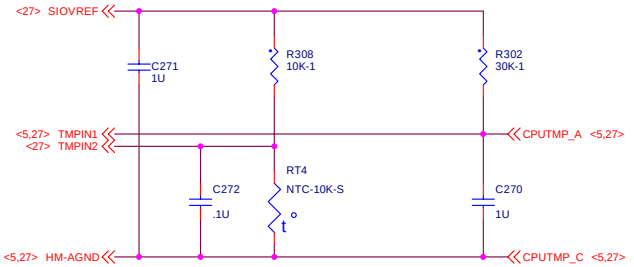


	NRIA/NRIB	RI#
Normal	-12V	High
Active	+12V	Low

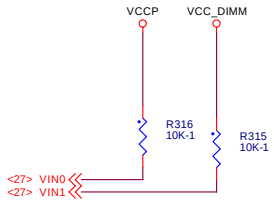


Temperature Monitor

Choosing method of measuring temperature by either thermistor or diode



Voltage Monitor



Elitegroup Computer Systems

Title: **661FX-M**

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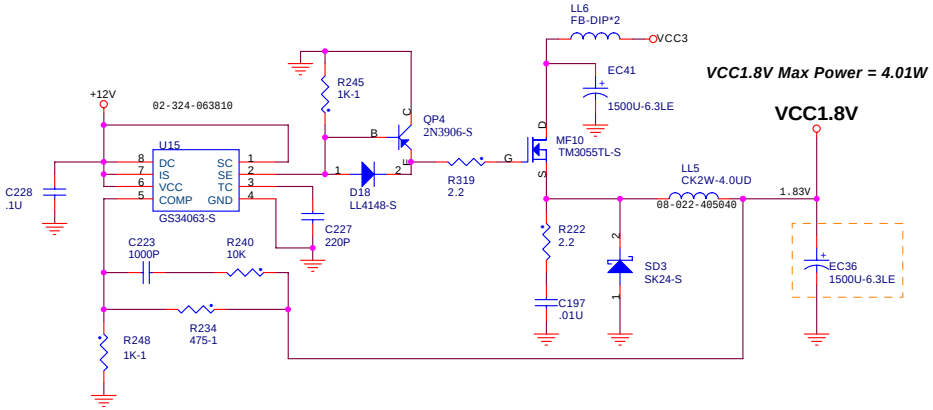
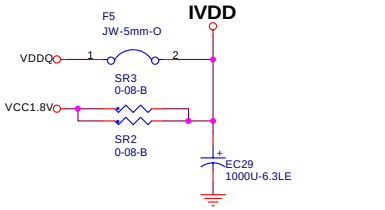
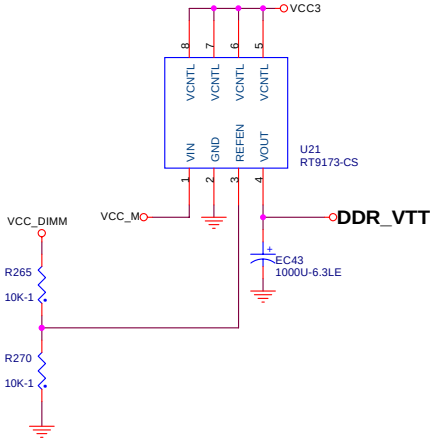
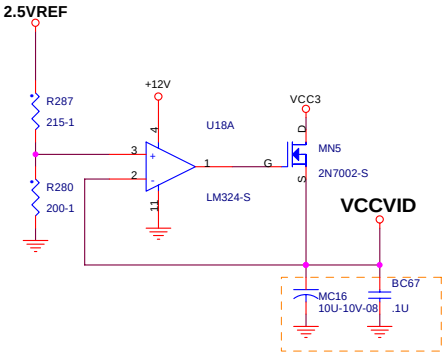


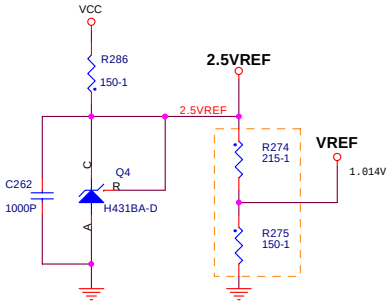




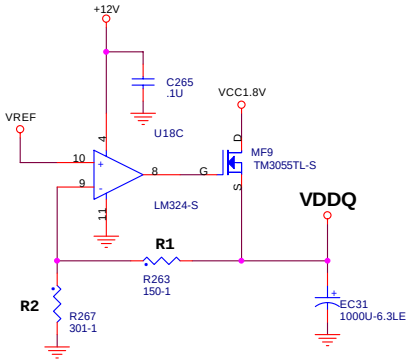
	IVDD	VCC1.8V	
648	1.8V	1.8V	short two power plane, one regulator
648FX	1.9V	1.9V	short two power plane, one regulator
661FX	1.8V	1.8V	short two power plane, one regulator or two regulator
661FXLV	1.5V	1.8V	two regulator

	AUX_IVDD	SB1.8V	
648	1.8V	1.8V	short two power plane, one regulator
648FX	1.9V	1.9V	short two power plane, one regulator
661FX	1.8V	1.8V	short two power plane, one regulator
661FXLV	1.5V	1.8V	two regulator

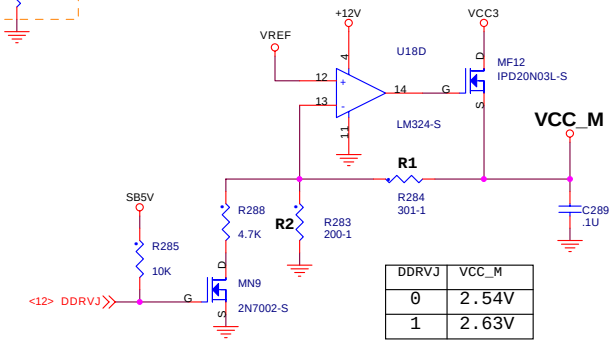




VCC1.5V Max Power = 0.3*(0.289+2.35)=0.7917W



Vo=VREF(1 + R1/R2)



DDRVJ	VCC_M
0	2.54V
1	2.63V

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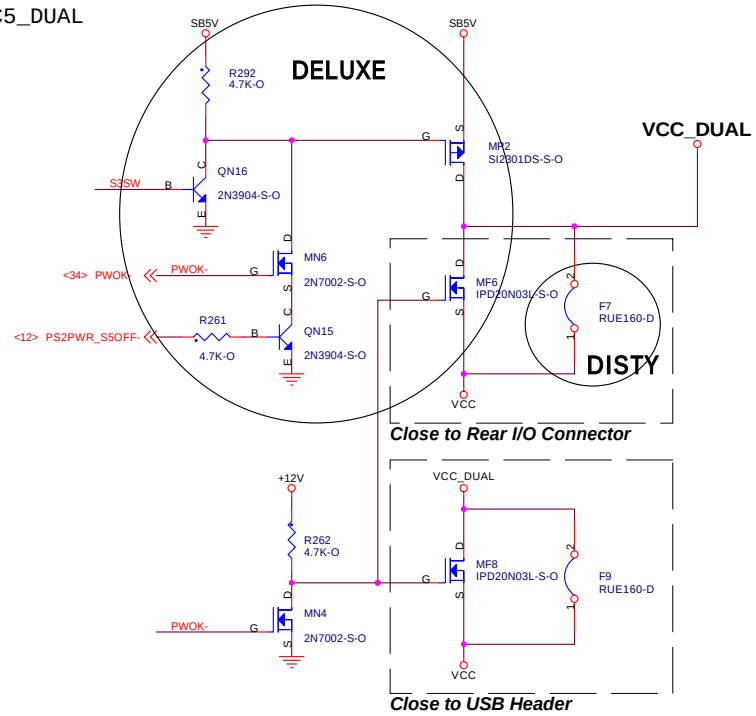
AUTO VOLTAGE SWITCH FOR ACPI STATE 3

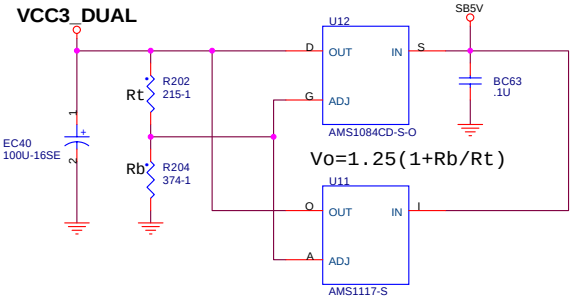
1.IN S0,S1
THIS CIRCUIT PASSES THE NORMAL POWER

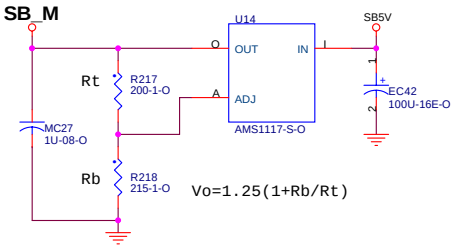
2.IN S3,S4,S5
THIS CIRCUIT PASSES THE STANDBY POWER

NOTE:
BECAUSE OF THE MAXIMUM CURRENT FROM POWER SUPPLY IS ONLY ABOUT 750~1000mA SO IF YOU WANT TO SUPPORT WAKE UP FROM S3 BY USB, YOU MUST HAVE A POWER SUPPLY WITH LARGER POWER.(ADDITIONAL 500mA PER USB PORT)

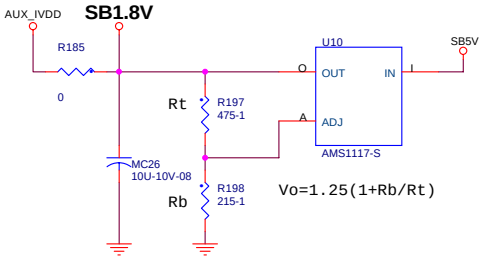
VCC3_DUAL & VCC5_DUAL

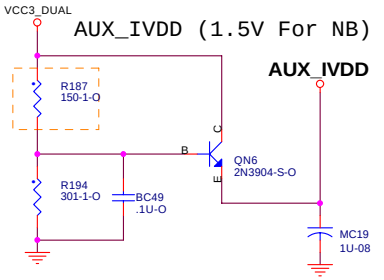


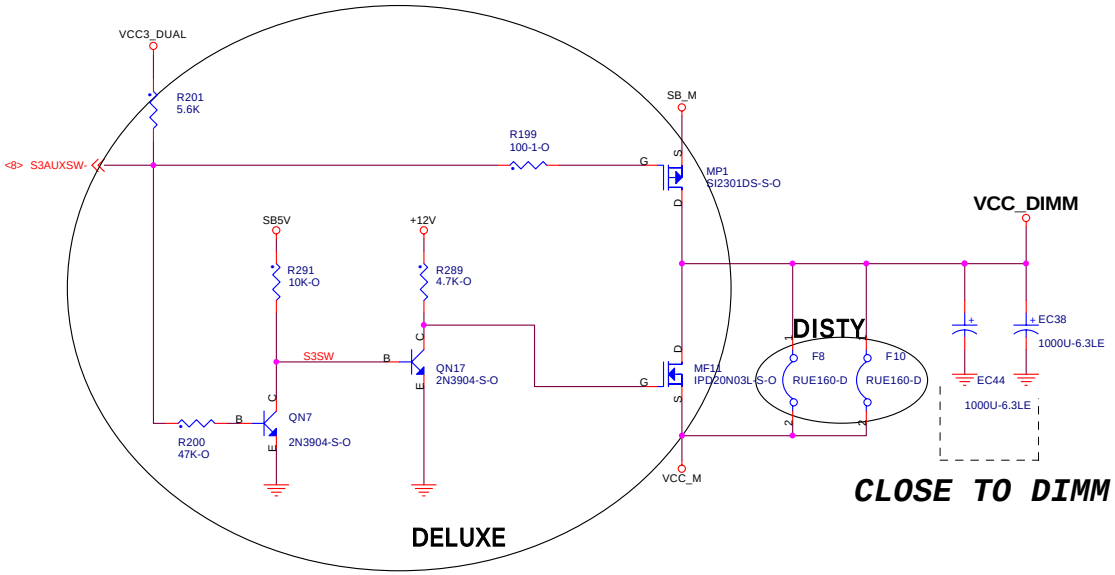




SB1.8V (For SB) 450mA







Intergroup Computer Systems		
Title	661FX-M	
Size: Custom	Document Number: Dual 5V&3V, STR	Rev: A
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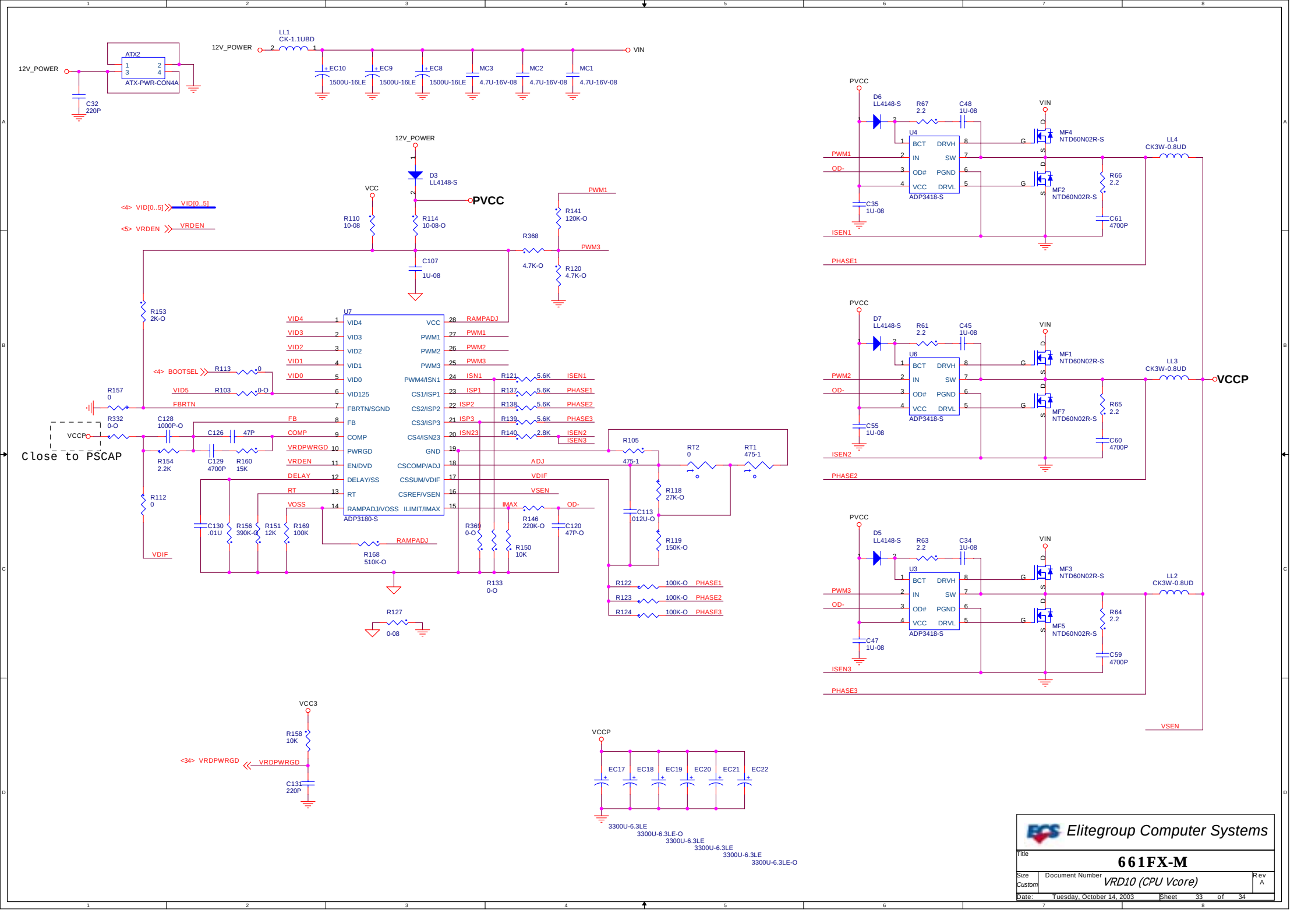

Elitegroup Computer Systems

Title	661FX-M	
Size: Custom	Document Number: VRD10 (CPU Vcore)	Rev: A
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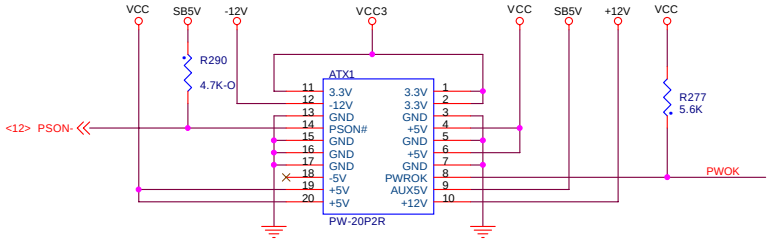
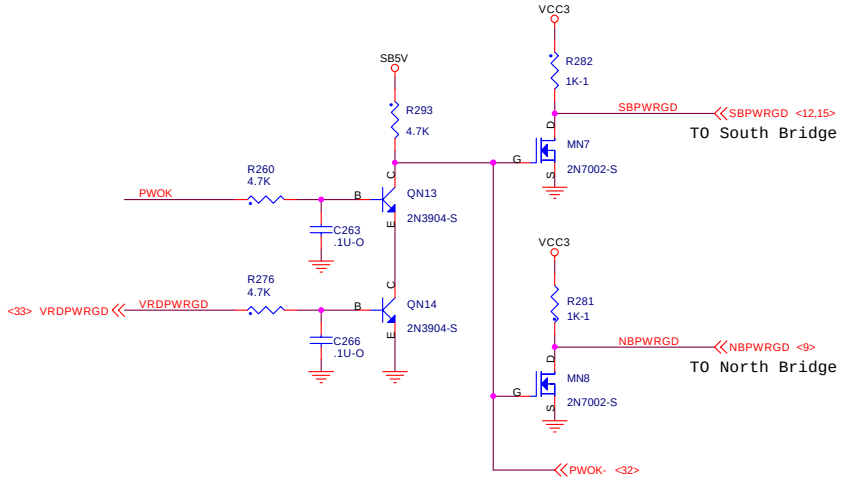
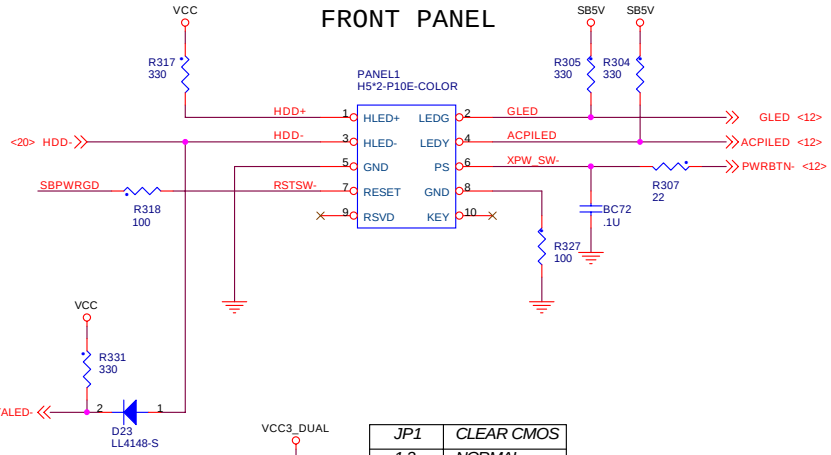
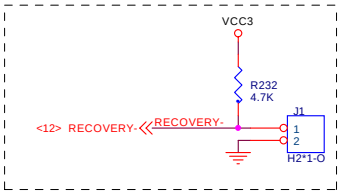


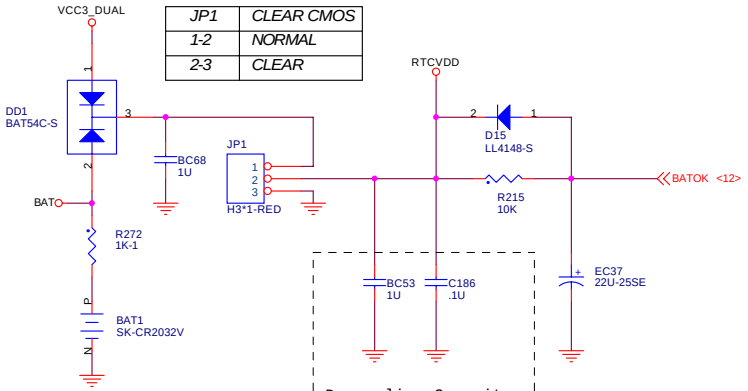


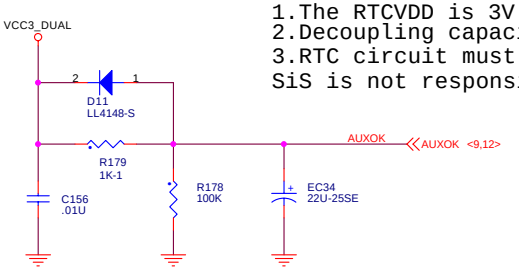


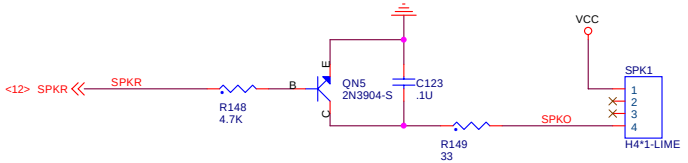


For Acer

JP1	CLEAR CMOS
1-2	NORMAL
2-3	CLEAR







RTC

NOTE!
1.The RTCVDD is 3V
2.Decoupling capacitor must be close to 635 RTCVDD pin.
3.RTC circuit must strictly follow SiS's recommended design
SiS is not responsible for RTC problems from foreign designs.

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