

Jan. 31 '05

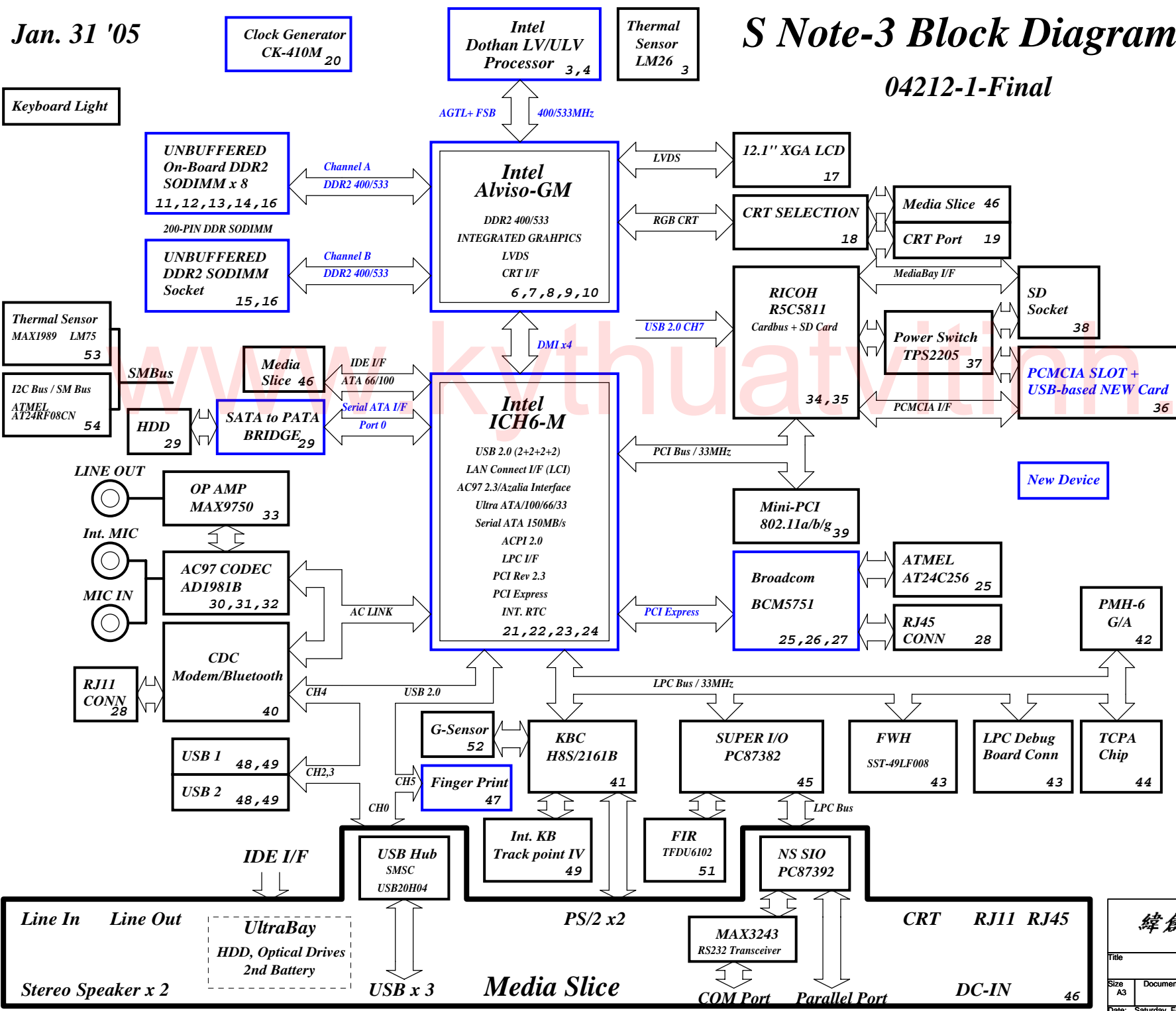
S Note-3 Block Diagram

04212-1-Final

PCB Layer Stackup

- L1: Component
- L2: GND
- L3: Signal 1
- L4: VCC
- L5: Signal 2
- L6: Signal 3
- L7: GND
- L8: Component

System DC/DC	
MAX1977 64	
INPUTS	OUTPUTS
VINT16	VCC5M
	VCC3M
Battery Charger/Selector	
MAX1870 58	
CV16	M-BAT-PWR
	S-BAT-PWR
VCC1R8M	
MAX1993 67	
VINT16	VCC1R8M
CPU DC/DC	
MAX1907 65	
VINT16	VCCCPUCORE
VCC1R05B/VCC1R5M	
MAX1540 68	
VINT16	VCC1R5M
	VCC1R5B
VCC0R9B/DDR2_VREF	
LP2997MRX 69	
VCC1R8A	VCC0R9B
	DDR2_VREF



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Title: **Block Diagram**

Size A3	Document Number	Rev -1
	S Note-3	

Date: Saturday, February 26, 2005 Sheet 1 of 75

RESISTOR

Symbol name	Value	Tolerance (J: 5%, F: 1%, D: 0.5%, B: 0.1 %)	Rating 0402=> 1/16W, 25V 0603 => 1/16W, 75V 0805 => 1/10W, 100V	Size 2=>0402, 3=>0603, 5=>0805, 6=>1206, 0=>1210
10KR3	10K Ohm	If no letter, it means J: 5%	1/16W, 75V	0603
33D3R5	33.3 Ohm	If no letter, it means J: 5%	1/10W, 100V	0805
1KR3F	1K Ohm	F: 1%	1/16W, 75V	0603

The naming rule is value + R + size + tolerance
 For the value, it can be read by the number before R. (R means resistor)
 For the tolerance, it can be read from the last letter.
 For the rating, we don't show on the symbol name.
 For the size, R2=>0402, R3=>0603, R5=>0805,....

PCI TABLE

DEVICE	IDSEL	IRQ (Default)	REQ# / GNT#
MINIPCI SLOT	AD18	F, G	REQ# 3/ GNT#3
CARDBUS R5C811	AD16	SERIRQ	REQ#0 / GNT#0
USB UHCI	AD29	A, C, D	
USB 2.0 EHCI	AD29	H	
DMI-to-PCI/ AC97 Modem/ AC97 Audio	AD30	B B	
LPC Bridge IDE SATA SMBus	AD31	C C B	
PCI Express	AD28	A, B, C, D	

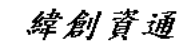
CAPACITOR

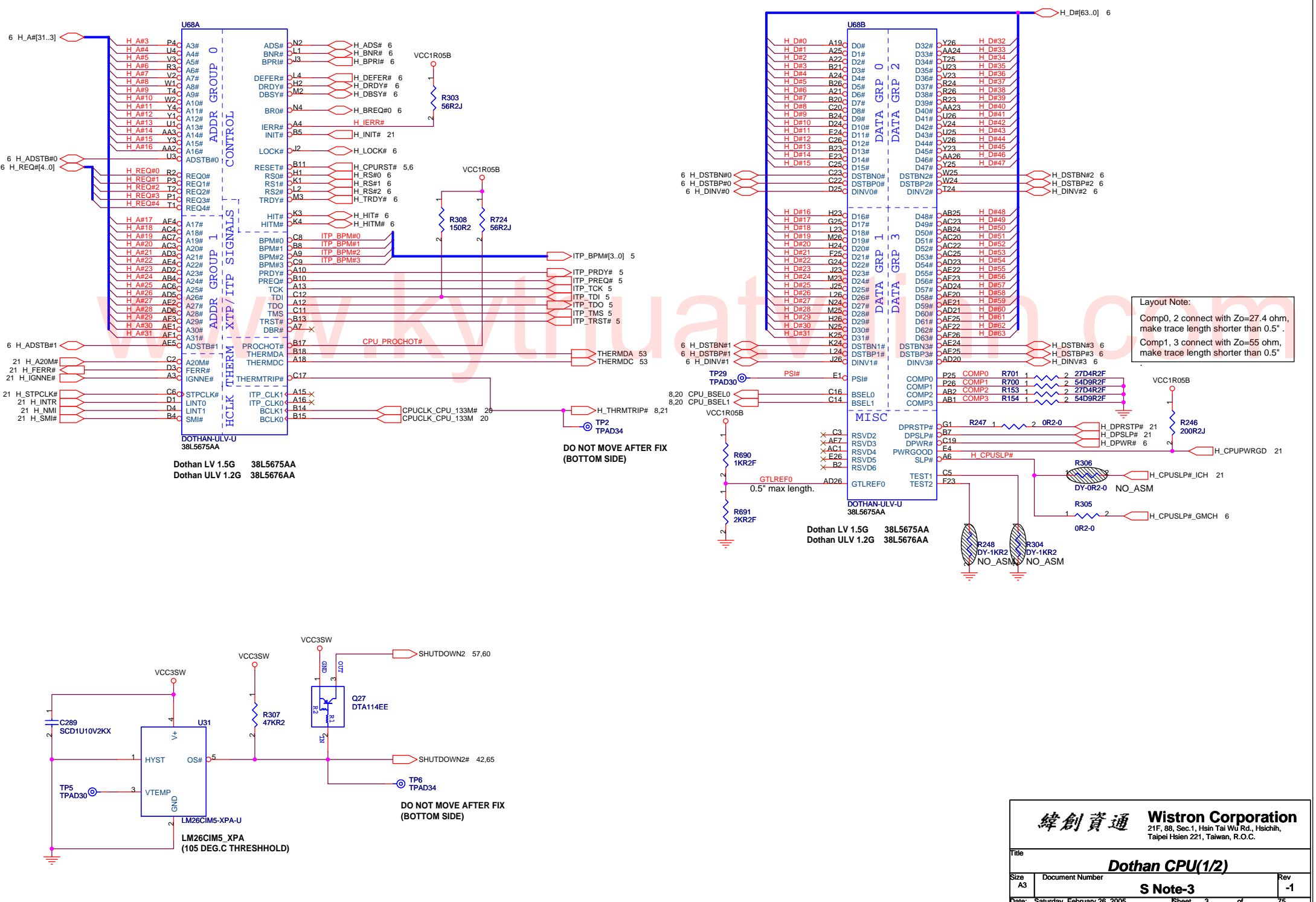
Symbol name	Value	Tolerance (M: +/-20, K: +/-10, Z: +80/-20)	Rating	Size 2=>0402, 3=>0603, 5=>0805, 6=>1206, 0=>1210
SCD1U10V2MX-1	0.1uF	M/X5R	10V	0402
SC10U6D3V5MX	10uF	M/X5R	6.3V	0805
SC2D2U16V5ZY	2.2uF	Z/Y5V	16V	0805

The naming rule is
 Capacitor type + value + rating + size + tolerance + material
 SCD1U10V2MX-1
 SC=> SMT Ceremic, TC=> POS cap or SP cap
 D1U => 0.1uF
 10V => the voltage rating is 10V
 2=> 0402, 3=>0603, 5=>0805
 M=>tolerance M, K, Z
 X=> X7R/X5R, Y=> Y5V
 -1 => symbol version, nonsense to EE characteristic

PLANAR_ID[3..0]

ICH4-M GPIO _n	31	30	29	26	Planar ID Version	Planar PCB Version
PLANAR_ID _n	3	2	1	0		
	0	0	0	0	SDV	04212-SA
	0	0	0	1	SIV	04212-SB
	0	0	1	0	SIT	04212-SC
	0	0	1	1	SVT	04212-1
	0	1	0	0		
	0	1	0	1		
	0	1	1	0		
	0	1	1	1		

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Reference	
Size A3	Document Number S Note-3
Date: Saturday, February 26, 2005	Sheet 2 of 75
Rev -1	

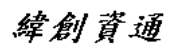


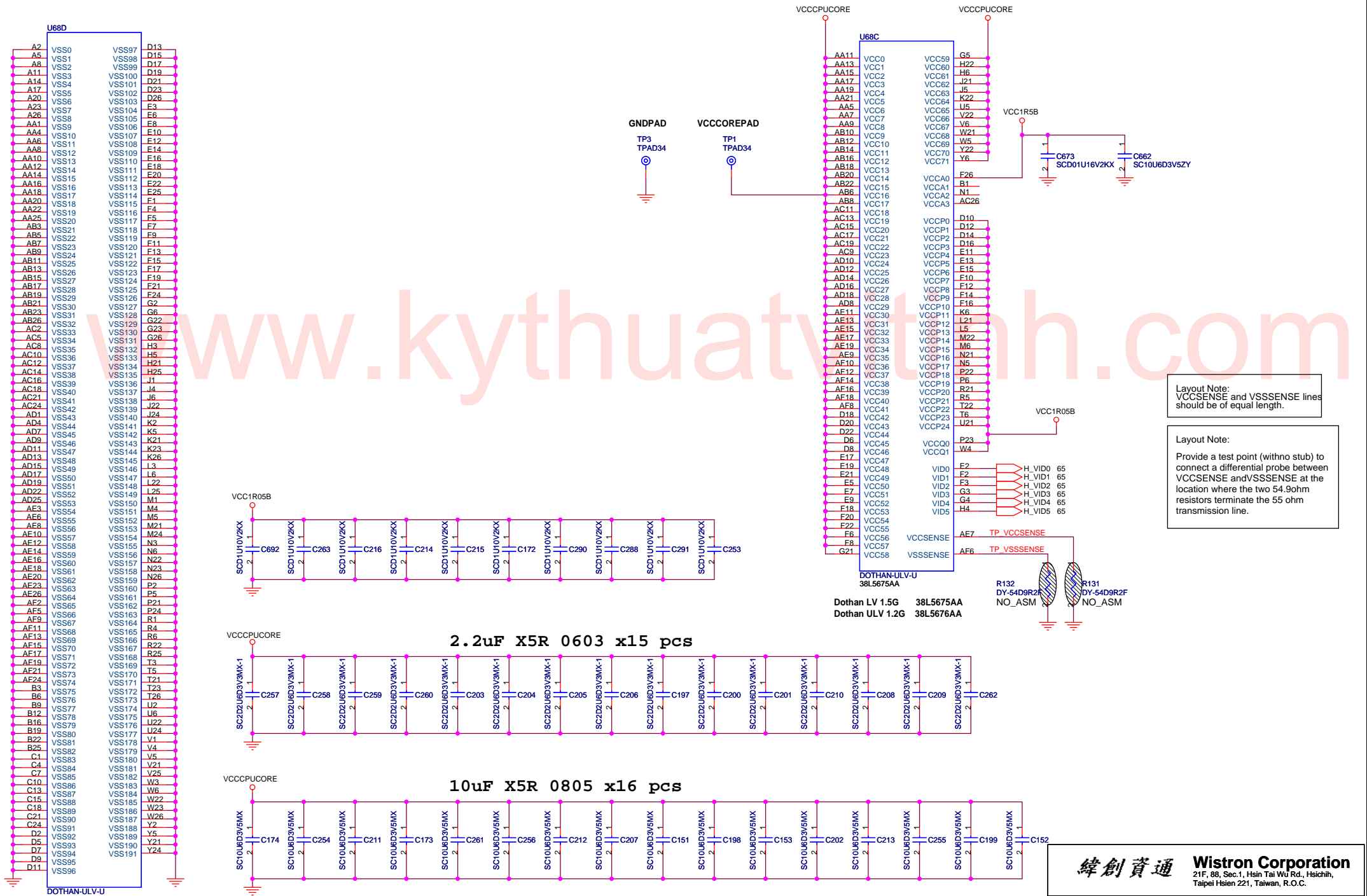
Dothan LV 1.5G 38L5675AA
Dothan ULV 1.2G 38L5676AA

DO NOT MOVE AFTER FIX
(BOTTOM SIDE)

Layout Note:
Comp0, 2 connect with Zo=27.4 ohm,
make trace length shorter than 0.5".
Comp1, 3 connect with Zo=55 ohm,
make trace length shorter than 0.5"

DO NOT MOVE AFTER FIX
(BOTTOM SIDE)

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Dothan CPU(1/2)			
Title	Document Number	Rev	
	S Note-3	-1	
Date: Saturday, February 26, 2005 Sheet 3 of 75			



Layout Note:
VCCSENSE and VSSSENSE lines should be of equal length.

Layout note:
Provide a test point (withno stub) to connect a differential probe between VCCSENSE andVSSSENSE at the location where the two 54.9ohm resistors terminate the 55 ohm transmission line.

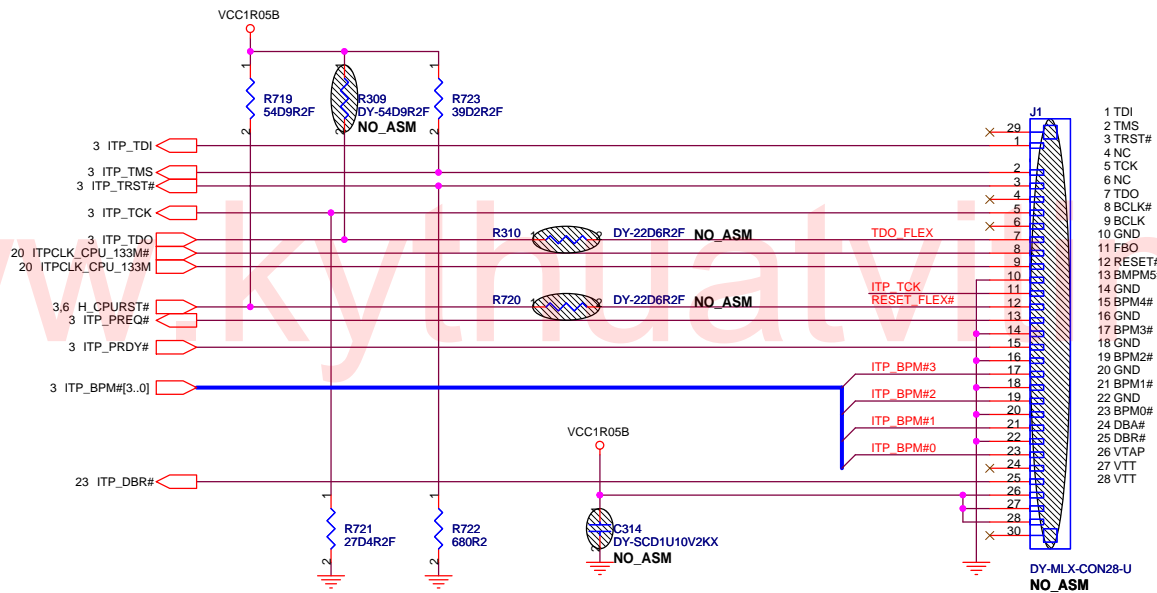
2.2uF X5R 0603 x15 pcs

10uF X5R 0805 x16 pcs

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Title			Dothan CPU(2/2)		
Size	Document Number		Rev		
A3	S Note-3				-1
Date:	Saturday, February 26, 2005		Sheet	4	of 75

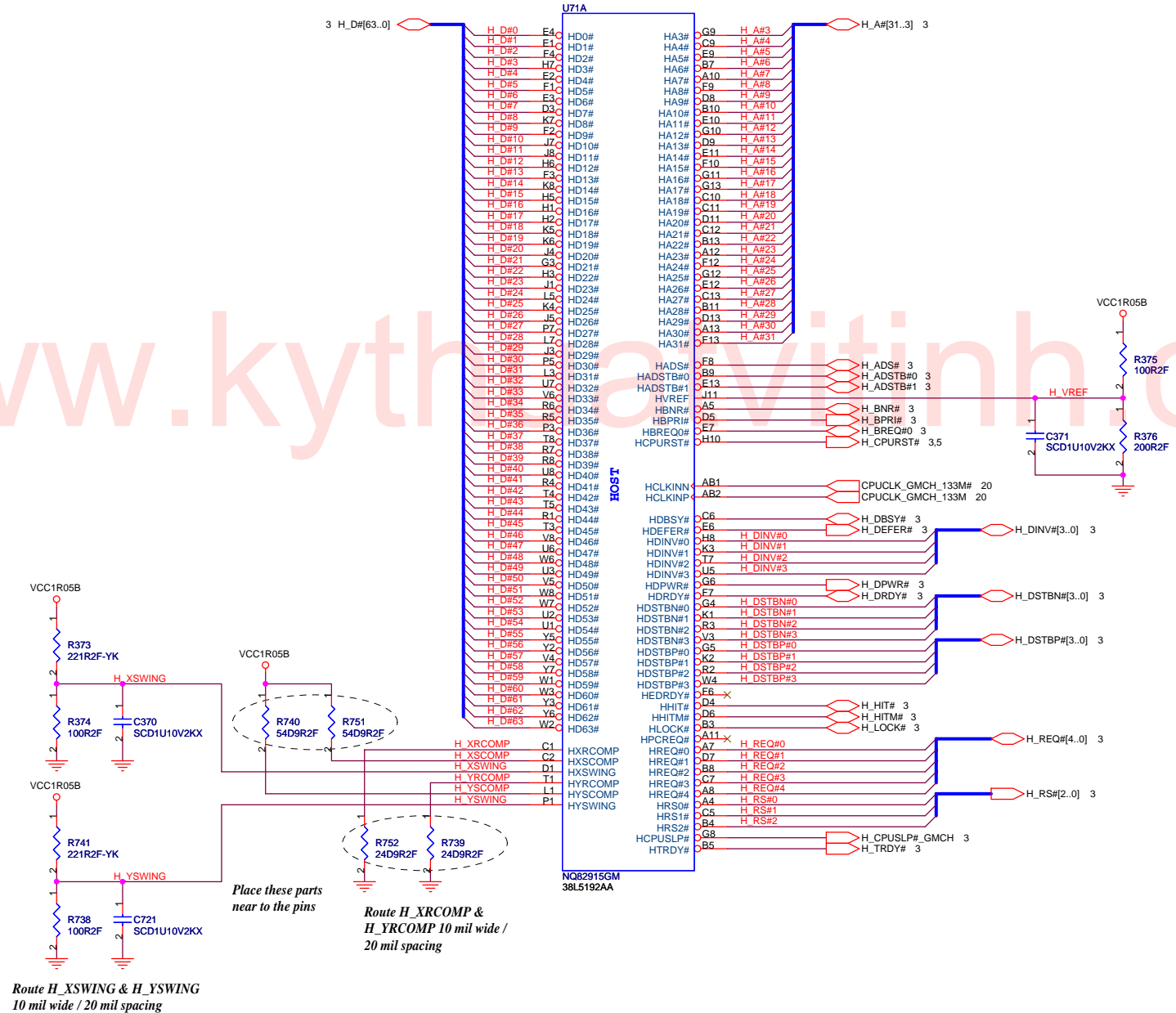
Dothan LV 1.5G 38L5675AA
Dothan ULV 1.2G 38L5676AA



(*1) TCK SIGNAL IS BRANCHED AT DOTHAN PIN

(*2) CPURST# SIGNAL IS BRANCHED AT ALVISO PIN

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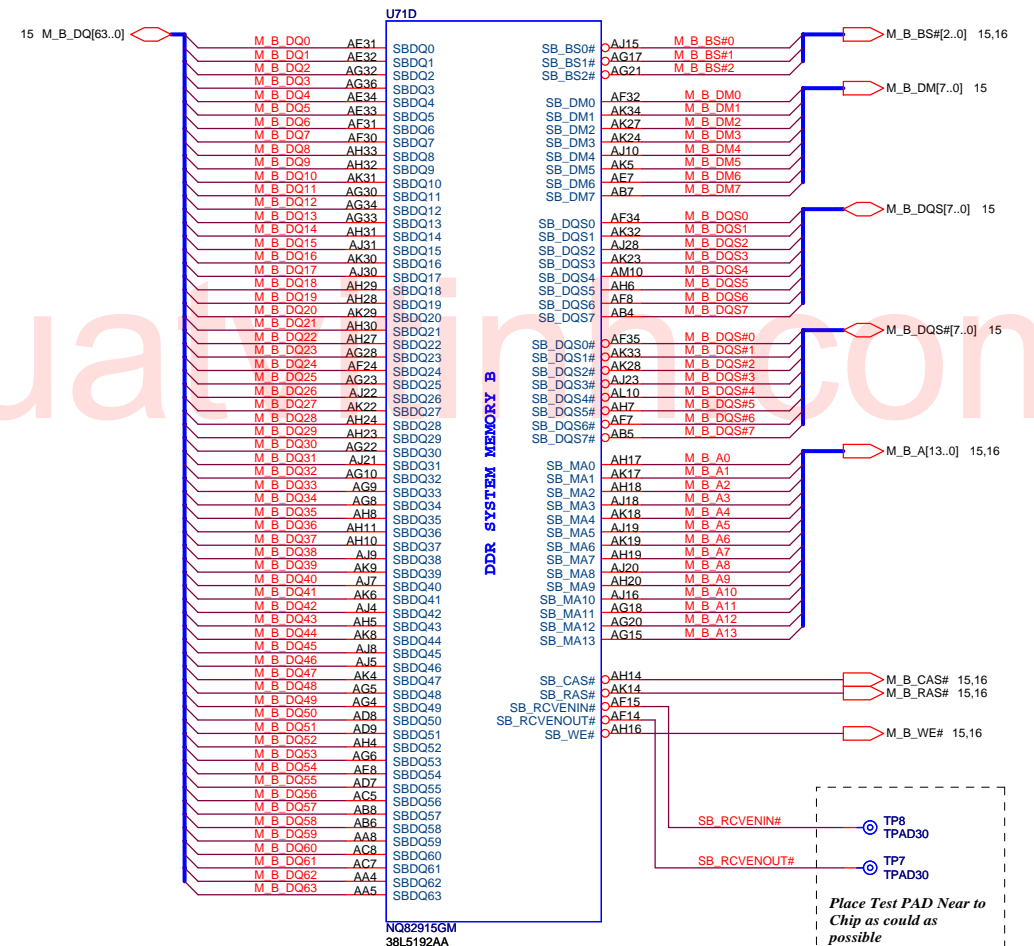
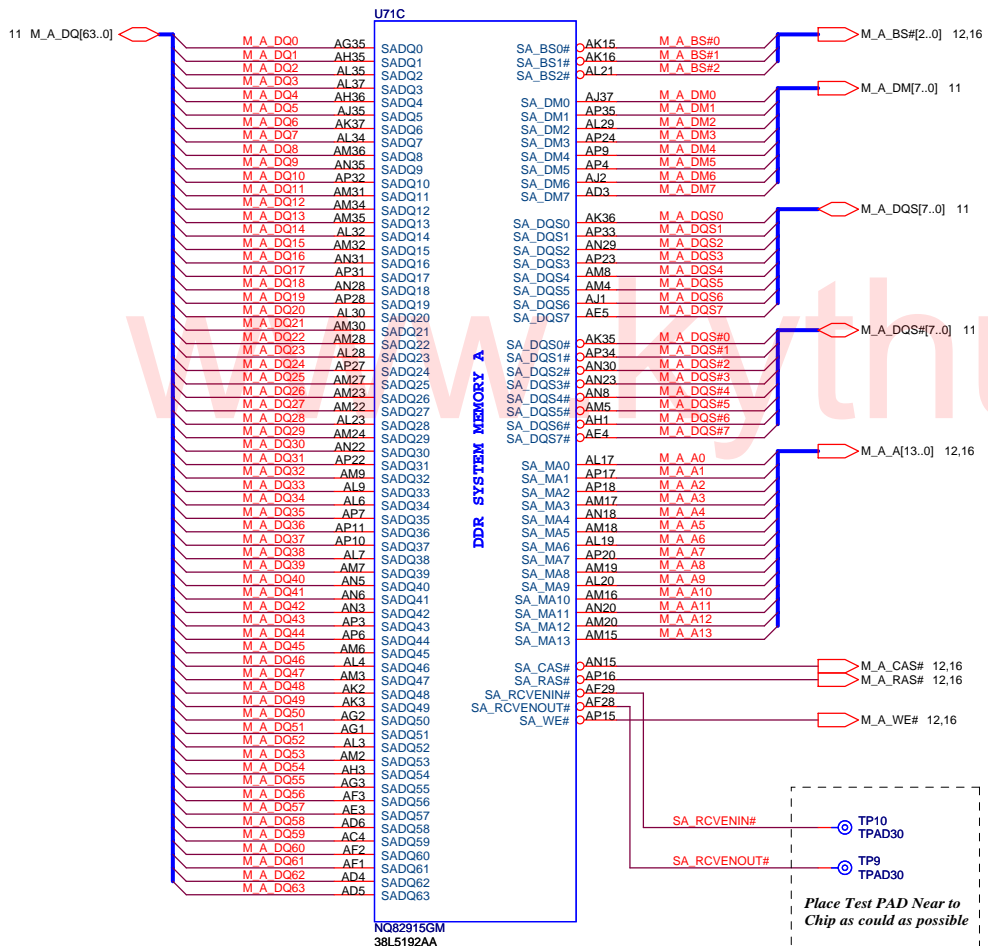


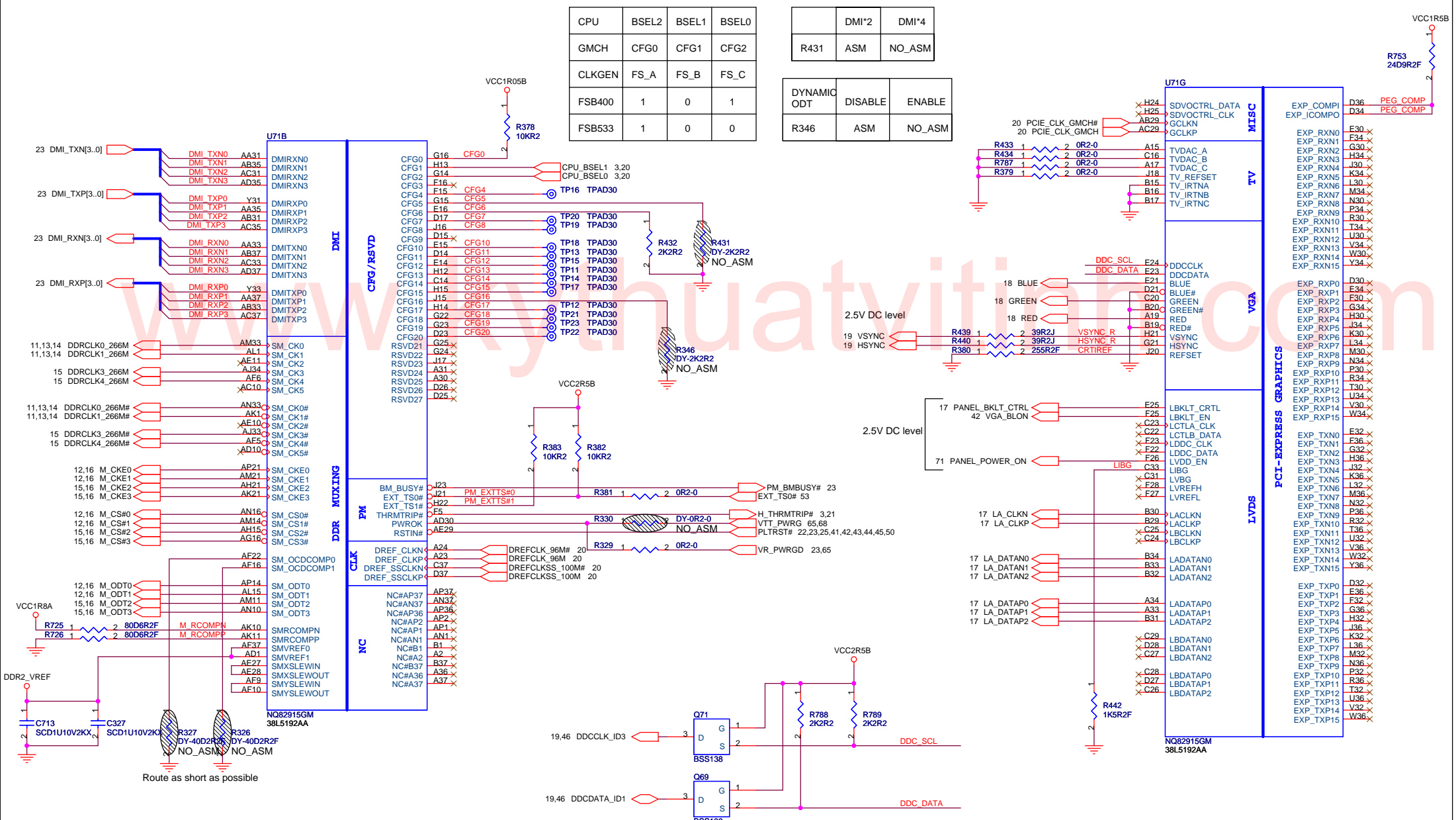
Route H_XSWING & H_YSWING
10 mil wide / 20 mil spacing

Place these parts
near to the pins

Route H_XRCOMP &
H_YRCOMP 10 mil wide /
20 mil spacing

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
GMCH (1/5) : HOST I/F			
Title	Document Number		Rev
Size A3	S Note-3		-1
Date: Saturday, February 26, 2005	Sheet 6	of	75

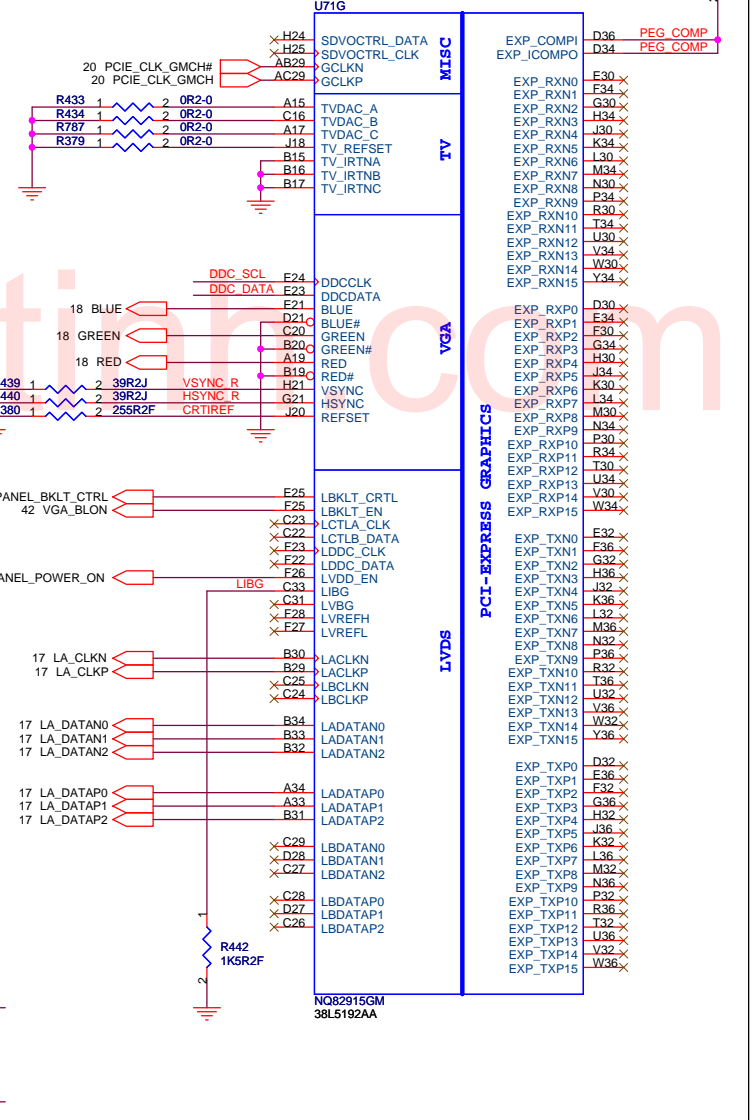
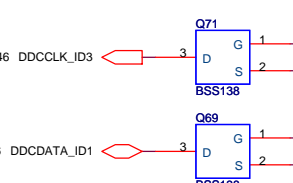
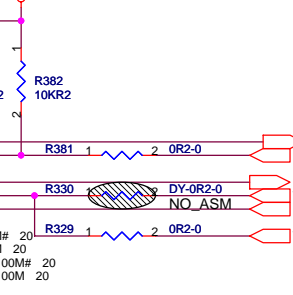
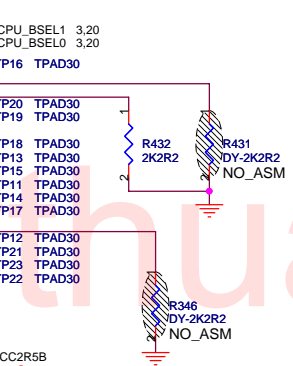




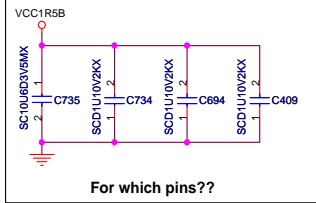
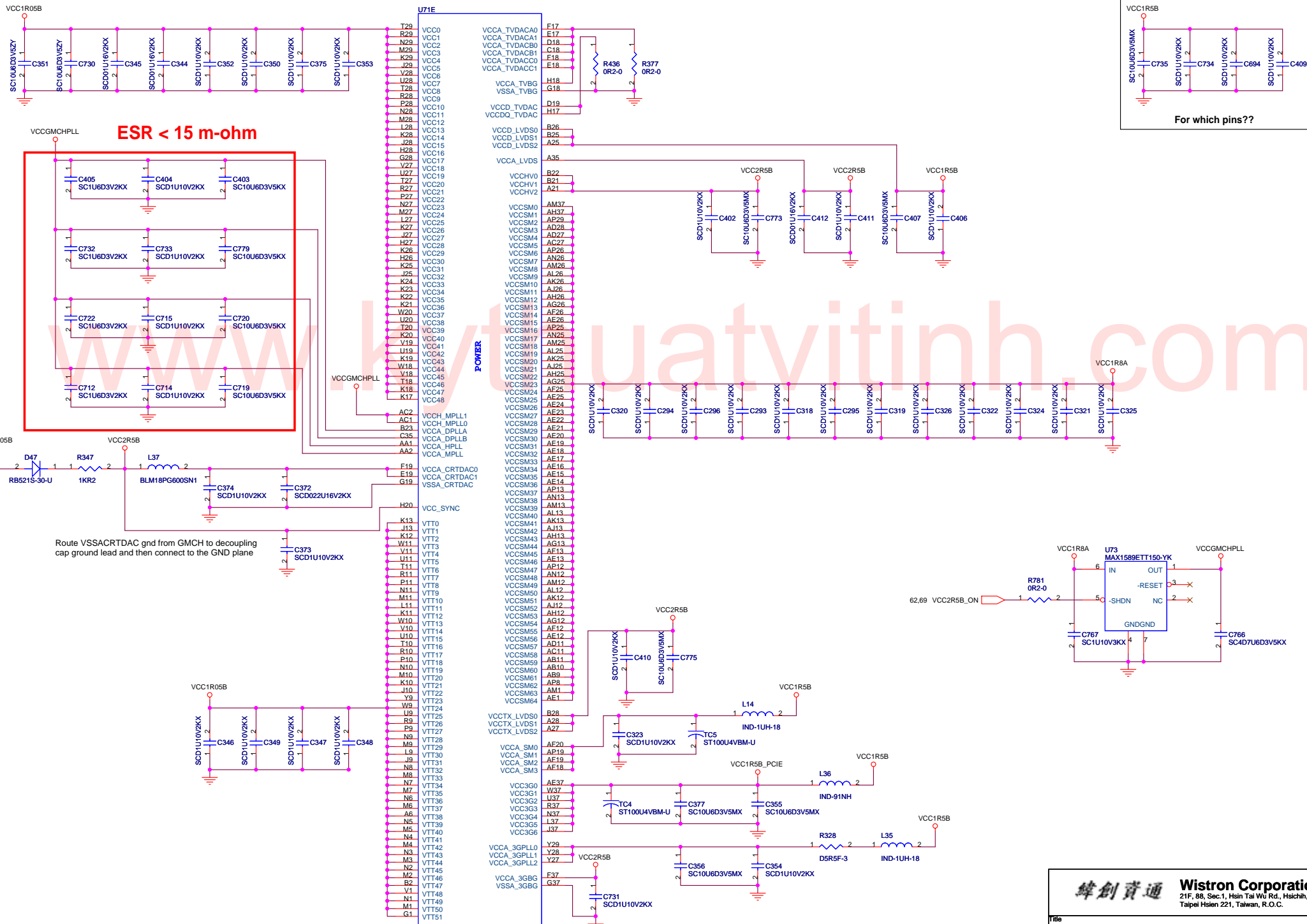
CPU	BSEL2	BSEL1	BSEL0
GMCH	CFG0	CFG1	CFG2
CLKGEN	FS_A	FS_B	FS_C
FSB400	1	0	1
FSB533	1	0	0

	DMI*2	DMI*4
R431	ASM	NO_ASM

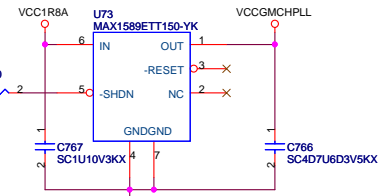
DYNAMIC ODT	DISABLE	ENABLE
R346	ASM	NO_ASM



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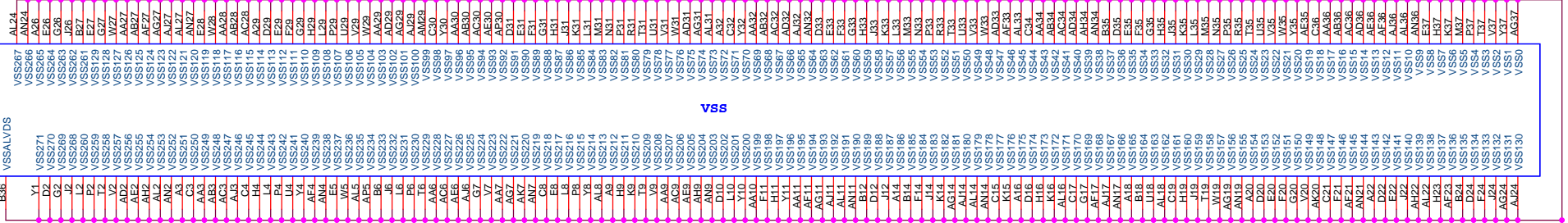


Route VSSACRTDAC gnd from GMCH to decoupling cap ground lead and then connect to the GND plane



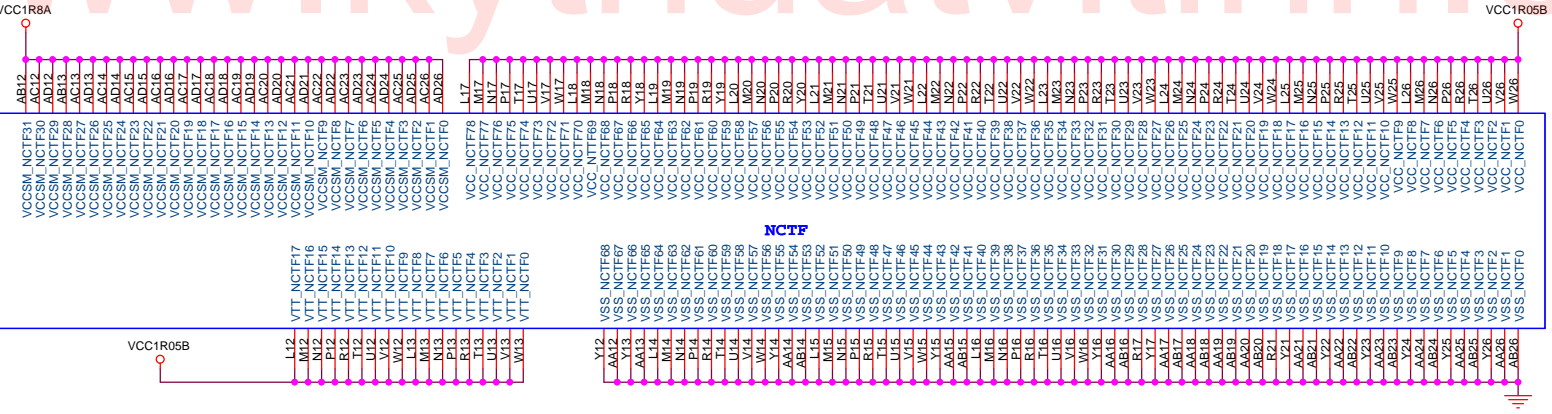
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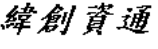
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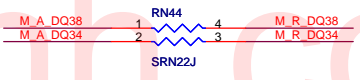
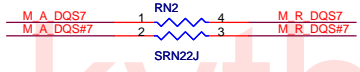
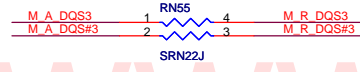
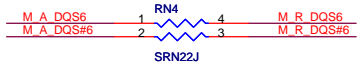
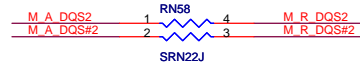
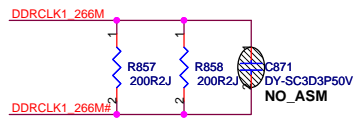
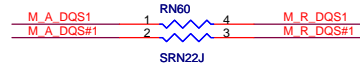
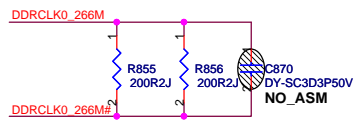
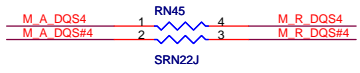
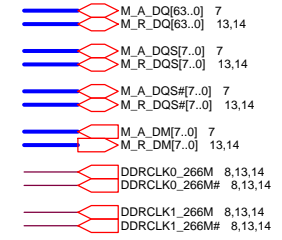


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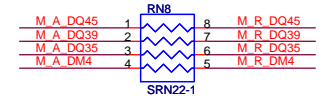
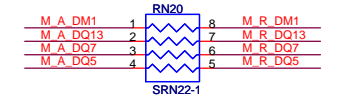
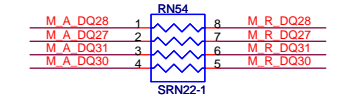
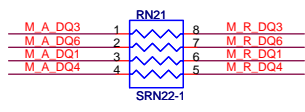
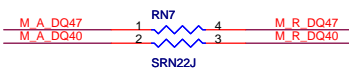
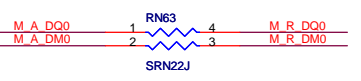
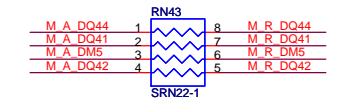
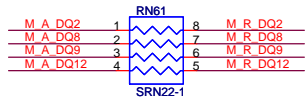
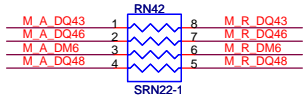
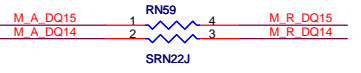
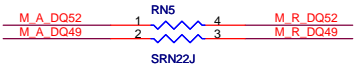
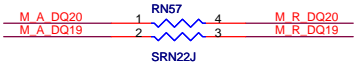
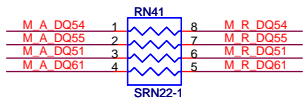
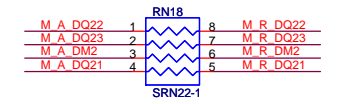
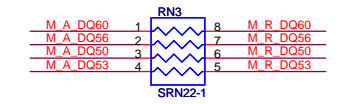
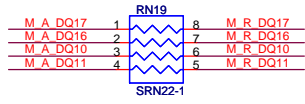
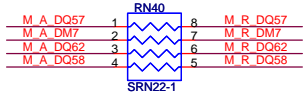
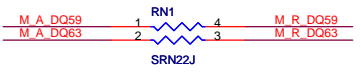
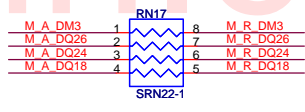
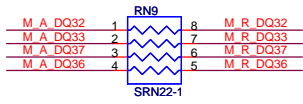
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GMCH (5/5) : GND		
Title	GMCH (5/5) : GND	
Size A3	Document Number	Rev -1
S Note-3		
Date: Saturday, February 26, 2005	Sheet 10	of 75







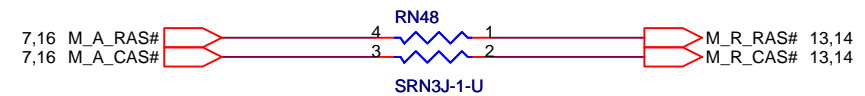
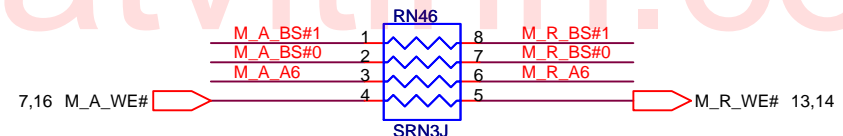
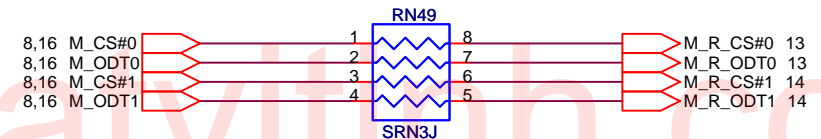
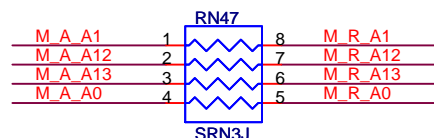
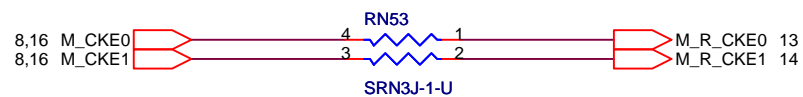
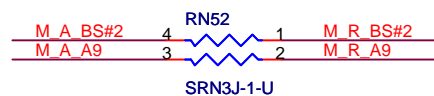
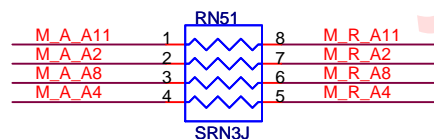
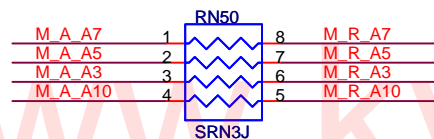
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Title: MEMORY RESISTORS (1/2)
 Size: A3 Document Number: S Note-3 Rev: -1
 Date: Saturday, February 26, 2005 Sheet: 11 of 75

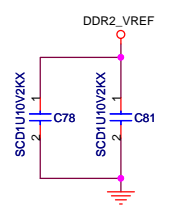
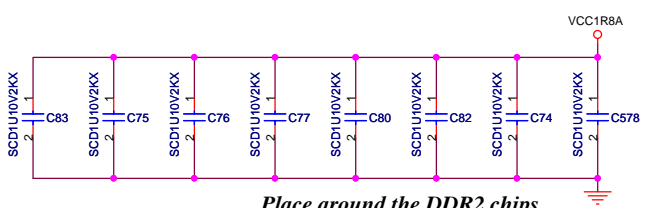
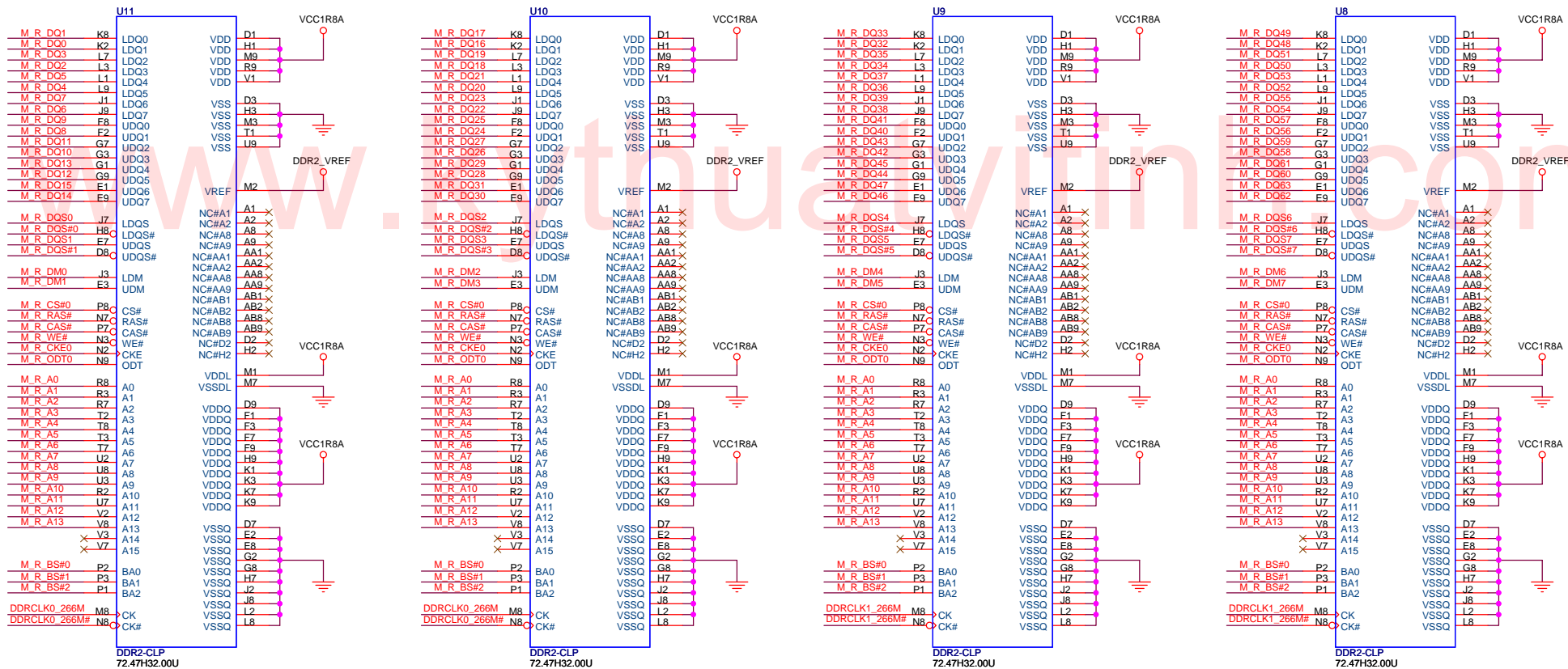
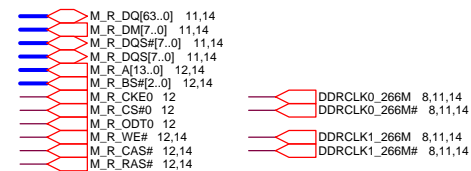
 M_A_A[13..0] 7,16
 M_R_A[13..0] 13,14
 M_A_BS#[2..0] 7,16
 M_R_BS#[2..0] 13,14



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Title		
MEMORY RESISTORS (1/2)		
Size	Document Number	Rev
A4	S Note-3	-1
Date:	Saturday, February 26, 2005	Sheet 12 of 75

On-board DDR2 Memory



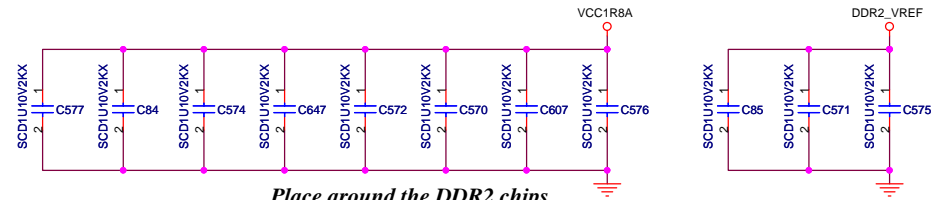
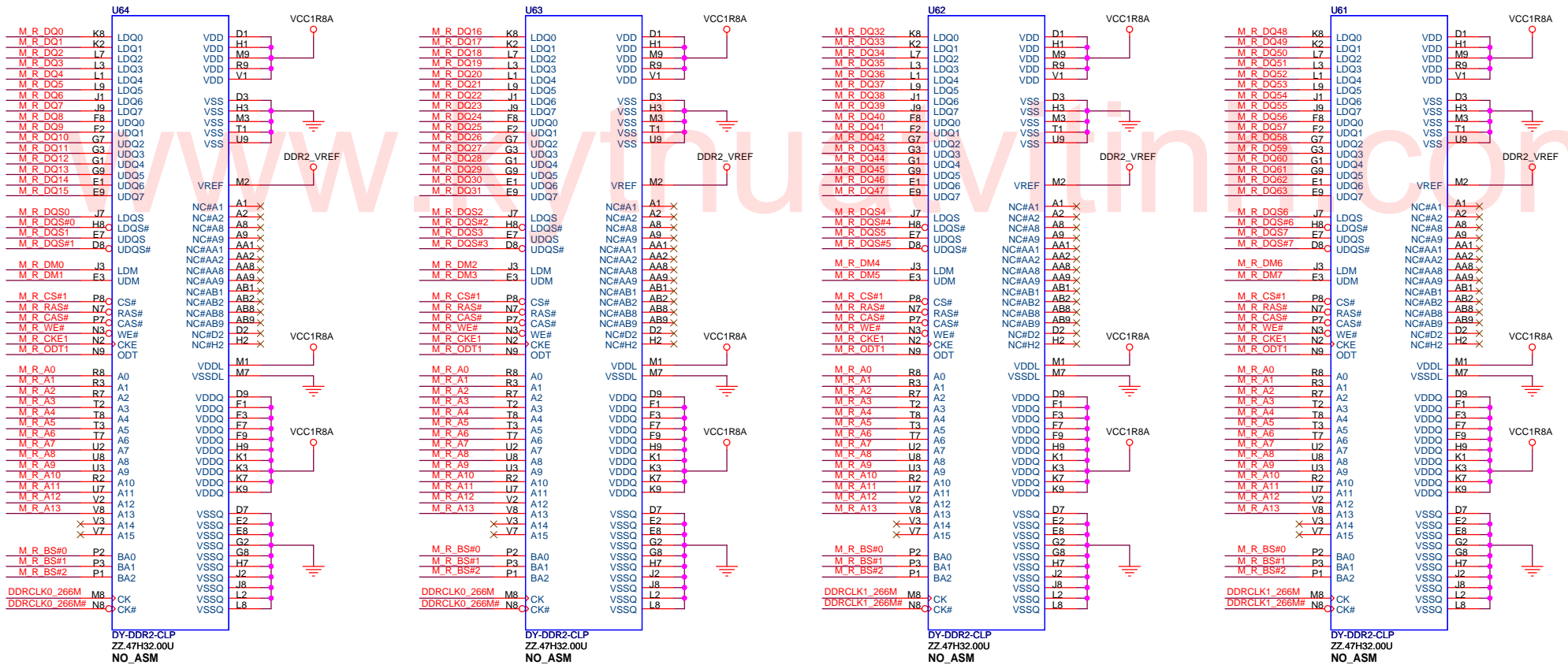
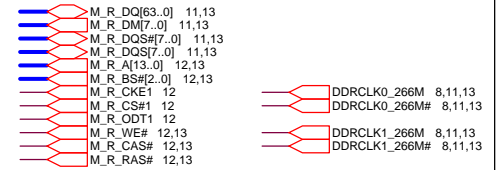
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **BASE MEMORY BANK0**

Size: A3 | Document Number: | Rev: -1

Date: Saturday, February 26, 2005 | Sheet: 13 of 75

On-board DDR2 Memory



Place around the DDR2 chips

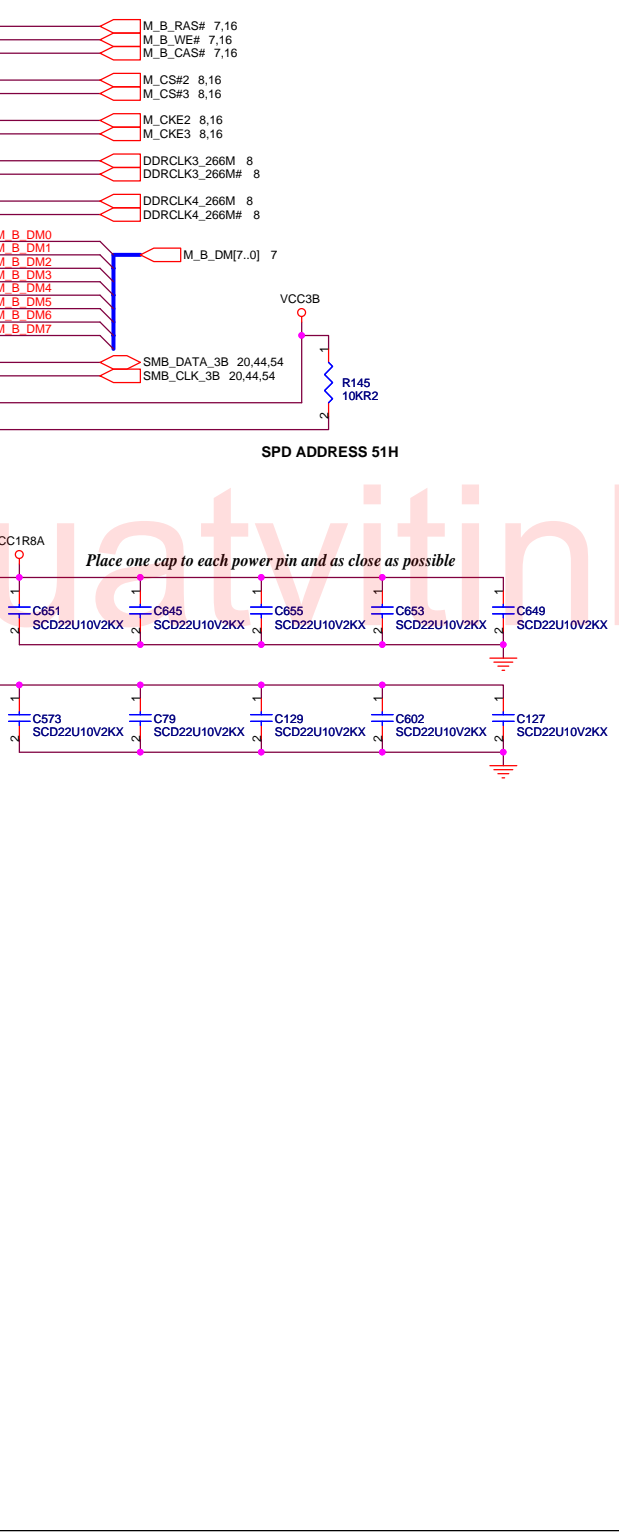
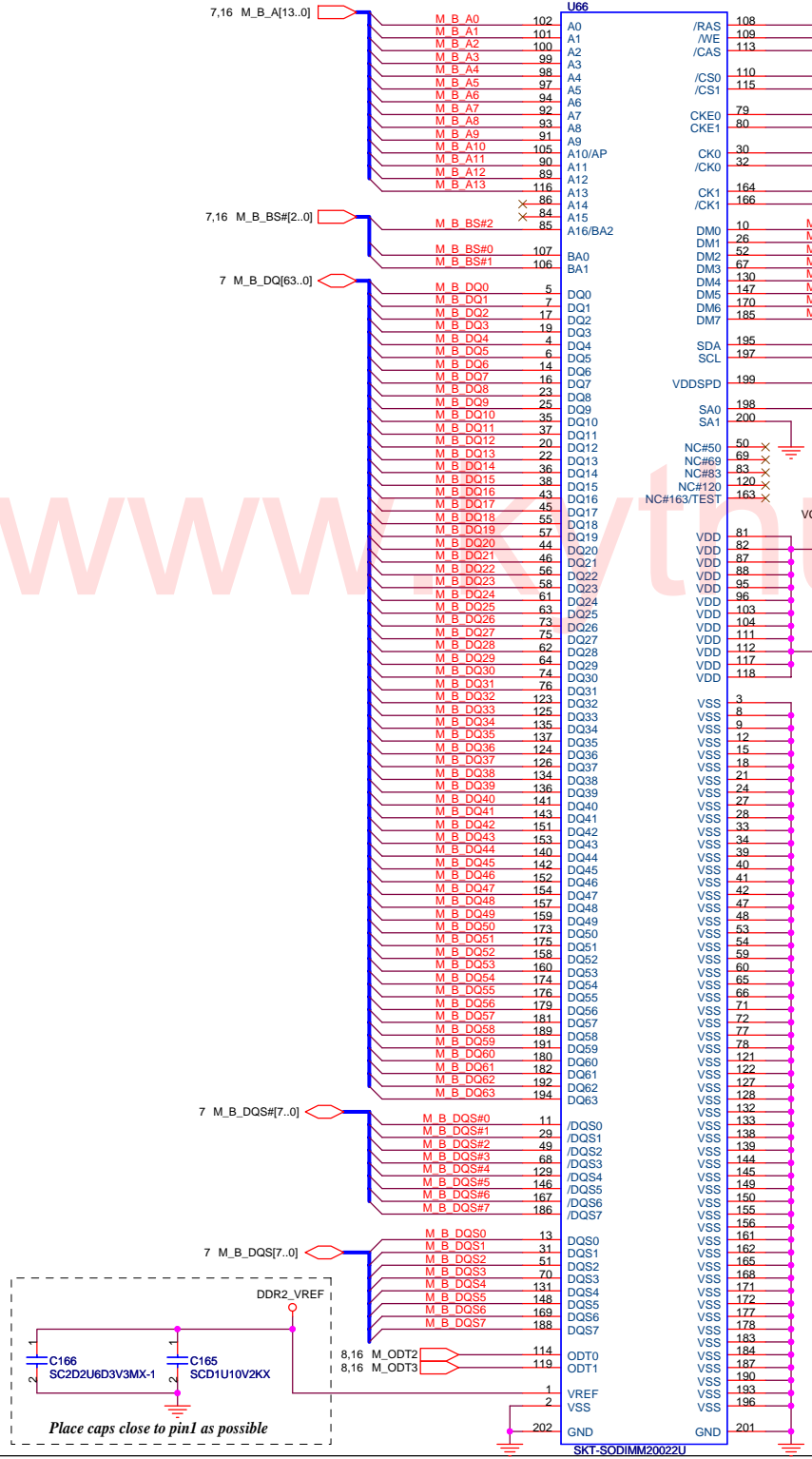
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **BASE MEMORY BANK1**

Size: A3 Document Number: **S Note-3** Rev: -1

Date: Saturday, February 26, 2005 Sheet 14 of 75

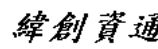
www.kyocera.com.tw



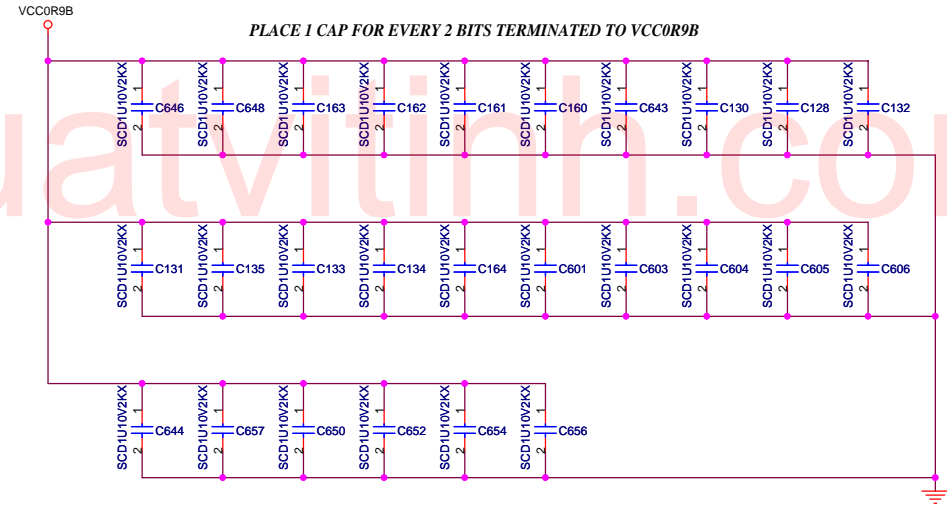
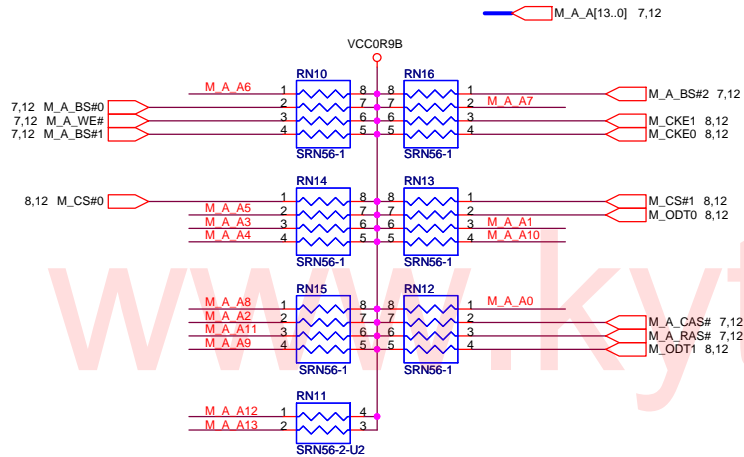
SPD ADDRESS 51H

Place one cap to each power pin and as close as possible

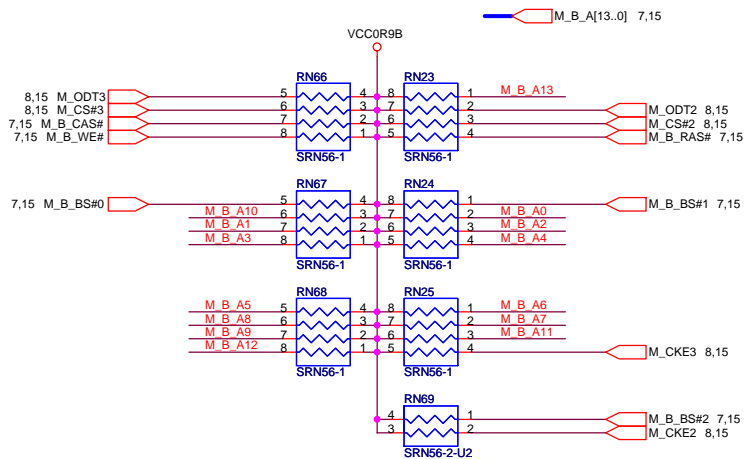
Place caps close to pin1 as possible

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
DDR-2 SO-DIMM		
Title	S Note-3	
Size A3	Document Number	Rev -1
Date: Saturday, February 26, 2005	Sheet 15	of 75

CHANNEL A PARALLEL TERMINATION



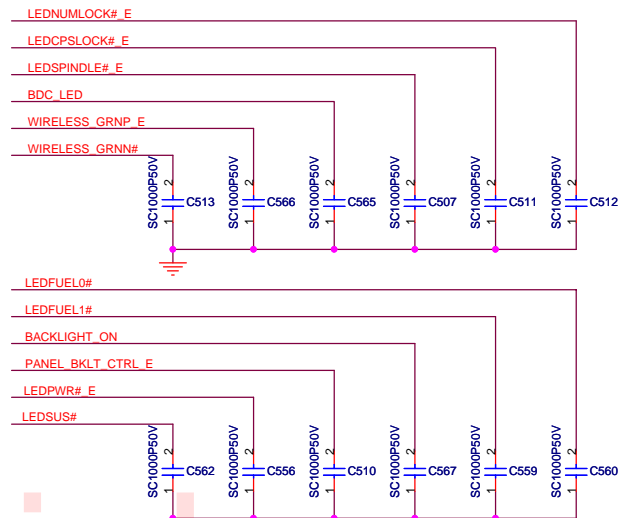
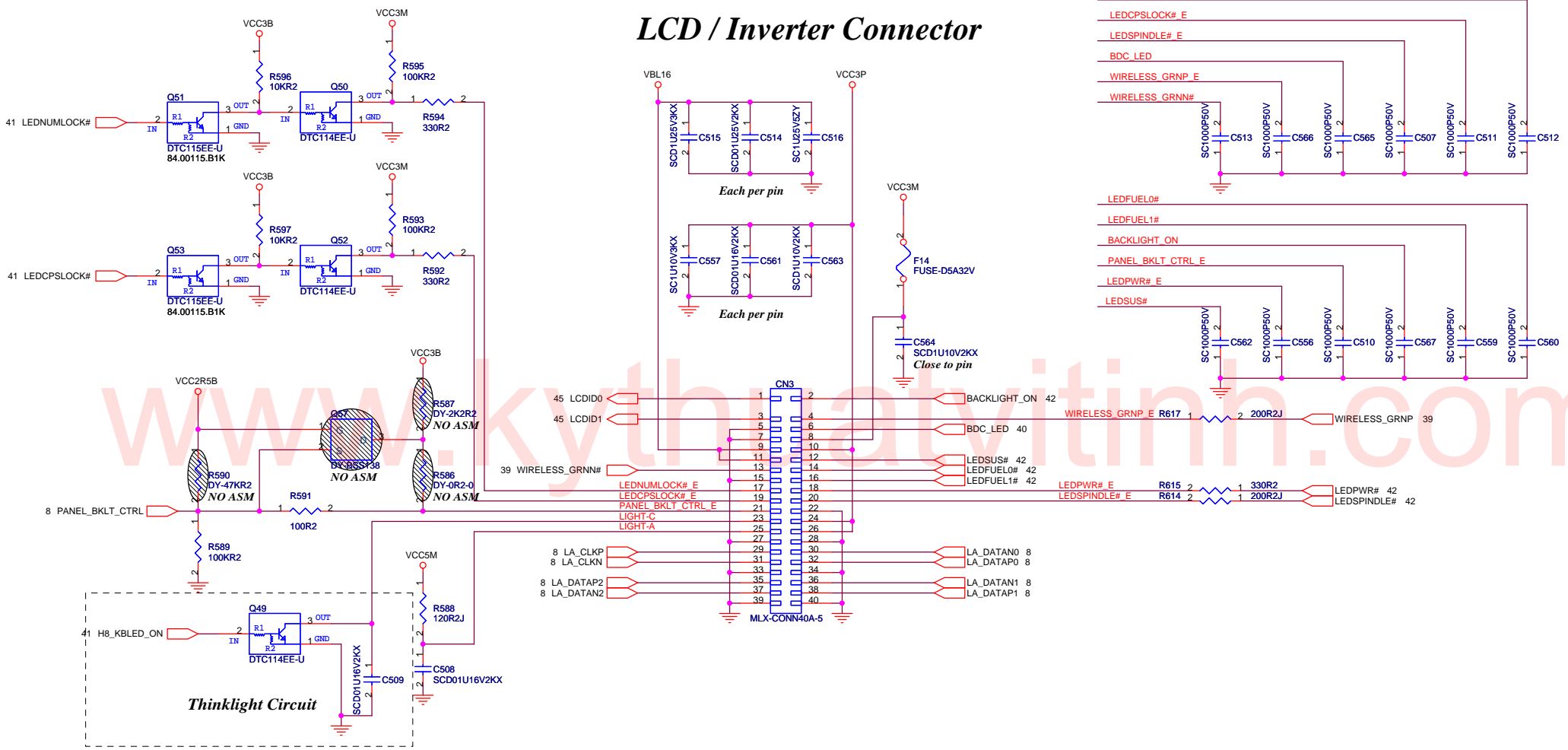
CHANNEL B PARALLEL TERMINATION



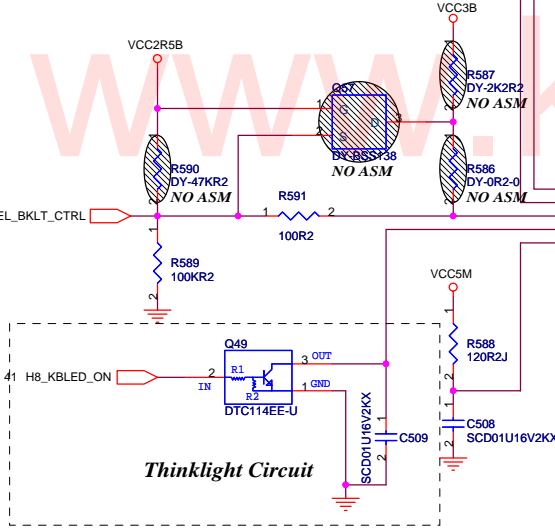
緯創資通 Wistron Corporation
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Taipei Hsien 221, Taiwan, R.O.C.

Title			
Size			Rev
A3	Document Number	-1	
S Note-3			
Date: Saturday, February 26, 2005	Sheet	16	of 75

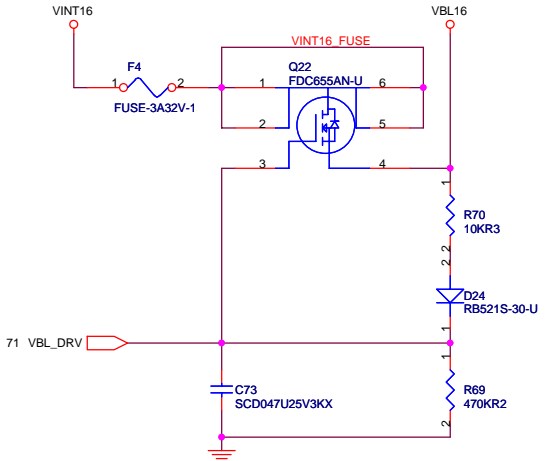
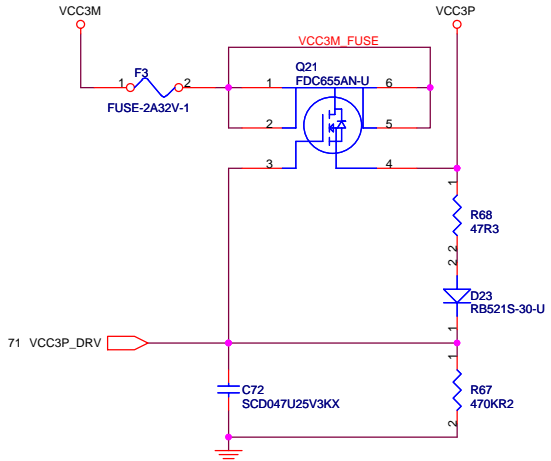
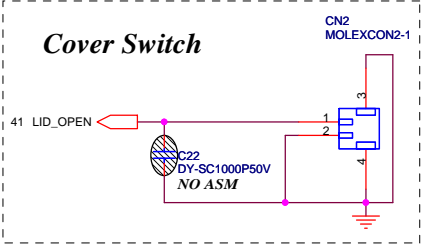
LCD / Inverter Connector



Thinklight Circuit

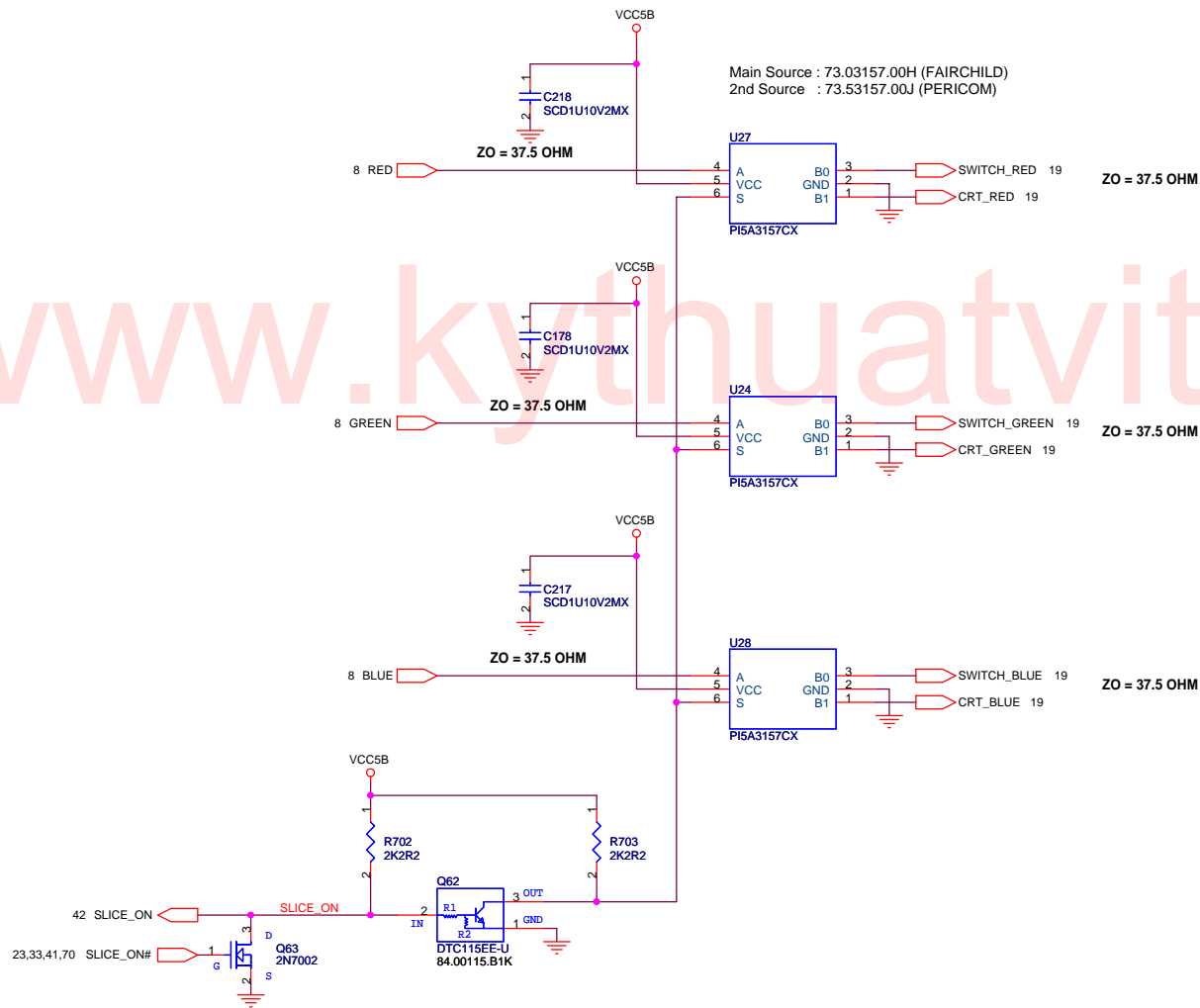


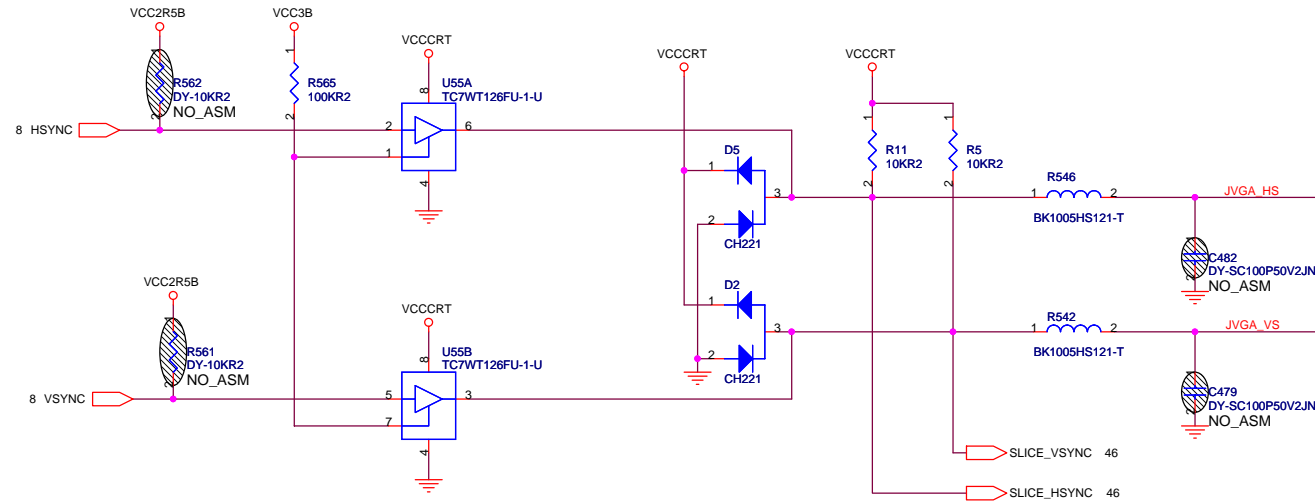
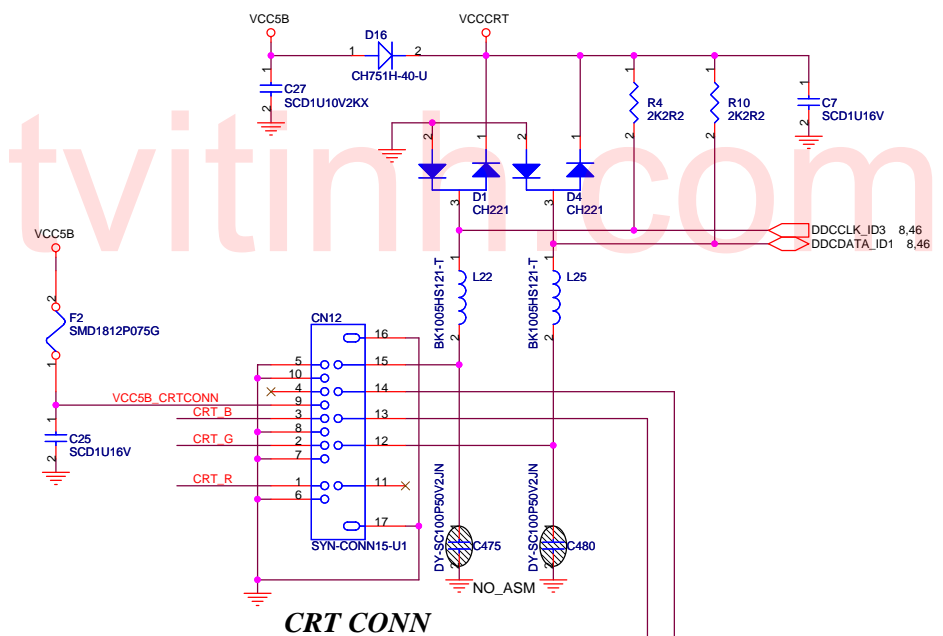
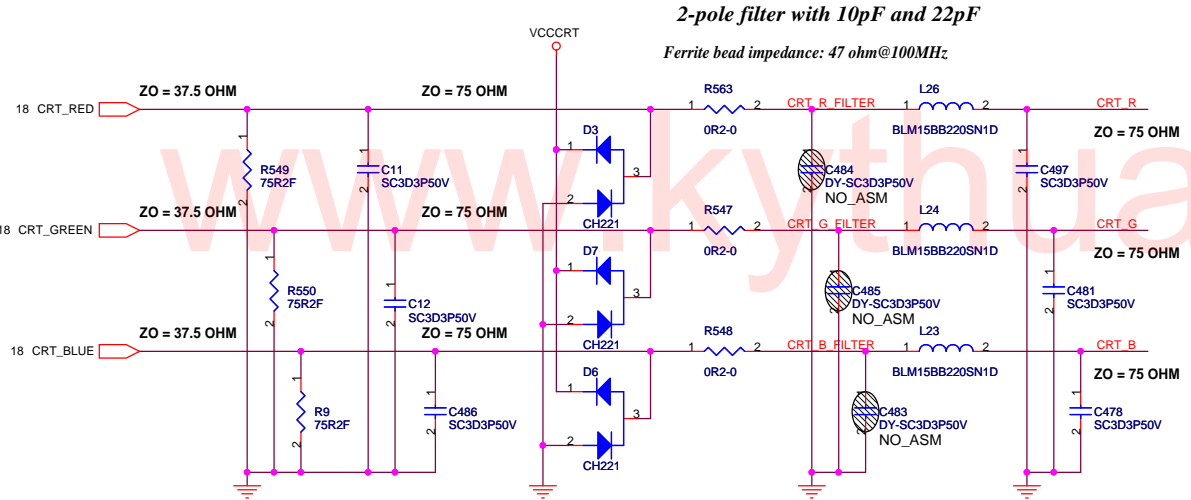
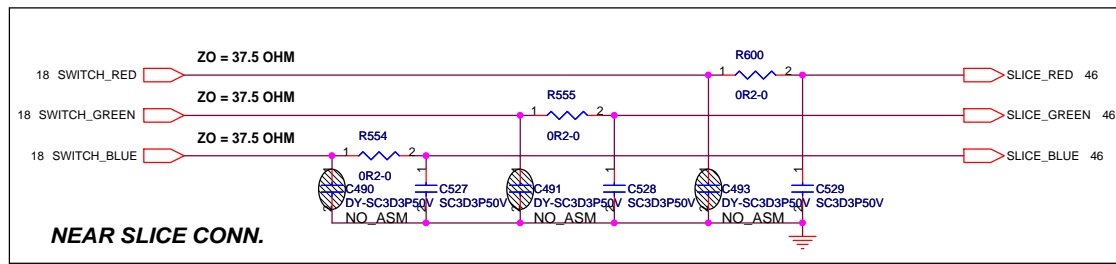
Cover Switch



緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
LCD CONNECTOR			
Title	Document Number		Rev
Size A3	S Note-3		-1
Date: Saturday, February 26, 2005	Sheet	17	of 75

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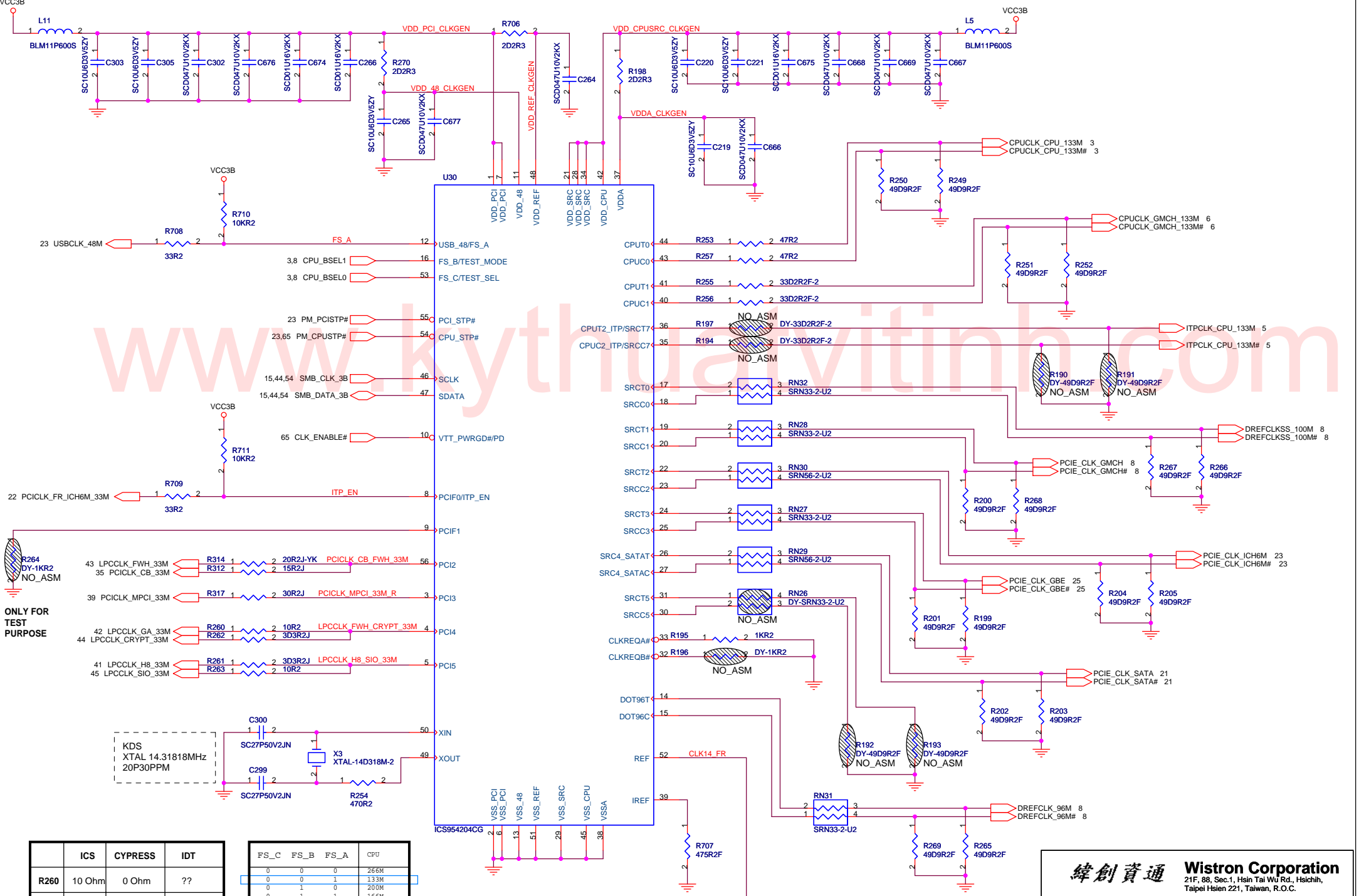




緯創資通 **Wistron Corporation**
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Title: **EXT CRT CONNECTOR**

Size A3	Document Number	Rev -1
S Note-3		
Date: Saturday, February 26, 2005	Sheet 19	of 75



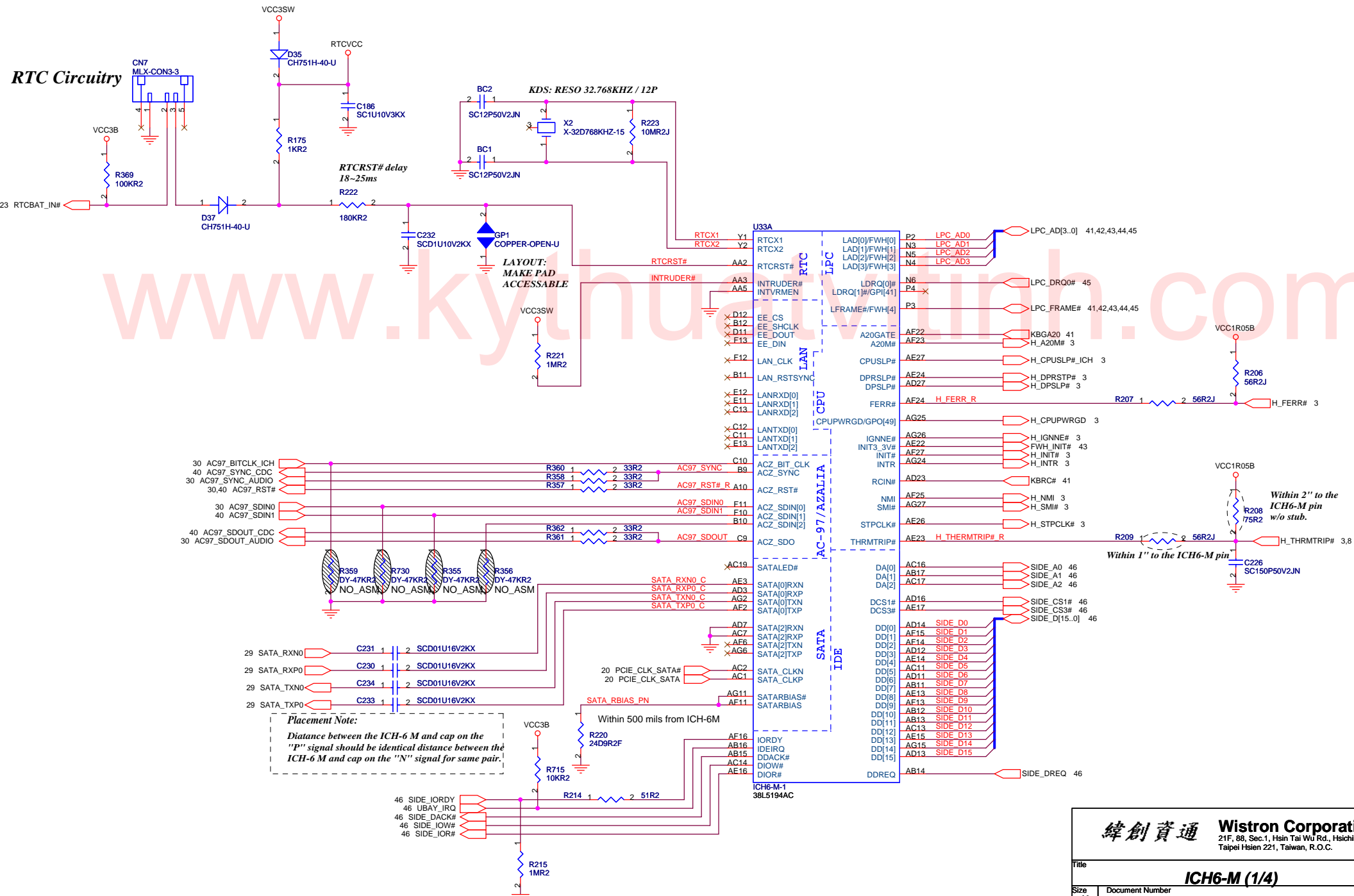
ONLY FOR TEST PURPOSE

	ICS	CYPRESS	IDT
R260	10 Ohm	0 Ohm	??
R314	20 Ohm	5.6 Ohm	??

FS_C	FS_B	FS_A	CPU
0	0	0	266M
0	0	1	133M
0	1	0	200M
0	1	1	166M
1	0	0	333M
1	0	1	100M
1	1	0	400M
1	1	1	Reserved

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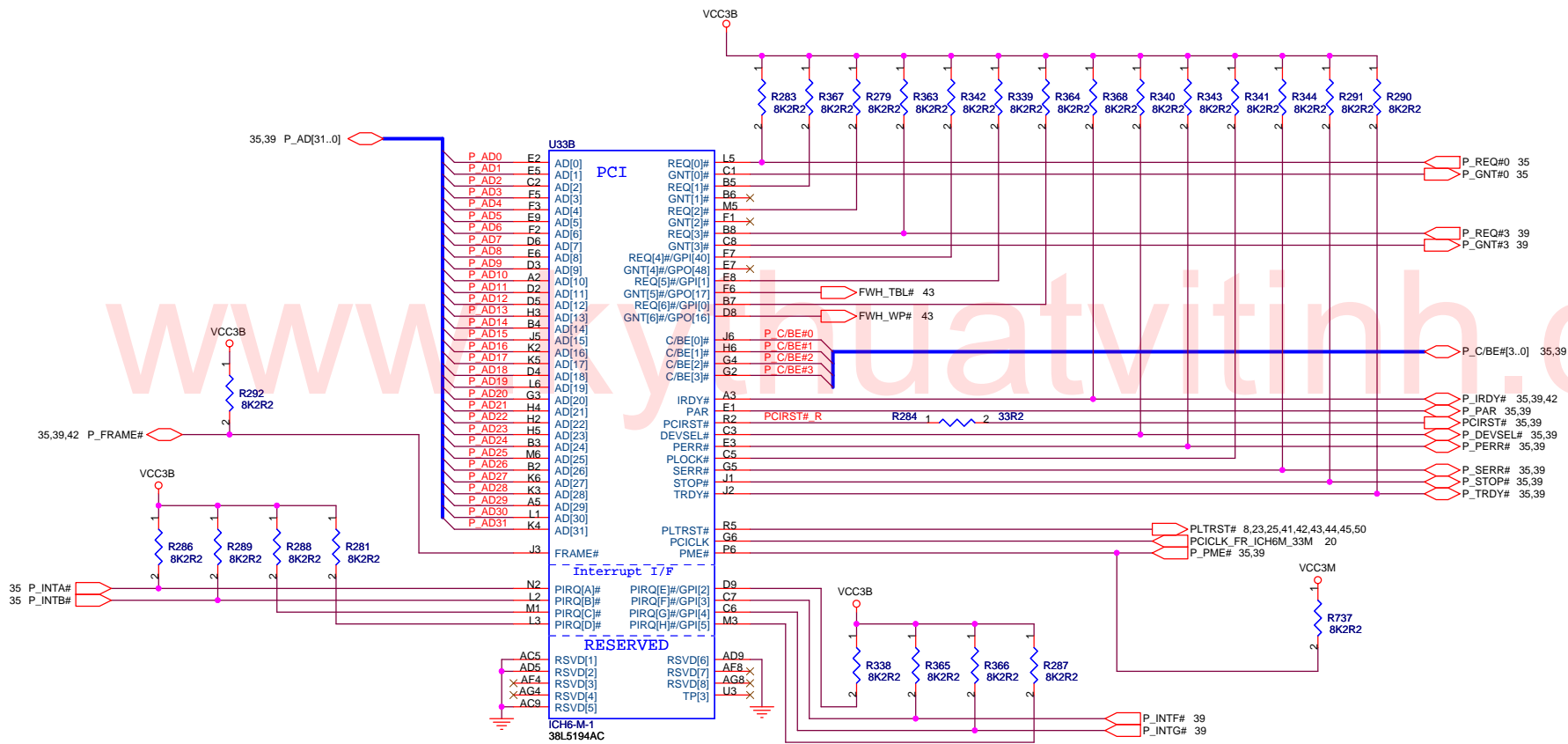
RTC Circuitry



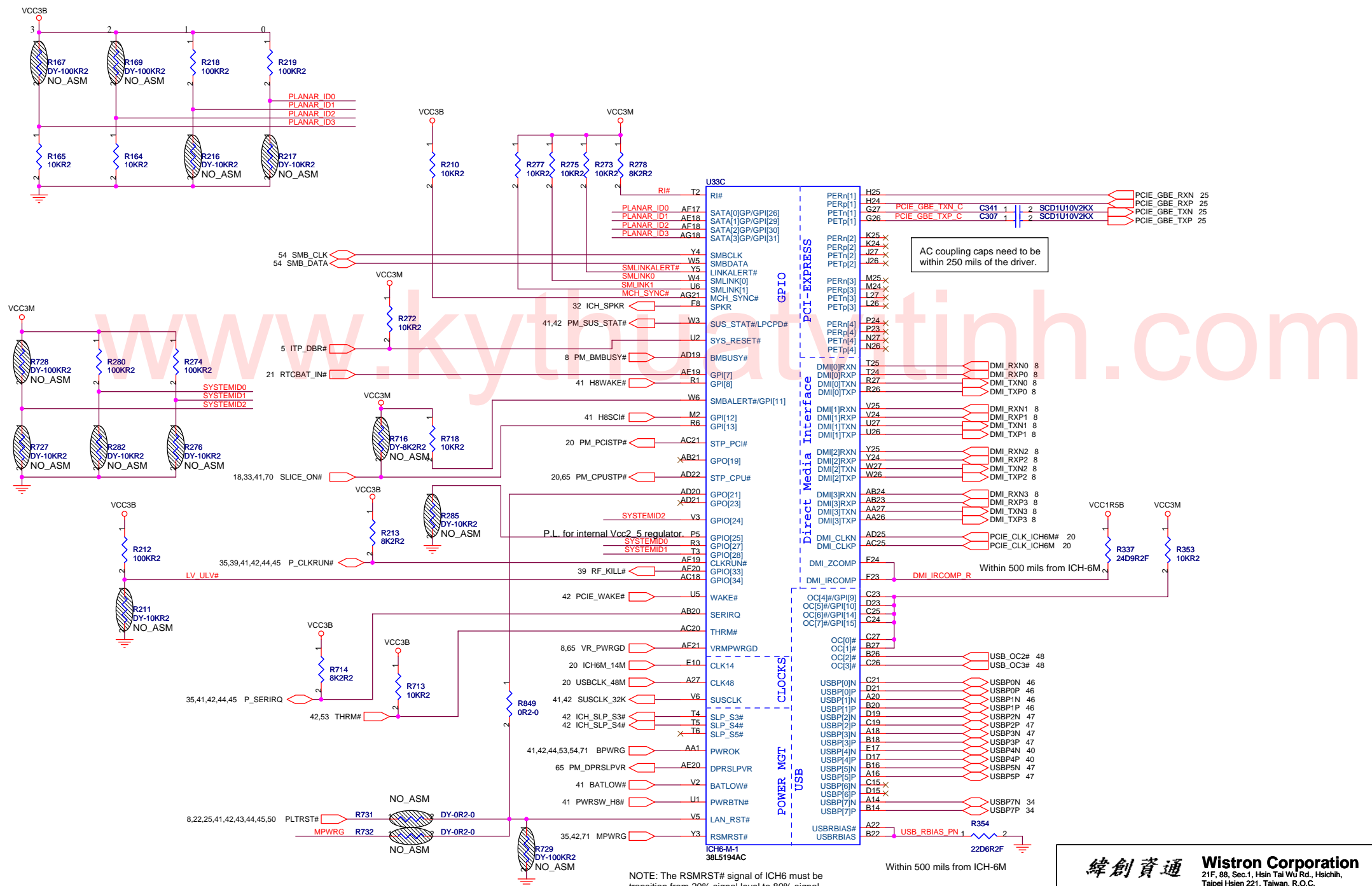
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Placement Note:
 Distance between the ICH-6 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.

緯創資通 Wistron Corporation		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
ICH6-M (1/4)			
Title	Document Number	Rev	
	S Note-3	-1	
Date: Saturday, February 26, 2005	Sheet	21	of 75



AC5: SATA1RXN
 AD5: SATA1RXP
 AC9: SATA3RXN
 AD5: SATA3RXP



NOTE: The RSMRST# signal of ICH6 must be transition from 20% signal level to 80% signal level and vice-versa in 50us or less.

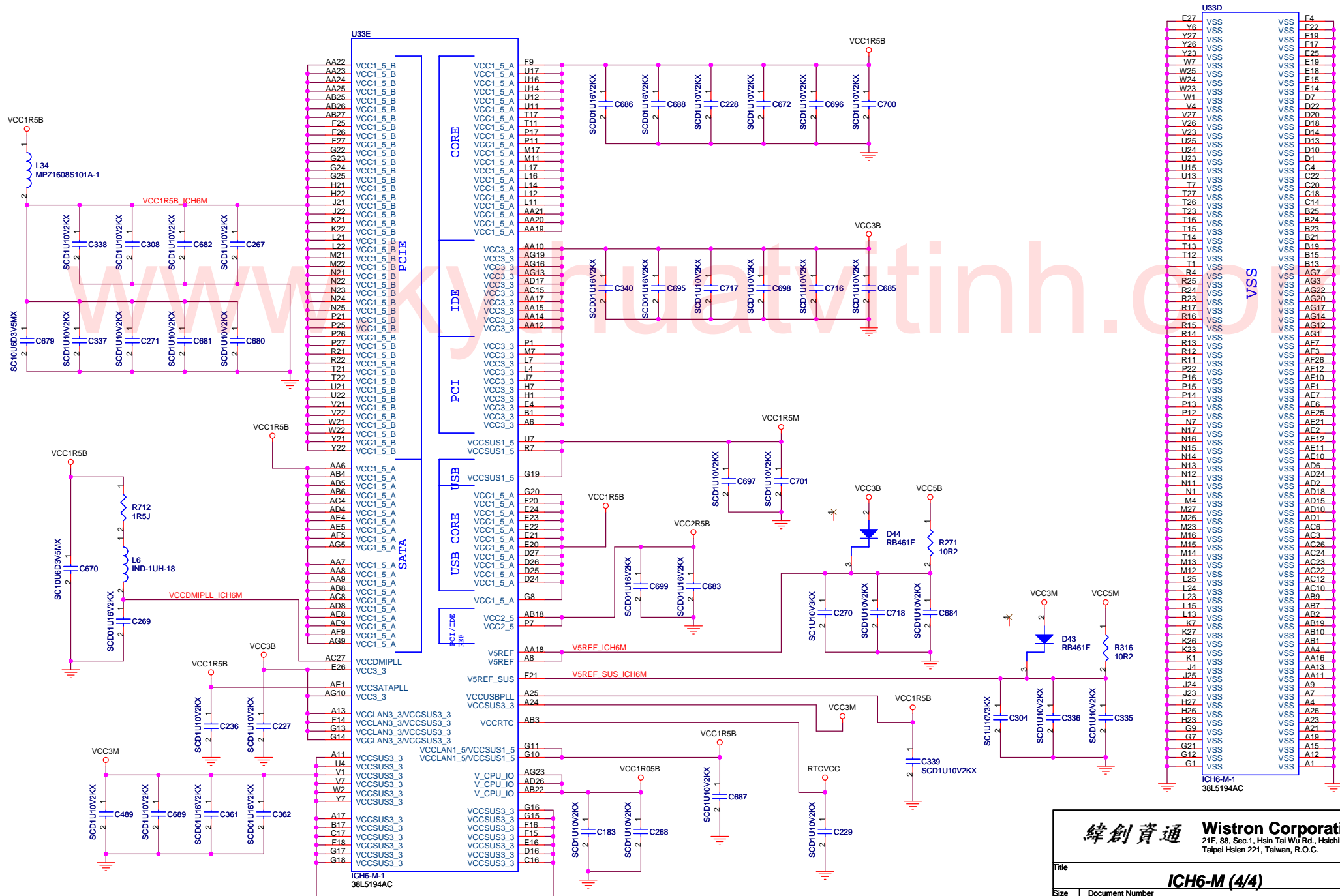
Within 500 mils from ICH-6M

AC coupling caps need to be within 250 mils of the driver.

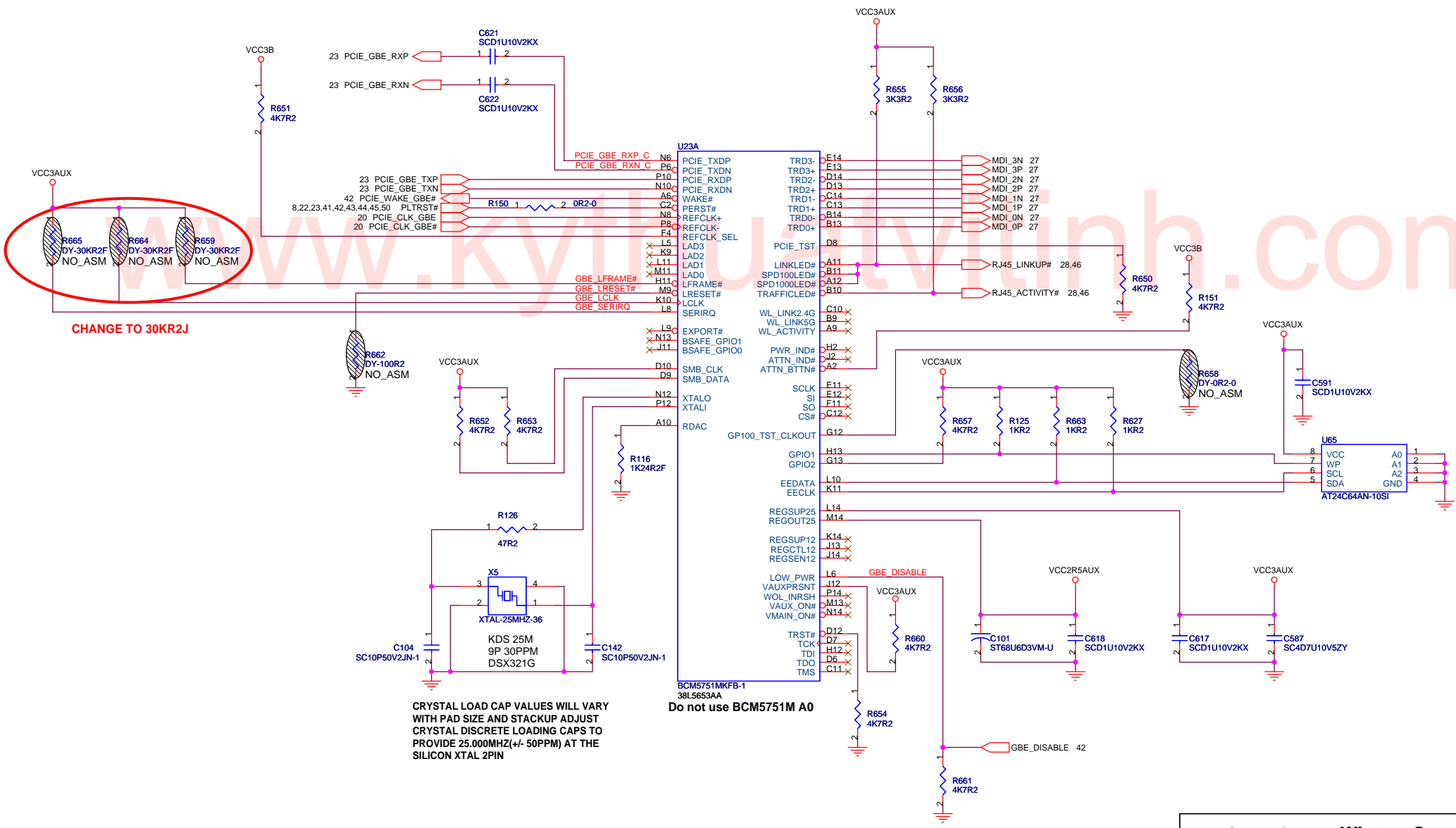
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **ICH6-M (3/4)**

Size A3	Document Number	Rev
	S Note-3	-1
Date: Saturday, February 26, 2005	Sheet 23 of	75



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ICH6-M (4/4)			
Title	Document Number		Rev
Size	S Note-3		-1
A3			
Date:	Saturday, February 26, 2005	Sheet	24 of 75



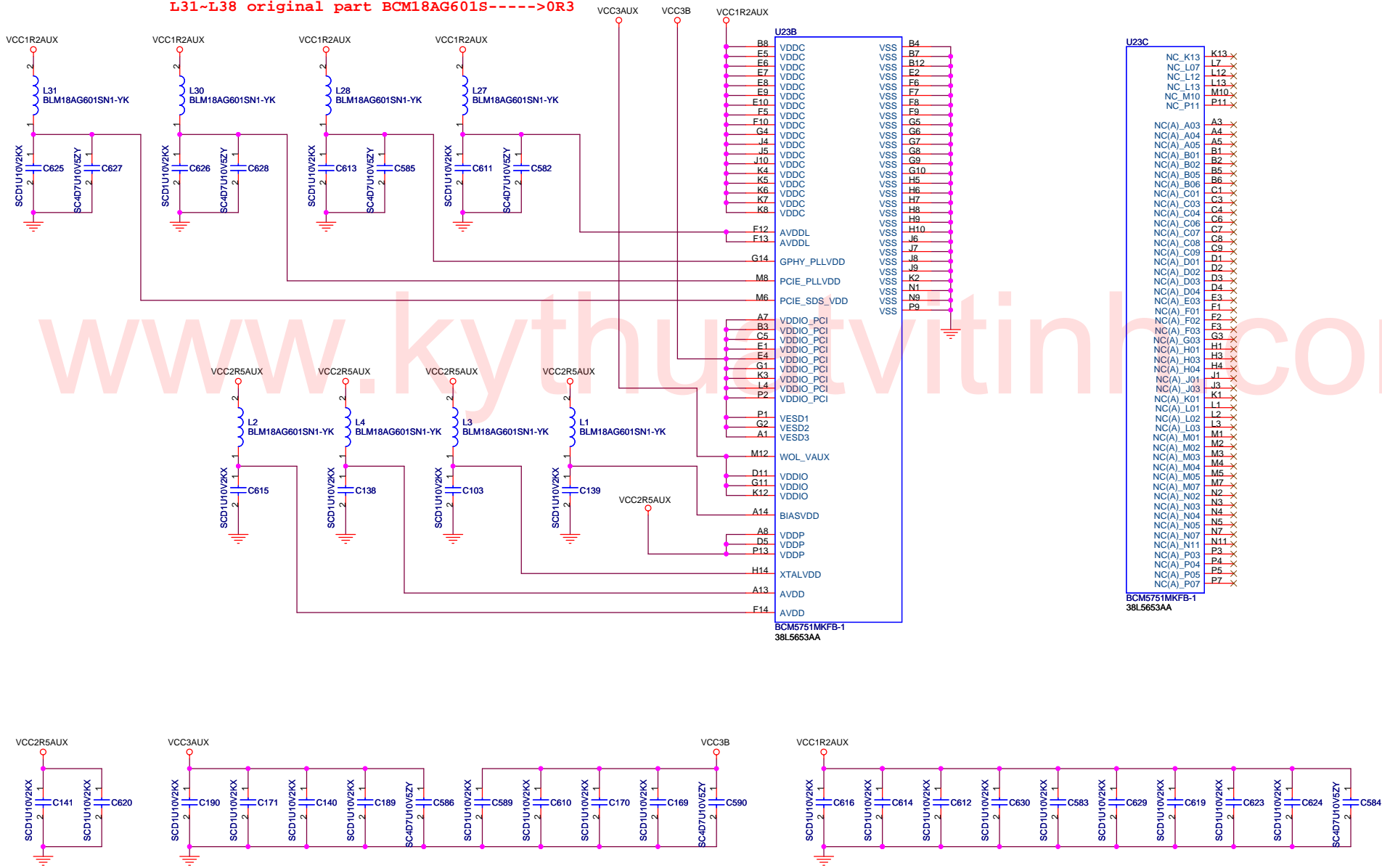
CHANGE TO 30KR2J

CRYSTAL LOAD CAP VALUES WILL VARY WITH PAD SIZE AND STACKUP ADJUST CRYSTAL DISCRETE LOADING CAPS TO PROVIDE 25.000MHZ(+/- 50PPM) AT THE SILICON XTAL 2PIN

Do not use BCM5751M A0

<p>緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</p>	
<p>Title: GBE BCM5751 (1/2)</p>	
Size: A3	Document Number: S Note-3
Date: Saturday, February 26, 2005	Sheet 25 of 75
Rev: -1	

L31~L38 original part BCM18AG601S----->OR3



BCM5751MKFB-1
38L5653AA

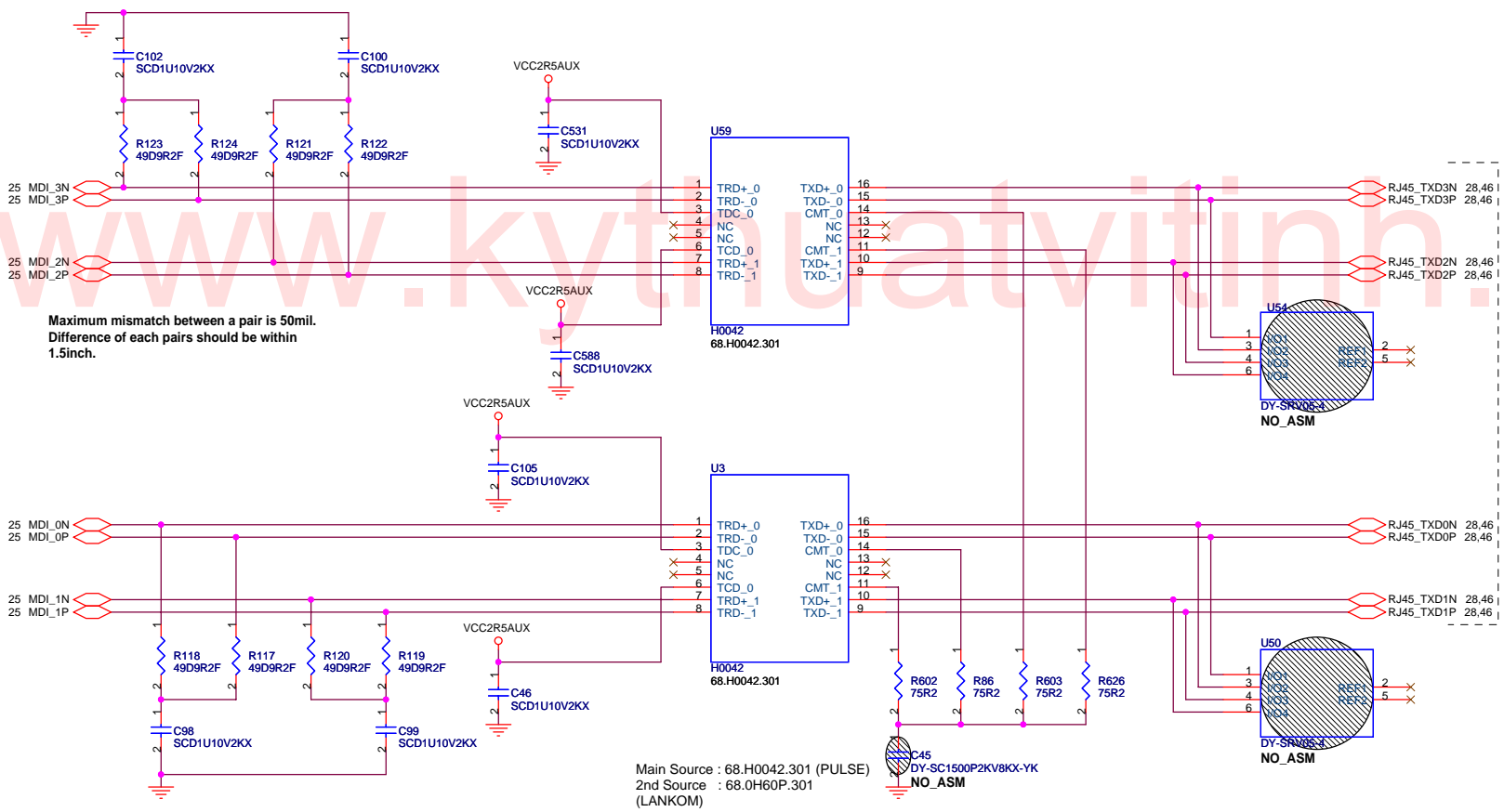
BCM5751MKFB-1
38L5653AA

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Title: **GBE BCM5751M (2/2) : POWER**

Size: A3 Document Number: S Note-3 Rev: -1

Date: Saturday, February 26, 2005 Sheet: 26 of 75



Maximum mismatch between a pair is 50mil.
Difference of each pairs should be within 1.5inch.

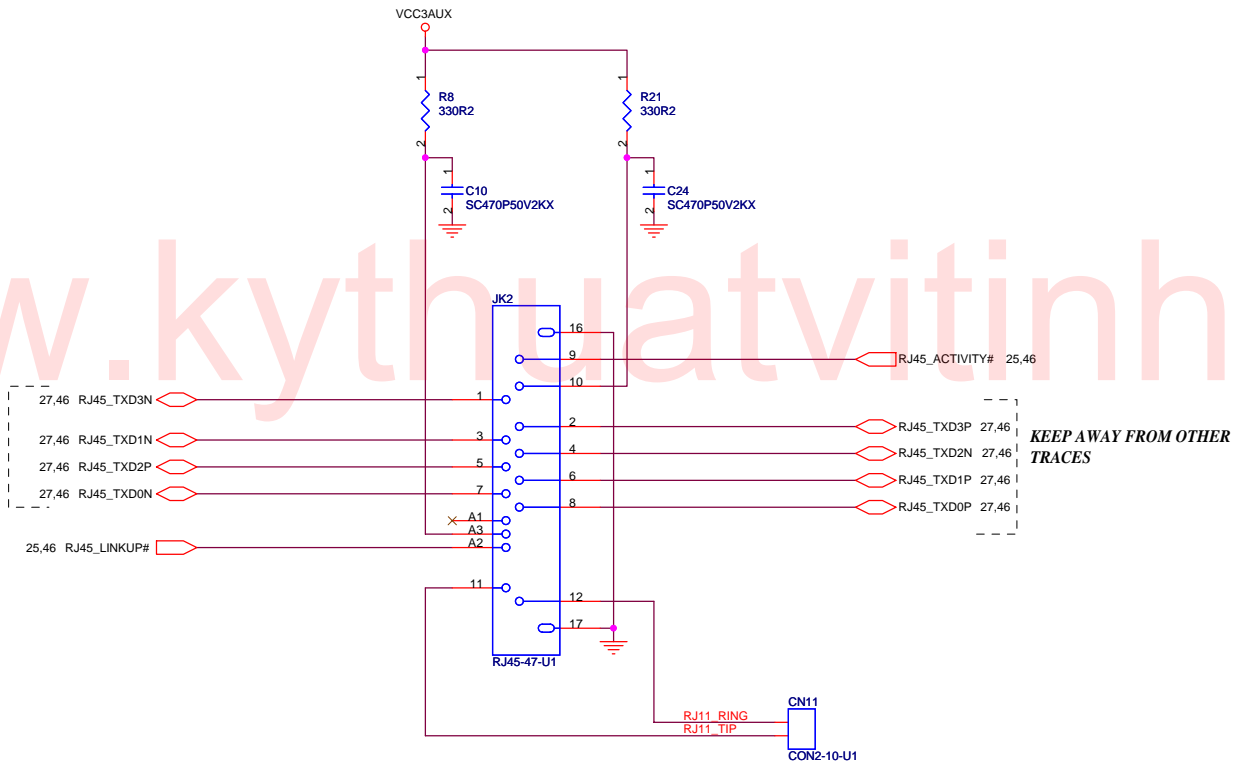
Be careful wiring.
- Need more 40mil spacing from other signals in case of routing on top/bottom(serface) side.
- Need more 20mil spacing from other signals in case of routing on internal layers.

Maximum mismatch between a pair is 50mil.
Difference of each pairs should be within 1.5inch.

Main Source : 68.H0042.301 (PULSE)
2nd Source : 68.0H60P.301 (LANKOM)

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KEEP AWAY FROM OTHER TRACES



KEEP AWAY FROM OTHER TRACES

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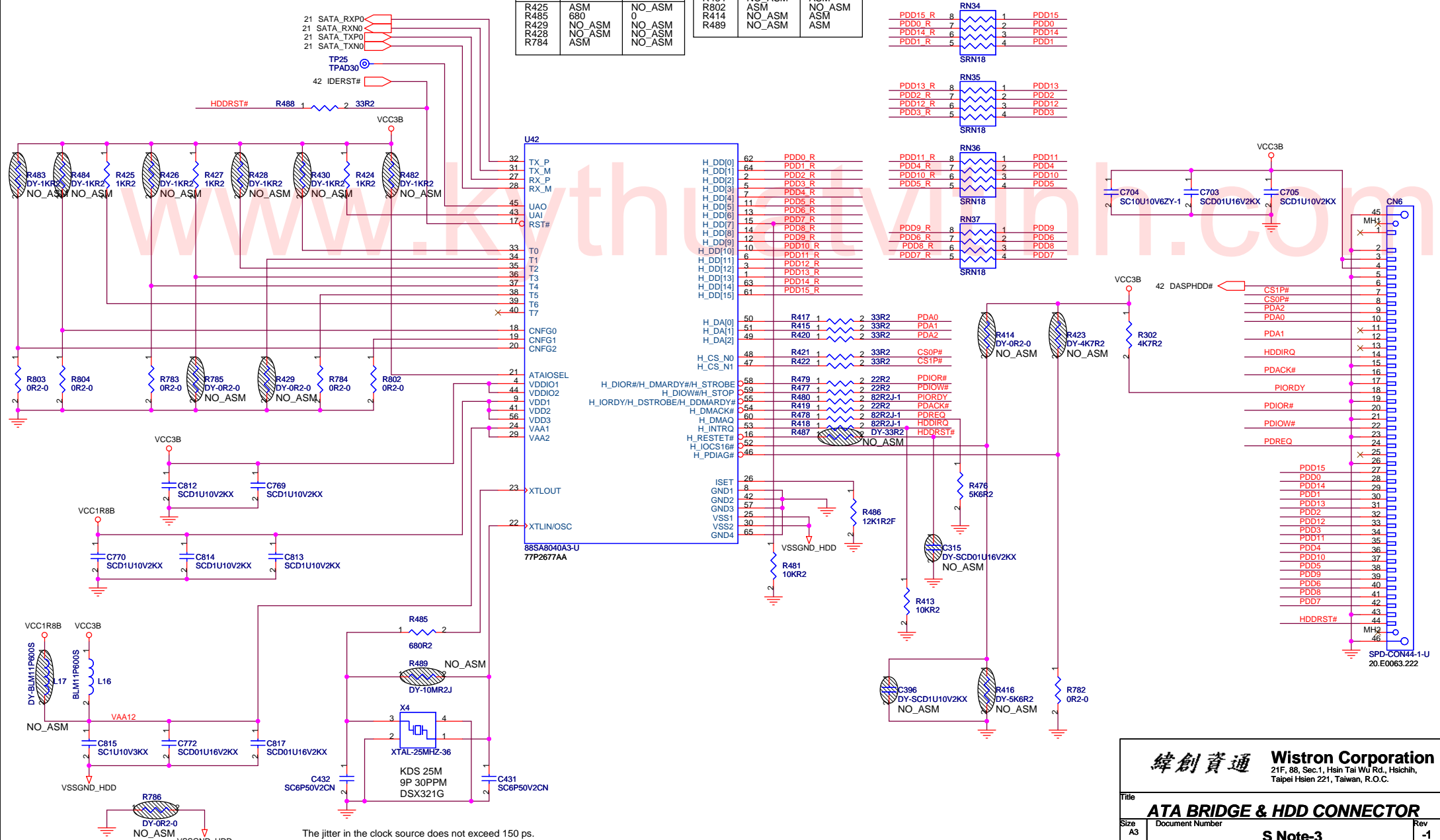
Title			RJ11/RJ45 CONN		
Size	Document Number	Rev			
A3		-1	S Note-3		
Date:	Saturday, February 26, 2005	Sheet	28	of	75

S-ATA TABLE 1/2

U42	88SA8040	Sil3811
C396 C431 C432	NO_ASM 10PF 10PF	ASM 10PF 10PF
L17 L16	NO_ASM ASM	ASM NO_ASM
R786 R426 R783 R427 R785	NO_ASM NO_ASM ASM ASM NO_ASM	ASM NO_ASM NO_ASM NO_ASM NO_ASM
R425 R485 R429 R428 R784	ASM 680 NO_ASM NO_ASM ASM	NO_ASM 0 NO_ASM NO_ASM NO_ASM

S-ATA TABLE 2/2

U42	88SA8040	Sil3811
R430 R424 R482 R486 R416	NO_ASM ASM NO_ASM 12.1K NO_ASM	NO_ASM NO_ASM ASM 1K NO_ASM
R423 R782 R803 R804 R483	NO_ASM ASM ASM ASM NO_ASM	NO_ASM ASM NO_ASM NO_ASM ASM
R484 R802 R414 R489	NO_ASM ASM NO_ASM NO_ASM	ASM NO_ASM ASM ASM



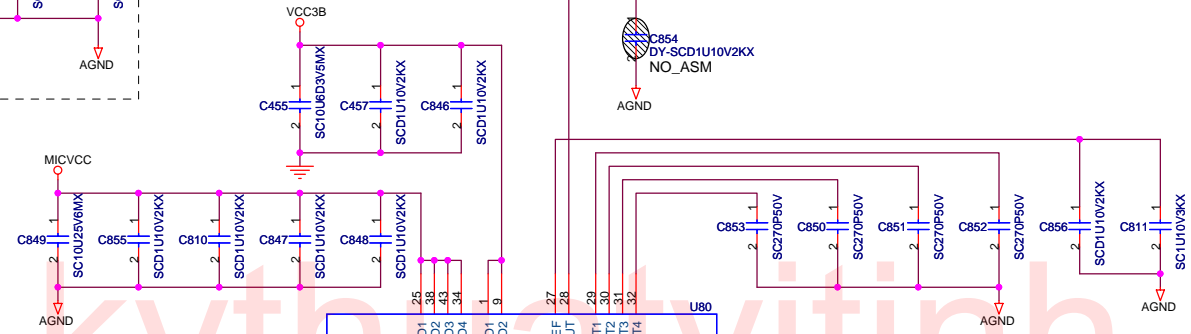
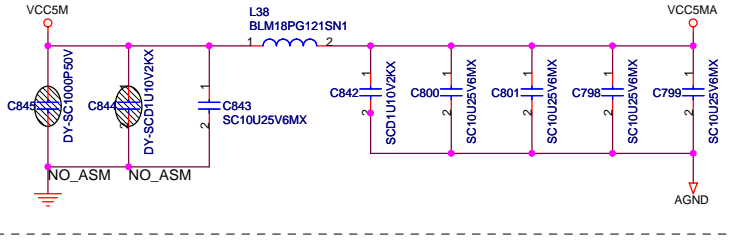
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title: **ATA BRIDGE & HDD CONNECTOR**

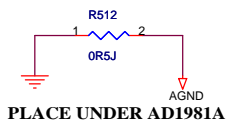
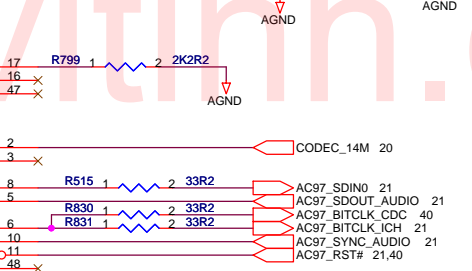
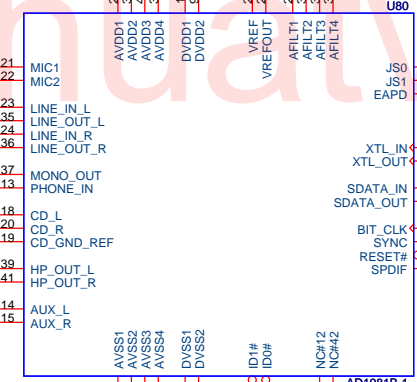
Size A3 Document Number: **S Note-3** Rev: **-1**

Date: Saturday, February 26, 2005 Sheet 29 of 75

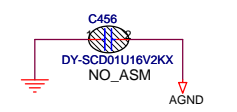
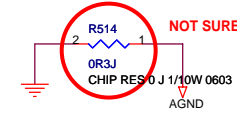
VCC5MA



- 31 MIC_M
- 33 L_OUT
- 33 R_OUT
- 32 PHONE
- 32 CD_AUDIO_L
- 32 CD_AUDIO_R
- 32 CD_AUDIO_GND

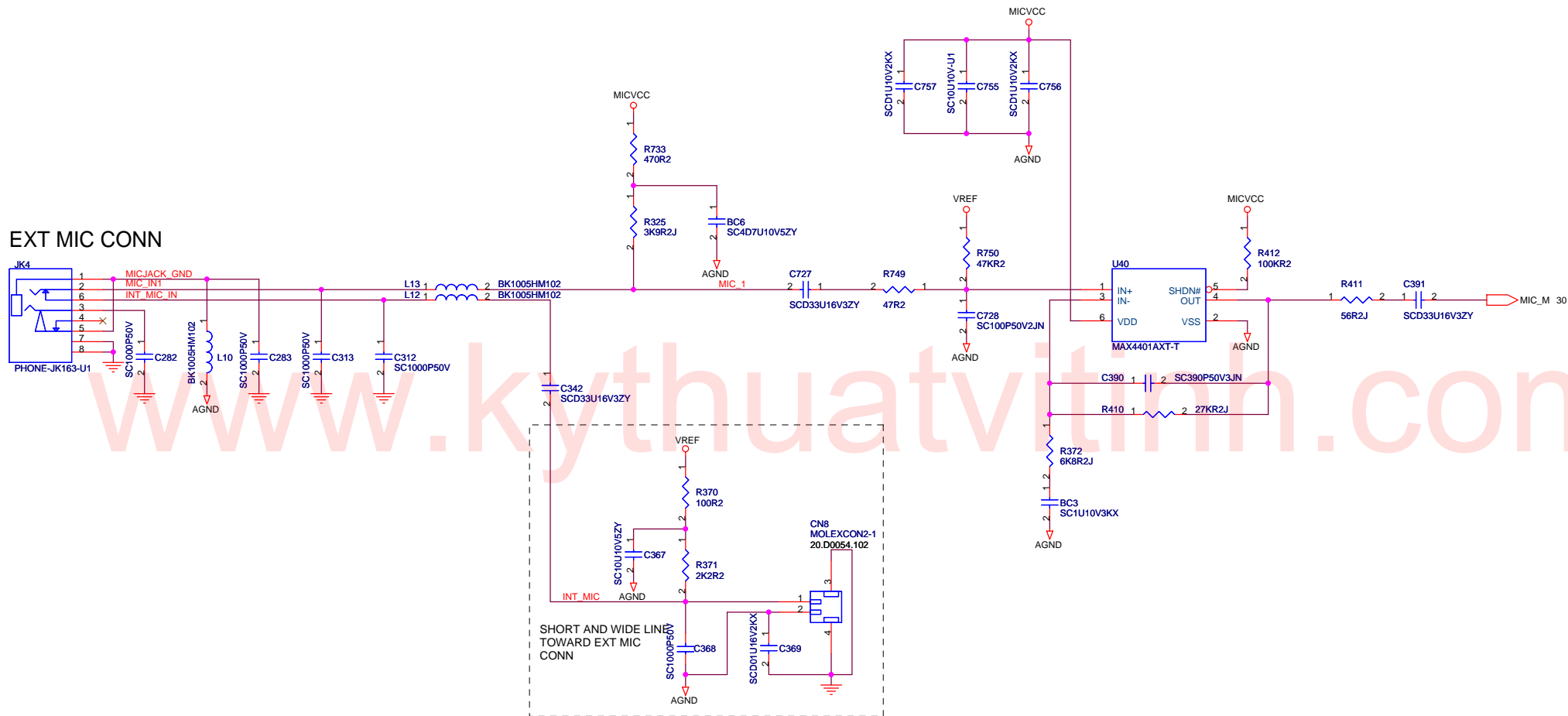


PLACE UNDER AD1981A



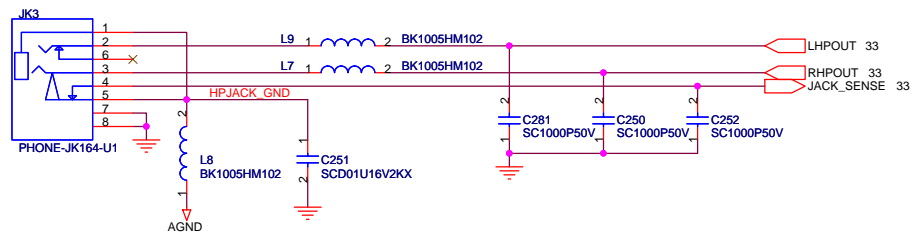
Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title: AUDIO 1981B	
Size: A3	Document Number: S Note-3
Date: Saturday, February 26, 2005	Sheet: 30 of 75
Rev: -1	

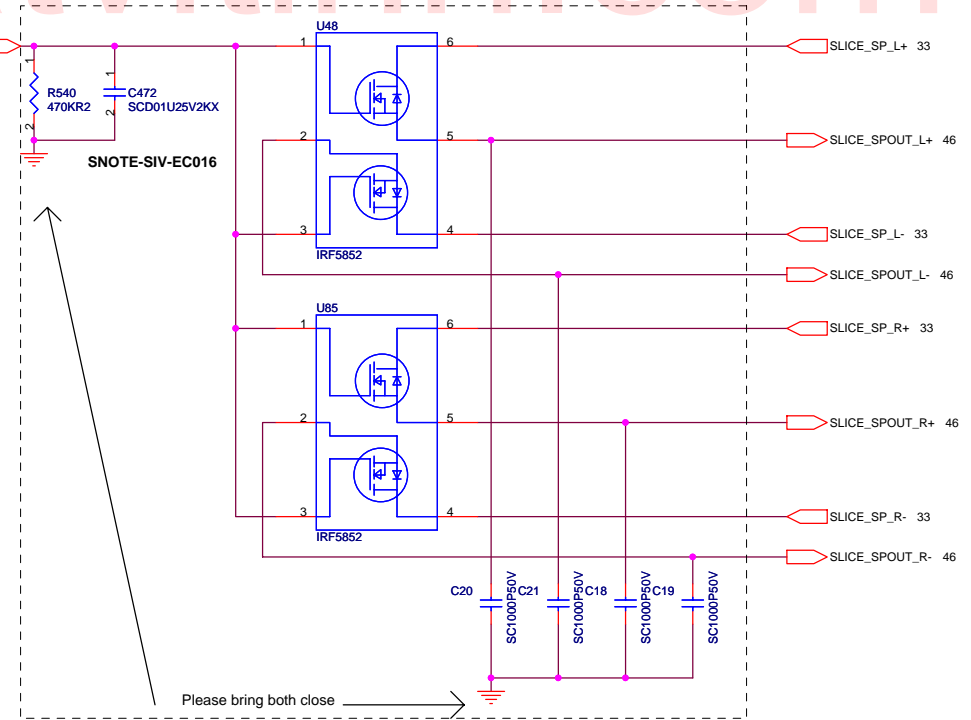
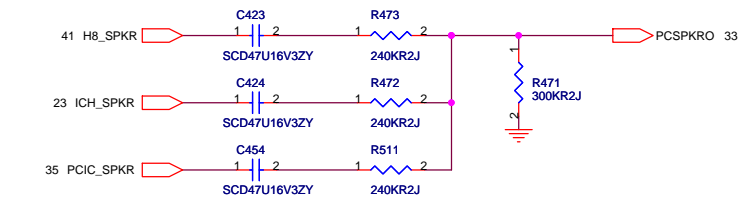
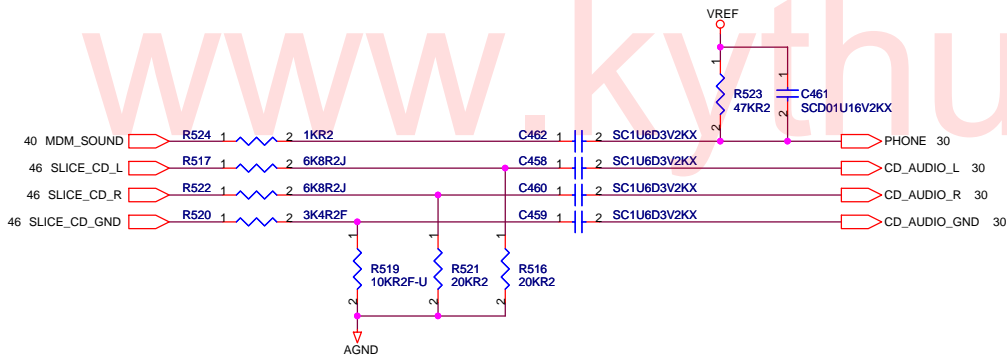
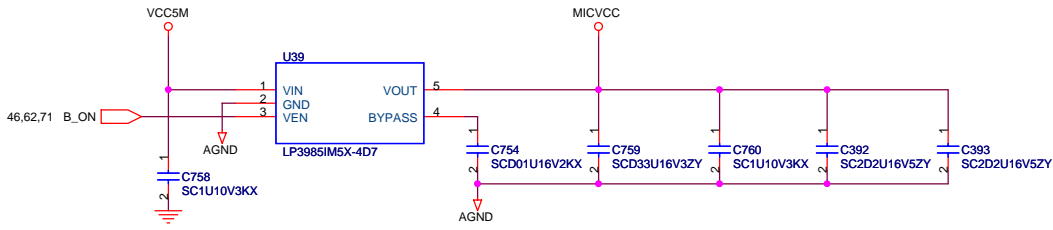
EXT MIC CONN



ALL PARTS MUST BE PLACED NEAR TO INTERNAL MICROPHONE

HEADPHONE CONN

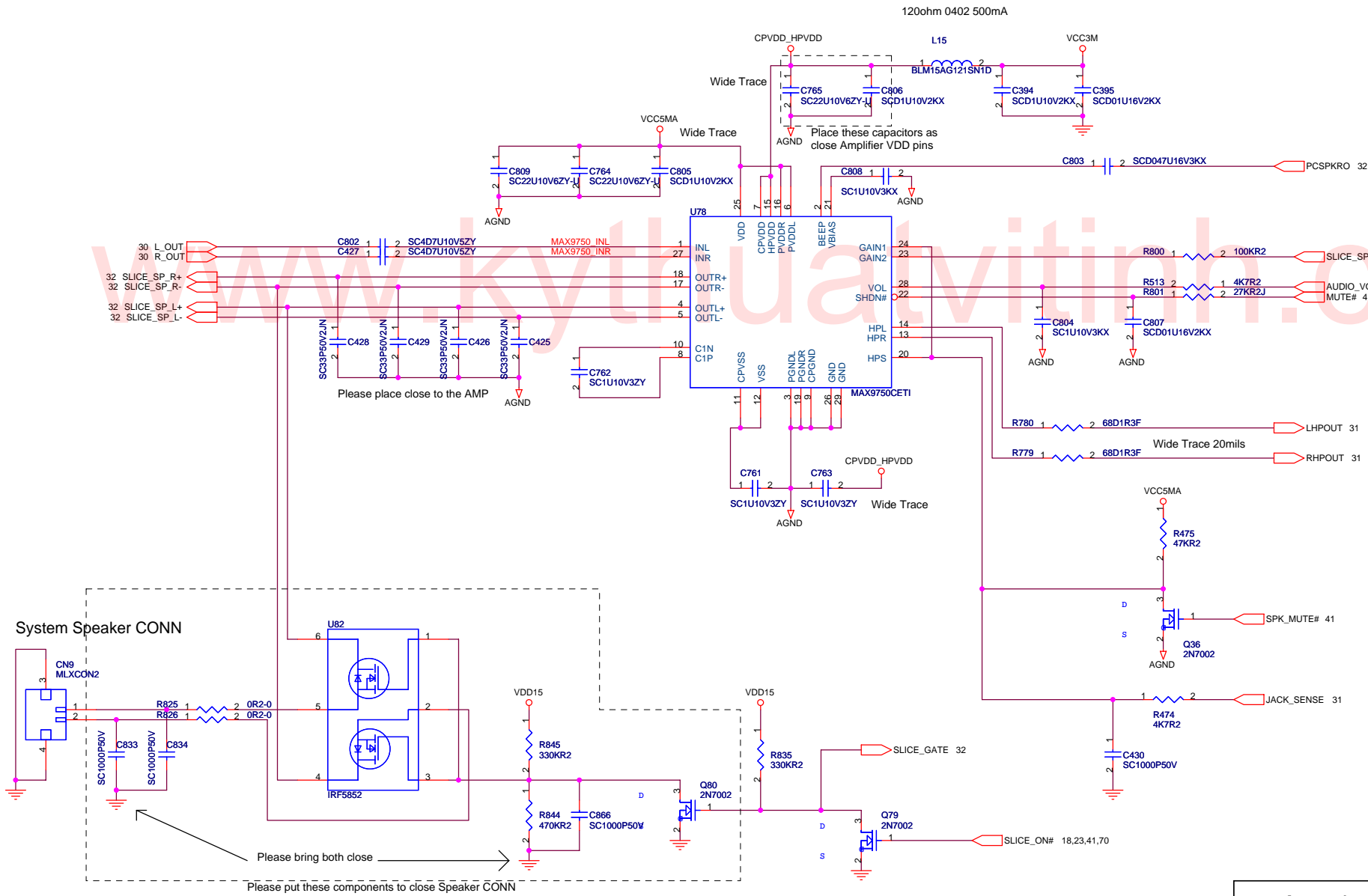




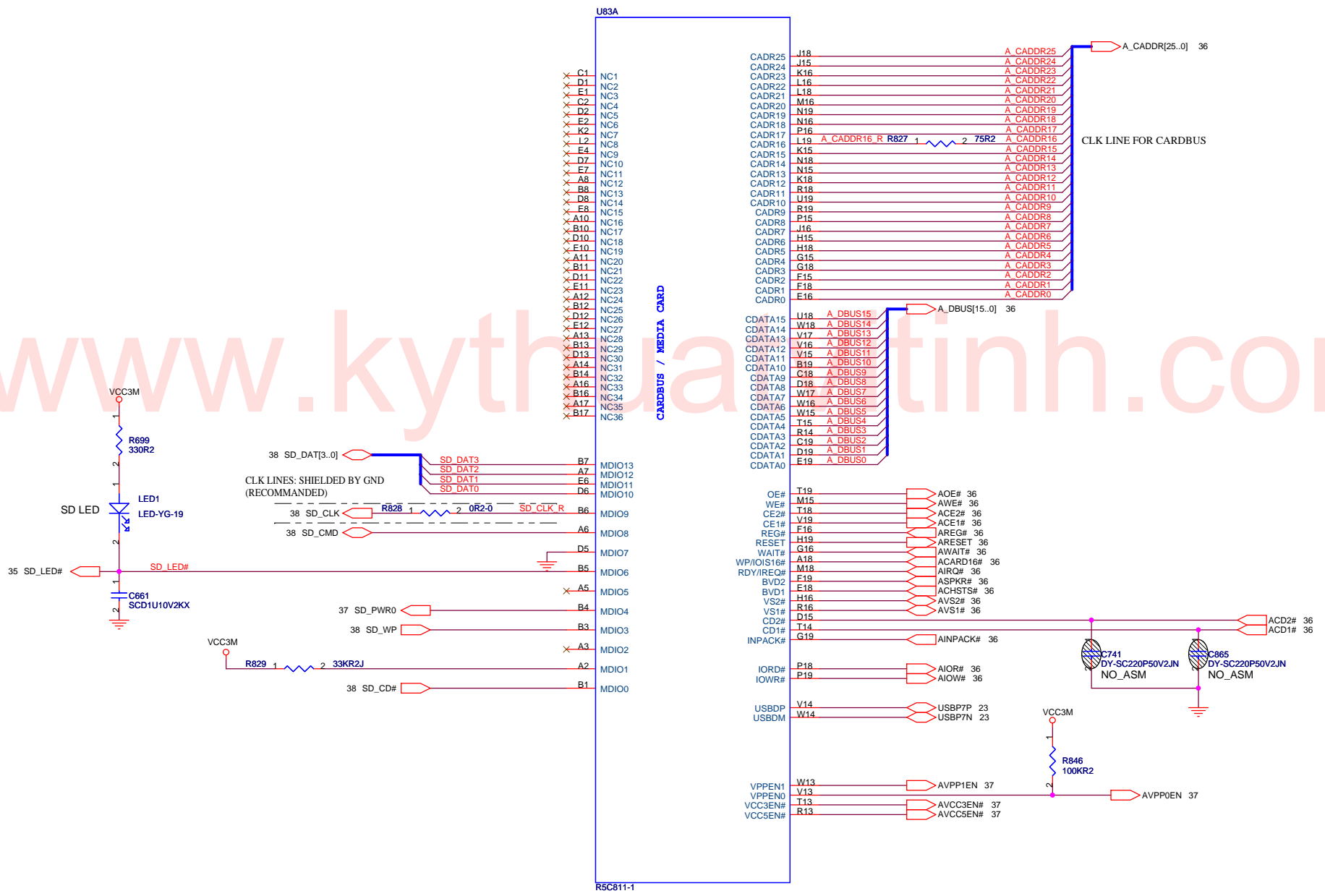
Please bring both close
Please put these components close to docking side

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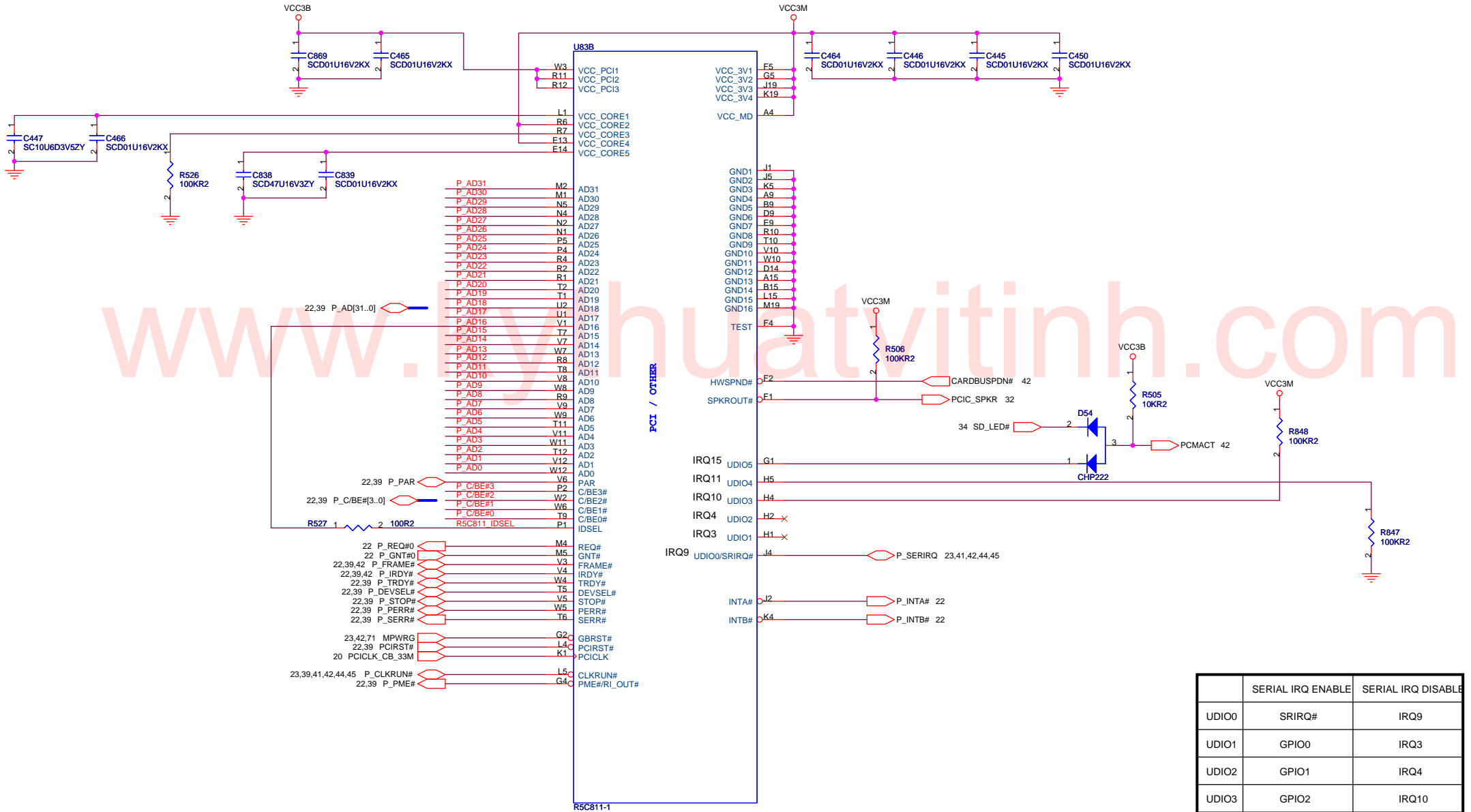
SPEAKER MODE GAIN (dB)				HEADPHONE MODE GAIN (dB)	
GAIN1 = 0 GAIN2 = 0	GAIN1 = 1 GAIN2 = 0	GAIN1 = 0 GAIN2 = 1	GAIN1 = 1 GAIN2 = 1	GAIN1 = X GAIN2 = 0	GAIN1 = X GAIN2 = 1
6	7.5	9	10.5	0	3



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Card BUS(1/2)	
S Note-3	
Title Size A3 Date: Saturday, February 26, 2005	Document Number Sheet 34 of 75
Rev -1	



	SERIAL IRQ ENABLE	SERIAL IRQ DISABLE
UDIO0	SRIRQ#	IRQ9
UDIO1	GPIO0	IRQ3
UDIO2	GPIO1	IRQ4
UDIO3	GPIO2	IRQ10
UDIO4	GPIO3	IRQ11
UDIO5	LED0#	IRQ15

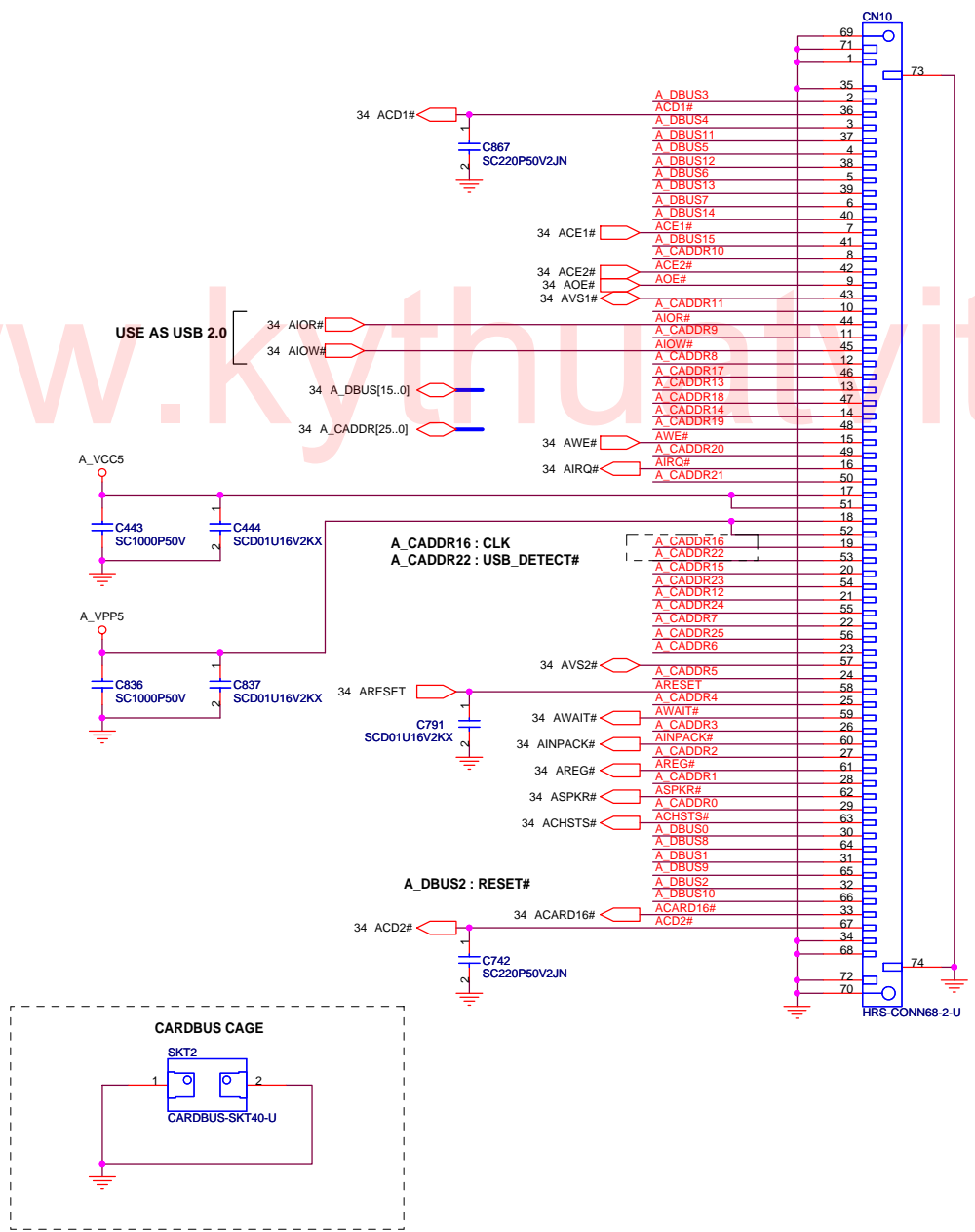
緯創資通 **Wistron Corporation**
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 Taipei Hsien 221, Taiwan, R.O.C.

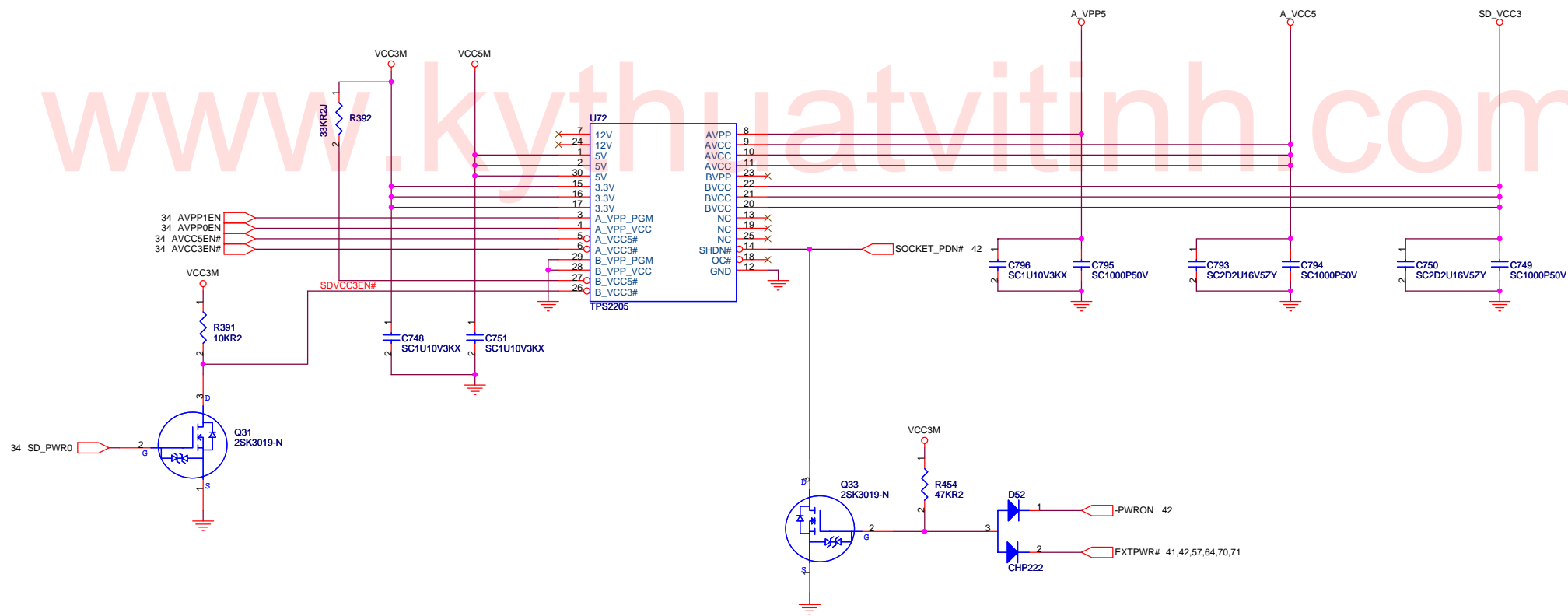
Title: **CARD BUS(2/2)**

Size A3 Document Number **S Note-3** Rev -1

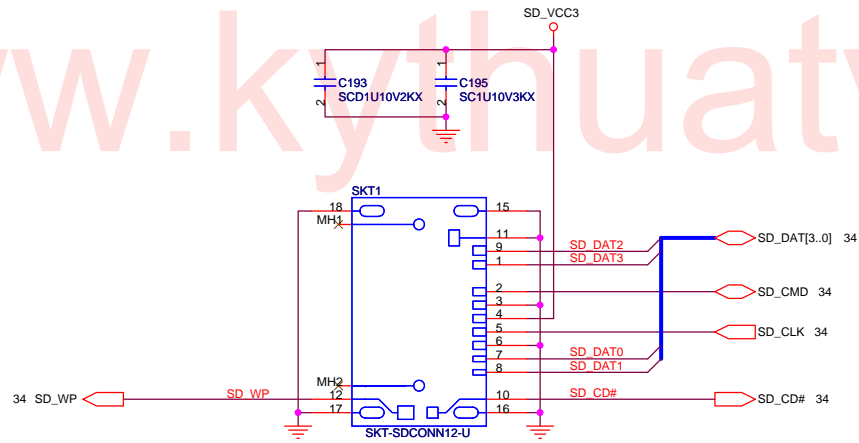
Date: Saturday, February 26, 2005 Sheet 35 of 75

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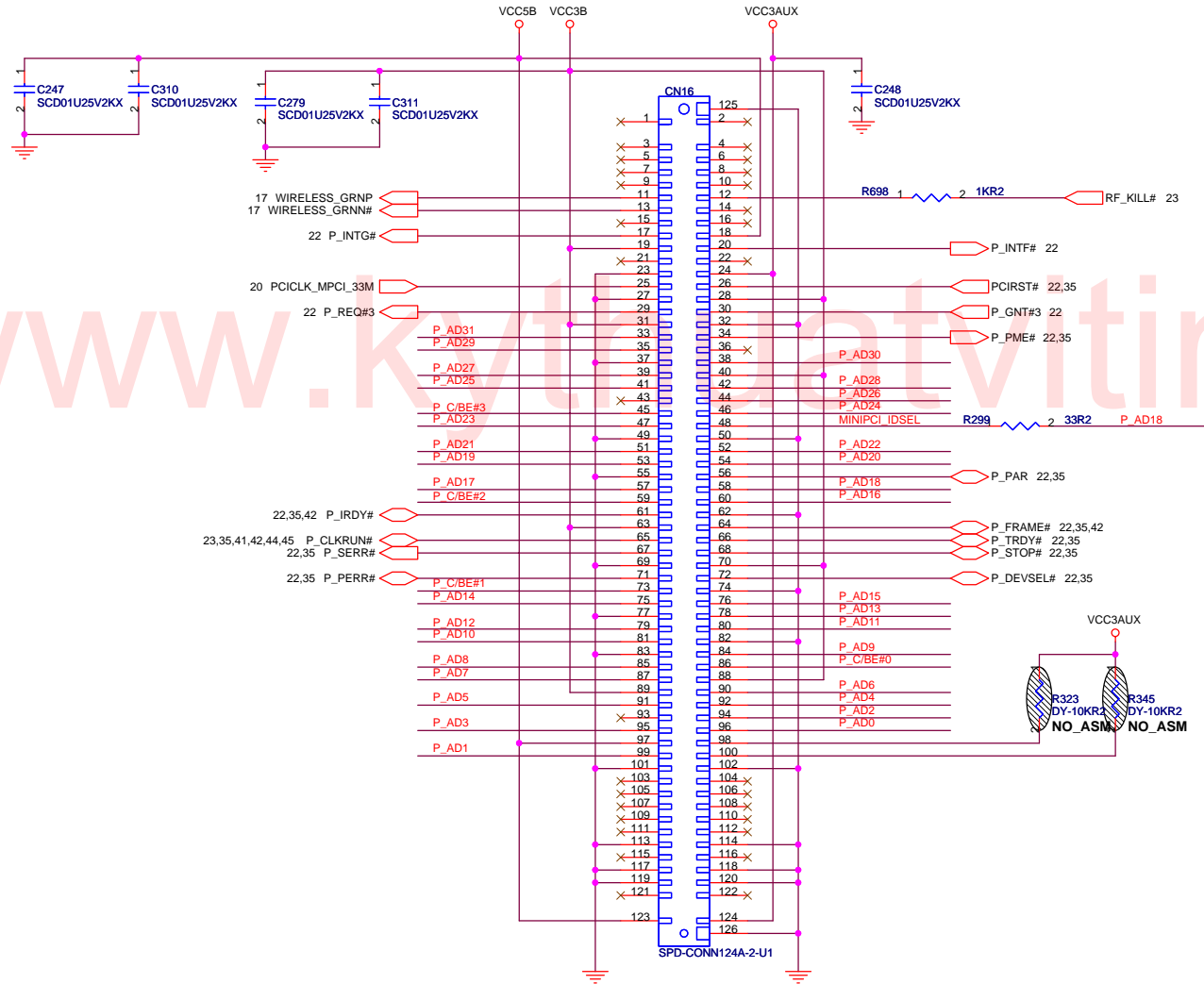


SD Slot



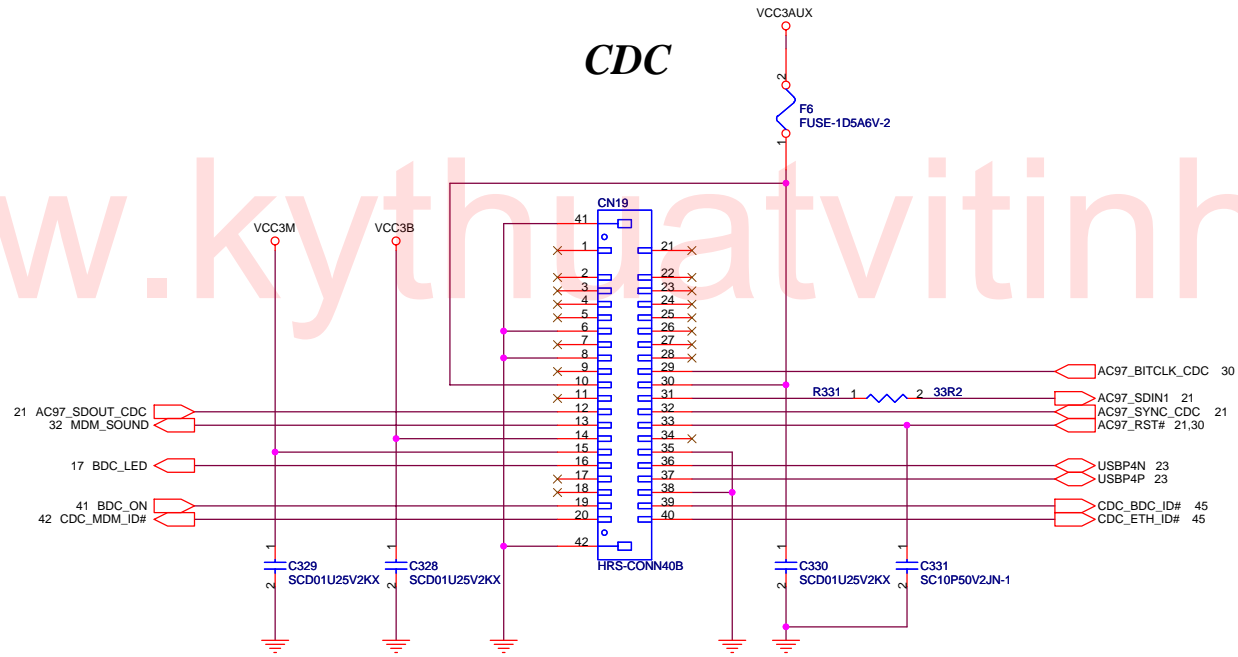
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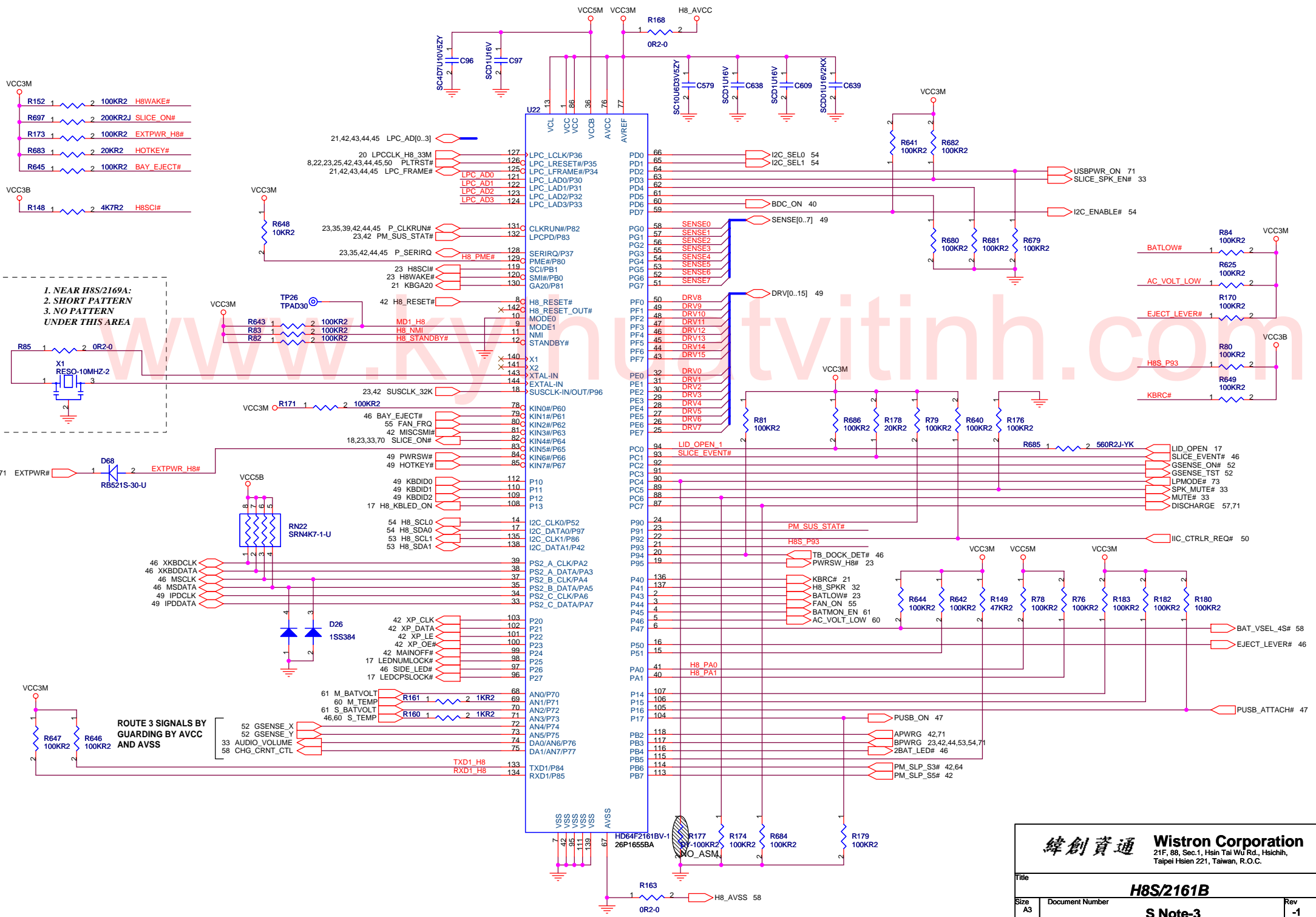
22,35 P_C/BE#[0..3]
22,35 P_AD[0..31]



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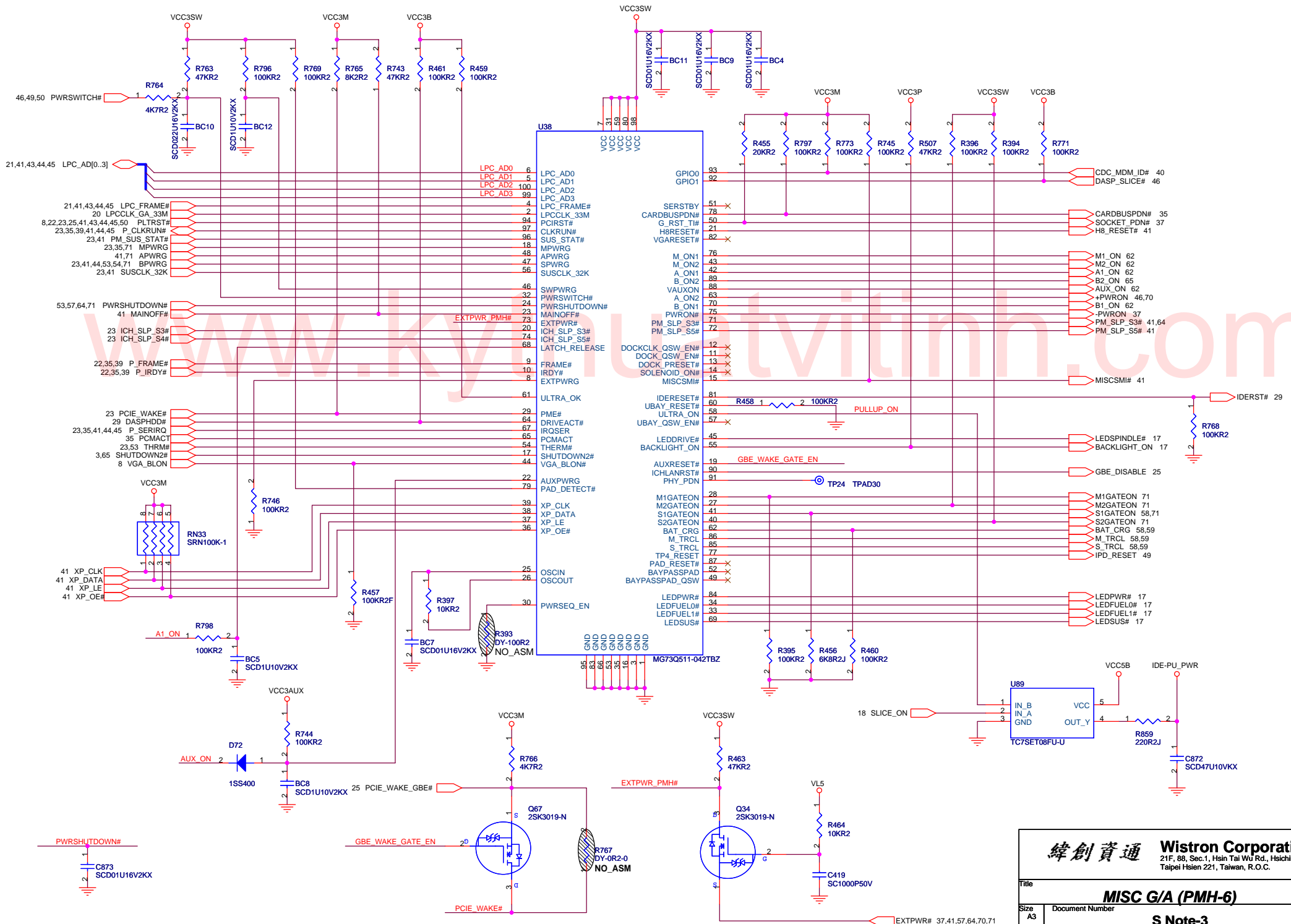
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Title		H8S/2161B	
Size	Document Number	Rev	
A3		S Note-3	
Date:	Saturday, February 26, 2005	Sheet	41 of 75



		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
MISC G/A (PMH-6)		
Title	S Note-3	
Size A3	Document Number	Rev -1
Date: Saturday, February 26, 2005	Sheet 42	of 75

MEM_BASE_ID[4..0]

FWH GPin	4	3	2	1	0	Base Memory	Memory Capacity	Memory Bank (Device Qty)	
BASE_MEM_IDn	4	3	2	1	0	Total Capacity	Capacity	(Device Qty)	
	0	0	0	x	x	128MB	256Mbit	1 (4pcs)	Reserved
	0	0	1	x	x	256MB	256Mbit	2 (8pcs)	Reserved
	0	1	0	0	0	256MB	512Mbit	1 (4pcs)	Elpida / Hynix / Infineon / Micron / Samsung
				0	1				Reserved
				1	0				Reserved
				1	1				Reserved
	0	1	1	0	0	512MB	512Mbit	2 (8pcs)	Elpida / Hynix / Infineon / Micron / Samsung
				0	1				Reserved
				1	0				Reserved
				1	1				Reserved
	1	0	0	x	x	512MB	1Gbit	1 (4pcs)	Reserved
	1	0	1	x	x	1GB	1Gbit	2 (8pcs)	Reserved

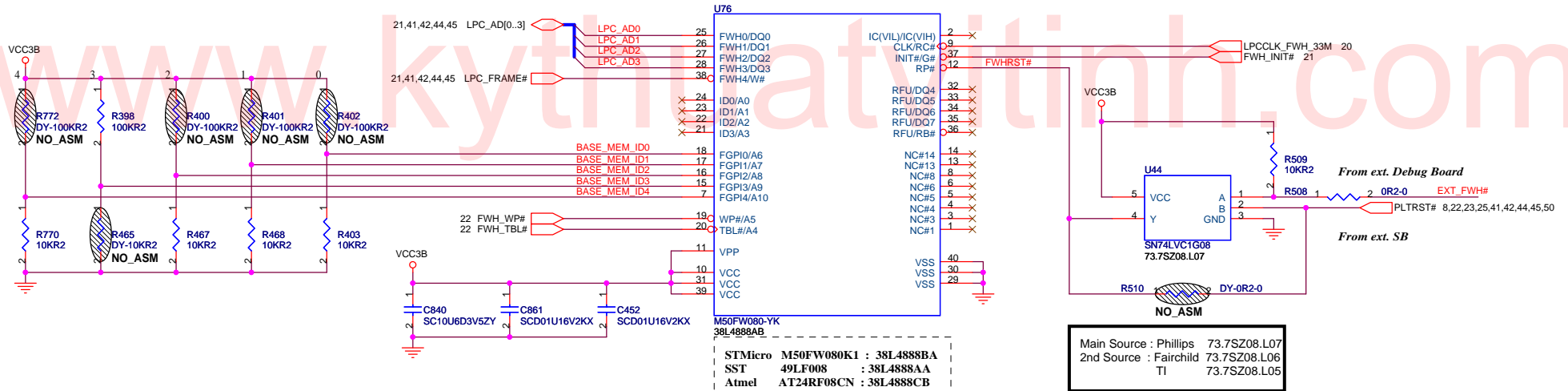
MEM_BASE_ID[4..0]

Bit 4-3 : Memory Capacity ID[1:0]
 00 = 256Mbit
 01 = 512Mbit
 10 = 1Gbit
 11 = Reserved

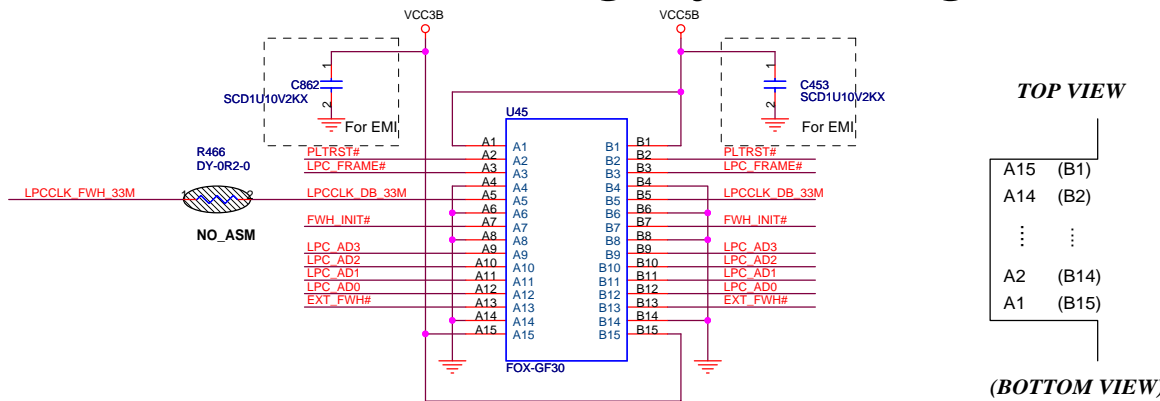
Bit 2 : Memory Bank ID
 0 = 1 Rank (4pcs)
 1 = 2 Rank (8pcs)

Bit 1-0 : Memory Vendor ID[1:0]
 00 = Default
 01 = Reserved (for Specific Memory Vendor)
 10 = Reserved (for Specific Memory Vendor)
 11 = Reserved (for Specific Memory Vendor)

x : don't care
 11000b ~ 11111b : reserved



Golden Finger for Debug Board



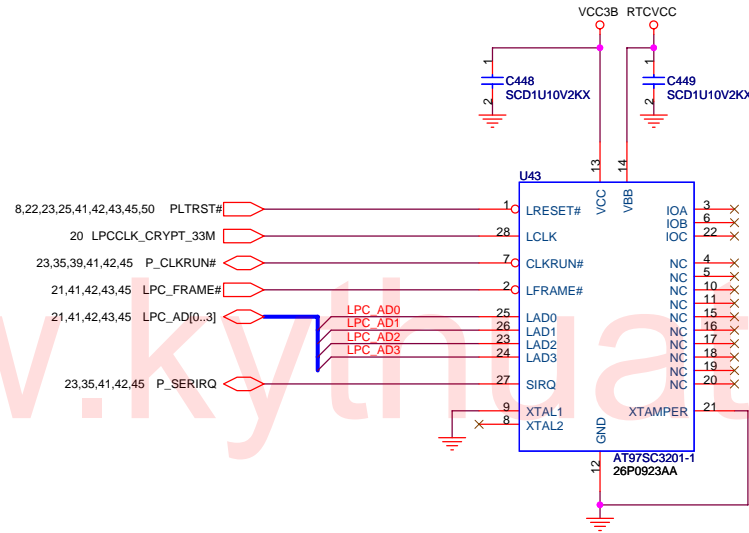
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **FWH**

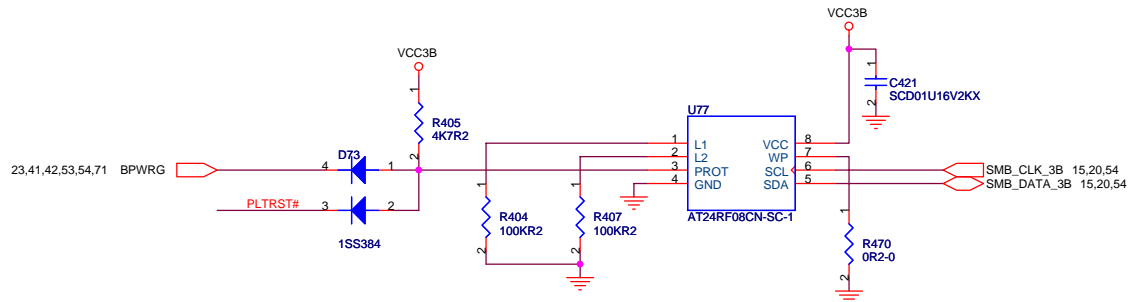
Size: A3 Document Number: **S Note-3** Rev: -1

Date: Saturday, February 26, 2005 Sheet 43 of 75

TCPA

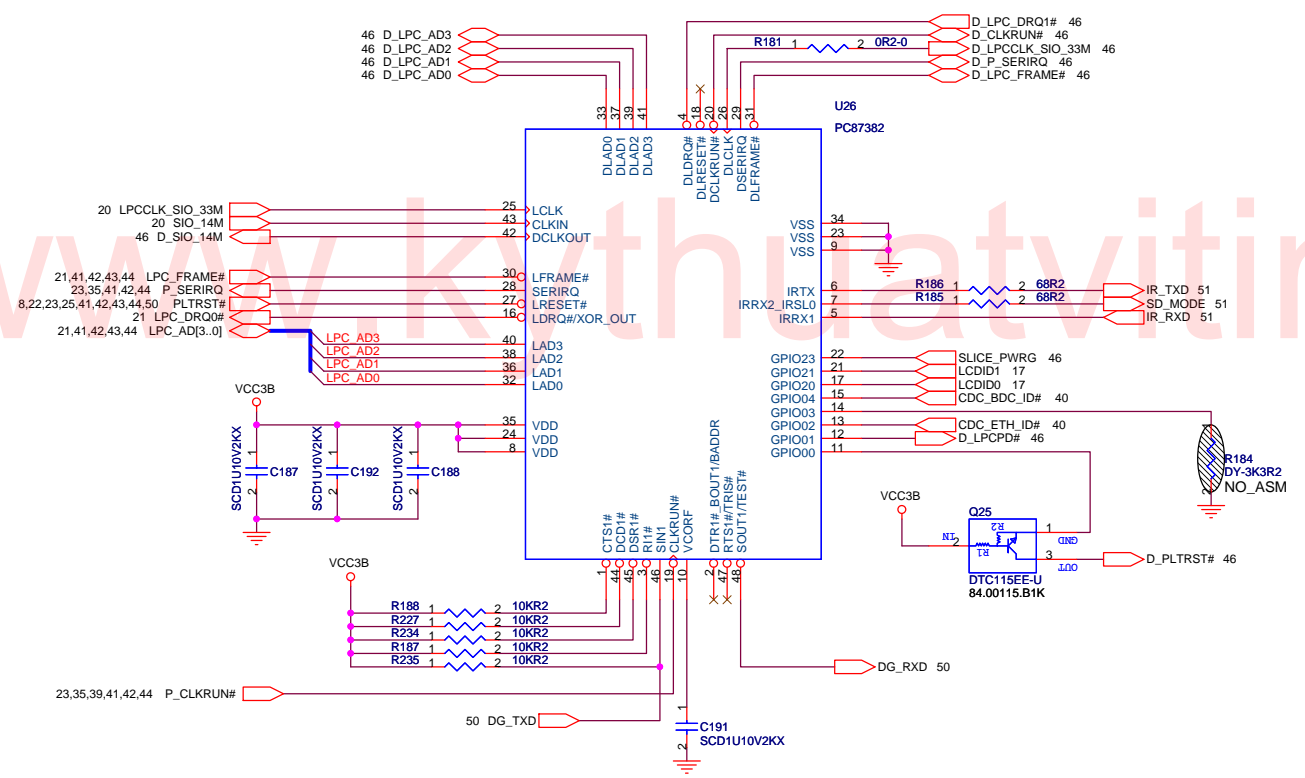


EEPROM

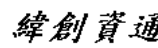


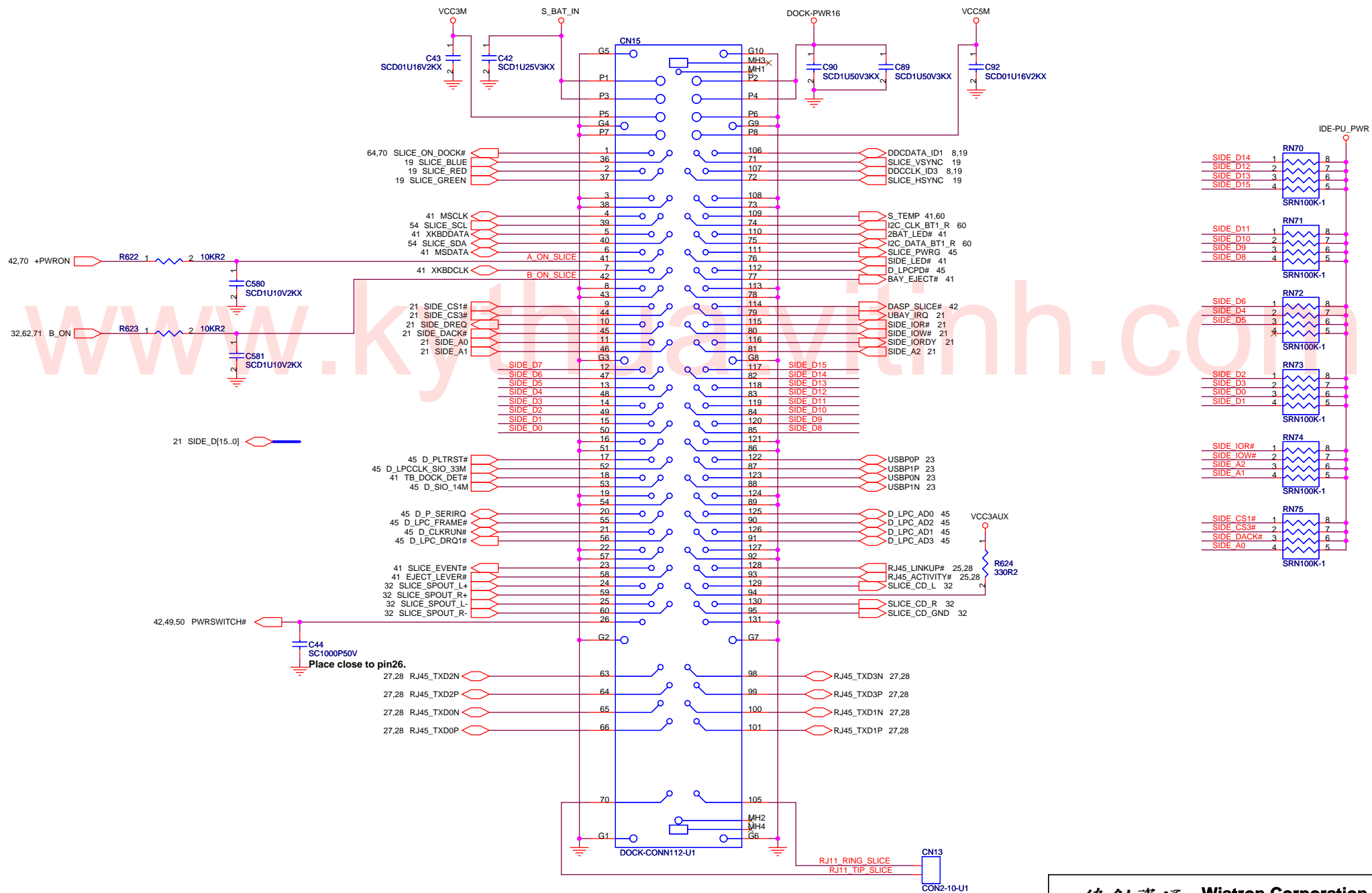
www.kythin.com

www.kyathu.tw
www.kyathu.com



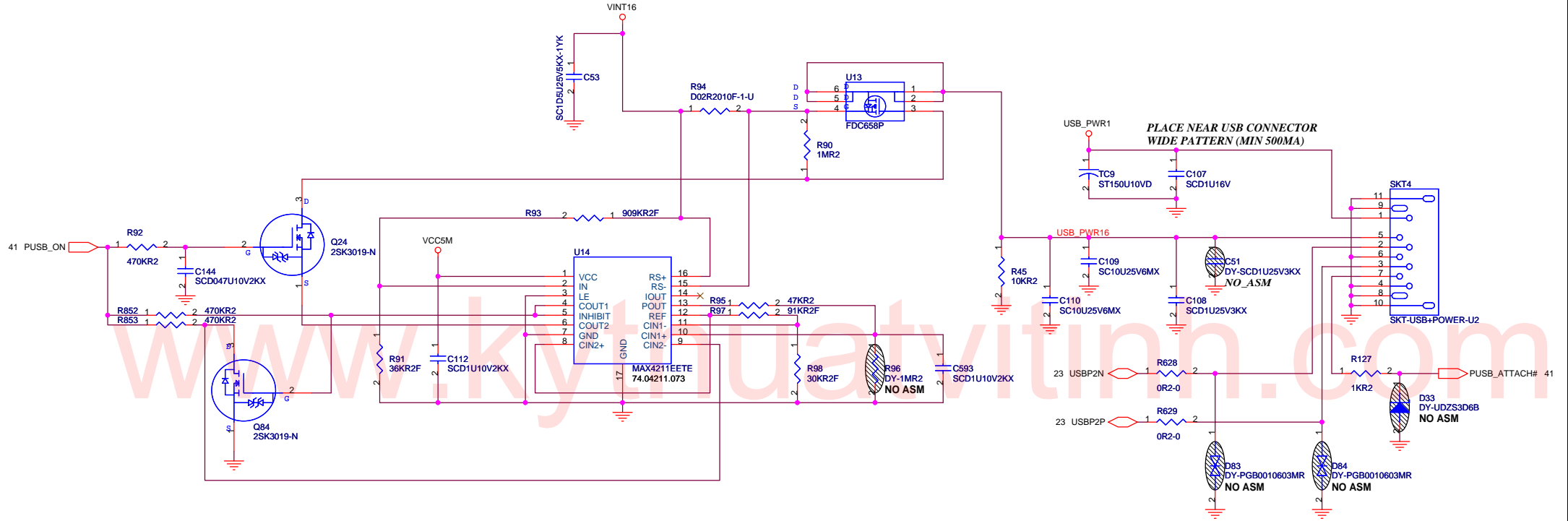
CRYPT_DETECTION BIT
None TCPA
model should
be assemble
this pull-down
resistor.

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title SIO NS87382		
Size A3	Document Number S Note-3	Rev -1
Date: Saturday, February 26, 2005 Sheet 45 of 75		

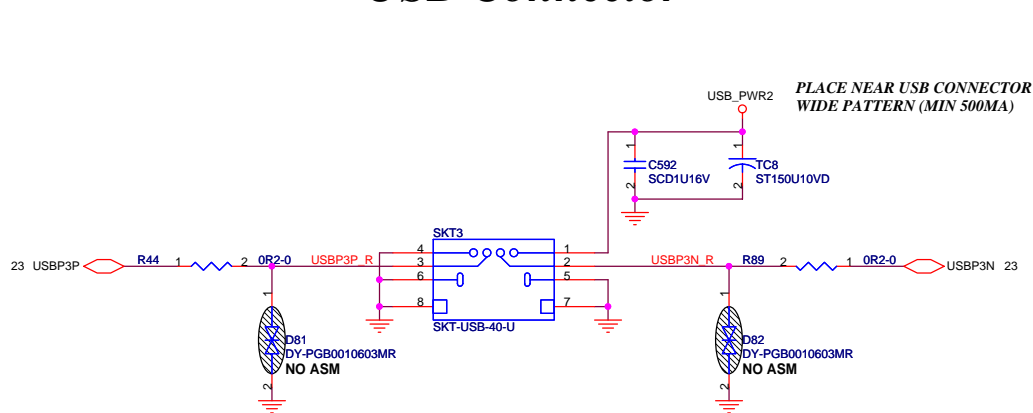


		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
SLICE CONNECTOR			
S Note-3			
Size A3	Document Number	Sheet 46	Rev -1
Date: Saturday, February 26, 2005			

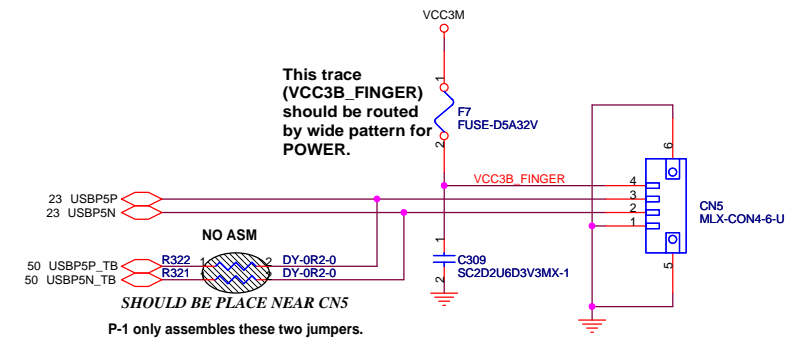
Powered USB Connector



USB Connector



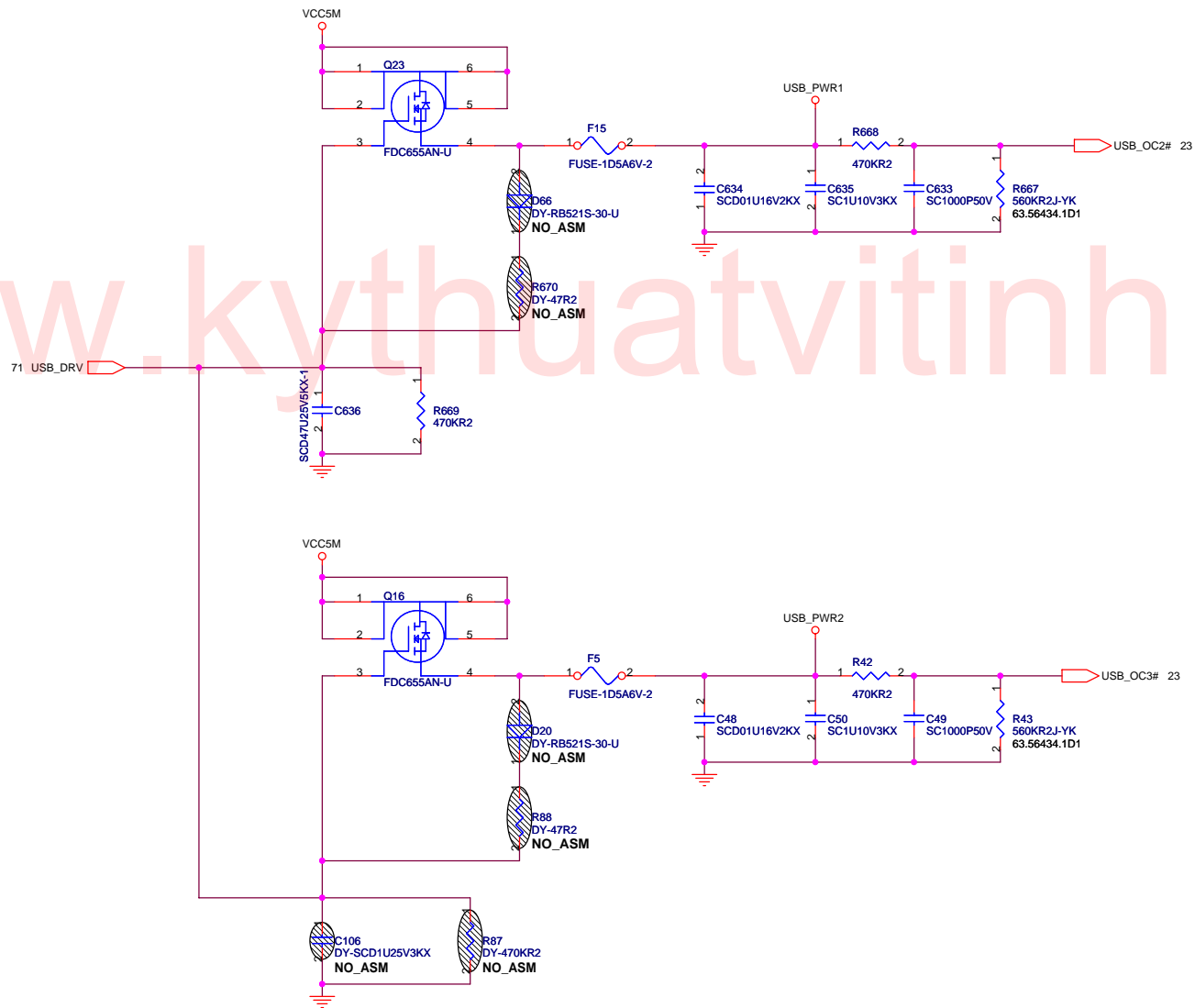
Fingerprint



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Taipei Hsien 221, Taiwan, R.O.C.

Title			USB CONNECTOR		
Size	Document Number	S Note-3			Rev
A3					-1
Date: Saturday, February 26, 2005			Sheet	47	of 75

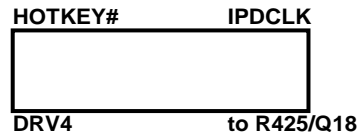
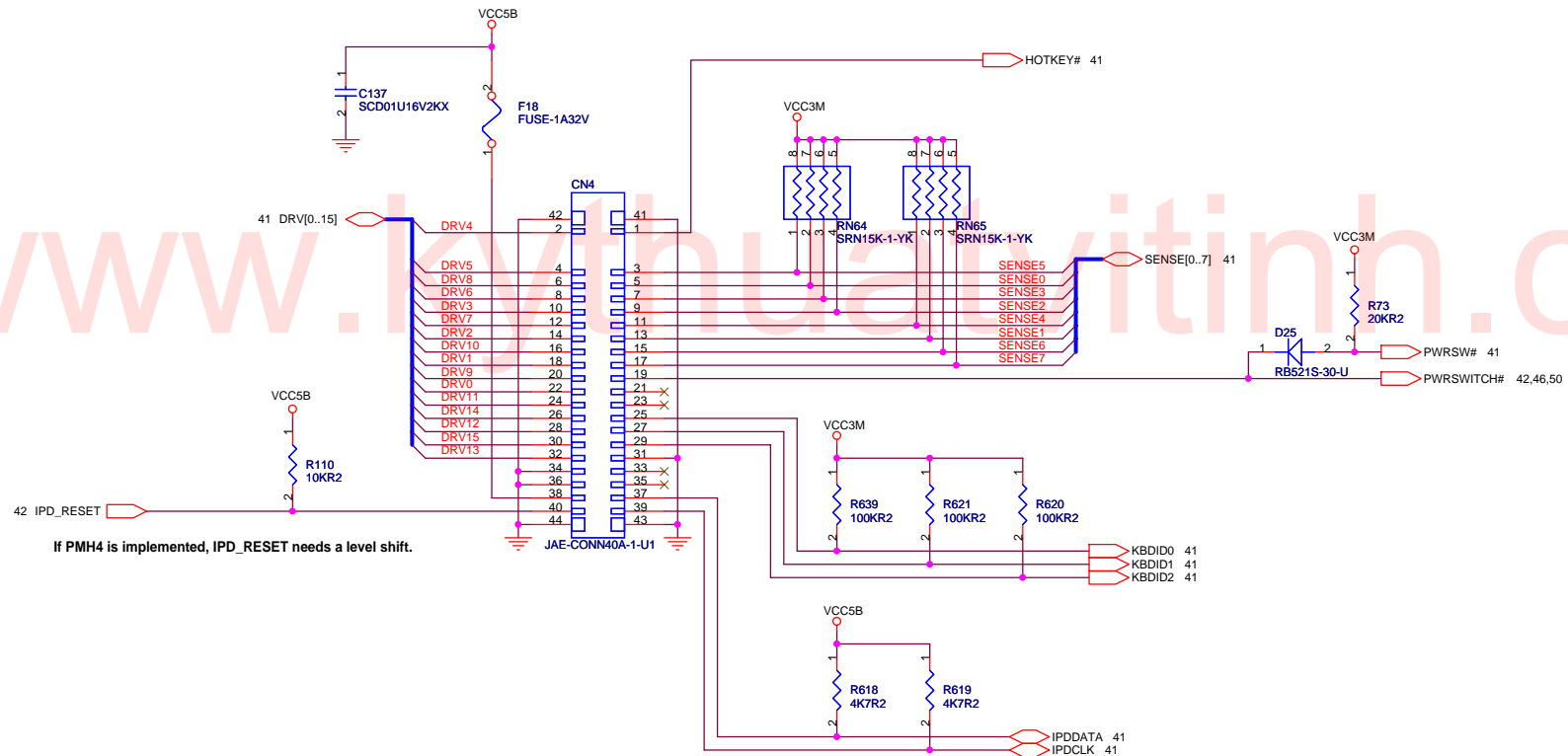
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Taipei Hsien 221, Taiwan, R.O.C.

Title		
USB POWER		
Size	Document Number	Rev
A3		-1
S Note-3		
Date:	Saturday, February 26, 2005	Sheet 48 of 75

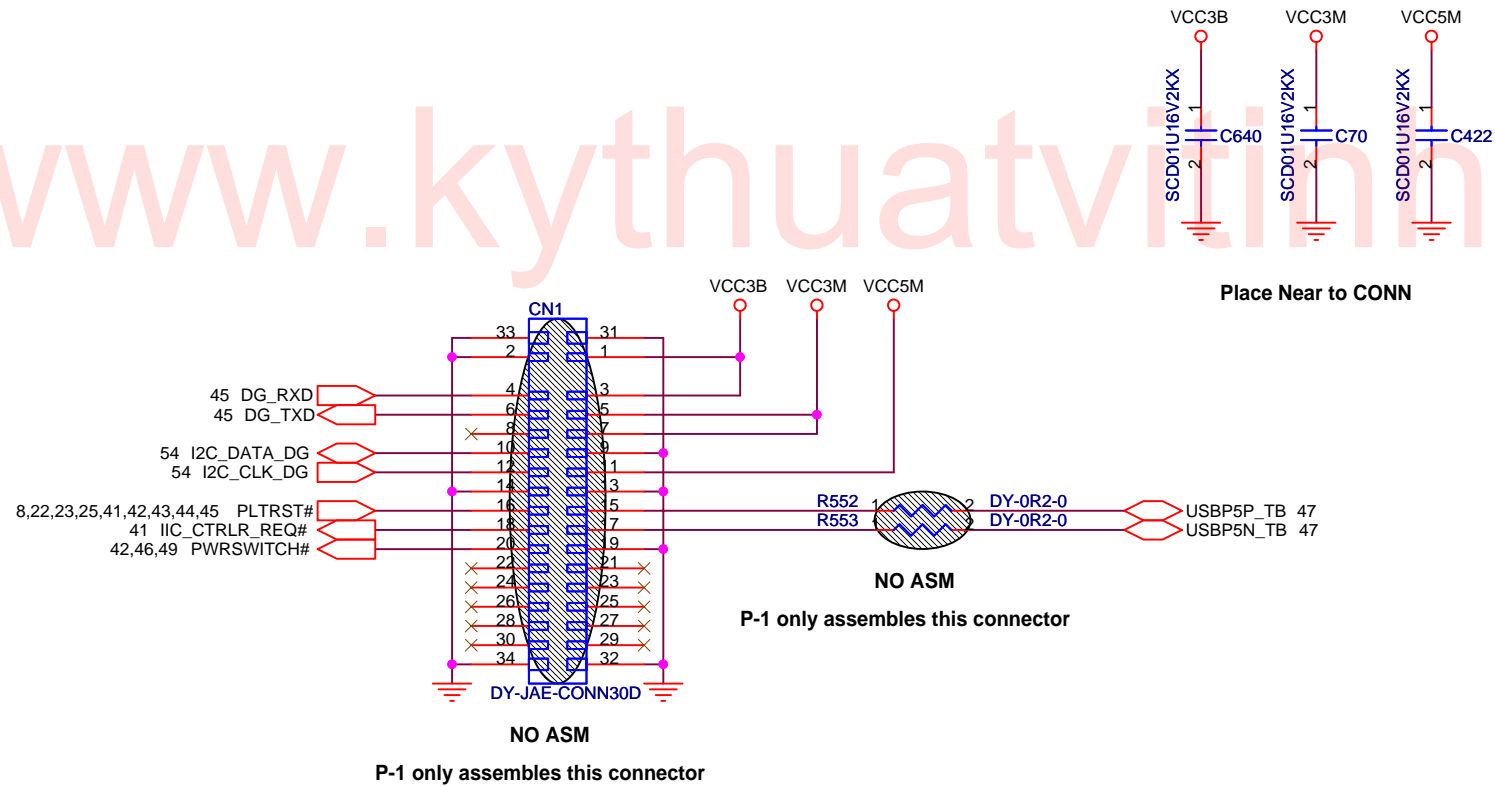
Keyboard Connector



Keyboard Connector Top View

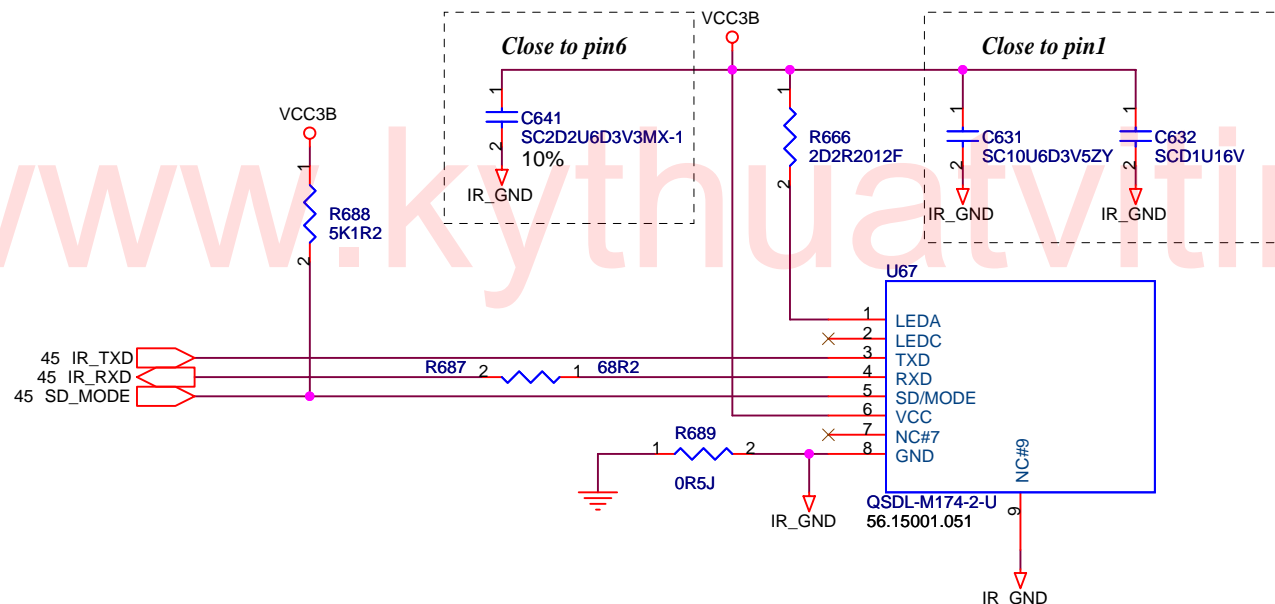
緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
KEYBOARD CONN			
Size A3	Document Number	S Note-3	
Date: Saturday, February 26, 2005	Sheet	49	of 75

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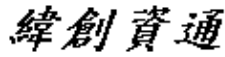


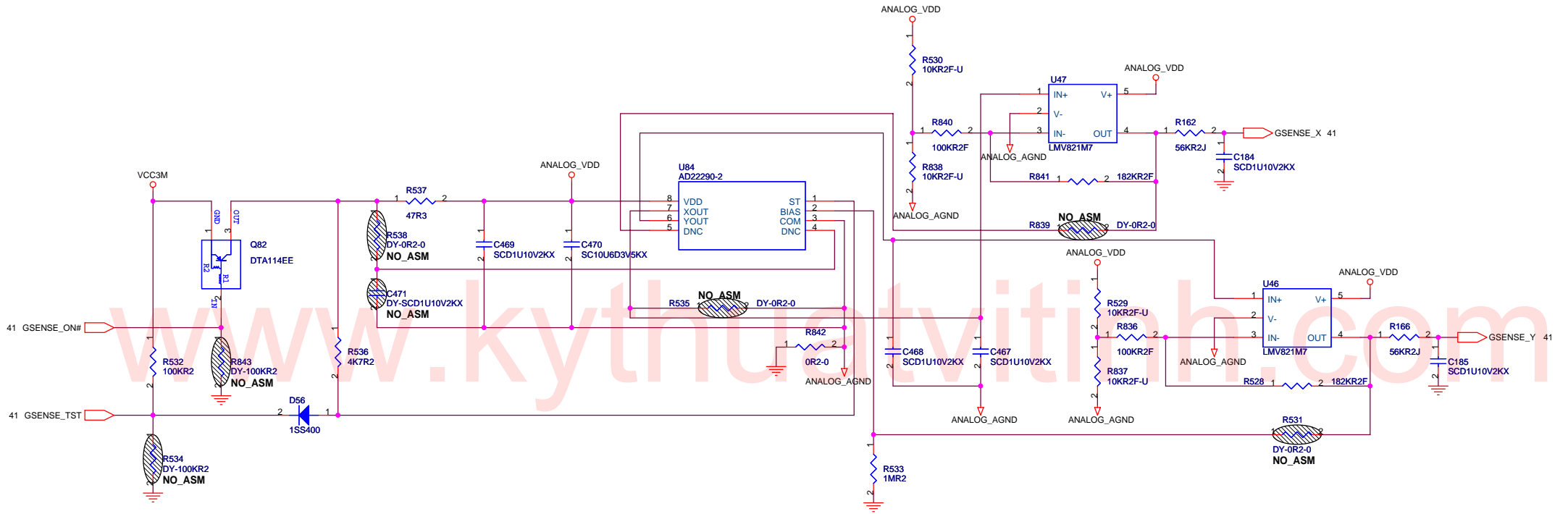
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title		
DG CONNECTOR		
Size A4	Document Number S Note-3	Rev -1
Date: Saturday, February 26, 2005	Sheet 50 of 75	



SHOULD QUALIFY BELOW PARTS
 PRIMATY ALIGENT QSDL-M174-1 : 74.00174.001
 SECOND VISHAY TFDU6102 : 56.15001.051

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
IR MODULE		
Size A4	Document Number S Note-3	Rev -1
Date: Saturday, February 26, 2005		Sheet 51 of 75



Accelerometer Parts List

Page	Usage Code	AD22290	MEMSIC	NO ACC.
52	R843 (100K 5%)	NO_ASM	NO_ASM	ASM
52	R534 (100K 5%)	NO_ASM	ASM	ASM
52	U47 (MAX4400AXK-T-1)	ASM	NO_ASM	NO_ASM
52	U84 (AD22290-2)	ASM	MXA2500GL	NO_ASM
52	U46 (MAX4400AXK-T-1)	ASM	NO_ASM	NO_ASM
52	Q82 (DTA114EE)	ASM	ASM	NO_ASM
52	D56 (1SS400)	ASM	NO_ASM	NO_ASM
52	R537(47ohm 5%)	47 ohm	10 ohm	NO_ASM
52	R530(10K 1%)	ASM	NO_ASM	NO_ASM
52	R840(100K 1%)	ASM	NO_ASM	NO_ASM
52	R612(56K 5%)	ASM	8.2K 5%	NO_ASM
52	R838(10K 1%)	ASM	NO_ASM	NO_ASM
52	R841(182K 1%)	ASM	NO_ASM	NO_ASM
52	R536(4.7K 5%)	ASM	NO_ASM	NO_ASM
52	R529(10K 1%)	ASM	NO_ASM	NO_ASM
52	R836(100K 1%)	ASM	NO_ASM	NO_ASM
52	R116(56K 5%)	ASM	8.2K 5%	NO_ASM
52	R842(0ohm 5%)	ASM	ASM	NO_ASM

Page	Usage Code	AD22290	MEMSIC	NO ACC.
52	R532(100K 5%)	ASM	NO_ASM	NO_ASM
52	R837(10K 1%)	ASM	NO_ASM	NO_ASM
52	R528(182K 1%)	ASM	NO_ASM	NO_ASM
52	R533(1M 5%)	ASM	NO_ASM	NO_ASM
52	C184 (0.1u 10%10V)	ASM	ASM	NO_ASM
52	C469 (0.1u 10%10V)	ASM	ASM	NO_ASM
52	C468 (0.1u 10%10V)	ASM	NO_ASM	NO_ASM
52	C467 (0.1u 10%10V)	ASM	NO_ASM	NO_ASM
52	C185 (0.1u 10%10V)	ASM	ASM	NO_ASM
52	R538(0ohm 5%)	NO_ASM	ASM	NO_ASM
52	R839(0ohm 5%)	NO_ASM	ASM	NO_ASM
52	R535(0ohm 5%)	NO_ASM	ASM	NO_ASM
52	R531(0ohm 5%)	NO_ASM	ASM	NO_ASM
52	C741 (0.1u 10%10V)	NO_ASM	ASM	NO_ASM
52	C470 (10u 10% 6.3V)	ASM	NO_ASM	NO_ASM

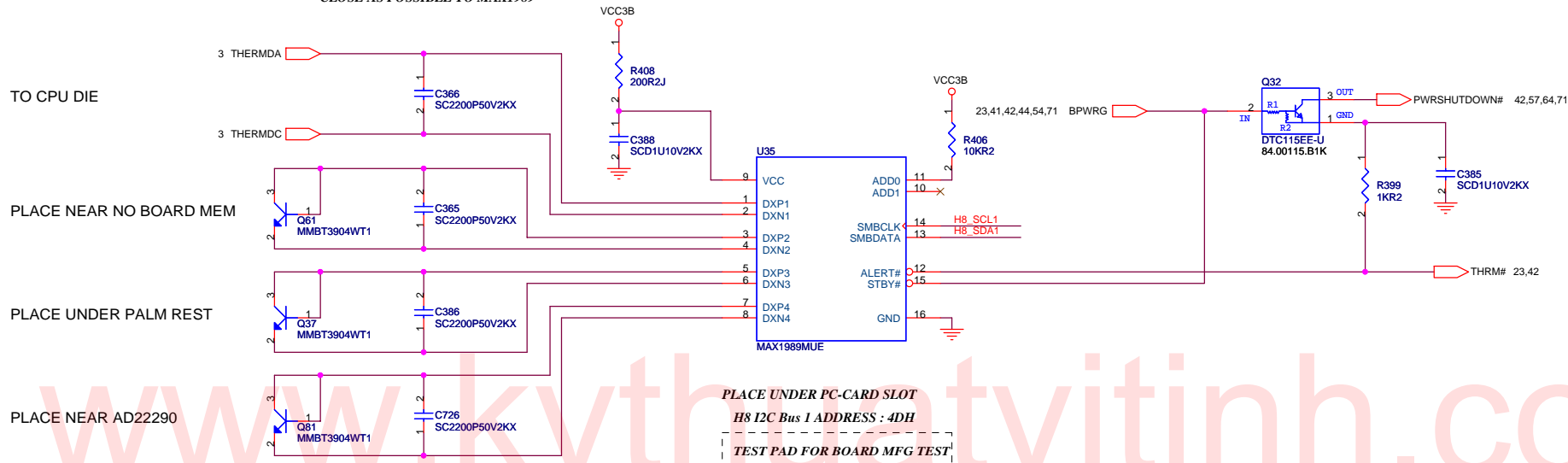
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

G-SENSOR

S Note-3

Title: _____
 Size: A3 Document Number: _____ Rev: -1
 Date: Saturday, February 26, 2005 Sheet 52 of 75

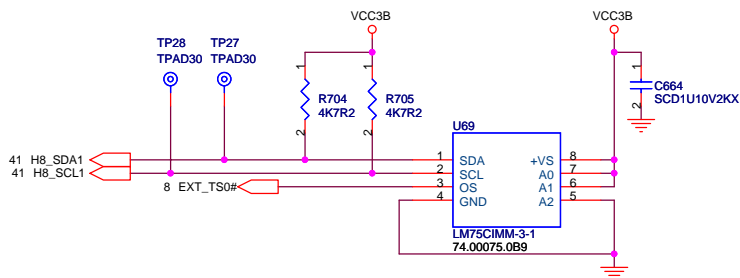
THESE CAPS MUST BE PLACED AS
CLOSE AS POSSIBLE TO MAX1989



Thermal Sensor LM75 for DDR module

(For DDR throttling implementation)

PLACE UNDER DIMM



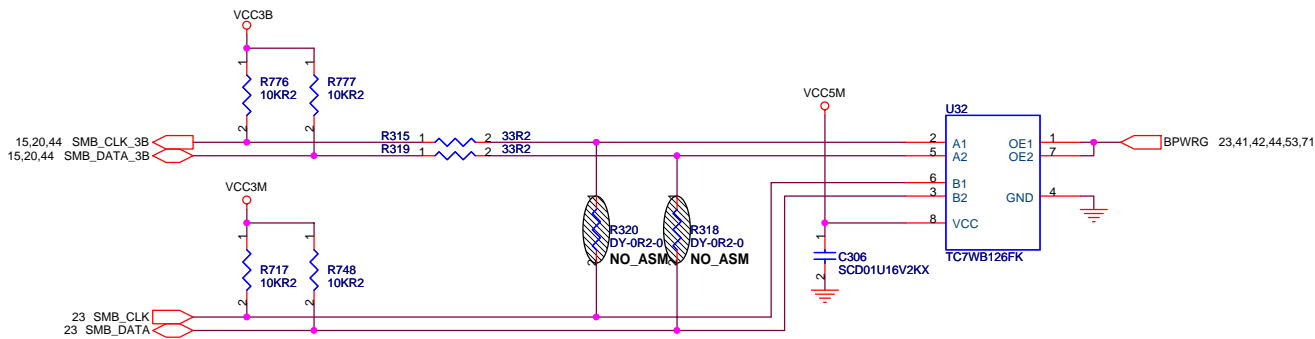
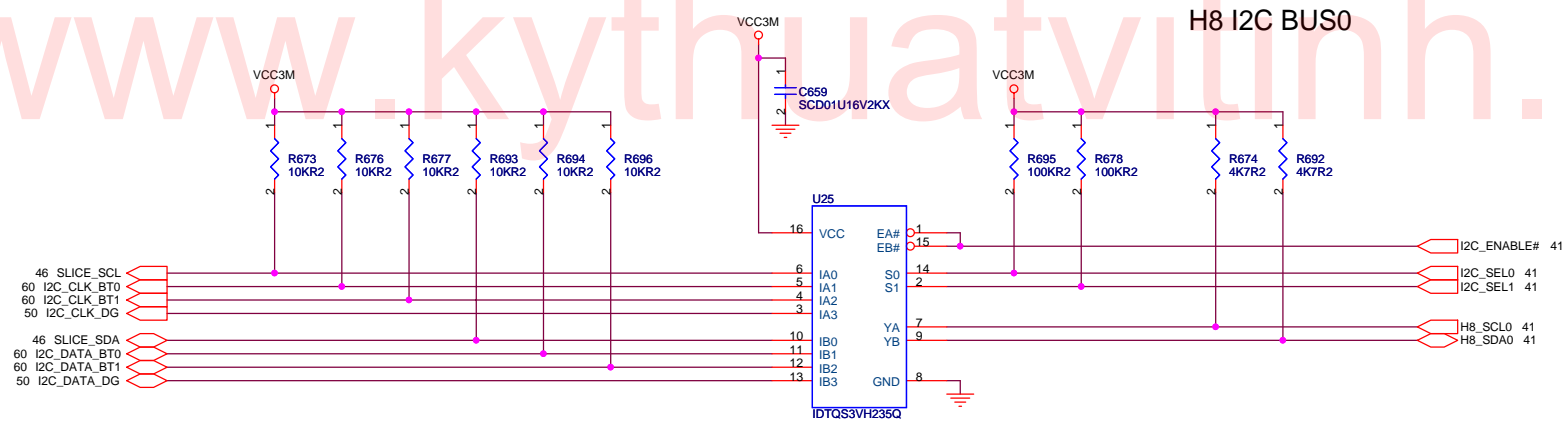
H8 I2C Bus 1 ADDRESS : 4BH

Main Source : 74.00075.0B9 (NS)
2nd Source : 74.00075.AB9 (MAXIM)
74.07416.0B9 (ADI)

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Taipei Hsien 221, Taiwan, R.O.C.

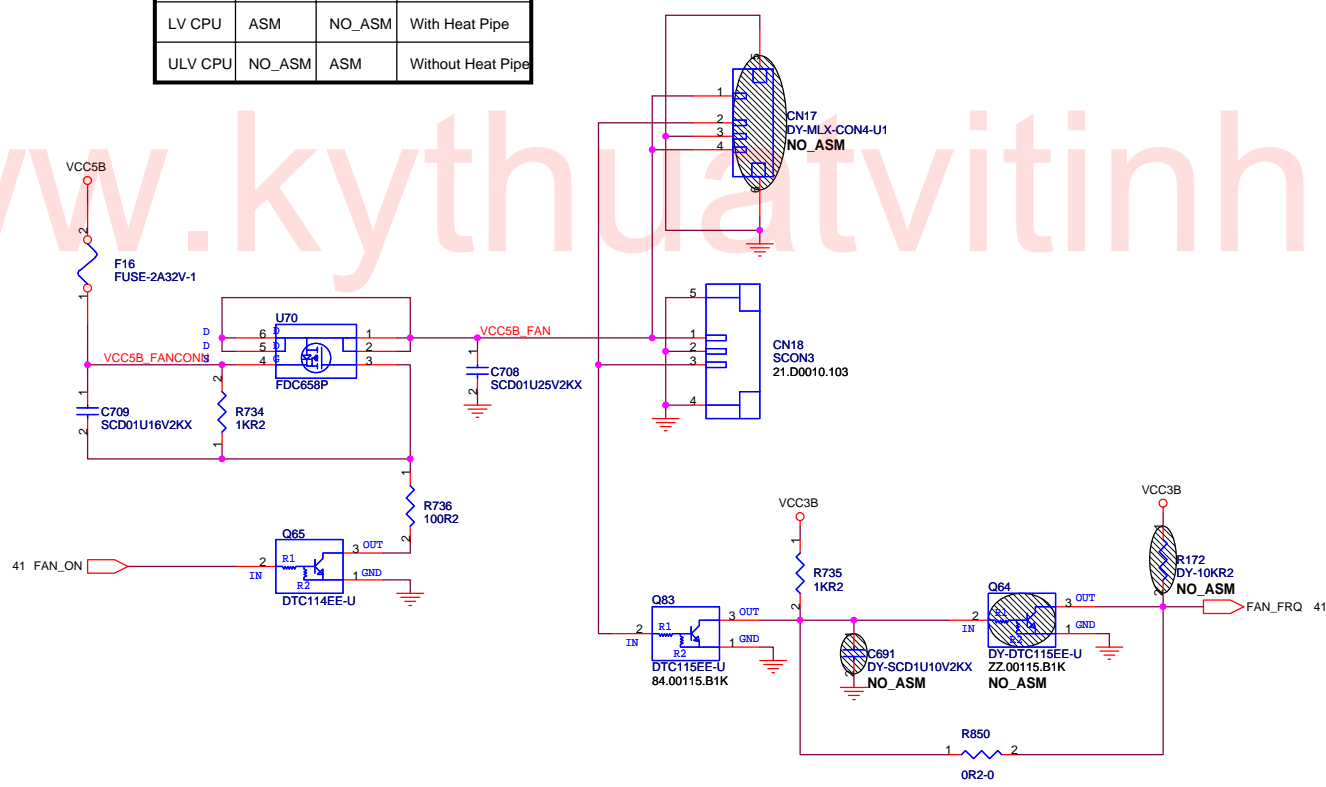
Title		
THERMAL SENSOR		
Size	Document Number	Rev
A3		-1
S Note-3		
Date:	Saturday, February 26, 2005	Sheet 53 of 75

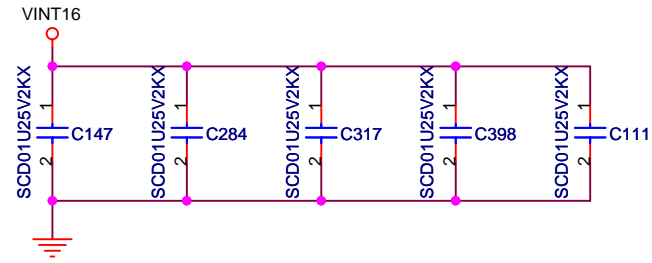
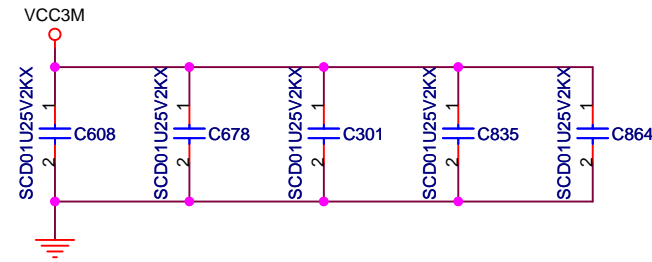
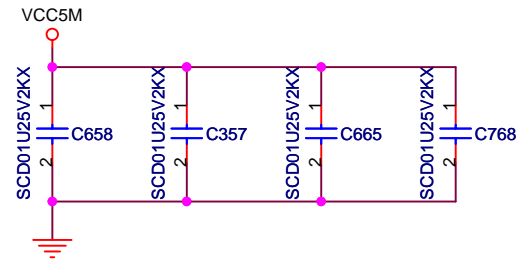
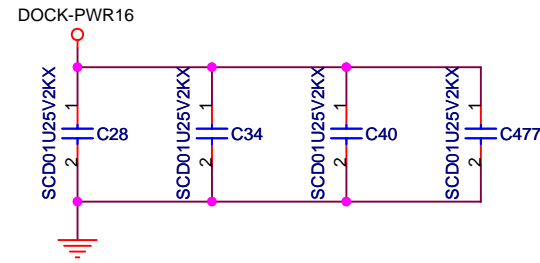
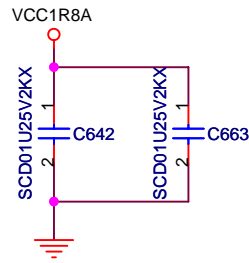
www.kythuratvilinh.com



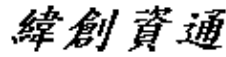
Fan Power Control

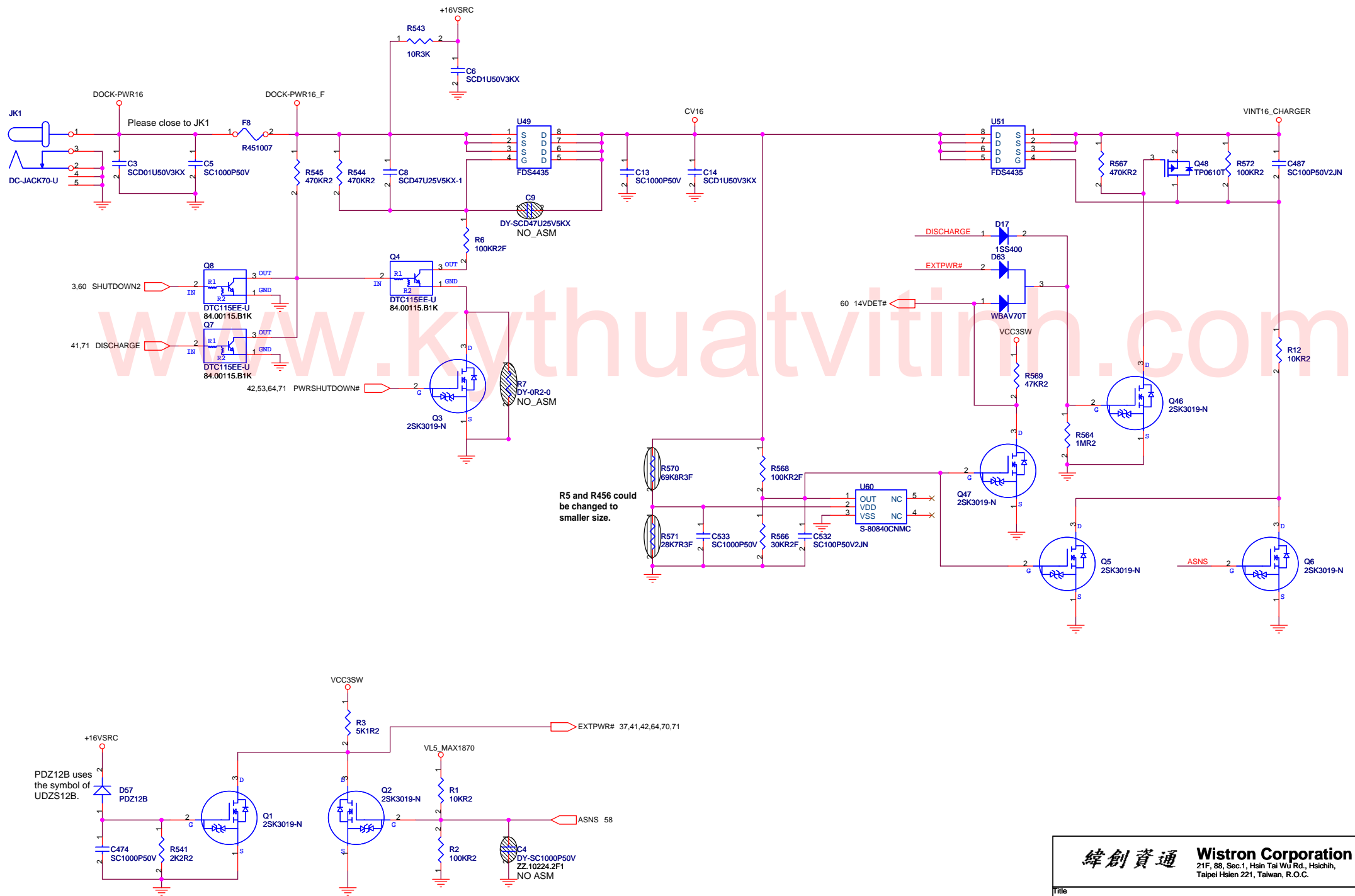
	CN18	CN17	FAN Module
LV CPU	ASM	NO_ASM	With Heat Pipe
ULV CPU	NO_ASM	ASM	Without Heat Pipe



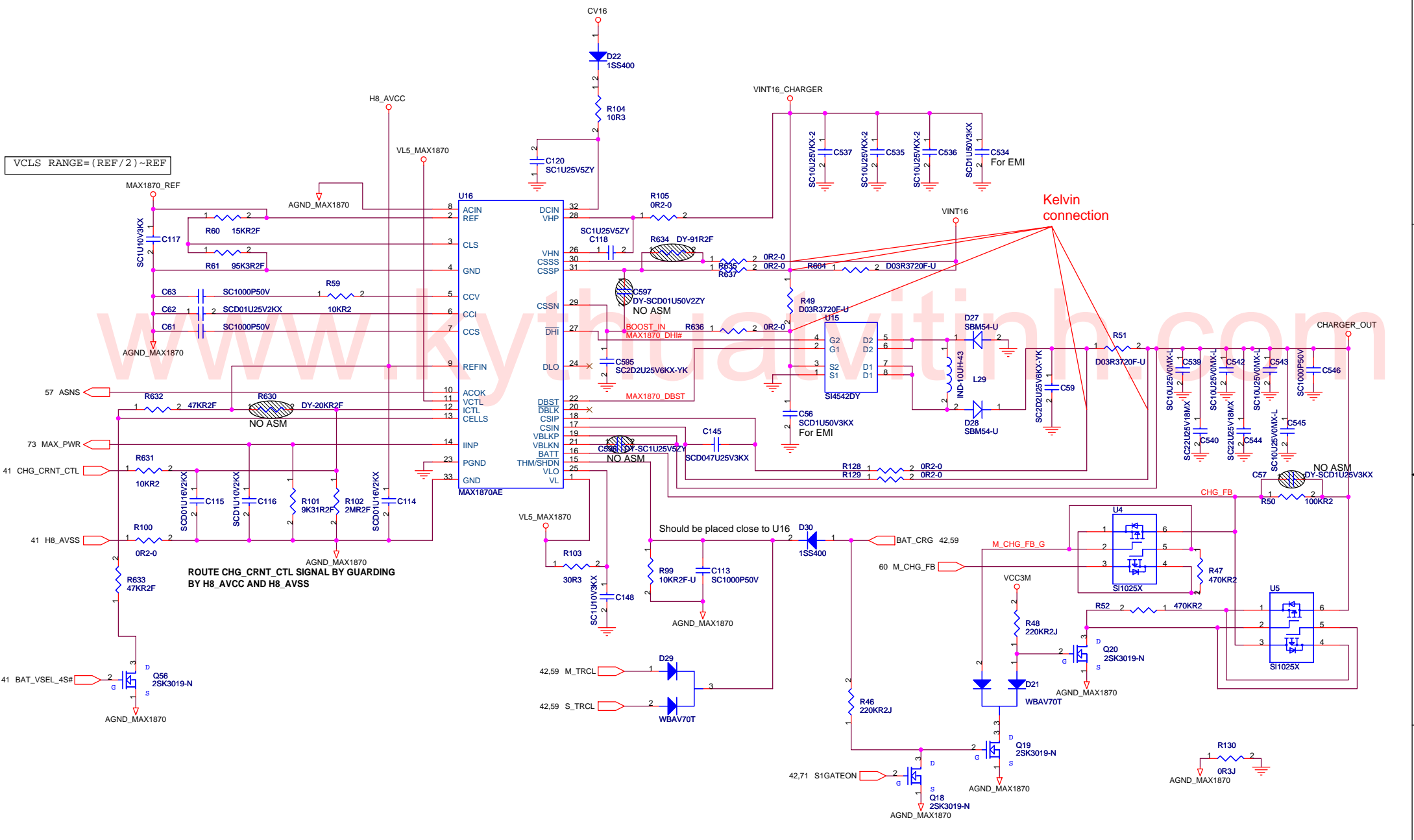


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EMC DECOUPLING	
Title S Note-3	Document Number S Note-3
Size A4	Rev -1
Date: Saturday, February 26, 2005	
Sheet 56 of 75	



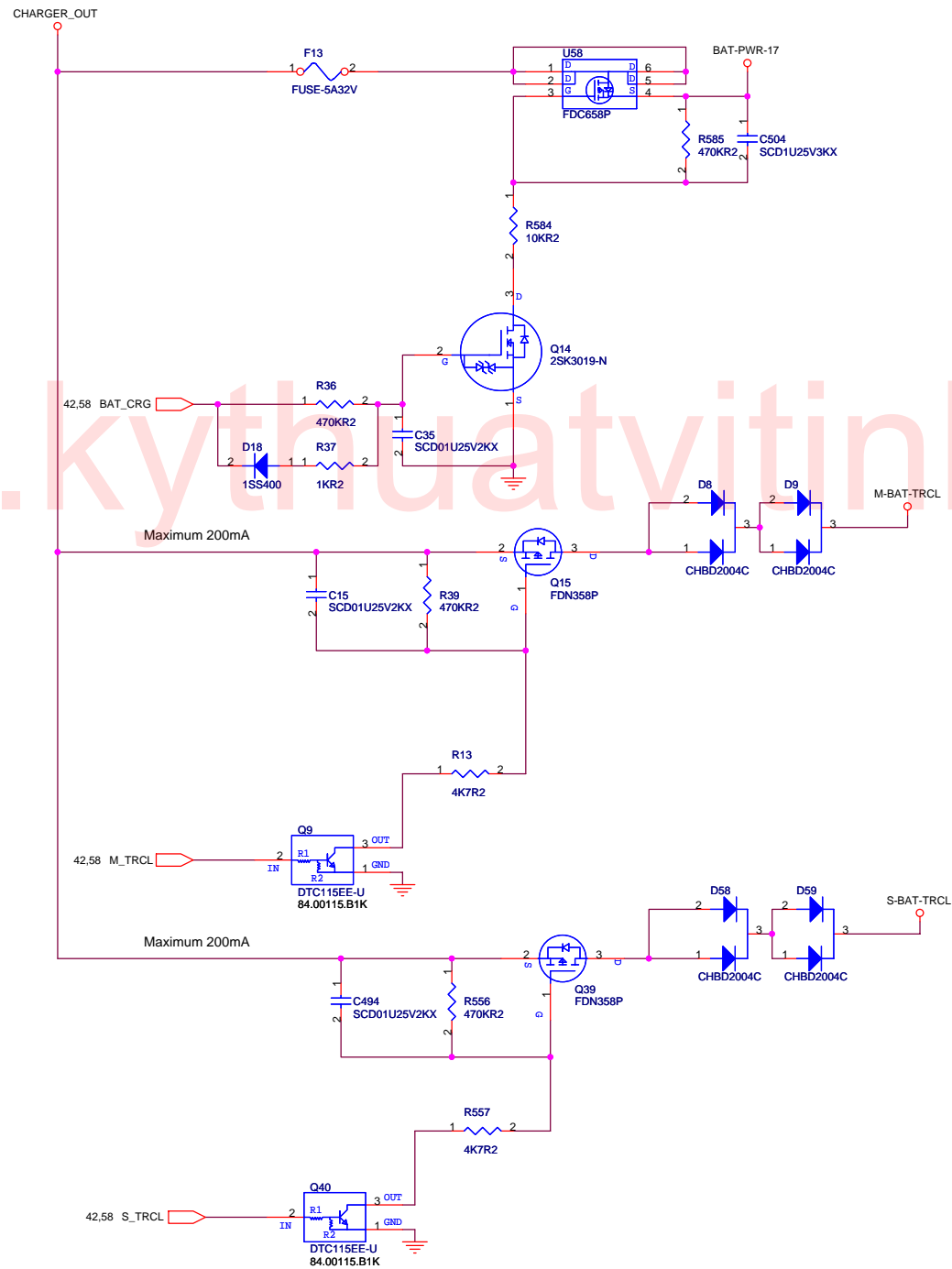
VCLS RANGE=(REF/2)~REF



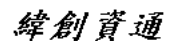
Some 2SK3019-Ns use the symbol of 2N7002, but swap the pin1 and pin2.
Q55, Q56, Q83, Q84

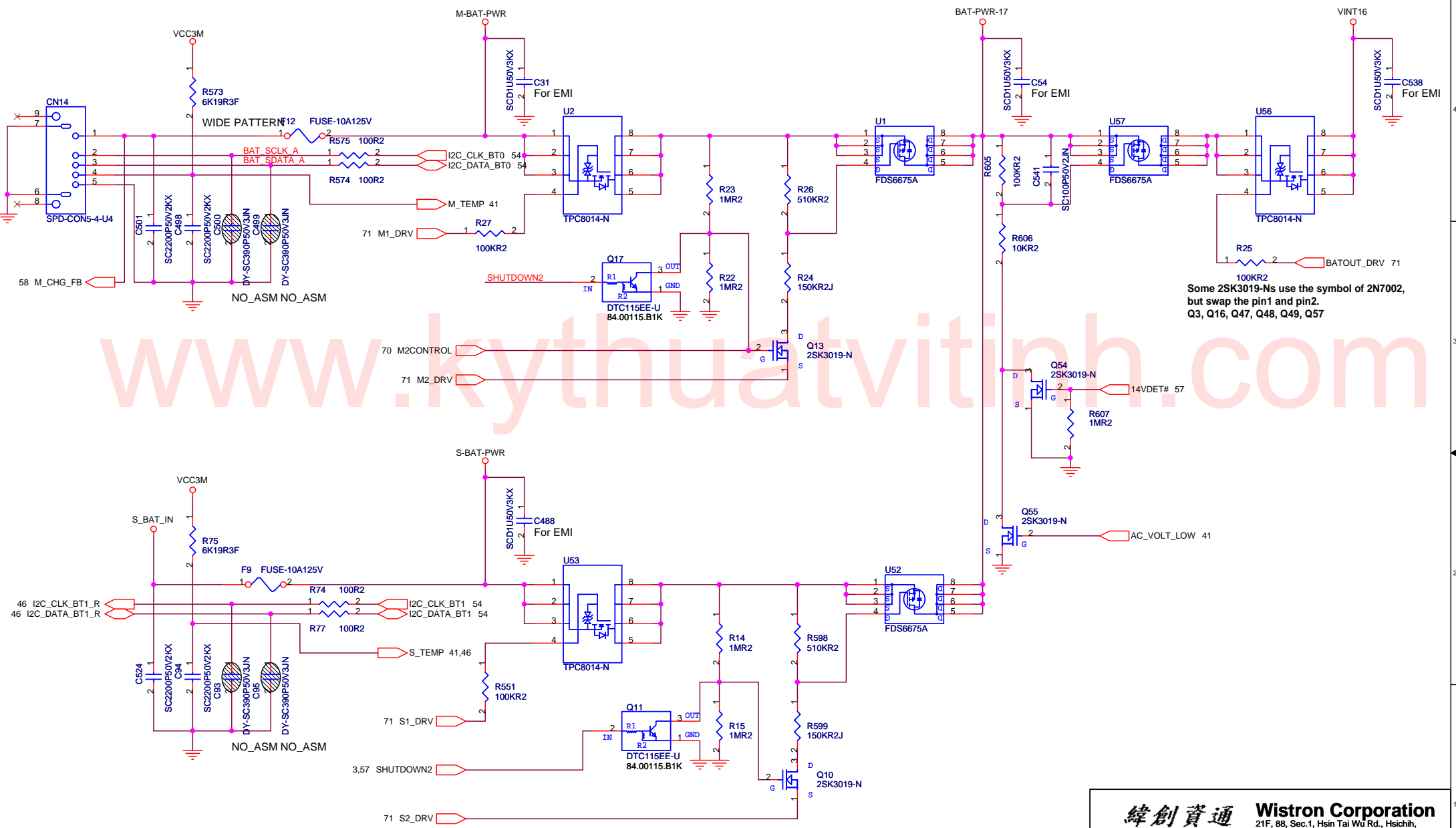
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title			CHARGER MAX1870		
Size	Document Number		S Note-3		Rev
A3					-1
Date:	Saturday, February 26, 2005		Sheet	58	of 75



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CHARGER_SELECT	
Title Size A3 Date: Saturday, February 26, 2005	Document Number S Note-3 Sheet 59 of 75
Rev -1	

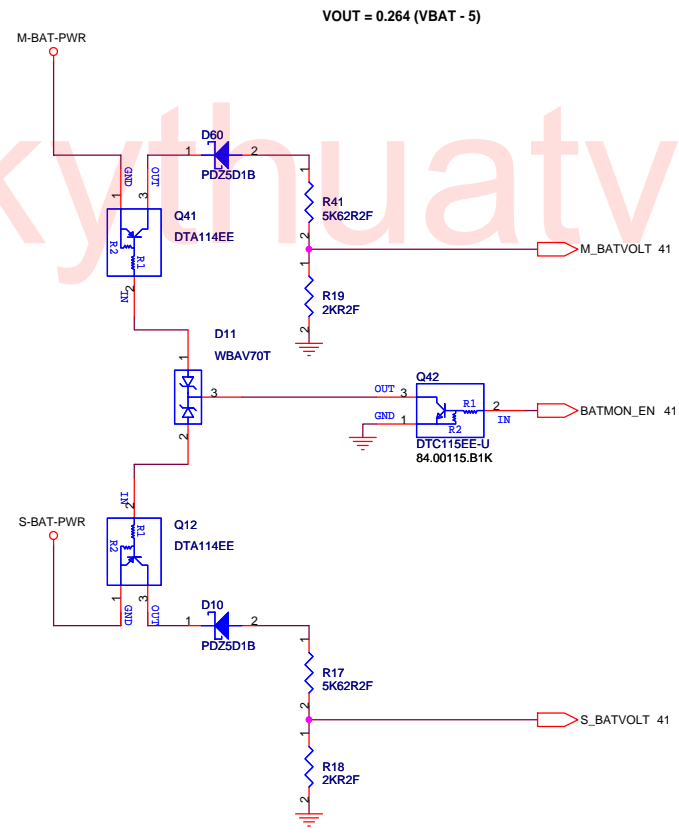


Some 2SK3019-Ns use the symbol of 2N7002, but swap the pin1 and pin2. Q3, Q16, Q47, Q48, Q49, Q57

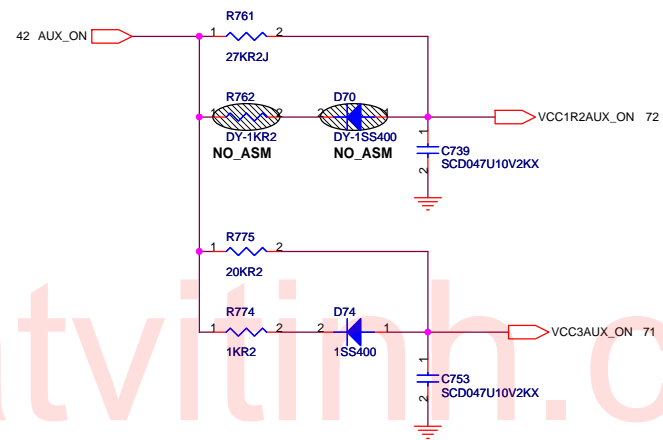
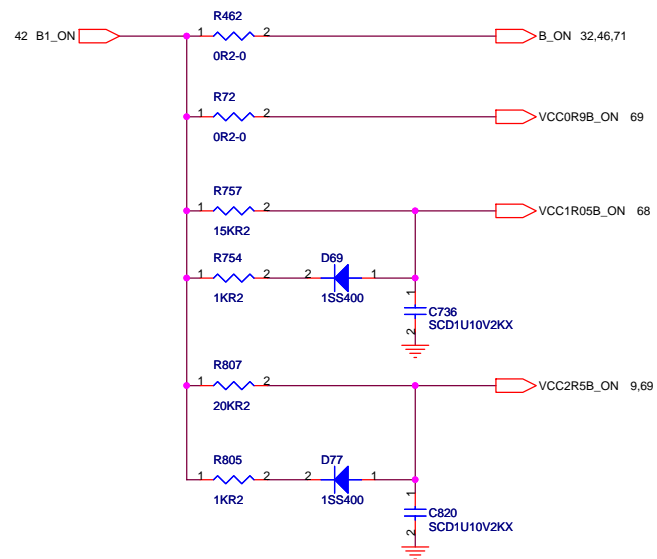
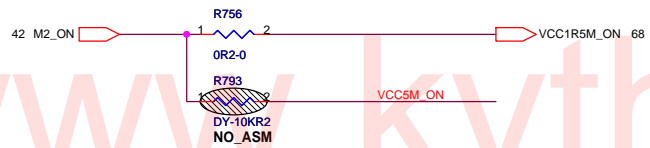
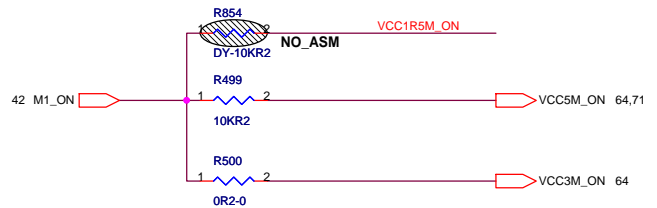
緯創資通 **Wistron Corporation**
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Title			BATTERY INPUT		
Size	Document Number				Rev
B			S Note-3		-1
Date:	Saturday, February 26, 2005	Sheet	60	of	75

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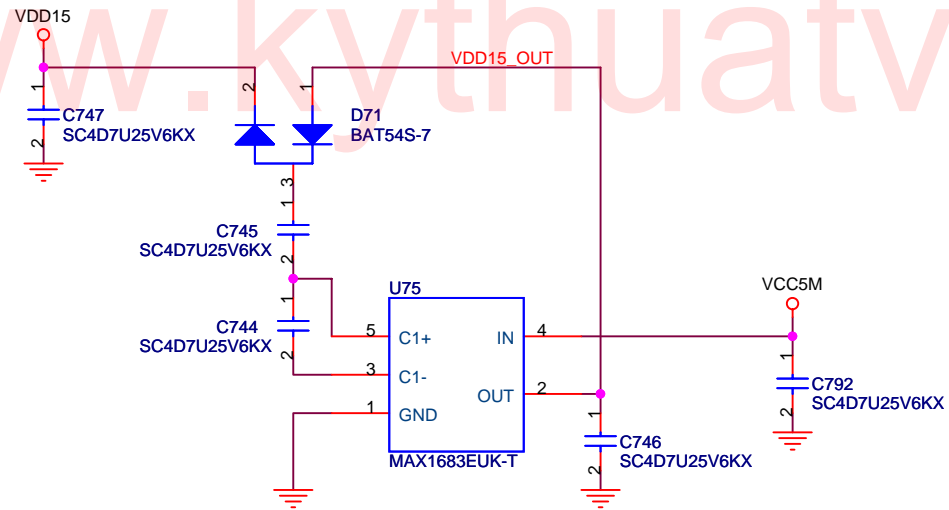


緯創資通		Wistron Corporation	
		<small>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</small>	
BATTERY MONITOR			
Title		Document Number	
		S Note-3	
Size	A3	Date	Saturday, February 26, 2005
Sheet	61	of	75
Rev	-1		



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Title

DC-DC VDD15

Size
A4

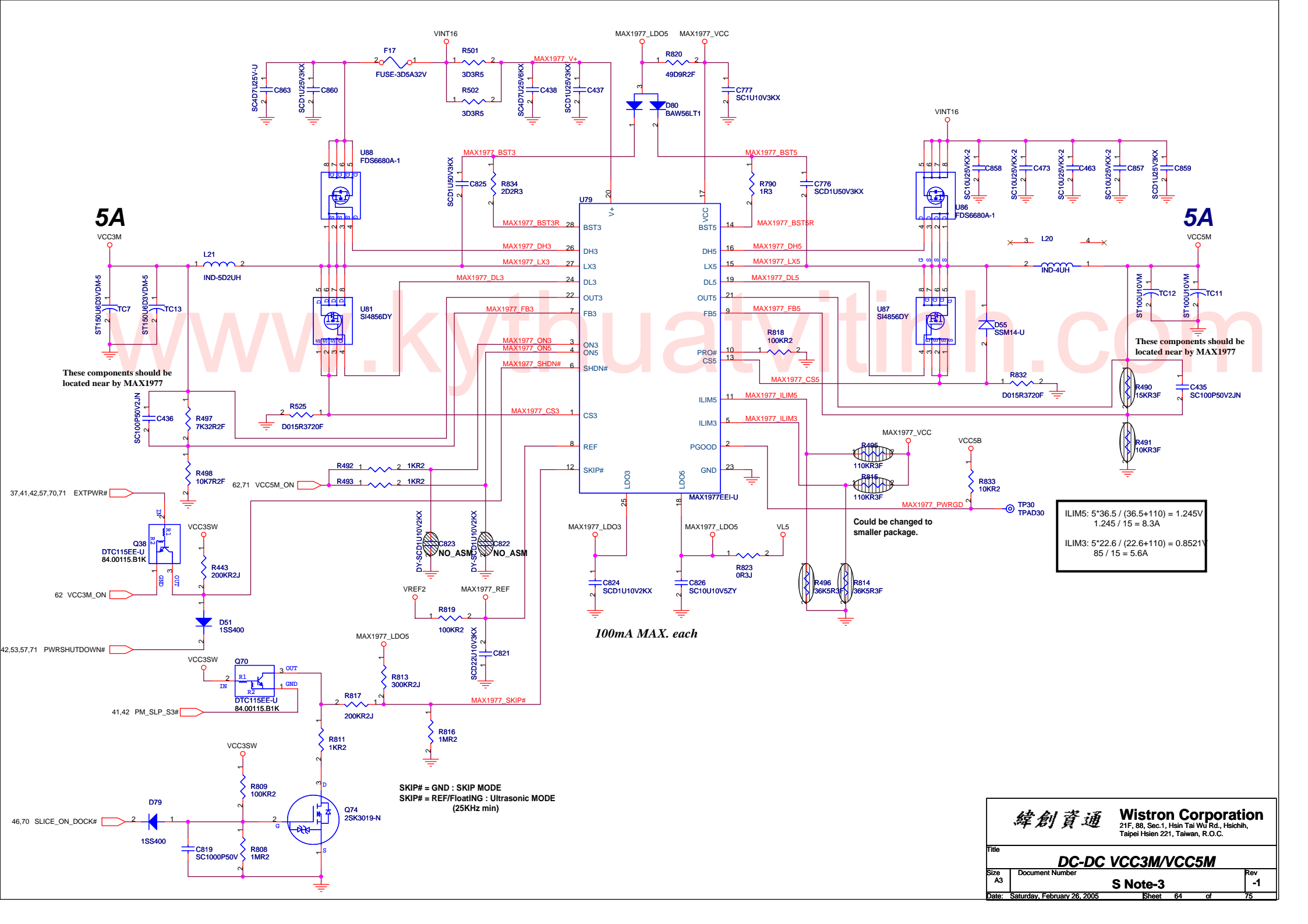
Document Number

S Note-3

Rev
-1

Date: Saturday, February 26, 2005

Sheet 63 of 75



5A

5A

These components should be located near by MAX1977

These components should be located near by MAX1977

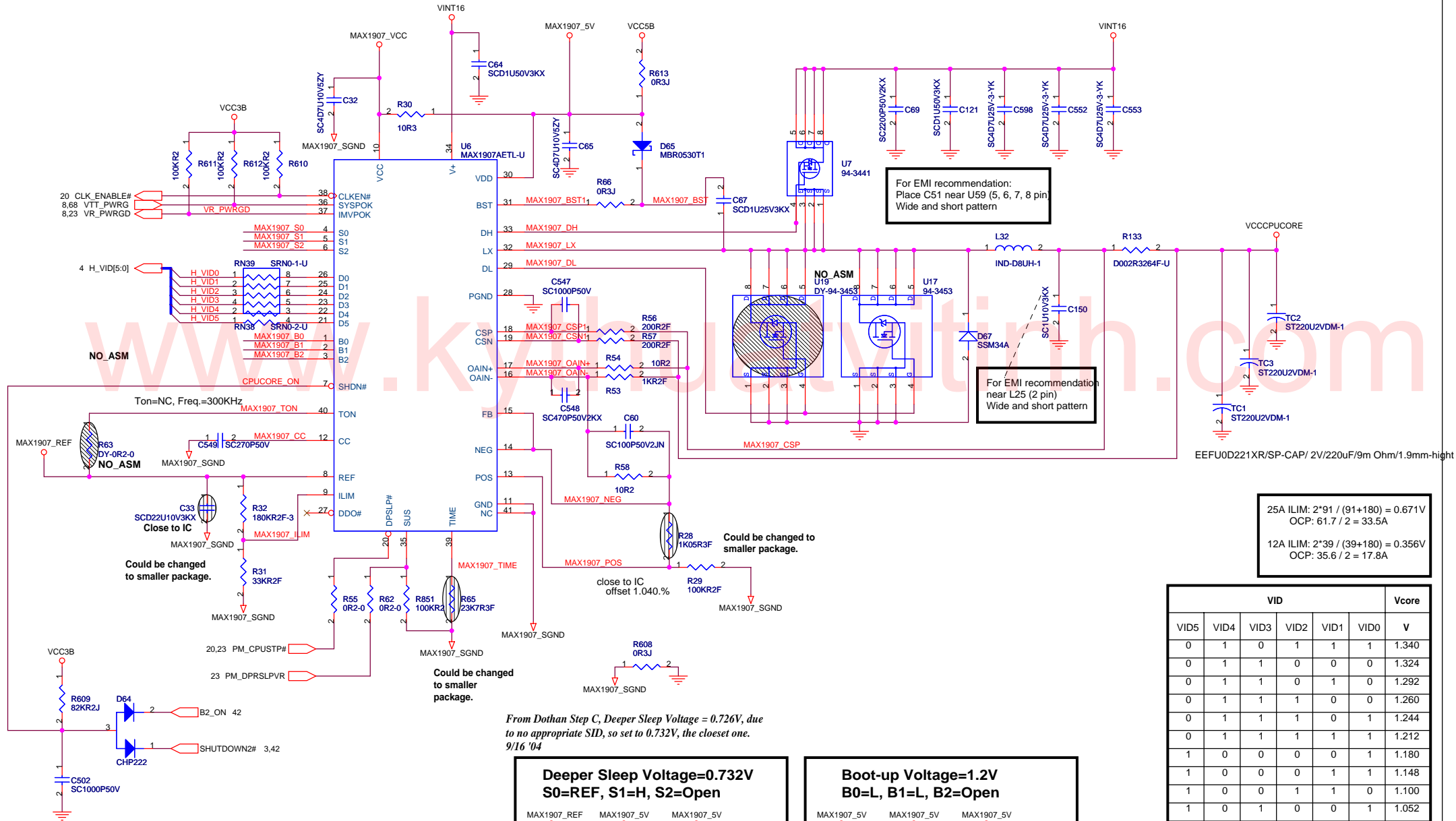
100mA MAX. each

Could be changed to smaller package.

$\text{ILIM5: } 5 \times 36.5 / (36.5 + 110) = 1.245\text{V}$ $1.245 / 15 = 8.3\text{A}$
$\text{ILIM3: } 5 \times 22.6 / (22.6 + 110) = 0.8521\text{V}$ $0.8521 / 15 = 5.6\text{A}$

SKIP# = GND : SKIP MODE
 SKIP# = REF/FloatNG : Ultrasonic MODE (25KHz min)

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DC-DC VCC3M/VCC5M	
Title	Rev
Size A3	Document Number
Date: Saturday, February 26, 2005	S Note-3
Sheet 64	of 75



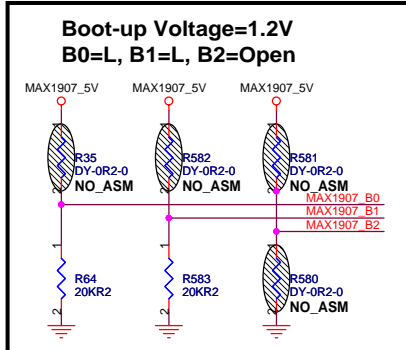
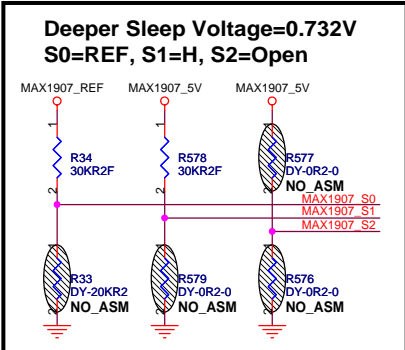
For EMI recommendation:
Place C51 near U59 (5, 6, 7, 8 pin)
Wide and short pattern

For EMI recommendation
near L25 (2 pin)
Wide and short pattern

25A ILIM: $2 \times 91 / (91 + 180) = 0.671V$
OCP: $61.7 / 2 = 33.5A$
12A ILIM: $2 \times 39 / (39 + 180) = 0.356V$
OCP: $35.6 / 2 = 17.8A$

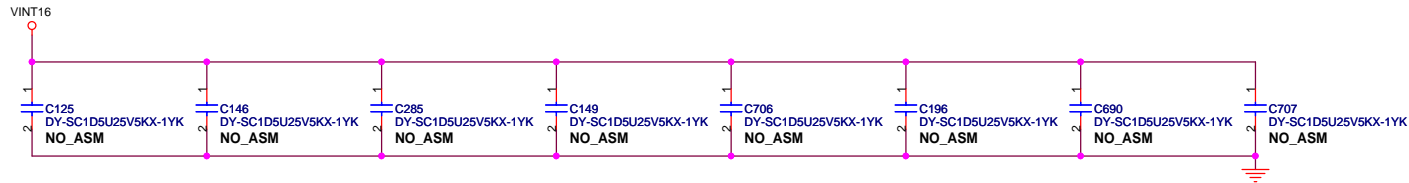
VID						Vcore
VID5	VID4	VID3	VID2	VID1	VID0	V
0	1	0	1	1	1	1.340
0	1	1	0	0	0	1.324
0	1	1	0	1	0	1.292
0	1	1	1	0	0	1.260
0	1	1	1	0	1	1.244
0	1	1	1	1	1	1.212
1	0	0	0	0	1	1.180
1	0	0	0	1	1	1.148
1	0	0	1	1	0	1.100
1	0	1	0	0	1	1.052
1	0	1	0	1	1	1.020
1	0	1	1	1	0	0.972
1	1	0	0	0	0	0.940

From Dothan Step C, Deeper Sleep Voltage = 0.726V, due to no appropriate SID, so set to 0.732V, the closest one.
9/16 '04



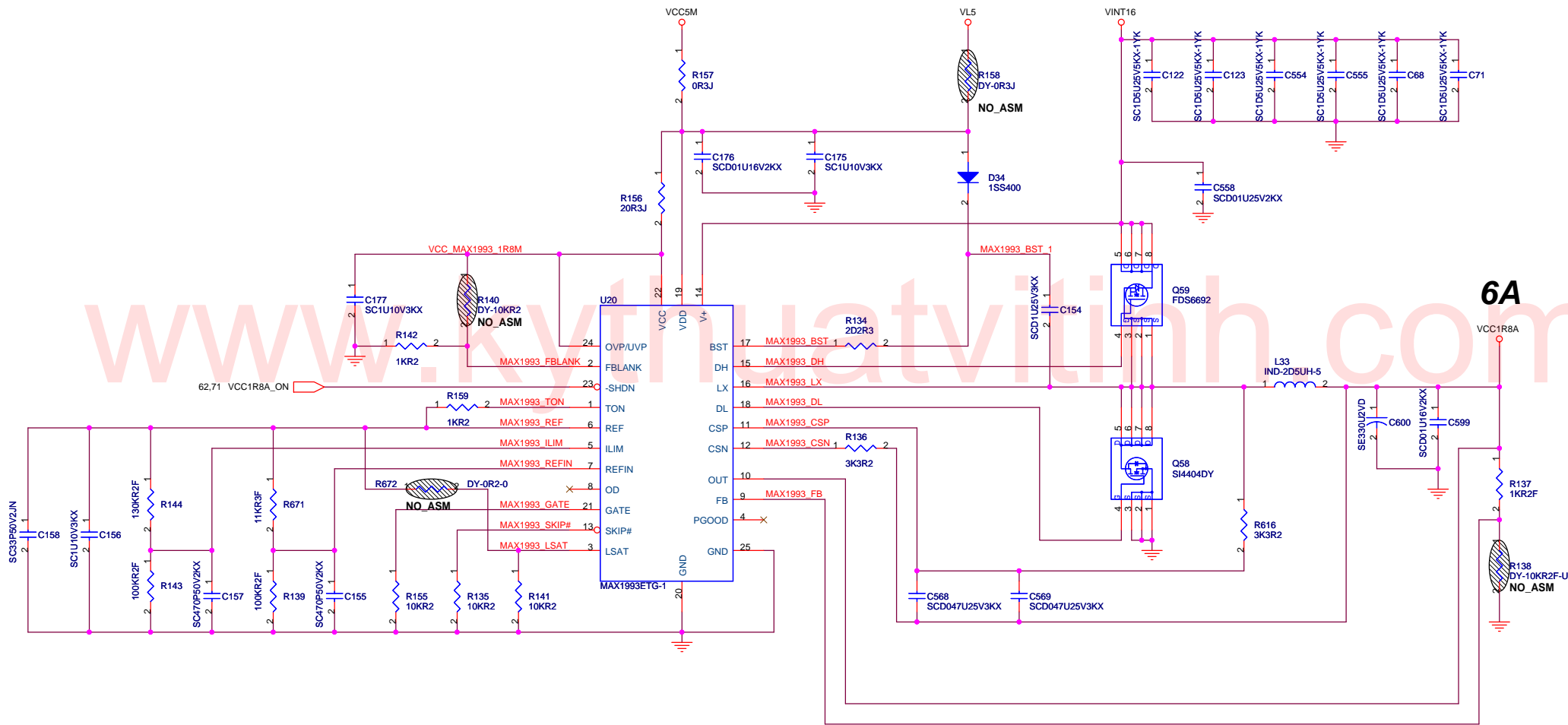
ALL CAPS ON THIS PAGE ARE NO-ASM FOR VCCCPUCORE.

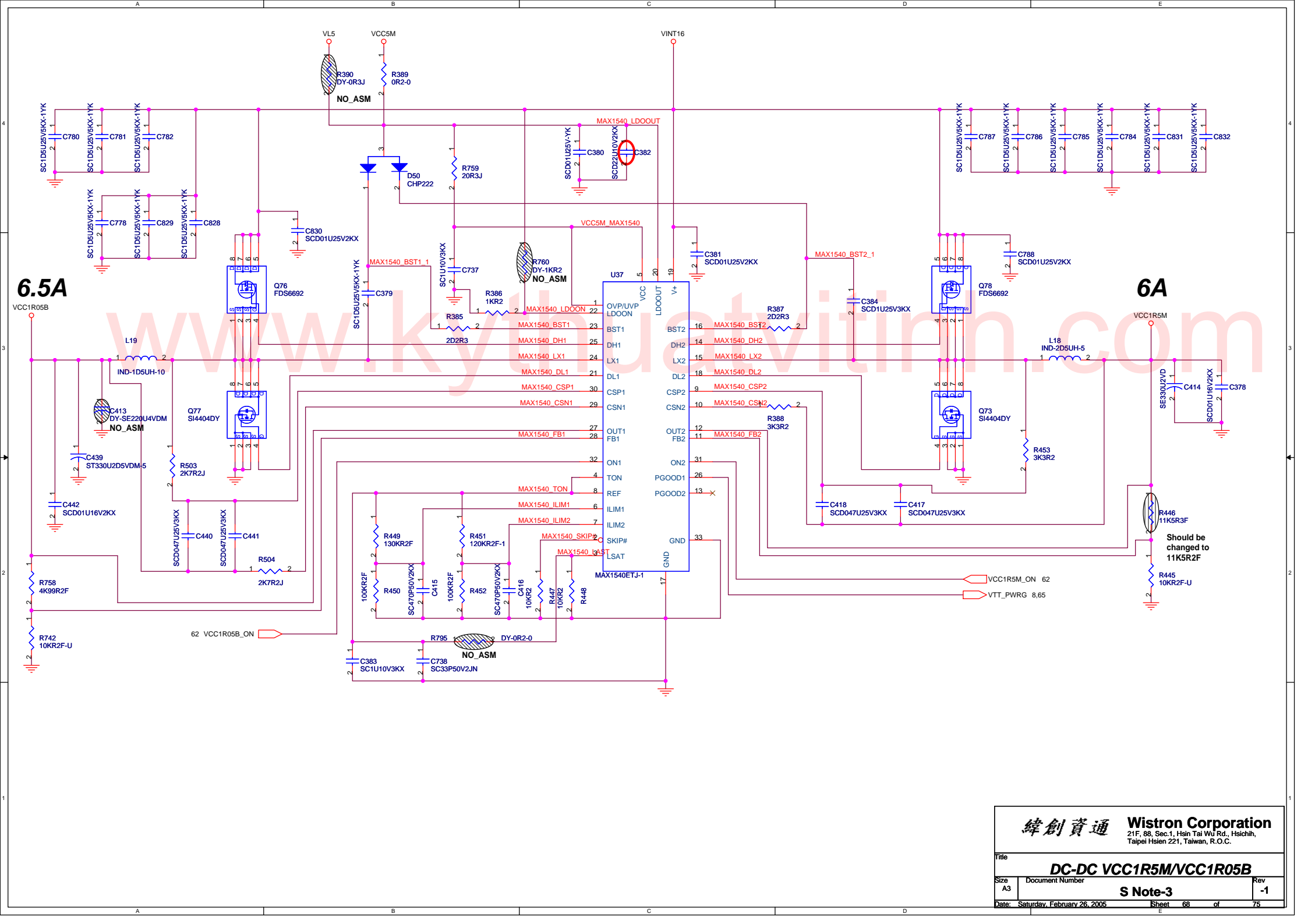
X8 PCS



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		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
DC-DC VCORE INPUT CAP			
Size	Document Number		Rev
A3		S Note-3	-1
Date: Saturday, February 26, 2005		Sheet 66	of 75



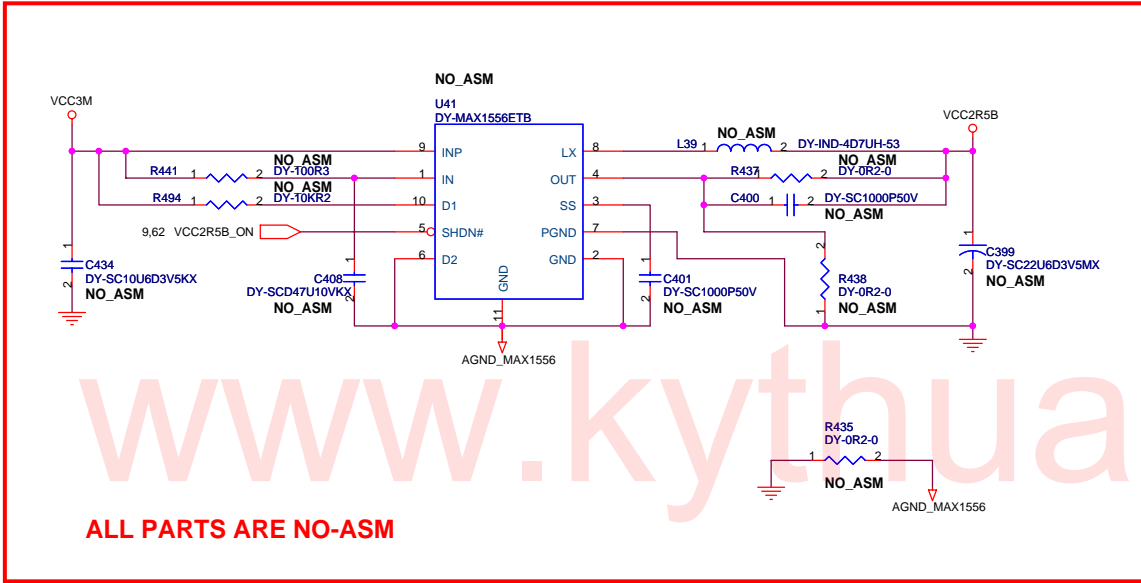


6.5A

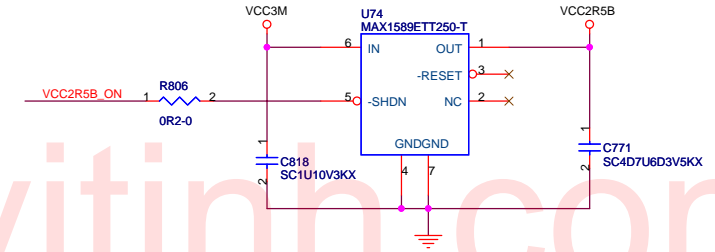
6A

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 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
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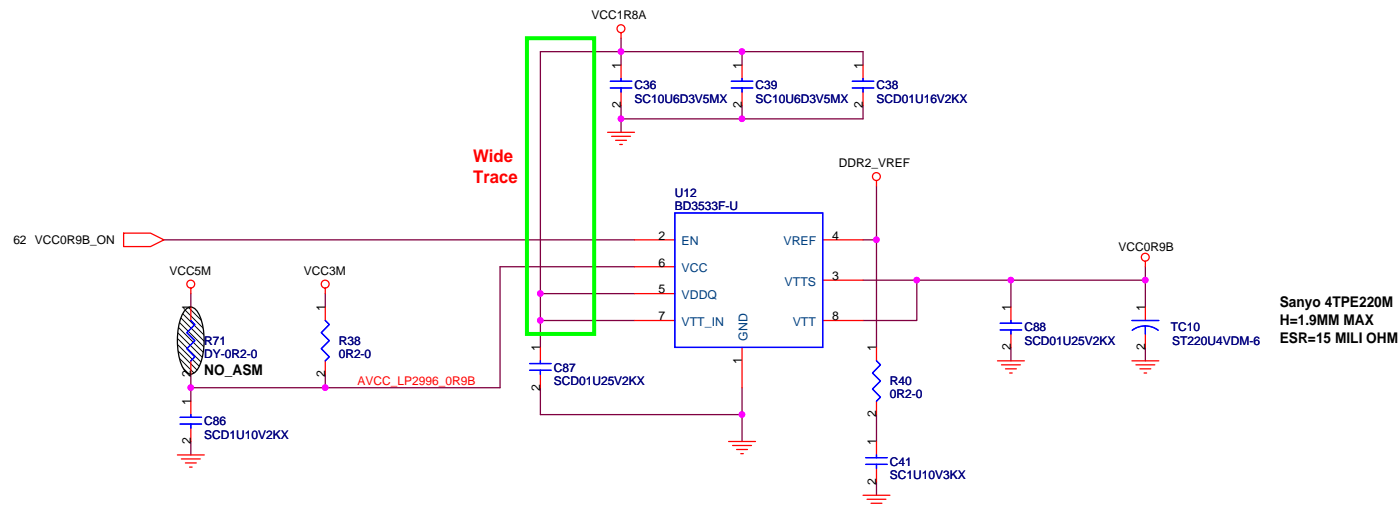
Title		
DC-DC VCC1R5M/VCC1R05B		
Size	Document Number	Rev
A3		-1
S Note-3		
Date: Saturday, February 26, 2005	Sheet 68	of 75



VCC2R5B

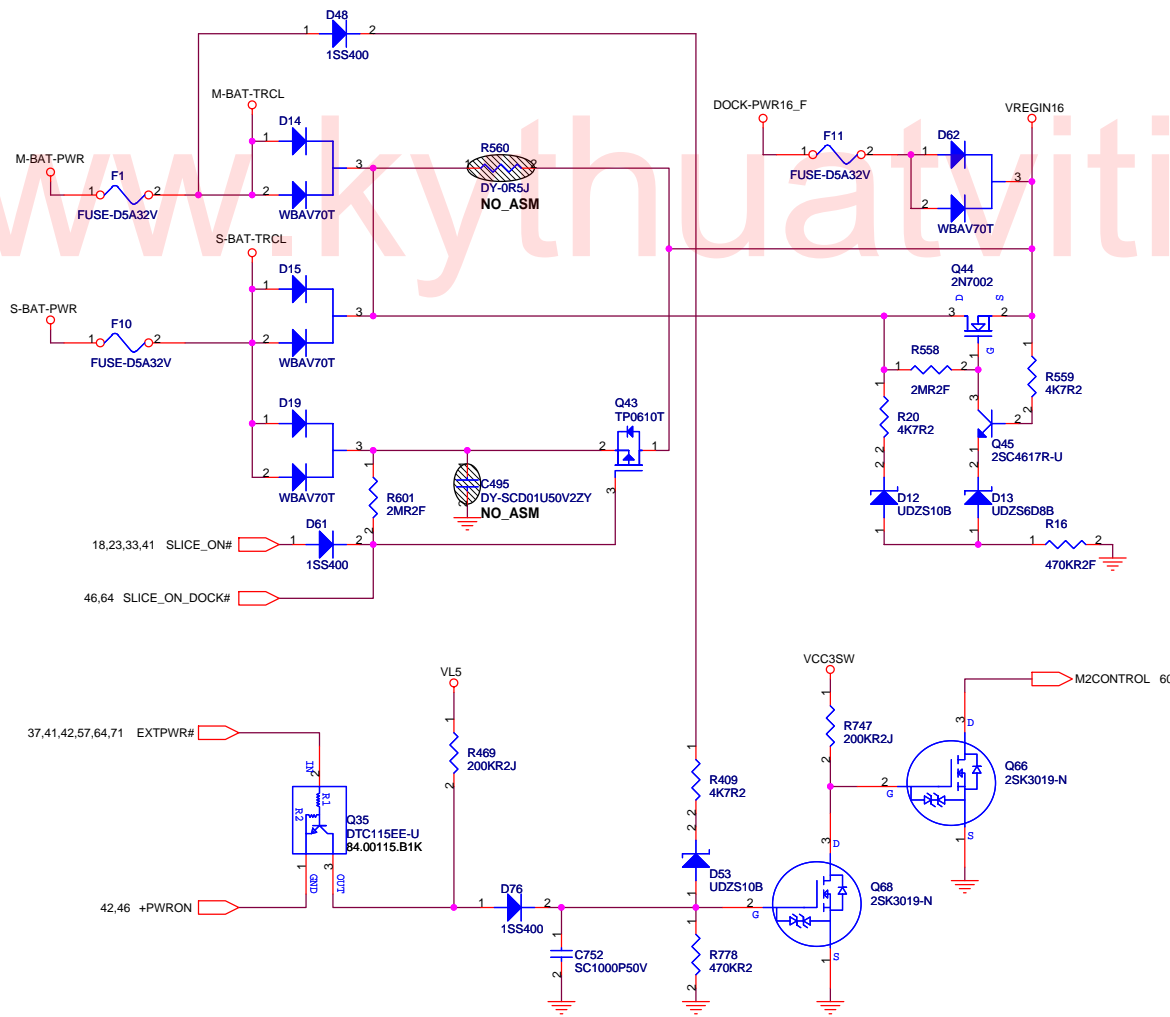


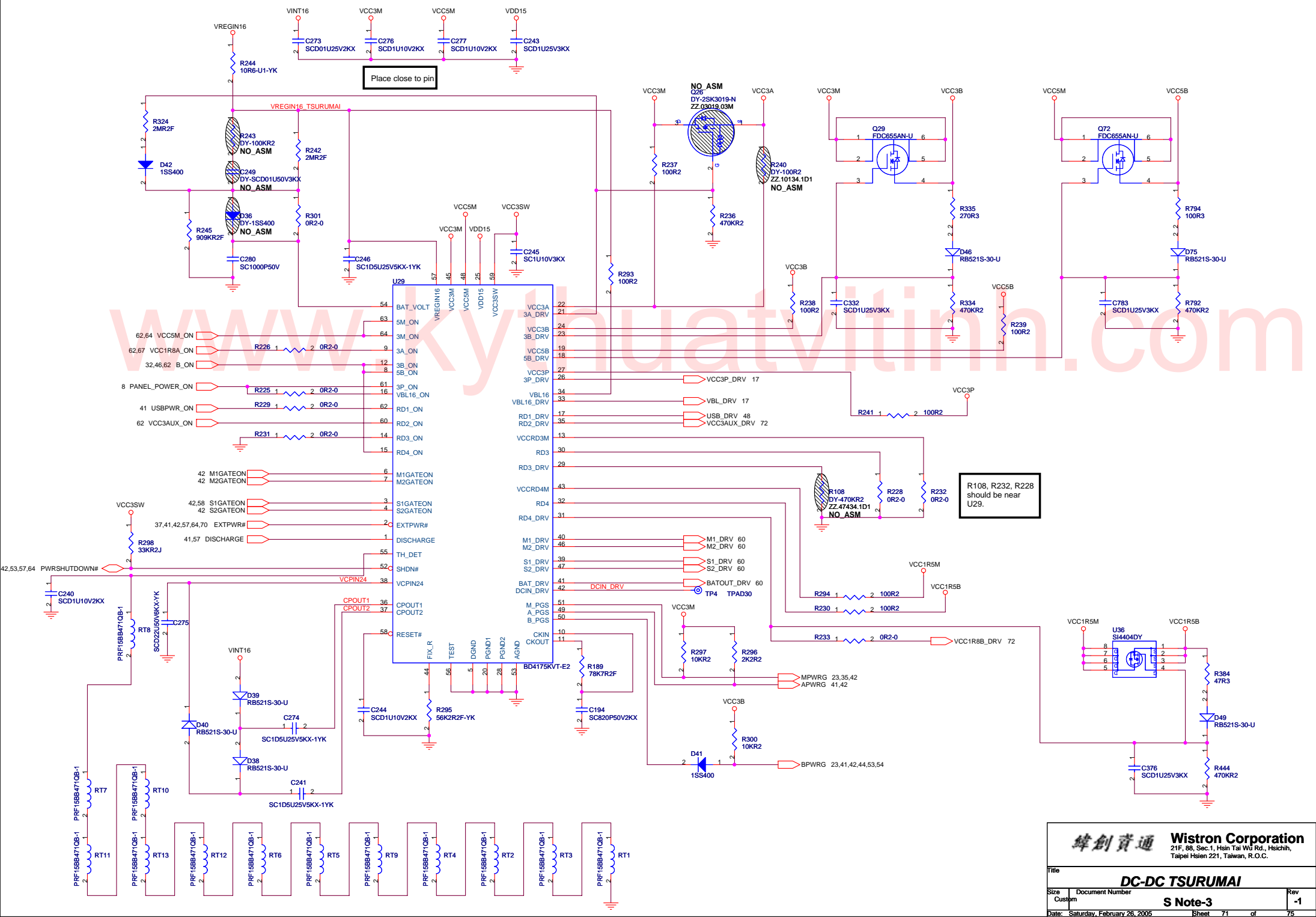
VCC0R9B & DDR2_VREF



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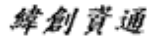
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Size	Document Number	Rev	
A3		-1	
Date: Saturday, February 26, 2005		Sheet	75
		69	of



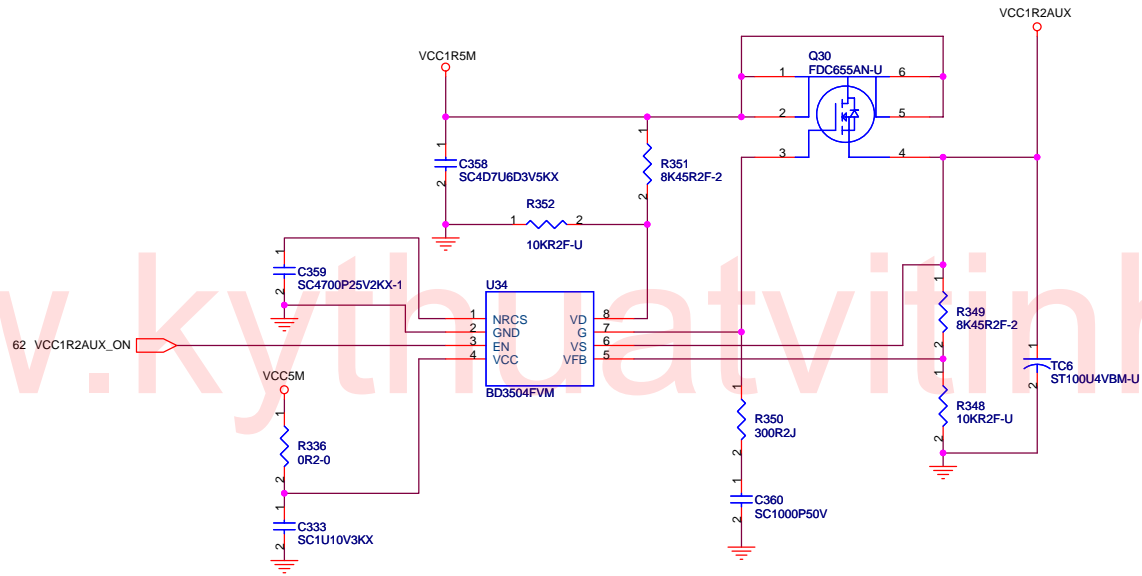


Place close to pin

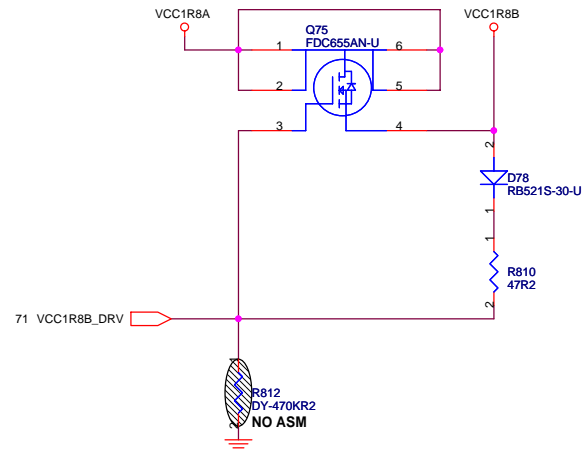
R108, R232, R228 should be near U29.

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Size	Document Number
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Date: Saturday, February 26, 2005	Sheet 71 of 75

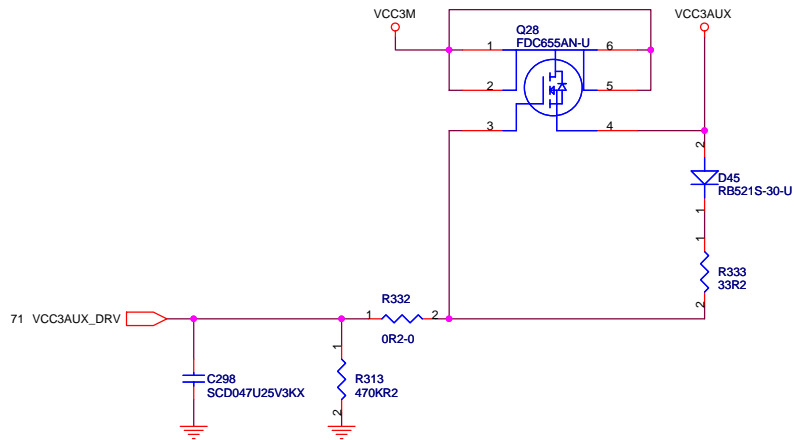
VCC1R2AUX



VCC1R8B



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A3		-1
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