



### 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	

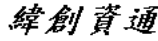
### CAPACITOR

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

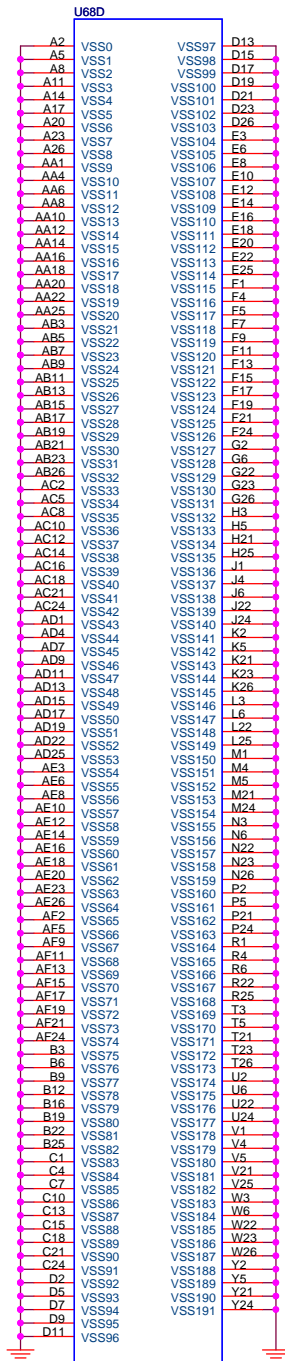
The naming rule is  
 Capacitor type + value + rating + size + tolerance + material  
 SCD1U10V2MX-1  
 SC=> SMT Ceremic, TC=> POS cap or SP cap  
 D1U => 0.1uF  
 10V => the voltage rating is 10V  
 2=> 0402, 3=>0603, 5=>0805  
 M=>tolerance M, K, Z  
 X=> X7R/X5R, Y=> Y5V  
 -1 => symbol version, nonsense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

### PLANAR\_ID[3..0]

ICH4-M GPIO <sub>n</sub>	31	30	29	26	Planar ID Version	Planar PCB Version
PLANAR_ID <sub>n</sub>	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		

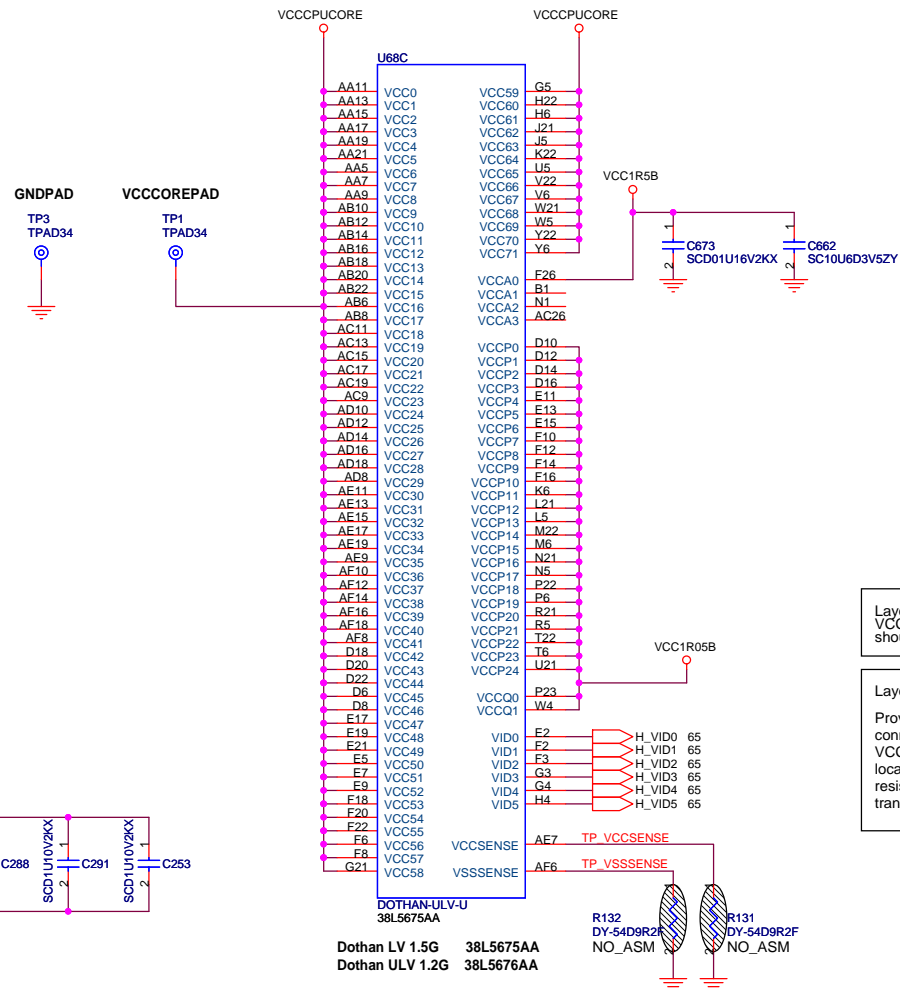
 <b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
<b>Reference</b>		
Size A3	Document Number <b>S Note-3</b>	Rev <b>-1</b>
Date: Saturday, February 26, 2005		Sheet 2 of 75





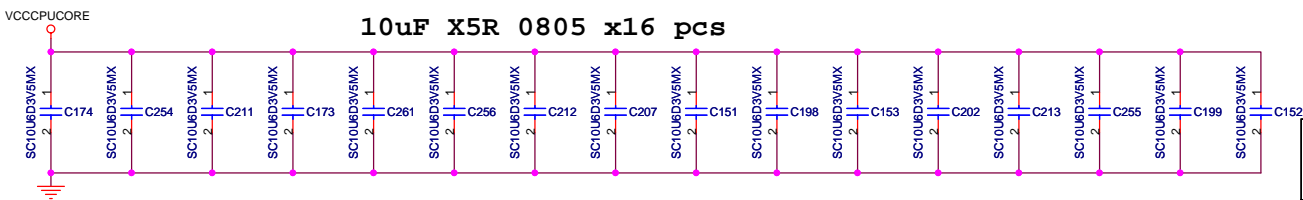
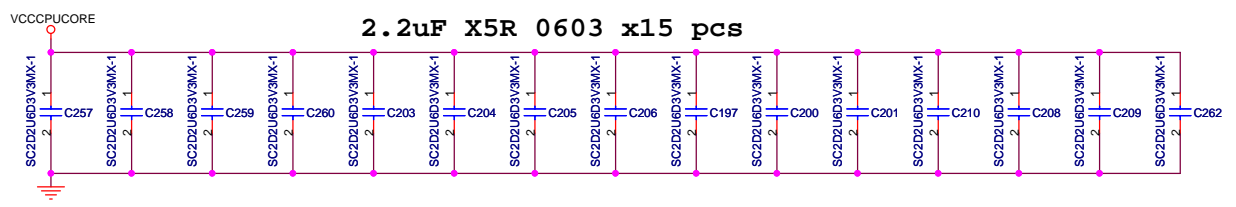
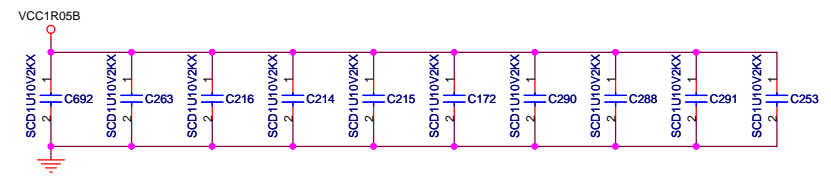
DOETHAN-ULV-U  
38L5675AA

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



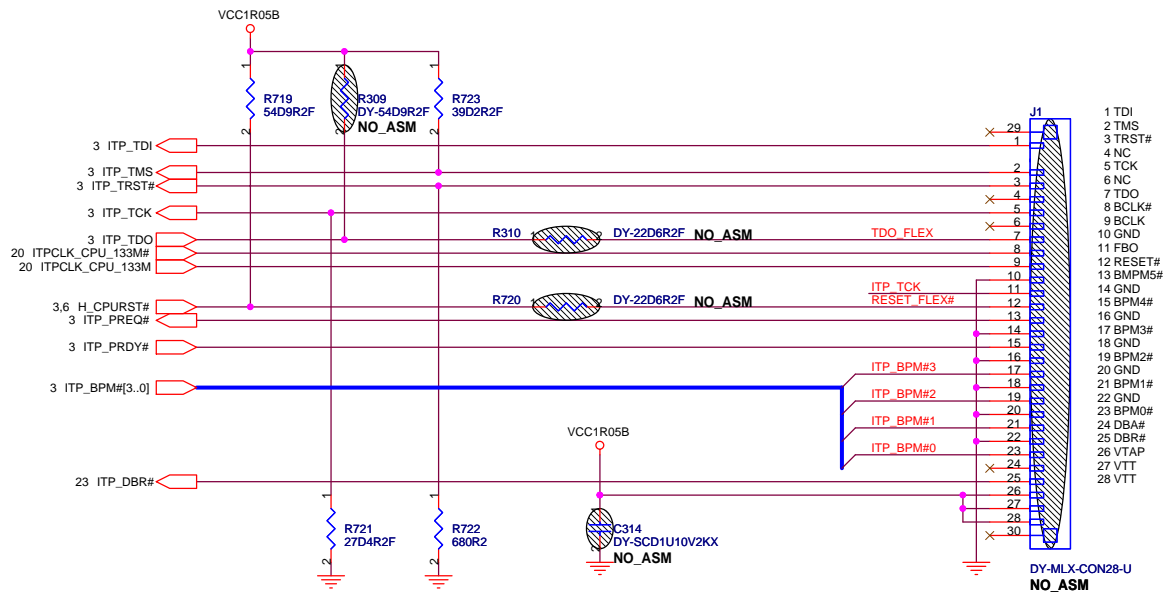
Layout Note:  
VCCSENSE and VSSSENSE lines  
should be of equal length.

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.



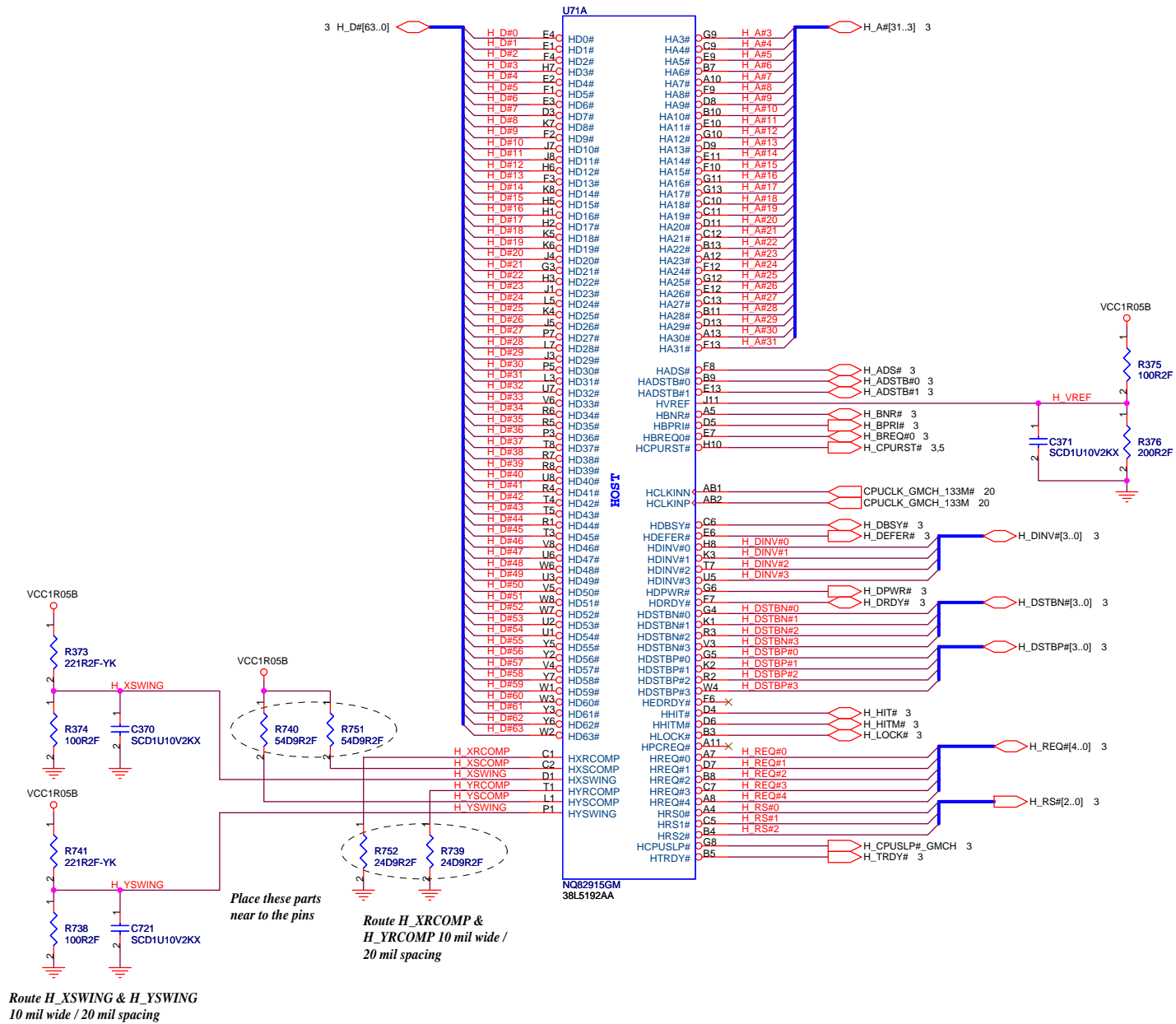
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Taipei Hsien 221, Taiwan, R.O.C.

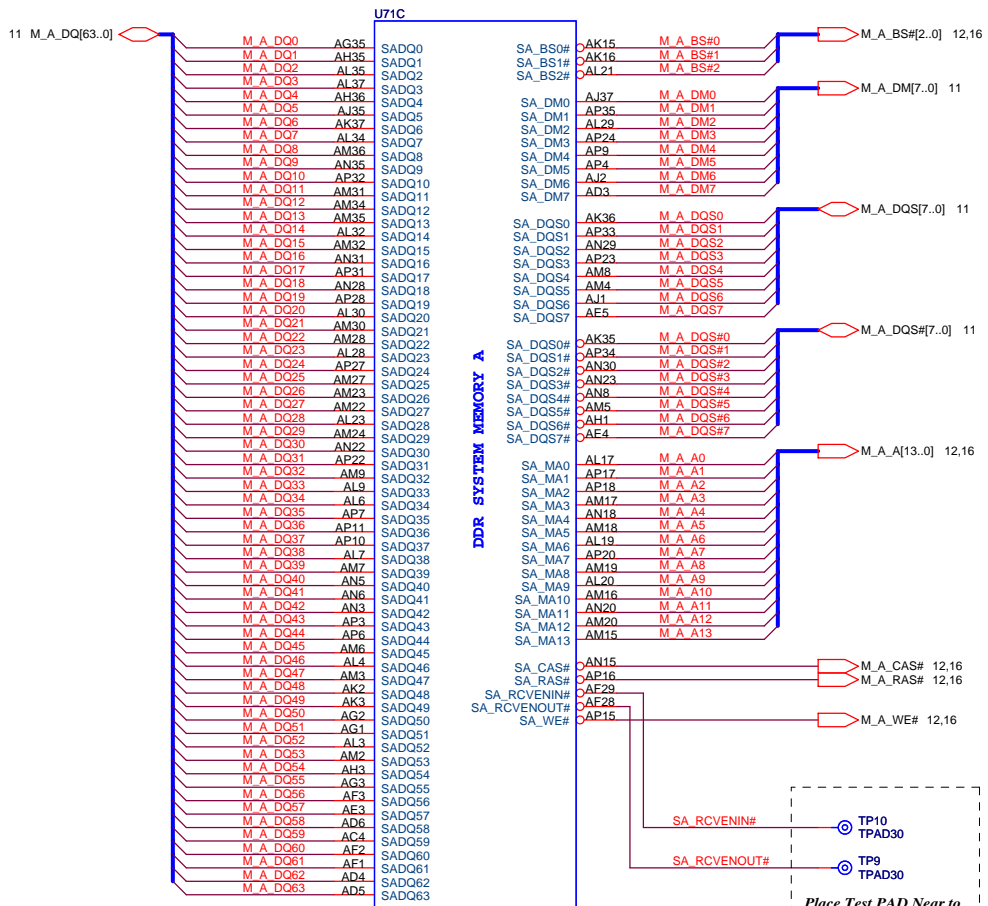
Title			<b>Dothan CPU(2/2)</b>		
Size	Document Number				Rev
A3			<b>S Note-3</b>		-1
Date:	Saturday, February 26, 2005		Sheet	4	of 75



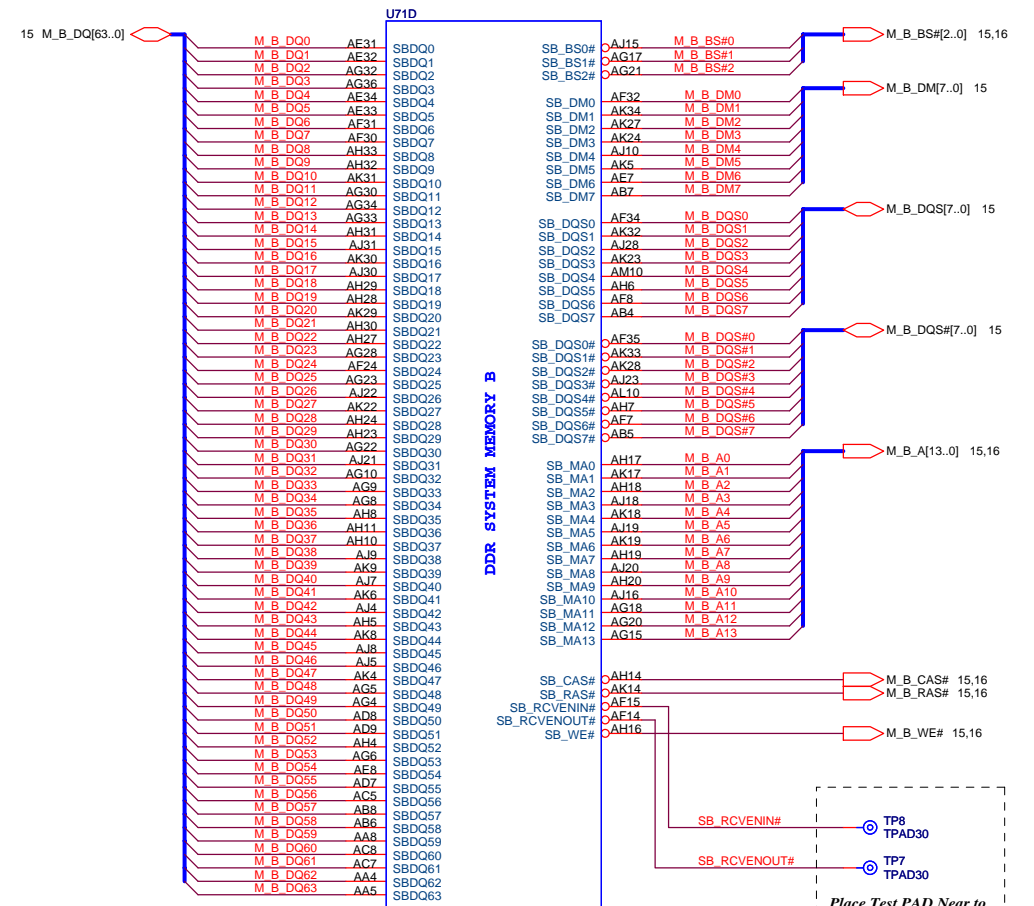
(\*1) TCK SIGNAL IS BRANCHED AT DOTHAN PIN

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

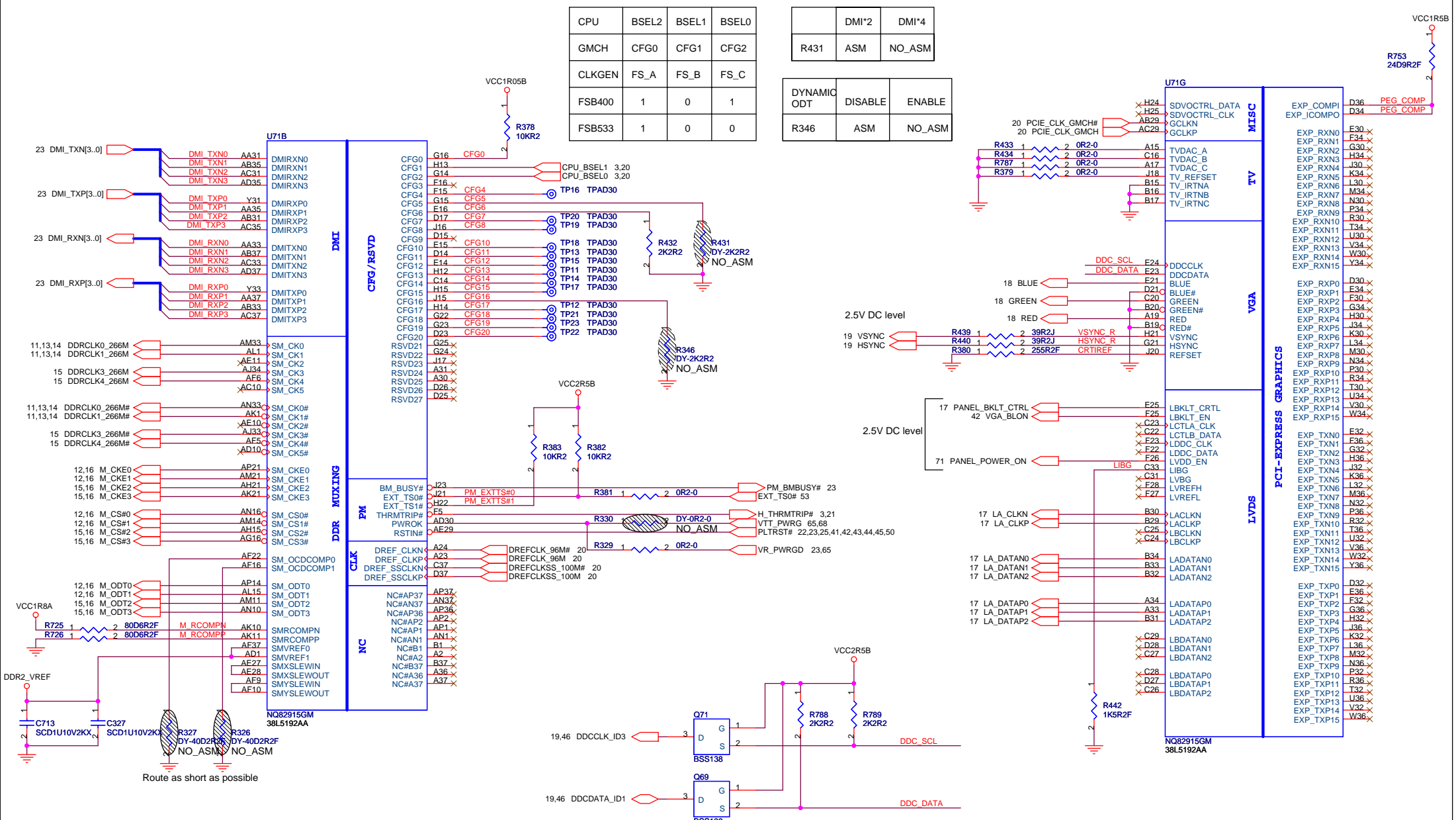




NQ82915GM  
38L5192AA



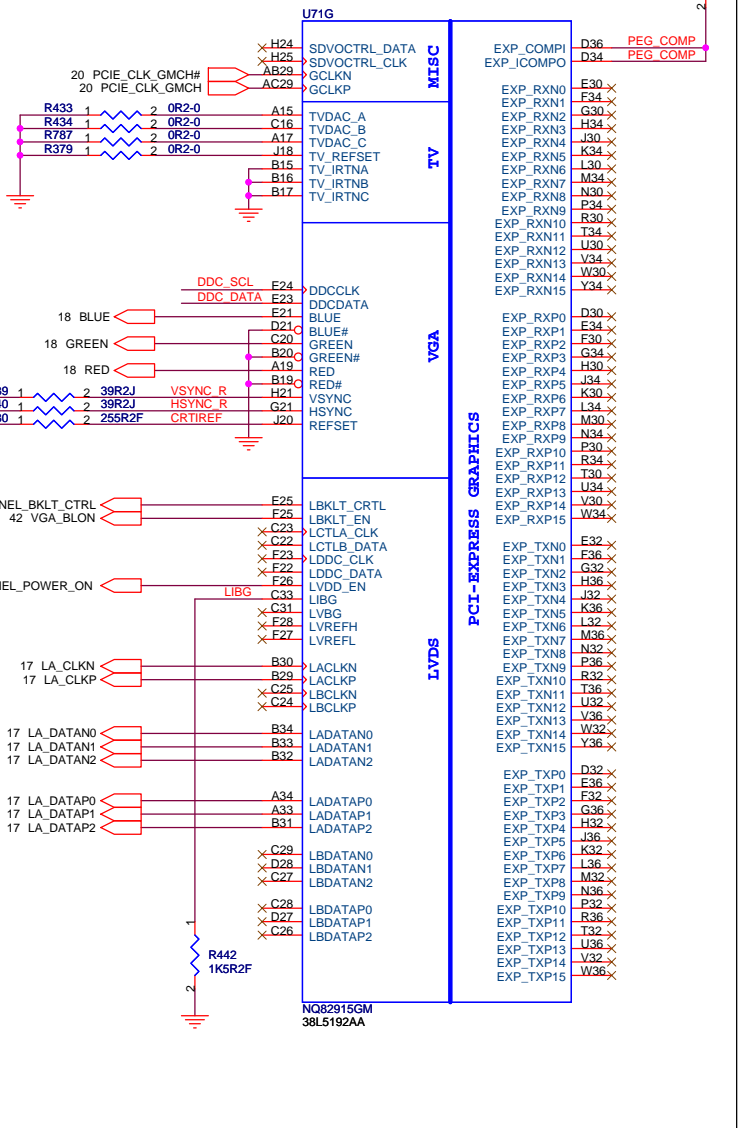
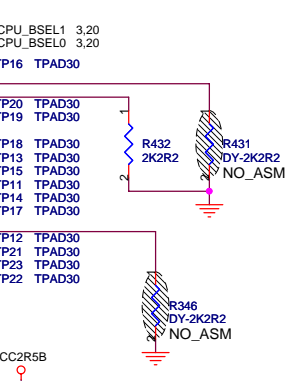
NQ82915GM  
38L5192AA



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

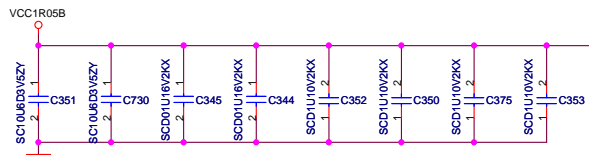
	DMI*2	DMI*4
R431	ASM	NO_ASM

DYNAMIC ODT	DISABLE	ENABLE
R346	ASM	NO_ASM

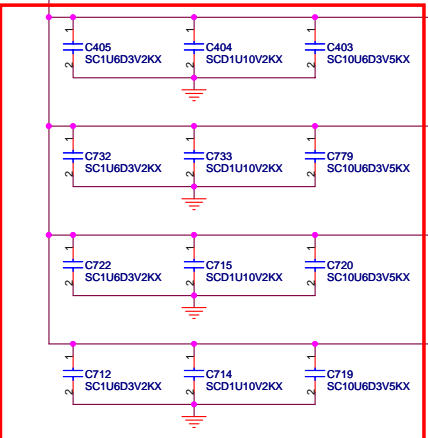


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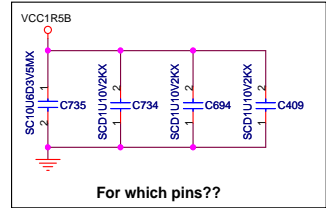
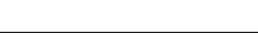
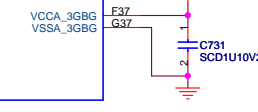
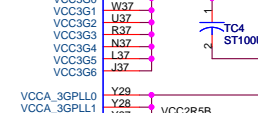
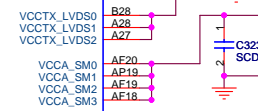
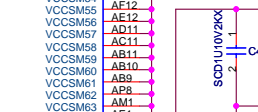
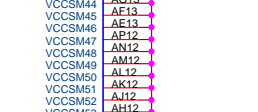
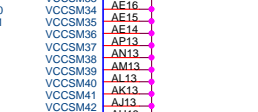
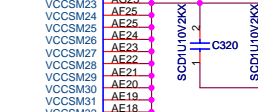
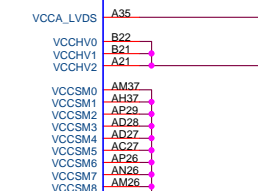
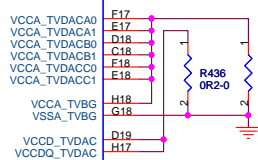


VCCGMCHPLL **ESR < 15 m-ohm**



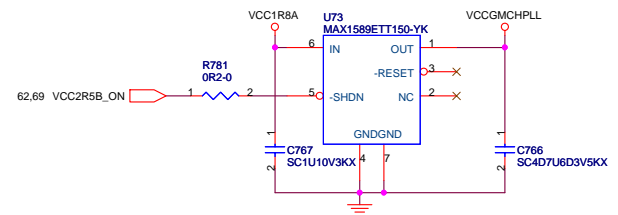
- U71E**
- T29 VCC0
  - N28 VCC1
  - M29 VCC2
  - K29 VCC3
  - J29 VCC4
  - H29 VCC5
  - G28 VCC6
  - F28 VCC7
  - E28 VCC8
  - D28 VCC9
  - C28 VCC10
  - B28 VCC11
  - A28 VCC12
  - V28 VCC13
  - W28 VCC14
  - X28 VCC15
  - Y28 VCC16
  - Z28 VCC17
  - V27 VCC18
  - U27 VCC19
  - T27 VCC20
  - R27 VCC21
  - P27 VCC22
  - M27 VCC23
  - L27 VCC24
  - K27 VCC25
  - J27 VCC26
  - H27 VCC27
  - G26 VCC28
  - F26 VCC29
  - E26 VCC30
  - D26 VCC31
  - C26 VCC32
  - B26 VCC33
  - A26 VCC34
  - V26 VCC35
  - W26 VCC36
  - X26 VCC37
  - Y26 VCC38
  - Z26 VCC39
  - V25 VCC40
  - U25 VCC41
  - T25 VCC42
  - R25 VCC43
  - P25 VCC44
  - M25 VCC45
  - L25 VCC46
  - K25 VCC47
  - J25 VCC48
  - H25 VCC49
  - G25 VCC50
  - F25 VCC51
  - E25 VCC52
  - D25 VCC53
  - C25 VCC54
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  - A25 VCC56
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  - W25 VCC58
  - X25 VCC59
  - Y25 VCC60
  - Z25 VCC61
  - V24 VCC62
  - U24 VCC63
  - T24 VCC64
  - R24 VCC65
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  - M24 VCC67
  - L24 VCC68
  - K24 VCC69
  - J24 VCC70
  - H24 VCC71
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  - M23 VCC89
  - L23 VCC90
  - K23 VCC91
  - J23 VCC92
  - H23 VCC93
  - G23 VCC94
  - F23 VCC95
  - E23 VCC96
  - D23 VCC97
  - C23 VCC98
  - B23 VCC99
  - A23 VCC100

**POWER**



For which pins??

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

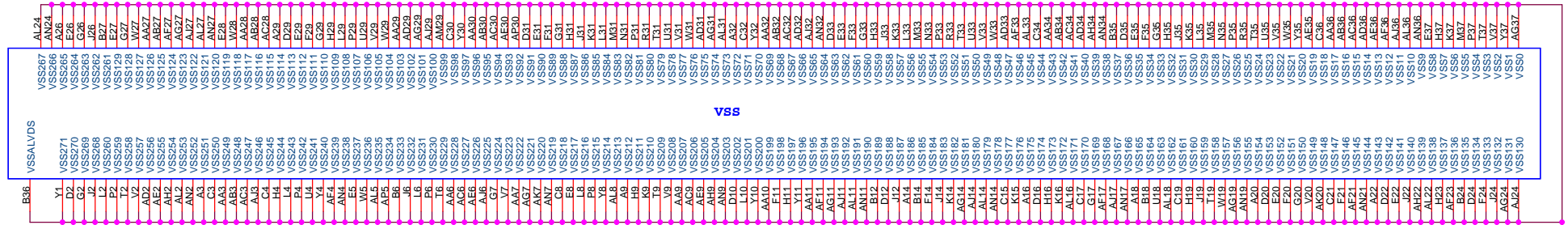


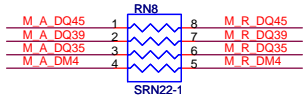
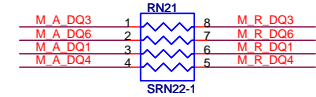
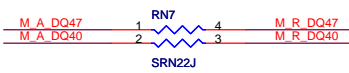
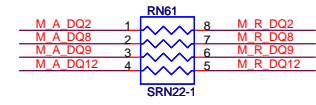
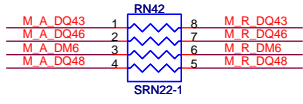
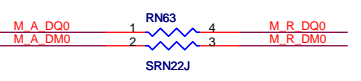
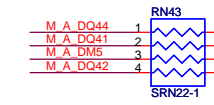
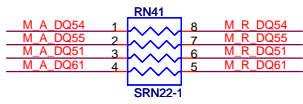
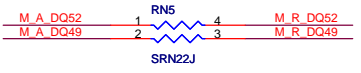
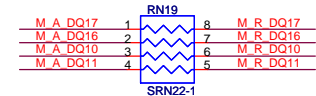
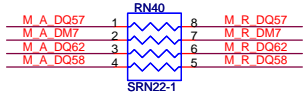
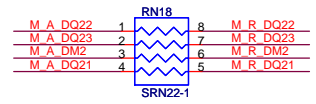
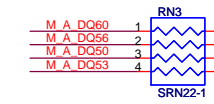
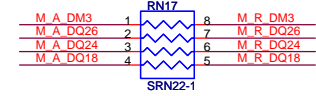
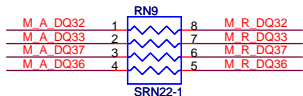
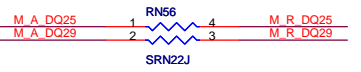
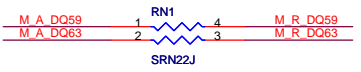
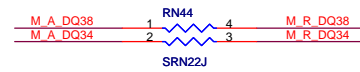
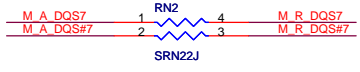
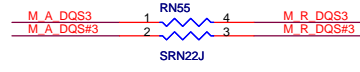
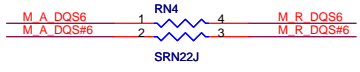
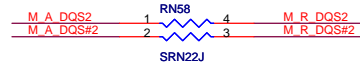
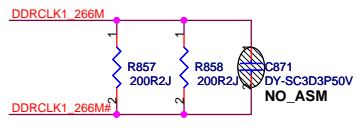
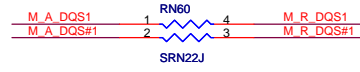
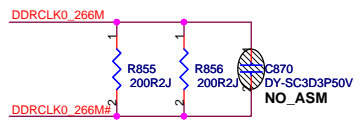
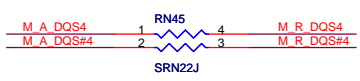
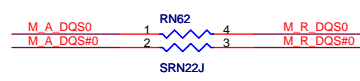
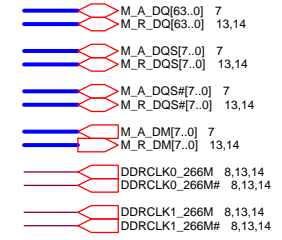
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Title		<b>GMCH (4/5) : Power</b>	
Size	Document Number	Rev	
Custpm		<b>S Note-3</b>	
Date: Saturday, February 26, 2005	Sheet 9	of	75

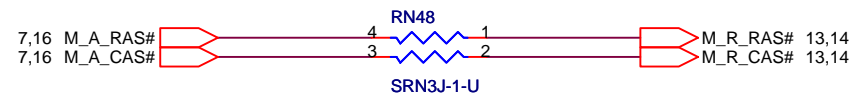
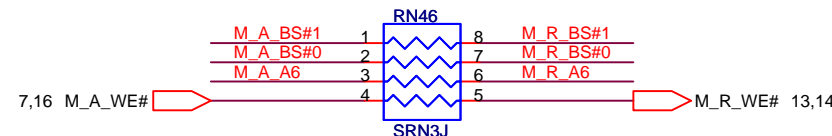
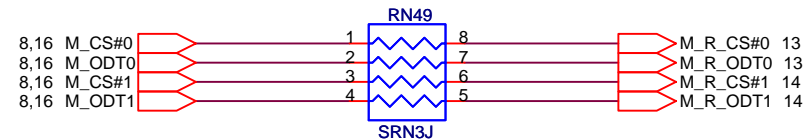
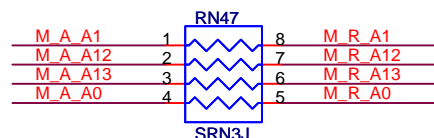
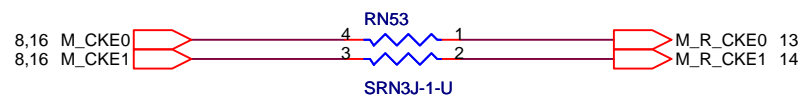
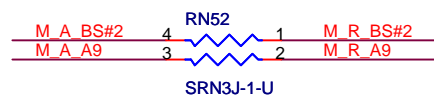
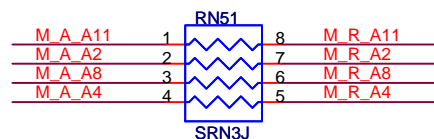
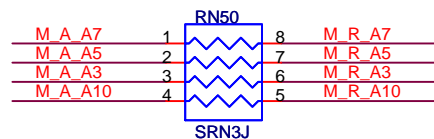
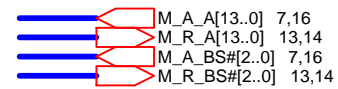
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NQ82915GM  
38L5192AA





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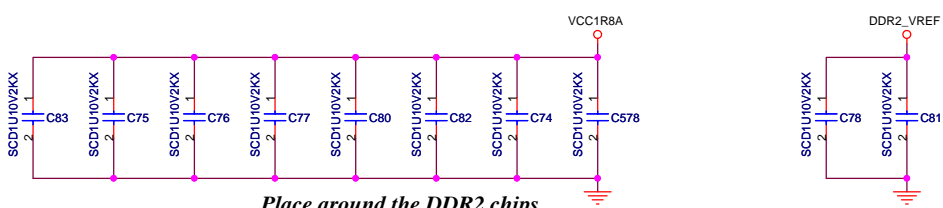
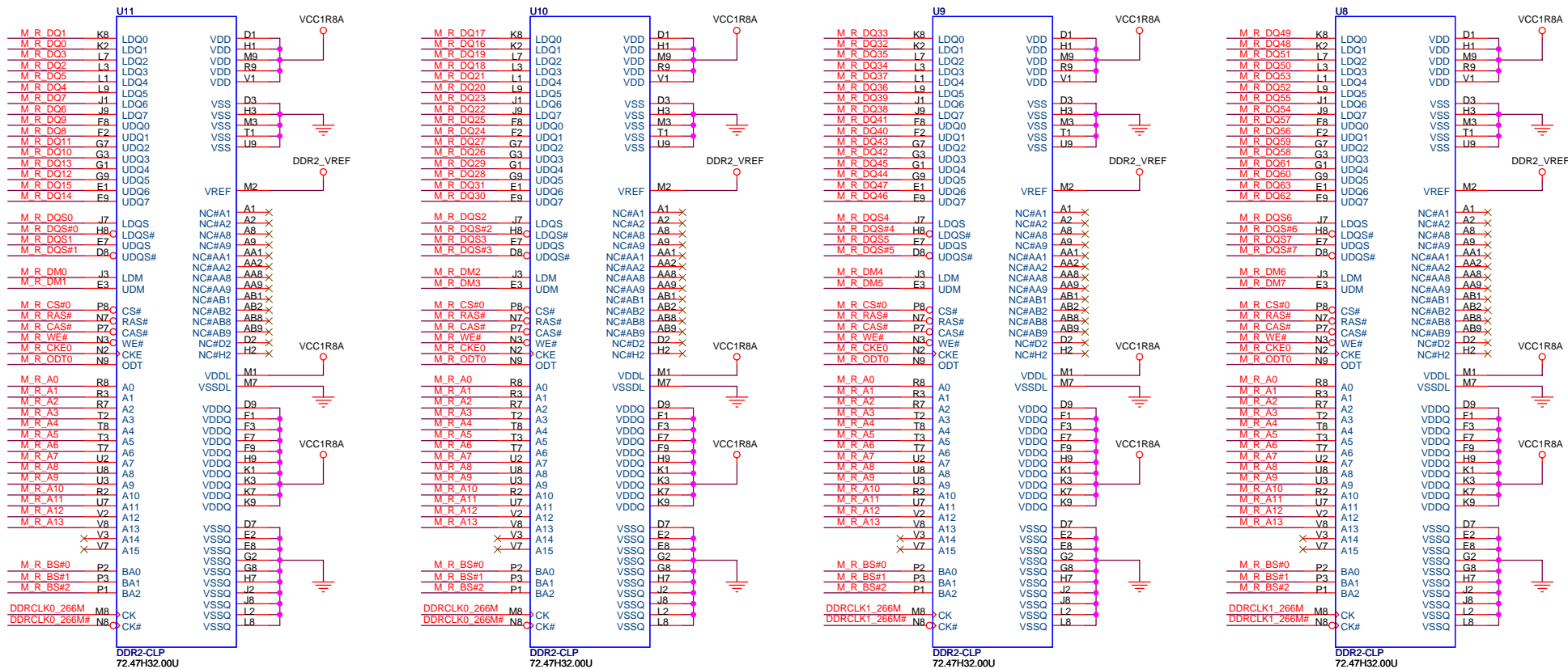
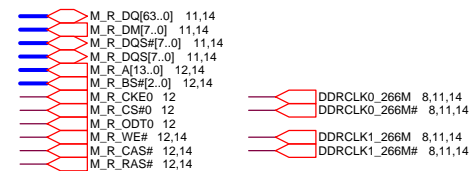
Title: **MEMORY RESISTORS (1/2)**  
 Size: A3 Document Number: **S Note-3** Rev: -1  
 Date: Saturday, February 26, 2005 Sheet 11 of 75



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

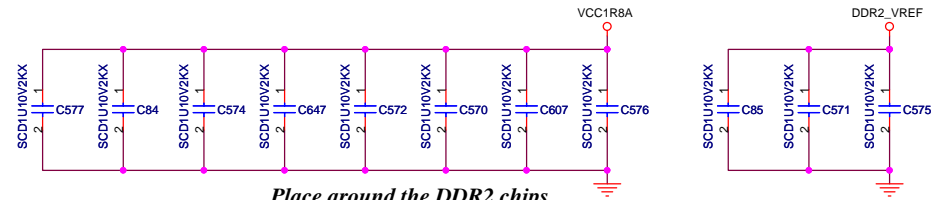
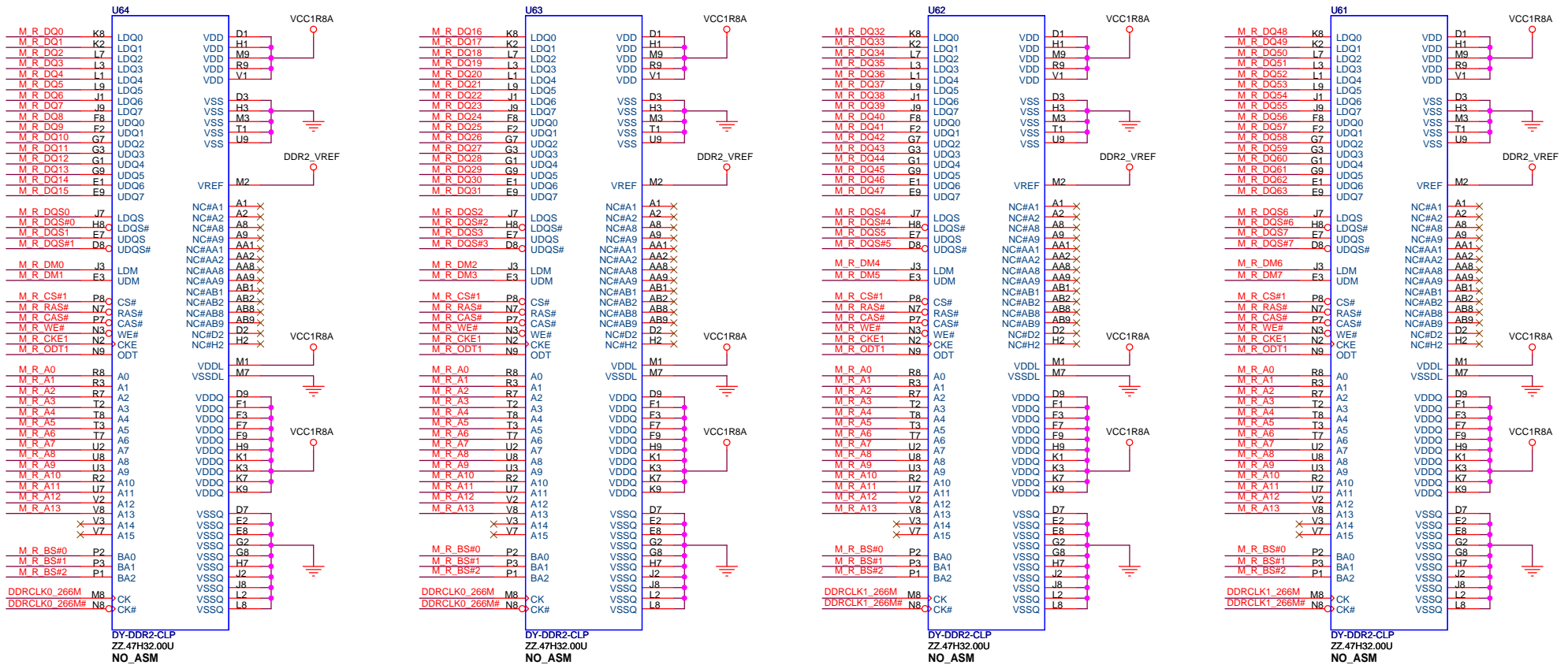
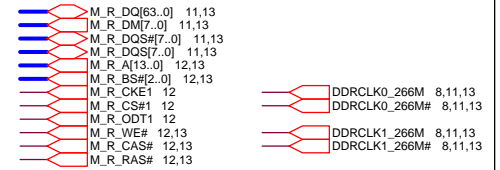
# On-board DDR2 Memory



Place around the DDR2 chips

<b>緯創資通</b>		<b>Wistron Corporation</b>	
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<b>BASE MEMORY BANK0</b>			
Title	Document Number	Rev	
A3		<b>S Note-3</b>	-1
Date: Saturday, February 26, 2005	Sheet 13	of	75

# On-board DDR2 Memory



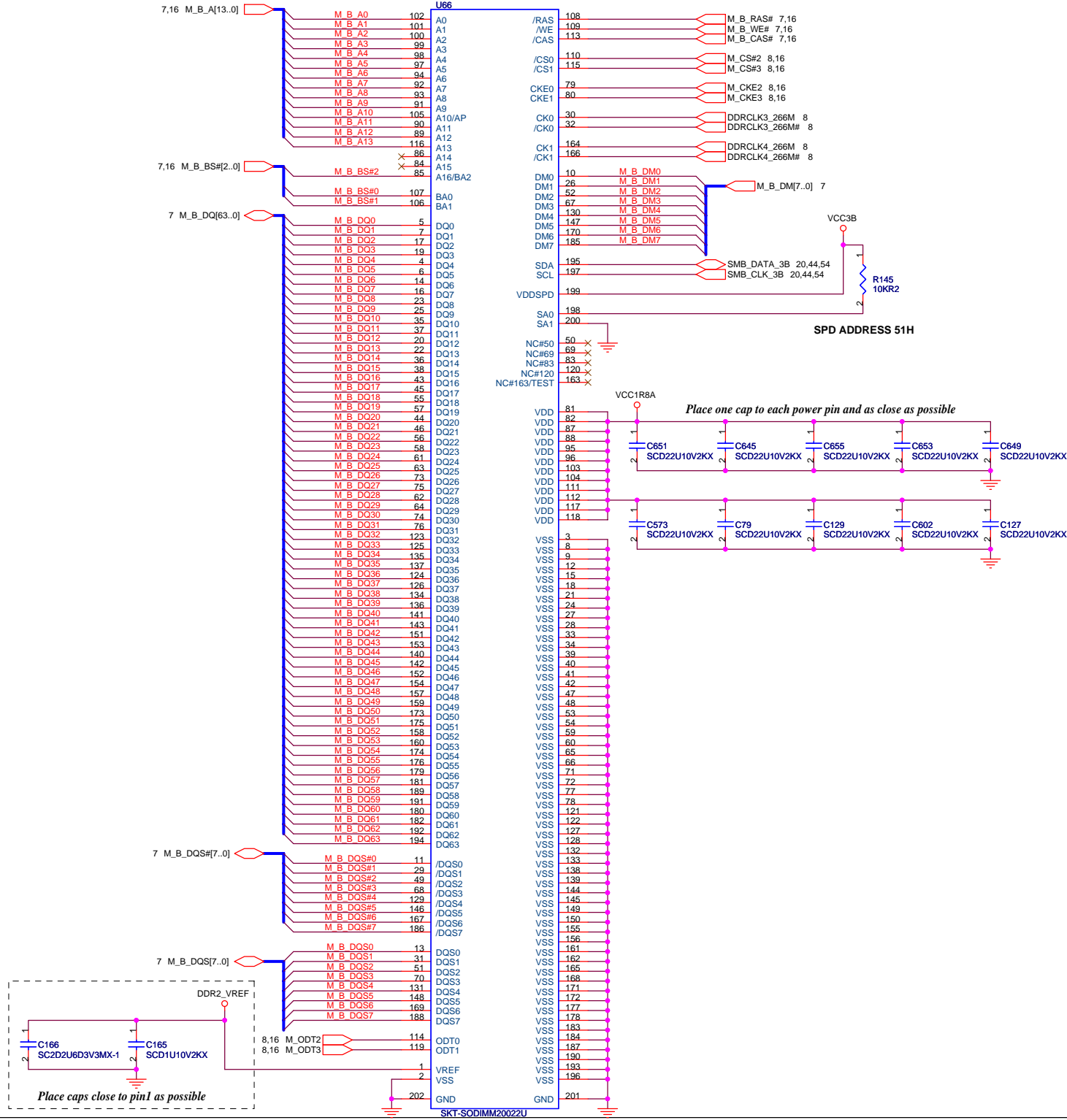
Place around the DDR2 chips

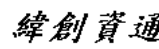
**緯創資通** **Wistron Corporation**  
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Taipei Hsien 221, Taiwan, R.O.C.

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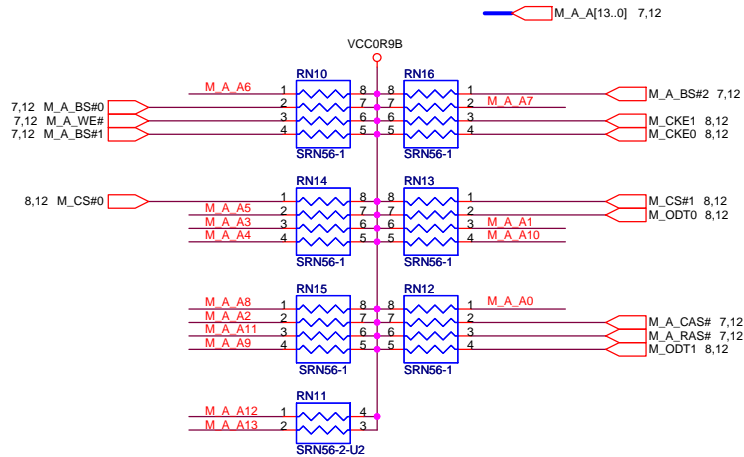
**BASE MEMORY BANK1**

Title	<b>BASE MEMORY BANK1</b>		Rev
Size	Document Number	<b>S Note-3</b>	
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Date:	Saturday, February 26, 2005	Sheet	14 of 75

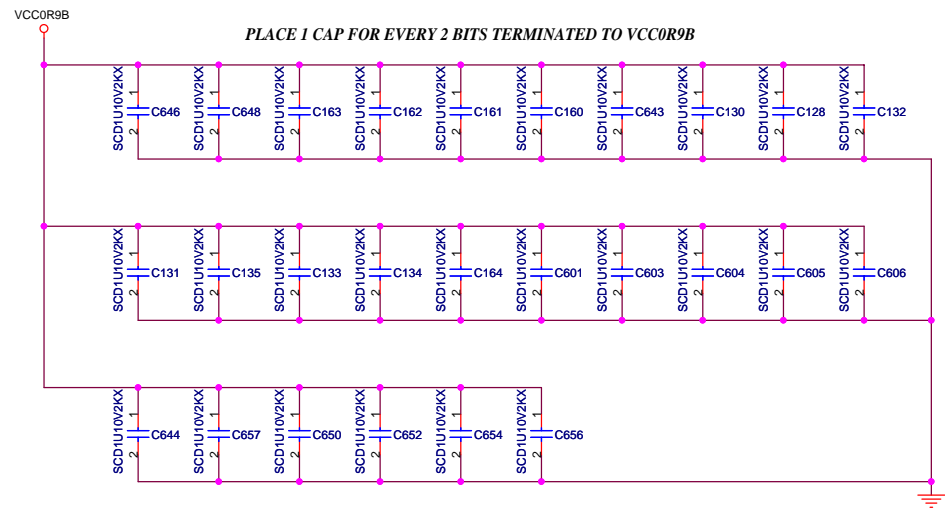
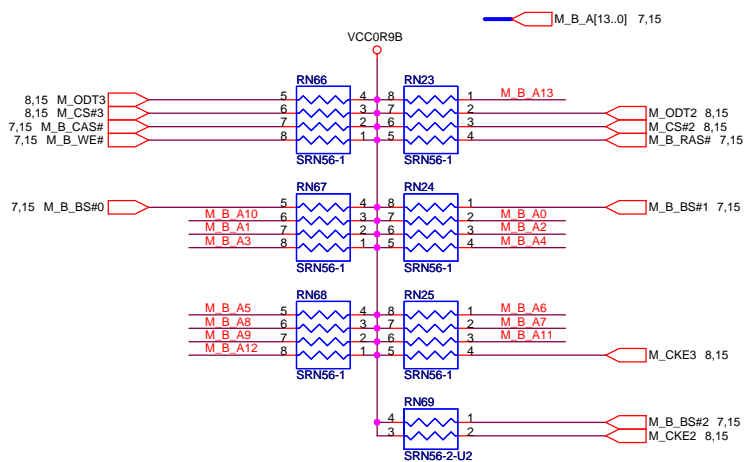


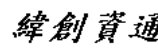
 <b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>DDR-2 SO-DIMM</b>	
Title	Rev
<b>S Note-3</b>	
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# CHANNEL A PARALLEL TERMINATION



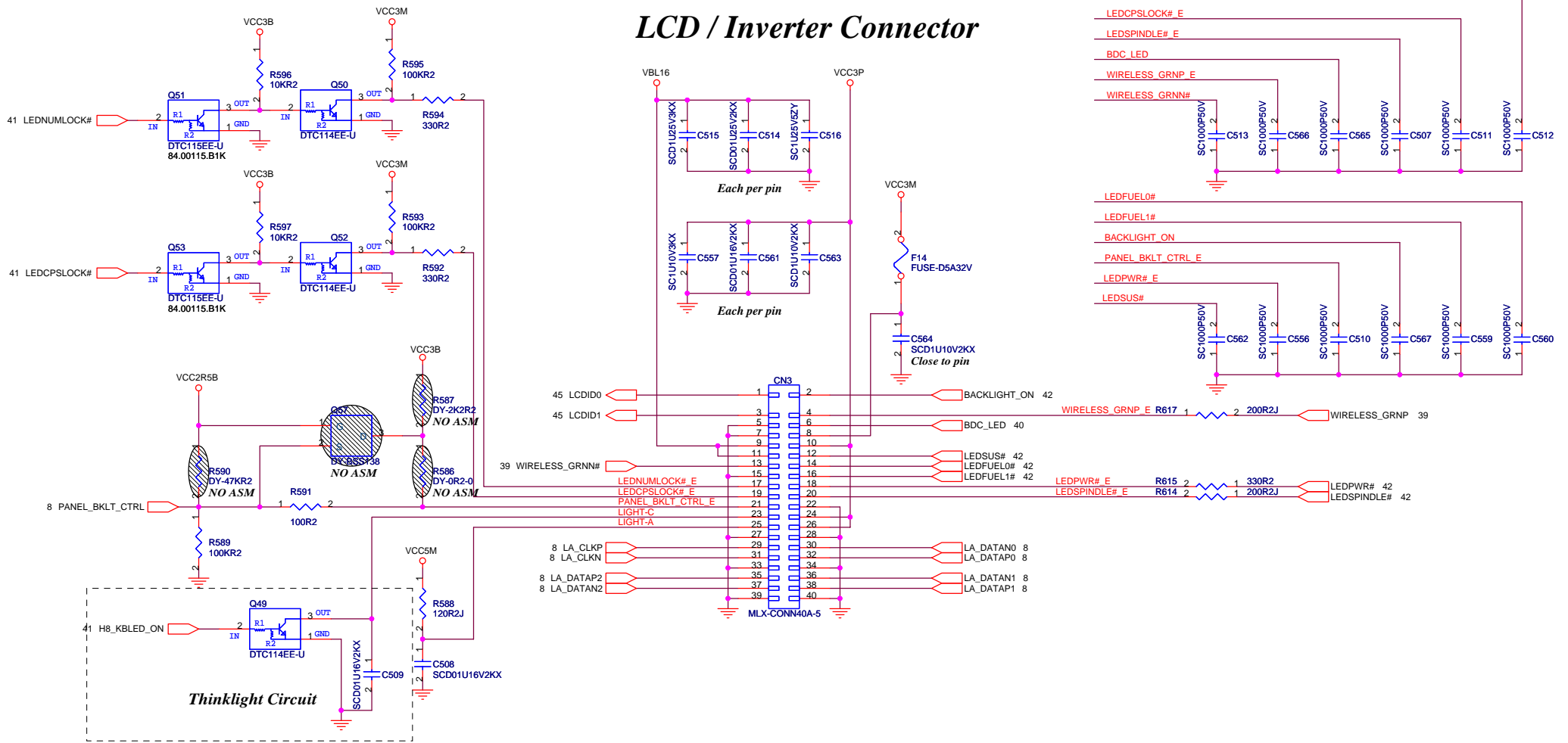
# CHANNEL B PARALLEL TERMINATION



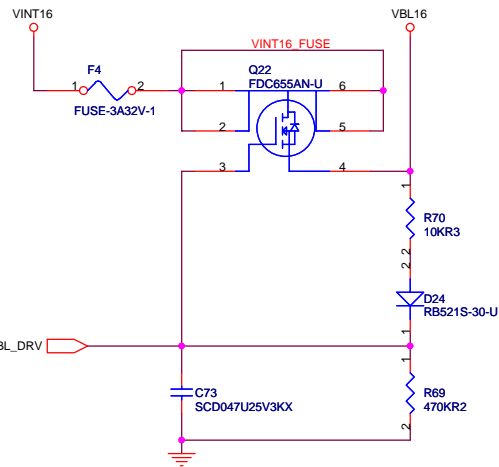
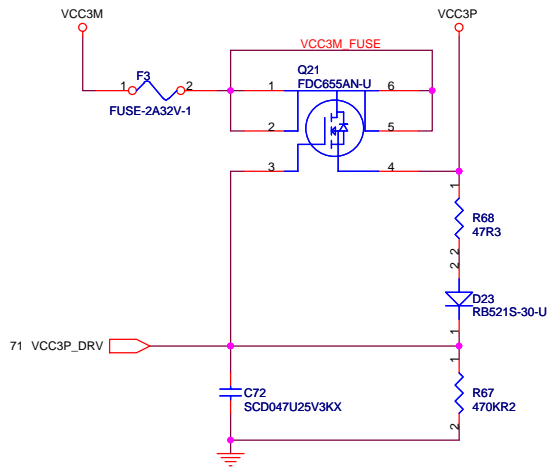
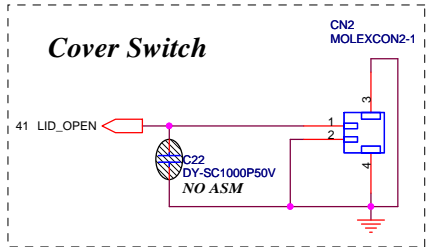
 <b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
<b>DDR-2 TERMINATION</b>		
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<b>S Note-3</b>		
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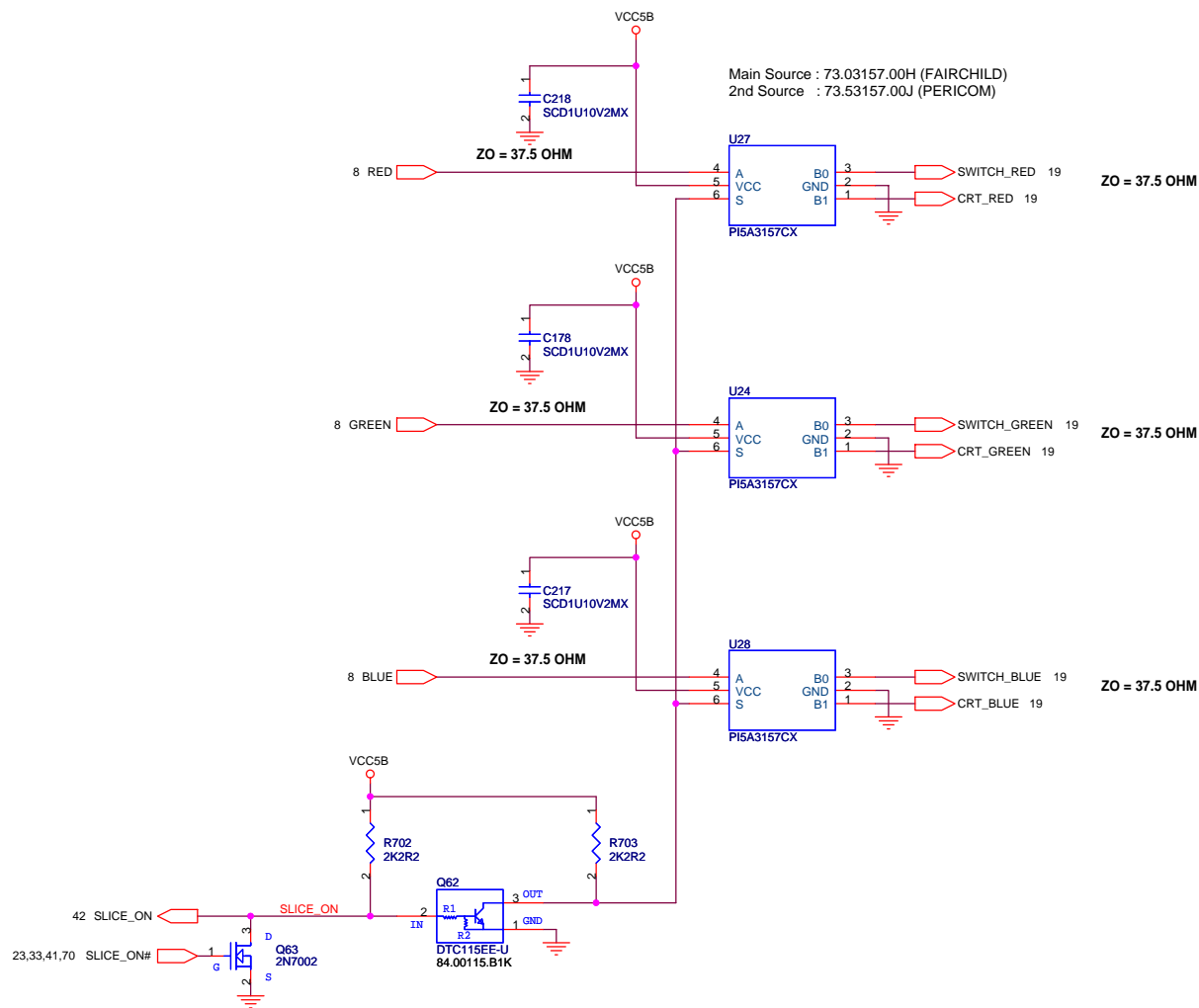
# LCD / Inverter Connector



**Thinklight Circuit**

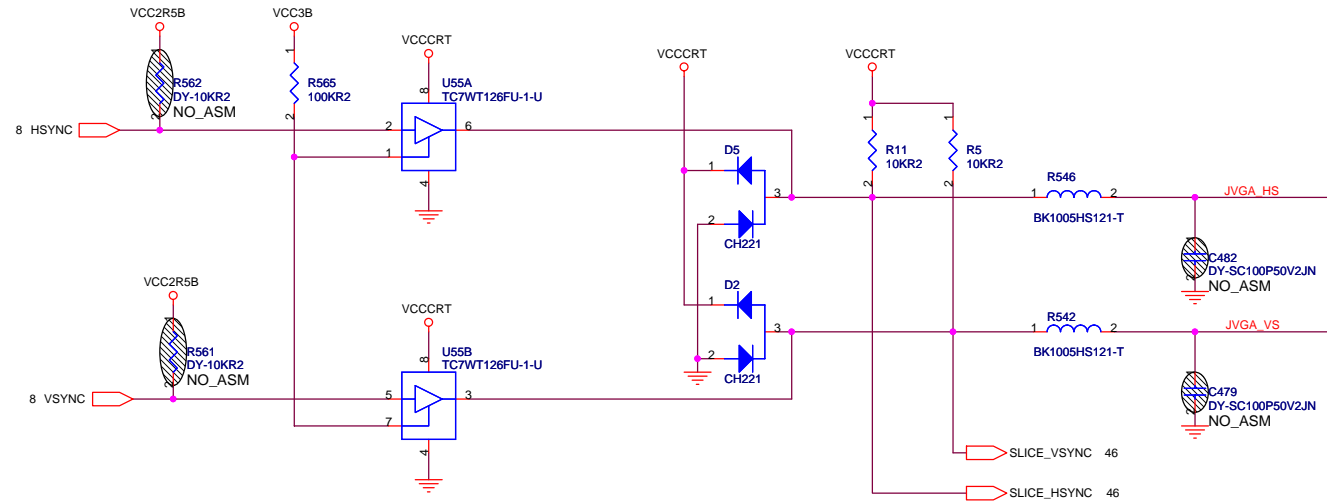
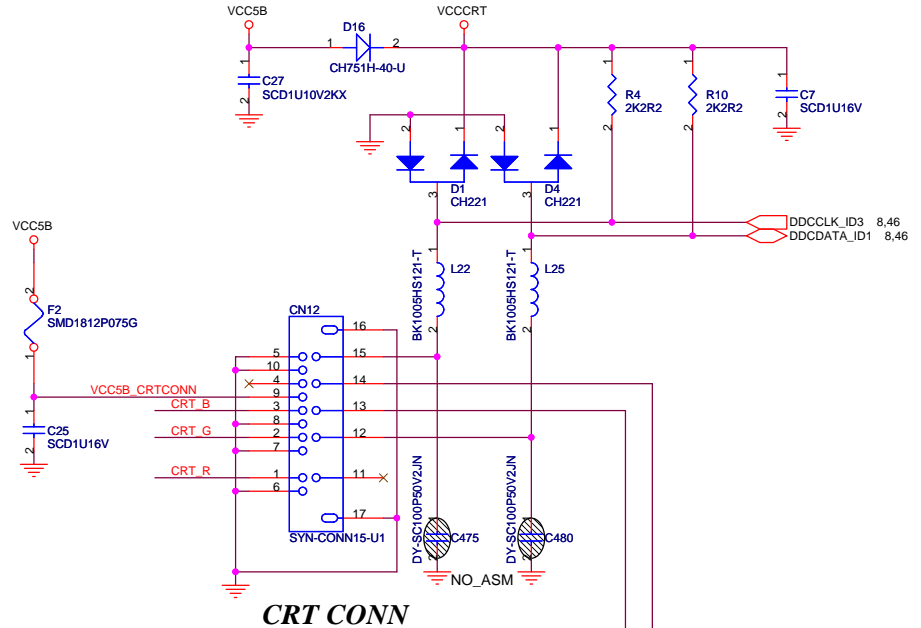
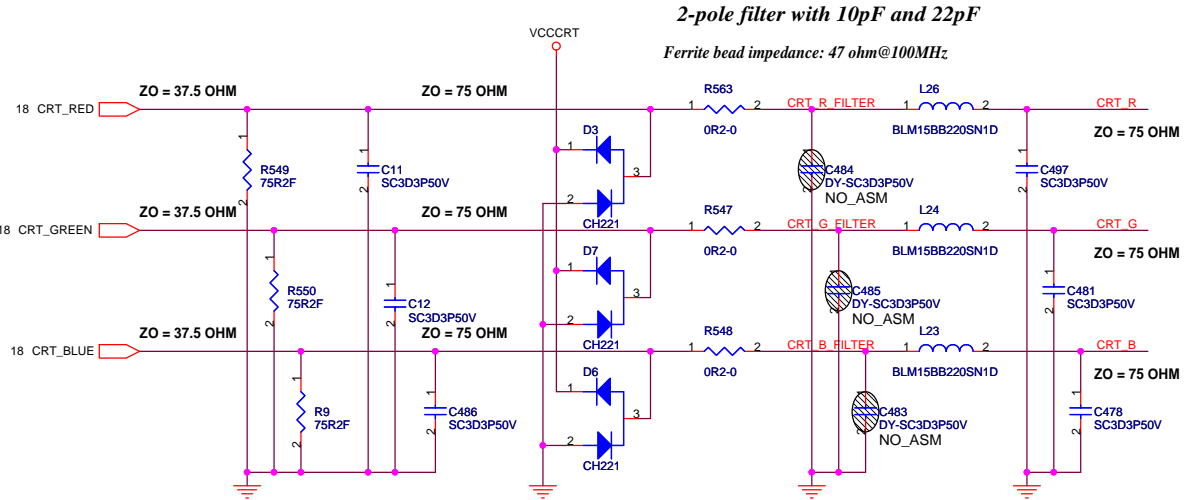
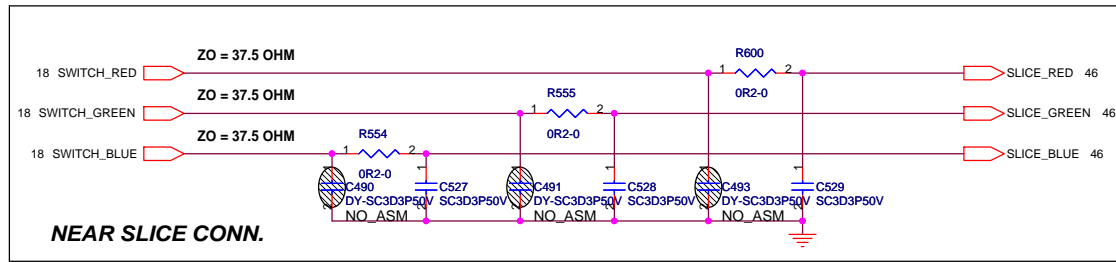


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		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>LCD CONNECTOR</b>			
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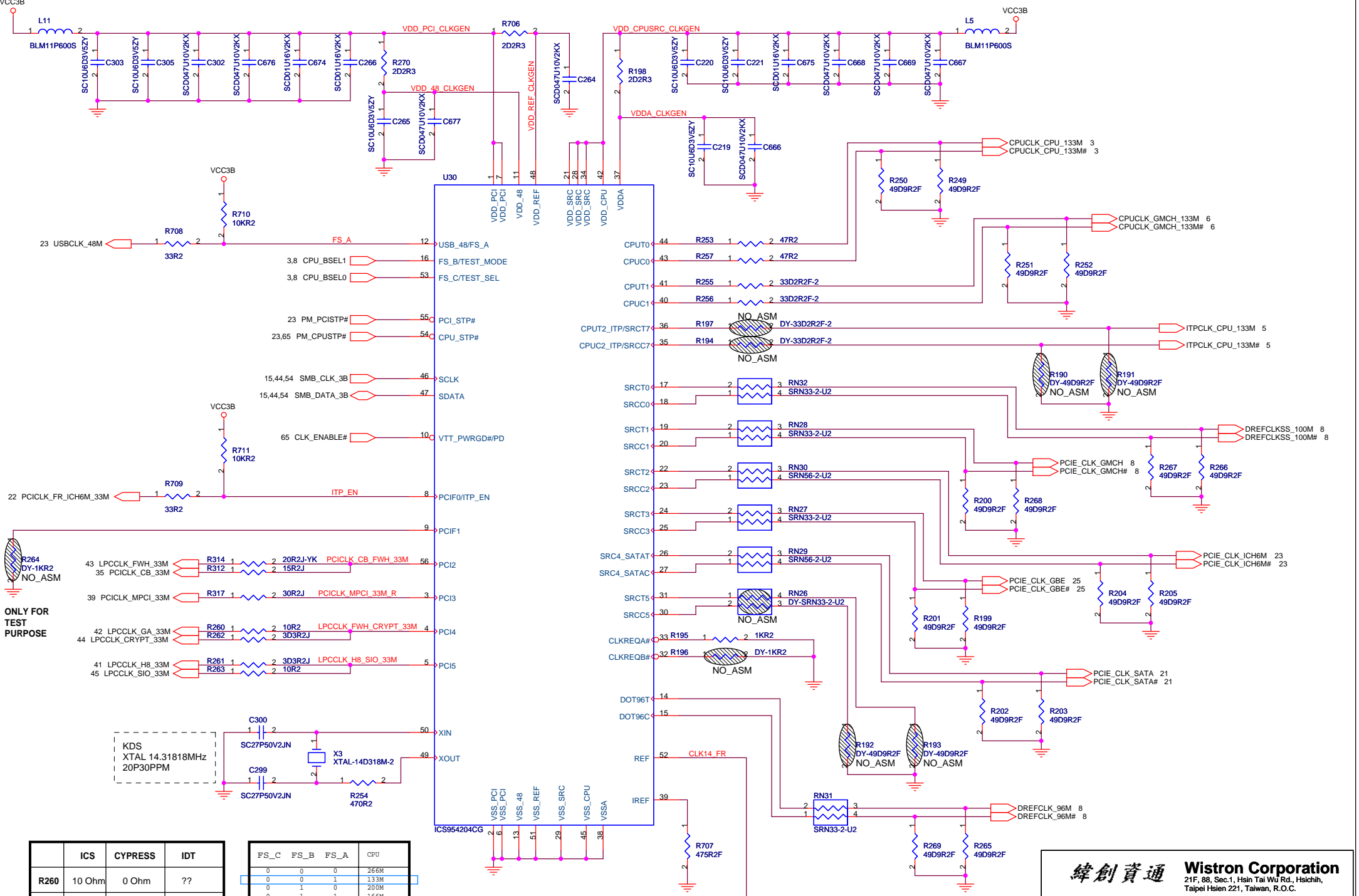
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Size	Document Number	S Note-3			Rev
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Title: **EXT CRT CONNECTOR**

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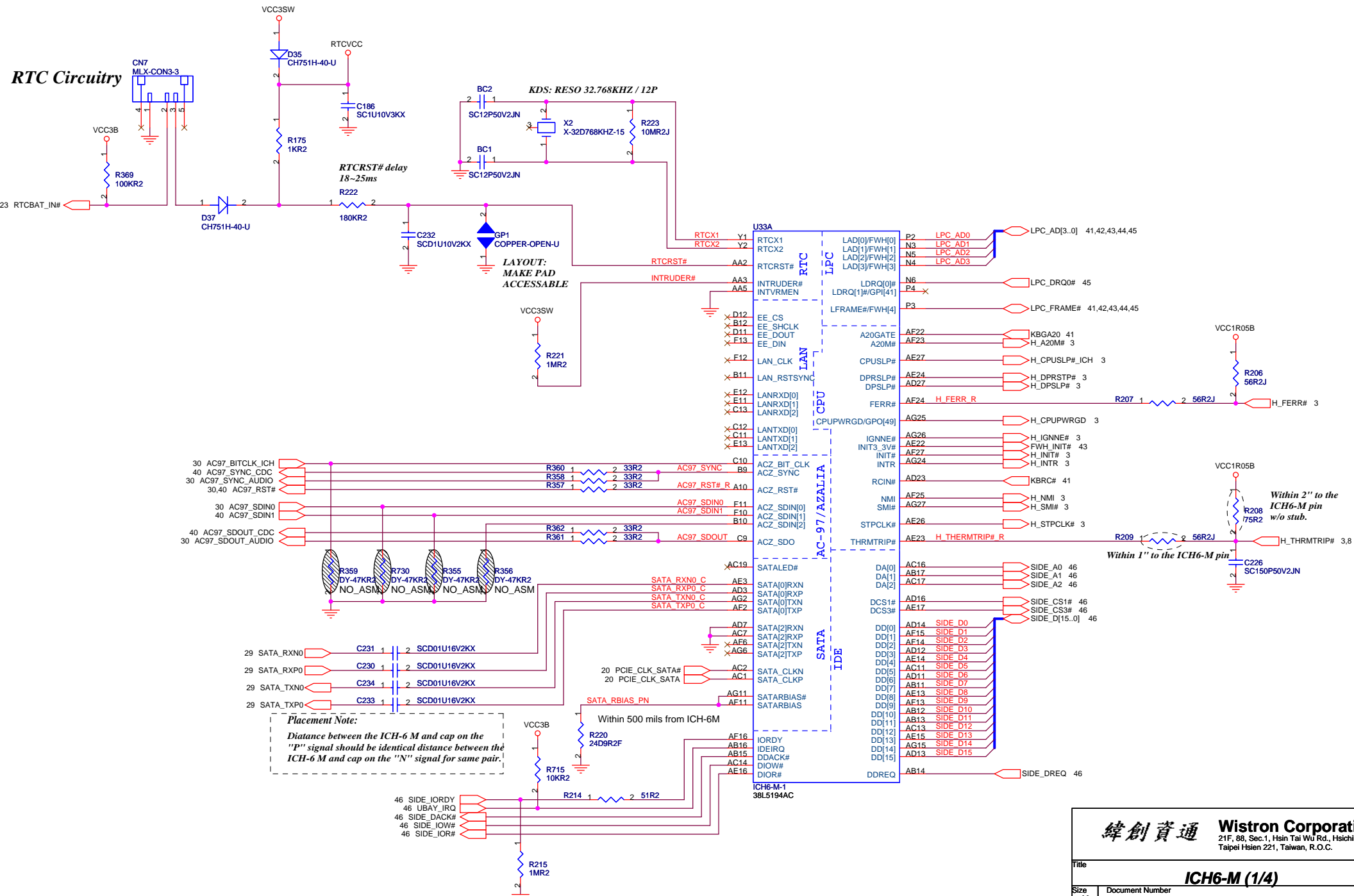
ONLY FOR TEST PURPOSE

	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

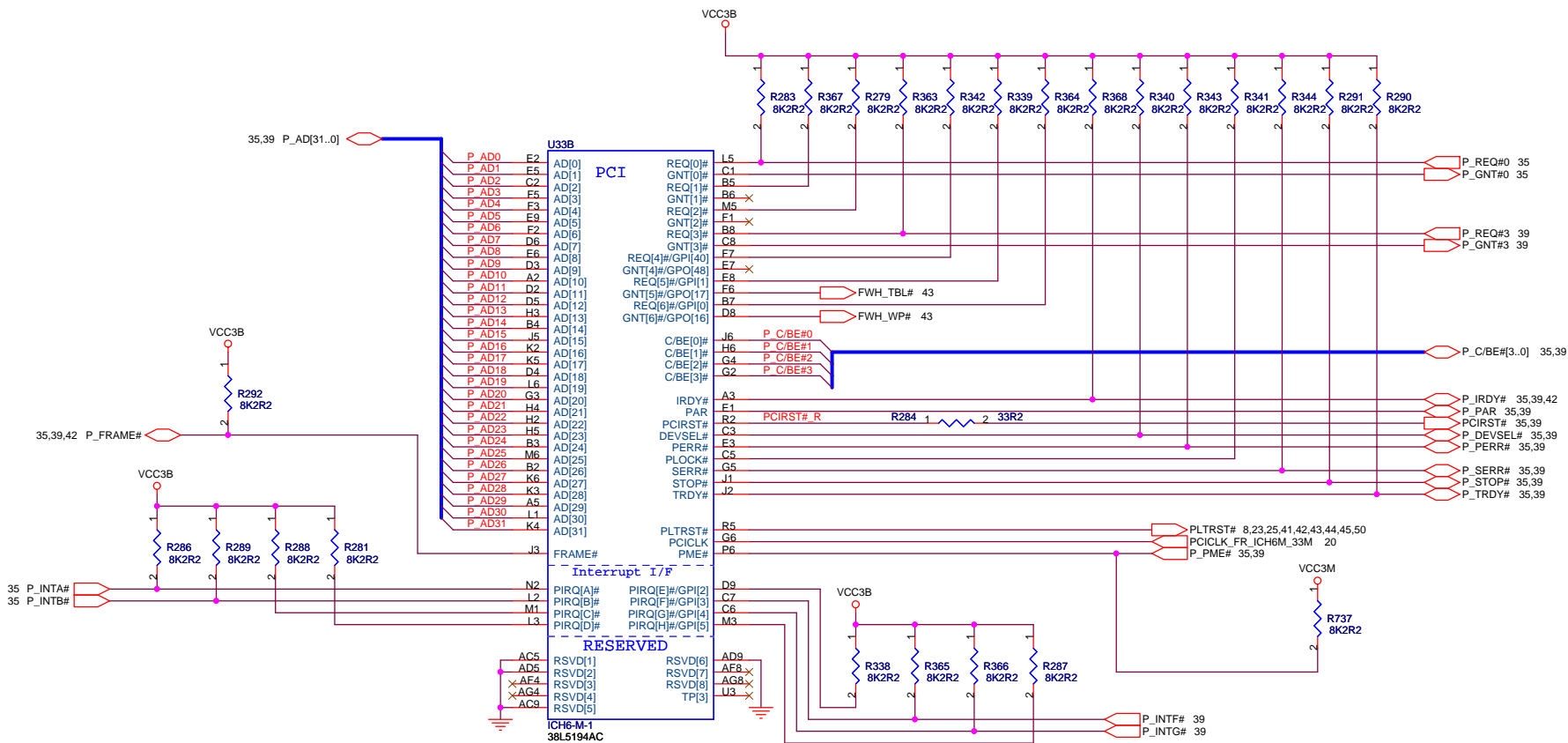
**緯創資通** Wistron Corporation  
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# RTC Circuitry

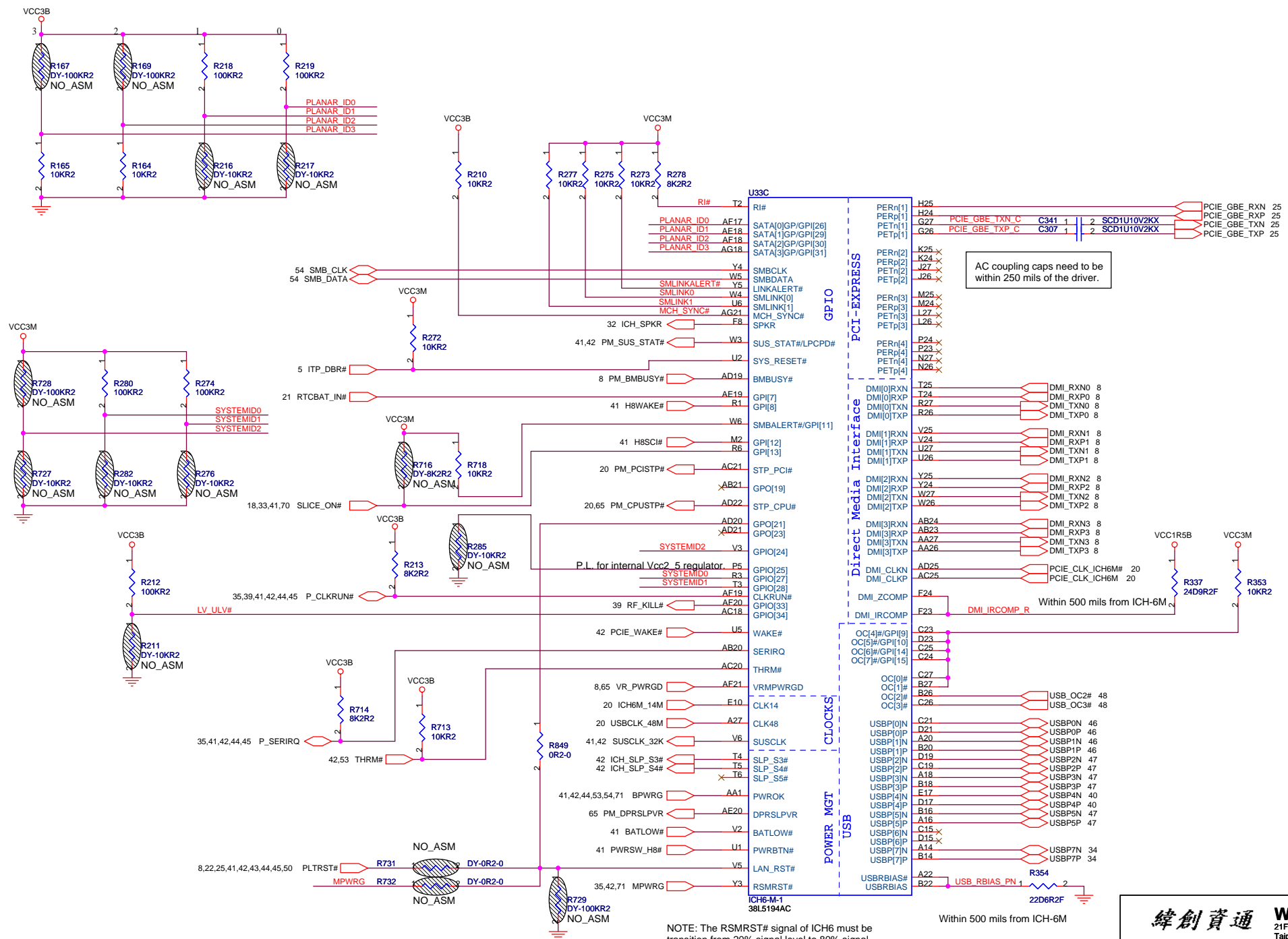


**Placement Note:**  
 Distance between the ICH-6 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.

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<b>ICH6-M (1/4)</b>	
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AC5: SATA1RXN  
 AD5: SATA1RXP  
 AC9: SATA3RXN  
 AD5: SATA3RXP



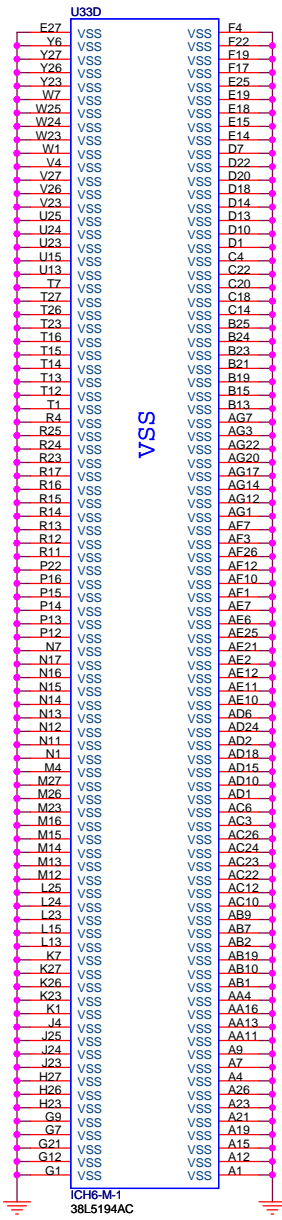
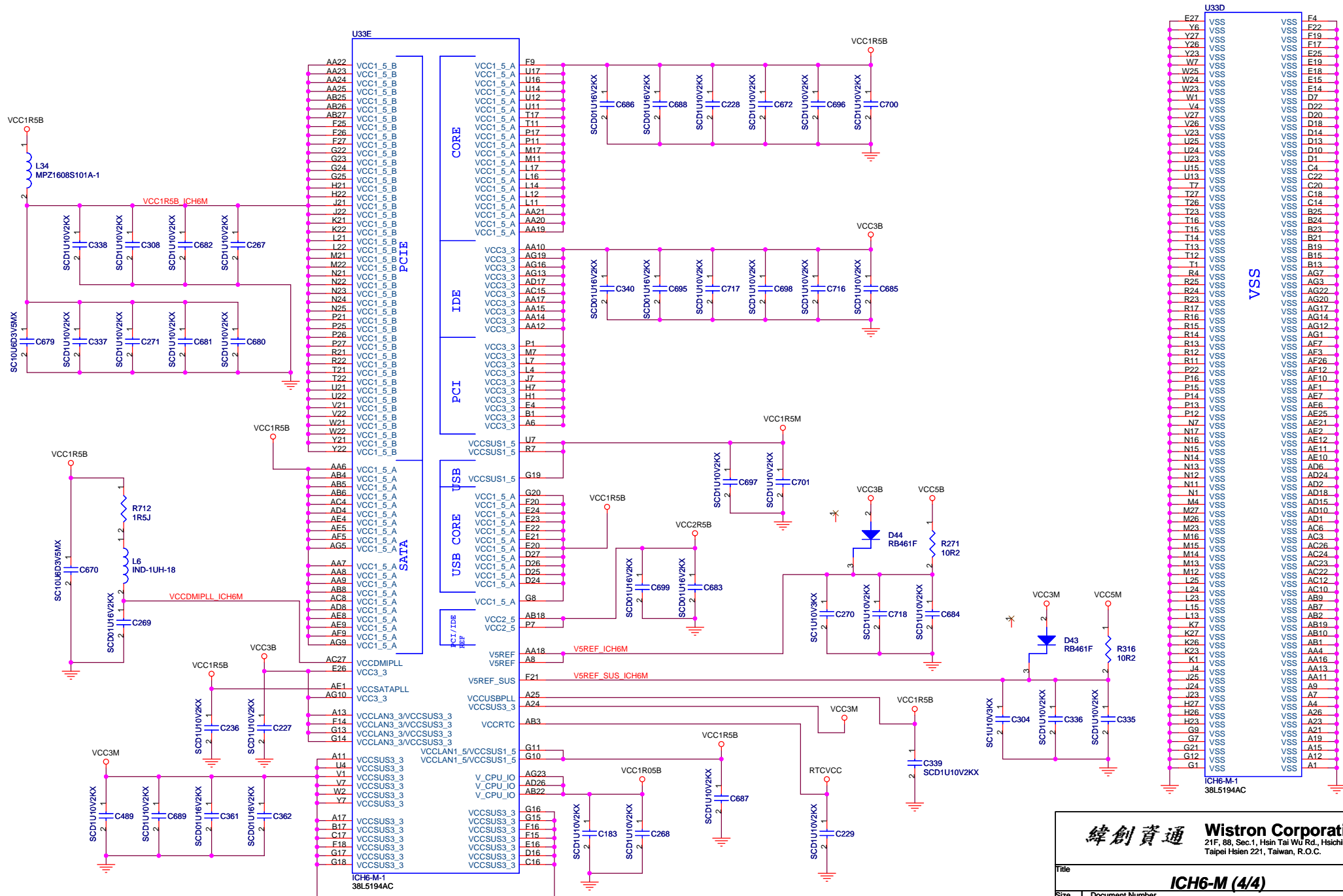
AC coupling caps need to be within 250 mils of the driver.

Within 500 mils from ICH-6M

Within 500 mils from ICH-6M

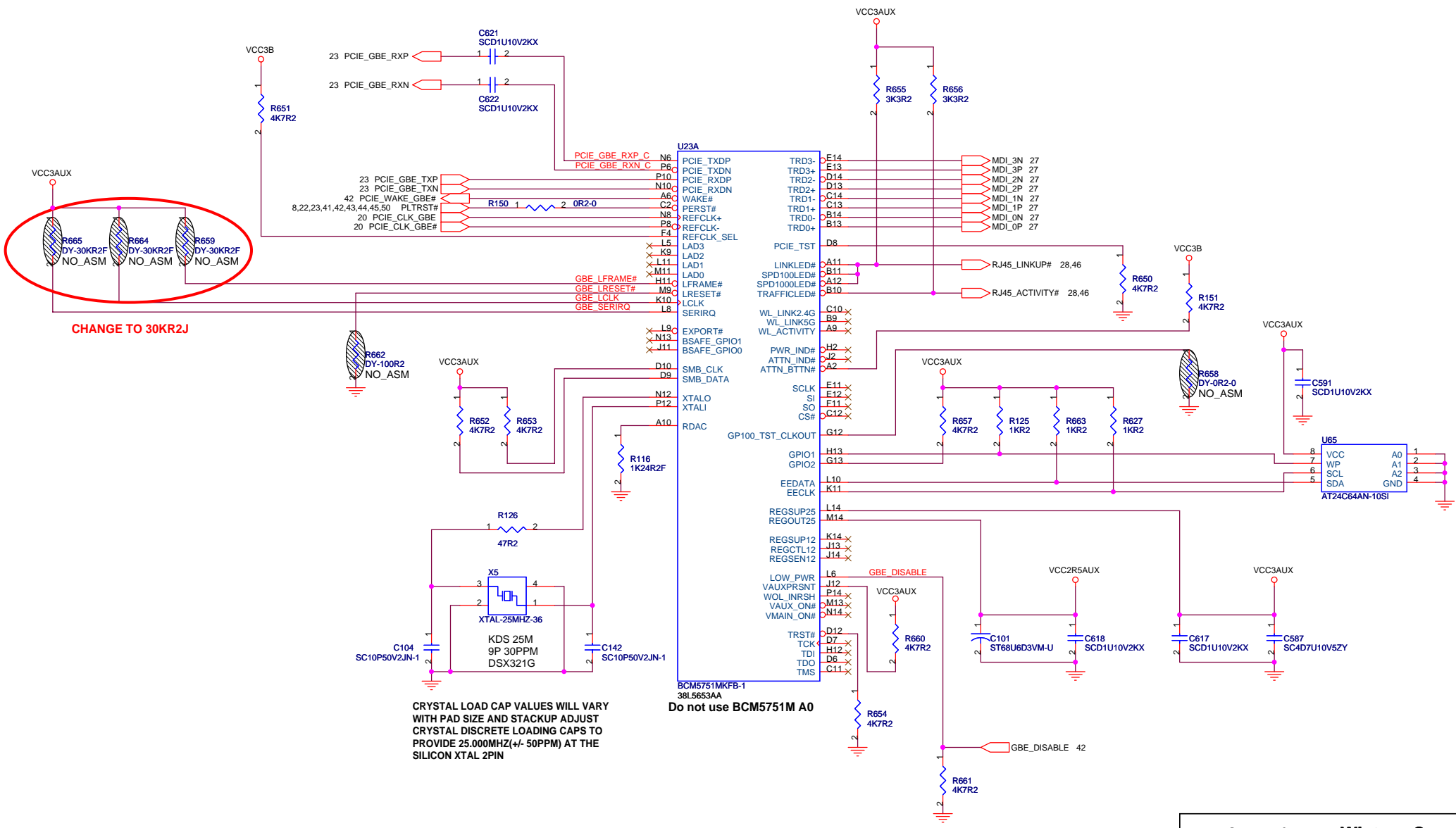
NOTE: The RSMRST# signal of ICH6 must be transition from 20% signal level to 80% signal level and vice-versa in 50us or less.

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<b>ICH6-M (3/4)</b>			
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<b>ICH6-M (4/4)</b>			
Title			
Size A3	Document Number	<b>S Note-3</b>	
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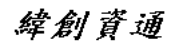




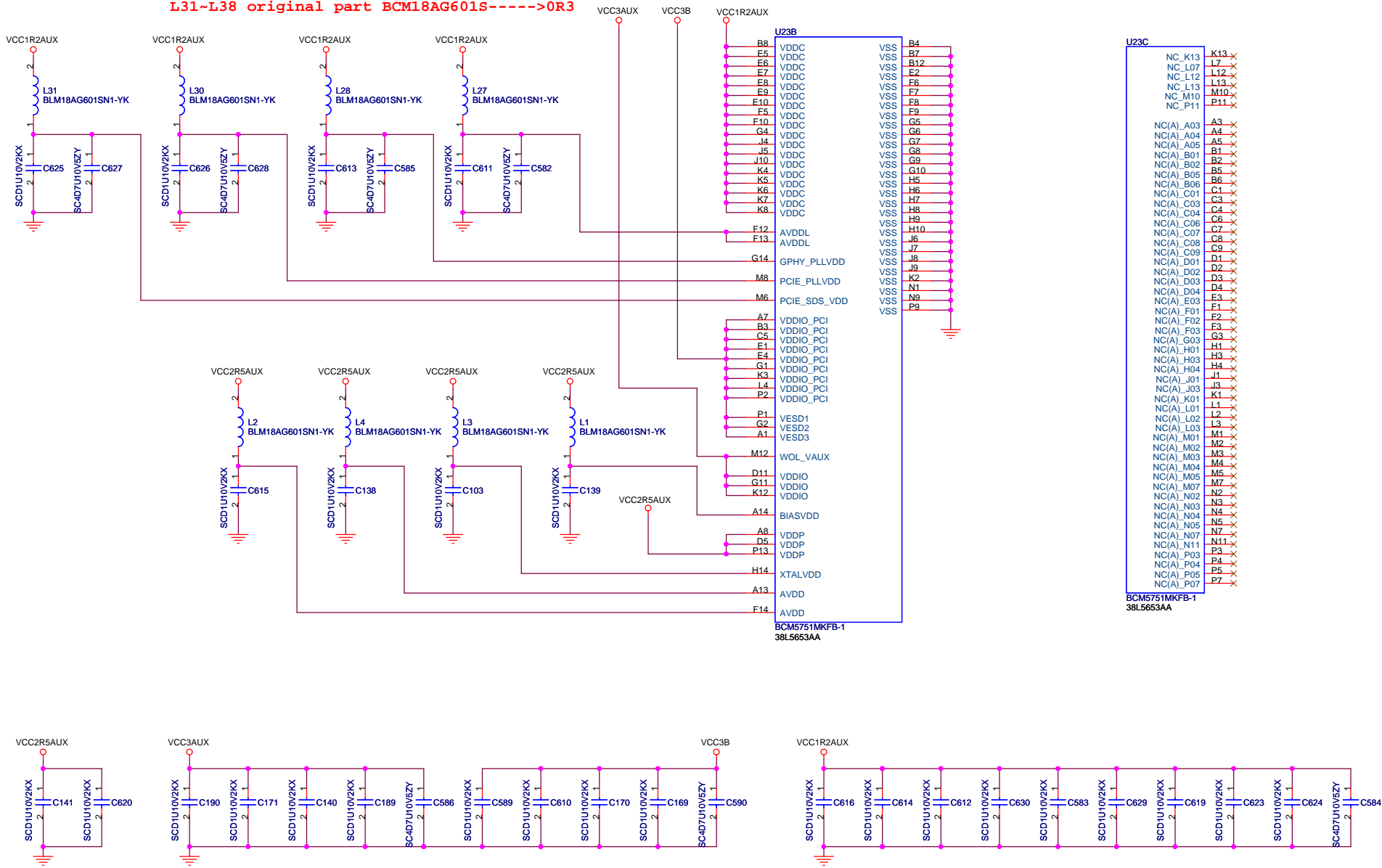
CHANGE TO 30KR2J

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

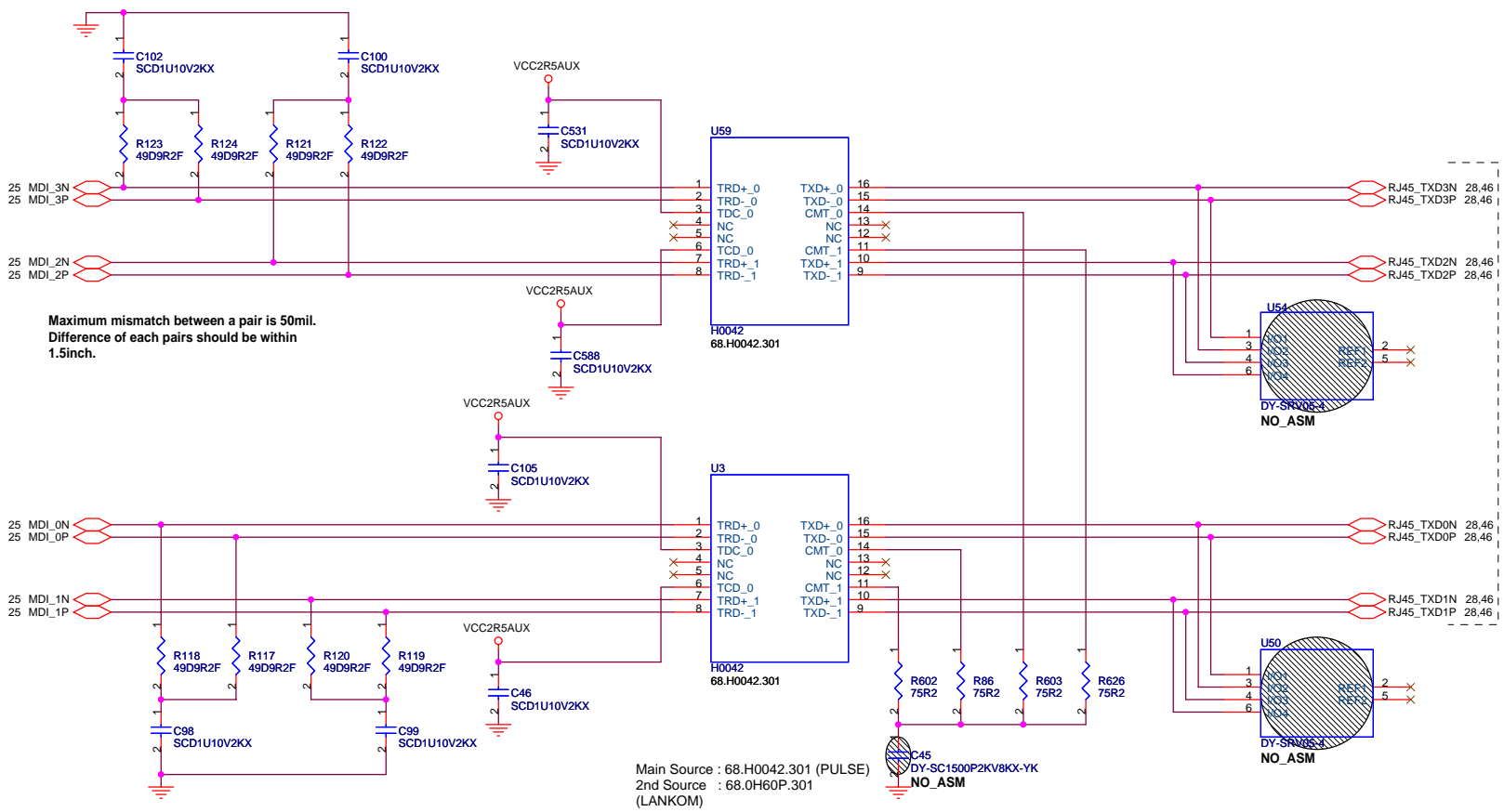
Do not use BCM5751M A0

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<b>GBE BCM5751 (1/2)</b>	
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L31~L38 original part BCM18AG601S----->OR3



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<b>GBE BCM5751M (2/2) : POWER</b>	
Title <b>S Note-3</b>	Rev <b>-1</b>
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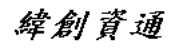


Maximum mismatch between a pair is 50mil.  
Difference of each pairs should be within 1.5inch.

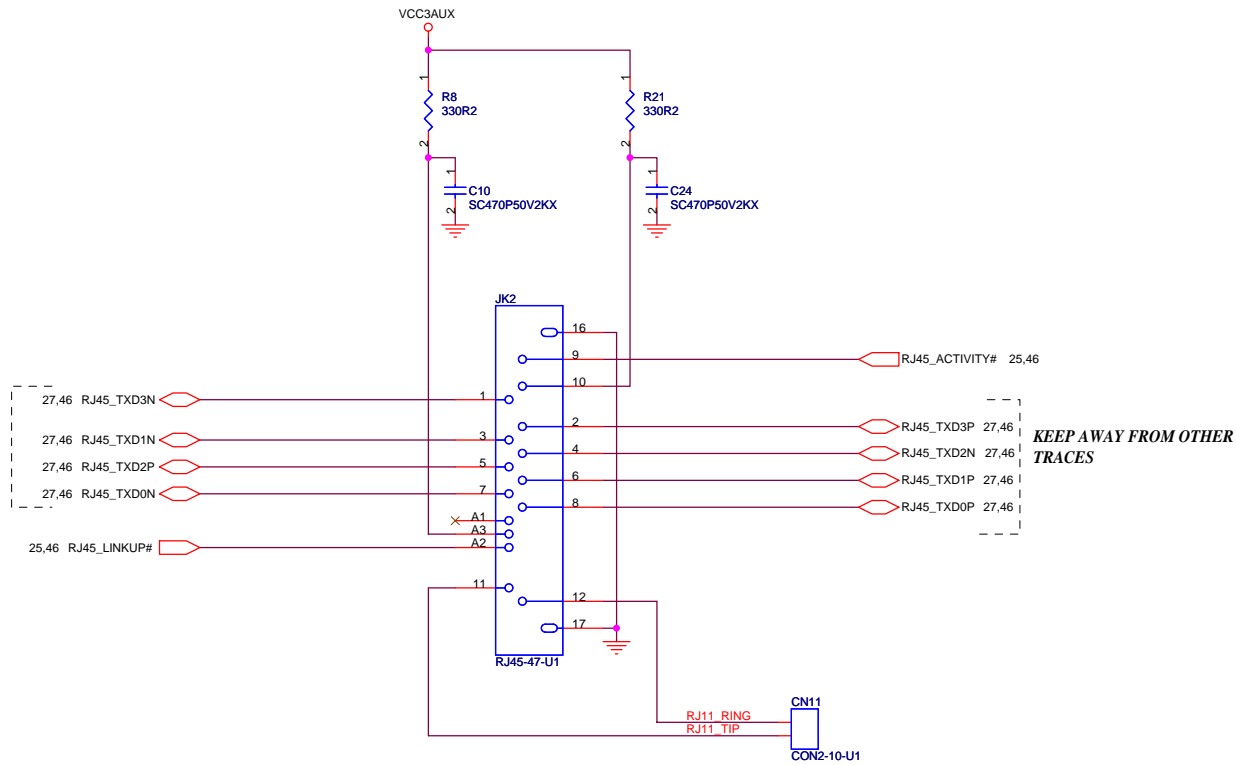
Be careful wiring.  
- Need more 40mil spacing from other signals in case of routing on top/bottom(serface) side.  
- Need more 20mil spacing from other signals in case of routing on internal layers.

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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<b>GBE MAGNETICS</b>	
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KEEP AWAY FROM OTHER TRACES



KEEP AWAY FROM OTHER TRACES

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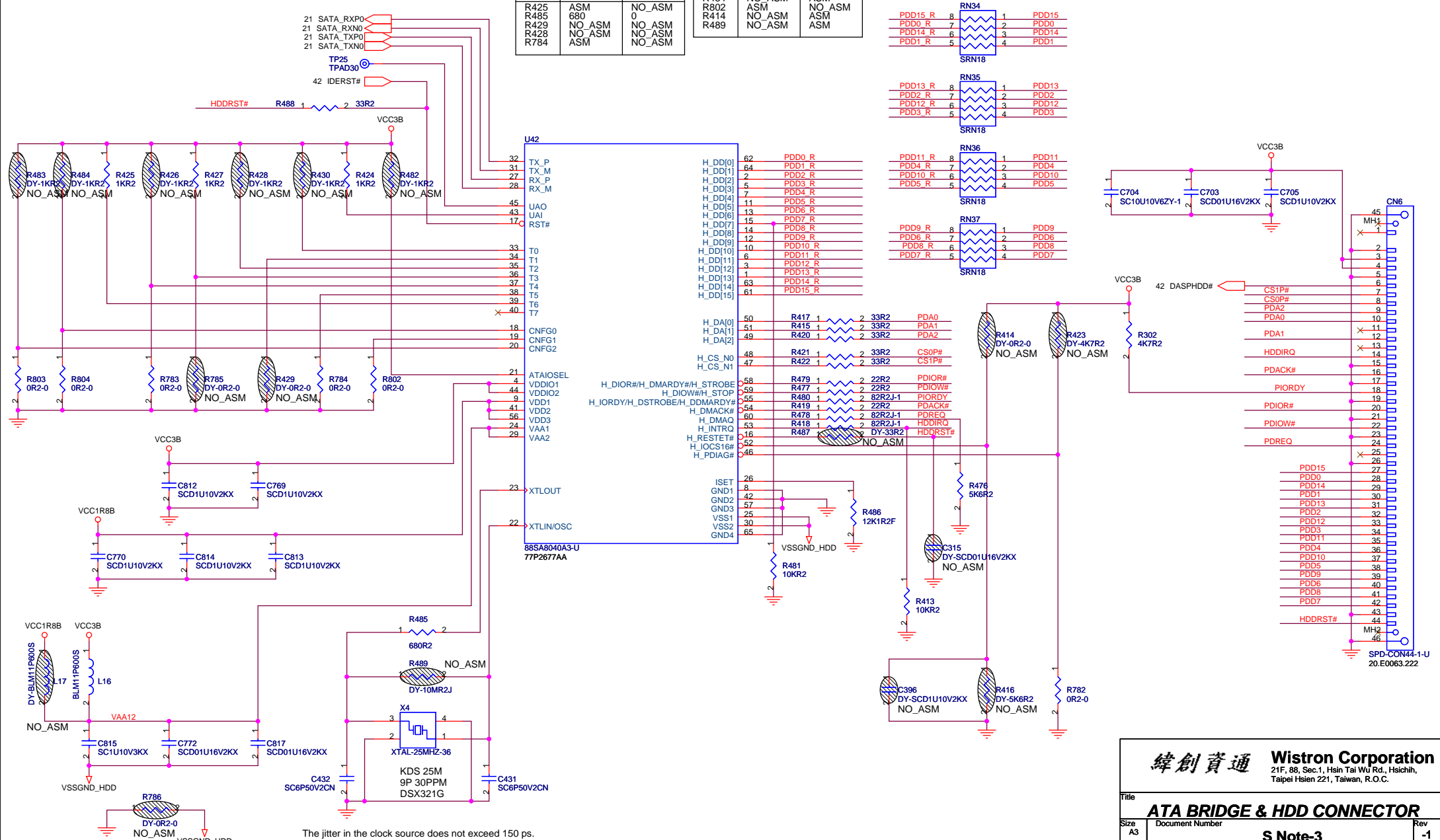
Title		
RJ11/RJ45 CONN		
Size	Document Number	Rev
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S-ATA TABLE 1/2

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

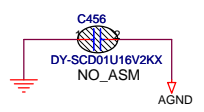
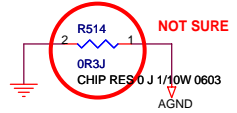
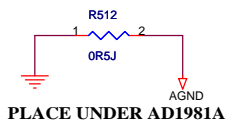
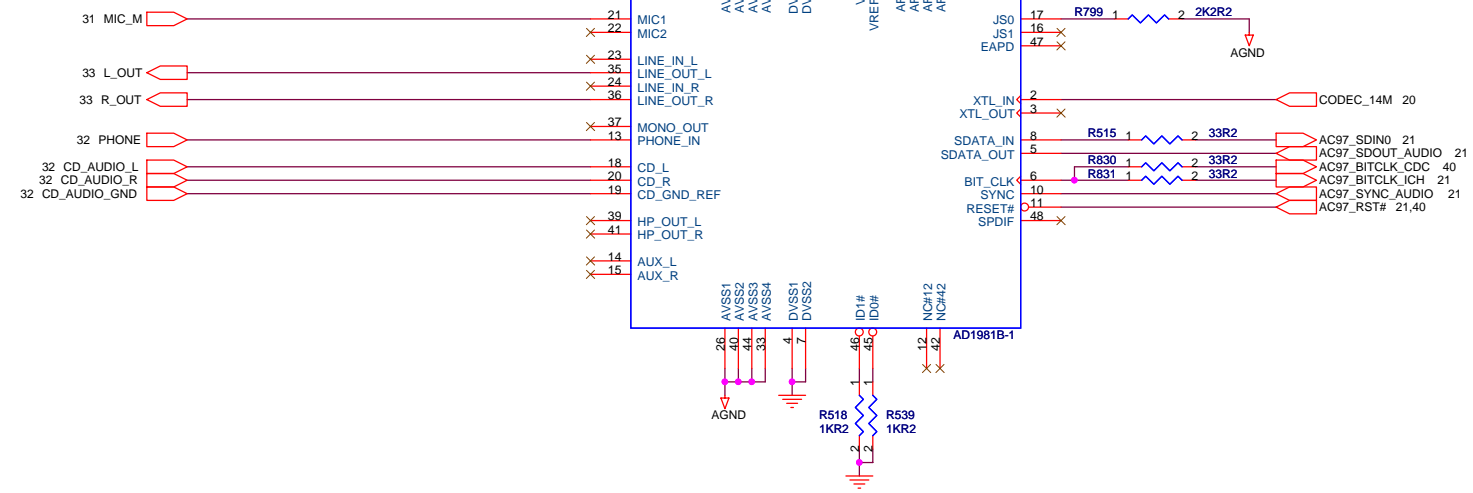
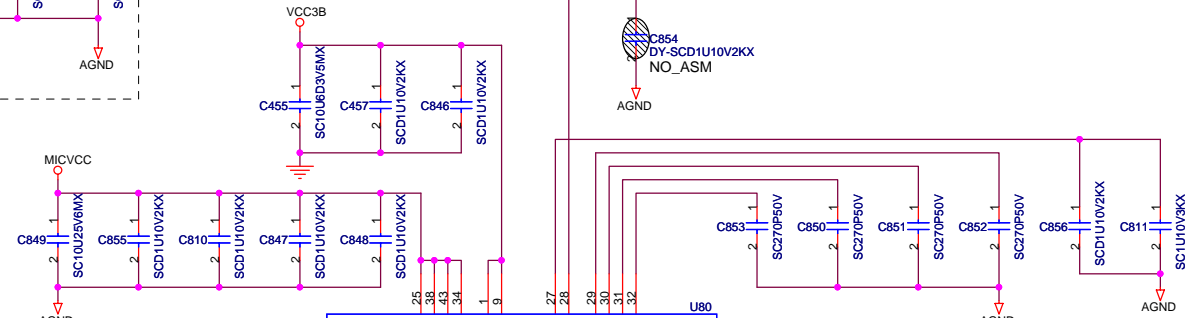
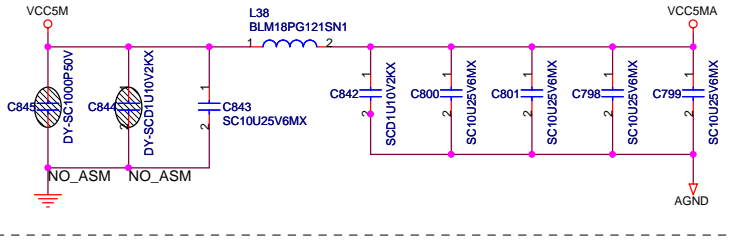


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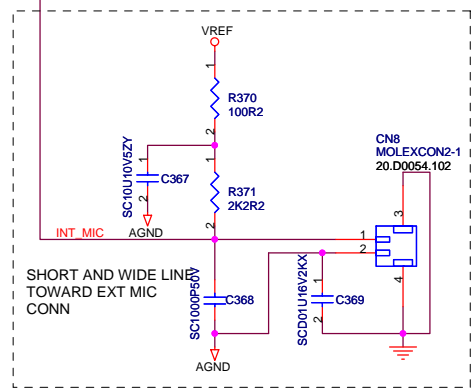
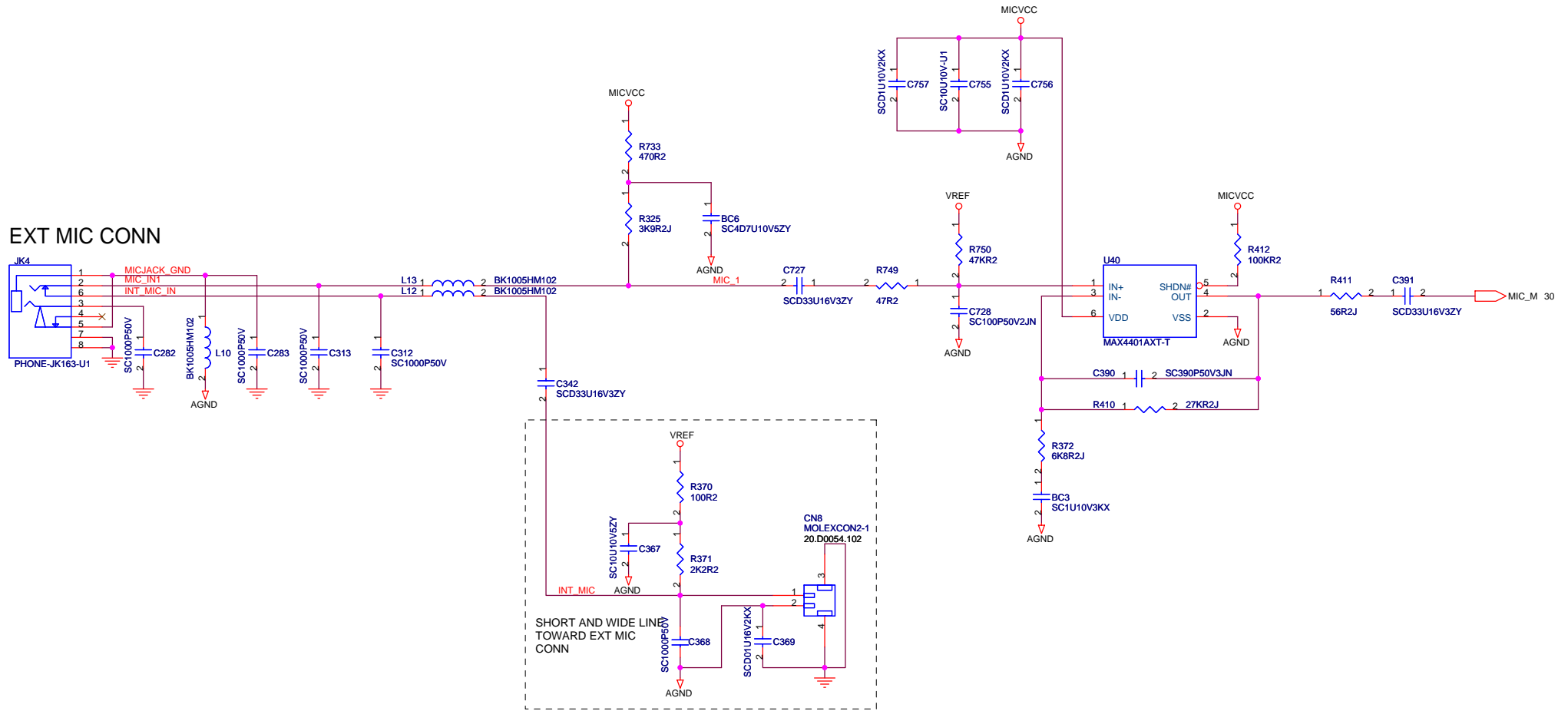
Title: **ATA BRIDGE & HDD CONNECTOR**  
 Size: A3      Document Number: **S Note-3**      Rev: -1  
 Date: Saturday, February 26, 2005      Sheet: 29 of 75

# VCC5MA



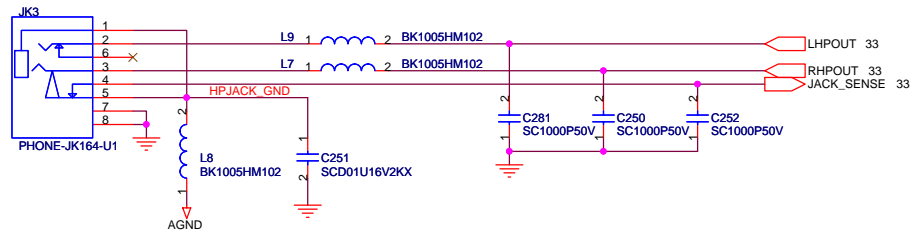
<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>AUDIO 1981B</b>	
Title	
Size A3	Document Number
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### EXT MIC CONN

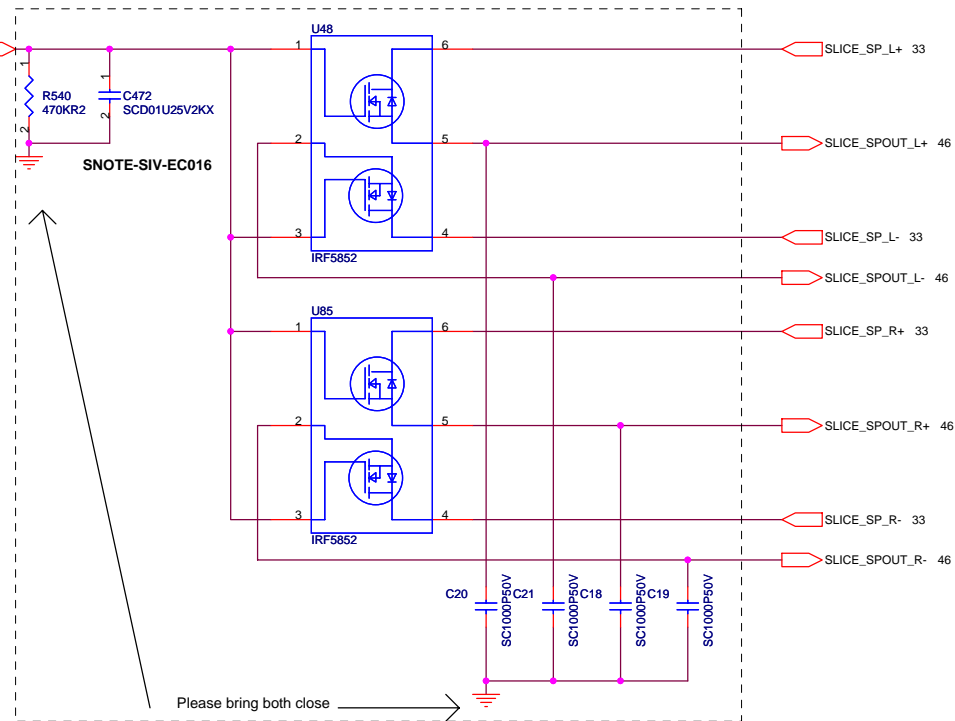
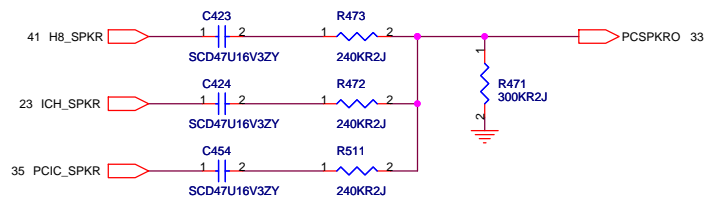
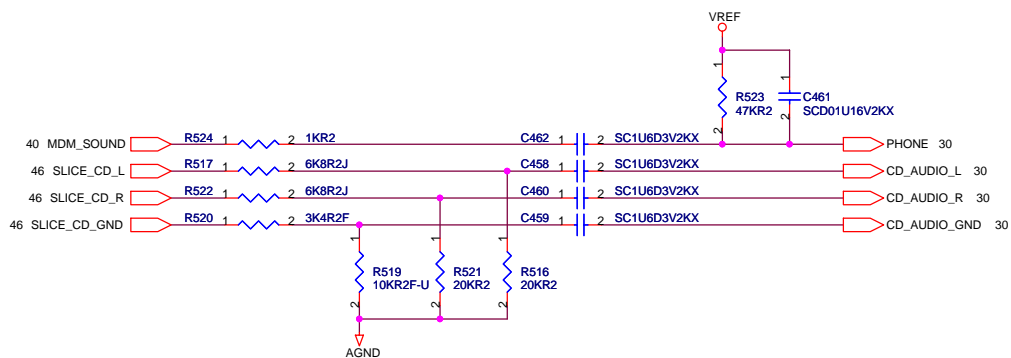
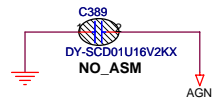
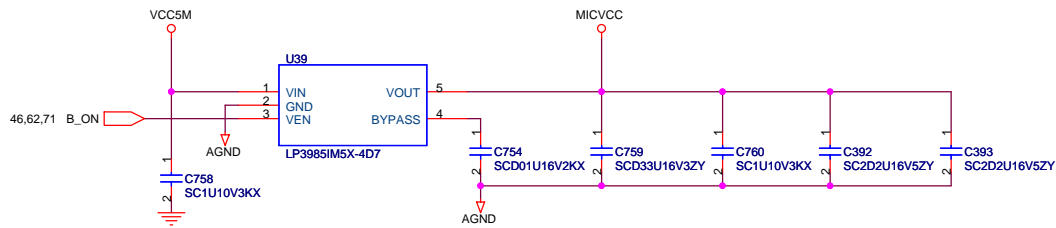


ALL PARTS MUST BE PLACED NEAR TO INTERNAL MICROPHONE

### HEADPHONE CONN



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<b>AUDIO MIC &amp; CONN</b>	
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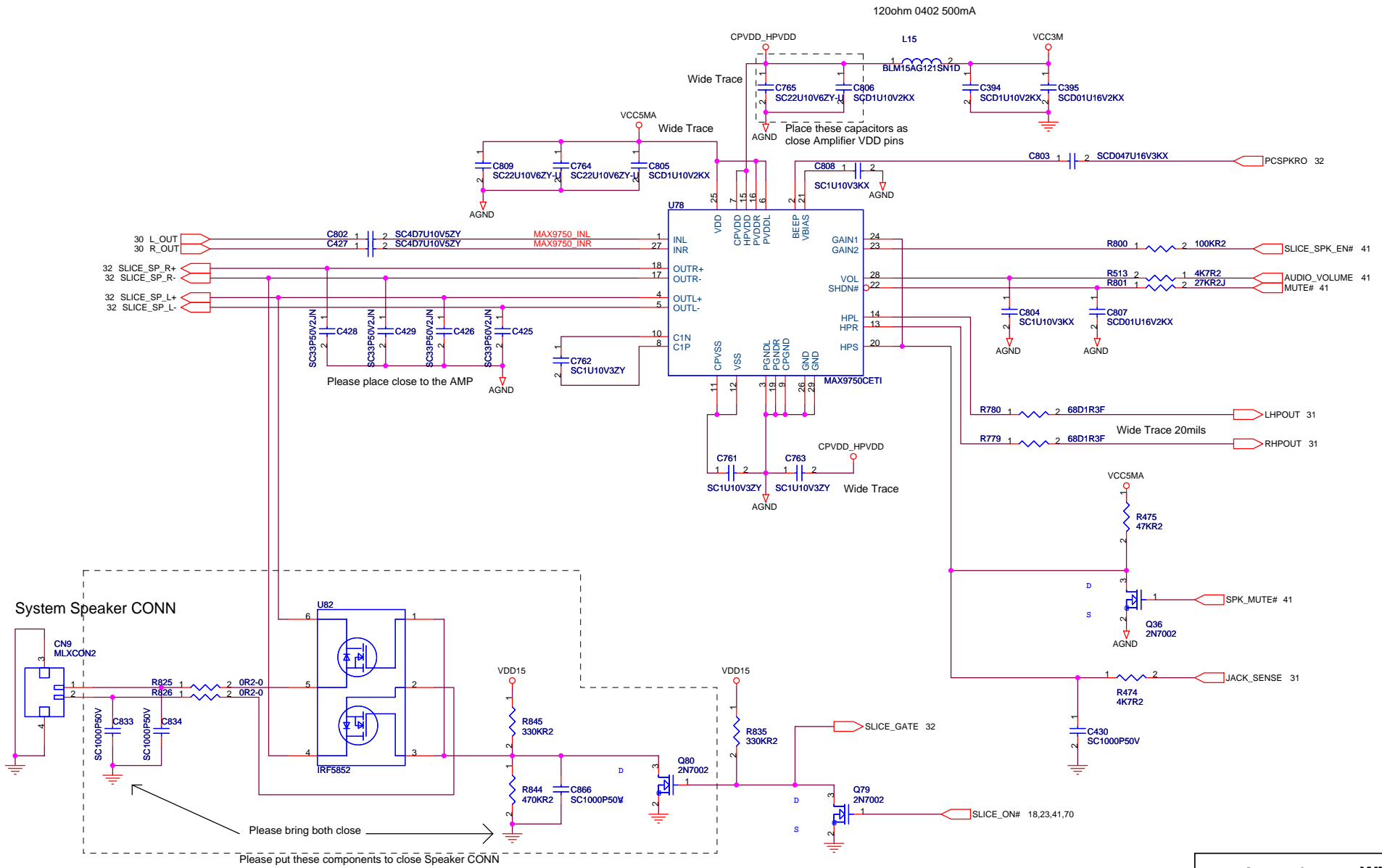


Please bring both close  
Please put these components close to docking side

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<b>AUDIO MISC</b>	
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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

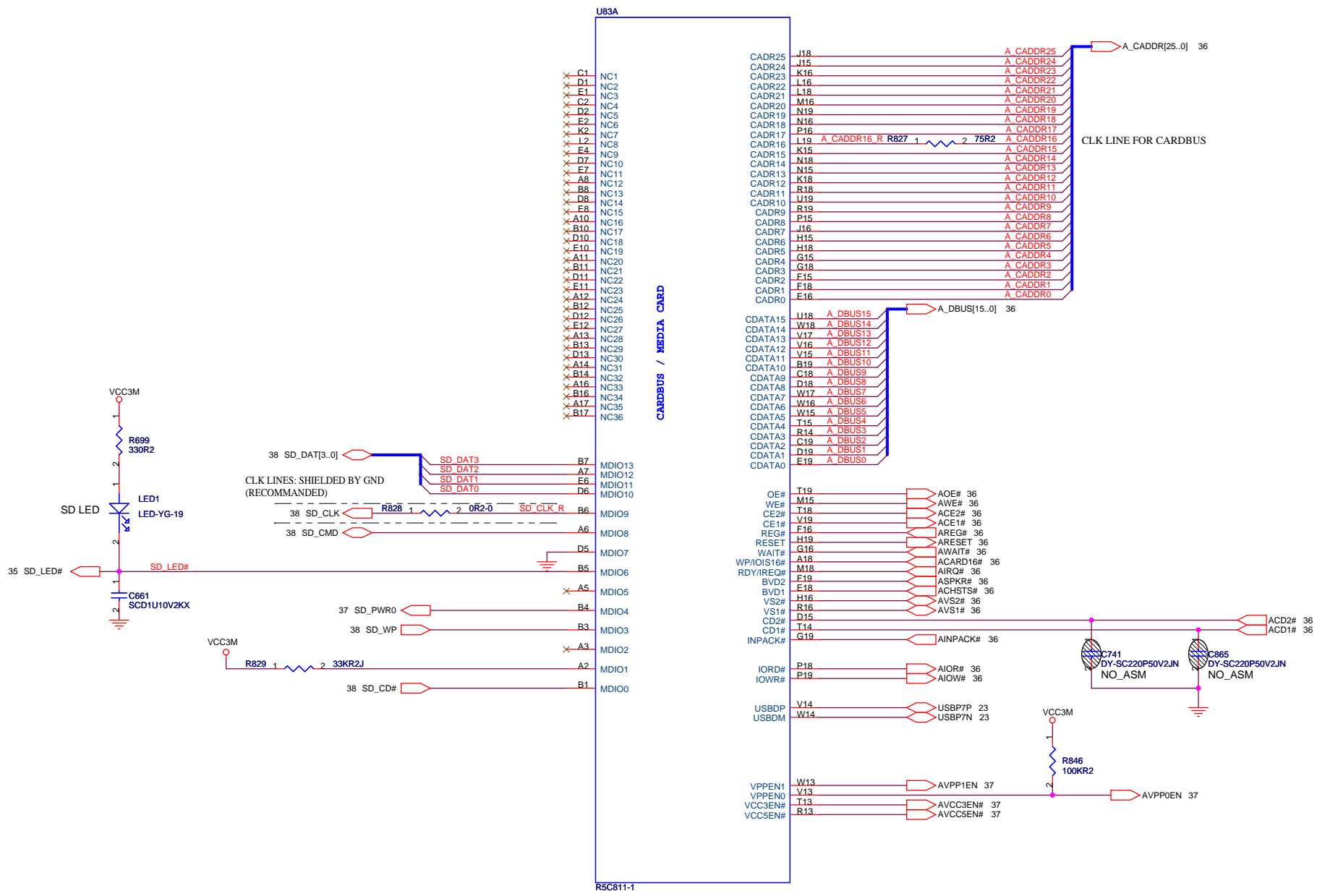


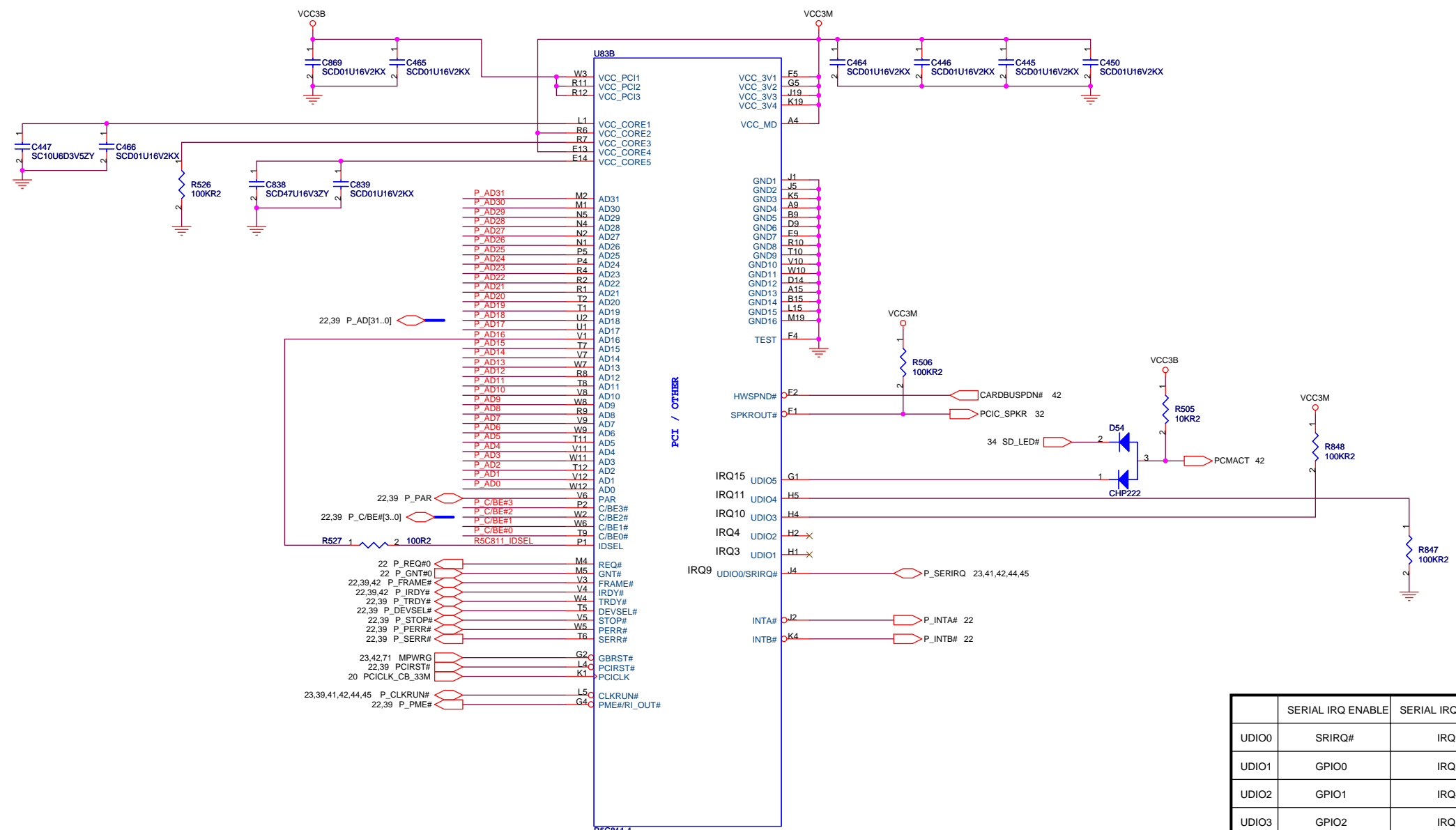
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**AUDIO AMP MAX9750**  
**S Note-3**

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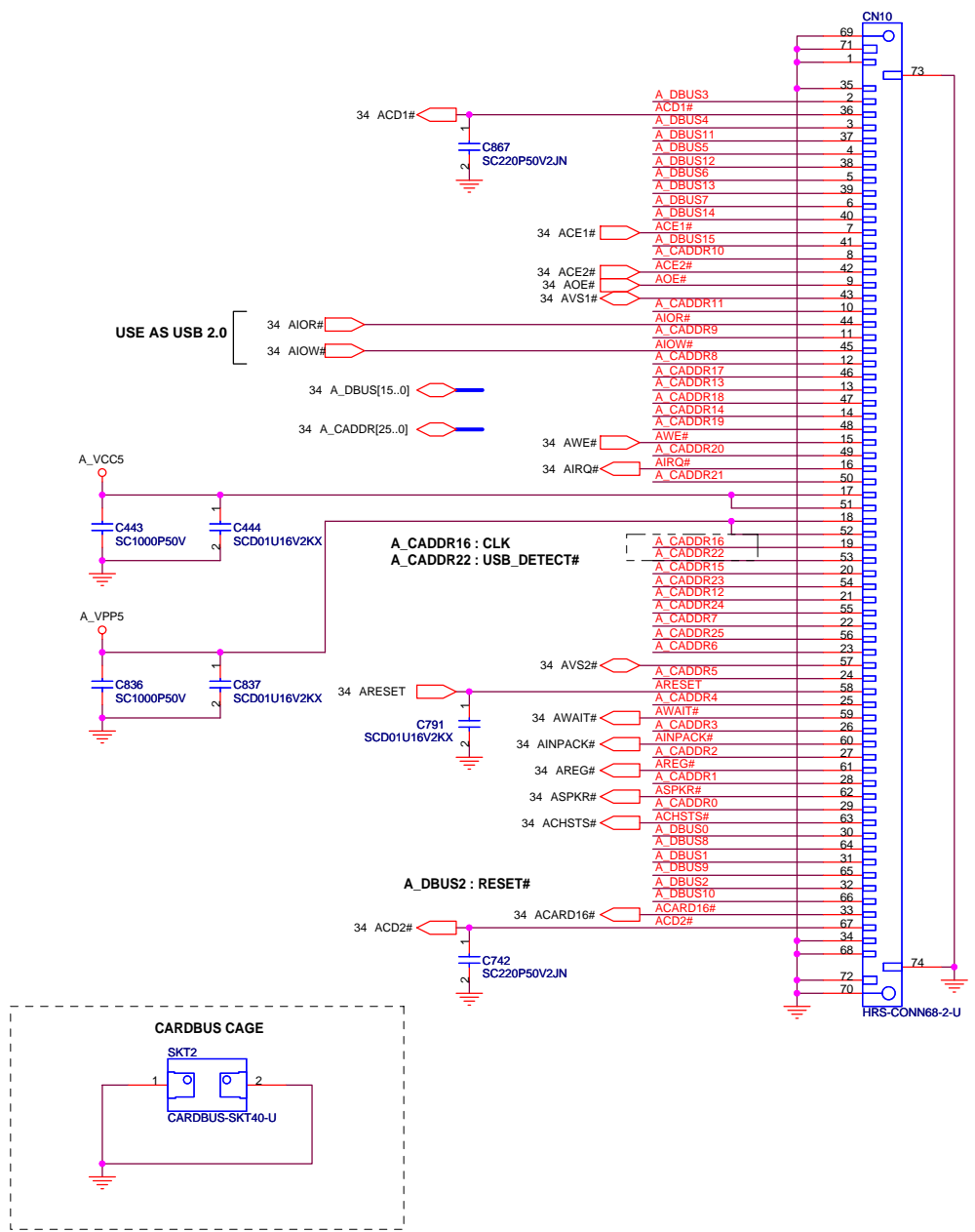
PCI / OTHER

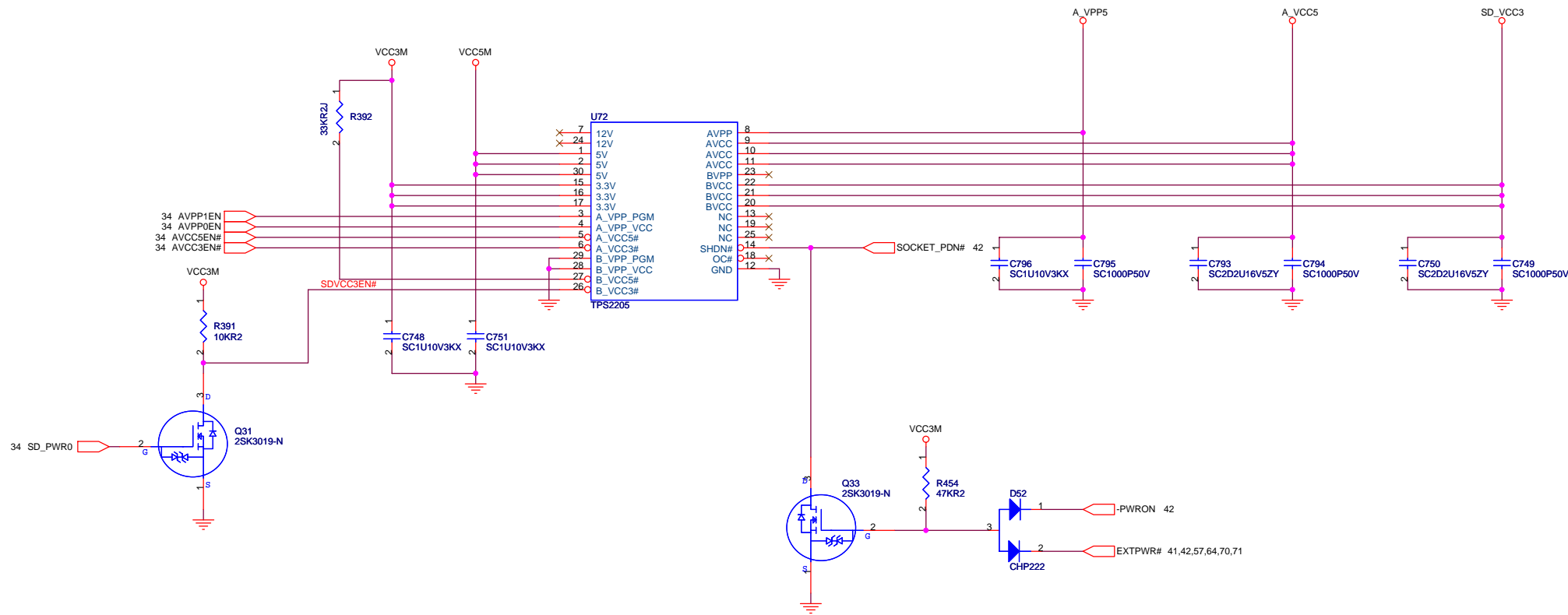
	SERIAL IRQ ENABLE	SERIAL IRQ DISABLE
UDIO0	SRIRQ#	IRQ9
UDIO1	GPIO0	IRQ3
UDIO2	GPIO1	IRQ4
UDIO3	GPIO2	IRQ10
UDIO4	GPIO3	IRQ11
UDIO5	LED0#	IRQ15

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

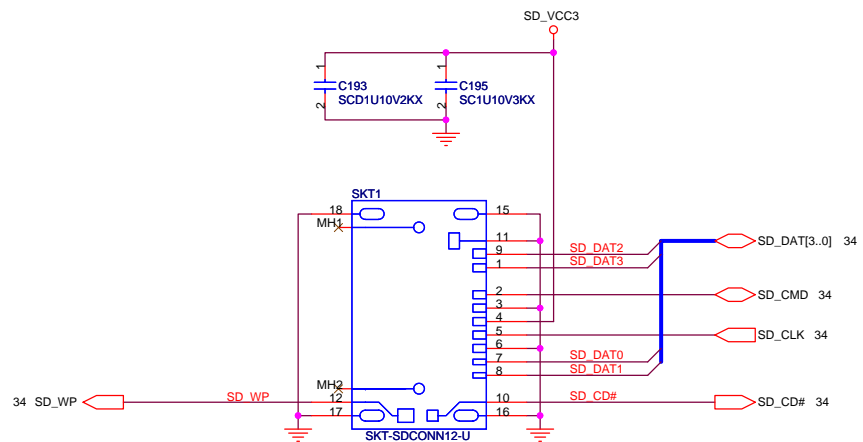
Title: **CARD BUS(2/2)**

Size A3	Document Number	Rev -1
<b>S Note-3</b>		
Date: Saturday, February 26, 2005	Sheet 35	of 75



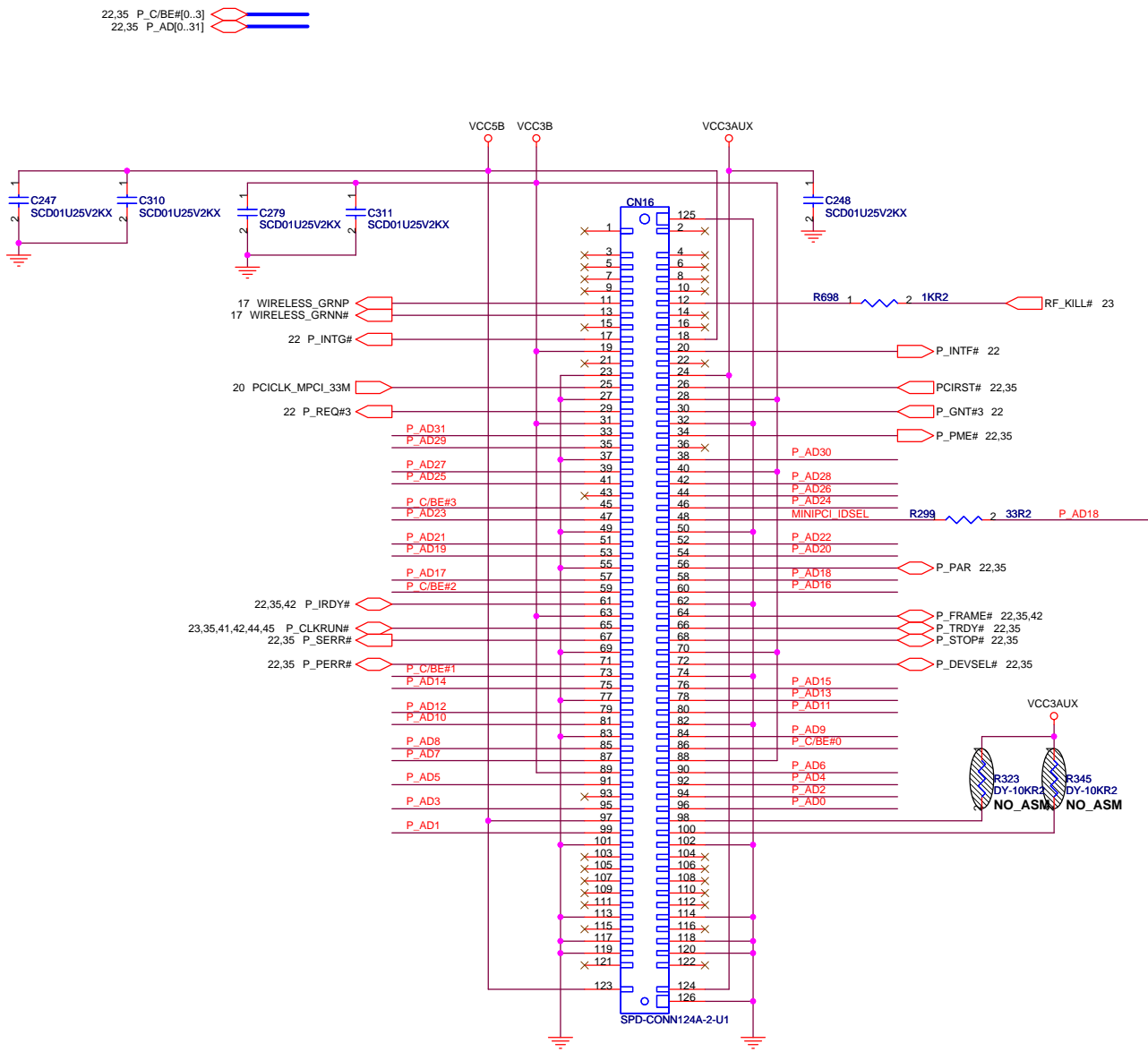


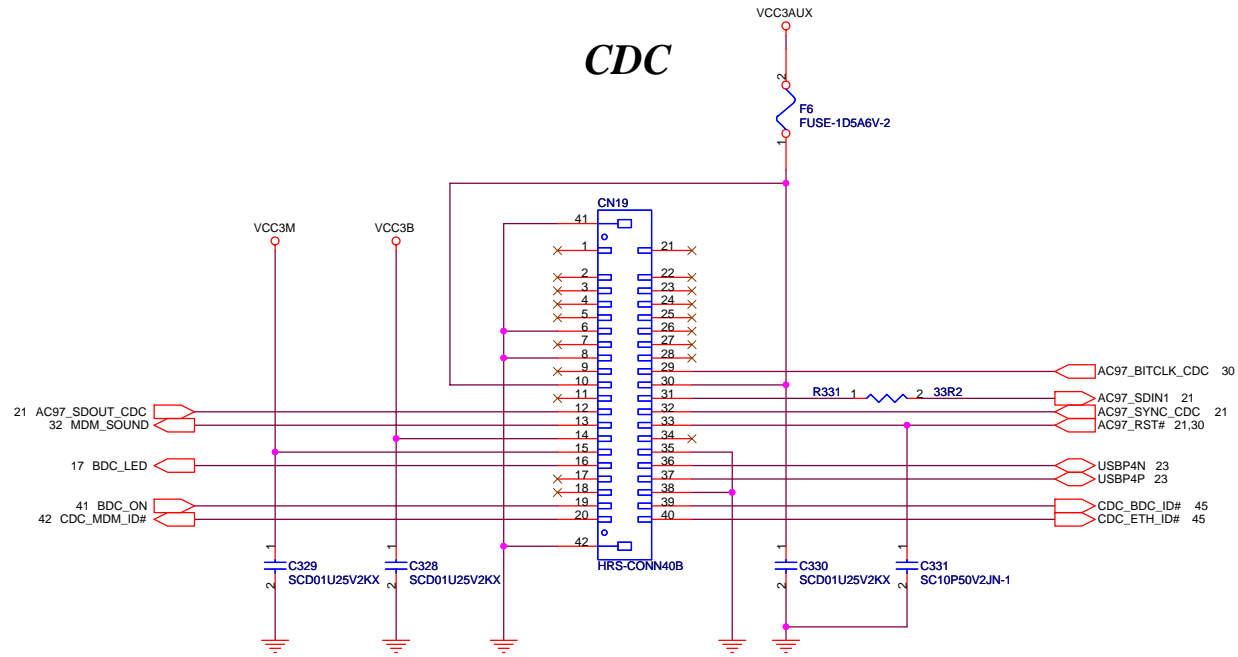
# SD Slot



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

Title		
<b>SD SLOT</b>		
Size	Document Number	Rev
A3		-1
Date: Saturday, February 26, 2005		Sheet 38 of 75

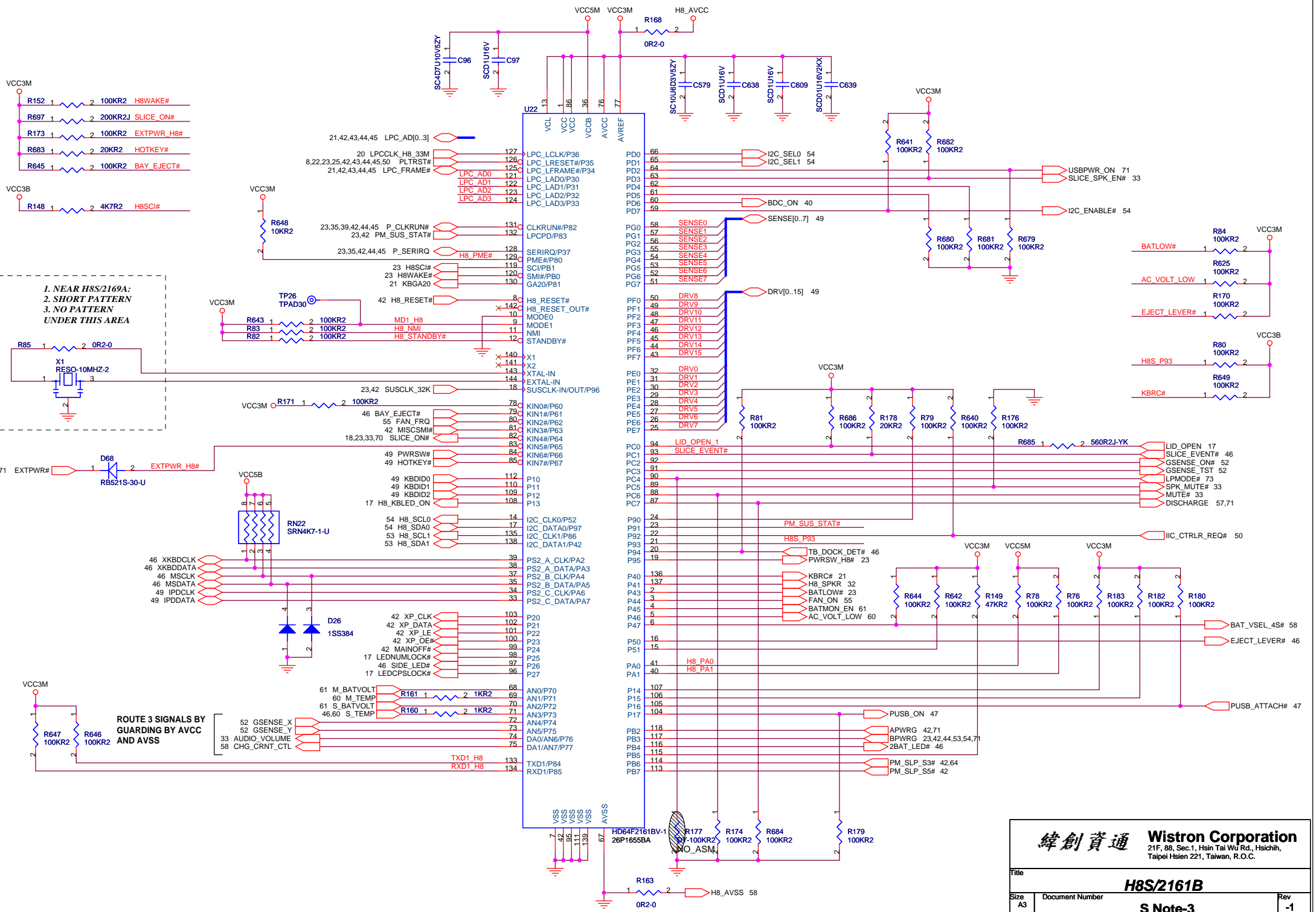




緯創資通 **Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title		
<b>CDC/Fingerprint CONNECTOR</b>		
Size	Document Number	Rev
A3		-1
Date:	Sheet	of
Saturday, February 26, 2005	40	75

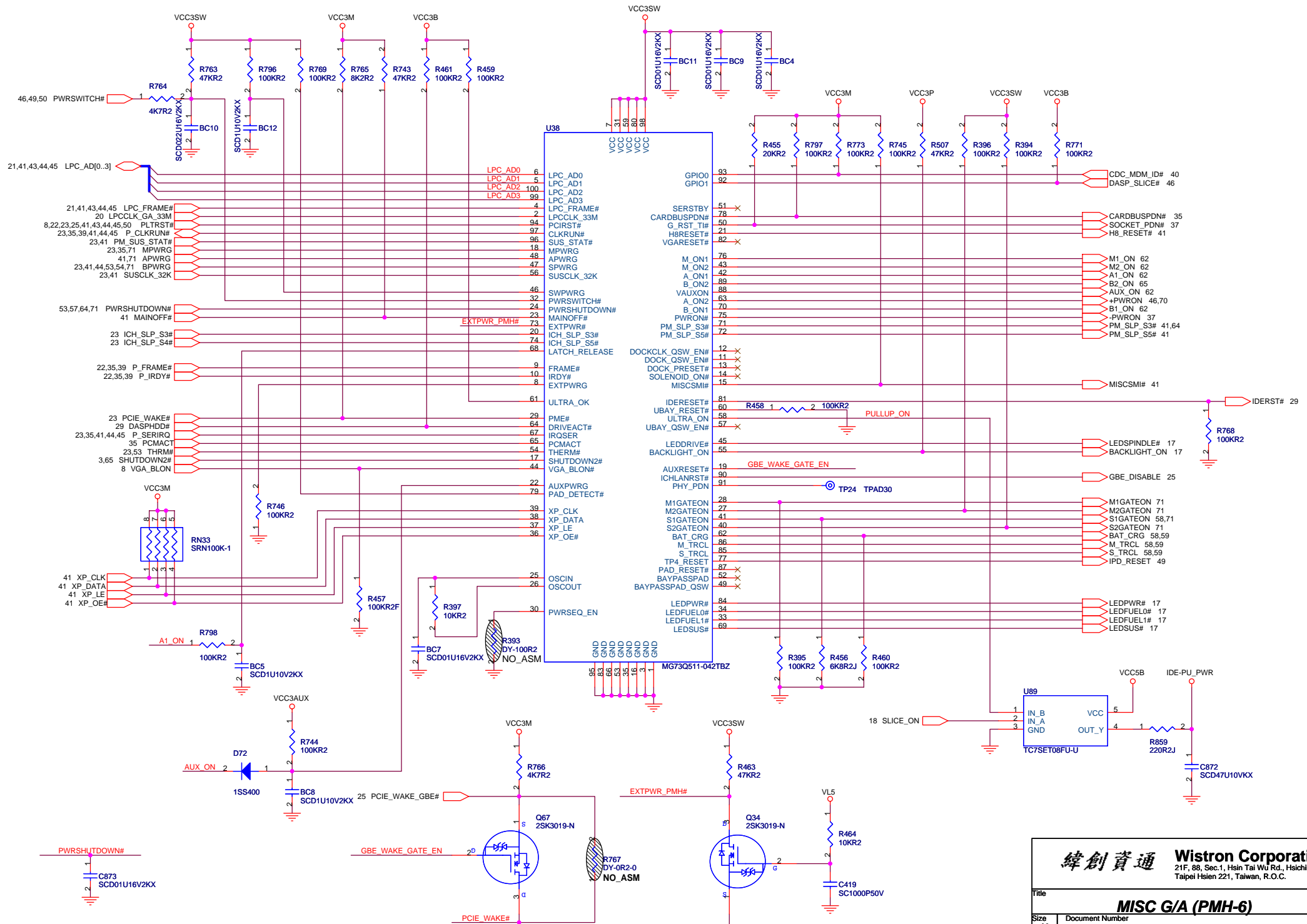




1. NEAR H8S/2169A:  
 2. SHORT PATTERN  
 3. NO PATTERN  
 UNDER THIS AREA

ROUTE 3 SIGNALS BY  
 GUARDING BY AVCC  
 AND AVSS

		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>Title</b> <b>H8S/2161B</b>			
Size A3	Document Number	<b>S Note-3</b>	
Date: Saturday, February 26, 2005	Sheet 41	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		
	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

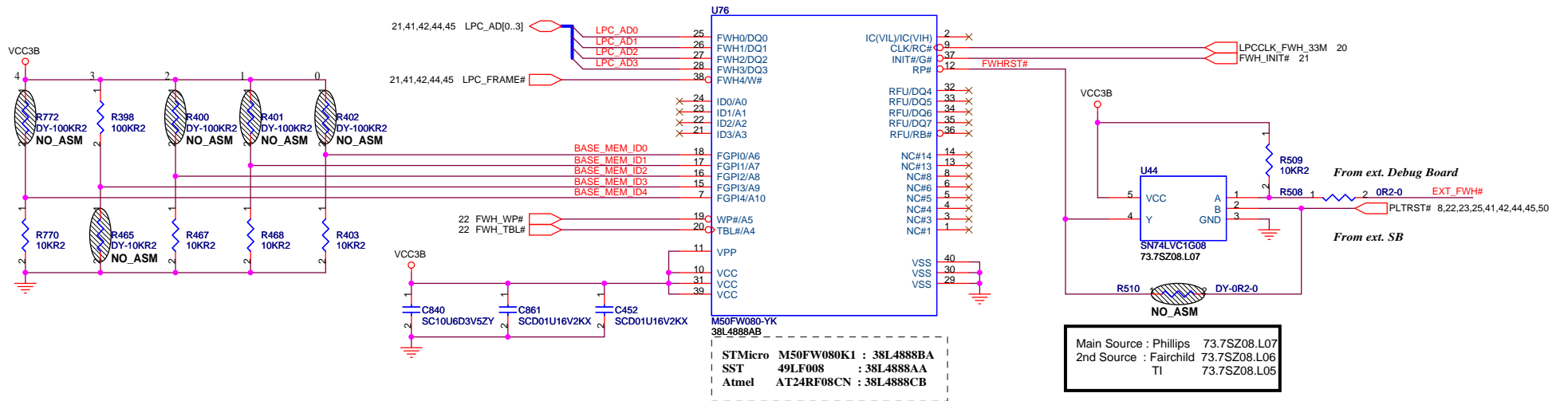
MEM\_BASE\_ID[4..0]

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

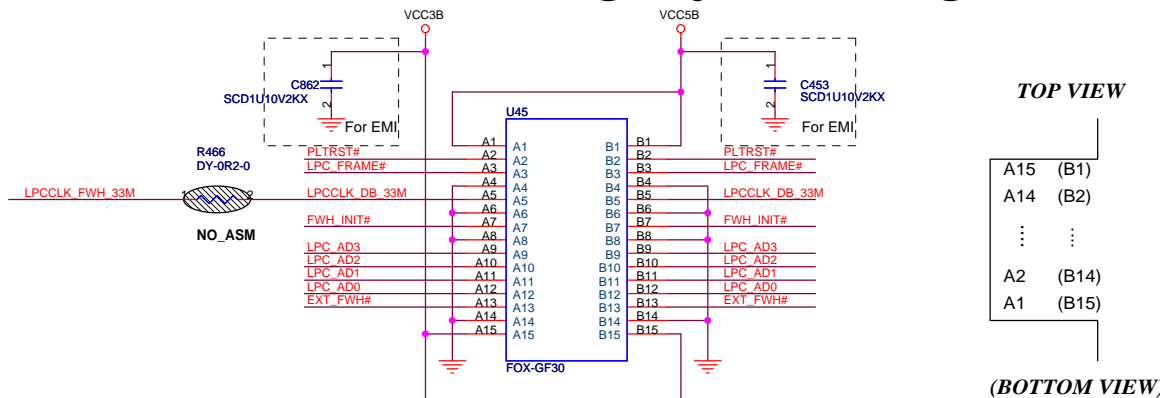
Bit 2 : Memory Bank ID  
 0 = 1 Rank ( 4pcs )  
 1 = 2 Rank ( 8pcs )

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



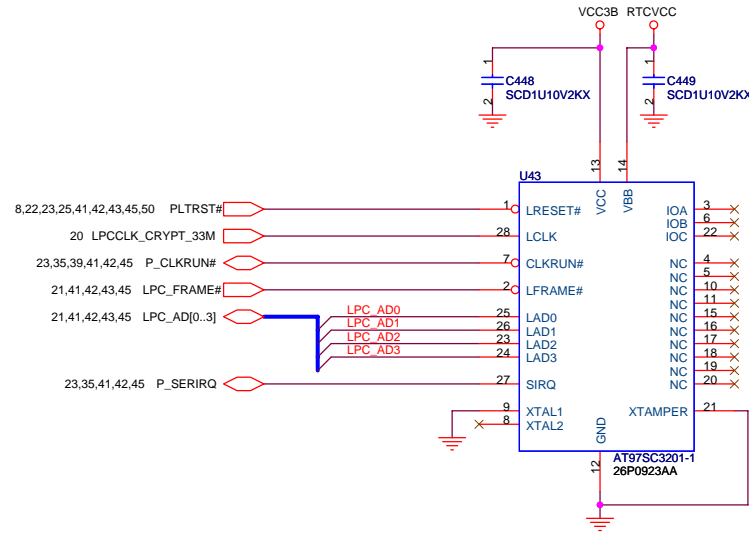
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **FWH**

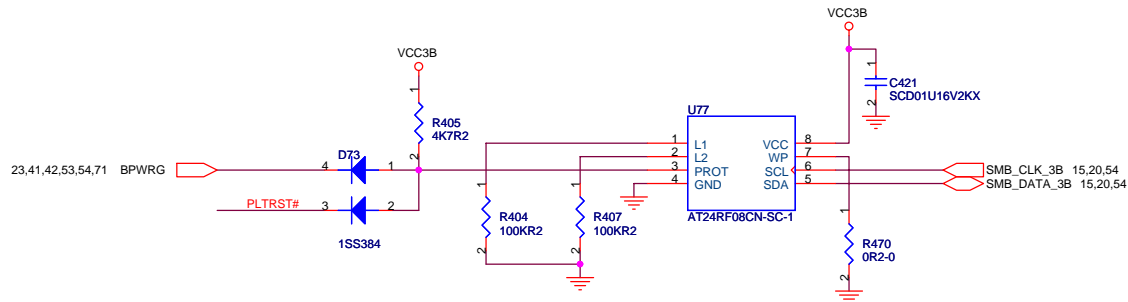
Size: A3 Document Number: **S Note-3** Rev: **-1**

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

# TCPA

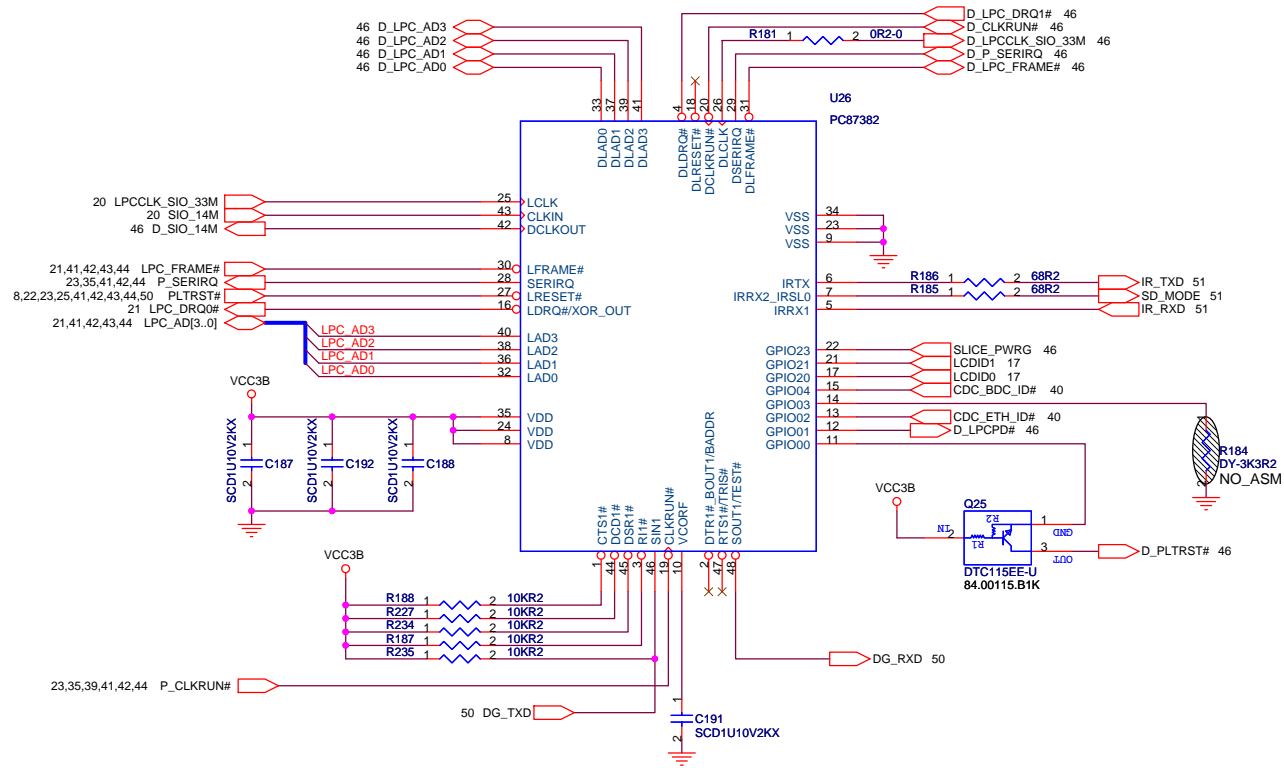


# EEPROM



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

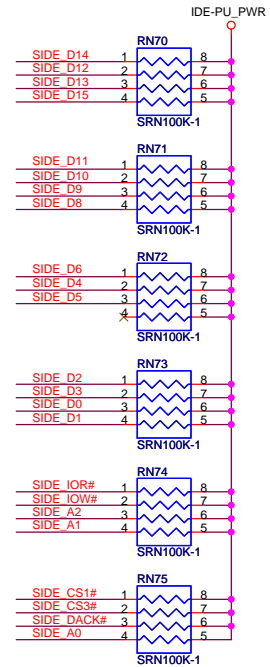
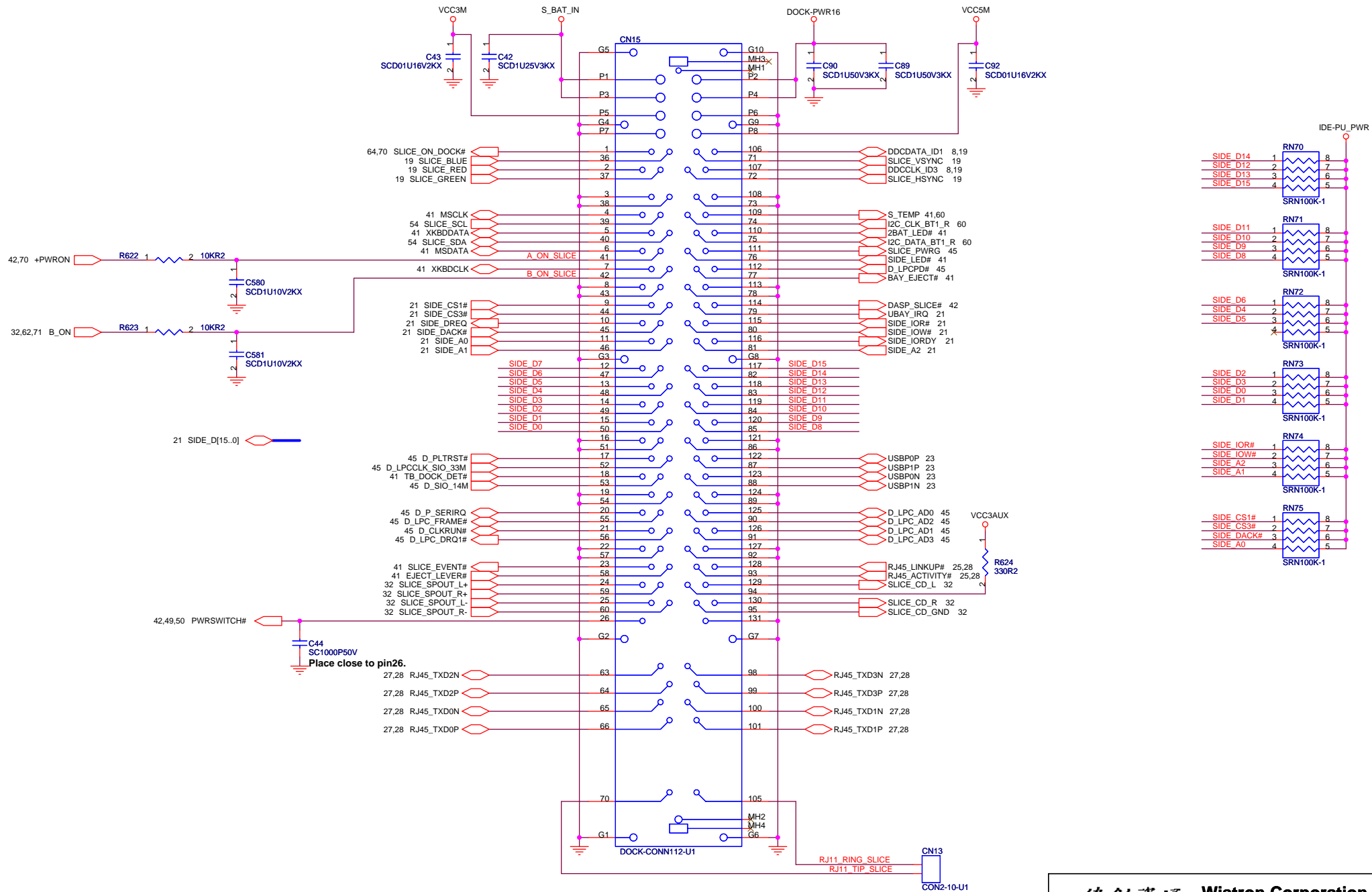
Title		<b>EEPROM / TPM</b>	
Size	Document Number	Rev	
A3	<b>S Note-3</b>	<b>-1</b>	
Date:	Saturday, February 26, 2005	Sheet	44 of 75



CRYPT\_DETECTION BIT  
None TCPA  
model should  
be assemble  
this pull-down  
resistor.

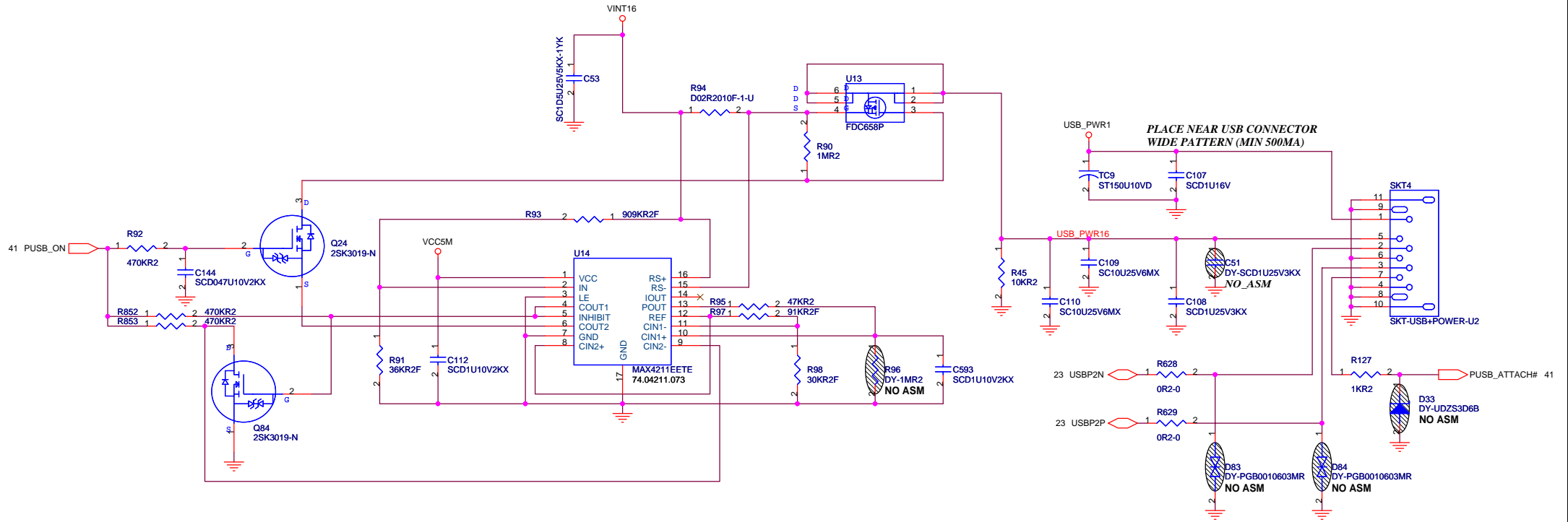
緯創資通 Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

Title		
<b>SIO NS87382</b>		
Size A3	Document Number <b>S Note-3</b>	Rev -1
Date: Saturday, February 26, 2005	Sheet 45	of 75

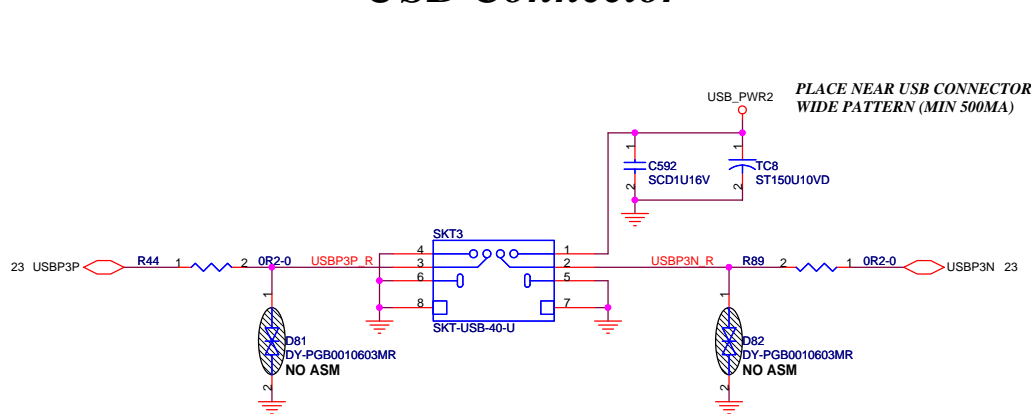


		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsein 221, Taiwan, R.O.C.	
<b>SLICE CONNECTOR</b>			
<b>S Note-3</b>			
Size A3	Document Number	Sheet 46	Rev -1
Date: Saturday, February 26, 2005			

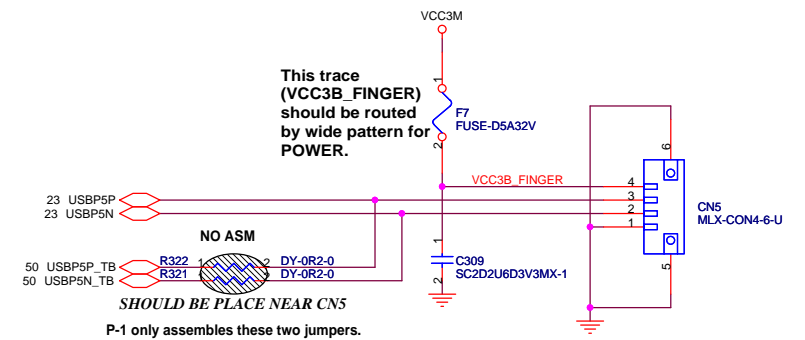
# Powered USB Connector



# USB Connector

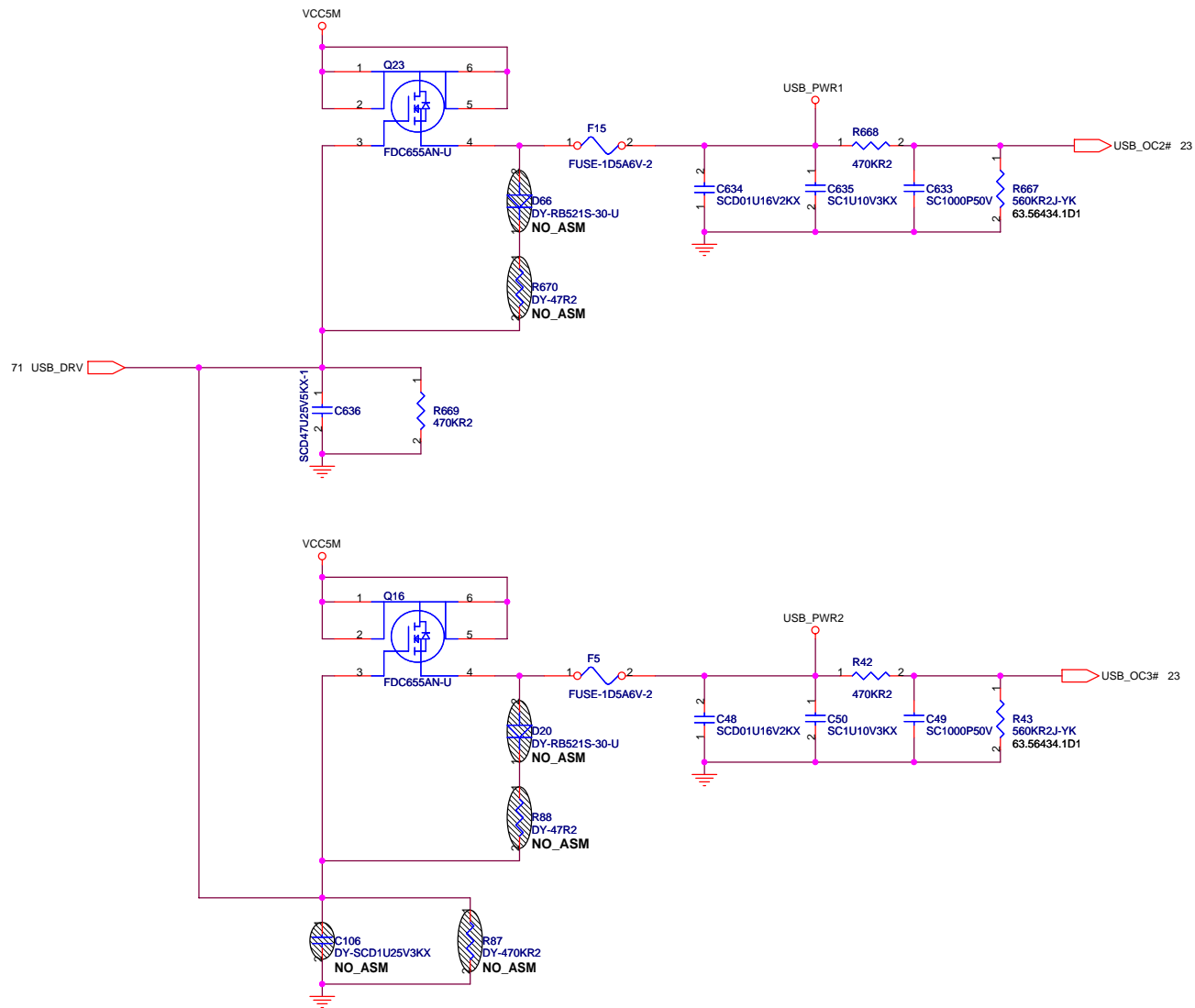


# Fingerprint



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

Title			
<b>USB CONNECTOR</b>			
Size	Document Number	Rev	
A3		-1	
Date: Saturday, February 26, 2005		Sheet 47	of 75

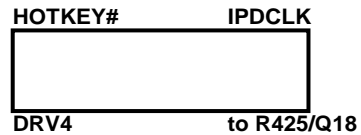
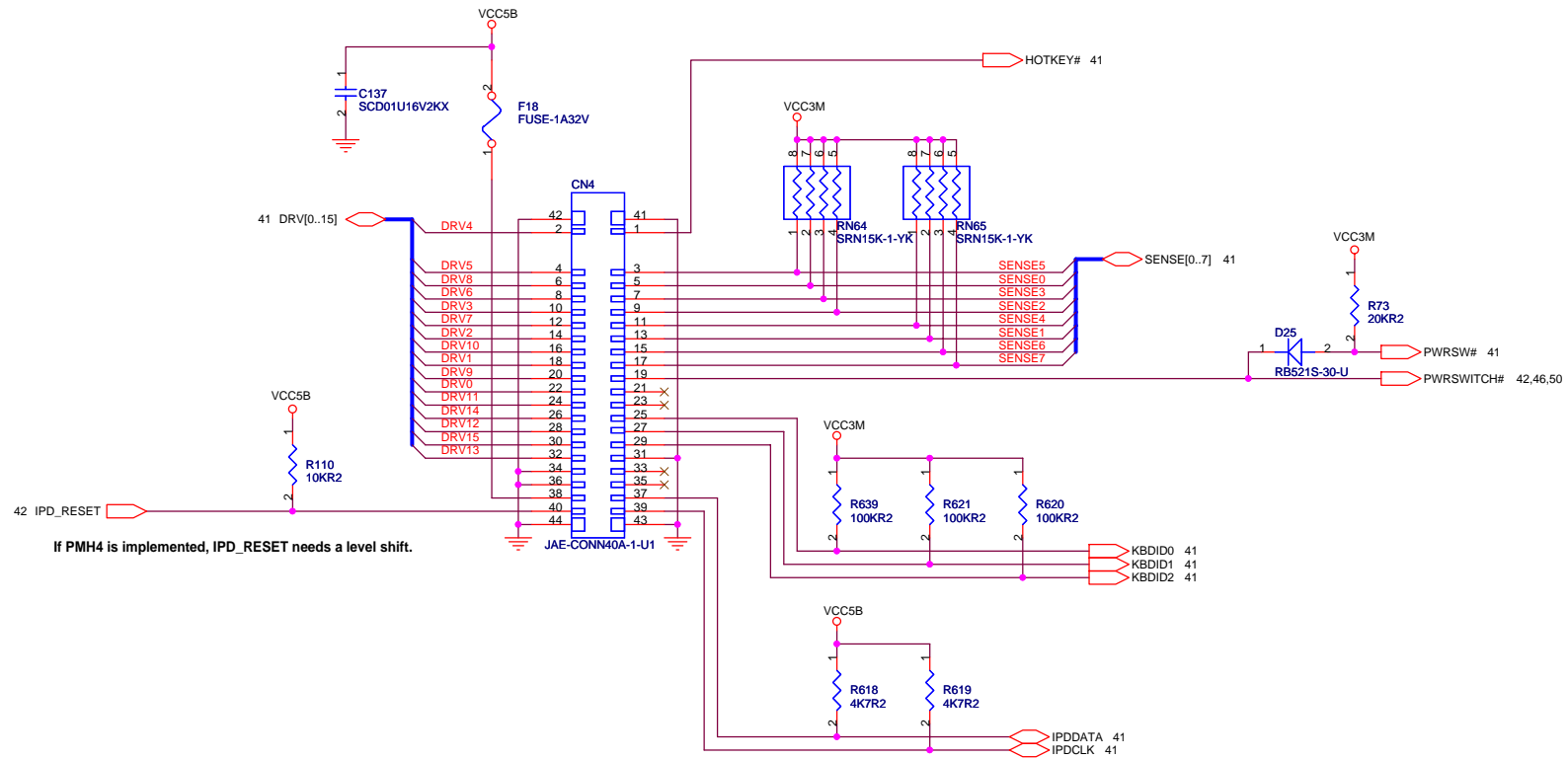


緯創資通 Wistron Corporation  
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

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

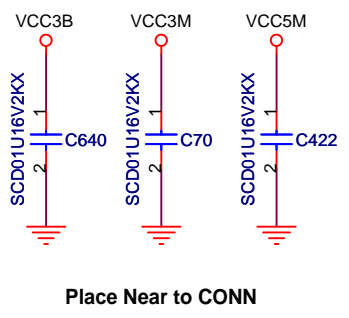
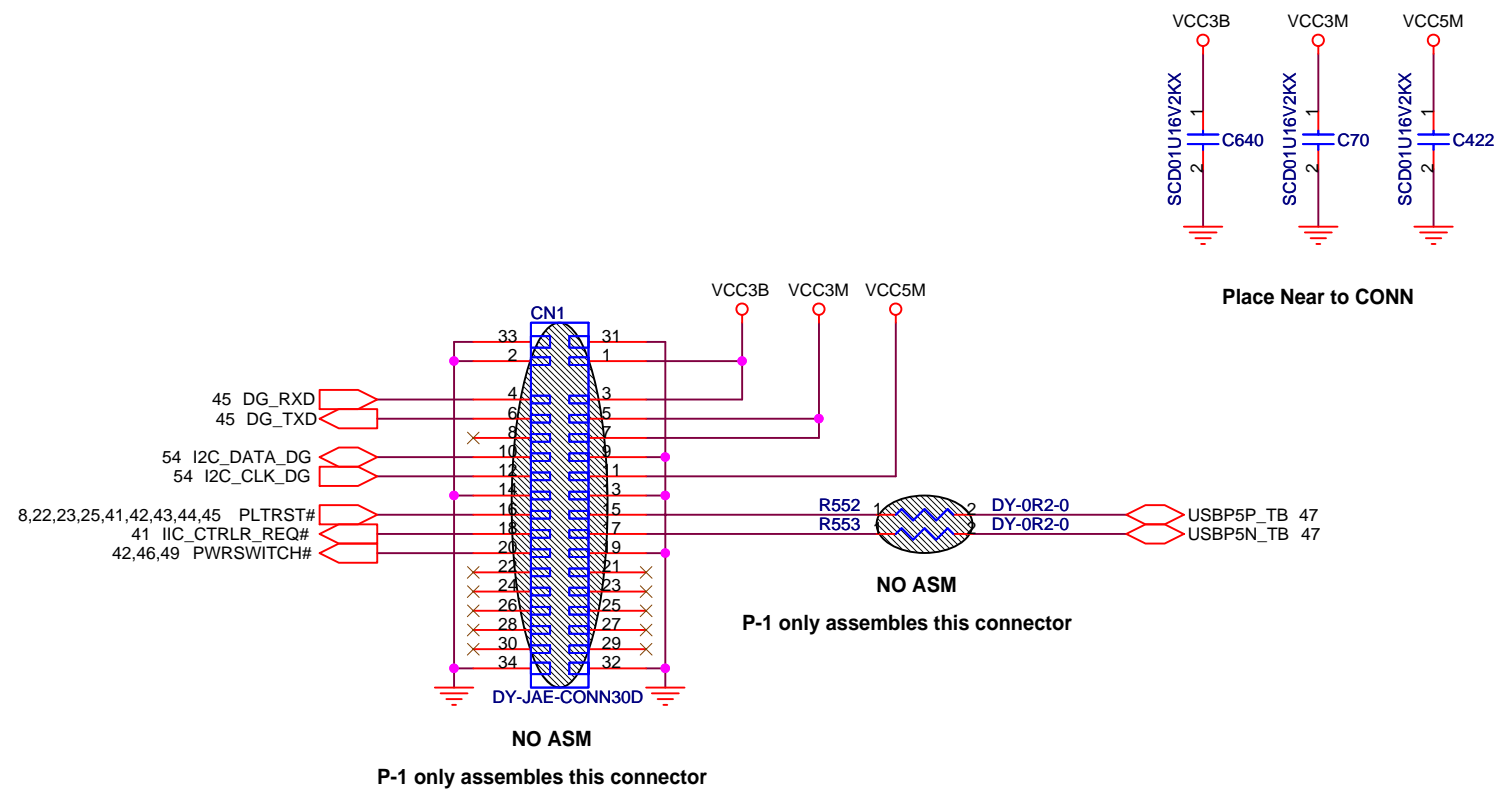


# Keyboard Connector

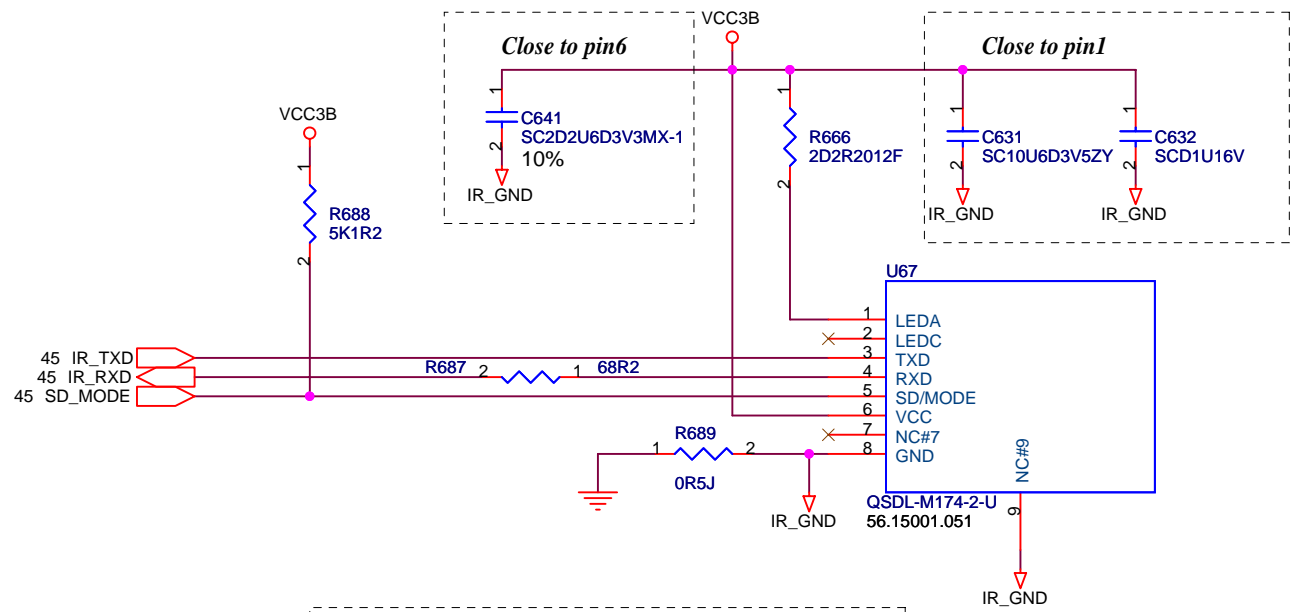


Keyboard Connector Top View

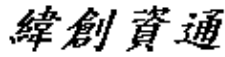
<b>緯創資通</b>		<b>Wistron Corporation</b>	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>KEYBOARD CONN</b>			
Size A3	Document Number	<b>S Note-3</b>	
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	Rev	-1	

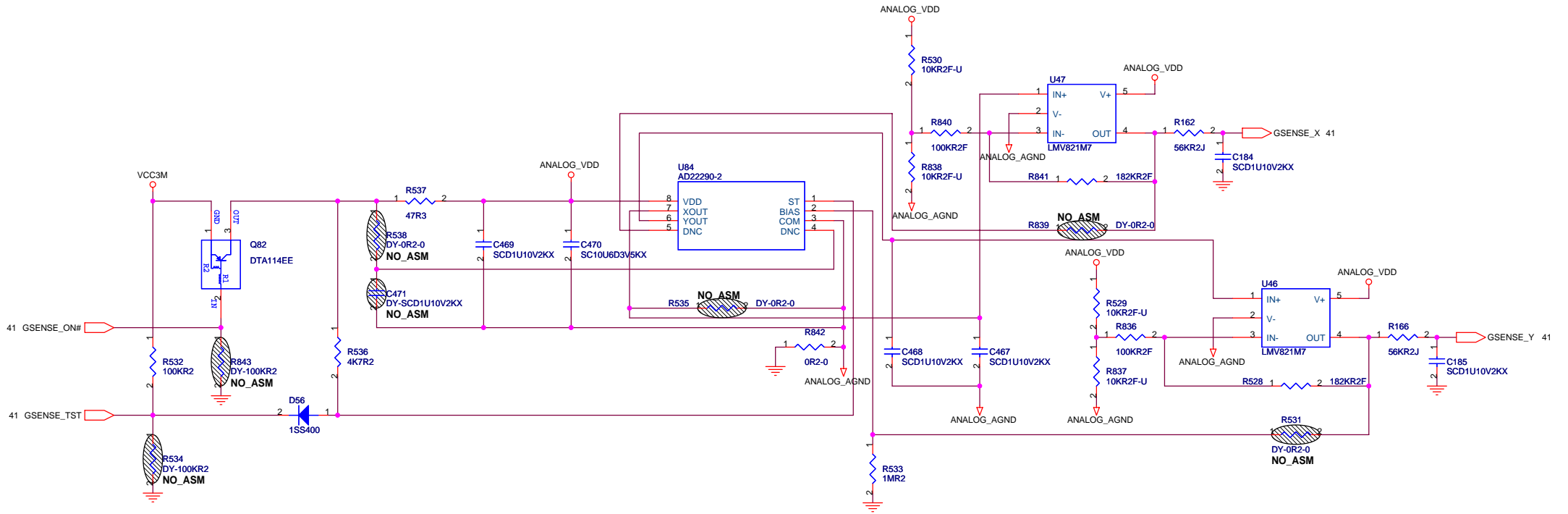


		<b>Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
<b>DG CONNECTOR</b>			
Size A4	Document Number <b>S Note-3</b>	Rev <b>-1</b>	
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SHOULD QUALIFY BELOW PARTS  
 PRIMATY ALIGENT QSDL-M174-1 : 74.00174.001  
 SECOND VISHAY TFDU6102 : 56.15001.051

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<b>IR MODULE</b>	
Size A4	Document Number <b>S Note-3</b>
Date: Saturday, February 26, 2005	Rev <b>-1</b>
Sheet 51 of 75	



**Accelero Meter 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

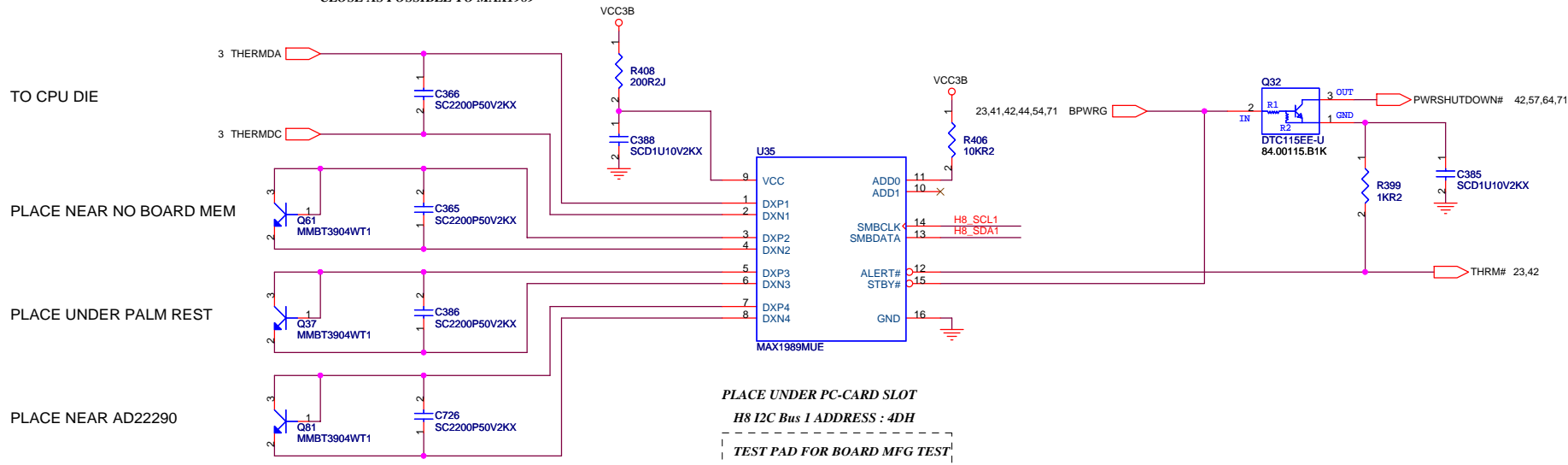
Page	Usage Code	AD22290	MEMSIC	NO ACC.
52	R532(100K 5%)	ASM	NO_ASM	NO_ASM
52	R837(10K 1%)	ASM	NO_ASM	NO_ASM
52	R528(182K 1%)	ASM	NO_ASM	NO_ASM
52	R533(1M 5%)	ASM	NO_ASM	NO_ASM
52	C184 (0.1u 10%10V)	ASM	ASM	NO_ASM
52	C469 (0.1u 10%10V)	ASM	ASM	NO_ASM
52	C468 (0.1u 10%10V)	ASM	NO_ASM	NO_ASM
52	C467 (0.1u 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.

**G-SENSOR**

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

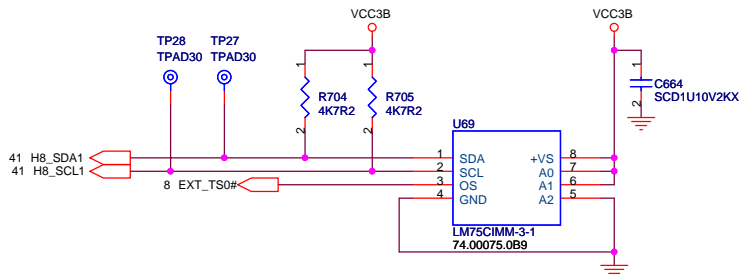
THESE CAPS MUST BE PLACED AS  
CLOSE AS POSSIBLE TO MAX1989



## Thermal Sensor LM75 for DDR module

(For DDR throttling implementation)

PLACE UNDER DIMM

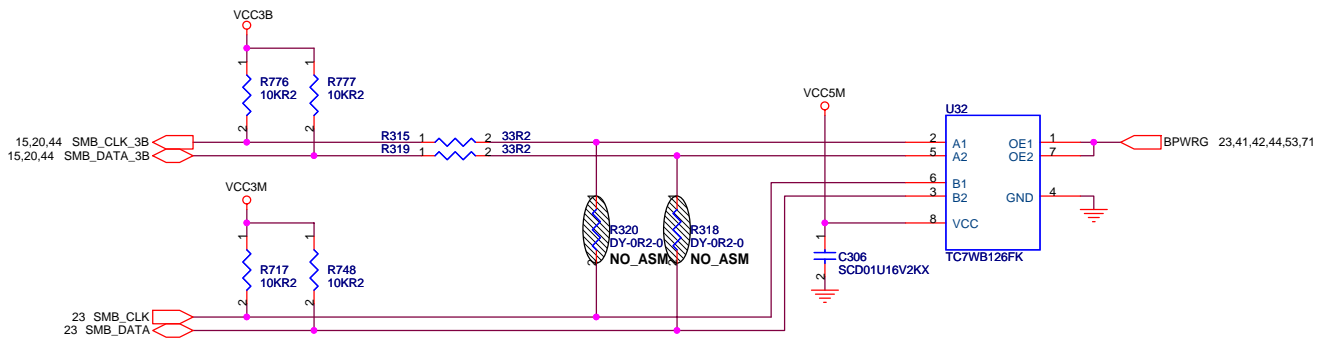
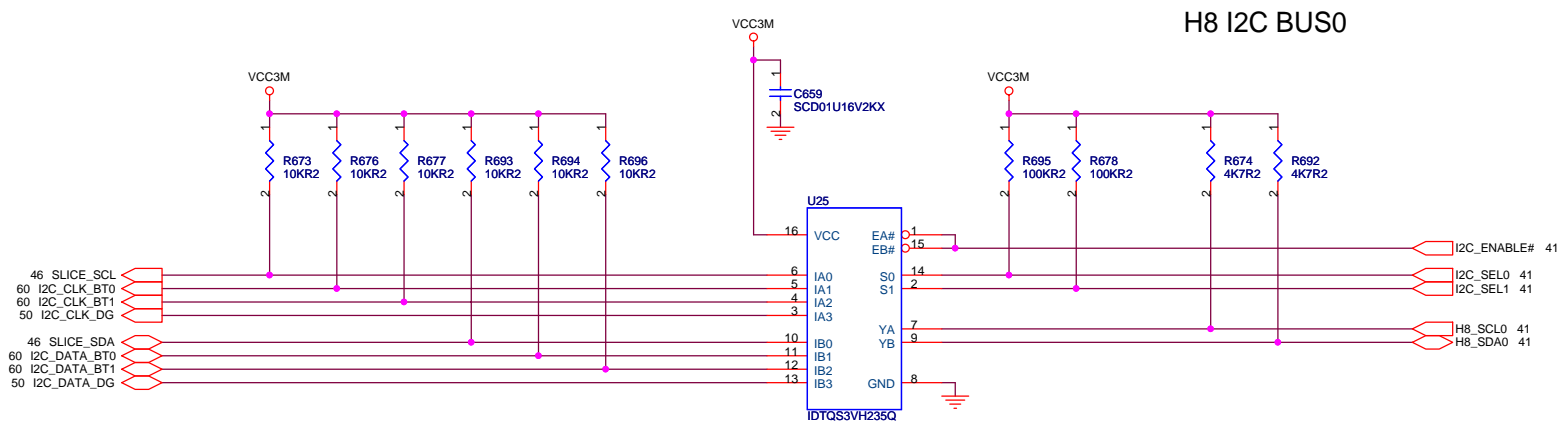


H8 I2C Bus 1 ADDRESS : 4BH

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

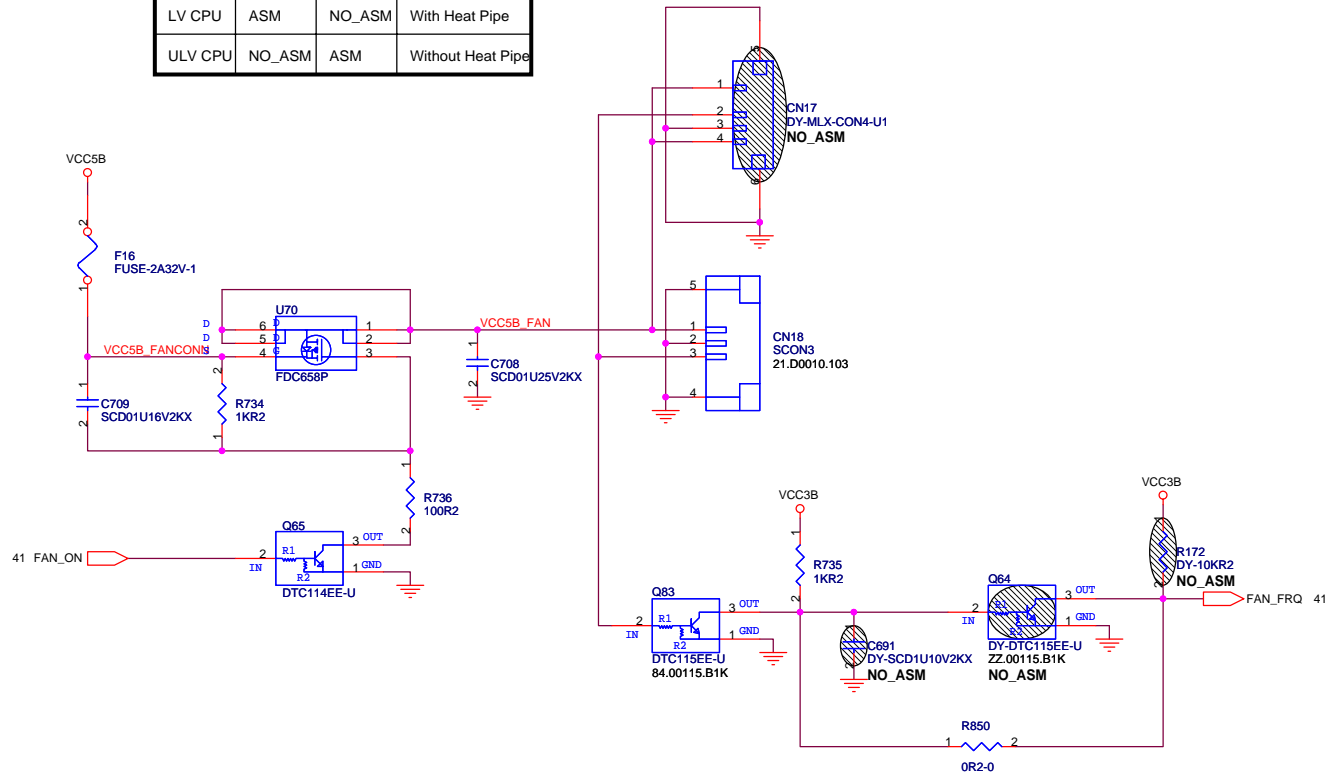
緯創資通 Wistron Corporation  
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Taipei Hsien 221, Taiwan, R.O.C.

Title		
<b>THERMAL SENSOR</b>		
Size	Document Number	Rev
A3		-1
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Sheet	53	of 75

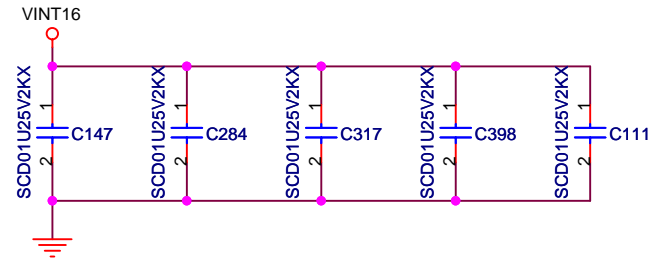
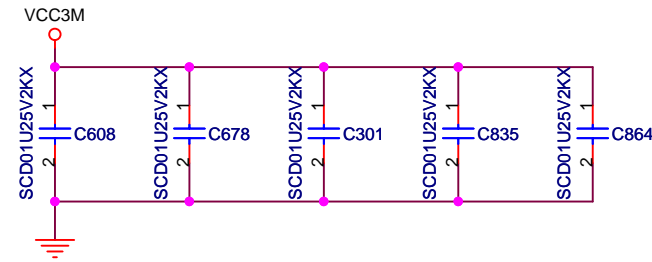
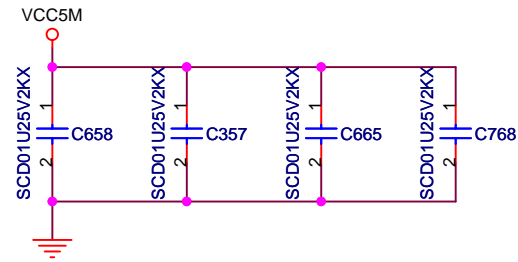
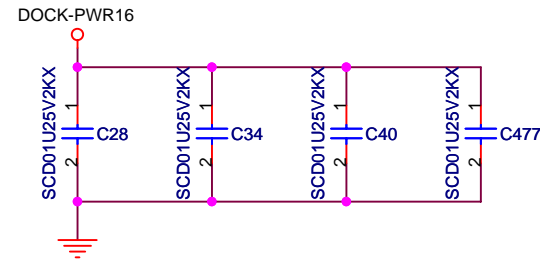
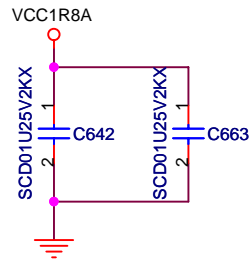


## Fan Power Control

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



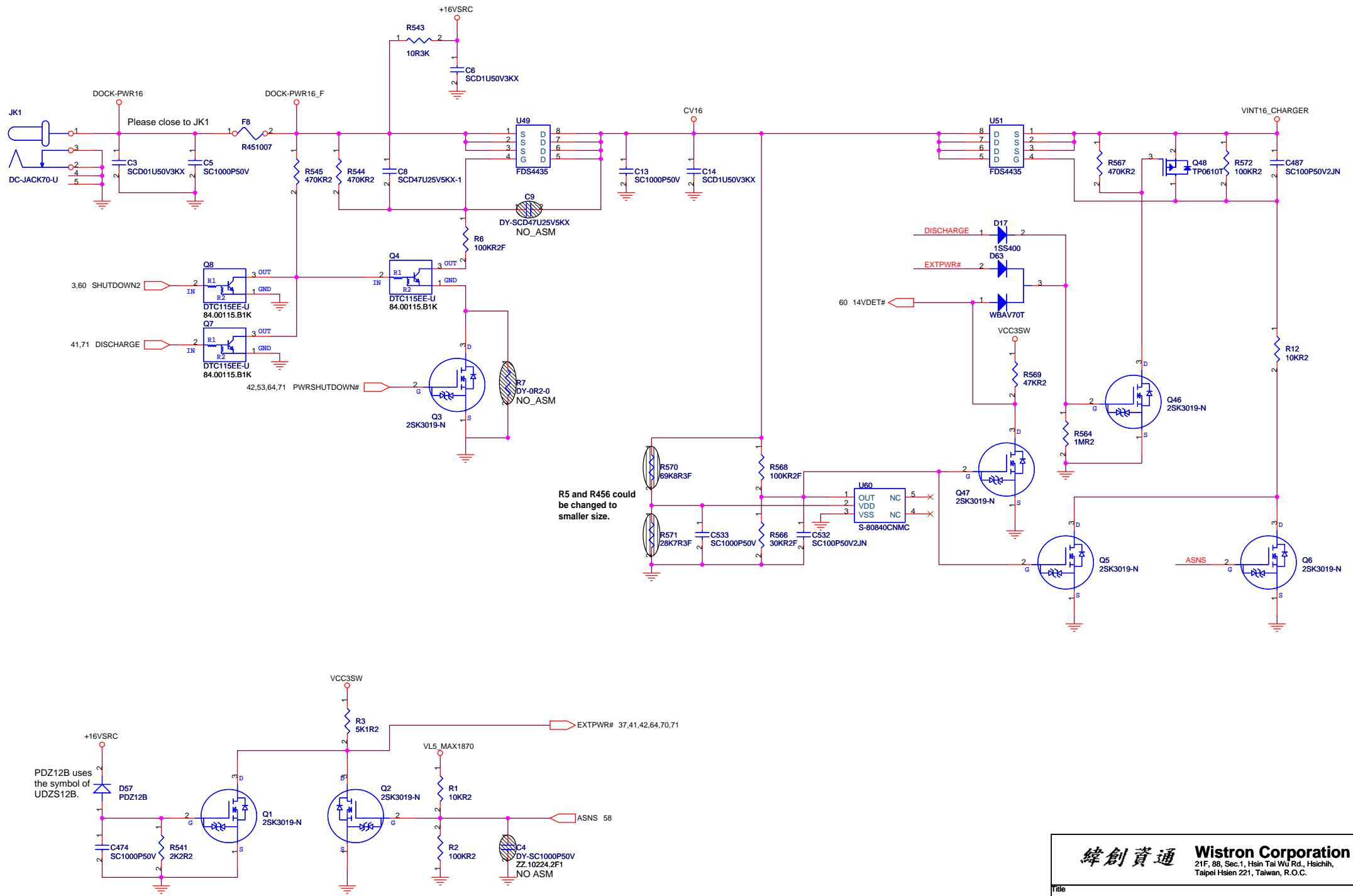
緯創資通 Wistron Corporation  
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Taipei Hsien 221, Taiwan, R.O.C.



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

Title		
<b>EMC DECOUPLING</b>		
Size A4	Document Number <b>S Note-3</b>	Rev <b>-1</b>
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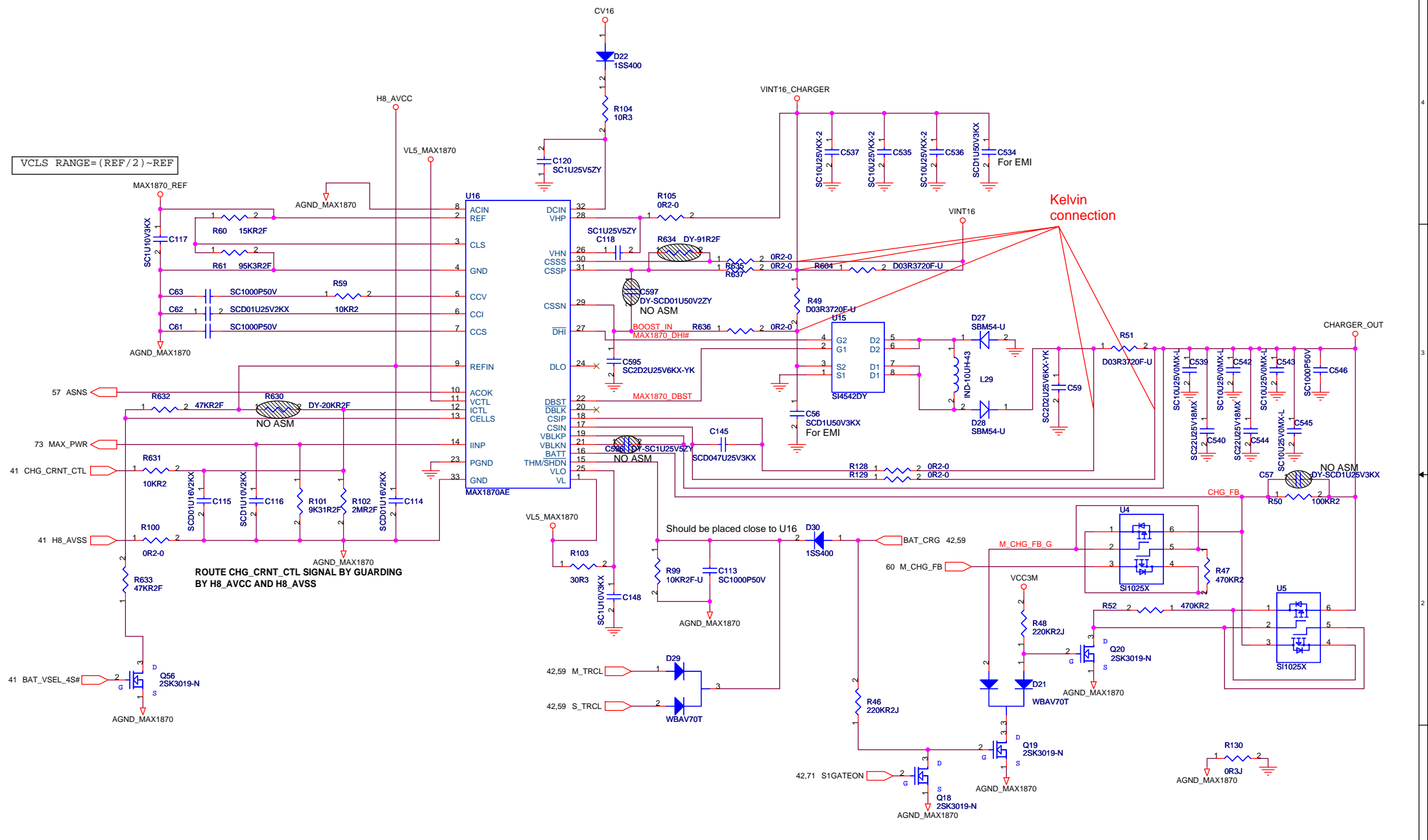


R5 and R456 could be changed to smaller size.

PDZ12B uses the symbol of UDZS12B.

<b>緯創資通 Wistron Corporation</b> 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
<b>DC-IN</b>		
File	Document Number	Rev
Size A3	<b>S Note-3</b>	-1
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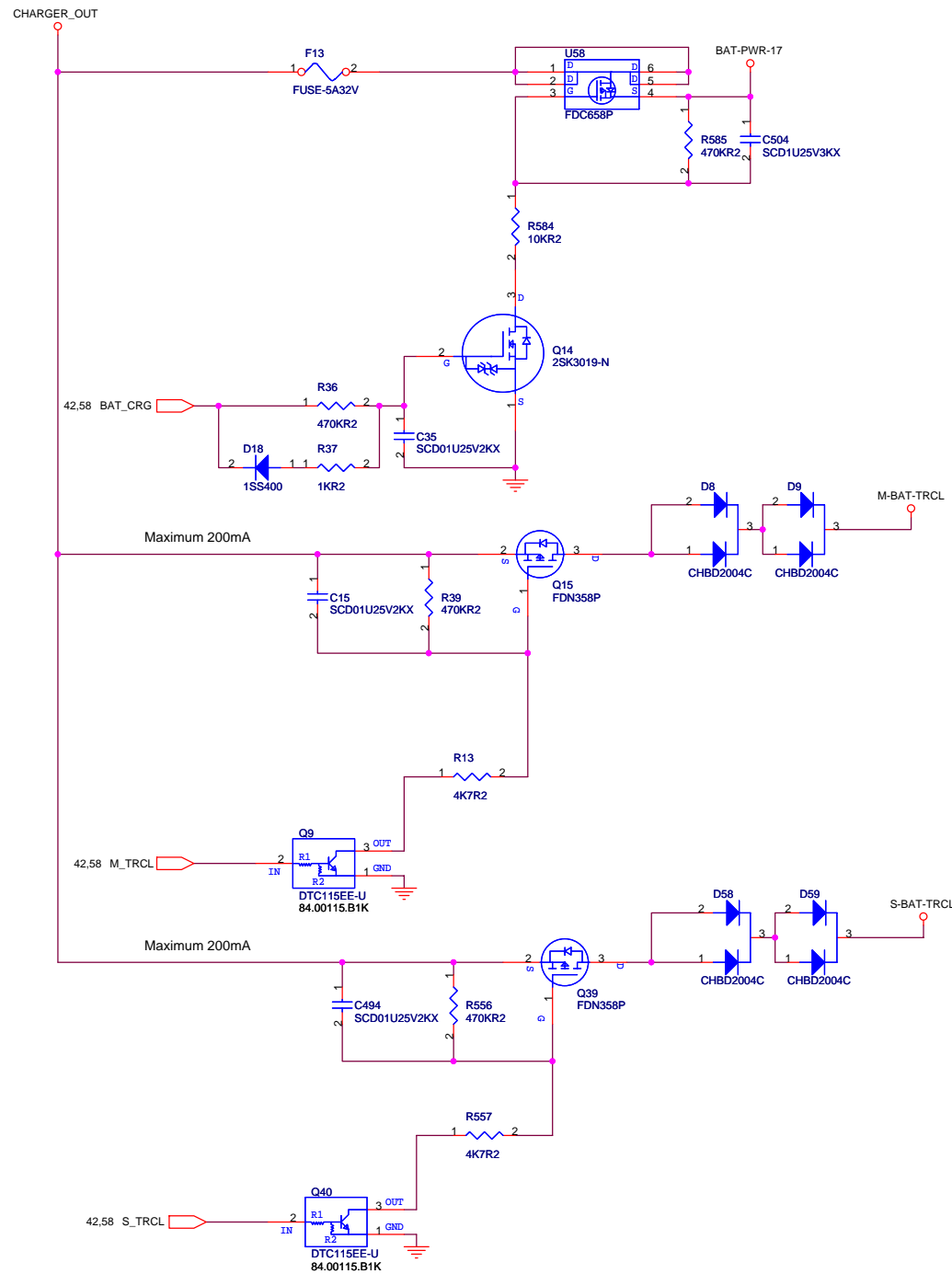
VCLS RANGE=(REF/2)~REF

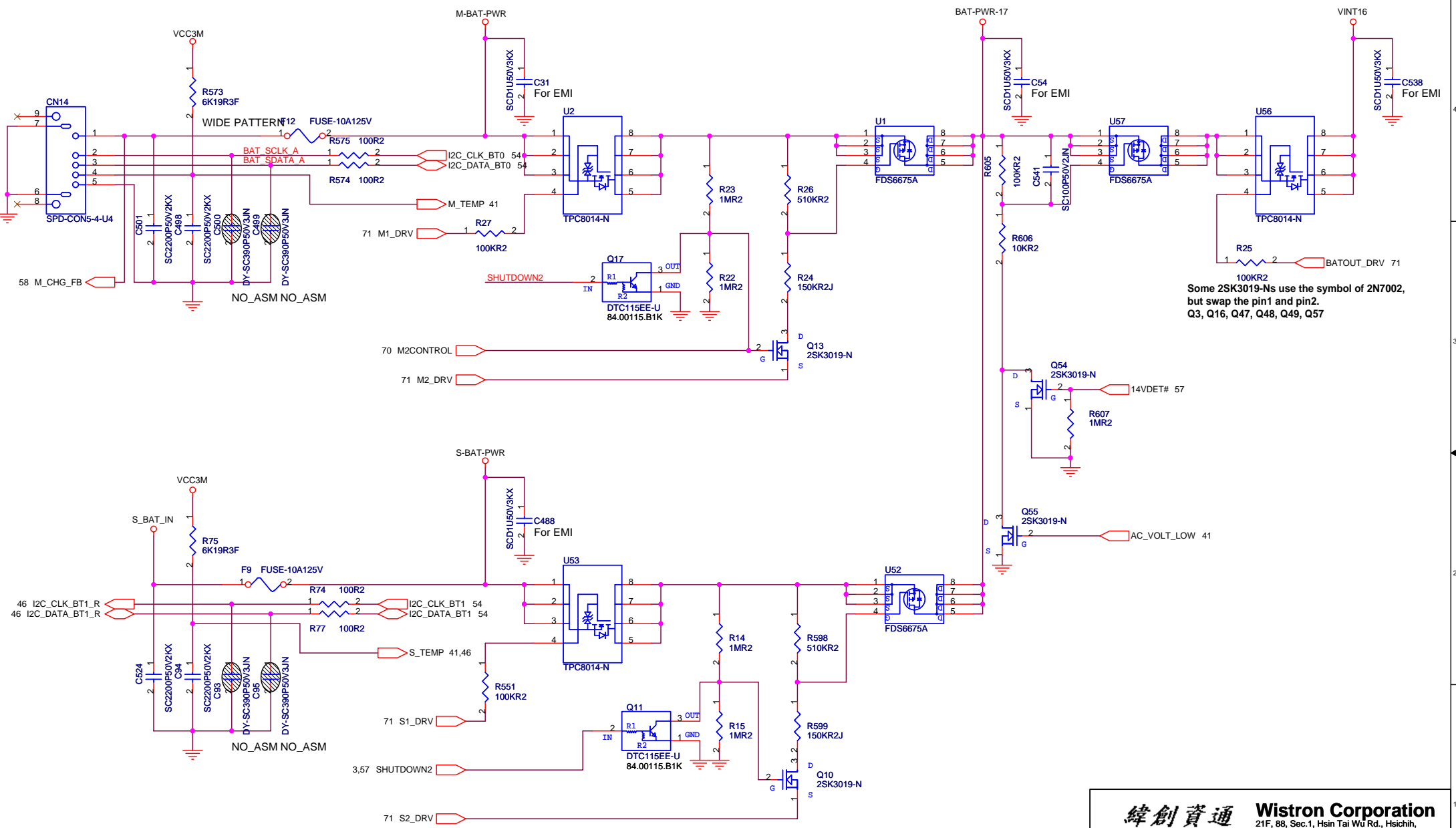


Some 2SK3019-Ns use the symbol of 2N7002, but swap the pin1 and pin2.  
Q55, Q56, Q83, Q84

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Title		
<b>CHARGER MAX1870</b>		
Size	Document Number	Rev
A3		-1
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<b>S Note-3</b>		

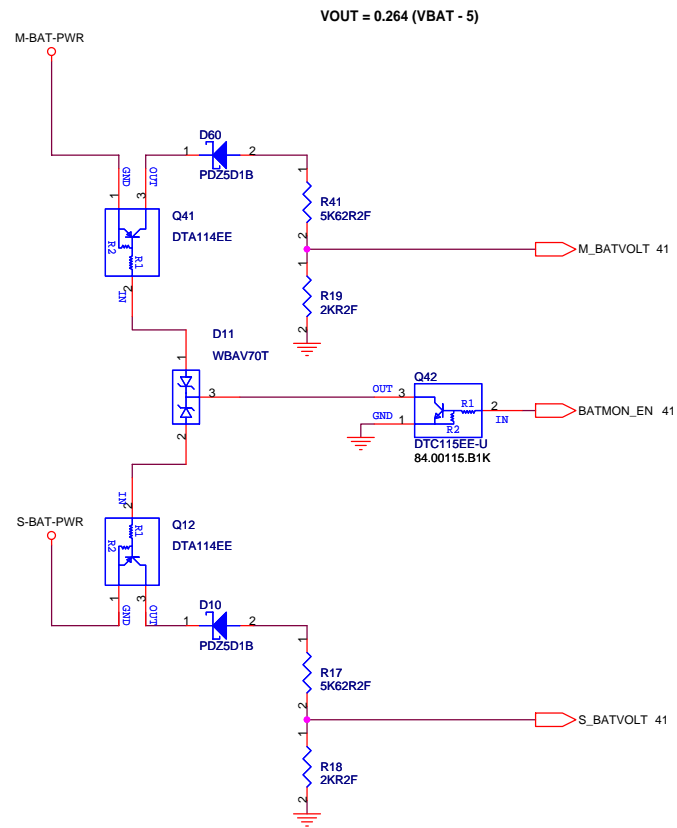


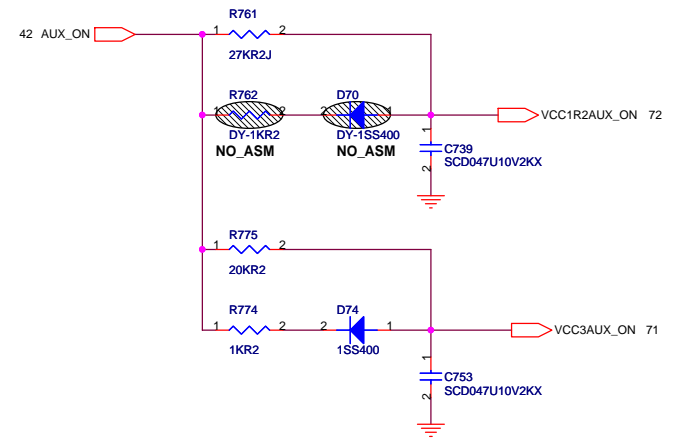
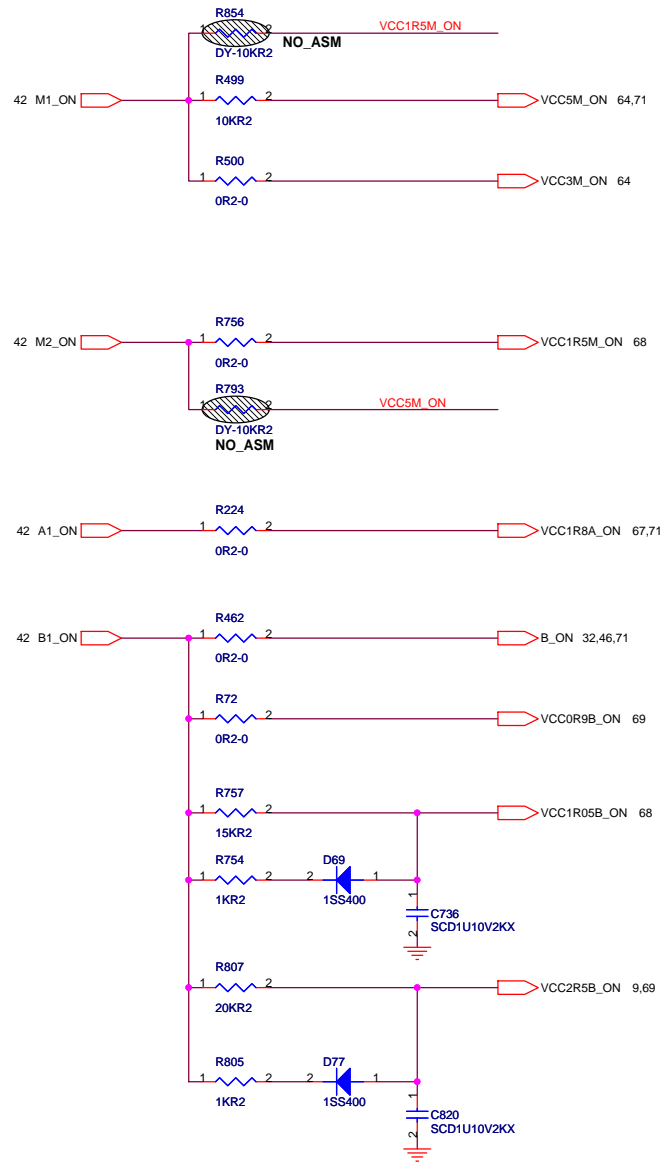


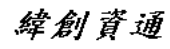
Some 2SK3019-Ns use the symbol of 2N7002, but swap the pin1 and pin2.  
 Q3, Q16, Q47, Q48, Q49, Q57

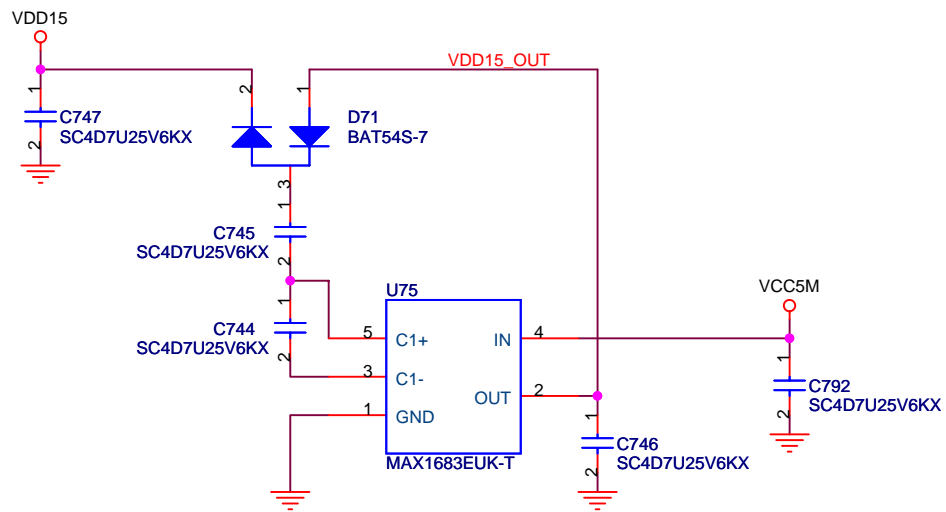
**緯創資通 Wistron Corporation**  
 21F, 88, Sec.1, Hsin Tai WJ Rd., Hsichih,  
 Taipei Hsien 221, Taiwan, R.O.C.

Title		
<b>BATTERY INPUT</b>		
Size B	Document Number	Rev
	<b>S Note-3</b>	<b>-1</b>
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<b>POWER SEQUENCE</b>		
Title		
Size	Document Number	Rev
A3	<b>S Note-3</b>	-1
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緯創資通

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

Title

**DC-DC VDD15**

Size  
A4

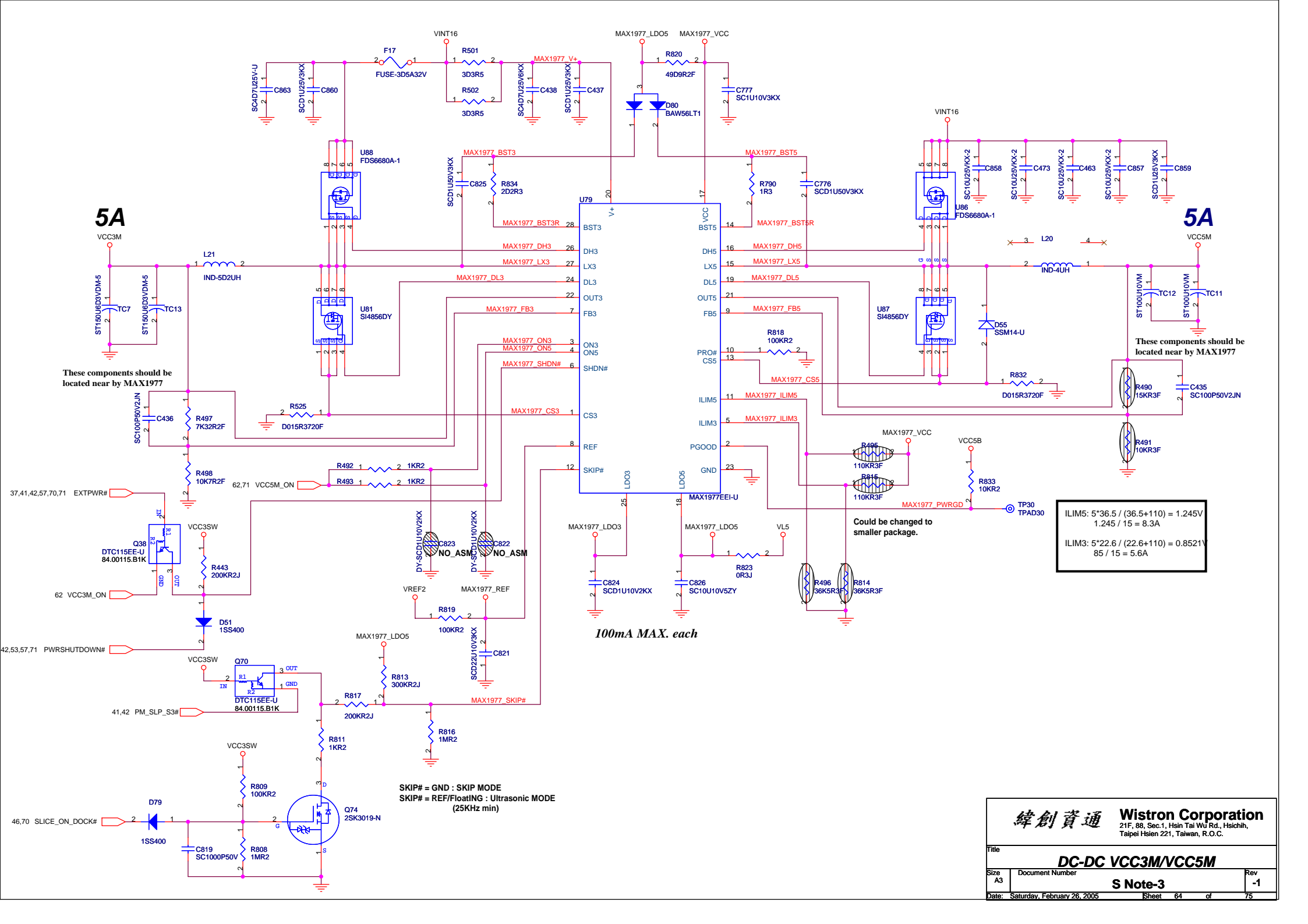
Document Number

**S Note-3**

Rev  
-1

Date: Saturday, February 26, 2005

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**5A**

VCC3M

These components should be located near by MAX1977

**5A**

VCC5M

These components should be located near by MAX1977

ILIM5:  $5 \times 36.5 / (36.5 + 110) = 1.245V$   
 $1.245 / 15 = 8.3A$

ILIM3:  $5 \times 22.6 / (22.6 + 110) = 0.8521V$   
 $0.8521 / 15 = 5.6A$

100mA MAX. each

Could be changed to smaller package.

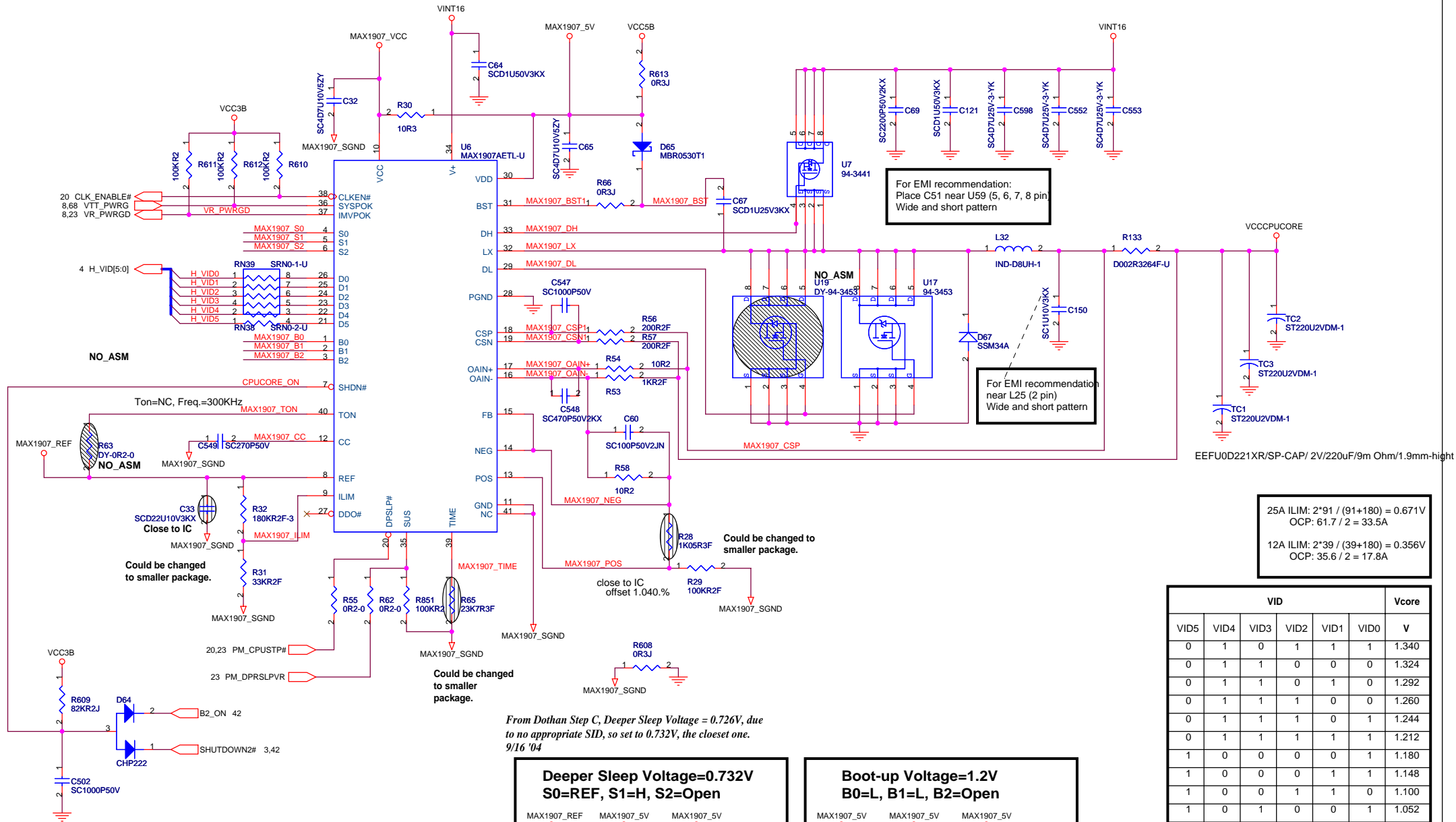
SKIP# = GND : SKIP MODE  
 SKIP# = REF/FloatiNG : Ultrasonic MODE (25KHz min)

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Title: **DC-DC VCC3M/VCC5M**

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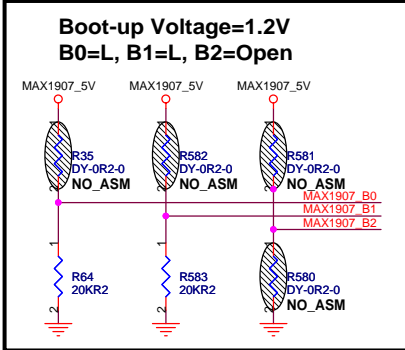
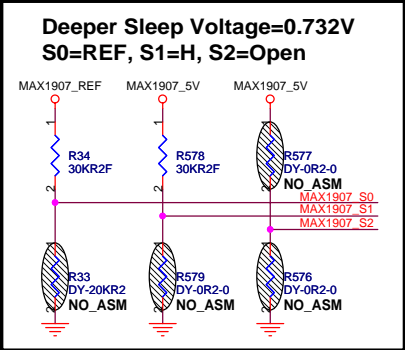


For EMI recommendation:  
Place C51 near U59 (5, 6, 7, 8 pin)  
Wide and short pattern

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

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

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	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

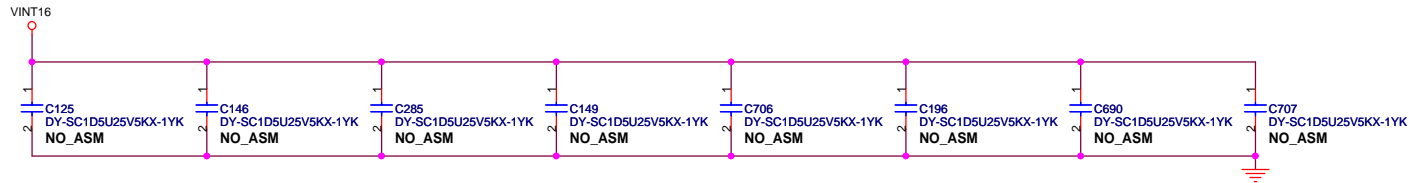
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**DC-DC VCCCPUCORE**

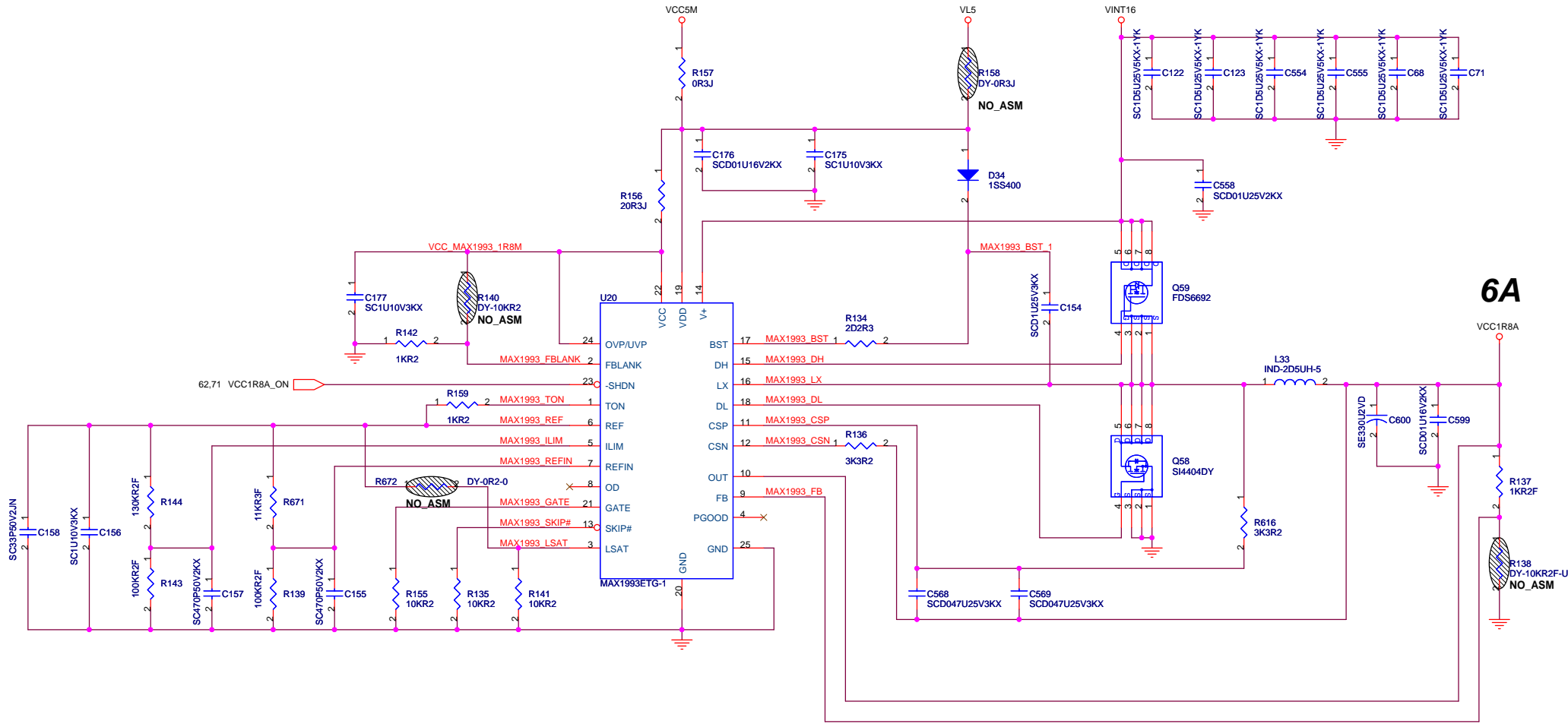
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Size A3 Document Number: S Note-3  
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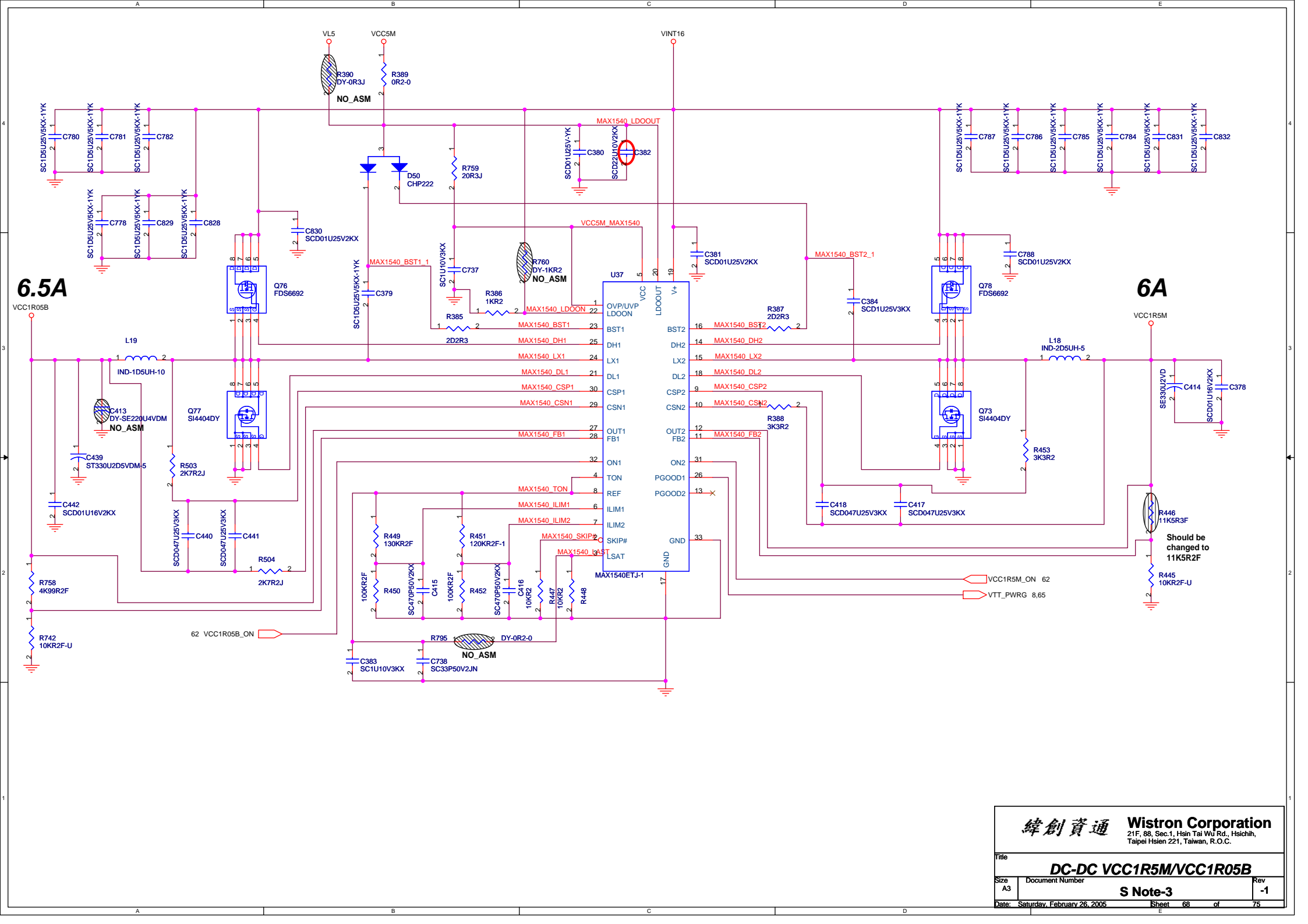
**ALL CAPS ON THIS PAGE ARE NO-ASM FOR VCCCPUCORE.**

**X8 PCS**



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Title			
<b>DC-DC VCORE INPUT CAP</b>			
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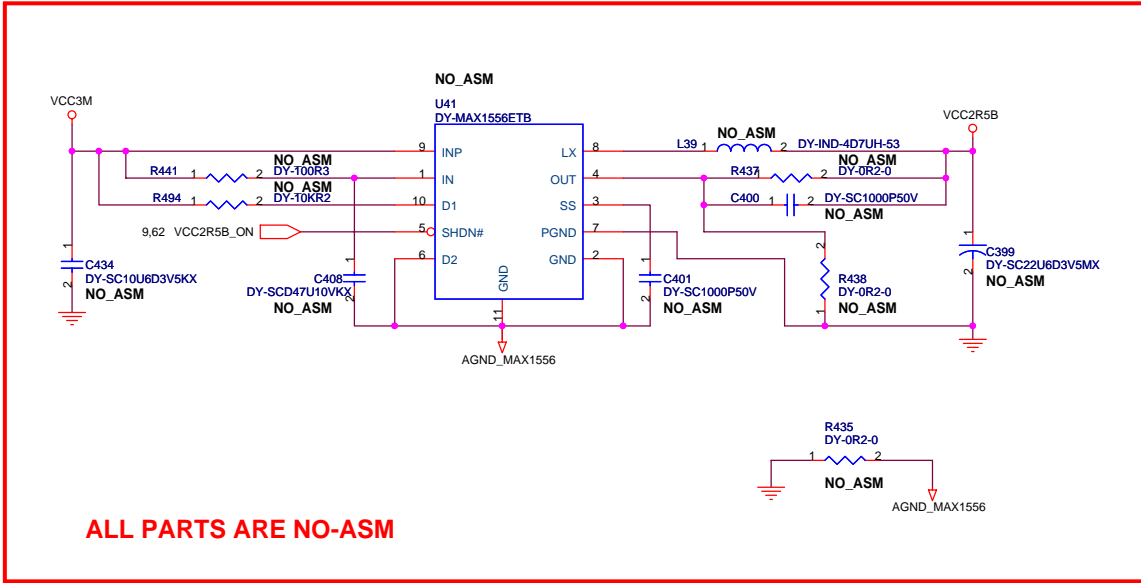


6.5A

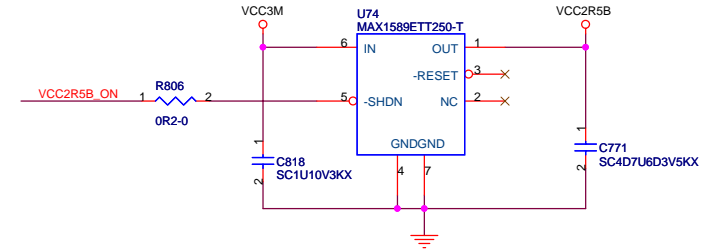
6A

Should be changed to 11K5R2F

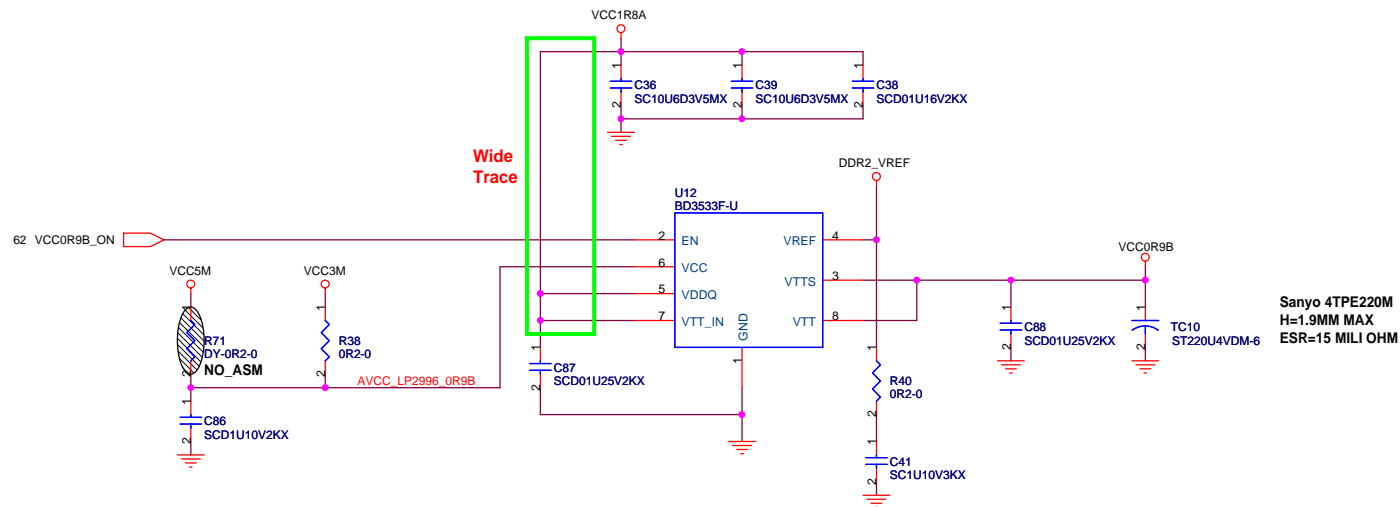
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<b>DC-DC VCC1R5M/VCC1R05B</b>	
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## VCC2R5B

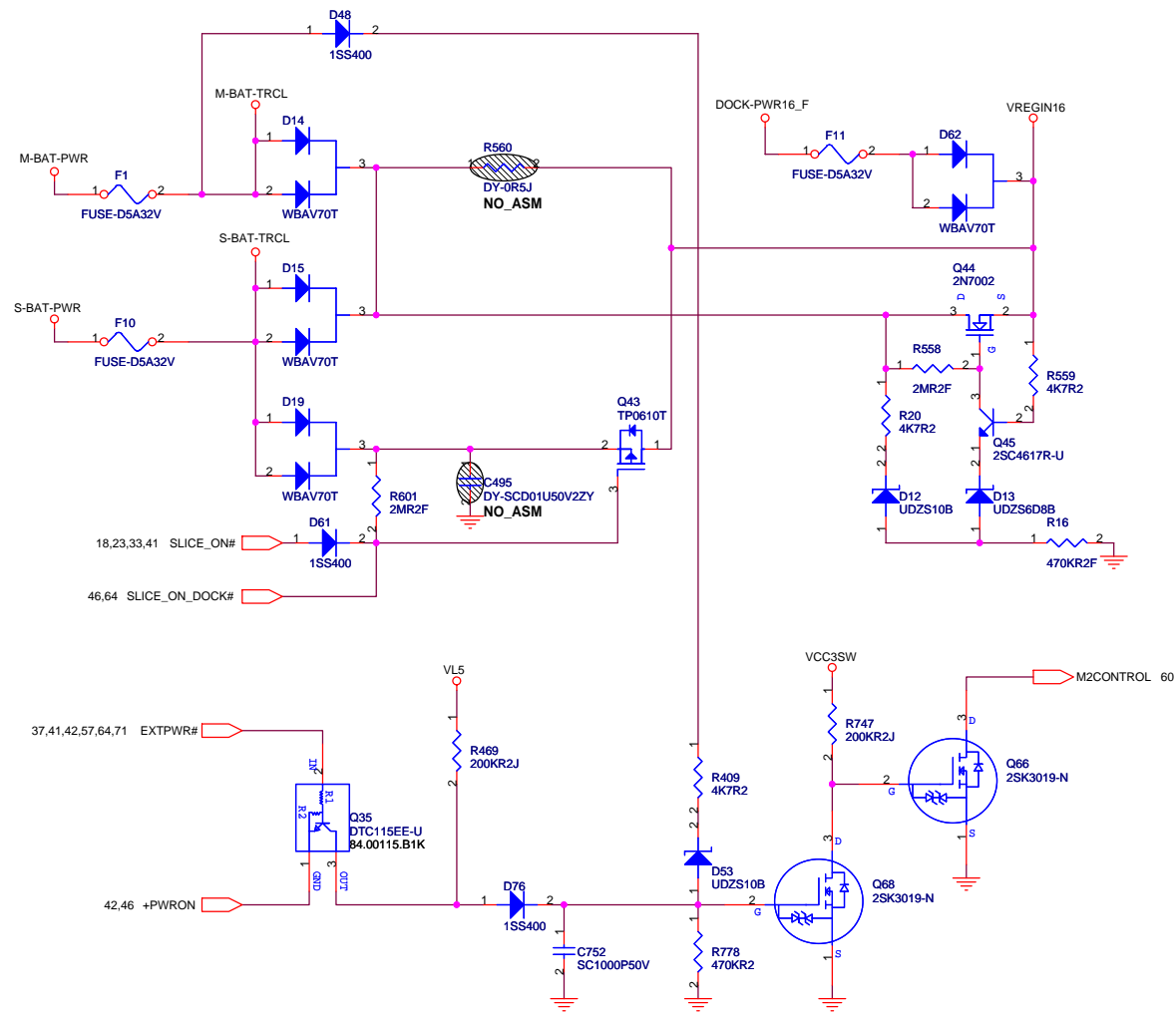


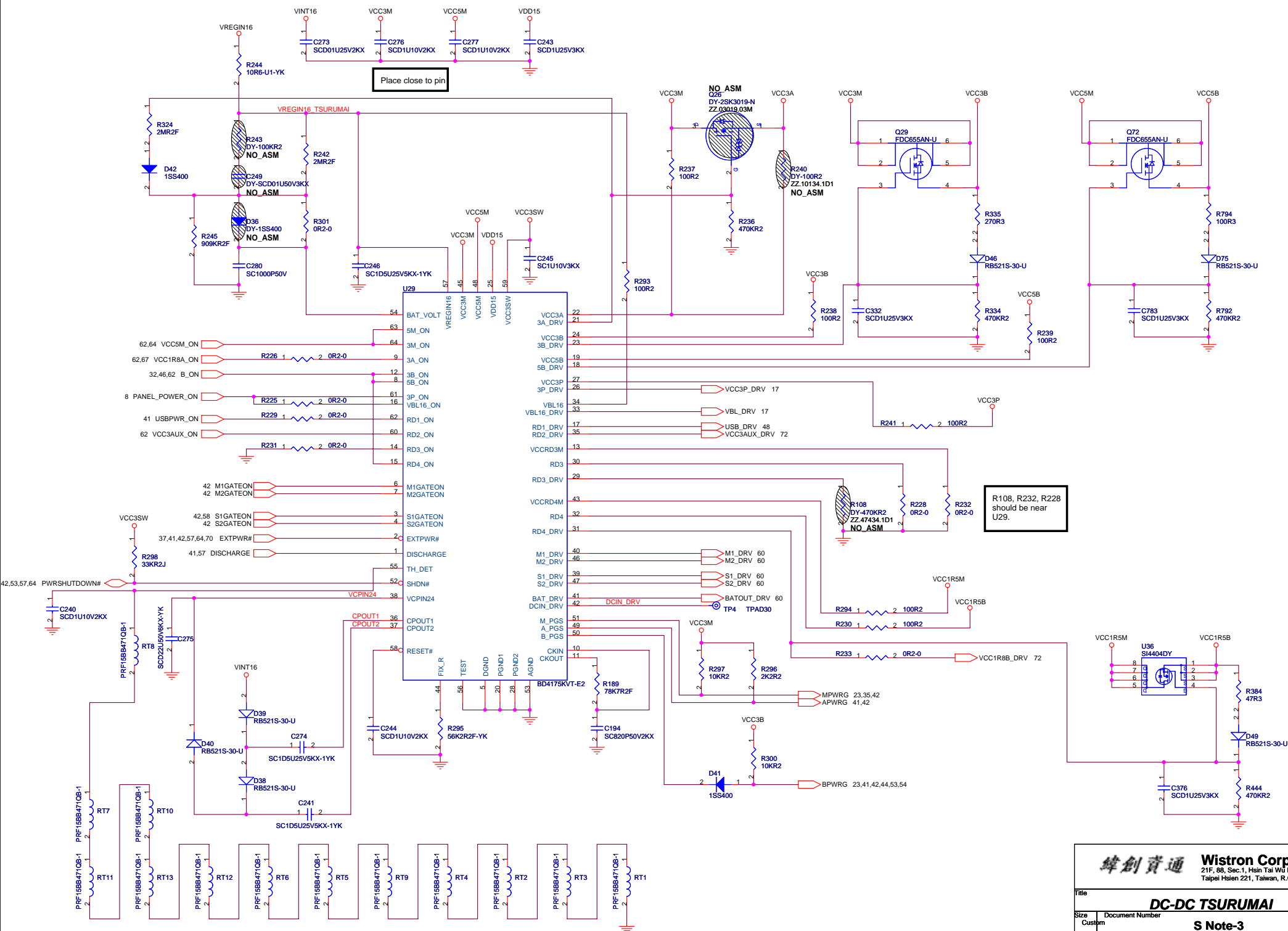
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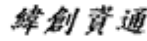


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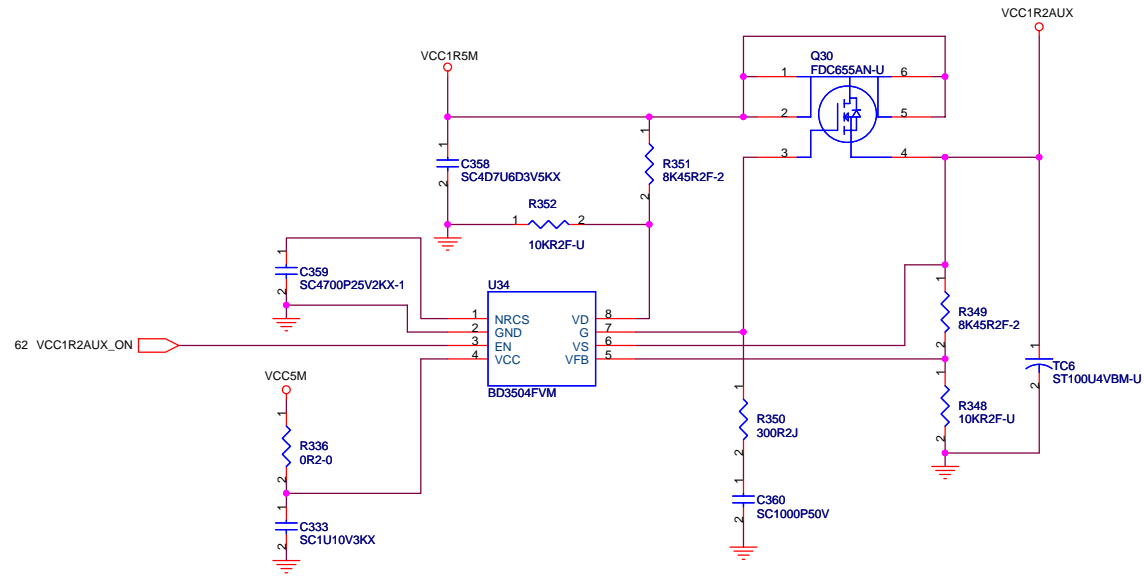




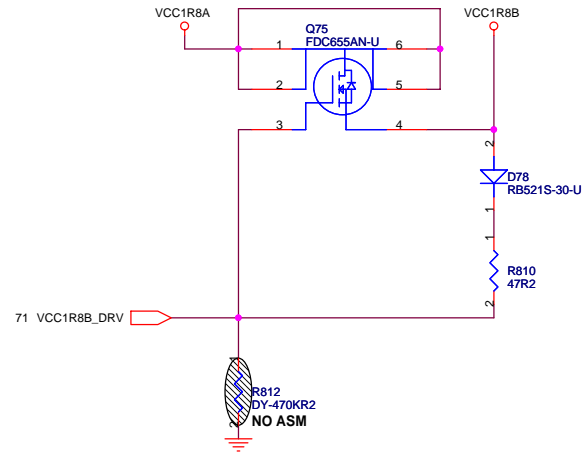

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Title		<b>DC-DC TSURUMAI</b>	
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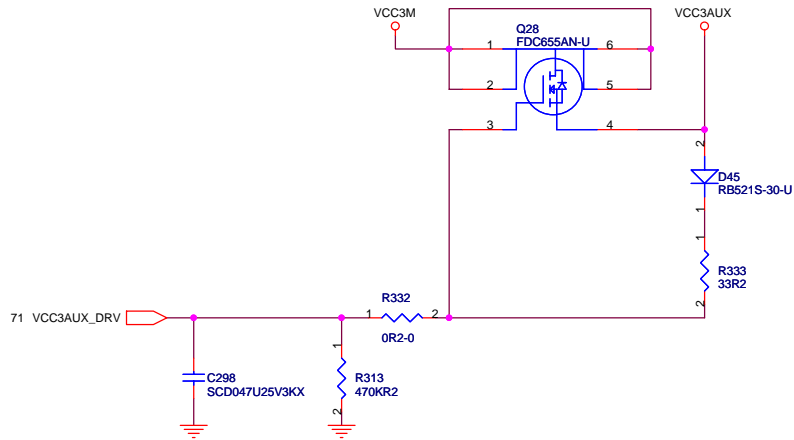
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# VCC1R8B



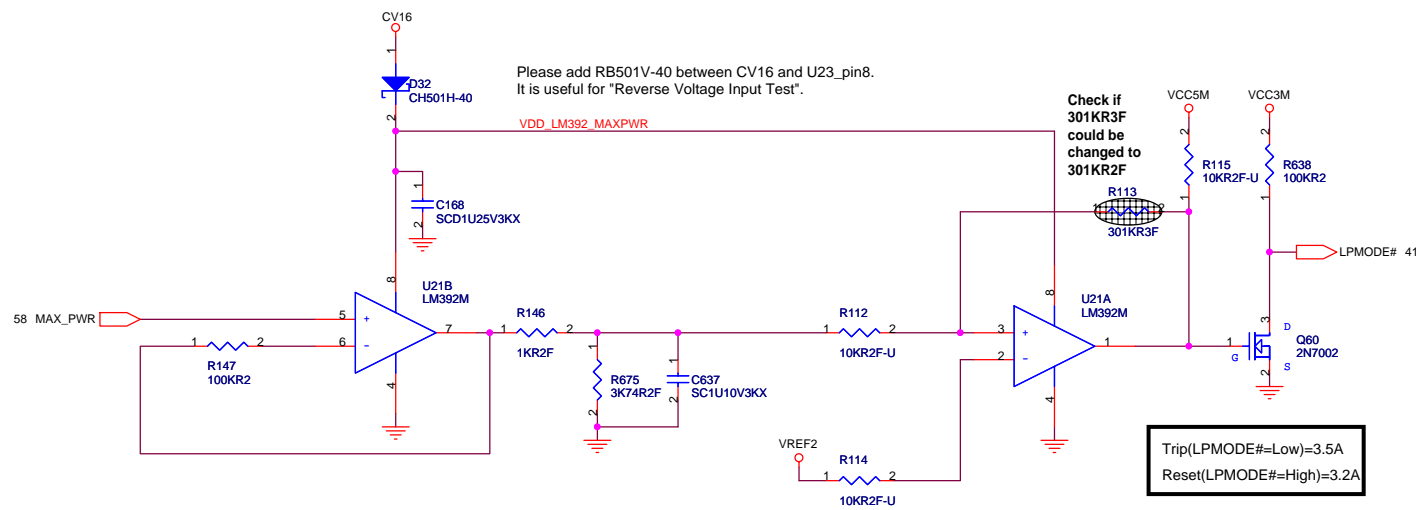
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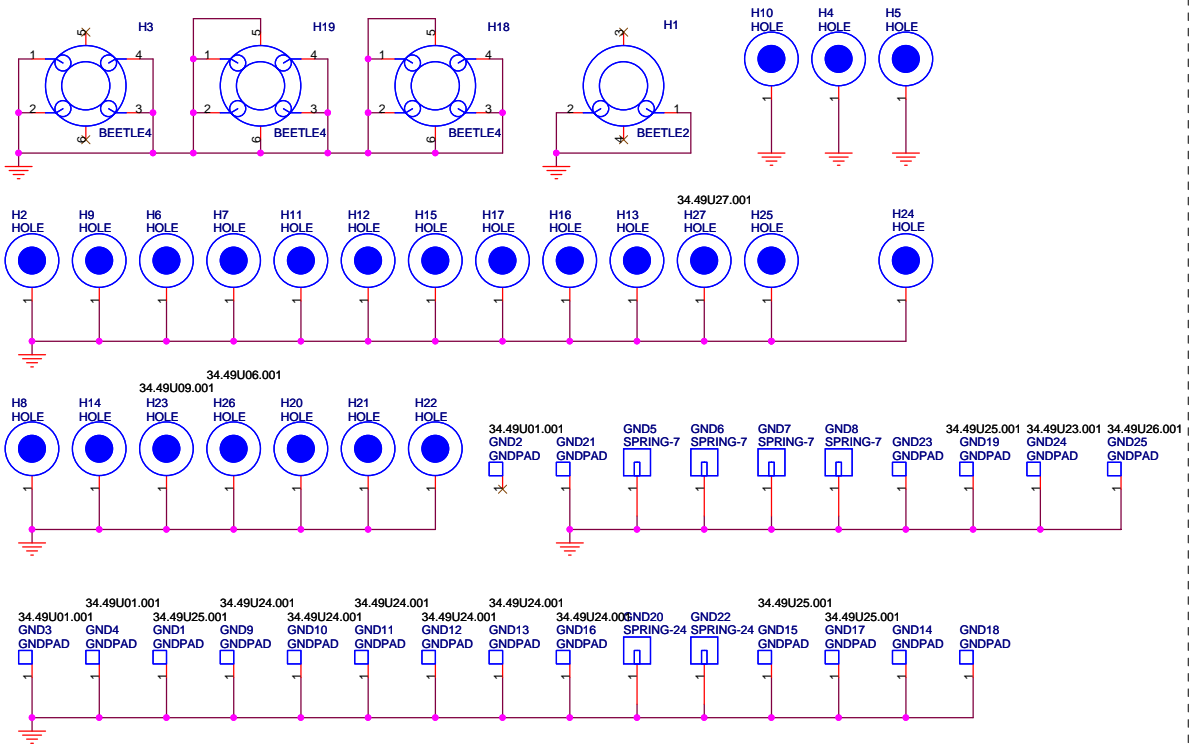


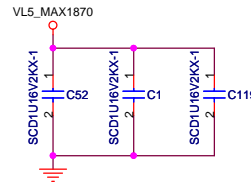
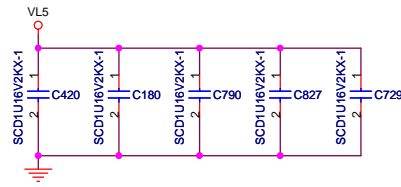
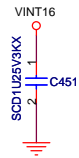
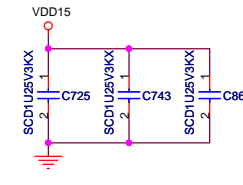
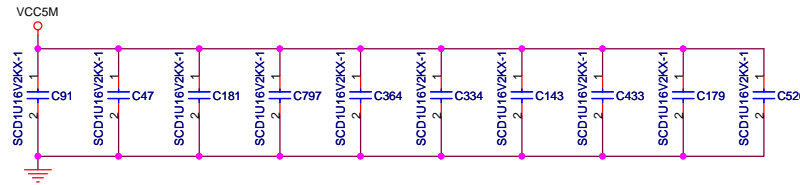
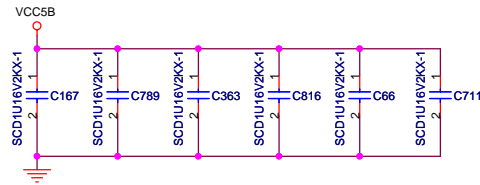
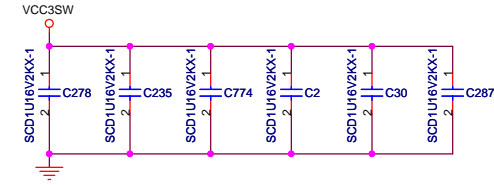
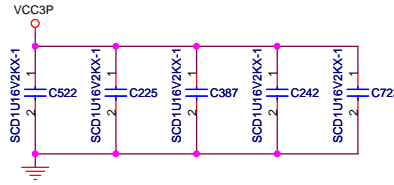
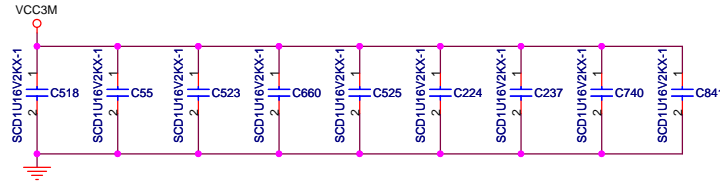
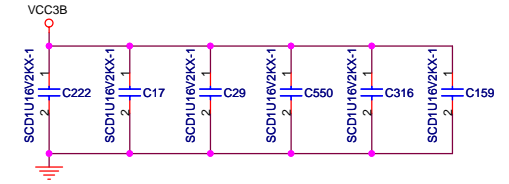
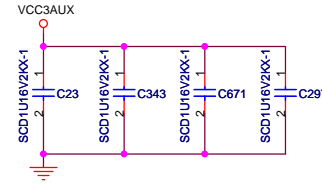
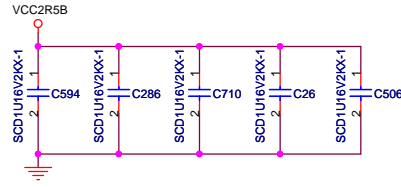
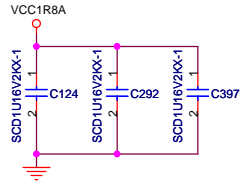
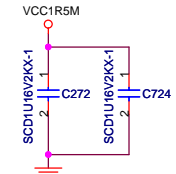
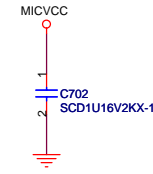
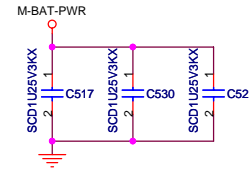
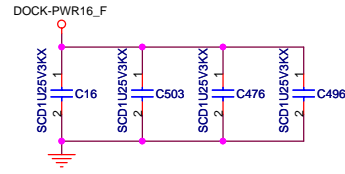
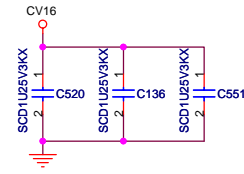
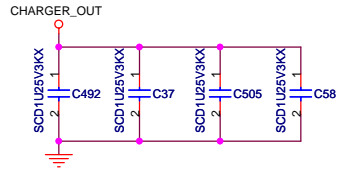
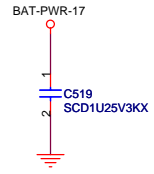
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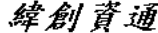
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<b>WISTRON EMI</b>	
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