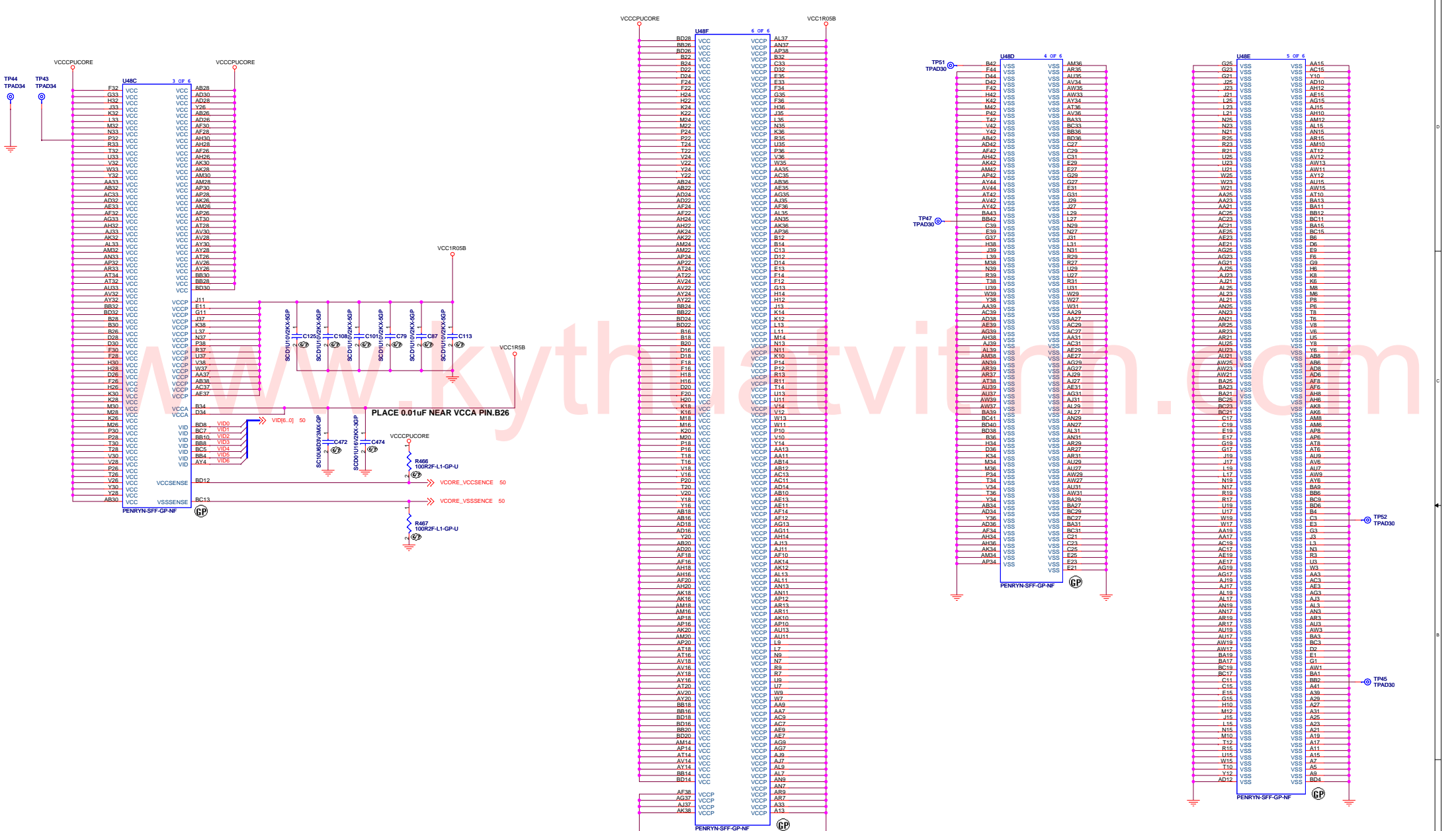


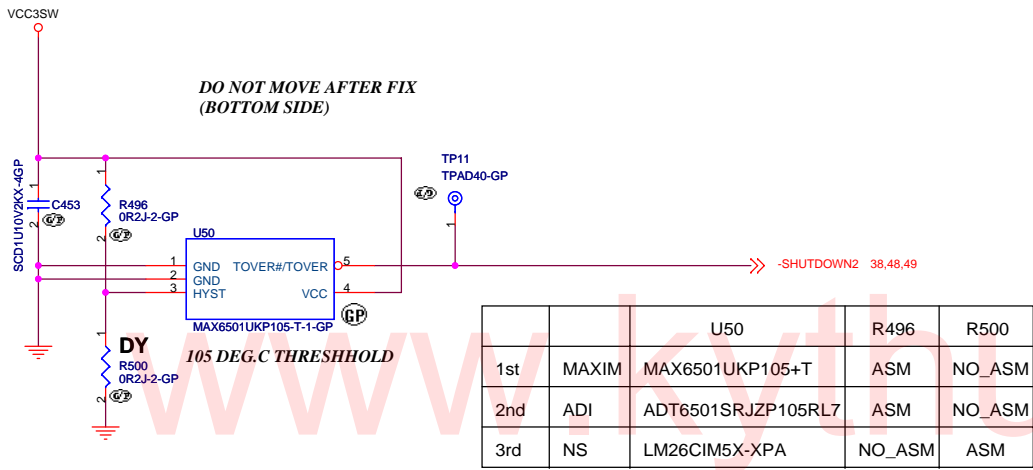
<Variant Name>

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

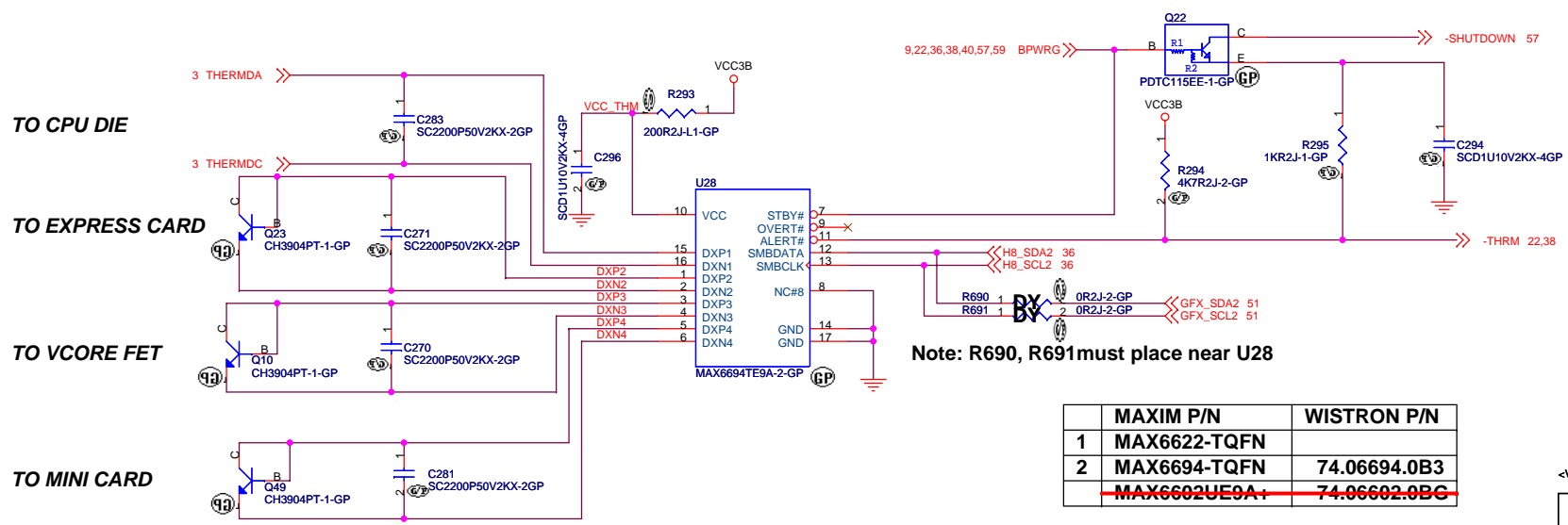
Title Penryn CPU SFF (1/2)		
Size A3	Document Number Carmel-1	Rev SC
Date Monday, July 14, 2008	Sheet 3	of 62



Thermal Sensor for CPU



THESE CAPS MUST BE PLACED AS CLOSE AS POSSIBLE TO MAX6602



	MAXIM P/N	WISTRON P/N
1	MAX6622-TQFN	
2	MAX6694-TQFN	74.06694.0B3
	MAX6602UE9A-1	74.06602.0B3

Layout Comment :

(1) Thermal sensor trace lines should not be overlapped with other high frequency trace lines in other layers.

(2) Also, it should not be overlapped with large amplitude trace lines either.

PLACE UNDER PC-CARD SLOT
 H8 I2C Bus 2 ADDRESS : 9AH
 TEST PAD FOR BOARD MFG TEST

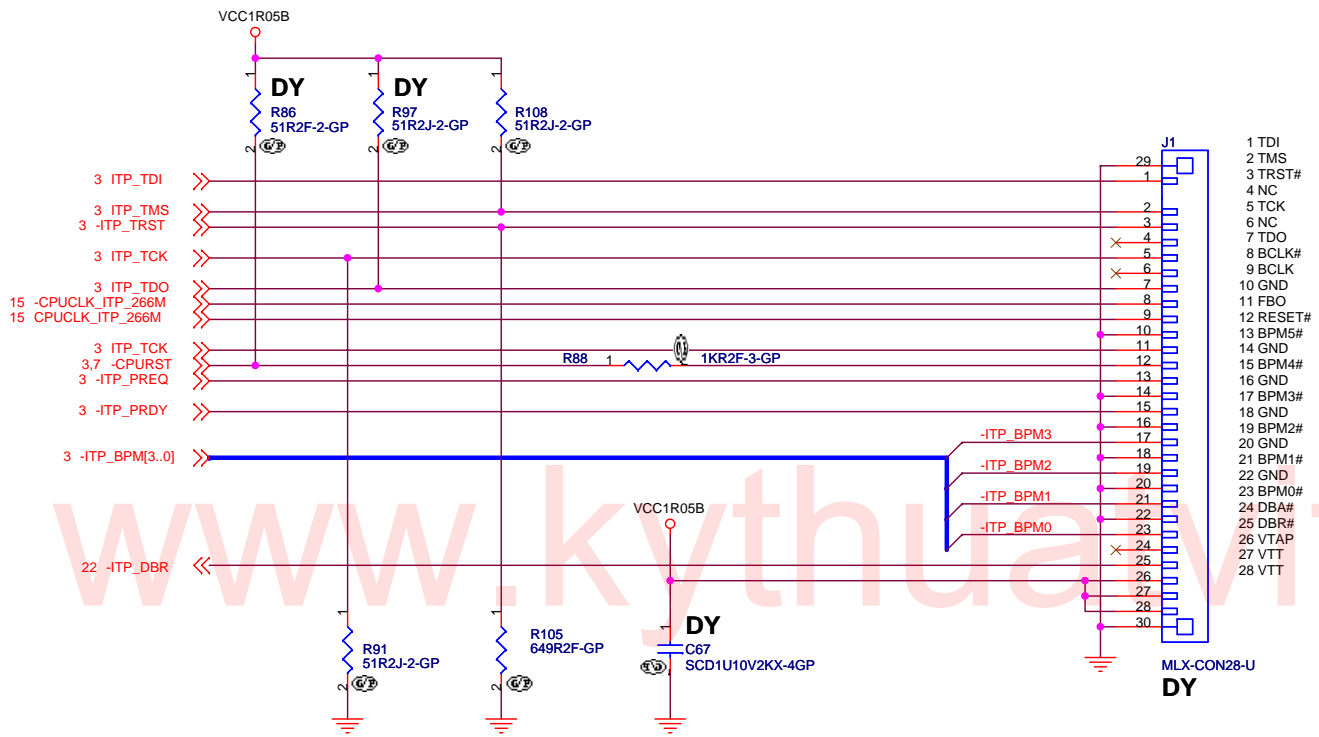
<Variant Name>

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

Title: **THERMAL SENSOR**

Size: A3 Document Number: **Caramel-1** Rev: **SC**

Date: Monday, July 14, 2008 Sheet 5 of 62



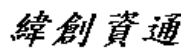
- 1 TDI
- 2 TMS
- 3 TRST#
- 4 NC
- 5 TCK
- 6 NC
- 7 TDO
- 8 BCLK#
- 9 BCLK
- 10 GND
- 11 FBO
- 12 RESET#
- 13 BPM5#
- 14 GND
- 15 BPM4#
- 16 GND
- 17 BPM3#
- 18 GND
- 19 BPM2#
- 20 GND
- 21 BPM1#
- 22 GND
- 23 BPM0#
- 24 DBA#
- 25 DBR#
- 26 VTAP
- 27 VTT
- 28 VTT

(*1) TCK SIGNAL IS BRANCHED AT CPU'S PIN

(*2) CPURST# SIGNAL IS BRANCHED AT GMCH'S PIN

Ref Des	For ITP-XDP
J1	NO_ASM-->ASM
C67	NO_ASM-->ASM
R88	NO_ASM-->1K 5% ASM
R105	ASM (No Change)
R86	ASM-->NO_ASM
R97	ASM (No Change)
R91	ASM-->51 5% ASM
R108	ASM-->51 5% ASM

<Variant Name>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
ITP_XDP CONN		
Size Custom	Document Number Caramel-1	Rev SC
Date: Monday, July 14, 2008		Sheet 6 of 62

13 M_A_DQ[63..0] <<<>

U57D 4 OF 10

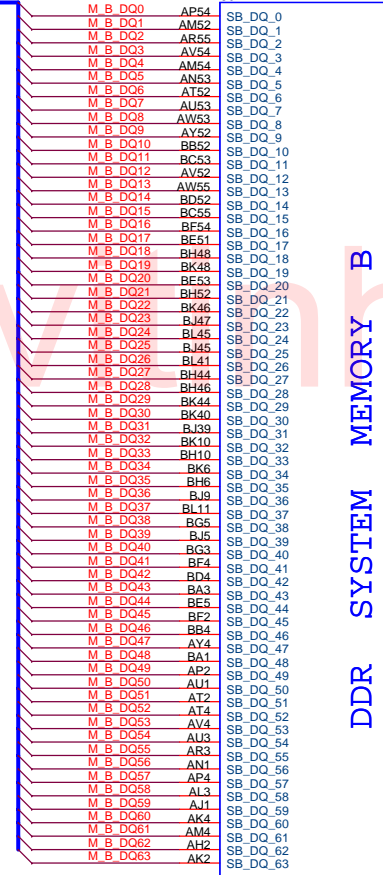


DDR SYSTEM MEMORY A

CANTIGA-GS-GP-NF

14 M_B_DQ[63..0] <<<>

U57E 5 OF 10



DDR SYSTEM MEMORY B

CANTIGA-GS-GP-NF

M_B BS0 <<> M_B BS0 14
 M_B BS1 <<> M_B BS1 14
 M_B BS2 <<> M_B BS2 14

-M_B_RAS 14
 -M_B_CAS 14
 -M_B_WE 14

M_B_DM[7..0] 14

M_B_DOS[7..0] 14

-M_B_DQS[7..0] 14

M_B_A[14..0] 14

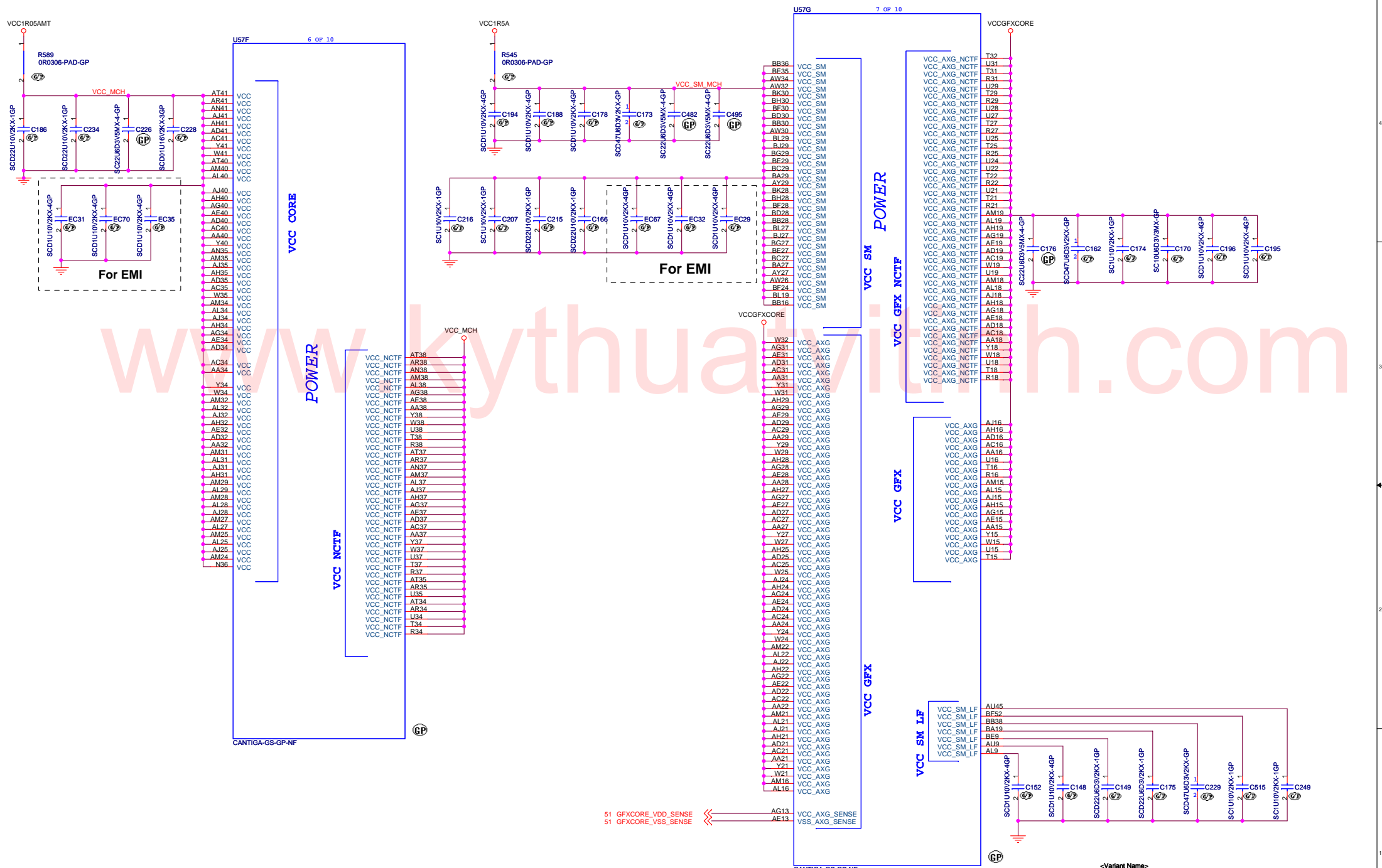
<Variant Name>

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

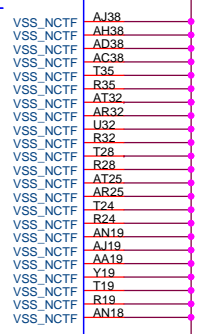
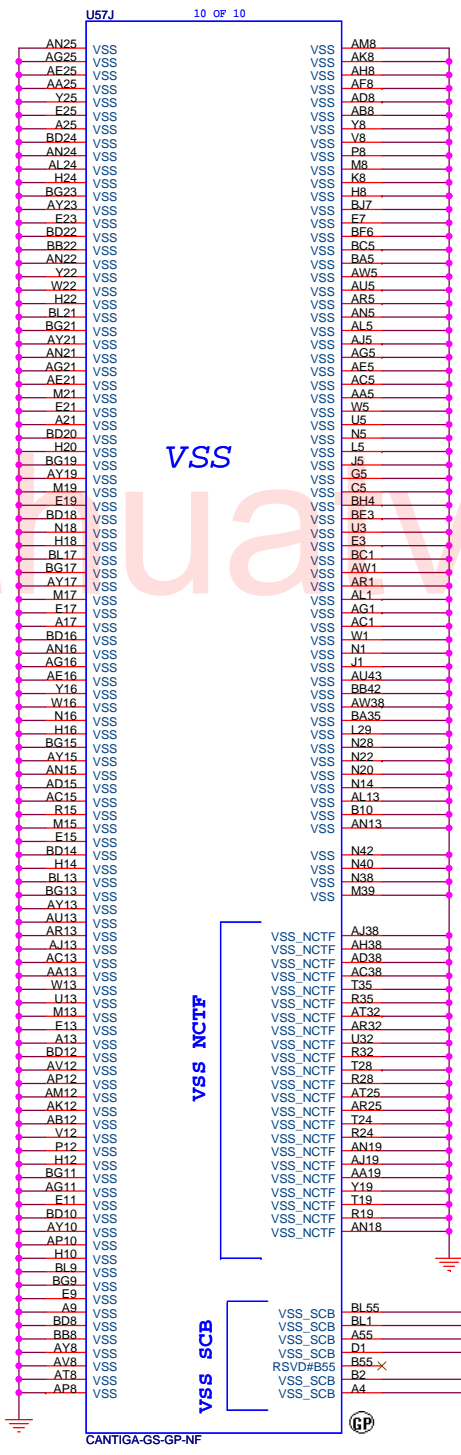
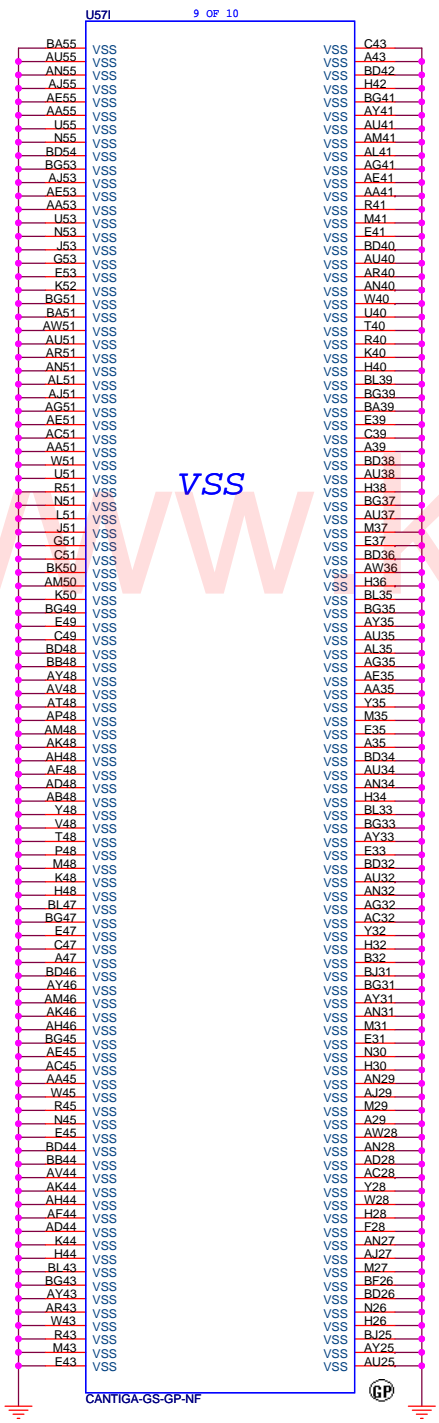
Title: **Cantiga-GS (2/6):DDR3**

Size A3 Document Number **Caramel-1** Rev SC

Date: Monday, July 14, 2008 Sheet 8 of 82



51 GFXCORE_VDD_SENSE AG13
 51 GFXCORE_VSS_SENSE AE13



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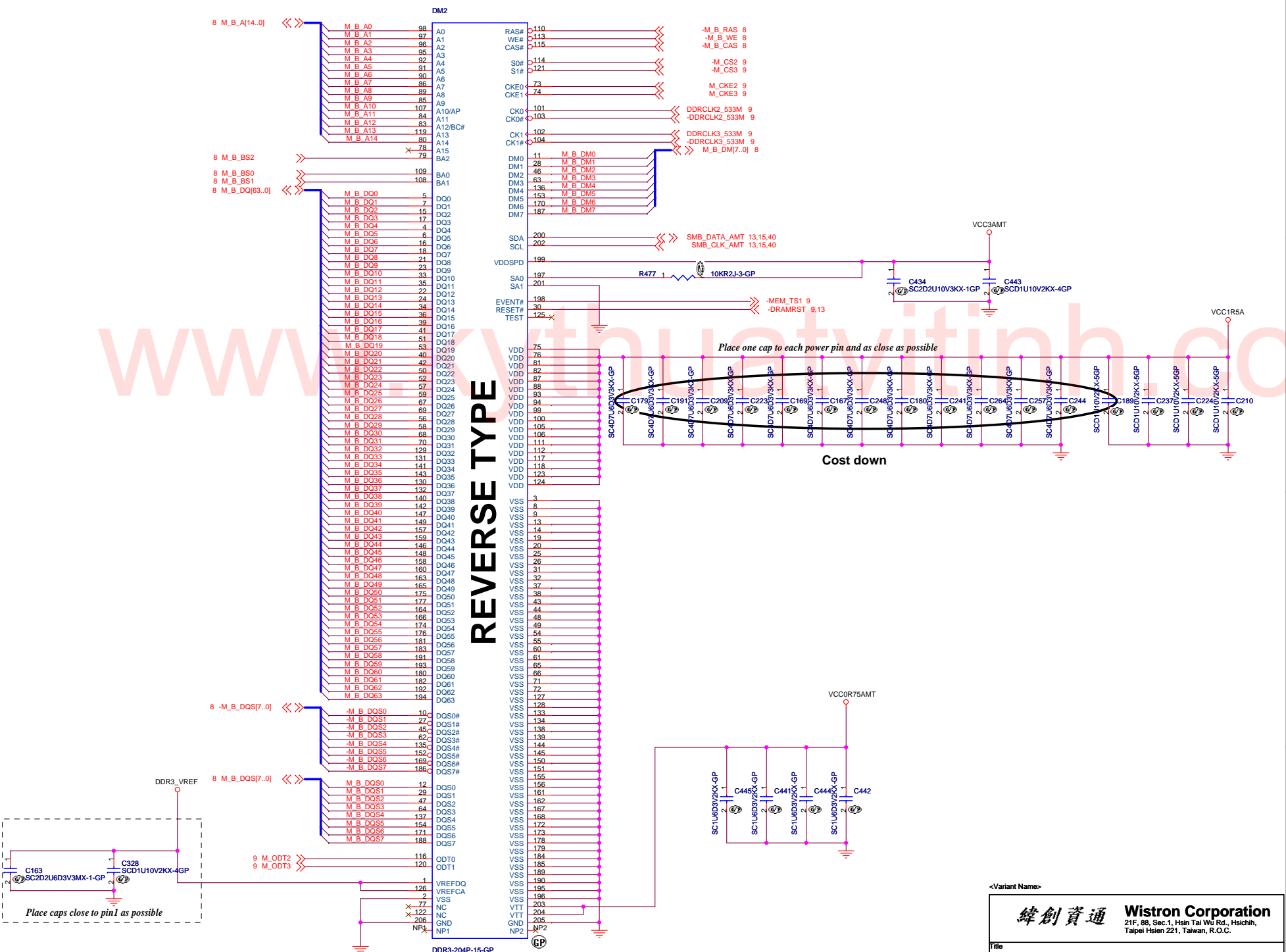
<Variant Name>

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

Title: **Cantiga-GS (6/6):GND**

Size: A3 Document Number: **Caramel-1** Rev: SC

Date: Monday, July 14, 2008 Sheet 12 of 62



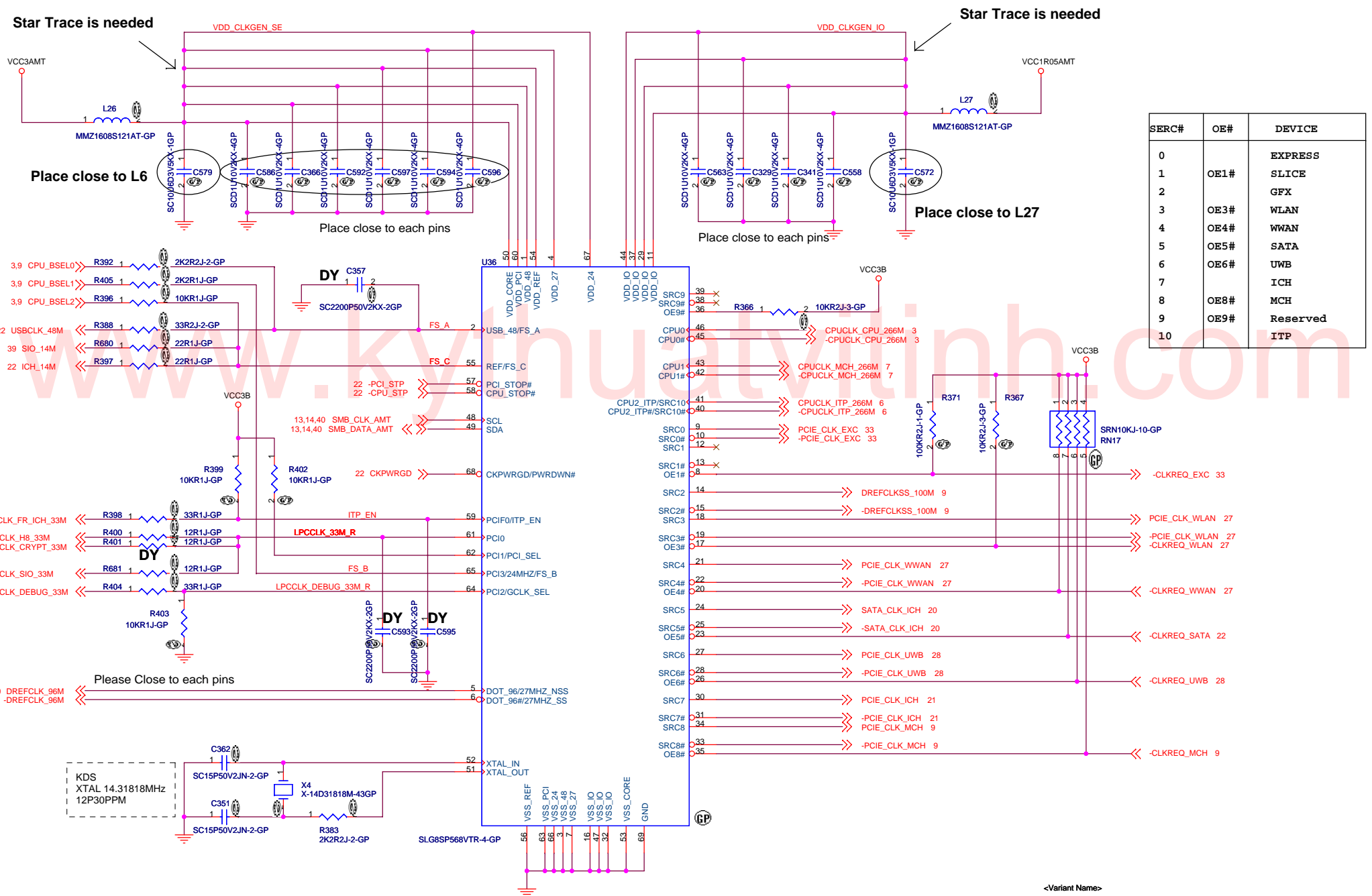
<Variant Name>

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

Title: **DDR3 SODIMM-B (REVERSE TYPE)**

Size: Custom Document Number: Caramel-1 Rev: SC

Date: Monday, July 14, 2008 Sheet 14 of 62



SERC#	OE#	DEVICE
0		EXPRESS
1	OE1#	SLICE
2		GFX
3	OE3#	WLAN
4	OE4#	WWAN
5	OE5#	SATA
6	OE6#	UWB
7		ICH
8	OE8#	MCH
9	OE9#	Reserved
10		ITP

[Source Cadidate]		
SILEGO	SLG8SP568V	71.08568.C03

<Variant Name>

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

Title: **CLOCK GEN(CK505)**

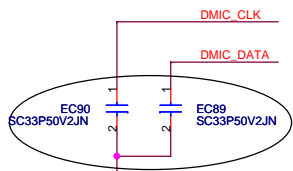
Size A3 Document Number **Caramel-1** Rev **SC**

Date: Monday, July 14, 2008 Sheet 15 of 62

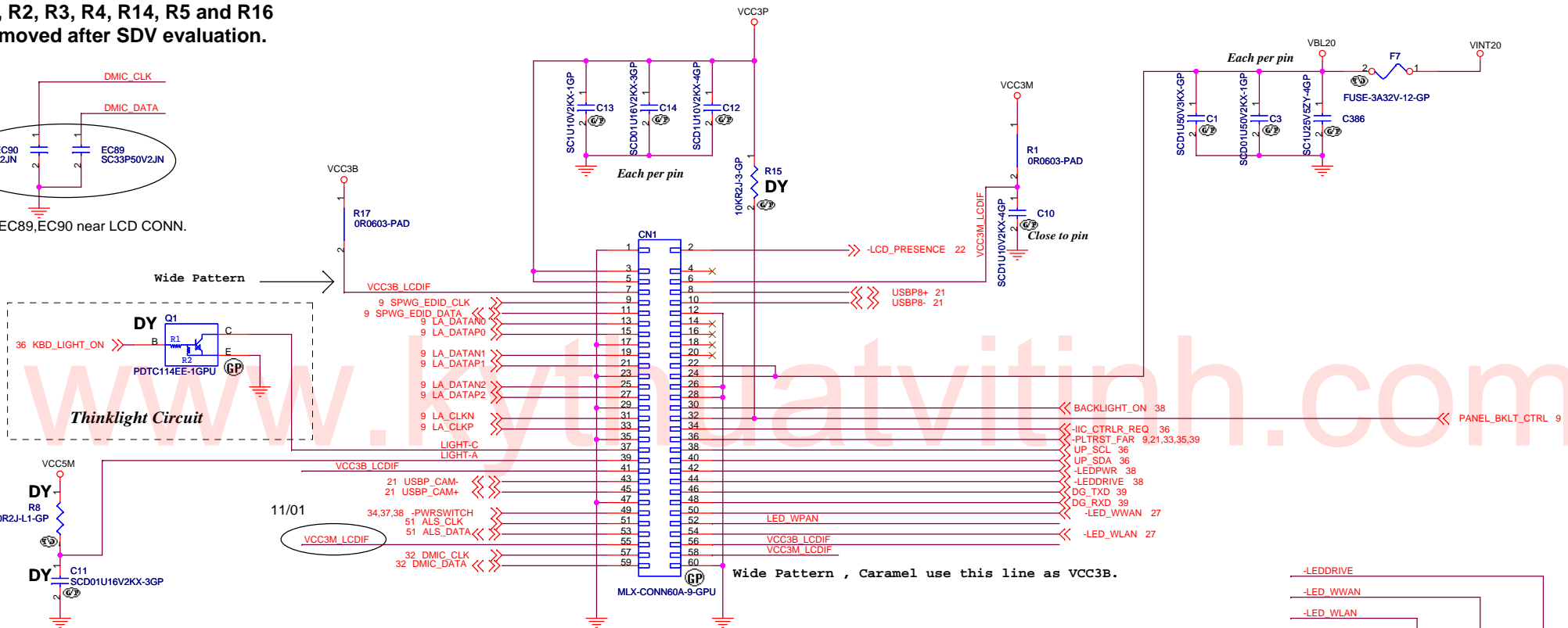
LCD / Inverter Connector

<Comment>

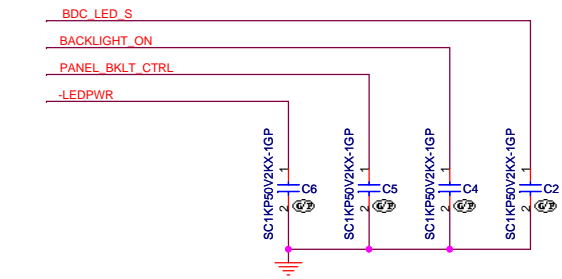
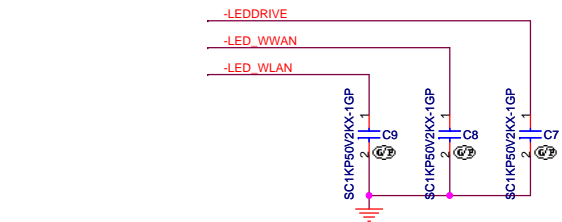
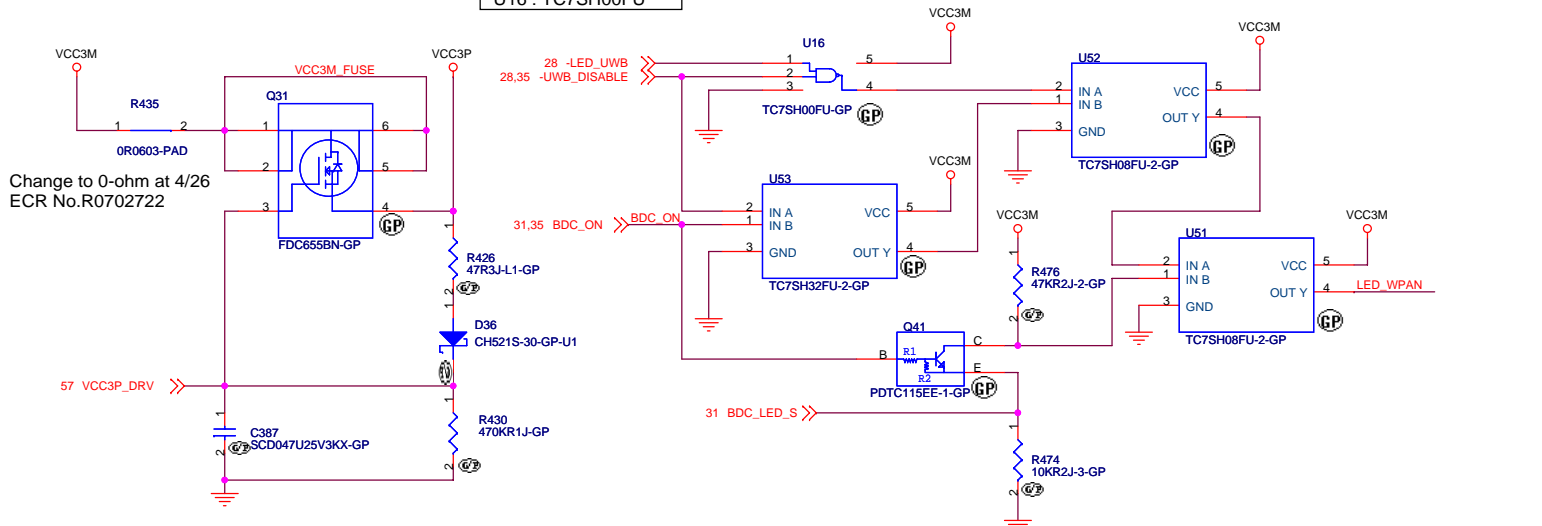
R19, R18, R2, R3, R4, R14, R5 and R16 will be removed after SDV evaluation.



Please place EC89, EC90 near LCD CONN.



AND GATE	U51 U52 : TC7SH08FU
OR GATE	U53 : TC7SH32FU
NAND GATE	U16 : TC7SH00FU



<Variant Name>

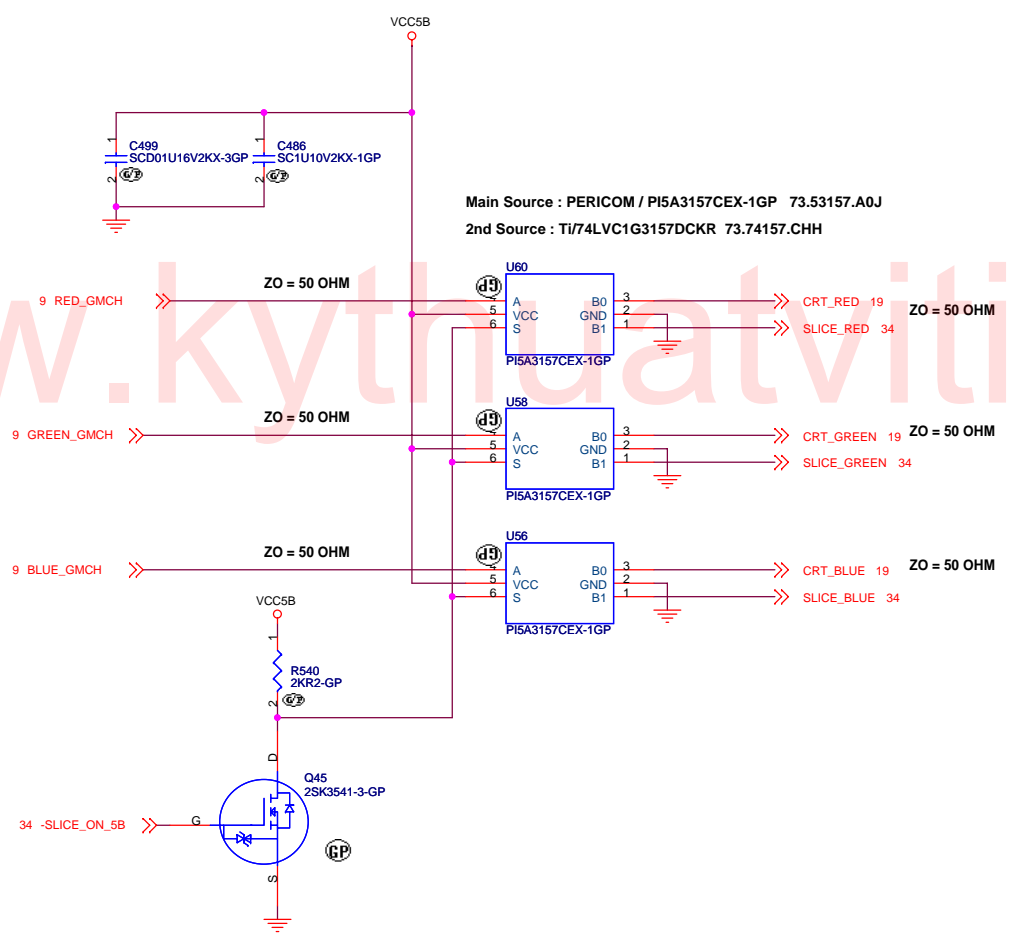
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title: **LCD CONNECTOR**

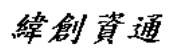
Size: A3 Document Number: **Caramel-1** Rev: **SC**

Date: Monday, July 14, 2008 Sheet: 16 of 61

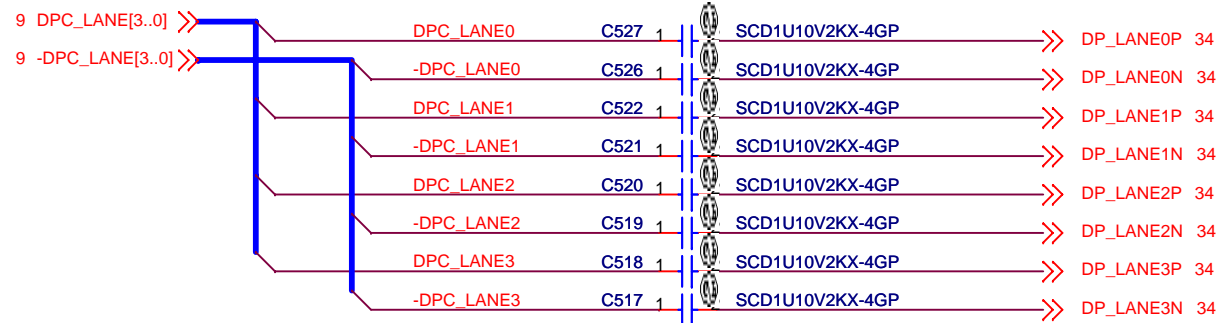
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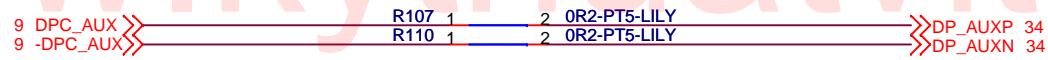
<Variant Name>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
CRT SELECTOR	
Size A3	Document Number Caramel-1
Date: Monday, July 14, 2008	Rev SC
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System DP: GMCH to SLICE Connector



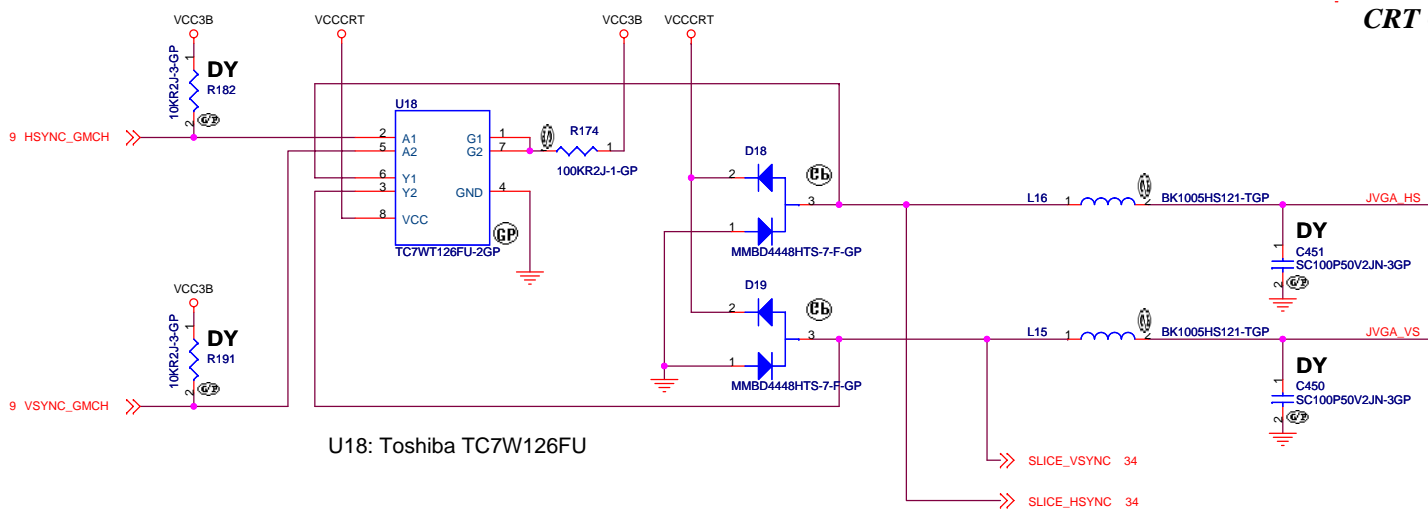
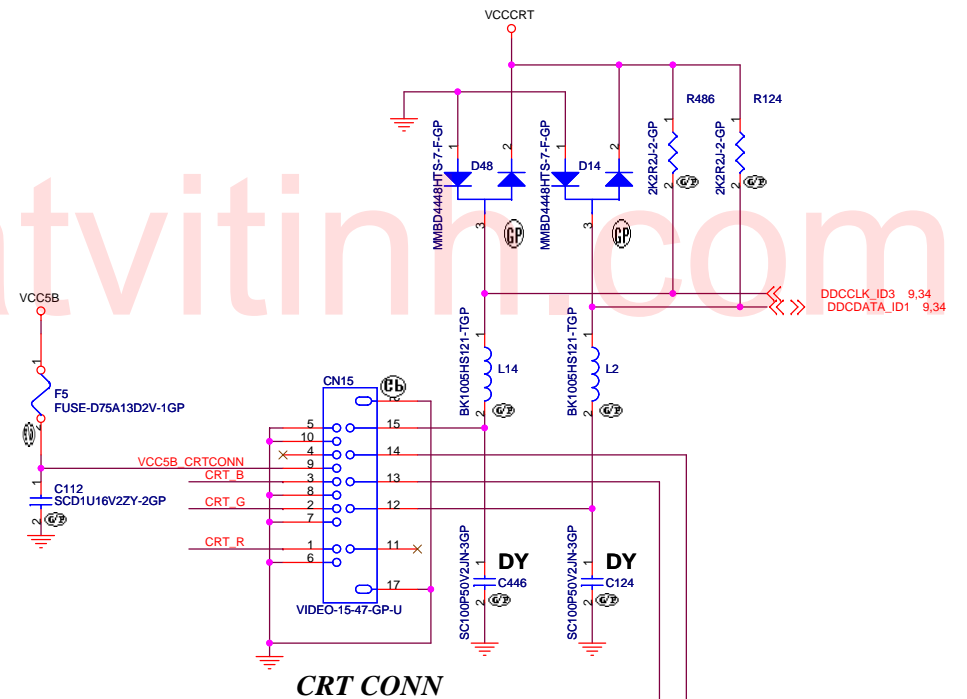
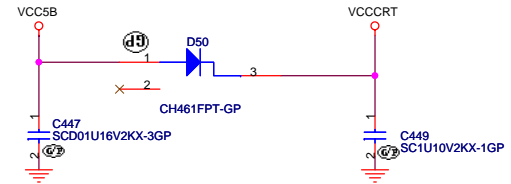
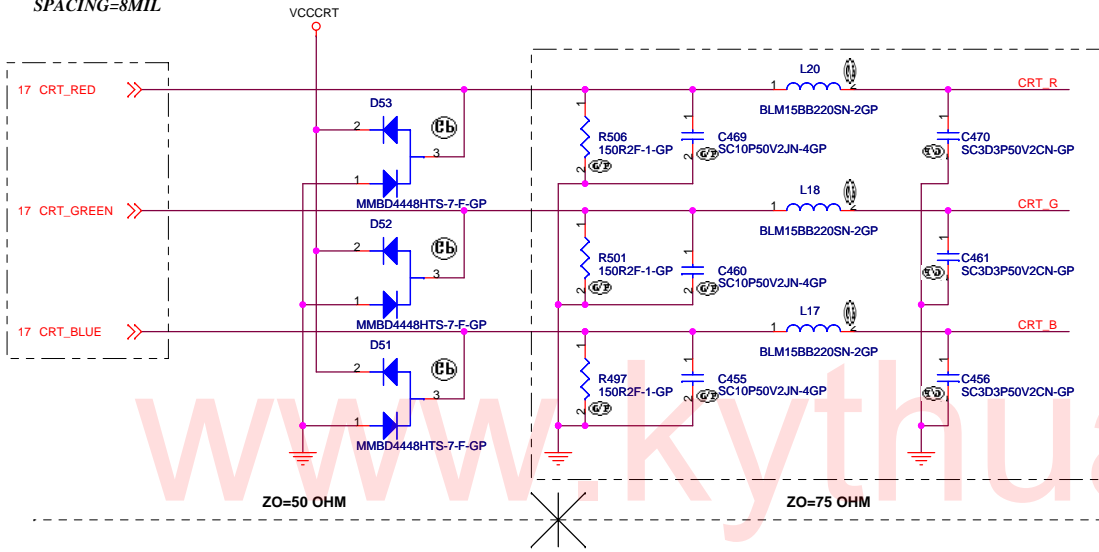
www.kythuatvithinh.com



<Variant Name>

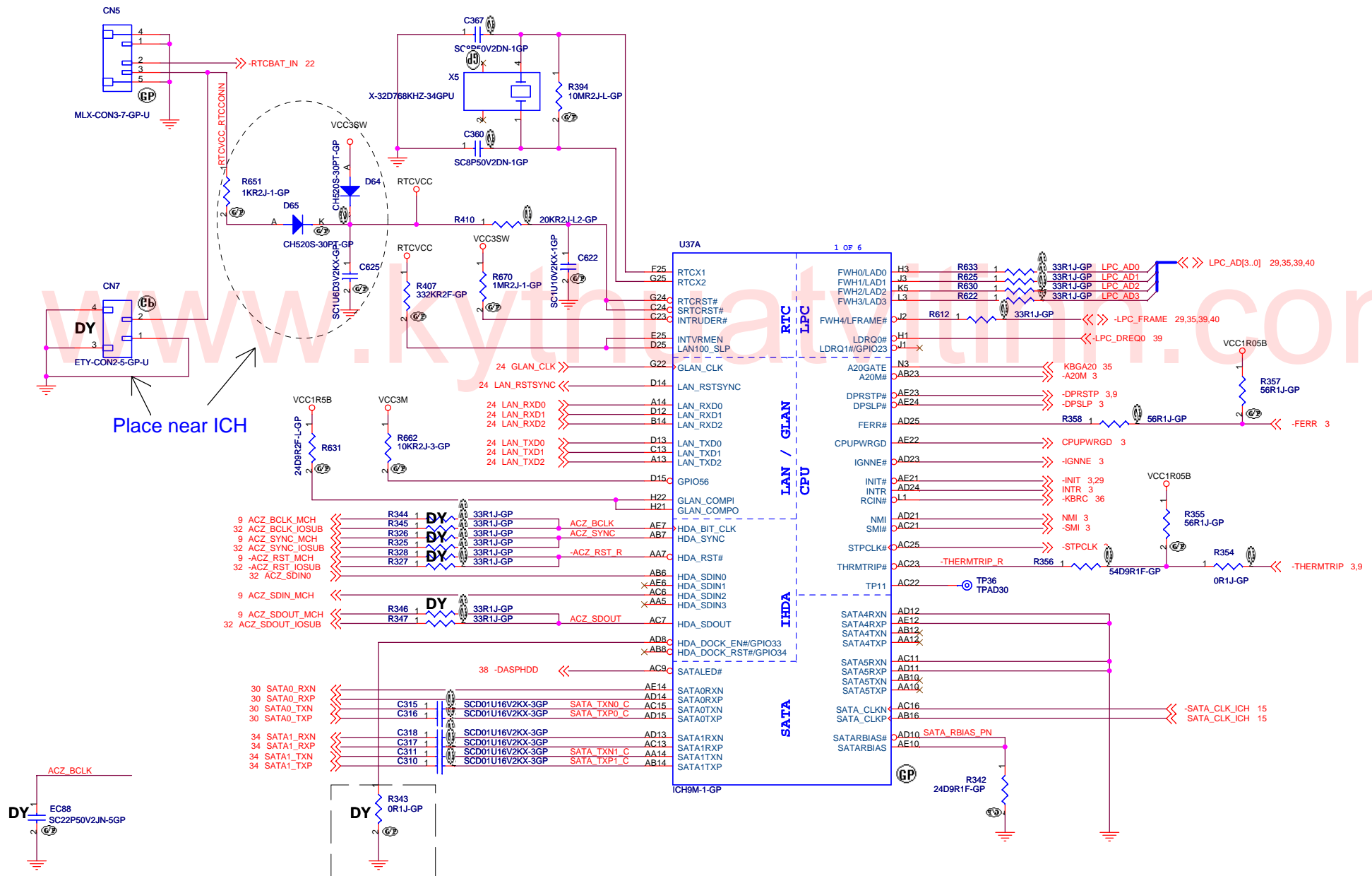
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Display Port AC Coupling	
Size A4	Document Number <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Caramel-1</div>
Date: Monday, July 14, 2008	Rev <div style="text-align: center; font-weight: bold; font-size: 1.2em;">SC</div>
Sheet 18 of 62	

GND GUARDING
 EACH SIGNAL WIDTH DEPENDS ON ZO(TRACE IMPEDANCE)
 SPACING=8MIL



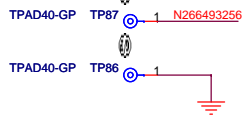
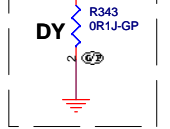
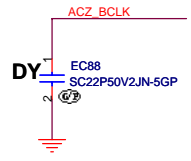
<Variant Name>

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai WJ Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
EXT CRT INTERFACE			
Size A3	Document Number Caramel-1	Rev SC	
Date: Monday, July 14, 2008		Sheet 19	of 62

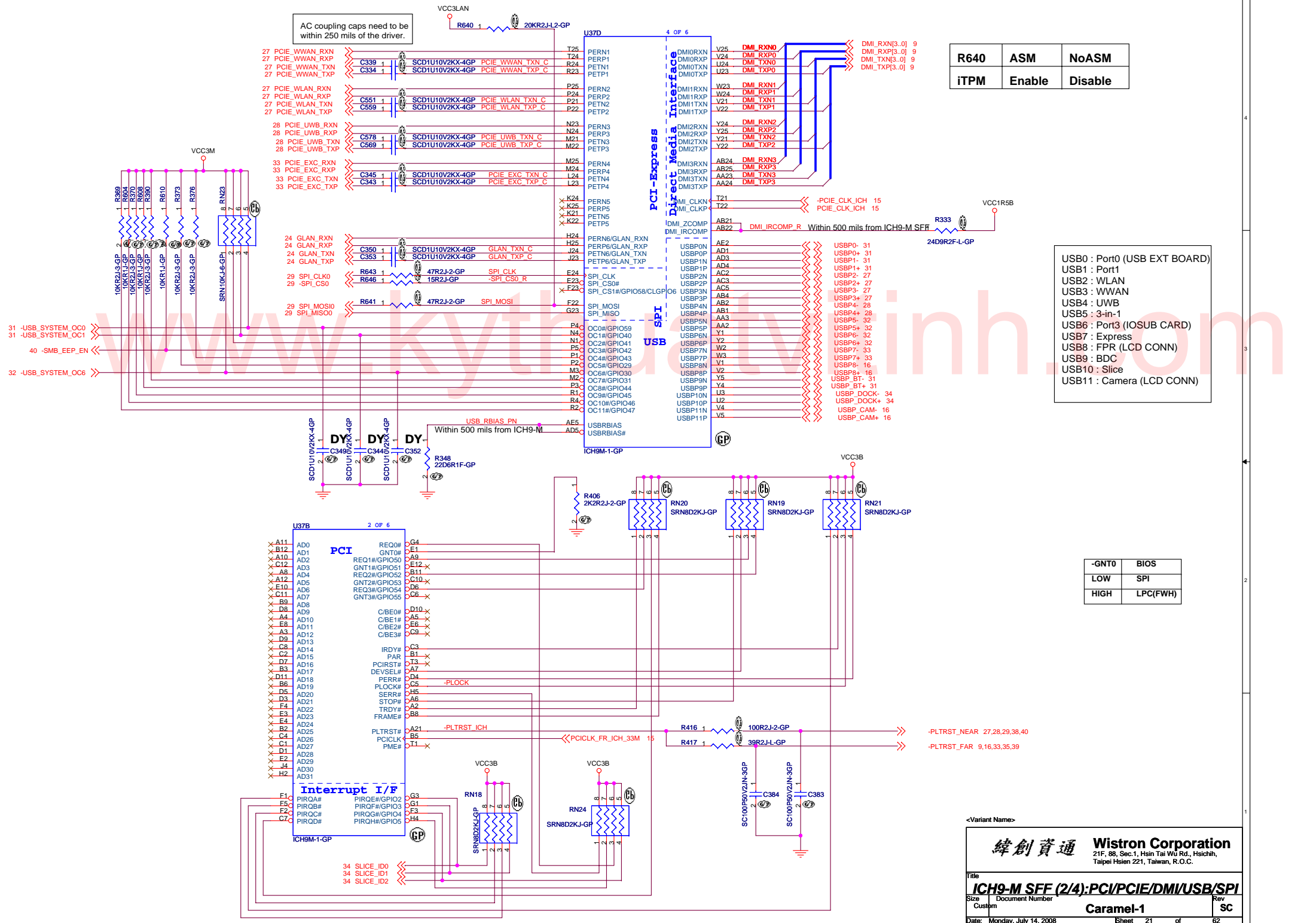


Place near ICH

Place on Top side (easily accessible point)



緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
ICH9-M SFF (1/4):ATA/AC97/LPC	
Title	Rev
Size A3	Document Number
Caramel-1	
Date: Monday, July 14, 2008	Sheet 20 of 62



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

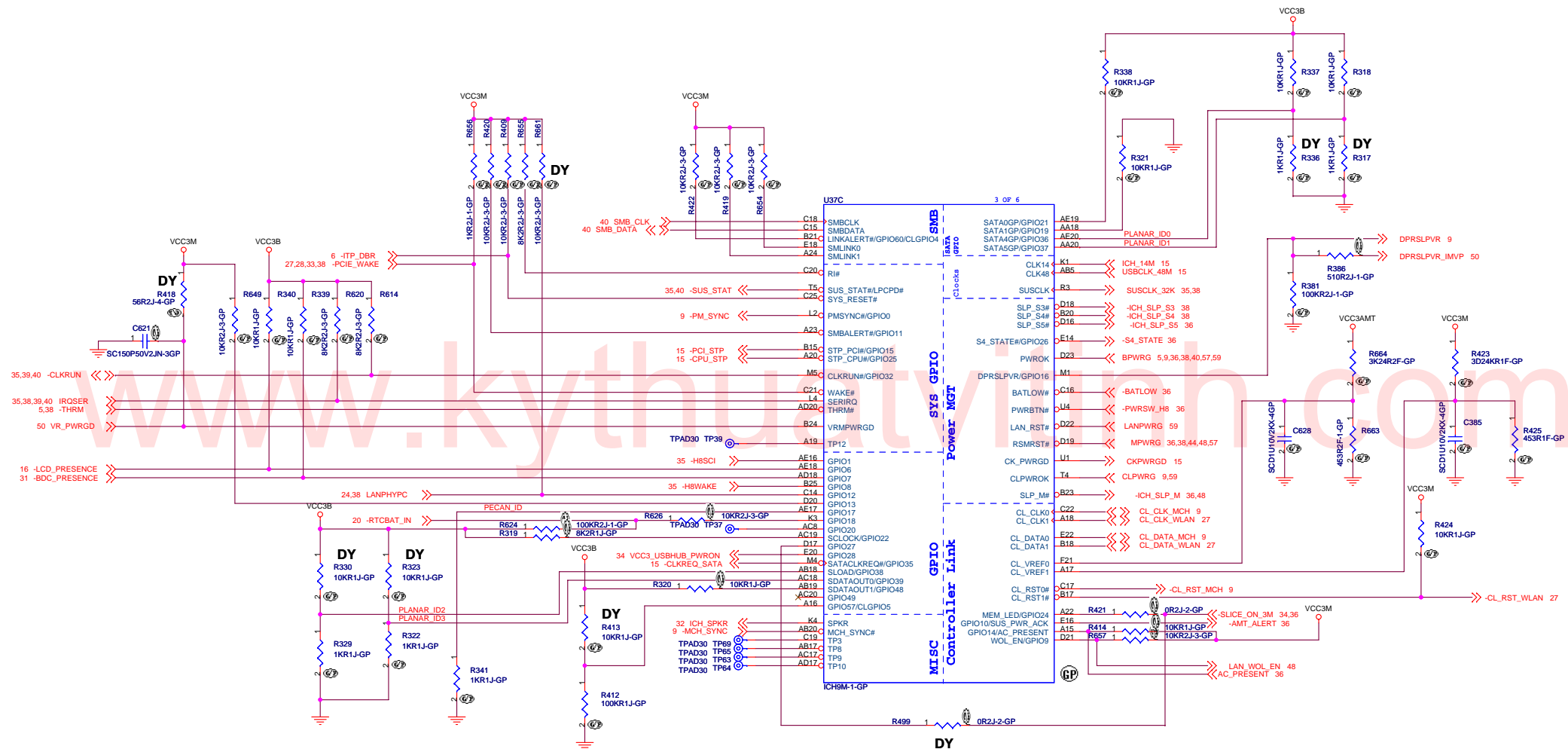
R640	ASM	NoASM
ITPM	Enable	Disable

- USB0 : Port0 (USB EXT BOARD)
- USB1 : Port1
- USB2 : WLAN
- USB3 : WWAN
- USB4 : UWB
- USB5 : 3-in-1
- USB6 : Port3 (IOSUB CARD)
- USB7 : Express
- USB8 : FPR (LCD CONN)
- USB9 : BDC
- USB10 : Slice
- USB11 : Camera (LCD CONN)

-GNT0	BIOS
LOW	SPI
HIGH	LPC(FWH)

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

Title: **ICH9-M SFF (2/4):PCI/PCIE/DMI/USB/SPI**
 Size: Custom Document Number: **Caramel-1** Rev: **SC**
 Date: Monday, July 14, 2008 Sheet 21 of 62



	PECAN_ID
Mocha-1	H
Pecan-1	L
Caramel-1	L

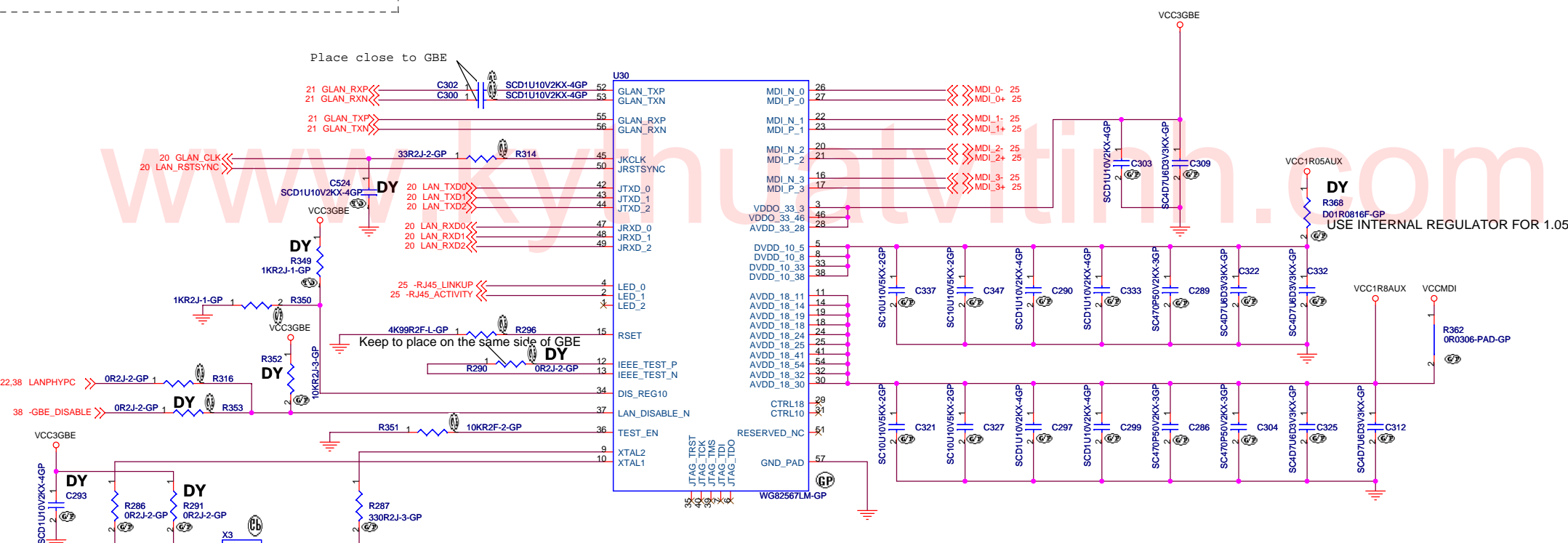
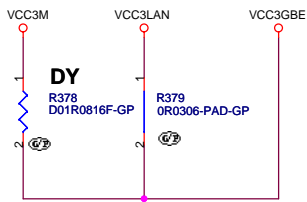
<Variant Name>

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

Title: **ICH9-M SFF (3/4):PM/SMB/GPIO**

Size: Custom Document Number: **Caramel-1** Rev: **SC**

Date: Monday, July 14, 2008 Sheet 22 of 62



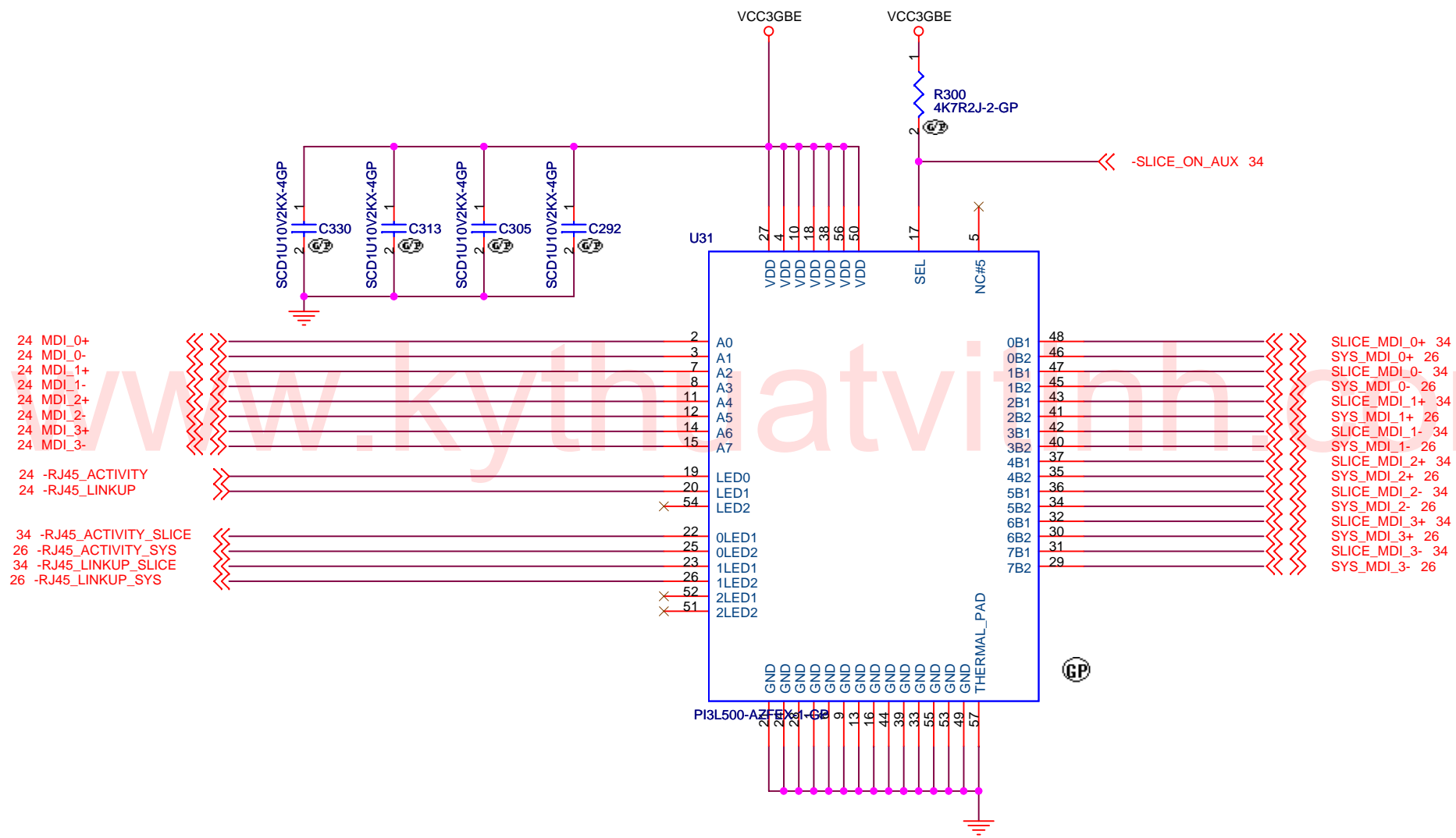
	Oscillator	Crystor
X3	NO ASM	ASM
C285	NO ASM	ASM
C227	NO ASM	ASM
R287	NO ASM	ASM
R289	NO ASM	ASM
X2	ASM	NO ASM
C293	ASM	NO ASM
R291	ASM	NO ASM

<Variant Name>

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

Title: **GBE BOAZMAN**

Size: A3	Document Number: Caramel-1	Rev: SC
Date: Monday, July 14, 2008	Sheet: 24	of 62



24 MDI_0+
 24 MDI_0-
 24 MDI_1+
 24 MDI_1-
 24 MDI_2+
 24 MDI_2-
 24 MDI_3+
 24 MDI_3-
 24 -RJ45_ACTIVITY
 24 -RJ45_LINKUP
 34 -RJ45_ACTIVITY_SLICE
 26 -RJ45_ACTIVITY_SYS
 34 -RJ45_LINKUP_SLICE
 26 -RJ45_LINKUP_SYS

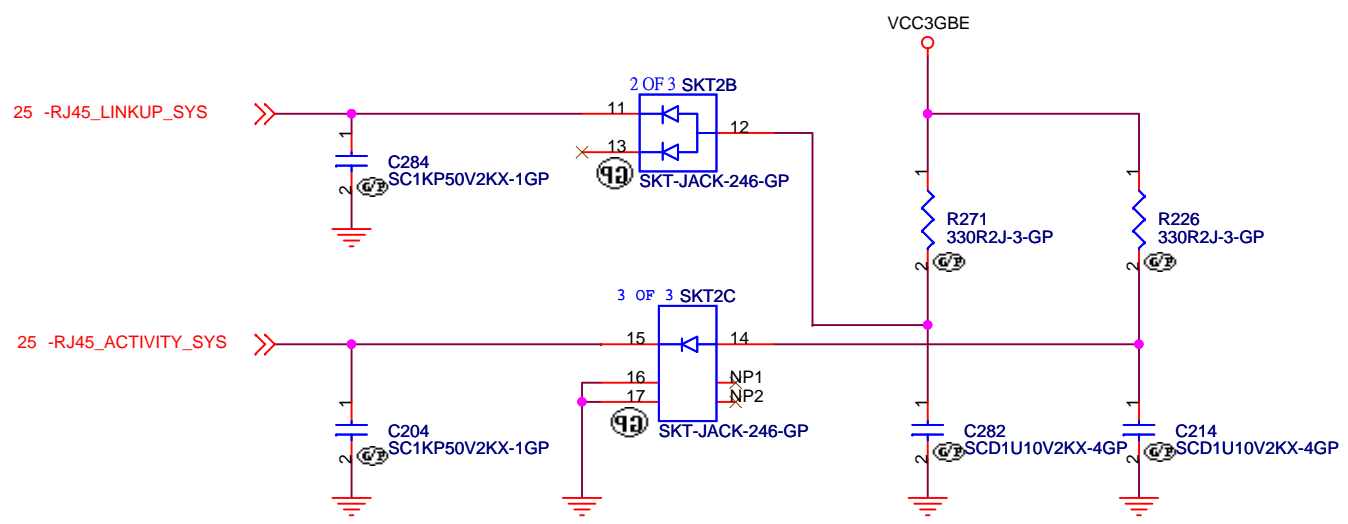
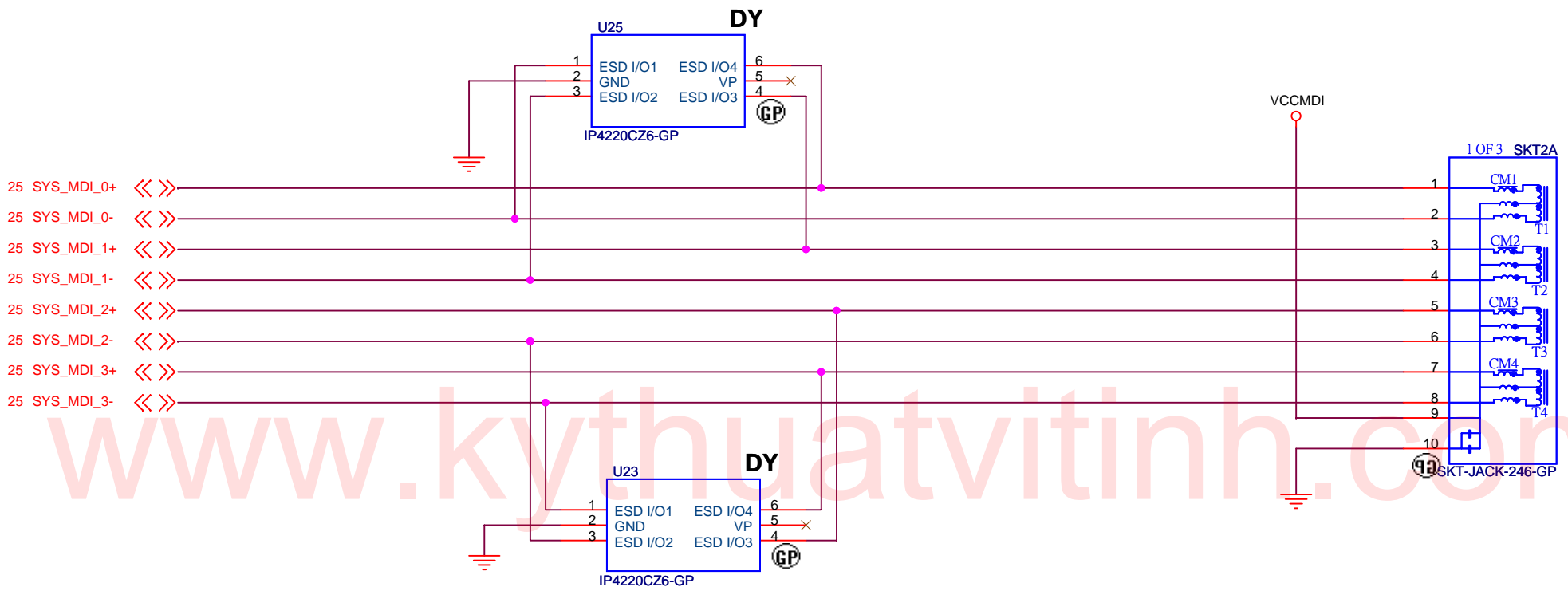
SLICE_MDI_0+ 34
 SYS_MDI_0+ 26
 SLICE_MDI_0- 34
 SYS_MDI_0- 26
 SLICE_MDI_1+ 34
 SYS_MDI_1+ 26
 SLICE_MDI_1- 34
 SYS_MDI_1- 26
 SLICE_MDI_2+ 34
 SYS_MDI_2+ 26
 SLICE_MDI_2- 34
 SYS_MDI_2- 26
 SLICE_MDI_3+ 34
 SYS_MDI_3+ 26
 SLICE_MDI_3- 34
 SYS_MDI_3- 26

		Vendor P/N	Wistron P/N
1st	Pericom	PI3L500AZFEX	73.3L500.003
2nd	TI	TS3L500AERHUR	73.3L500.A0V
3rd	MAXIM	MAX4927ETN+	74.04927.073


<Variant Name>

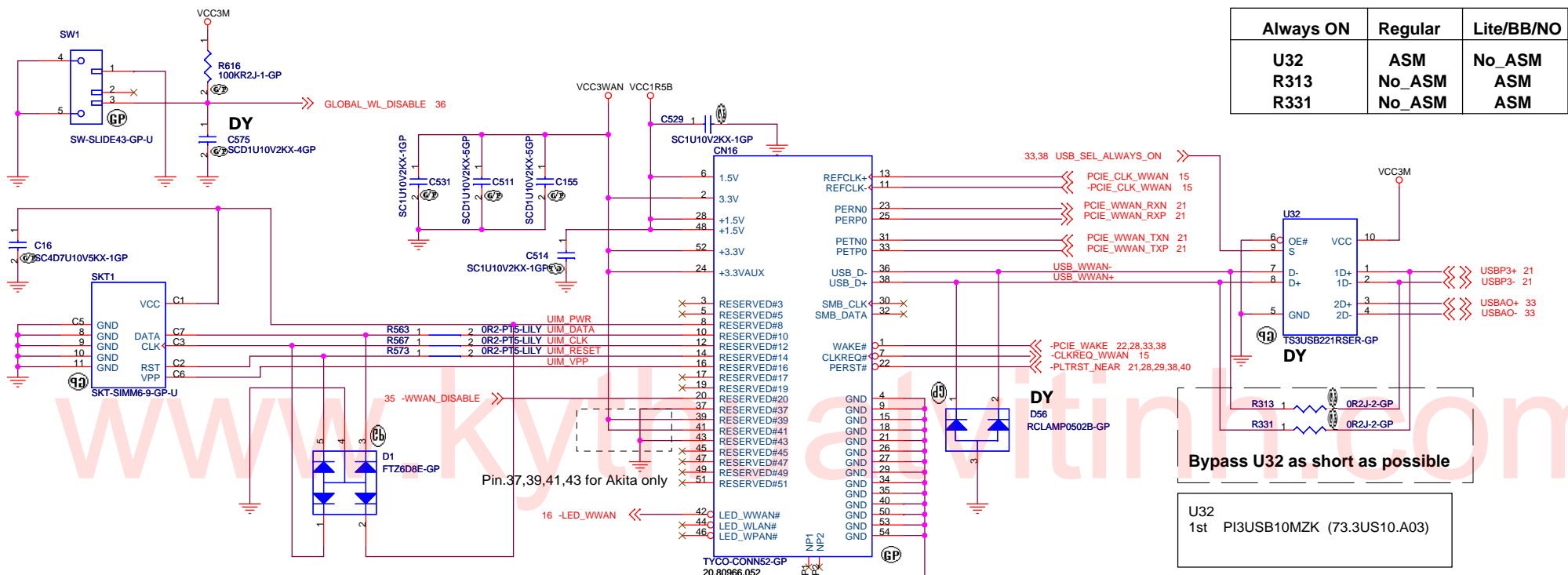

Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

Title		
GBE LAN SW		
Size A4	Document Number Caramel-1	Rev SC
Date Monday, July 14, 2008	Sheet 25	of 62



<Variant Name>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
RJ45 CONN	
Title RJ45 CONN	Document Number Caramel-1
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Date: Monday, July 14, 2008	Sheet 26 of 62



Always ON	Regular	Lite/BB/NO
U32	ASM	No_ASM
R313	No_ASM	ASM
R331	No_ASM	ASM

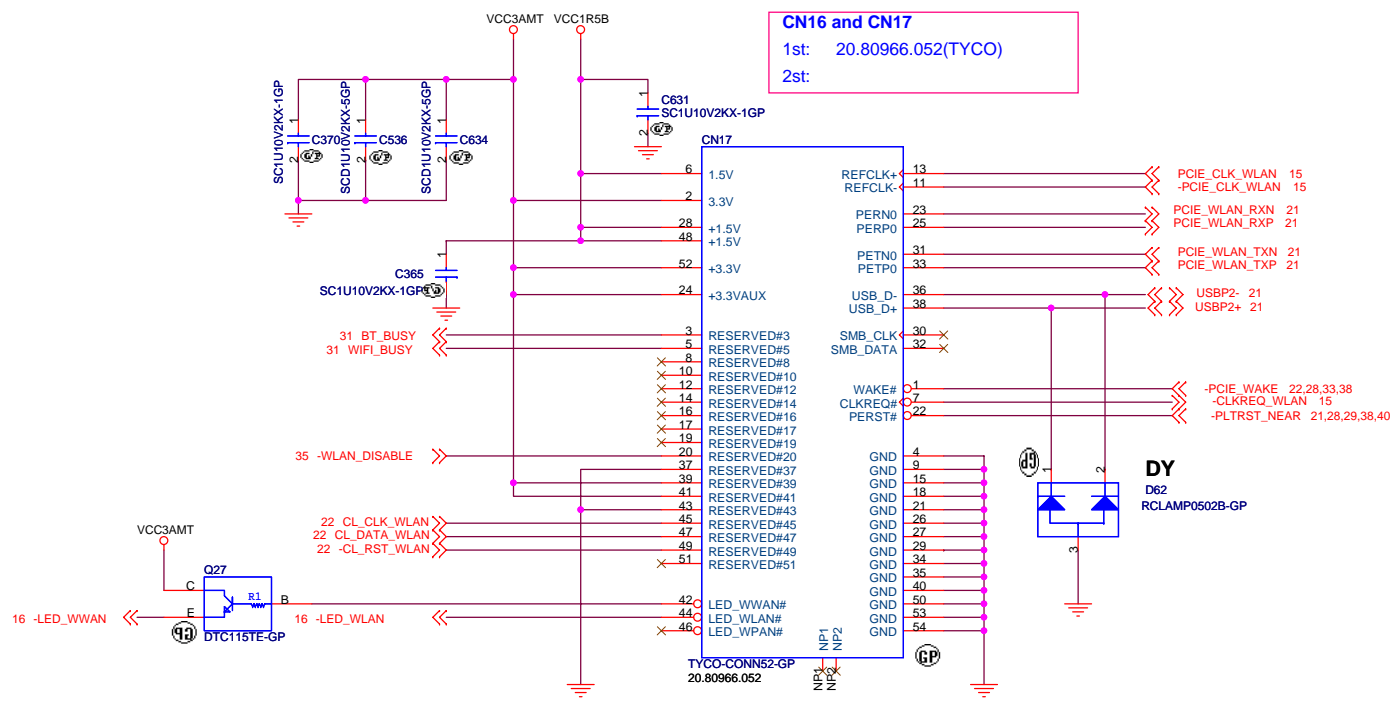
U32
1st PI3USB10MZK (73.3US10.A03)

DY
D56 RCLAMP0502B-GP

R313
R331

Bypass U32 as short as possible

CN16 and CN17
1st: 20.80966.052(TYCO)
2st:



WWAN CONTROL TABLE

PAGE	LOCATION	YES	NO
27	CN16 SKT1 D1 C16 C531 C511 C155 C529	ASM	NON_ASM
58	Q14 R149 D17 R160 C153 R143	ASM	NON_ASM
60	H12 H13	ASM	NON_ASM

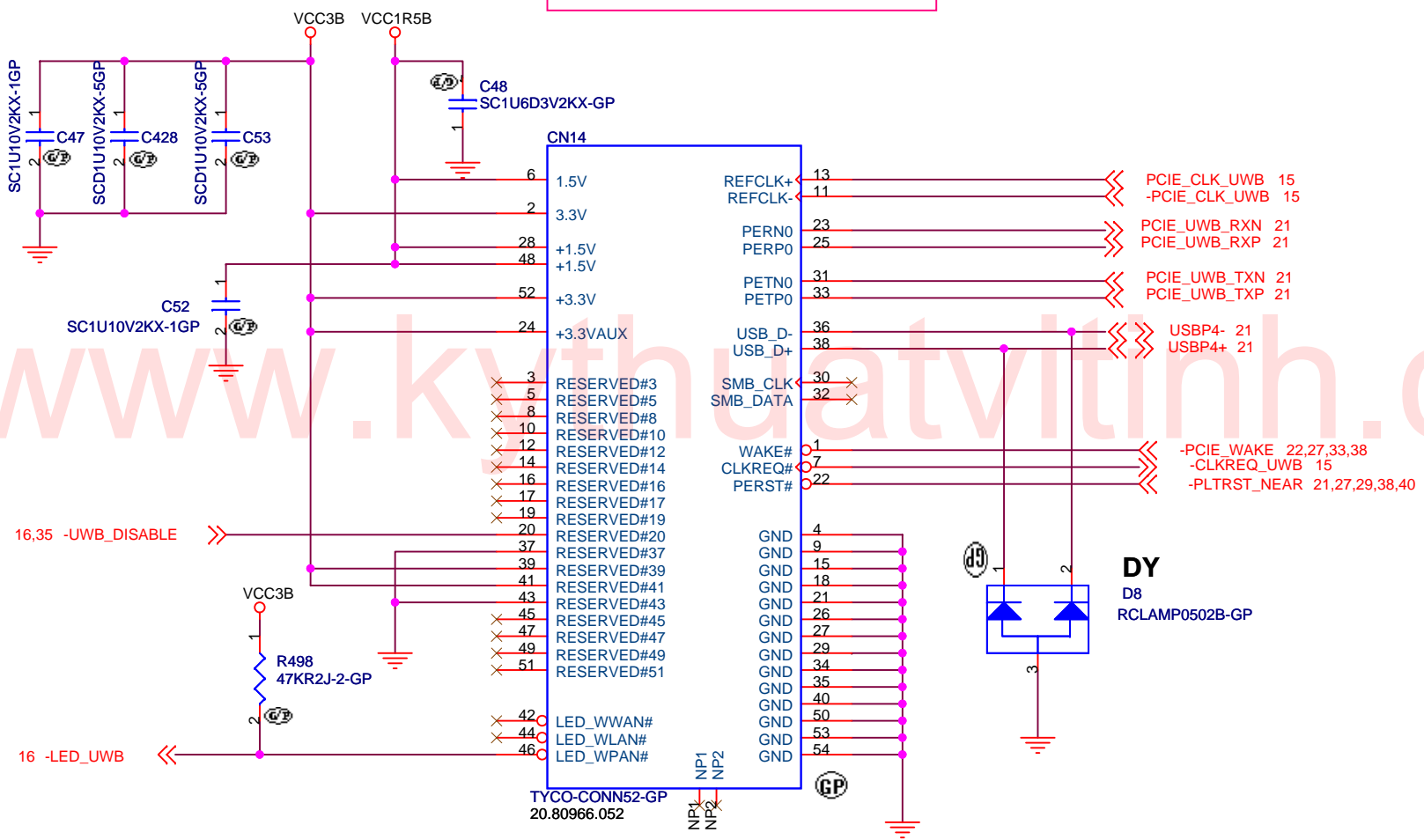
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

MINI CARD SLOT

Size A3 Document Number **Caramel-1** Rev **SC**

Date: Monday, July 14, 2008 Sheet 27 of 62

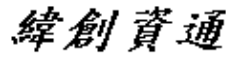
CN14
 1st: 20.80966.052(TYCO)
 2st:



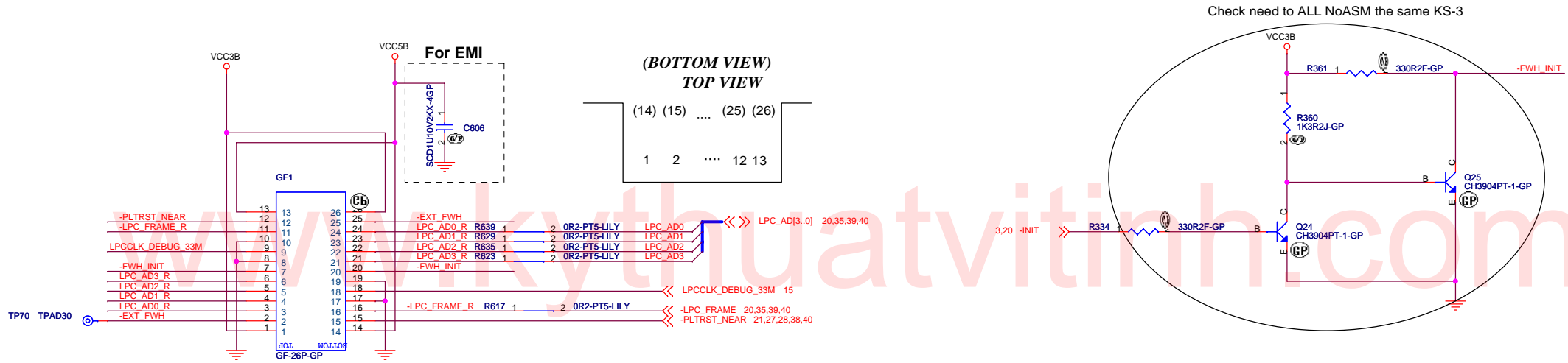
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DY
 D8
 RCLAMP0502B-GP

<Variant Name>

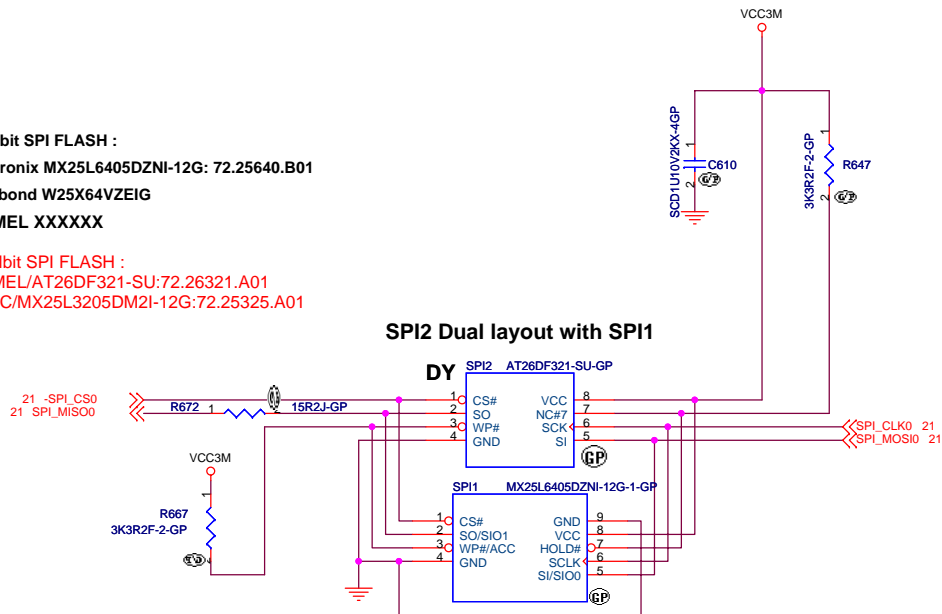
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
MINI CARD SLOT 2	
Title MINI CARD SLOT 2	Document Number Caramel-1
Size A4	Rev SC
Date Monday, July 14, 2008	Sheet 28 of 62

Golden Finger for Debug Board



64Mbit SPI FLASH :
 Macronix MX25L6405DZNI-12G: 72.25640.B01
 Winbond W25X64VZEIG
 ATMEL XXXXXX

32Mbit SPI FLASH :
 ATMEL/AT26DF321-SU:72.26321.A01
 MXIC/MX25L3205DM2I-12G:72.25325.A01



SO8 and WSON8 are both supported!

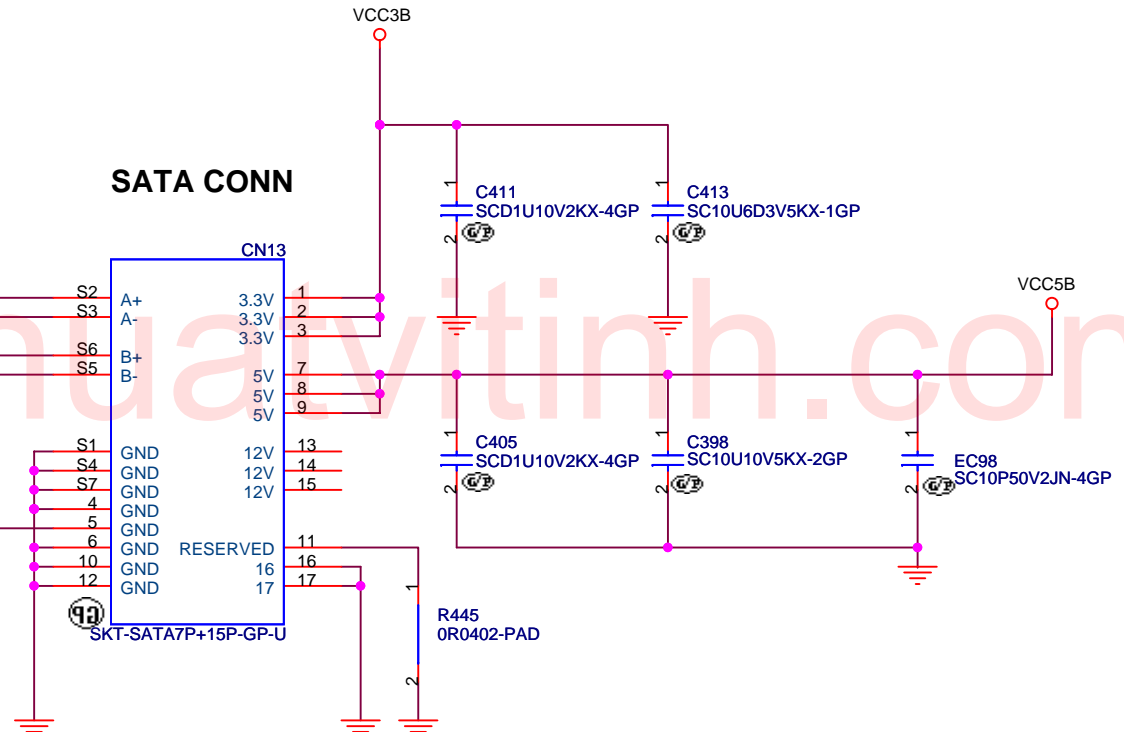
<Variant Name>

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
SPI			
Size A3	Document Number Caramel-1	Rev SC	
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20 SATA0_TXP >>>
 20 SATA0_TXN >>>
 20 SATA0_RXP <<<
 20 SATA0_RXN <<<

38 -HDD_PRESENCE <<<

SATA CONN



<Core Design>

緯創資通

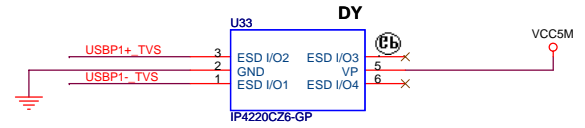
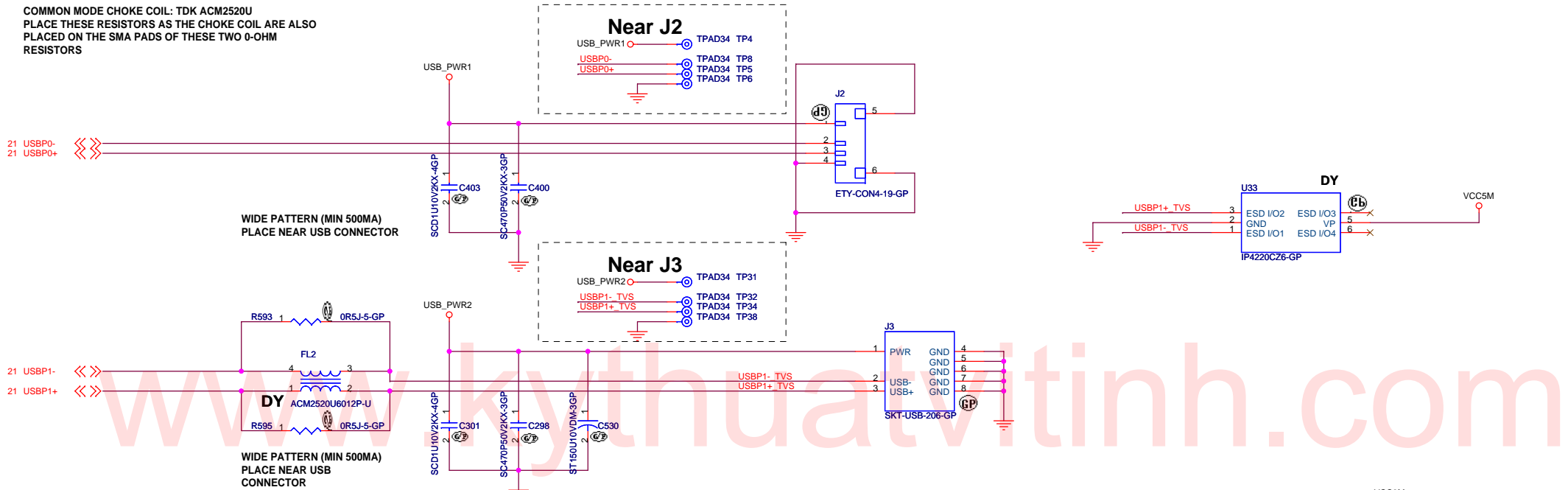
Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

Title **2.5 inch SATA Connector**

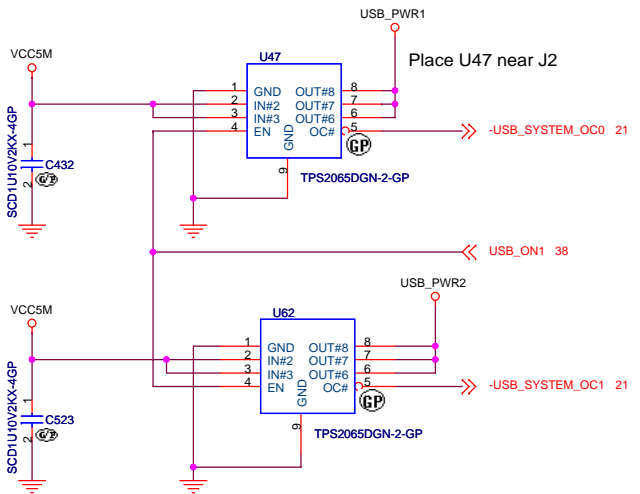
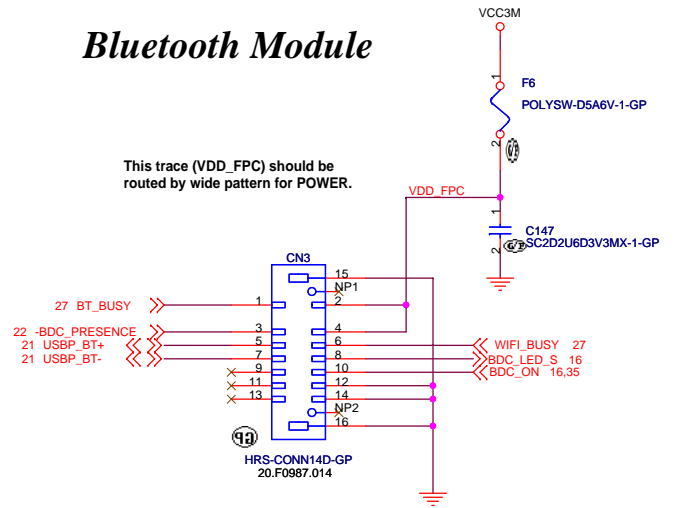
Size A4	Document Number Caramel-1	Rev SC
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Date: Monday, July 14, 2008 Sheet 30 of 62

COMMON MODE CHOKE COIL: TDK ACM2520U
 PLACE THESE RESISTORS AS THE CHOKE COIL ARE ALSO
 PLACED ON THE SMA PADS OF THESE TWO 0-OHM
 RESISTORS



Bluetooth Module



	TI P/N	WISTRON P/N
1	TPS2065DGN-GP	74.02065.079
2	TPS2065DGN-1-GP	74.02065.A79

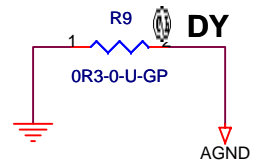
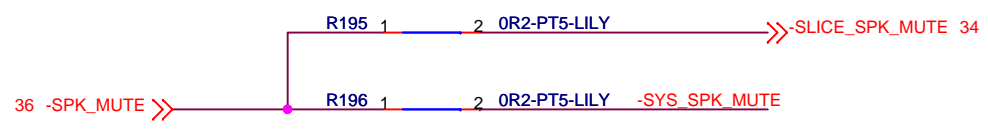
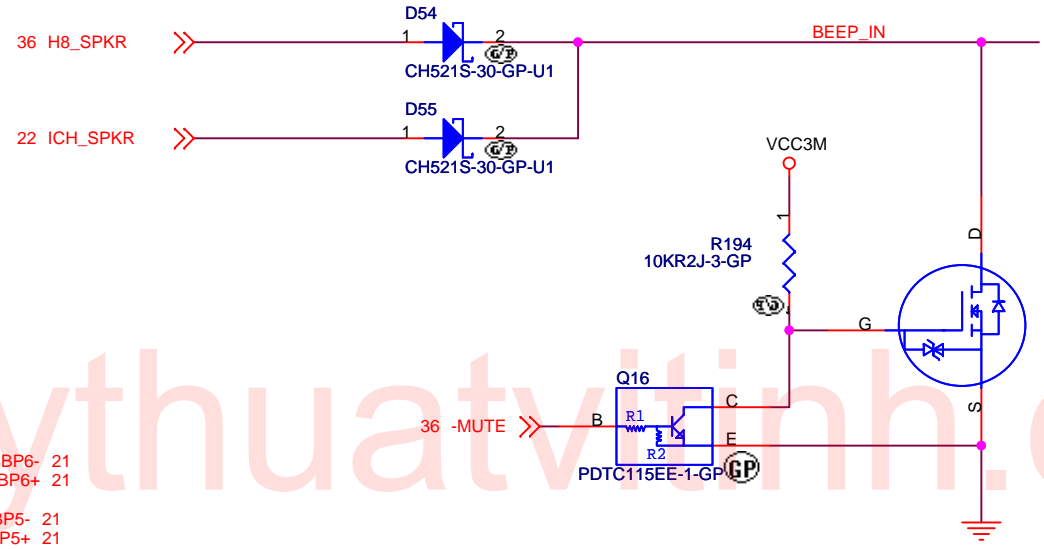
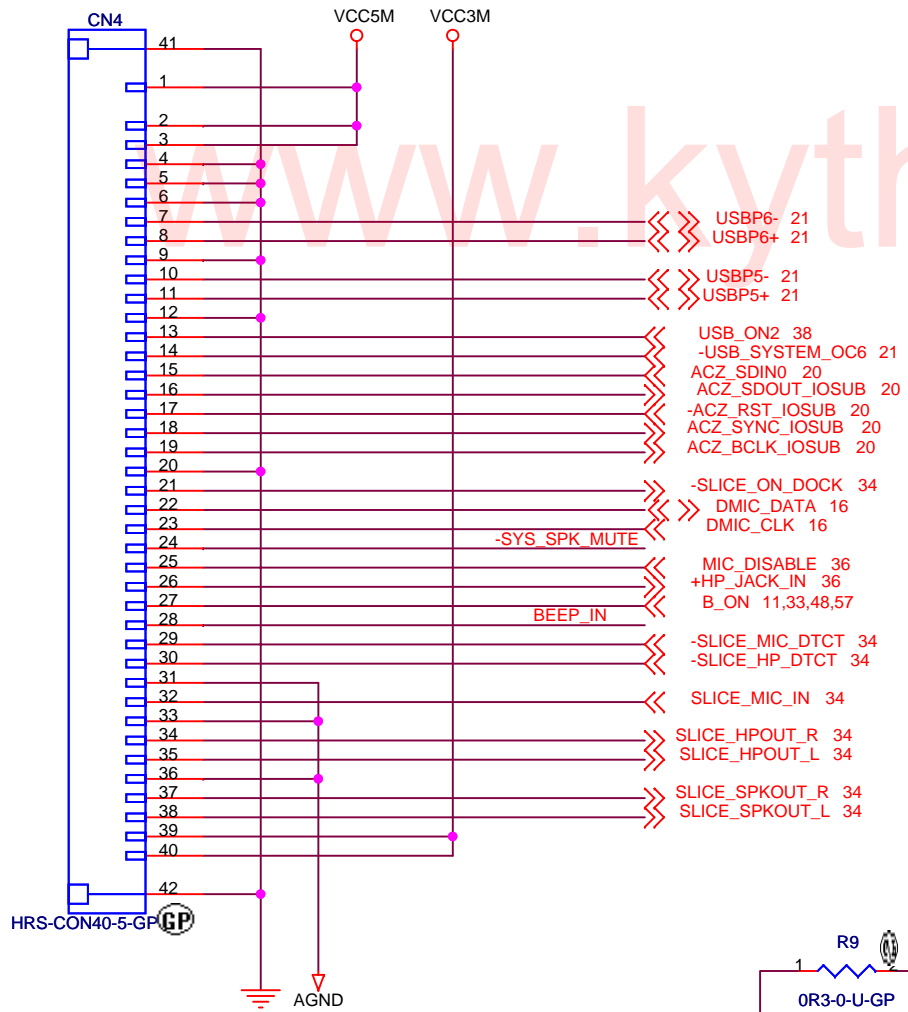
<Variant Name>

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

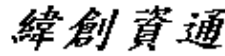
Title: **USB POWER / CONNECTOR**

Size: A3 Document Number: **Caramel-1** Rev: **SC**

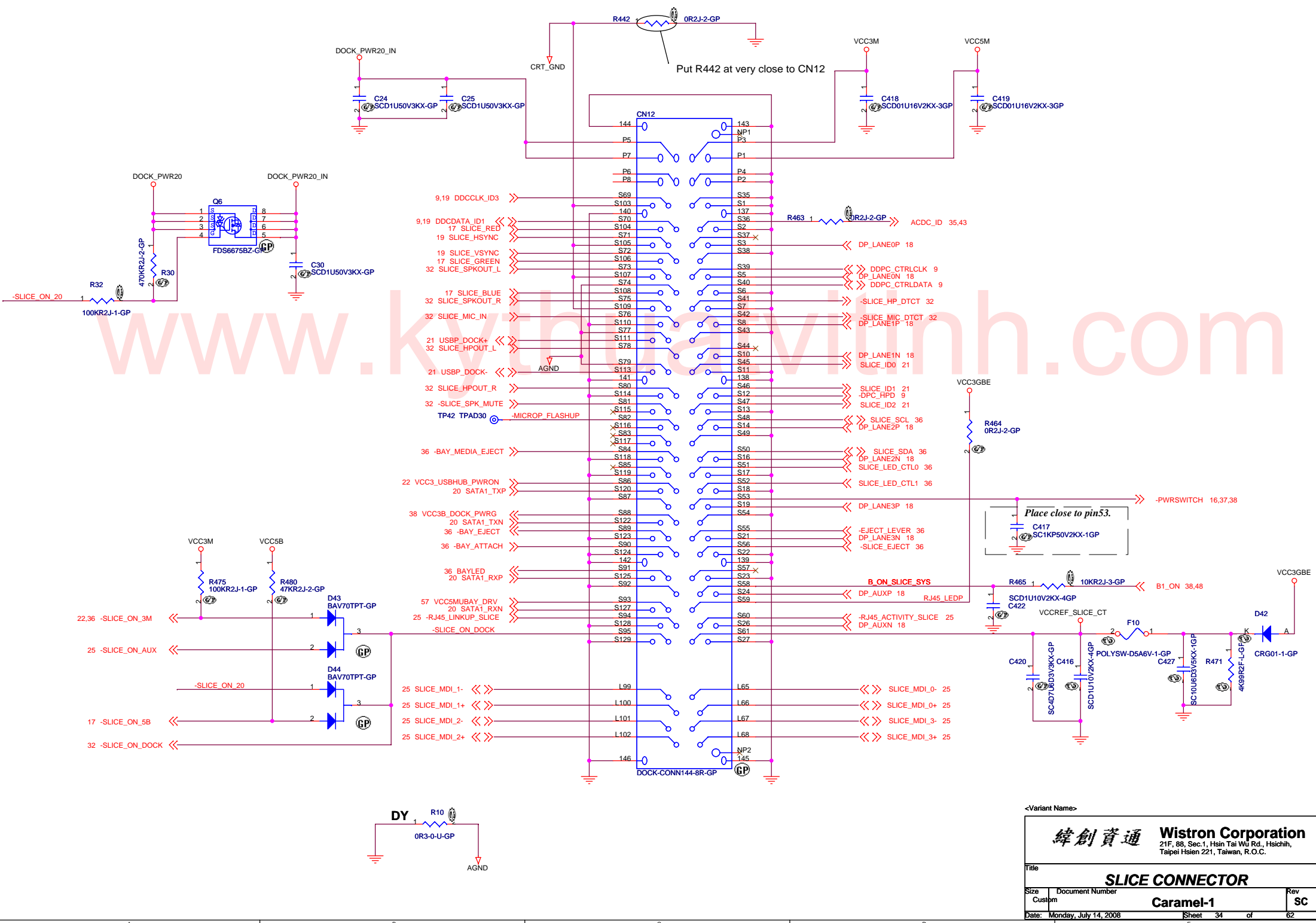
Date: Monday, July 14, 2008 Sheet 31 of 62



<Variant Name>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
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Title		
SUB-CARD CONNECTOR		
Size	Document Number	Rev
A4	Caramel-1	SC
Date:	Monday, July 14, 2008	Sheet 32 of 62



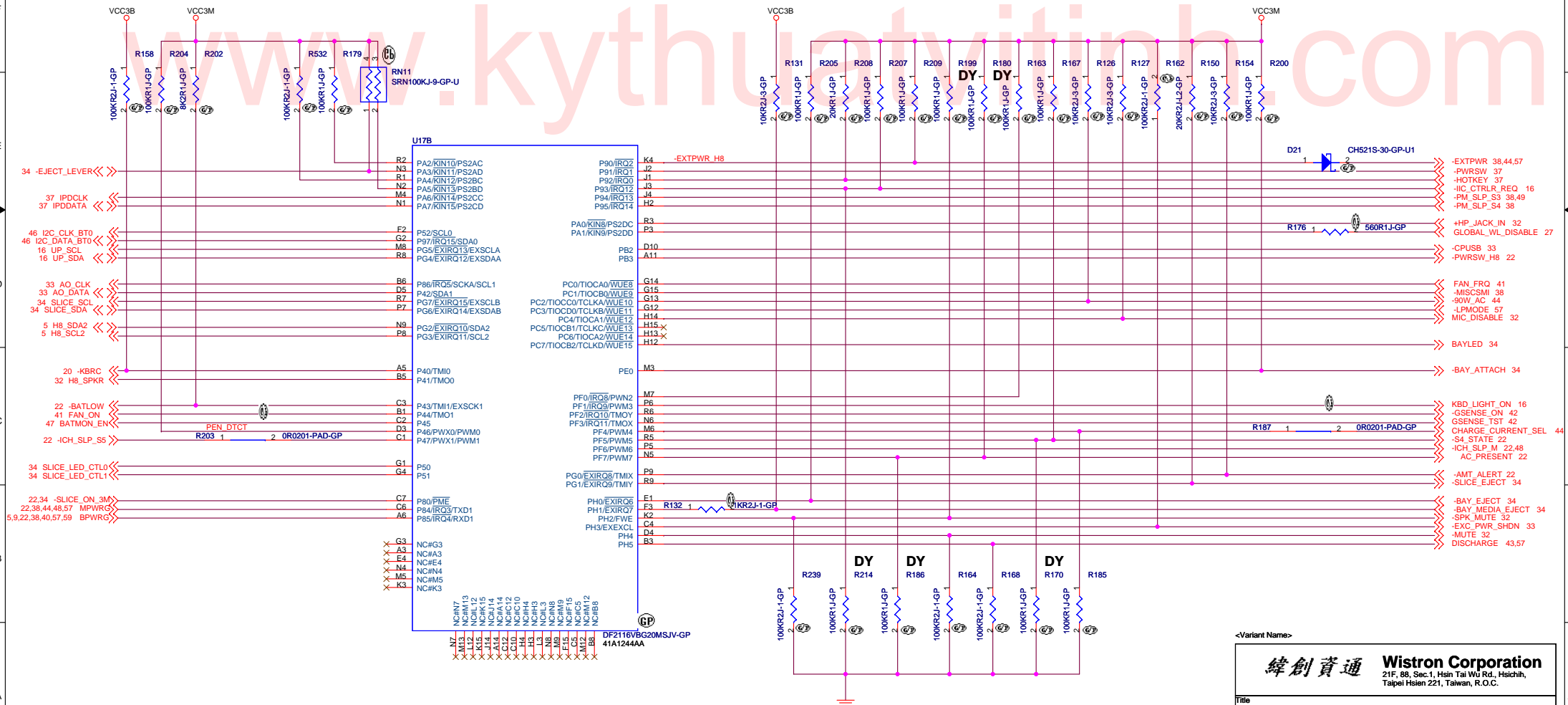
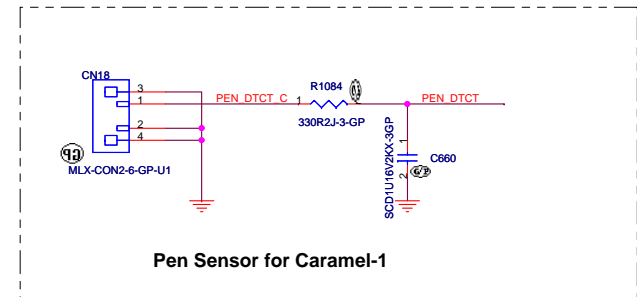
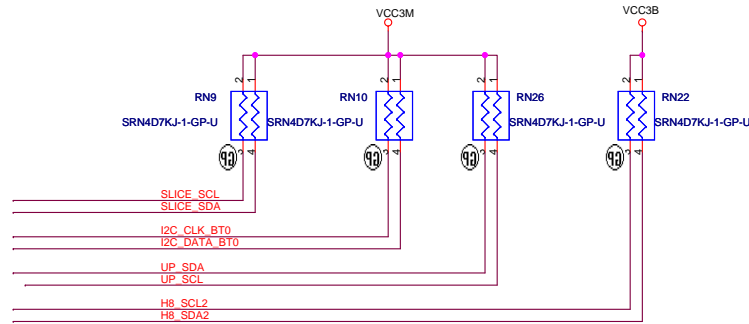
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緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

Title: **SLICE CONNECTOR**

Size	Document Number	Rev
Custpm	Caramel-1	SC

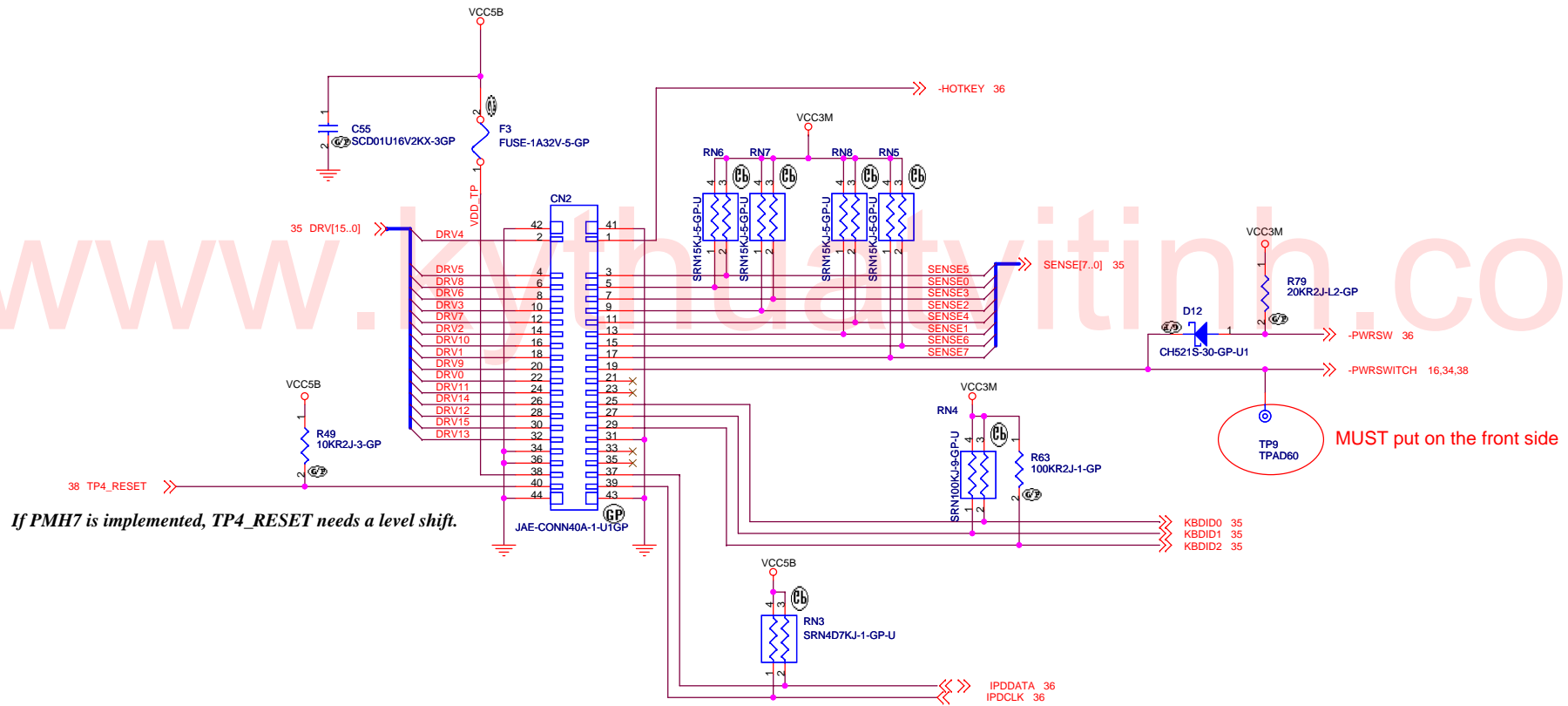
Date: Monday, July 14, 2008 Sheet 34 of 62



<Variant Name>

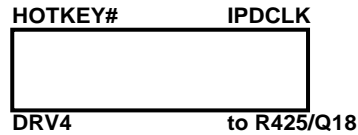
緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsein 221, Taiwan, R.O.C.	
H8S2116(2/2)	
Title	Rev
Size	SC
Custom	Document Number
Caramel-1	
Date: Monday, July 14, 2008	Sheet 36 of 82

Keyboard Connector



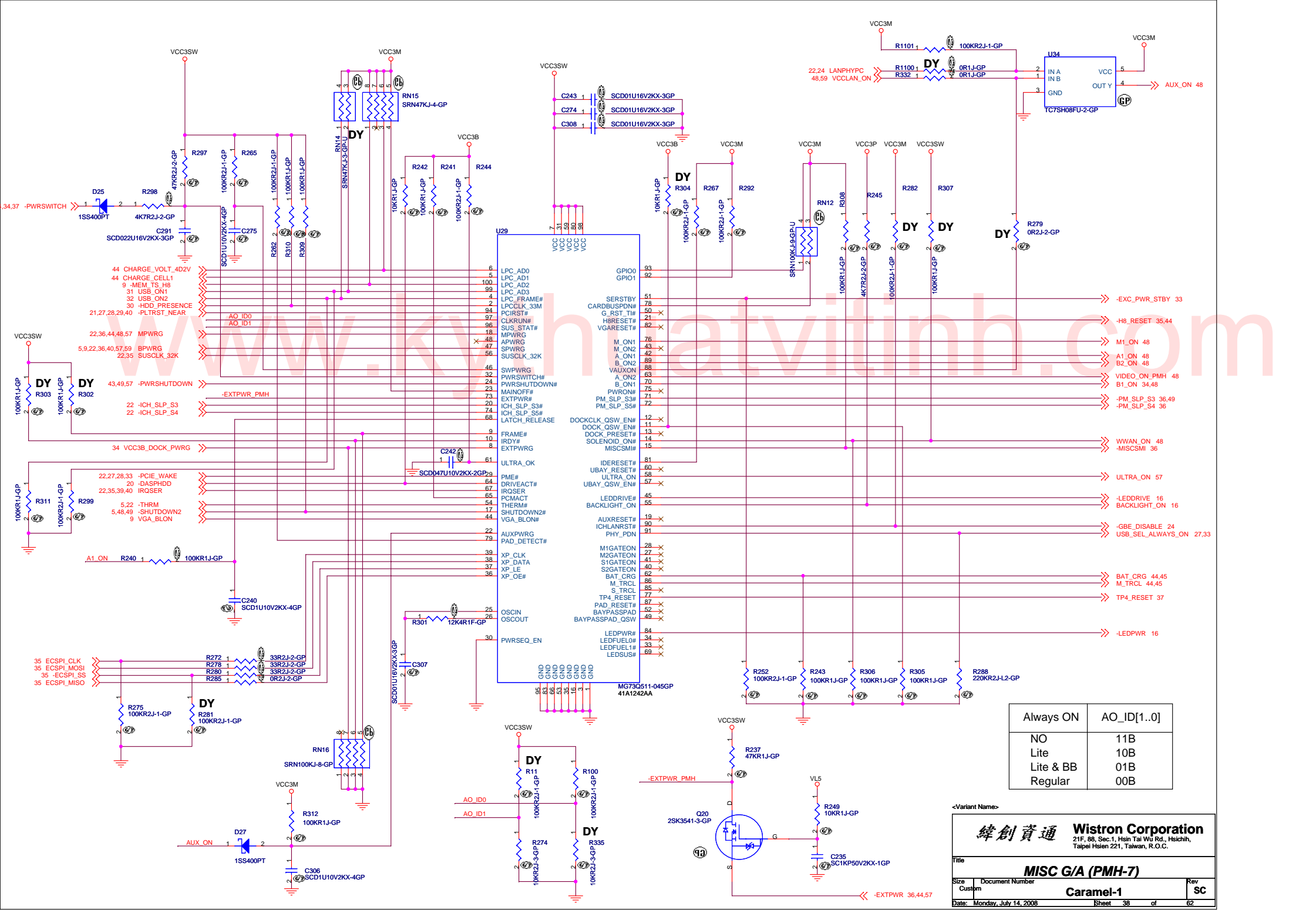
If PMH7 is implemented, TP4_RESET needs a level shift.

TP9 TPAD60 MUST put on the front side



Keyboard Connector Top View

<Variant Name>			
緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai WU Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
KEYBOARD CONN			
Size	Document Number	Rev	SC
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Date: Monday, July 14, 2008		Sheet	62



Always ON	AO_ID[1..0]
NO	11B
Lite	10B
Lite & BB	01B
Regular	00B

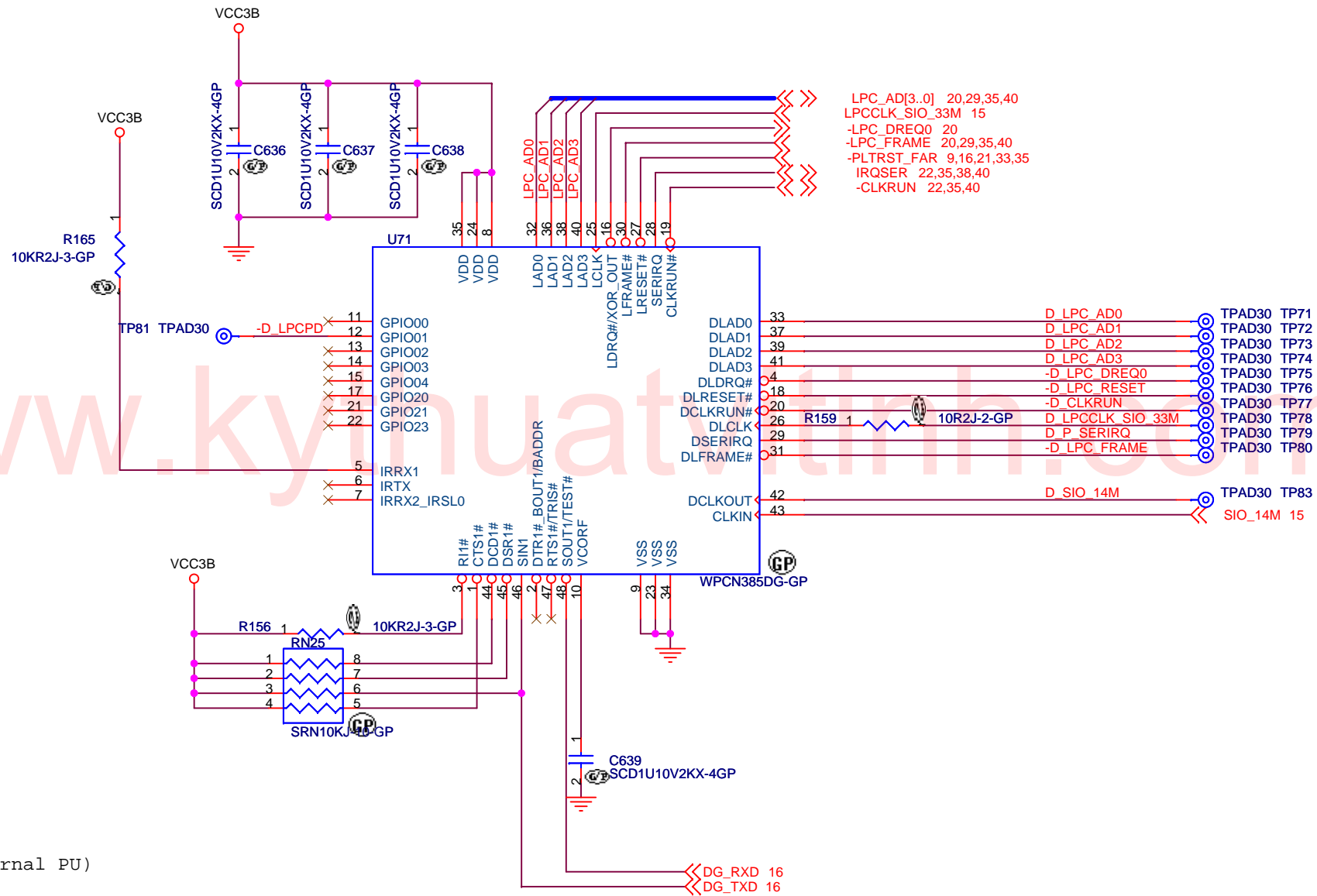
<Variant Name>

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

Title **MISC G/A (PMH-7)**

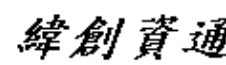
Size	Document Number	Rev
Custom	Caramel-1	SC

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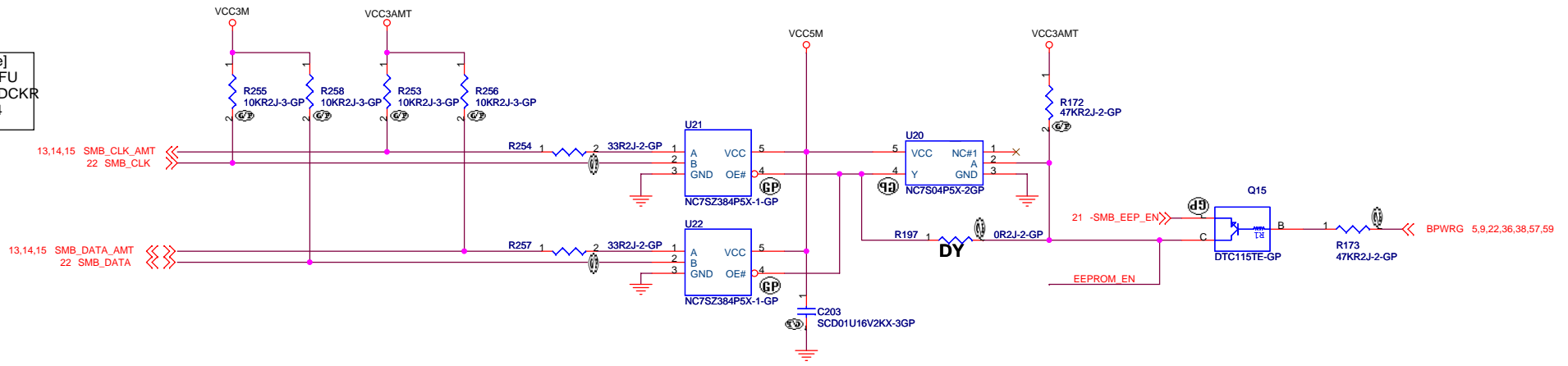


Power On strap pin
 Pin2 : Base I/O address
 NC : 164E/164F (Internal PU)
 PD : 2E/2F
 Pin31 : LPC Switch function
 NC : Switch Enable(controlle by DLCON bit)
 PD : Switch Disable(forced to be Dissconnected)
 Pin47 : Tristate
 NC : Normal Operation
 PD : All pins floting
 Pin48 : Test
 NC : Normal Operation
 PD : Test mode

<Variant Name>

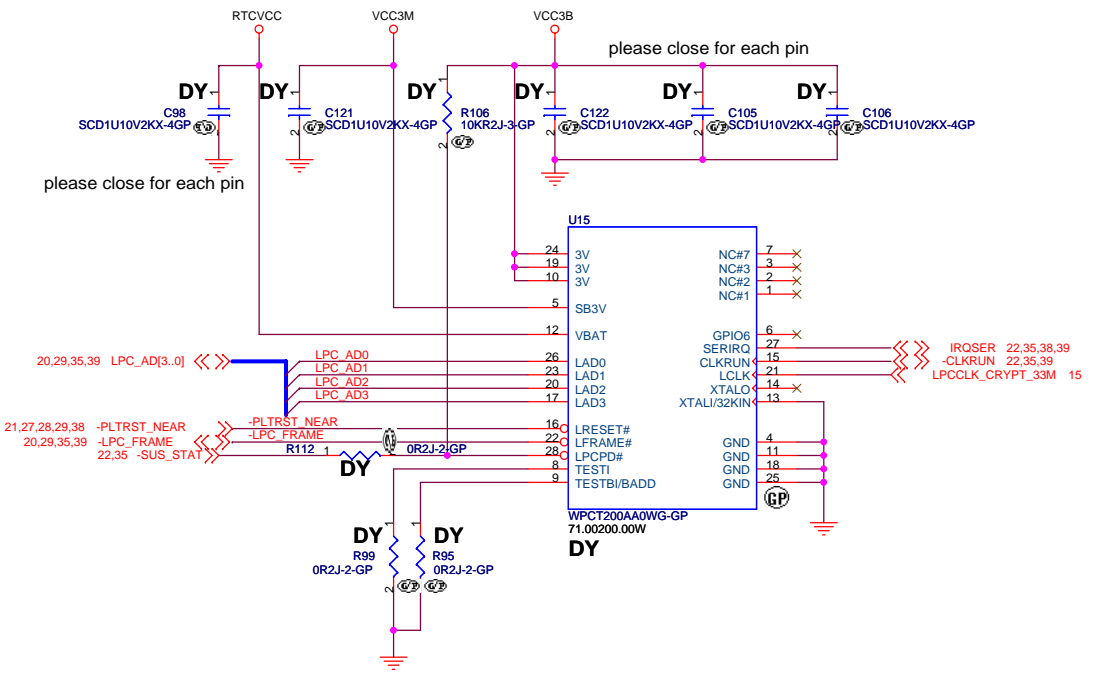
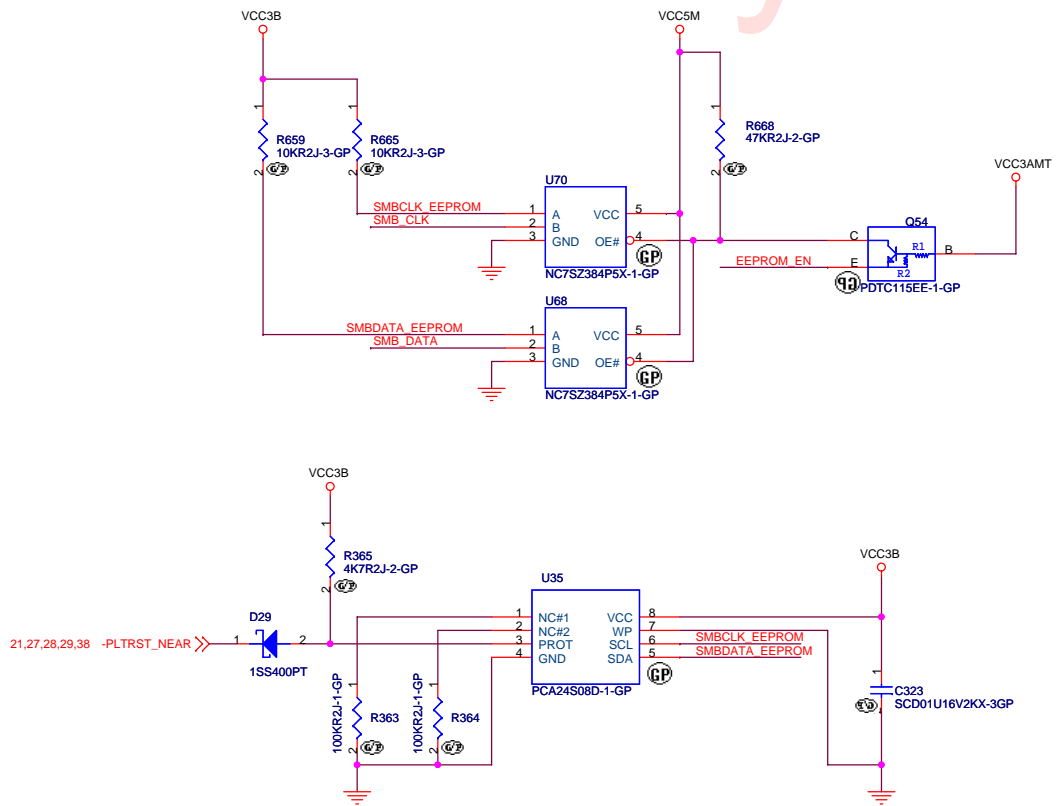
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
WPCN385SDG		
Size A4	Document Number	Rev SC
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[Sourcing Candidate]
 Toshiba TC7SB384FU
 TI SN74CBT1G384DCKR
 Fairchild NC7SZ384



EEPROM

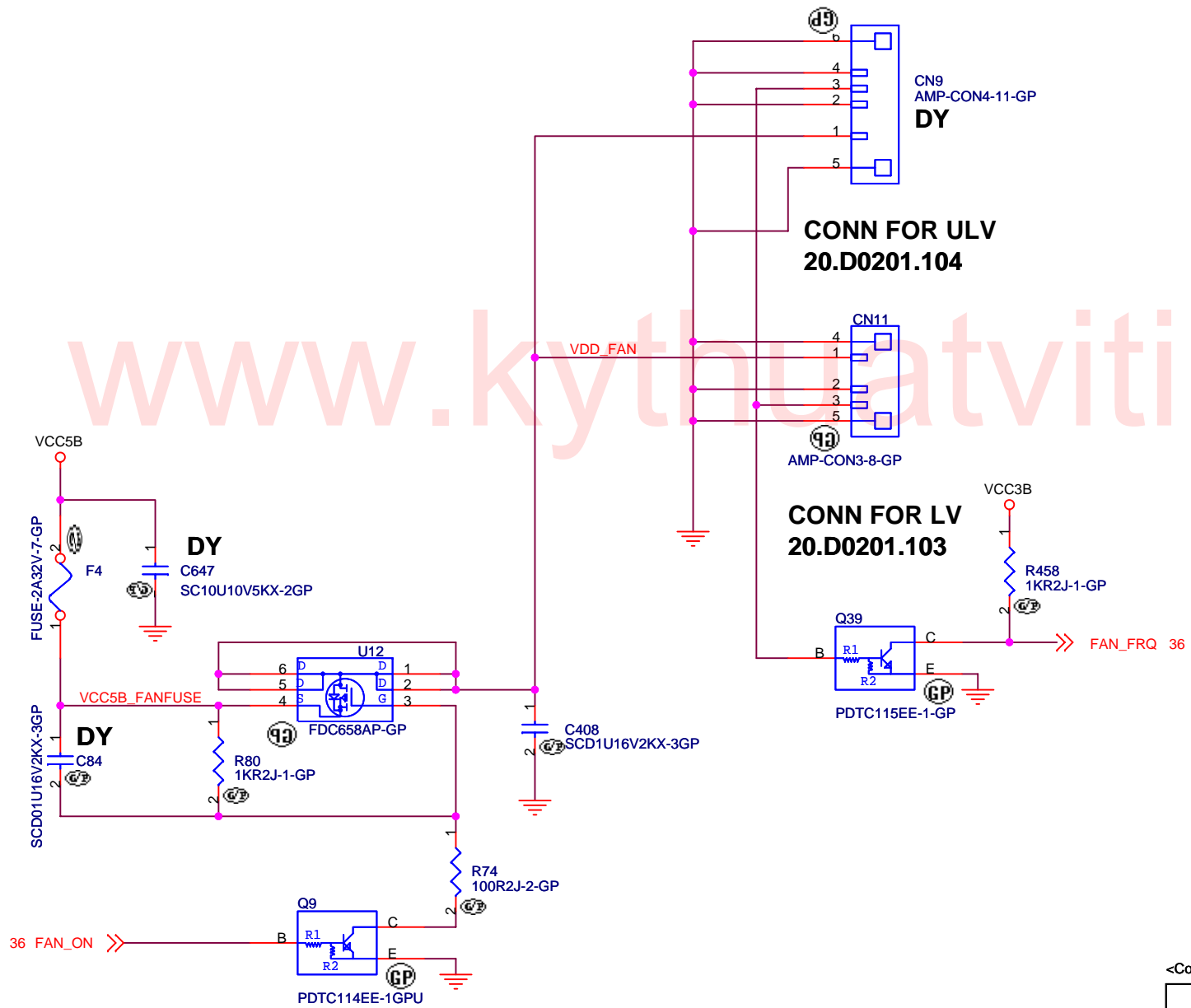
TCPA



<Core Design>

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

Title	EEPROM/TCPA		Rev
Size	Document Number	Caramel-1	SC
A3			
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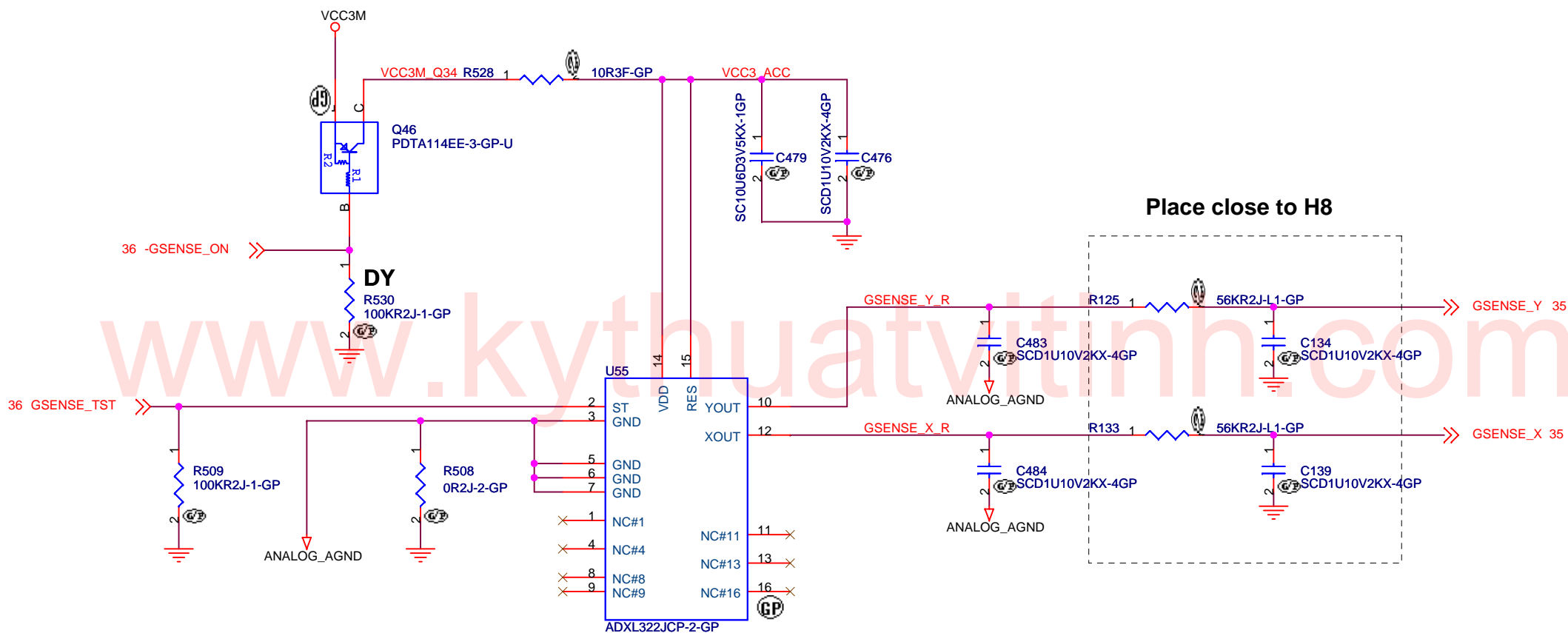


<Core Design>

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

Size A4	Document Number Caramel-1	Rev SC
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Primary : ADI ADXL322
 2nd : STMicro LIS244AL
 3rd : STMicro LIS34AL: 74.00034.0BZ

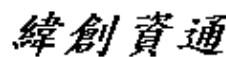
Width = 6 mil & Spacing = 10 mil
 for three Output traces

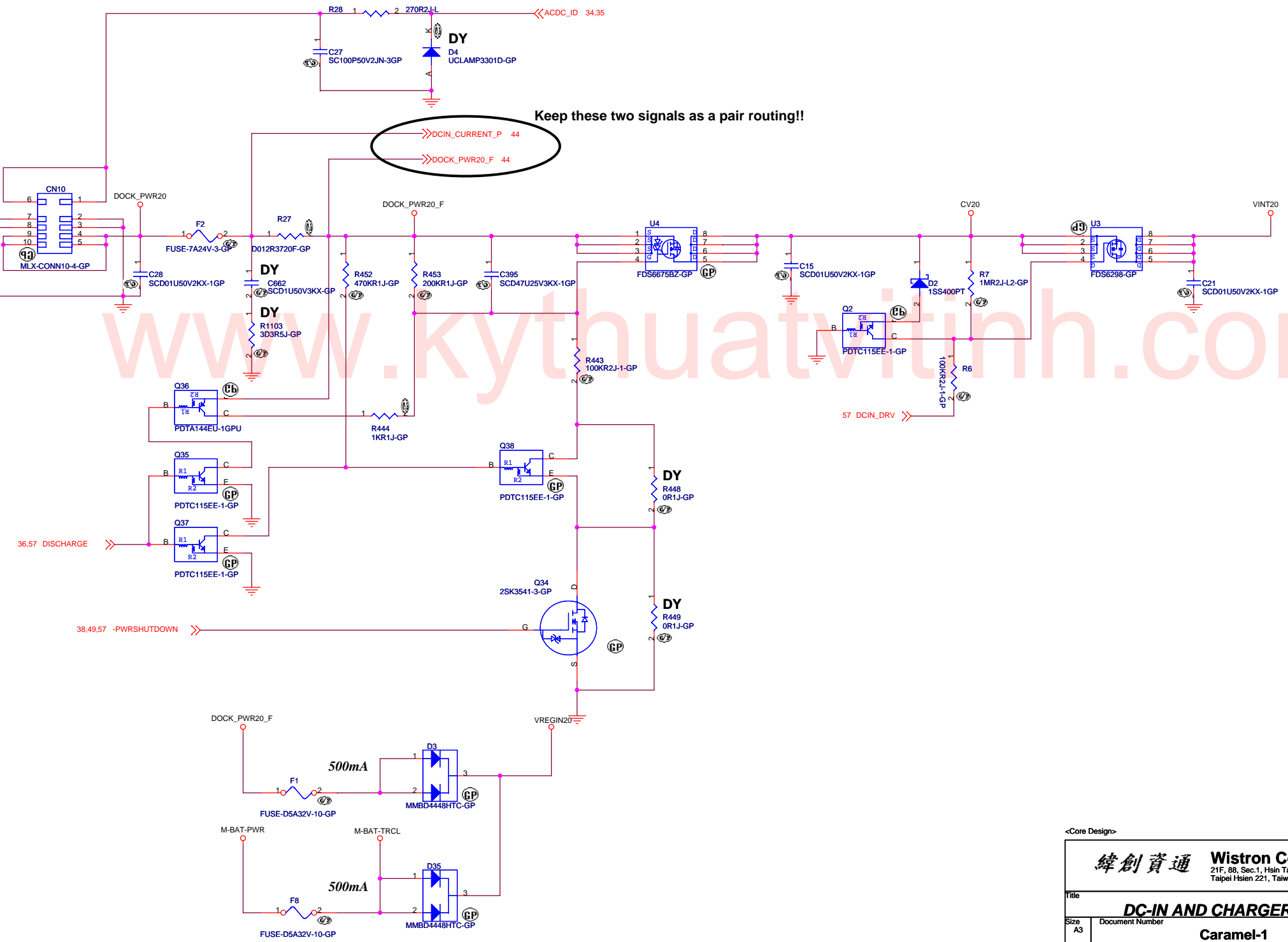
Layout Comment :

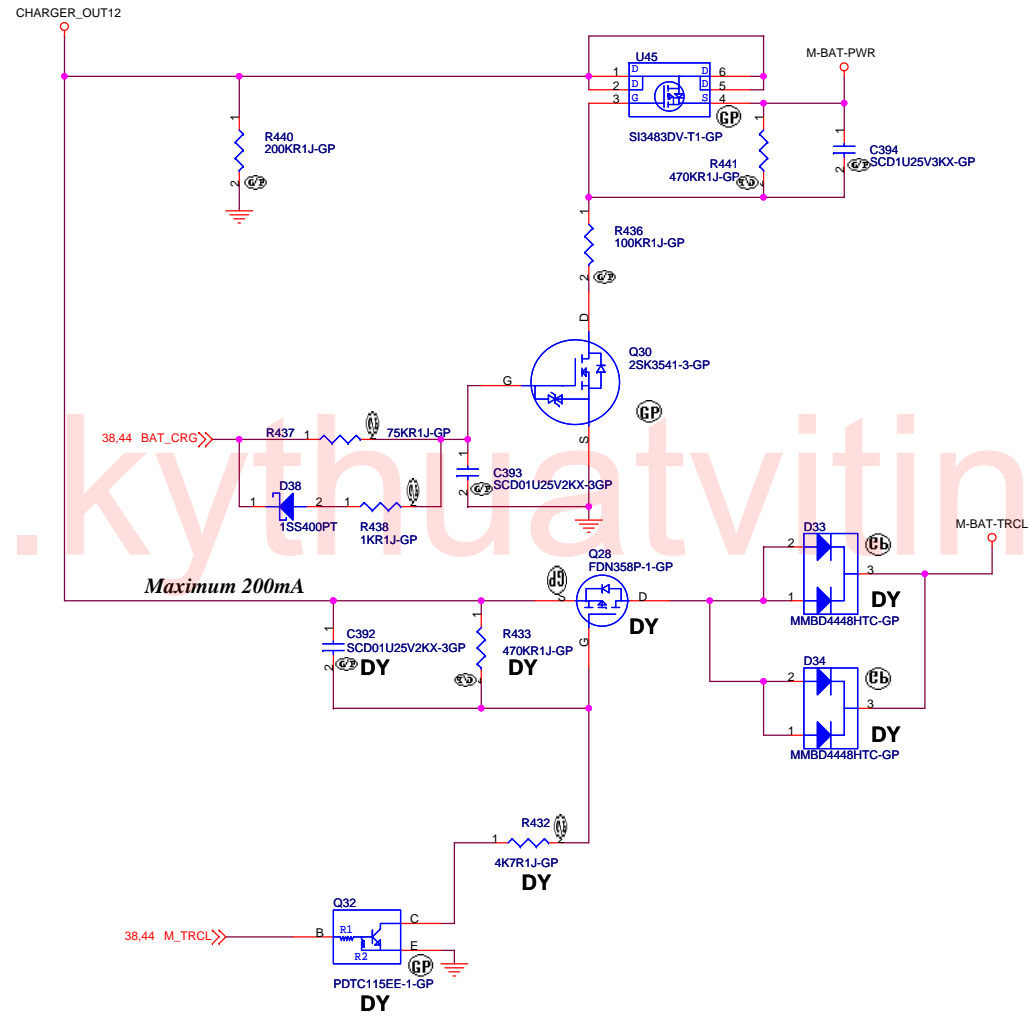
- (1) Place C483, C484, Q46, R528, R530, C479, C476, R509, R508 close to U55.
- (2) Avoid routing under DCDC switching area.

	ADXL322	
	LIS244AL	No Accel
	LIS34AL	
R530	NO_ASM	ASM
R509	ASM	ASM
All other	ASM	NO_ASM


<Core Design>

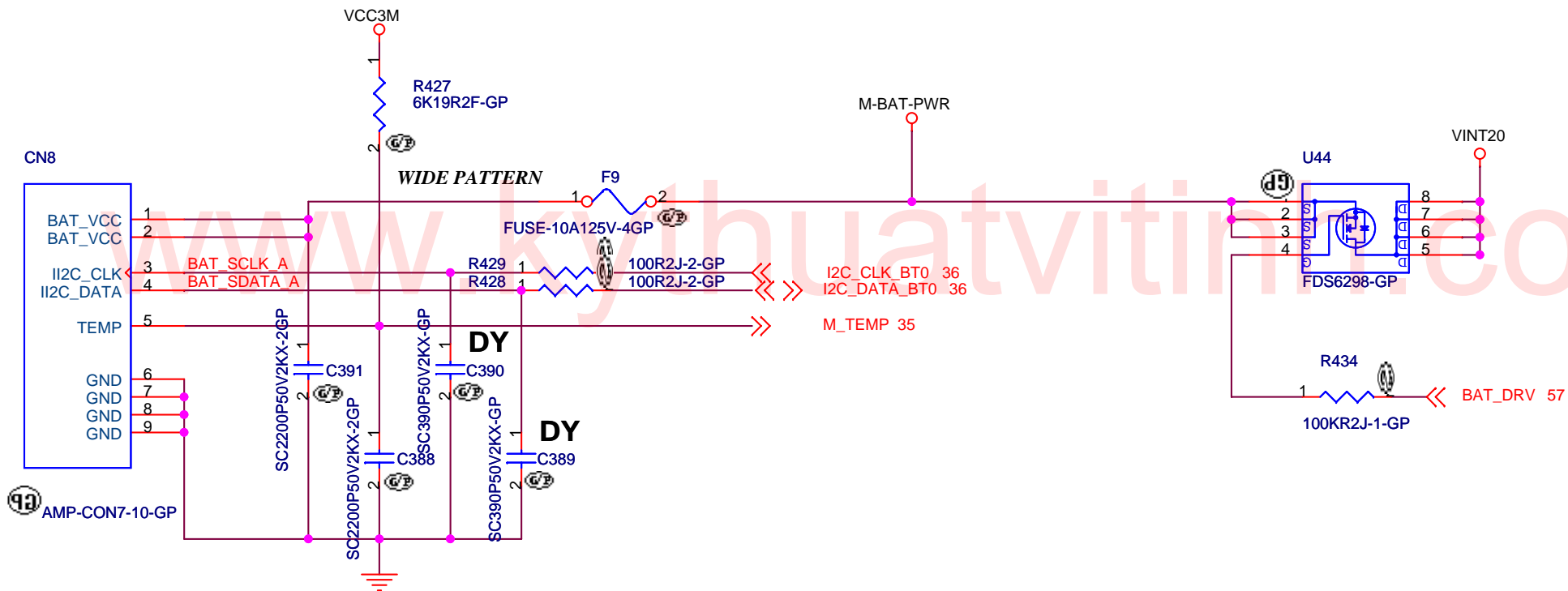
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
G-SENSOR	
Size A4	Document Number Caramel-1
Date: Monday, July 14, 2008	Rev SC
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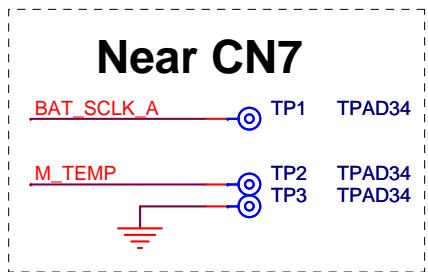


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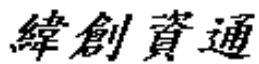
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
CHARGER SELECT	
Title	
Size A3	Document Number Caramel-1
Date: Monday, July 14, 2008	Rev SC
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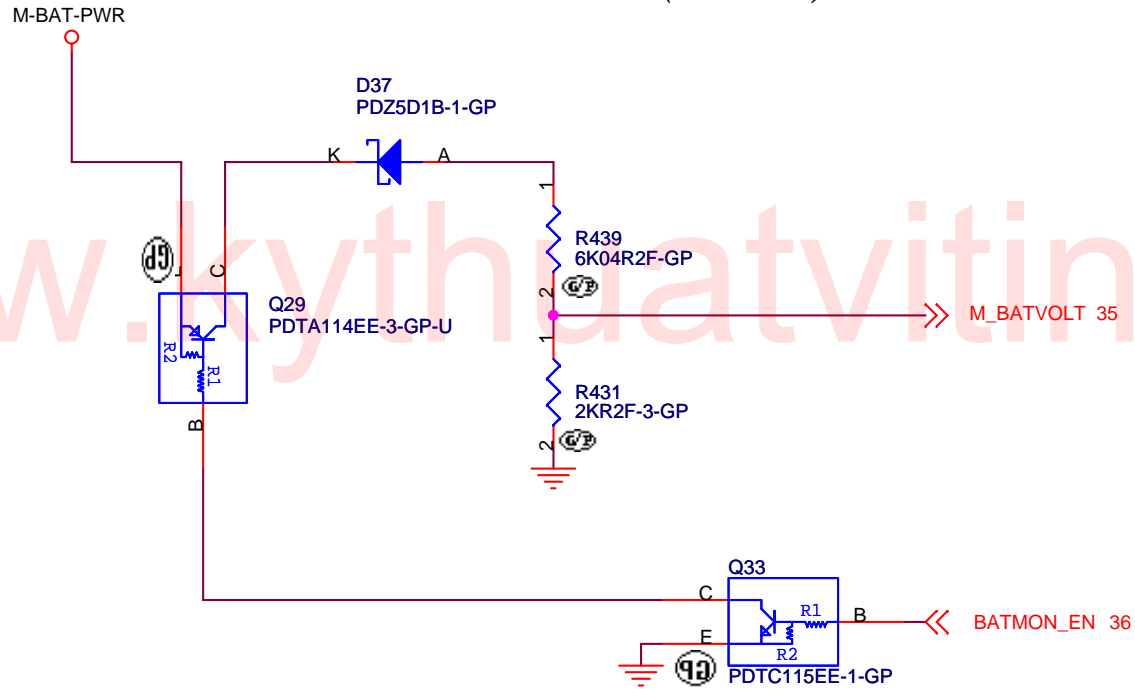
AMP-CON7-10-GP



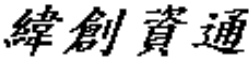
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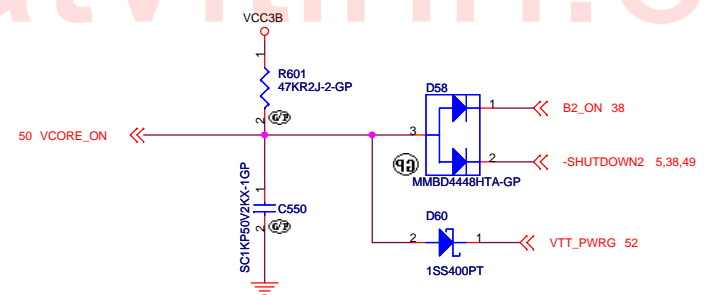
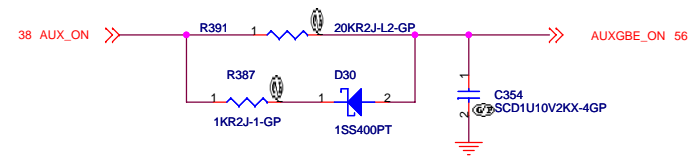
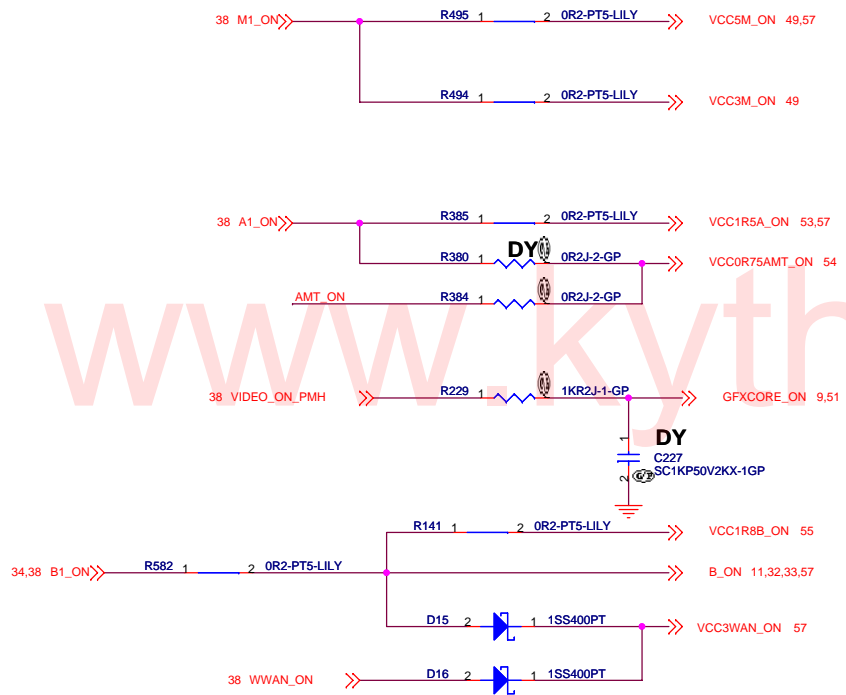
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title BATTERY INPUT		
Size A	Document Number	Rev SC
Caramel-1		
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$$V_{OUT} = 0.249 (V_{BAT} - 5)$$

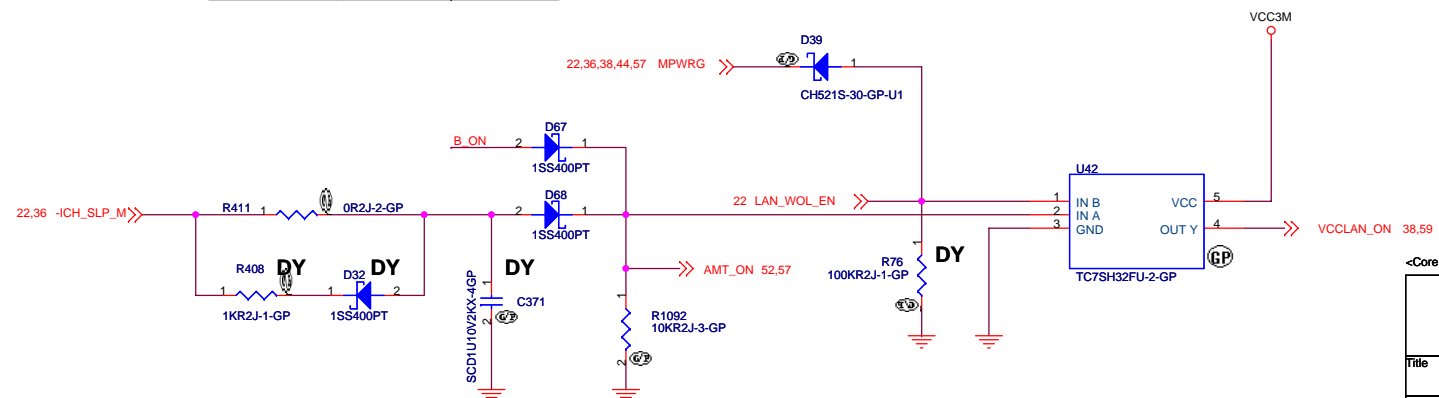


<Core Design>

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title BATTERY MONITOR			
Size A	Document Number Caramel-1		Rev SA
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Always ON	Enable	Disable
D15	ASM	No_ASM
D16	ASM	No_ASM



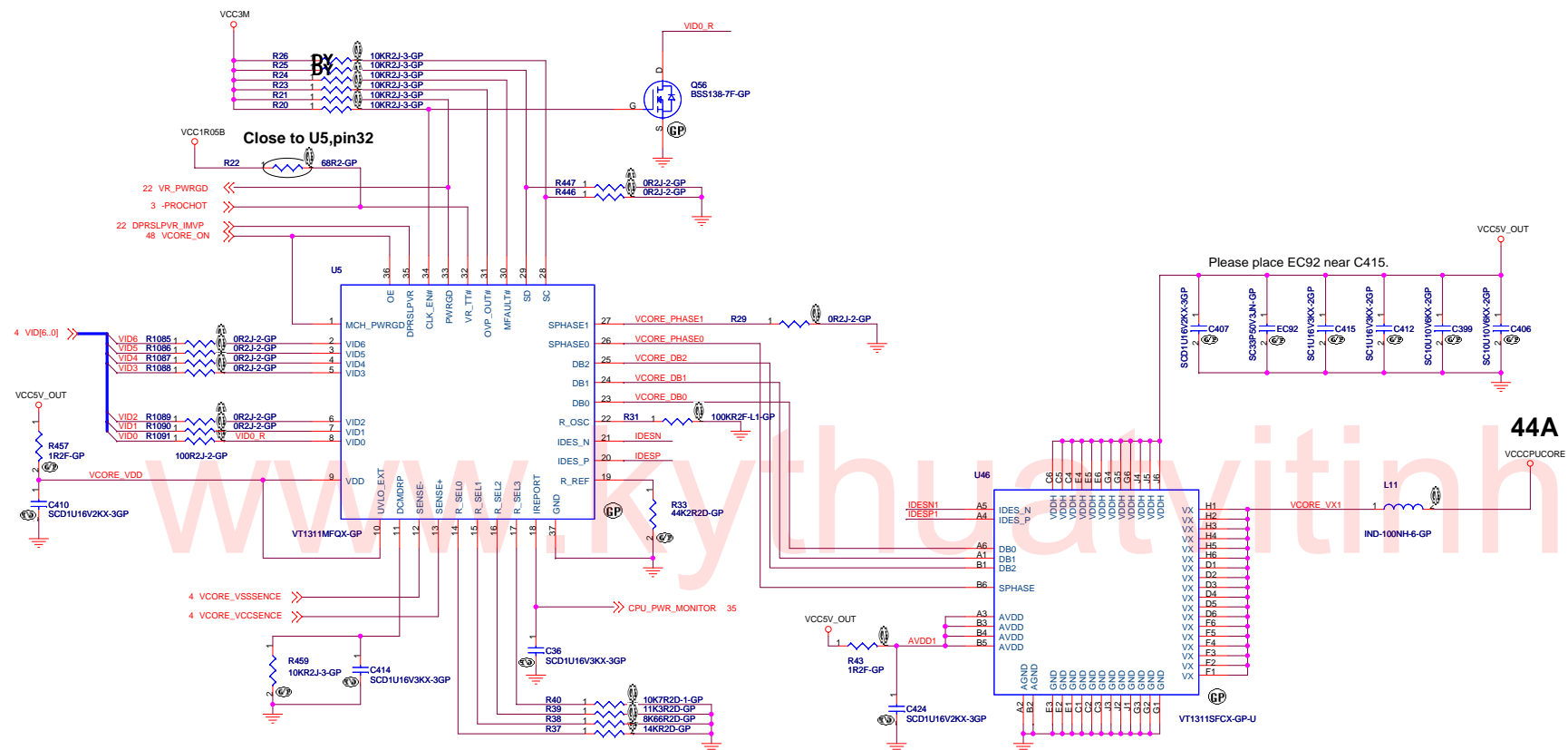
<Core Design>

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

Title: **POWER SEQUENCE**

Size: A3 Document Number: **Caramel-1** Rev: SC

Date: Monday, July 14, 2008 Sheet 48 of 62

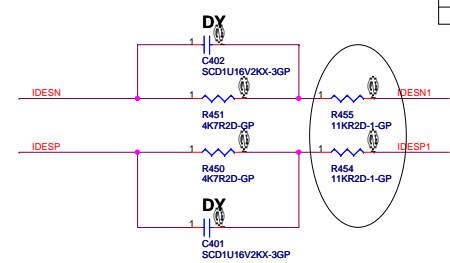
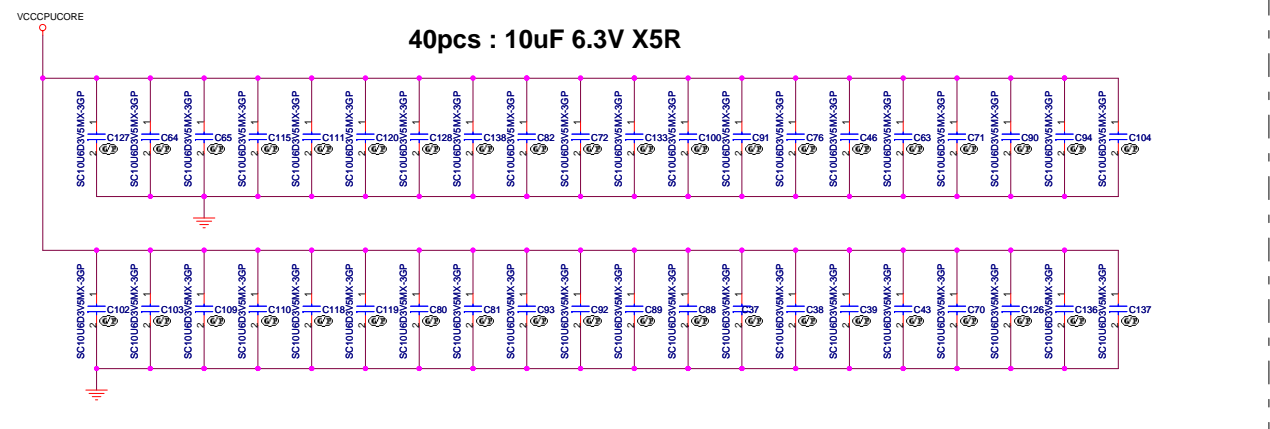


	LV dual core	ULV dual core	ULV single core
LoadLine	2.1m-Ohm	2.1m-Ohm	5.1m-Ohm
Fsw	1MHz	1MHz	1MHz
Imax	28A	24A	10A
DCM IpK	8A	8A	8A
RseL0	39.2K-ohm	14K-ohm	2.4K-ohm
RseL2	3.1K-ohm	3.1K-ohm	13K-ohm
Rldes	9.76+7.5K ohm	9.76+7.5K ohm	14+1.87K ohm
L11	100nH	150nH	200nH
Cout	40x 10uF	40x 10uF	40x 10uF

Note1: UVLO_ext not use.
 Note2: L2 and Cout value.
 Subject to optimize.

	Wistron P/N	Vendor P/N
LV Dual Core	68.1011N.10A	PA1682.101NL
ULV Dual Core	68.1511N.101	PA1682.151NL
ULV Single core	68.1911N.101	PA1682.191NL

	Pre DV	DV
R455	12.1k ohm	11k ohm
R454	12.1k ohm	11k ohm



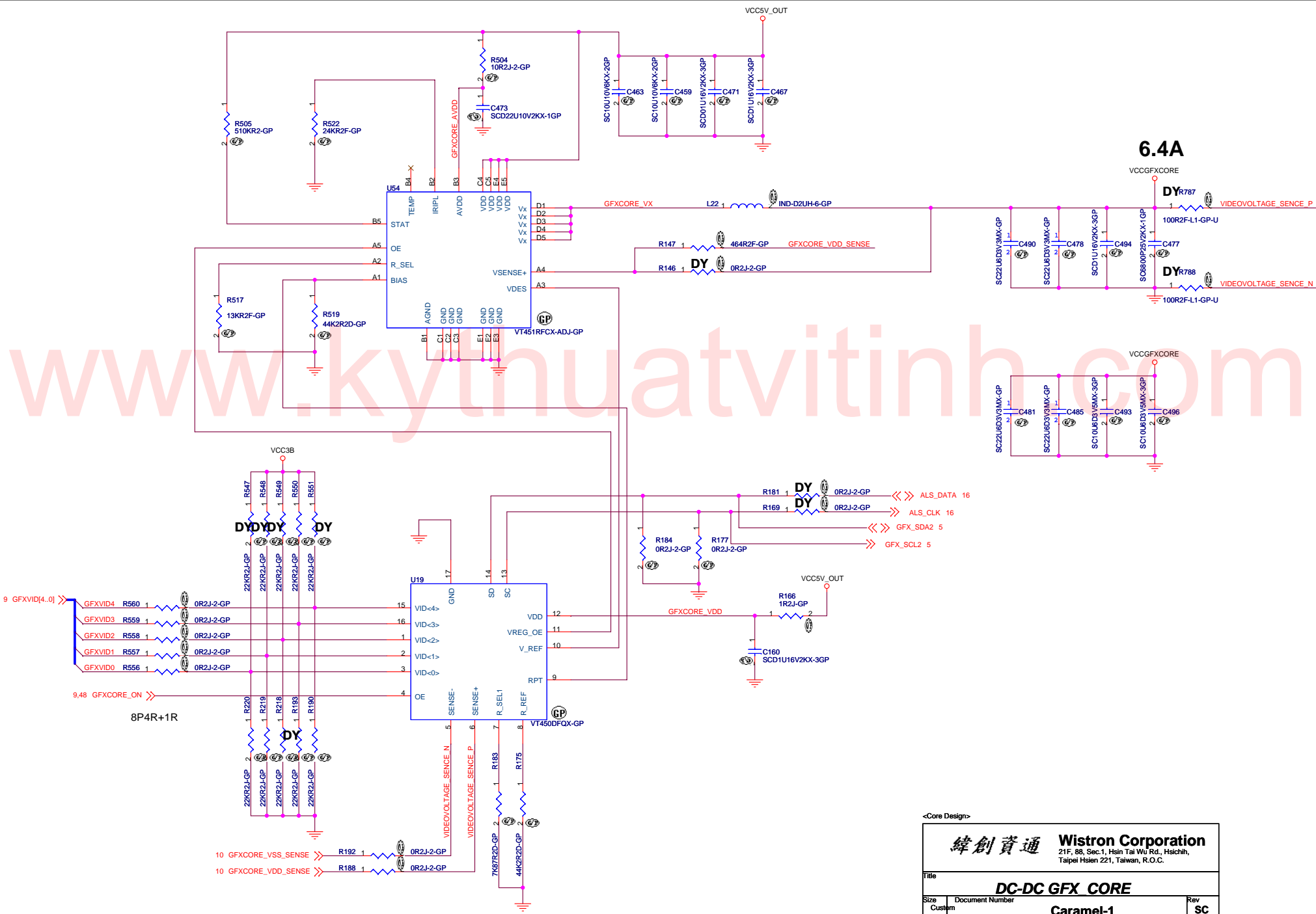
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緯創資通 Wistron Corporation
 21F, 88, Sec.1, Hsin-Tsa Wu Rd., Hsueh-shan, Taipei Hsein 221, Taiwan, R.O.C.

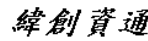
Title: **DC-DC VCC5V CORE LV/ULV**

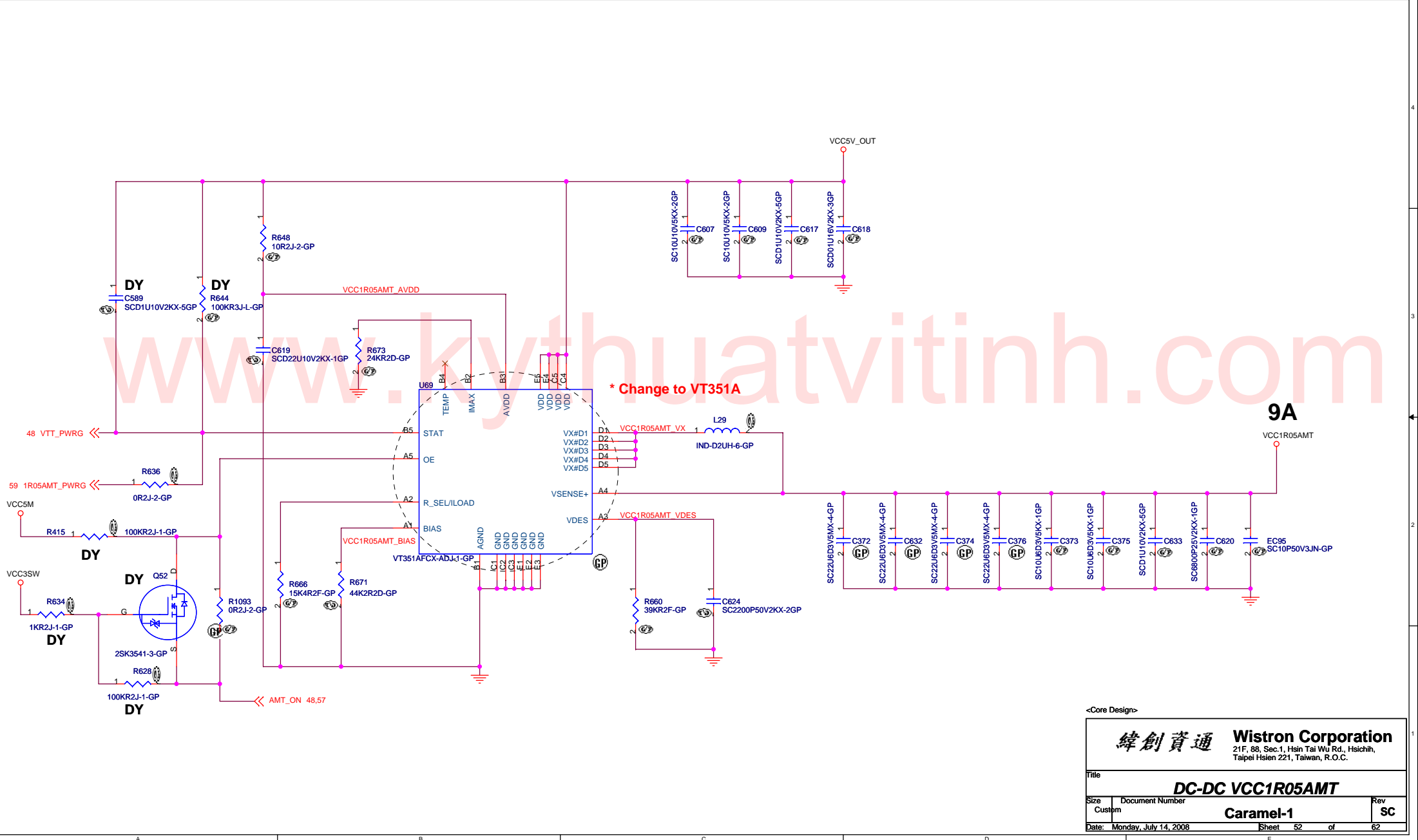
Size: Document Number
 Custom: **Caramel-1** New: SC

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<Core Design>

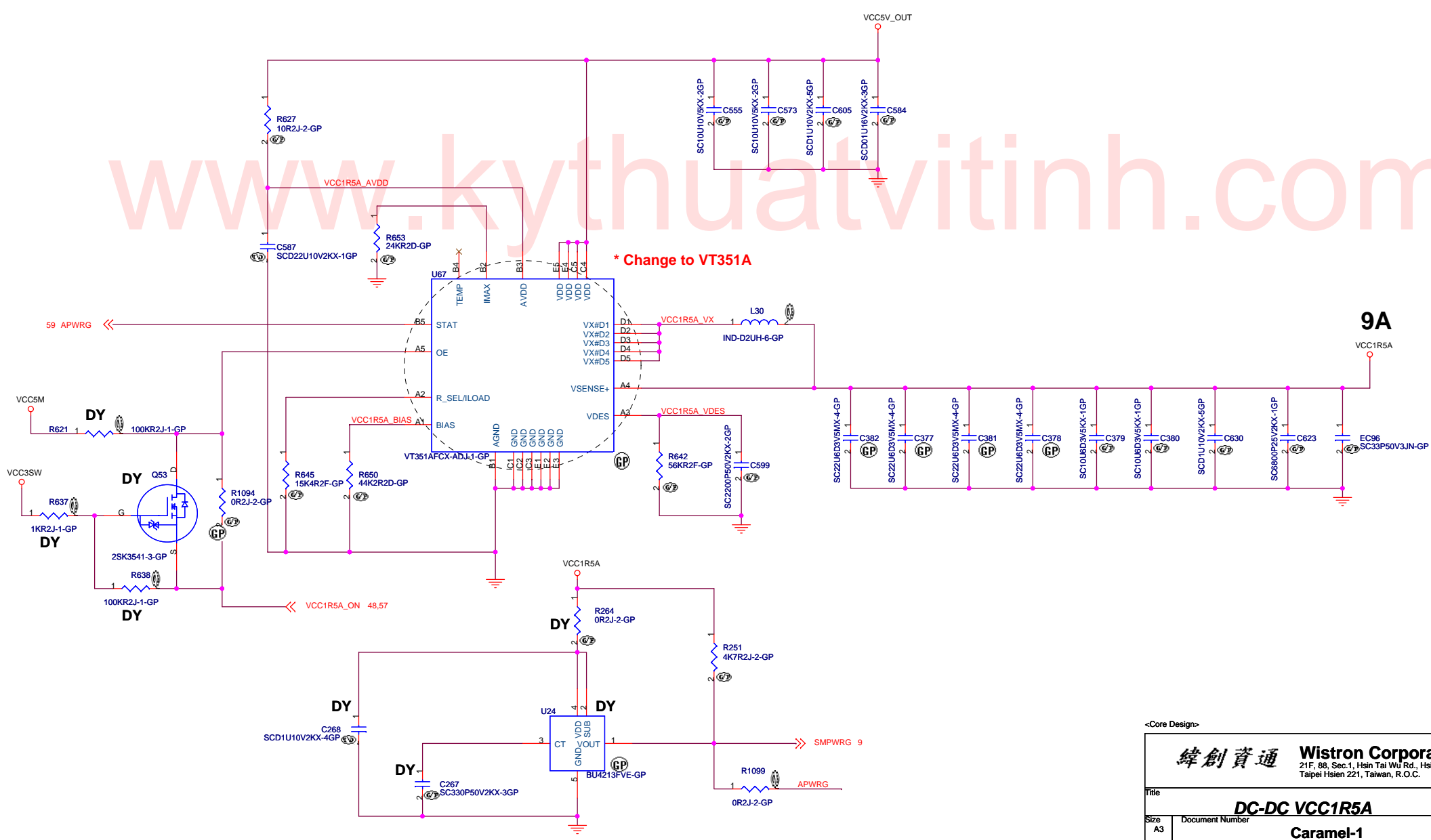
 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC GFX CORE	
Caramel-1	
Title Size Custom	Document Number Caramel-1
Date: Monday, July 14, 2008	Rev SC
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<Core Design>

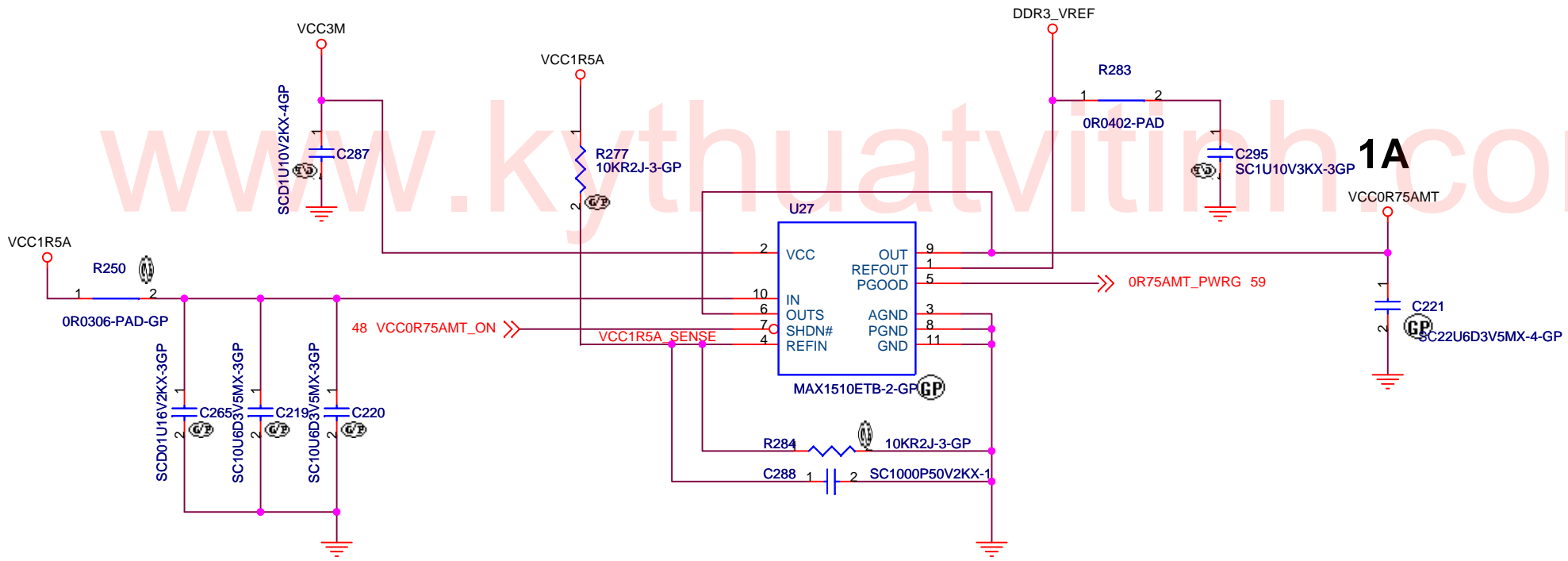
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC VCC1R05AMT	
Title Size Custom	Document Number Caramel-1
Date: Monday, July 14, 2008	Sheet 52 of 62
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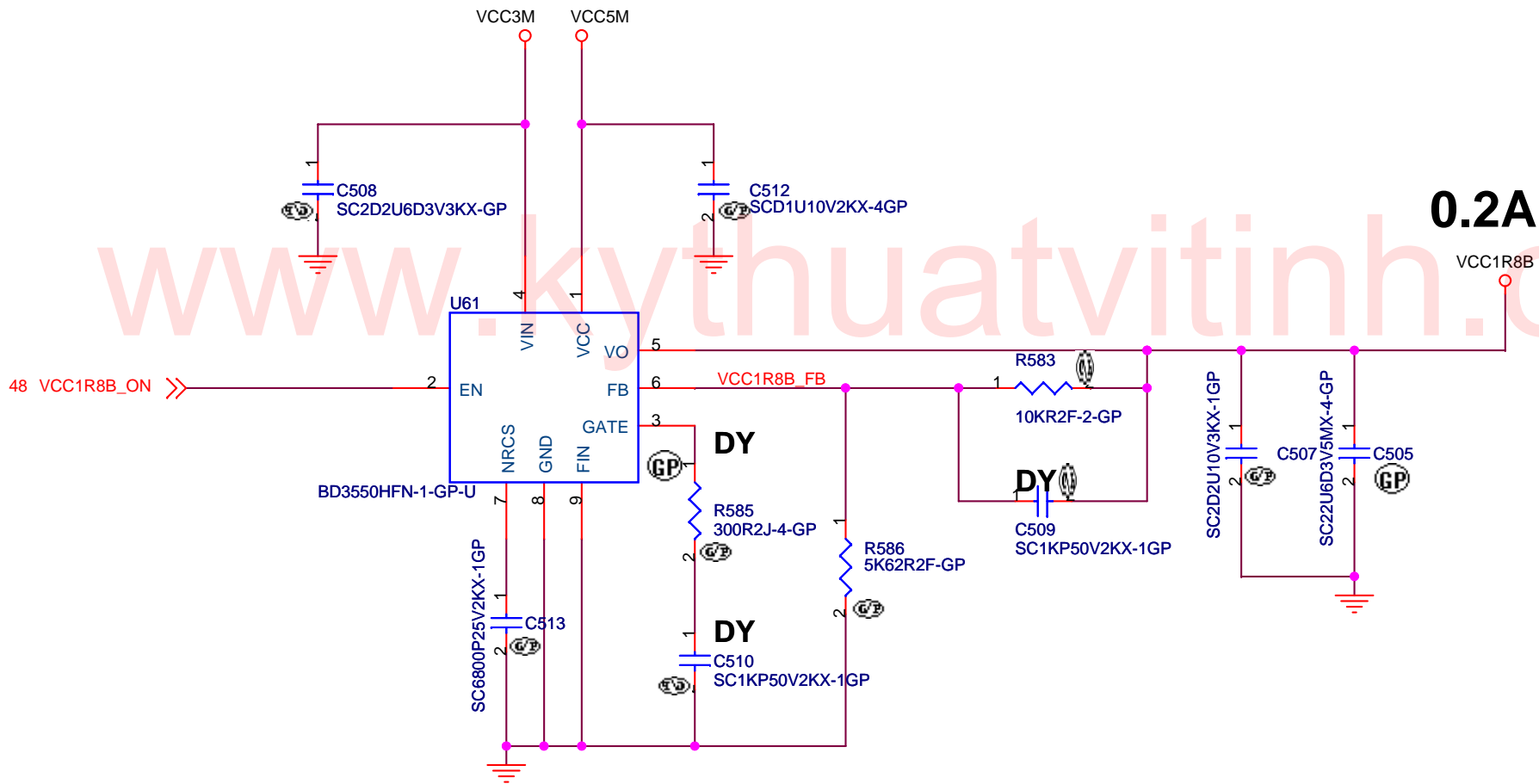
<Core Design>

<p>緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</p>		
<p>Title: DC-DC VCC1R5A</p>		
Size: A3	Document Number: Caramel-1	Rev: SC
Date: Monday, July 14, 2008	Sheet: 53 of 62	

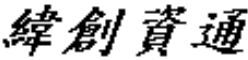


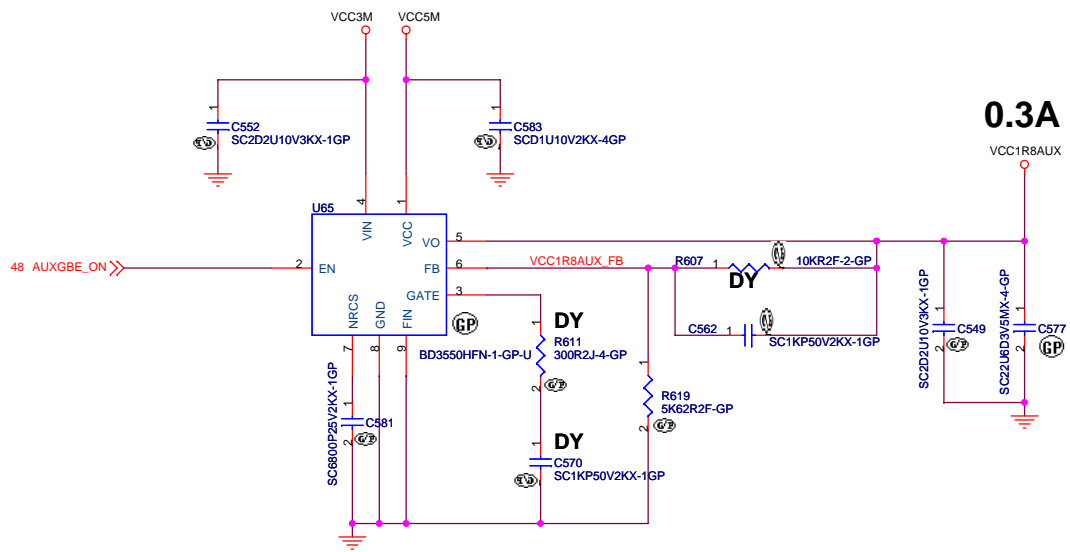
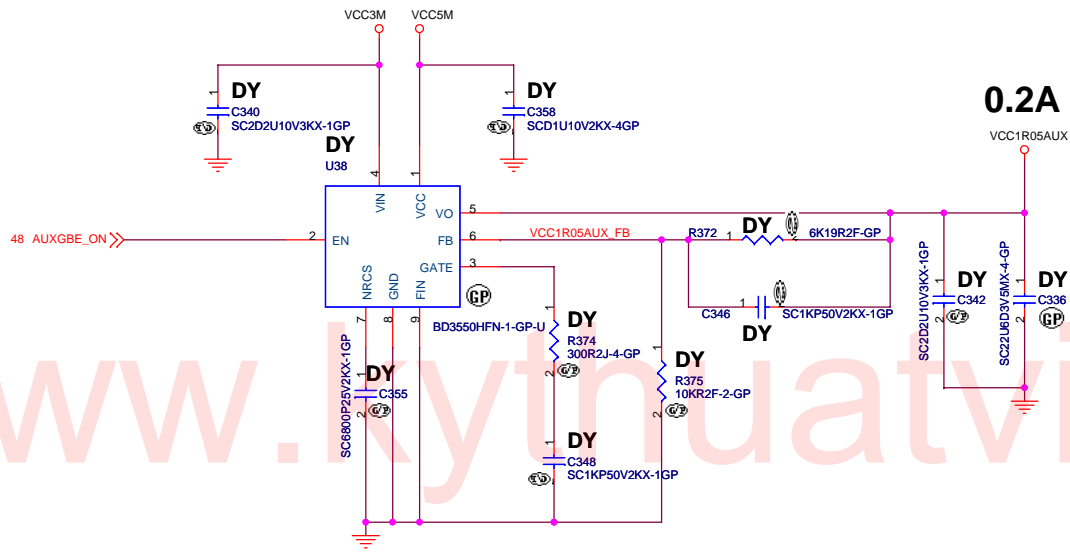
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 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC VCC0R75AMT	
Size A4	Document Number <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Caramel-1</div>
Date: Monday, July 14, 2008	Rev <div style="text-align: center; font-weight: bold; font-size: 1.2em;">SC</div>
Sheet 54 of 62	

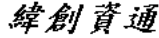


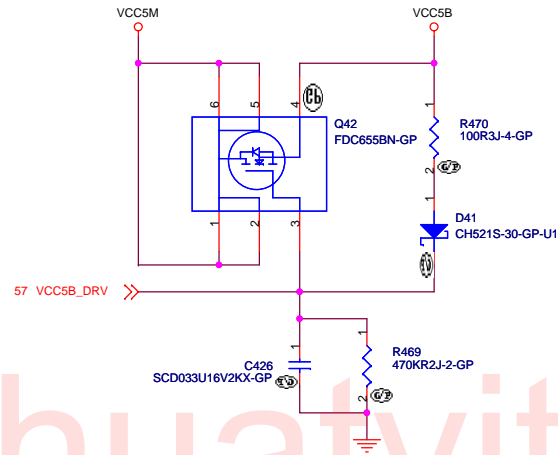
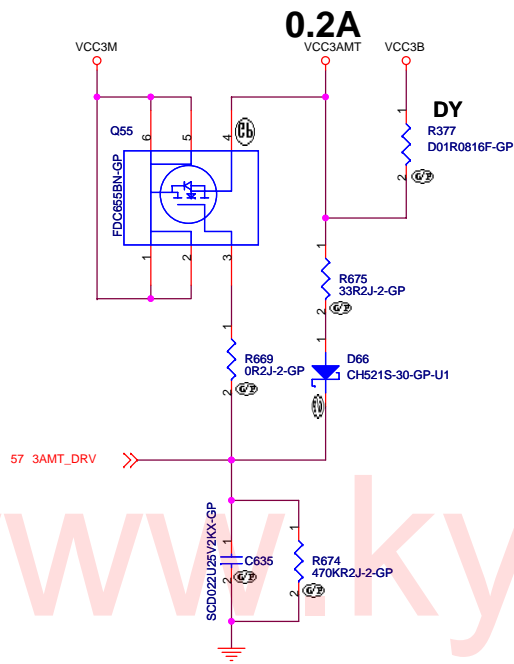
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 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC VCC1R8B	
Title	Document Number
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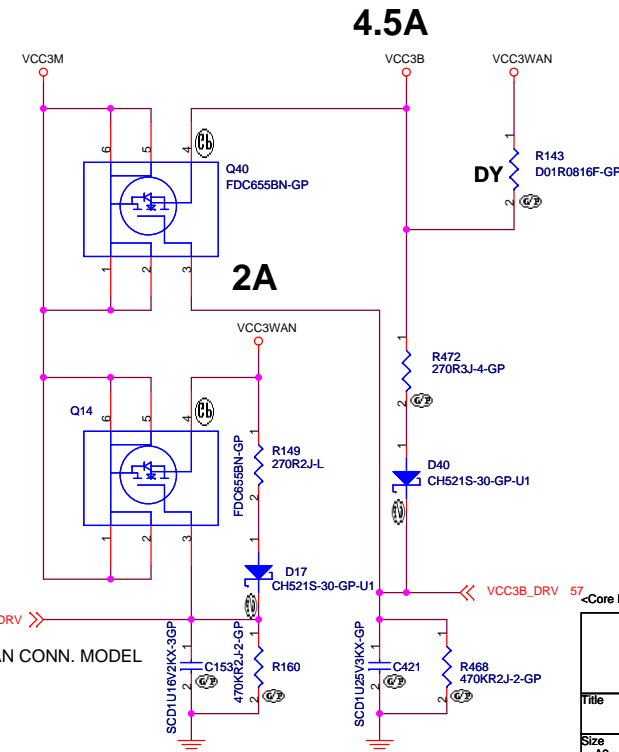
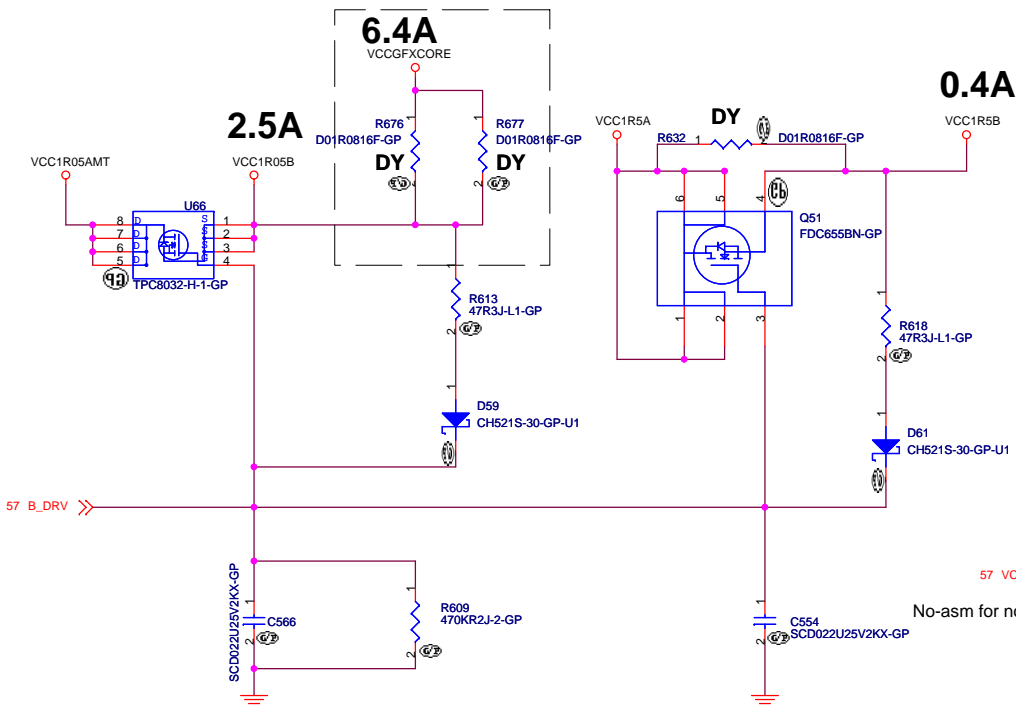
<Core Design>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
DC-DC VCC1R05AUX/VCC1R8AUX	
Title Size A3	Document Number Caramel-1
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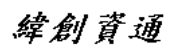
Place near VCCGFXCORE logic

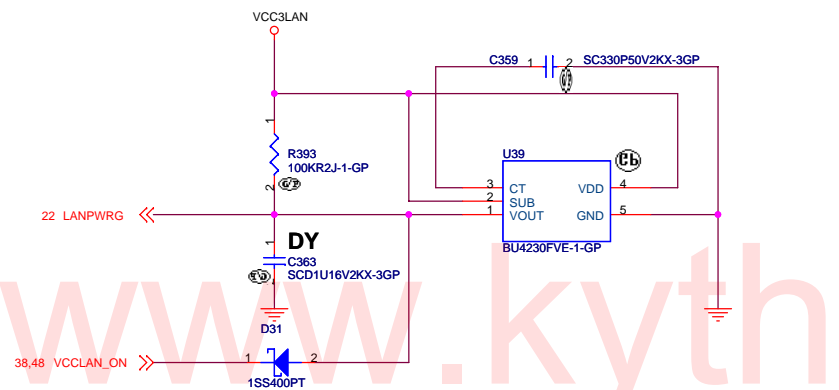


Always ON	Enable	Disable
Q14	ASM	No_ASM
R149	ASM	No_ASM
D17	ASM	No_ASM
R160	ASM	No_ASM
C153	ASM	No_ASM
R143	No_ASM	ASM

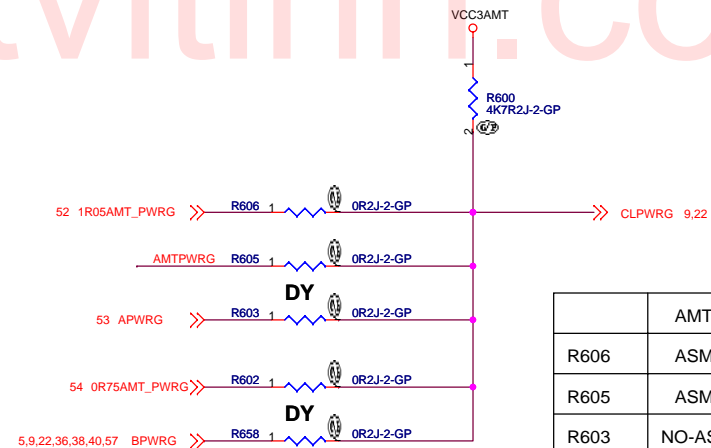
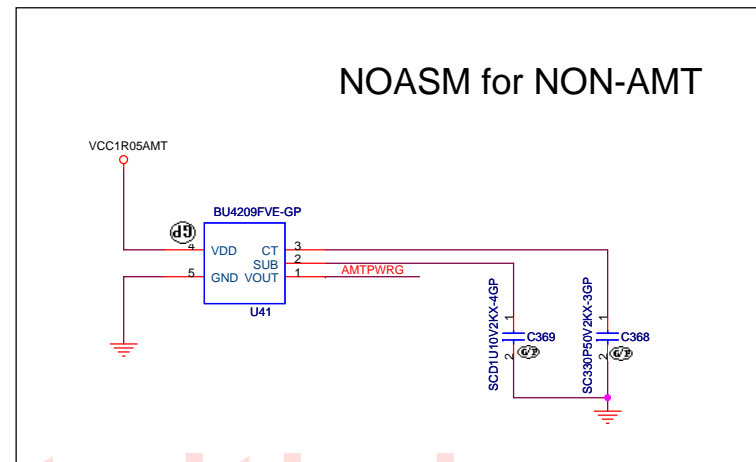
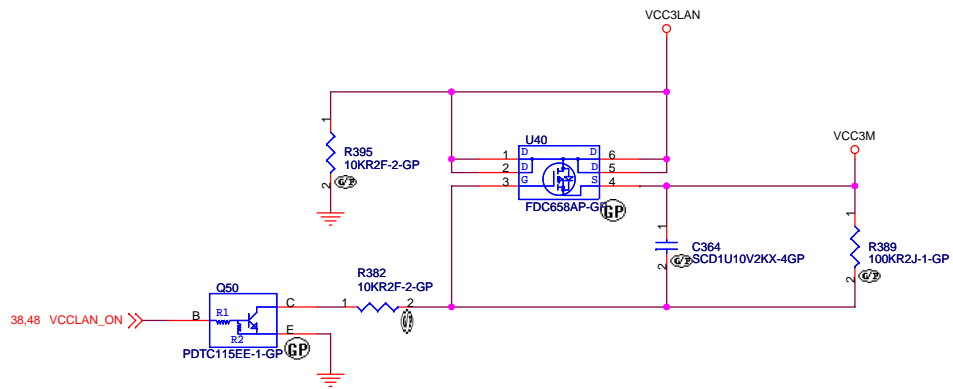
No-asm for no WWAN CONN. MODEL

<Core Design>

 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
LOAD SW 1		
Size A3	Document Number Caramel-1	Rev SC
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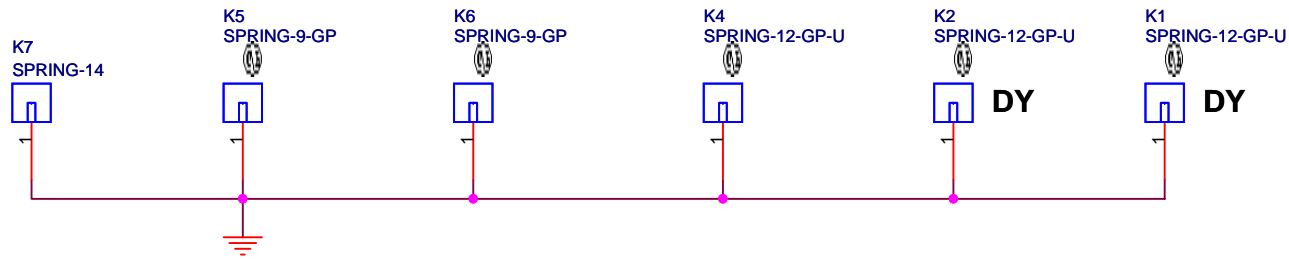
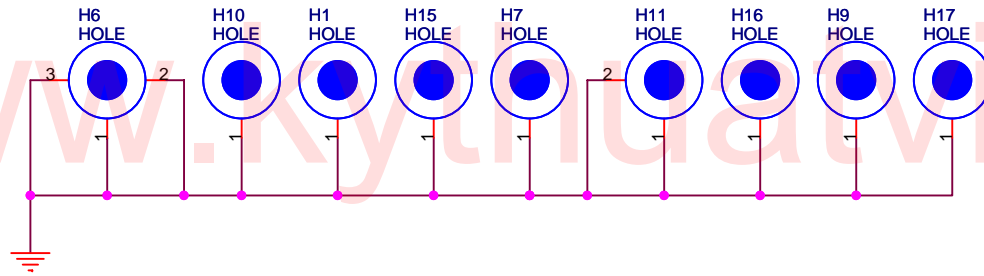
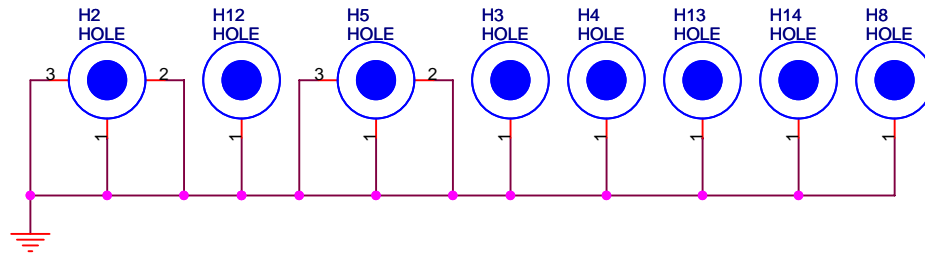
0.2A




	AMT	NON-AMT
R606	ASM	NO-ASM
R605	ASM	NO-ASM
R603	NO-ASM	NO-ASM
R602	ASM	NO-ASM
R600	ASM	NO-ASM
R658	NO-ASM	ASM

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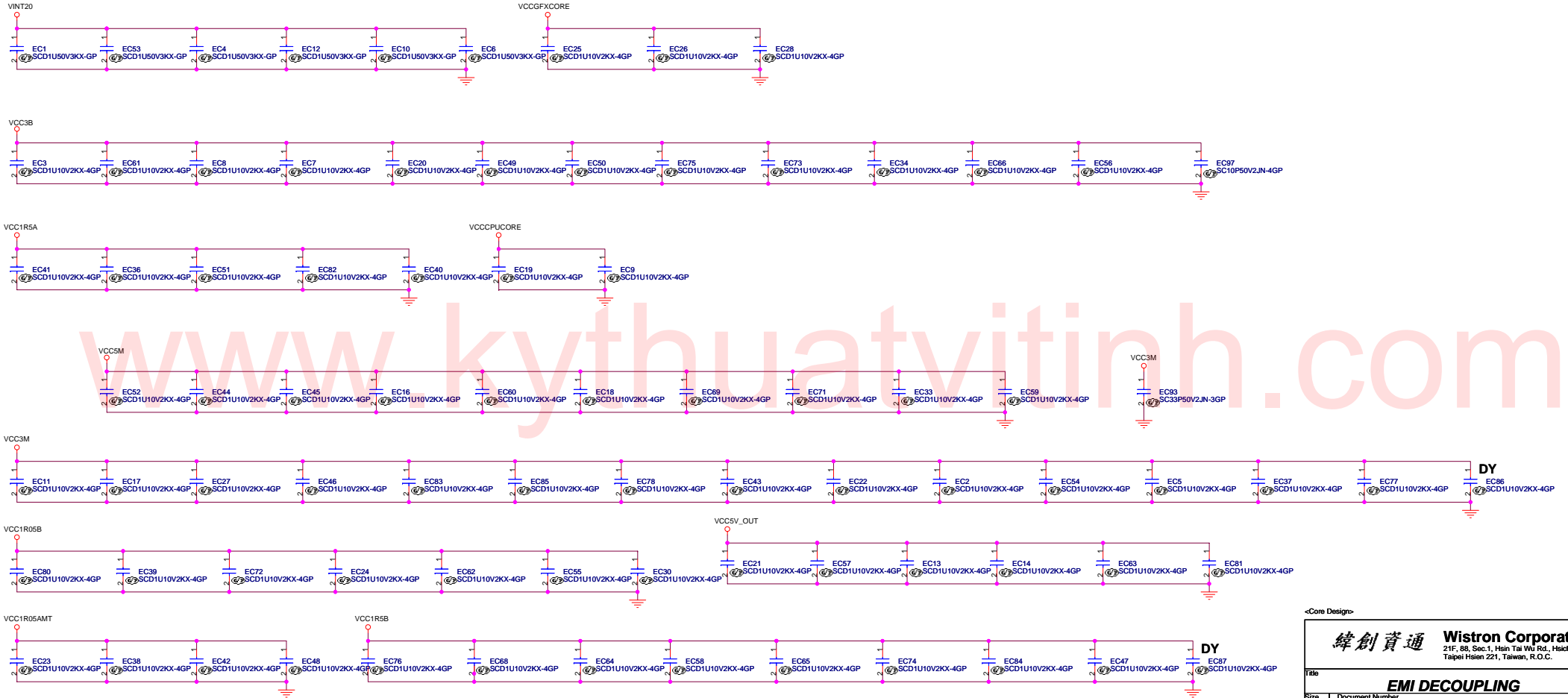
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Comparison chart for AMT function

Item	Page	Location Netname	AMT	NON_AMT	Modify	Note
1	22	U37	ICH9-M Enhanced	ICH9-M		
	22	R424	NO_ASM	ASM		
	24	U30	BOAZMAN 82567LM			
	29	SPI1	64Mbit			
	49	R411	ASM	NO_ASM		
	52	R636	ASM	NO_ASM		
	59	R603	ASM	NO_ASM		
		R605	ASM	NO_ASM		
		R606	ASM	NO_ASM		
	58	R377	NO_ASM	ASM		
		Q55	ASM	NO_ASM		
		R669	ASM	NO_ASM		
		R675	ASM	NO_ASM		
		D66	ASM	NO_ASM		
		C635	ASM	NO_ASM		
		R674	ASM	NO_ASM		
		U66	ASM	NO_ASM		
		R613	ASM	NO_ASM		
		D59	ASM	NO_ASM		
		C566	ASM	NO_ASM		
R609		ASM	NO_ASM			

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Long power trace EMI decoupling caps



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Title			
EMI DECOUPLING			
Size	Document Number	Rev	
Custom	Caramel-1	SA	
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