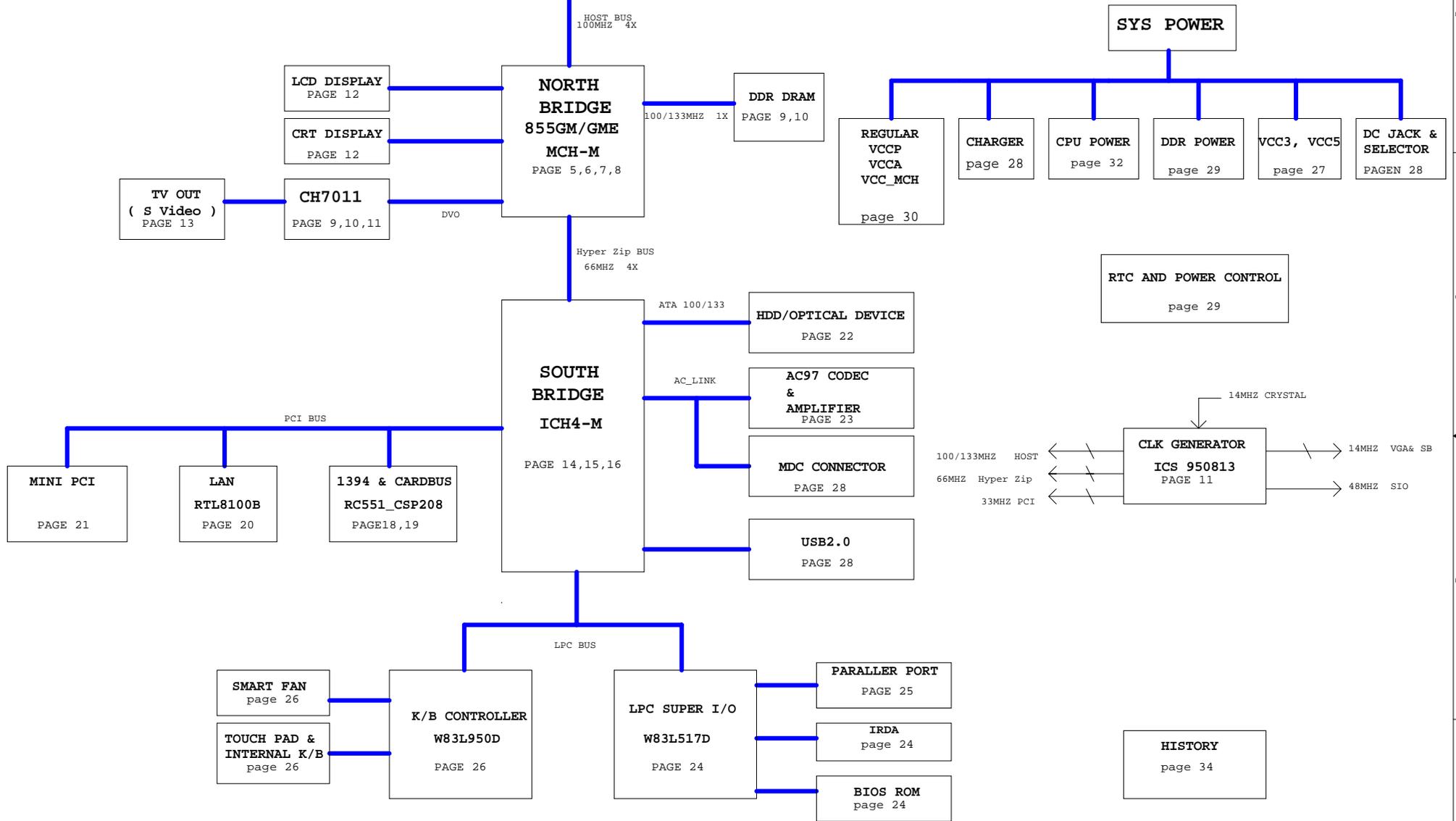


# G553

**SOCKET 479**  
**Banias/Dothan**  
**478 uFCPGA**  
 PAGE 2,3,4



PAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
REV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DATE	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18

PAGE	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
REV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
DATE	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18	9/18			

P/N : 15-F44-010010

**HISTORY**  
page 34

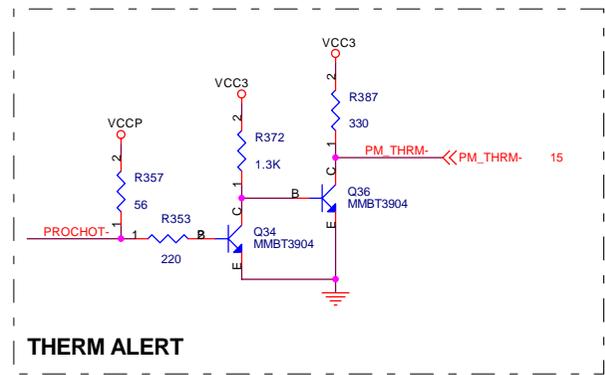
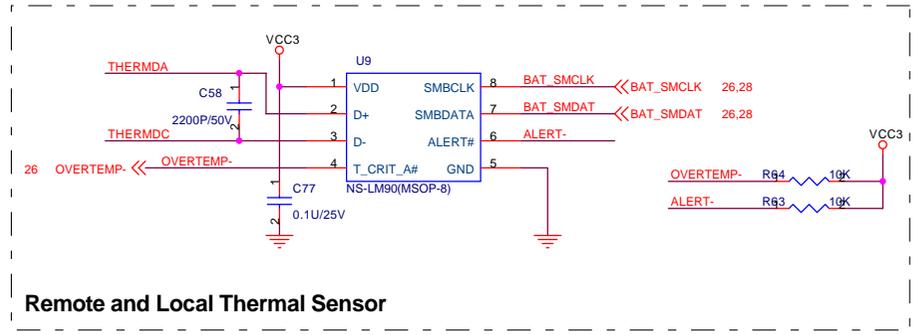
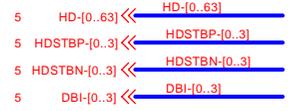
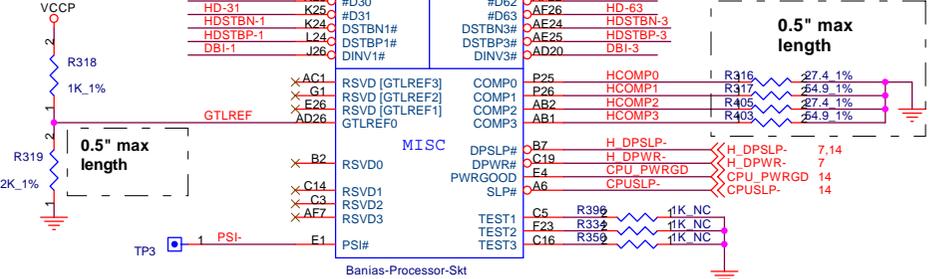
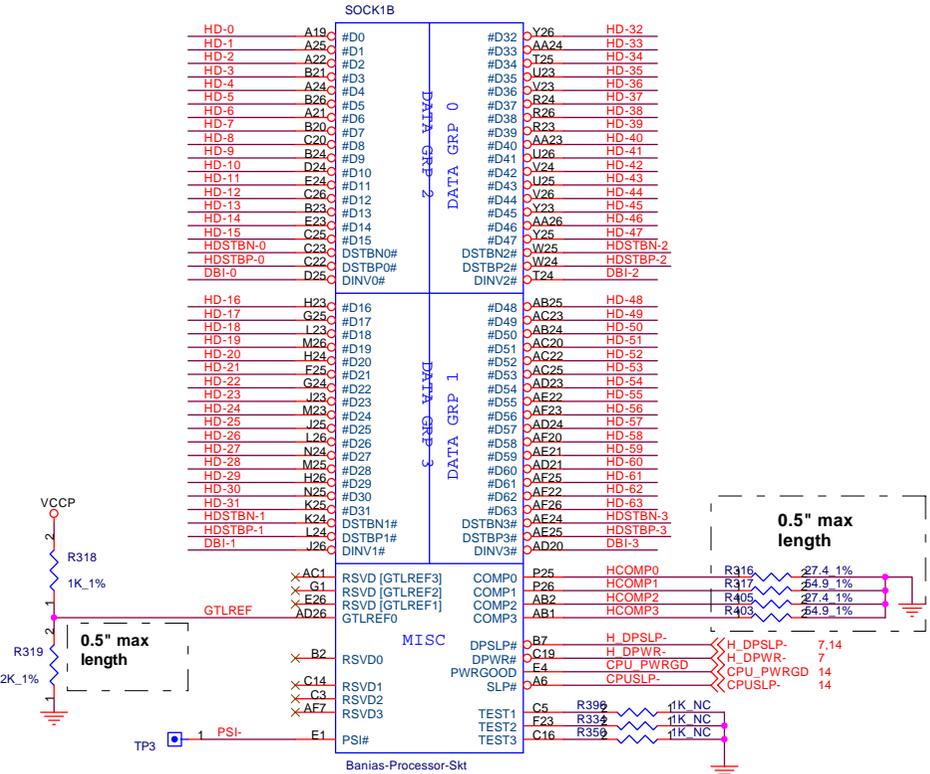
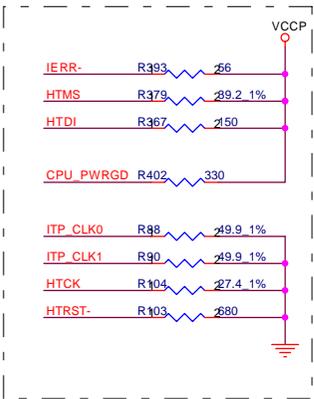
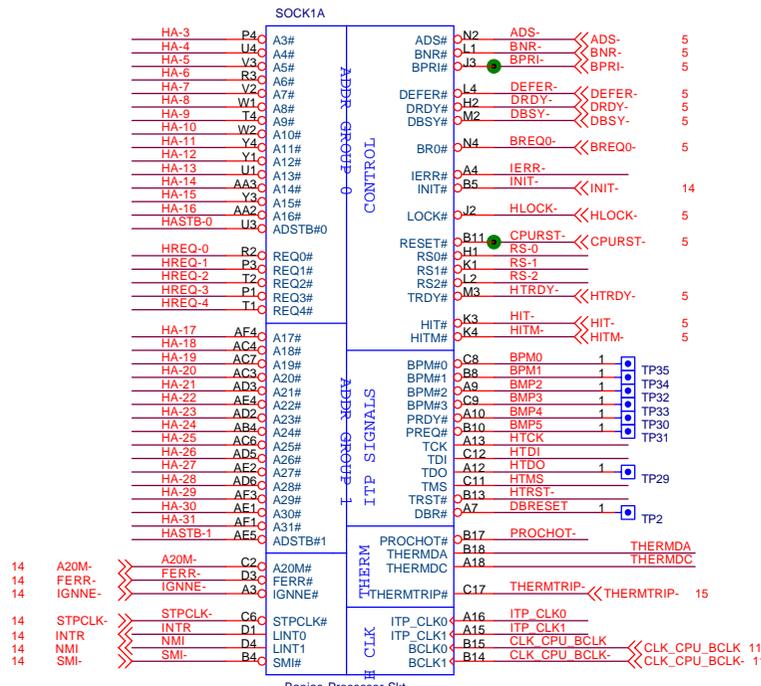
Approved by \_\_\_\_\_ Checked by \_\_\_\_\_ Designed by \_\_\_\_\_

ELITEGROUP COMPUTER SYSTEM CO., LTD.

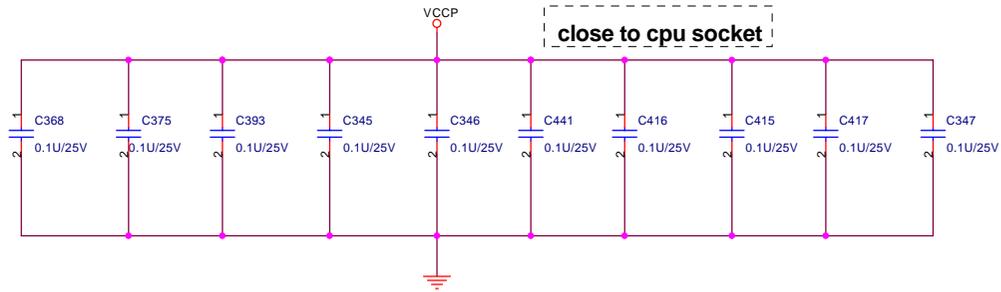
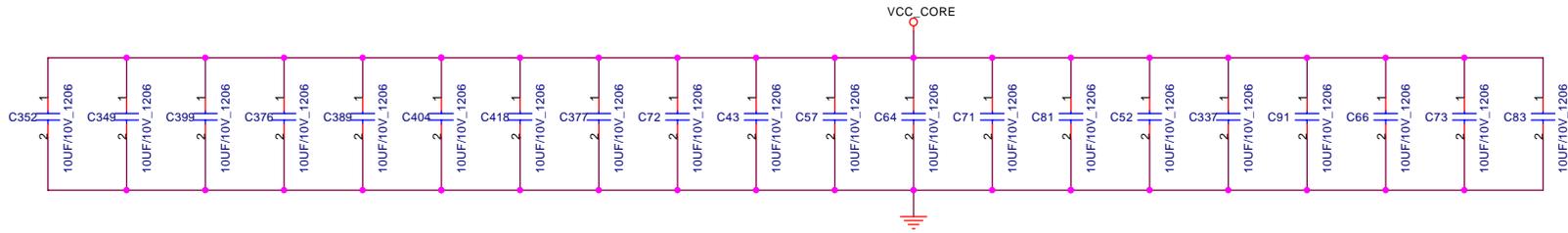
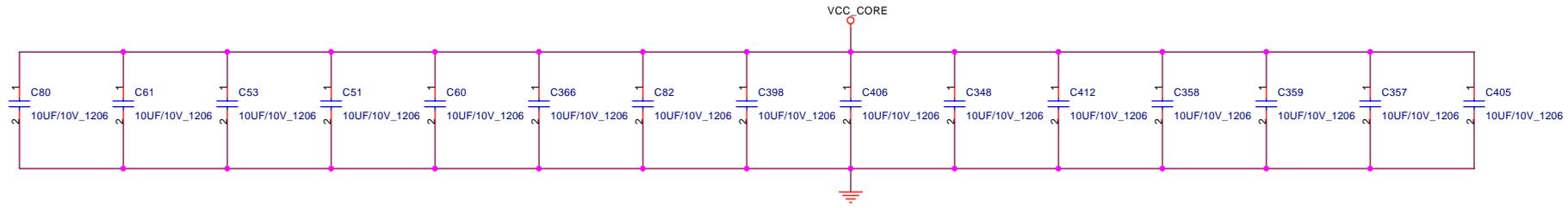
P.Leader Title: G553 BLOCK DIAGRAM

Size: C Document Number: G553-1-9-03 Rev: A

Date: Friday, September 19, 2003 Sheet: 1 of 34



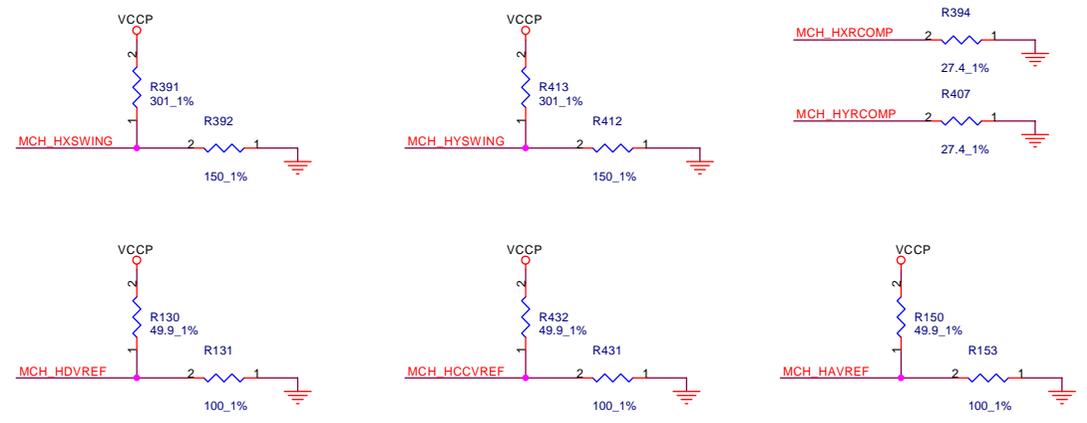




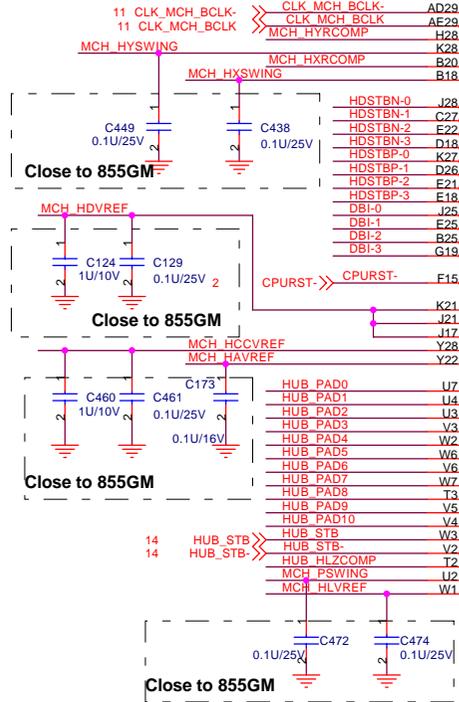
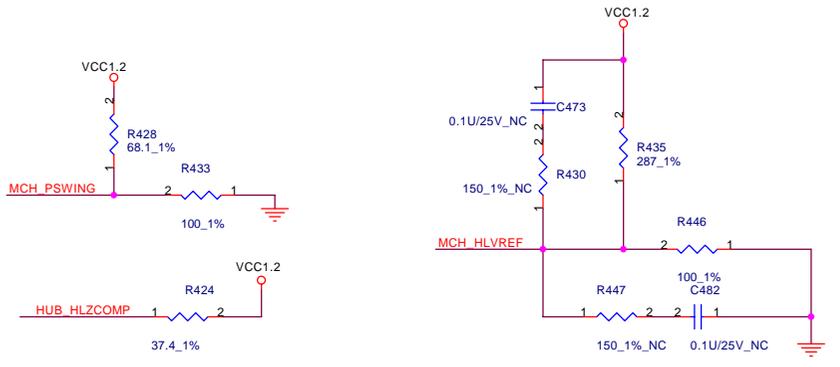
# GMCH Compensation & Reference Voltages



## HOST



## Hub Interface



HD#0	K22	HD-0
HD#1	H27	HD-1
HD#2	K25	HD-2
HD#3	L24	HD-3
HD#4	J27	HD-4
HD#5	G29	HD-5
HD#6	L23	HD-6
HD#7	L25	HD-7
HD#8	L25	HD-8
HD#9	J24	HD-9
HD#10	H25	HD-10
HD#11	K23	HD-11
HD#12	K26	HD-12
HD#13	J23	HD-13
HD#14	H26	HD-14
HD#15	E25	HD-15
HD#16	F25	HD-16
HD#17	B27	HD-17
HD#18	H23	HD-18
HD#19	E27	HD-19
HD#20	G27	HD-20
HD#21	F28	HD-21
HD#22	D27	HD-22
HD#23	G24	HD-23
HD#24	C28	HD-24
HD#25	B26	HD-25
HD#26	G22	HD-26
HD#27	C26	HD-27
HD#28	E26	HD-28
HD#29	G23	HD-29
HD#30	B28	HD-30
HD#31	B21	HD-31
HD#32	G21	HD-32
HD#33	C24	HD-33
HD#34	C23	HD-34
HD#35	C23	HD-35
HD#36	D22	HD-36
HD#37	C25	HD-37
HD#38	D24	HD-38
HD#39	D24	HD-39
HD#40	G20	HD-40
HD#41	E23	HD-41
HD#42	B22	HD-42
HD#43	B23	HD-43
HD#44	F23	HD-44
HD#45	F21	HD-45
HD#46	C20	HD-46
HD#47	C21	HD-47
HD#48	G18	HD-48
HD#49	E19	HD-49
HD#50	E20	HD-50
HD#51	D20	HD-51
HD#52	G17	HD-52
HD#53	C19	HD-53
HD#54	C19	HD-54
HD#55	C17	HD-55
HD#56	F17	HD-56
HD#57	G16	HD-57
HD#58	E16	HD-58
HD#59	C16	HD-59
HD#60	E17	HD-60
HD#61	D16	HD-61
HD#62	C18	HD-62
HD#63	C18	HD-63

	855GM	855GME
R428	49.9_1%	68.1_1%
R424	27.4_1%	37.4_1%
R435	243_1%	287_1%

# DDR Seris Termination

MD2	RP33D	5	4	10	8P4R	0402	/RMD2
MD3	RP33A	7	1	10	8P4R	0402	/RMD3
MD7	RP33B	7	2	10	8P4R	0402	/RMD7
MD6	RP33C	6	3	10	8P4R	0402	/RMD6

MD4	RP15A	8	1	10	8P4R	0402	/RMD4
MD1	RP15B	7	2	10	8P4R	0402	/RMD1
MD0	RP15C	6	3	10	8P4R	0402	/RMD0
MD5	RP15D	5	4	10	8P4R	0402	/RMD5

MD11	RP14A	8	1	10	8P4R	0402	/RMD11
MD14	RP14B	7	2	10	8P4R	0402	/RMD14
MD8	RP14C	6	3	10	8P4R	0402	/RMD8
MD12	RP14D	5	4	10	8P4R	0402	/RMD12

MD13	RP32A	8	1	10	8P4R	0402	/RMD13
MD9	RP32B	7	2	10	8P4R	0402	/RMD9
MD15	RP32C	6	3	10	8P4R	0402	/RMD15
MD10	RP32D	5	4	10	8P4R	0402	/RMD10

MD20	RP31A	8	1	10	8P4R	0402	/RMD20
MD17	RP31B	7	2	10	8P4R	0402	/RMD17
MD18	RP31C	6	3	10	8P4R	0402	/RMD18
MD19	RP31D	5	4	10	8P4R	0402	/RMD19

MD23	RP13A	8	1	10	8P4R	0402	/RMD23
MD21	RP13B	7	2	10	8P4R	0402	/RMD21
MD22	RP13C	6	3	10	8P4R	0402	/RMD22
MD16	RP13D	5	4	10	8P4R	0402	/RMD16

MD24	RP30A	8	1	10	8P4R	0402	/RMD24
MD28	RP30B	7	2	10	8P4R	0402	/RMD28
MD25	RP30C	6	3	10	8P4R	0402	/RMD25
MD26	RP30D	5	4	10	8P4R	0402	/RMD26

MD31	RP12A	8	1	10	8P4R	0402	/RMD31
MD27	RP12B	7	2	10	8P4R	0402	/RMD27
MD29	RP12C	6	3	10	8P4R	0402	/RMD29
MD30	RP12D	5	4	10	8P4R	0402	/RMD30

MD35	RP11A	8	1	10	8P4R	0402	/RMD35
MD34	RP11B	7	2	10	8P4R	0402	/RMD34
MD36	RP11C	6	3	10	8P4R	0402	/RMD36
MD37	RP11D	5	4	10	8P4R	0402	/RMD37

MD32	RP37A	8	1	10	8P4R	0402	/RMD32
MD33	RP37B	7	2	10	8P4R	0402	/RMD33
MD38	RP37C	6	3	10	8P4R	0402	/RMD38
MD39	RP37D	5	4	10	8P4R	0402	/RMD39

MD42	RP10A	8	1	10	8P4R	0402	/RMD42
MD43	RP10B	7	2	10	8P4R	0402	/RMD43
MD47	RP10C	6	3	10	8P4R	0402	/RMD47
MD44	RP10D	5	4	10	8P4R	0402	/RMD44

MD45	RP36A	8	1	10	8P4R	0402	/RMD45
MD41	RP36B	7	2	10	8P4R	0402	/RMD41
MD40	RP36C	6	3	10	8P4R	0402	/RMD40
MD46	RP36D	5	4	10	8P4R	0402	/RMD46

MD54	RP8A	8	1	10	8P4R	0402	/RMD54
MD50	RP8B	7	2	10	8P4R	0402	/RMD50
MD48	RP8C	6	3	10	8P4R	0402	/RMD48
MD53	RP8D	5	4	10	8P4R	0402	/RMD53

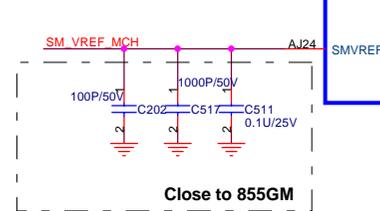
MD52	RP35A	8	1	10	8P4R	0402	/RMD52
MD49	RP35B	7	2	10	8P4R	0402	/RMD49
MD55	RP35C	6	3	10	8P4R	0402	/RMD55
MD51	RP35D	5	4	10	8P4R	0402	/RMD51

MD60	RP34A	8	1	10	8P4R	0402	/RMD60
MD56	RP34B	7	2	10	8P4R	0402	/RMD56
MD59	RP34C	6	3	10	8P4R	0402	/RMD59
MD58	RP34D	5	4	10	8P4R	0402	/RMD58

MD63	RP9A	8	1	10	8P4R	0402	/RMD63
MD62	RP9B	7	2	10	8P4R	0402	/RMD62
MD57	RP9C	6	3	10	8P4R	0402	/RMD57
MD61	RP9D	5	4	10	8P4R	0402	/RMD61

/RDQS0	R492	2	10	1%	0402	M_DQS0
/RDQS1	R495	2	10	1%	0402	M_DQS1
/RDQS2	R493	2	10	1%	0402	M_DQS2
/RDQS3	R492	2	10	1%	0402	M_DQS3
/RDQS4	R490	2	10	1%	0402	M_DQS4
/RDQS5	R198	2	10	1%	0402	M_DQS5
/RDQS6	R196	2	10	1%	0402	M_DQS6
/RDQS7	R194	2	10	1%	0402	M_DQS7

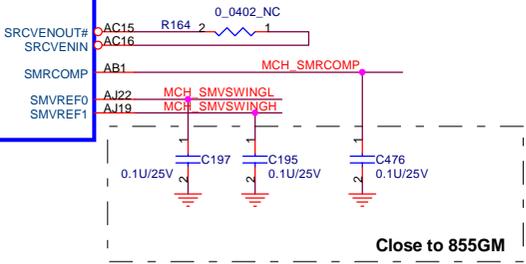
/RDM0	R497	2	10	1%	0402	M_DM0
/RDM1	R496	2	10	1%	0402	M_DM1
/RDM2	R494	2	10	1%	0402	M_DM2
/RDM3	R491	2	10	1%	0402	M_DM3
/RDM4	R199	2	10	1%	0402	M_DM4
/RDM5	R197	2	10	1%	0402	M_DM5
/RDM6	R195	2	10	1%	0402	M_DM6
/RDM7	R493	2	10	1%	0402	M_DM7



# 855GM-2 DDR SYSTEM MEMORY

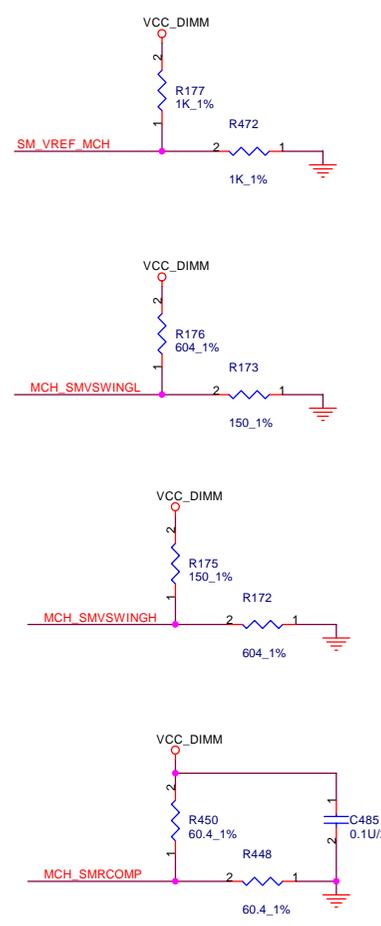
MD0	AF2	SDQ0
MD1	AE3	SDQ1
MD2	AE4	SDQ2
MD3	AH2	SDQ3
MD4	AD3	SDQ4
MD5	AE2	SDQ5
MD6	AC4	SDQ6
MD7	AH3	SDQ7
MD8	AD6	SDQ8
MD9	AG5	SDQ9
MD10	AG7	SDQ10
MD11	AE8	SDQ11
MD12	AE5	SDQ12
MD13	AH4	SDQ13
MD14	AE7	SDQ14
MD15	AH6	SDQ15
MD16	AE8	SDQ16
MD17	AG8	SDQ17
MD18	AH9	SDQ18
MD19	AG10	SDQ19
MD20	AH7	SDQ20
MD21	AD9	SDQ21
MD22	AF10	SDQ22
MD23	AE11	SDQ23
MD24	AH10	SDQ24
MD25	AG11	SDQ25
MD26	AH11	SDQ26
MD27	AF14	SDQ27
MD28	AG11	SDQ28
MD29	AD12	SDQ29
MD30	AF13	SDQ30
MD31	AH13	SDQ31
MD32	AH16	SDQ32
MD33	AG19	SDQ33
MD34	AE19	SDQ34
MD35	AE20	SDQ35
MD36	AD18	SDQ36
MD37	AE18	SDQ37
MD38	AG19	SDQ38
MD39	AH18	SDQ39
MD40	AH20	SDQ40
MD41	AG20	SDQ41
MD42	AF22	SDQ42
MD43	AH22	SDQ43
MD44	AE20	SDQ44
MD45	AH19	SDQ45
MD46	AH21	SDQ46
MD47	AG22	SDQ47
MD48	AE23	SDQ48
MD49	AH23	SDQ49
MD50	AE24	SDQ50
MD51	AH25	SDQ51
MD52	AG23	SDQ52
MD53	AF23	SDQ53
MD54	AE25	SDQ54
MD55	AG25	SDQ55
MD56	AH26	SDQ56
MD57	AE26	SDQ57
MD58	AG28	SDQ58
MD59	AE28	SDQ59
MD60	AE26	SDQ60
MD61	AE26	SDQ61
MD62	AE27	SDQ62
MD63	AD27	SDQ63
AG14	SDQ64	
AE14	SDQ65	
AE1Z	SDQ66	
AG16	SDQ67	
AH14	SDQ68	
AE15	SDQ69	
AE16	SDQ70	
AE17	SDQ71	

SMA0	AC18	M_A0	M_A0	9,10
SMA1	AD14	M_A1	M_A1	9,10
SMA2	AD13	M_A2	M_A2	9,10
SMA3	AD17	M_A3	M_A3	9,10
SMA4	AD11	M_A4	M_A4	9,10
SMA5	AC13	M_A5	M_A5	9,10
SMA6	AD9	M_A7	M_A5	9,10
SMA7	AC6	M_A8		
SMA8	AC5	M_A9		
SMA9	AC19	M_A10		
SMA10	AD5	M_A11		
SMA11	AB5	M_A12		
SMA12				
SMA_B1	AD16	M_AB1	M_AB1	9,10
SMA_B2	AC12	M_AB2	M_AB2	9,10
SMA_B4	AF11	M_AB4	M_AB4	9,10
SMA_B5	AD10	M_AB5	M_AB5	9,10
SCKE0	AC7	CKE0		
SCKE1	AB7	CKE1		
SCKE2	AC9	CKE2		
SCKE3	AC10	CKE3		
SCS0#	AD23	/RCS-0		
SCS1#	AD26	/RCS-1		
SCS2#	AC22	/RCS-2		
SCS3#	AC25	/RCS-3		
SBA0	AD22	M_BS0	M_BS0	9,10
SBA1	AD20	M_BS1	M_BS1	9,10
SRAS#	AC21	M_RAS-	M_RAS-	9,10
SCAS#	AC24	M_CAS-	M_CAS-	9,10
SWE#	AD25	M_WE-	M_WE-	9,10
SCK0	AB2	M_CLK0		
SCK#0	AA2	M_CLK-0		
SCK#1	AC26	M_CLK-1		
SCK#2	AB25	M_CLK-1		
SCK#3	AC3	M_CLK2		
SCK#4	AD4	M_CLK2		
SCK#5	AC2	M_CLK3		
SCK#6	AD2	M_CLK-3		
SCK#7	AB23	M_CLK4		
SCK#8	AB24	M_CLK-4		
SCK#9	AA3	M_CLK5		
SCK#5	AB4	M_CLK-5		
SDQS0	AG2	M_DQS0		
SDQS1	AH5	M_DQS1		
SDQS2	AH8	M_DQS2		
SDQS3	AE12	M_DQS3		
SDQS4	AH17	M_DQS4		
SDQS5	AE21	M_DQS5		
SDQS6	AH24	M_DQS6		
SDQS7	AH27	M_DQS7		
SDQS8	AD19			
SDM0	AE5	M_DM0		
SDM1	AE6	M_DM1		
SDM2	AE9	M_DM2		
SDM3	AH12	M_DM3		
SDM4	AD19	M_DM4		
SDM5	AD21	M_DM5		
SDM6	AD24	M_DM6		
SDM7	AH28	M_DM7		
SDM8	AH19			



/RMD[0..63]	<<	/RMD[0..63]	9,10
/RDQS[0..7]	<<	/RDQS[0..7]	9,10
/RCS-[0..3]	<<	/RCS-[0..3]	9,10
CKE[0..3]	<<	CKE[0..3]	9,10
M_A[6..12]	<<	M_A[6..12]	9,10
/RDM[0..7]	<<	/RDM[0..7]	9,10
M_CLK[0..5]	<<	M_CLK[0..5]	9
M_CLK[0..5]	<<	M_CLK[0..5]	9

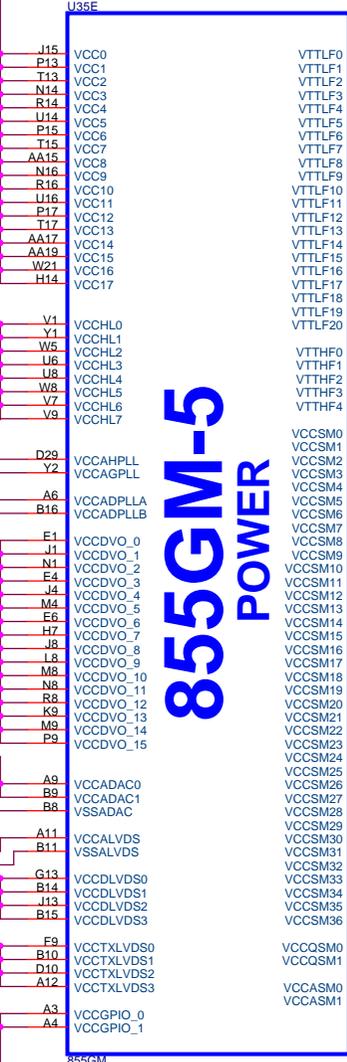
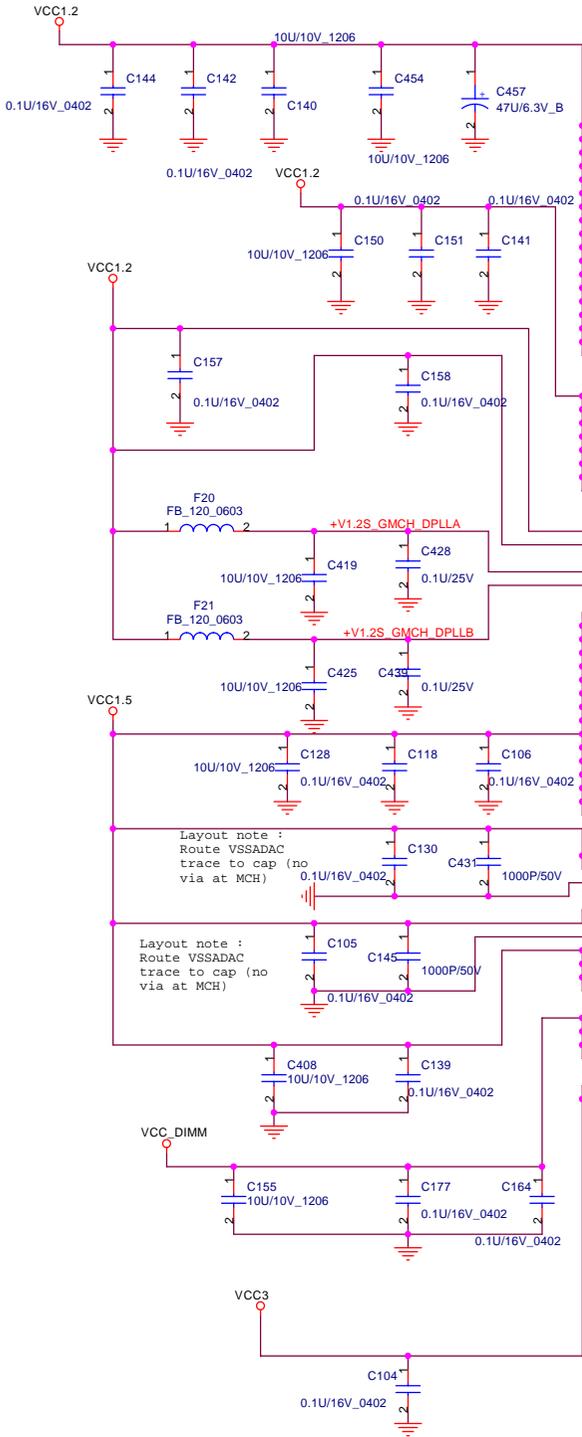
## System Memory



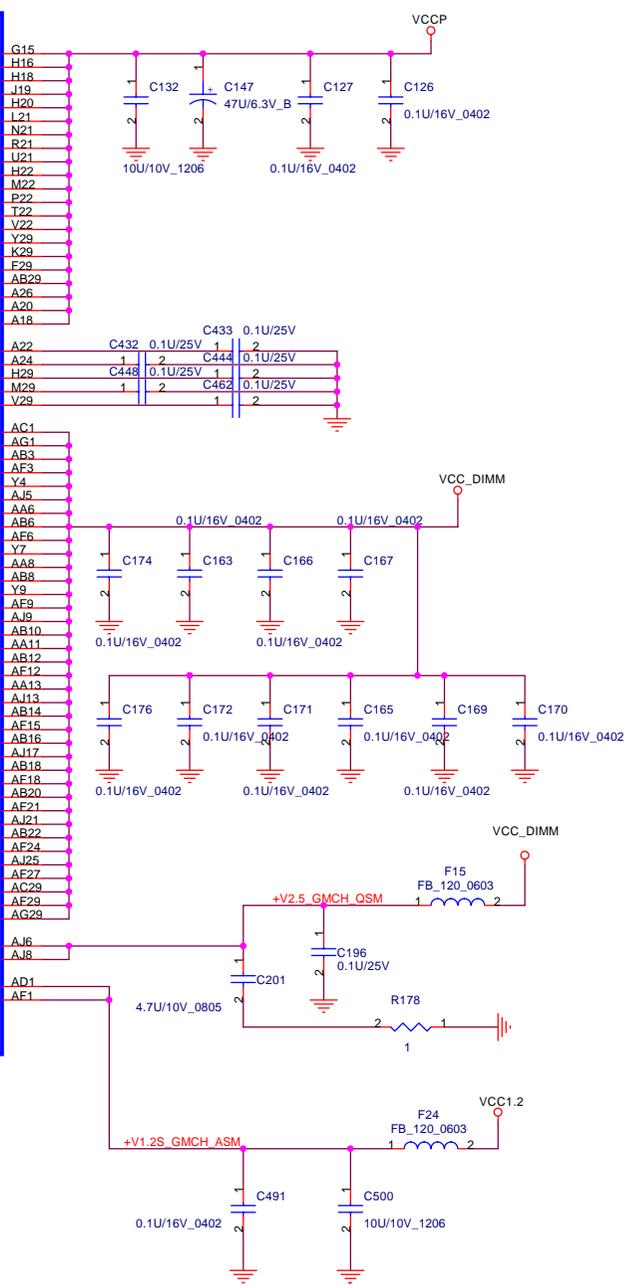


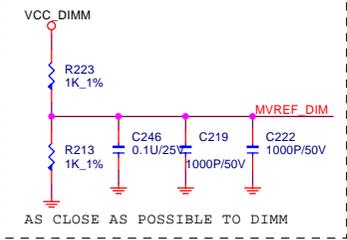
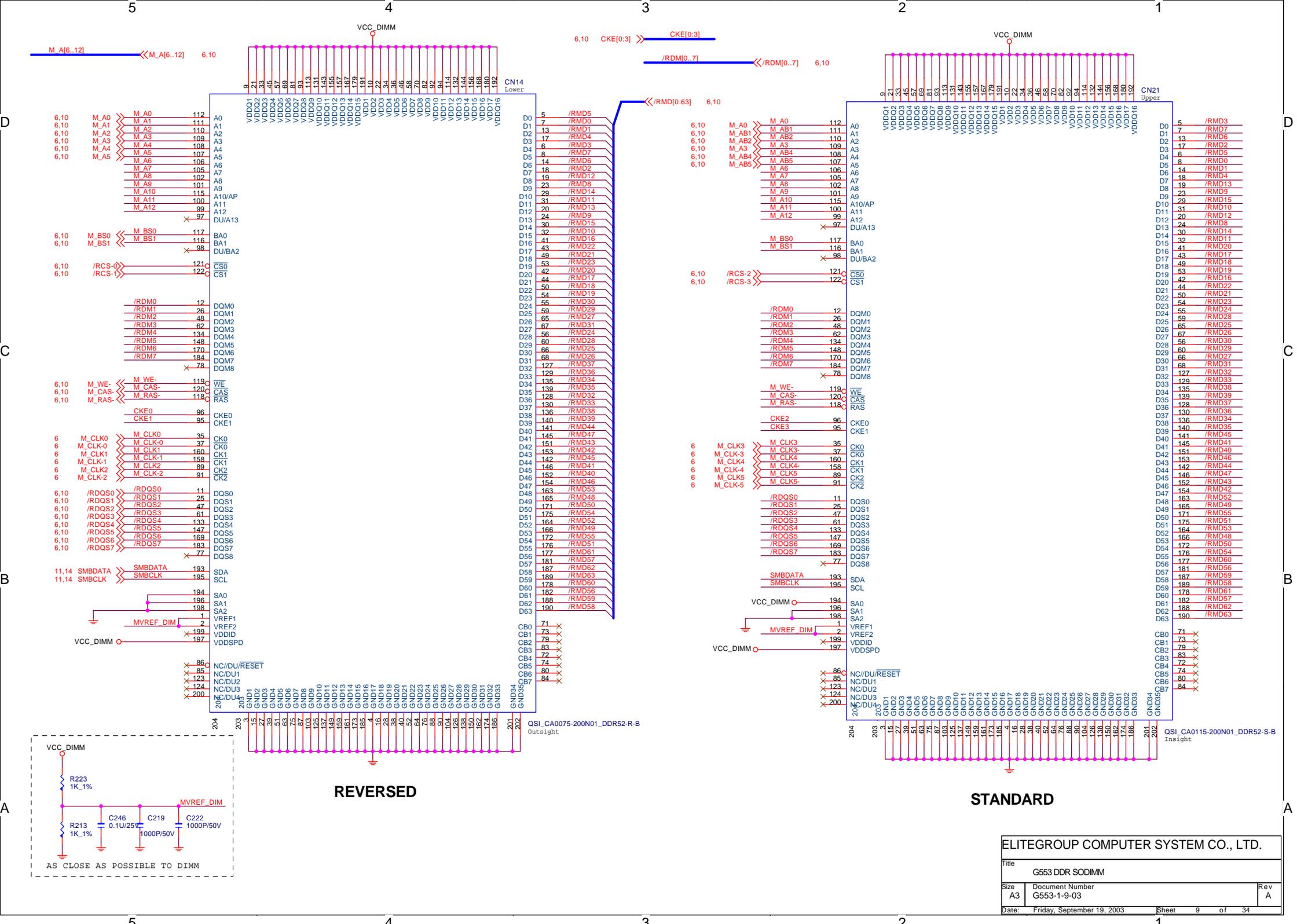
# 855GM-4 VSS

C1	VSS0	VSS91	R17
G1	VSS1	VSS92	AB17
U1	VSS2	VSS93	AC17
AA1	VSS3	VSS94	F18
AE1	VSS4	VSS95	J18
R2	VSS5	VSS96	AA18
AG3	VSS6	VSS97	AG18
AJ3	VSS7	VSS98	AI19
D4	VSS8	VSS99	D19
G4	VSS9	VSS100	H19
VSS10	VSS10	VSS101	AB19
K4	VSS11	VSS102	AE19
N4	VSS12	VSS103	F20
T4	VSS13	VSS104	J20
W4	VSS14	VSS105	AA20
AA4	VSS15	VSS106	AC20
AC4	VSS16	VSS107	A21
AE4	VSS17	VSS108	D21
VSS18	VSS18	VSS109	H21
U5	VSS19	VSS110	M21
Y5	VSS20	VSS111	P21
Y6	VSS21	VSS112	T21
AG6	VSS22	VSS113	V21
C7	VSS23	VSS114	Y21
E7	VSS24	VSS115	AA21
G7	VSS25	VSS116	AB21
J7	VSS26	VSS117	AC21
M7	VSS27	VSS118	B24
R7	VSS28	VSS119	F22
AA7	VSS29	VSS120	J22
AE7	VSS30	VSS121	L22
AJ7	VSS31	VSS122	N22
H8	VSS32	VSS123	R22
K8	VSS33	VSS124	T22
P8	VSS34	VSS125	W22
T8	VSS35	VSS126	Y22
V8	VSS36	VSS127	AE22
Y8	VSS37	VSS128	A23
AC8	VSS38	VSS129	D23
E9	VSS39	VSS130	AA23
L9	VSS40	VSS131	AC23
N9	VSS41	VSS132	AJ23
R9	VSS42	VSS133	E24
U9	VSS43	VSS134	H24
W9	VSS44	VSS135	K24
AB9	VSS45	VSS136	M24
AG9	VSS46	VSS137	P24
C10	VSS47	VSS138	T24
I10	VSS48	VSS139	V24
AA10	VSS49	VSS140	AA24
AE10	VSS50	VSS141	AG24
D11	VSS51	VSS142	A25
F11	VSS52	VSS143	D25
H11	VSS53	VSS144	AA25
AB11	VSS54	VSS145	AE25
AC11	VSS55	VSS146	G26
AJ11	VSS56	VSS147	J26
J12	VSS57	VSS148	L26
AA12	VSS58	VSS149	N26
AG12	VSS59	VSS150	R26
D13	VSS60	VSS151	U26
F13	VSS61	VSS152	W26
H13	VSS62	VSS153	AA26
N13	VSS63	VSS154	A27
R13	VSS64	VSS155	F27
U13	VSS65	VSS156	AC27
AB13	VSS66	VSS157	AG27
AE13	VSS67	VSS158	AJ27
AJ13	VSS68	VSS159	AC28
P14	VSS69	VSS160	AE28
T14	VSS70	VSS161	C29
AA14	VSS71	VSS162	E29
AC14	VSS72	VSS163	G29
D15	VSS73	VSS164	J29
H15	VSS74	VSS165	L29
N15	VSS75	VSS166	N29
R15	VSS76	VSS167	U29
U15	VSS77	VSS168	W29
AB15	VSS78	VSS169	AA29
AG15	VSS79	VSS170	AJ10
F16	VSS80	VSS171	AJ11
J16	VSS81	VSS172	AJ18
P16	VSS82	VSS173	AJ20
T16	VSS83	VSS174	C22
AA16	VSS84	VSS175	D28
AE16	VSS85	VSS176	L16
AJ16	VSS86	VSS177	E28
D17	VSS87	VSS178	T9
H17	VSS88	VSS179	T9
N17	VSS89	VSS180	AJ26
	VSS90		



# 855GM-5 POWER

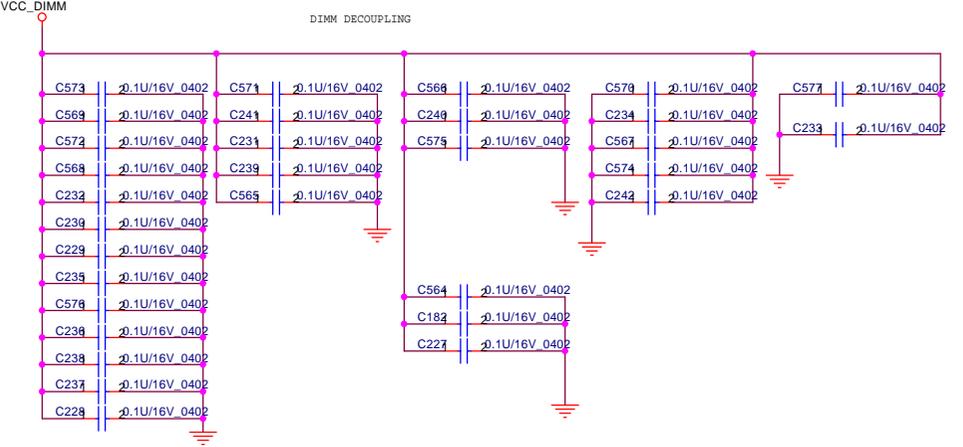
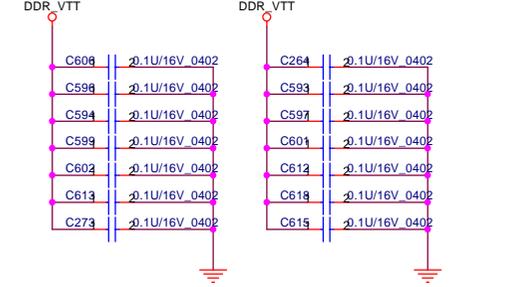
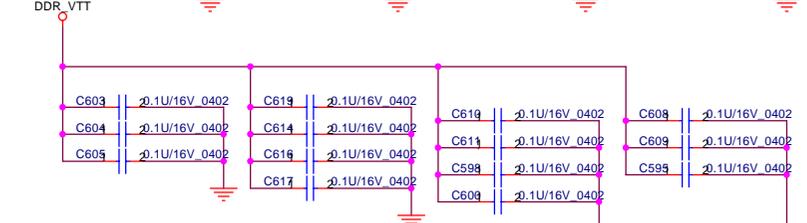
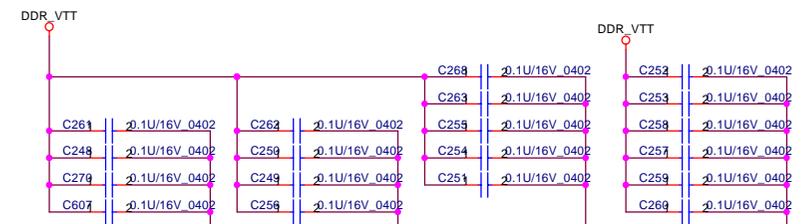
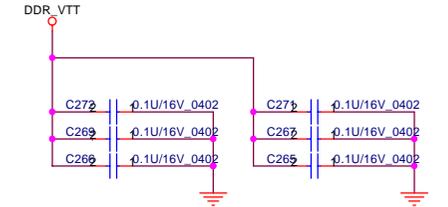
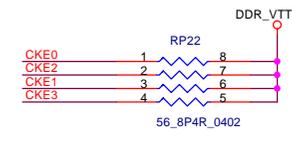
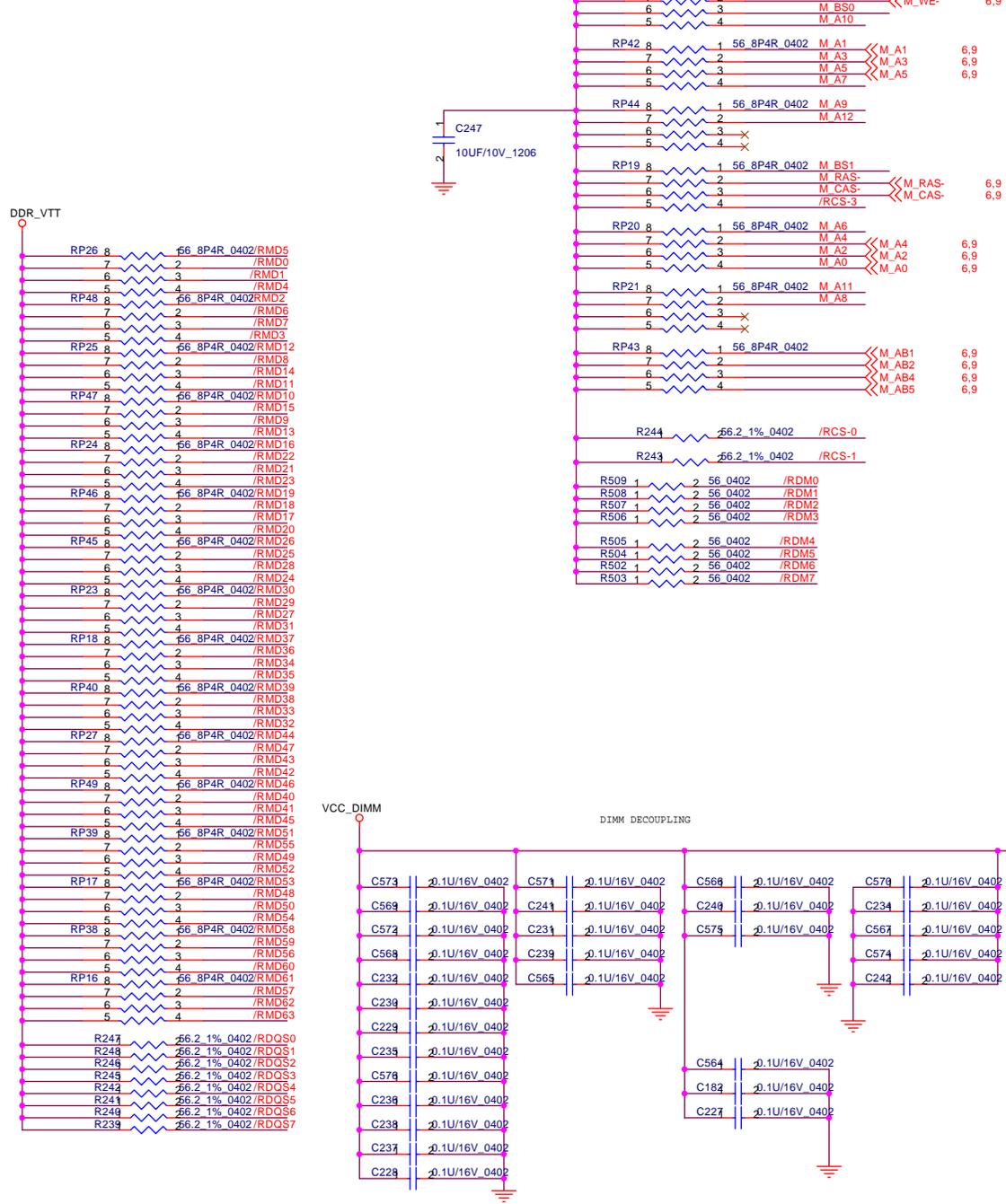




ELITEGROUP COMPUTER SYSTEM CO., LTD.			
Title G553 DDR SODIMM			
Size A3	Document Number G553-1-9-03		Rev A
Date: Friday, September 19, 2003	Sheet 9	of 34	

# DDR Parallel Termination

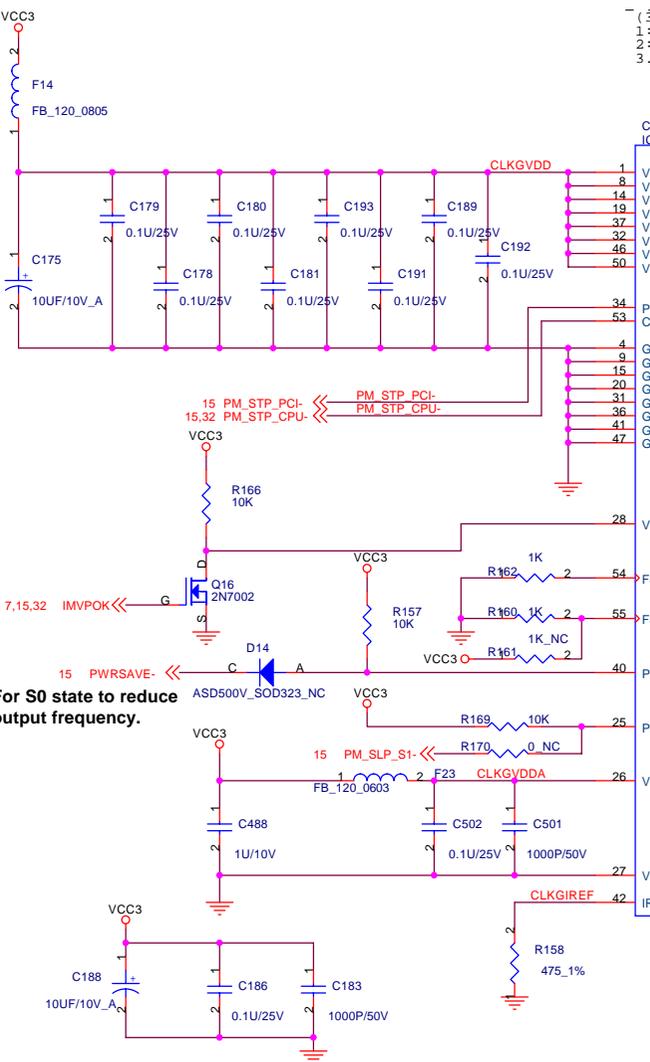
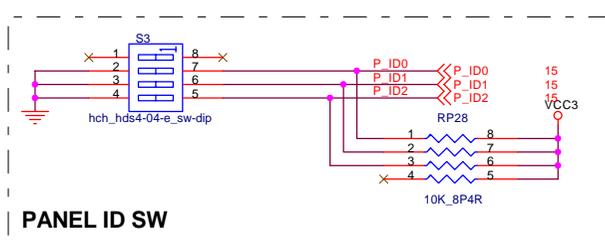
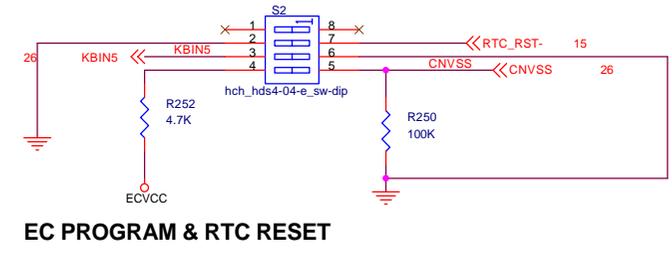
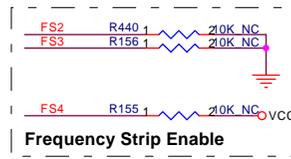
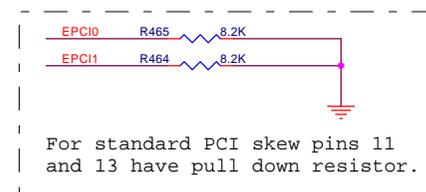
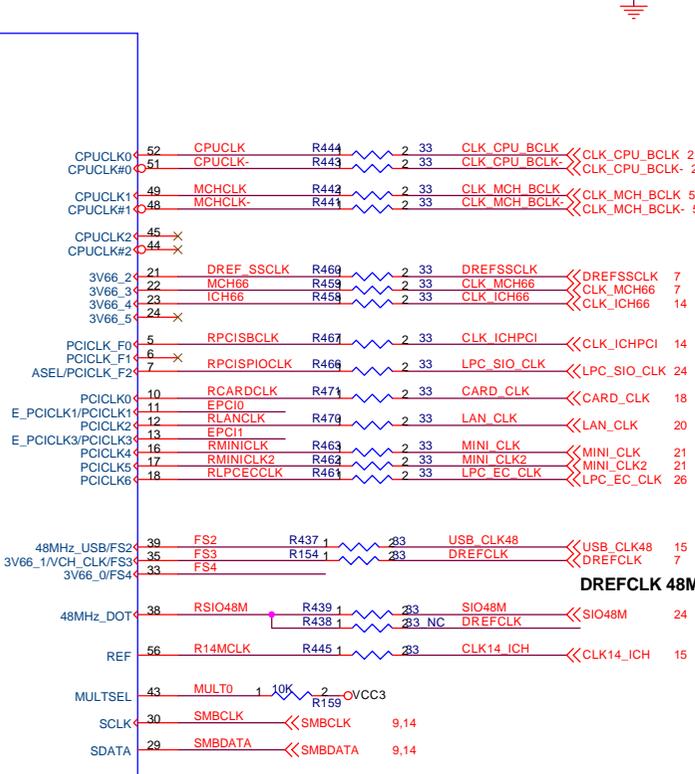
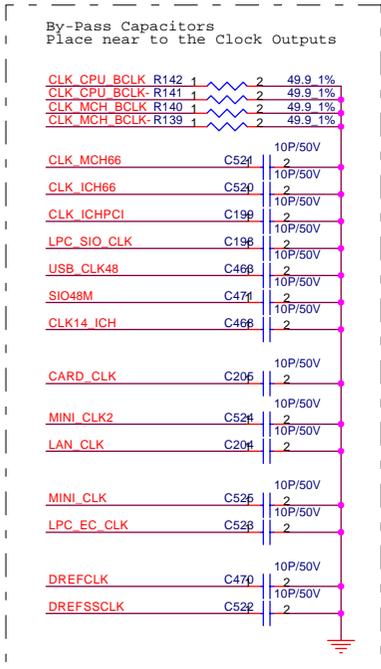
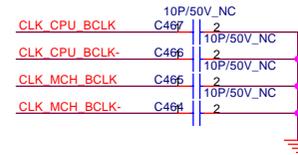
/RMD[0..63]	<<	/RMD[0..63]	6,9
/RDQS[0..7]	<<	/RDQS[0..7]	6,9
M_A[6..12]	<<	M_A[6..12]	6,9
/RCS[0..3]	<<	/RCS[0..3]	6,9
CKE[0..3]	<<	CKE[0..3]	6,9
M_BS[0..1]	<<	M_BS[0..1]	6,9
/RDM[0..7]	<<	/RDM[0..7]	6,9



ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title G553_DDR_RES_VTT		
Size A3	Document Number G553-1-9-03	Rev A
Date: Friday, September 19, 2003	Sheet 10	of 34

# Main Clock Generator

(3 OPTIONS)  
 1: (ICS)  
 2: (Cypress)  
 3: (Hitachi)



INTERNAL PULL UP PIN  
 ICS 120K Internal Pull Up to VDD  
 CPU\_STOP#  
 PCI\_STOP#  
 PWRSAVE#  
 MULTSEL#  
 PD#

VCC_GME	1.2V	1.35V
S2-Pin1	O	X
S2-Pin8	X	O

	CPU	AGP	PCI
General	100MHZ	66MHZ	33MHZ
PWRSAVE#	80MHZ	53MHZ	26MHZ

FS0:0 Defult  
 FS1:0  
 FS2:0  
 FS3:0  
 FS4:1  
 Frequency Strip

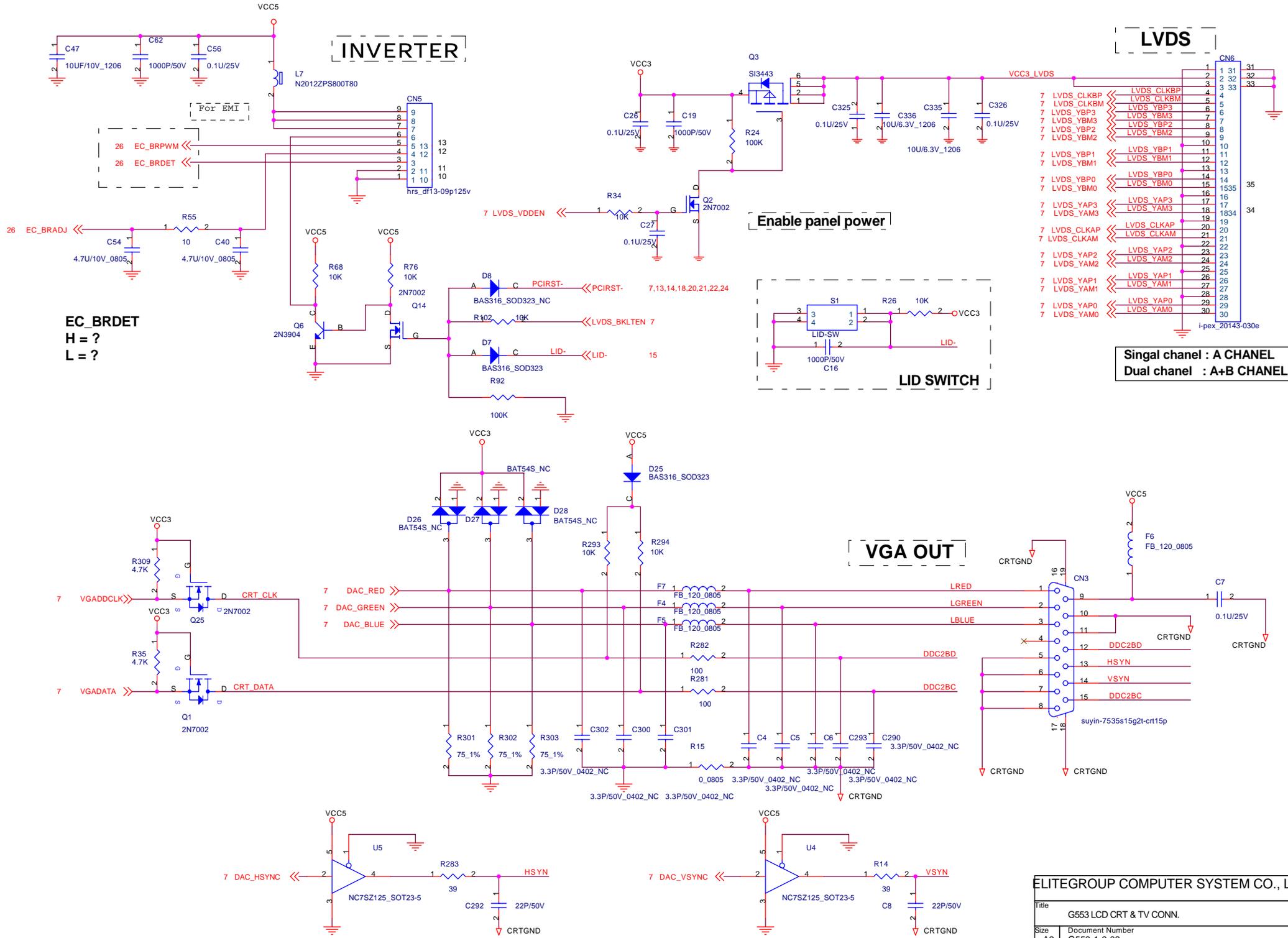
# INVERTER

# LVDS

# Enable panel power

# LID SWITCH

# VGA OUT



EC\_BRDET  
H = ?  
L = ?

Pin	Signal	Panel Pin	Signal
7	LVDS_CLKBP	4	LVDS_CLKBP
7	LVDS_CLKBM	5	LVDS_CLKBM
7	LVDS_YBP3	6	LVDS_YBP3
7	LVDS_YBM3	7	LVDS_YBM3
7	LVDS_YBP2	8	LVDS_YBP2
7	LVDS_YBM2	9	LVDS_YBM2
7	LVDS_YBP1	11	LVDS_YBP1
7	LVDS_YBM1	12	LVDS_YBM1
7	LVDS_YBP0	13	LVDS_YBP0
7	LVDS_YBM0	14	LVDS_YBM0
7	LVDS_YAP3	17	LVDS_YAP3
7	LVDS_YAM3	18	LVDS_YAM3
7	LVDS_CLKAP	20	LVDS_CLKAP
7	LVDS_CLKAM	21	LVDS_CLKAM
7	LVDS_YAP2	23	LVDS_YAP2
7	LVDS_YAM2	24	LVDS_YAM2
7	LVDS_YAP1	25	LVDS_YAP1
7	LVDS_YAM1	26	LVDS_YAM1
7	LVDS_YAP0	28	LVDS_YAP0
7	LVDS_YAM0	29	LVDS_YAM0

Singal channel : A CHANNEL  
Dual channel : A+B CHANNEL

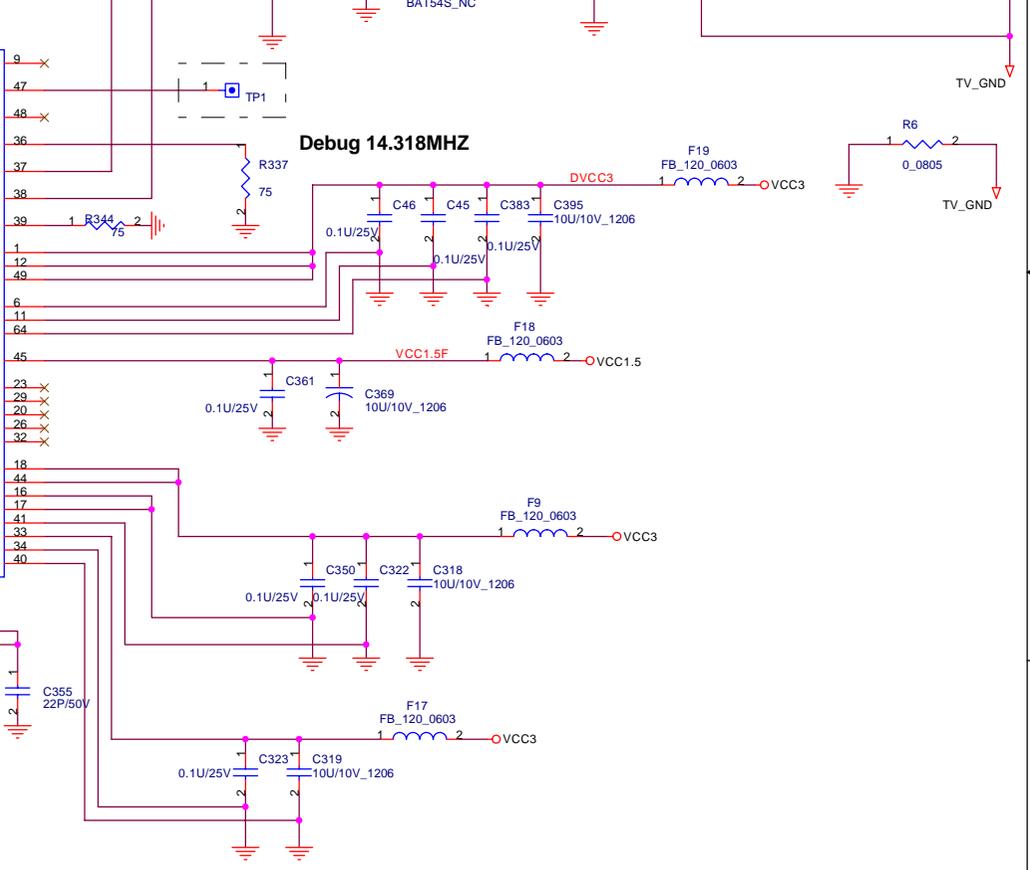
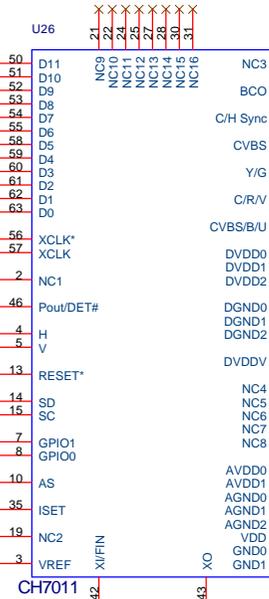
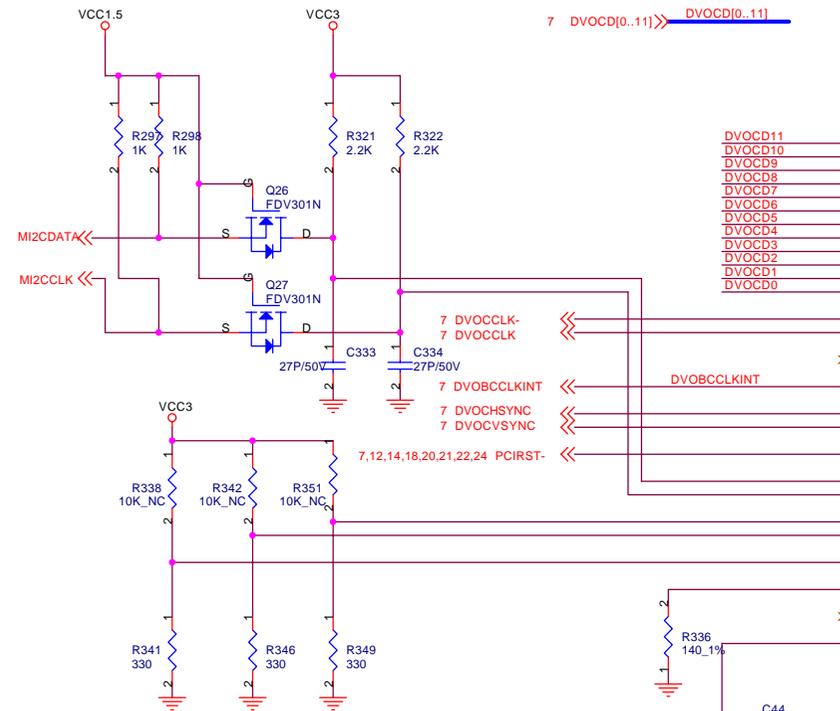
ELITGROUP COMPUTER SYSTEM CO., LTD.

Title		G553 LCD CRT & TV CONN.
Size	Document Number	Rev A
A3	G553-1-9-03	
Date:	Friday, September 19, 2003	Sheet 12 of 34

7 ADDID7 << 1K 1 R127 2

**ADD ID Selector**  
 Default ID: 0 1 1 1 1 1 1  
 Stuff:R571

7 DVOCDD[0..11] >> DVOCDD[0..11]

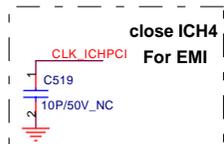
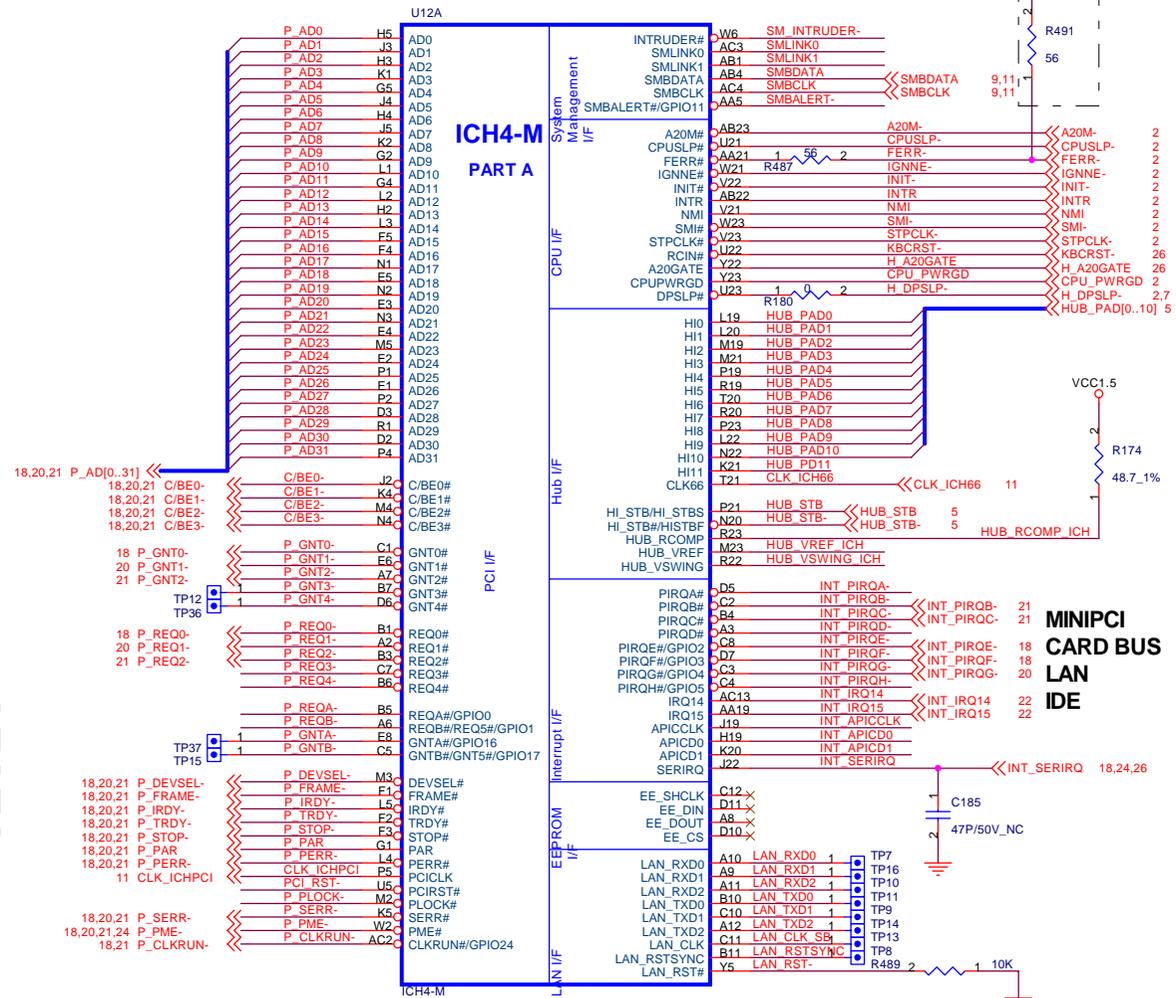


**Options:**

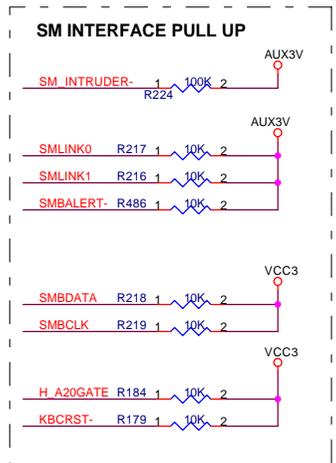
CH7011 Address	Mode	Stuff	No Stuff
0X75	R540	R27	
0X76	R27	R540	

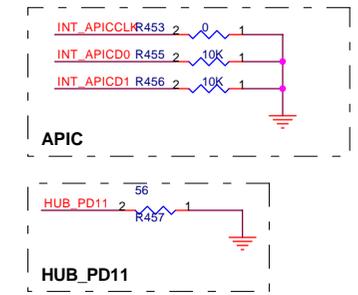
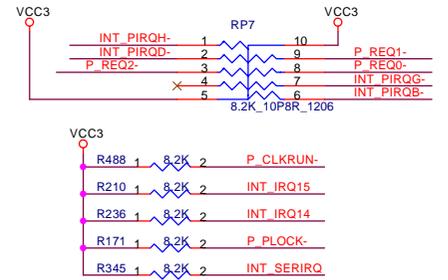
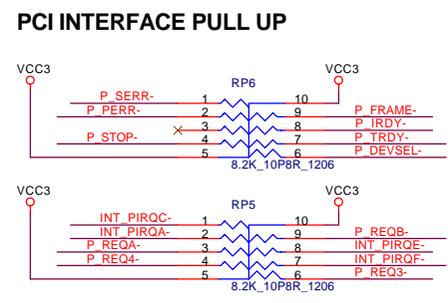
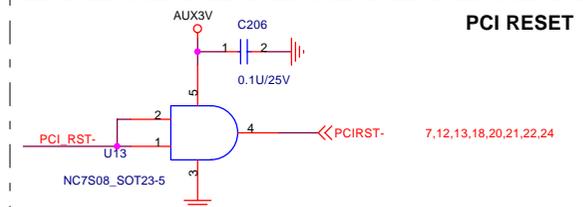
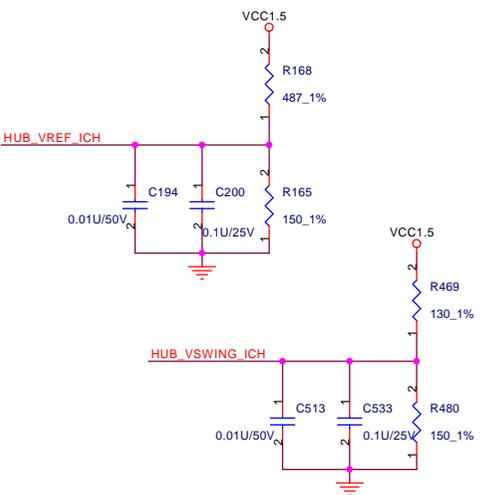
NTSC or PAL	Mode	Stuff	No Stuff
PAL	R543	R28	
NTSC	R28	R543	

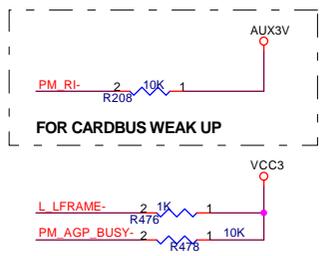
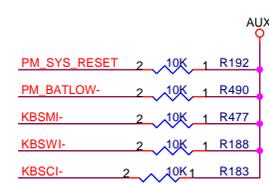


VCCP Placed Close to ICH4

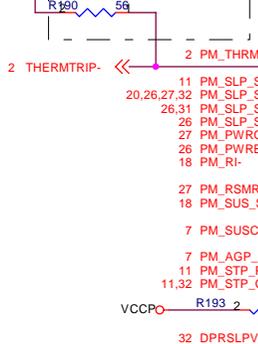


MINIPCI CARD BUS LAN IDE

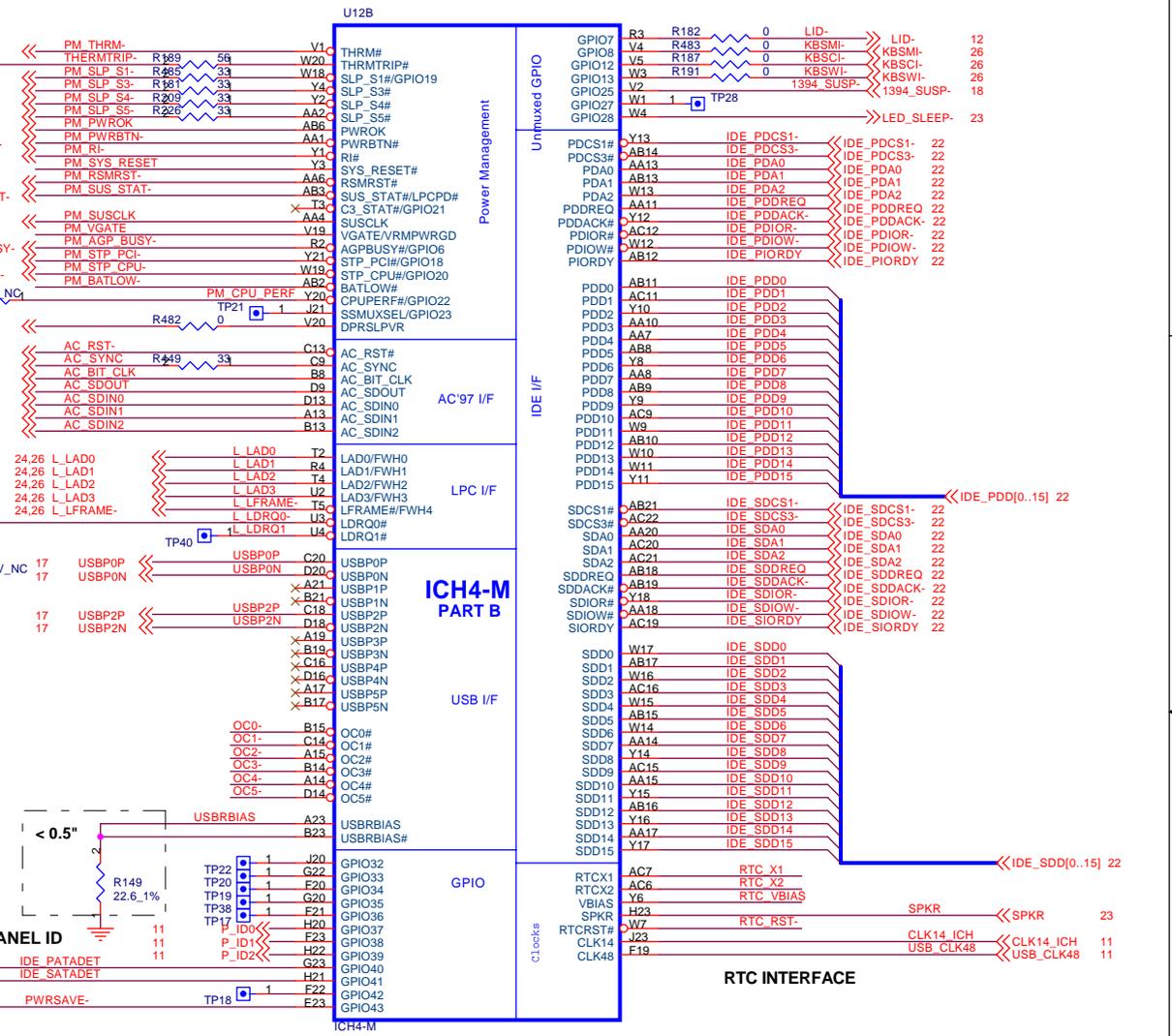
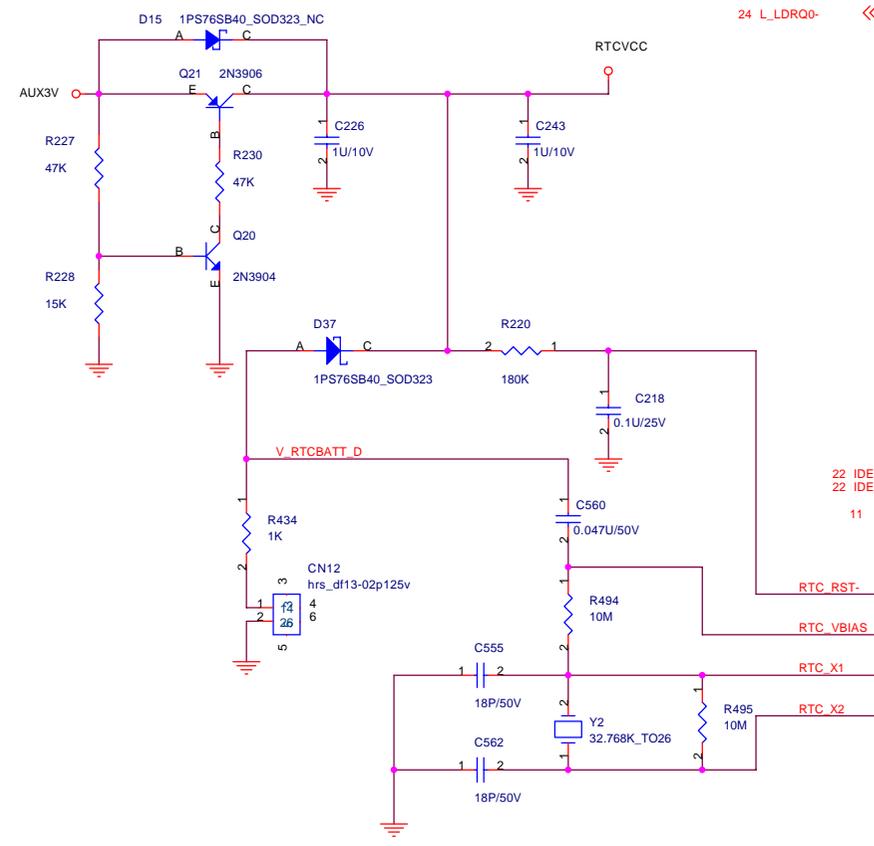


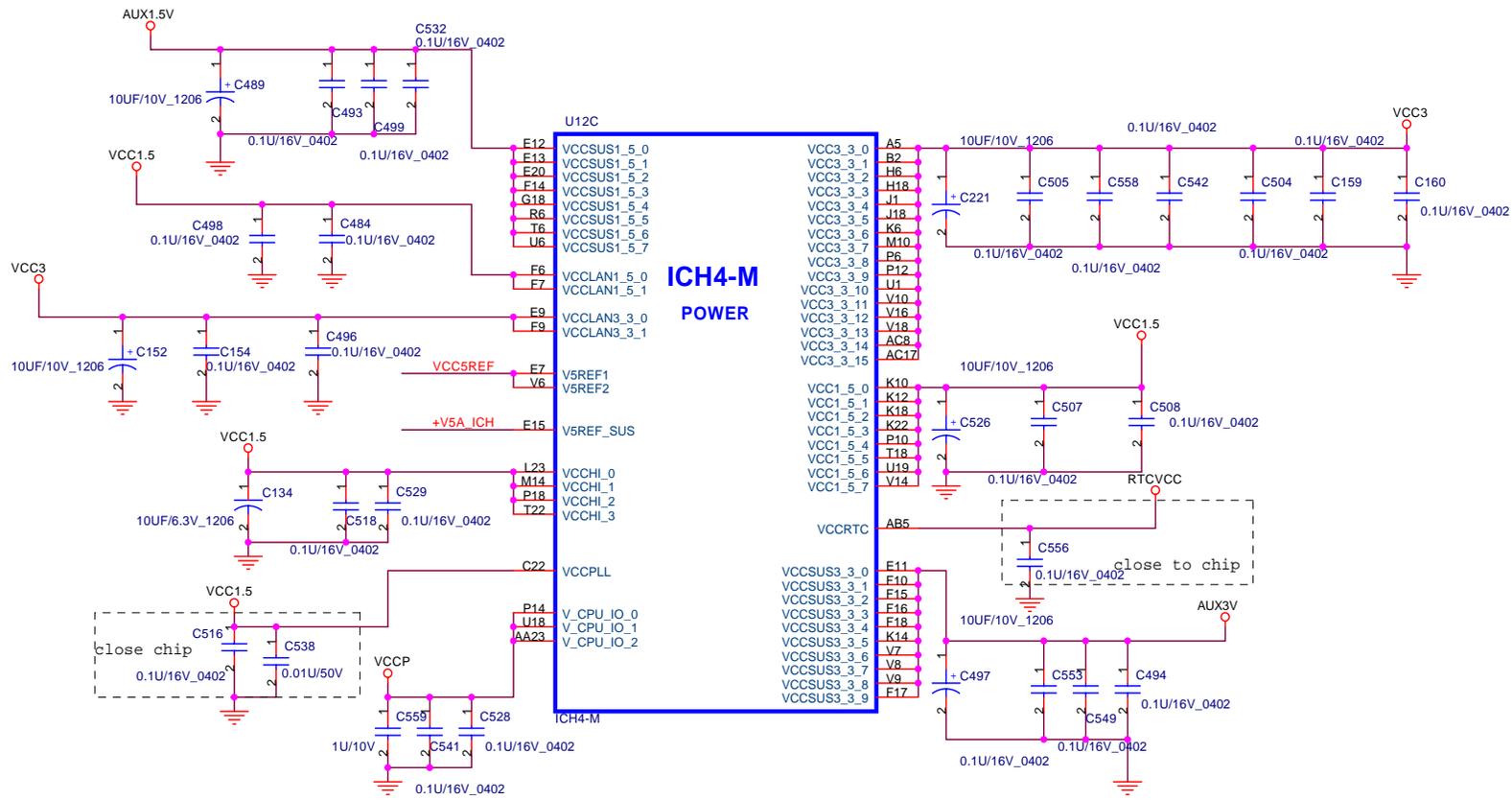


**Placed close to ICH4**

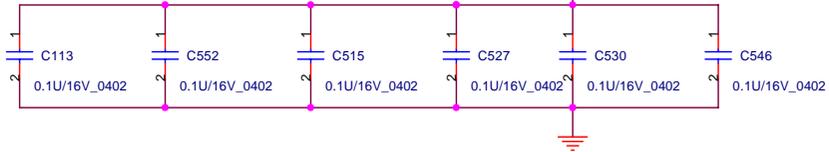
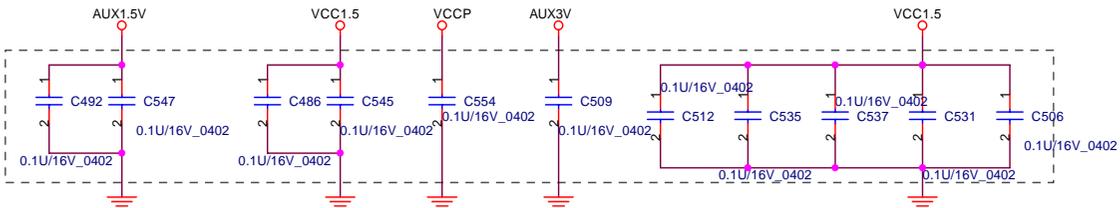
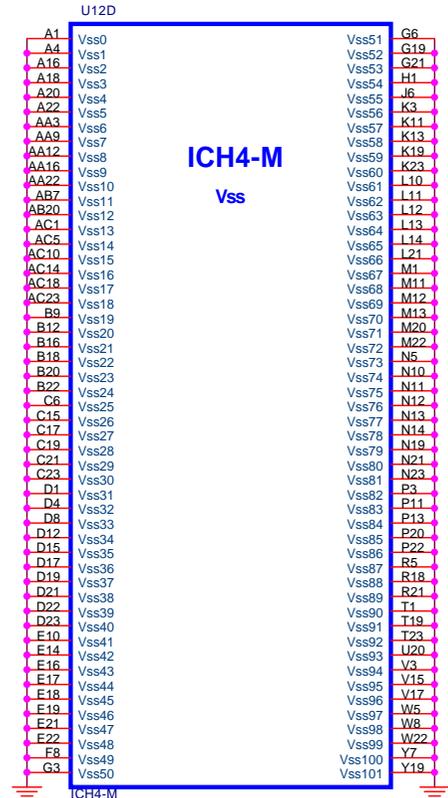


**RTC Circuitry**



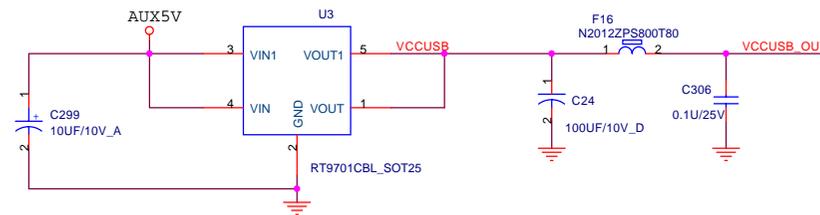


- U12C
- VCC3\_3\_0 A5
  - VCC3\_3\_1 B2
  - VCC3\_3\_2 H6
  - VCC3\_3\_3 H18
  - VCC3\_3\_4 J1
  - VCC3\_3\_5 J18
  - VCC3\_3\_6 K6
  - VCC3\_3\_7 M10
  - VCC3\_3\_8 P6
  - VCC3\_3\_9 P12
  - VCC3\_3\_10 U1
  - VCC3\_3\_11 V10
  - VCC3\_3\_12 V16
  - VCC3\_3\_13 V18
  - VCC3\_3\_14 AC8
  - VCC3\_3\_15 AC17
- VCC1\_5\_0 K10
- VCC1\_5\_1 K12
- VCC1\_5\_2 K18
- VCC1\_5\_3 K22
- VCC1\_5\_4 P10
- VCC1\_5\_5 T18
- VCC1\_5\_6 U19
- VCC1\_5\_7 V14
- VCCRTIC AB5
- VCCSUS3\_3\_0 E11
- VCCSUS3\_3\_1 F10
- VCCSUS3\_3\_2 F15
- VCCSUS3\_3\_3 F16
- VCCSUS3\_3\_4 F18
- VCCSUS3\_3\_5 K14
- VCCSUS3\_3\_6 V7
- VCCSUS3\_3\_7 V8
- VCCSUS3\_3\_8 V9
- VCCSUS3\_3\_9 F17

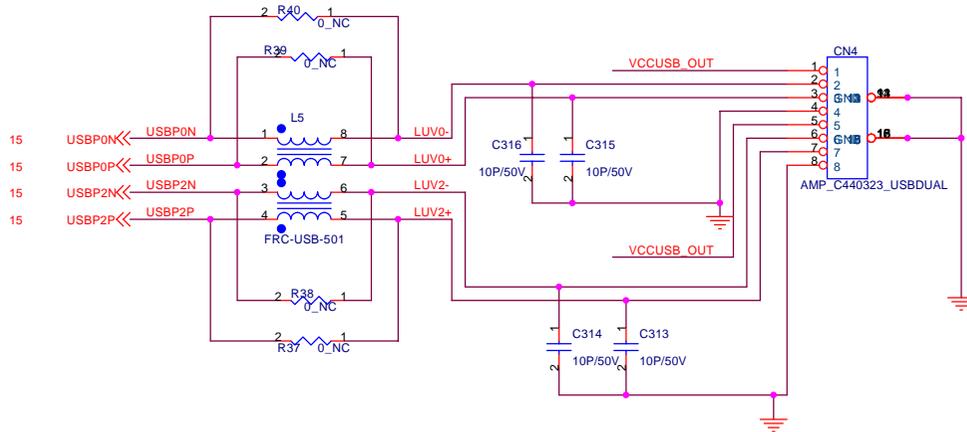


ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 ICH4-M-3 (POWER)	
Size	Document Number	Rev
B	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 16 of 34

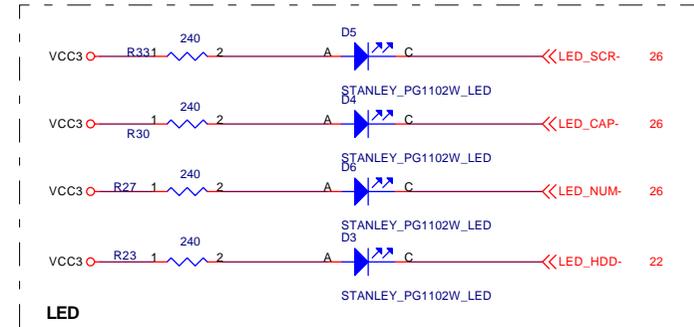
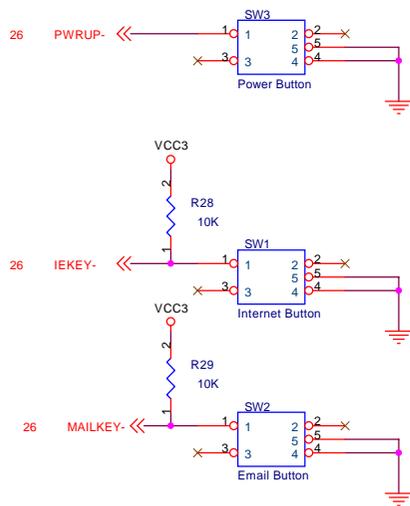
**Note :**  
**Add Capacitor on AUX5V trace**



**POWER trace above 80 mils**

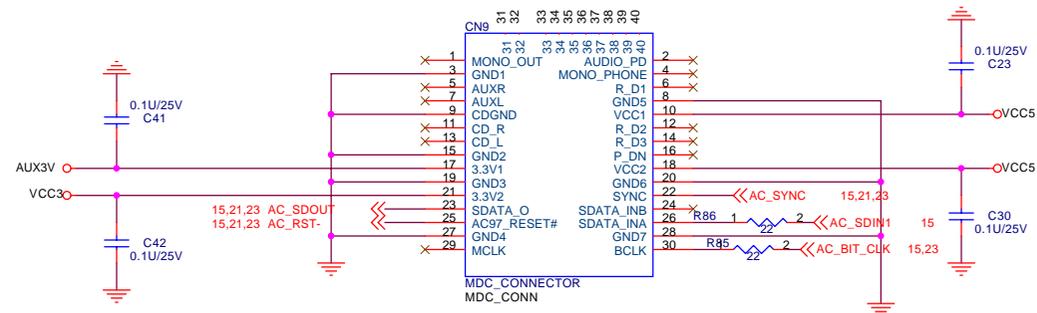


pin 1 & 4 to press



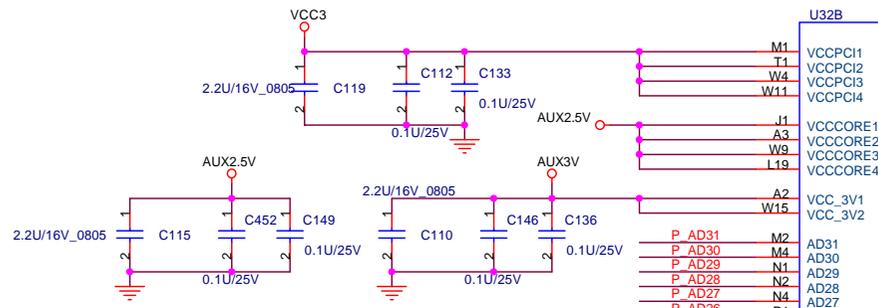
**LED**

**Modem Daughter Card Connector**

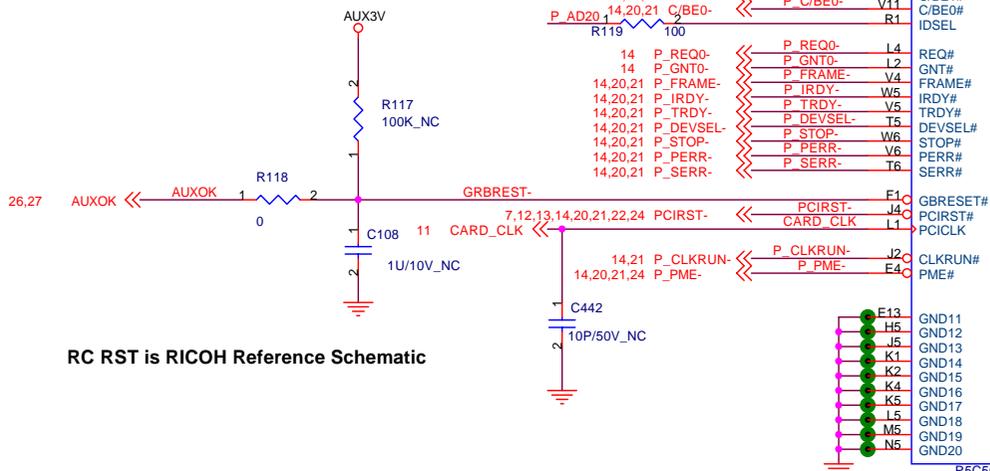


**ELITGROUP COMPUTER SYSTEM CO., LTD.**

Title G553 USB & LED & MDC CONN		
Size A3	Document Number G553-1-9-03	Rev A
Date: Friday, September 19, 2003	Sheet 17	of 34

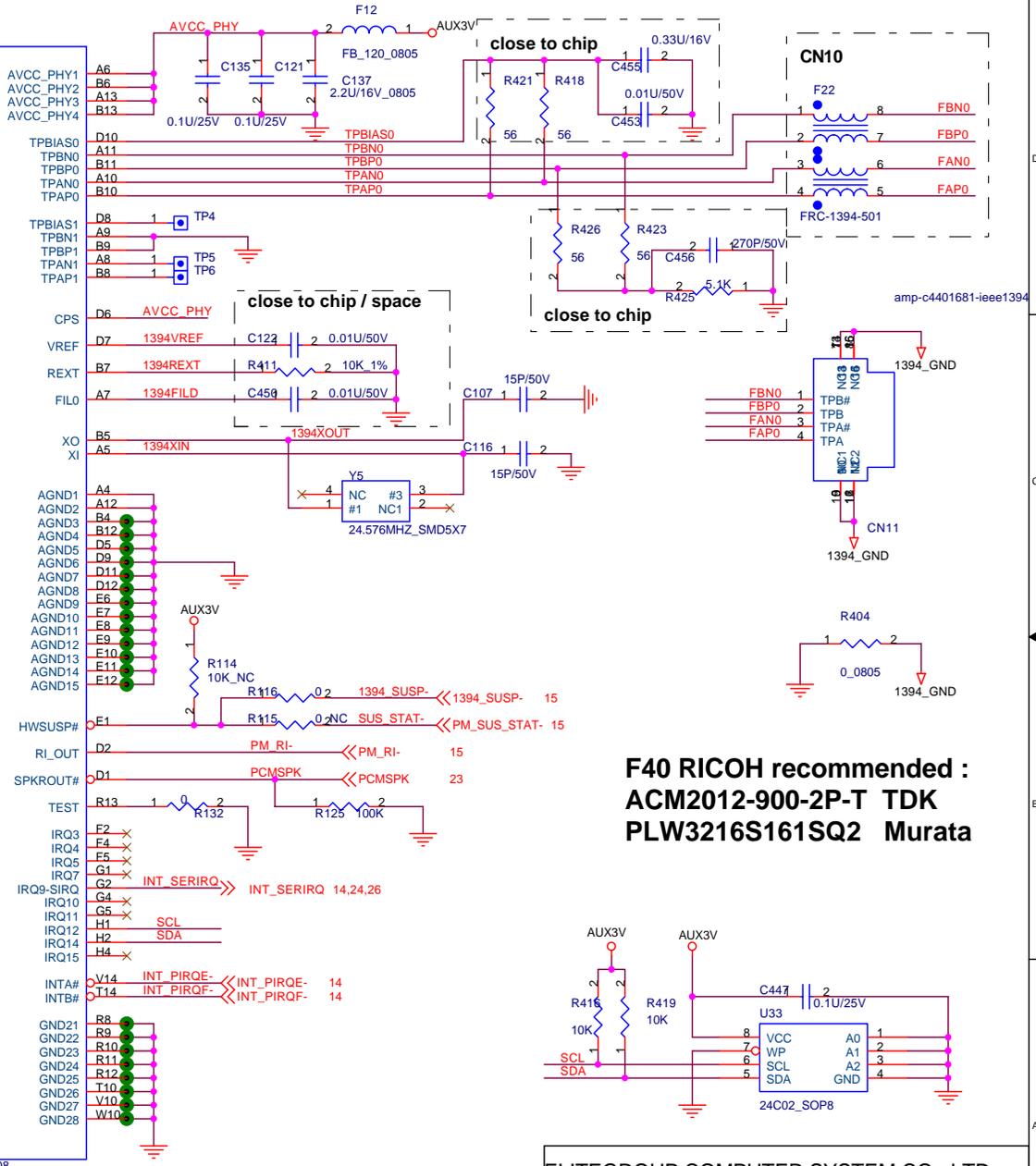


14.20.21 P\_AD[0..31] <<< P\_AD[0..31]

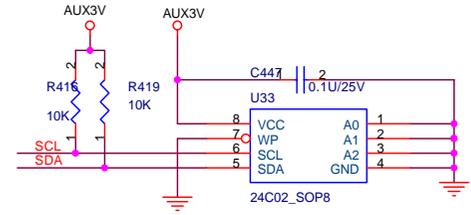


RC RST is RICOH Reference Schematic

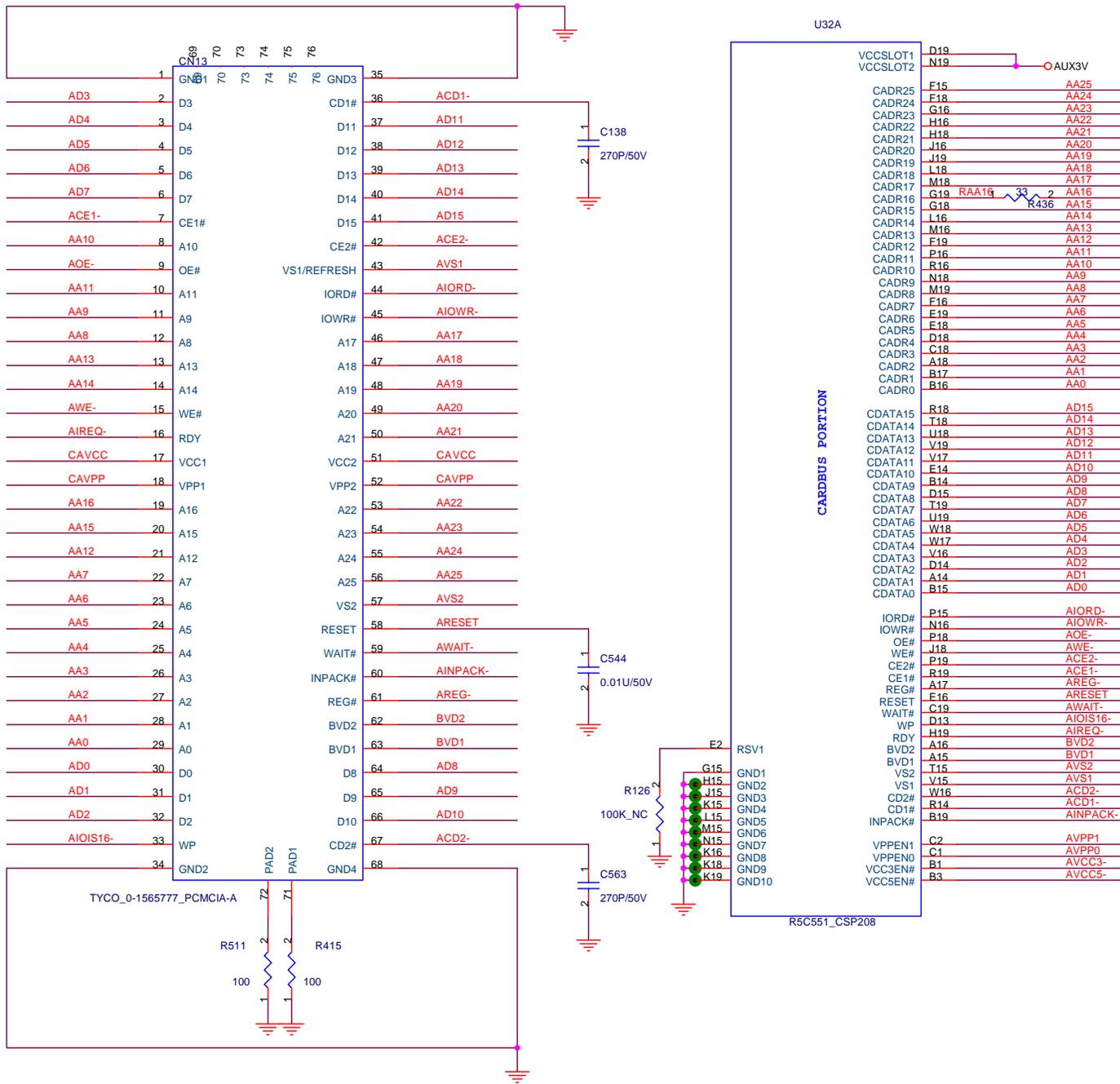
PCI/1394\_OHCI PORTION



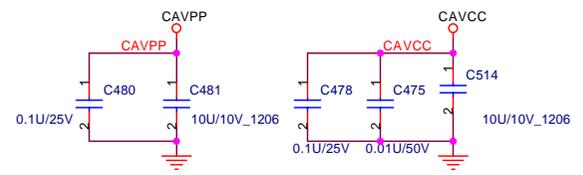
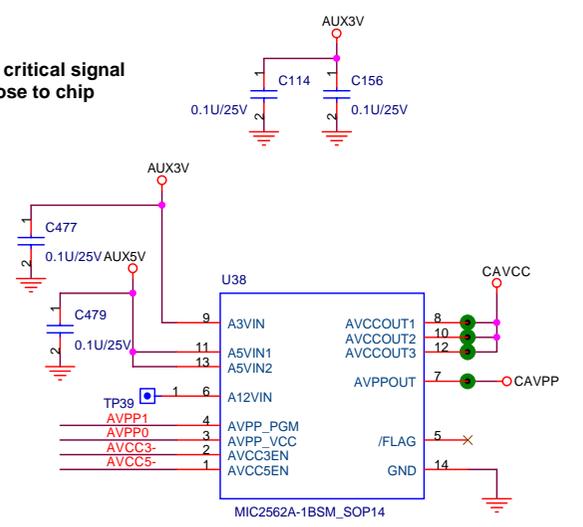
**F40 RICOH recommended :**  
**ACM2012-900-2P-T TDK**  
**PLW3216S161SQ2 Murata**



ELITEGROUP COMPUTER SYSTEM CO., LTD.			
Title	G553 1394 OHCI		
Size	Document Number	Rev	
B	G553-1-9-03	A	
Date:	Friday, September 19, 2003	Sheet	18 of 34

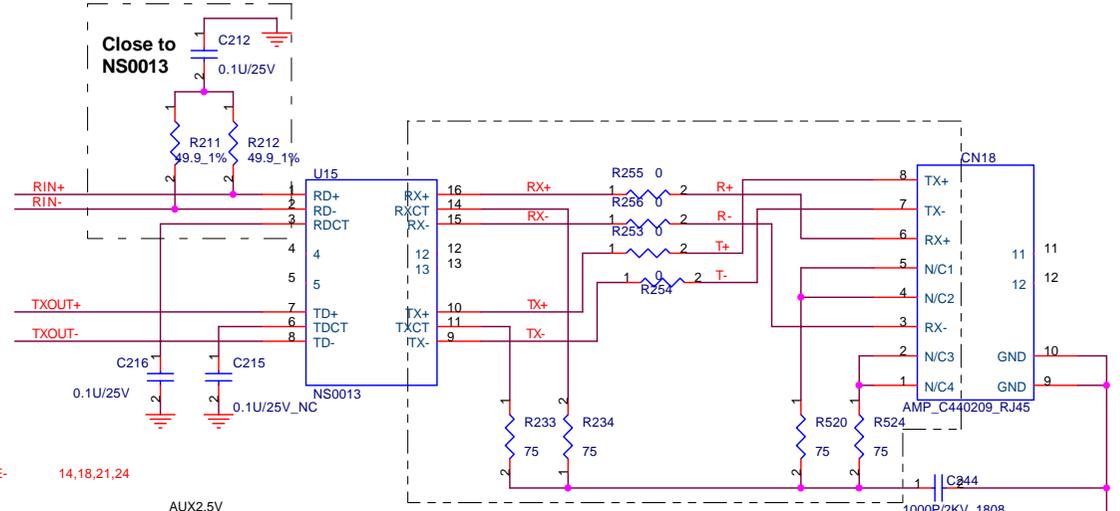
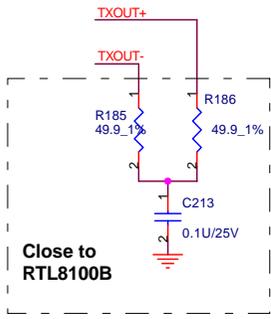


AA16 is critical signal R400 close to chip

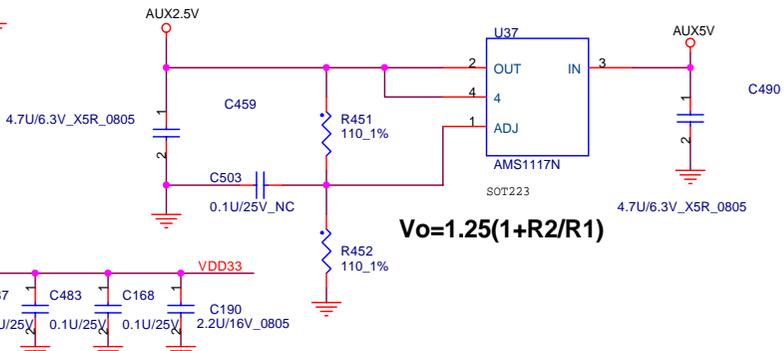
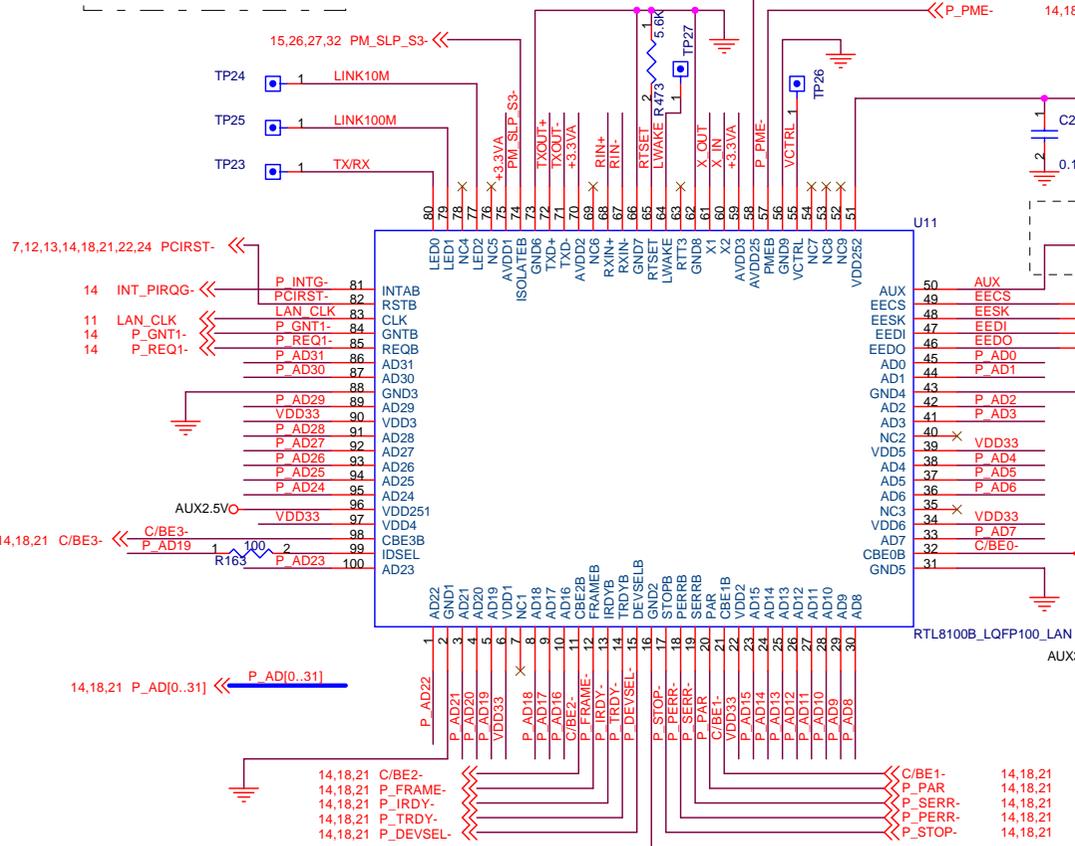
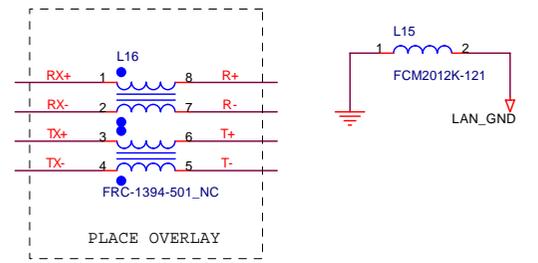


ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 CARDBUS	
Size	Document Number	Rev
B	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 19 of 34

- Lay out Rule :**
1. Tx+/- and Rx+/- length : +-100mil
  2. Through hole less.
  3. Tx+/-  
GND  
Rx+/-
- Ground separates Tx/Rx .

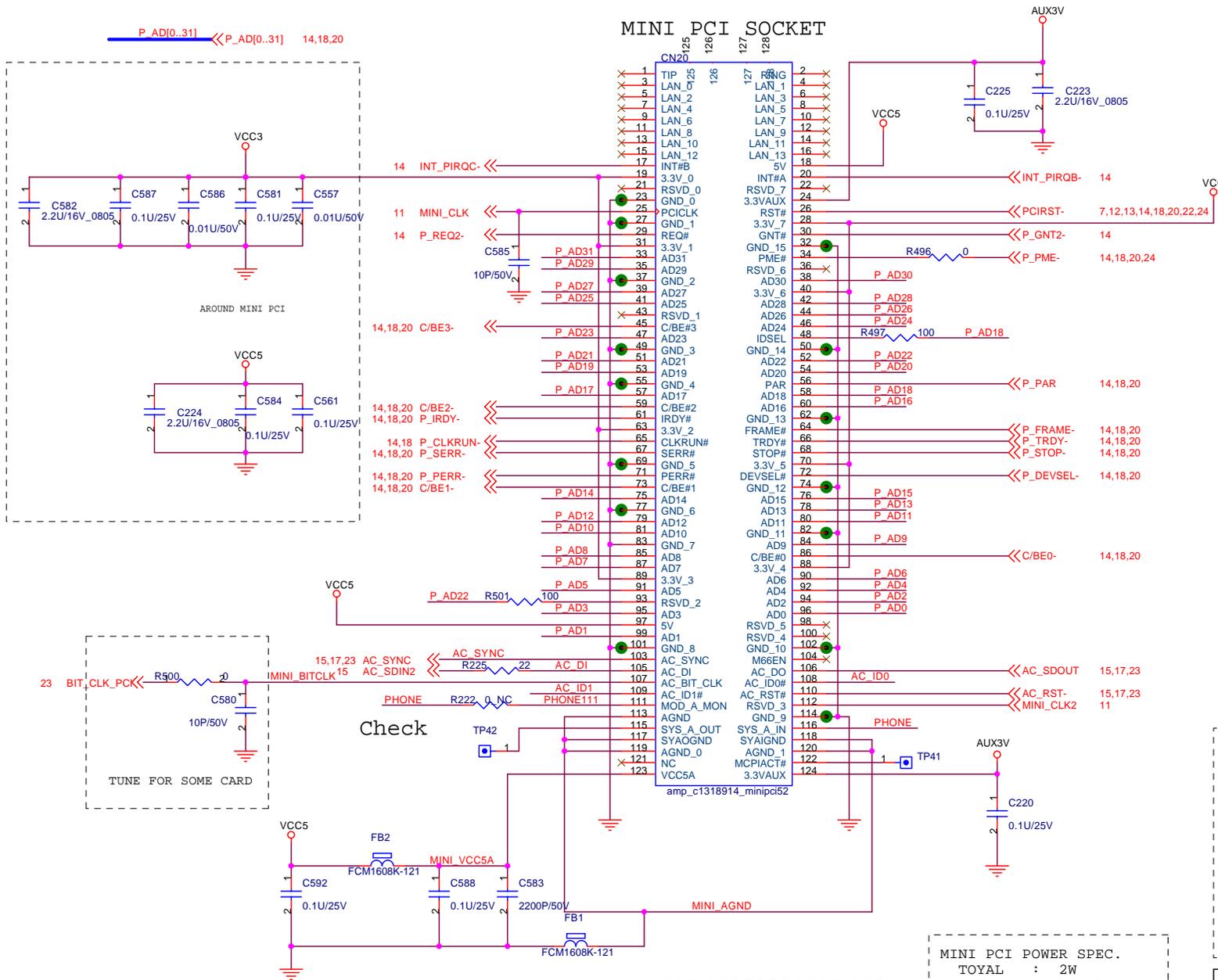


Realtek suggest 0.01uF/2KV



ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 LAN	
Size	Document Number	Rev
B	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 20 of 34

# MINI PCI SOCKET



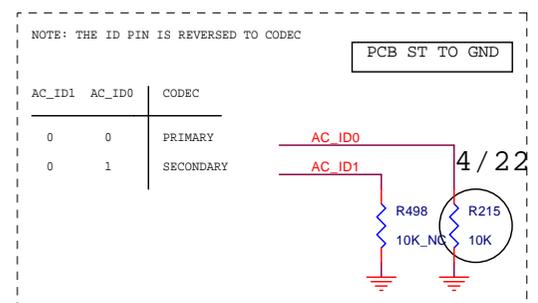
AROUND MINI PCI

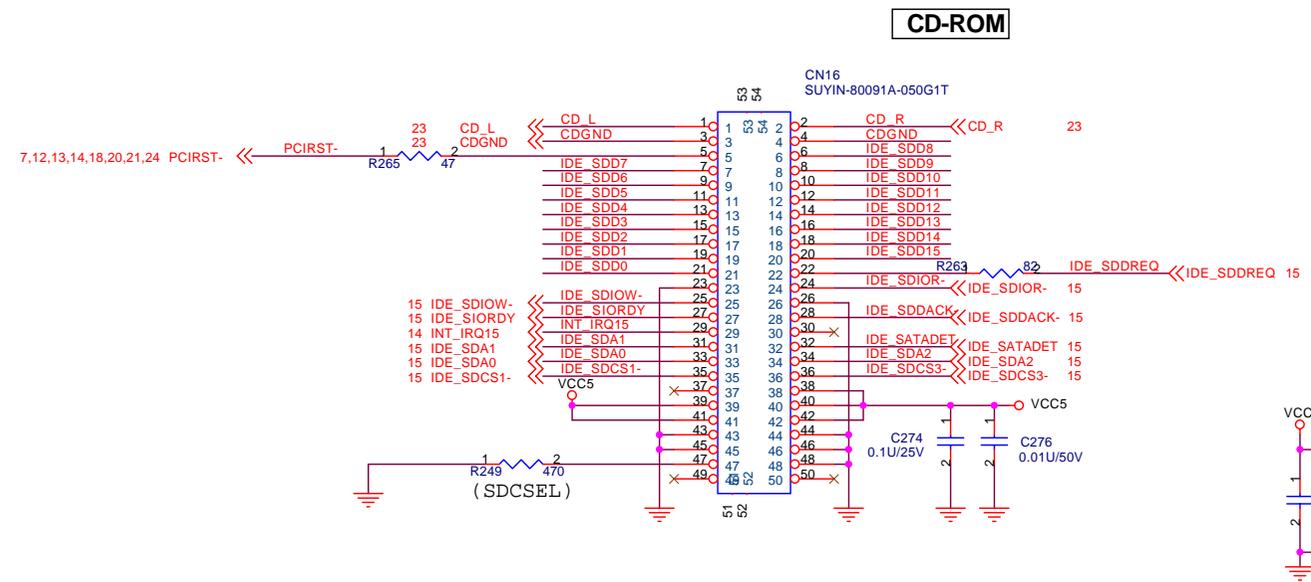
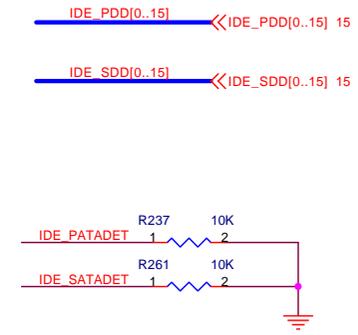
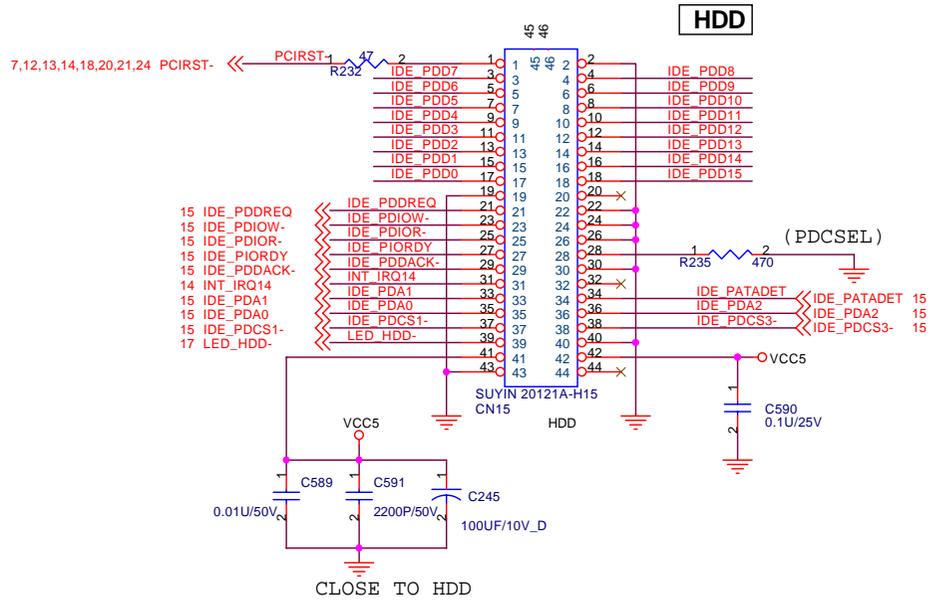
TUNE FOR SOME CARD

Check

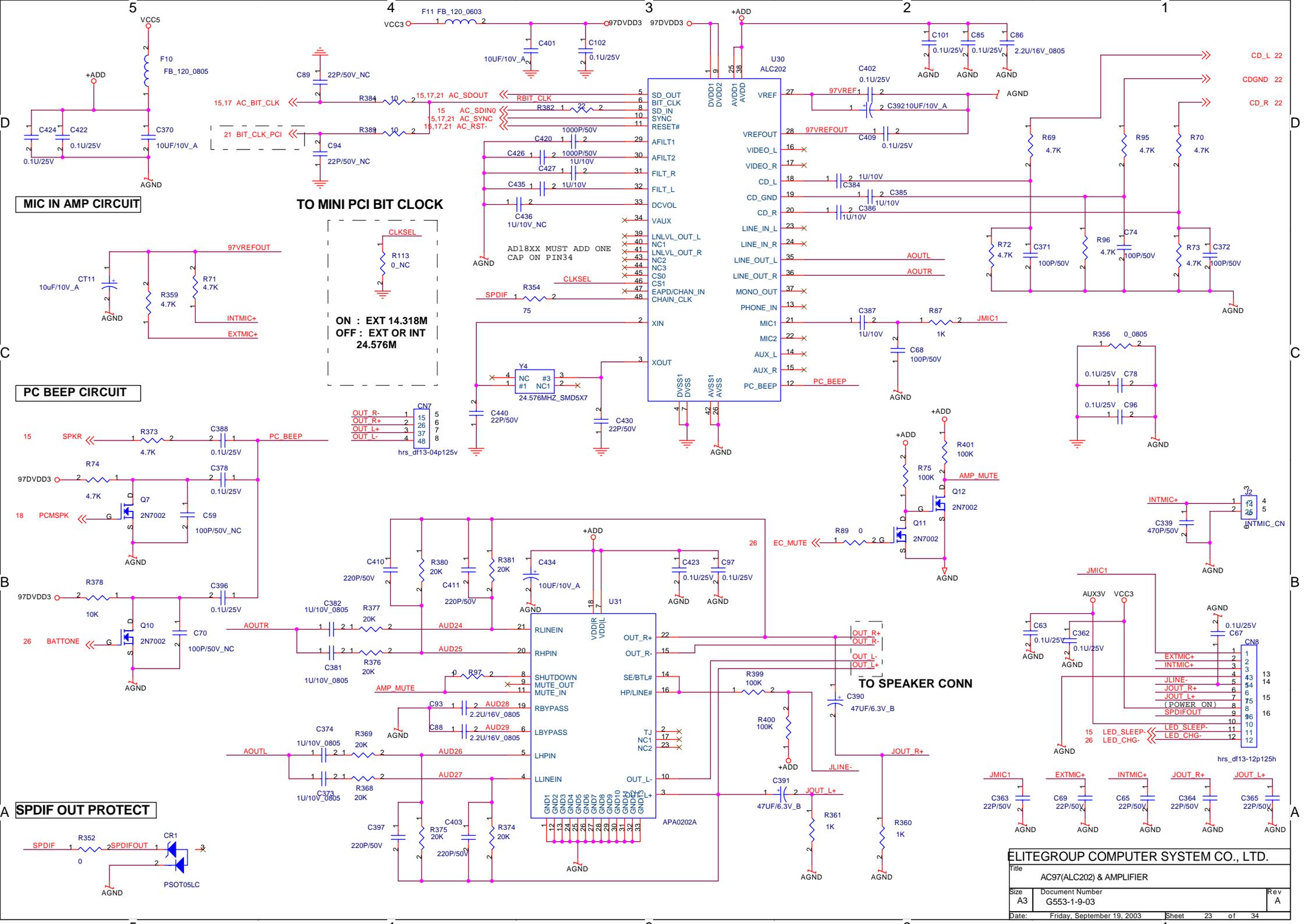
FOR G551 :  
PHONE AND MONO\_OUT NOT USE

MINI PCI POWER SPEC.  
TOYAL : 2W  
+5V : 100mA  
3.3VAUX : 5/200/375mA  
VCC5A : 100mA  
+3V





ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title G553 HDD & CDROM CONN.		
Size B	Document Number G553-1-9-03	Rev A
Date: Friday, September 19, 2003	Sheet 22	of 34



**MIC IN AMP CIRCUIT**

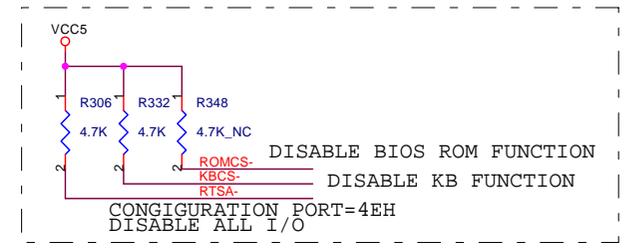
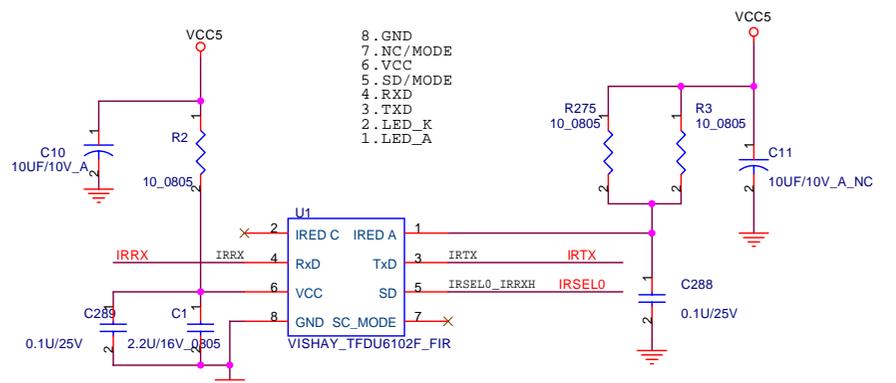
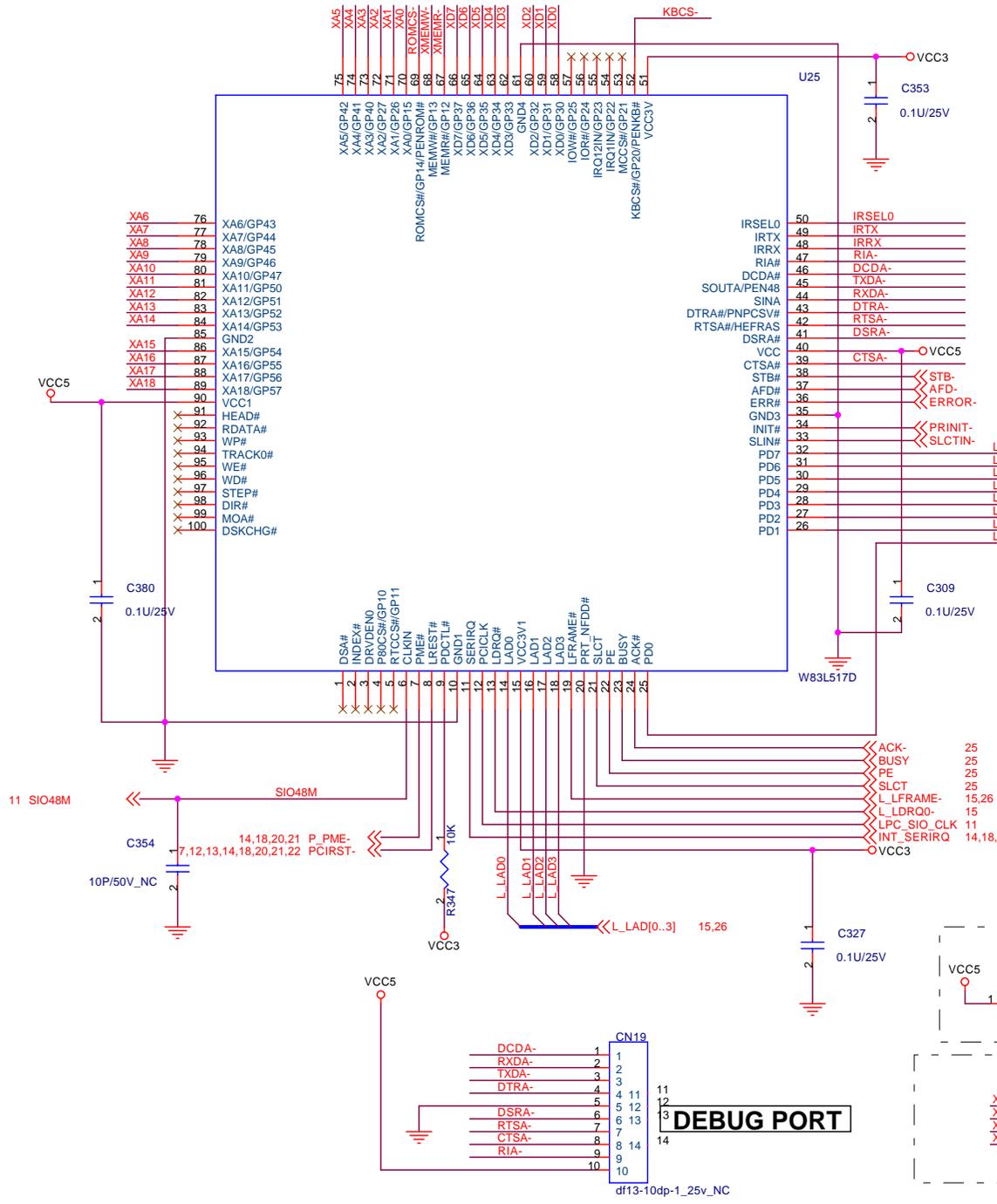
**PC BEEP CIRCUIT**

**SPDIF OUT PROTECT**

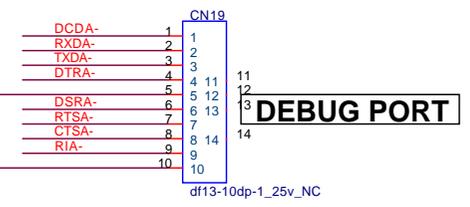
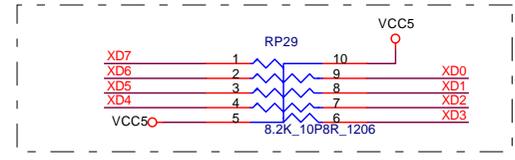
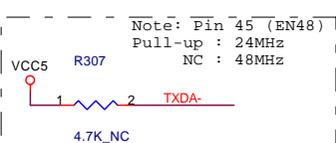
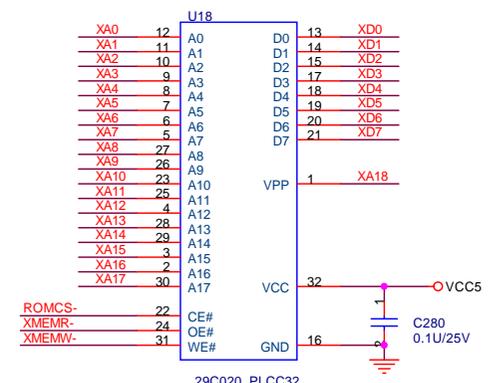
**TO MINI PCI BIT CLOCK**

**TO SPEAKER CONN**

Title		
AC97(ALC202) & AMPLIFIER		
Size	Document Number	Rev
A3	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 23 of 34



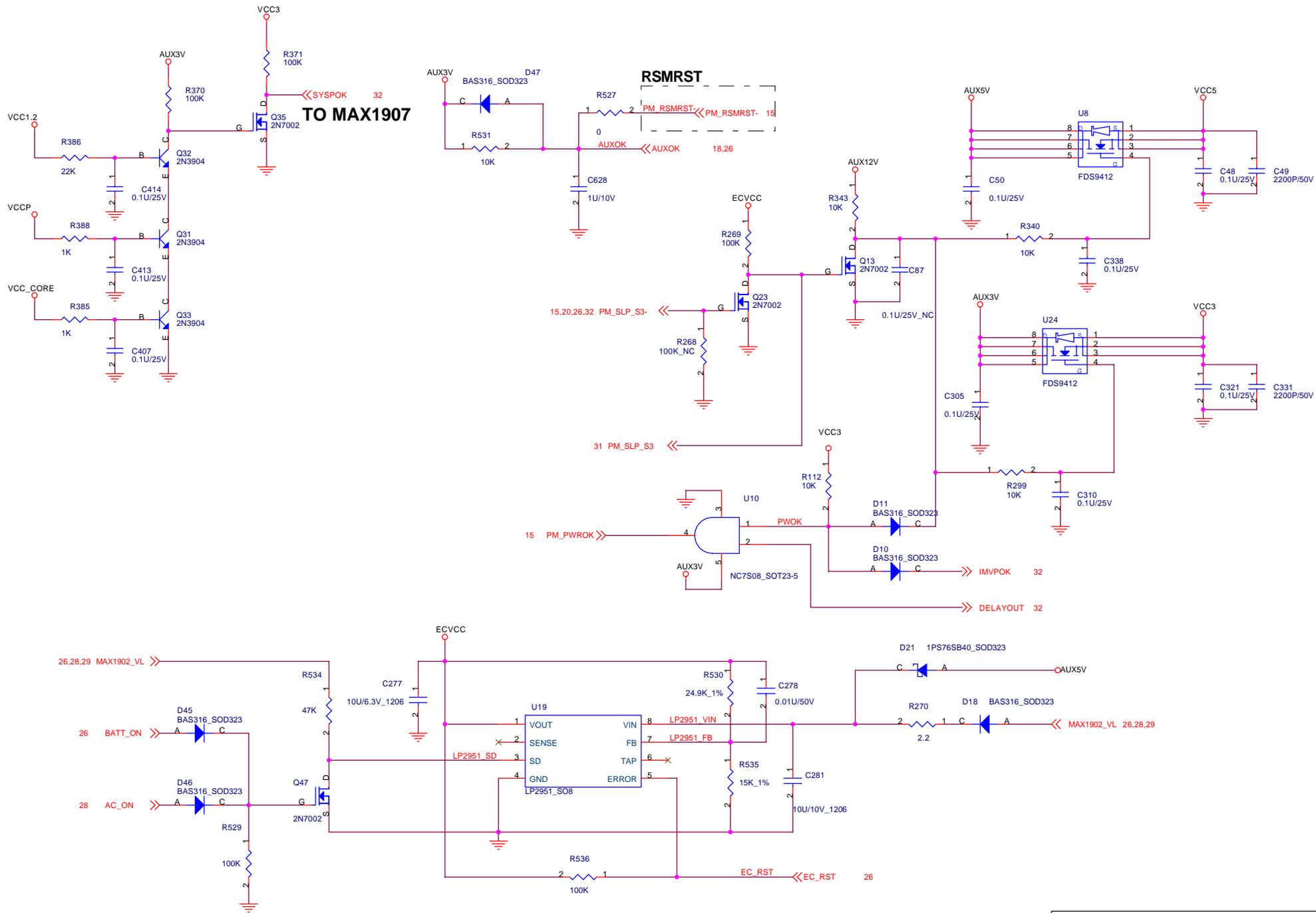
**BIOS ROM**



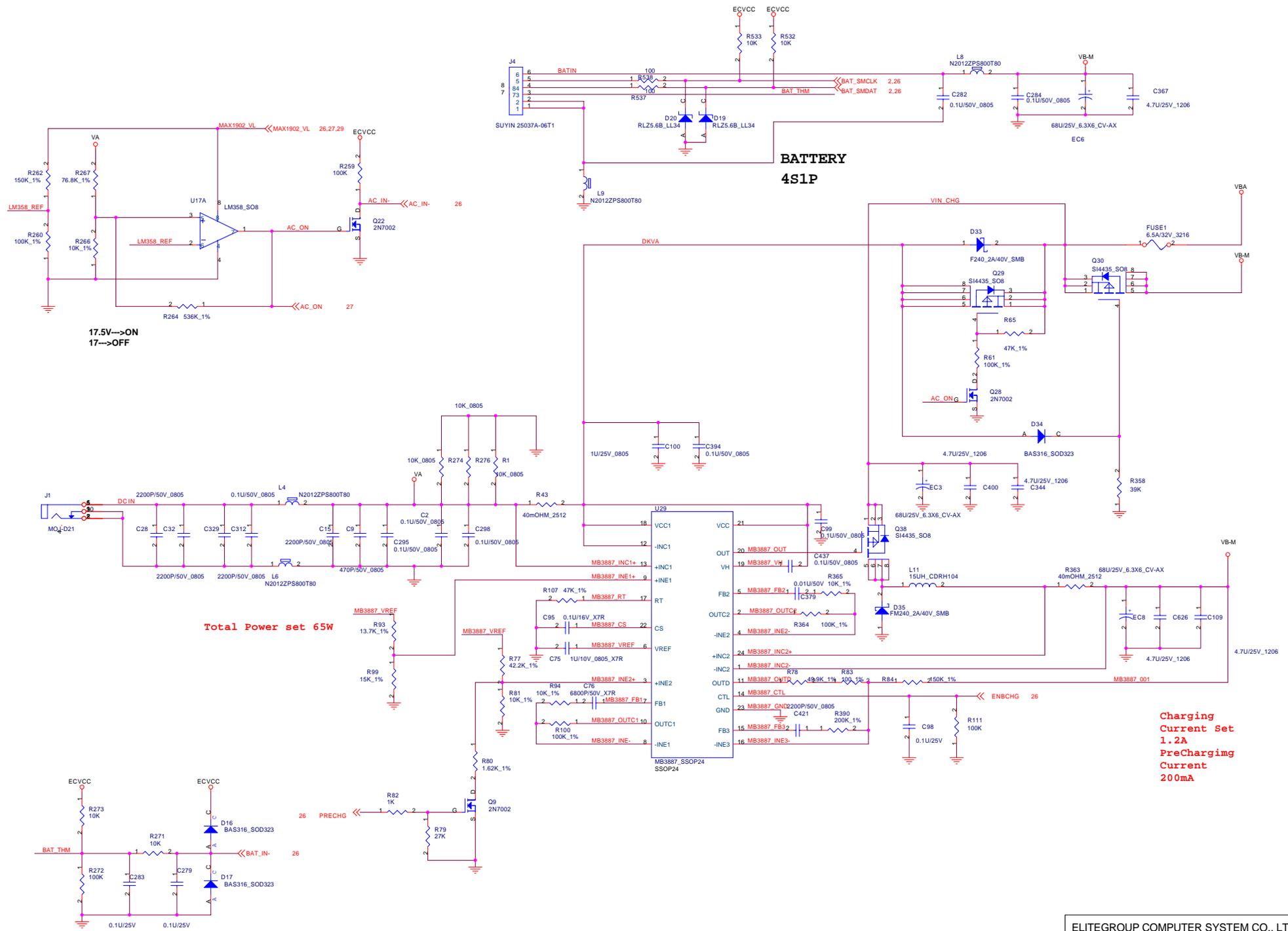
ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 W83L517D LPC SUPER IO	
Size	Document Number	Rev
B	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 24 of 34



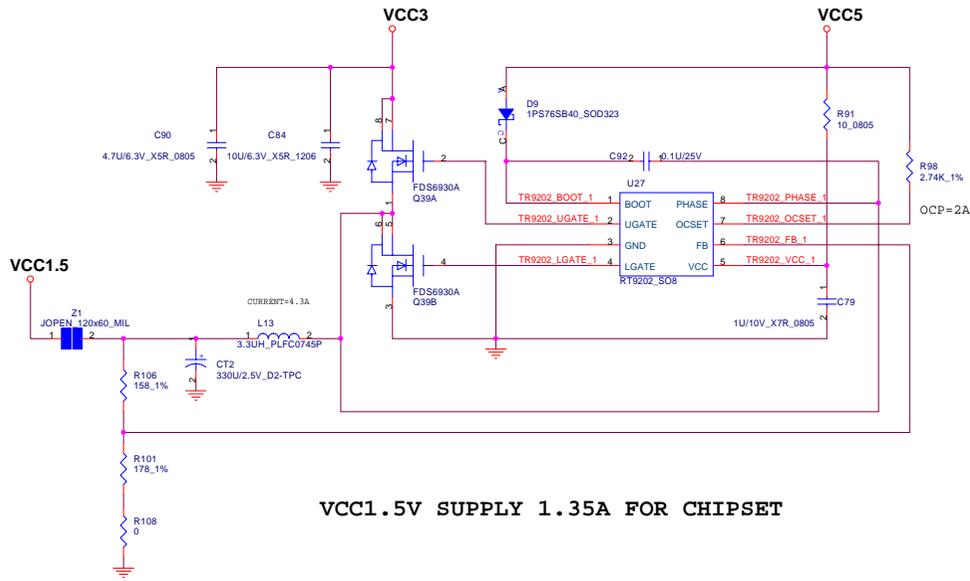




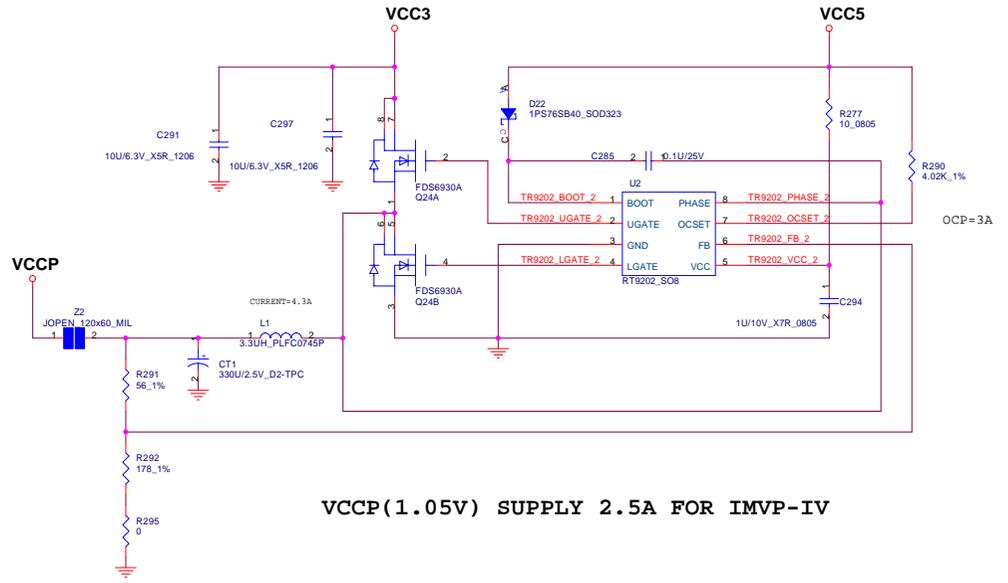
ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 RTC & POWER SW	
Size	Document Number	Rev
A3	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 27 of 34



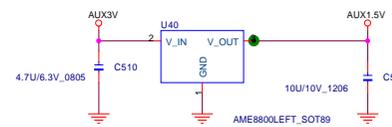




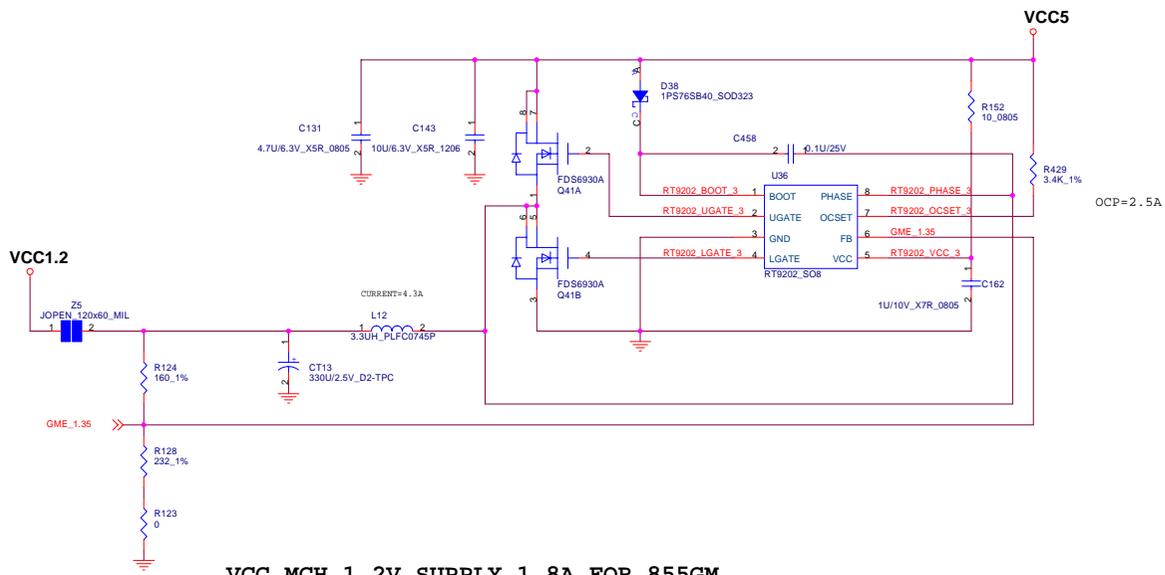
**VCC1.5V SUPPLY 1.35A FOR CHIPSET**



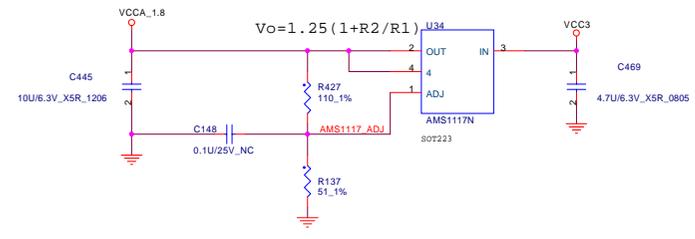
**VCCCP(1.05V) SUPPLY 2.5A FOR IMVP-IV**



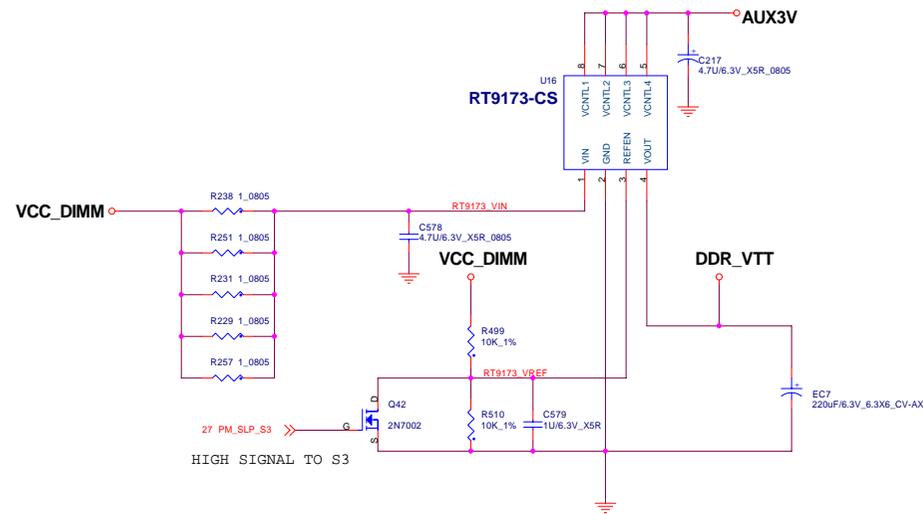
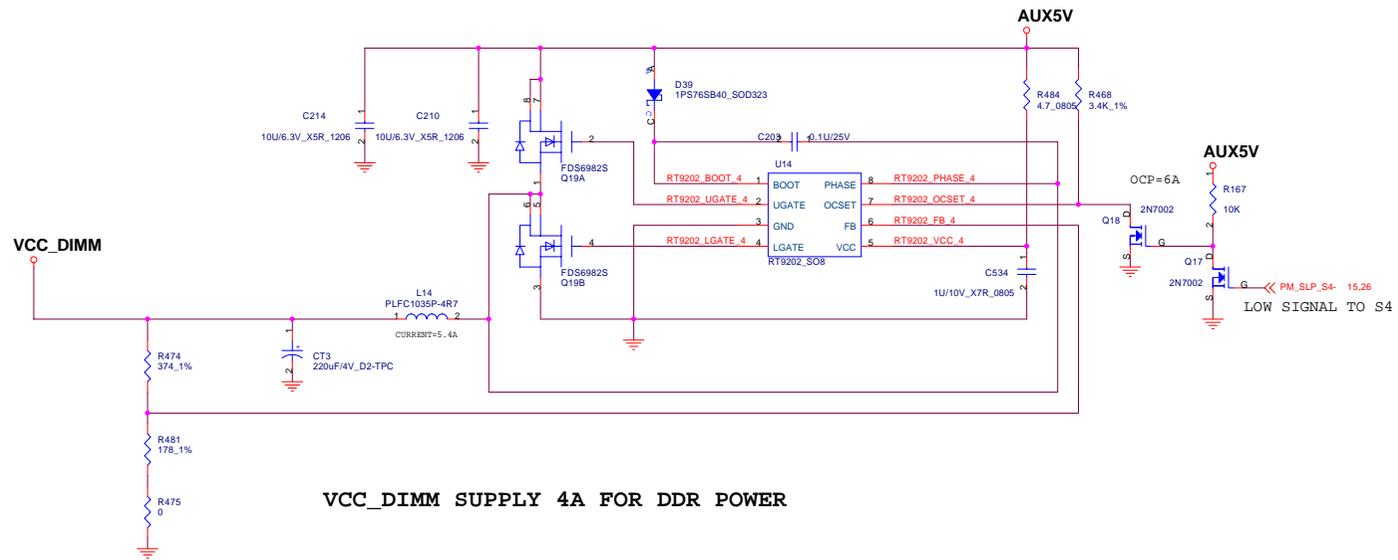
**AUX1.5V SUPPLY 100mA for ICH4-M**

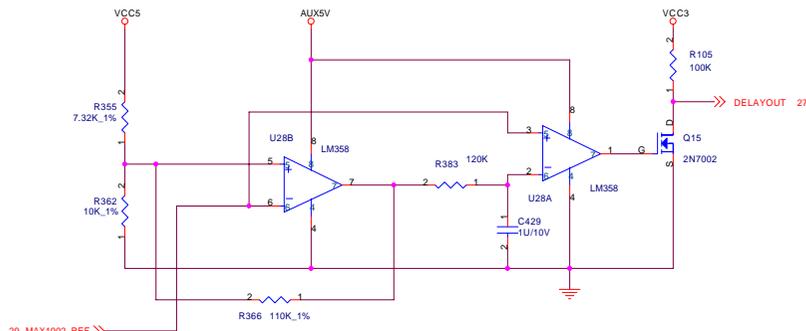
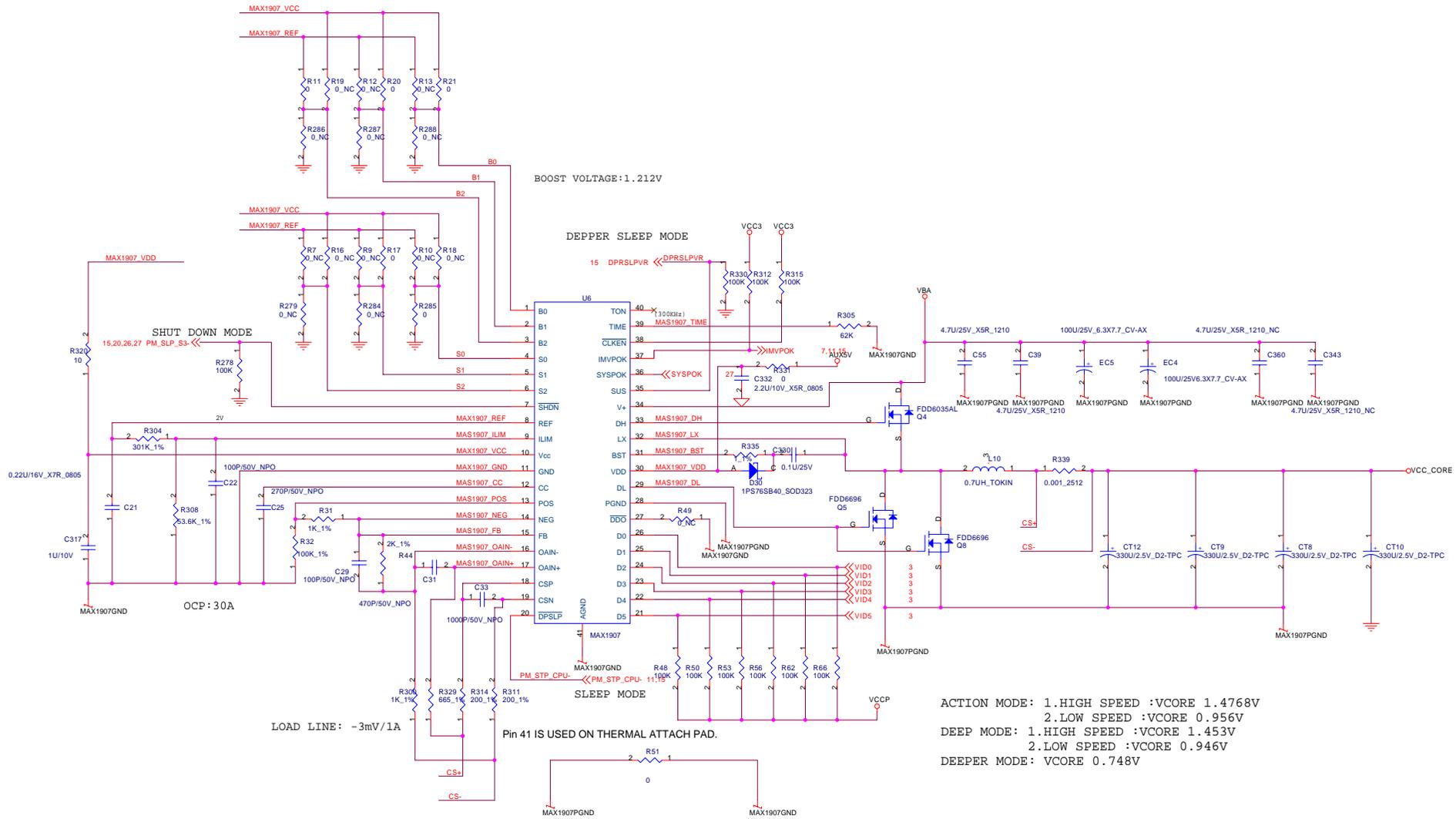


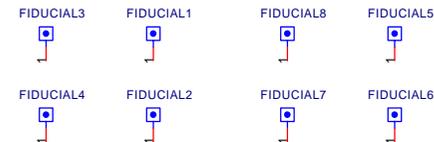
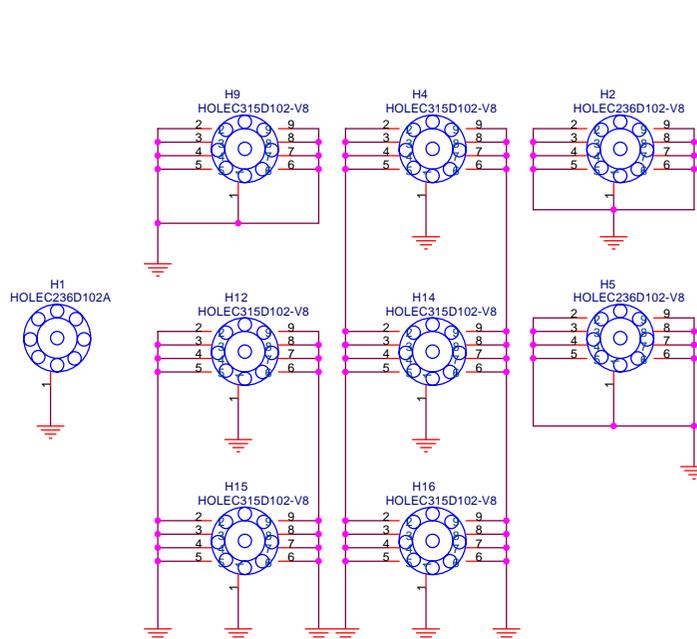
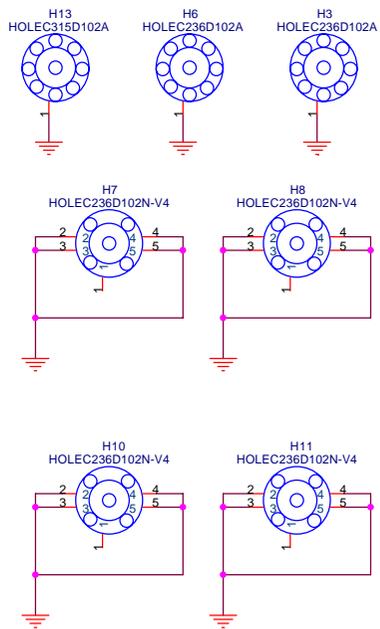
**VCC\_MCH 1.2V SUPPLY 1.8A FOR 855GM**  
**VCC\_MCH 1.35V SUPPLY 1.8A FOR 855GME**



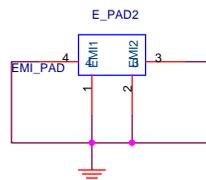
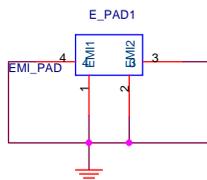
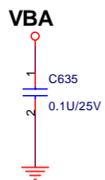
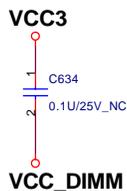
**VCCA(1.8V) SUPPLY 600mA FOR Banias (PLL VOLTAGE)**  
**VCCA(1.5V & 1.8V) SUPPLY FOR DOTHAN (PLL VOLTAGE)**







**EMI SOLUTION**



ELITEGROUP COMPUTER SYSTEM CO., LTD.		
Title	G553 SCREW	
Size	Document Number	Rev
A3	G553-1-9-03	A
Date:	Friday, September 19, 2003	Sheet 33 of 34

0.0 : Initial Release. 2003/9/18

ELITEGROUP COMPUTER SYSTEM CO., LTD.			
Title	G553 HISTORY		
Size	Document Number	Rev	
A3	G553-1-9-03	A	
Date:	Friday, September 19, 2003	Sheet	34 of 34