

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

VCORE POWER
PWM VRD11
(RT8802A)

INTEL
P4 Processor
 Core 2 Duo & Wolfdale
 LGA 775 pin

CLOCK GEN:9LPRS437

FSB : 1066MHz & Freq : 266MHz
 FSB : 800MHz & Freq : 200MHz

PCIEx16

INTEL
G31
 1210pin FC-BGA

BW : 10.7GB/s @ DDR2 :800/667MHz
DIMM1: DDR2 Socket 240P

DIMM2 : DDR2 Socket 240P

Analog Display
 RAMDAC: 400MHz
 Resolutions Up To 2048x1536@75Hz

VGA

BW : 2GB/s

USB V2.0

USB1
2 ports

USB2
2 ports

USB3
2 ports

Up to Ultra ATA/100

INTEL
ICH7
 652pin EBGA

PCIEx1
 BW : 133MB/s @ Freq : 33MHz

PCI1 Slot 120pin @ AD17
 PCI2 Slot 120pin @ AD18

IDE1 40pin
 One IDE Channel

PCIE-LAN
 PCIE LAN L1e/L2-48

Line in
 Line out
 Mic in

Audio Codec
 VT1708B

Azalia I/F

USBLAN
 RJ45

Flash Bios
 SPI

LPC bus

SATA1 7Pin
 SATA2 7pin
 SATA3 7Pin
 SATA4 7pin

BW : 150MB/s

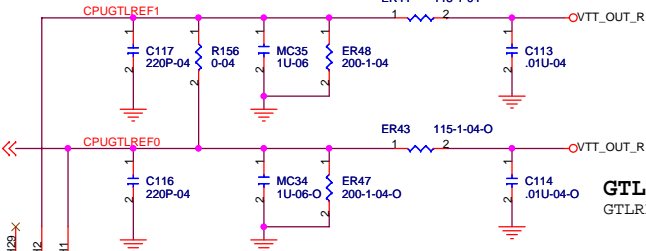
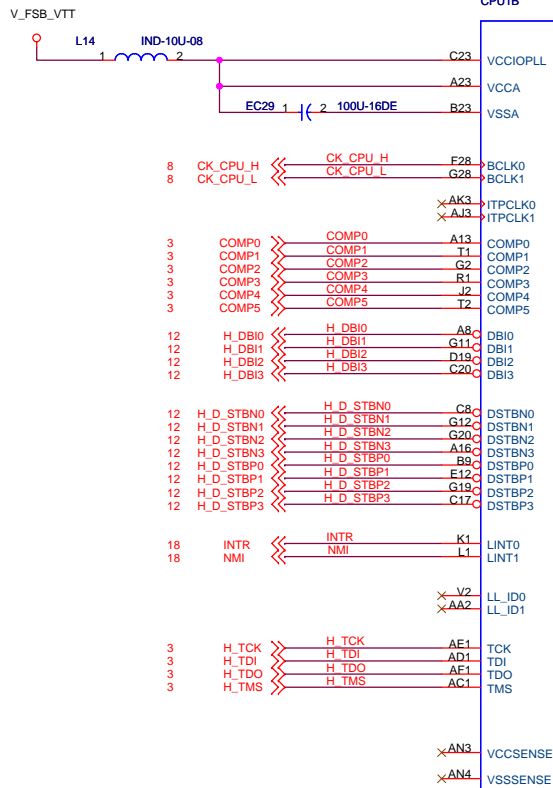
Super I/O
 IT8713F
 128pin PQFP

ECS Elitegroup Computer Systems

Title: **System Block Diagram**

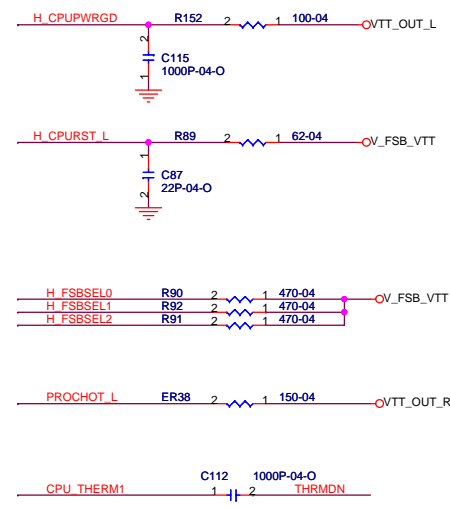
Size: Document Number **G31T-M7** Rev **1.0**

Date: Wednesday, May 28, 2008 Sheet 2 of 30



GTLREF = 0.63 * VTT = 0.76V
 GTLREF GENERATION CIRCUITS

CPUGTLREF1	ER44	115-1-04	VTT_OUT_R
CPUGTLREF0	ER43	115-1-04-O	VTT_OUT_R
C117	220P-04		
R156	0-04		
MC35	1U-06		
ER48	200-1-04		
C113	.01U-04		
C116	220P-04		
MC34	1U-06-O		
ER47	200-1-04-O		
C114	.01U-04-O		
A20M	CK3	A20M_L	18
ADS	CD2	H_ADS_L	12
ADSTB0	CR6	H_A_STB0	12
ADSTB1	AD5	H_A_STB1	12
BINIT	AD3		
BNR	C2	H_BNR_L	12
BPRJ	G8	H_BPRJ_L	12
BR0	E3	H_BREQ0_L	3,12
DBR	AC2	HWRST_L	8,9,19
DBSY	B2	H_DBSY_L	12
DEFER	G7	H_DEFER_L	12
DRDY	C1	H_DRDY_L	12
EDRDY	E2	CPUGTLREF1	
FERR/PBE	CR3	FERR_L	18
HIT0	CD4	H_HIT_L	12
HITM	E4	H_HITM_L	12
IERR	AB2	H_IERR_L	3
IGNNE	AN2	H_IGNNE_L	18
INIT	CP3	H_INIT_L	18
LOCK	CP3	H_LOCK_L	12
MCERR	AB3		
PC_REQ	GS	PECI	24
PROCHOT	N1	H_PROCHOT	19
PWRGOOD	G23	H_PWRGOOD	12
RESET	CH4	H_RESET	19
RSP	L2	CPU_SLP_L	3
SPL	CP2	H_SPL_L	18
SMT	CM3	H_SMT_L	18
STPCLK	E3	H_STPCLK_L	18
TRDY	CG1	H_TRDY_L	12
TRST	AG1	H_TRST_L	3
THERMDA	AL1	CPU_THERM1	24
THERMDC	AK1	THRMDN	24
THERMTRIP	M2	THERMTRIP_L	18
BSEL0	G29	H_FSBSEL0	8,13
BSEL1	H30	H_FSBSEL1	8,13
BSEL2	G30	H_FSBSEL2	8,13
AP0	U2	ICT 775 U2	
AP1	U3	ICT 775 U3	
STP7			
STP8			
TP			



LGA-775P-S

ECS Elitegroup Computer Systems


Title: **P4 LGA775P Part B**

Size: Custom Document Number: **G31T-M7** Rev: 1.0

Date: Wednesday, May 28, 2008 Sheet 4 of 30



CPU1C
LGA-775P-S

 Elitegroup Computer Systems		
Title P4 LGA775P Part C		
Size Custom	Document Number G31T-M7	Rev 1.0
Date: Wednesday, May 28, 2008 Sheet 5 of 30		

CPU1D
LGA-775-P



AF20 VSS53
AF17 VSS52
AF13 VSS51
AF10 VSS50
VSS49
AF7 VSS48
AE5 VSS47
AE30 VSS46
AE29 VSS45
AE28 VSS44
AE27 VSS43
AE26 VSS42
AE25 VSS41
AE24 VSS40
AE20 VSS39
AE2 VSS38
AE17 VSS37
AE16 VSS36
AE13 VSS35
AE10 VSS34
AD7 VSS33
AD4 VSS32
AC7 VSS31
AC6 VSS30
AC3 VSS29
AB7 VSS28
AB30 VSS27
AB29 VSS26
AB28 VSS25
AB27 VSS24
AB26 VSS23
AB25 VSS22
AB24 VSS21
AB23 VSS20
AB1 VSS19
AA7 VSS18
AA6 VSS17
AA30 VSS16
AA3 VSS15
AA29 VSS14
AA28 VSS13
AA27 VSS12
AA26 VSS11
AA25 VSS10
AA24 VSS9
AA23 VSS8
A9 VSS7
A6 VSS6
A24 VSS5
A21 VSS4
A2 VSS3
A18 VSS2
A15 VSS1
A12 VSS0

3 LG_775_A24 >>> LG_775_A24



AE23 VSS54
AE24 VSS56
AE25 VSS57
AE26 VSS58
AE27 VSS59
AE28 VSS60
AE3 VSS62
AE30 VSS63
AE1 VSS64
AG10 VSS65
AG13 VSS66
AG16 VSS67
AG17 VSS68
AG23 VSS69
AG24 VSS70
AG7 VSS72
AH1 VSS73
AH10 VSS74
AH16 VSS75
AH17 VSS76
AH20 VSS77
AH23 VSS78
AH24 VSS79
AH3 VSS80
AH4 VSS81
AH6 VSS82
AH7 VSS83
AJ10 VSS84
AJ18 VSS85
AJ17 VSS86
AJ20 VSS87
AJ23 VSS88
AJ24 VSS89
AJ25 VSS90
AJ26 VSS91
AJ28 VSS92
AJ29 VSS93
AJ30 VSS94
AJ4 VSS95
AJ11 VSS96
AK10 VSS97
AK13 VSS98
AK16 VSS99
AK17 VSS100
AK20 VSS101
AK23 VSS102
AK24 VSS103
AK27 VSS104
AK28 VSS106
AK29 VSS107
AK30 VSS108
AK5 VSS110
AK7 VSS110
AL10 VSS111
AL13 VSS112
AL17 VSS113
AL20 VSS114
AL23 VSS115
AL24 VSS116
AL25 VSS117
AL26 VSS118
AL28 VSS119
AL3 VSS120
AL7 VSS121
AM1 VSS122
AM10 VSS123
AM11 VSS124
AM13 VSS124
AM16 VSS126
AM17 VSS126
AM20 VSS127
AM23 VSS128
AM24 VSS128
AM27 VSS129
AM28 VSS130

STP5
TP

VSS173 E17
VSS172 E14
VSS171 D9
VSS170 D6
VSS169 D5
VSS168 D3
VSS167 D24
VSS166 D21
VSS165 D18
VSS164 D15
VSS163 D12
VSS162 C7
VSS161 C4
VSS160 C24
VSS159 C22
VSS158 C19
VSS157 C16
VSS156 C13
VSS155 B8
VSS154 B5
VSS153 B24
VSS152 B17
VSS151 B14
VSS150 B11
VSS149 B1
VSS148 AN28
VSS147 AN27
VSS146 AN24
VSS144 AN23
VSS143 AN20
VSS142 AN2
VSS141 AN17
VSS140 AN16
VSS139 AN13
VSS138 AN10
VSS137 AN1
VSS136 AM4
VSS135
VSS134
VSS132
VSS275 Y7
VSS274 Y5
VSS273 Y2
VSS272 W7
VSS271 W4
VSS270 V7
VSS269 V6
VSS268 V30
VSS267 V3
VSS266 V29
VSS265 V28
VSS264 V27
VSS263 V26
VSS262 V25
VSS261 V24

VSS174 E9
VSS175 E26
VSS176 E27
VSS177 E28
VSS178 E8
VSS179 E8
VSS180 F10
VSS181 F10
VSS182 F13
VSS183 F13
VSS184 F16
VSS185 F16
VSS186 F22
VSS187 F22
VSS188 F4
VSS189 F4
VSS190 G1
VSS191 H10
VSS192 H12
VSS193 H13
VSS194 H14
VSS195 H14
VSS196 H17
VSS197 H17
VSS198 H20
VSS199 H20
VSS200 H21
VSS201 H21
VSS202 H24
VSS203 H24
VSS204 H26
VSS205 H27
VSS206 H28
VSS207 H3
VSS208 H6
VSS209 H6
VSS210 H7
VSS211 H8
VSS212 H8
VSS213 J4
VSS214 J4
VSS215 J7
VSS216 J7
VSS217 K2
VSS218 K2
VSS219 K2
VSS220 L24
VSS221 L24
VSS222 L26
VSS223 L26
VSS224 L27
VSS225 L3
VSS226 L3
VSS227 L6
VSS228 L6
VSS229 M1
VSS230 M1
VSS231 M7
VSS232 M7
VSS233 N3
VSS234 N3
VSS235 N6
VSS236 N6
VSS237 P24
VSS238 P24
VSS239 P25
VSS240 P25
VSS241 P26
VSS242 P26
VSS243 P27
VSS244 P27
VSS245 P30
VSS246 P30
VSS247 P4
VSS248 P4
VSS249 P7
VSS250 P7
VSS251 R23
VSS252 R23
VSS253 R24
VSS254 R24
VSS255 R25
VSS256 R25
VSS257 R26
VSS258 R26
VSS259 R26
VSS260 R29
VSS261 R30
VSS262 R30
VSS263 R5
VSS264 R5
VSS265 R7
VSS266 R7
VSS267 T6
VSS268 T6
VSS269 U1
VSS270 U1
VSS271 U7
VSS272 U7
VSS273 V23



FOR CONORE CPU

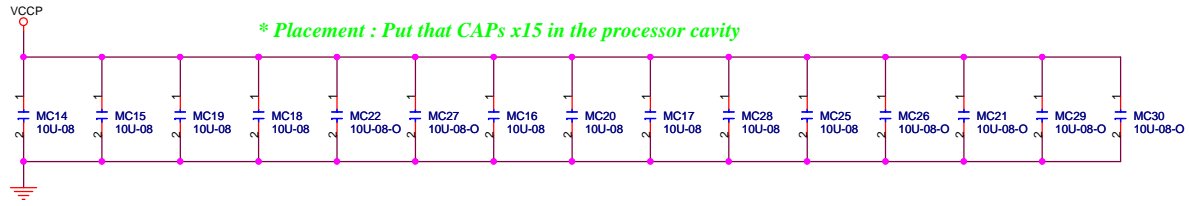
STP1
TP

H_BPM2_0 <<< H_BPM2_0 3

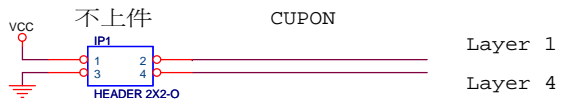
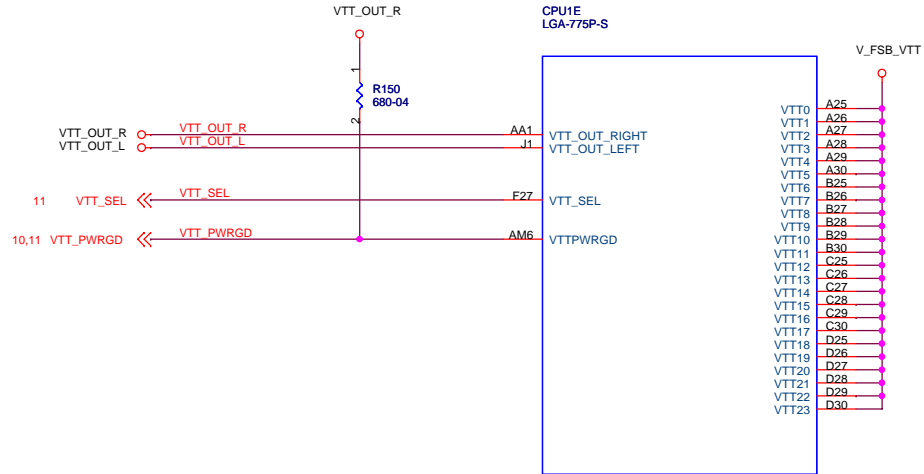
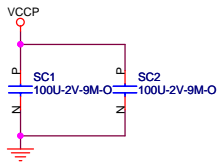
TESTH12 3
FOR CONORE CPU



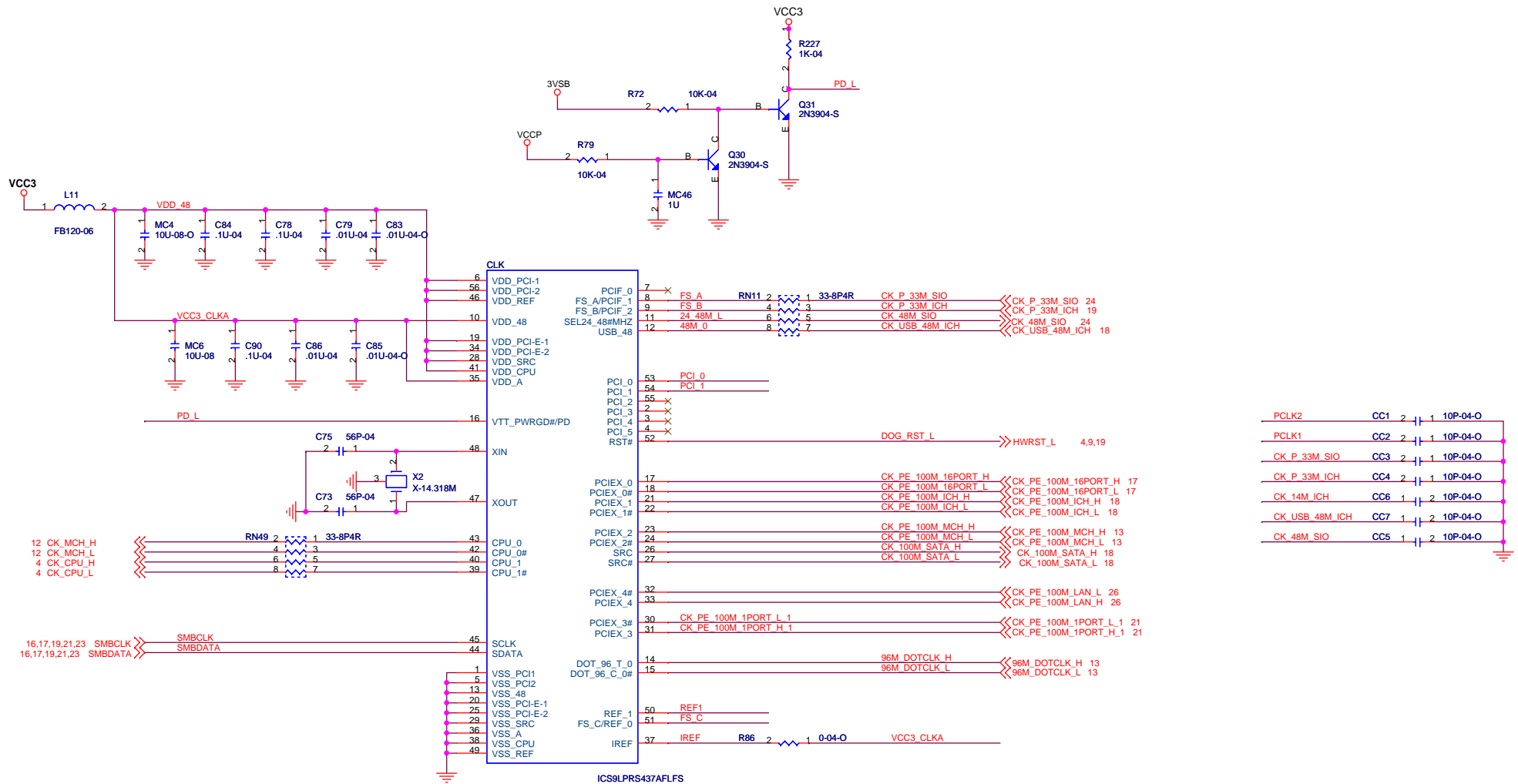
Title P4 LGA775P Part D		
Size Custom	Document Number G31T-M7	Rev 1.0
Date: Wednesday, May 28, 2008	Sheet 6	of 30



* Placement : Put that CAPs x2 on solder side



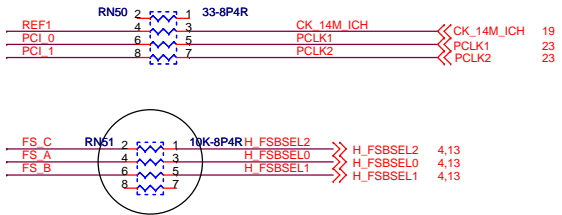
1080 : trace width 4 mil 50 ohm
 Trace Length 3150 mils
 Spacing: 1.clearance to itself 50/4/50(S:W:S)
 2.clearance to other signal 3W



BSEL TABLE

2 1 0 PSB FREQUENCY

0 0 1	133 MHZ (533)
0 1 0	200 MHZ (800)
0 0 0	266 MHZ (1066)



Swap PCIEX16 and SATA clock
Change ICH clk to pin 8

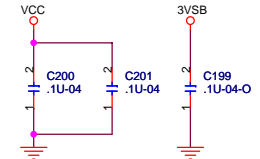
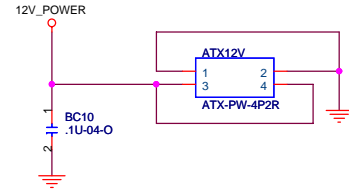
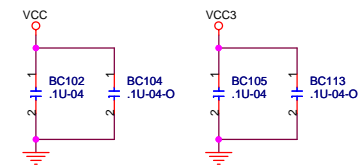
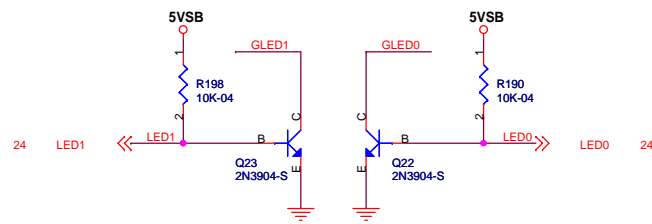
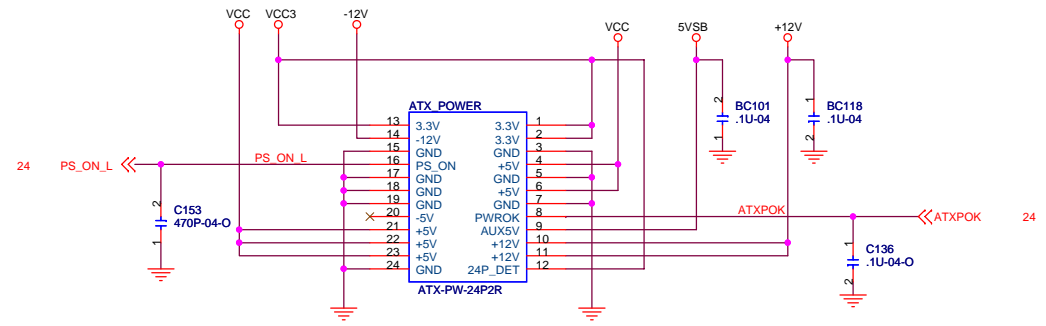
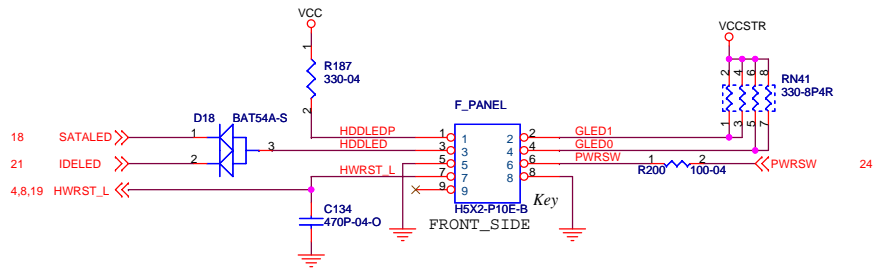
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Title: **CLK 9LPRS437**

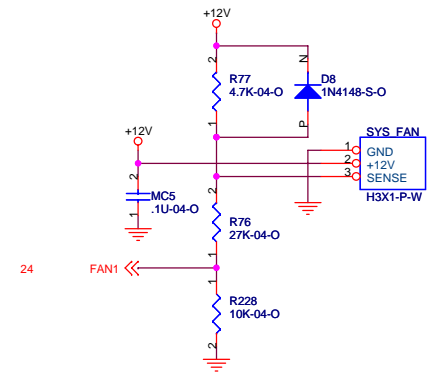
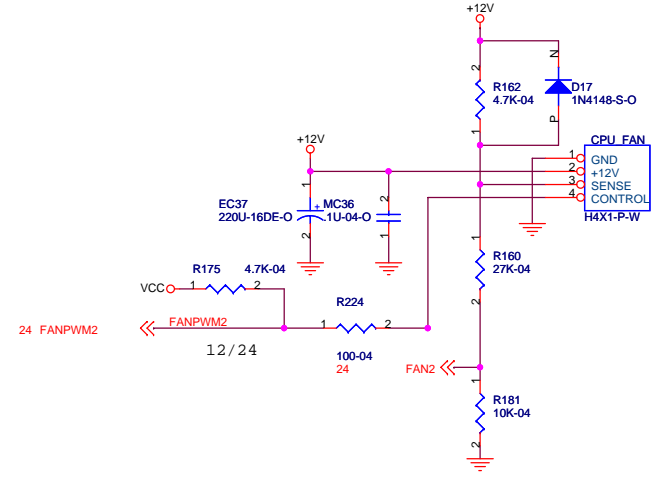
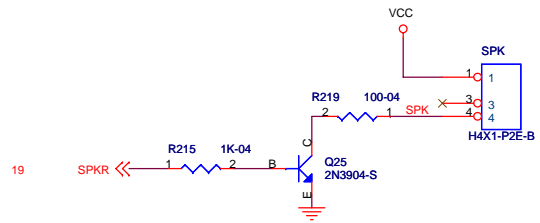
Size: Document Number: **G31T-M7** Rev: **1.0**

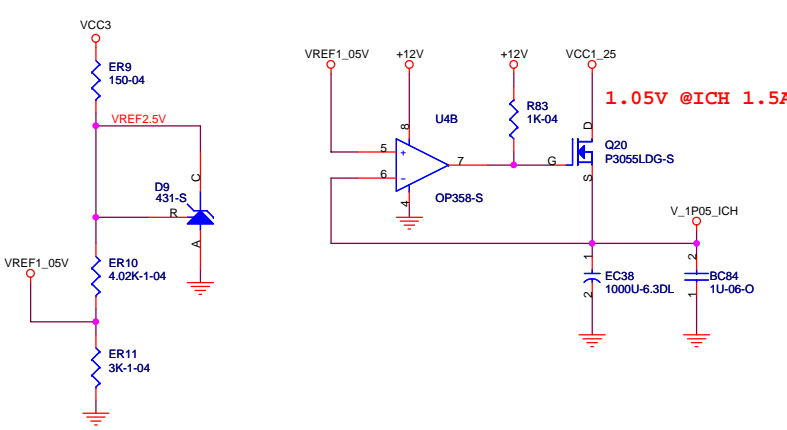
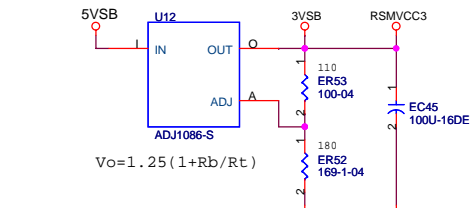
Custom: **G31T-M7**

Date: Wednesday, May 26, 2006 Sheet: 8 of 30

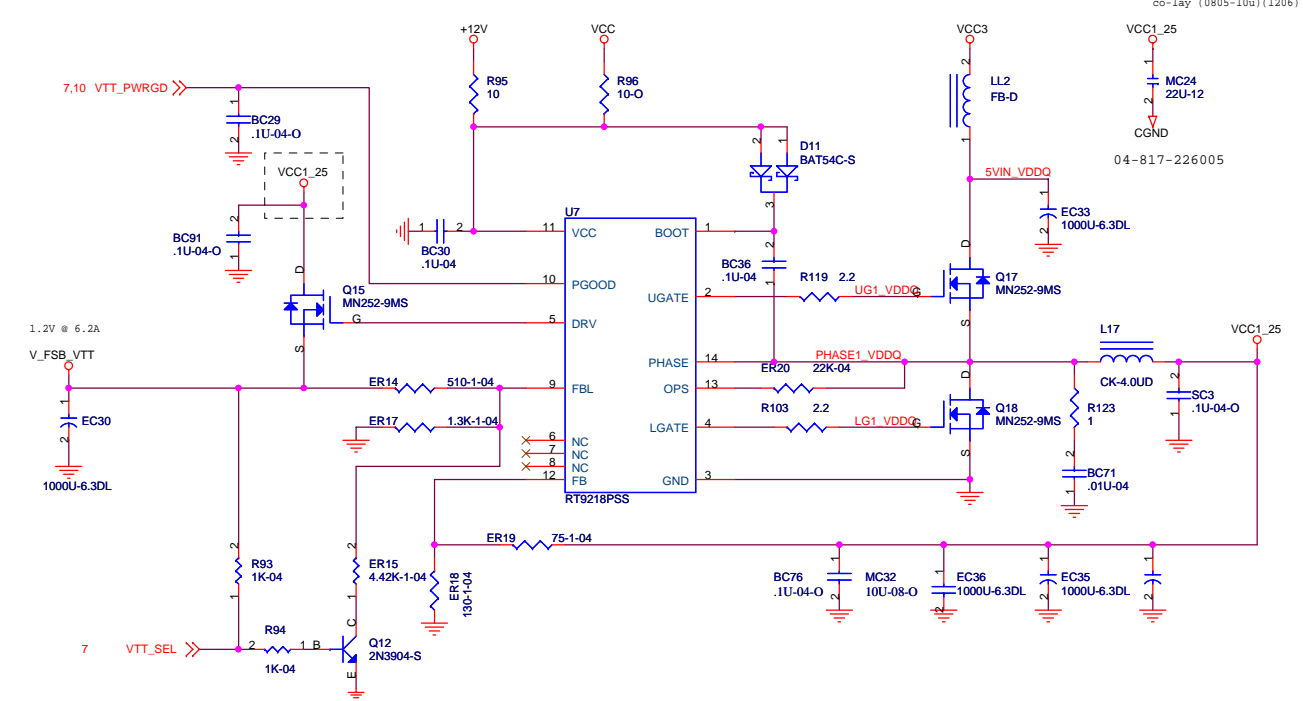
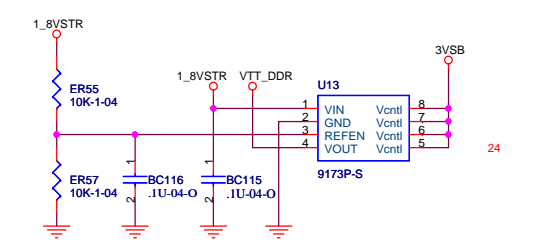
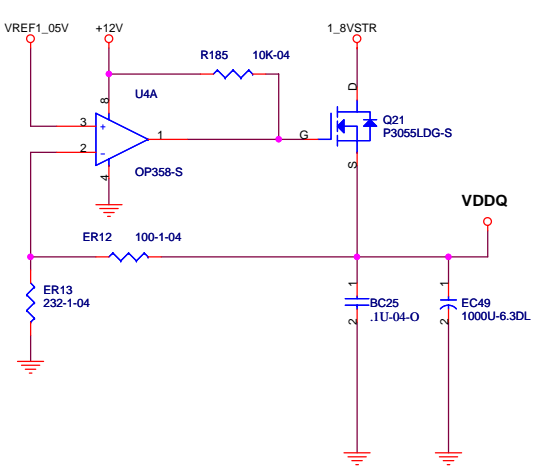


	AC_ON	S0	S1	S3	S5
LED0 (PIN78)	0	1	B	B	0
LED1 (PIN84)	0	0	0	1	0
-GLED0 (PIN4)	0	0	B	B	0
-GLED1 (PIN2)	0	1	1	0	0
LED STATE	OFF	Green	G-blink	Y-blink	OFF

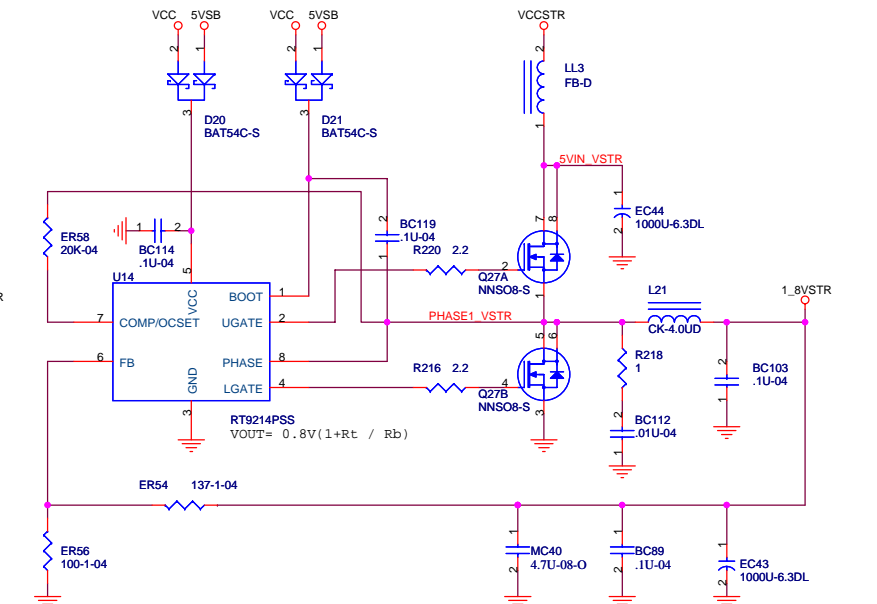
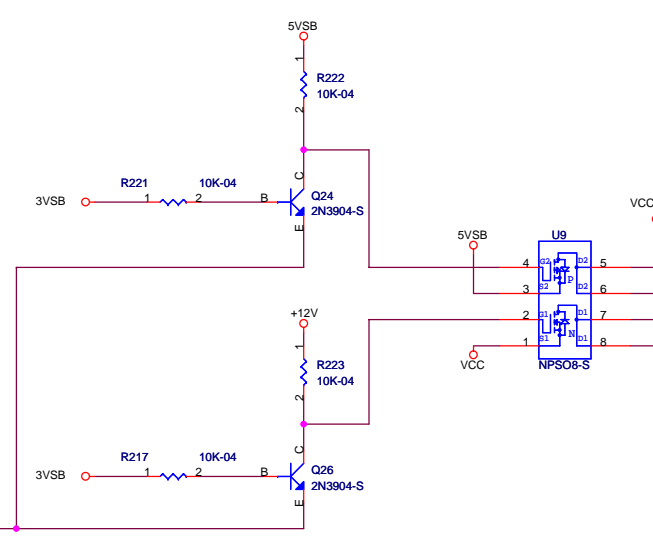




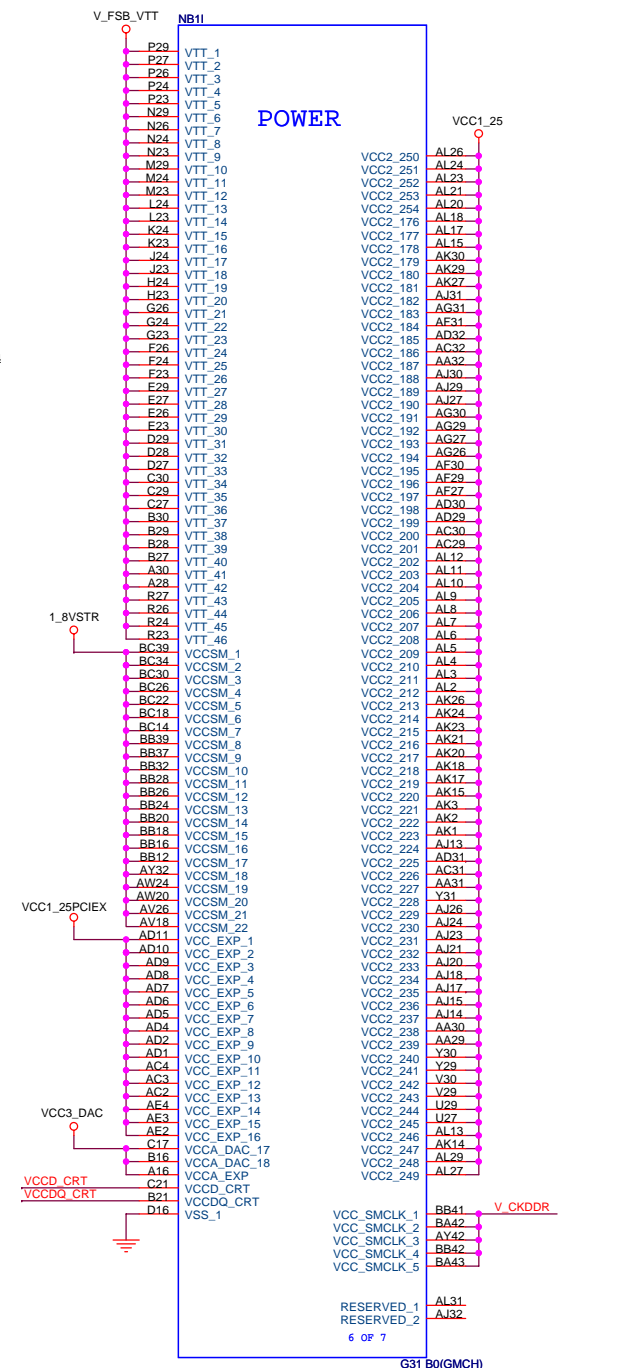
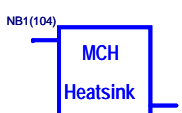
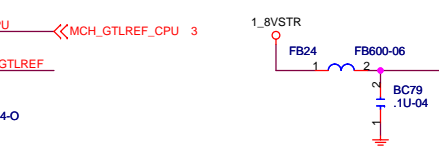
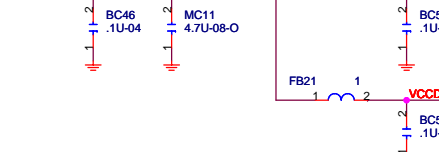
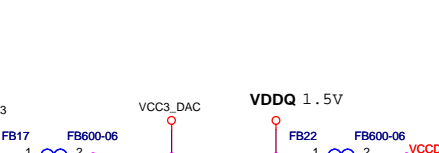
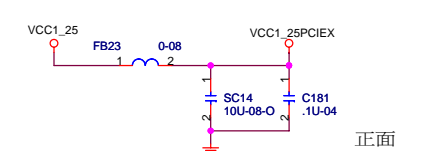
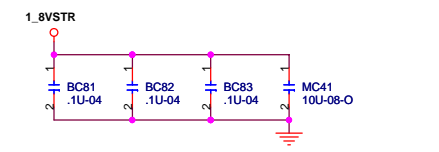
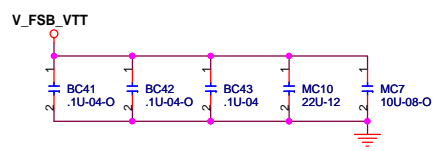
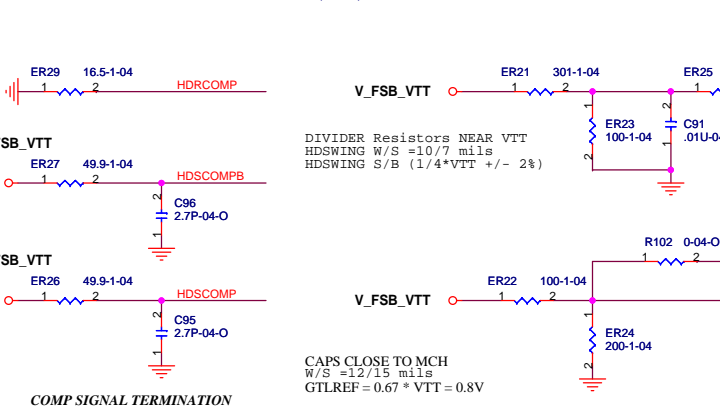
(VDDQ 1.5V/1.8A)

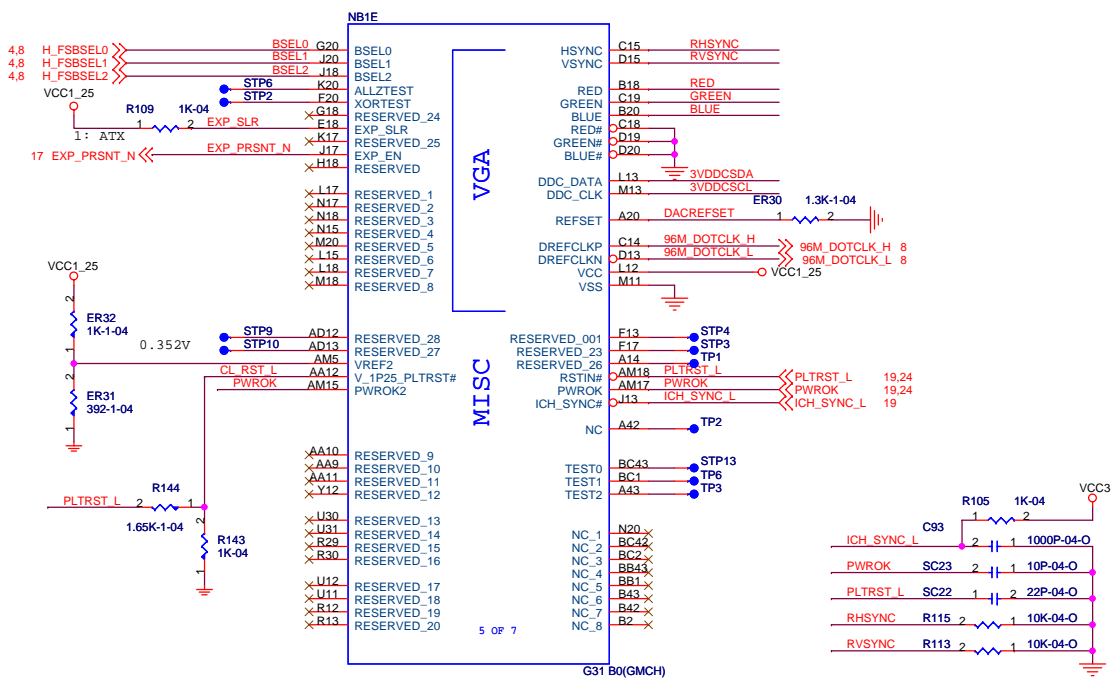
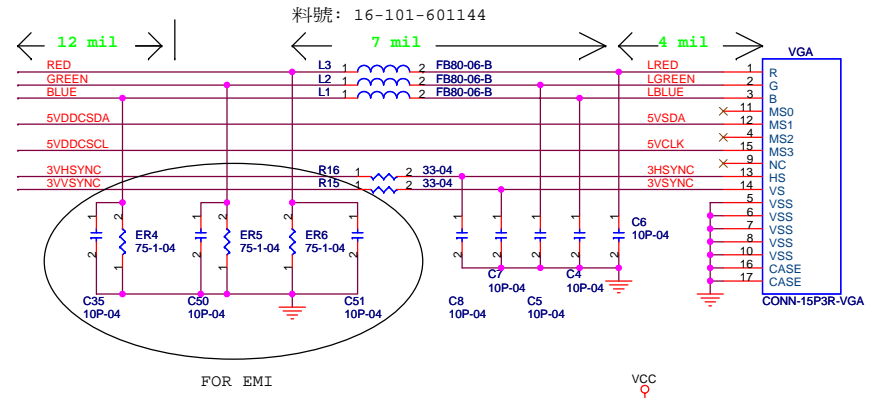
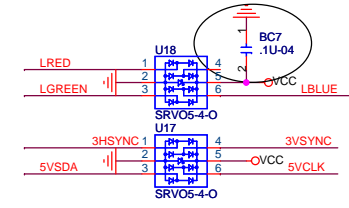
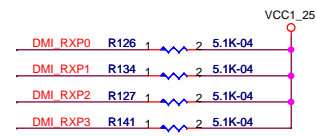
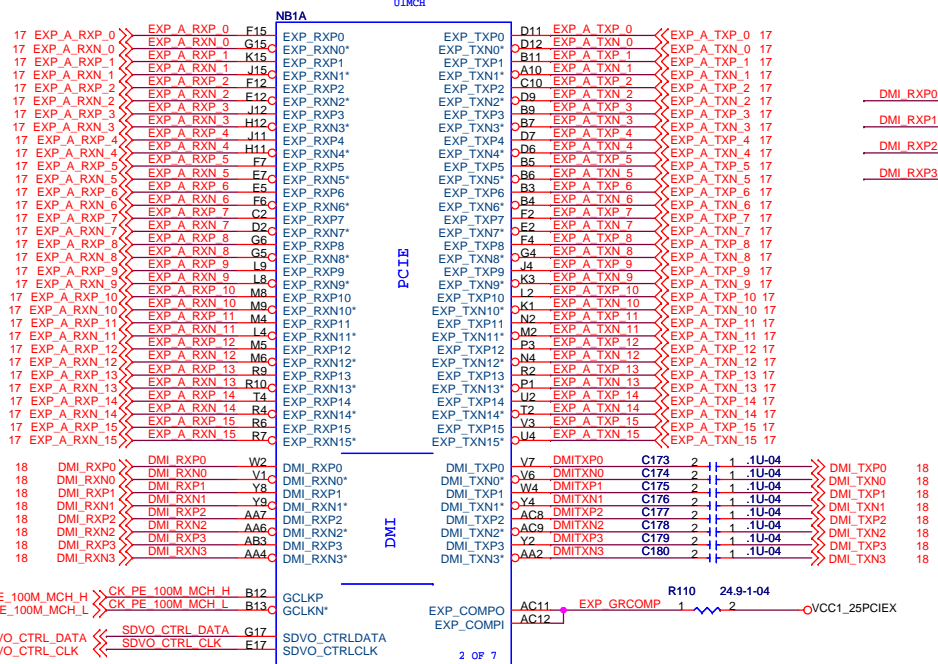


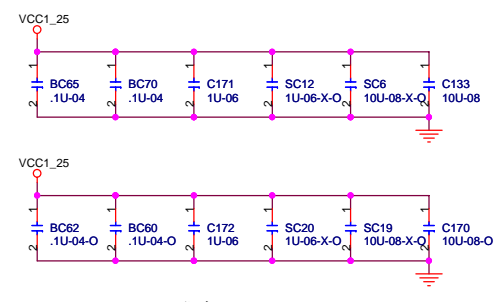
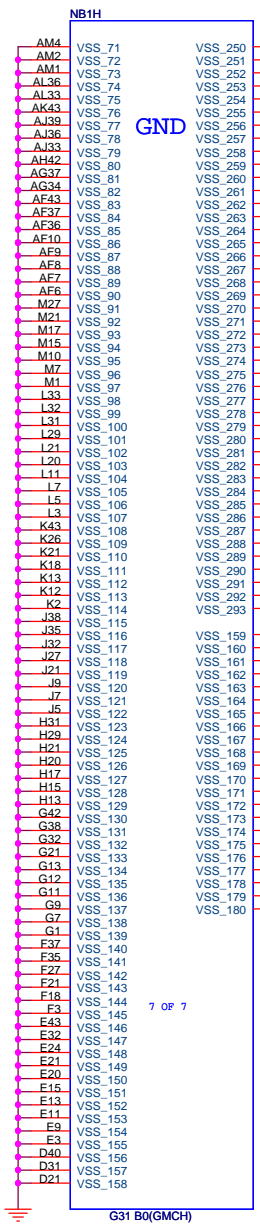
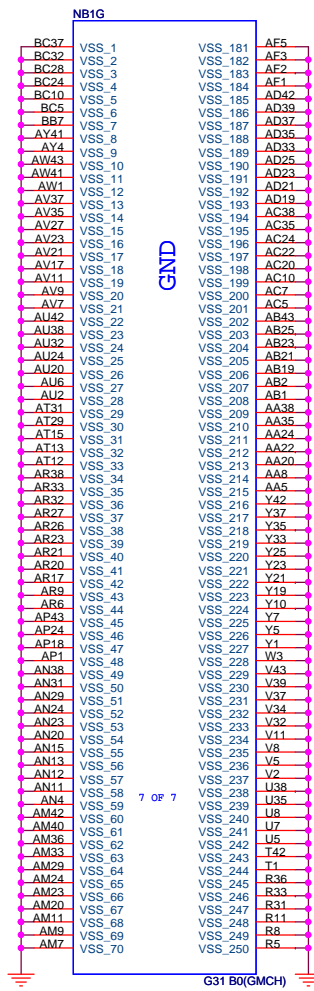
High: 1.2V (Conroe)
LOW: 1.1V (Wolfdale)



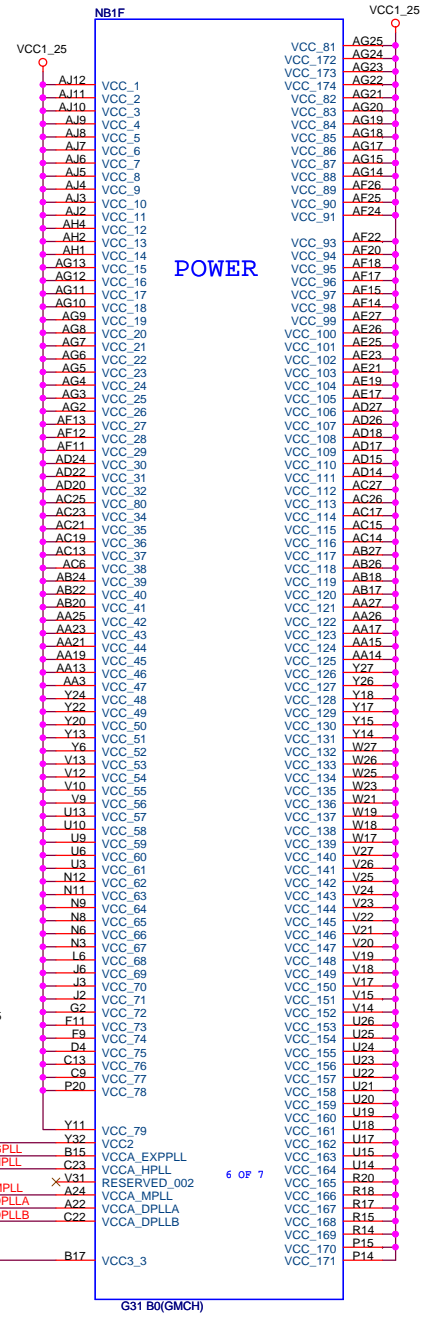
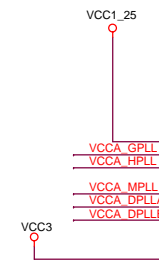
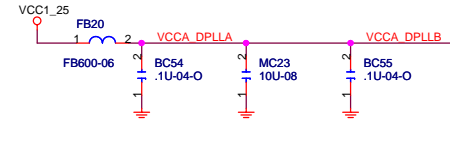
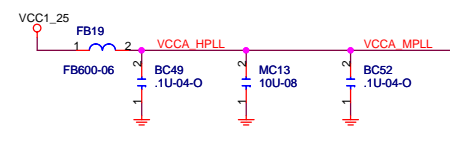
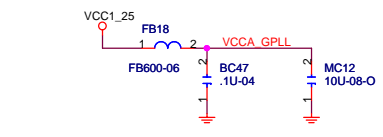
NB1B		UTMCH		FSB		MCH	
H_A3	H_A3	J42	HA3#	HD0#	R40	H_D0	H_D0
H_A4	H_A4	L39	HA4#	HD1#	P41	H_D1	H_D1
H_A5	H_A5	J40	HA5#	HD2#	R41	H_D2	H_D2
H_A6	H_A6	L37	HA6#	HD3#	M40	H_D3	H_D3
H_A7	H_A7	L36	HA7#	HD4#	M39	H_D4	H_D4
H_A8	H_A8	K42	HA8#	HD5#	M41	H_D5	H_D5
H_A9	H_A9	N32	HA9#	HD6#	N41	H_D6	H_D6
H_A10	H_A10	N34	HA10#	HD7#	M42	H_D7	H_D7
H_A11	H_A11	M38	HA11#	HD8#	L41	H_D8	H_D8
H_A12	H_A12	N37	HA12#	HD9#	J42	H_D9	H_D9
H_A13	H_A13	M36	HA13#	HD10#	L41	H_D10	H_D10
H_A14	H_A14	R34	HA14#	HD11#	K41	H_D11	H_D11
H_A15	H_A15	N35	HA15#	HD12#	G40	H_D12	H_D12
H_A16	H_A16	N38	HA16#	HD13#	F41	H_D13	H_D13
H_A17	H_A17	U37	HA17#	HD14#	G42	H_D14	H_D14
H_A18	H_A18	N39	HA18#	HD15#	C42	H_D15	H_D15
H_A19	H_A19	R37	HA19#	HD16#	D41	H_D16	H_D16
H_A20	H_A20	P42	HA20#	HD17#	F38	H_D17	H_D17
H_A21	H_A21	R39	HA21#	HD18#	E37	H_D18	H_D18
H_A22	H_A22	V36	HA22#	HD19#	G37	H_D19	H_D19
H_A23	H_A23	R38	HA23#	HD20#	E42	H_D20	H_D20
H_A24	H_A24	U33	HA24#	HD21#	E37	H_D21	H_D21
H_A25	H_A25	R35	HA25#	HD22#	C39	H_D22	H_D22
H_A26	H_A26	R35	HA26#	HD23#	B39	H_D23	H_D23
H_A27	H_A27	V33	HA27#	HD24#	G33	H_D24	H_D24
H_A28	H_A28	V35	HA28#	HD25#	A37	H_D25	H_D25
H_A29	H_A29	Y34	HA29#	HD26#	K32	H_D26	H_D26
H_A30	H_A30	V42	HA30#	HD27#	H32	H_D27	H_D27
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H_A32	H_A32	Y36	HA32#	HD29#	K32	H_D29	H_D29
H_A33	H_A33	Y38	HA33#	HD30#	H32	H_D30	H_D30
H_A34	H_A34	Y39	HA34#	HD31#	S31	H_D31	H_D31
H_A35	H_A35	AA37	HA35#	HD32#	F32	H_D32	H_D32
H_REQ0	H_REQ0	F40	HREQ0#	HD33#	M31	H_D33	H_D33
H_REQ1	H_REQ1	L35	HREQ1#	HD34#	K27	H_D34	H_D34
H_REQ2	H_REQ2	L36	HREQ2#	HD35#	E31	H_D35	H_D35
H_REQ3	H_REQ3	G43	HREQ3#	HD36#	K31	H_D36	H_D36
H_REQ4	H_REQ4	I37	HREQ4#	HD37#	G31	H_D37	H_D37
H_A_STB0	H_A_STB0	M34	HADSTB0#	HD38#	K29	H_D38	H_D38
H_A_STB1	H_A_STB1	U34	HADSTB1#	HD39#	E31	H_D39	H_D39
H_D_STBP0	H_D_STBP0	L40	HDSTBP0#	HD40#	J29	H_D40	H_D40
H_D_STBN0	H_D_STBN0	M43	HDSTBN0#	HD41#	F29	H_D41	H_D41
H_D_DB10	H_D_DB10	M40	HDINV0#	HD42#	K27	H_D42	H_D42
H_D_STBP1	H_D_STBP1	G35	HDSTBP1#	HD43#	J26	H_D43	H_D43
H_D_STBN1	H_D_STBN1	H33	HDSTBN1#	HD44#	L26	H_D44	H_D44
H_D_DB11	H_D_DB11	I33	HDINV1#	HD45#	J26	H_D45	H_D45
H_D_STBP2	H_D_STBP2	G27	HDSTBP2#	HD46#	M26	H_D46	H_D46
H_D_STBN2	H_D_STBN2	H27	HDSTBN2#	HD47#	C33	H_D47	H_D47
H_D_DB12	H_D_DB12	G29	HDINV2#	HD48#	C32	H_D48	H_D48
H_D_STBP3	H_D_STBP3	B38	HDSTBP3#	HD49#	E41	H_D49	H_D49
H_D_STBN3	H_D_STBN3	D38	HDSTBN3#	HD50#	B41	H_D50	H_D50
H_DB13	H_DB13	E33	HDINV3#	HD51#	S42	H_D51	H_D51
H_ADS_L	H_ADS_L	W40	HADS#	HD52#	D42	H_D52	H_D52
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H_DRDY_L	H_DRDY_L	W41	HDRDY#	HD54#	D35	H_D54	H_D54
H_DEFER_L	H_DEFER_L	L43	HDEFER#	HD55#	R40	H_D55	H_D55
H_HITM_L	H_HITM_L	Y43	HHITM#	HD56#	C38	H_D56	H_D56
H_HIT_L	H_HIT_L	U42	HHIT#	HD57#	D37	H_D57	H_D57
H_LOCK_L	H_LOCK_L	V41	HLOCK#	HD58#	B33	H_D58	H_D58
H_BREQ0_L	H_BREQ0_L	AA42	HBREQ0#	HD59#	D33	H_D59	H_D59
H_BNR_L	H_BNR_L	W42	HBNR#	HD60#	C34	H_D60	H_D60
H_BPRI_L	H_BPRI_L	G38	HBPRI#	HD61#	B35	H_D61	H_D61
H_DBSY_L	H_DBSY_L	U40	HDBSY#	HD62#	A32	H_D62	H_D62
H_RS0_L	H_RS0_L	U41	HRS0#	HD63#	D32	H_D63	H_D63
H_RS1_L	H_RS1_L	AA41	HRS1#				
H_RS2_L	H_RS2_L	U39	HRS2#				
H_CPURST_L	H_CPURST_L	C31	HCPURST#				

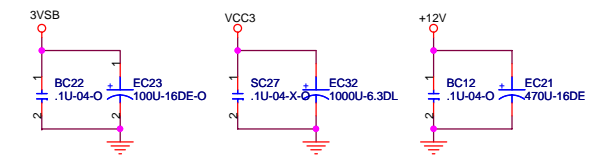
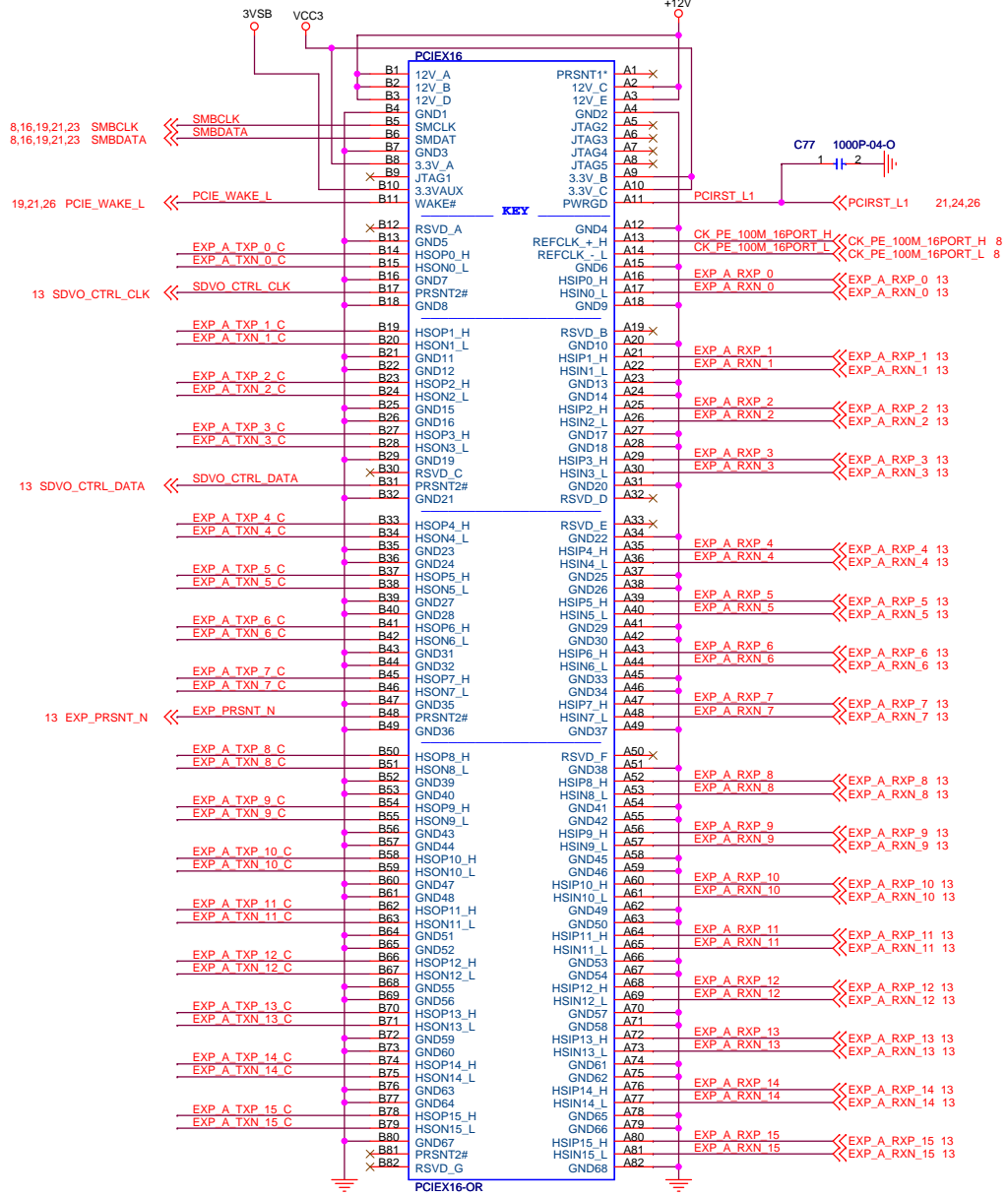






正面 不上 正面





EXP A_TXP_0_C	BC28	1	2	.1U-04	EXP A_TXP_0	EXP_A_TXP_0	13
EXP A_TXN_0_C	BC27	1	2	.1U-04	EXP A_TXN_0	EXP_A_TXN_0	13
EXP A_TXP_1_C	BC31	1	2	.1U-04	EXP A_TXP_1	EXP_A_TXP_1	13
EXP A_TXN_1_C	BC32	1	2	.1U-04	EXP A_TXN_1	EXP_A_TXN_1	13
EXP A_TXP_2_C	BC33	1	2	.1U-04	EXP A_TXP_2	EXP_A_TXP_2	13
EXP A_TXN_2_C	BC34	1	2	.1U-04	EXP A_TXN_2	EXP_A_TXN_2	13
EXP A_TXP_3_C	BC35	1	2	.1U-04	EXP A_TXP_3	EXP_A_TXP_3	13
EXP A_TXN_3_C	BC37	1	2	.1U-04	EXP A_TXN_3	EXP_A_TXN_3	13
EXP A_TXP_4_C	BC38	1	2	.1U-04	EXP A_TXP_4	EXP_A_TXP_4	13
EXP A_TXN_4_C	BC39	1	2	.1U-04	EXP A_TXN_4	EXP_A_TXN_4	13
EXP A_TXP_5_C	BC44	1	2	.1U-04	EXP A_TXP_5	EXP_A_TXP_5	13
EXP A_TXN_5_C	BC40	1	2	.1U-04	EXP A_TXN_5	EXP_A_TXN_5	13
EXP A_TXP_6_C	BC48	1	2	.1U-04	EXP A_TXP_6	EXP_A_TXP_6	13
EXP A_TXN_6_C	BC45	1	2	.1U-04	EXP A_TXN_6	EXP_A_TXN_6	13
EXP A_TXP_7_C	BC51	1	2	.1U-04	EXP A_TXP_7	EXP_A_TXP_7	13
EXP A_TXN_7_C	BC50	1	2	.1U-04	EXP A_TXN_7	EXP_A_TXN_7	13
EXP A_TXP_8_C	BC53	1	2	.1U-04	EXP A_TXP_8	EXP_A_TXP_8	13
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EXP A_TXP_9_C	BC59	1	2	.1U-04	EXP A_TXP_9	EXP_A_TXP_9	13
EXP A_TXN_9_C	BC61	1	2	.1U-04	EXP A_TXN_9	EXP_A_TXN_9	13
EXP A_TXP_10_C	BC64	1	2	.1U-04	EXP A_TXP_10	EXP_A_TXP_10	13
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EXP A_TXP_11_C	BC67	1	2	.1U-04	EXP A_TXP_11	EXP_A_TXP_11	13
EXP A_TXN_11_C	BC66	1	2	.1U-04	EXP A_TXN_11	EXP_A_TXN_11	13
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EXP A_TXN_12_C	BC68	1	2	.1U-04	EXP A_TXN_12	EXP_A_TXN_12	13
EXP A_TXP_13_C	BC73	1	2	.1U-04	EXP A_TXP_13	EXP_A_TXP_13	13
EXP A_TXN_13_C	BC72	1	2	.1U-04	EXP A_TXN_13	EXP_A_TXN_13	13
EXP A_TXP_14_C	BC75	1	2	.1U-04	EXP A_TXP_14	EXP_A_TXP_14	13
EXP A_TXN_14_C	BC74	1	2	.1U-04	EXP A_TXN_14	EXP_A_TXN_14	13
EXP A_TXP_15_C	BC78	1	2	.1U-04	EXP A_TXP_15	EXP_A_TXP_15	13
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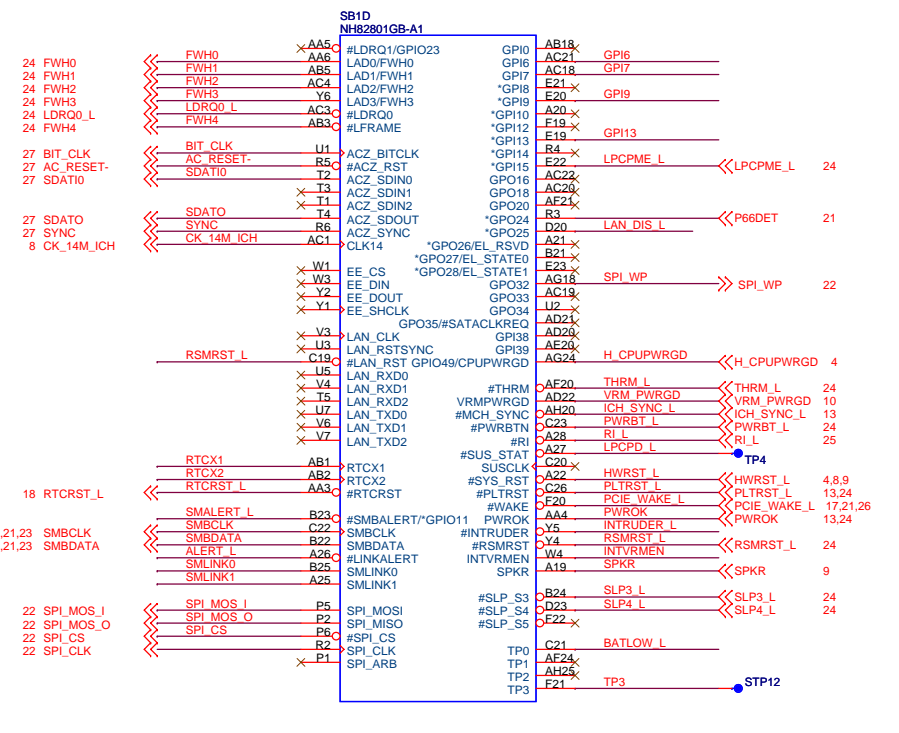
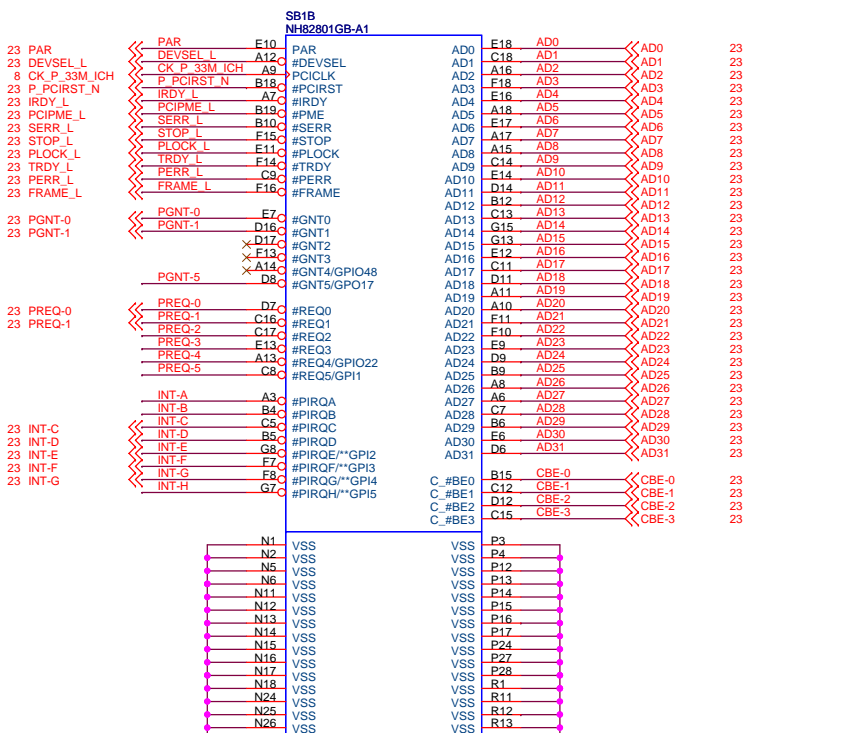
ECS Elitegroup Computer Systems

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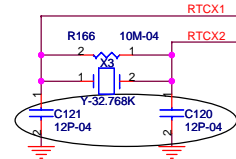
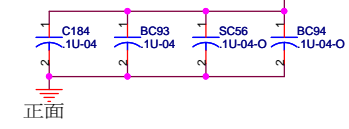
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Customer: **G31T-M7**

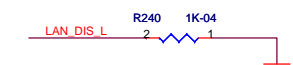
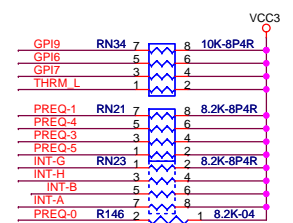
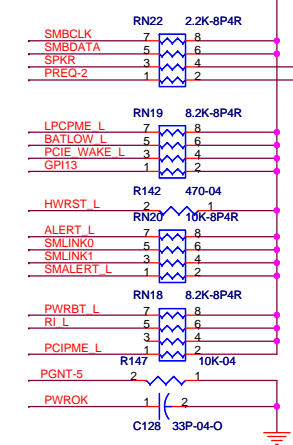
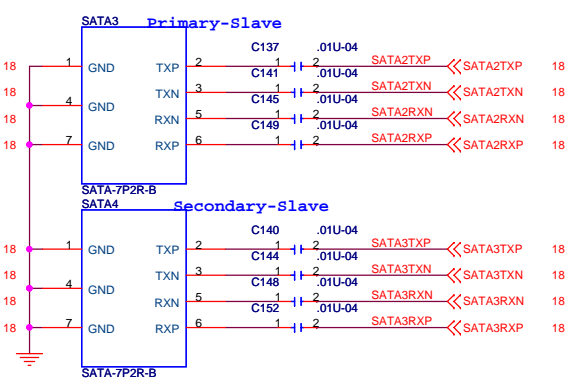
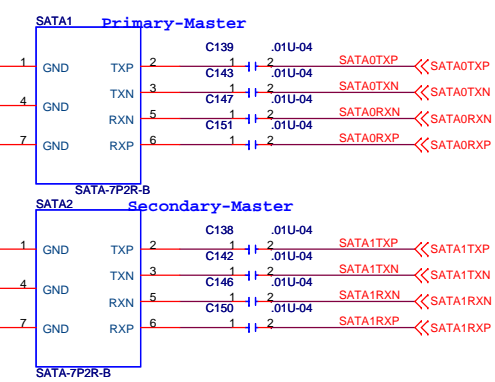
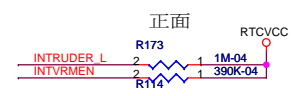
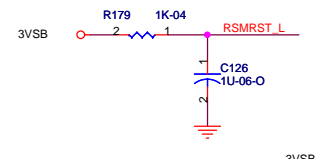
Date: Wednesday, May 28, 2008 Sheet 17 of 30



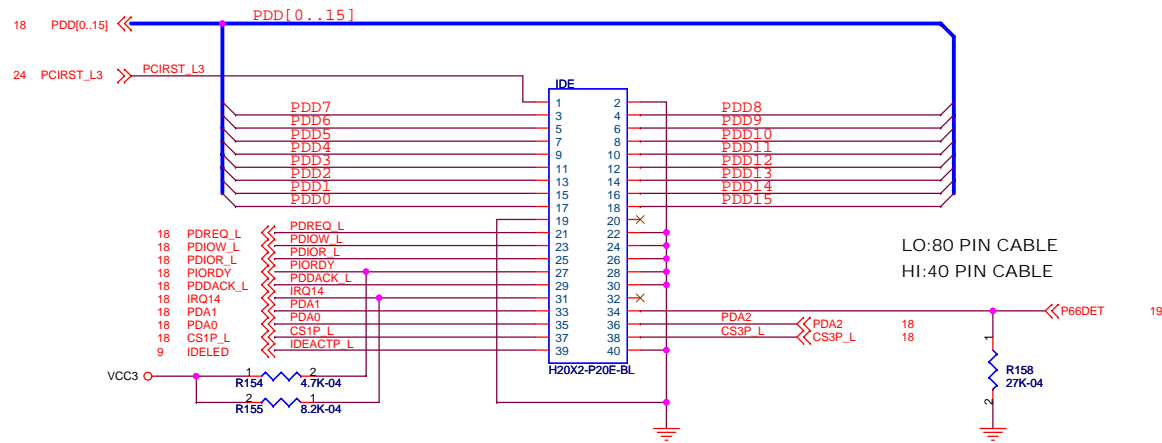
CAD NOTE:
PLACE 1 EACH NEAR A3 & F1.
PLACE REMAINDER ANYWHERE.



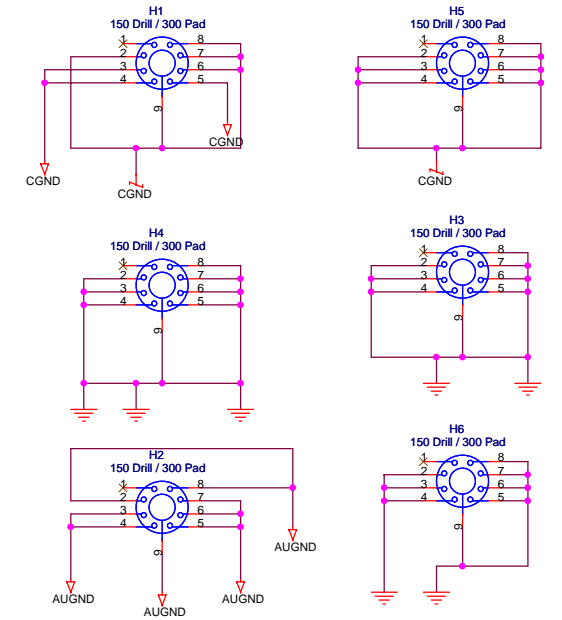
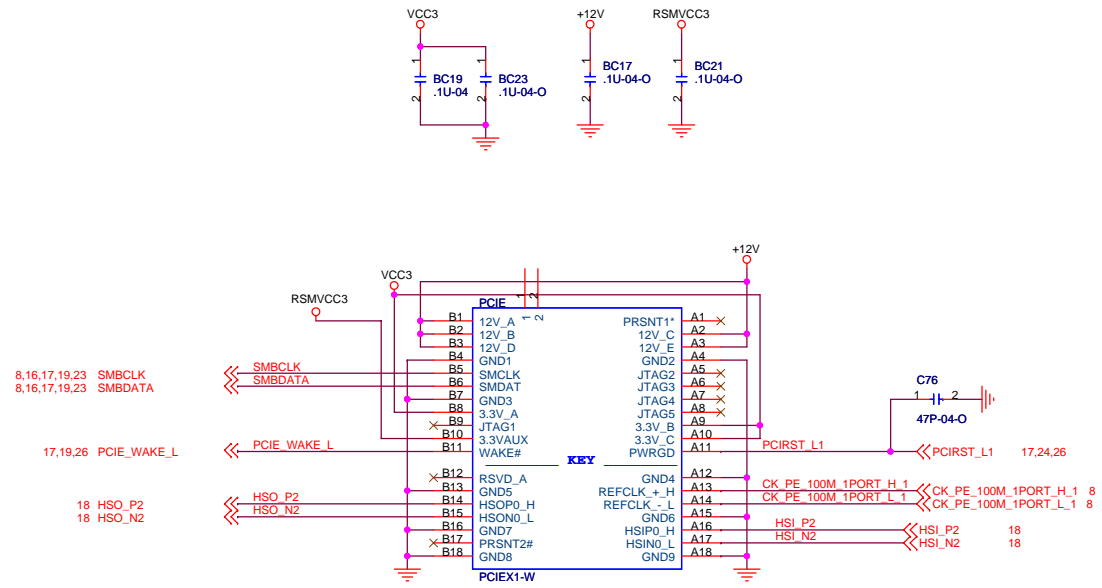
For 103
X3(wire)
XTAL-JW



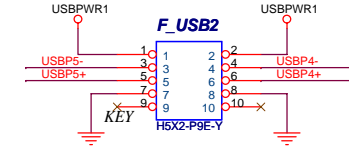
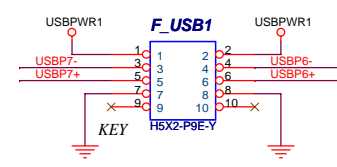
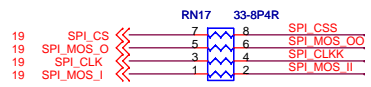
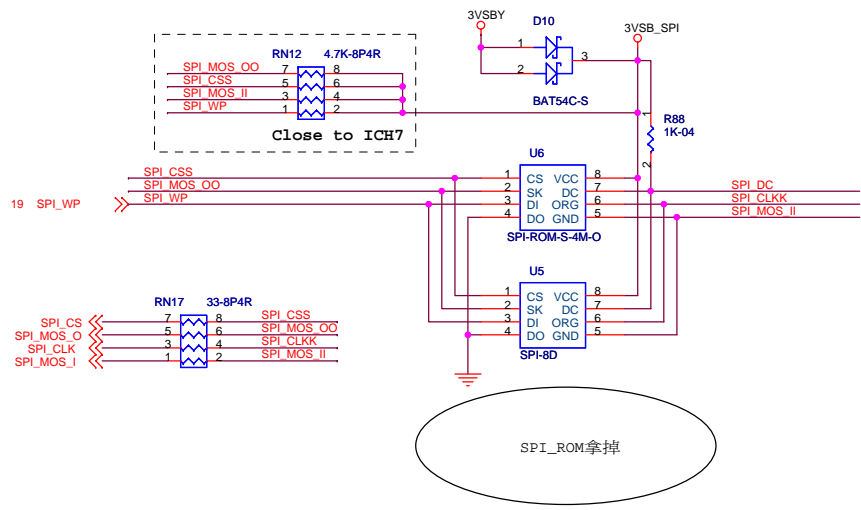
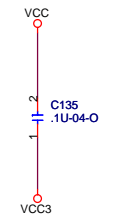
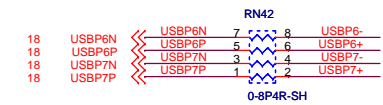
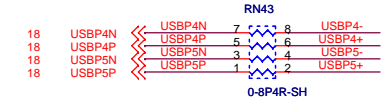
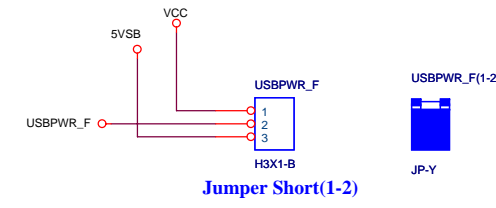
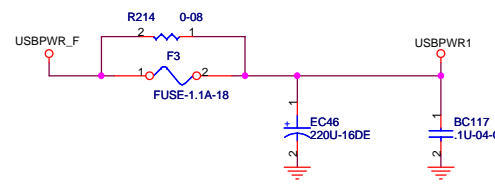
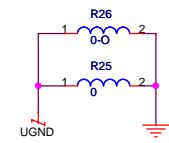
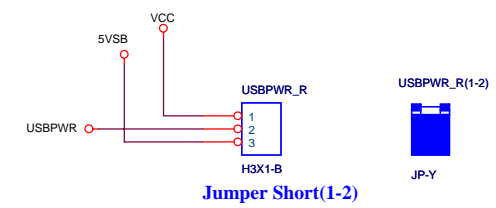
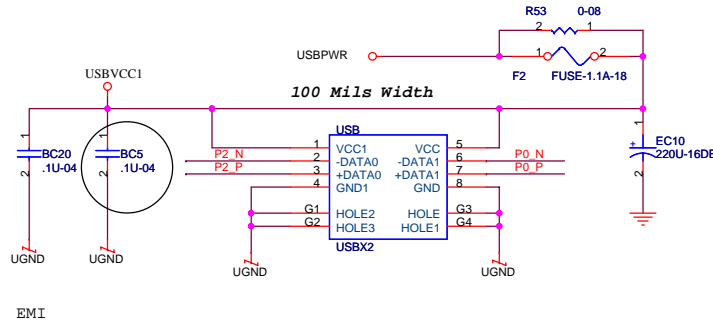
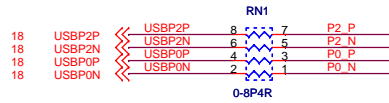
Elitegroup Computer Systems			
ICH7 PCI/SPI/OTHER			
Title	Document Number	Rev 1.0	
Size	Customer	G3IT-M7	
Date:	Wednesday, May 28, 2008	Sheet	19 of 30

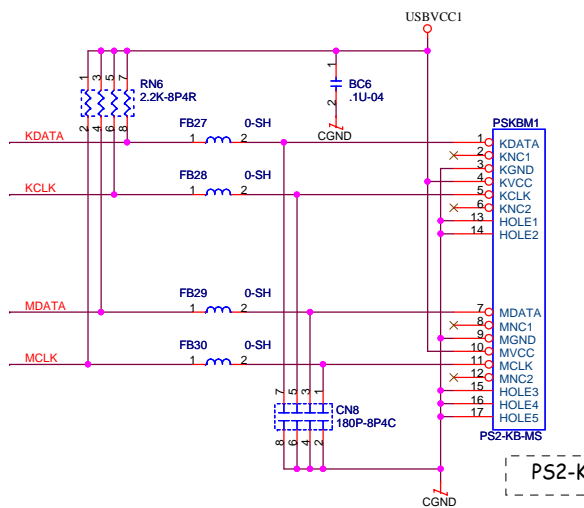
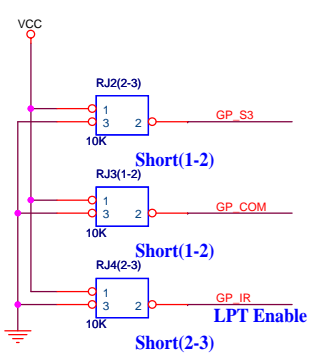
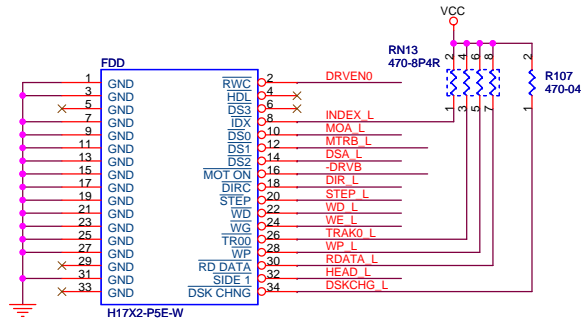


DATA LINES SHOULD BE MATCHED TO STROBES (PDIOR_L , PIORDY_L) WITHIN +/- 250 MIL,
STROBES SHOULD BE MATCHED TO THEIR COMPLEMENT WITHIN +/- 10MIL.



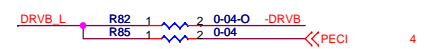
REAR_SIDE



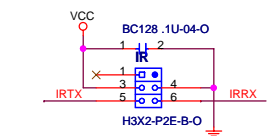
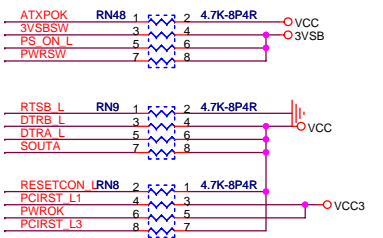
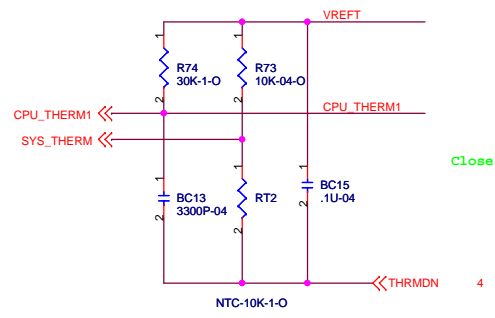


PS2-KB-MS改成無彈片

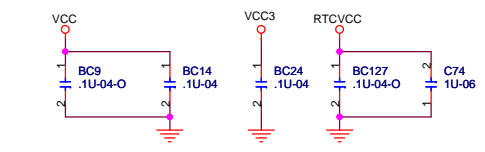
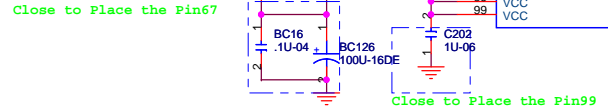
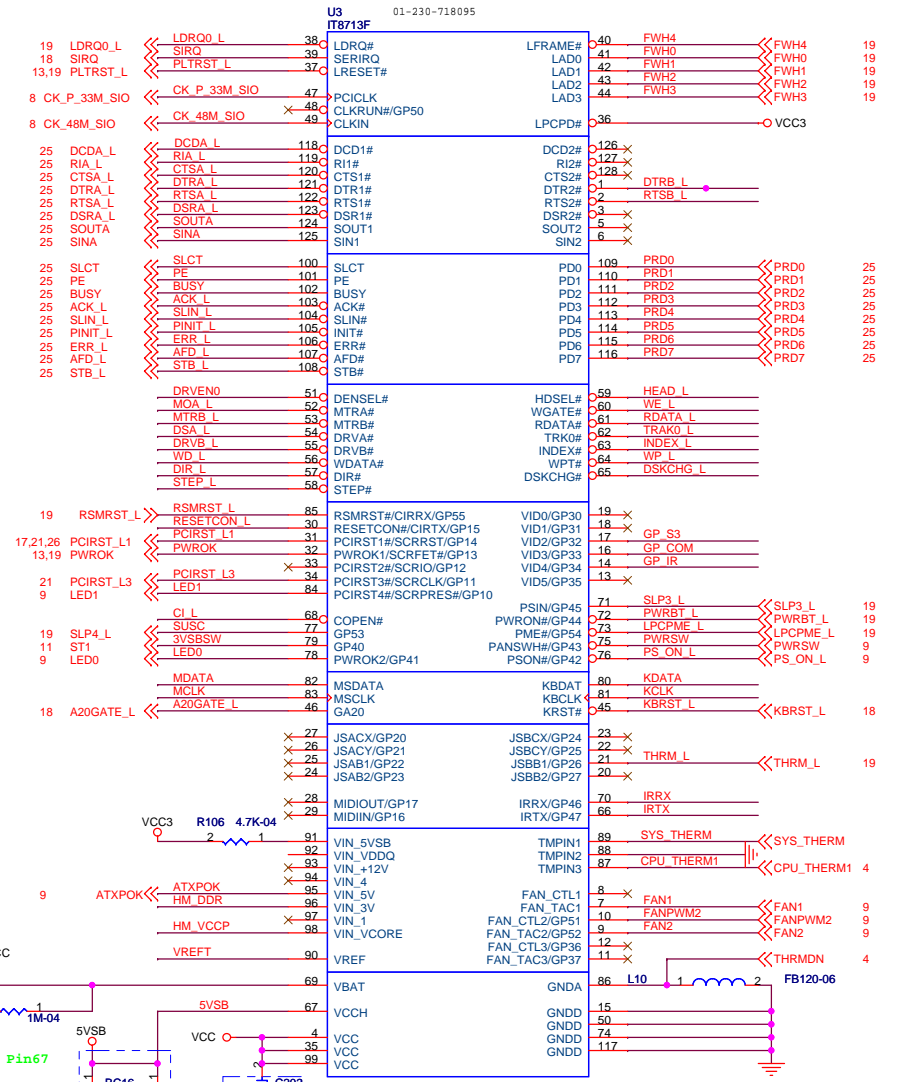
install PECl when 8718



THERM. SENSING



修改U3 Value:8718F



IOGND have to 10mil width

Elitegroup Computer Systems

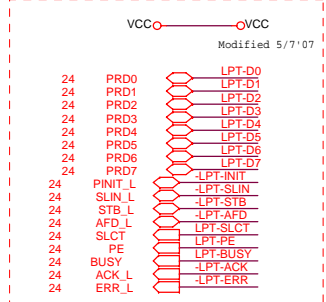
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Size: Document Number **G3IT-M7** Rev: 1.0

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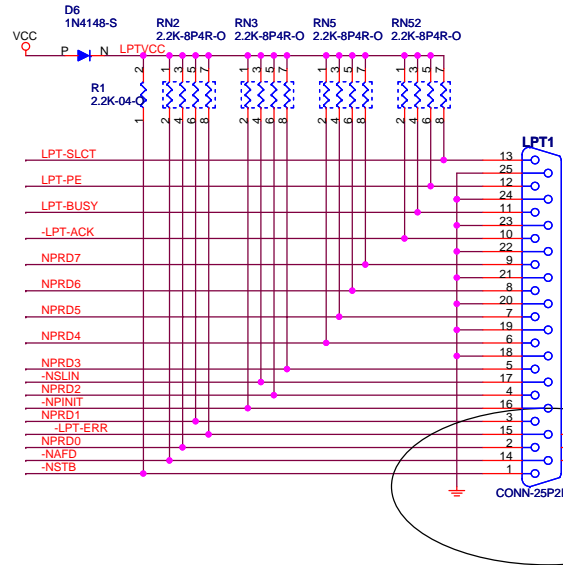
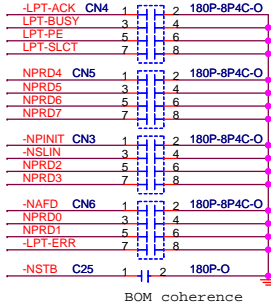
LPT

External Connection

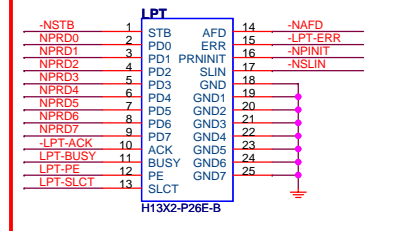


If you found anything wrong with this circuit, please contact with Jack Hu (Ext:622)

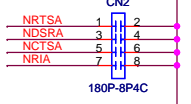
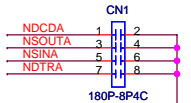
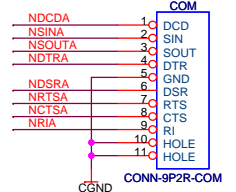
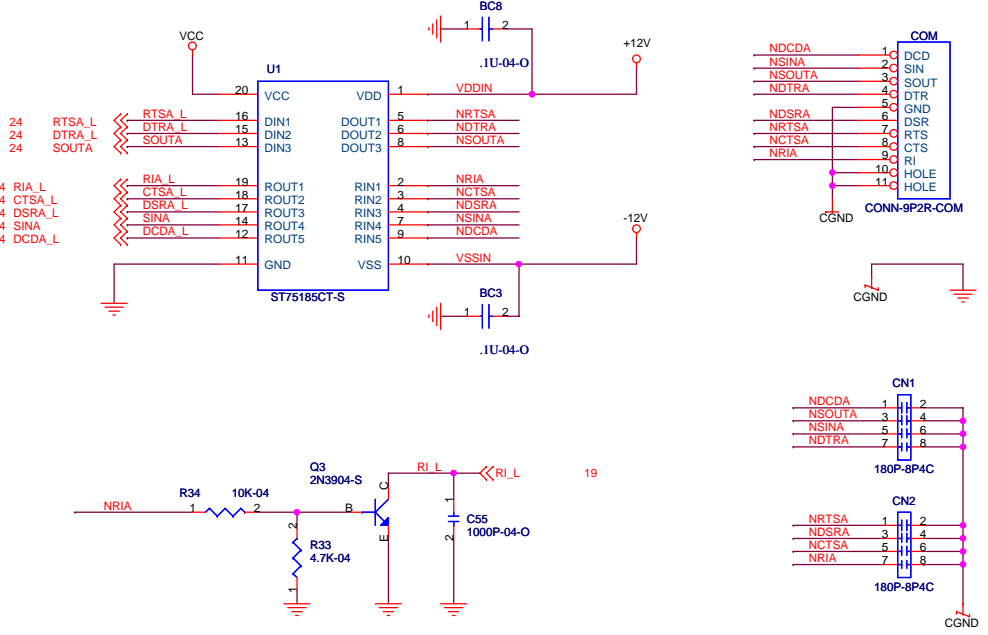
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LPT-D5	NPRD5
LPT-D6	NPRD6
LPT-D7	NPRD7
-LPT-INIT	-NPINIT
-LPT-SLIN	-NSLIN
LPT-D2	NPRD2
LPT-D3	NPRD3
-LPT-STB	-NSTB
-LPT-AFD	-NAFD
LPT-D0	NPRD0
LPT-D1	NPRD1



Selection design with LPT1



COM



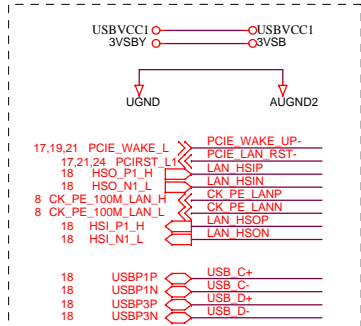
ECS Elitegroup Computer Systems

Title: **I/O Ports**

Size: Custom Document Number: **G31T-M7** Rev: 1.0

Date: Wednesday, May 28, 2008 Sheet: 25 of 30

External Connection



When you found some bug, please inform Ren(ext:1665) to update circuit.

新手提醒:

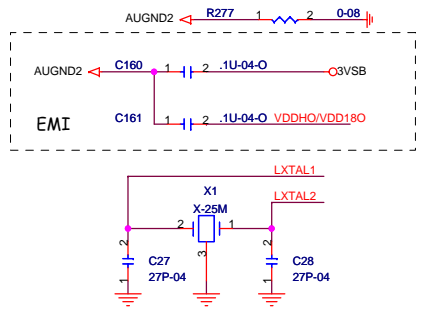
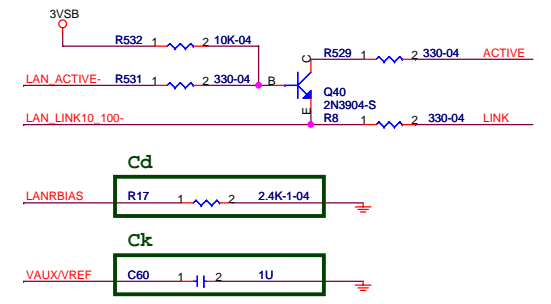
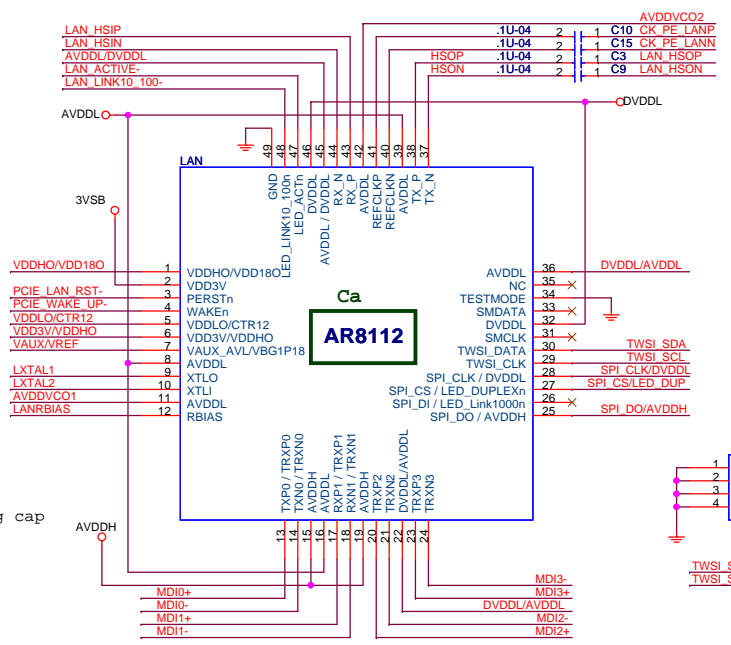
LAN_HSOP/N請接到SB的PCIE RX端
LAN_HSN/N請接到SB的PCIE TX端
LAN_HSIP/N在SB的PCIE TX端要記得放AC coupling cap

BOM Difference

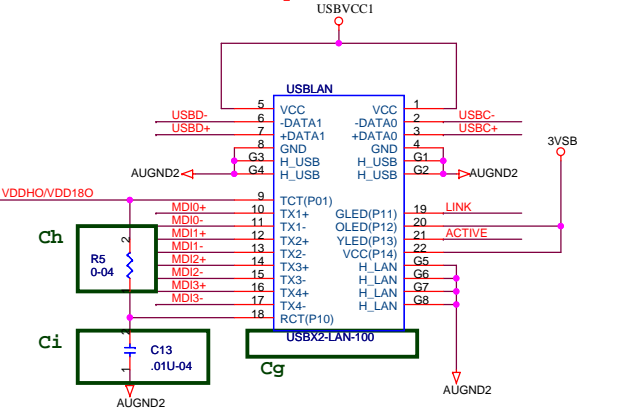
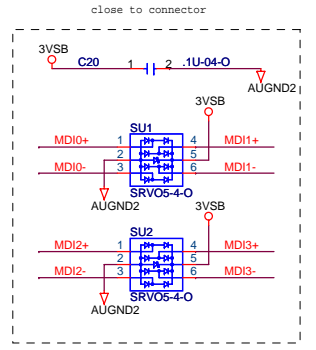
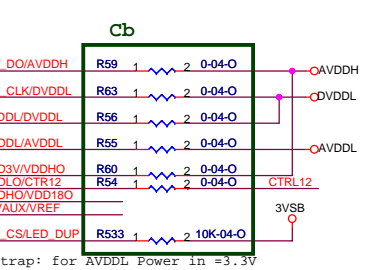
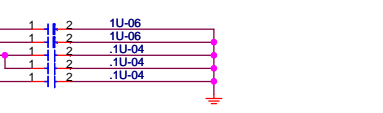
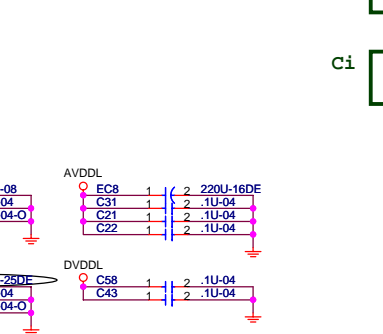
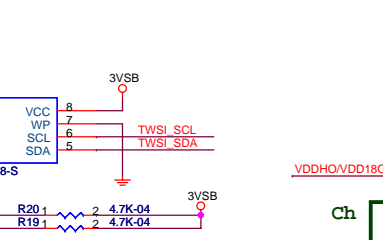
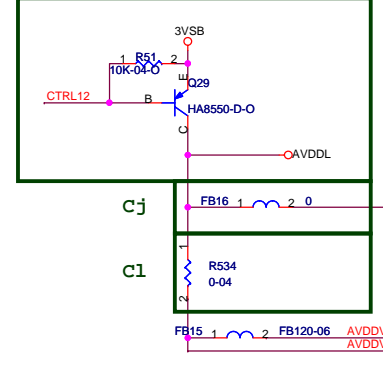
	L2-48 10/100M	L1e 1000M
Ca	AR8112	AR8121
Cb	X	V
Cc	V	X
Cd	2.4K-1-04	2.37K-1-04
Ce	X	V
Cf	X	V
Cg	USBX2-LAN-100	USBX2-LAN-1000
Ch	V	X
Ci	.01U-04	0-04
Cj	0	FB120-06
Ck	1U	1000P
Cl	V	X

Power Difference

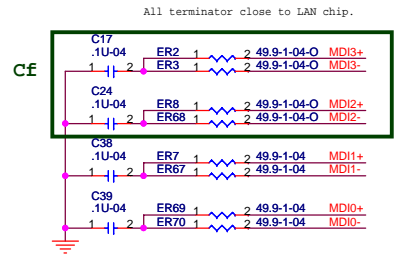
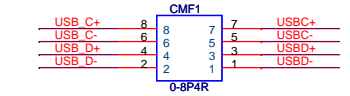
	L2	L1
3VSB	3.3V 3VSB供應	3.3V 3VSB供應
AVDDL	1.5V pin5供應	1.2V pin5 CTRL
DVDDL	1.5V pin5供應	1.2V pin5 CTRL
AVDDH	2.5V pin1供應	2.5V pin6供應
VDDO18	N/A	1.8V pin1供應



Ce



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



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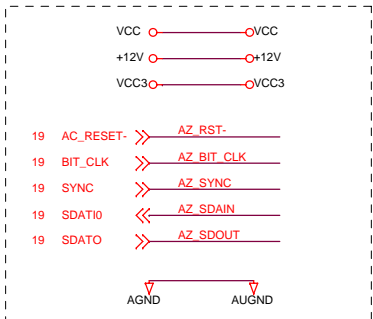
Title: **PCIE LAN L1e/L2-48**

Size: Document Number **G31T-M7** Rev **1.0**

Custom: **G31T-M7**

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External Connection

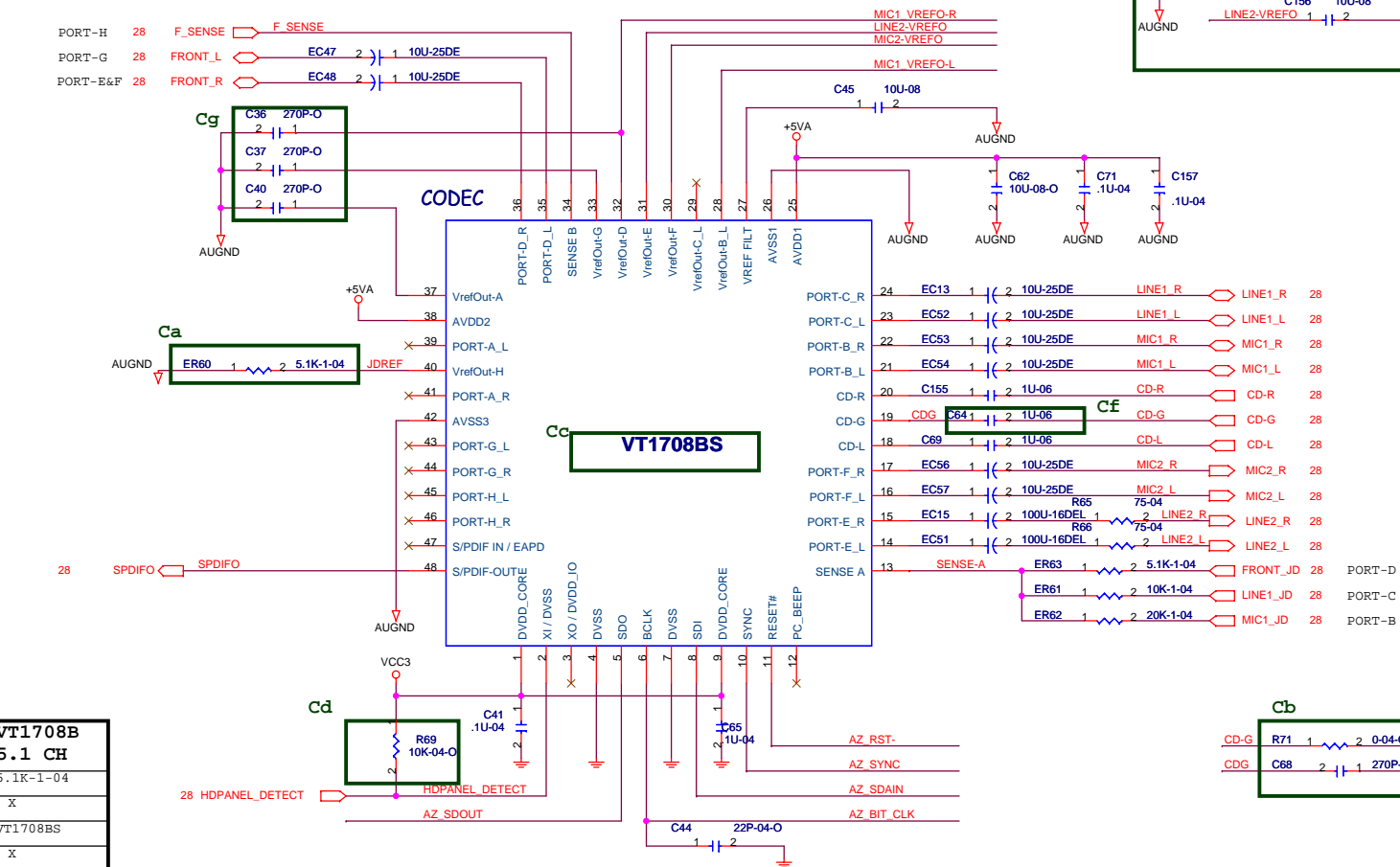


When you found some bug, please inform Ren(ext:665) to update circuit.

BOM Difference

Location	ALC662 5.1 CH	VT1708A 5.1 CH	VT1708B 5.1 CH
Ca	20K-1-04	5.1K-1-04	5.1K-1-04
Cb	X	V	X
Cc	ALC662	VT1708AS	VT1708BS
Cd	V	X	X
Ce	X	V	V
Cf	V	X	V
Cg	X	V	X
Ci	V	X	X

02-301-662690
ALC662-GR
When you change BOM, remember change GPI to inform BIOS use different Verx-Table.



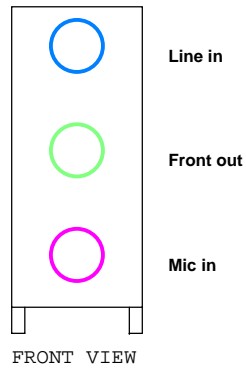
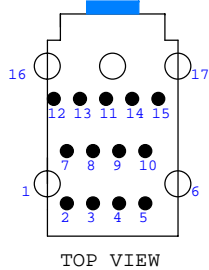
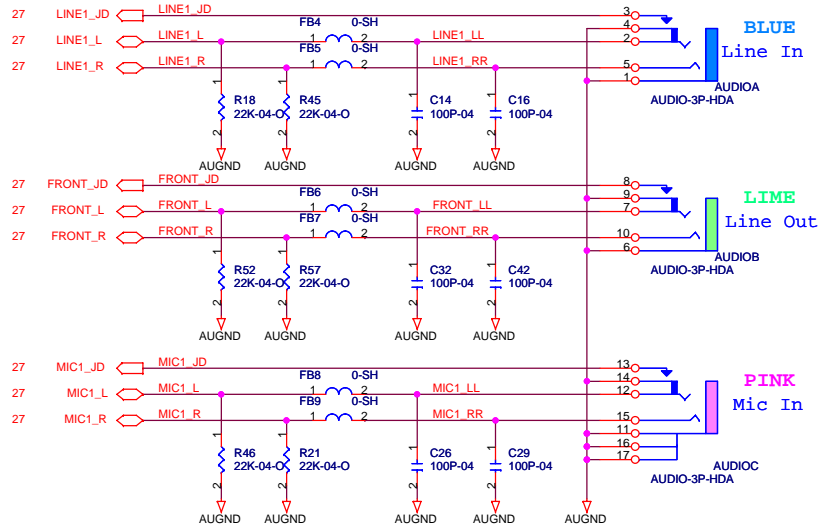
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Title: **AUDIO VT1708BS(CHIP)**

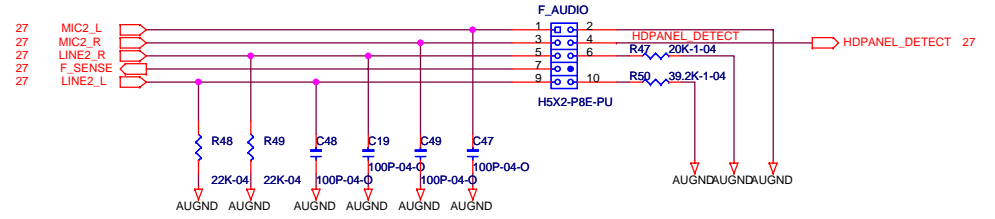
Size Custom: Document Number **G31T-M7** Rev **1.0**

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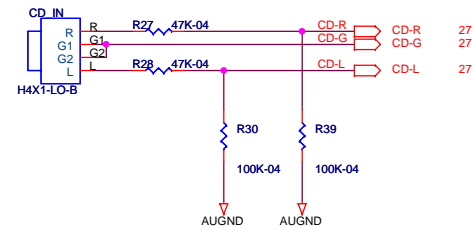
REAR-AUDIO



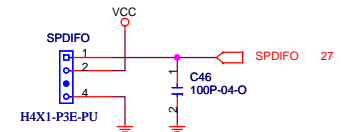
FRONT-AUDIO

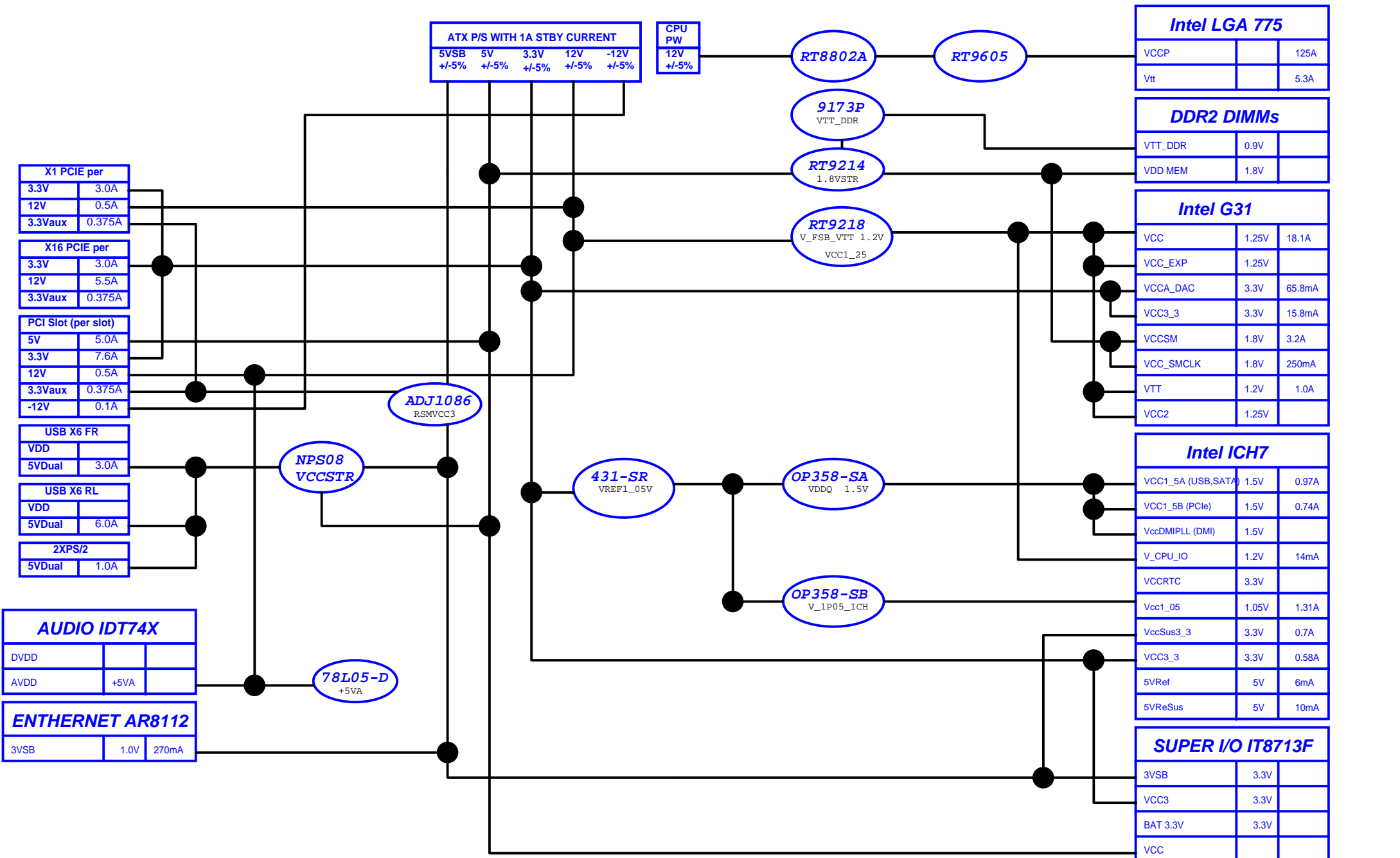


CD_IN



SPDIF-OUT





ATX P/S WITH 1A STBY CURRENT				
5VSB	5V	3.3V	12V	-12V
+/-5%	+/-5%	+/-5%	+/-5%	+/-5%

CPU PW
12V
+/-5%

Intel LGA 775		
VCCP		125A
Vtt		5.3A

DDR2 DIMMs		
VTT_DDR	0.9V	
VDD MEM	1.8V	

Intel G31		
VCC	1.25V	18.1A
VCC_EXP	1.25V	
VCCA_DAC	3.3V	65.8mA
VCC3_3	3.3V	15.8mA
VCCSM	1.8V	3.2A
VCC_SMCLK	1.8V	250mA
VTT	1.2V	1.0A
VCC2	1.25V	

Intel ICH7		
VCC1_5A (USB,SATA)	1.5V	0.97A
VCC1_5B (PCIe)	1.5V	0.74A
VccDMIPLL (DMI)	1.5V	
V_CPU_IO	1.2V	14mA
VCCRTC	3.3V	
Vcc1_05	1.05V	1.31A
VccSus3_3	3.3V	0.7A
VCC3_3	3.3V	0.58A
5VRef	5V	6mA
5VReSus	5V	10mA

SUPER I/O IT8713F		
3VSB	3.3V	
VCC3	3.3V	
BAT 3.3V	3.3V	
VCC		

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

PCI Slot (per slot)	
5V	5.0A
3.3V	7.6A
12V	0.5A
3.3Vaux	0.375A
-12V	0.1A

USB X6 FR	
VDD	
5VDual	3.0A

USB X6 RL	
VDD	
5VDual	6.0A

2XPS/2	
5VDual	1.0A

AUDIO IDT74X		
DVDD		
AVDD	+5VA	

ENETHERNET AR8112		
3VSB	1.0V	270mA

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Title: **Power Delivery Chart**

Size: Custom Document Number: **G31T-M7** Rev: 1.0

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