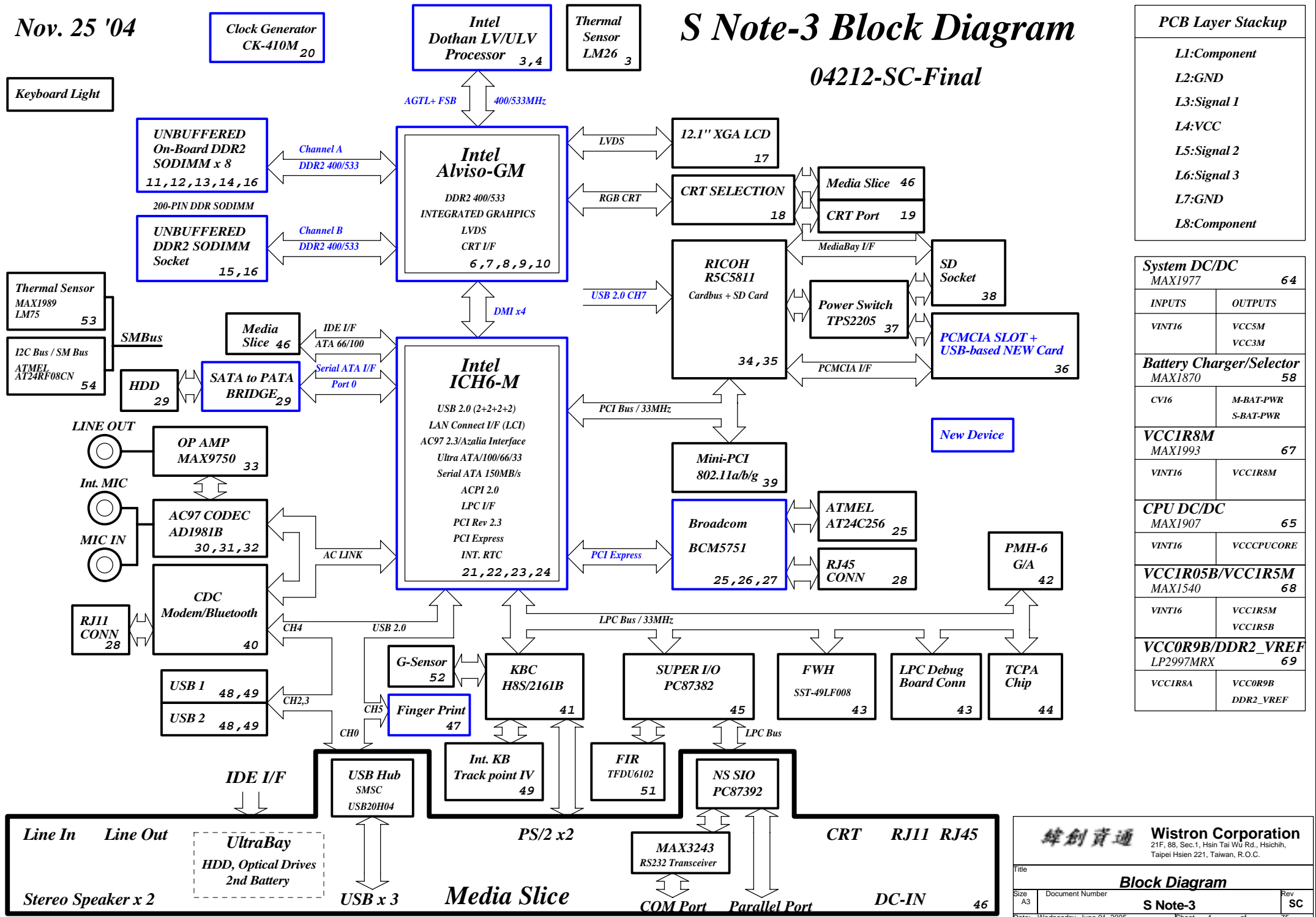


S Note-3 Block Diagram

04212-SC-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

VCCIR8M
MAX1993 67

VINT16	VCCIR8M
--------	---------

CPU DC/DC
MAX1907 65

VINT16	VCCPCUCORE
--------	------------

VCCIR05B/VCCIR5M
MAX1540 68

VINT16	VCCIR5M
	VCCIR5B

VCC0R9B/DDR2_VREF
LP2997MRX 69

VCCIR8A	VCC0R9B
	DDR2_VREF

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Title

Block Diagram

Size A3 Document Number S Note-3 Rev SC

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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#
CARDBUS R5C811	AD16	SERIRQ	REQ#0 / GNT#
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

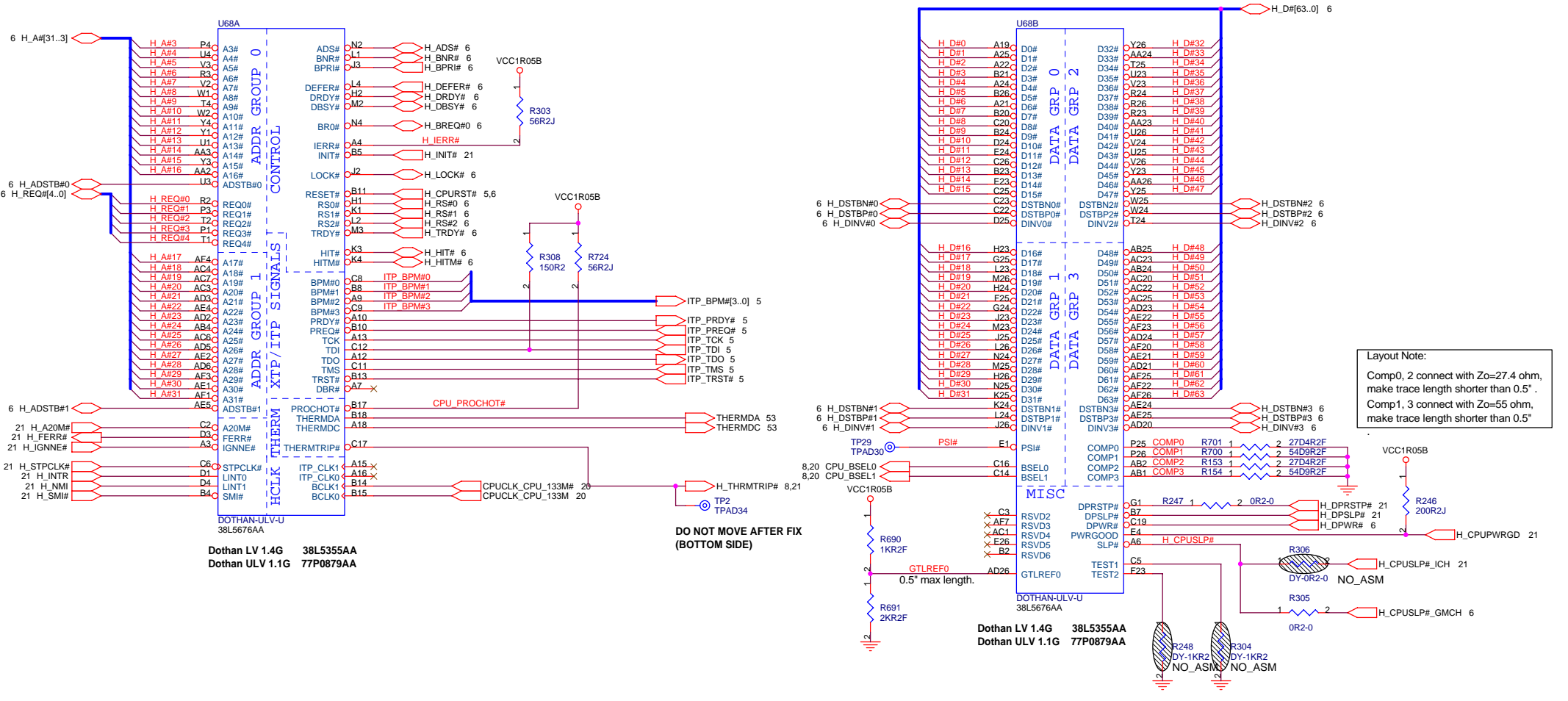
Symbol name	Value	Tolerance (M: +/-20, K: +/-10, Z: +80/-20)	Rating	Size 2=>0402, 3=>0603, 5=>0805, 6=>1206, 0=>1210
SCD1U10V2MX-1	0.1uF	M/X5R	10V	0402
SC10U6D3V5MX	10uF	M/X5R	6.3V	0805
SC2D2U16V5ZY	2.2uF	Z/Y5V	16V	0805

The naming rule is
 Capacitor type + value + rating + size + tolerance + material
 SCD1U10V2MX-1
 SC=> SMT Ceramic, 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		
	0	1	0	0		
	0	1	0	1		
	0	1	1	0		
	0	1	1	1		

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Title			
Reference			
Size A3	Document Number	S Note-3	Rev SC
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		Sheet 2	of 75

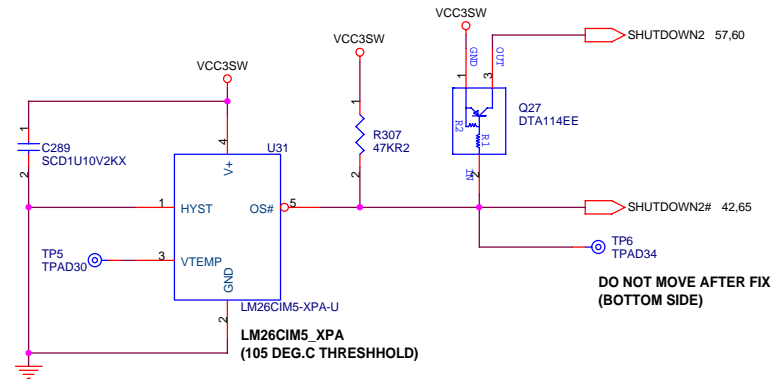


Layout Note:
 Comp0, 2 connect with Zo=27.4 ohm, make trace length shorter than 0.5".
 Comp1, 3 connect with Zo=55 ohm, make trace length shorter than 0.5"

DO NOT MOVE AFTER FIX (BOTTOM SIDE)

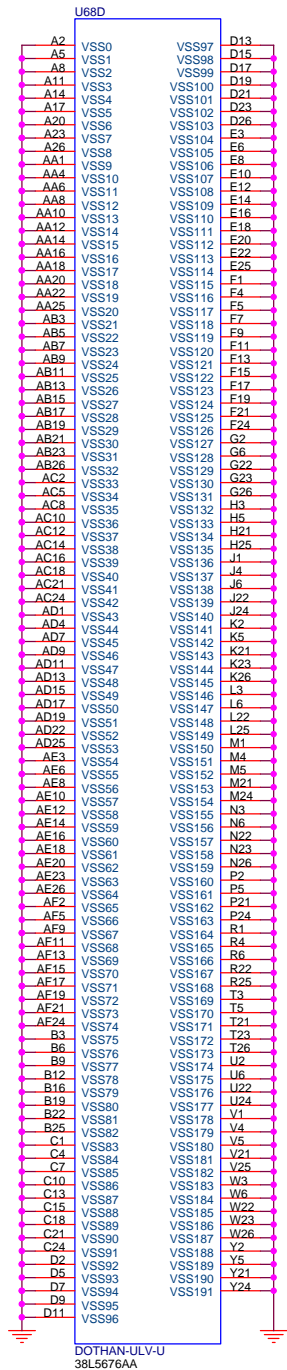
Dothan LV 1.4G 38L5355AA
 Dothan ULV 1.1G 77P0879AA

Dothan LV 1.4G 38L5355AA
 Dothan ULV 1.1G 77P0879AA

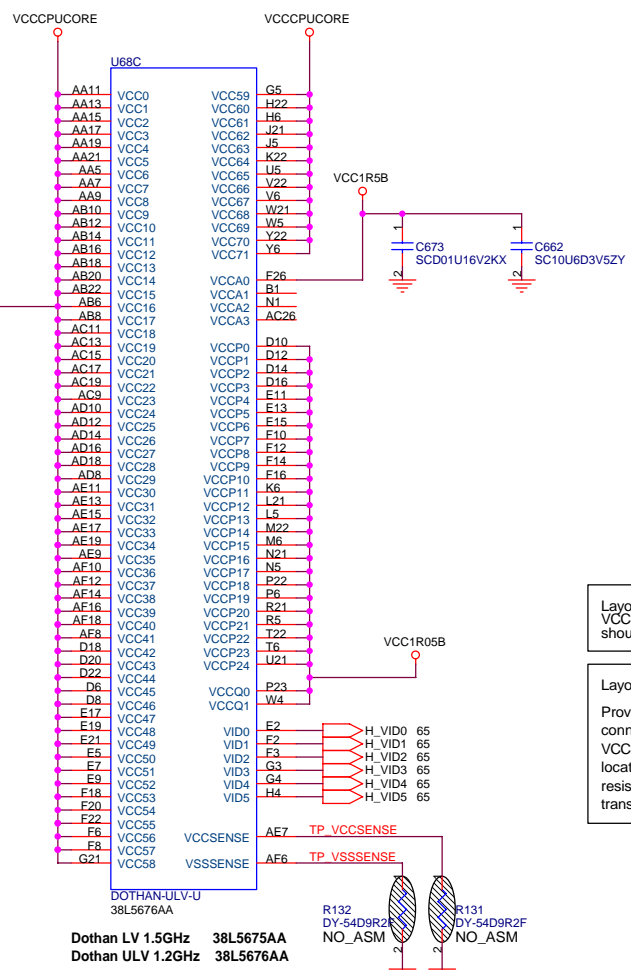
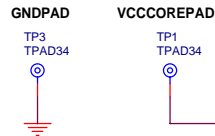


DO NOT MOVE AFTER FIX (BOTTOM SIDE)

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Title		
Dothan CPU(1/2)		
Size A3	Document Number	Rev SC
S Note-3		
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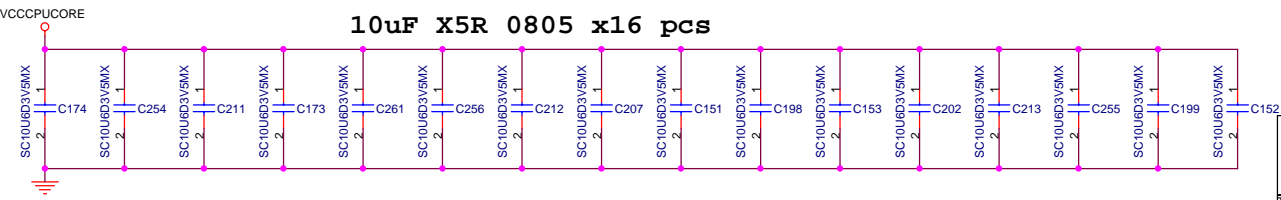
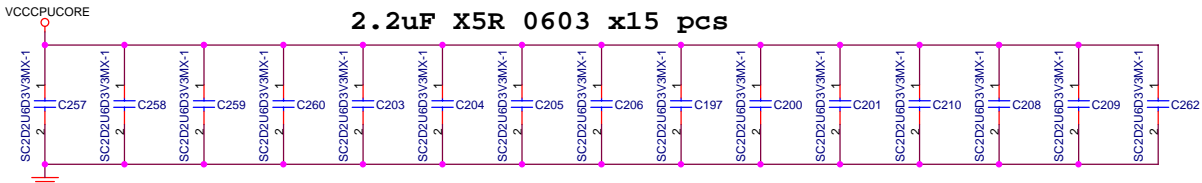
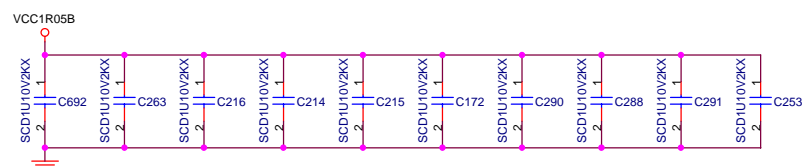
Dothan LV 1.4G 38L5355AA
Dothan ULV 1.1G 77P0879AA



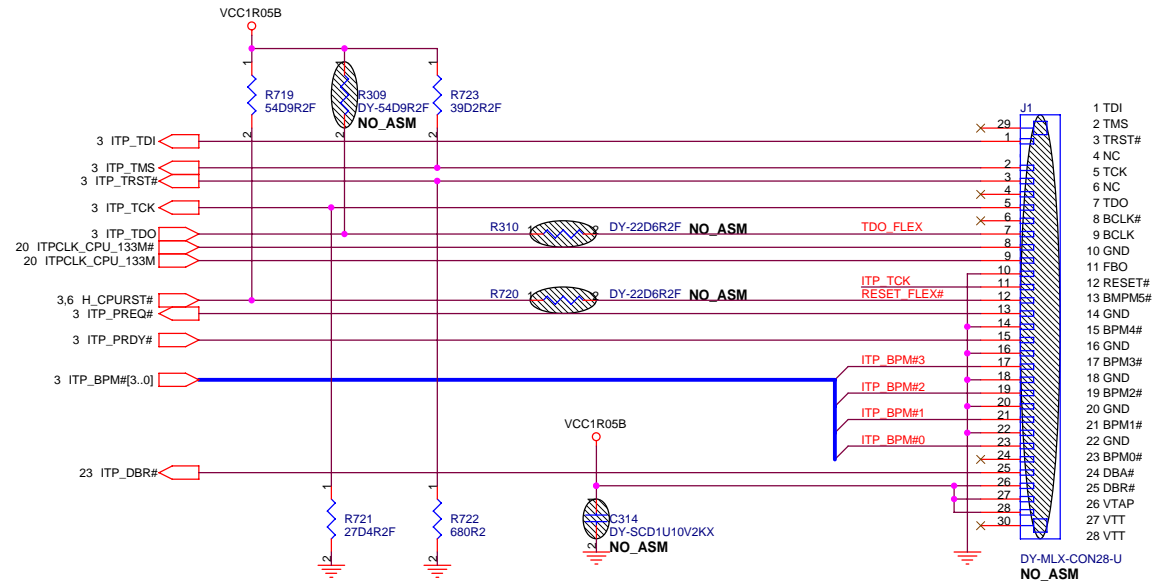
Dothan LV 1.5GHz 38L5675AA
Dothan ULV 1.2GHz 38L5676AA

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

Layout Note:
Provide a test point (with no stub) to connect a differential probe between VCCSENSE and VSSSENSE at the location where the two 54.9ohm resistors terminate the 55 ohm transmission line.



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File Dothan CPU(2/2)	
Size A3	Document Number S Note-3
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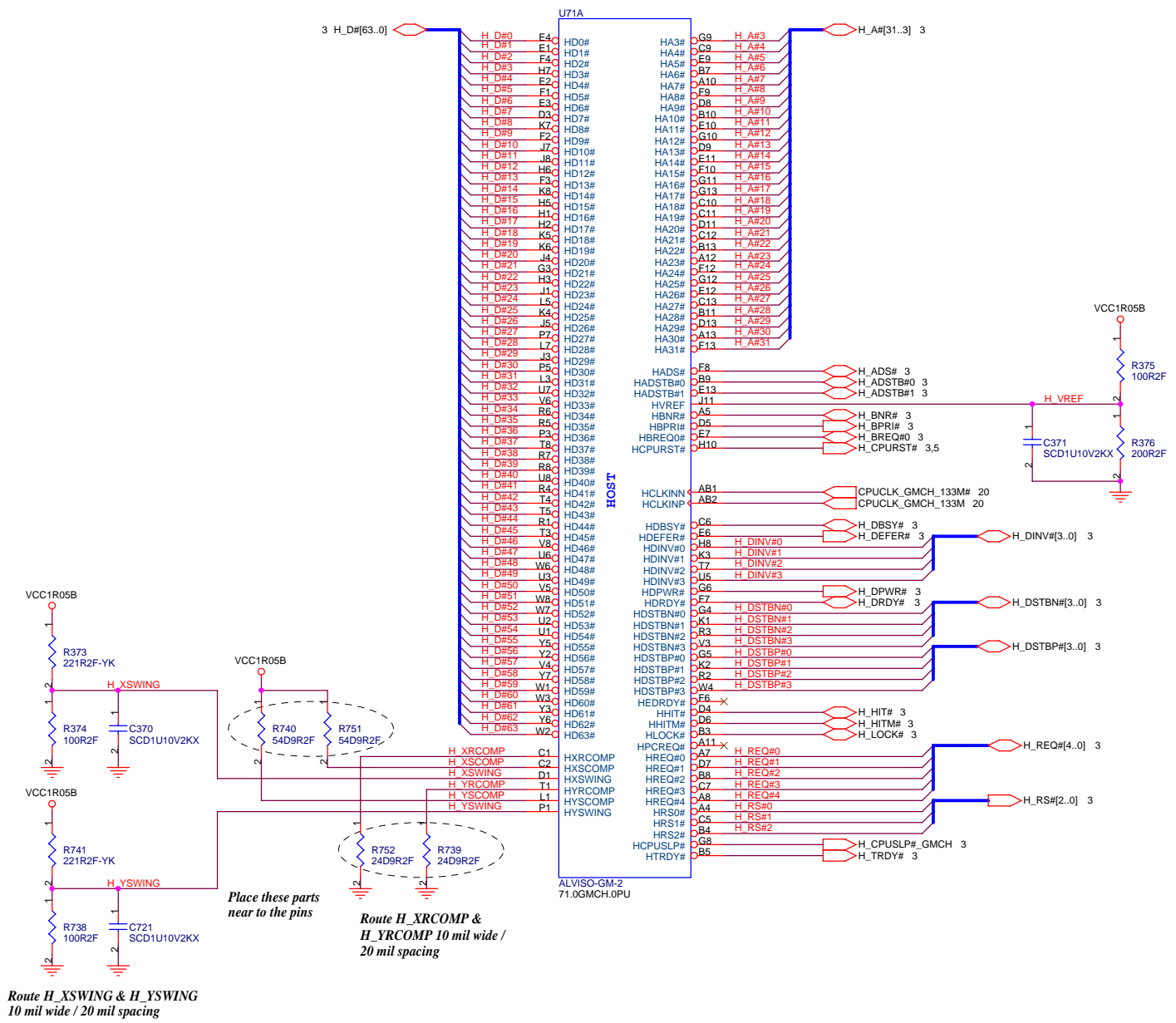


(*1) TCK SIGNAL IS BRANCHED AT DOTHAN PIN

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

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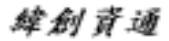
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Size	Document Number	S Note-3			Rev
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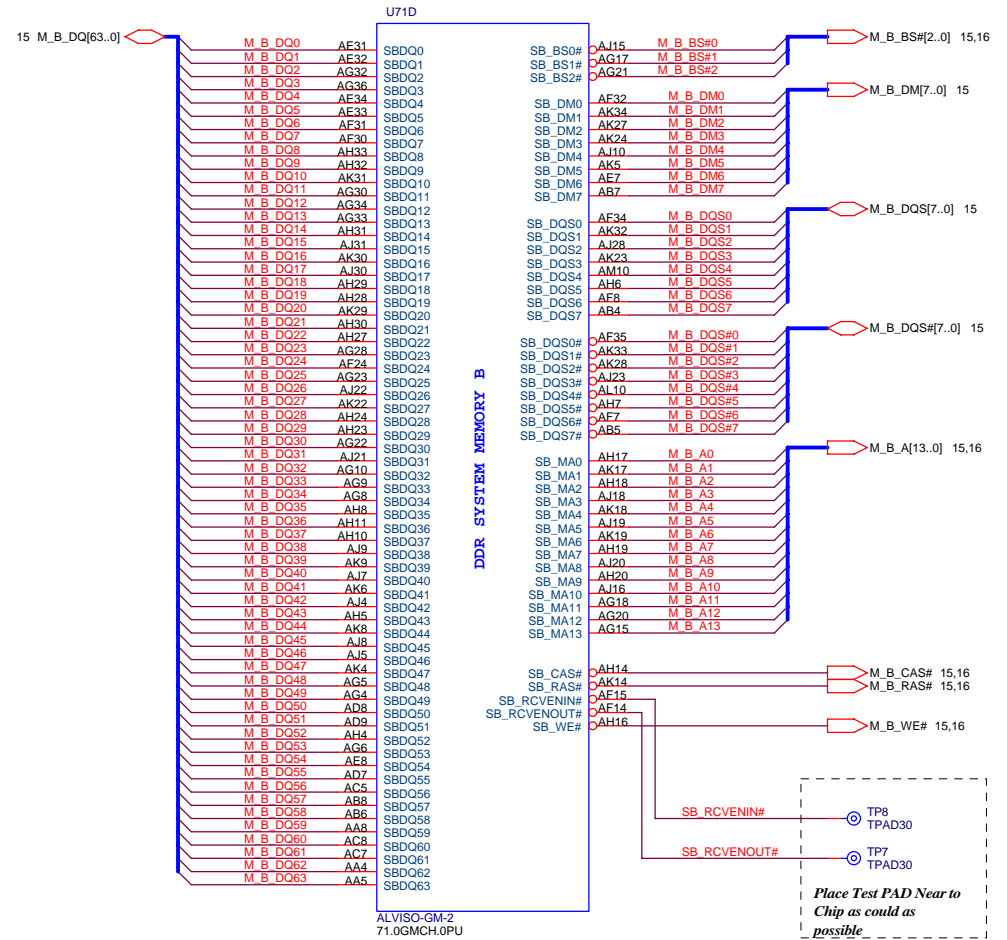
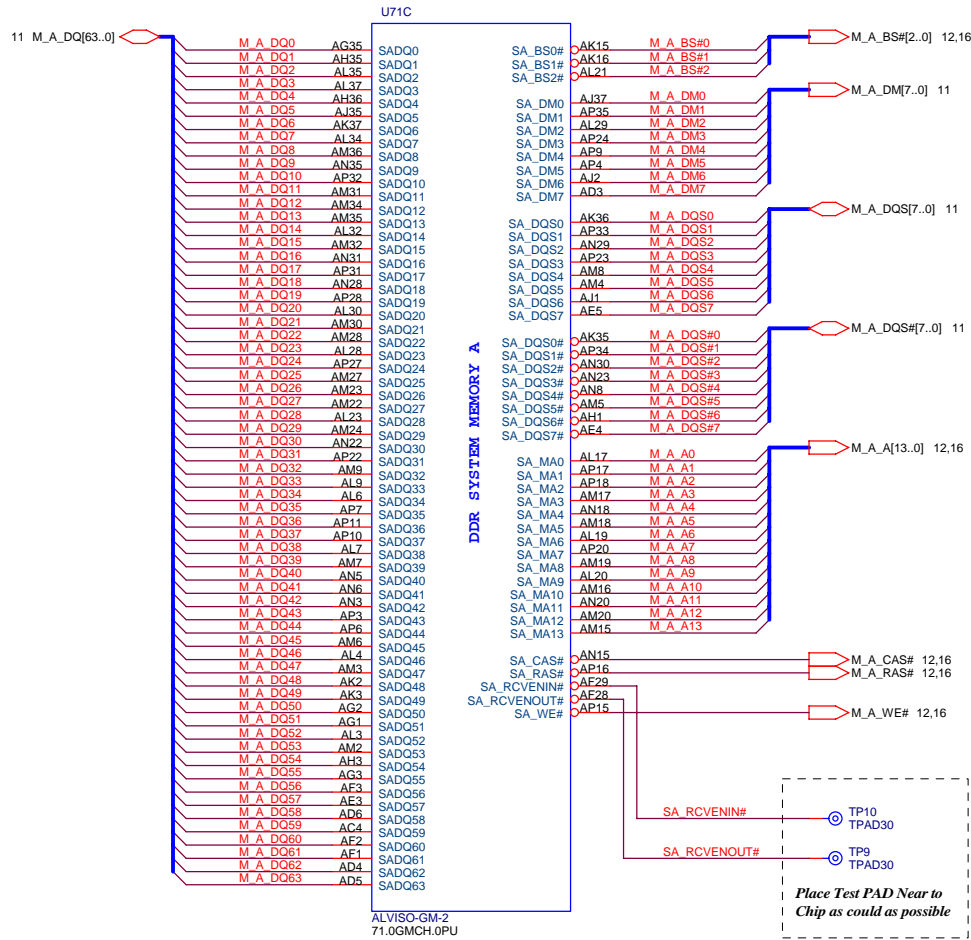


Route H_XSWING & H_YSWING
10 mil wide / 20 mil spacing

Place these parts
near to the pins

Route H_XRCOMP &
H_YRCOMP 10 mil wide /
20 mil spacing

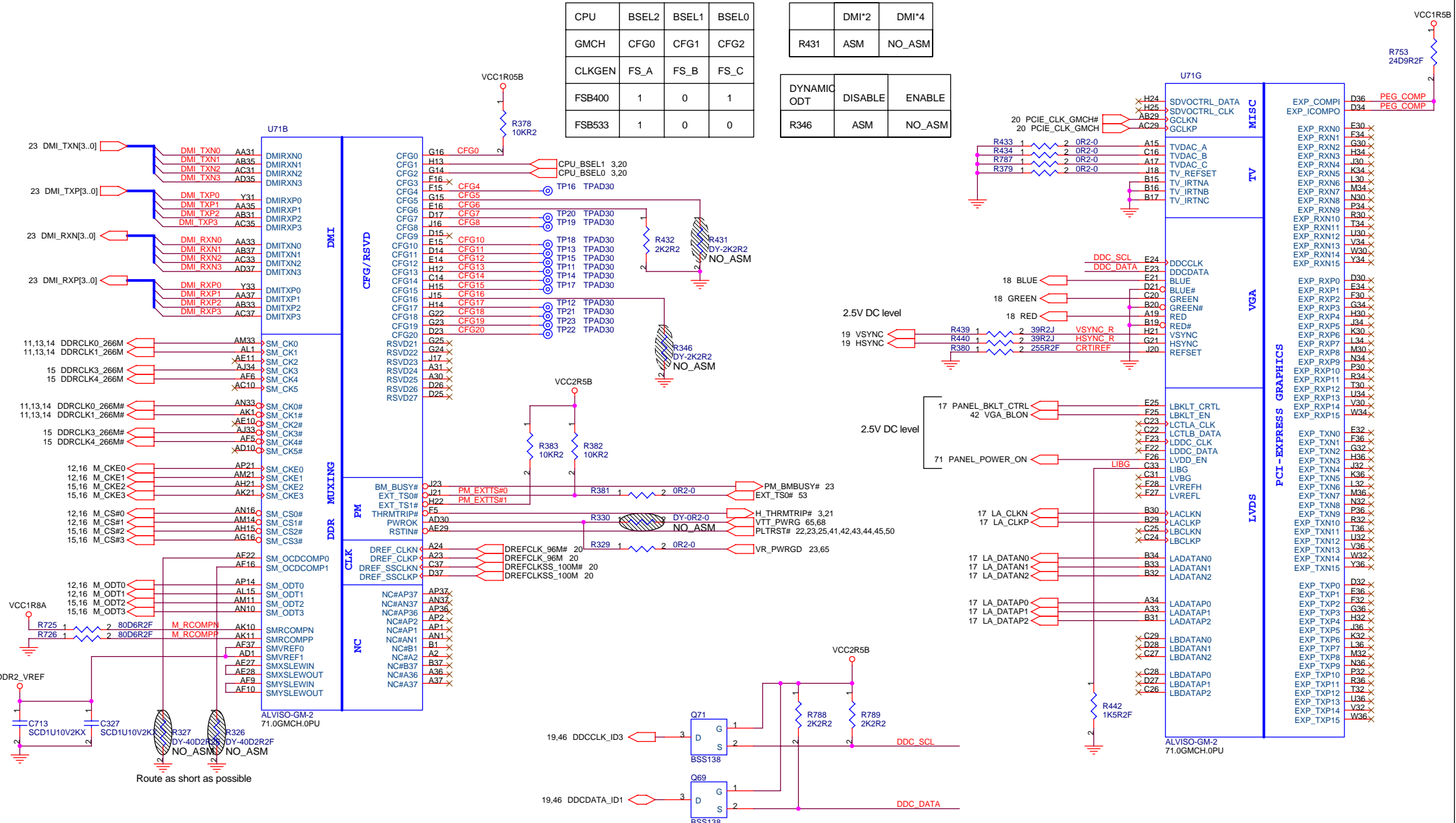
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
GMCH (1/5) : HOST I/F	
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CPU	BSEL2	BSEL1	BSEL0
GMCH	CFG0	CFG1	CFG2
CLKGEN	FS_A	FS_B	FS_C
FSB400	1	0	1
FSB533	1	0	0

	DMI*2	DMI*4
R431	ASM	NO_ASM

DYNAMIC ODT	DISABLE	ENABLE
R346	ASM	NO_ASM

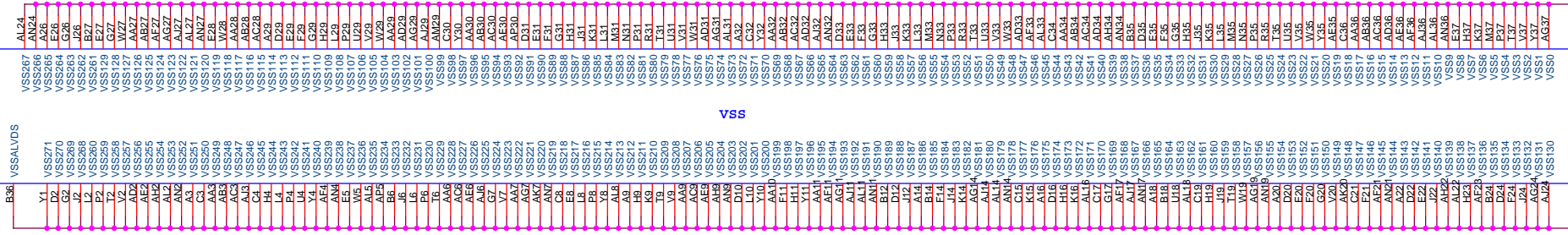


Route as short as possible

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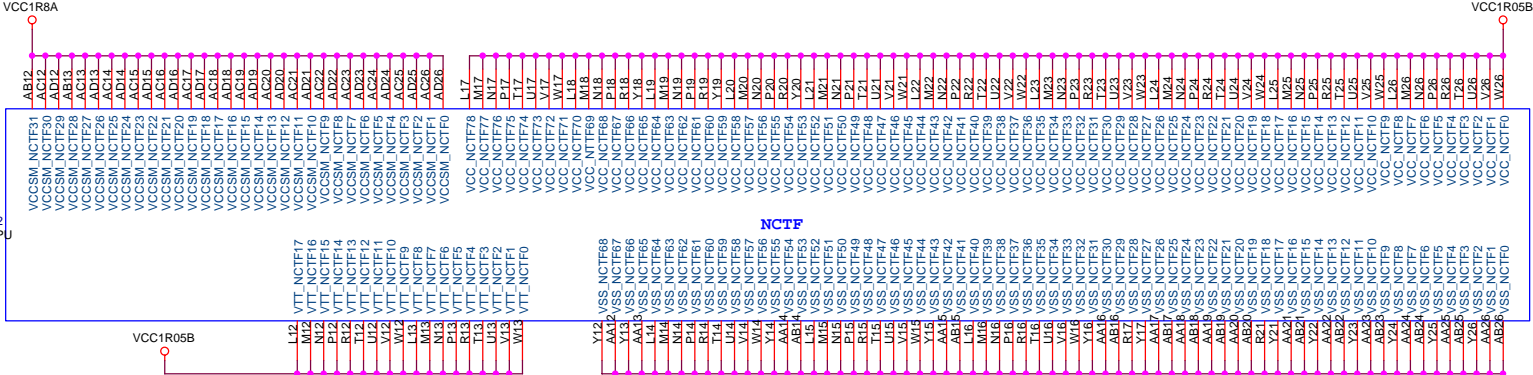
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Size	Document Number	S Note-3	
A3		8	75
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U71F
ALVISO-GM-2
71.0GMCH.OPJ

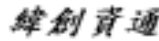


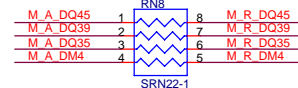
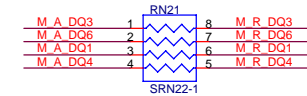
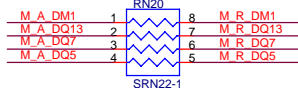
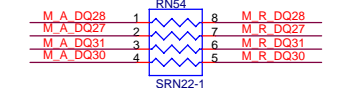
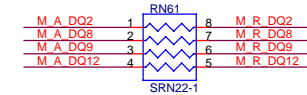
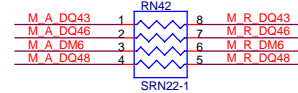
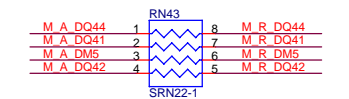
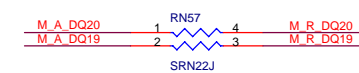
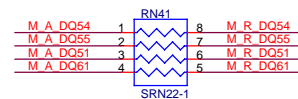
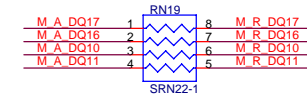
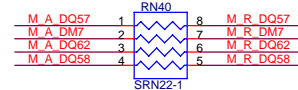
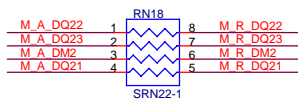
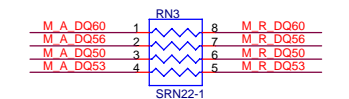
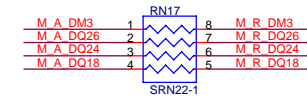
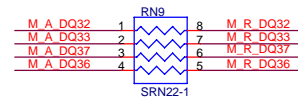
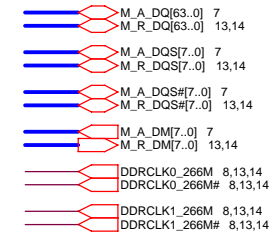
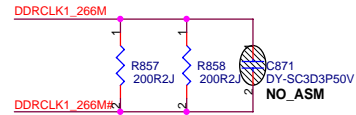
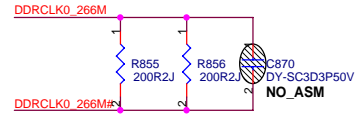
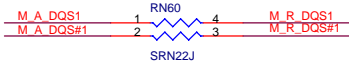
VSS

U71H
ALVISO-GM-2
71.0GMCH.OPJ



NCTF

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Title GMCH (5/5) : GND	Rev SC
Size A3	Document Number S Note-3
Date: Wednesday, June 01, 2005	Sheet 10 of 75

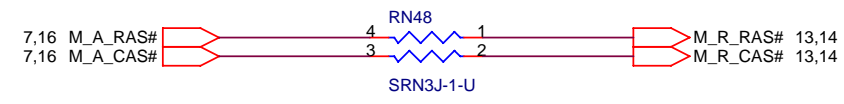
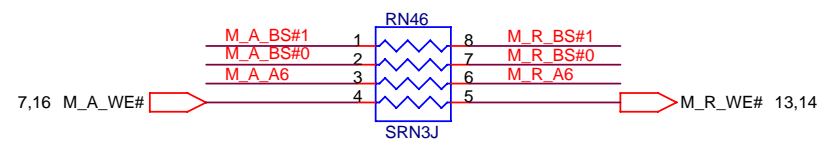
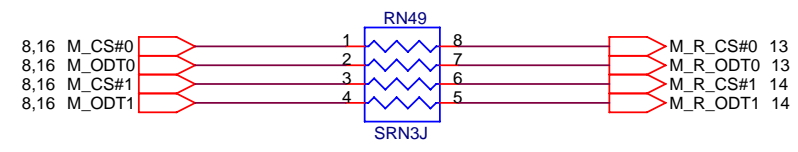
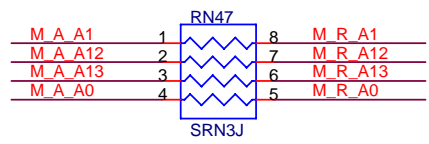
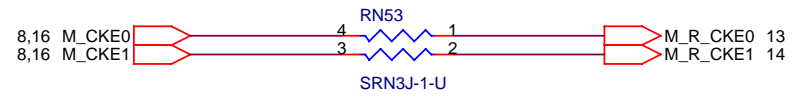
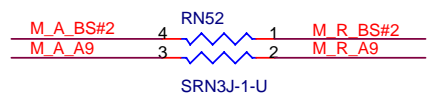
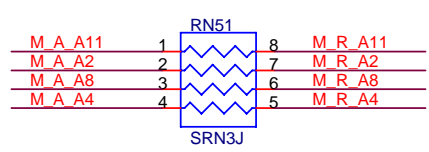
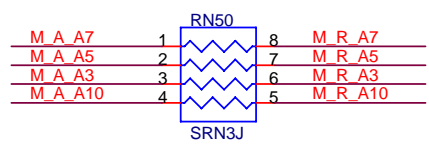
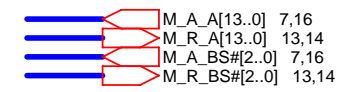


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Title
MEMORY RESISTORS (1/2)

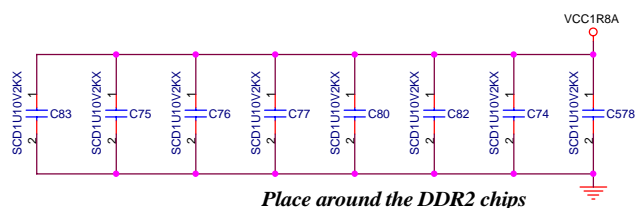
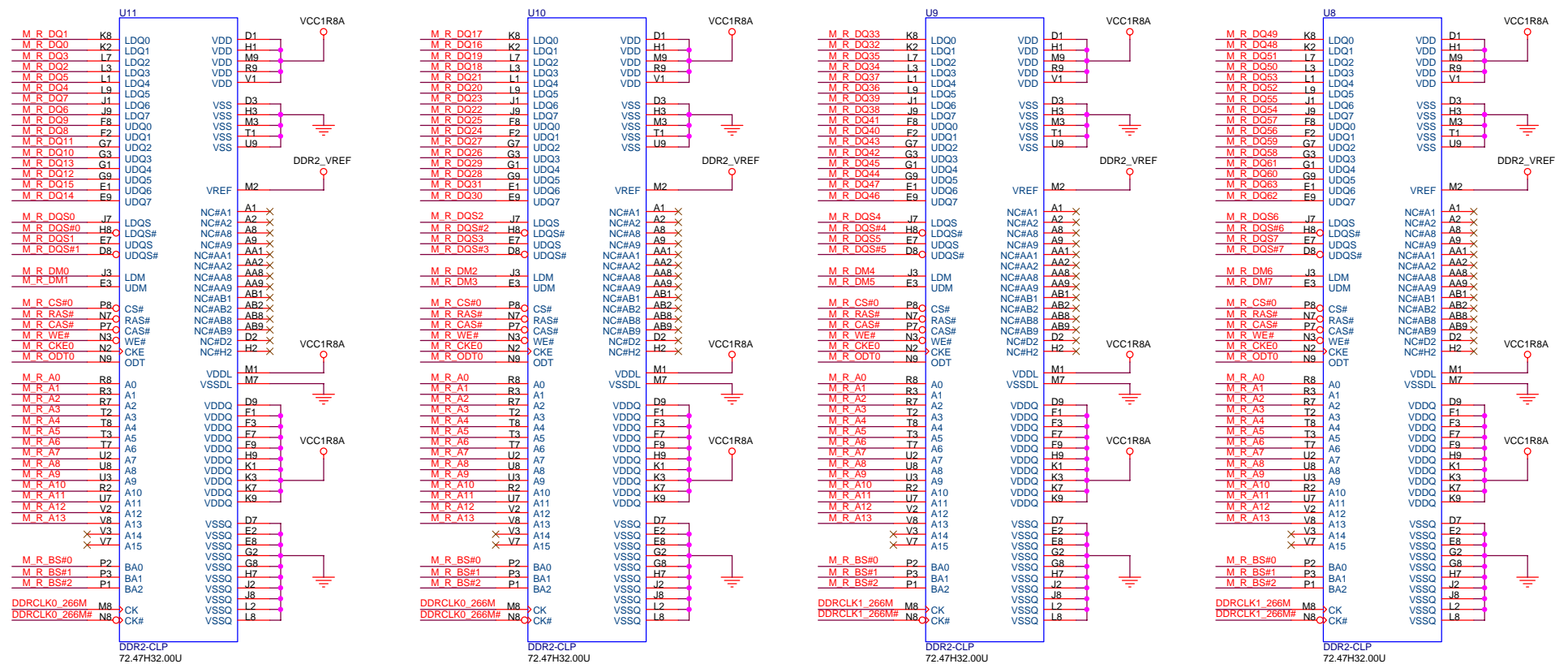
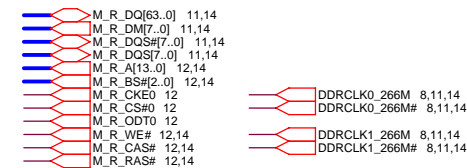
Size A3 Document Number **S Note-3** Rev **SC**

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		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
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MEMORY RESISTORS (1/2)			
Size A4	Document Number		Rev SC
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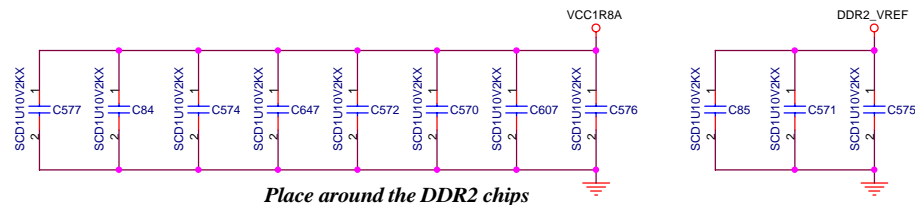
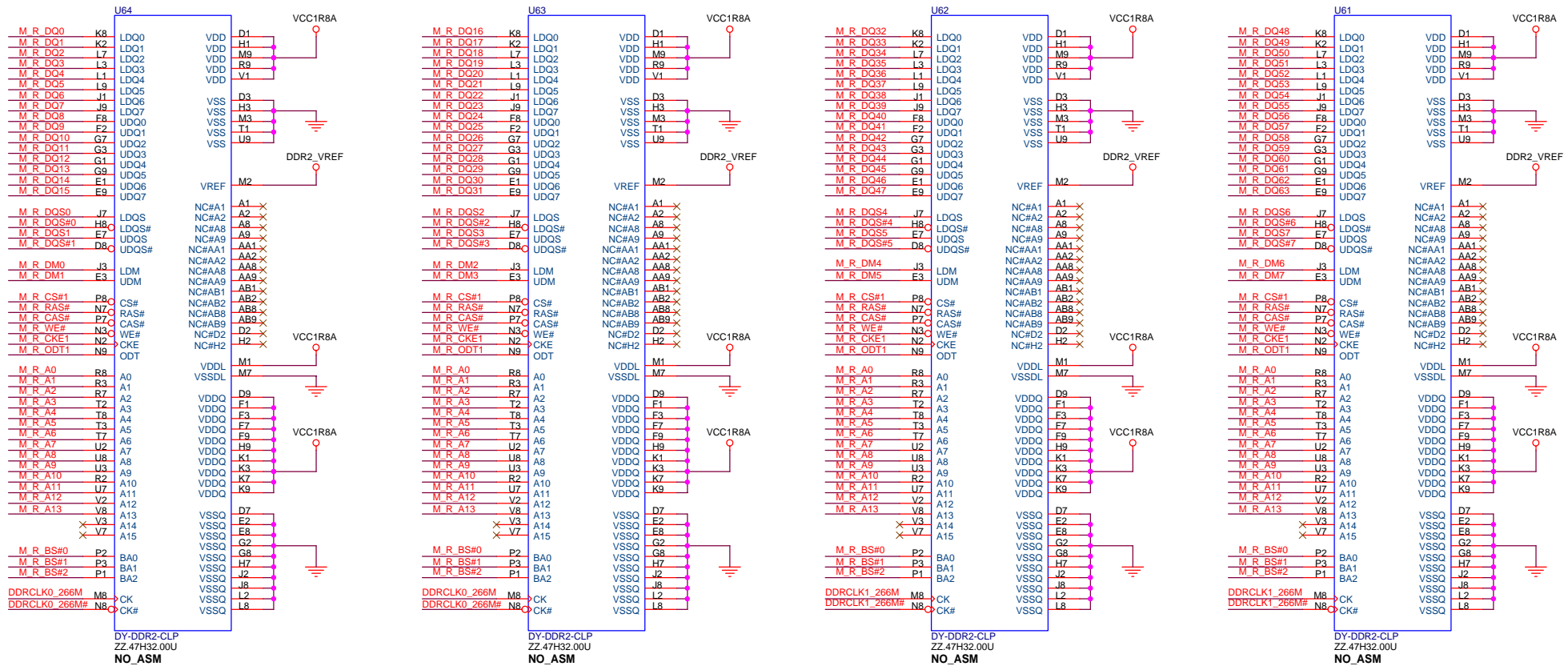
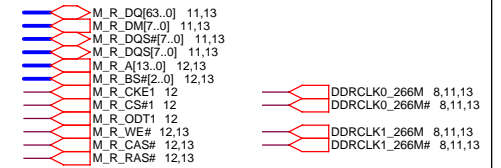
On-board DDR2 Memory



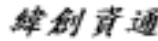
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

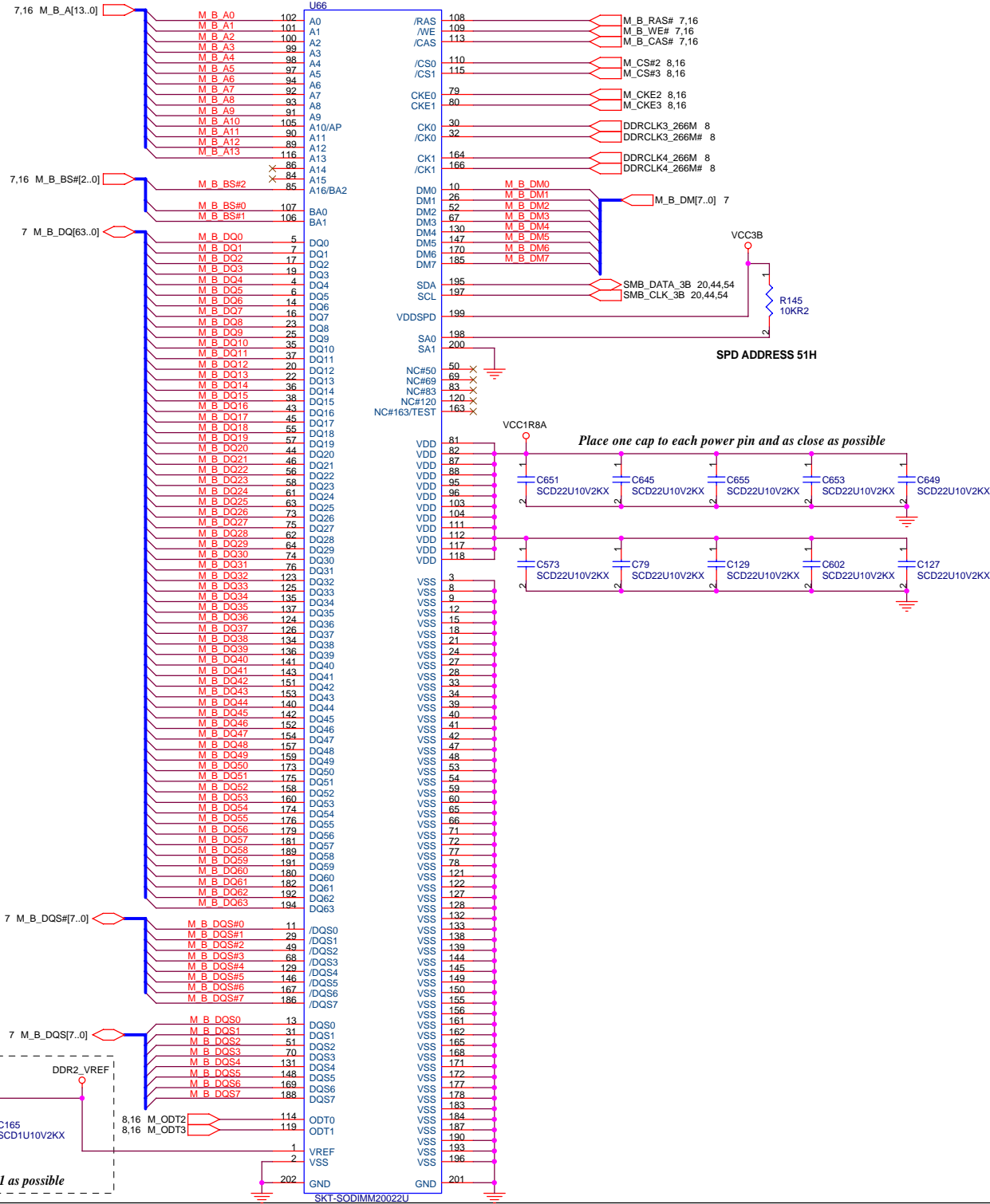
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 Size A3 Document Number: **S Note-3** Rev SC
 Date: Wednesday, June 01, 2005 Sheet 13 of 75

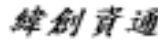
On-board DDR2 Memory



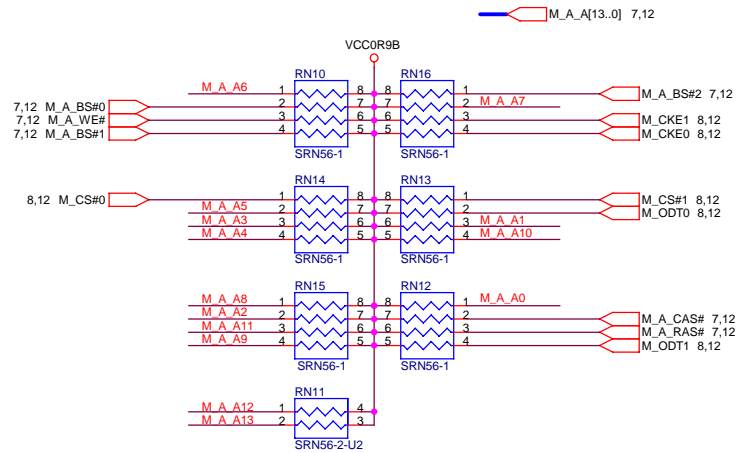
Place around the DDR2 chips

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BASE MEMORY BANK1	
S Note-3	
Title Size A3 Date: Wednesday, June 01, 2005	Document Number Sheet 14 of 75
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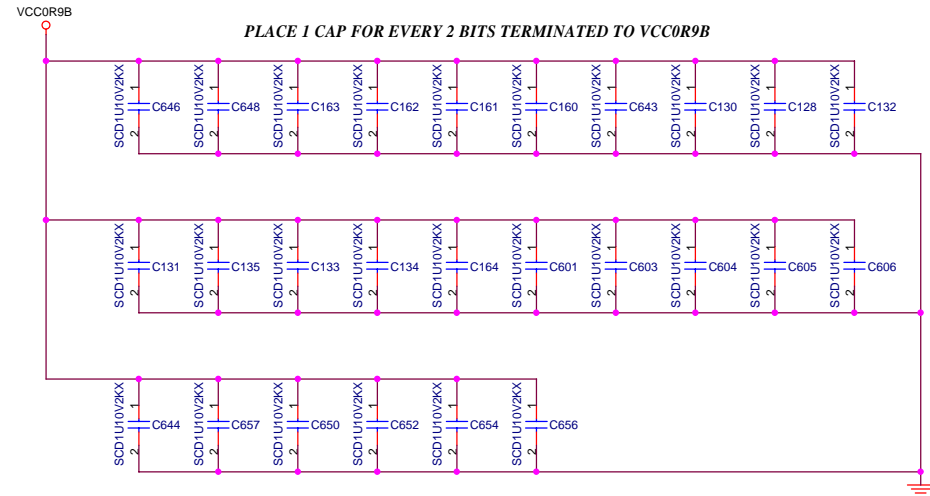
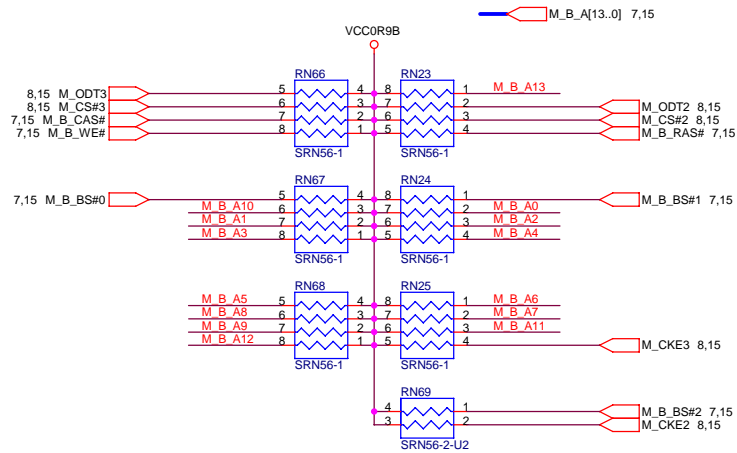


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Title	
DDR-2 SO-DIMM	
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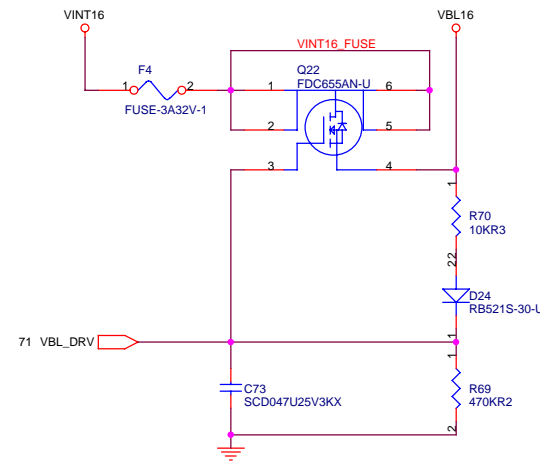
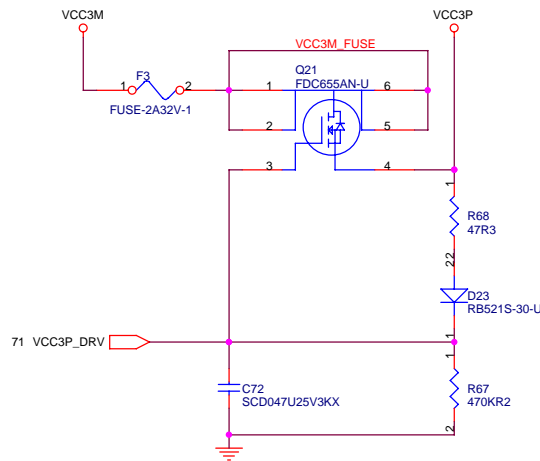
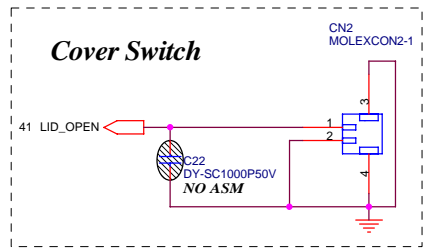
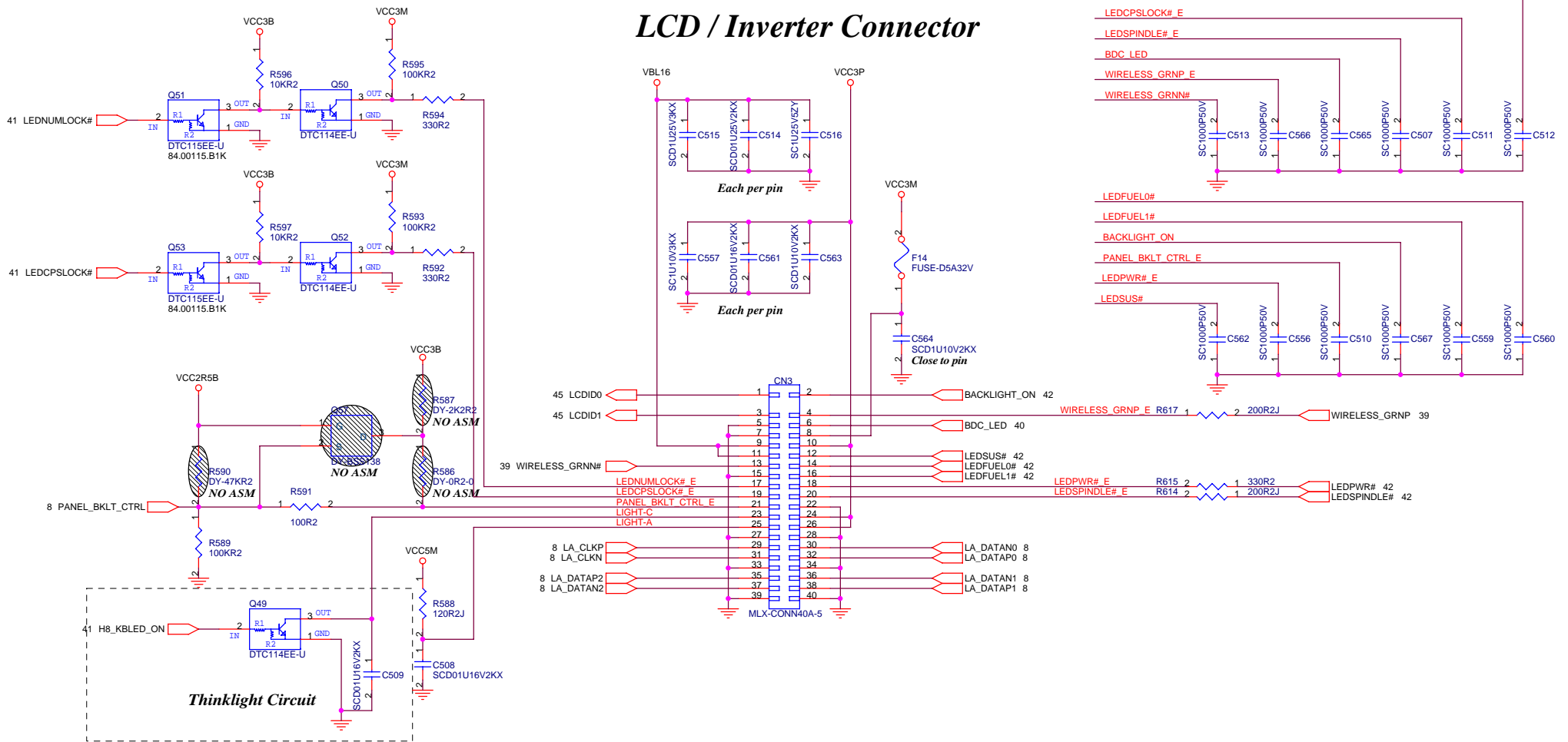
CHANNEL A PARALLEL TERMINATION

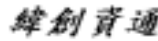


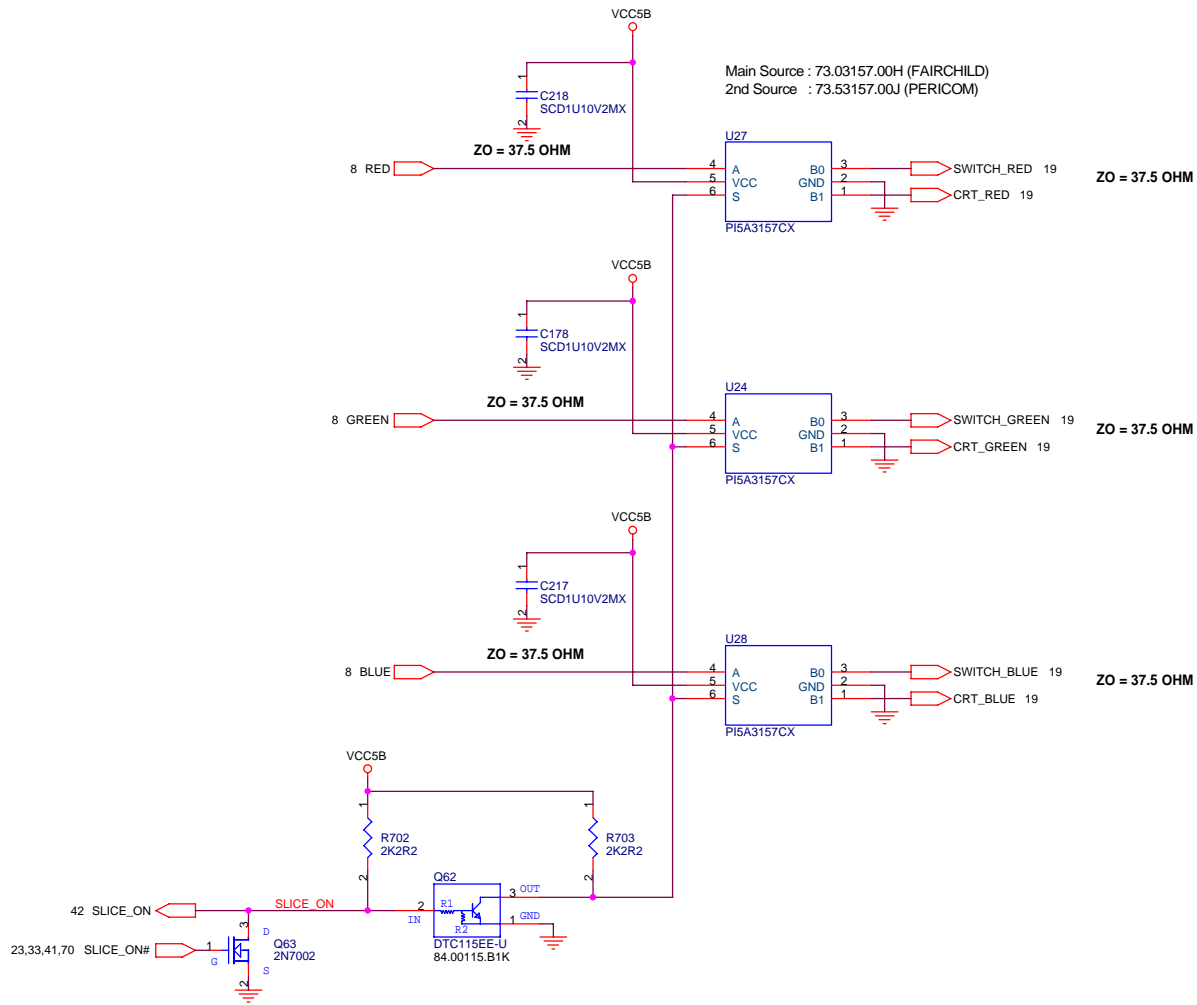
CHANNEL B PARALLEL TERMINATION

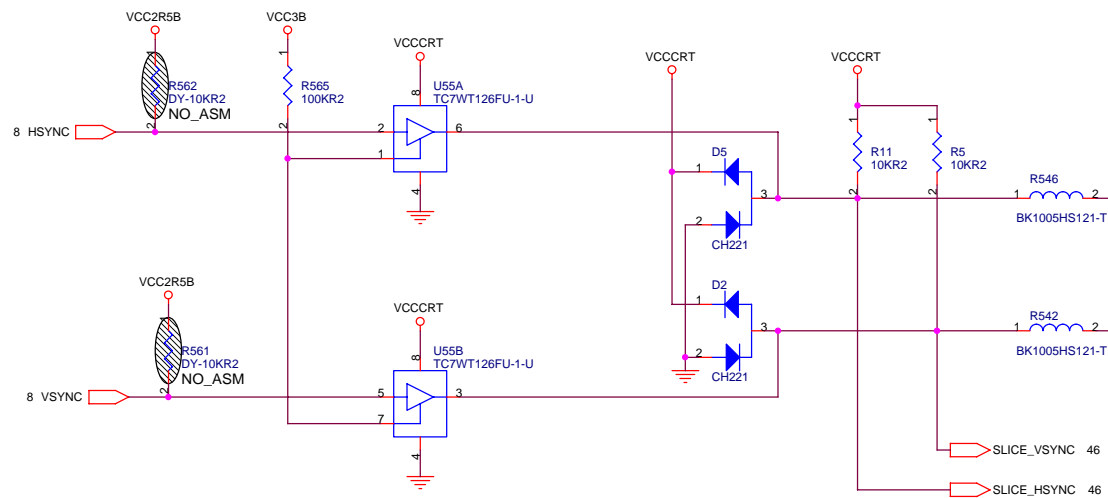
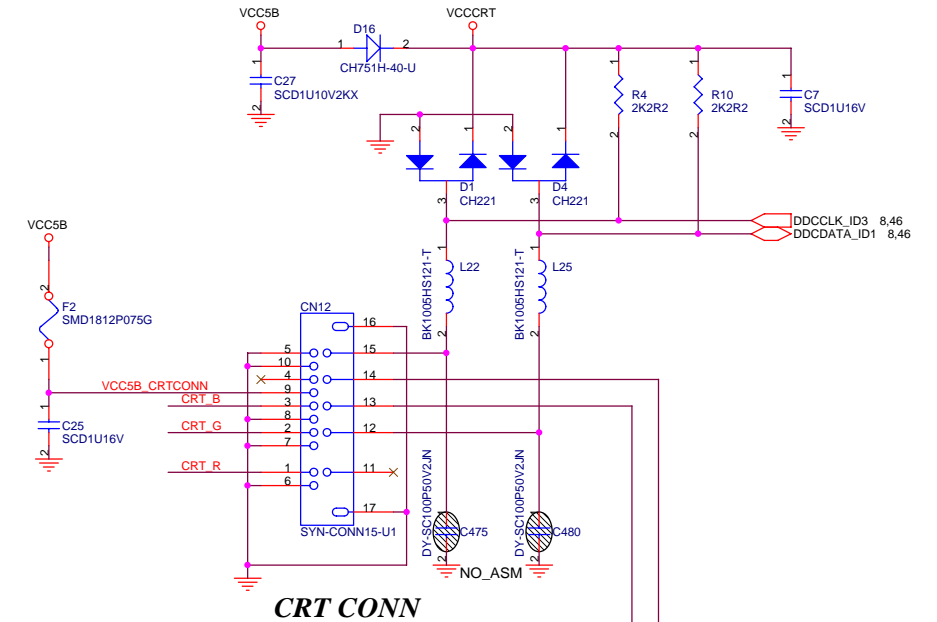
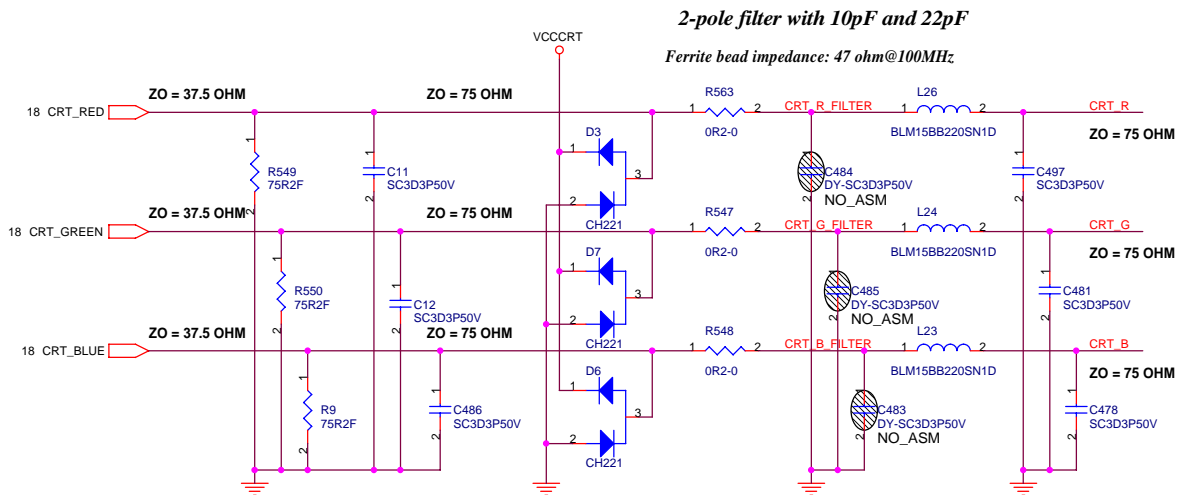
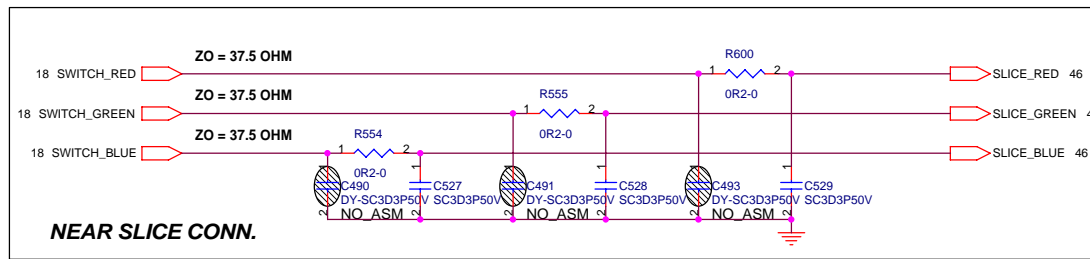


LCD / Inverter Connector

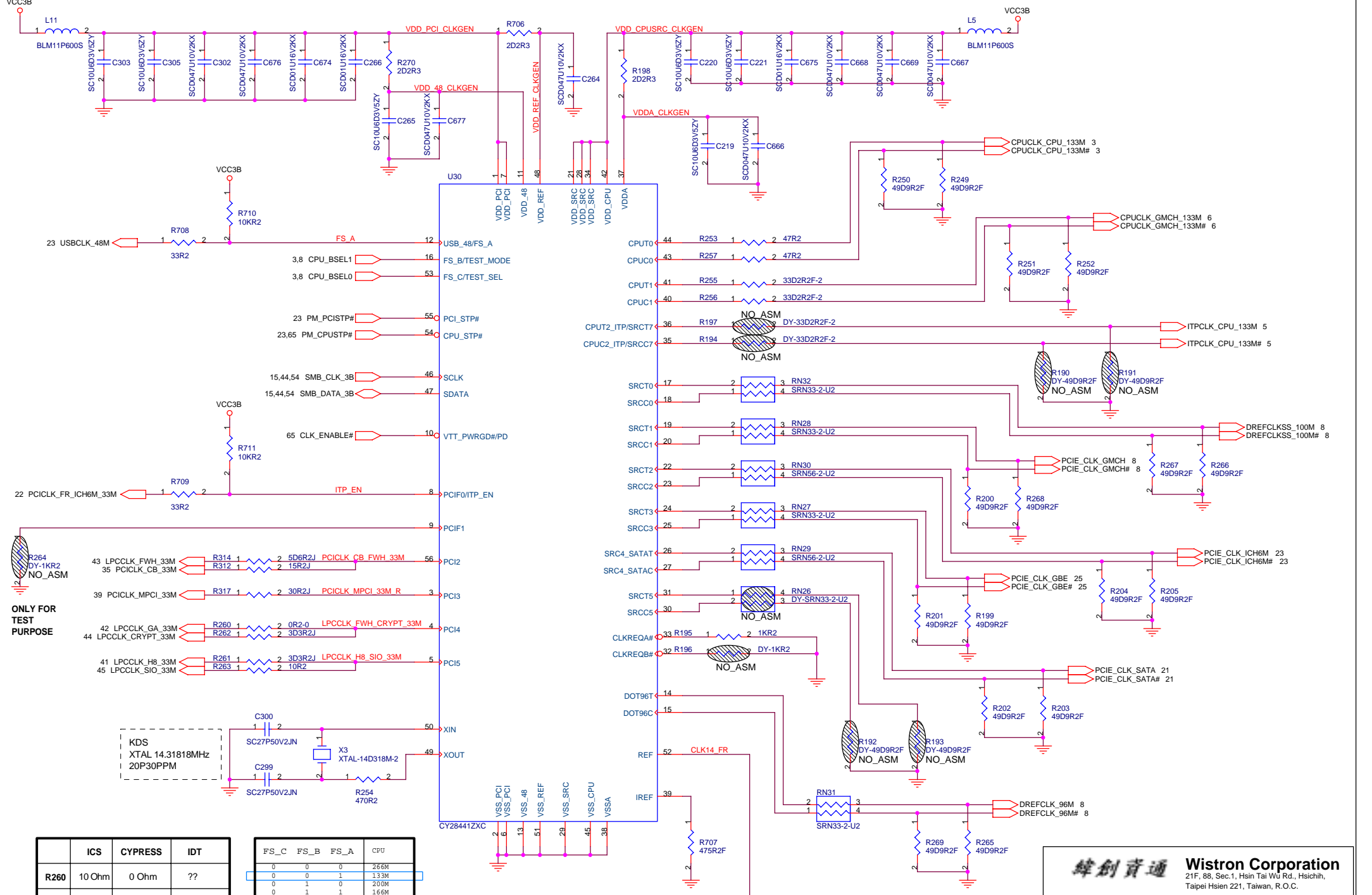


 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
LCD CONNECTOR	
Title LCD CONNECTOR	Rev SC
Size A3	Document Number S Note-3
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緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
EXT CRT CONNECTOR			
Size	Document Number	S Note-3	Rev
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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

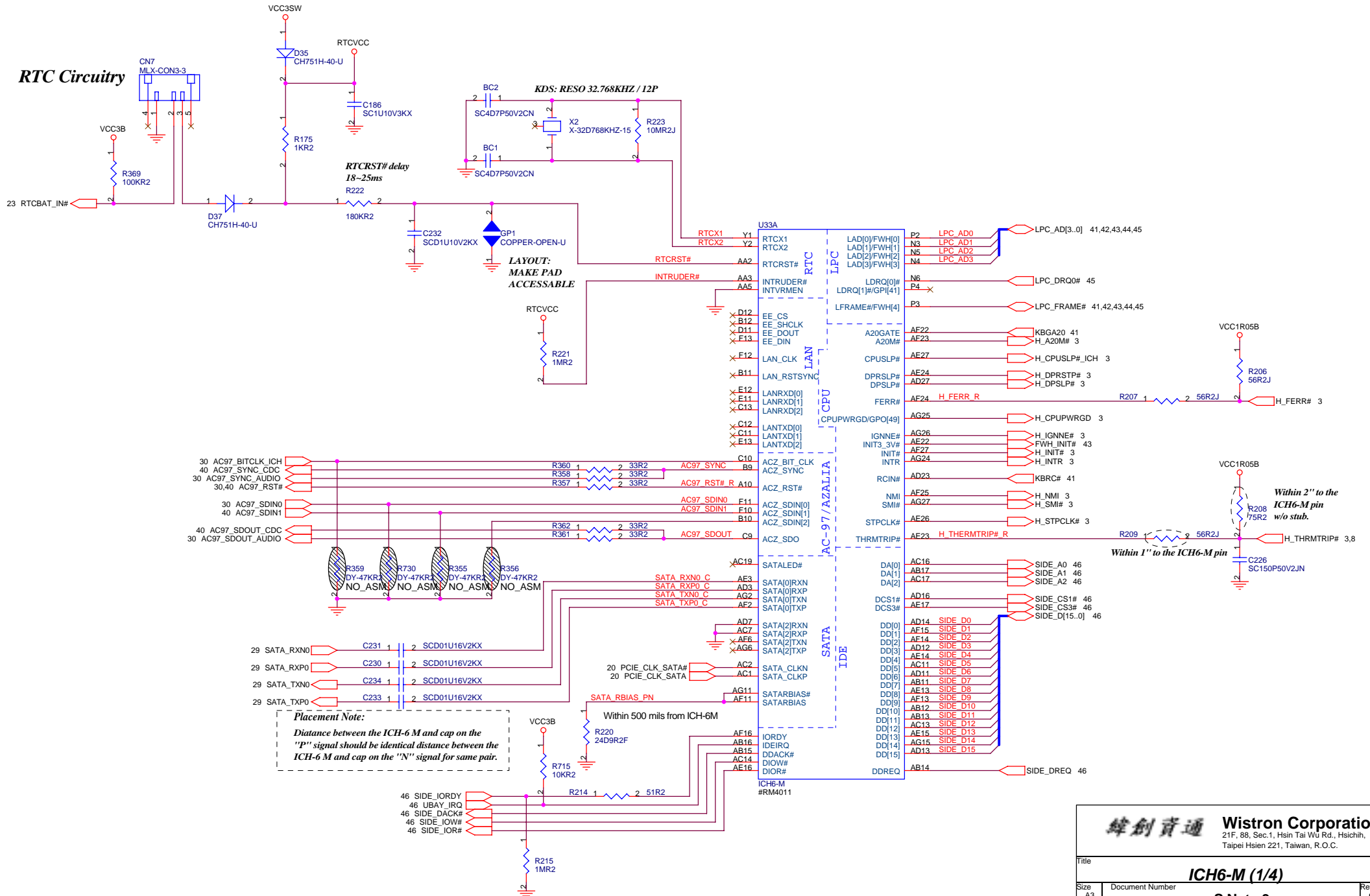
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **Clock Generator**

Size: A3 | Document Number: | Rev: SC

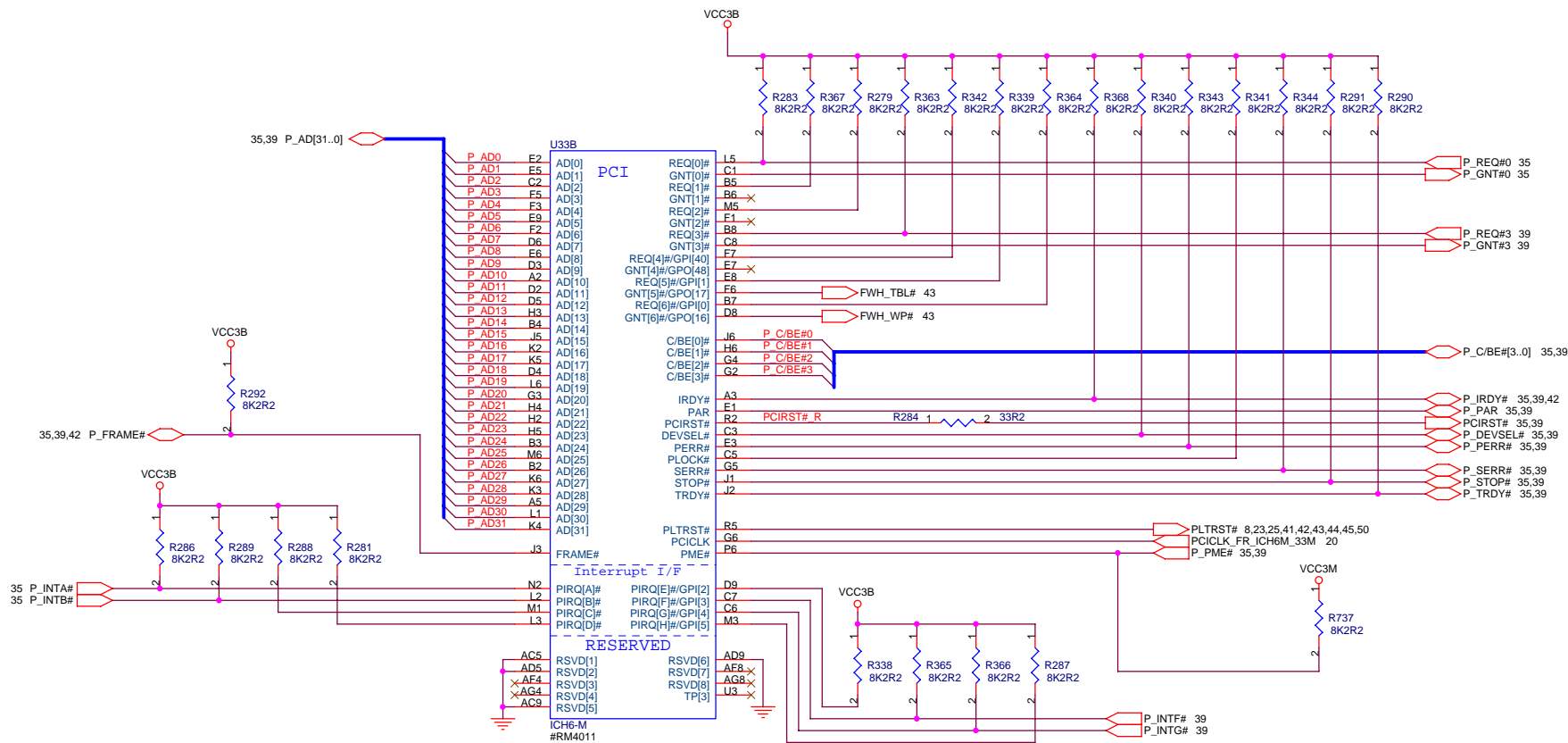
Date: Wednesday, June 01, 2005 | Sheet: 20 of 75

RTC Circuitry

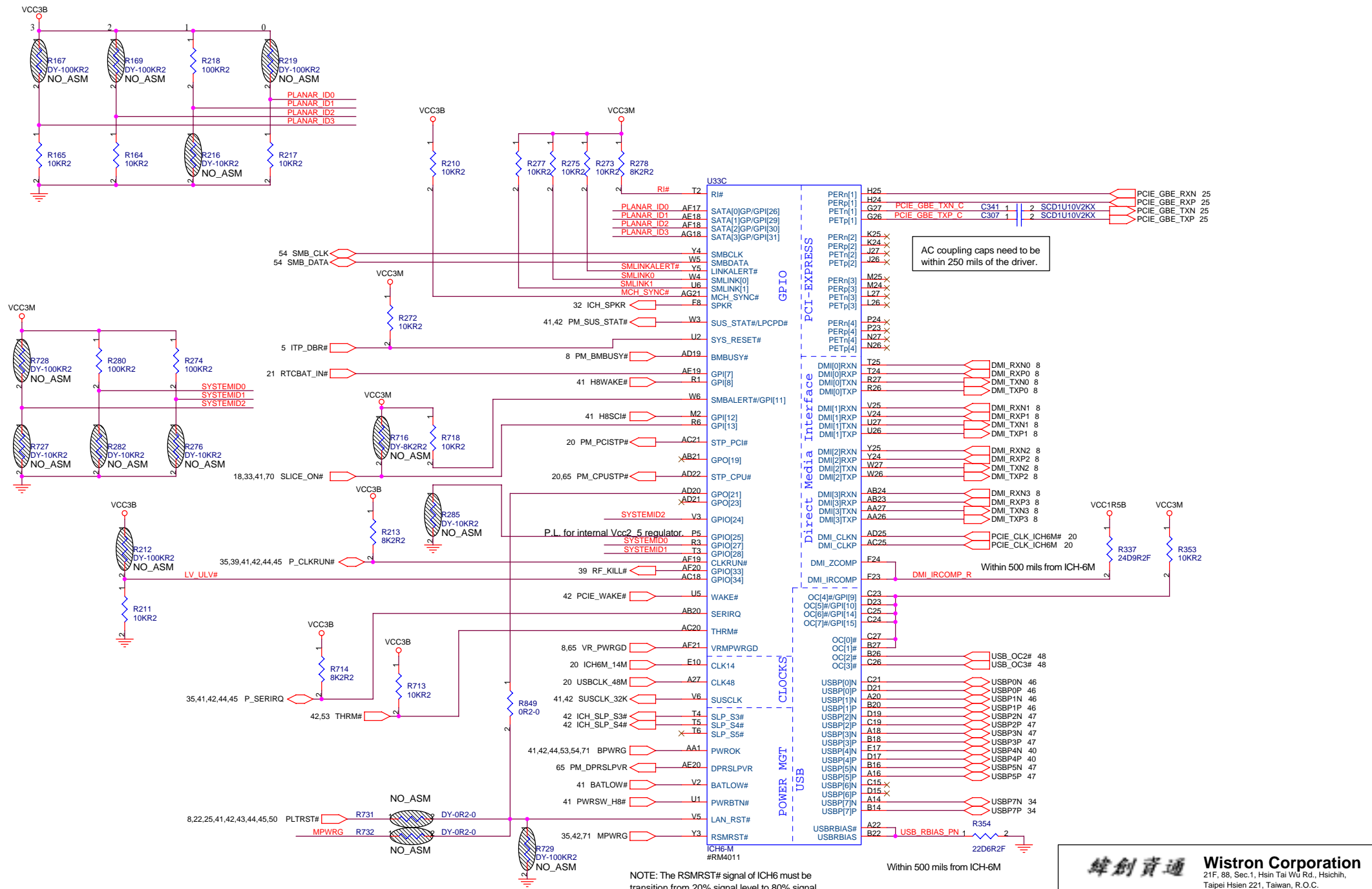


Placement Note:
 Distance between the ICH-6 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.

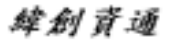
Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
ICH6-M (1/4)	
Size	Document Number
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Rev	SC

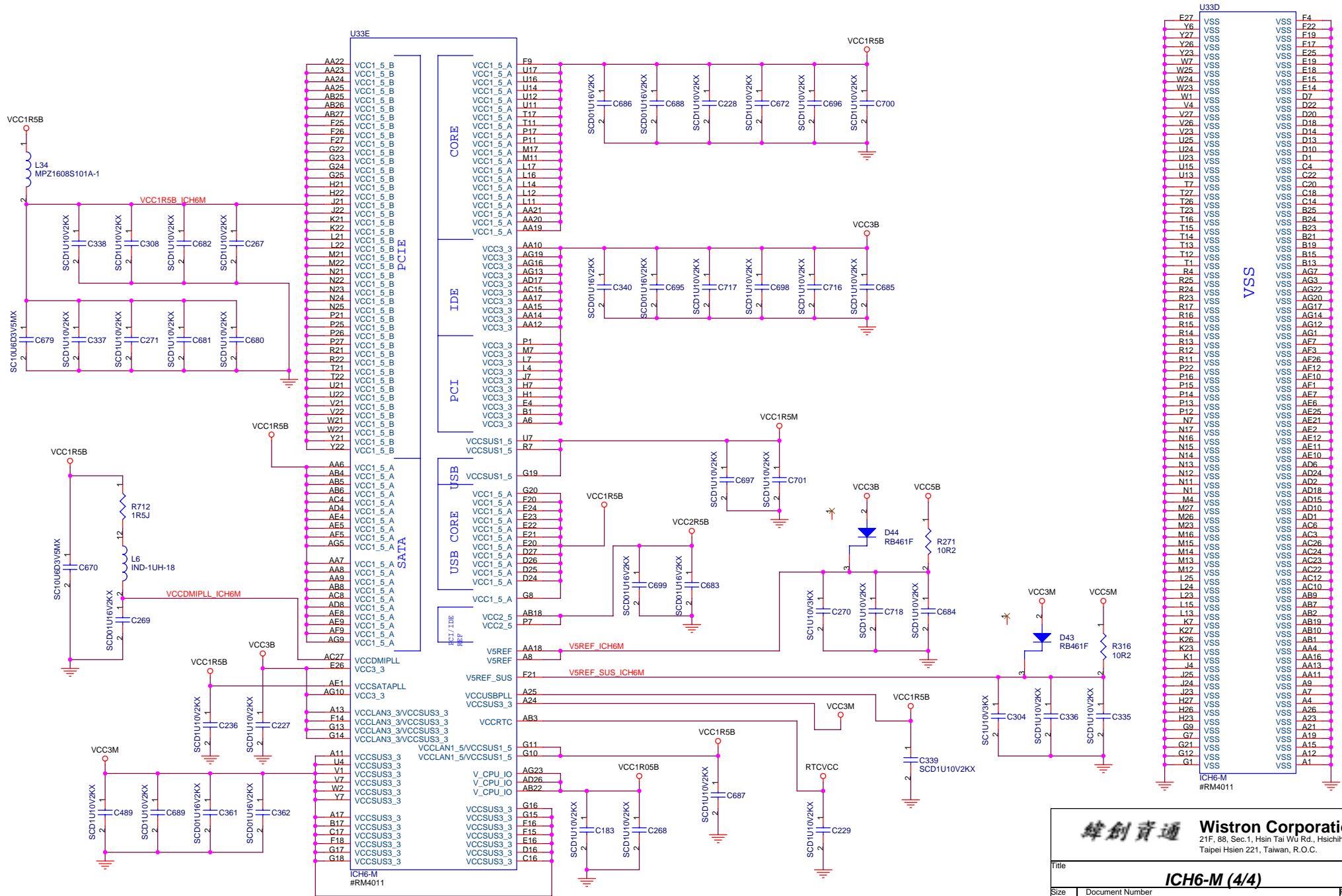


AC5: SATA1RXN
 AD5: SATA1RXP
 AC9: SATA3RXN
 AD5: SATA3RXP



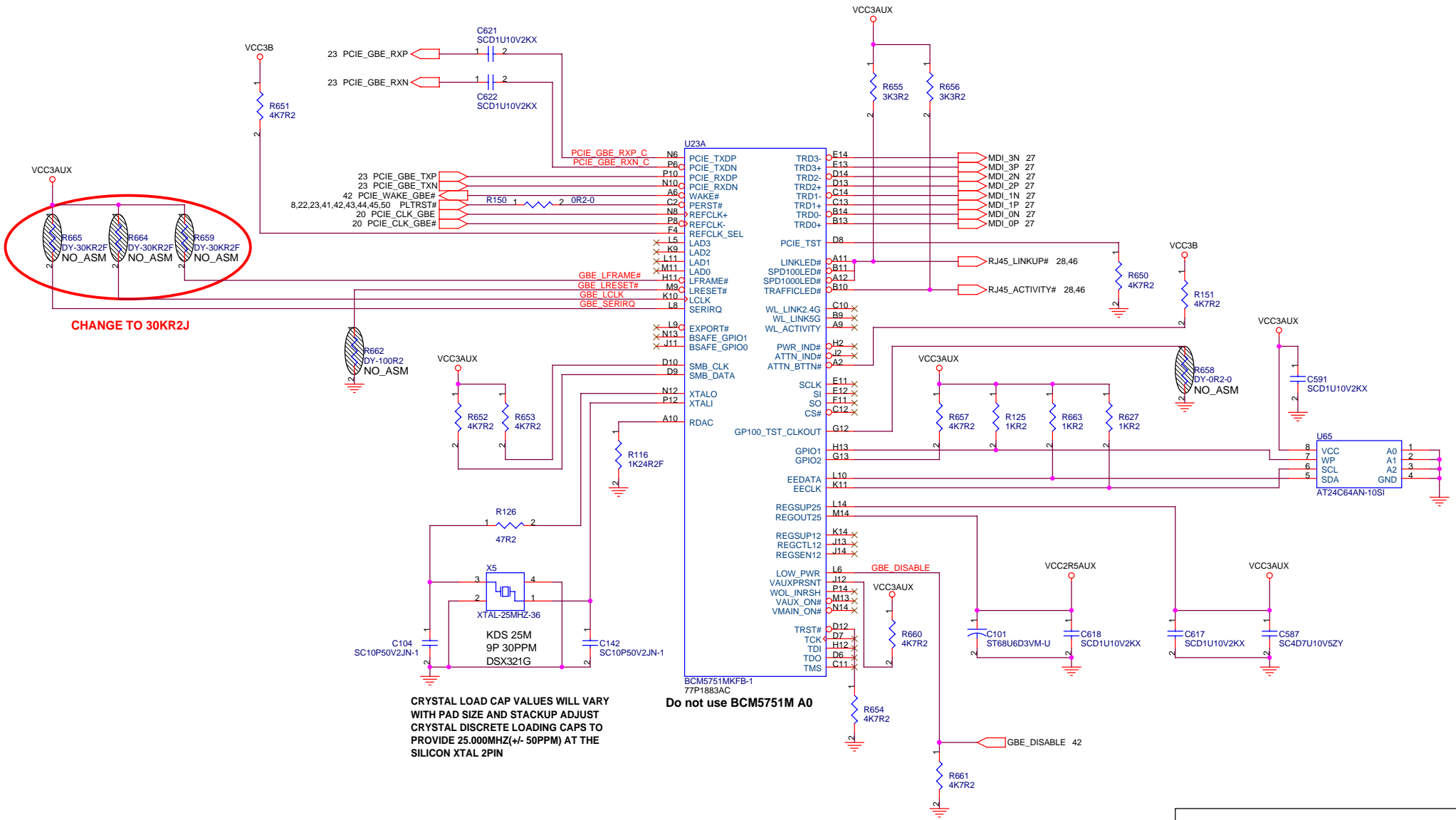
NOTE: The RSMRST# signal of ICH6 must be transition from 20% signal level to 80% signal level and vice-versa in 50us or less.

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
ICH6-M (3/4)		
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緯創資通 **Wistron Corporation**
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 Taipei Hsien 221, Taiwan, R.O.C.

File		ICH6-M (4/4)	
Size	Document Number	S Note-3	
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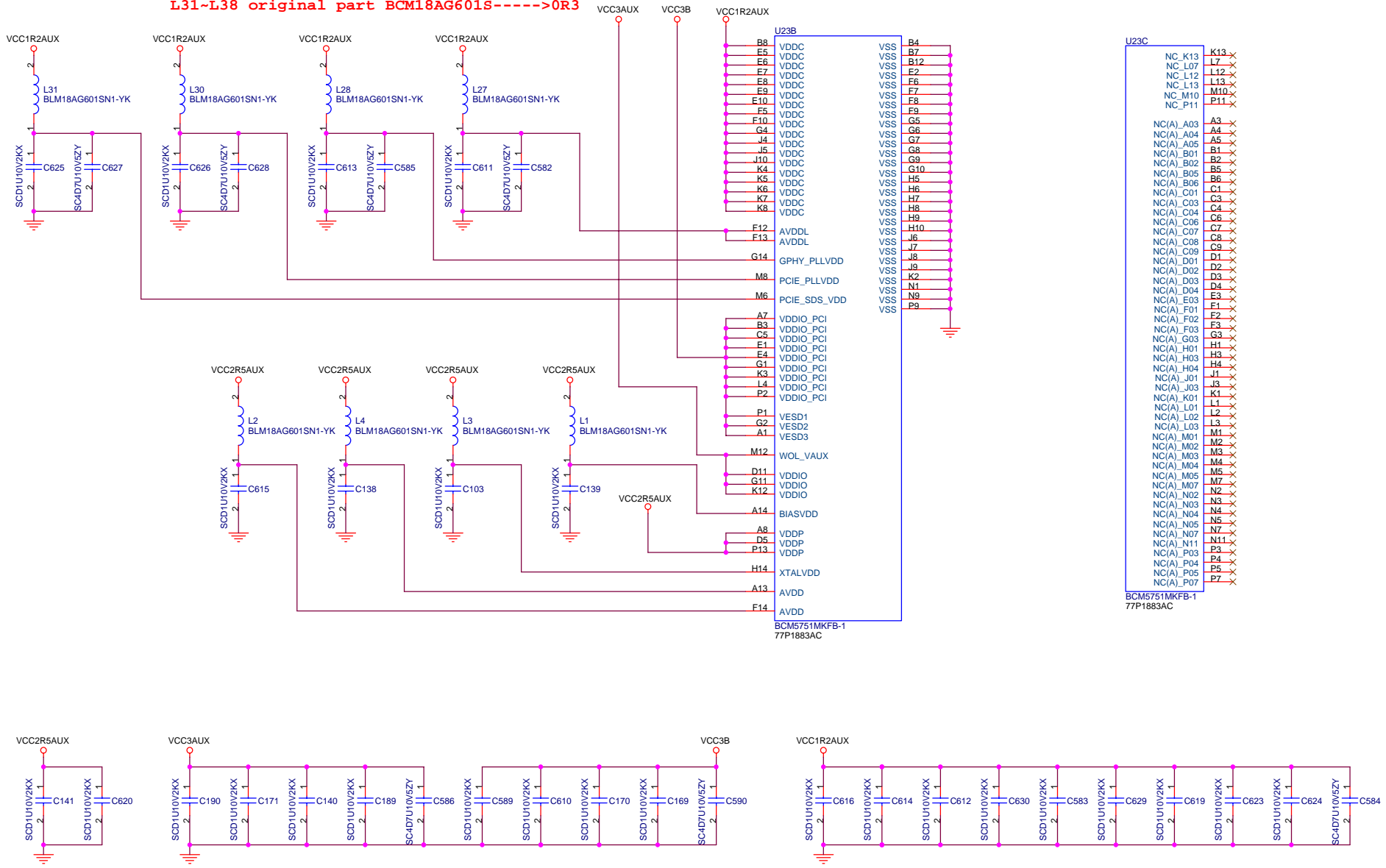
CHANGE TO 30KR2J

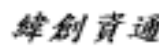
CRYSTAL LOAD CAP VALUES WILL VARY WITH PAD SIZE AND STACKUP ADJUST CRYSTAL DISCRETE LOADING CAPS TO PROVIDE 25.000MHZ(+/- 50PPM) AT THE SILICON XTAL 2PIN

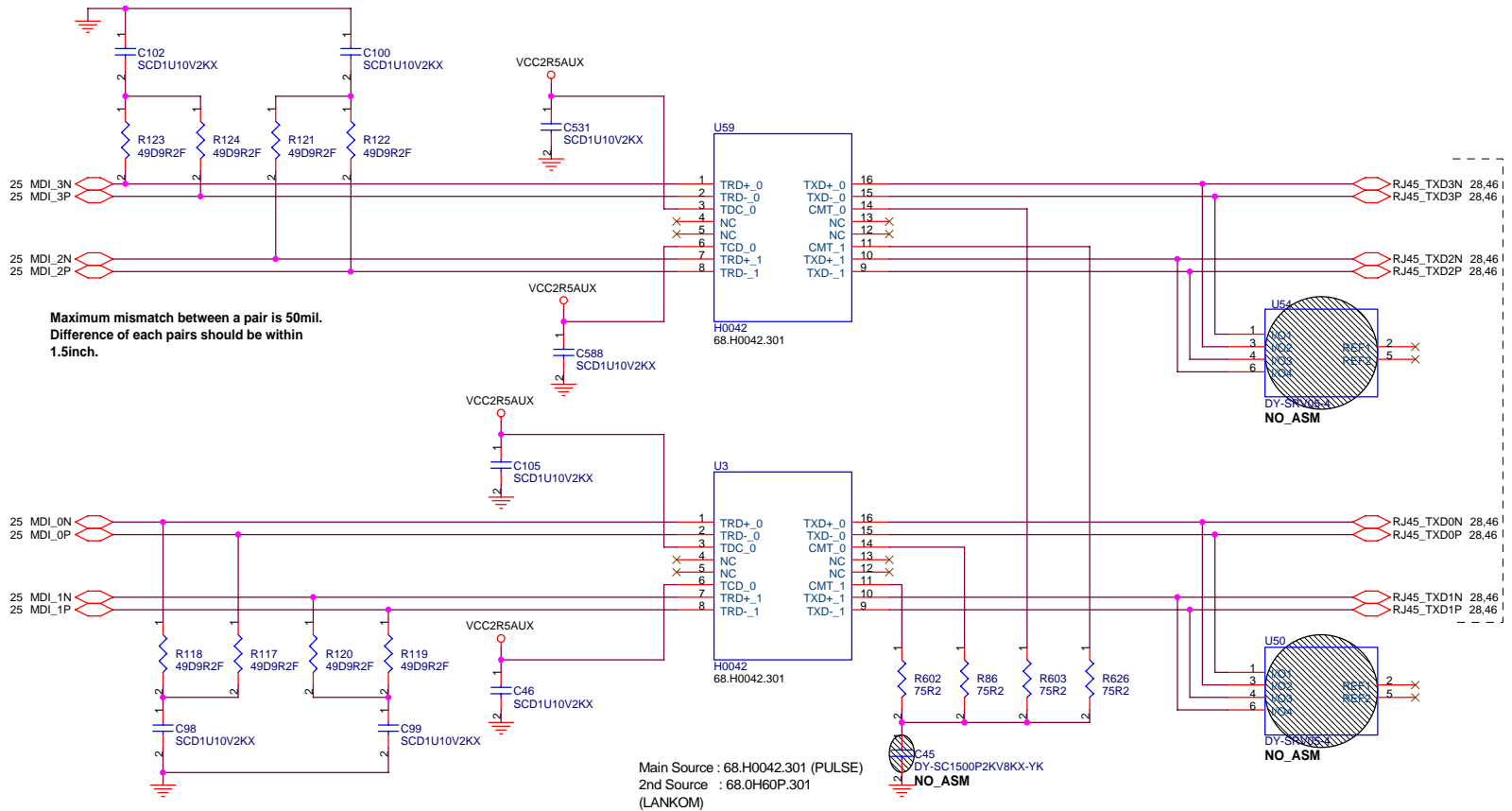
Do not use BCM5751M A0

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
GBE BCM5751 (1/2)			
Size A3	Document Number	S Note-3	
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L31-L38 original part BCM18AG601S----->OR3



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GBE BCM5751M (2/2) : POWER	
Title	Document Number
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Date: Wednesday, June 01, 2005	Sheet 26 of 75

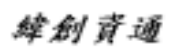


Maximum mismatch between a pair is 50mil.
Difference of each pairs should be within 1.5inch.

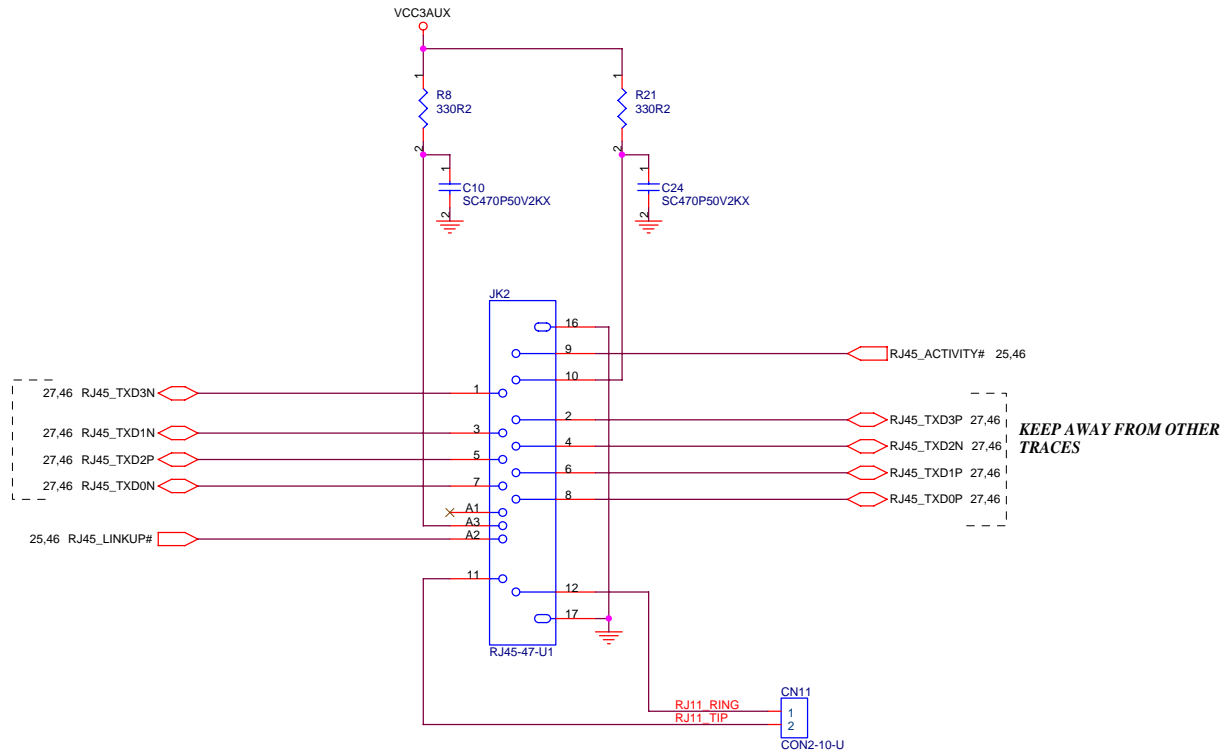
Be careful wiring.
- Need more 40mil spacing from other signals in case of routing on top/bottom(serface) side.
- Need more 20mil spacing from other signals in case of routing on internal layers.

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)

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
GBE MAGNETICS	
Title	
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KEEP AWAY FROM OTHER TRACES



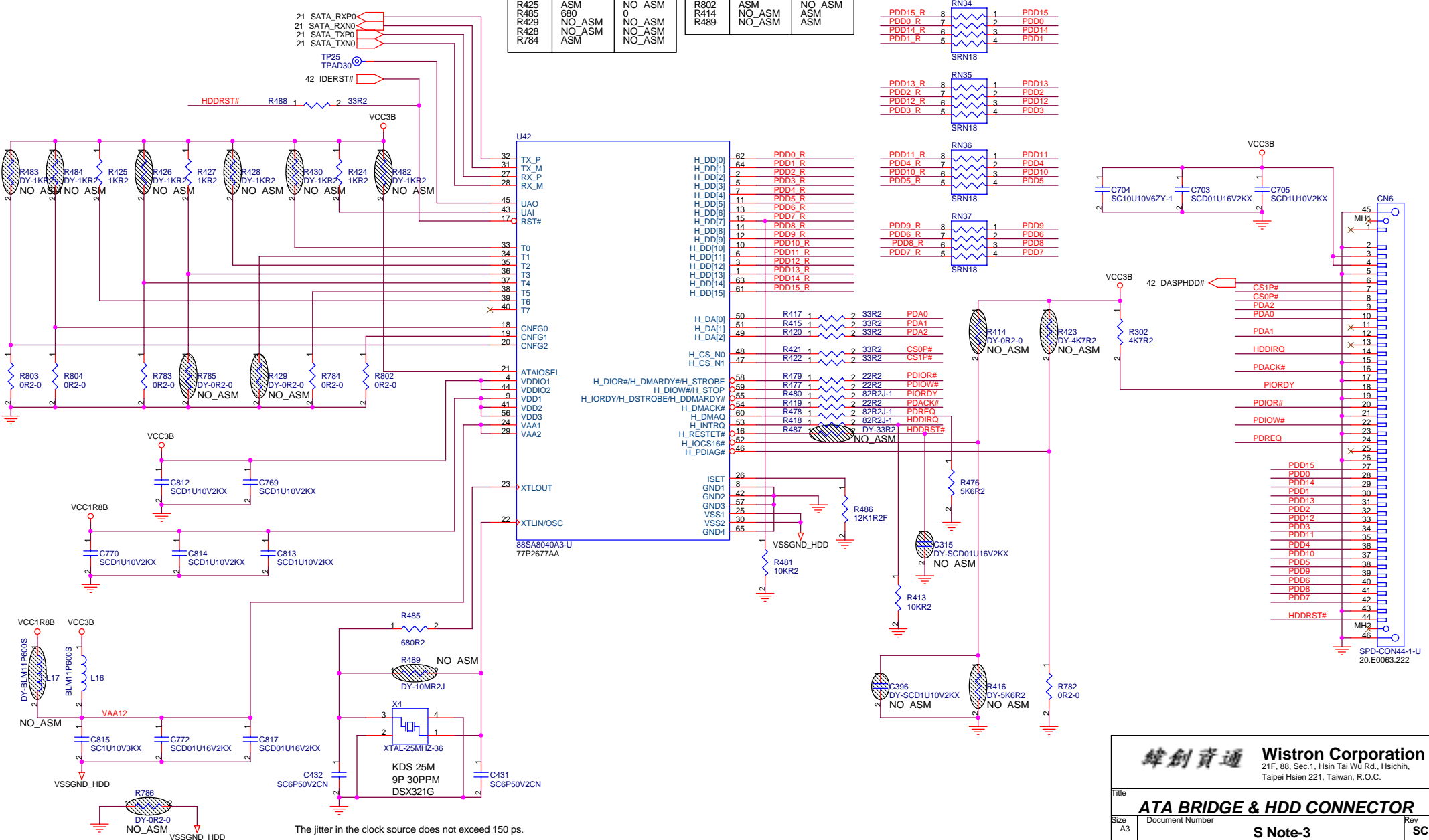
KEEP AWAY FROM OTHER TRACES

S-ATA TABLE 1/2

U42	88SA8040	Si3811
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 NO_ASM NO_ASM	ASM NO_ASM NO_ASM NO_ASM NO_ASM
R425 R485 R429 R428 R784	ASM 680 NO_ASM NO_ASM NO_ASM	NO_ASM 0 NO_ASM NO_ASM NO_ASM

S-ATA TABLE 2/2

U42	88SA8040	Si3811
R430 R424 R482 R486 R416	NO_ASM ASM NO_ASM 121K NO_ASM	NO_ASM NO_ASM ASM 1K NO_ASM
R423 R782 R603 R604 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



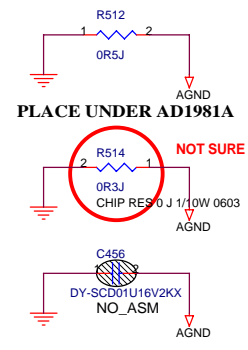
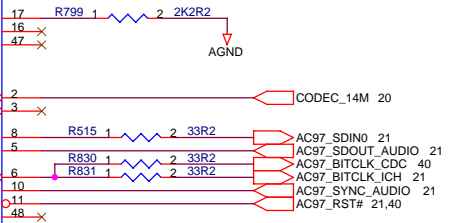
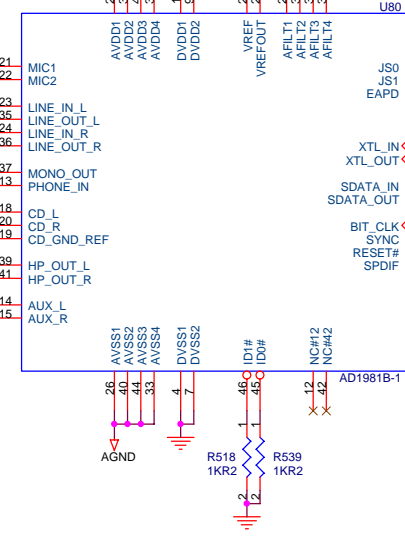
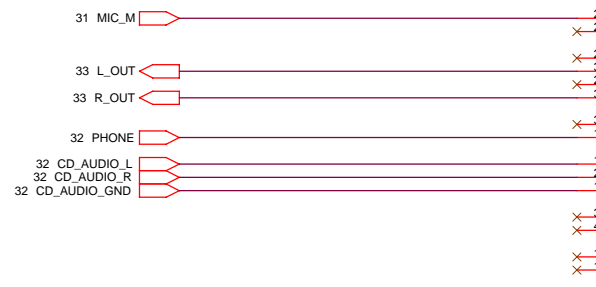
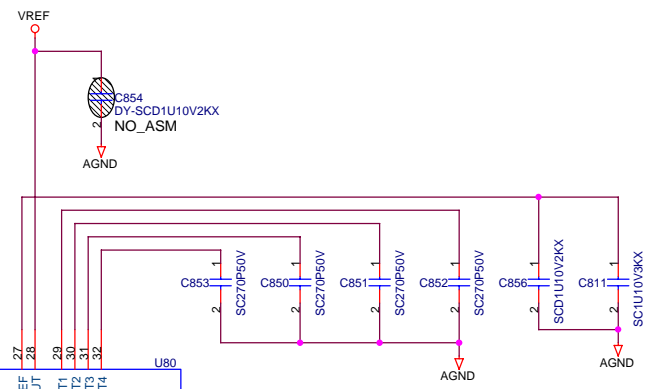
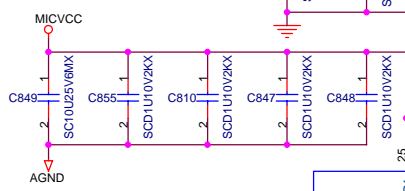
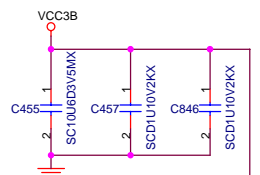
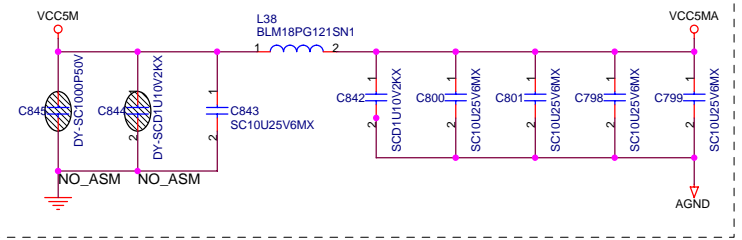
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title: **ATA BRIDGE & HDD CONNECTOR**

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

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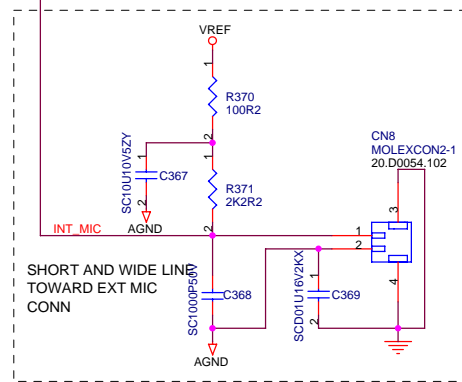
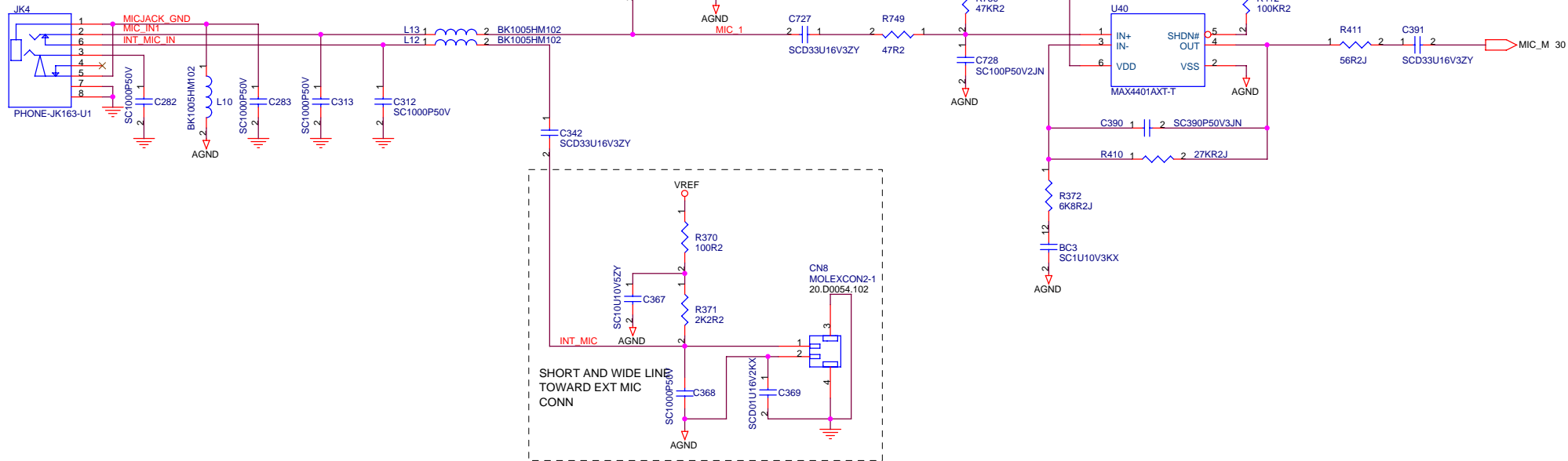
VCC5MA



緯創資通 **Wistron Corporation**
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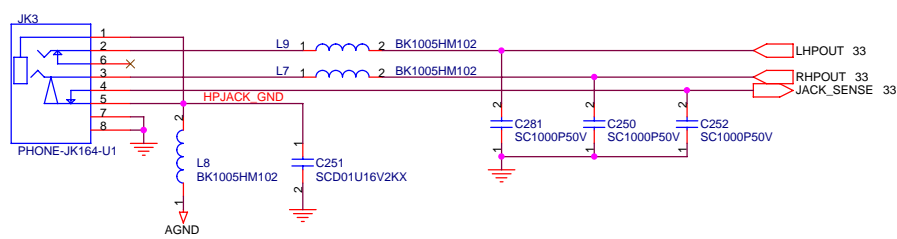
Title			AUDIO 1981B
Size	Document Number	Rev	
A3		S Note-3	
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		30	SC

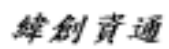
EXT MIC CONN

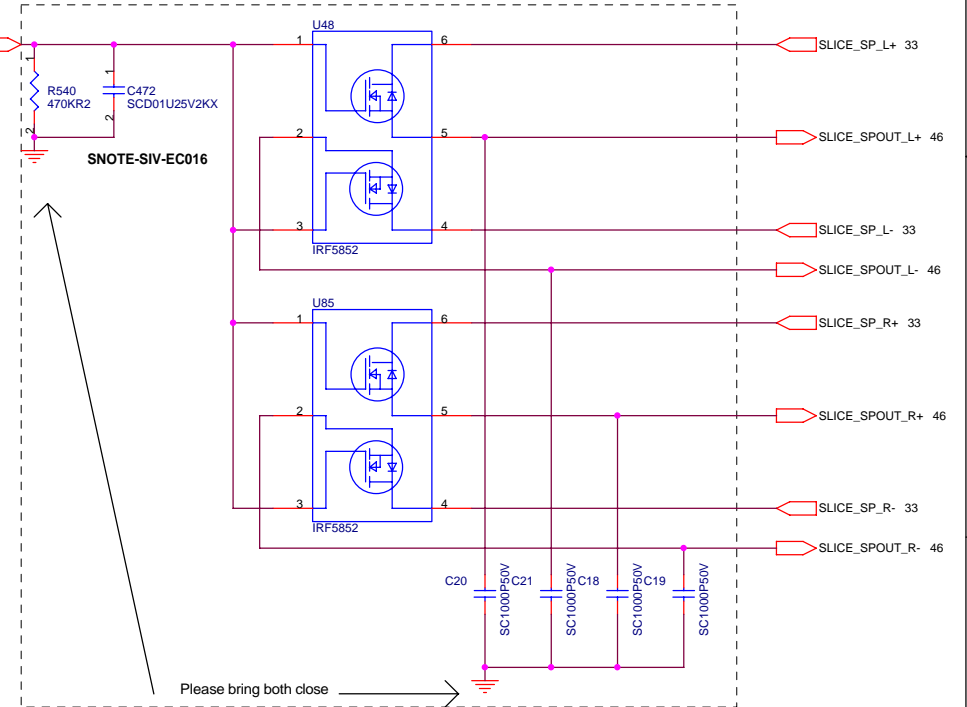
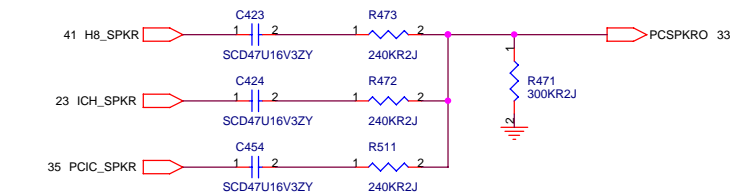
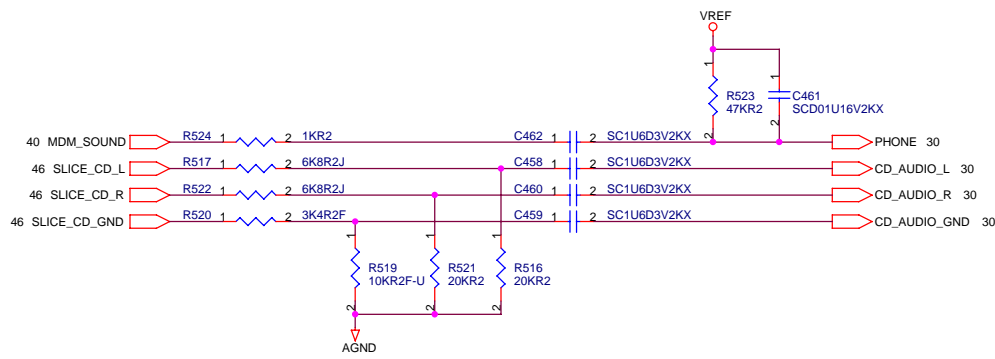
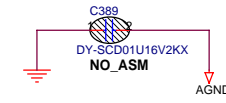
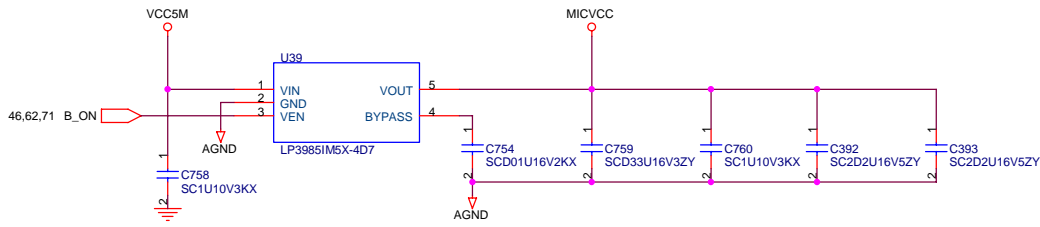


ALL PARTS MUST BE PLACED NEAR TO INTERNAL MICROPHONE

HEADPHONE CONN



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AUDIO MIC & CONN		
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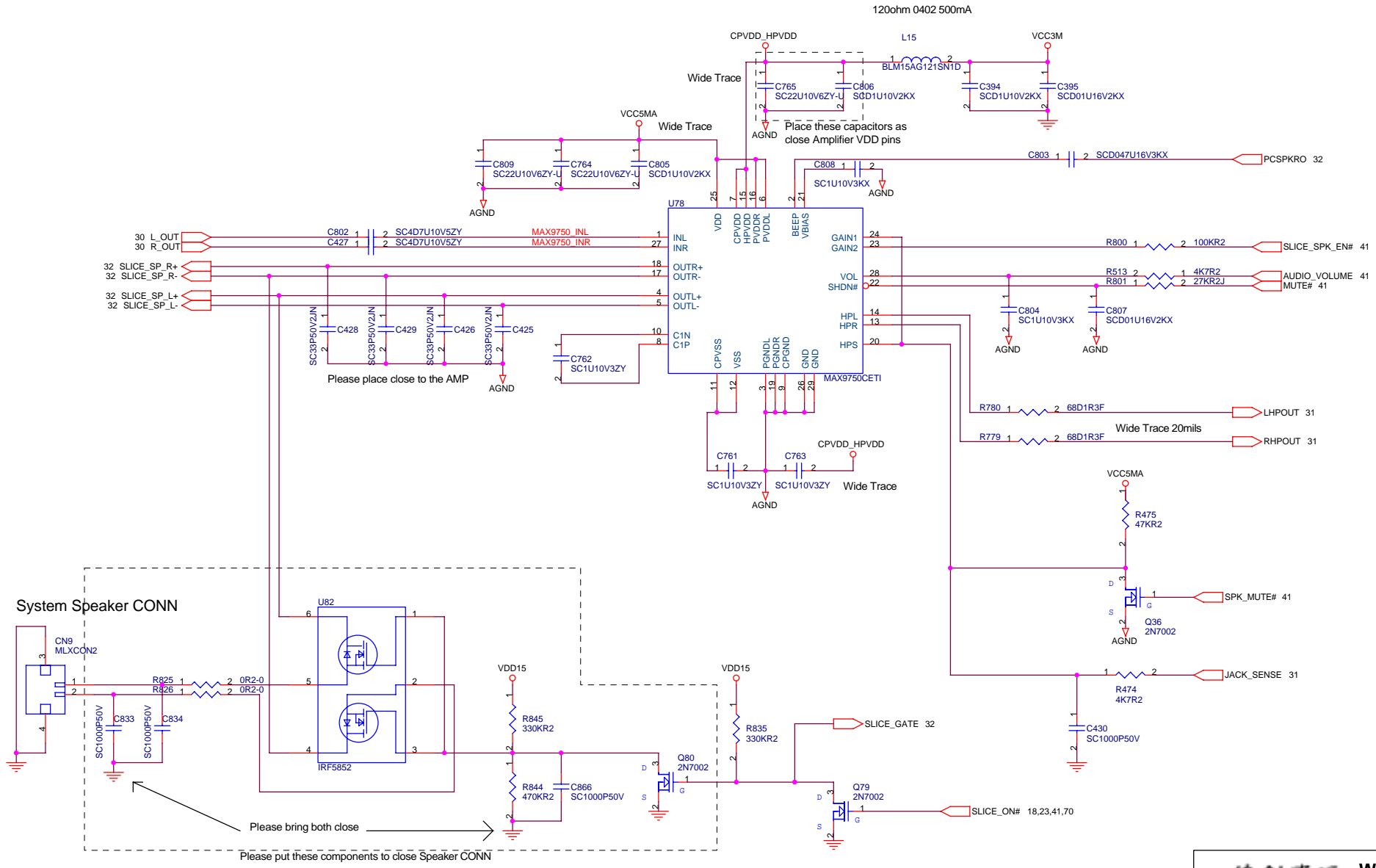


Please bring both close
Please put these components close to docking side

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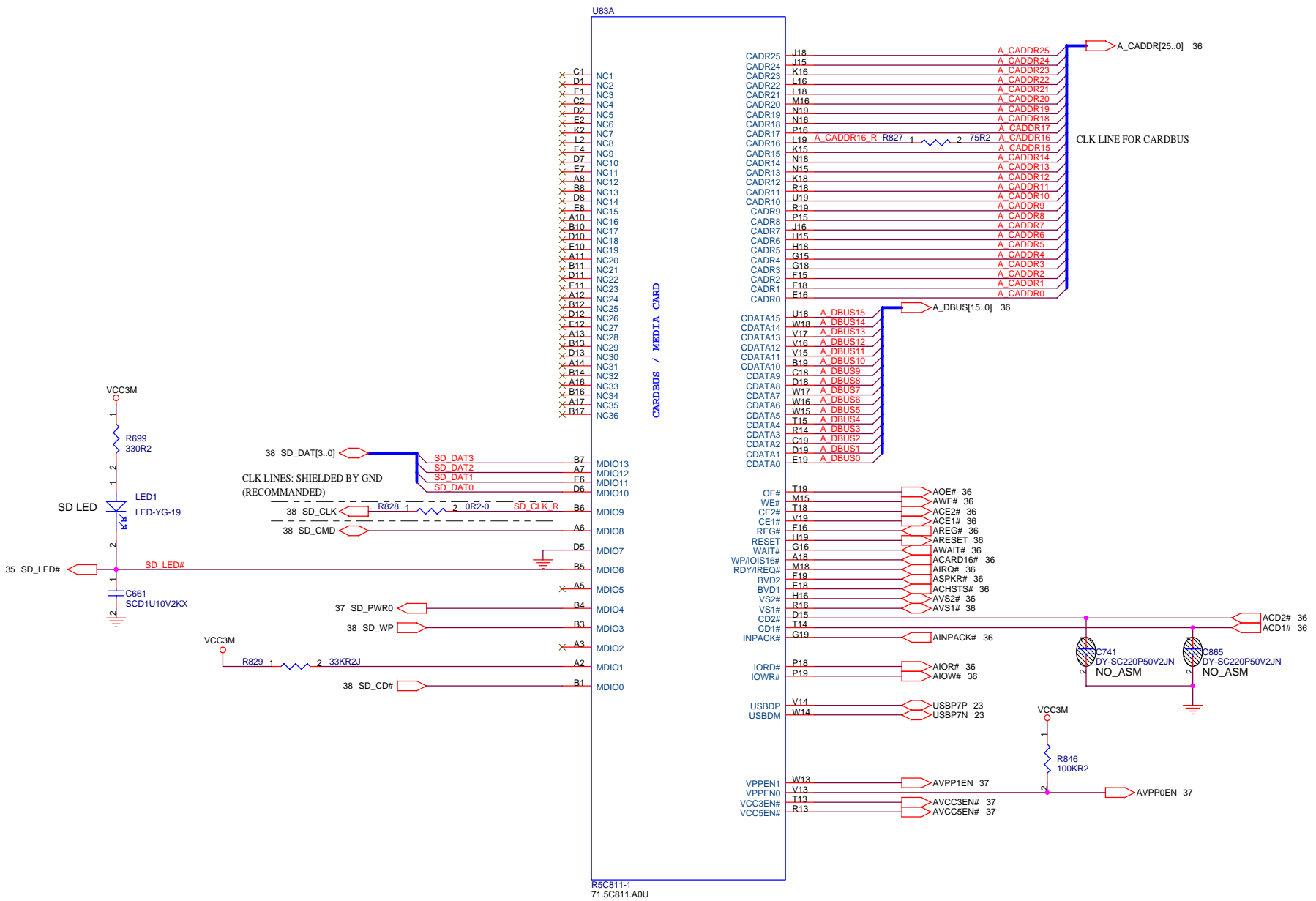
Title			
AUDIO MISC			
Size	Document Number	Rev	
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SPEAKER MODE GAIN (dB)				HEADPHONE MODE GAIN (dB)	
GAIN1 = 0	GAIN1 = 1	GAIN1 = 0	GAIN1 = 1	GAIN1 = X	GAIN1 = X
GAIN2 = 0	GAIN2 = 0	GAIN2 = 1	GAIN2 = 1	GAIN2 = 0	GAIN2 = 1
6	7.5	9	10.5	0	3



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Title: **AUDIO AMP MAX9750**
 Size: A3 Document Number: **S Note-3** Rev: **SC**
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U83A

CARDBUS / MEDIA CARD

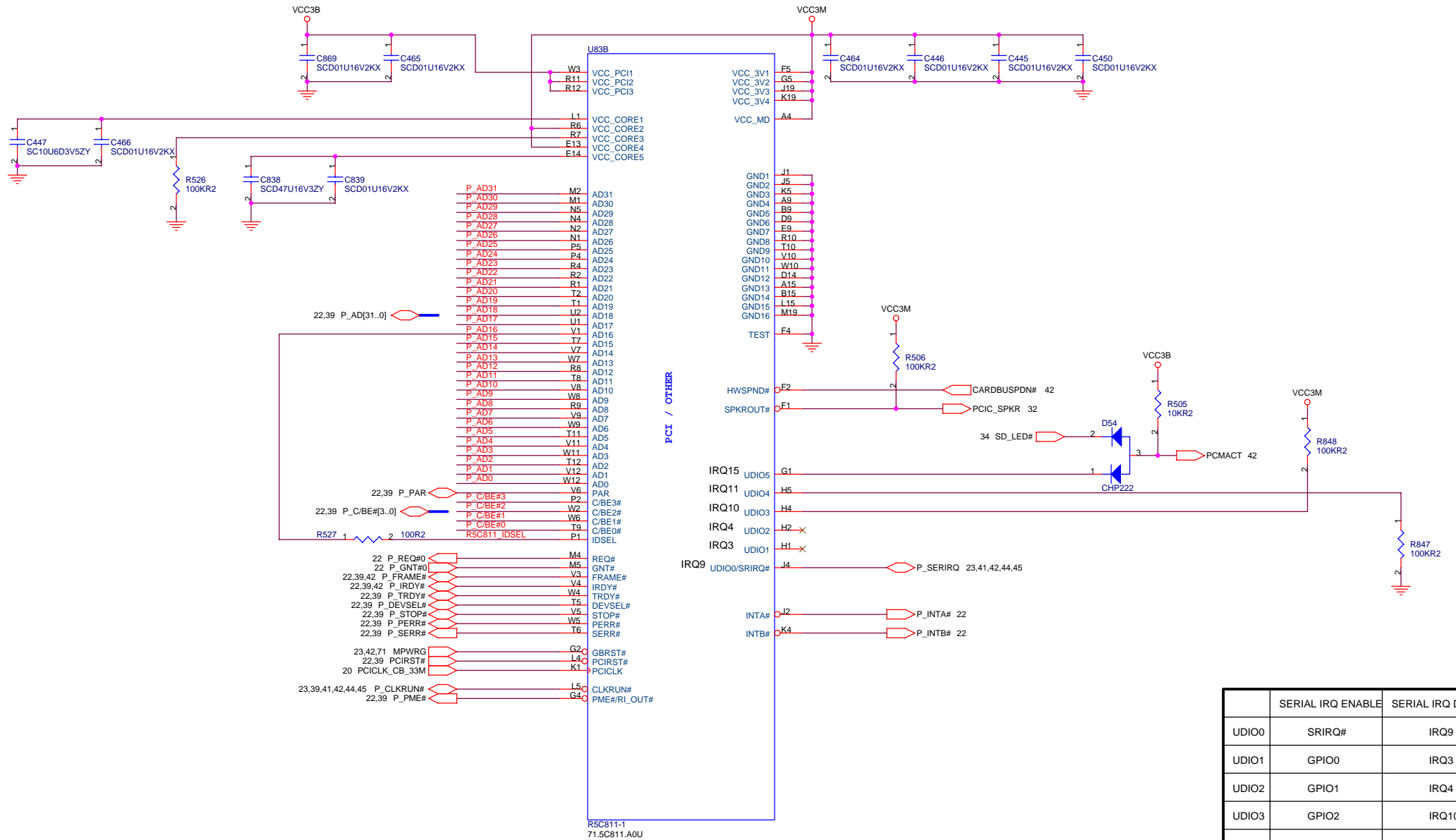
R5C811-1
71.5C811.A0U

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

Title: **CARD BUS(1/2)**

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PCI / OTHER

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

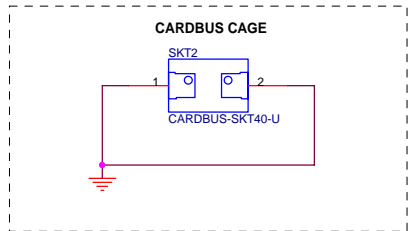
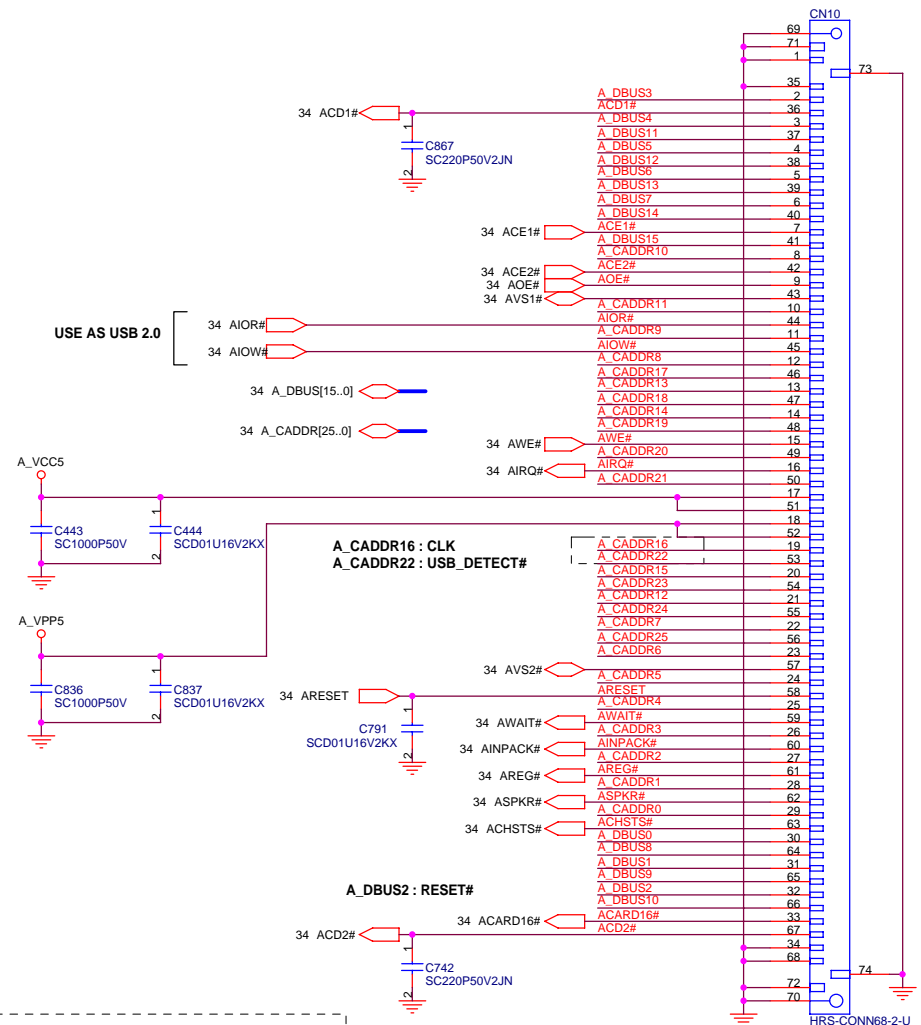
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

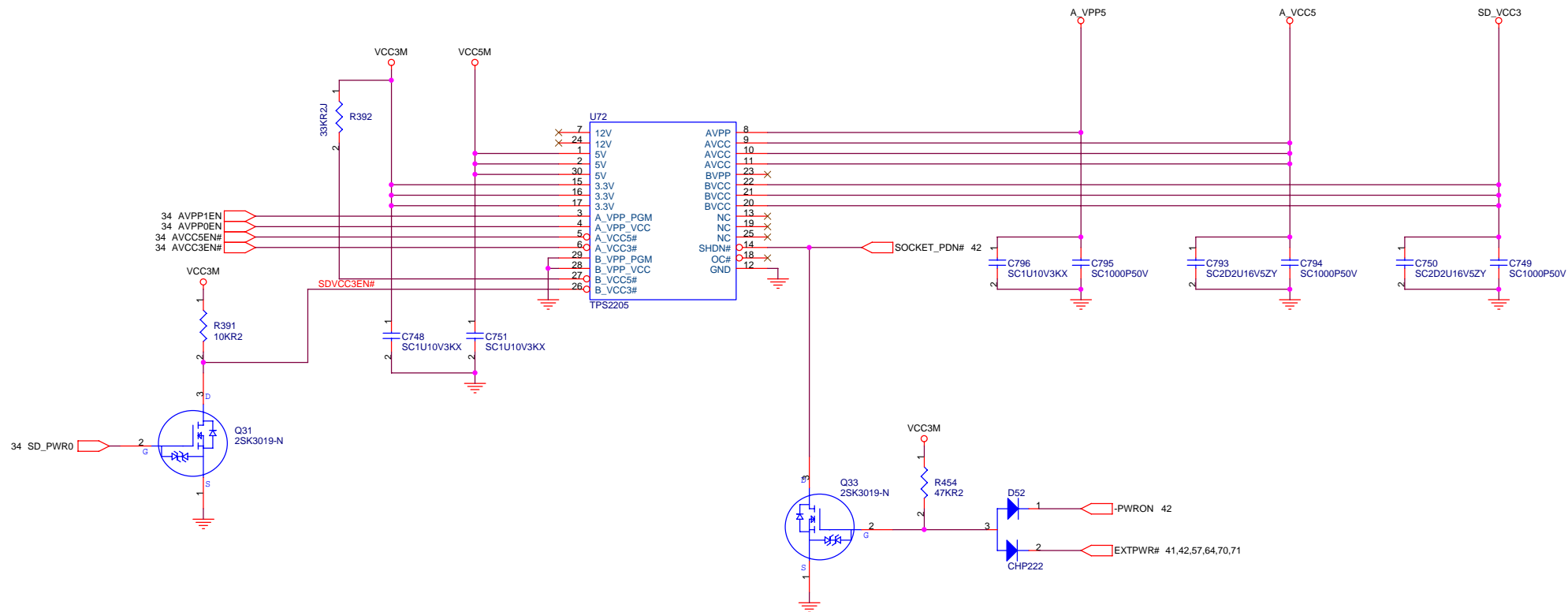
CARD BUS(2/2)

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

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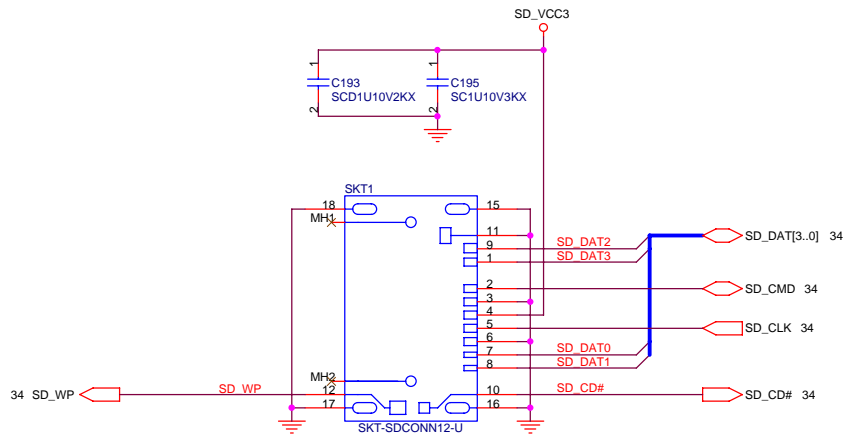


緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
CARD BUS SLOT			
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緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
CARD BUS POWER CONTROL			
Size	Document Number	Rev	
A3		S Note-3	SC
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		37	75

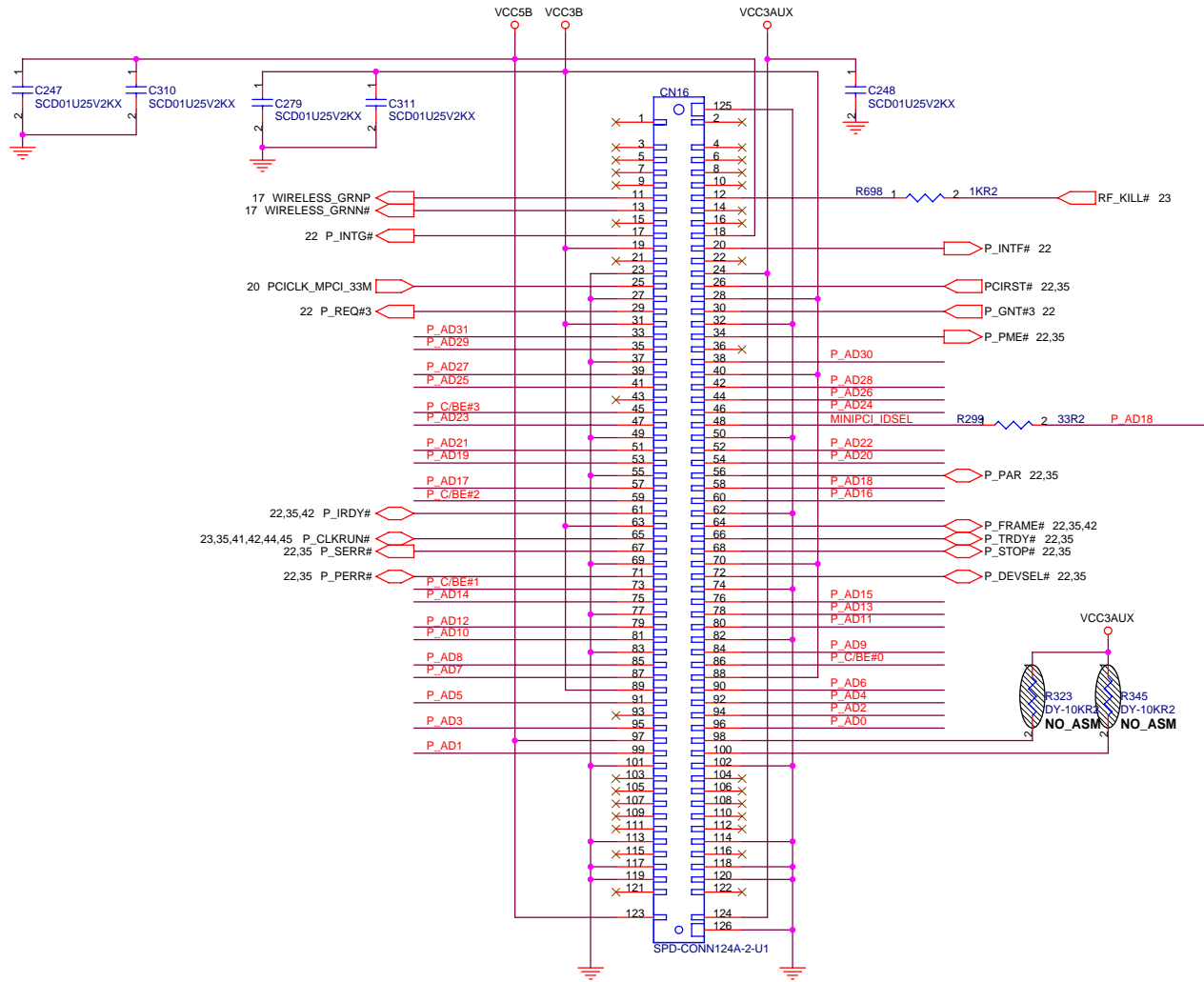
SD Slot



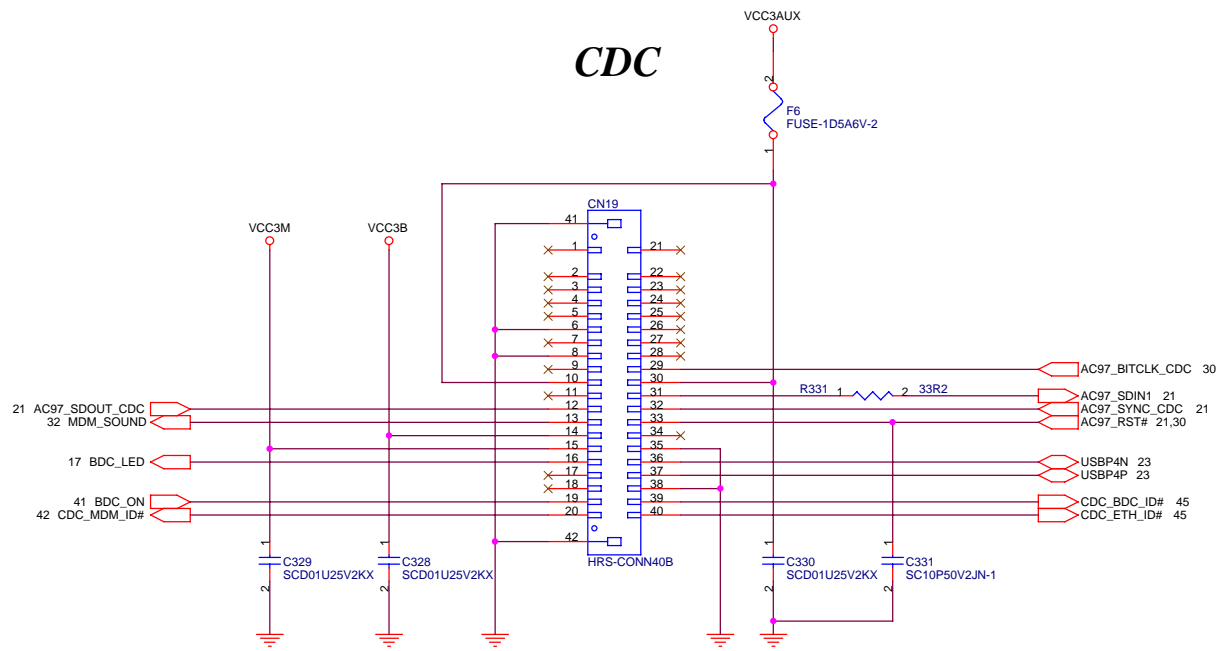
緯創資通 **Wistron Corporation**
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 Taipei Hsien 221, Taiwan, R.O.C.

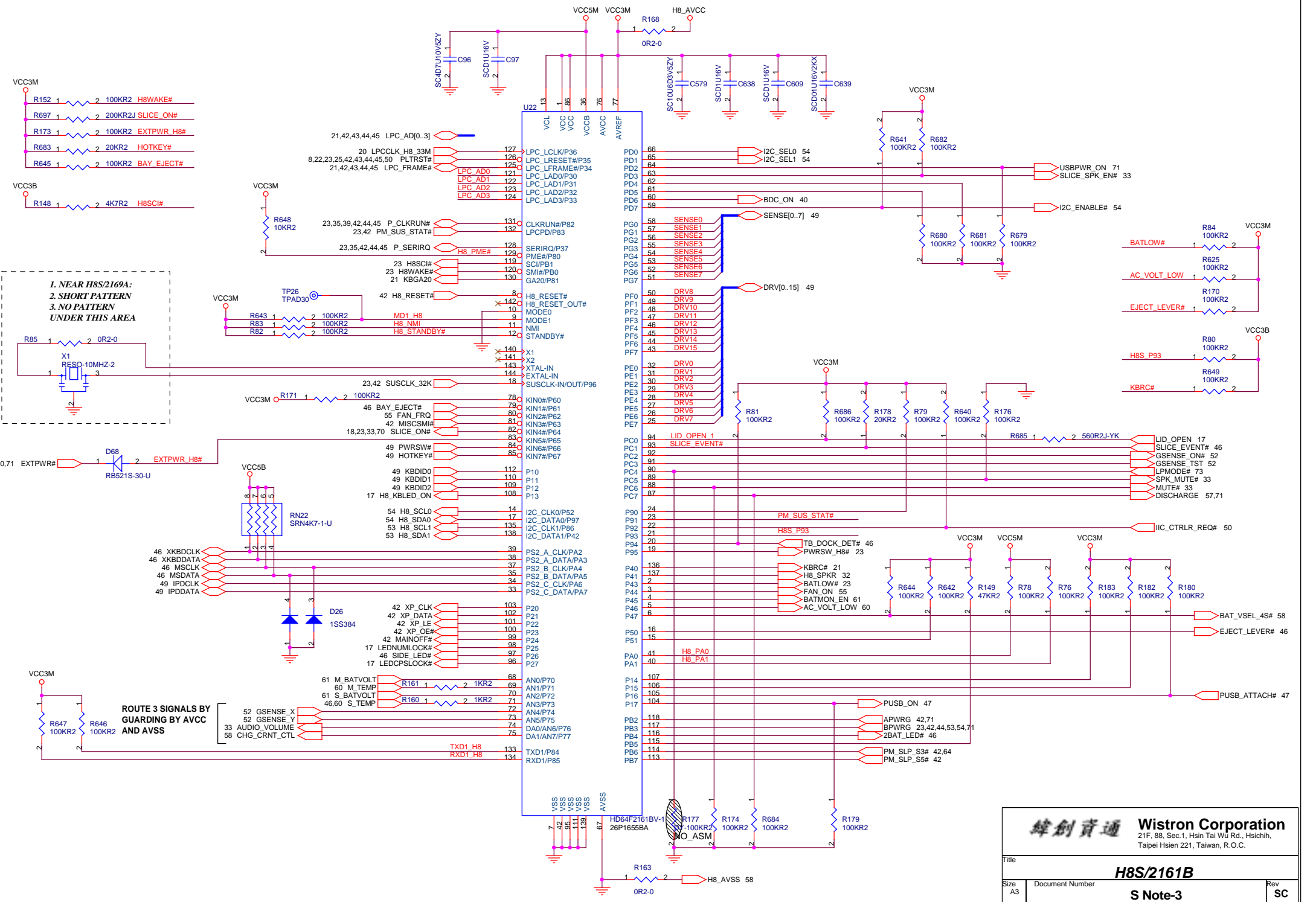
Title			
Size			Rev
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22,35 P_C/BE#[0..3]
22,35 P_AD#[0..31]



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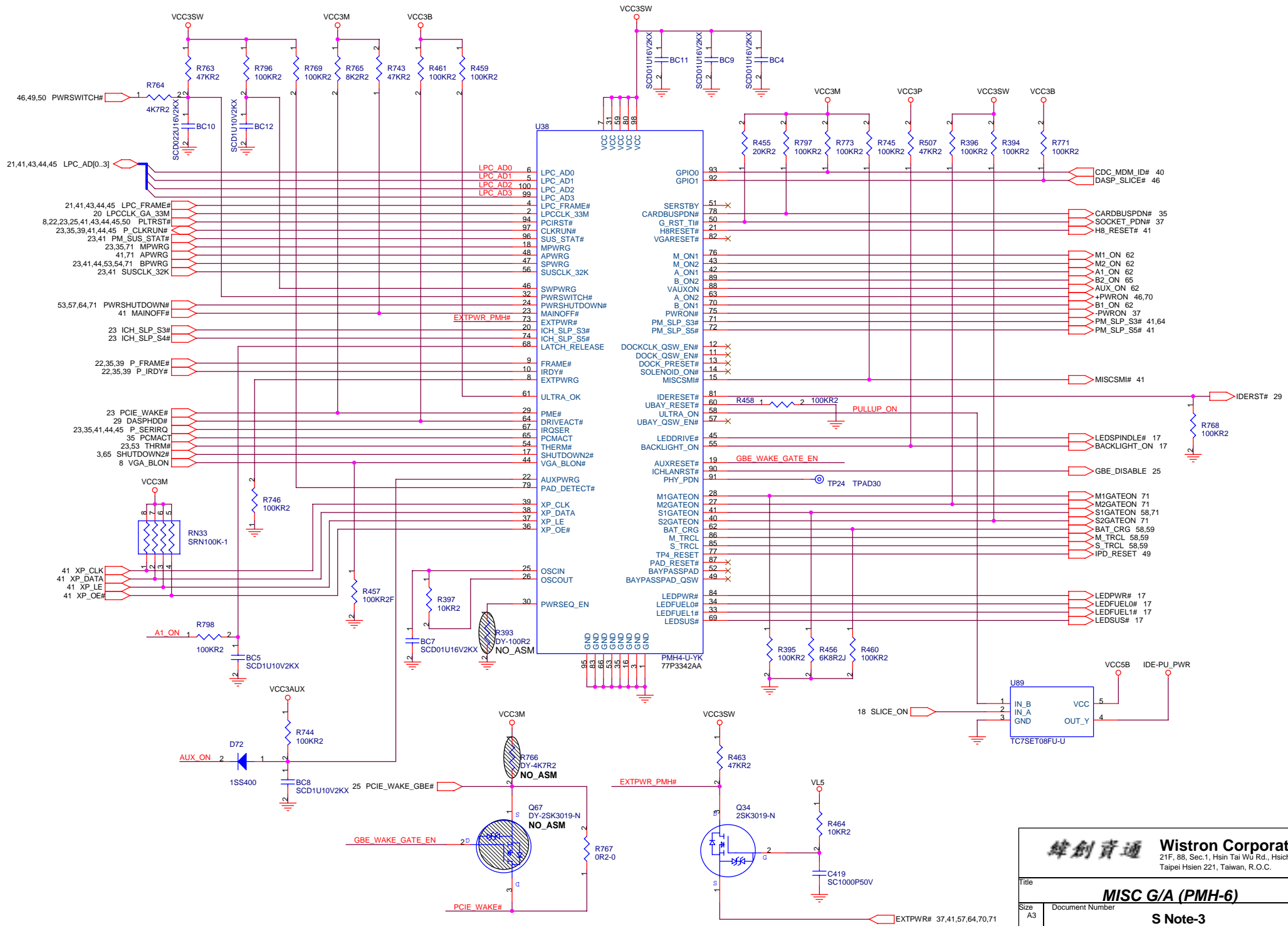


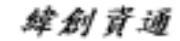
緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **H8S/2161B**

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

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

Title		MISC G/A (PMH-6)	
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MEM_BASE_ID[4..0]

FWH GPIn	4	3	2	1	0	Base Memory	Memory	Memory Bank	
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

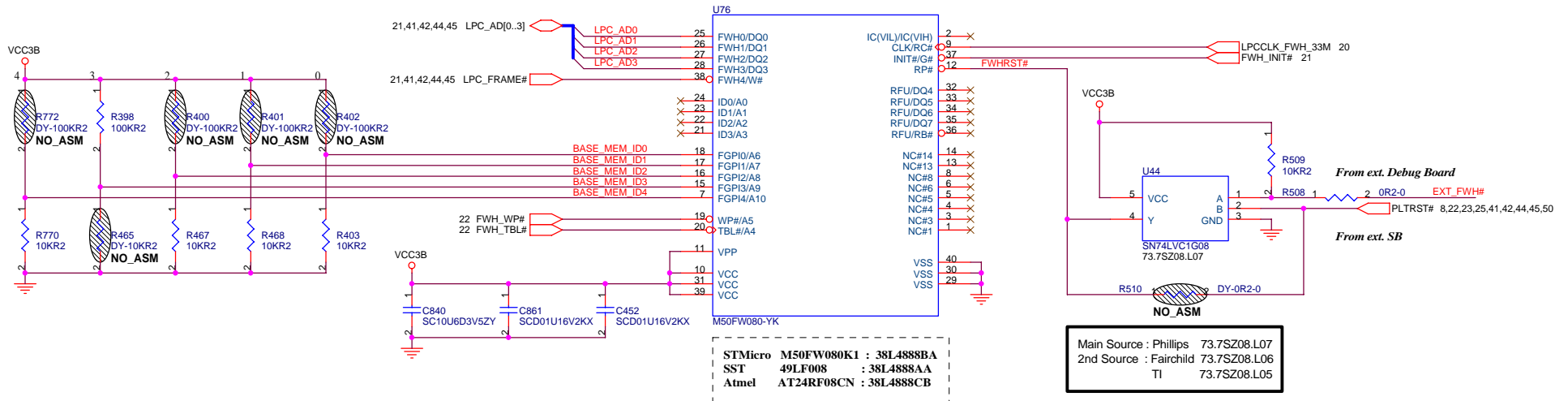
01 = Reserved (for Specific Memory Vendor)

10 = Reserved (for Specific Memory Vendor)

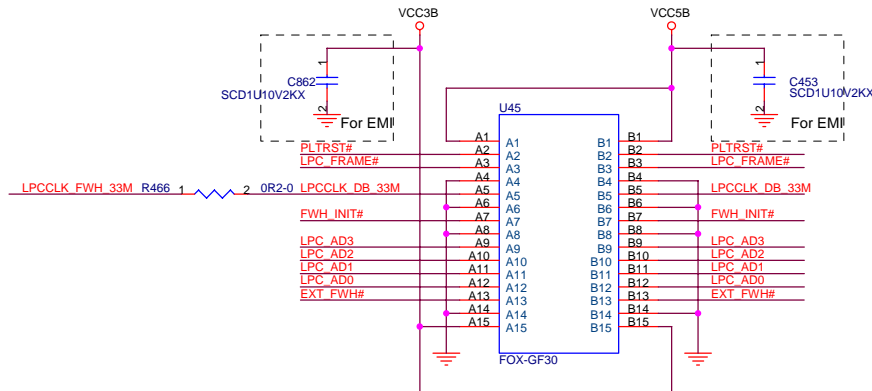
11 = Reserved (for Specific Memory Vendor)

x : don't care

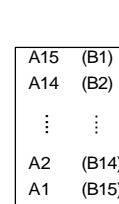
11000b 11111b : reserved



Golden Finger for Debug Board



TOP VIEW

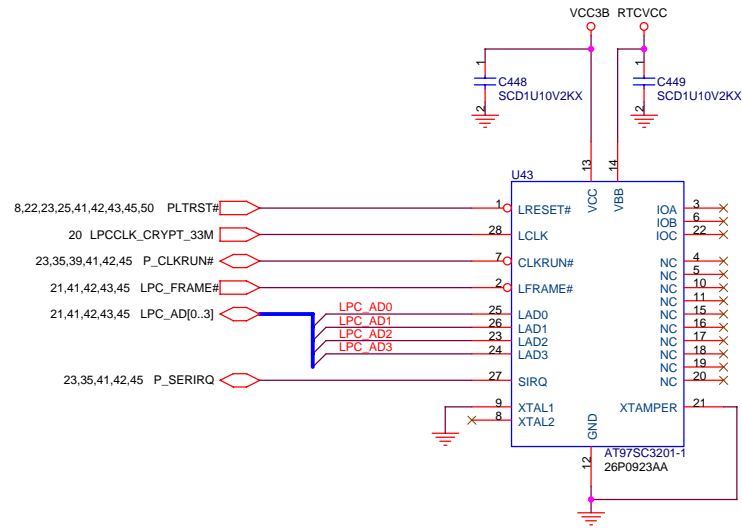


(BOTTOM VIEW)

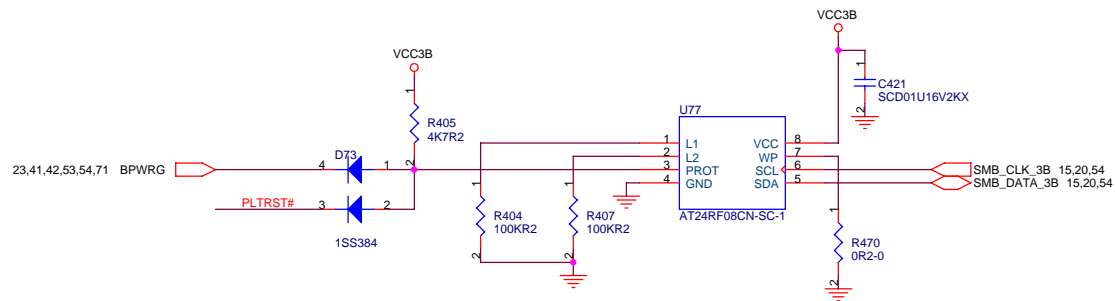
緯創資通 Wistron Corporation
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 Taipei Hsien 221, Taiwan, R.O.C.

Title			FWH		
Size	Document Number				Rev
A3	S Note-3				SC
Date: Wednesday, June 01, 2005	Sheet 43	of		75	

TCPA

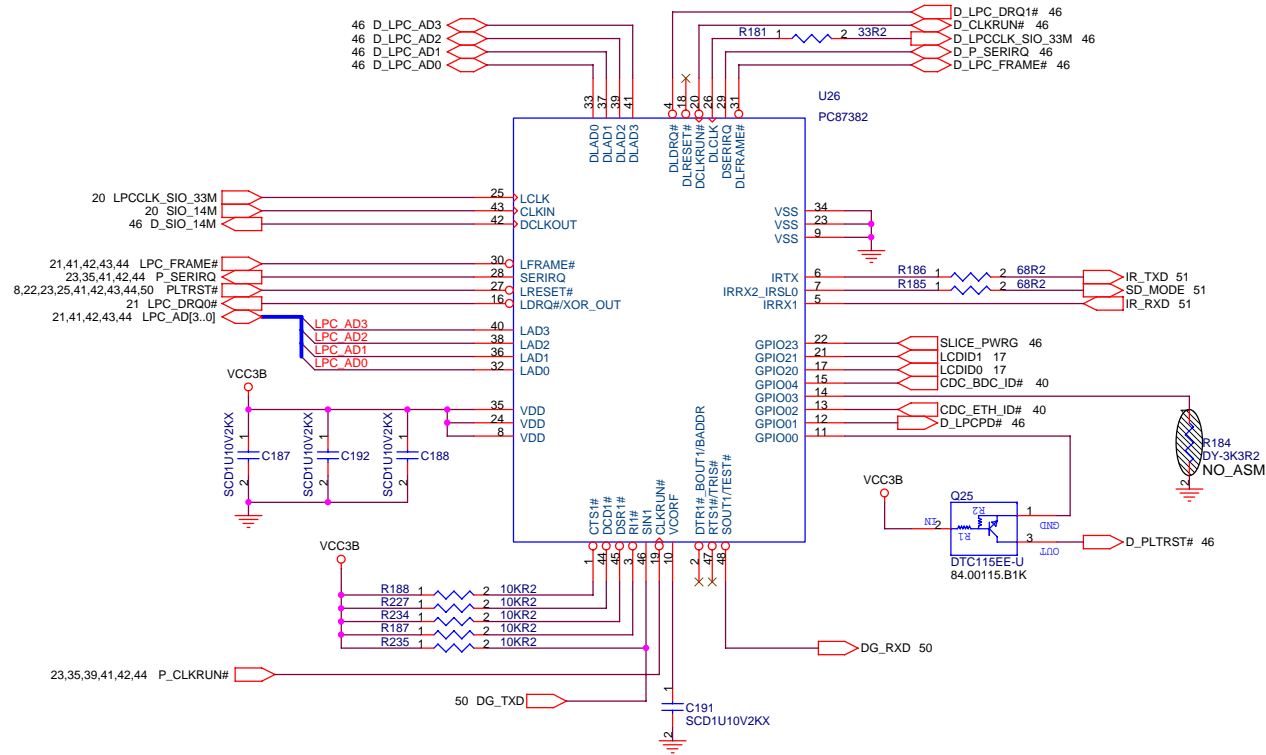


EEPROM



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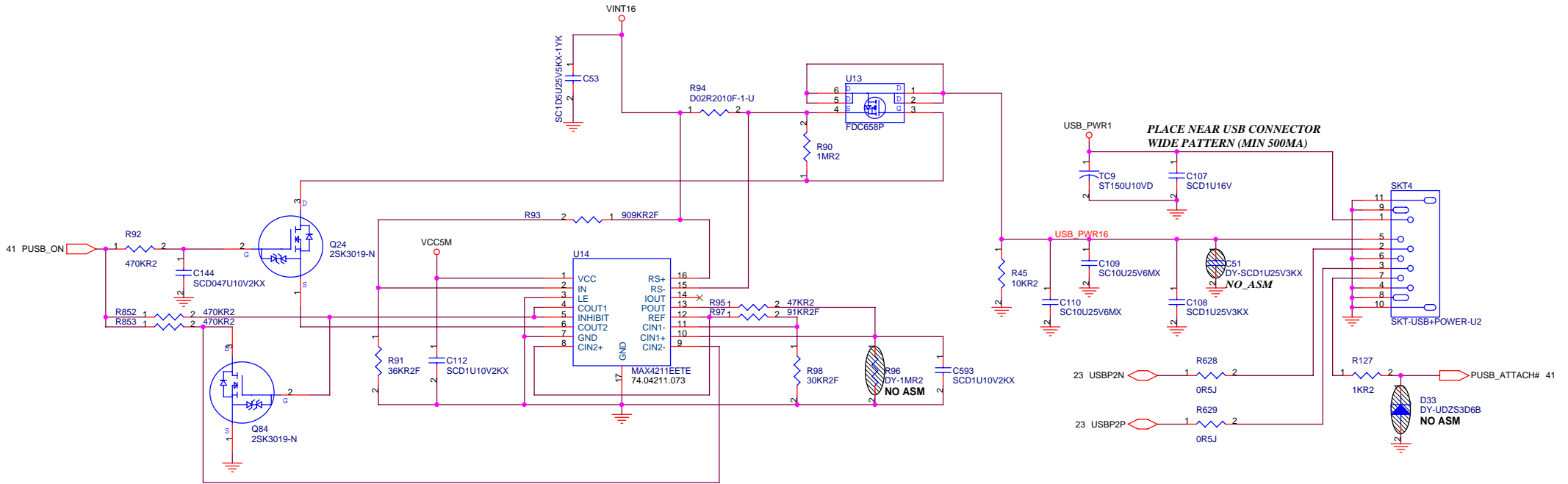
Title			
EEPROM / TPM			
Size	Document Number	Rev	
A3		S Note-3	SC
Date: Wednesday, June 01, 2005		Sheet 44	of 75



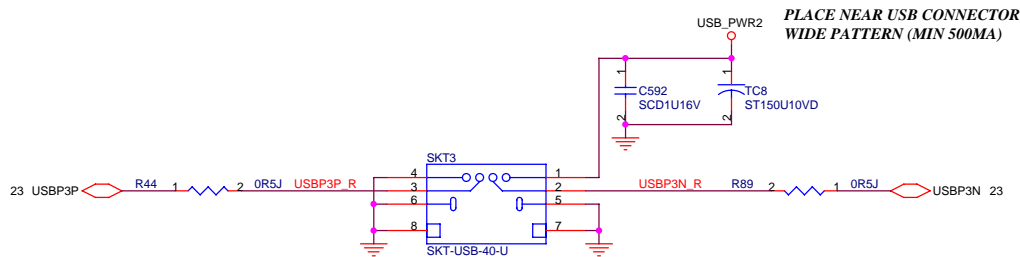
CRYPT_DETECTION BIT

None TCPA model should be assemble this pulldown resistor.

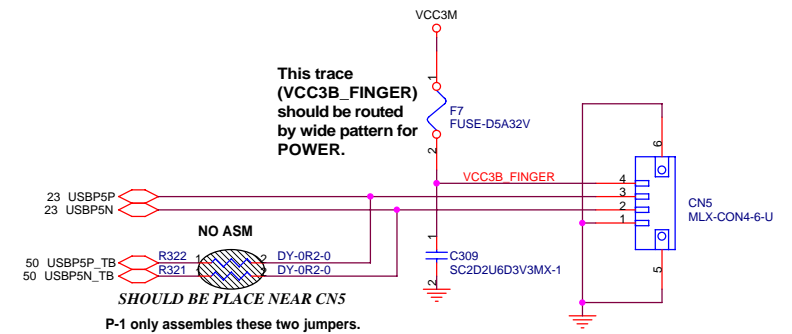
Powered USB Connector

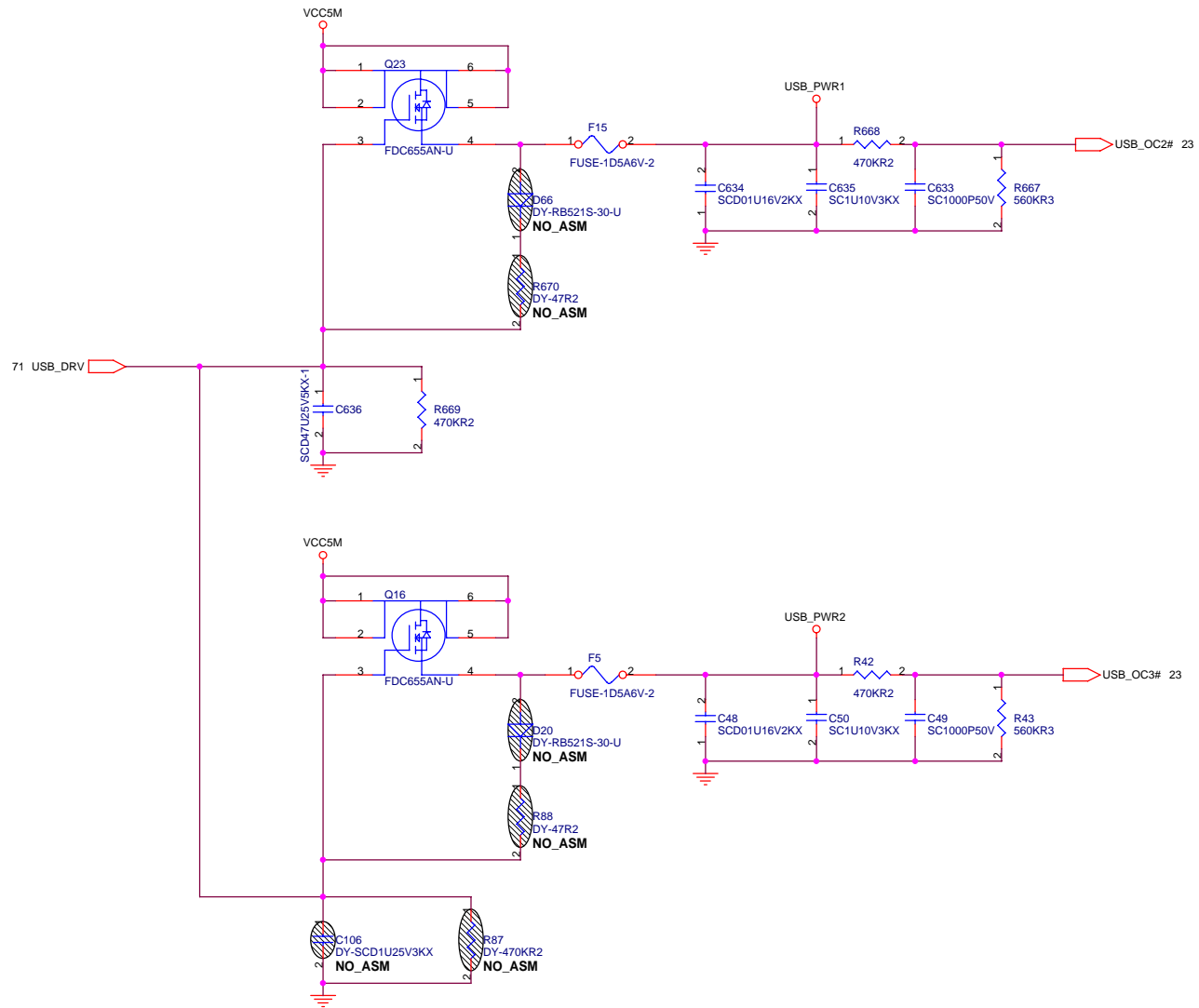


USB Connector

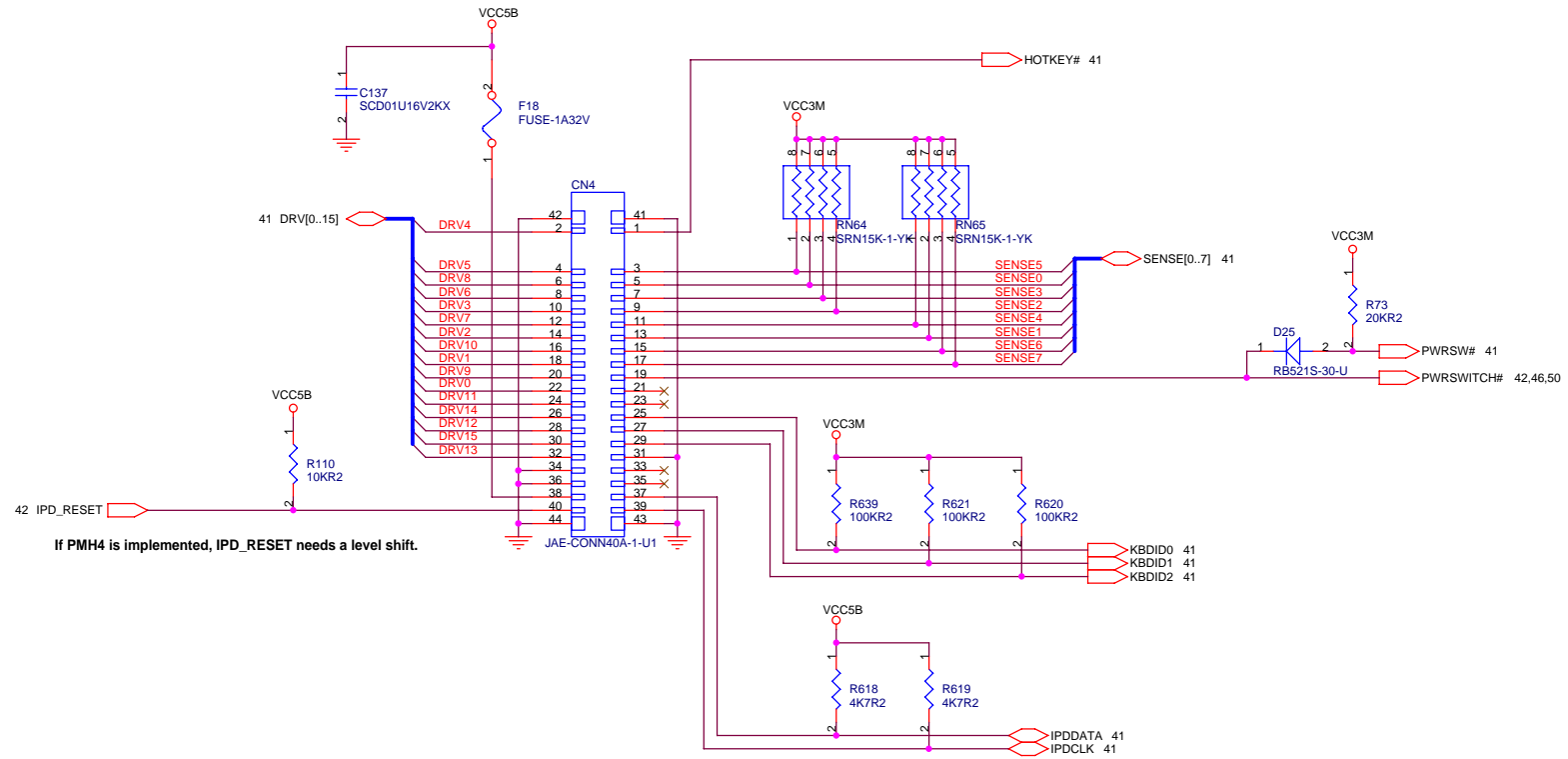


Fingerprint

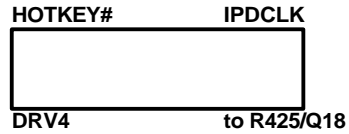




Keyboard Connector

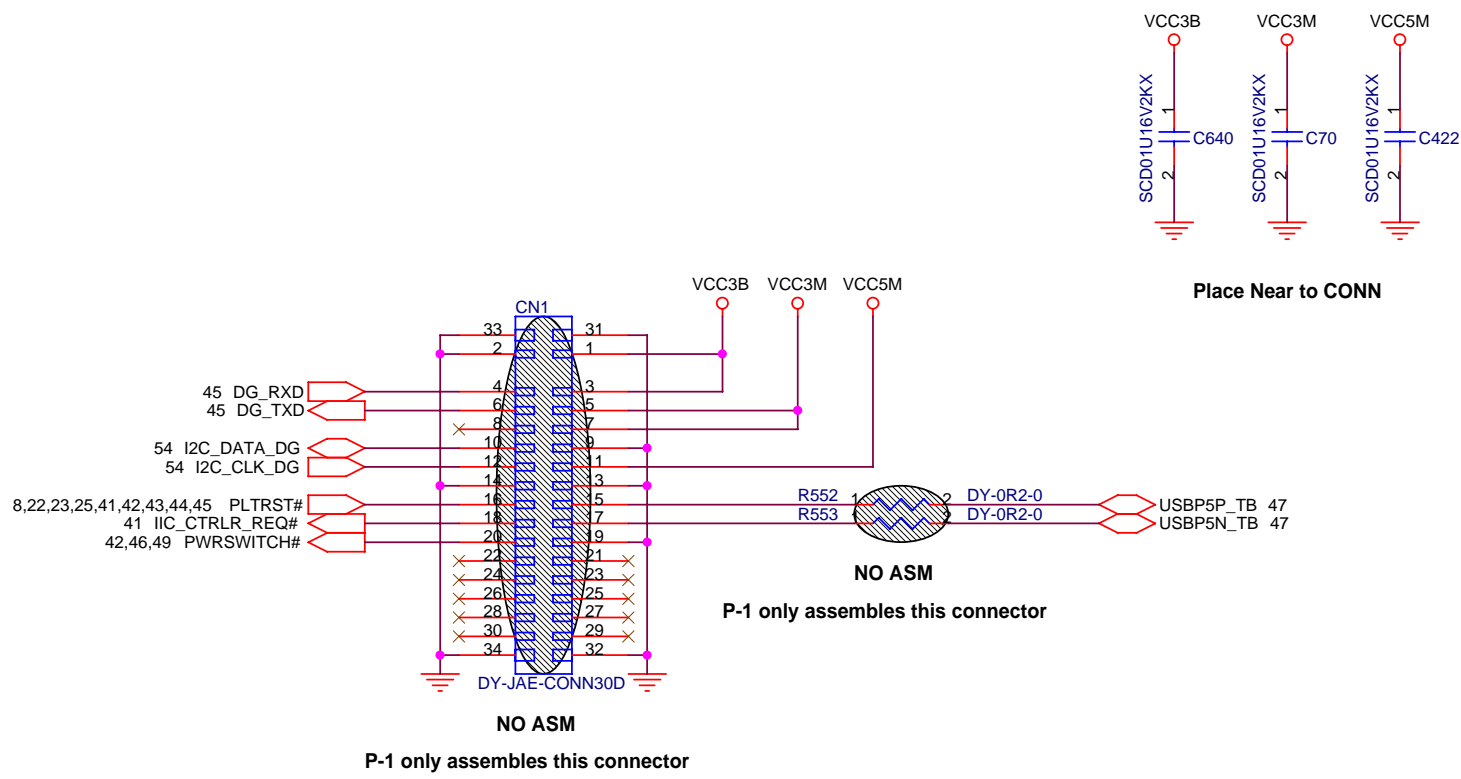



If PMH4 is implemented, IPD_RESET needs a level shift.

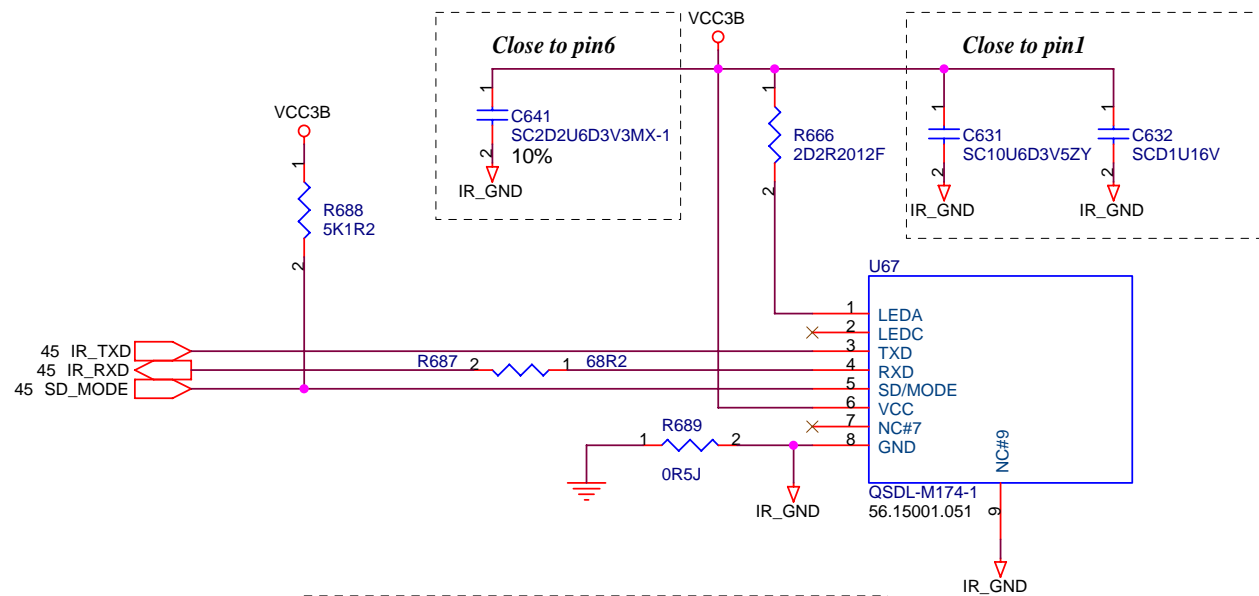


Keyboard Connector Top View

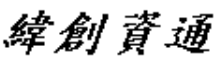
緯創資通		Wistron Corporation	
		<small>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</small>	
KEYBOARD CONN			
Size A3	Document Number S Note-3	Rev SC	
Date: Wednesday, June 01, 2005		Sheet 49	of 75

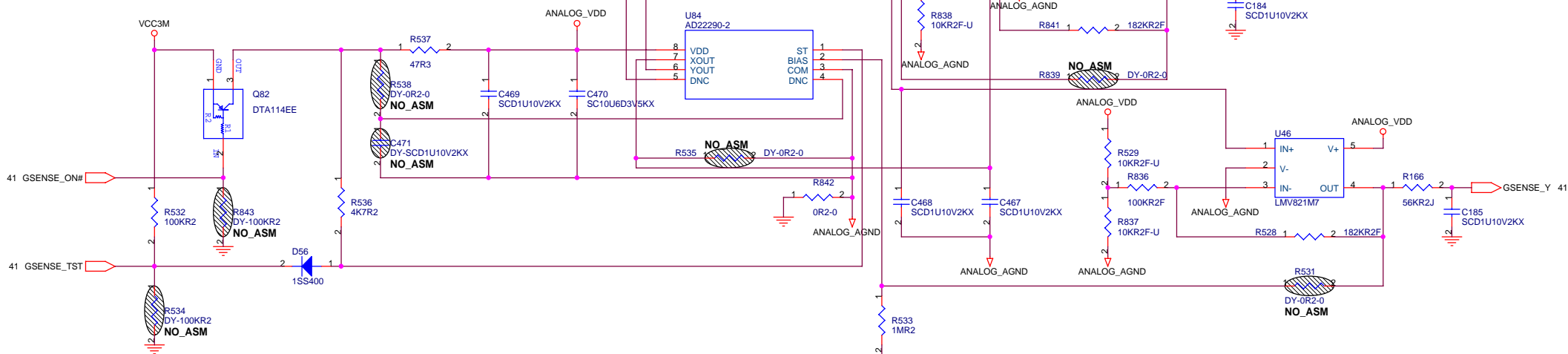


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Title	
DG CONNECTOR	
Size A4	Document Number S Note-3
Date: Wednesday, June 01, 2005	Rev SC
Sheet 50 of 75	



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

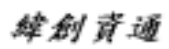
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
IR MODULE	
Title	Document Number
Size A4	Rev SC
S Note-3	
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Accelerometer Parts List

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

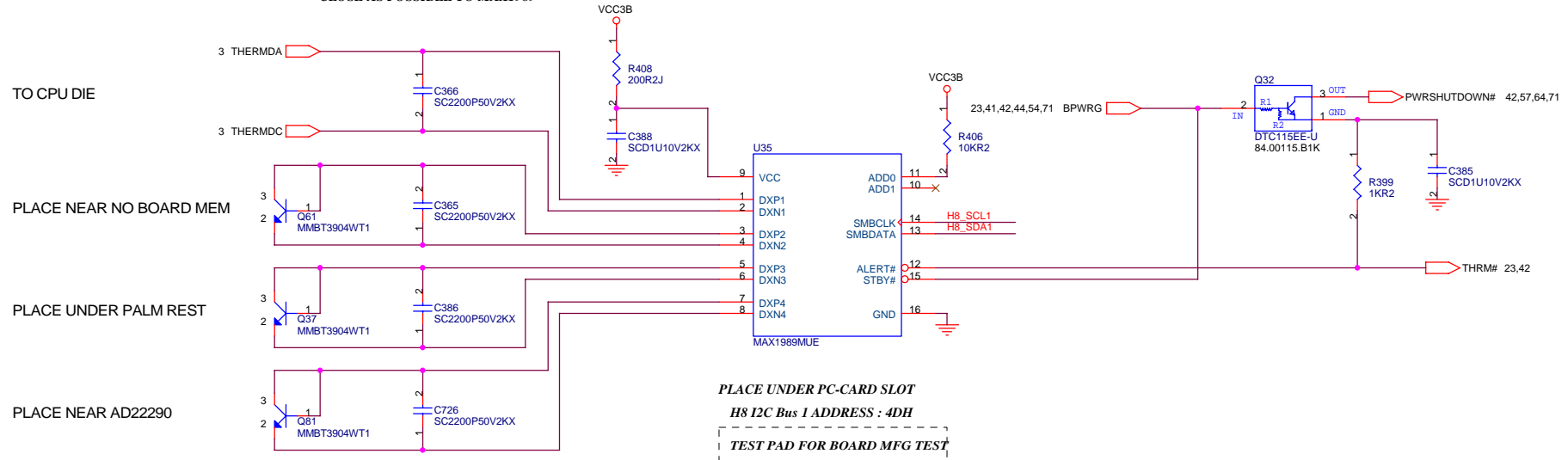

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 Taipei Hsien 221, Taiwan, R.O.C.

Title: **G-SENSOR**

Size: A3 | Document Number: **S Note-3** | Rev: **SC**

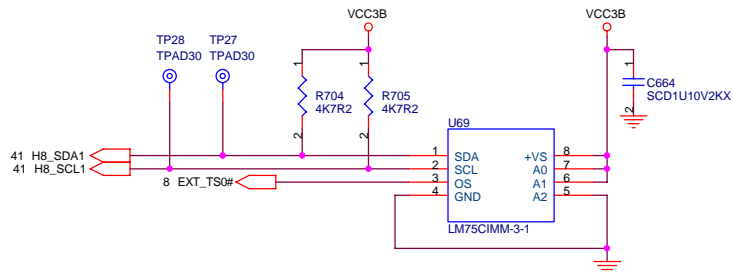
Date: Wednesday, June 01, 2005 | Sheet: 52 of 75

THESE CAPS MUST BE PLACED AS
CLOSE AS POSSIBLE TO MAX1989



Thermal Sensor LM75 for DDR module (For DDR throttling implementation)

PLACE UNDER DIMM

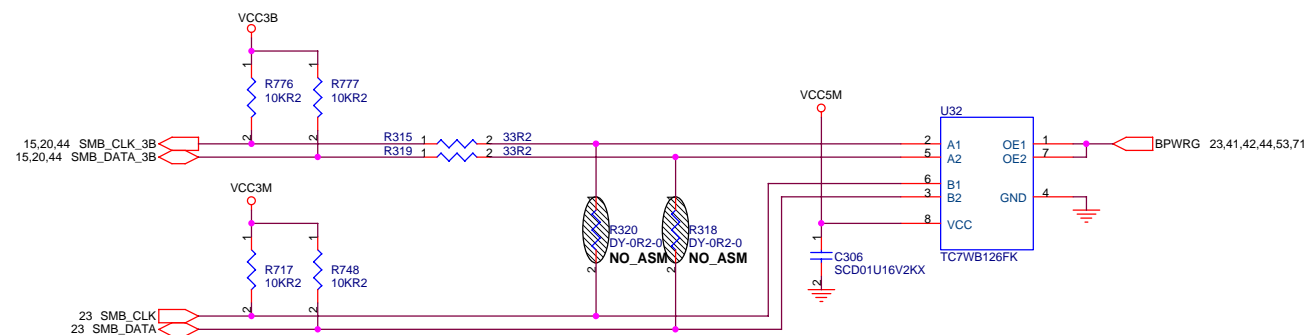
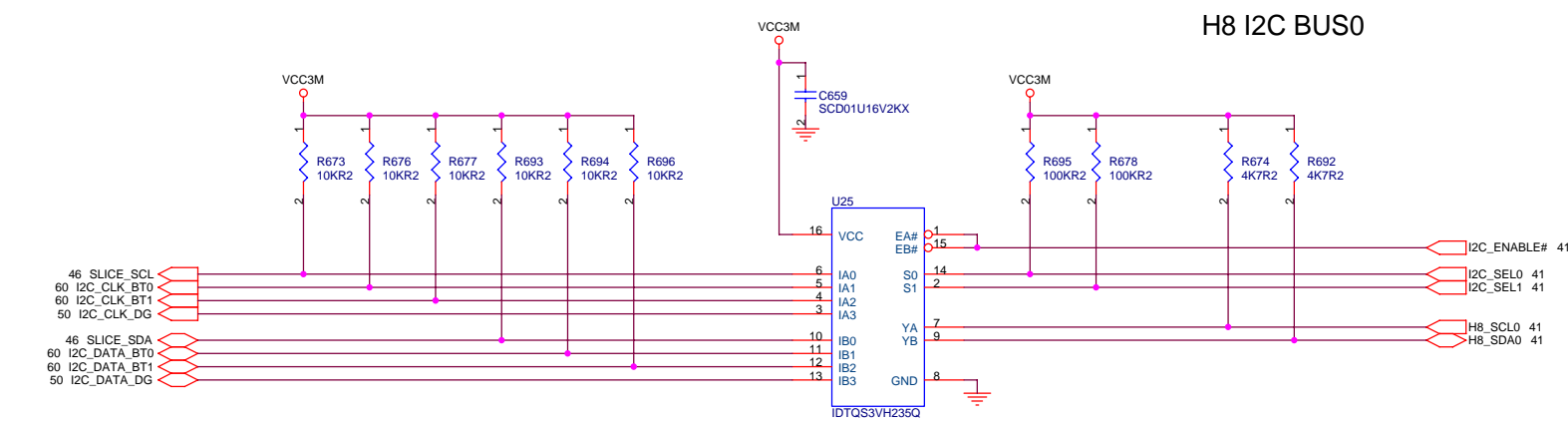


H8 I2C Bus 1 ADDRESS : 4BH

Main Source : 74.00075.0B9 (NS)
2nd Source : 74.00075.CB1 (MAXIM)
74.07416.0B9 (ADI)

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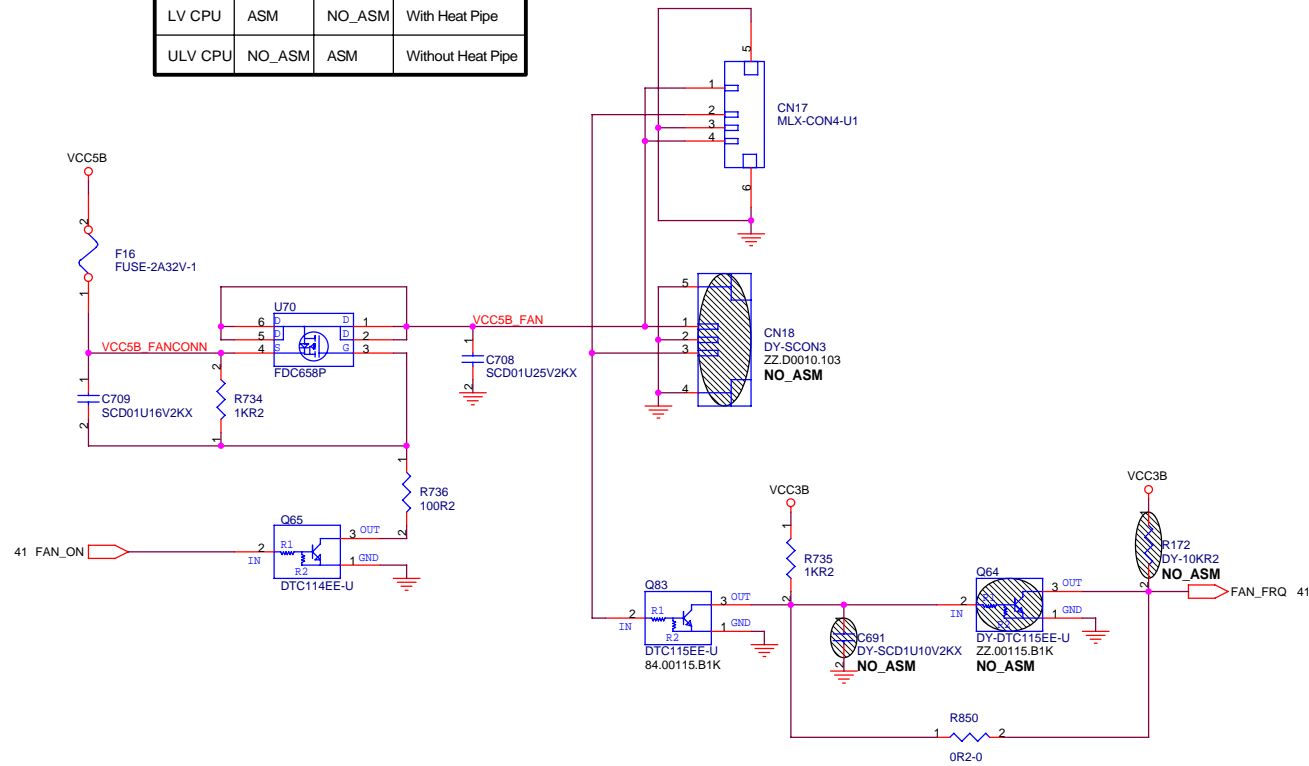
Title		
THERMAL SENSOR		
Size A3	Document Number S Note-3	Rev SC
Date: Wednesday, June 01, 2005	Sheet 53	of 75



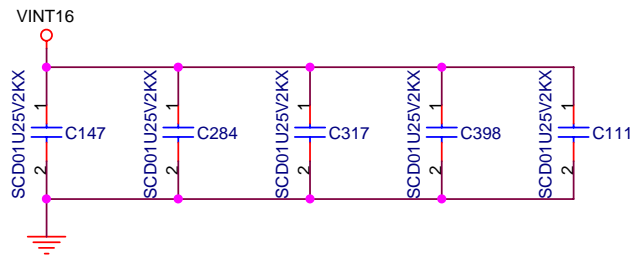
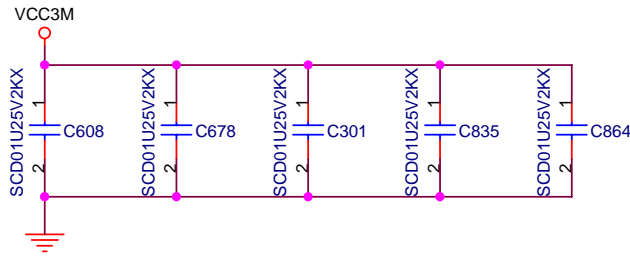
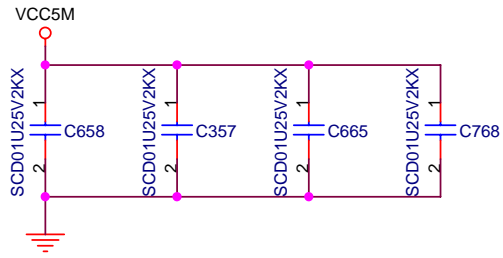
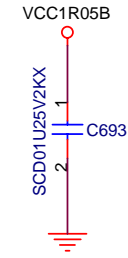
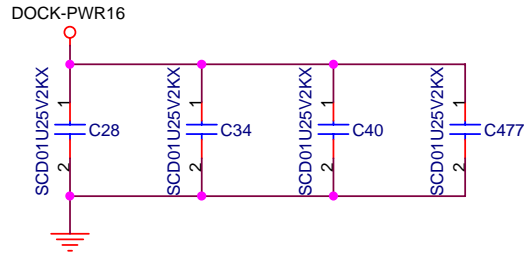
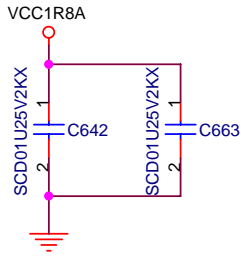
緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
I2CBUS/SMBUS			
Size A3	Document Number S Note-3		Rev SC
Date: Wednesday, June 01, 2005			
		Sheet 54	of 75

Fan Power Control

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

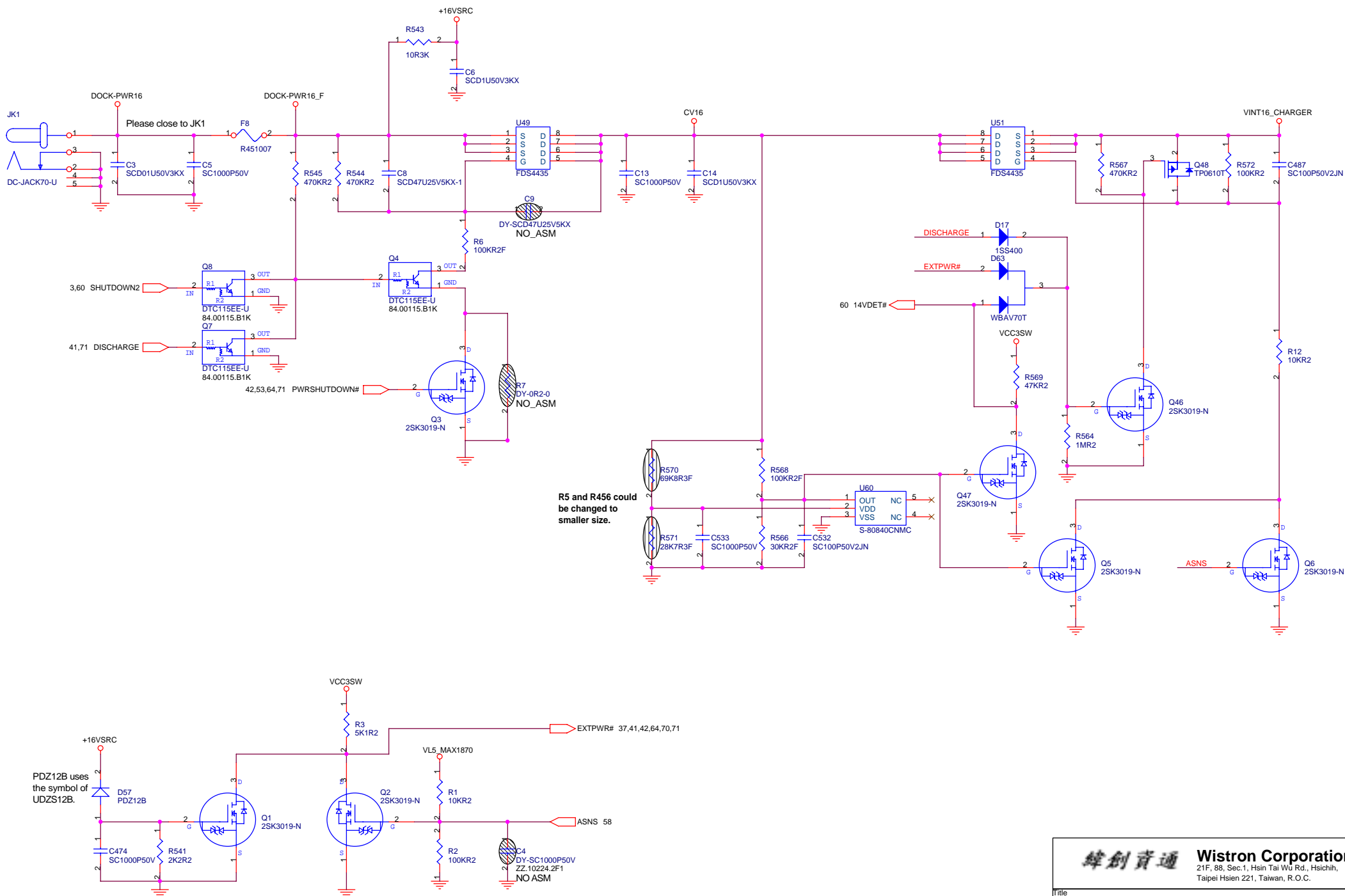


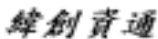
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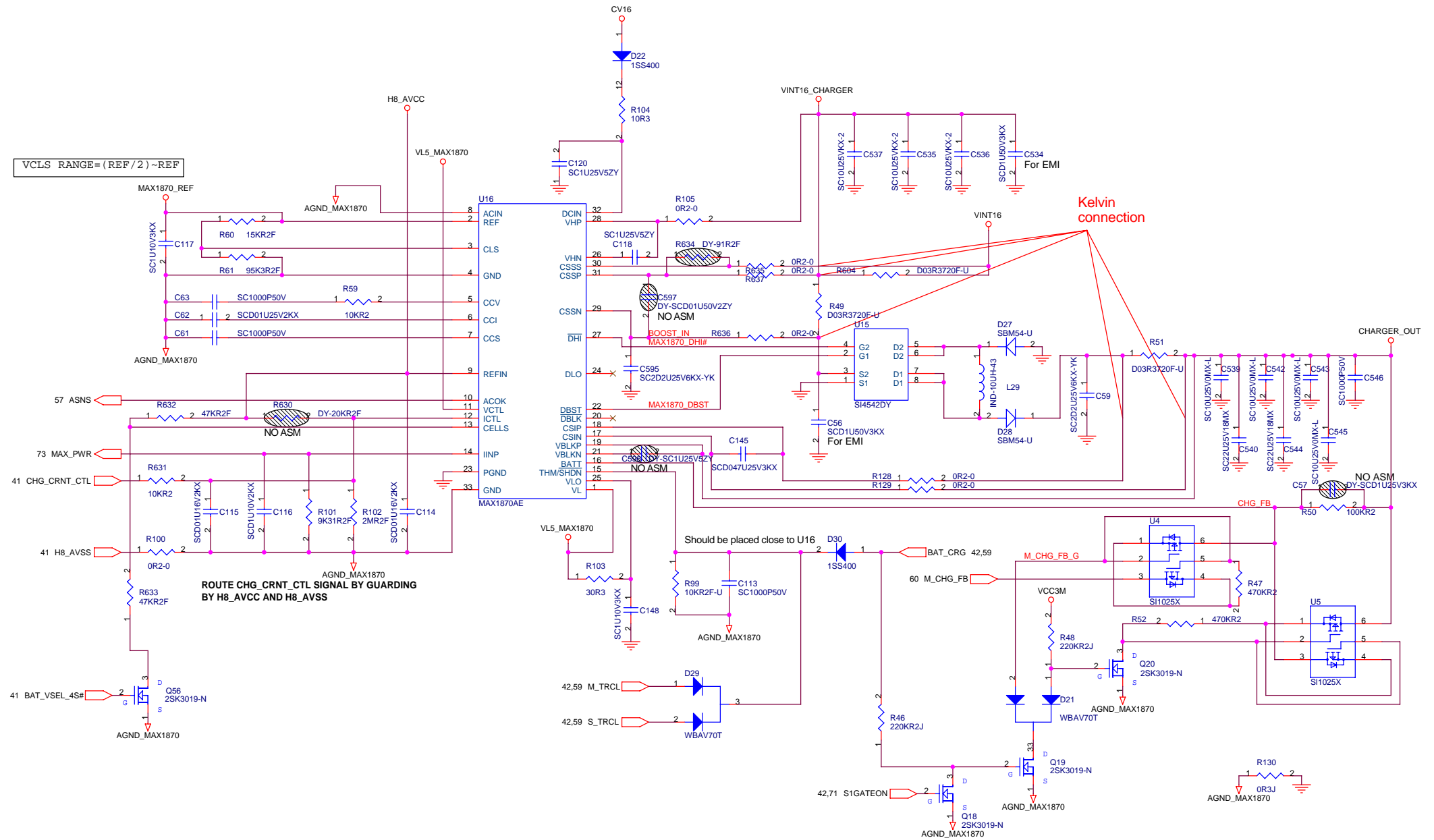
緯創資通 **Wistron Corporation**
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Title		
EMC DECOUPLING		
Size A4	Document Number S Note-3	Rev SC
Date: Wednesday, June 01, 2005	Sheet 56 of	75

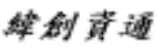


 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-IN	
Title DC-IN	Document Number S Note-3
Size A3	Rev SC
Date: Wednesday, June 01, 2005	Sheet 57 of 75

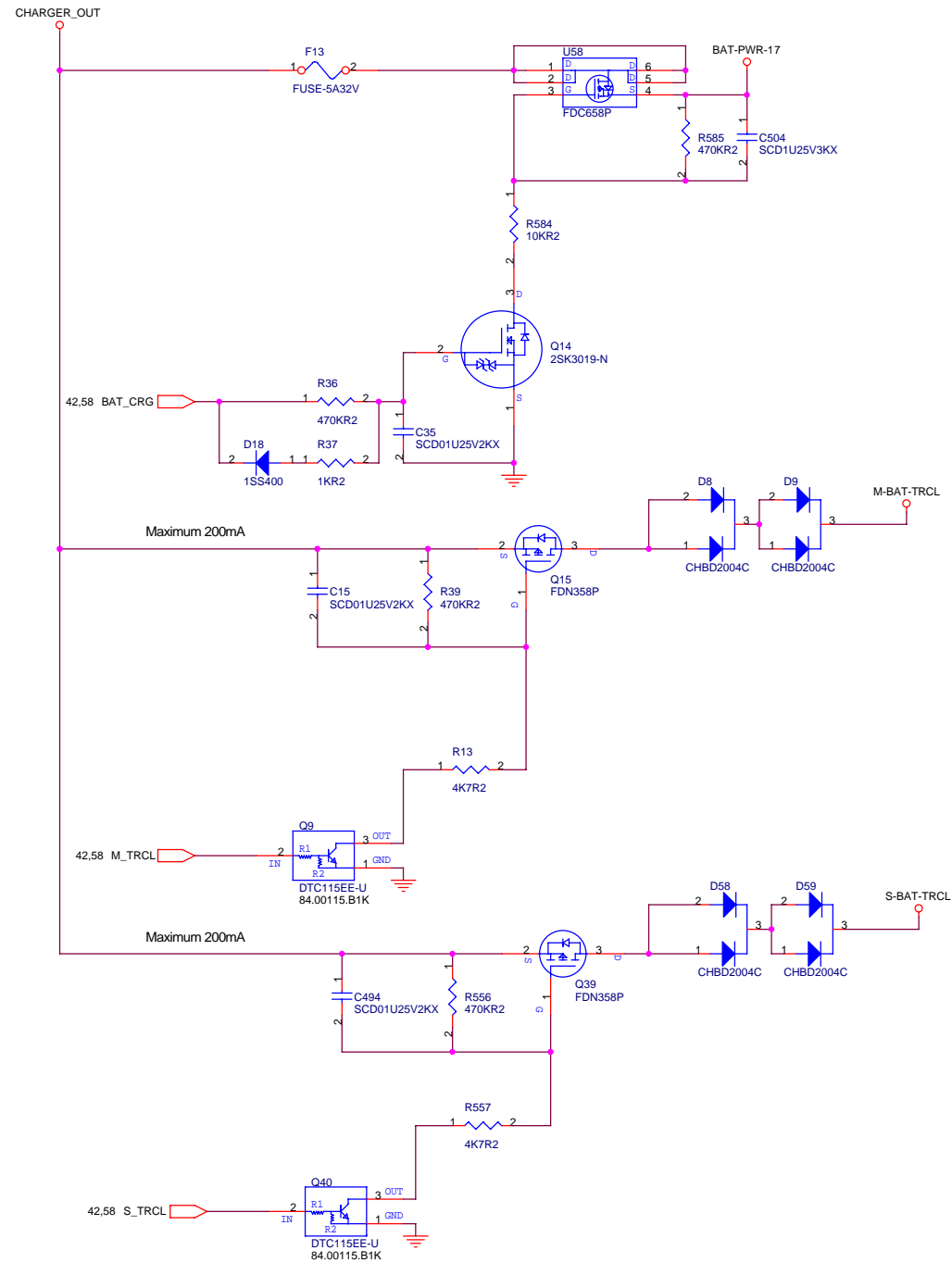
$$VCLS_RANGE = (REF/2) - REF$$



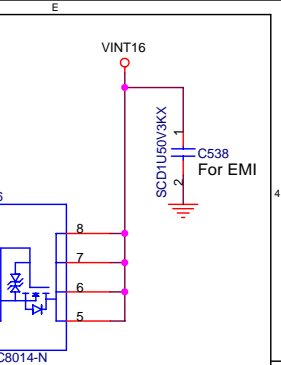
Some 2SK3019-Ns use the symbol of 2N7002, but swap the pin1 and pin2. Q55, Q56, Q83, Q84


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Title			
CHARGER MAX1870			
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CHARGER SELECT			
Title	Document Number		Rev
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BATOUT_DRV 71

Is use the symbol of 2N7002,
1 and pin2.
8, Q49, Q57

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Y INPUT

lote-3 Rev SC

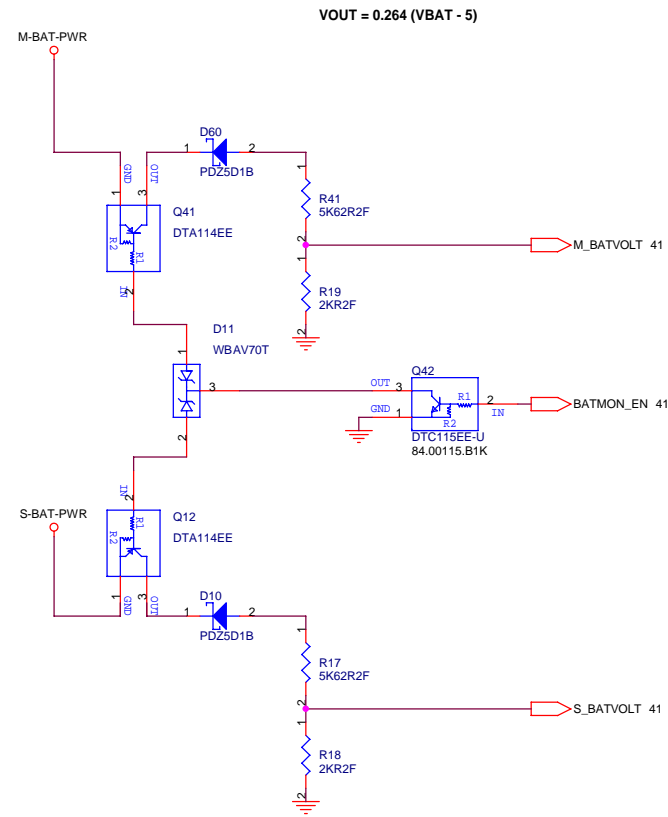
Sheet 60 of 75

4

3

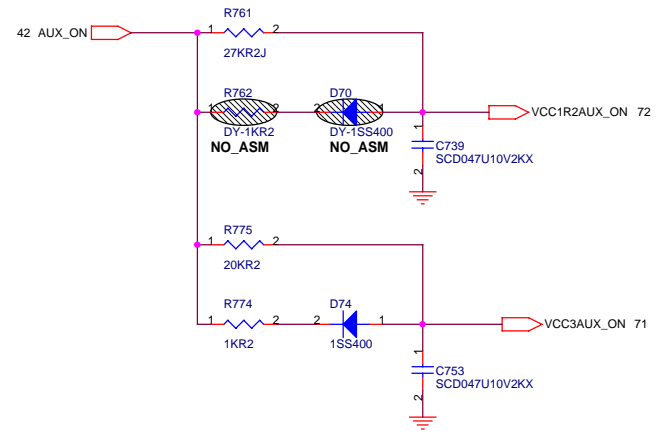
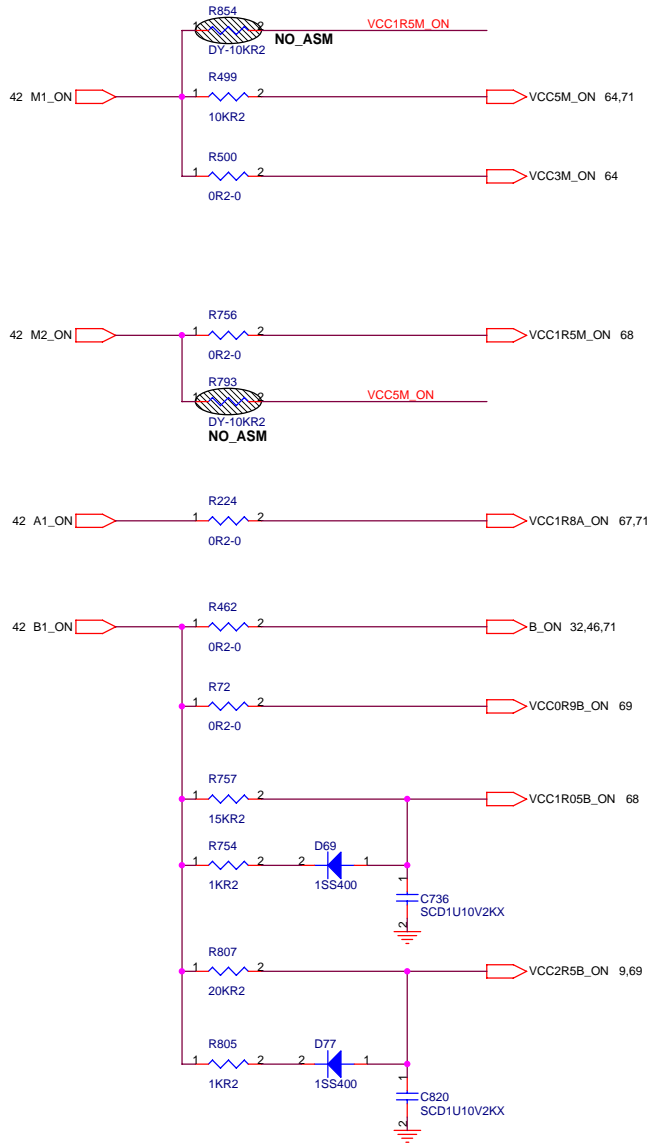
2

1



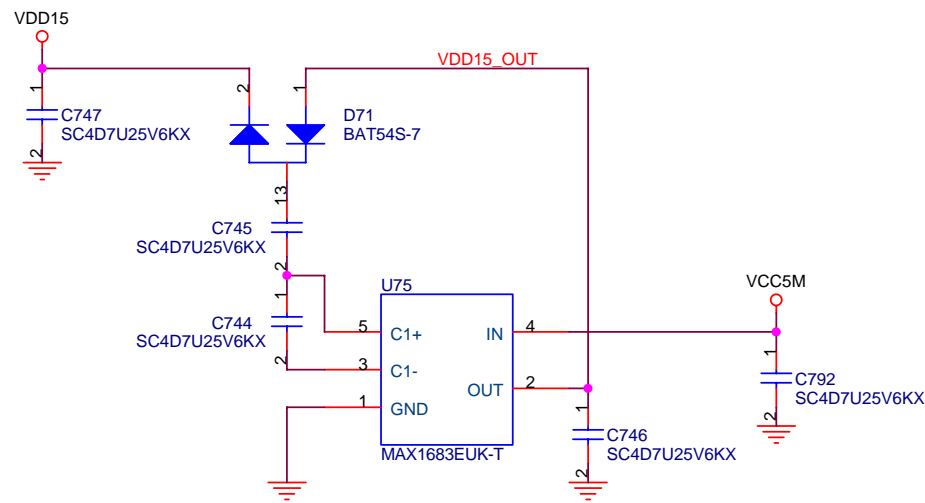

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Title			
BATTERY MONITOR			
Size	Document Number	Rev	
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Date: Wednesday, June 01, 2005		Sheet	61 of 75



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Title			
POWER SEQUENCE			
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Title

DC-DC VDD15

Size
A4

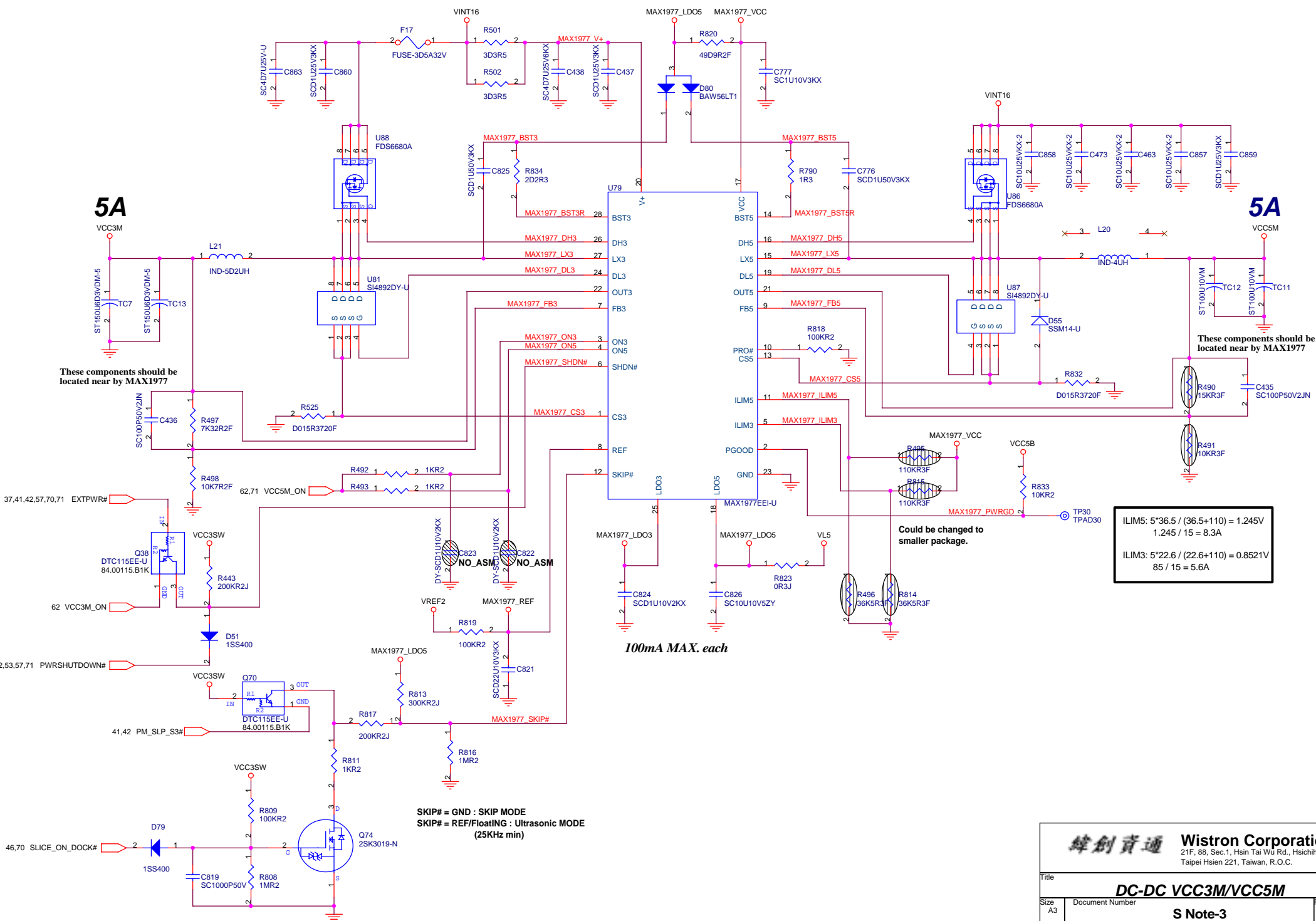
Document Number

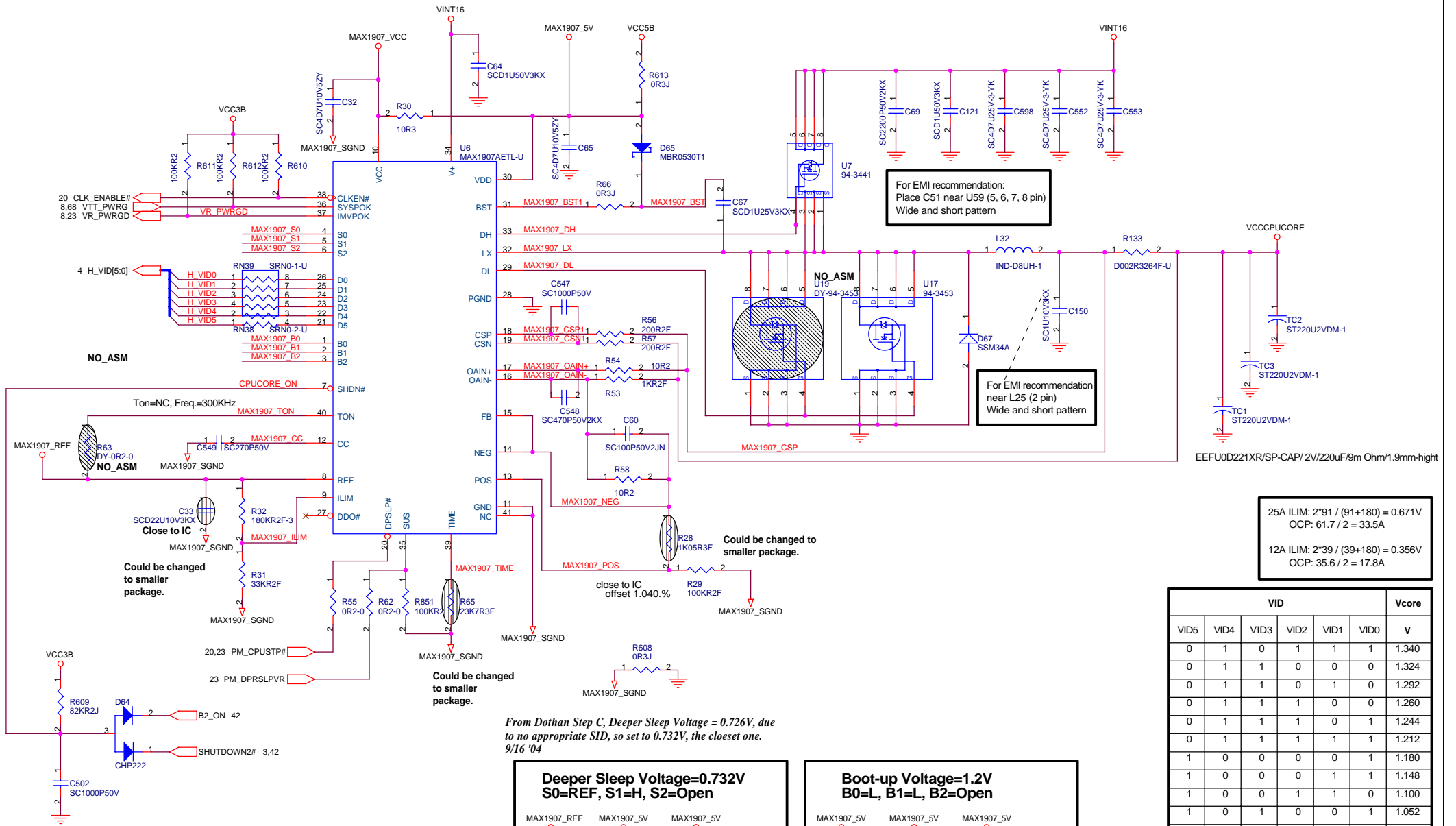
S Note-3

Rev
SC

Date: Wednesday, June 01, 2005

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

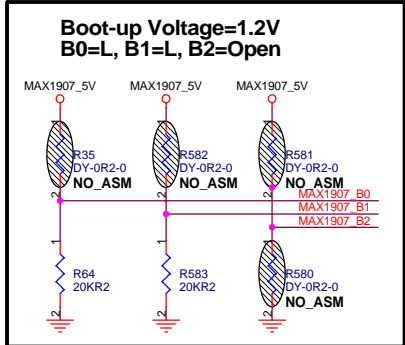
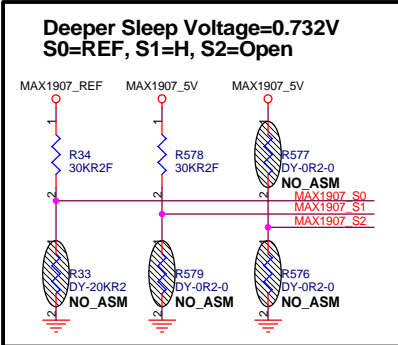
For EMI recommendation
near L25 (2 pin)
Wide and short pattern

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

Could be changed to smaller package.

Could be changed to smaller package.

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



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	1	0	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	0	1	1.020
1	0	1	1	1	0	0.972
1	1	0	0	0	0	0.940

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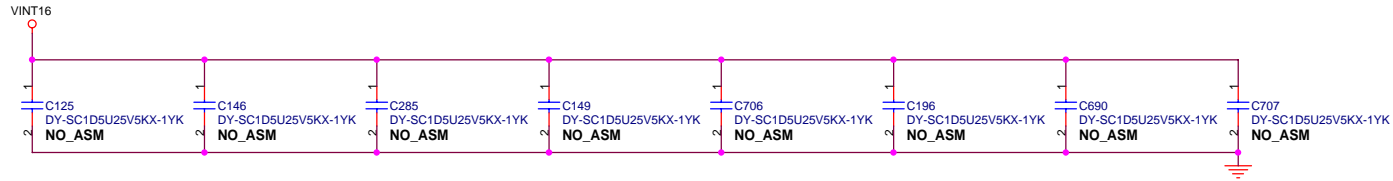
Title: **DC-DC VCCCPUCORE**

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

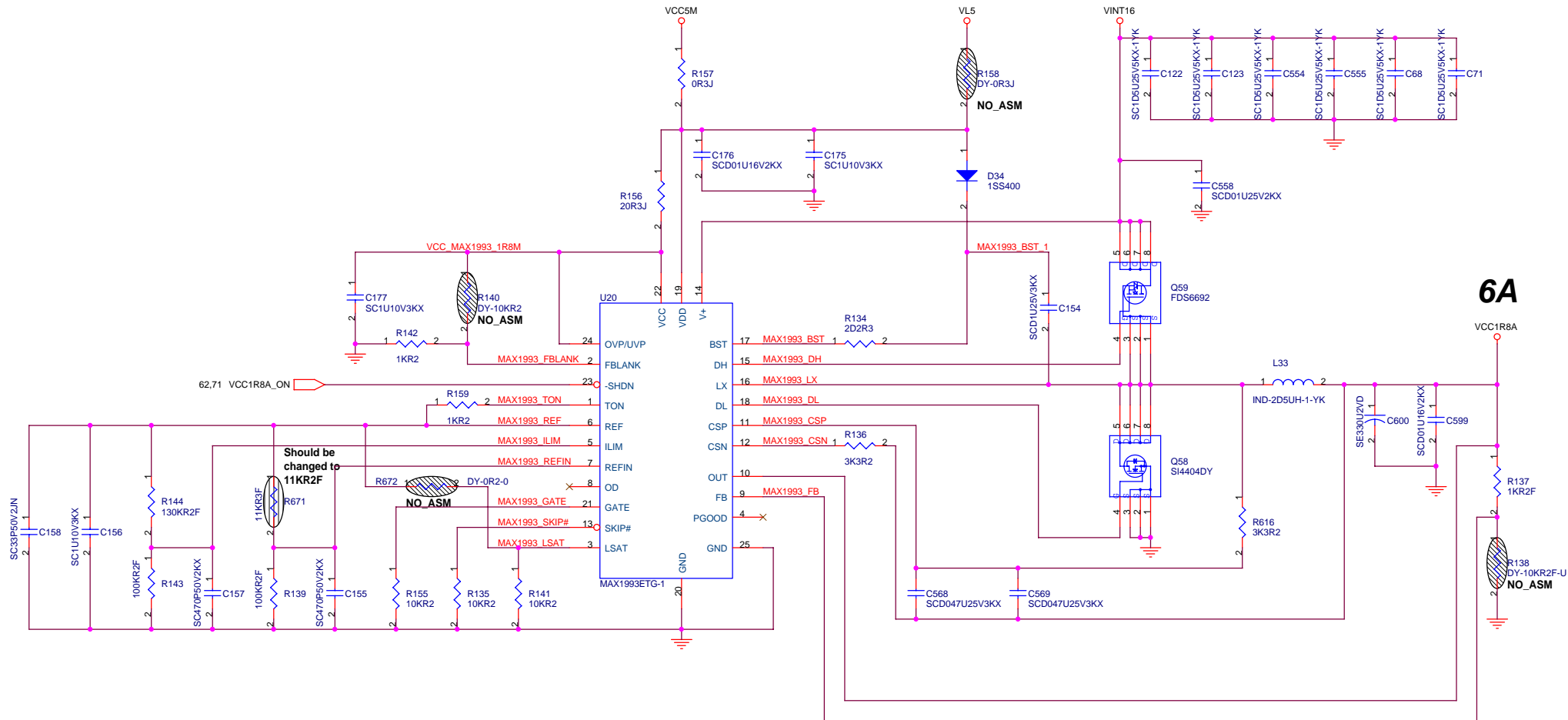
Date: Wednesday, June 01, 2005 Sheet 65 of 75

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

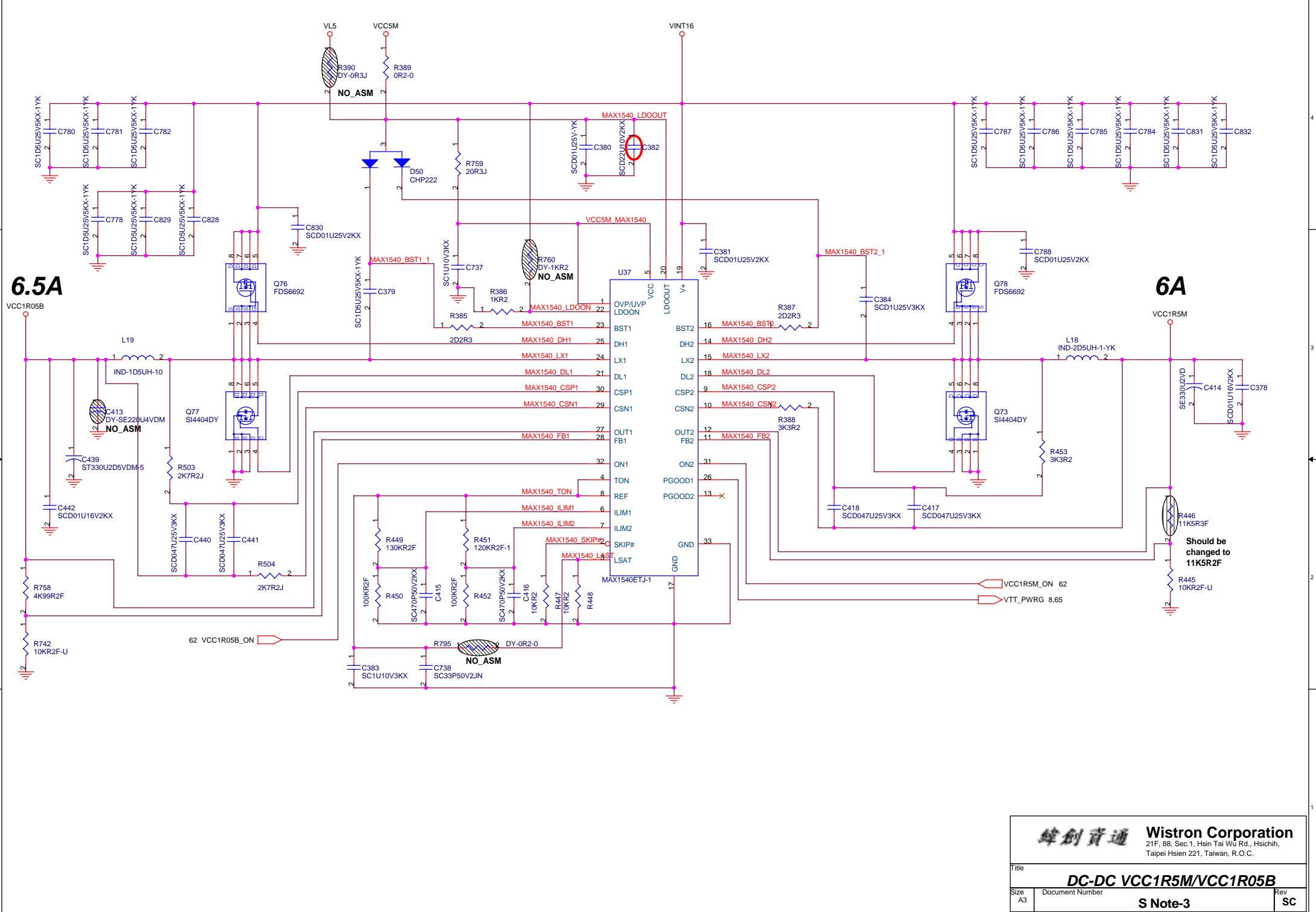
X8 PCS



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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	SC
Date: Wednesday, June 01, 2005		Sheet	66 of 75



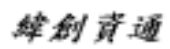
6A

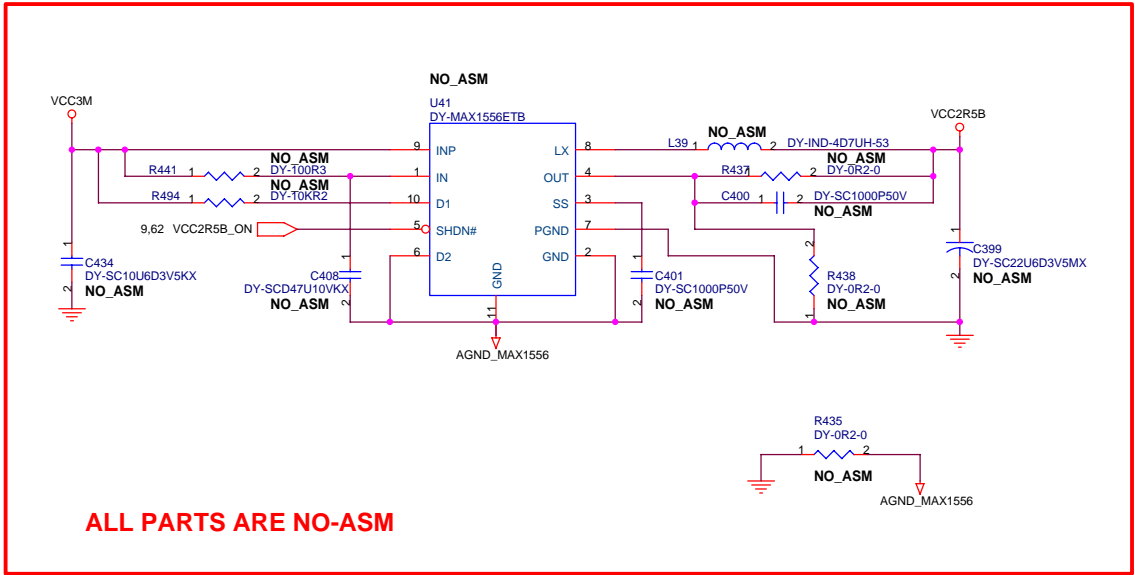


6.5A

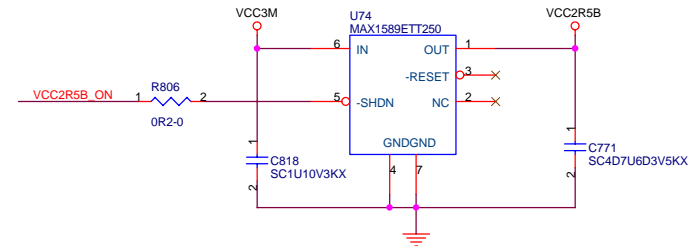
6A

Should be changed to 11K5R2F

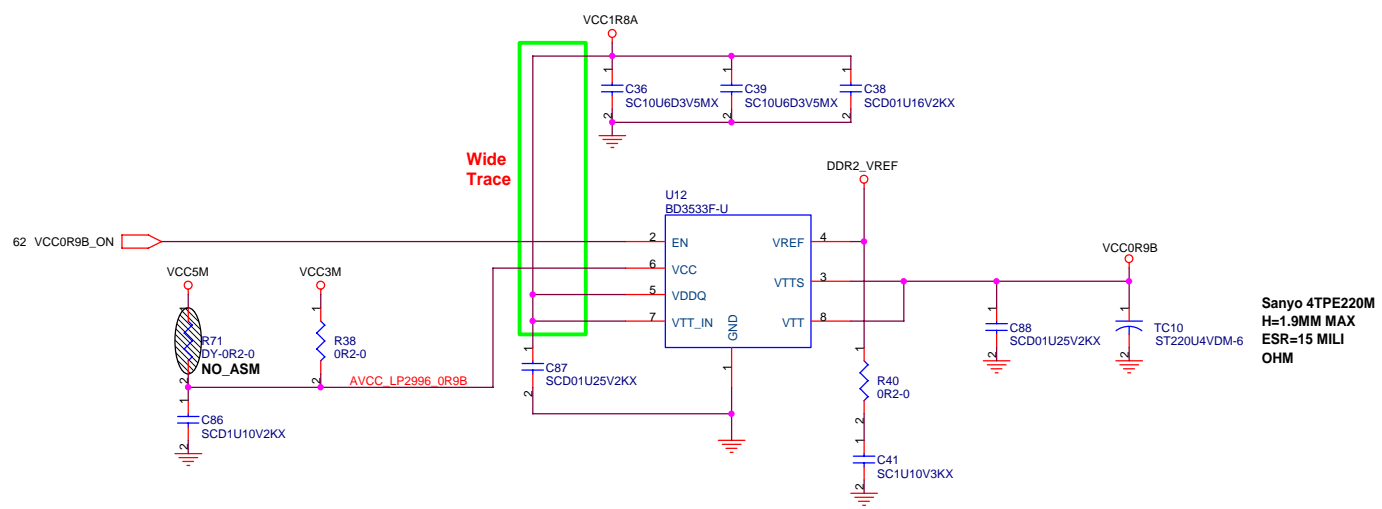
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC VCC1R5M/VCC1R05B	
Title	Document Number
Size A3	Rev SC
S Note-3	
Date: Wednesday, June 01, 2005	Sheet 68 of 75



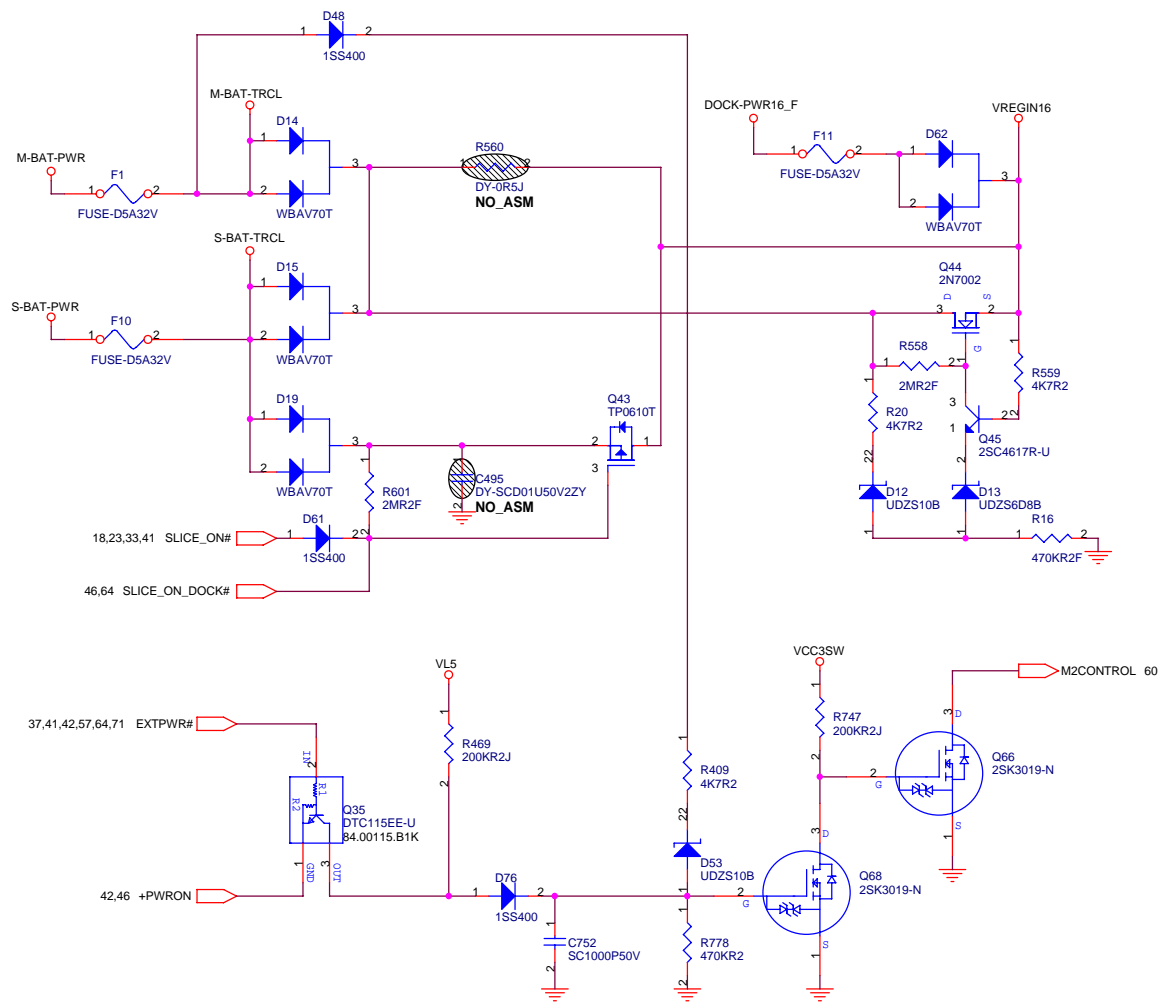
VCC2R5B

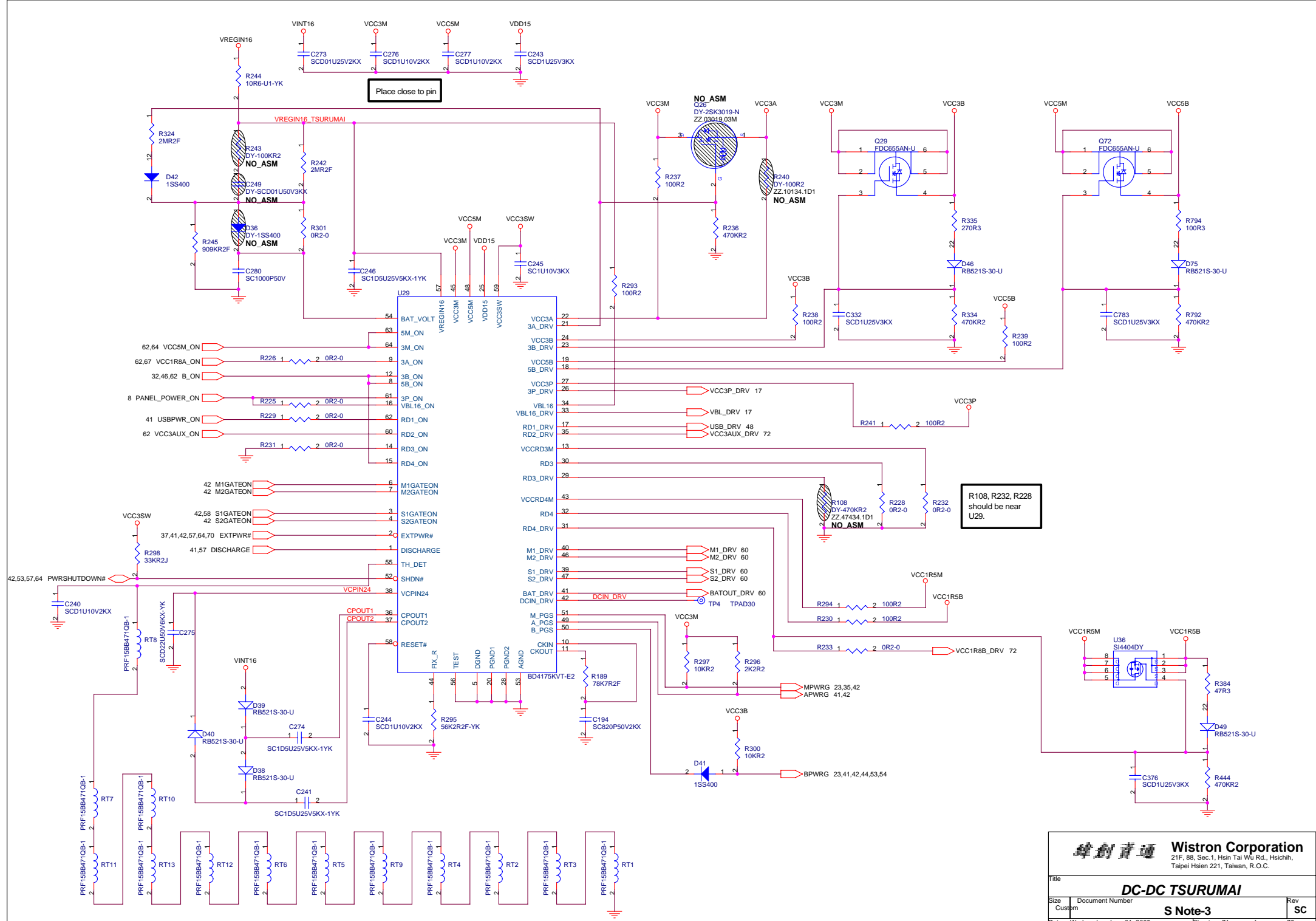


VCC0R9B & DDR2_VREF




緯創資通 Wistron Corporation	
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DC-DC VCC2R5B/VCC0R9B	
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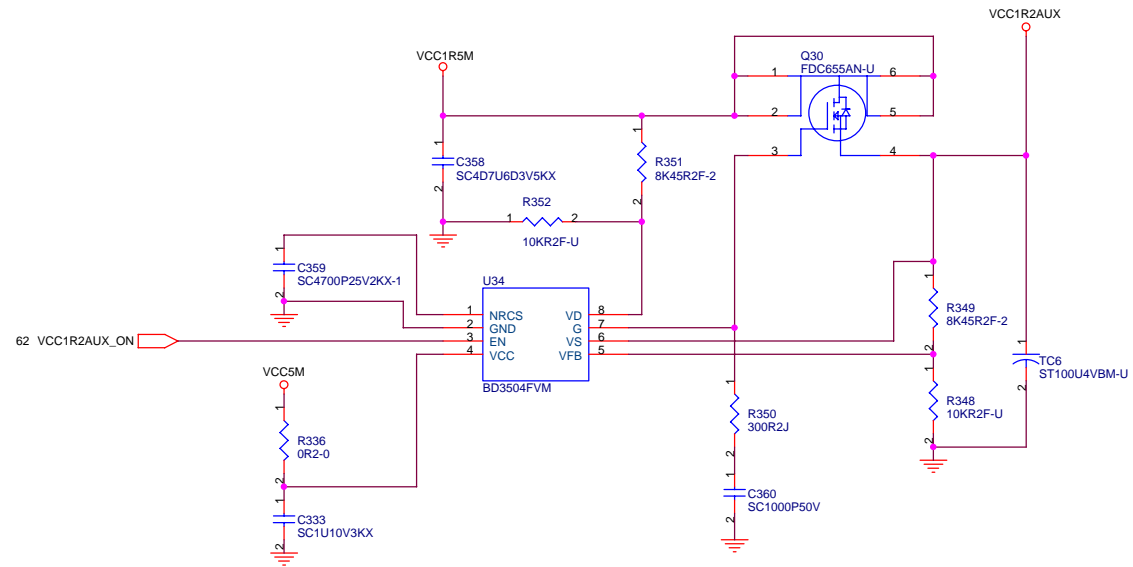
Place close to pin

R108, R232, R228 should be near U29.

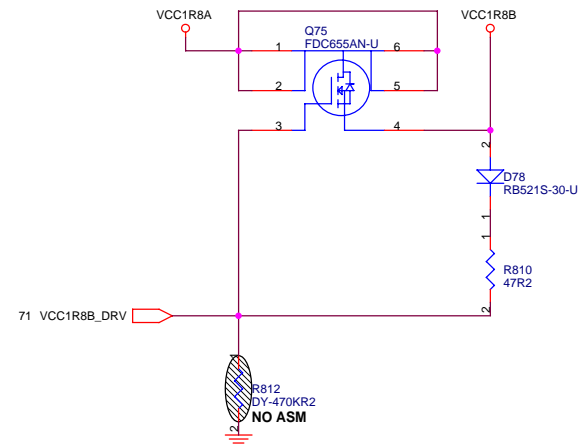

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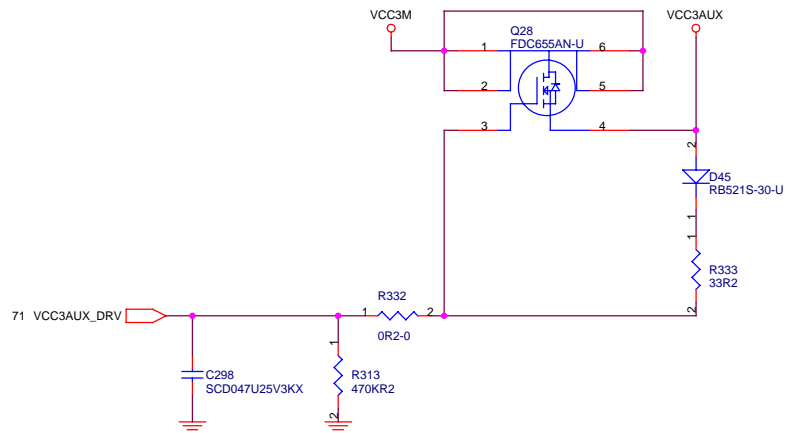
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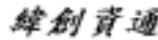


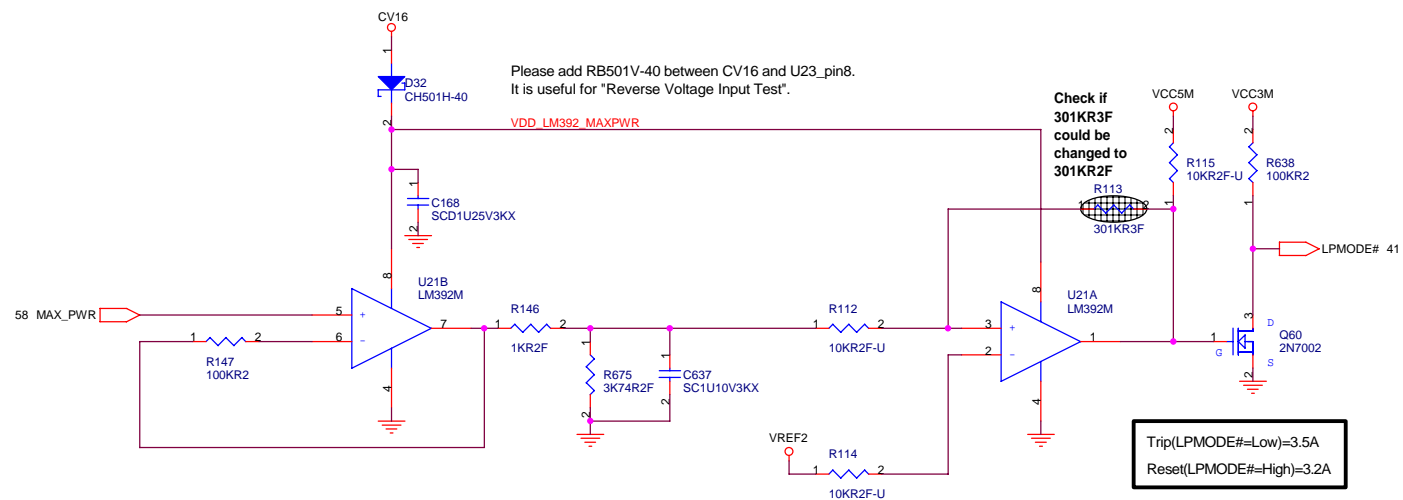
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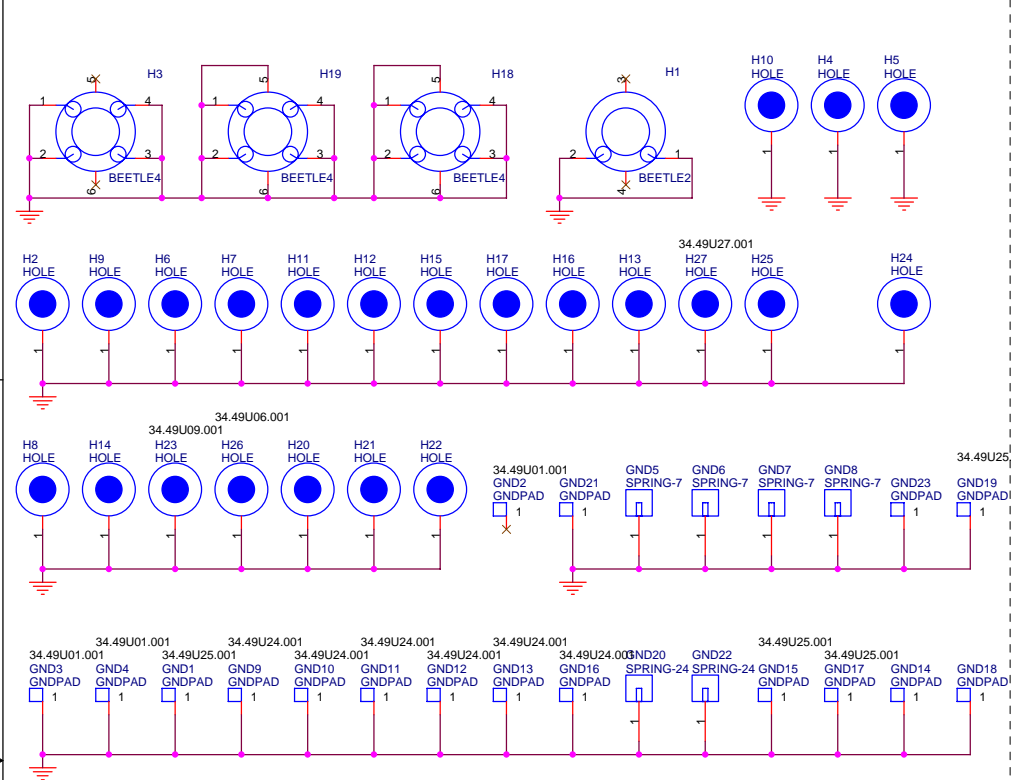


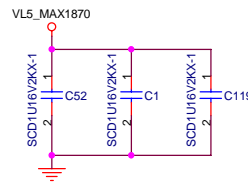
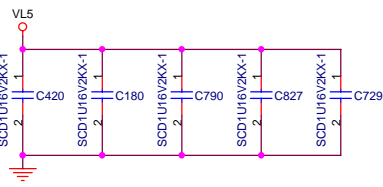
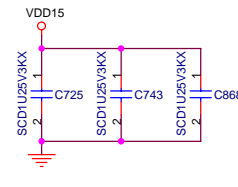
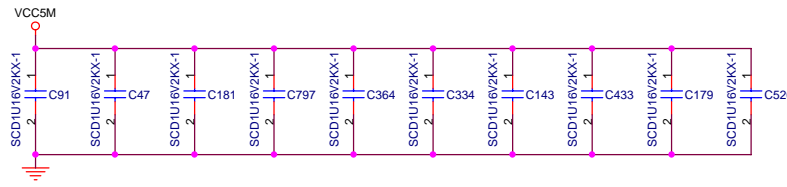
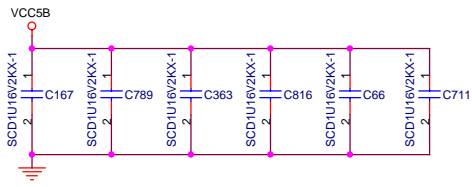
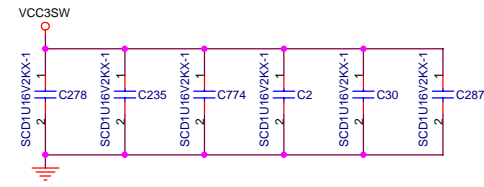
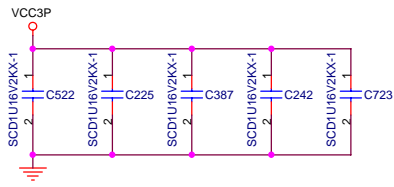
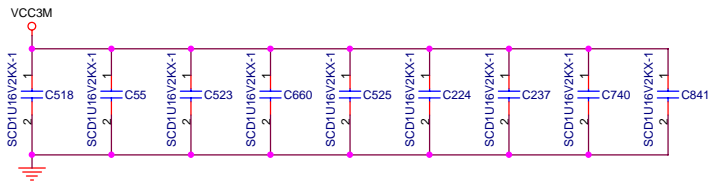
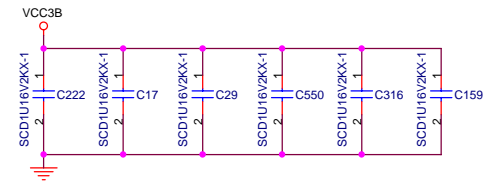
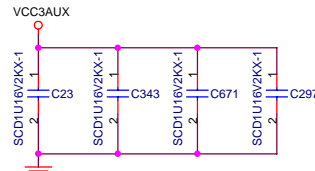
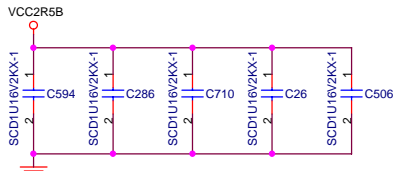
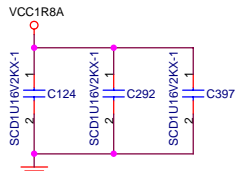
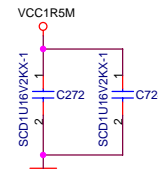
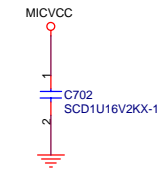
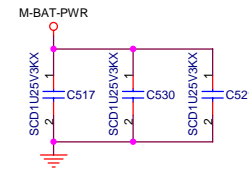
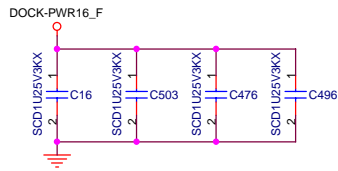
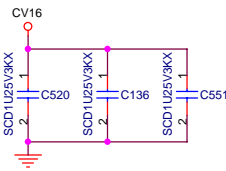
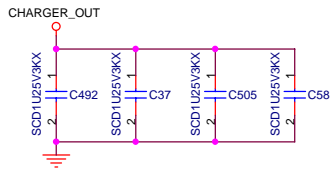
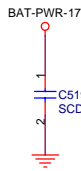
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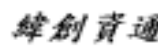


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