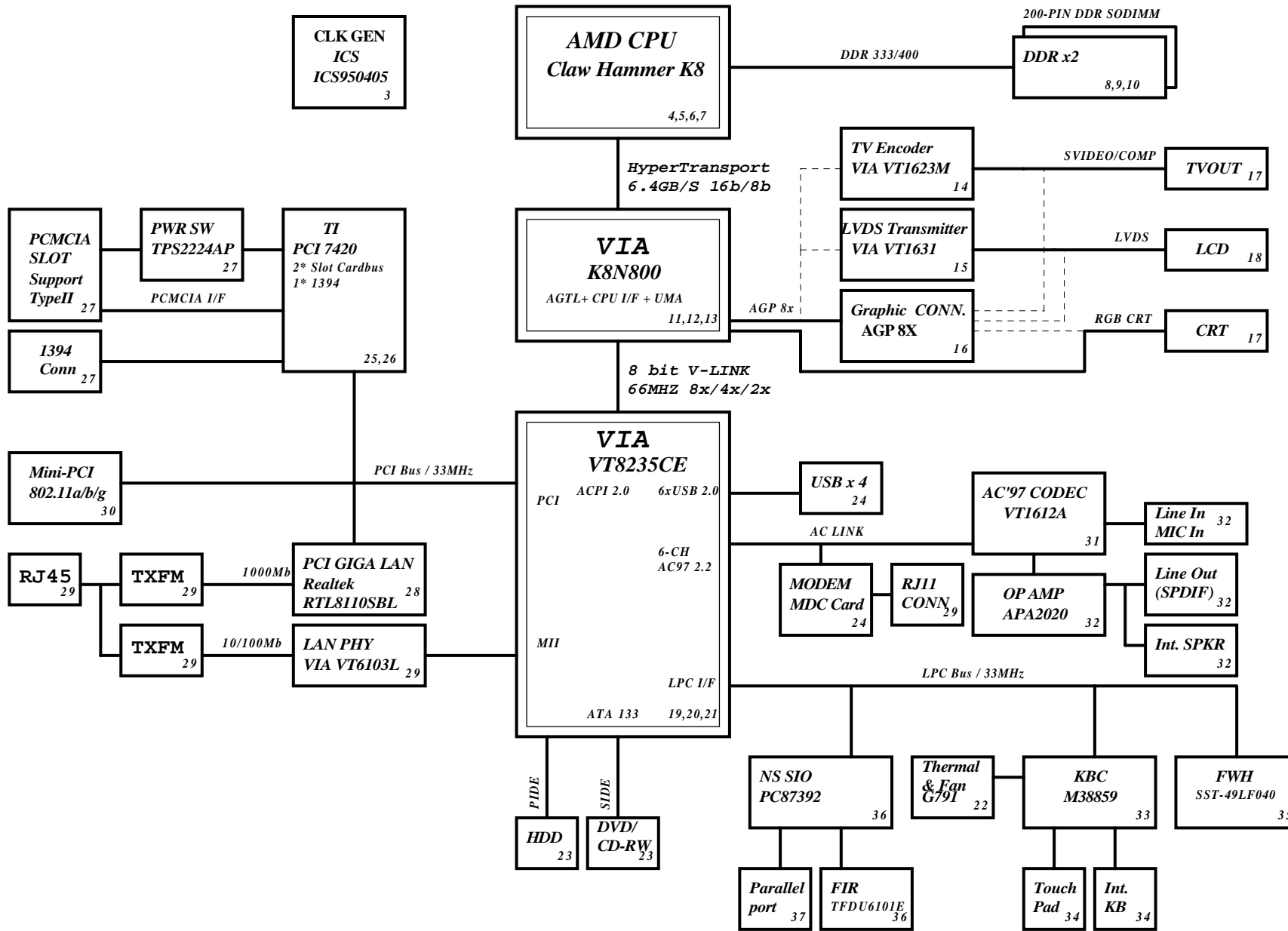


# EGRET Block Diagram



**PCB Layer Stackup**

L1: Signal 1  
 L2: GND  
 L3: Signal 2  
 L4: Signal 3  
 L5: VCC  
 L6: Signal 4

**Battery Charger** 46  
 MAX1645BEE1

INPUTS	OUTPUTS
AD+ BAT+	DCBATOUT

**SYSTEM DC/DC** 43  
 MAX1999

INPUT	OUTPUT
DCBATOUT	5V_S5, 3D3V_S5

**SYSTEM DC/DC** 44  
 TPS5110

INPUT	OUTPUT
DCBATOUT	2D5V_S3 1D5V_S0

**CPU V\_CORE** 41,42  
 ISL6559CR

INPUT	OUTPUT
DCBATOUT	VCC_CORE_S0

**SYSTEM POWER** 44,45  
 FDD6035AL/FDS9412-U  
 FDS9412-U/SI4892DY/LP2951ACM  
 APL5508-18VC/APL5308-25AC

INPUT	OUTPUT
5V_S3 3D3V_S5 3D3V_S3 3D3V_S0 3D3V_S0 DCBATOUT	2D5V_S5 5V_S0 3D3V_S3 3D3V_S0 3D3V_LAN_S3 1D8V_S0 +5V_AUX_S5 +5V_UP_S5 2D5V_S0

**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title: **Block Diagram**

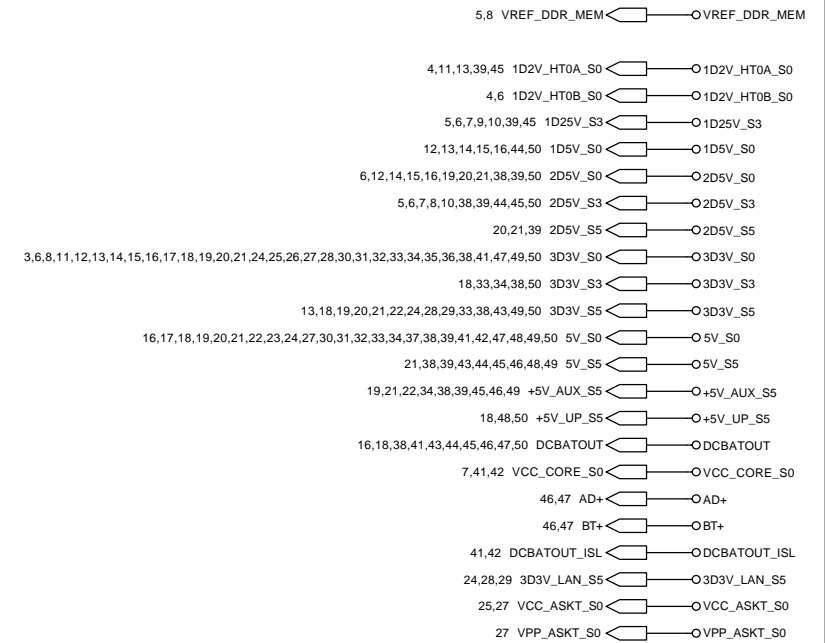
Size: A3 Document Number: **EGRET** Rev: SC

Date: Friday, July 23, 2004 Sheet 1 of 50

# EGRET REVISION HISTORY

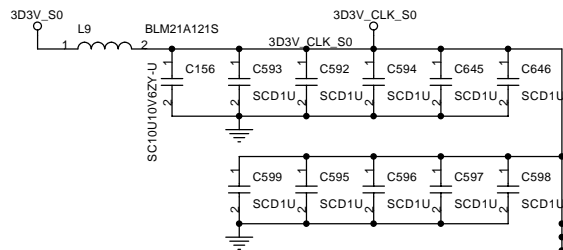
# PCI RESOURCE TABLE

DEVICE	IDSEL	PCI IRQ	REQ# / GNT#
VGA & AGP		P_INTA#	
PCI7420-CardBus A	AD22	P_INTB#	P_REQ#1 / P_GNT#1
PCI7420-CardBus B	AD22	P_INTC#	P_REQ#1 / P_GNT#1
PCI7420-IEEE1394A	AD22	P_INTD#	P_REQ#1 / P_GNT#1
Mini-PCI	AD21	P_INTF#	P_REQ#0 / P_GNT#0
Giga LAN RTL8110SBL	AD23	P_INTG#	P_REQ#2 / P_GNT#2

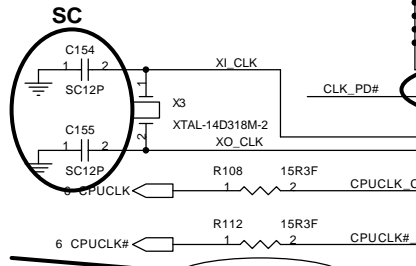


**緯創資通** Wistron Corporation  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title		
<b>REVISION HISTORY</b>		
Size A3	Document Number <b>EGRET</b>	Rev SC
Date: Friday, July 23, 2004	Sheet 2 of	50



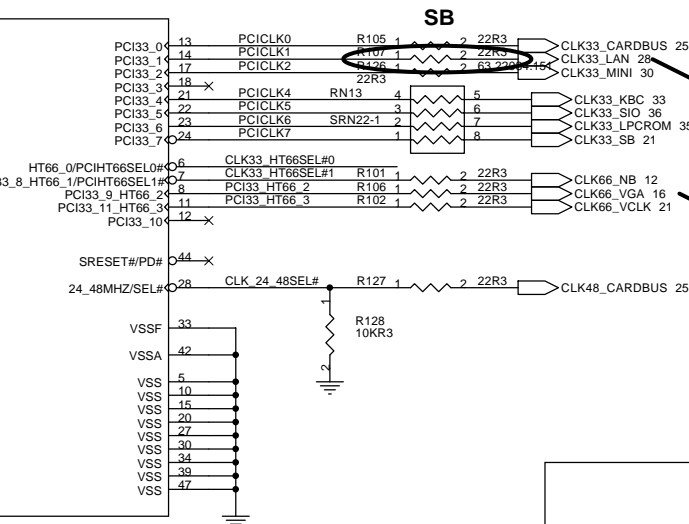
**FS0-FS2 Have internal Pull-up resistor**  
**FS3 Have internal Pull-down resistor**



By KDS suggested change  
 From 78.33034.1B1  
 To 78.12034.1B1

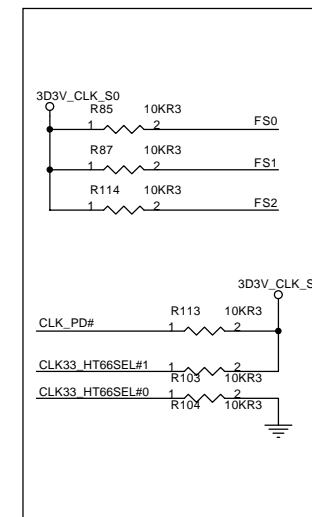
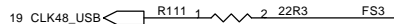
**GUICKL Damping only**  
**Stuff for K8N800 UMA**

**Library Issue**  
**Pin32: PD#**



**CLK33\_LAN Damping only**  
**Stuff for RTL8110SB**

**CLK66\_VGA Damping only**  
**Stuff for K8N800 Discrete**

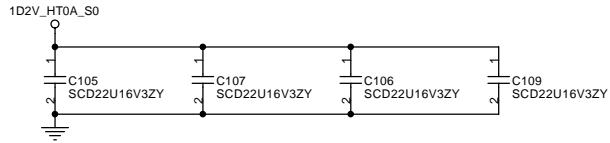


Input Configuration				Clock Generator Output			
FS3	FS2	FS1	FS0	CPU (MHz)	PCI33_HT66 (MHz)	PCI33 (MHz)	
0	0	0	0	100.90	67.27	33.63	All output Tri-state
0	0	0	1	133.90	66.95	33.48	
0	0	1	0	168.00	67.20	33.60	
0	0	1	1	202.00	67.33	33.67	
0	1	0	0	100.20	66.80	33.40	
0	1	0	1	133.50	66.75	33.38	
0	1	1	0	166.70	66.68	33.34	
* 0	1	1	1	200.40	66.80	33.40	Normal Hammer operation
1	0	0	0	150.00	60.00	30.00	
1	0	0	1	180.00	60.00	30.00	
1	0	1	0	210.00	70.00	35.00	
1	0	1	1	240.00	60.00	30.00	
1	1	0	0	270.00	67.50	33.75	
1	1	0	1	233.33	66.67	33.33	
1	1	1	0	266.67	66.67	33.33	
1	1	1	1	300.00	75.00	37.50	

24_48 SEL#	24_48MHz
0	48MHz
1	24MHz

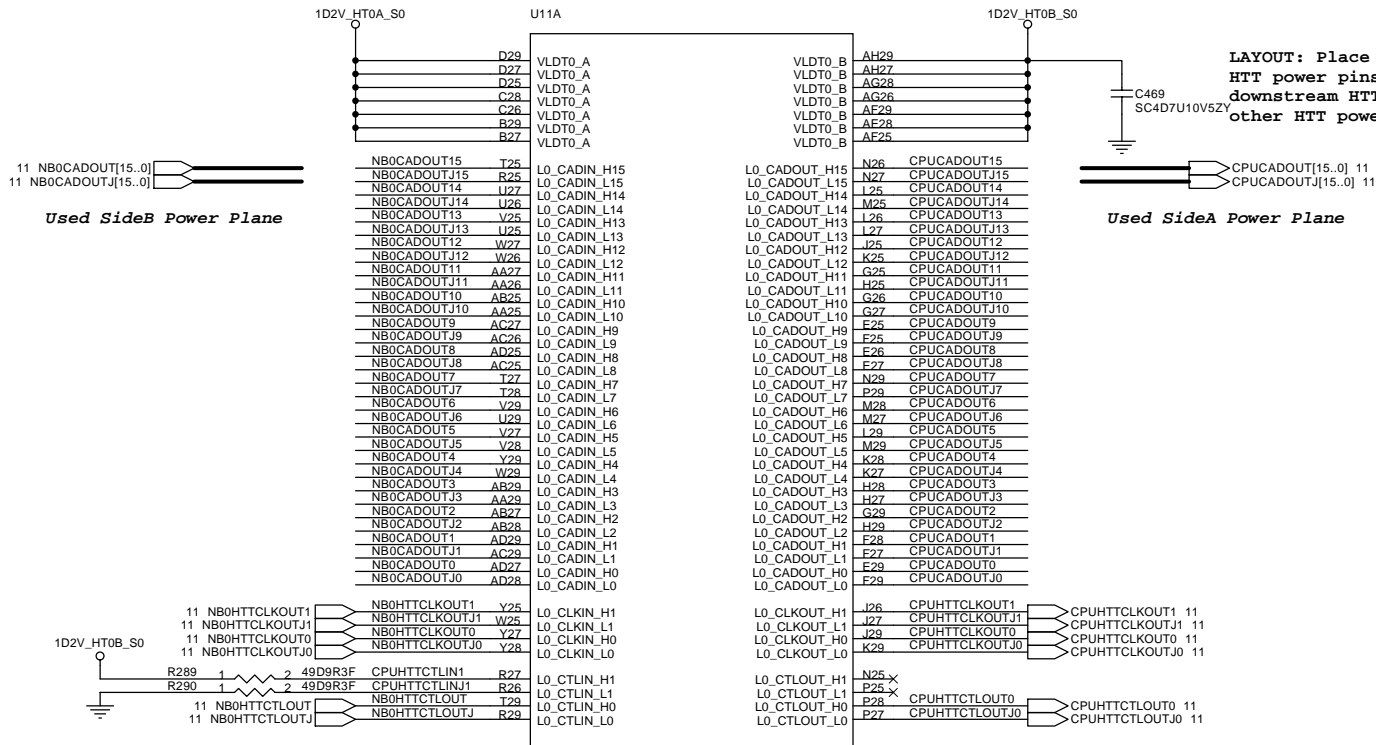
PCIHT66 SEL[1:0]#		PCI33_HT66[3:0]		
SEL0	SEL1	PIN7	PIN8	PIN11
0	0	HT66	HT66	PCI33
* 0	1	HT66	HT66	HT66
1	0	PCI33	PCI33	PCI33
1	1	HT66	PCI33	PCI33

**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.



**HTT for CPU sideA**  
 Transmit power  
 and NB sideA Receive power

**HTT for CPU sideB**  
 Receive power  
 and NB sideA Transmit power



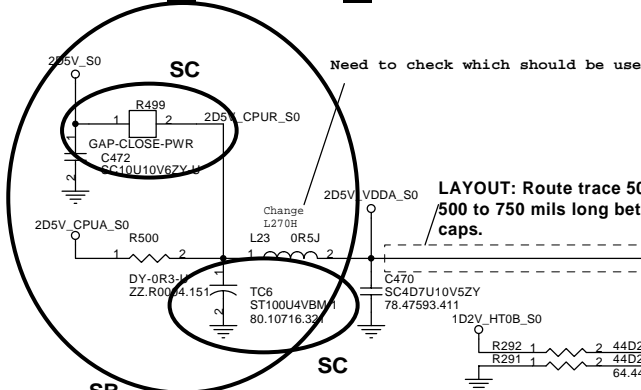
BGA754-SKT-U  
 62.10030.041

By ME request U11 P/N:  
 Main 62.10030.041  
 Second 62.10053.191  
 Third 62.10053.201

<b>緯創資通 Wistron Corporation</b>	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>File</b> CPU(1/4)_HyperTransport I/F	
Size A3	Document Number <b>EGRET</b>
Date: Friday, July 23, 2004	Sheet 4 of 50



# 2D5V VDDA\_S0

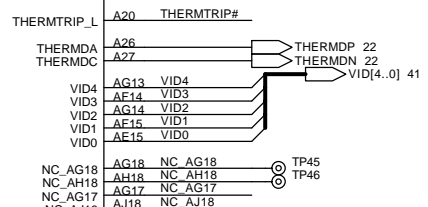
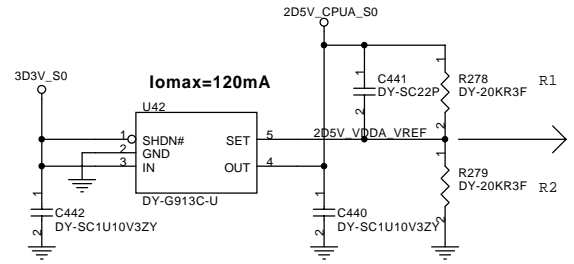


**KEMET, NT: 5.7, B2 size**  
**ST100U4VBM-1 (80.10716.321)**  
 Irripple=1.1A, ESR=70mohm  
**SANYO, NT: 6.1**  
 Irripple=1.1A, ESR=70mohm  
 3.5/2.8/2.0  
 77.21071.031

**LAYOUT: Route trace 50 mils wide and 500 to 750 mils long between these caps.**

**LAYOUT: Route VDDA trace approx. 50 mils wide (use 2x25 mil traces to exit ball field) and 500 mils long.**

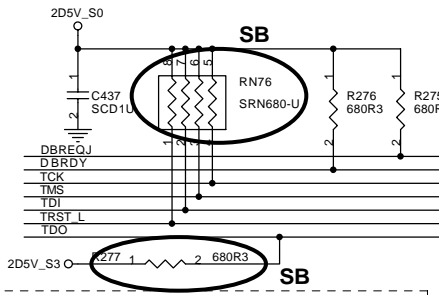
**AMD suggest voltage from 2D5V\_S0 to 2D5V\_S3 differentially impedance 100**



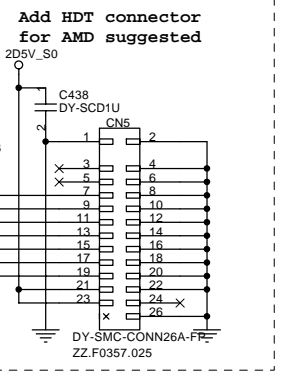
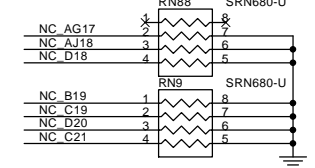
**LAYOUT: Route FBCLKOUT\_H/L differentially impedance 80**



## HDT Connectors



**CHANGE FROM 1KR3 TO 680R2 FOR AMD CHECK LIST**

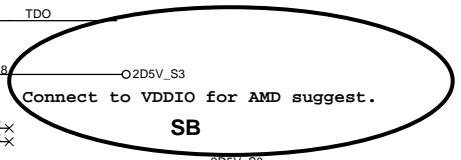
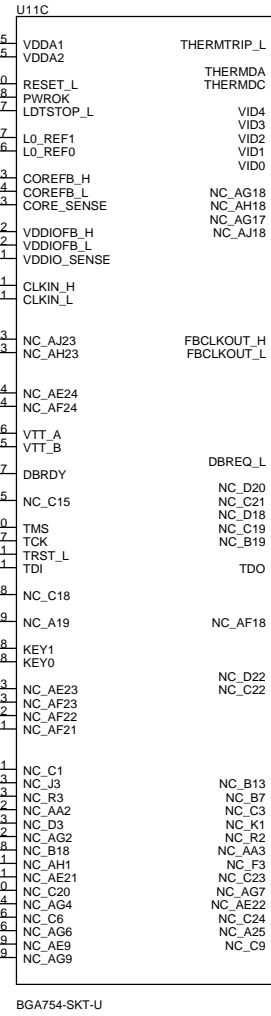


## Validation Test Points

LAYOUT: Place close to the CPU.

- |         |      |            |      |
|---------|------|------------|------|
| NC_C15  | TP36 | RST_CPU#   | TP30 |
| NC_AE23 | TP24 | CLKIN      | TP32 |
| NC_AF23 | TP25 | CLKIN#     | TP33 |
| NC_AF22 | TP26 | CORE_SENSE | TP28 |
| NC_AF21 | TP27 | VDDIOF5    | TP43 |
|         |      | VDDIOFBJ   | TP44 |
|         |      | VDDIOSENSE | TP41 |
|         |      | NC_AE24    | TP29 |
|         |      | NC_AF24    | TP31 |

- |         |      |         |      |
|---------|------|---------|------|
| NC_AE23 | AE23 | NC_C1   | C1   |
| NC_AF23 | AF23 | NC_R3   | R3   |
| NC_AF22 | AF22 | NC_AA2  | AA2  |
| NC_AF21 | AF21 | NC_D3   | D3   |
|         |      | NC_AG2  | AG2  |
|         |      | NC_R2   | R2   |
|         |      | NC_B18  | B18  |
|         |      | NC_AH1  | AH1  |
|         |      | NC_F3   | F3   |
|         |      | NC_AE21 | AE21 |
|         |      | NC_C20  | C20  |
|         |      | NC_AG4  | AG4  |
|         |      | NC_C6   | C6   |
|         |      | NC_AG6  | AG6  |
|         |      | NC_AE9  | AE9  |
|         |      | NC_AG9  | AG9  |



THERMTRIPJ Level shift to VT8235  
 EM\_OFF PIN near VT8235

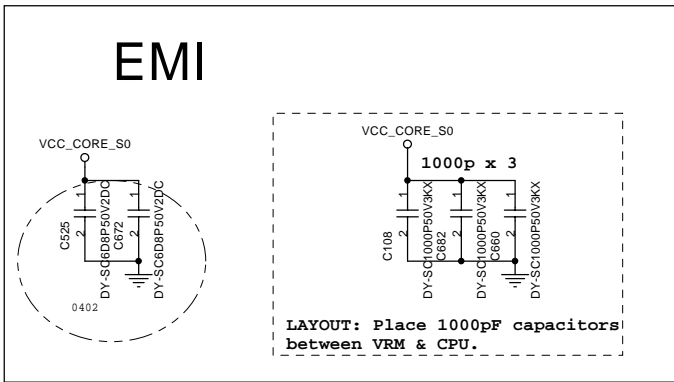
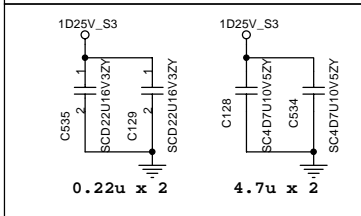
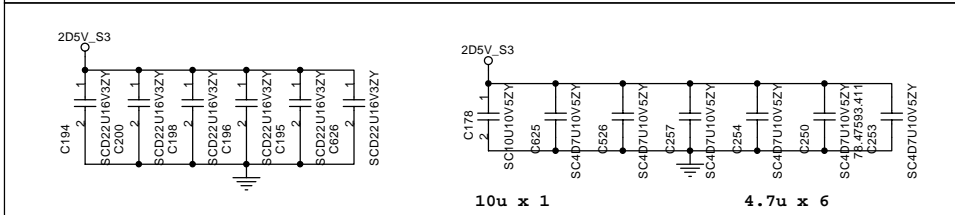
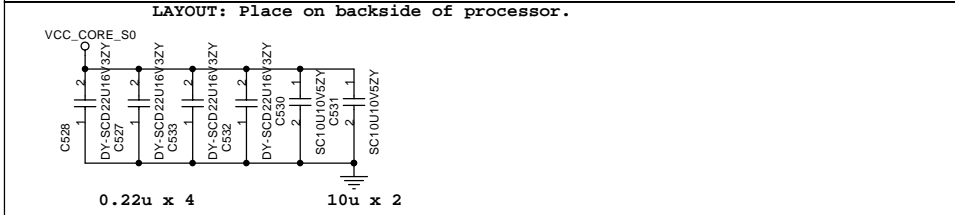
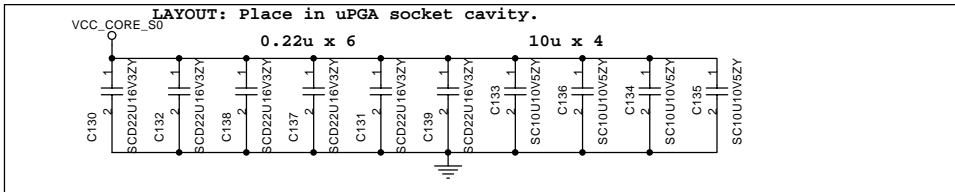
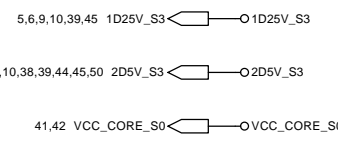
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hstchih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **CPU(3/4) Control & Debug**  
 Size: A3 Document Number: **EGRET** Rev: SC  
 Date: Friday, July 23, 2004 Sheet 6 of 50

Y17	VSS	N20
K17	VSS	I20
H17	VSS	AF19
F17	VSS	AD19
F18	VSS	AB19
AJ26	VSS	Y19
AE29	VSS	K19
AC16	VSS	H19
AA16	VSS	F19
I16	VSS	D19
G16	VSS	AC18
F16	VSS	AA18
AH14	VSS	G18
AD15	VSS	R16
AB15	VSS	AD17
K15	VSS	AB17
F15	VSS	H15
D16	VSS	F15
AE14	VSS	G28
AC14	VSS	D28
AA14	VSS	AA15
I14	VSS	B28
G14	VSS	C27
AE17	VSS	AH26
AD13	VSS	AF26
AB13	VSS	AD26
Y13	VSS	Y26
T13	VSS	G17
H13	VSS	T26
F13	VSS	M26
AH12	VSS	H26
AC12	VSS	D26
AA12	VSS	B26
G12	VSS	C25
B12	VSS	R25
AD11	VSS	AB18
AB11	VSS	AD18
Y11	VSS	AG19
K11	VSS	AA24
H11	VSS	W24
F11	VSS	U24
AH10	VSS	R24
AC10	VSS	N24
W10	VSS	J24
U10	VSS	H20
R10	VSS	F24
N10	VSS	AG23
I10	VSS	AD23
G10	VSS	T20
B10	VSS	AB23
AD9	VSS	Y23
Y9	VSS	Y20
V9	VSS	V23
T9	VSS	T23
P9	VSS	P23
M9	VSS	K23
K9	VSS	H23
H9	VSS	F23
AE8	VSS	E23
ACR	VSS	D23
WR	VSS	AJ22
UR	VSS	AH22
R8	VSS	AG22
NR	VSS	AC22
IR	VSS	AA22
GR	VSS	AC28
B8	VSS	E22
AD7	VSS	K22
AB7	VSS	R22
V7	VSS	M22
T7	VSS	P22
P7	VSS	T22
M7	VSS	Y22
K7	VSS	G22
H7	VSS	AB22
F7	VSS	AD22
AH6	VSS	E23
AC6	VSS	G23
AA6	VSS	L23
U6	VSS	Y21
R6	VSS	V21
NR	VSS	N23
IR	VSS	R23
GR	VSS	U23
B6	VSS	P23
AH4	VSS	M21
R4	VSS	K21
AH2	VSS	H21
AD2	VSS	F21
Y2	VSS	D24
V2	VSS	D24
T2	VSS	AJ20
P2	VSS	AG20
M2	VSS	M24
K2	VSS	P24
H2	VSS	T24
F2	VSS	W24
C29	VSS	G20
AH28	VSS	J18
AE28	VSS	AE16
AC28	VSS	Y15
W28	VSS	B14
R28	VSS	I12
L28	VSS	AA10
		AA8
		Y7
		W6
		AE2
		D2
		AG27
		AG25
		L24
		M23
		W22
		AB21
		AH20
		B2

VCC_CORE_S0	U11D	2D5V_S3
L7	VDD	E4
AC15	VDD	G4
AD19	VDD	J4
H18	VDD	L4
B20	VDD	N4
Y19	VDD	W4
E21	VDD	AA4
H22	VDD	AC4
F19	VDD	AE4
H24	VDD	D5
F26	VDD	AF5
N7	VDD	ER
I9	VDD	H6
V10	VDD	JK
R16	VDD	M6
AD17	VDD	P6
G13	VDD	T6
AB17	VDD	V6
K14	VDD	Y6
Y14	VDD	AB6
AB14	VDD	AD6
G15	VDD	D7
J15	VDD	G7
B8	VDD	J7
AA15	VDD	AA7
H16	VDD	AC7
AH26	VDD	AF7
Y16	VDD	F8
AB16	VDD	H8
G17	VDD	AB8
J17	VDD	AD8
AA17	VDD	D9
AC17	VDD	G9
AE17	VDD	AC9
F18	VDD	AF9
K18	VDD	F10
Y18	VDD	F10
AB18	VDD	AD10
AD18	VDD	D11
AG19	VDD	AE11
F19	VDD	F12
G19	VDD	AD12
AC19	VDD	D13
AA19	VDD	AE13
N24	VDD	E14
F20	VDD	AD14
H20	VDD	F16
K20	VDD	AD16
M20	VDD	D15
P20	VDD	R4
T20	VDD	N28
Y20	VDD	IJ28
AB20	VDD	AA28
AD20	VDD	AE27
G21	VDD	R7
J21	VDD	U7
F23	VDD	W7
N21	VDD	K8
AJ22	VDD	M8
AH22	VDD	P8
AG22	VDD	T8
AC22	VDD	V8
AA22	VDD	Y8
AC28	VDD	J9
E22	VDD	N9
K22	VDD	R9
R22	VDD	U9
M22	VDD	W9
P22	VDD	AA9
T22	VDD	H10
Y22	VDD	I10
G22	VDD	K10
AB22	VDD	M10
AD22	VDD	P10
E23	VDD	T10
G23	VDD	Y10
L23	VDD	AB10
Y21	VDD	G11
V21	VDD	H11
N23	VDD	I11
R23	VDD	AA11
U23	VDD	AC11
P21	VDD	H12
M21	VDD	K12
K21	VDD	Y12
H21	VDD	AB12
F21	VDD	I13
D24	VDD	AA13
AJ20	VDD	AC13
AG20	VDD	H14
M24	VDD	AB26
P24	VDD	E28
T24	VDD	I28
W24	VDD	
Y24	VDD	
AB24	VDD	
AD24	VDD	
AH24	VDD	
AE25	VDD	
K26	VDD	
B14	VDD	
I12	VDD	
V26	VDD	

BGA754-SKT-U



**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hstchih, Taipei Hsien 221, Taiwan, R.O.C.

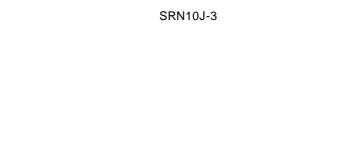
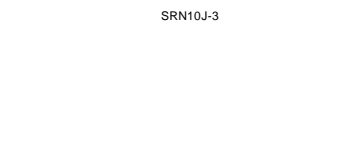
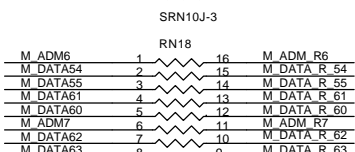
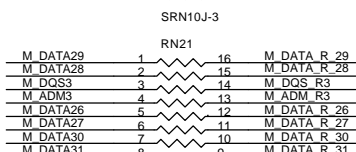
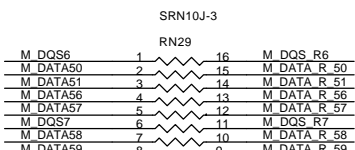
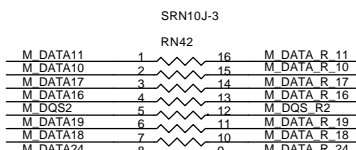
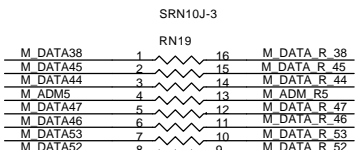
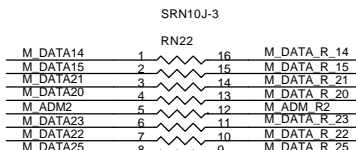
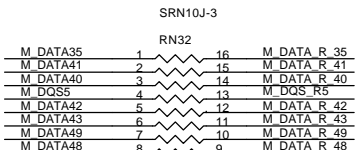
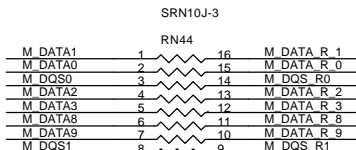
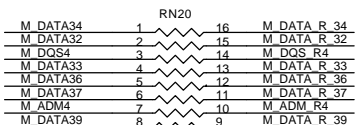
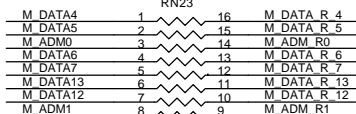
Title		
<b>CPU(4/4)_Power</b>		
Size	Document Number	Rev
A3	<b>EGRET</b>	SC
Date:	Friday, July 23, 2004	Sheet 7 of 50





# SERIES DAMPING

PLACE RNs CLOSE TO FIRST DM ( DM1 ), < 0.75"  
STRICT EQUAL LENGTH LIMITATION WITH DQS,  
CB PINS

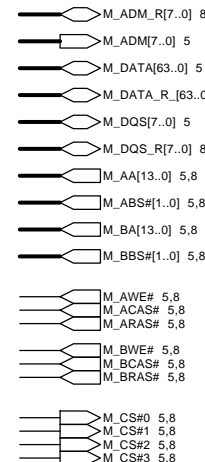
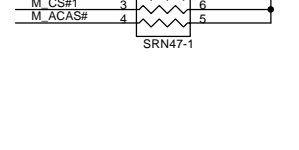
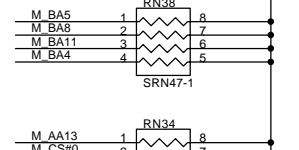
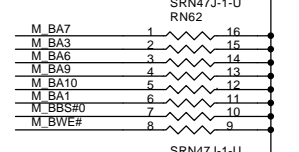
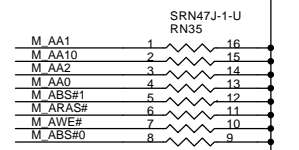
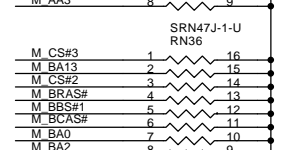
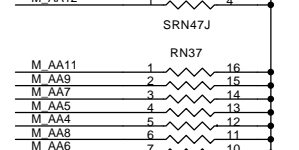
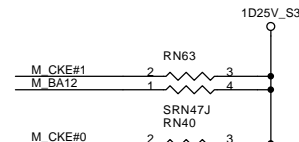
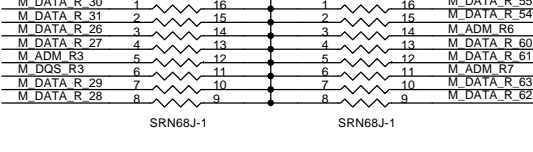
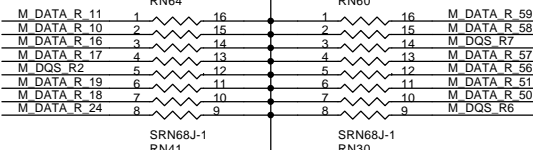
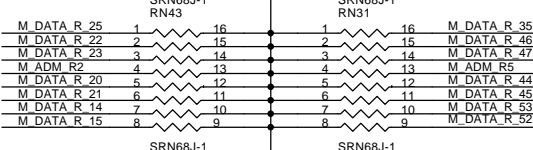
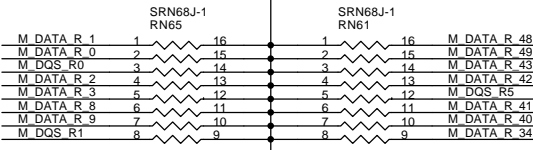
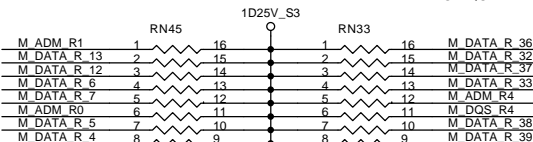


05/10  
Remove the damping resistor for AMD suggest.

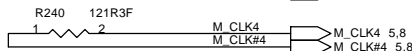
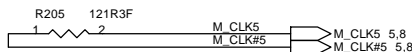
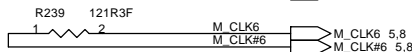
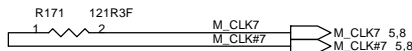
# PARALLEL TERMINATION

PULL HIGH STUBS < 0.8", PLACE RPs CLOSE TO SECOND DM ( DM2 )  
NO EQUAL LENGTH LIMITATION

5,6,7,10,39,45 1D25V\_S3



PLACE BETWEEN DM1, DM2  
CLOSE TO FIRST DM ( DM2 ) < 0.2", TO SECOND DM ( DM1 ) < 1.1"  
EQUAL LENGTH LIMITATION WITH SCK/SCK#



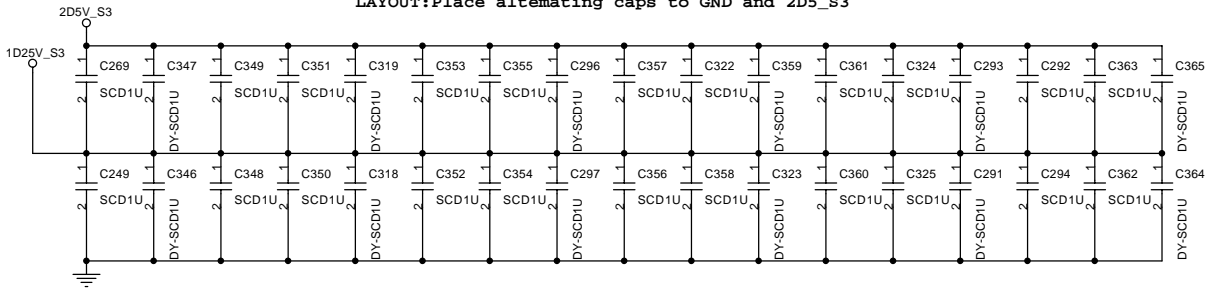
緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hstichh,  
Taipei Hsien 221, Taiwan, R.O.C.

DDR DAMPING & TERMINATION

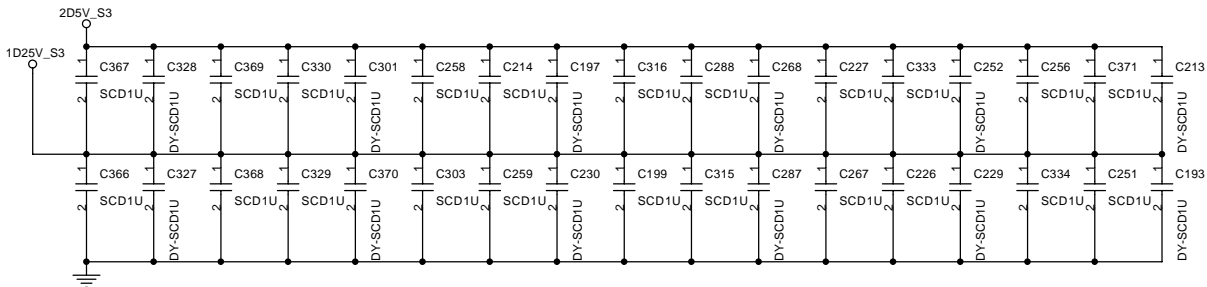
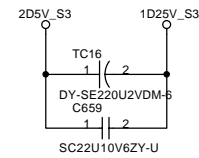
Size A3 Document Number EGRET Rev SC

Date: Friday, July 23, 2004 Sheet 9 of 50

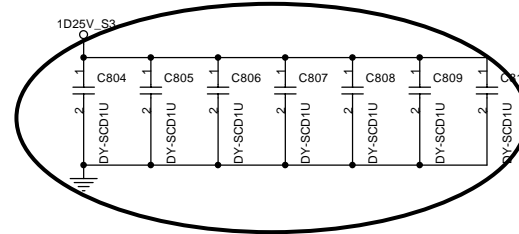
LAYOUT:Place alternating caps to GND and 2D5\_S3



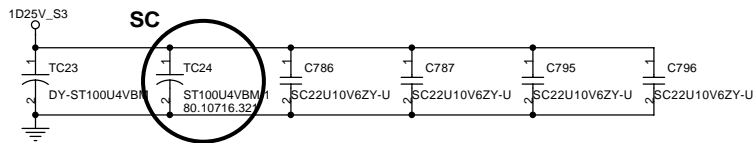
LAYOUT:Locate close to CPU socket.



SB

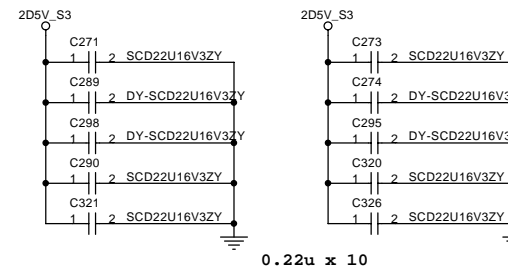


LAYOUT:Place at end of the DIMMs

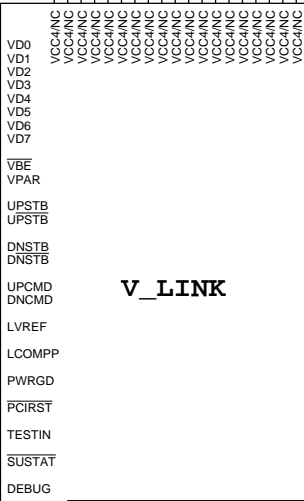
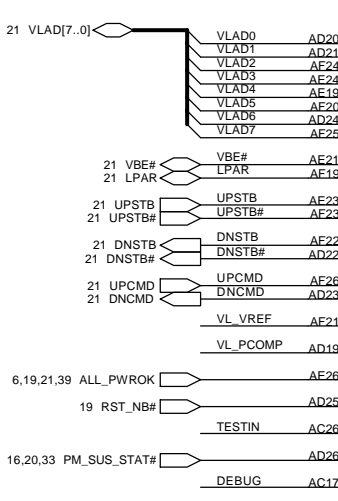
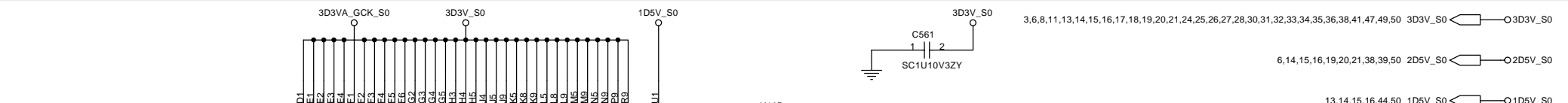


**KEMET,NT:5.7, B2 size**  
**ST100U4VBM-1 (80.10716.321)**  
**Iripple=1.1A,ESR=70mohm**  
**SANYO, NT\$:6.1**  
**Iripple=1.1A,ESR=70mohm**  
**3.5/2.8/2.0**  
**77.21071.031**

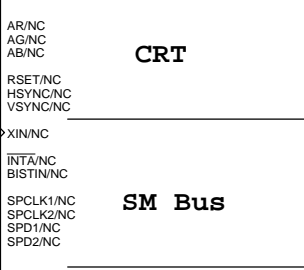
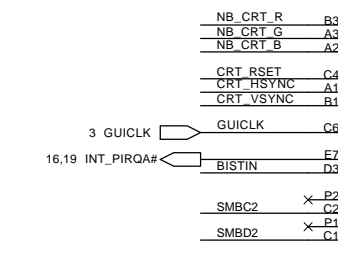
LAYOUT:Place close to Power Pin of DDR socket.





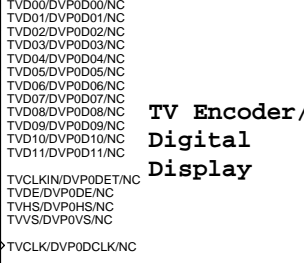
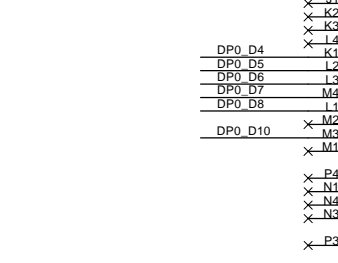


**V\_LINK**

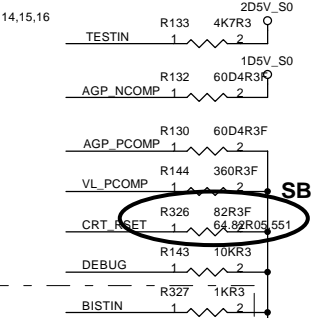
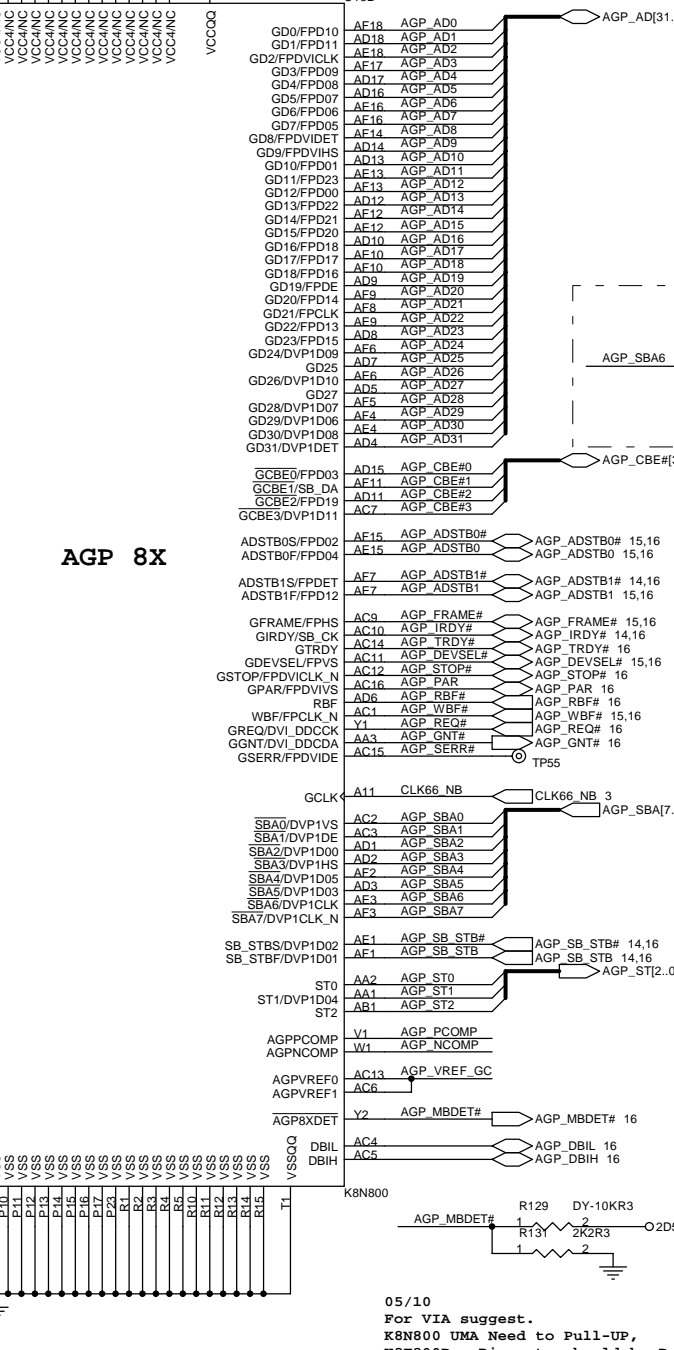


**CRT**

**AGP 8X**



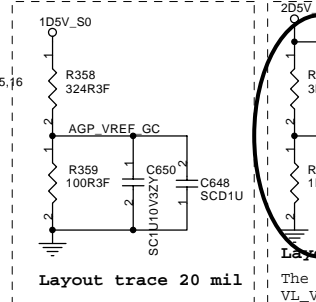
**TV Encoder/  
Digital  
Display**



For K8T800PRO remove.  
For K8N800 install.

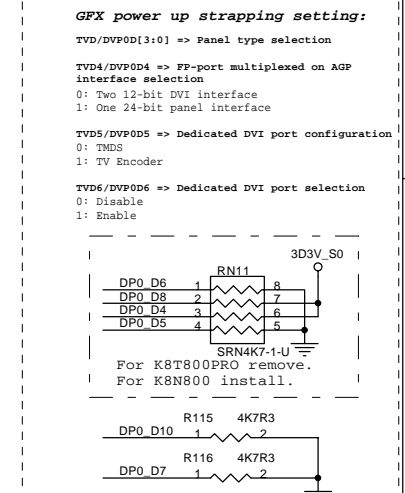


05/10  
For VIA suggest.  
UMA AGPVREF 0.75V, Use 100 ohm  
64.10005.651  
Discrete 8X AGPVREF 0.35V, Use 324 ohm  
64.32405.651

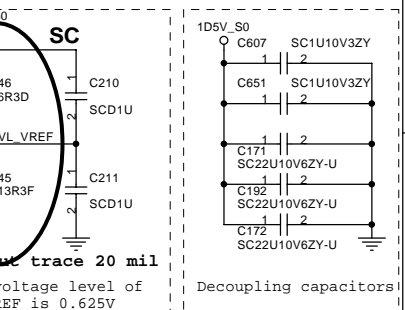
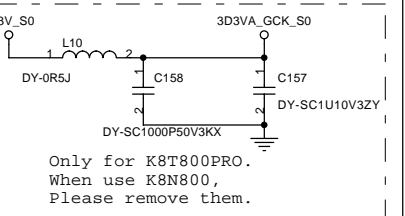


Layout trace 20 mil

Use this function for K8N800

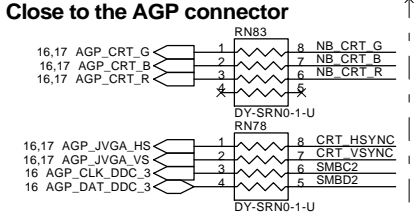


Note: All of these power up strapping pin have internal pull down. Put an external pull up resistor if want to set the default value to 1.



Layout trace 20 mil  
The voltage level of VL\_VREF is 0.625V

For K8T800PRO remove.  
For K8N800 install.



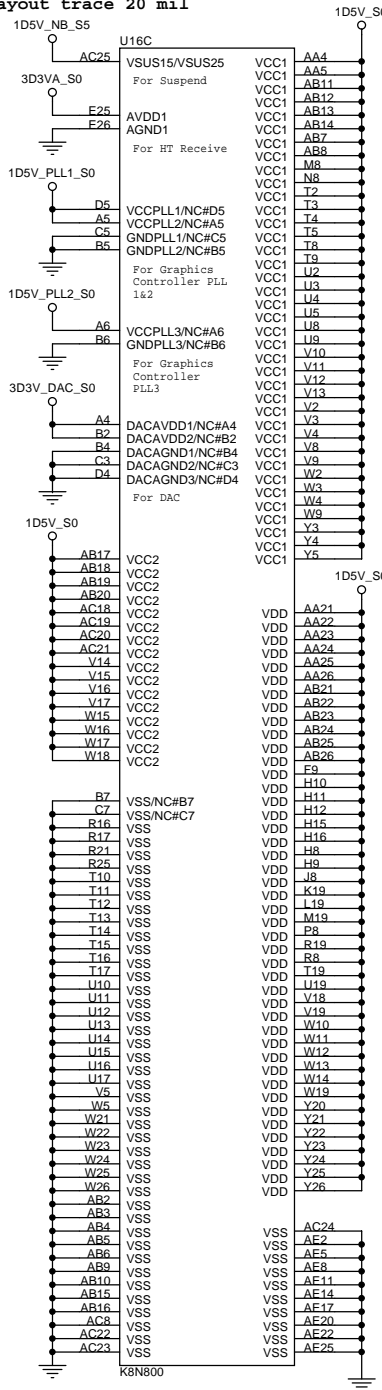
Close to the AGP connector

**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

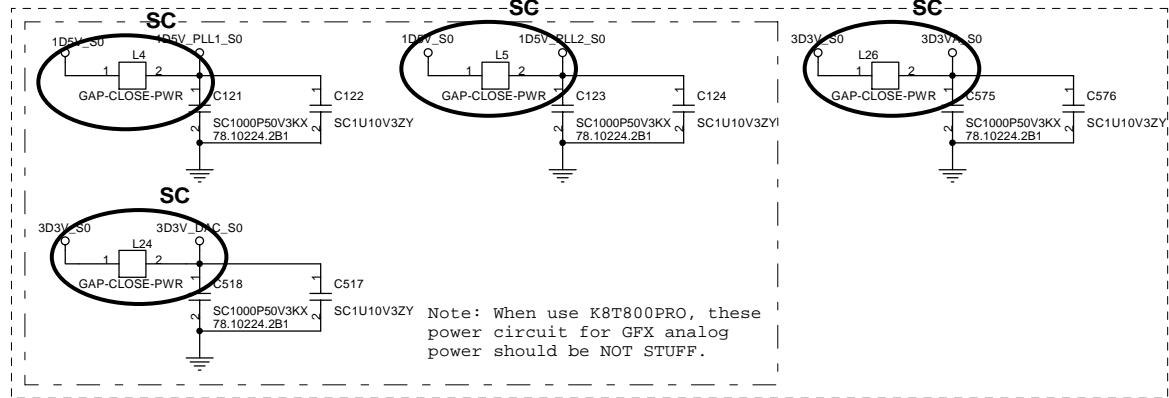
Title: **NB-K8N800(2/3) AGP\_VLINK**  
Size: A3 Document Number: **EGRET** Rev: SC  
Date: Friday, July 23, 2004 Sheet 12 of 50

05/10  
For VIA suggest.  
K8N800 UMA Need to Pull-UP,  
K8T800Pro Discrete should be Pull-down.

Layout trace 20 mil

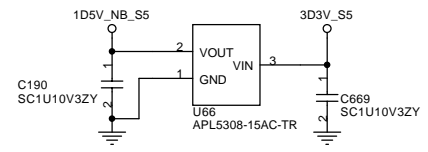
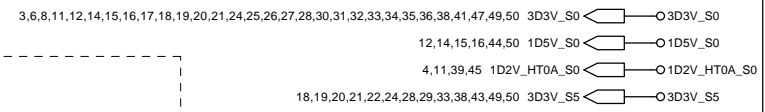
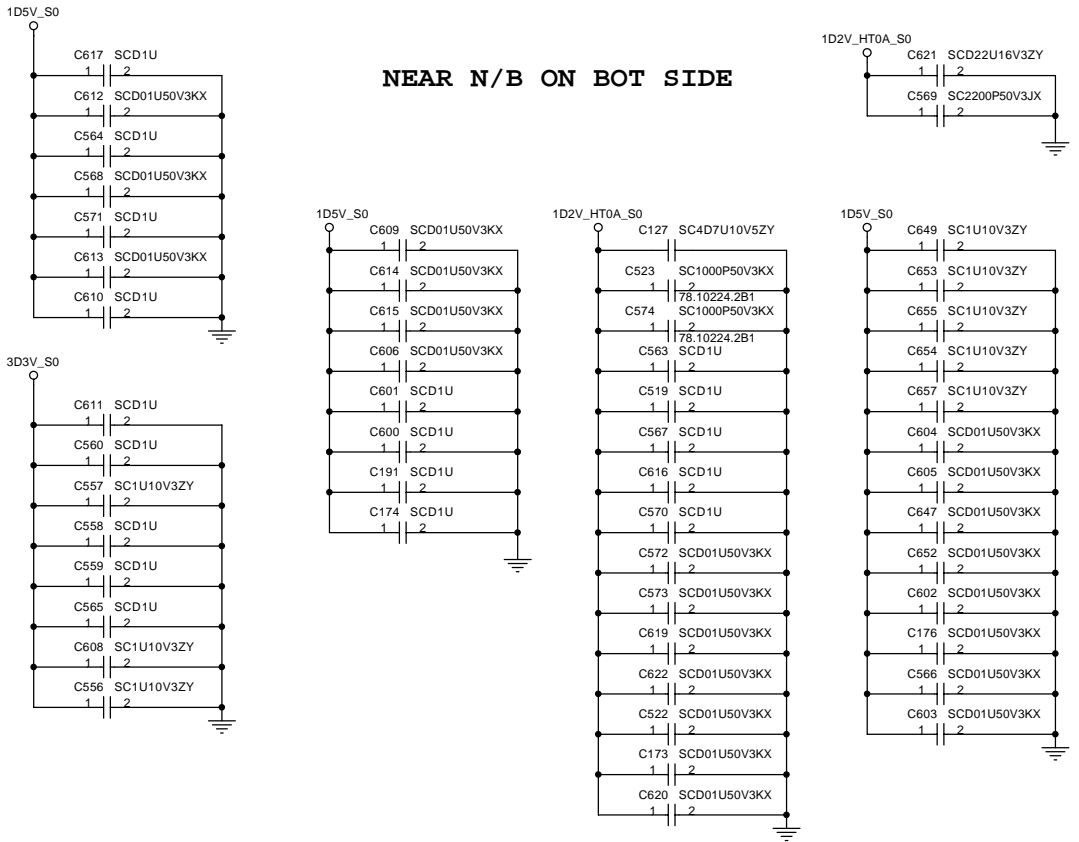


Layout trace 20 mil



Note: When use K8T800PRO, these power circuit for GFX analog power should be NOT STUFF.

NEAR N/B ON BOT SIDE

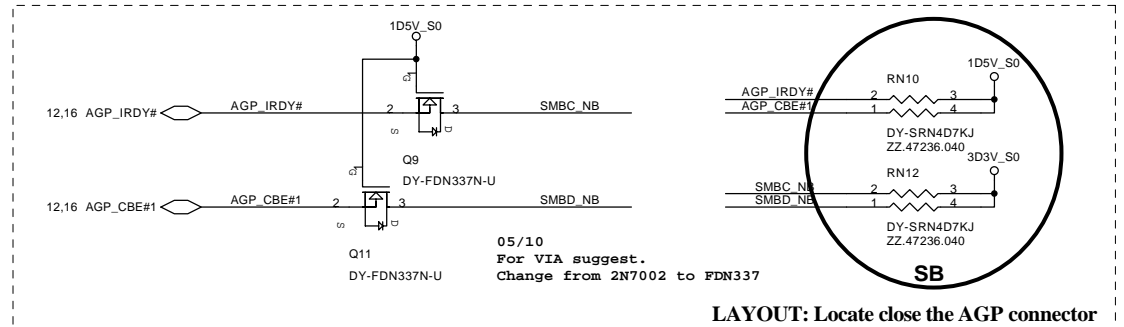
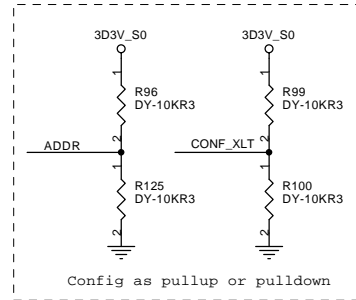
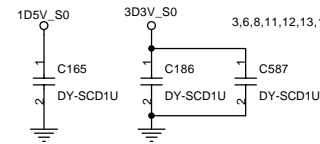
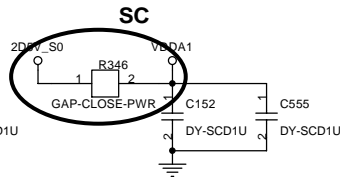
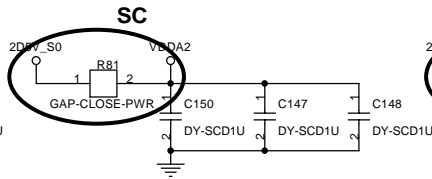
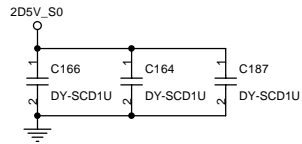


**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

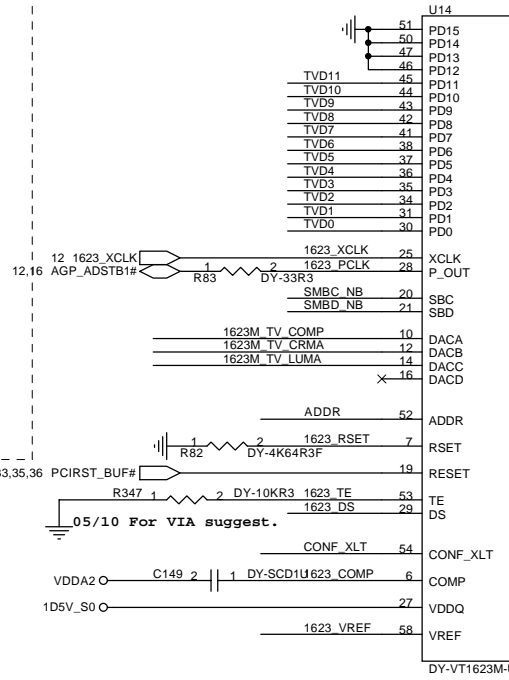
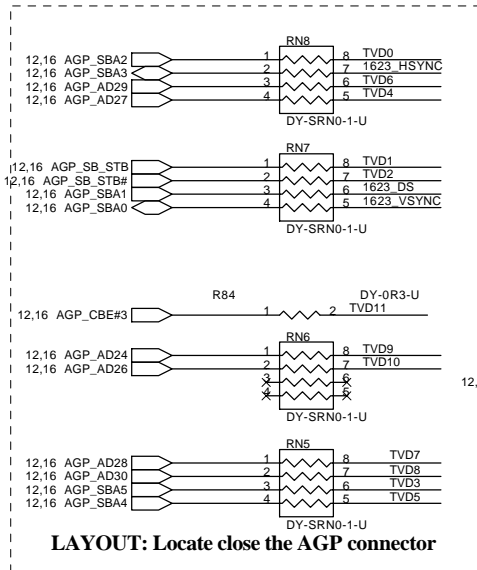
Title: **NB-K8N800(3/3) POWER**

Size: A3 | Document Number: **EGRET** | Rev: SC

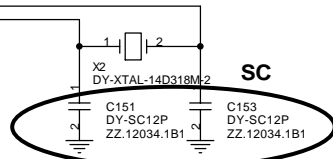
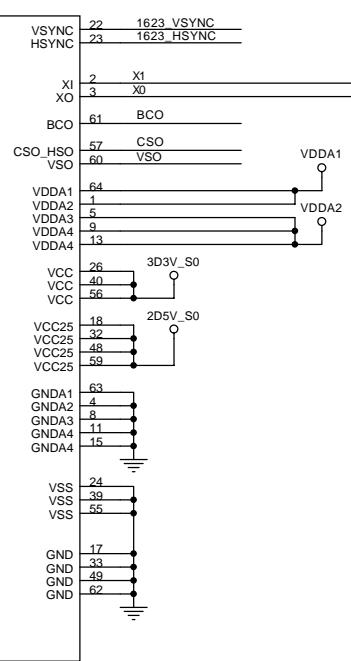
Date: Friday, July 23, 2004 | Sheet: 13 of 50



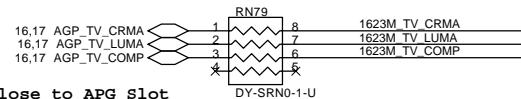
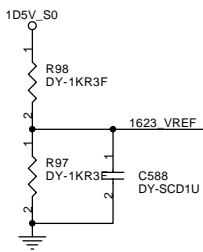
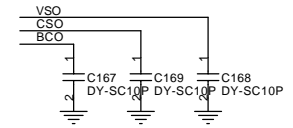
**LAYOUT: Locate close the AGP connector**



Note: Only for K8N800.  
When use K8T800PRO,  
Please remove them.

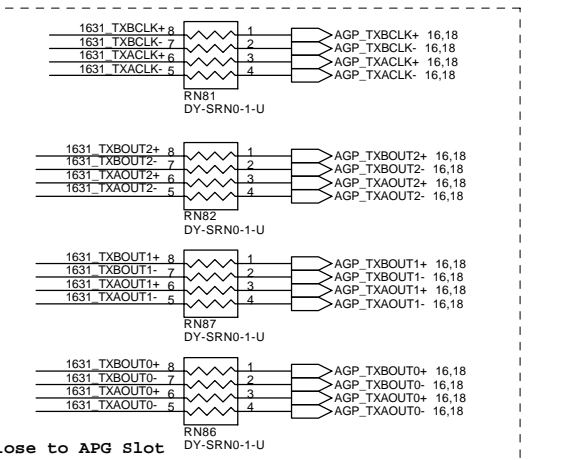
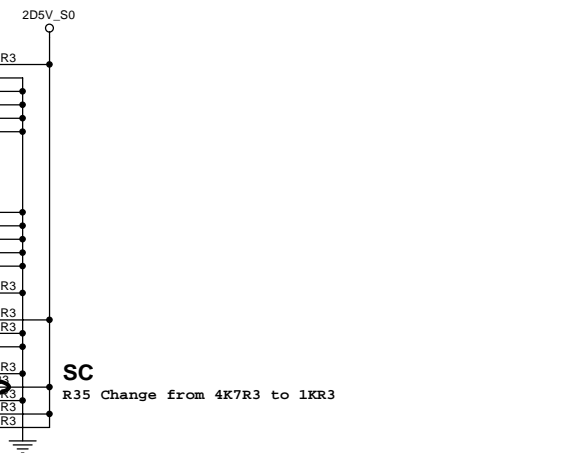
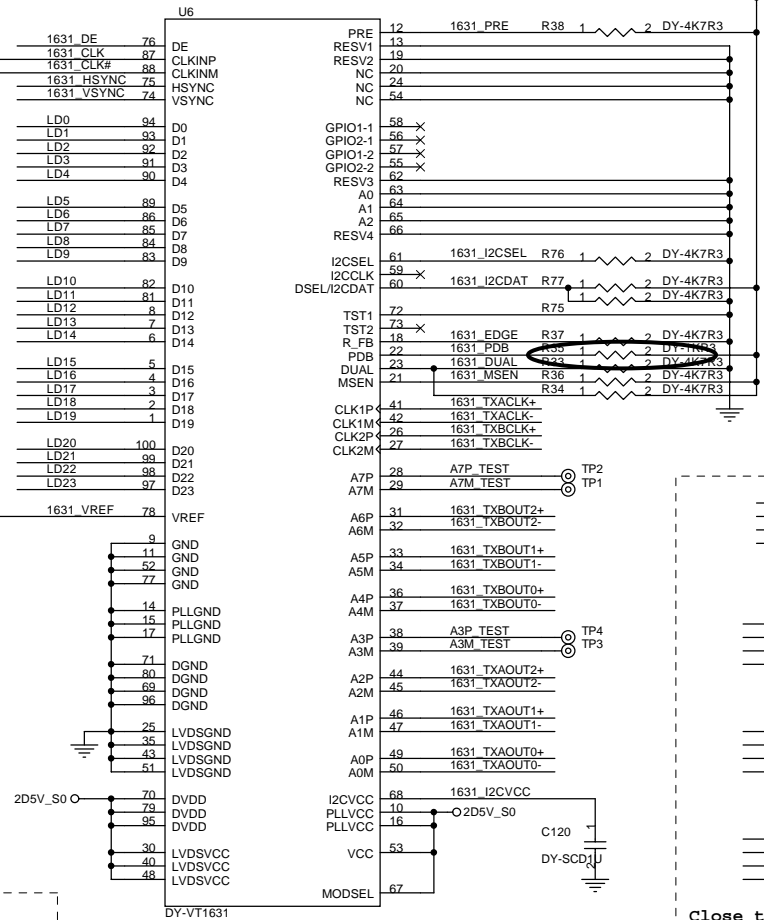
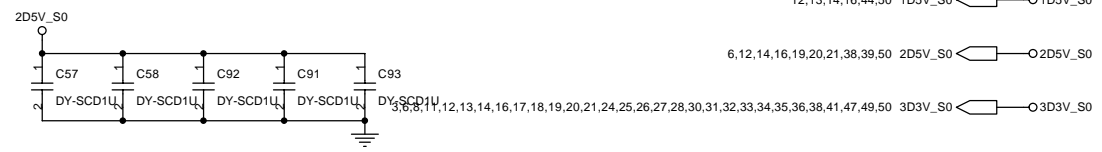
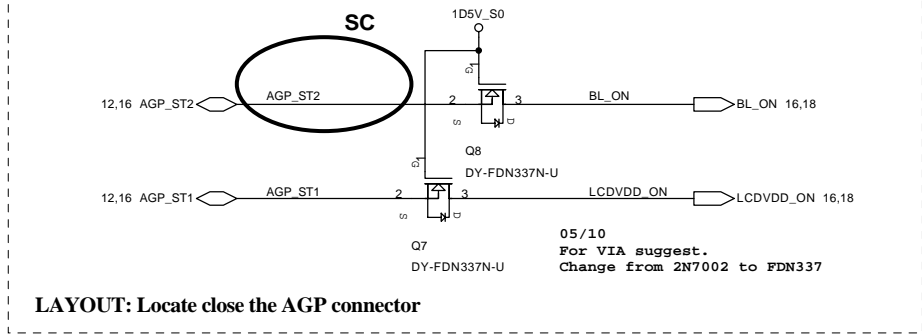
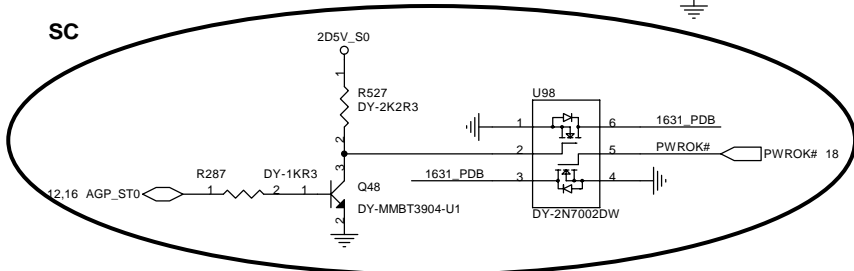
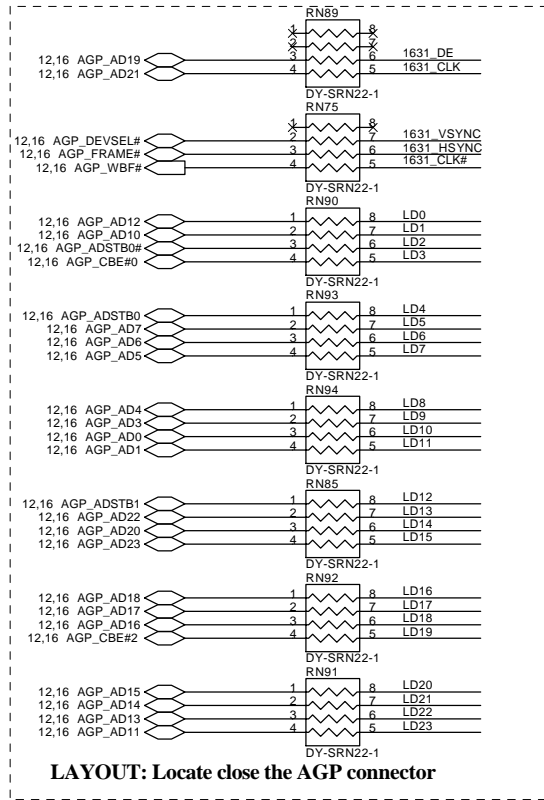


By KDS suggested change  
From 78.39034.1B1  
To 78.12034.1B1

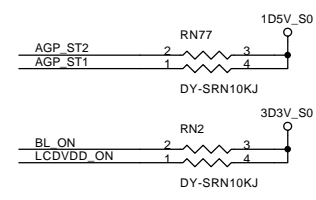


Close to APG Slot

<b>緯創資通 Wistron Corporation</b>	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title <b>VT1623M-TV Encoder</b>	
Size A3	Document Number <b>EGRET</b>
Date: Friday, July 23, 2004	Sheet 14 of 50



Note: Only for K8N800.  
When use K8T800PRO,  
Please remove them.

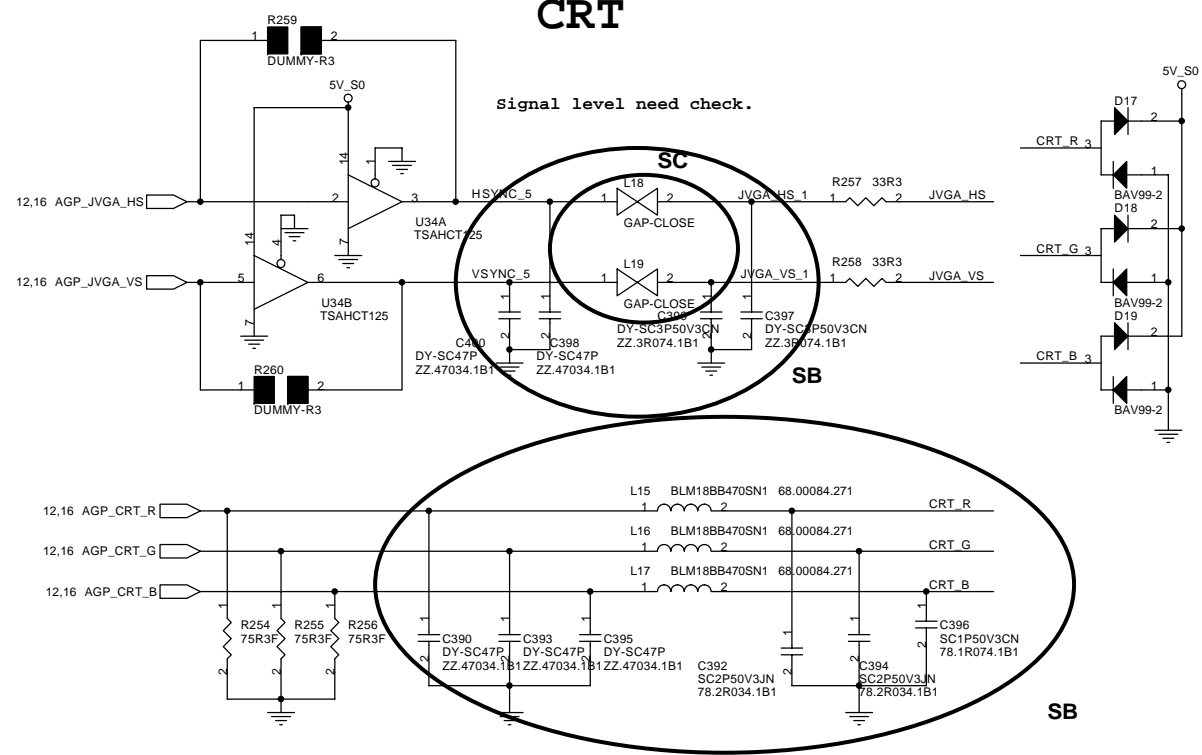






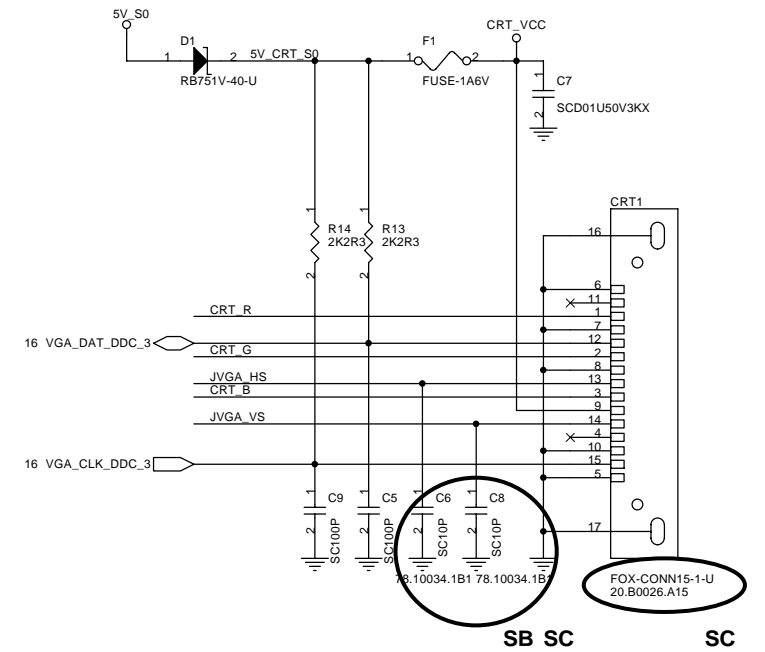
# CRT

Signal level need check.



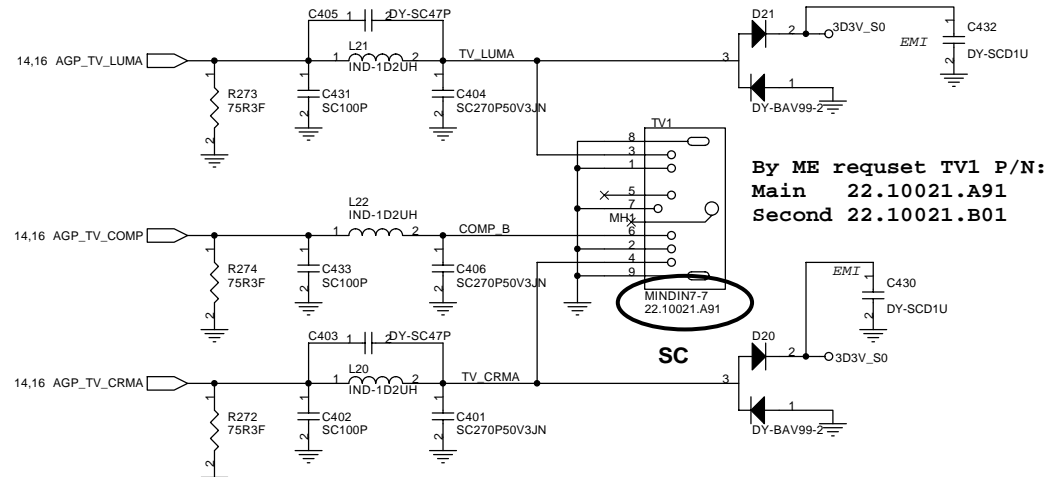
# CRT CONN

200mA Rating/Spec 500mA

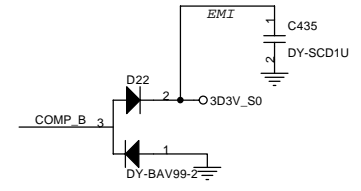


By ME request CRT1 P/N:  
 Main 20.B0026.A15  
 Second 20.B0034.015

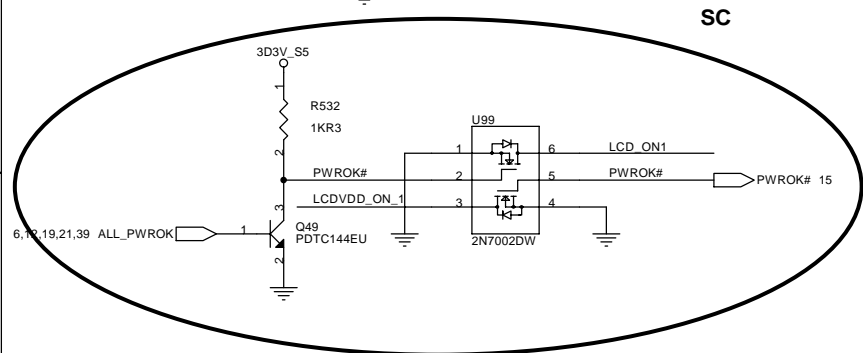
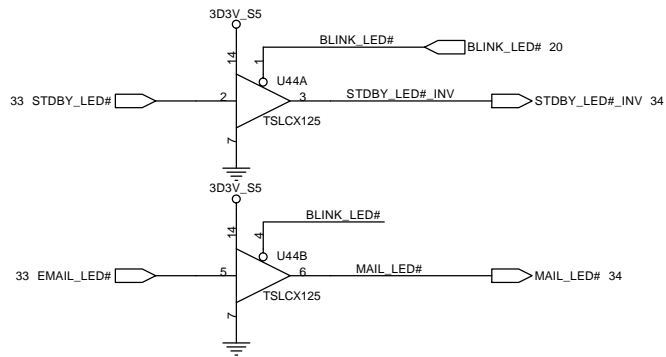
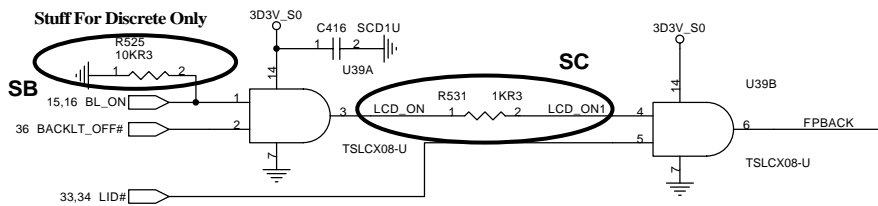
# TV CONN



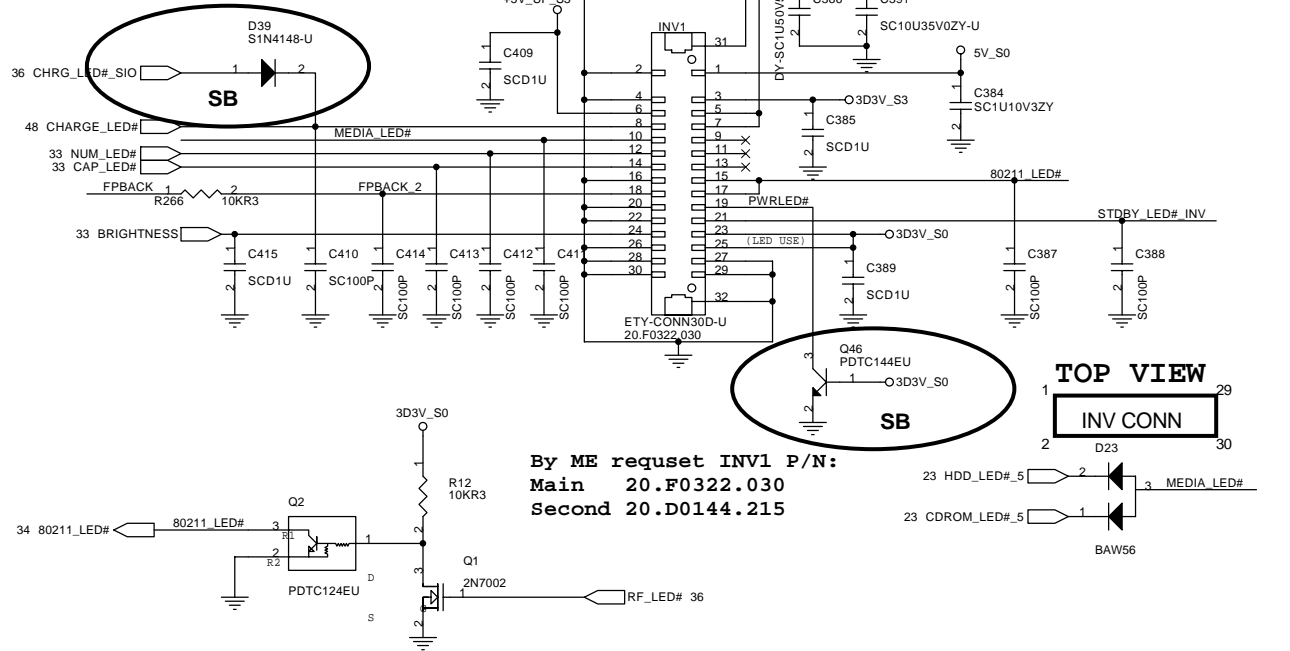
By ME request TV1 P/N:  
 Main 22.10021.A91  
 Second 22.10021.B01



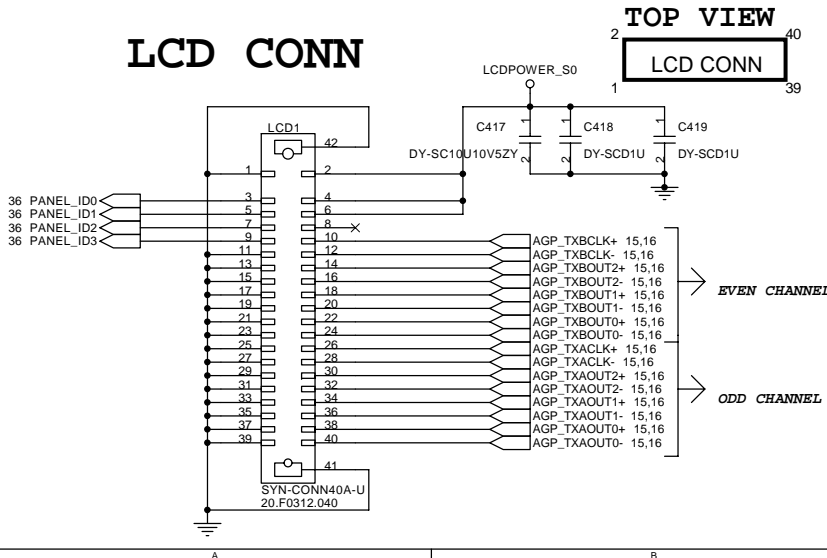
<b>緯創資通 Wistron Corporation</b>		
<small>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</small>		
Title <b>CRT/TV</b>		
Size A3	Document Number <b>EGRET</b>	Rev <b>SC</b>
Date: Friday, July 23, 2004	Sheet 17	of 50



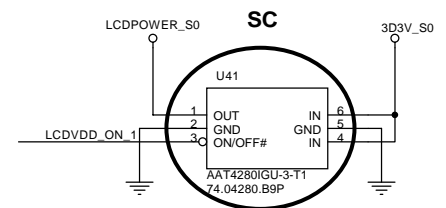
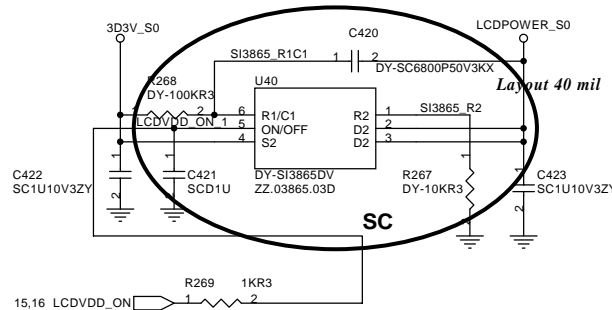
# INVERTER/LED



## LCD CONN

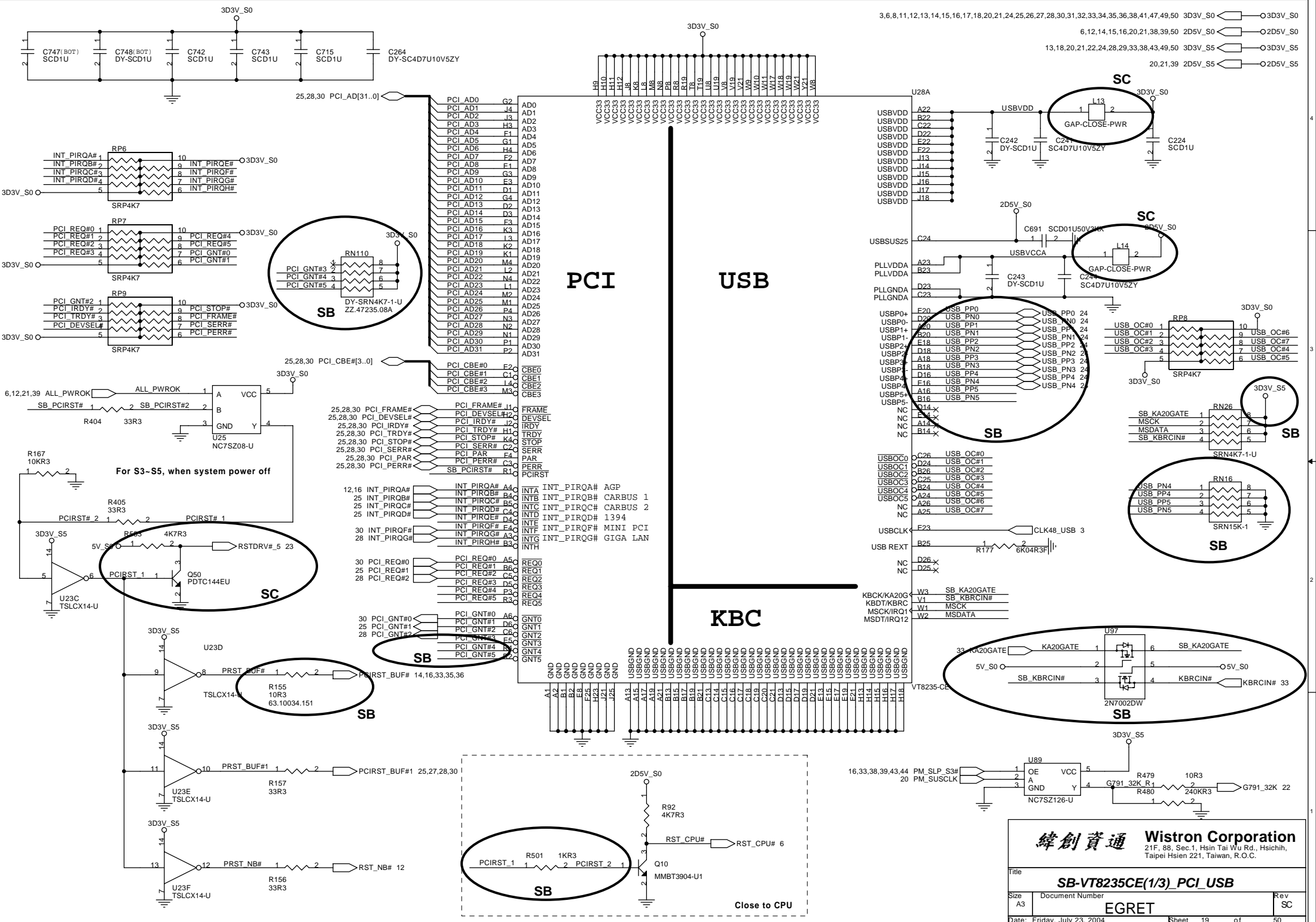


## LCD POWER



緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title <b>INV / LCD</b>		
Size A3	Document Number <b>EGRET</b>	Rev SC
Date: Friday, July 23, 2004	Sheet 18 of 50	



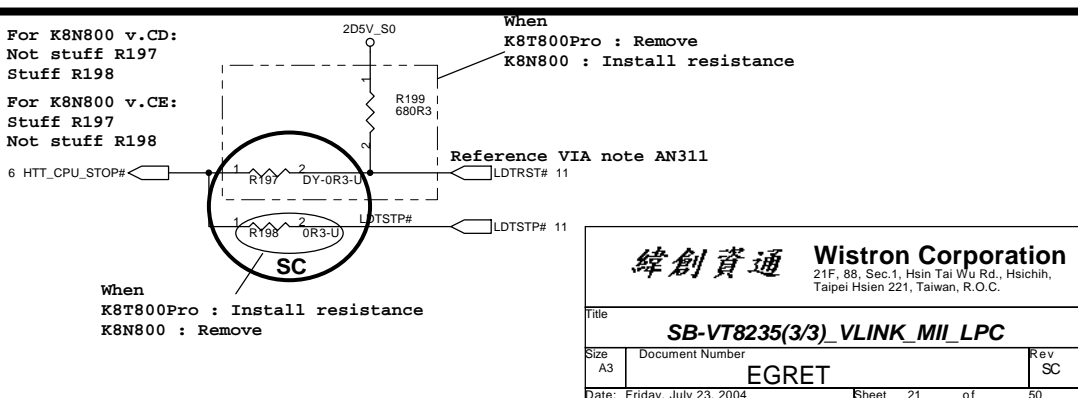
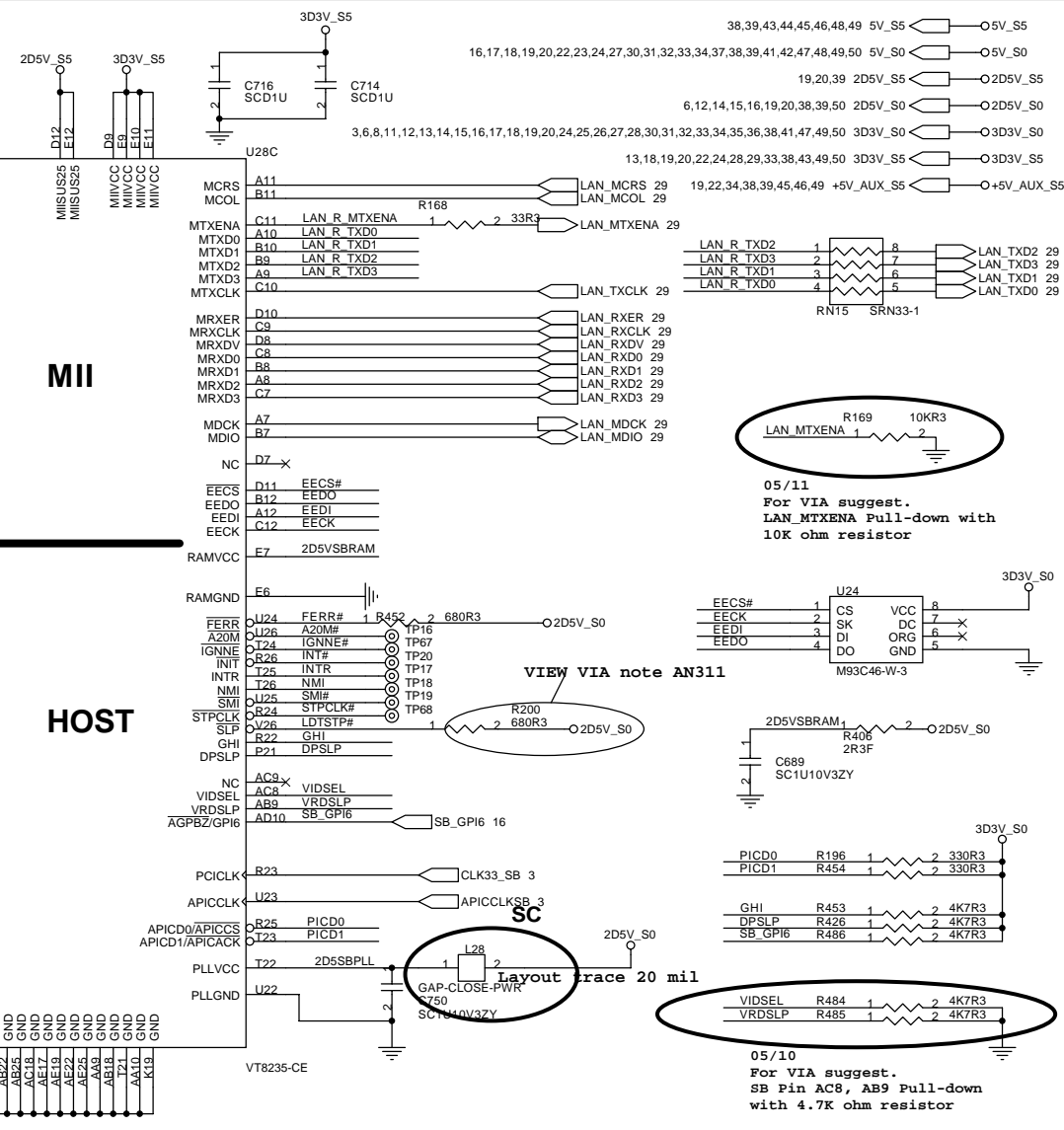
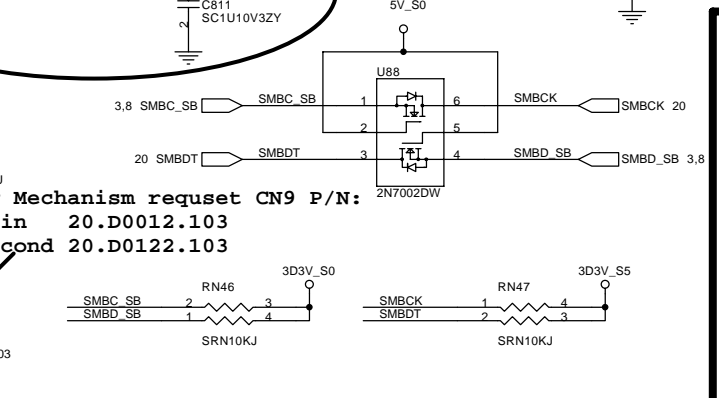
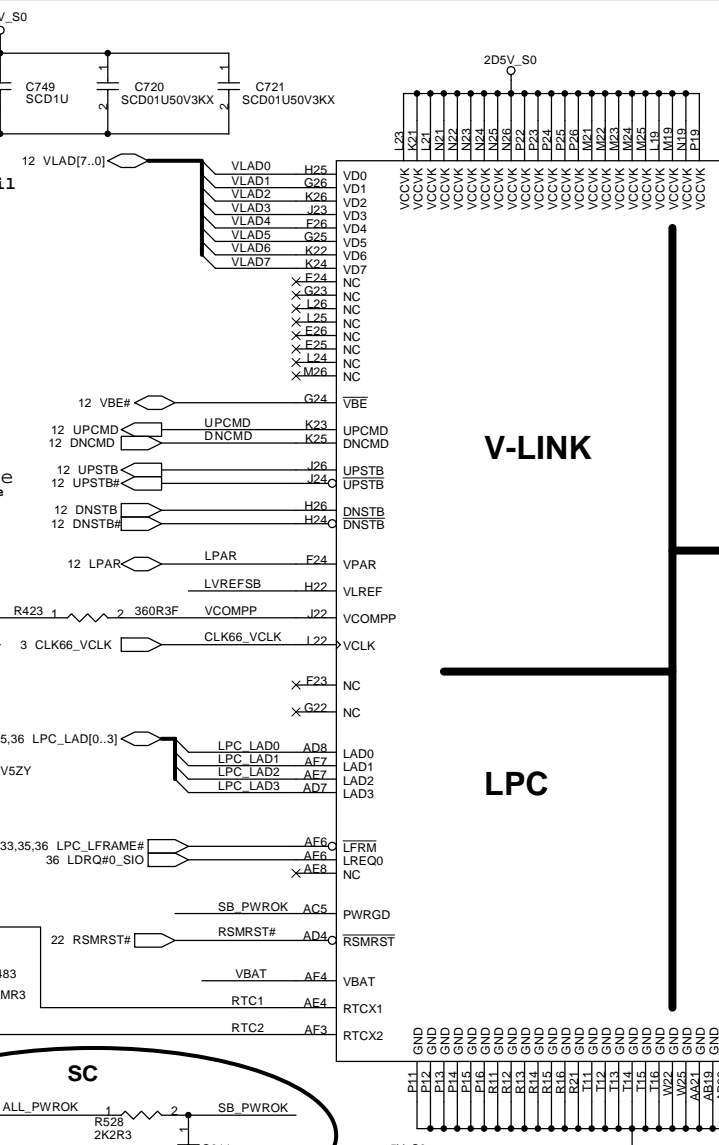
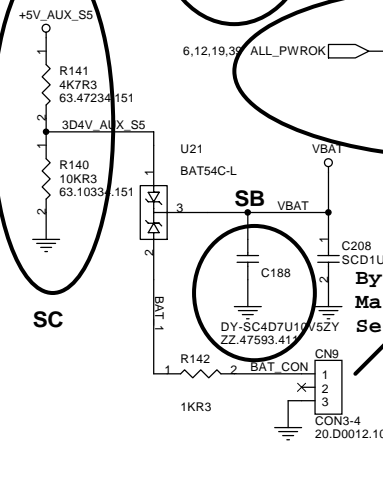
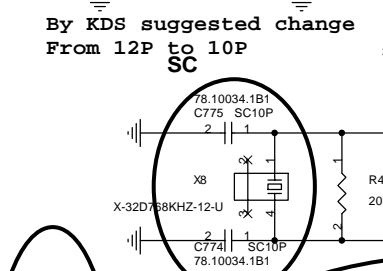
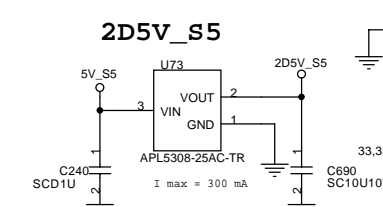
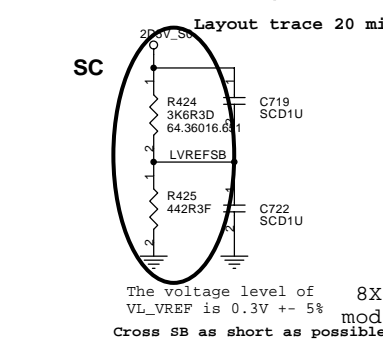
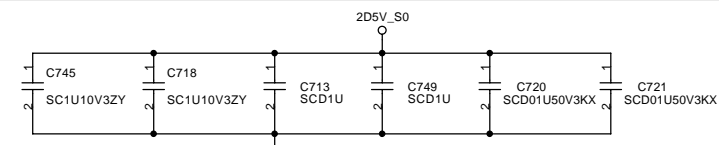
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title: **SB-VT8235CE(1/3) PCI\_USB**

Size: A3 Document Number: EGRET Rev: SC

Date: Friday, July 23, 2004 Sheet 19 of 50





**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

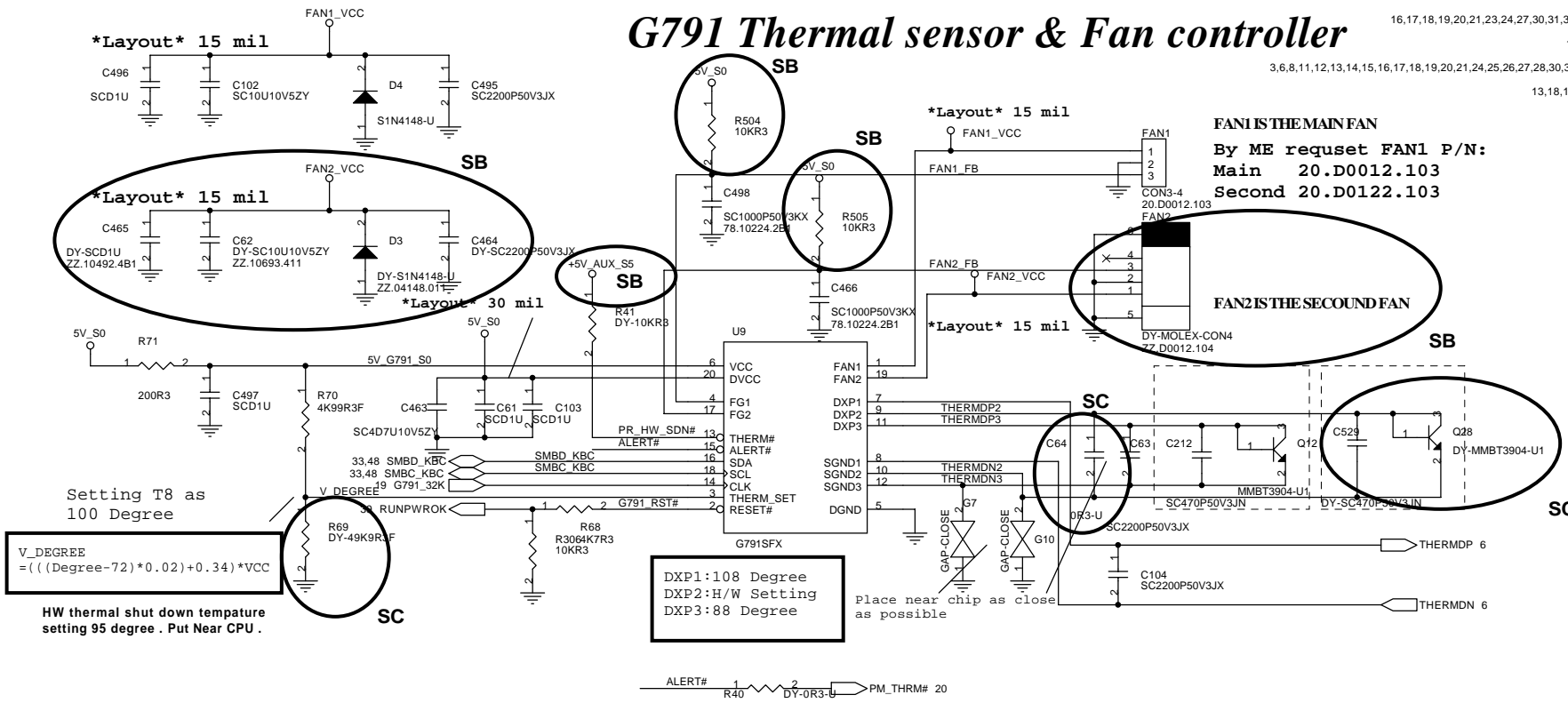
File: **SB-VT8235(3/3)\_VLINK\_MII\_LPC**

Size: A3 Document Number: EGRET Rev: SC

Date: Friday, July 23, 2004 Sheet 21 of 50

# G791 Thermal sensor & Fan controller

16,17,18,19,20,21,23,24,27,30,31,32,33,34,37,38,39,41,42,47,48,49,50 5V\_S0  
 16,18,38,41,43,44,45,46,47,50 DCBATOUT  
 3,6,8,11,12,13,14,15,16,17,18,19,20,21,24,25,26,27,28,30,31,32,33,34,35,36,38,41,47,49,50 3D3V\_S0  
 13,18,19,20,21,24,28,29,33,38,43,49,50 3D3V\_S5  
 21,38,39,43,44,45,46,48,49 5V\_S5



**FAN1 IS THE MAIN FAN**  
 By ME request FAN1 P/N:  
 Main 20.D0012.103  
 Second 20.D0122.103

**FAN2 IS THE SECOND FAN**

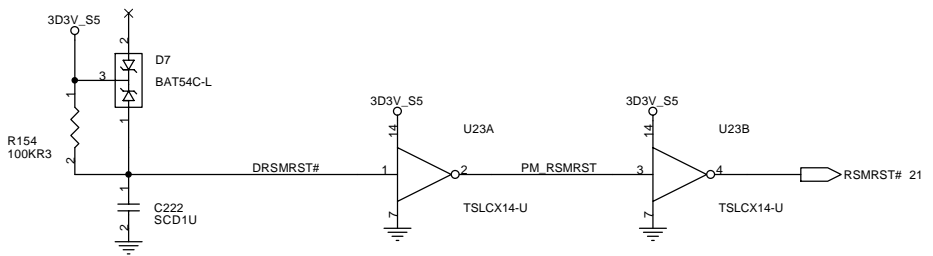
Setting T8 as 100 Degree

$$V\_DEGREE = (((Degree - 72) * 0.02) + 0.34) * VCC$$

HW thermal shut down temperature setting 95 degree . Put Near CPU .

DXP1:108 Degree  
 DXP2:H/W Setting  
 DXP3:88 Degree

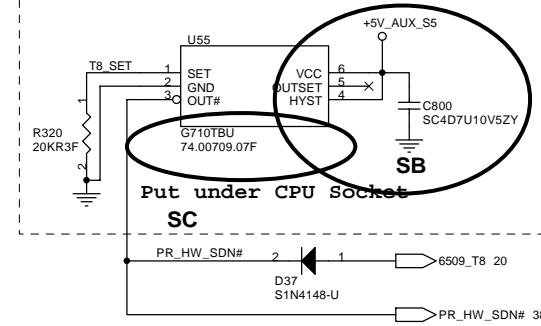
place near chip as close as possible



## Dummy when G791 enhanced T8 function

T8\_RSET:27K SET TO 80°C  
 T8\_RSET:20K SET TO 90°C  
 T8\_RSET:15K SET TO 100°C

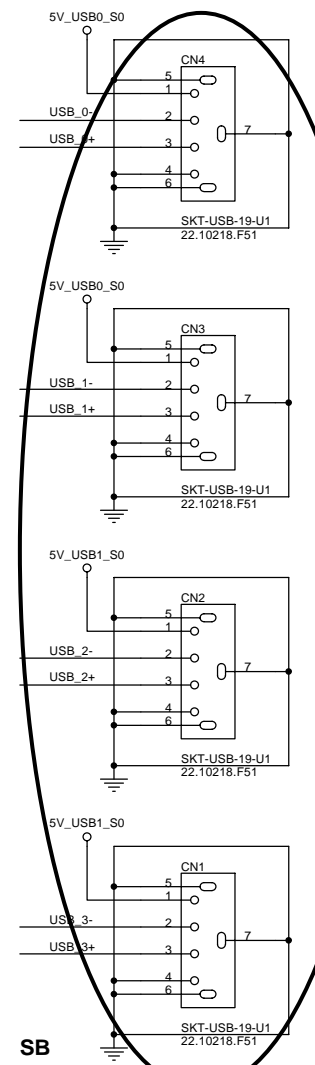
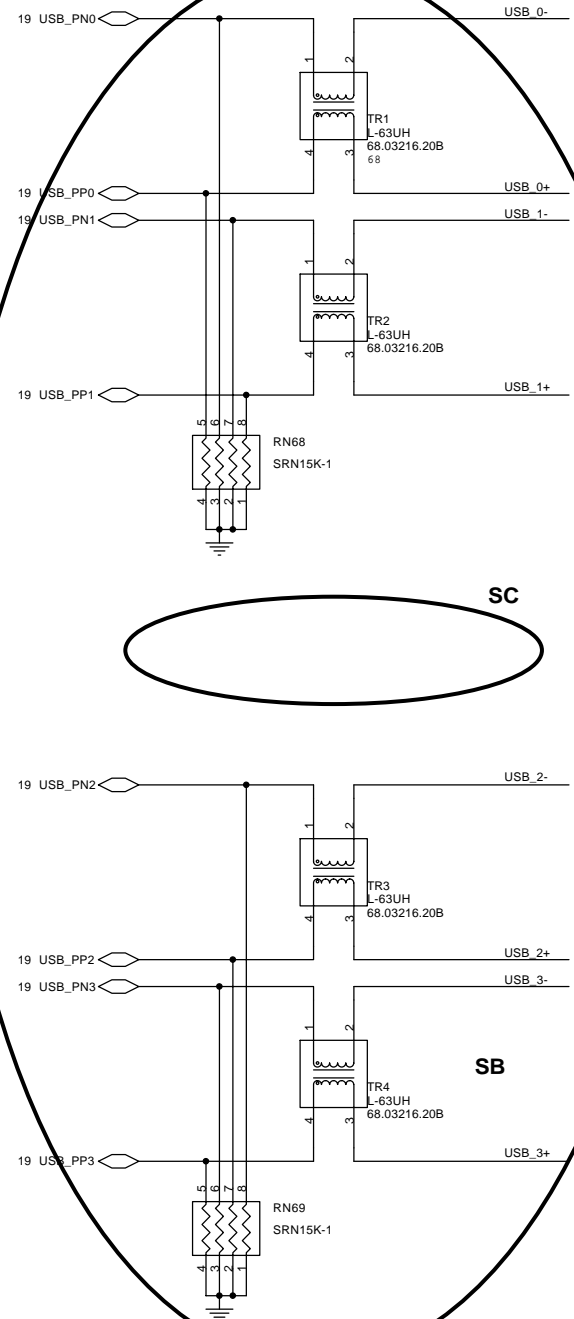
**By Sourcer request:**  
 Main souce 74.00709.07F  
 Second souce 74.00710.03P  
 74.06509.07F  
 74.06510.A7P



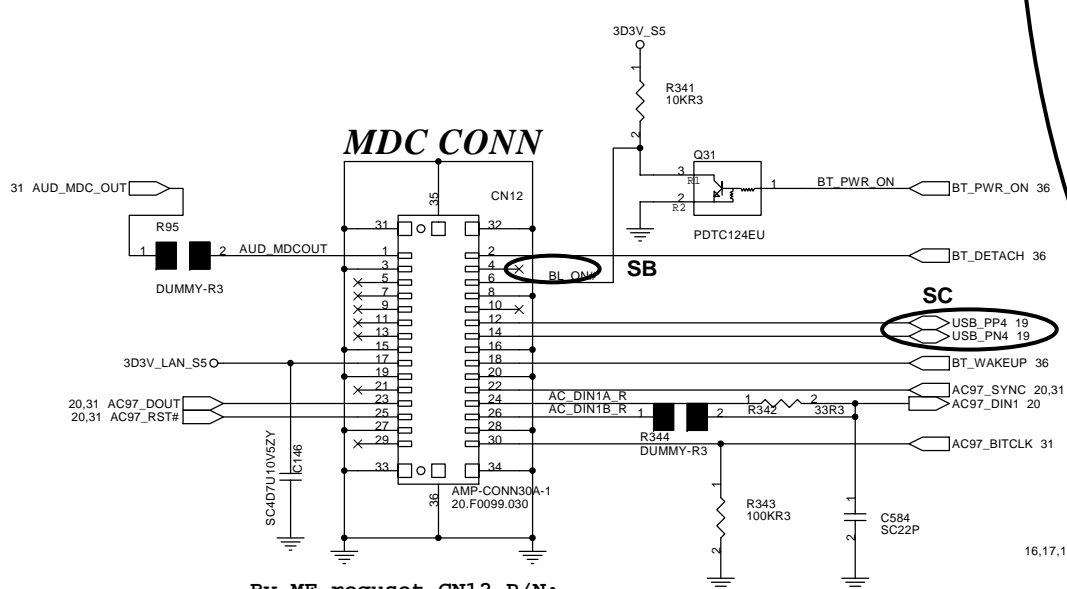
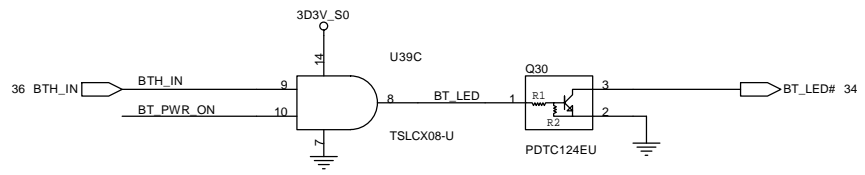
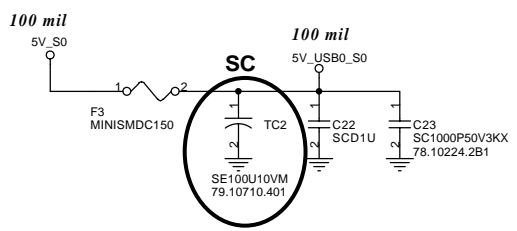
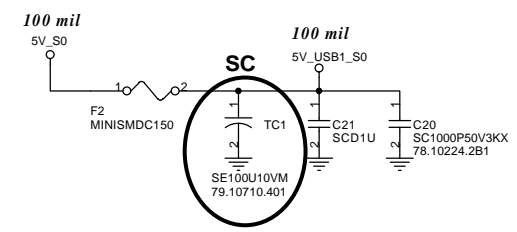
Put under CPU socket  
 SC



# USB PORT



By Sourcer request change P/N:  
 From 22.10218.701  
 To 22.10218.F51  
 By ME request P/N:  
 Main 22.10218.F51  
 Second 22.10218.F41

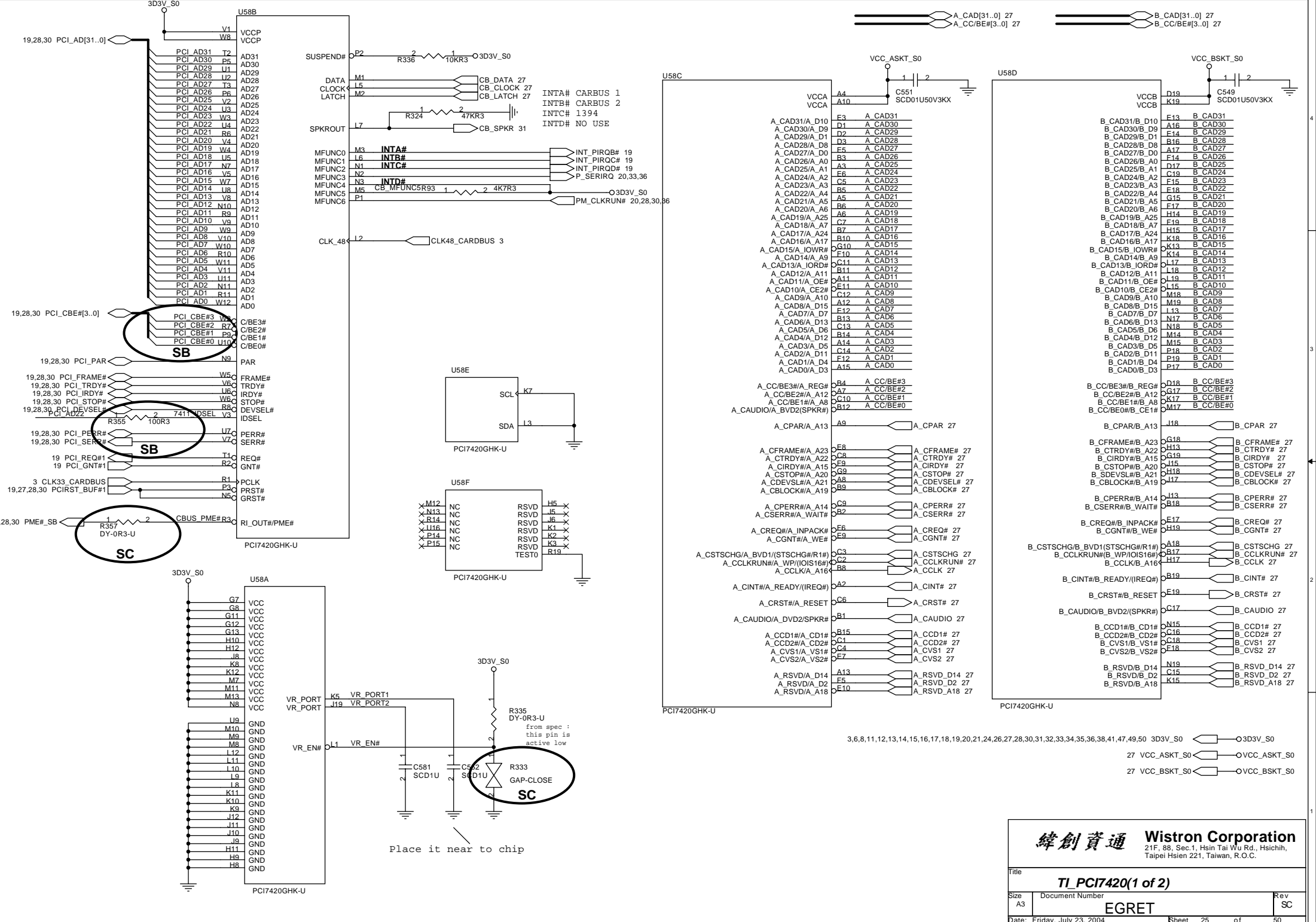


By ME request CN12 P/N:  
 Main 20.F0099.030  
 Second 20.F0589.030

- 16,17,18,19,20,21,22,23,27,30,31,32,33,34,37,38,39,41,42,47,48,49,50 5V\_S0
- 13,18,19,20,21,22,28,29,33,38,43,49,50 3D3V\_S5
- 28,29 3D3V\_LAN\_S5
- 3,6,8,11,12,13,14,15,16,17,18,19,20,21,25,26,27,28,30,31,32,33,34,35,36,38,41,47,49,50 3D3V\_S0

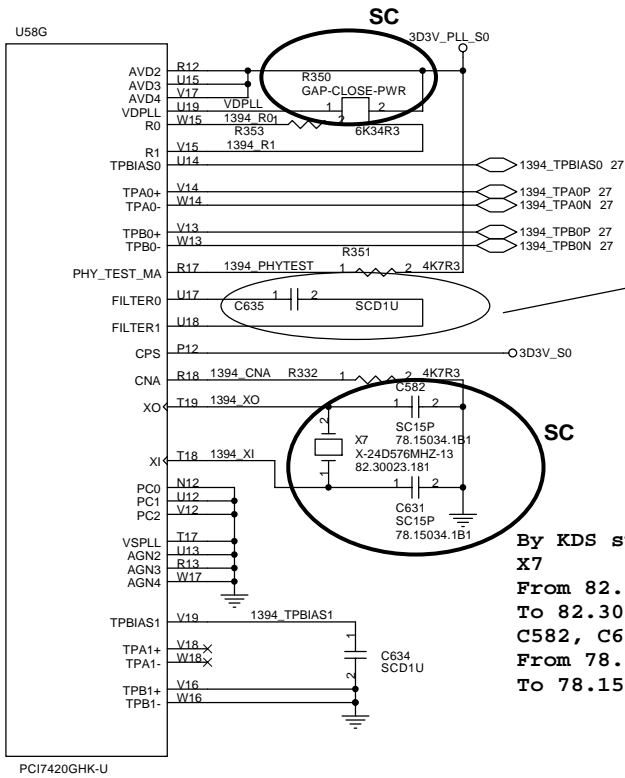
		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title <b>USB and MDC</b>		
Size A3	Document Number <b>EGRET</b>	Rev <b>SC</b>
Date: Friday, July 23, 2004 Sheet 24 of 50		





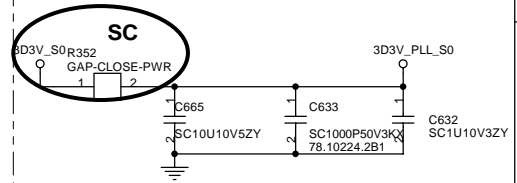
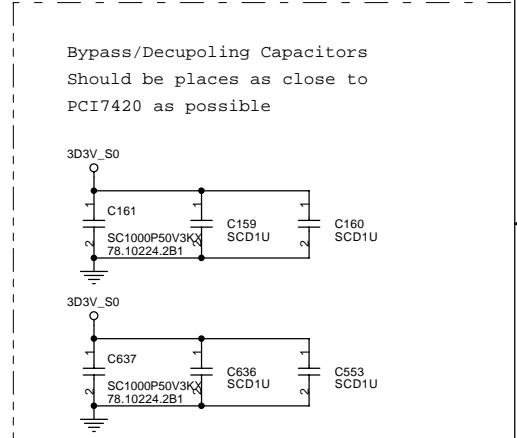
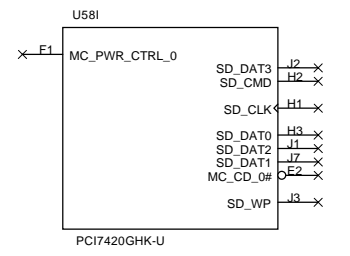
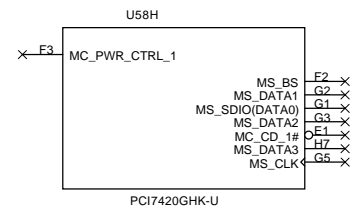
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

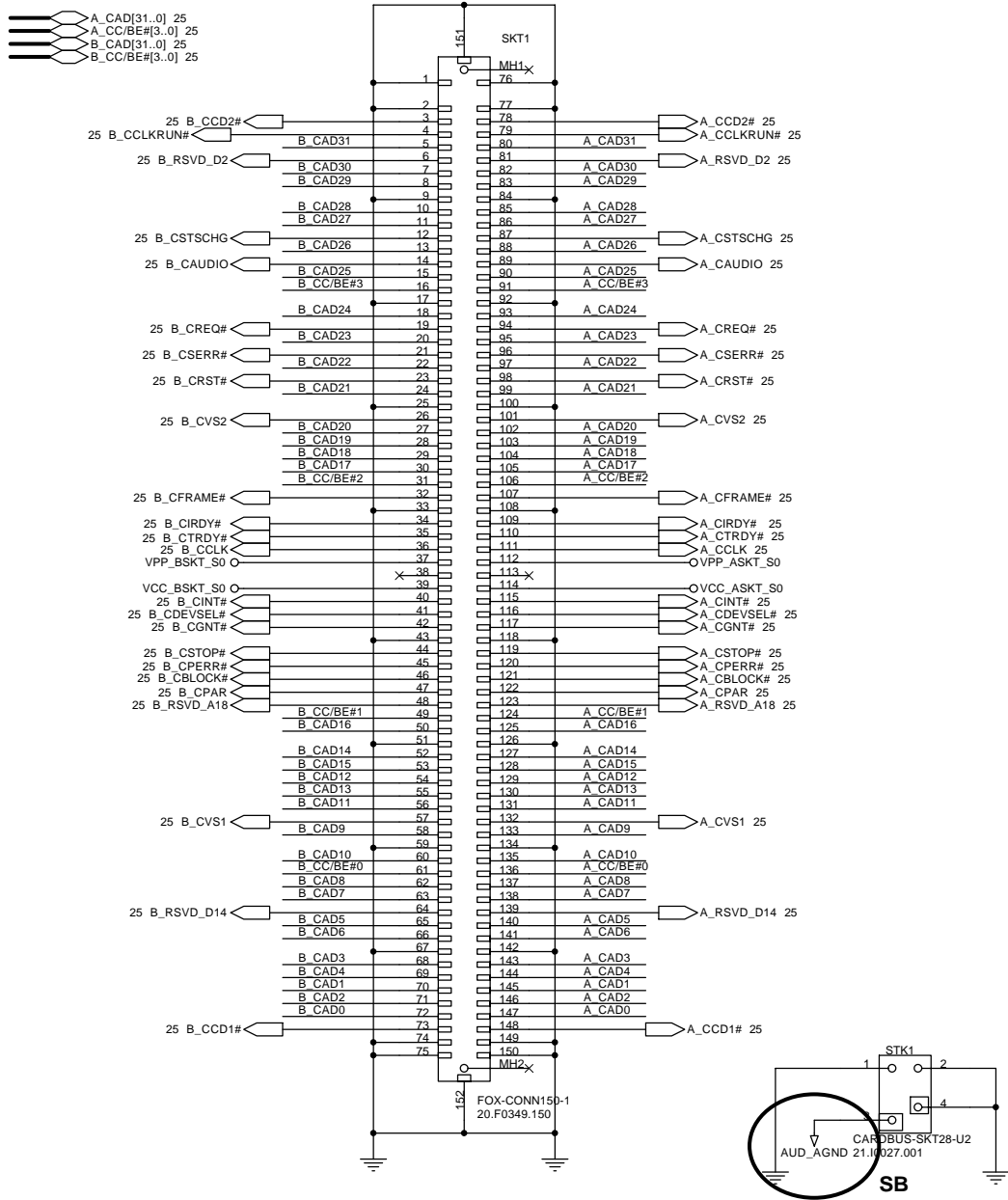
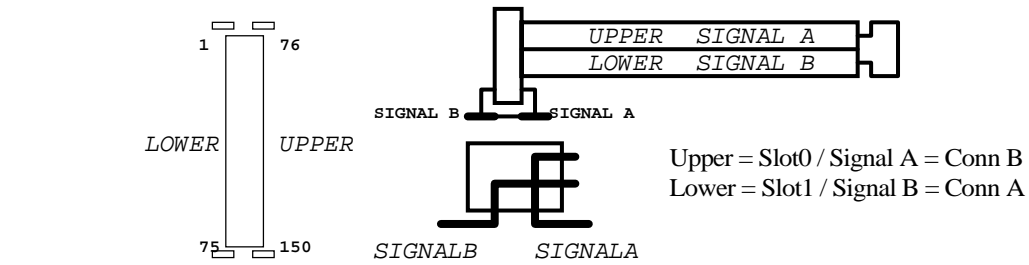
Title		<b>TI_PCI7420(1 of 2)</b>	
Size	Document Number	<b>EGRET</b>	
A3		Date: Friday, July 23, 2004	Sheet 25 of 50



**7420 SPEC Description**

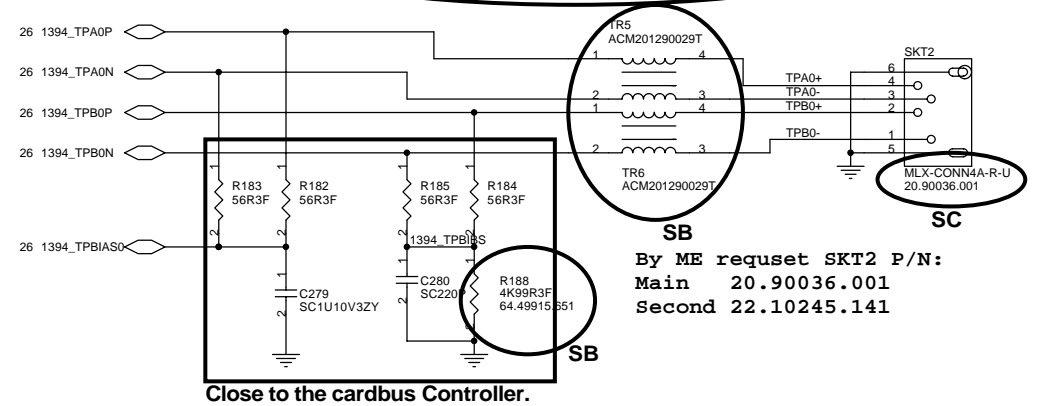
**By KDS suggested change X7**  
**From 82.30023.161**  
**To 82.30023.181**  
**C582, C631**  
**From 78.10034.1B1**  
**To 78.15034.1B1**



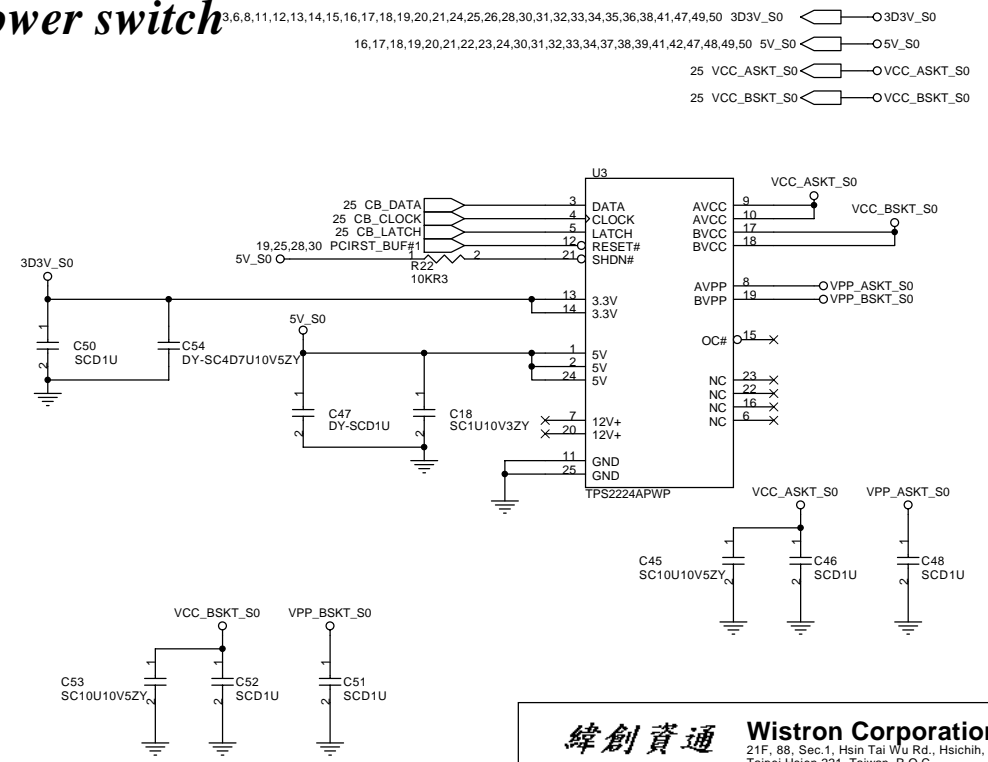


# 1394 Connector

\*\* SC SB



# Power switch



緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

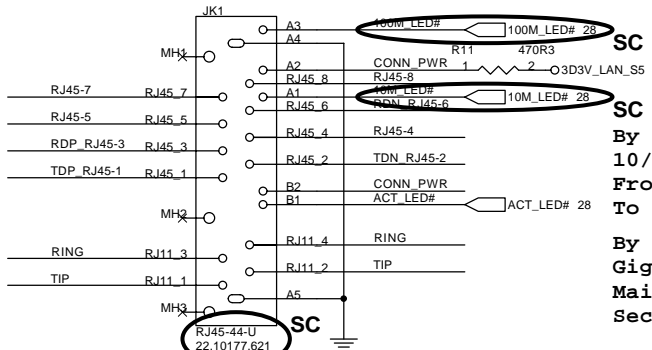
Title: **PCMCA SLOT\_1394 CONN**

Size A3 Document Number: **EGRET** Rev SC

Date: Friday, July 23, 2004 Sheet 27 of 50

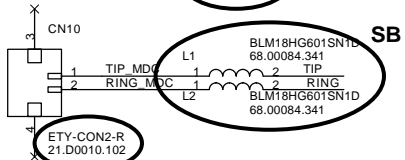


Link: Green - 10Mbps/802.11b  
 Orange - 100Mbps/802.11a  
 Yellow - 1Gbps  
 Activity: Yellow

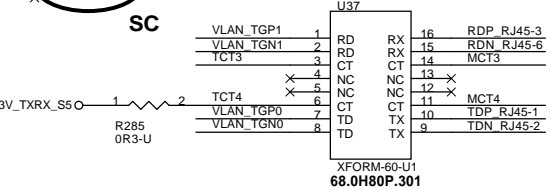


**SC**  
 By ME request for  
 10/100 LAN change P/N:  
 From 22.10177.601  
 To 22.10177.621

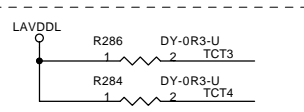
**SC**  
 By ME request for  
 GigaLAN JK1 P/N:  
 Main 22.10177.601  
 Second 22.10245.771



**SB**  
 By ME request change P/N:  
 From 20.D0121.102  
 To 21.D0010.102



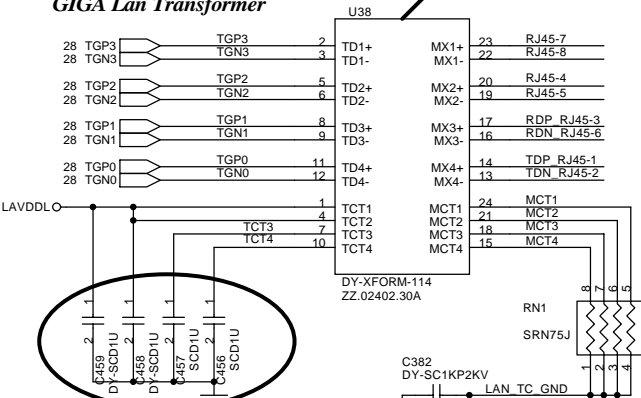
Stuff for VT6103L  
 10/100 Lan Transformer



By Sourcer request change P/N:  
 From 68.H0013.301  
 To 68.0H80P.301

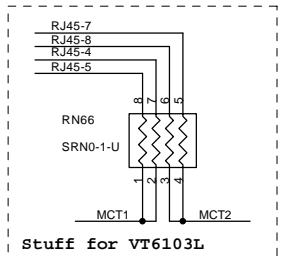
By Sourcer request change P/N:  
 From 68.H5015.301  
 To 68.02402.30A

GIGA Lan Transformer

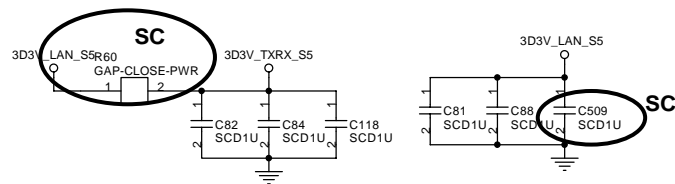


For GigaLAN Cap. change  
 to SCD01U50V3KX  
 78.10324.2B1

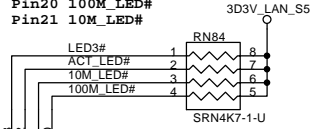
1. route on bottom as differential pairs.
2. Tx+/Tx- are pairs. Rx+/Rx- are pairs.
3. No vias, No 90 degree bends.
4. pairs must be equal lengths.
5. 6mil trace width, 12mil separation.
6. 36mil between pairs and any other trace.
7. Must not cross ground moat, except RJ-45 moat.



Stuff for VT6103L

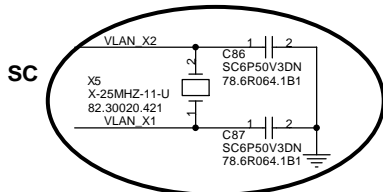
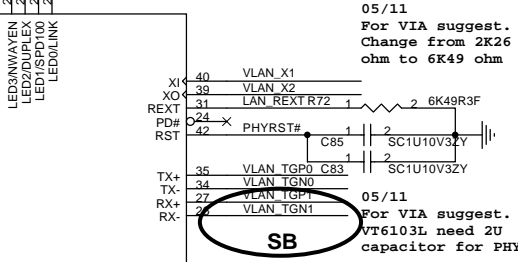
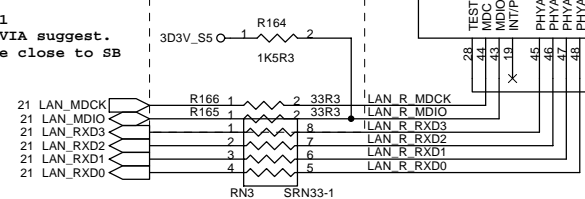


05/11  
 For VIA suggest.  
 Pin20 100M\_LED#  
 Pin21 10M\_LED#



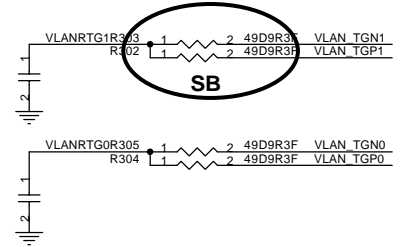
05/11  
 For VIA suggest.  
 Change from 2K26  
 ohm to 6K49 ohm

05/11  
 For VIA suggest.  
 Place close to SB



05/11  
 For VIA suggest.  
 Change from 18P to 22P

By KDS suggested change  
 X5  
 From 82.30020.161  
 To 82.30023.421  
 C86, C87  
 From 22P To 6P



**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title: **LAN\_CONN&10/100LAN**

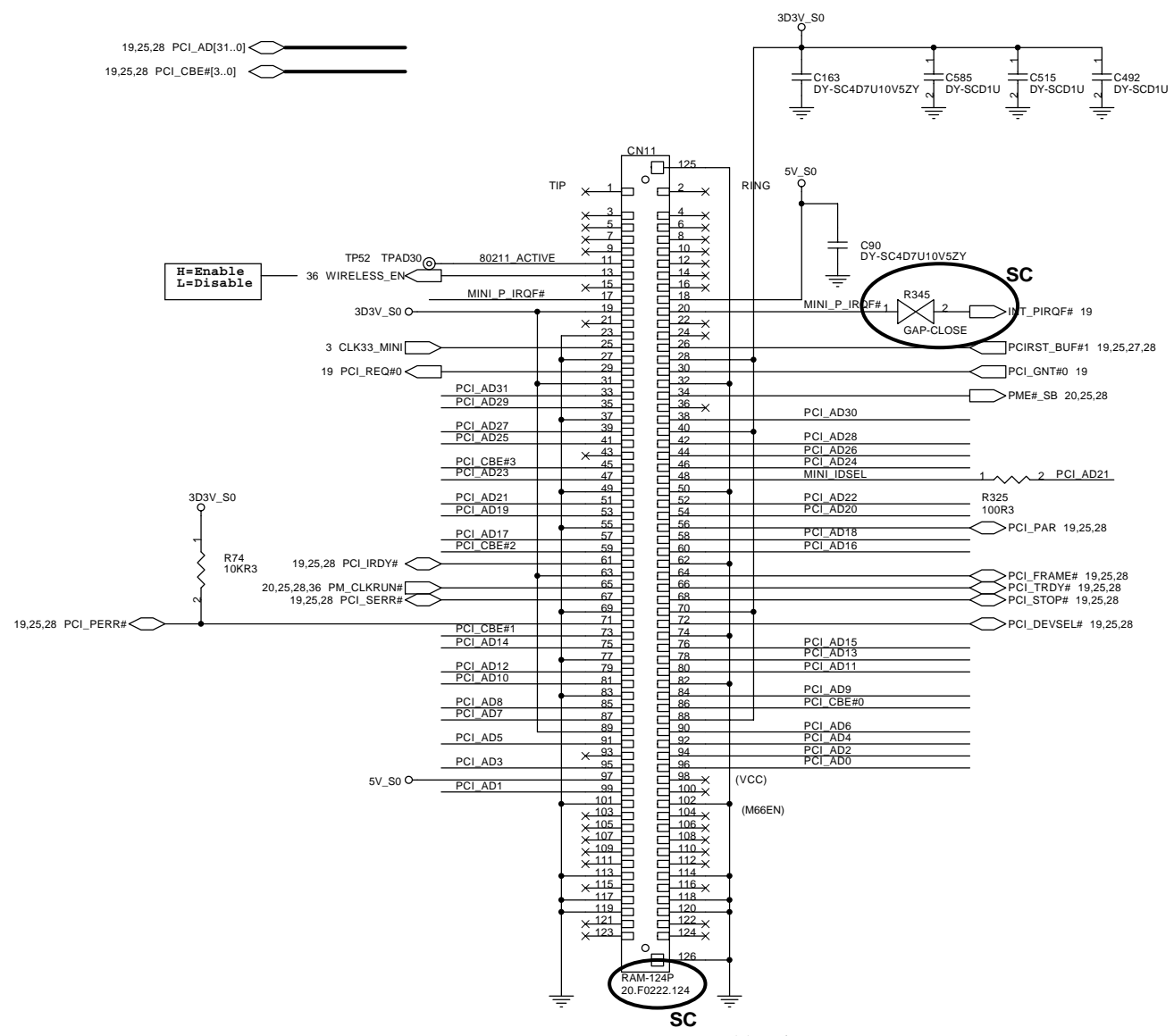
Size: A3 Document Number: EGRET Rev: SC

Date: Friday, July 23, 2004 Sheet 29 of 50

# MINI-PCI

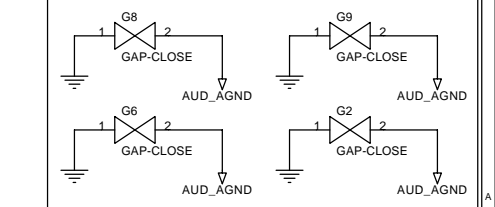
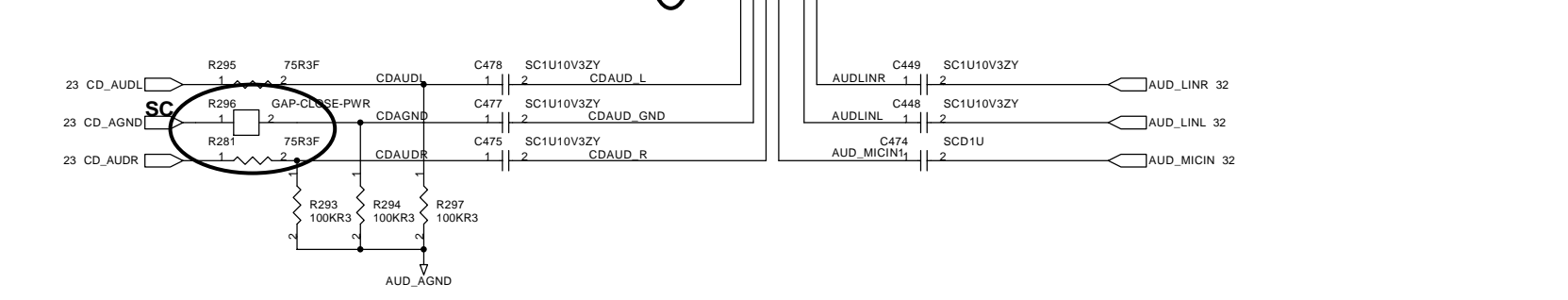
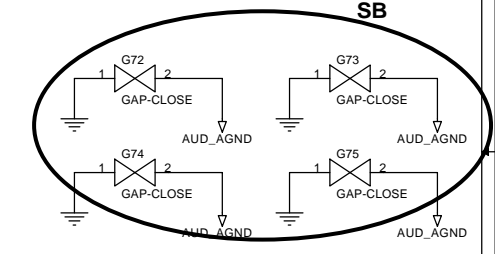
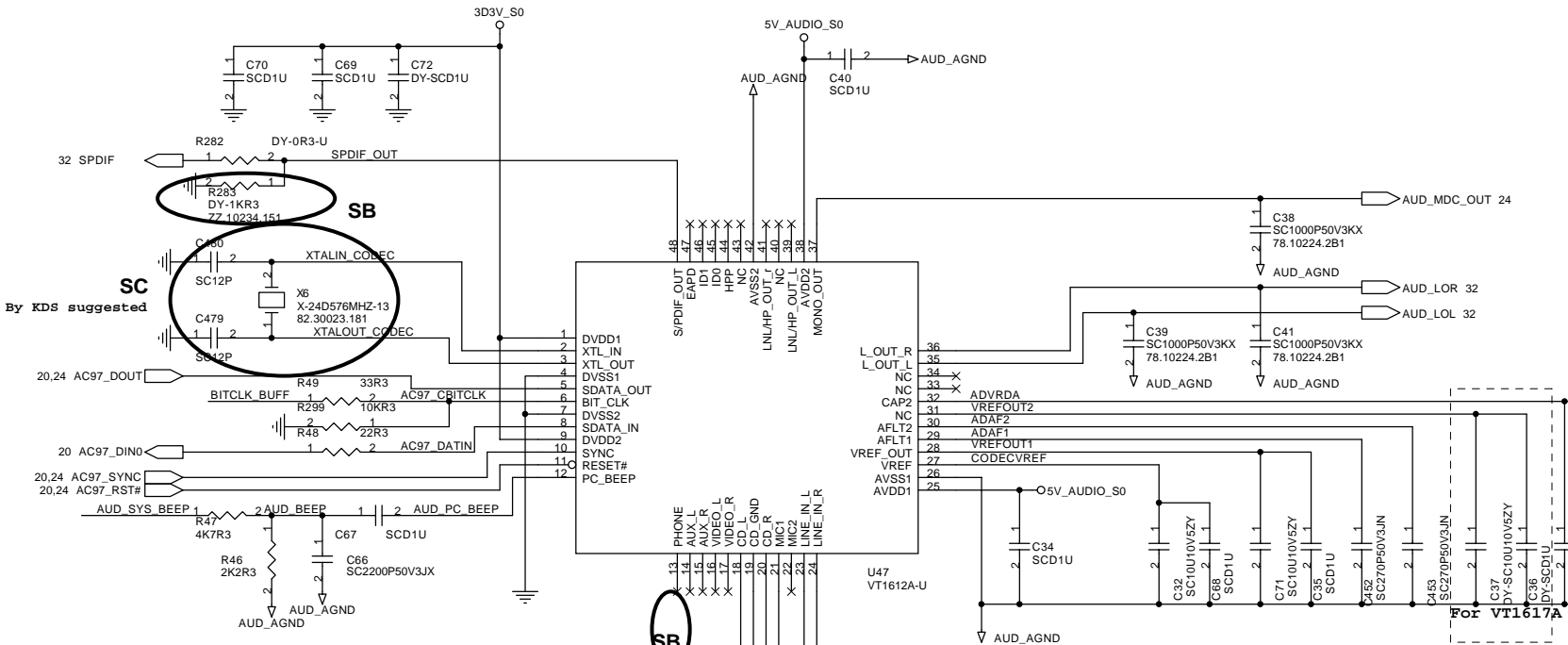
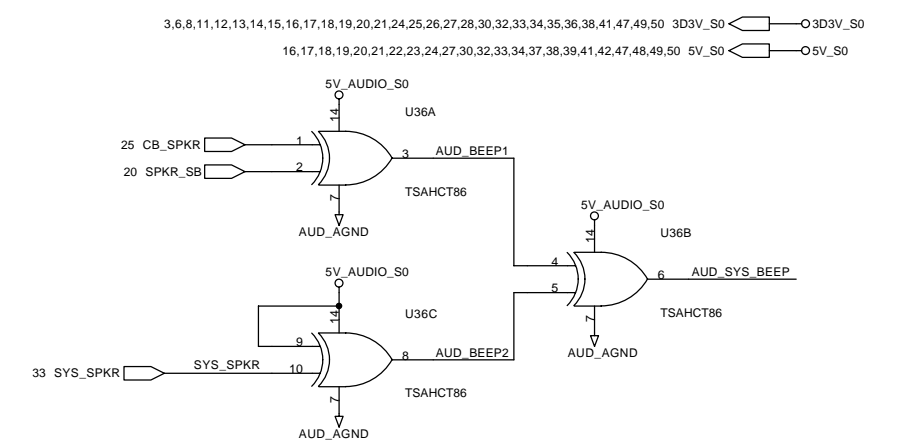
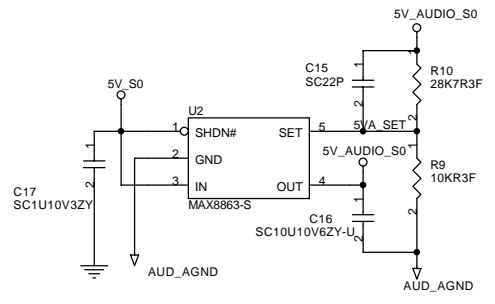
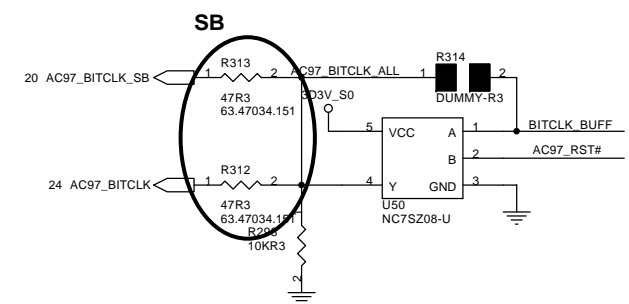
3,6,8,11,12,13,14,15,16,17,18,19,20,21,24,25,26,27,28,31,32,33,34,35,36,38,41,47,49,50 3D3V\_S0

16,17,18,19,20,21,22,23,24,27,31,32,33,34,37,38,39,41,42,47,48,49,50 5V\_S0



By ME request CN11 P/N:  
 Main 20.F0222.124  
 Second 62.10034.031

<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>MINI-PCI</b>	
Title MINI-PCI	Document Number EGRET
Size A3	Rev SC
Date: Friday, July 23, 2004	Sheet 30 of 50

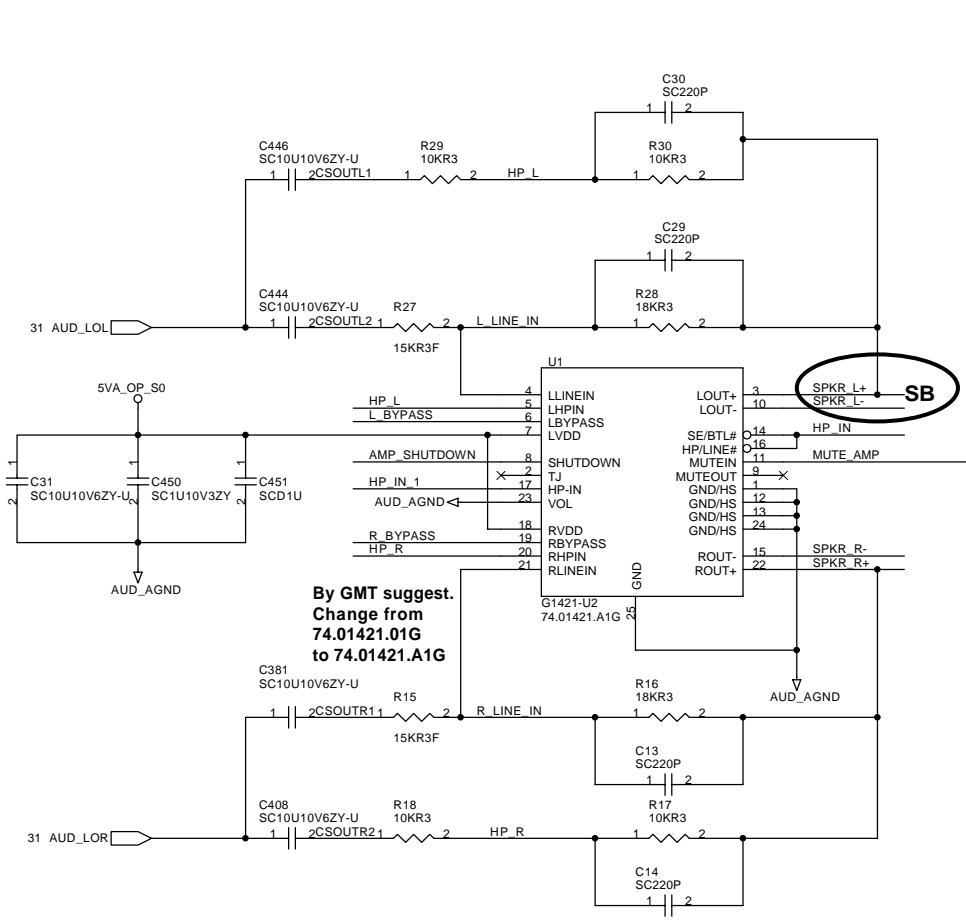


**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

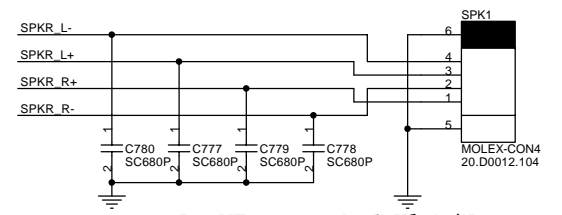
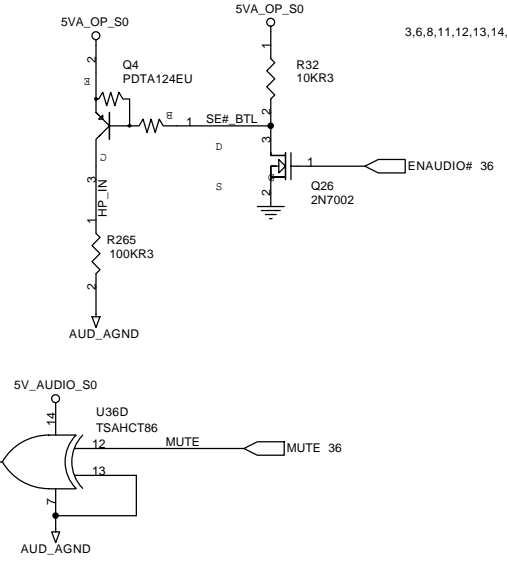
Title: **AUDIO (1/2) -- CODEC VT1612A**

Size: A3 Document Number: EGRET Rev: SC

Date: Friday, July 23, 2004 Sheet 31 of 50

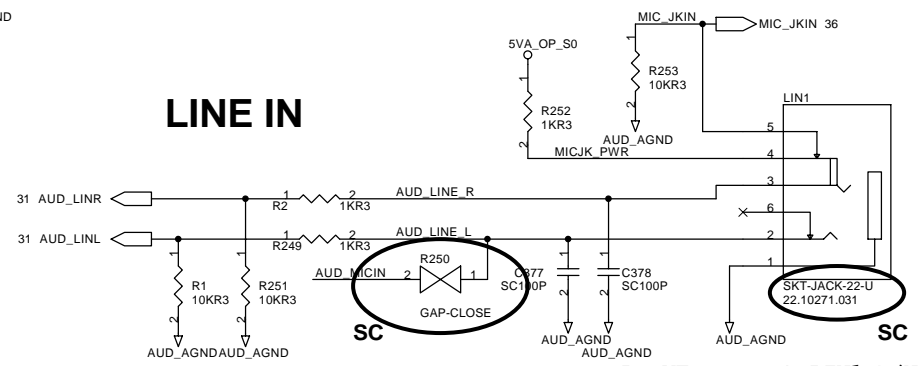


By GMT suggest.  
Change from  
74.01421.01G  
to 74.01421.A1G



By ME request SPK1 P/N:  
Main 20.D0012.104  
Second 20.D0152.104

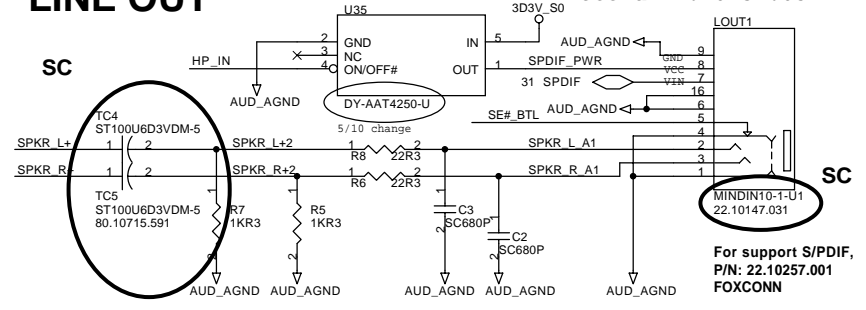
### LINE IN



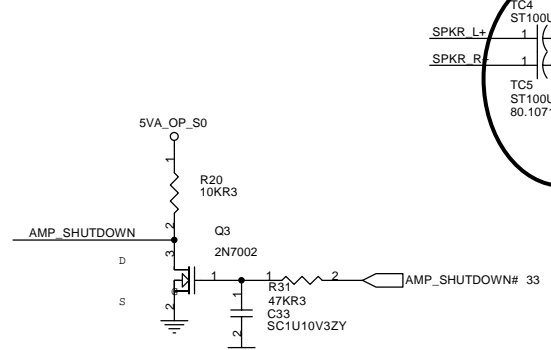
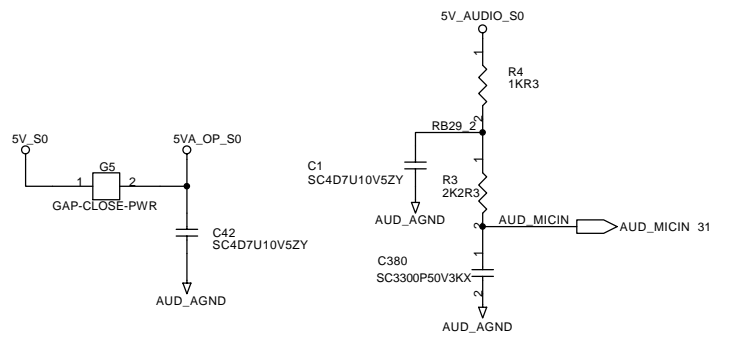
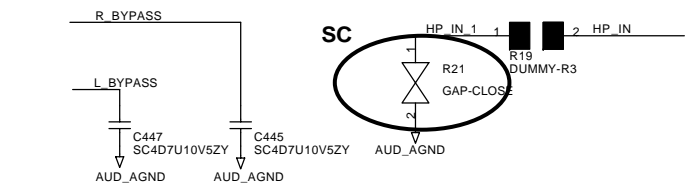
By ME request LIN1 P/N:  
Main 22.10271.031  
Second 22.10088.381  
By ME request LOU1 P/N:  
Main 22.10147.031  
Second 22.10251.031

If R->L 避免 noise  
1000P -> 100P

### LINE OUT



For support S/PDIF,  
P/N: 22.10257.001  
FOXCONN



**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

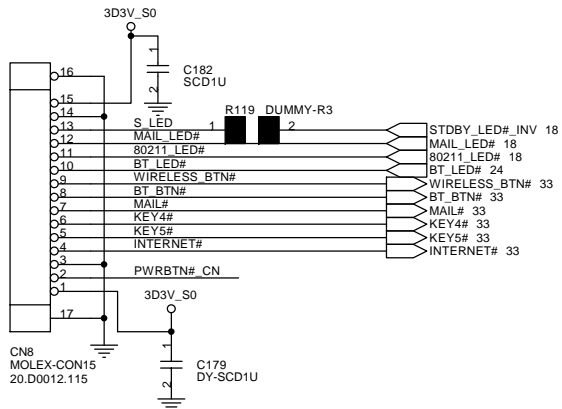
Title: **AUDIO (2/2)**

Size: A3 Document Number: EGRET Rev: SC

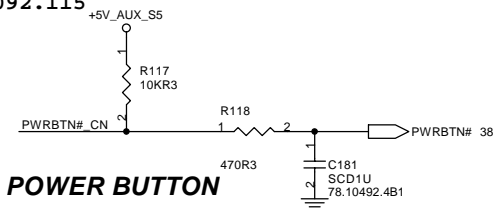
Date: Friday, July 23, 2004 Sheet 32 of 50



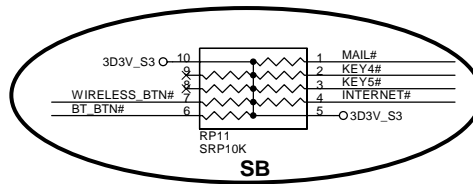
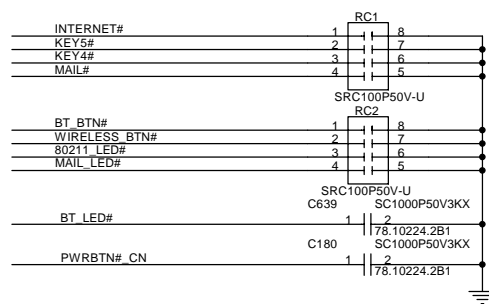




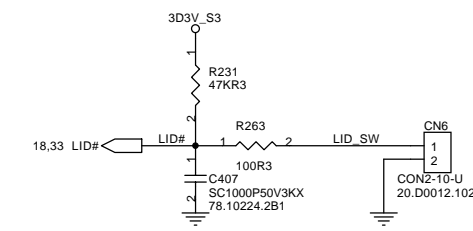
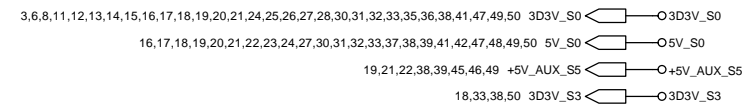
By ME request CN8 P/N:  
Main 20.D0012.115  
Second 20.D0092.115



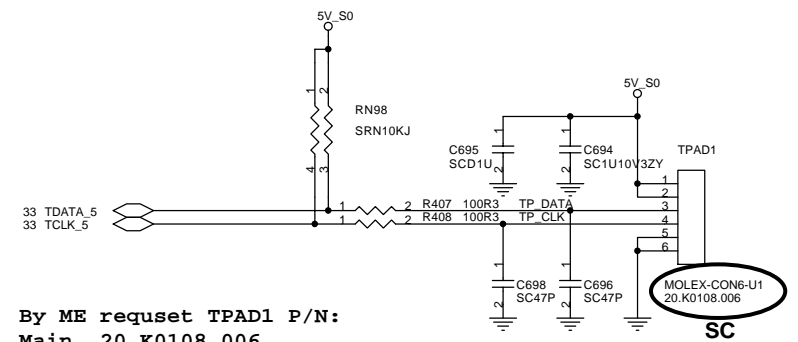
**POWER BUTTON**



**Launch Board CONN**



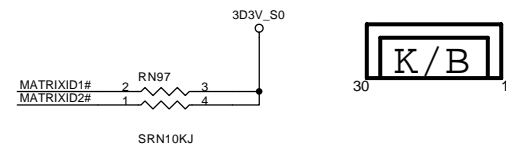
**Cover Up Switch**



By ME request TPAD1 P/N:  
Main 20.K0108.006  
Second 20.K0021.006

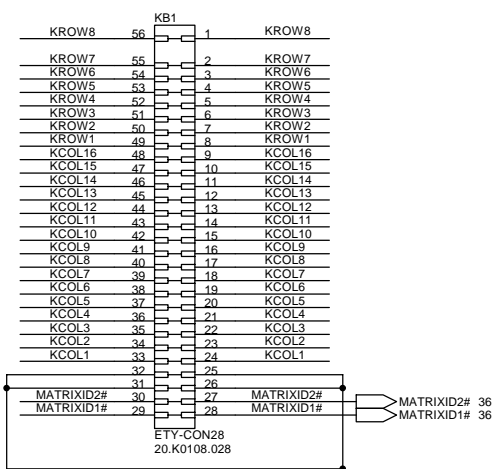
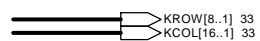
**TOUCH PAD**

**Internal KeyBoard CONN**



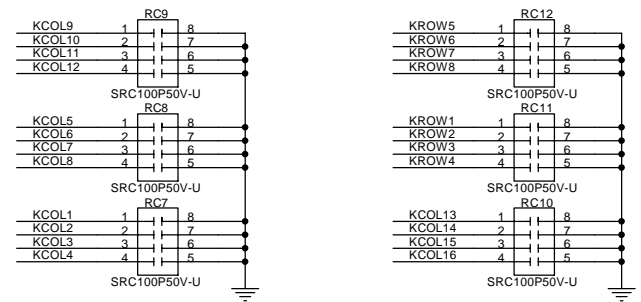
Keyboard matrix	( from vendor )				
		US	Jap	Eur	Other

Low Bit	MATRIXID1#	1	1	0	0
High Bit	MATRIXID2#	1	0	1	0



By ME request KB1 P/N:  
Main 20.K0108.028  
Second 20.K0021.028

**EMI Bypass cap.**

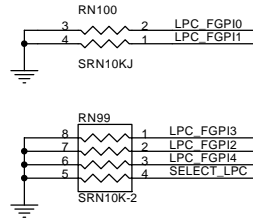


**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

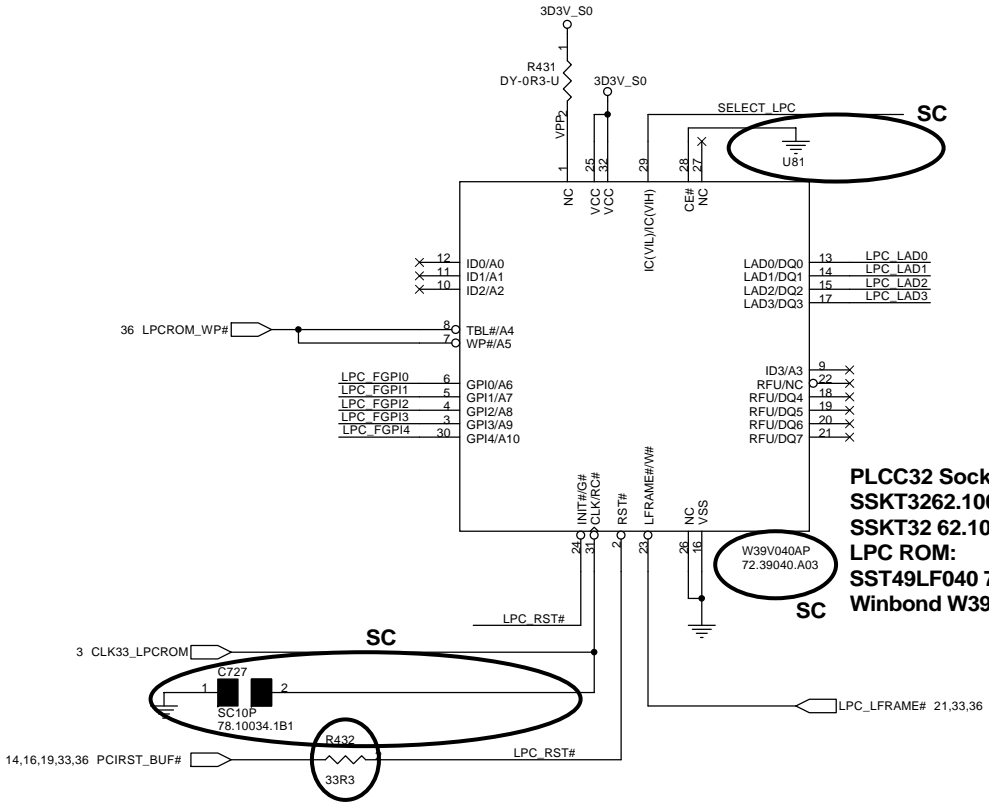
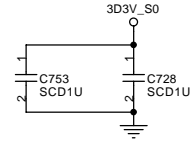
Title: **LAUNCH / TOUCHPAD / KB CONN**

Size: A3 Document Number: **EGRET** Rev: SC

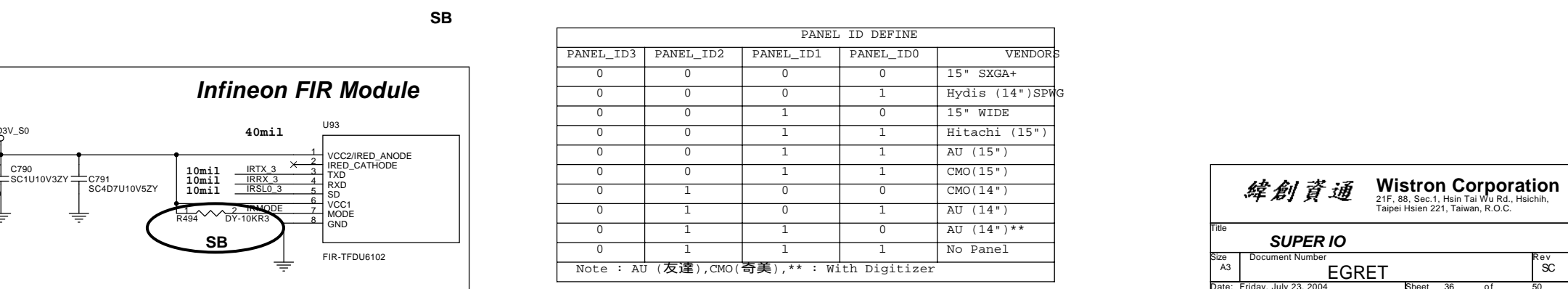
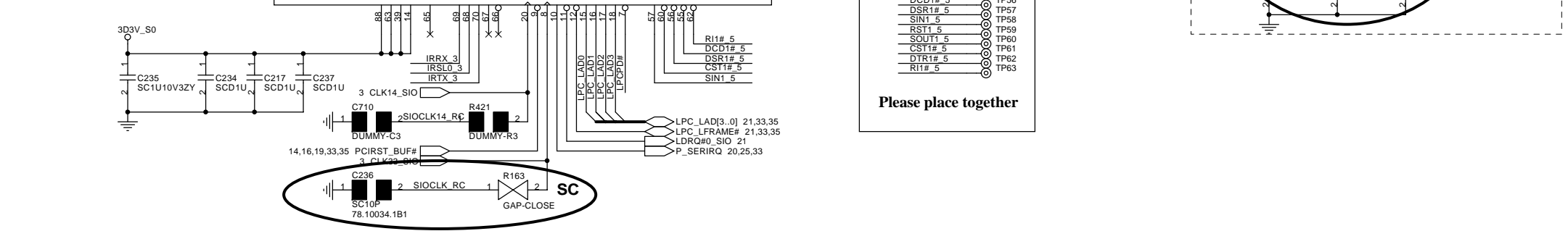
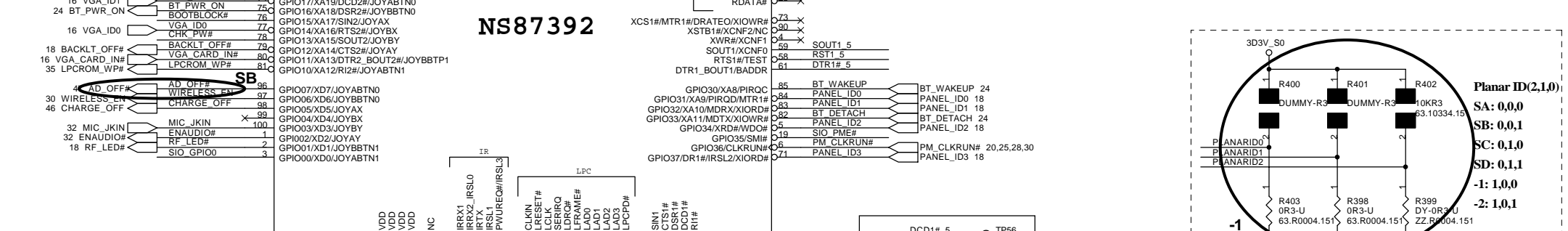
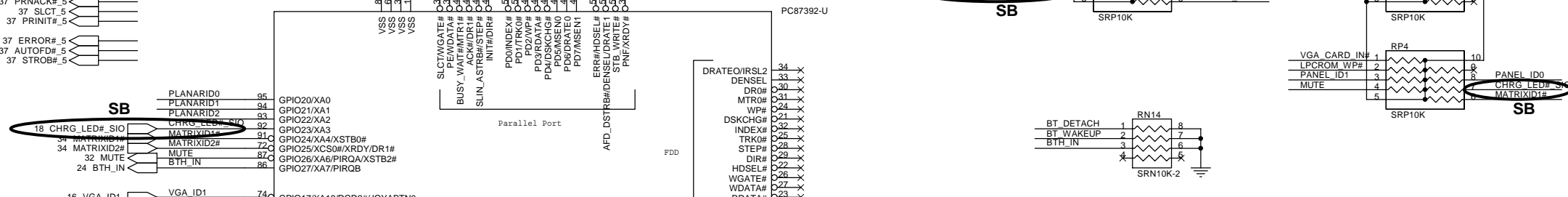
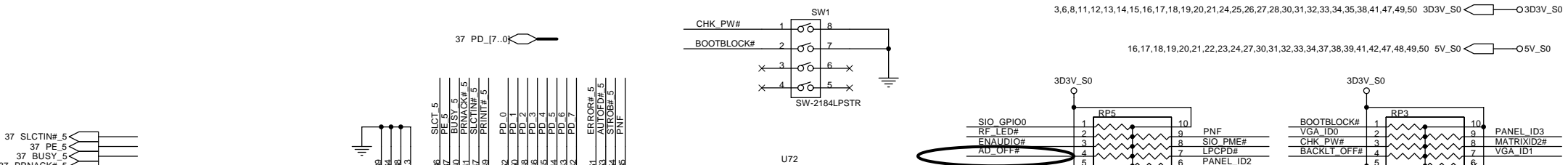
Date: Friday, July 23, 2004 Sheet 34 of 50



21,33,36 LPC\_LAD[3..0]



**PLCC32 Socket P/N:**  
**SSKT3262.10002.032**  
**SSKT32 62.10005.032**  
**LPC ROM:**  
**SST49LF040 72.49040.A03**  
**Winbond W39V040AP 72.39040.A03**



PANEL ID DEFINE				
PANEL_ID3	PANEL_ID2	PANEL_ID1	PANEL_ID0	VENDORS
0	0	0	0	15" SXGA+
0	0	0	1	Hydis (14")SPWG
0	0	1	0	15" WIDE
0	0	1	1	Hitachi (15")
0	0	1	1	AU (15")
0	1	0	1	CMO (15")
0	1	0	0	CMO (14")
0	1	0	1	AU (14")
0	1	1	0	AU (14")**
0	1	1	1	No Panel

Note : AU (友達),CMO(奇美),\*\* : With Digitizer

**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

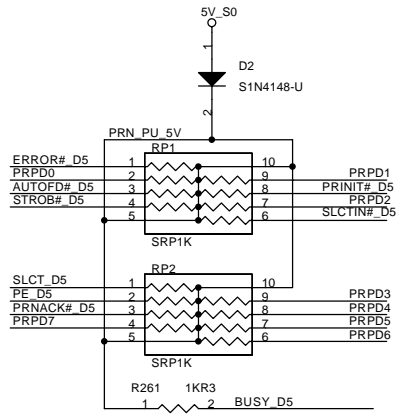
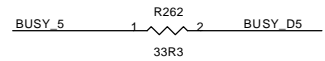
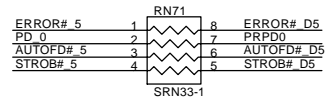
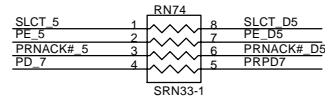
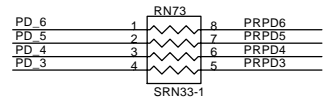
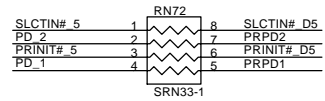
Title: **SUPER IO**

Size: A3 Document Number: **EGRET** Rev: SC

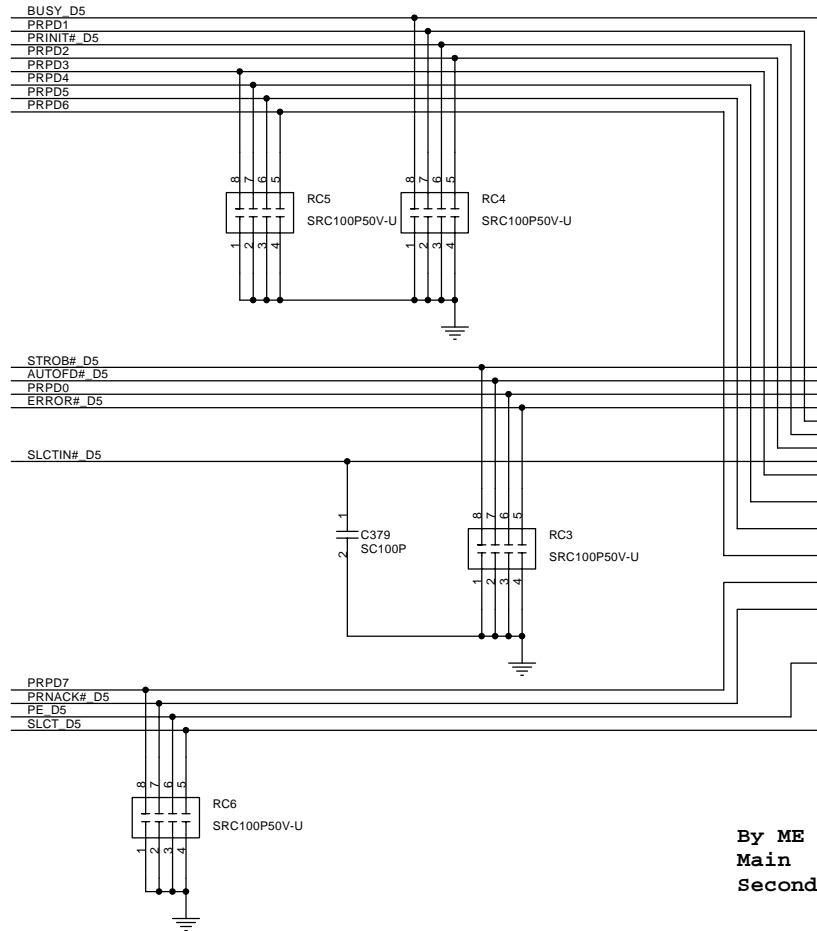
Date: Friday, July 23, 2004 Sheet 36 of 50

# PRINTER PORT

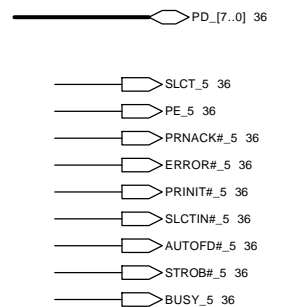
16,17,18,19,20,21,22,23,24,27,30,31,32,33,34,38,39,41,42,47,48,49,50 5V\_S0 ◀ O5V\_S0



CHECK PULL HIGH

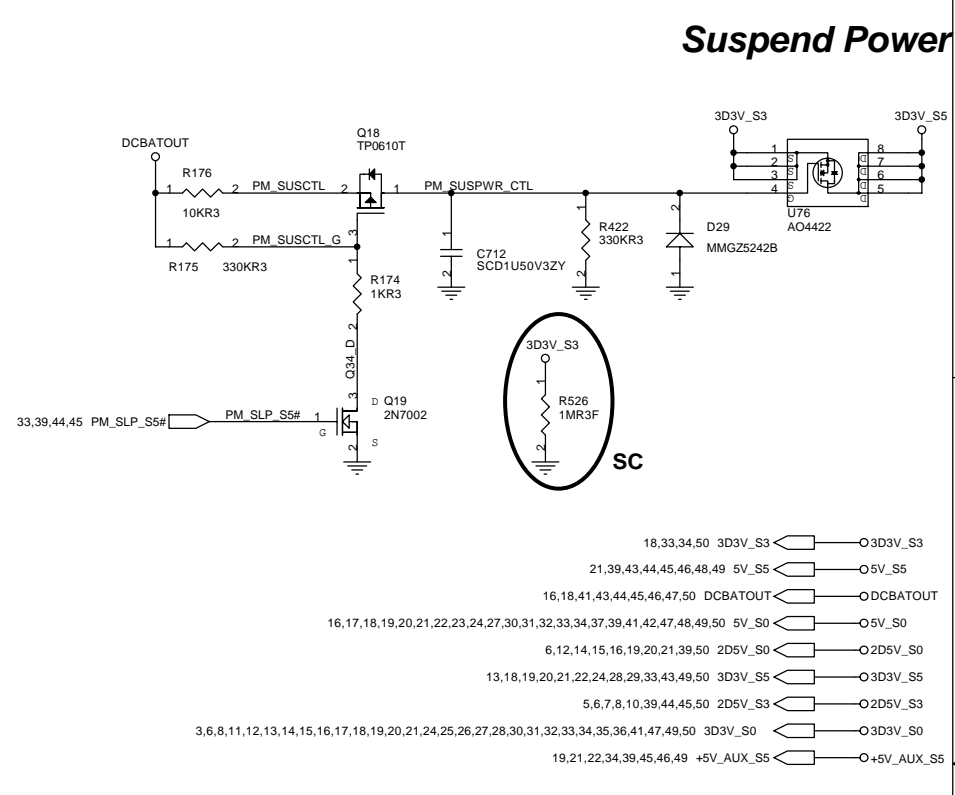
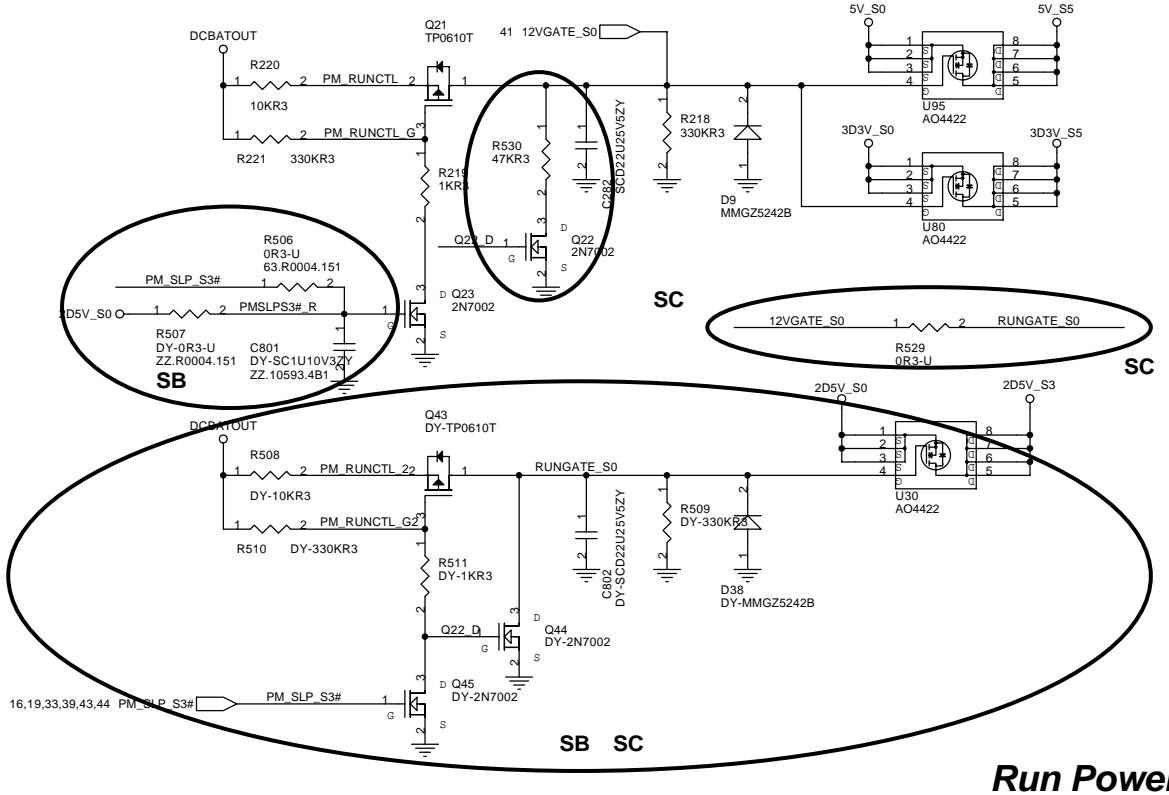


FROM SIO



By ME request PRT1 P/N:  
Main 20.B0030.A25  
Second 20.B0028.L01

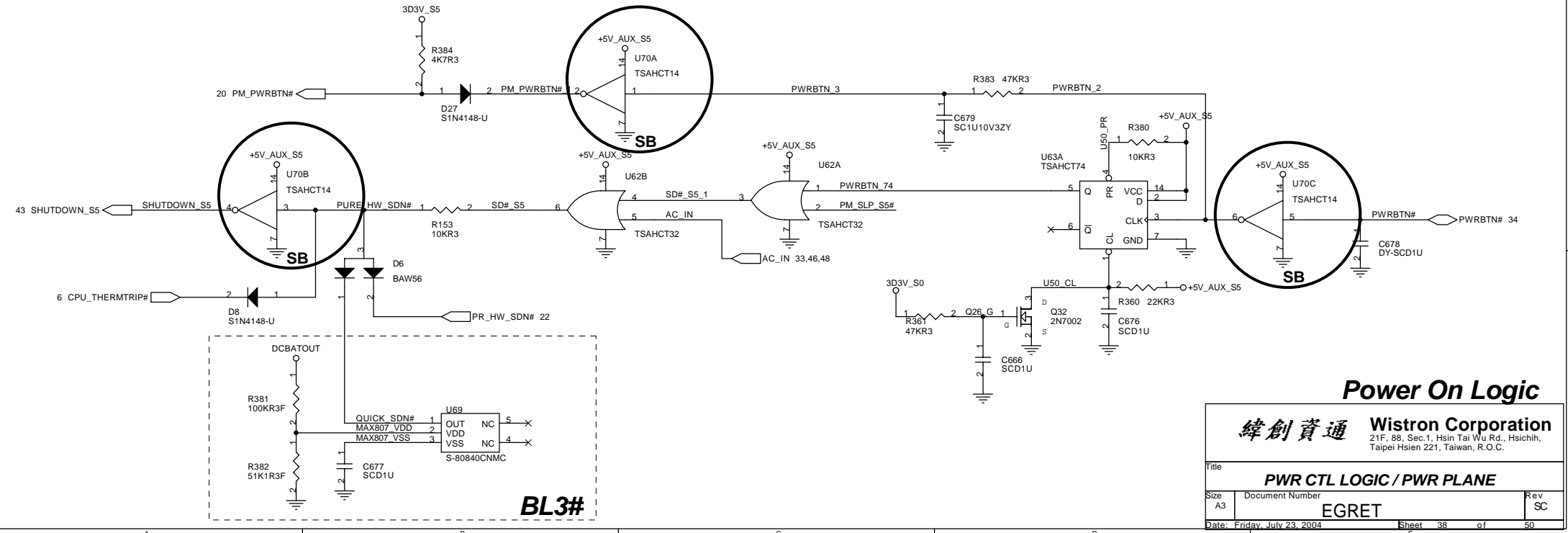
		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title		
<b>Printer PORT</b>		
Size	Document Number	Rev
A3	EGRET	SC
Date: Friday, July 23, 2004		Sheet 37 of 50



**Suspend Power**

**Run Power**

- 18,33,34,50 3D3V\_S3
- 21,39,43,44,45,46,48,49 5V\_S5
- 16,18,41,43,44,45,46,47,50 DCBATOUT
- 16,17,18,19,20,21,22,23,24,27,30,31,32,33,34,37,39,41,42,47,48,49,50 5V\_S0
- 6,12,14,15,16,19,20,21,39,50 2D5V\_S0
- 13,18,19,20,21,22,24,28,29,33,43,49,50 3D3V\_S5
- 5,6,7,8,10,39,44,45,50 2D5V\_S3
- 3,6,8,11,12,13,14,15,16,17,18,19,20,21,24,25,26,27,28,30,31,32,33,34,35,36,41,47,49,50 3D3V\_S0
- 19,21,22,34,39,45,46,49 +5V\_AUX\_S5



**Power On Logic**

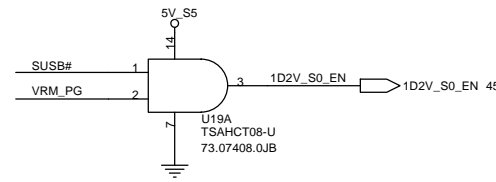
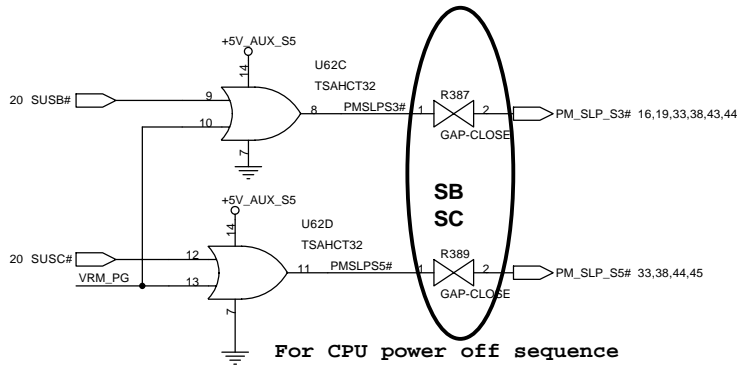
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **PWR CTL LOGIC / PWR PLANE**

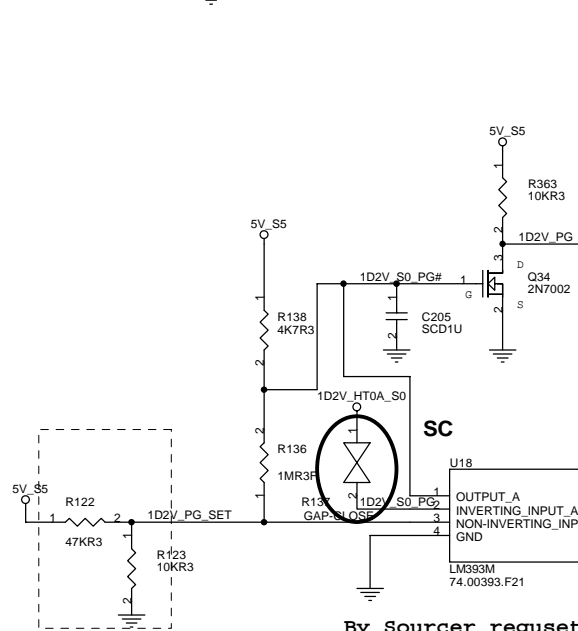
Size: A3 Document Number: EGRET Rev: SC

Date: Friday, July 23, 2004 Sheet 38 of 50

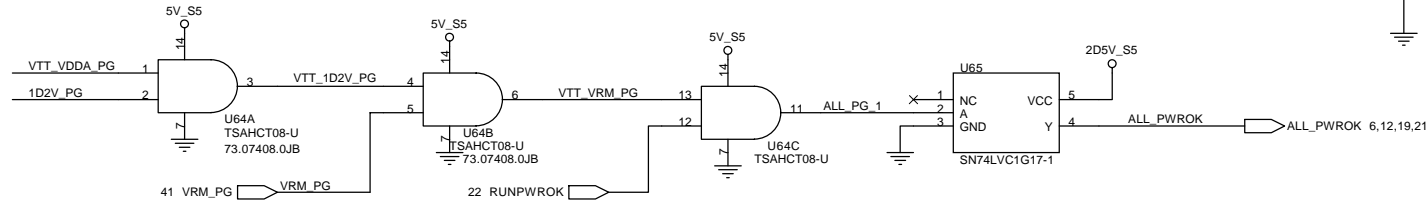
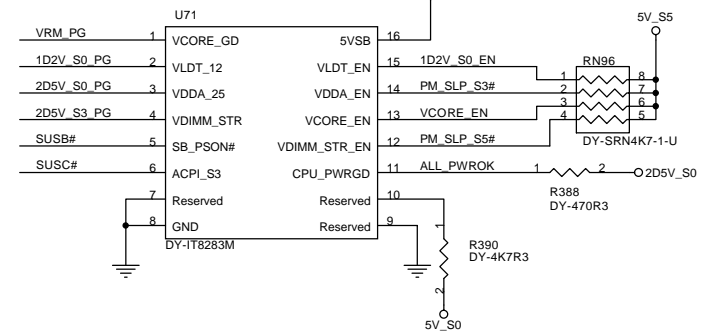
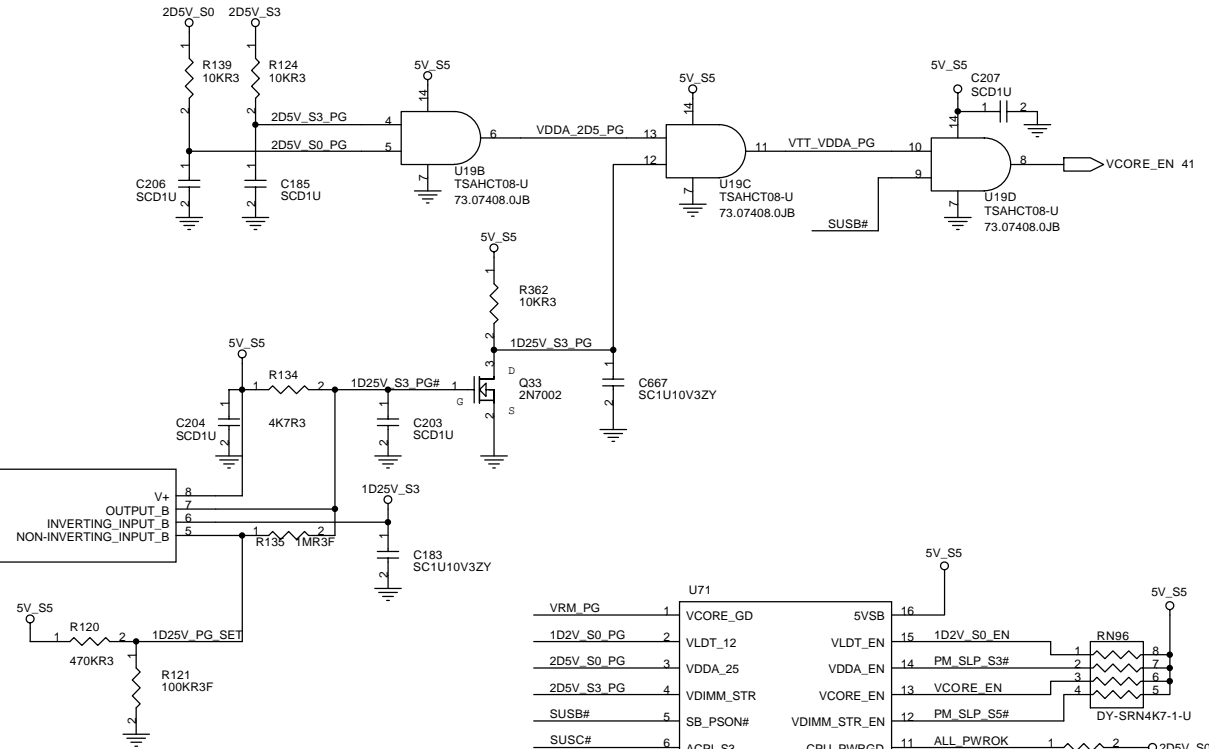
**BL3#**



- 21,38,43,44,45,46,48,49 5V\_S5
- 6,12,14,15,16,19,20,21,38,50 2D5V\_S0
- 4,11,13,45 1D2V\_HT0A\_S0
- 5,6,7,9,10,45 1D25V\_S3
- 5,6,7,8,10,38,44,45,50 2D5V\_S3
- 19,21,22,34,38,45,46,49 +5V\_AUX\_S5
- 20,21 2D5V\_S5



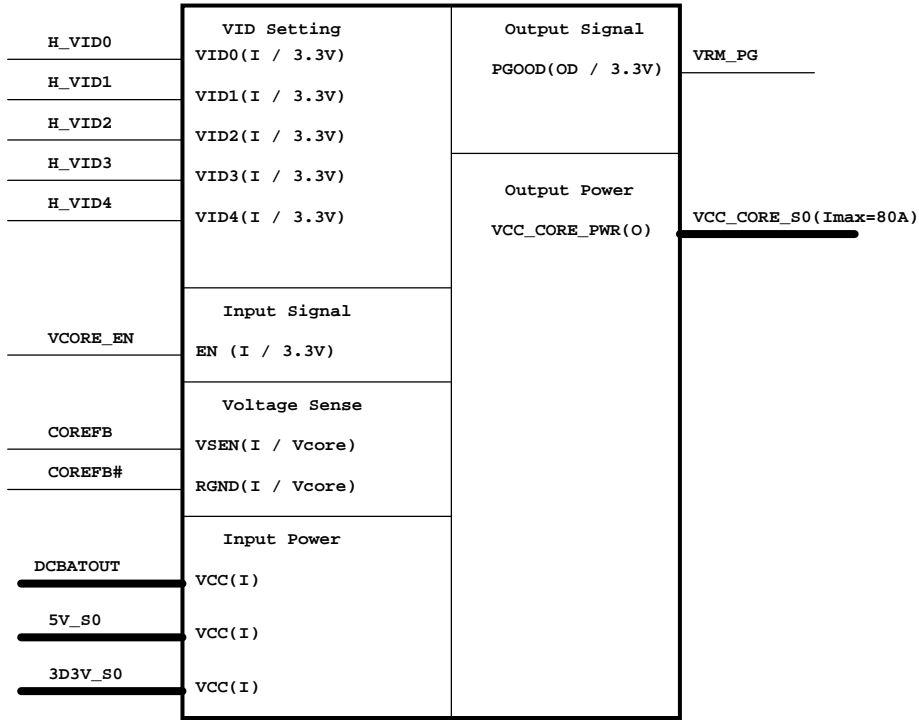
By Sourcer request change P/N:  
From 74.00393.D21  
To 74.00393.F21



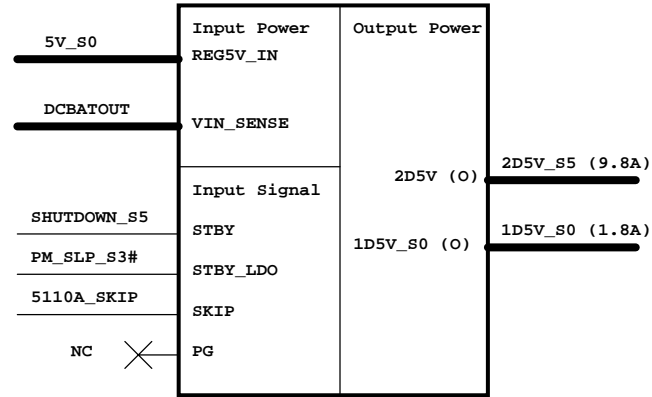
緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

Title			<b>POWERGOD&amp;ENABLES</b>		
Size	Document Number	EGRET		Rev	SC
Custom	Date: Friday, July 23, 2004				Sheet 39 of 50

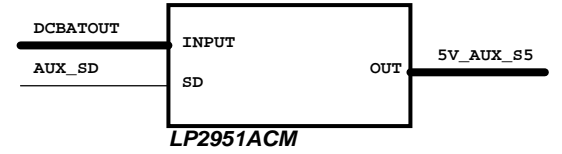
**CPU\_CORE**  
Intersil 6559CR + ISL6209CB\*2



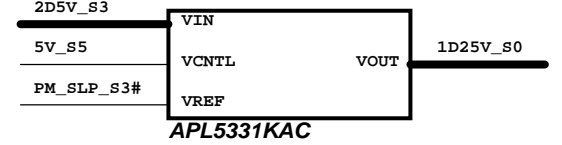
**TI TPS5110**  
2D5V/1D5V



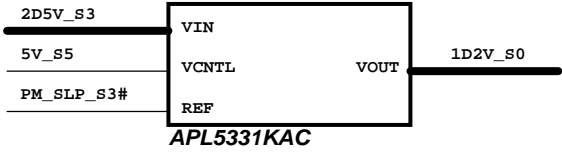
**5V\_AUX\_S5**



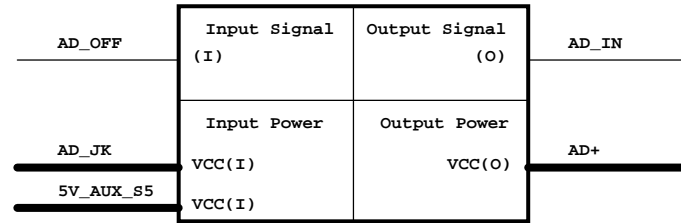
**1D25V\_S3**



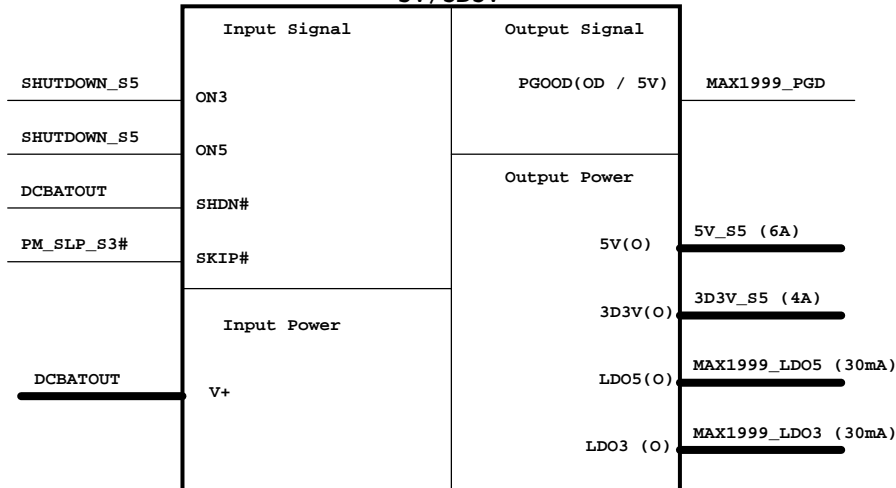
**1D2V\_S0**



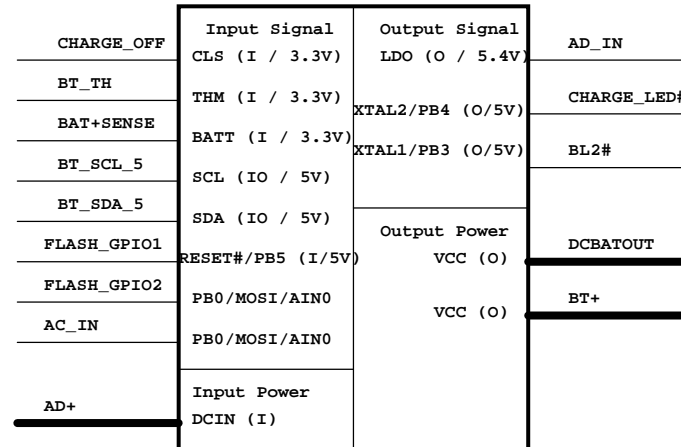
**Adapter**



**Max1999**  
5V/3D3V



**Charger\_Max1645 + Tiny12**



緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

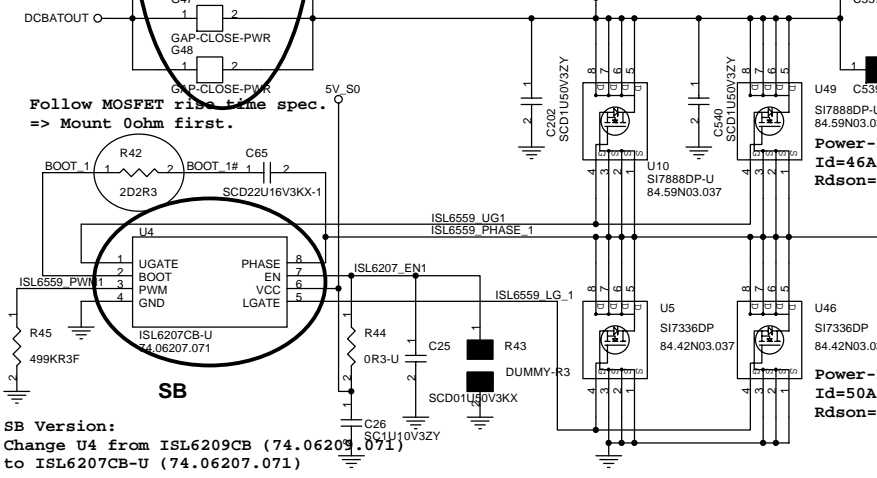
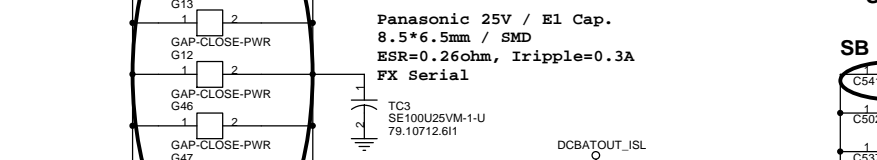
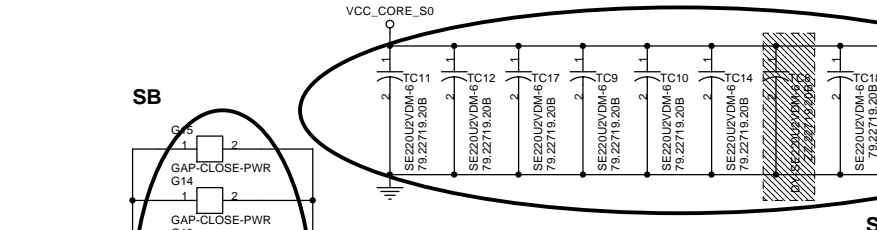


Vcore\_CPU=1.500V  
Iomax=52.9A  
Vcore\_CPU=1.400V  
Iomax=42.7A

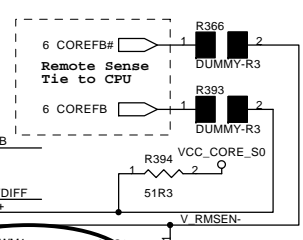
Vdrop is over spec under max loading  
R value large, then offset small.  
=> 3K or 4.99K?  
Now=>Offset value is over 0.05V  
If without offset =>R158=0ohm

Gain value large, then bandwidth large!  
=> 2.74K or 3.65K  
PLACE IN THE BACK OF CPU

SHOWA 2V/ 7.3\*4.3\*1.9mm / SMD  
79.22719.20B  
ESR=9mohm, Iripple=3.0A  
2'nd Source:  
NEC 220uF / 2.5V / ESR=9 / Iripple=3.7A 77.C2271.081  
7.3\*4.3\*1.9 / NT\$:8.0

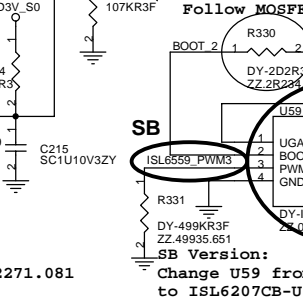


SB Version:  
Change U4 from ISL6209CB (74.06207.071)  
to ISL6207CB-U (74.06207.071)

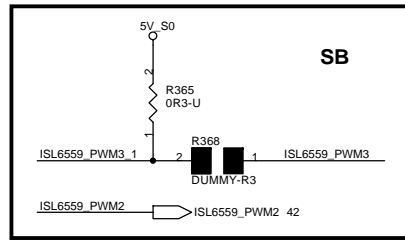


Remote Sense Tie to CPU

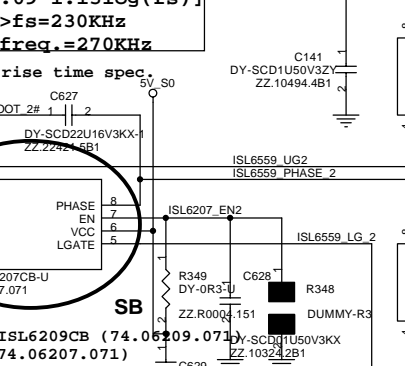
Follow MOSFET rise time spec.  
Rt=10\*[11.09-1.13log(fs)]  
Rt=107K, =>fs=230KHz  
But real freq.=270KHz



SB Version:  
Change U59 from ISL6209CB (74.06207.071)  
to ISL6207CB-U (74.06207.071)

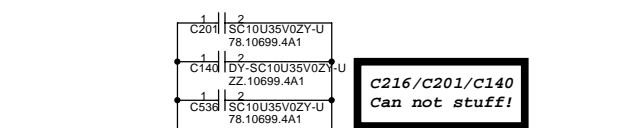


SB Version:  
53A=>2K

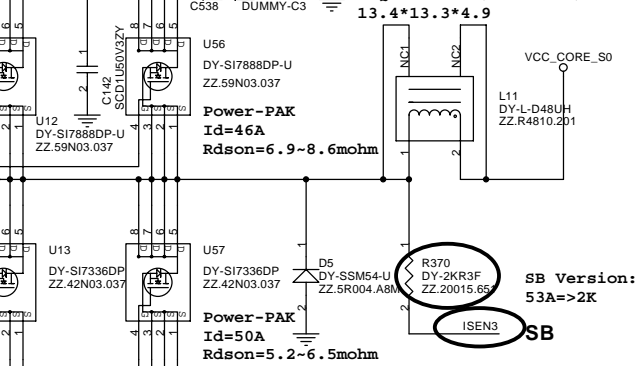


SB Version:  
53A=>2K

53A\*1.5=79.5A (OCP), =>79.5A/2Phase=39.75A/Phase  
90uA\*Rsense=39.75A\*(6.5m/2)\*1.4  
=>Rsense=2.0K

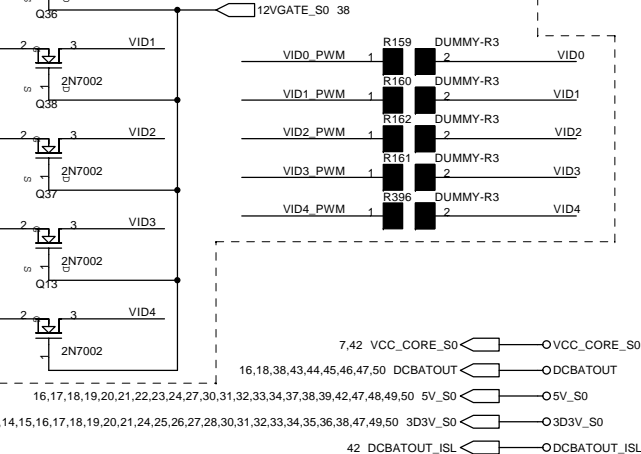


SB Version:  
53A=>2K



SB Version:  
53A=>2K

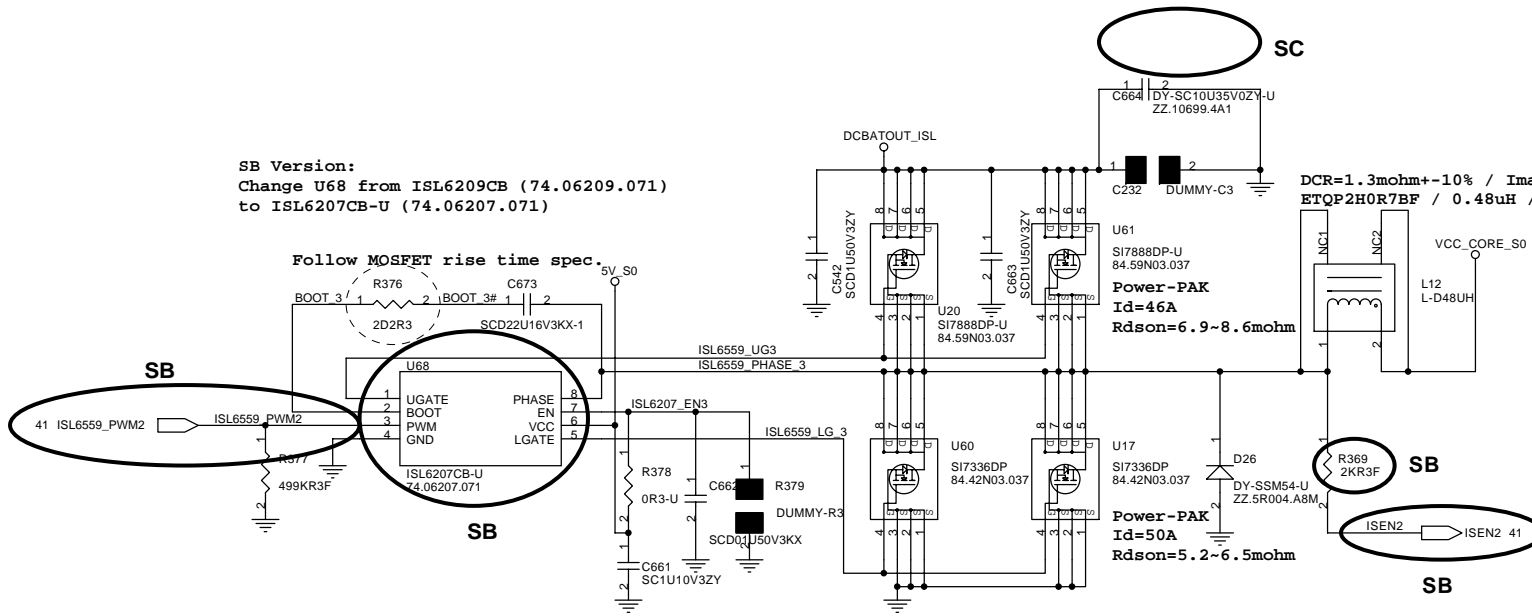
By PWRteam request High side MosFETchange  
From SI7888DP-U (84.07888.037)  
To BSC059N03S-U (84.59N03.037)  
Low side MosFETchange  
From SI7338DP (84.07336.037)  
To BSC042N03S-U (84.42N03.037)  
2'nd Source:  
H/S:SI7888DP (84.07888.037)  
L/S:SI7886DP (84.07886.037)



7.42 VCC\_CORE\_S0  
16.18,38,43,44,45,46,47,50 DCBATOUT  
5V\_S0  
3D3V\_S0  
42 DCBATOUT\_ISL

SB Version:  
Change U68 from ISL6209CB (74.06209.071)  
to ISL6207CB-U (74.06207.071)

Follow MOSFET rise time spec.



DCR=1.3mohm+-10% / Imax=40A / Panasonic /  
ETQP2H0R7BF / 0.48uH / 13.4\*13.3\*4.9

By PWRteam request High side  
MosFETchange  
From SI7888DP-U (84.07888.037)  
To BSC059N03S-U (84.59N03.037)  
Low side MosFETchange  
From SI7336DP (84.07336.037)  
To BSC042N03S-U (84.42N03.037)

TABLE 1. VOLTAGE IDENTIFICATION CODES

VID4	VID3	VID2	VID1	VID0	DAC
0	0	0	0	0	1.550
0	0	0	0	1	1.525
0	0	0	1	0	1.500
0	0	0	1	1	1.475
0	0	1	0	0	1.450
0	0	1	0	1	1.425
0	0	1	1	0	1.400
0	0	1	1	1	1.375
0	1	0	0	0	1.350
0	1	0	0	1	1.325
0	1	0	1	0	1.300
0	1	0	1	1	1.275
0	1	1	0	0	1.250
0	1	1	0	1	1.225
0	1	1	1	0	1.200
0	1	1	1	1	1.175
1	0	0	0	0	1.150
1	0	0	0	1	1.125
1	0	0	1	0	1.100
1	0	0	1	1	1.075
1	0	1	0	0	1.050
1	0	1	0	1	1.025
1	0	1	1	0	1.000
1	0	1	1	1	0.975
1	1	0	0	0	0.950
1	1	0	0	1	0.925
1	1	0	1	0	0.900
1	1	0	1	1	0.875
1	1	1	0	0	0.850
1	1	1	0	1	0.825
1	1	1	1	0	0.800
1	1	1	1	1	Shutdown

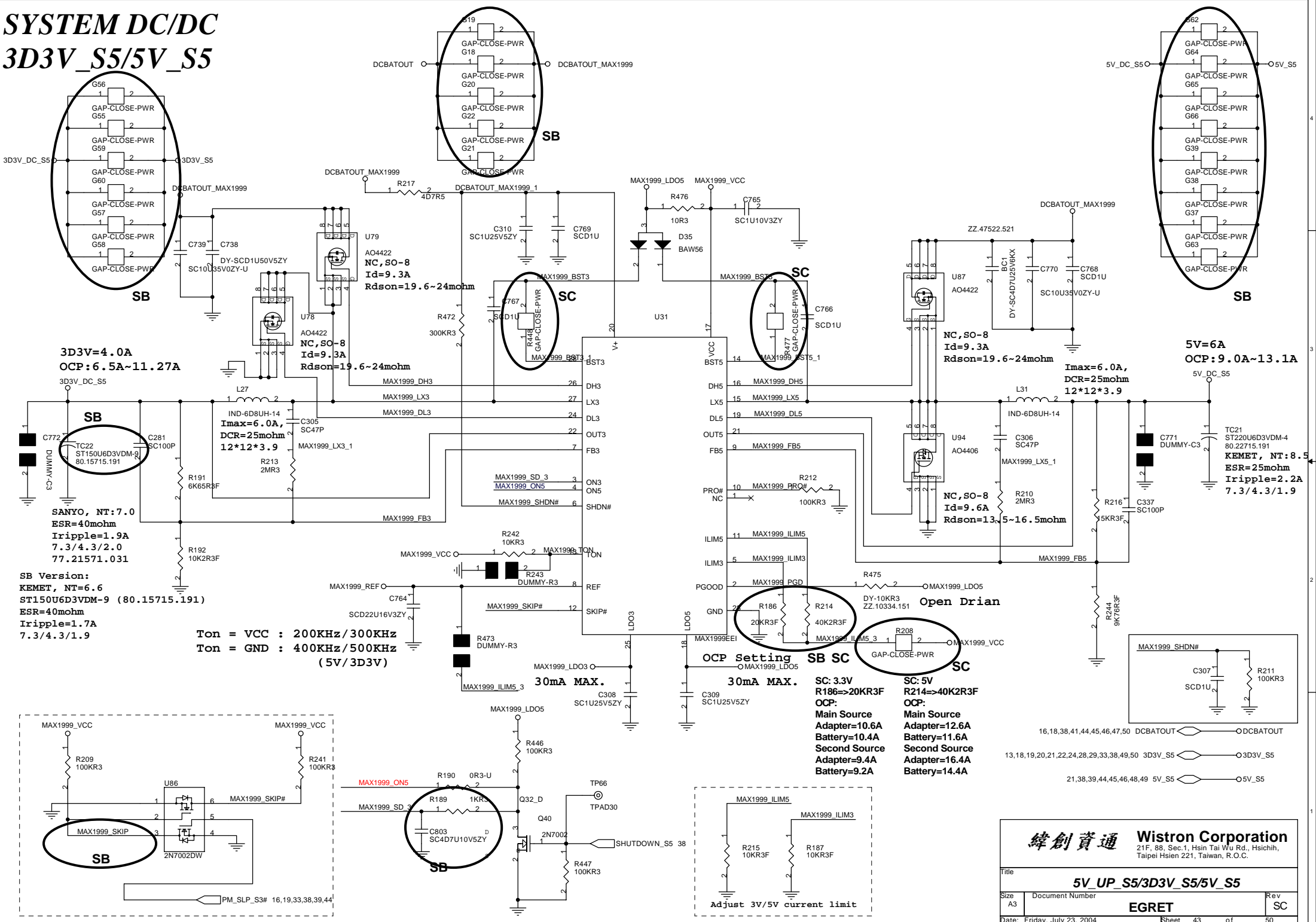
41 DCBATOUT\_ISL ← DCBATOUT\_ISL

7.41 VCC\_CORE\_S0 ← VCC\_CORE\_S0

16,17,18,19,20,21,22,23,24,27,30,31,32,33,34,37,38,39,41,47,48,49,50 5V\_S0 ← 5V\_S0

緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

# SYSTEM DC/DC 3D3V\_S5/5V\_S5



**3D3V=4.0A**  
**OCP: 6.5A~11.27A**

**SANYO, NT: 7.0**  
**ESR=40mohm**  
**Iripple=1.9A**  
**7.3/4.3/2.0**  
**77.21571.031**

**SB Version:**  
**KEMET, NT=6.6**  
**ST150U6D3VDM-9 (80.15715.191)**  
**ESR=40mohm**  
**Iripple=1.7A**  
**7.3/4.3/1.9**

**Ton = VCC : 200KHz/300KHz**  
**Ton = GND : 400KHz/500KHz**  
**(5V/3D3V)**

**30mA MAX.**

**OCP Setting SB SC**  
**30mA MAX.**

**SC: 3.3V**  
**R186=>20KR3F**  
**OCP:**  
**Main Source**  
**Adapter=10.6A**  
**Battery=10.4A**  
**Second Source**  
**Adapter=9.4A**  
**Battery=9.2A**

**SC: 5V**  
**R214=>40K2R3F**  
**OCP:**  
**Main Source**  
**Adapter=12.6A**  
**Battery=11.6A**  
**Second Source**  
**Adapter=16.4A**  
**Battery=14.4A**

**TC21**  
**ST220U6D3VDM-4**  
**80.22715.191**  
**KEMET, NT: 8.5**  
**ESR=25mohm**  
**Iripple=2.2A**  
**7.3/4.3/1.9**

**緯創資通 Wistron Corporation**  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

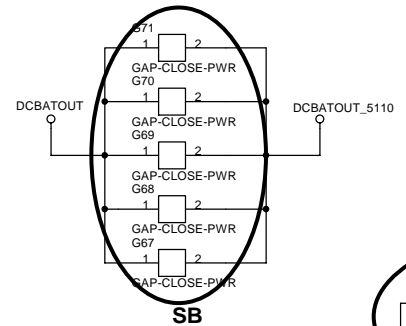
Title: **5V\_UP\_S5/3D3V\_S5/5V\_S5**

Size A3	Document Number	Rev
	<b>EGRET</b>	<b>SC</b>

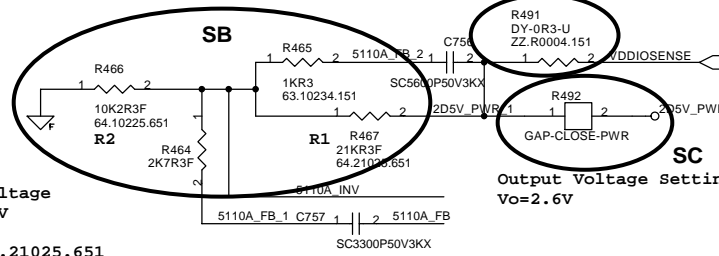
Date: Friday, July 23, 2004 Sheet 43 of 50

# TI TPS5110 for 2.5V and 1.5V

CT = 47pF/300KHz  
 2D5V\_S5: 9.8Amax , OCP>14.7A  
 1D5V\_S3: 1.8Amax , OCP>3.3A

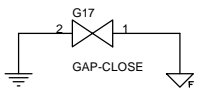
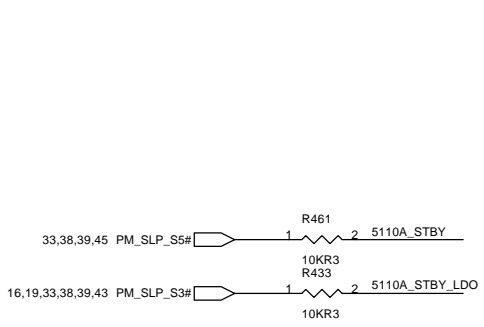
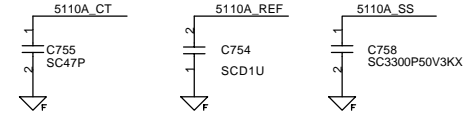


SB

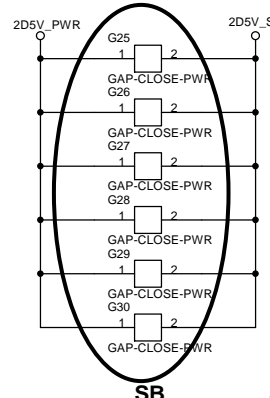


Change Output Voltage from 2.5V to 2.6V (support DDR400)  
 R467 = 21KR3F 64.21025.651  
 R466 = 10K2R3F 64.10225.651

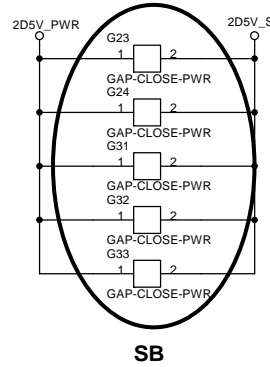
Output Voltage Setting  
 Vo=2.6V



LDO Output Voltage Setting  
 Vo=1.518V



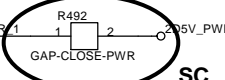
SB



SB

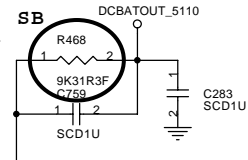


SB

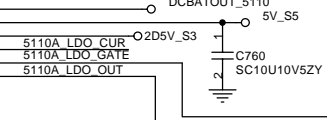


SC

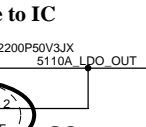
OCP Setting



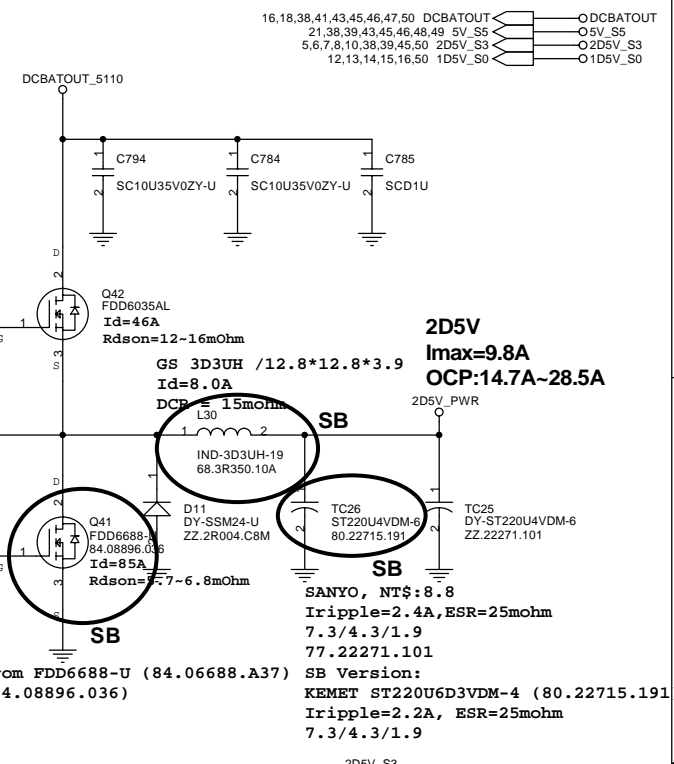
SB



SB



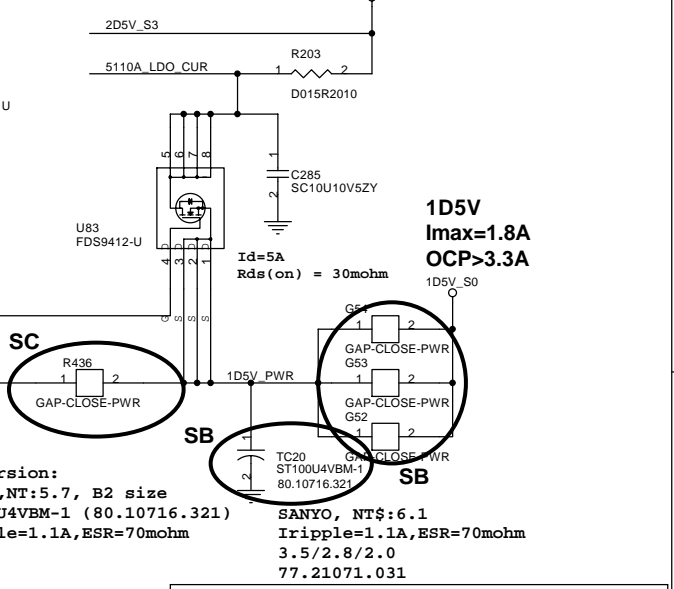
SC



2D5V  
 I<sub>max</sub>=9.8A  
 OCP:14.7A~28.5A

SANYO, NT\$:8.8  
 Iripple=2.4A, ESR=25mohm  
 7.3/4.3/1.9  
 77.22271.101  
 SB Version:  
 KEMET ST220U6D3VDM-4 (80.22715.191)  
 Iripple=2.2A, ESR=25mohm  
 7.3/4.3/1.9

Change Q41 from FDD6688-U (84.06688.A37) to FDD8896 (84.08896.036)

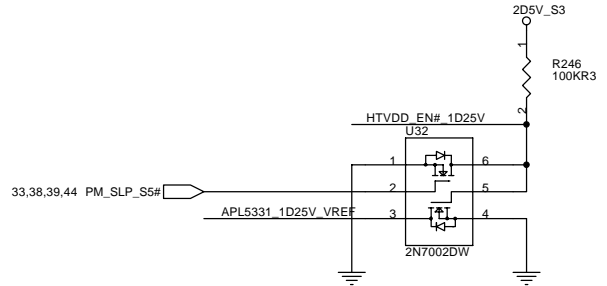
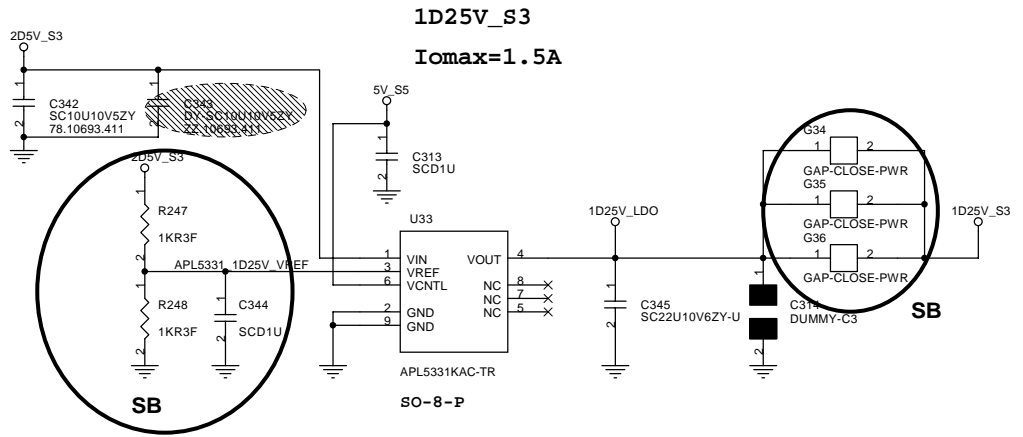
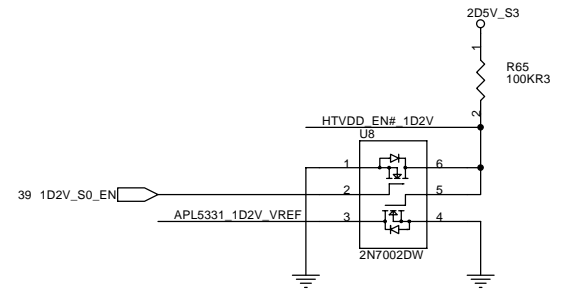
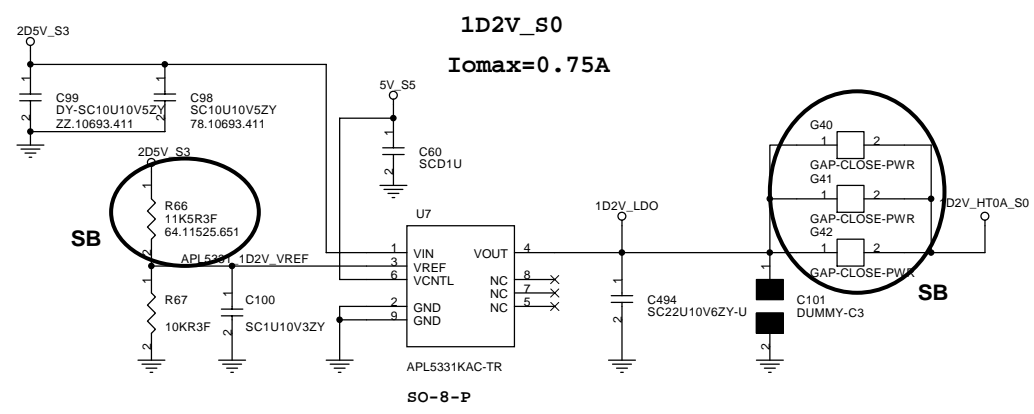
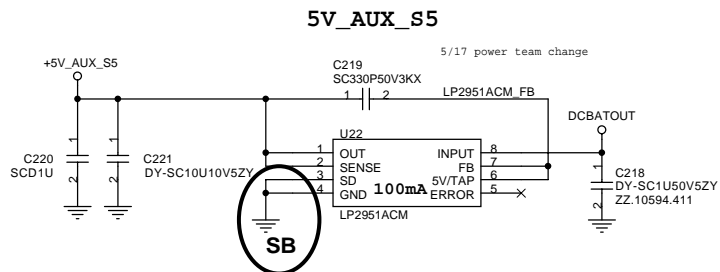


1D5V  
 I<sub>max</sub>=1.8A  
 OCP>3.3A

SB Version:  
 KEMET, NT\$:5.7, B2 size  
 ST100U4VBM-1 (80.10716.321)  
 Iripple=1.1A, ESR=70mohm  
 3.5/2.8/2.0  
 77.21071.031

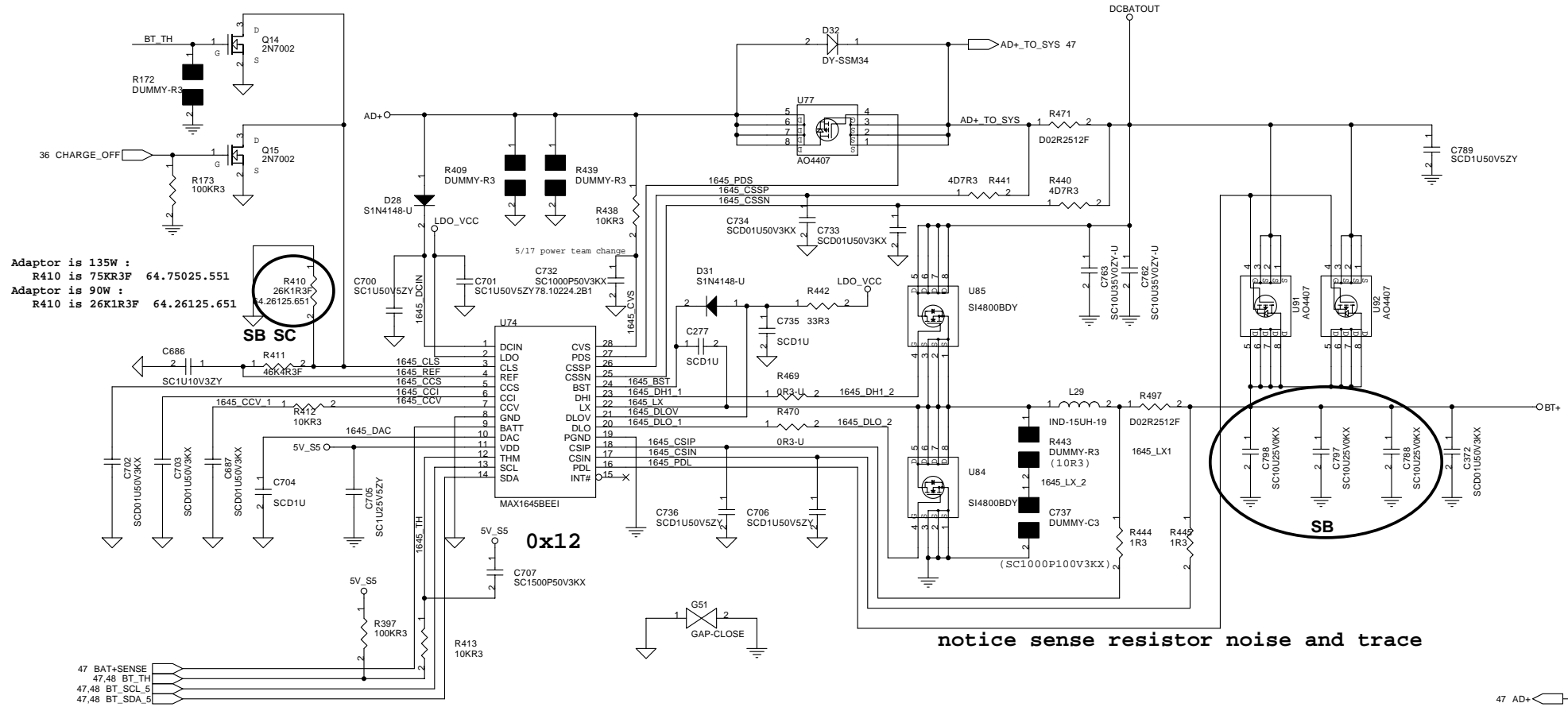
緯創資通 Wistron Corporation  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title			2D5V_S5/1D5V_S0_TPS5110		
Size	Document Number			Rev	SC
A3	EGRET				
Date:	Friday, July 23, 2004	Sheet	44	of	50



- 4,11,13,39 1D2V\_HT0A\_S0 O1D2V\_HT0A\_S0
- 16,18,38,41,43,44,46,47,50 DCBATOUT ODCBATOUT
- 19,21,22,34,38,39,46,49 +5V\_AUX\_S5 O+5V\_AUX\_S5
- 21,38,39,43,44,46,48,49 5V\_S5 O5V\_S5
- 5,6,7,8,10,38,39,44,50 2D5V\_S3 O2D5V\_S3
- 5,6,7,9,10,39 1D25V\_S3 O1D25V\_S3

<b>緯創資通 Wistron Corporation</b>		
<small>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</small>		
<b>Title</b>		
<b>1D25V_LDO/3V_AUX/5V_AUX</b>		
Size	Document Number	Rev
A3		SC
<b>EGRET</b>		
Date: Friday, July 23, 2004		
Sheet		of
45		50



Adaptor is 135W :  
 R410 is 75KR3F 64.75025.551  
 Adaptor is 90W :  
 R410 is 26K1R3F 64.26125.651

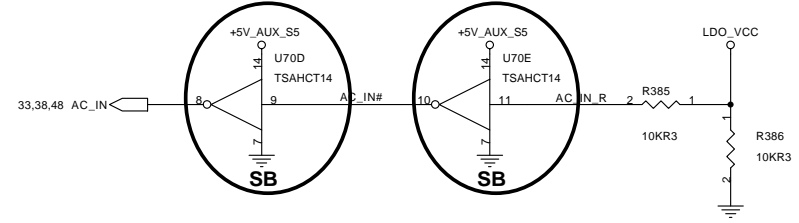
0x12

notice sense resistor noise and trace

- 47 AD+ AD+
- 16,18,38,41,43,44,45,47,50 DCBATOUT DCBATOUT
- 47 BT+ BT+
- 19,21,22,34,38,39,45,49 +5V\_AUX\_S5 +5V\_AUX\_S5

Li-ion =>8 Cells (4S2P\*2=16.8V)  
 Ni-Mh =>8 Cells (8\*1.8=14.4V)

Low => Li-ion  
 (3.3A=2400mAH\*2\*0.7C)  
 High => Ni-MH  
 (2.5A=4800mAH\*0.55C)

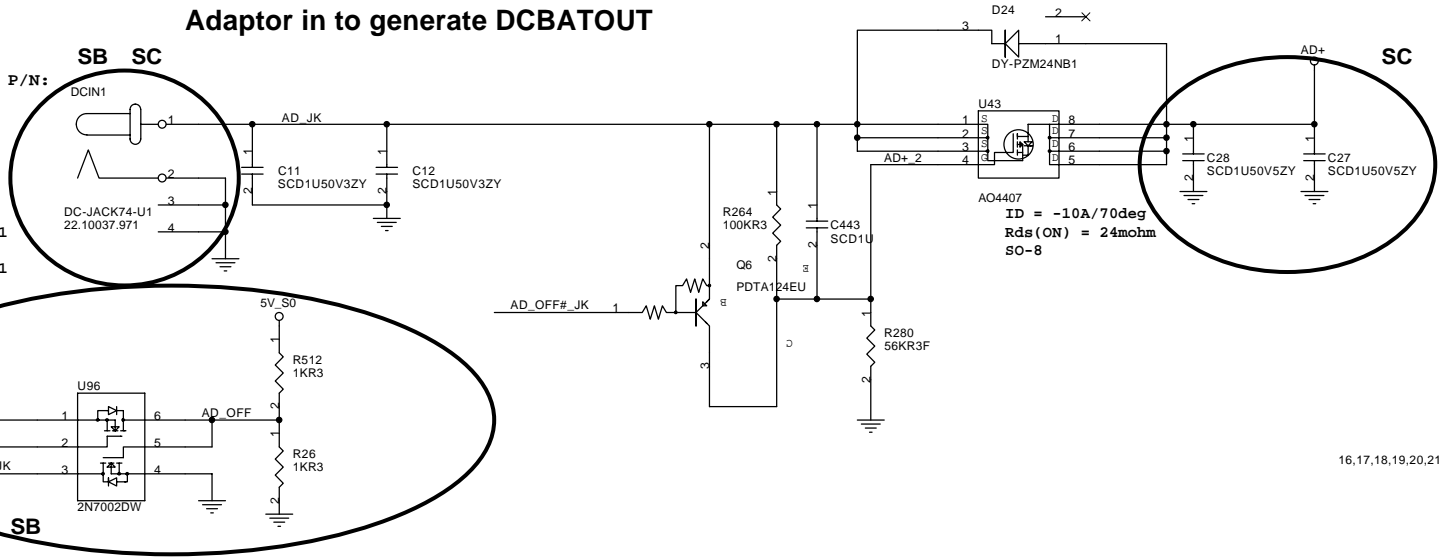


<b>緯創資通 Wistron Corporation</b>	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>CHARGER MAX1645</b>	
Title	Rev
Size	Document Number
Custom	EGRET
Date: Friday, July 23, 2004	Sheet 46 of 50

### Adaptor in to generate DCBATOUT

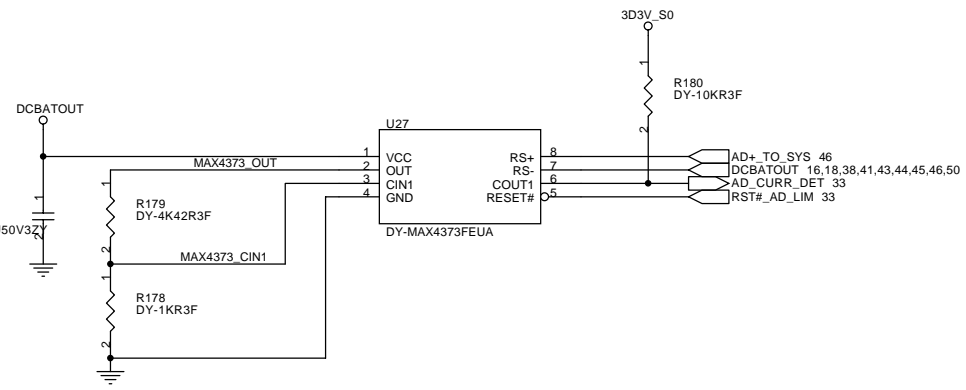
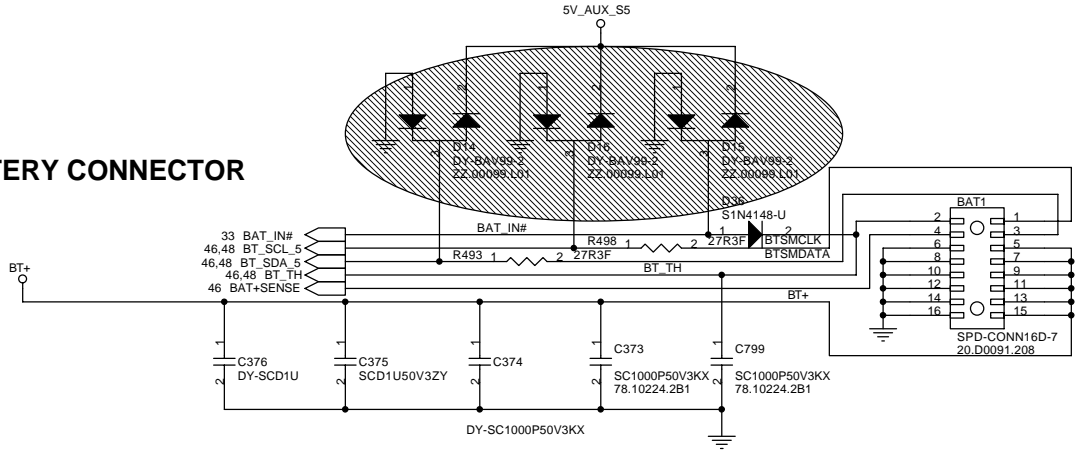
By ME request change P/N:  
From 22.10037.511  
To 22.10037.971

Adaptor is 135W :  
DCIN1 is 22.10037.821  
Adaptor is 90W :  
DCIN1 is 22.10037.971



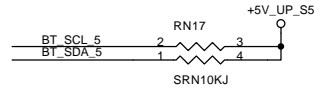
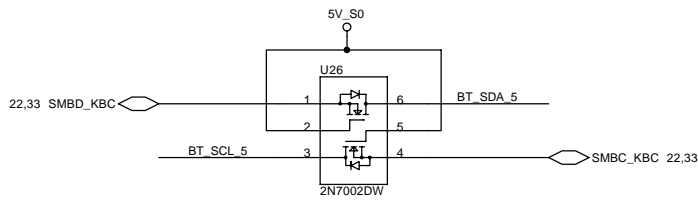
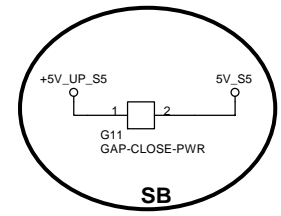
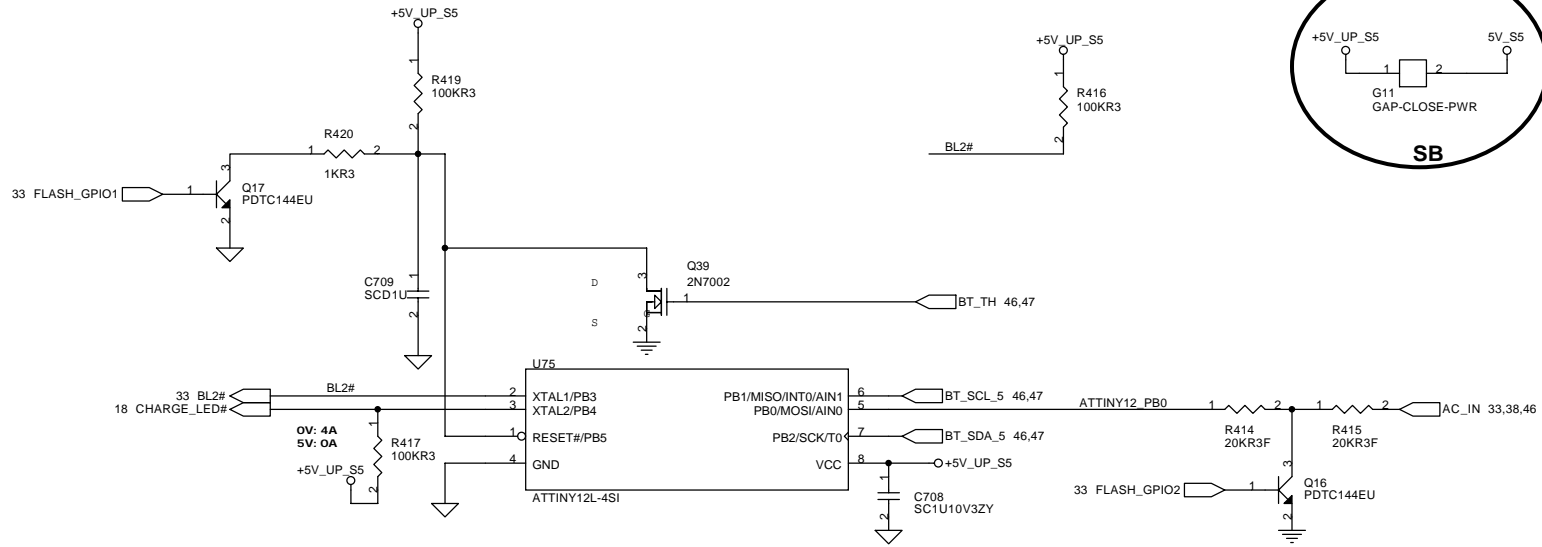
- 19,21,22,34,38,39,45,46,49 +5V\_AUX\_S5 +5V\_AUX\_S5
- 16,17,18,19,20,21,22,23,24,27,30,31,32,33,34,37,38,39,41,42,48,49,50 5V\_S0 5V\_S0
- 46 AD+ AD+
- 46 BT+ BT+

### BATTERY CONNECTOR



Check Setting Value(6.5A)

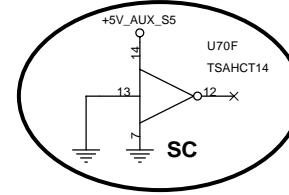
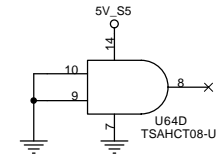
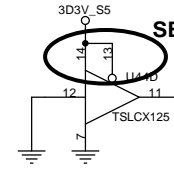
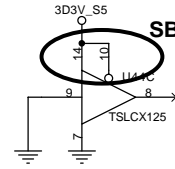
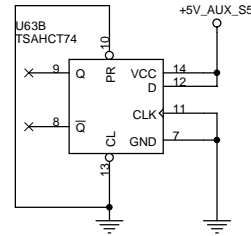
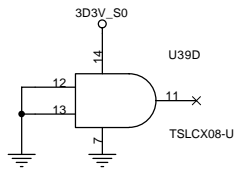
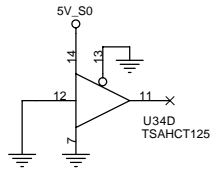
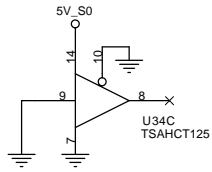
<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title <b>DC/DC (1/2) -- 5V / 3.3V / 2.5V</b>	
Size A3	Document Number <b>EGRET</b>
Date: Friday, July 23, 2004	Sheet 47 of 50



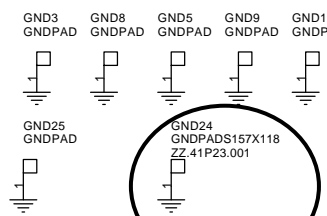
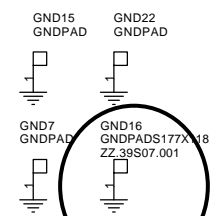
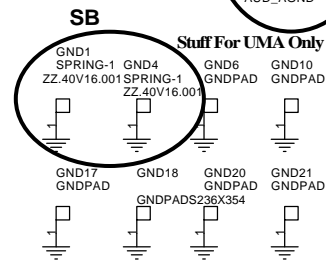
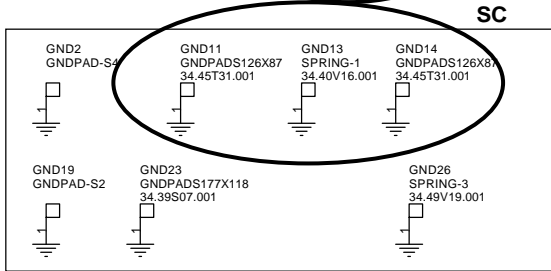
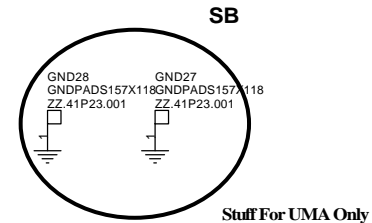
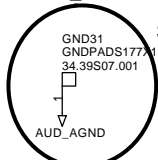
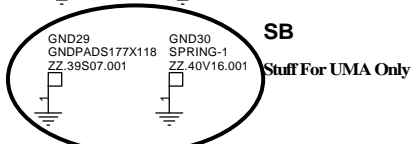
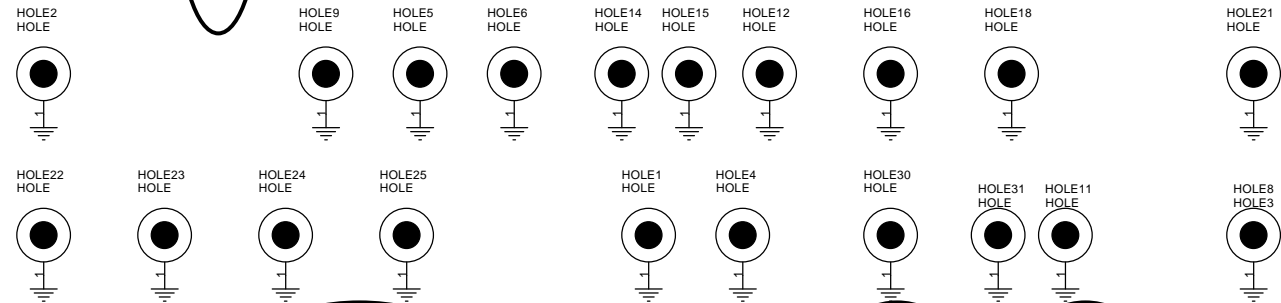
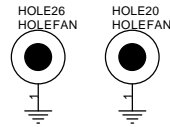
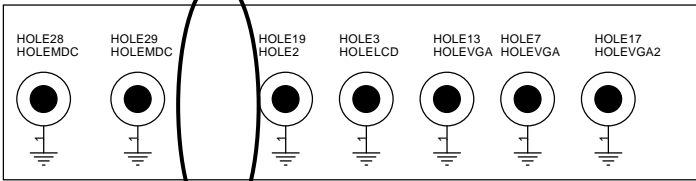
- 13,18,19,20,21,22,24,28,29,33,38,43,49,50 3D3V\_S5
- 21,38,39,43,44,45,46,49 5V\_S5
- 18,50 +5V\_UP\_S5



**NO USE LOGIC**



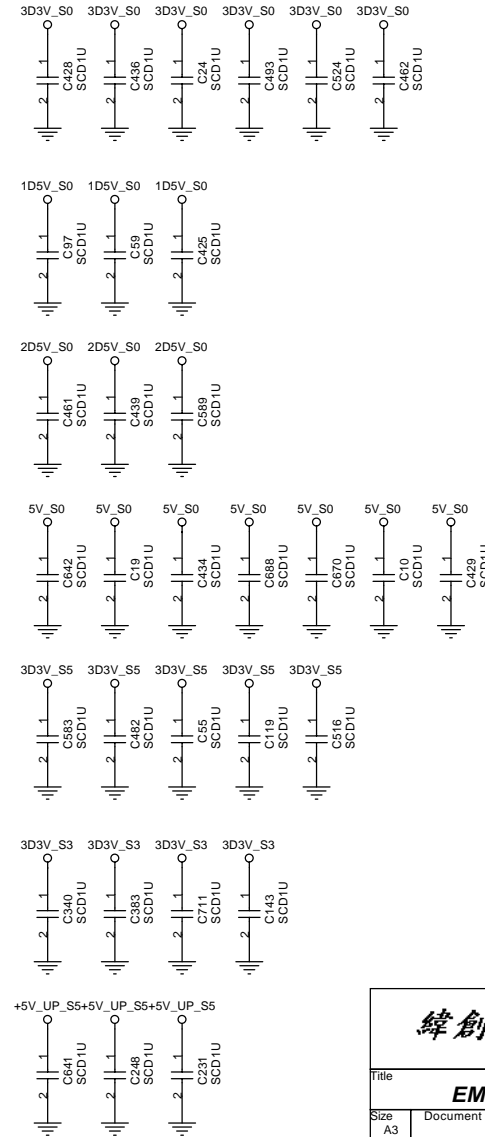
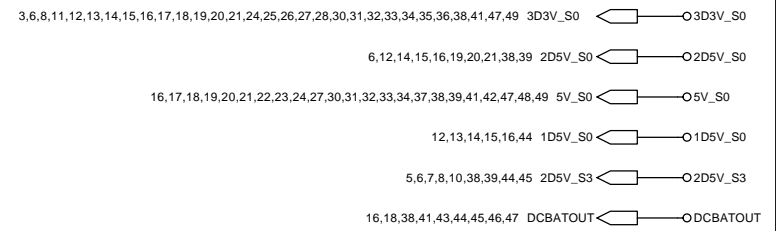
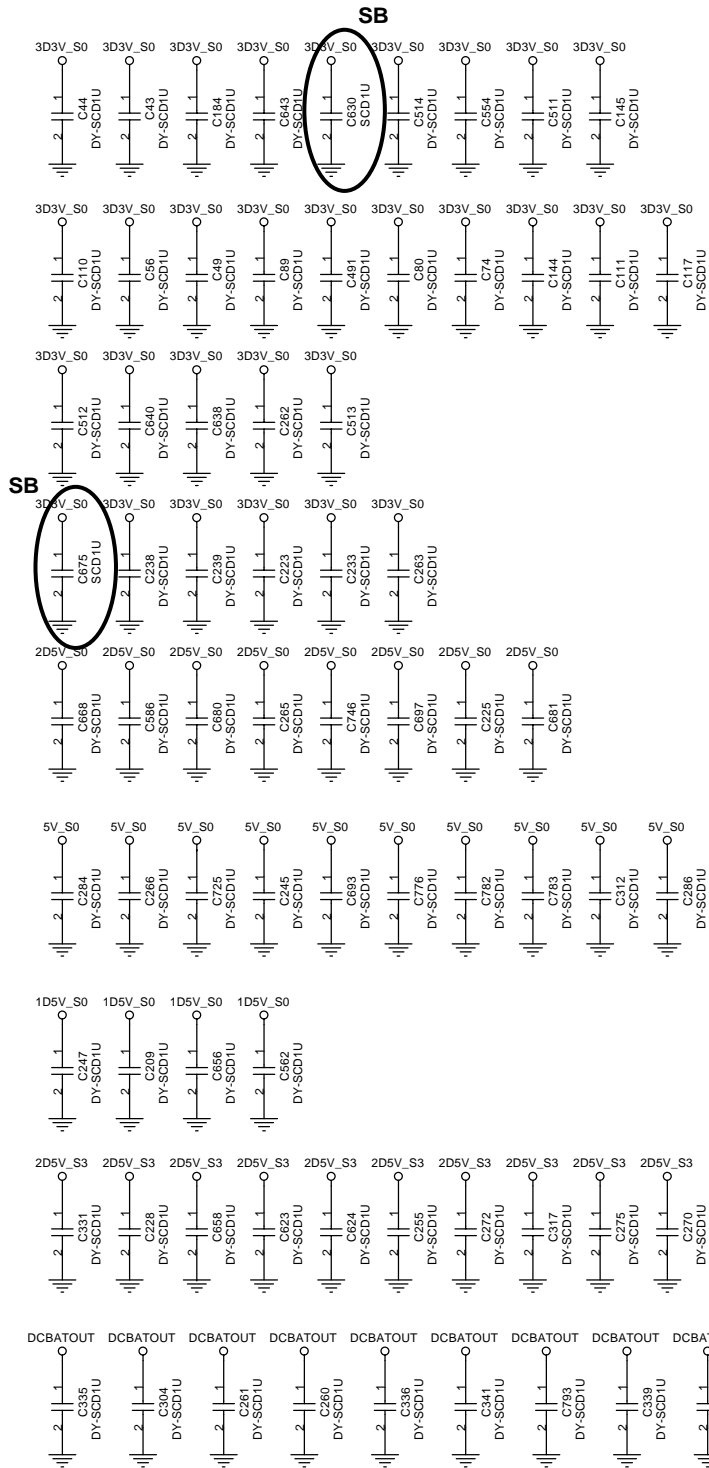
**SB**  
**SC**



<b>緯創資通 Wistron Corporation</b>		
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title <b>MISC</b>		
Size A3	Document Number <b>EGRET</b>	Rev <b>SC</b>
Date: Friday, July 23, 2004 Sheet 49 of 50		

**3D3V\_S0: 30 pcs**  
**2D5V\_S0: 8 pcs**  
**5V\_S0: 10 pcs**  
**1D5V\_S0: 4 pcs**  
**2D5V\_S3: 10 pcs**  
**DCBATOUT: 10 pcs**

**FOR EMI  
DECOUPLING CAPS**



<b>緯創資通 Wistron Corporation</b>		<small>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</small>	
Title: <b>EMI</b>			
Size: A3	Document Number: <b>EGRET</b>	Rev: <b>SC</b>	
Date: Friday, July 23, 2004		Sheet: 50	of: 50