

Wistron Confidential

PV

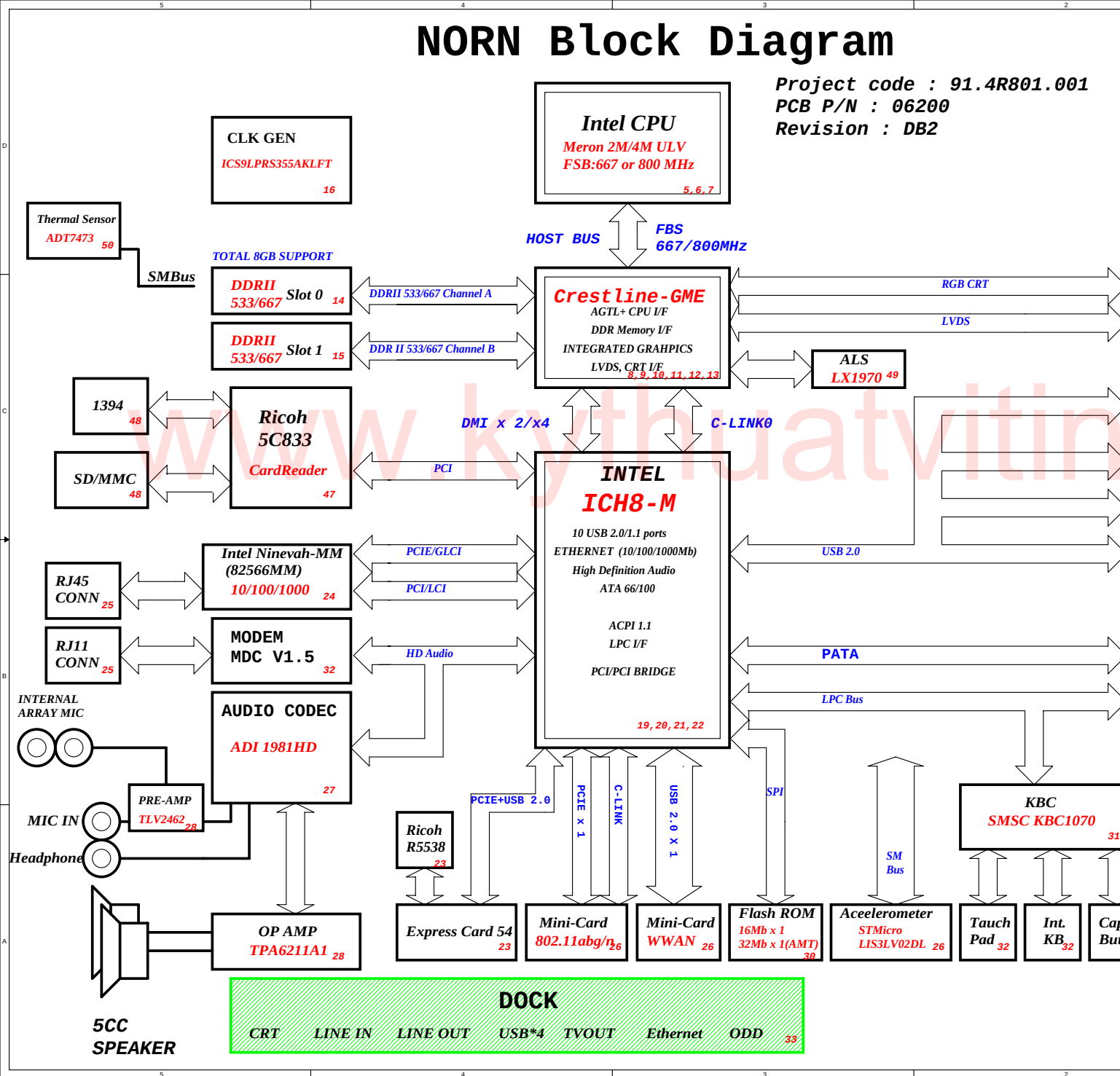
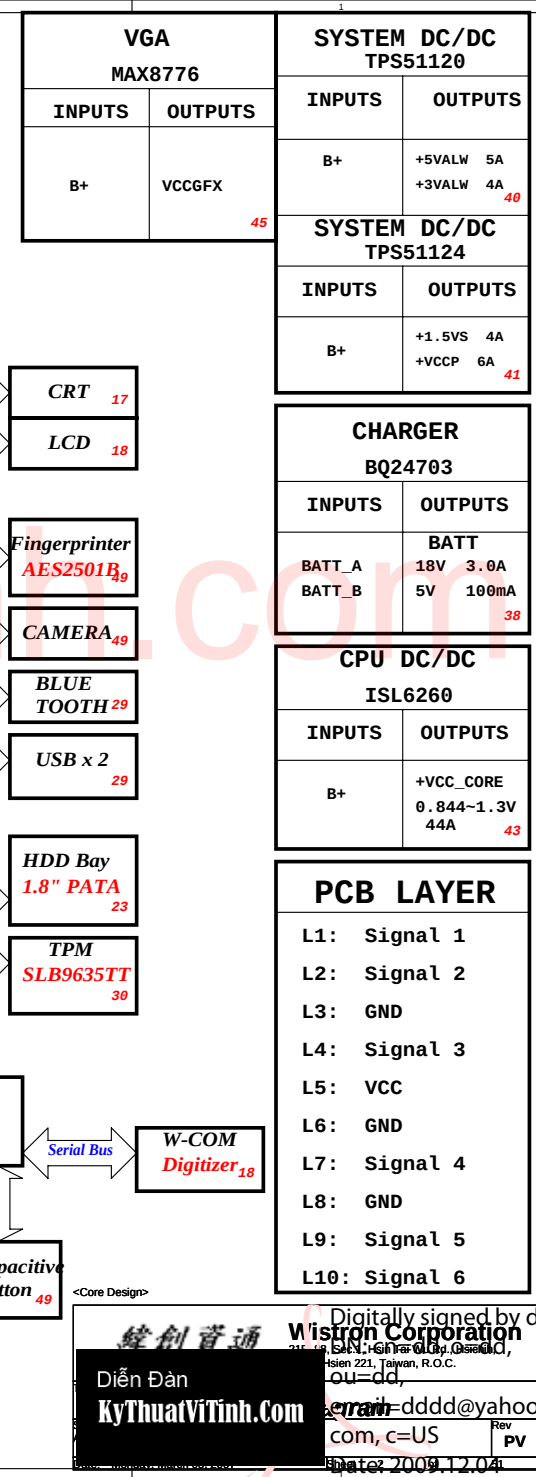
2007/03/30

REV : PV-04

<Variant Name>			
緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
NORN			
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NORN Block Diagram

Project code : 91.4R801.001
PCB P/N : 06200
Revision : DB2



Digitally signed by dd
Wistron Corporation
Hsien 221, Taiwan, R.O.C.
Diễn Đàn
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Date: 2009.12.04
Rev PV

19:46:56 +07'00'

www.kythuatvitinh.com

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

o MEANS ON x MEANS OFF

power plane State	+BB LD03 LD05	+5VALW +5VALW	+1.8V +0.9V	+5VS +3VS +1.8VS +1.5VS +1.25VS +VGA_CORE +CPU_CORE +VCCP	+3VM +1.05VM +1.25VM	CLOCK
S0	O	O	O	O	O	O
S3/M1	O	O	O	X	O	O
S3	O	O	O	X	O	O
S5 S4/AC	O	O	X	X	O	O
S5 S4/Battery only	O	X	X	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X	X	X

PCI Devices

EETERNAL	IDSEL#	REQ/GNT#	PIRQ
Cardreader & 1394	AD22	2	G, E

DMA Channel	Device
DMA0	Modem/LAN
DMA1	ECP
DMA2	Floppy Disk
DMA3	Audio
DMA4	(Cascade)
DMA5	Unused
DMA6	Unused
DMA7	Unused

USB PORT#	Destination
0	FREE
1	Fingerprint
2	EXPRESS SLOT
3	Camera
4	Walk-up1 (Right Side)
5	Walk-up2 (Left Side)
6	Bluetooth
7	Dock 1
8	WWAN
9	Dock 2

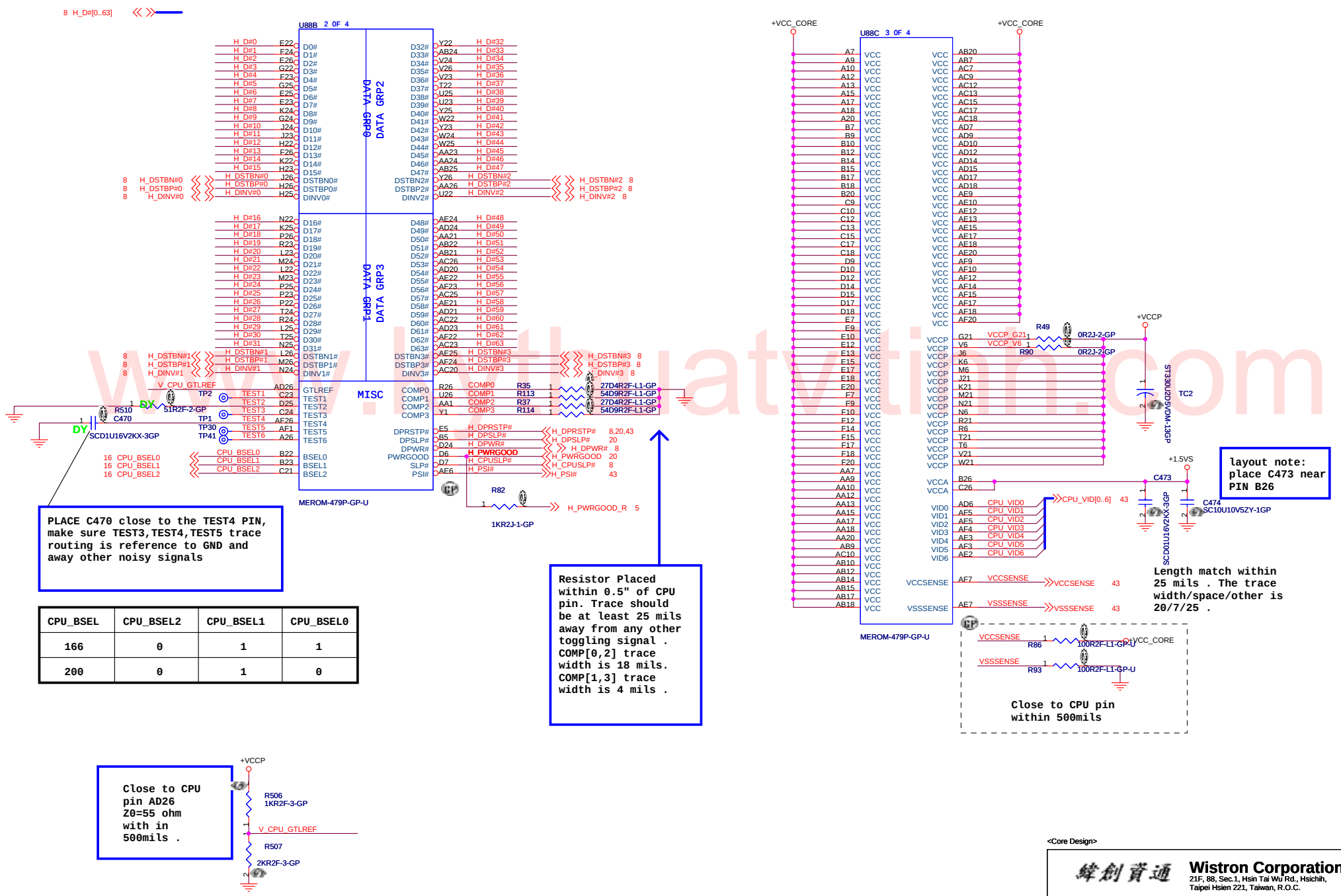
Symbols	Description
DY/DUMMY	No install
1KR2J	Resistor 1K ohm ,Size 0402 ,5%
1KR3F	Resistor 1K ohm ,Size 0603 ,1%
GP	ROHS parts
NC	Pin no connect to anything

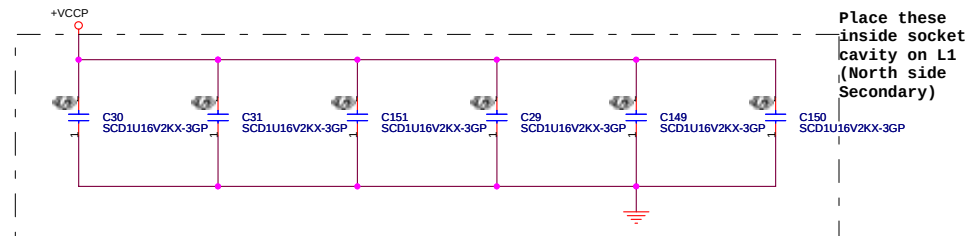
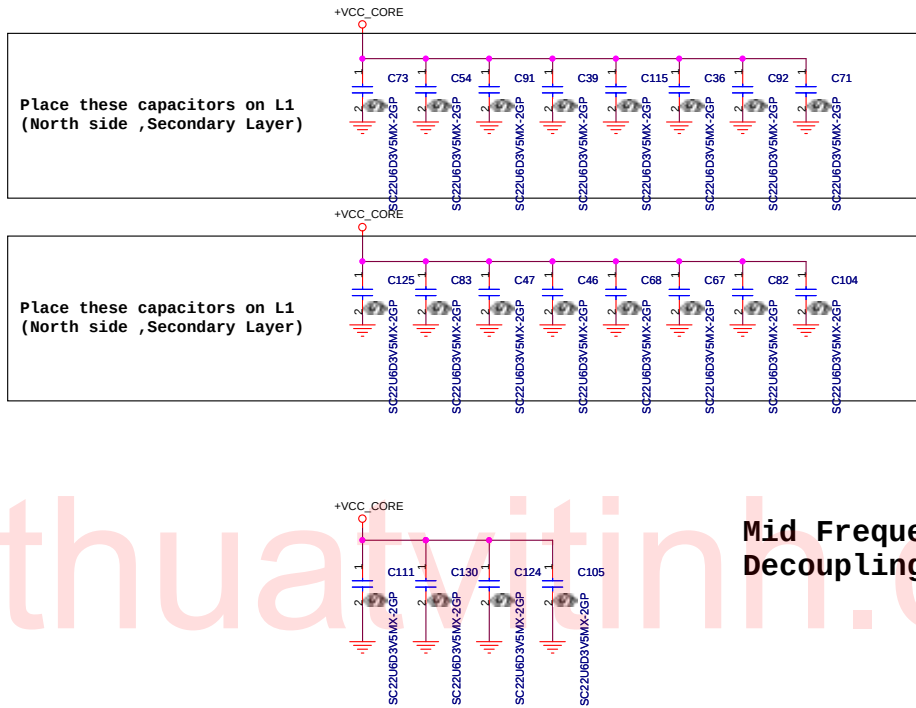
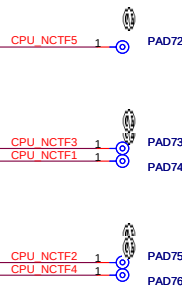
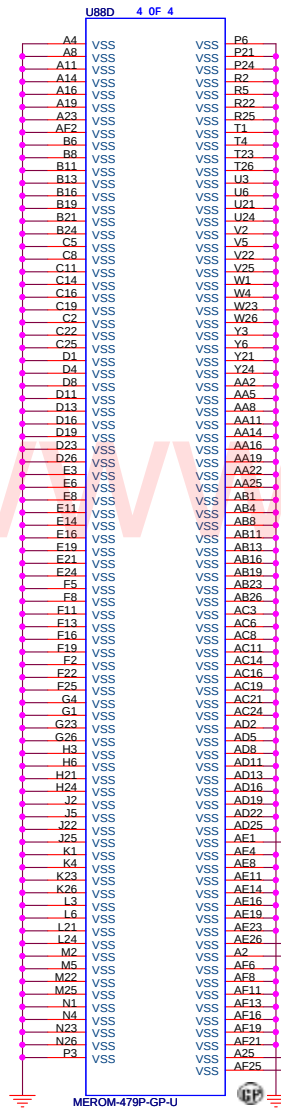
IRQ	Device
0	System Timer
1	Keyboard
2	N/A
3	Serial port (COM2) ,LAN/Modem
4	Serial port (COM1)
5	Audio/VGA
6	Floppy
7	Parallel port
8	System CMOS/Real-time clock
9	Microsoft ACPI
10	N/A, Modem, LAN
11	Mass storage control/PCI simple communication control
12	synactic PS2 port GlidePAD
13	Numeric Data Process
14	Primary IDE interface ,HDD
15	Secondary IDE interface ,CD-ROM
16	Mobile Intel Crestline Express Chipset Family Microsoft UAA Bus Drive for High Definition Audio Intel 82801H (ICH8 Family) PCI Express Root Port -27D0 Broadcom NetXtreme Gigabit Ethernet
17	Intel 82801H (ICH8 Family) PCI Express Root Port -27D2 Broadcom 802.11b/g WLAN Intel 82801H (ICH8 Family) USB Universal Host Control
18	Intel 82801H (ICH8 Family) USB Universal Host Control Richo R5C853 Integrates FlashMedia Control Richo R5C853 Gemcore based SmartCard Control
19	Intel 82801H (ICH8 Family) PCI Express Root Port -27D6 Intel 82801H (ICH8 Family) USB Universal Host Control
20	Intel 82801H (ICH8 Family) USB Universal Host Control Intel 82801H (ICH8 Family) USB2 Enhanced Host Control
21	Intel 82801H (ICH8 Family) USB Universal Host Control
22	SDA Standard Compliant SD Host Control
23	HP Mobile Data Protection Sensor

<Variant Name>

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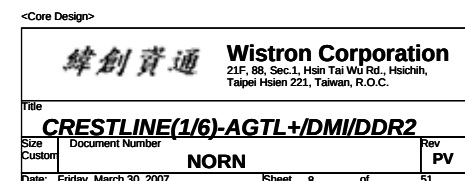




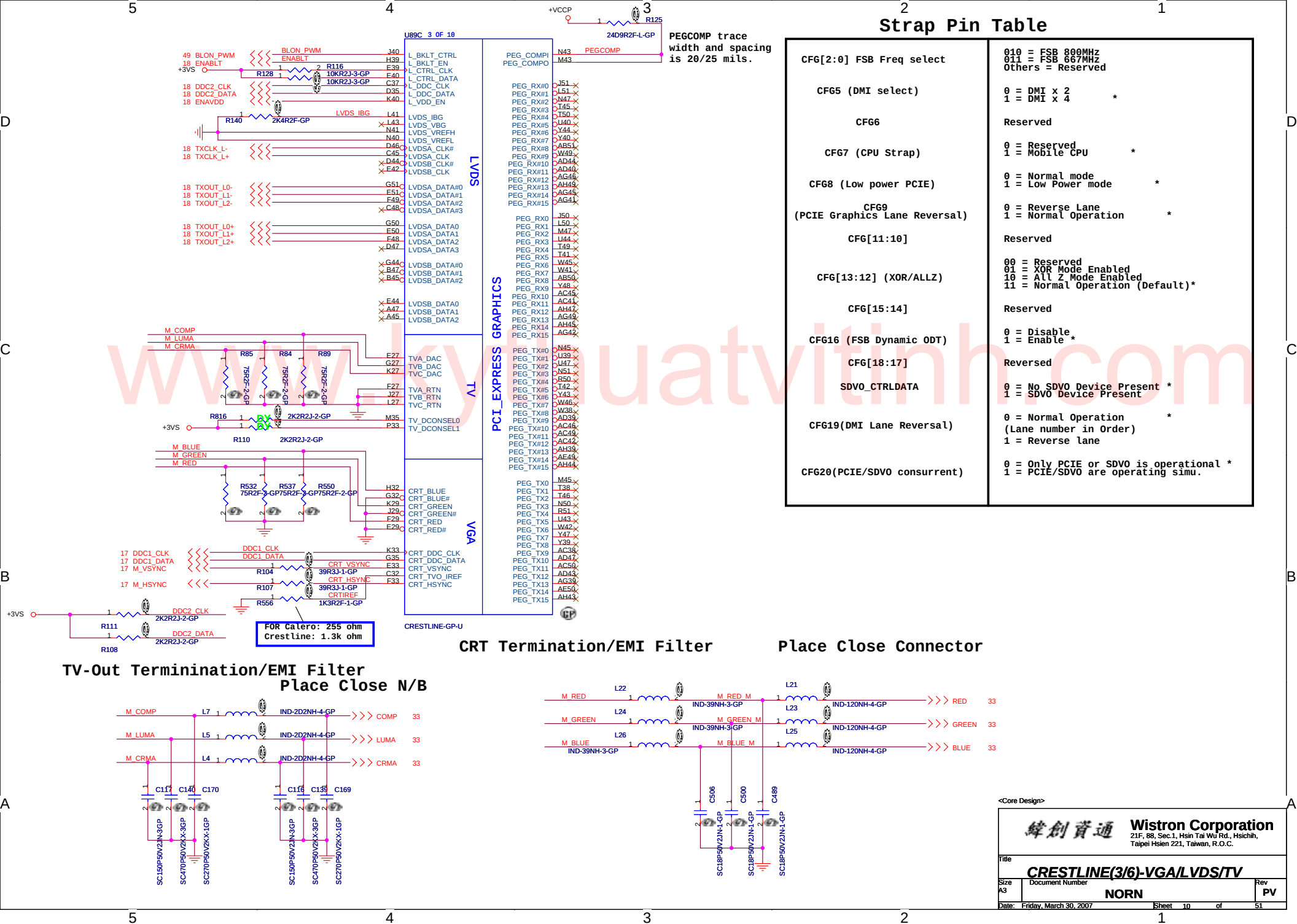


<Core Design>

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
Merom(3/3)-GND&Bypass	
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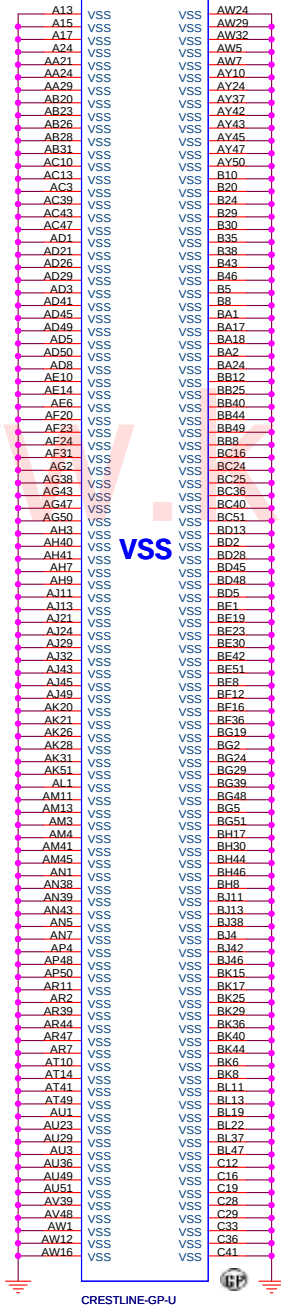






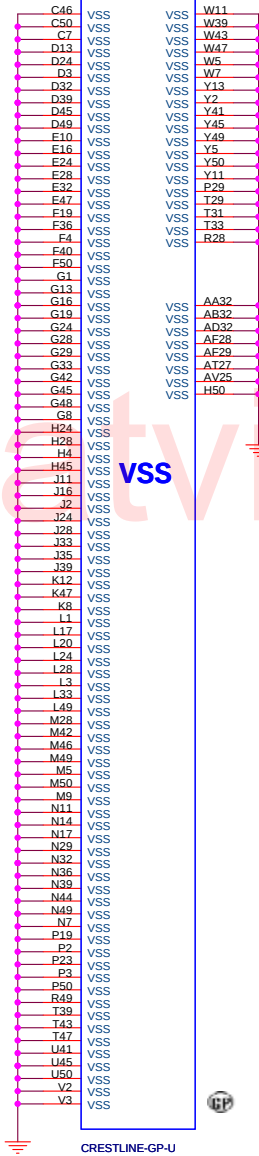


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CRESTLINE-GP-U

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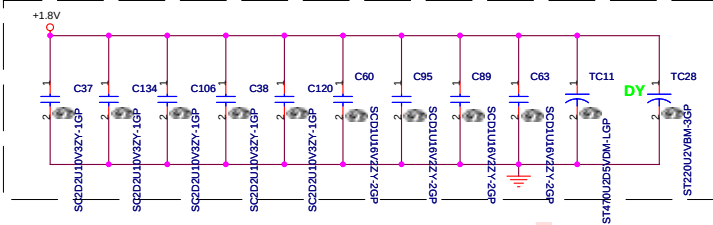
CRESTLINE-GP-U

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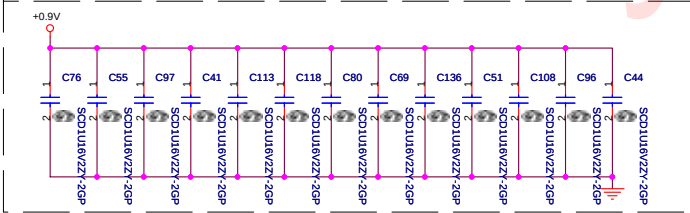
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CRESTLINE(6/6)-PWR/GND	
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9 DDR_A_DQS#[0..7] << >>
 9 DDR_A_D[0..63] << >>
 9 DDR_A_DM[0..7] << >>
 9 DDR_A_DQS[0..7] << >>
 9 DDR_A_MA[0..13] << >>
 9 DDR_A_BS[0..2] << >>

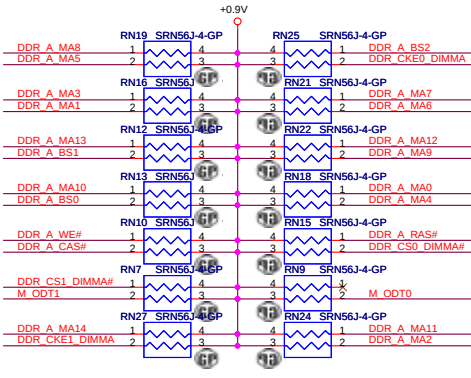
Layout Note:
Place near DM1



Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS



Layout Note:
Place these resistors
closely DM1,all
trace length Max=1.5"

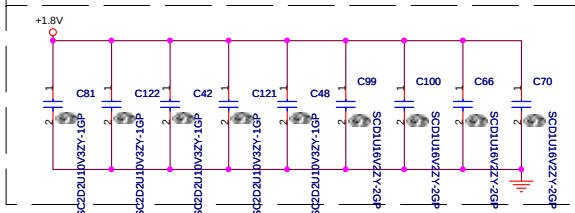


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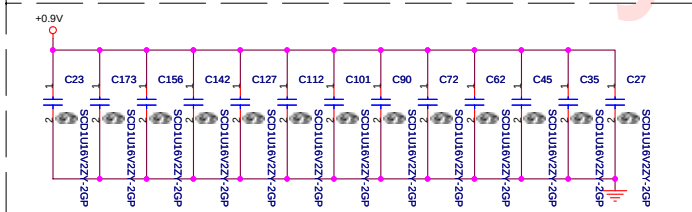
		DM1
DDR_A_MA0	102	A0
DDR_A_MA1	101	A1
DDR_A_MA2	100	A2
DDR_A_MA3	99	A3
DDR_A_MA4	98	A4
DDR_A_MA5	97	A5
DDR_A_MA6	96	A6
DDR_A_MA7	95	A7
DDR_A_MA8	94	A8
DDR_A_MA9	93	A9
DDR_A_MA10	105	A10/AP
DDR_A_MA11	99	A11
DDR_A_MA12	98	A12
DDR_A_MA13	116	A13
DDR_A_MA14	86	A14
DDR_A_MA15	87	A15
DDR_A_MA16	88	A16/BA
DDR_A_MA17	89	BA0
DDR_A_MA18	107	BA1
DDR_A_MA19	106	
DDR_D_D0	5	DQ0
DDR_D_D1	7	DQ1
DDR_D_D2	2	DQ2
DDR_D_D3	17	DQ3
DDR_D_D4	19	DQ4
DDR_D_D5	6	DQ5
DDR_D_D6	14	DQ6
DDR_D_D7	17	DQ7
DDR_D_D8	23	DQ8
DDR_D_D9	25	DQ9
DDR_D_D10	35	DQ10
DDR_D_D11	39	DQ11
DDR_D_D12	20	DQ12
DDR_D_D13	22	DQ13
DDR_D_D14	36	DQ14
DDR_D_D15	38	DQ15
DDR_D_D16	43	DQ16
DDR_D_D17	47	DQ17
DDR_D_D18	55	DQ18
DDR_D_D19	57	DQ19
DDR_D_D20	57	DQ20
DDR_D_D21	46	DQ21
DDR_D_D22	58	DQ22
DDR_D_D23	58	DQ23
DDR_D_D24	61	DQ24
DDR_D_D25	63	DQ25
DDR_D_D26	72	DQ26
DDR_D_D27	75	DQ27
DDR_D_D28	75	DQ28
DDR_D_D29	62	DQ29
DDR_D_D30	64	DQ30
DDR_D_D31	74	DQ31
DDR_D_D32	123	DQ32
DDR_D_D33	123	DQ33
DDR_D_D34	125	DQ34
DDR_D_D35	137	DQ35
DDR_D_D36	124	DQ36
DDR_D_D37	125	DQ37
DDR_D_D38	134	DQ38
DDR_D_D39	136	DQ39
DDR_D_D40	141	DQ40
DDR_D_D41	141	DQ41
DDR_D_D42	151	DQ42
DDR_D_D43	153	DQ43
DDR_D_D44	153	DQ44
DDR_D_D45	142	DQ45
DDR_D_D46	152	DQ46
DDR_D_D47	154	DQ47
DDR_D_D48	154	DQ48
DDR_D_D49	159	DQ49
DDR_D_D50	173	DQ50
DDR_D_D51	173	DQ51
DDR_D_D52	158	DQ52
DDR_D_D53	160	DQ53
DDR_D_D54	174	DQ54
DDR_D_D55	174	DQ55
DDR_D_D56	179	DQ56
DDR_D_D57	181	DQ57
DDR_D_D58	189	DQ58
DDR_D_D59	189	DQ59
DDR_D_D60	180	DQ60
DDR_D_D61	182	DQ61
DDR_D_D62	182	DQ62
DDR_D_D63	194	DQ63
DDR_D_D64	194	DQ64
DDR_D_D65	11	/DQ50
DDR_D_D66	29	/DQ51
DDR_D_D67	49	/DQ52
DDR_D_D68	68	/DQ53
DDR_D_D69	68	/DQ54
DDR_D_D70	145	/DQ55
DDR_D_D71	146	/DQ56
DDR_D_D72	167	/DQ57
DDR_D_D73	186	/DQ58
DDR_D_D74	186	/DQ59
DDR_D_D75	13	DQ50
DDR_D_D76	31	DQ51
DDR_D_D77	51	DQ52
DDR_D_D78	70	DQ53
DDR_D_D79	131	DQ54
DDR_D_D80	145	DQ55
DDR_D_D81	148	DQ56
DDR_D_D82	148	DQ57
DDR_D_D83	187	DQ58
DDR_D_D84	187	DQ59

9 DDR_B_DQS#0..7 <<>>
 9 DDR_B_DQ#0..63 <<>>
 9 DDR_B_DM#0..7 <<>>
 9 DDR_B_DQS#0..7 <<>>
 9 DDR_B_MA#0..13 <<>>
 9 DDR_B_BS#0..2 <<>>

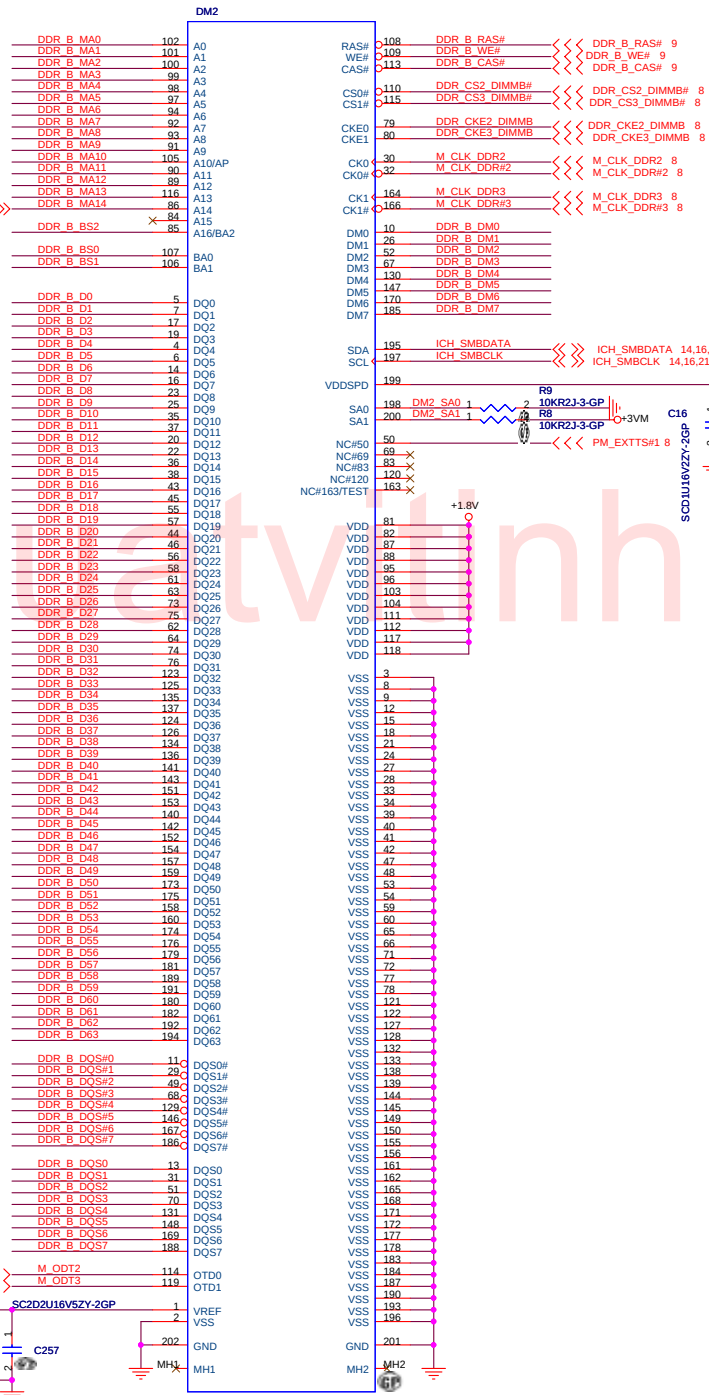
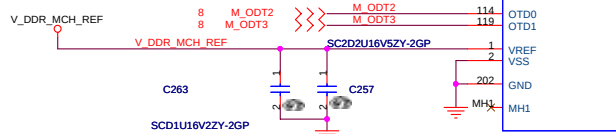
Layout Note:
Place near DM2



Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS



Layout Note:
Place these resistors
closely DM2, all
trace length Max=1.5"

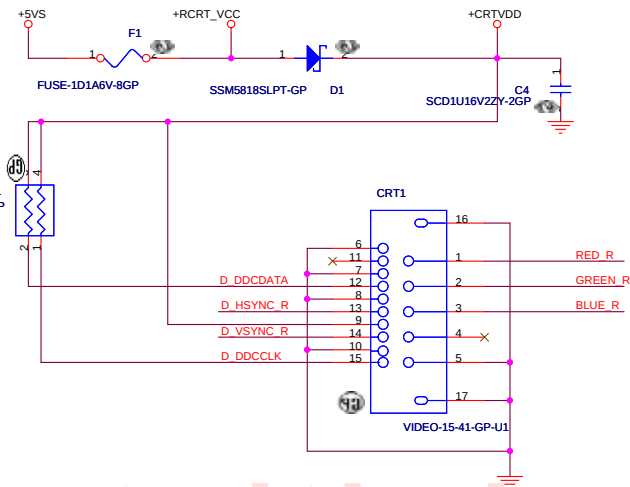
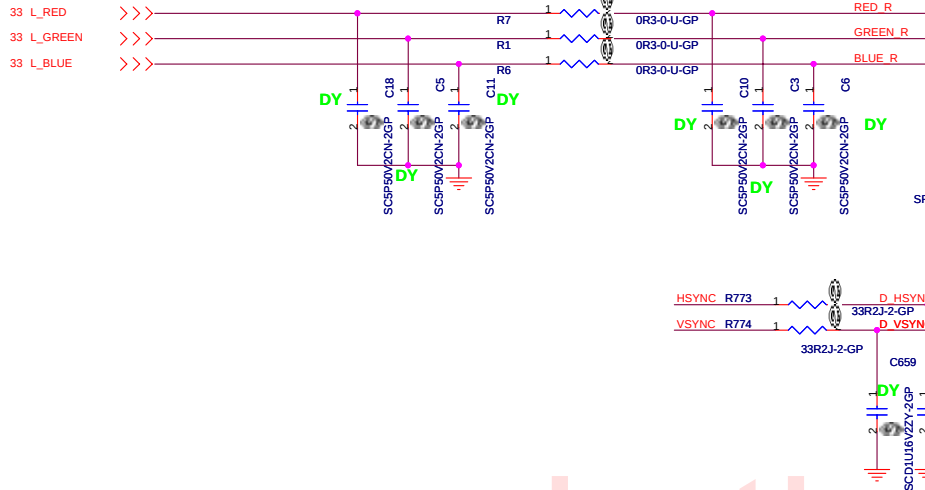


SO-DIMM 2
STANDARD

<Variant Name>

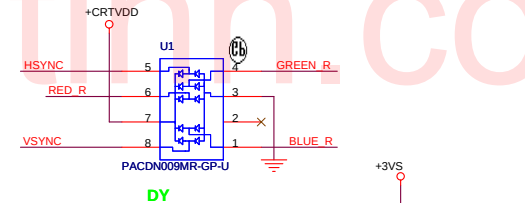
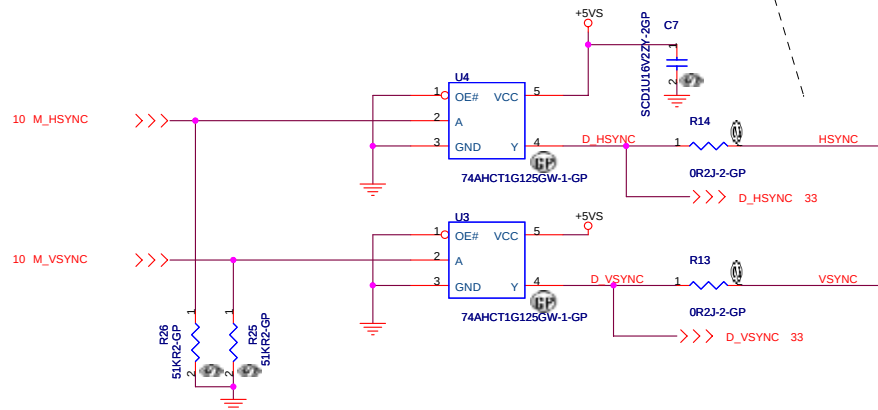
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin,
Taipei Hsien 221, Taiwan, R.O.C.

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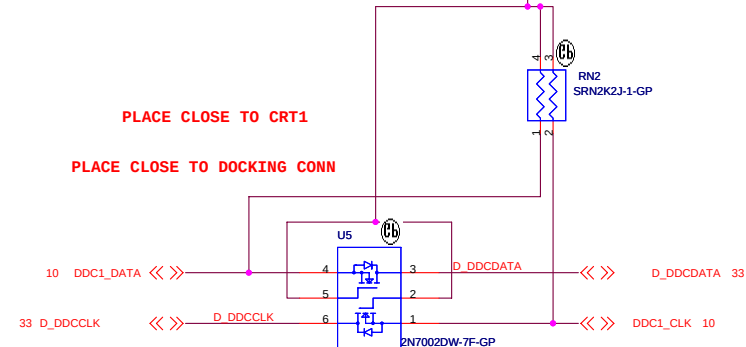


CRT

Layout Note : HSYNC & VSYNC SHOULD BE ROUTED TO DOCK CRT CONN. ,THEN TO SYSTEM CRT CONN.



PLACE CLOSE TO CRT1
PLACE CLOSE TO DOCKING 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

CRT/TV CONNECTOR

Size

Document Number

NORN

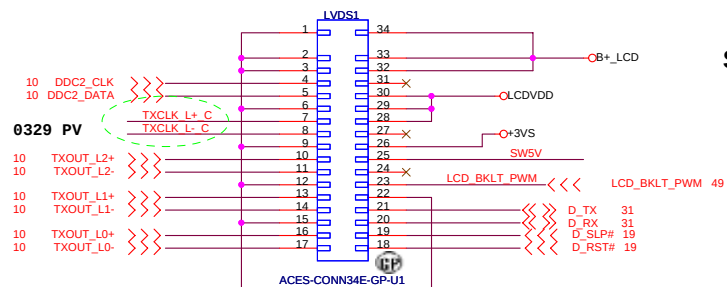
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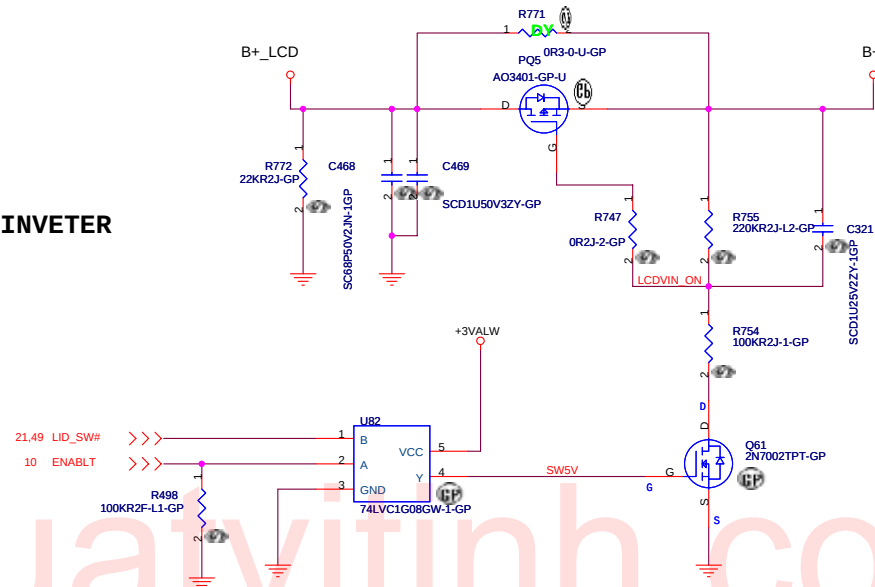
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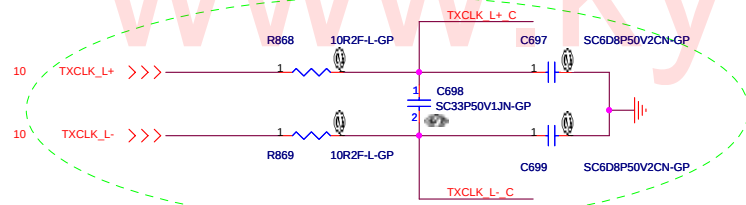
LVDS CONN



SUPPORT LED INVETER

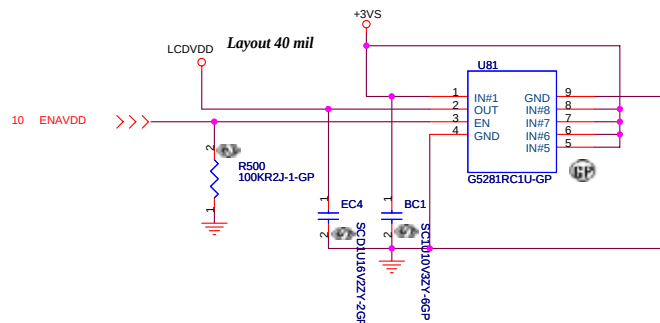
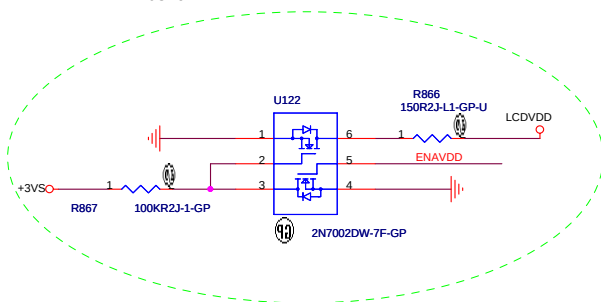


0329 PV Near the LVDS1 connector



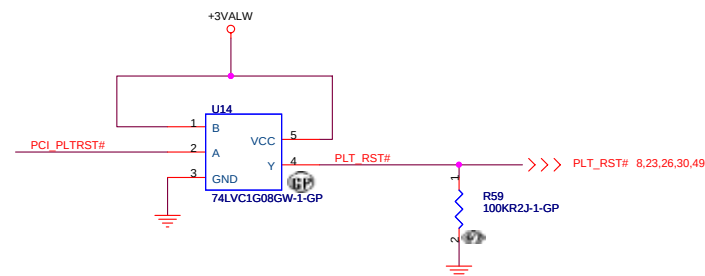
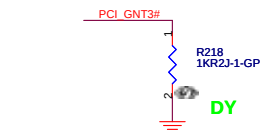
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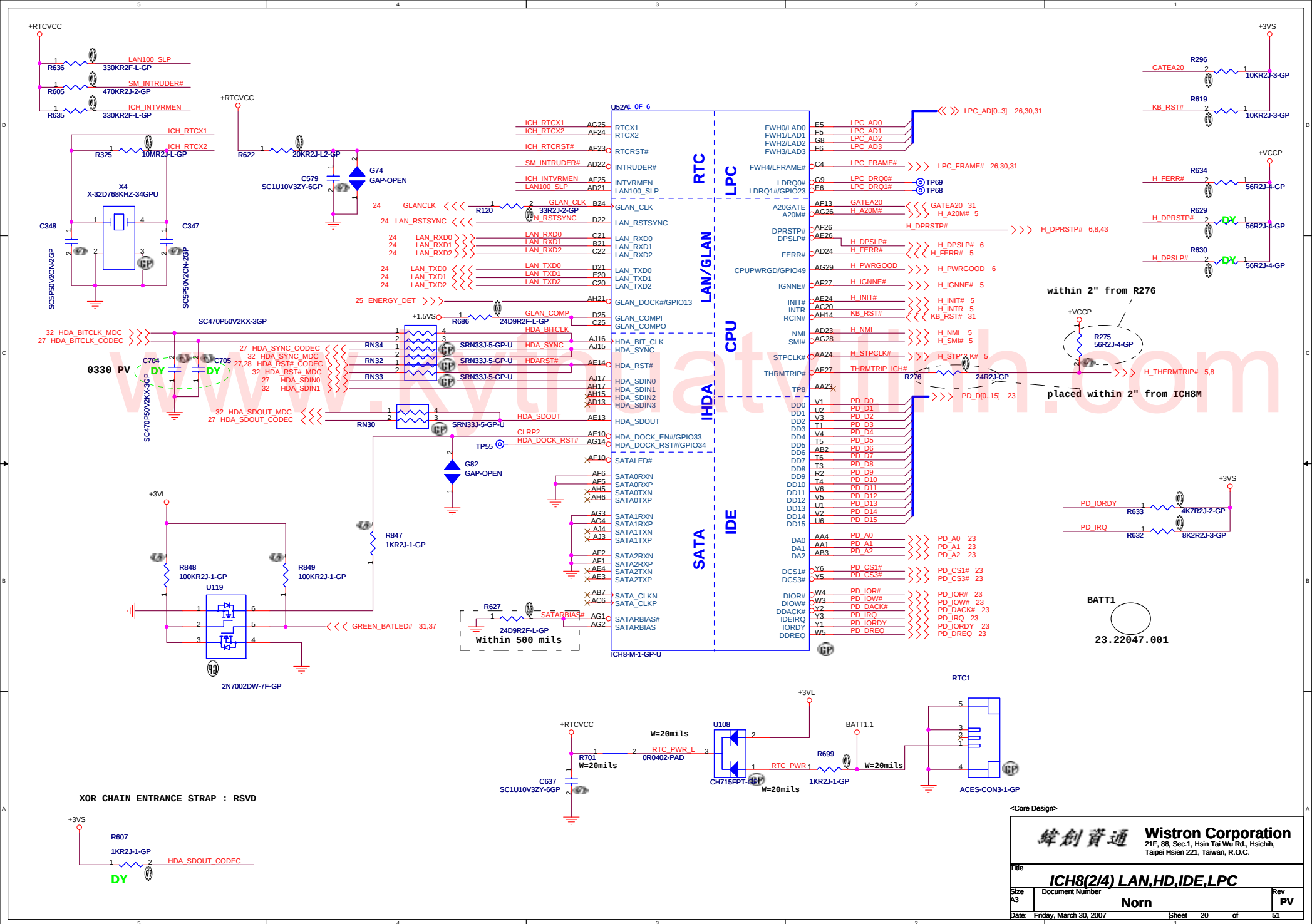
0319 PV

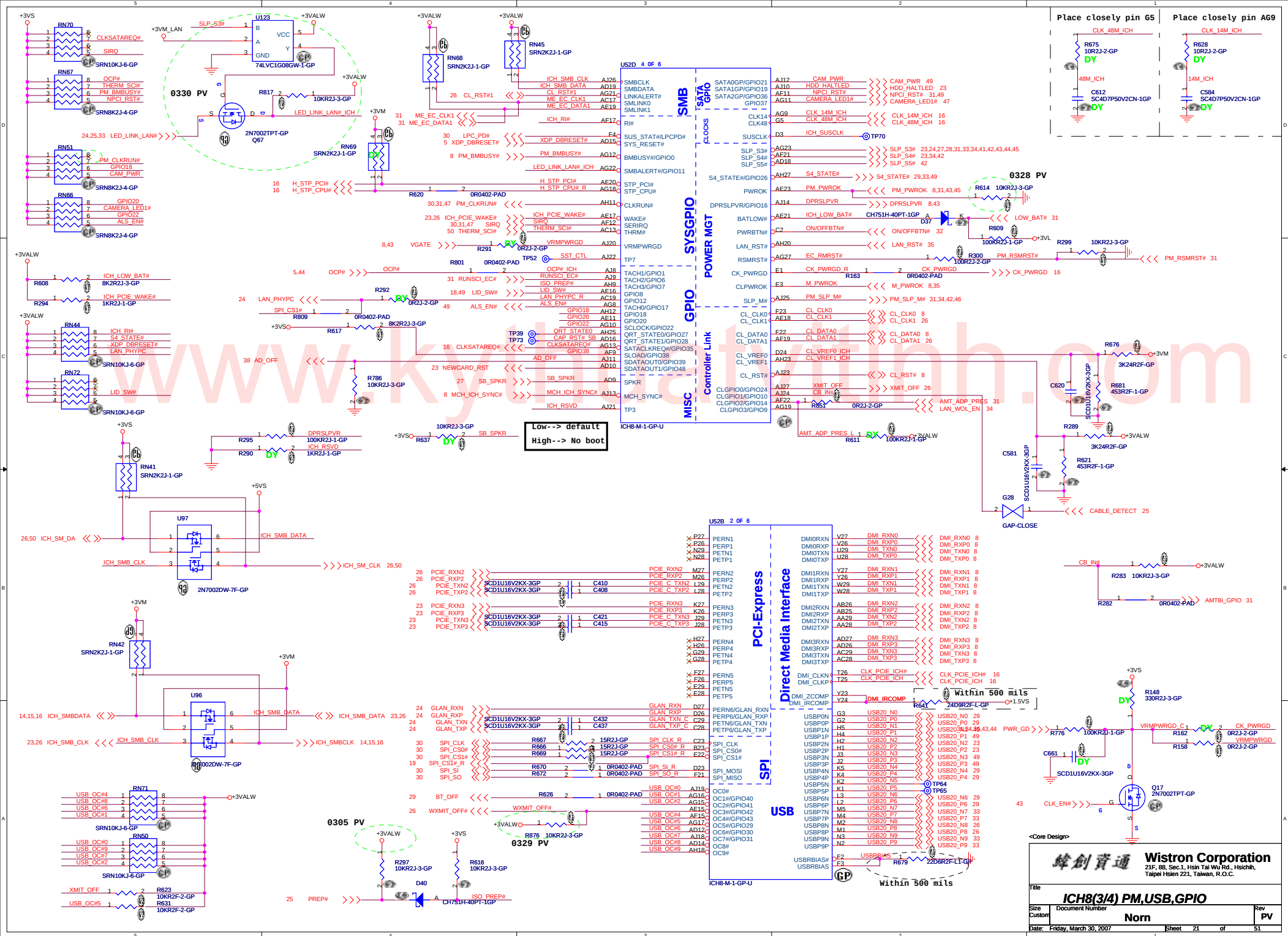


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LCD CONN.	
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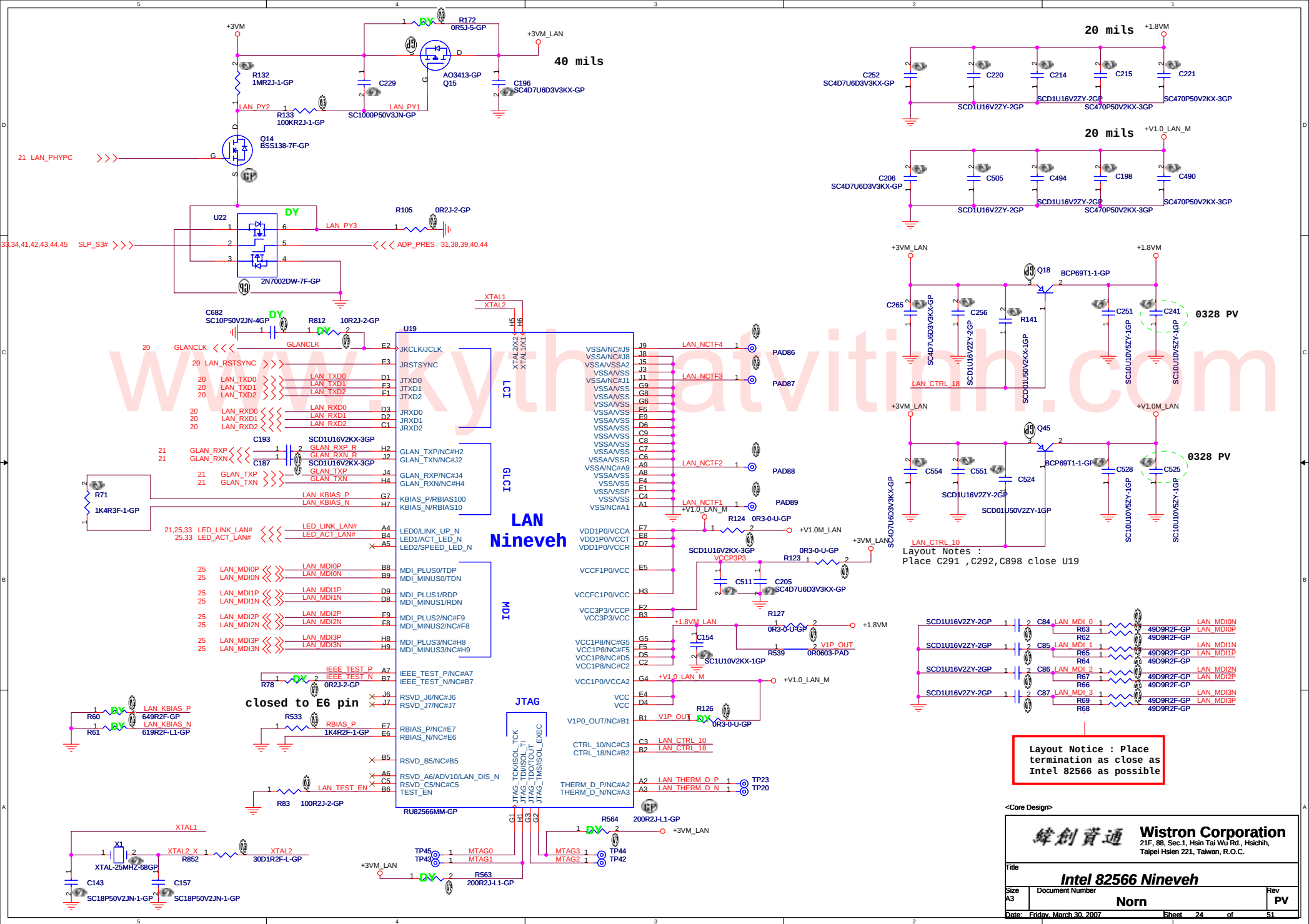




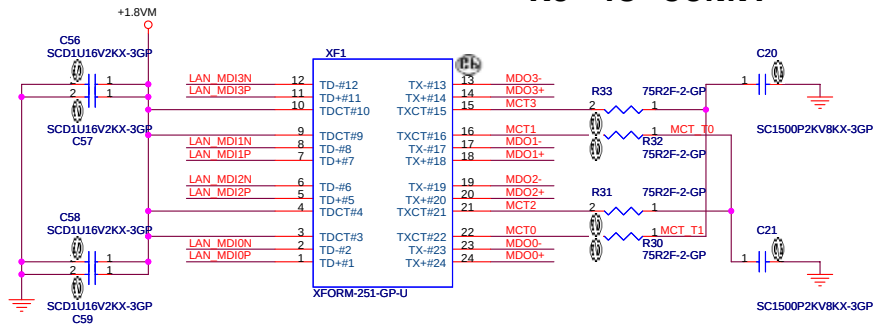


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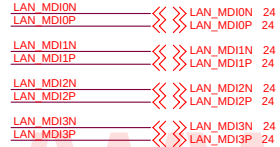
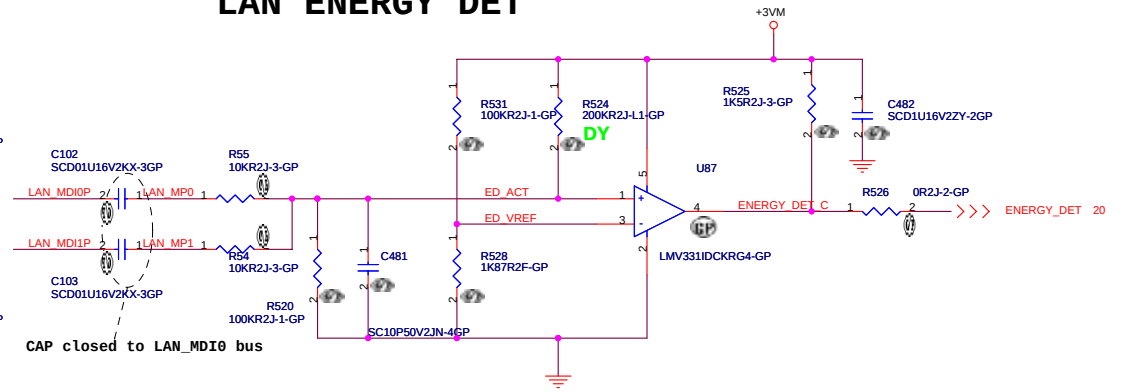




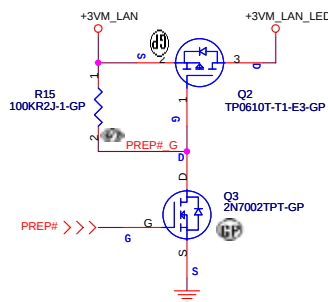
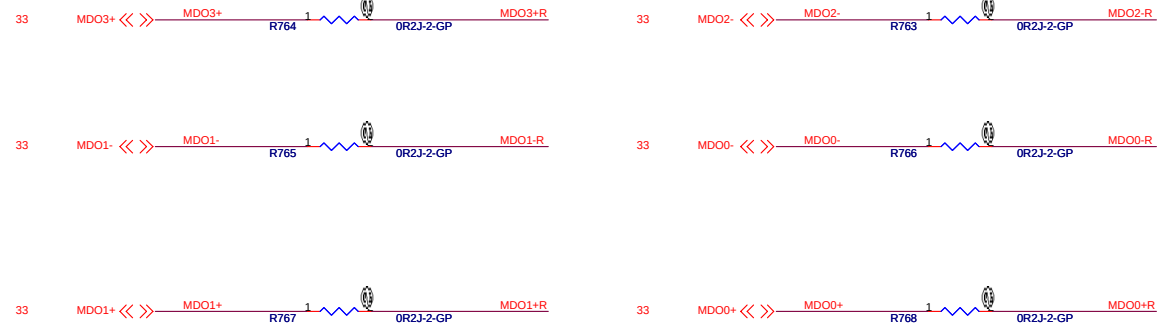
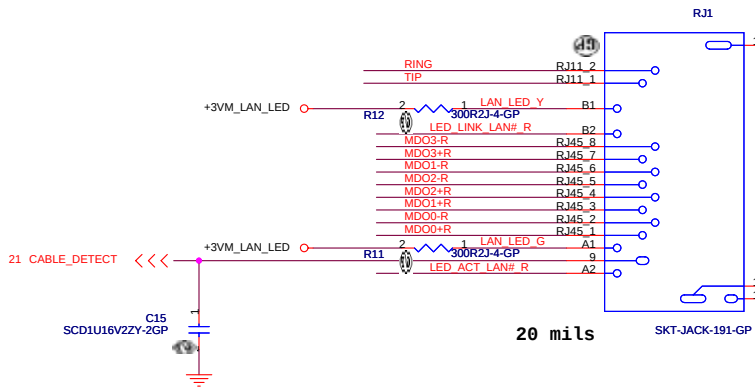
RJ-45 CONN.



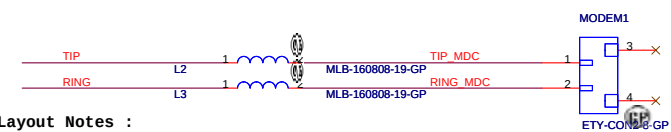
LAN ENERGY DET



Note : MDO[3..0]+ signals should route to RJ45 first then to DOCK CONN .

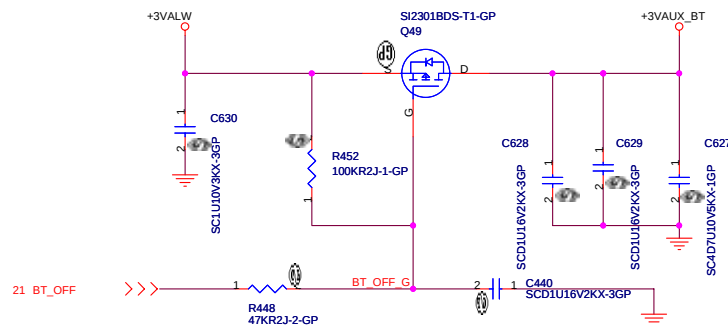
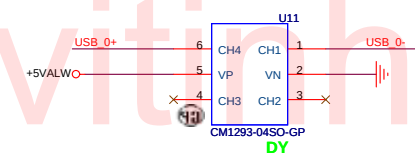
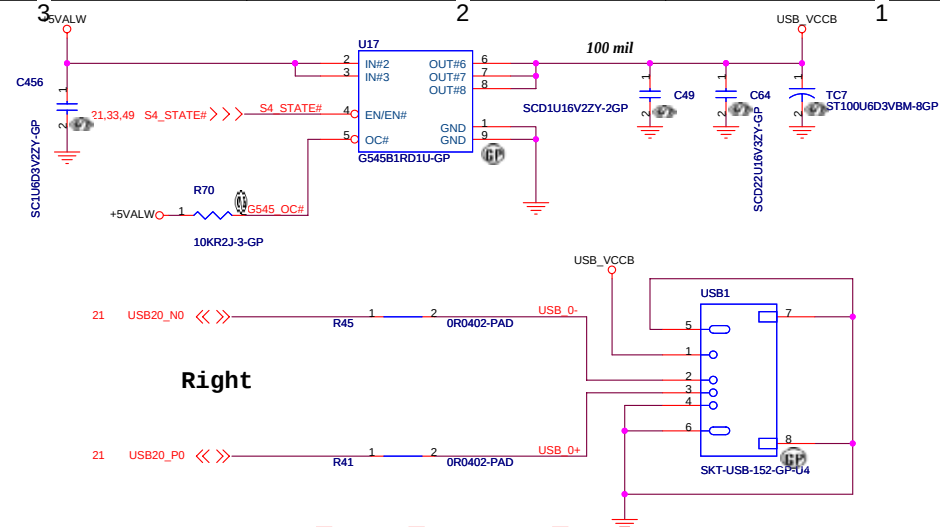


Layout Notes :
Place MODEM1 & BEAD near RJ11 connector



<Core Design>

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

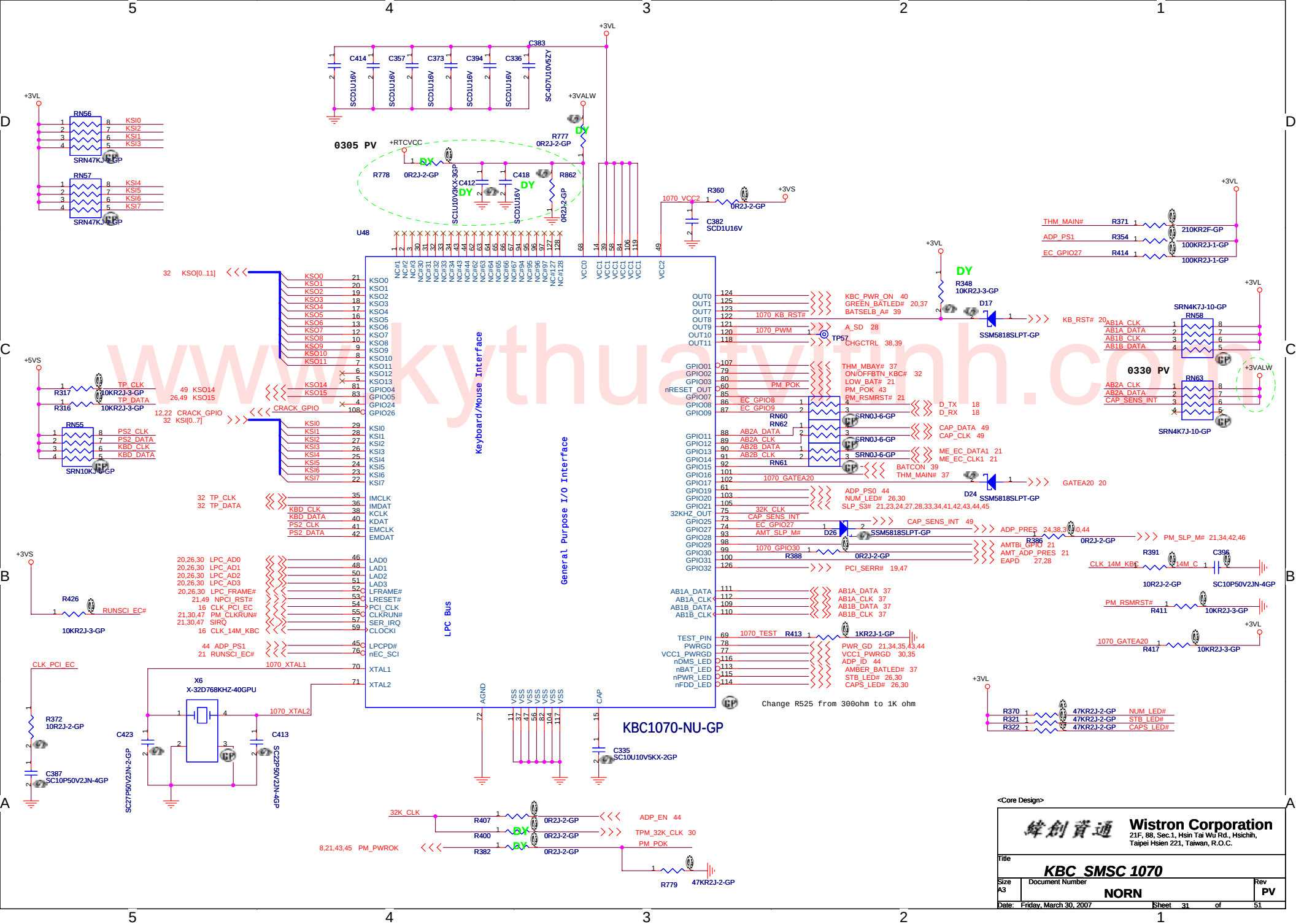


- C

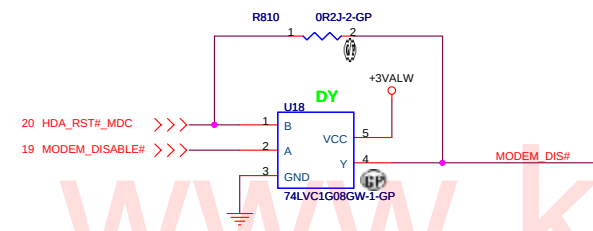
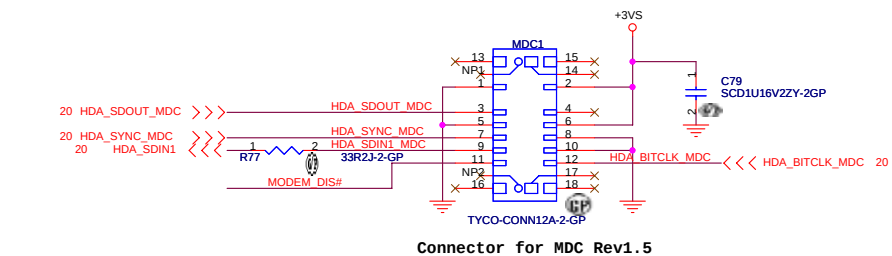


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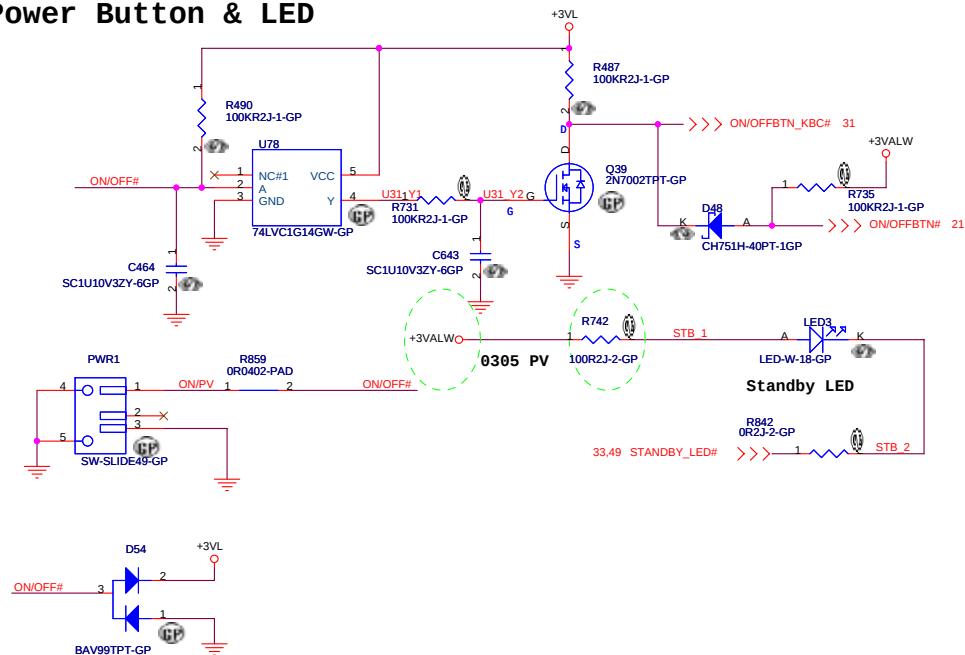
5



MDC 1.5 Conn.

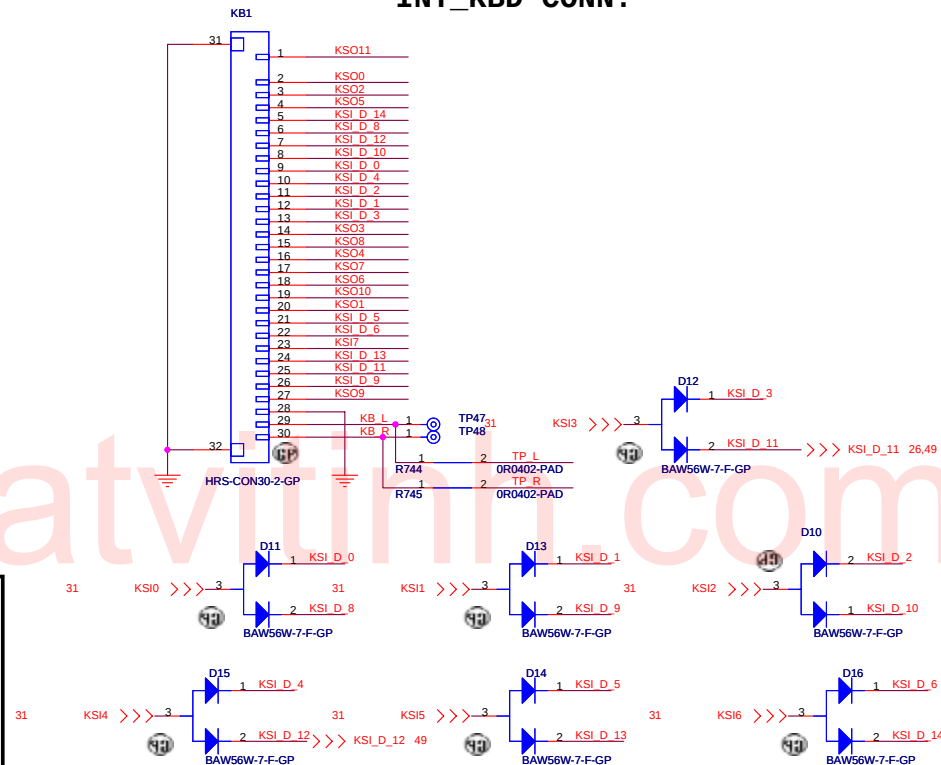


Power Button & LED

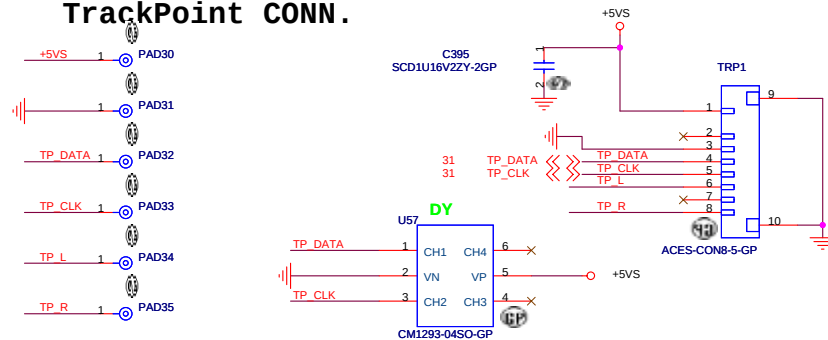


31 KSO[0..11] <<< KSO[0..11]
31 KSI[0..7] <<< KSI[0..7]

INT_KBD CONN.



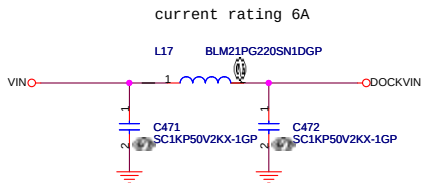
TrackPoint CONN.



<Core Design>

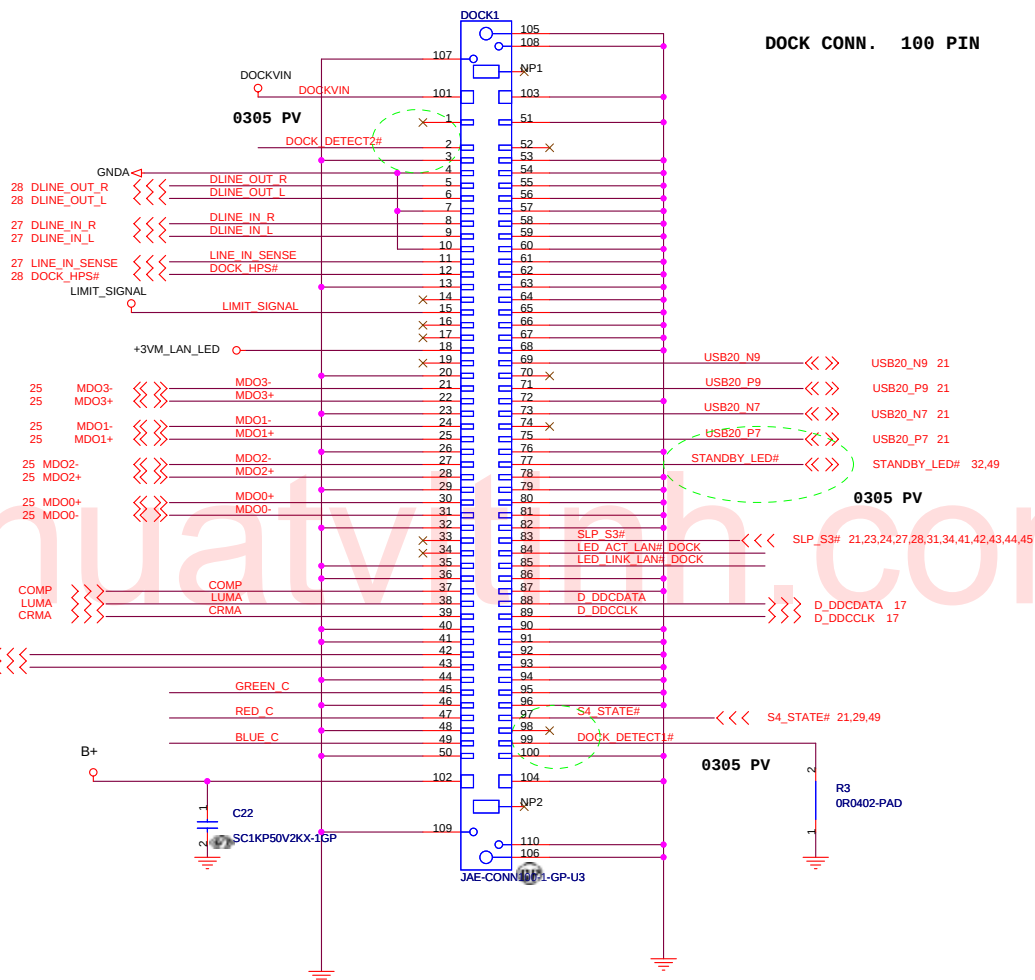
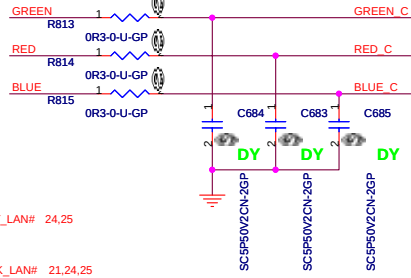
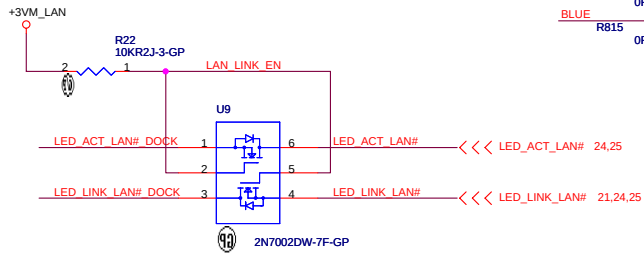
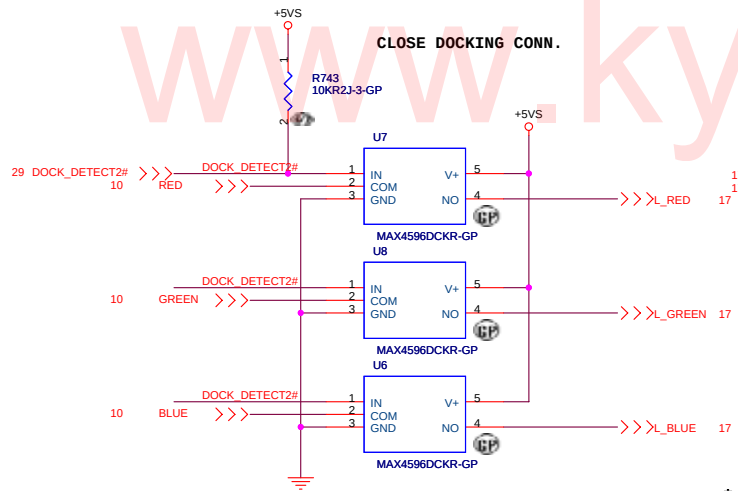
緯創資通 Wistron Corporation
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Taipei Hsien 221, Taiwan, R.O.C.

Title	MDC/KBD/ON OFF/T.P.		
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Norm			
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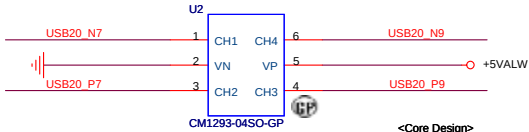


MAX4596

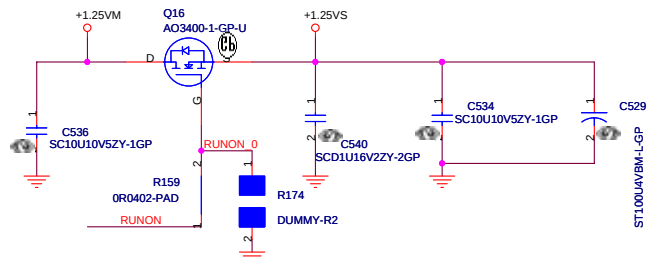
IN	NO TO COM COM TO NO
L	OFF
H	ON



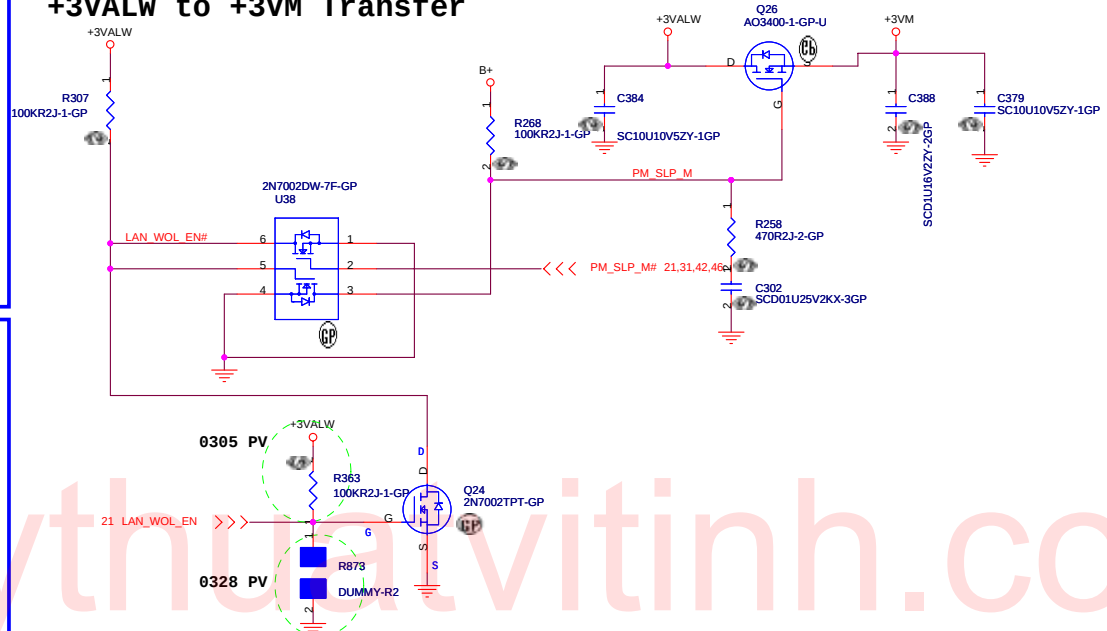
Power Pins
 2 sets
 Set 1 = 18.5V @ 4A per contact
 Set 2 = VBATR @ 3A per contact



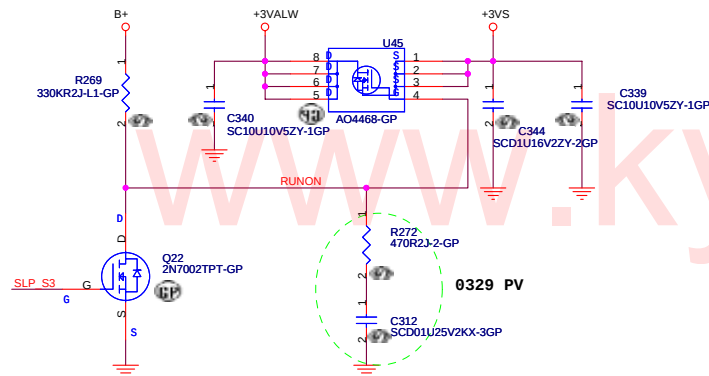
+1.25VM to +1.25VS Transfer



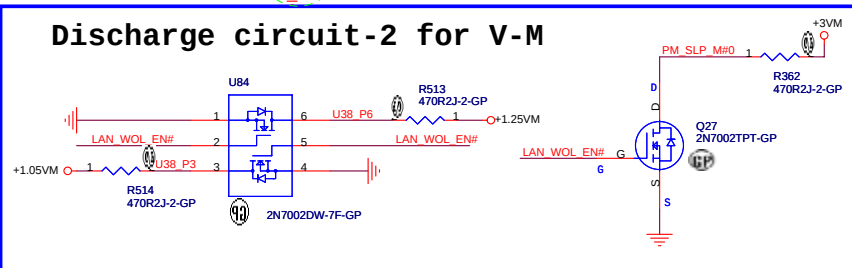
+3VALW to +3VM Transfer



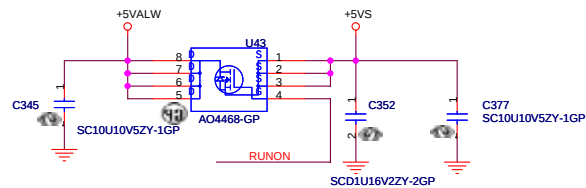
+3VALW to +3VS Transfer



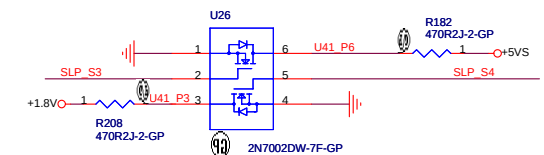
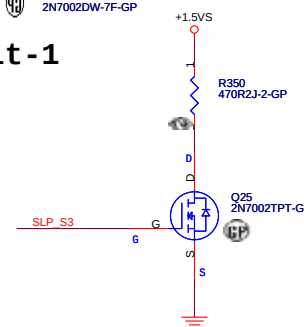
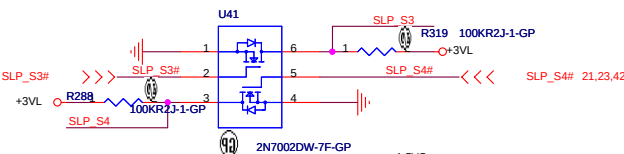
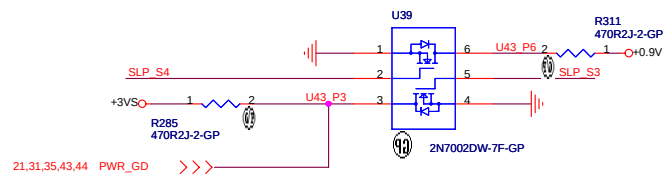
Discharge circuit-2 for V-M



+5VALW to +5VS Transfer



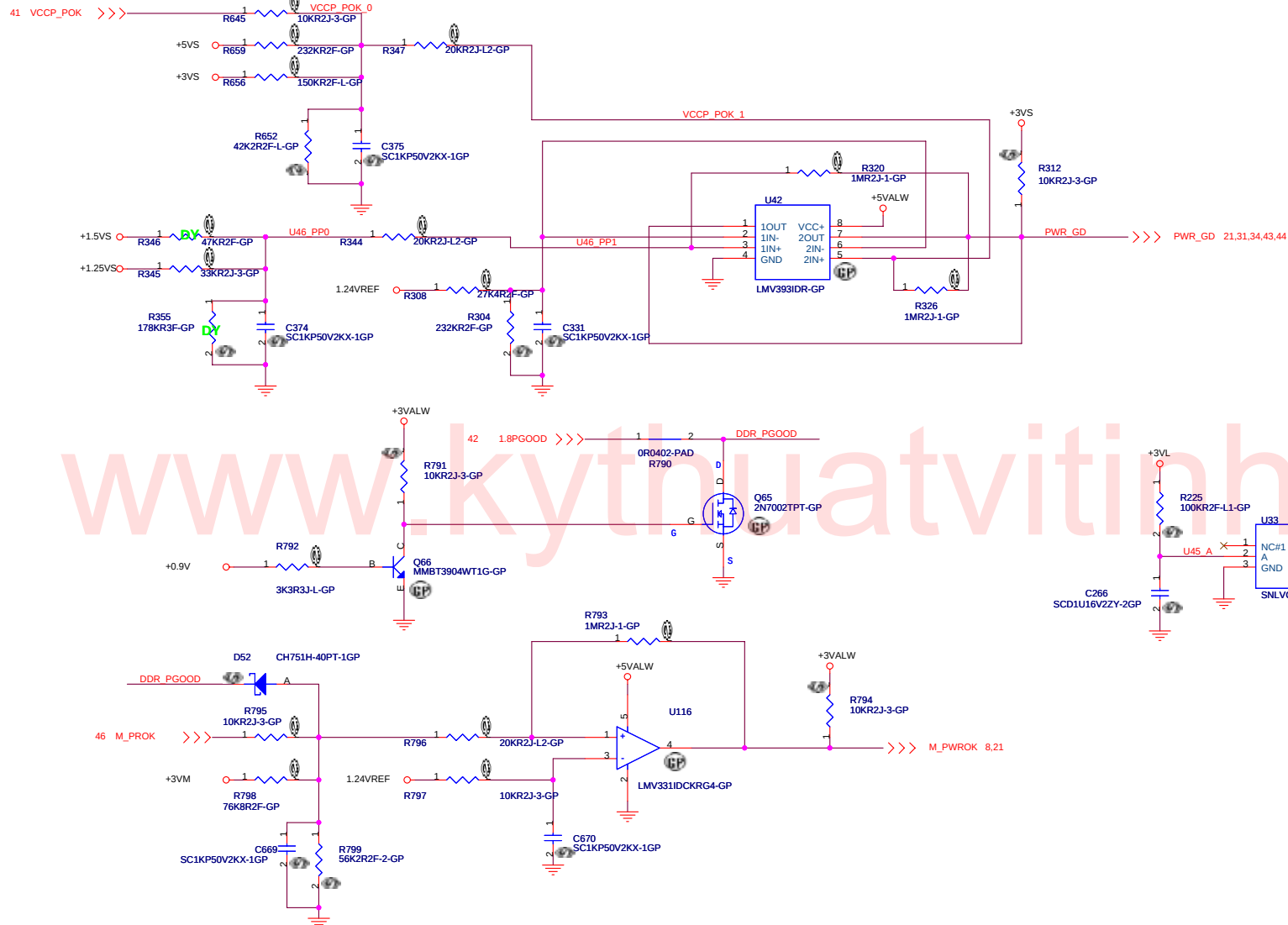
Discharge circuit-1



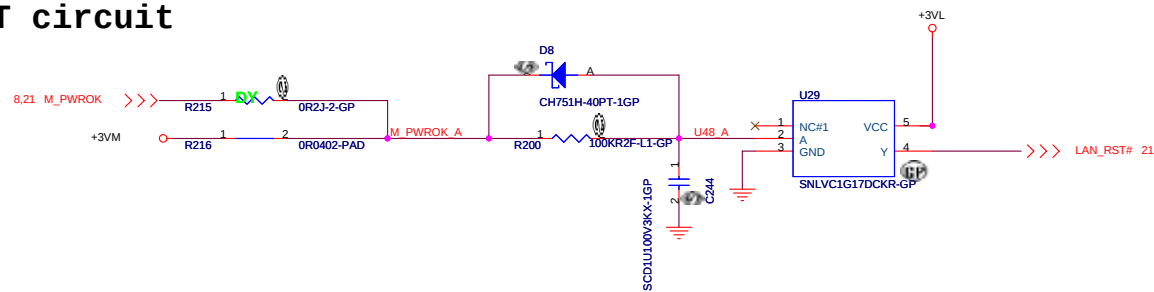
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LAN_RST circuit



<Core Design>

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

Title

POK CKT

Size

Document Number

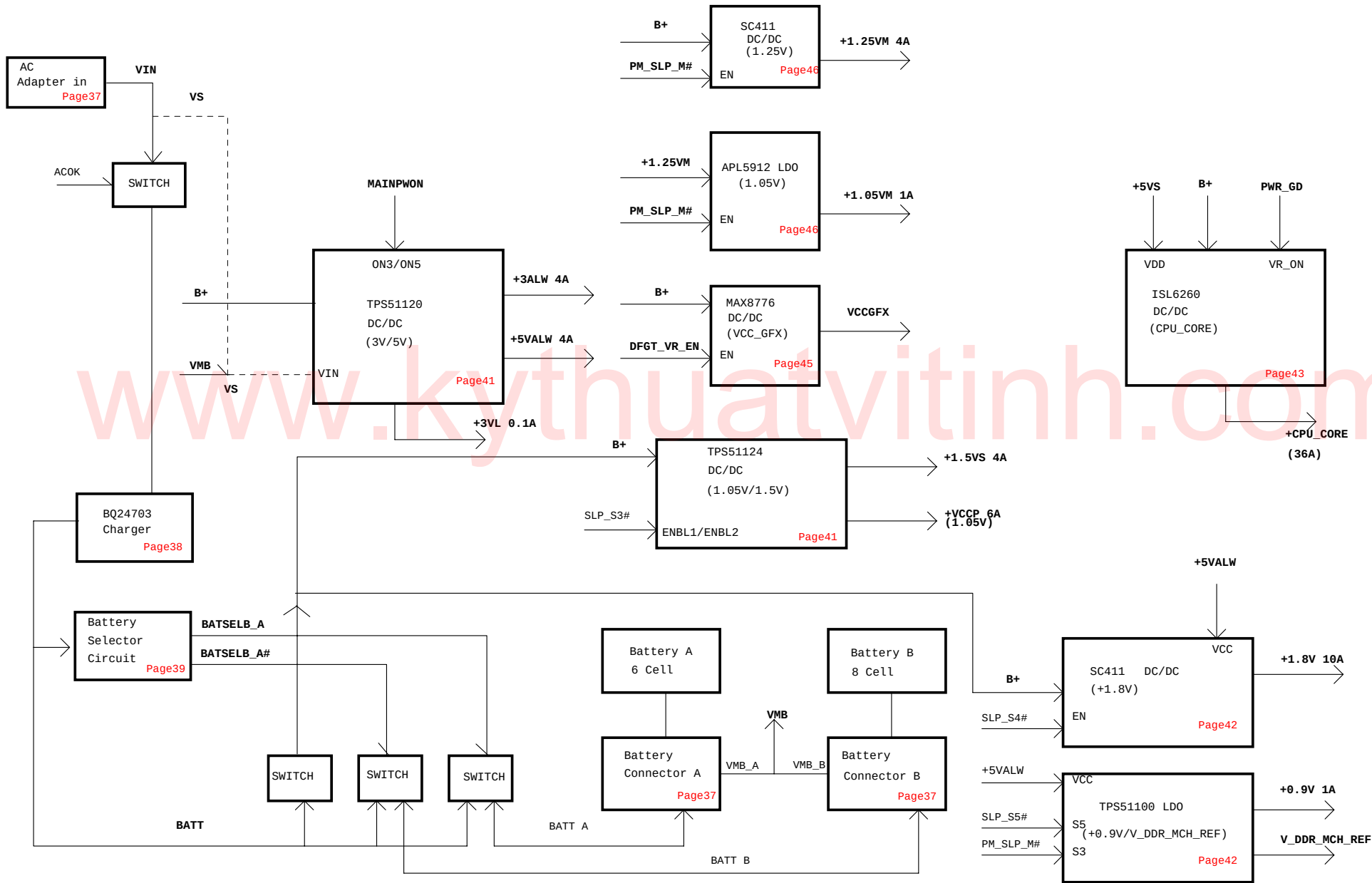
NORN

Rev

PV

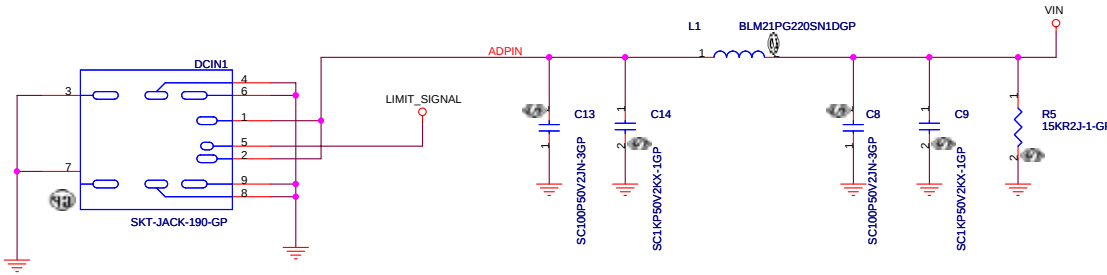
Date: Friday, March 30, 2007

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Adaptor in to generate DCBATOUT

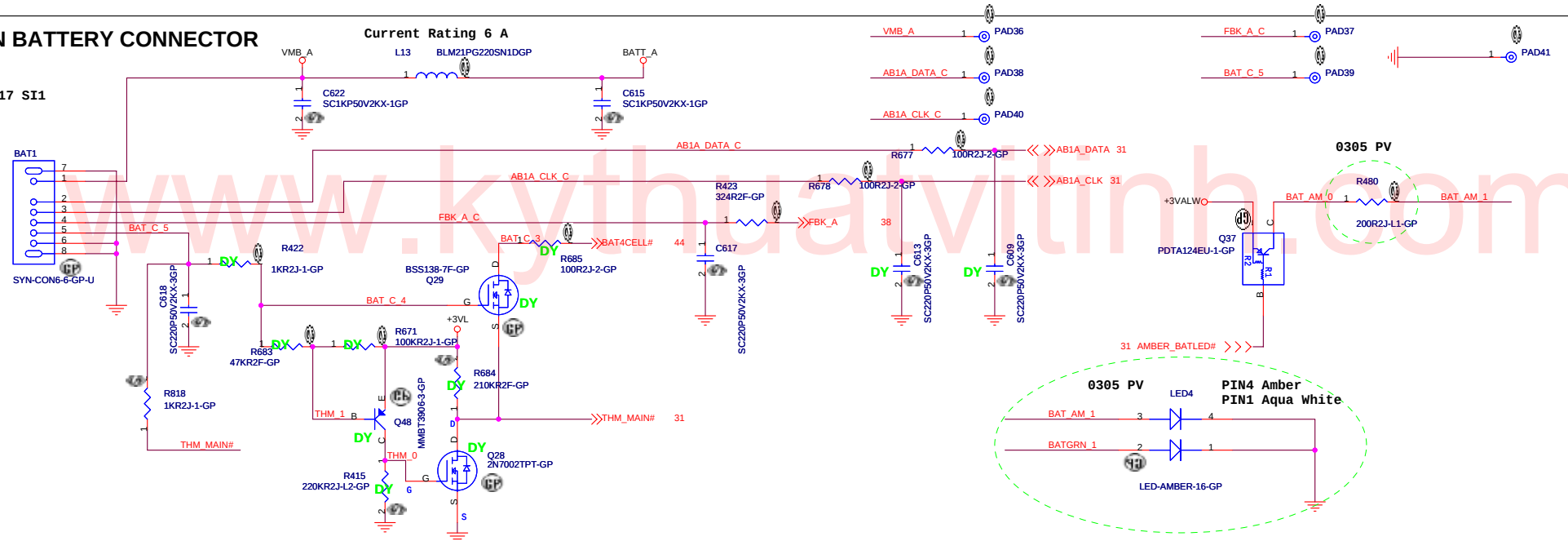
Current Rating 6 A



MAIN BATTERY CONNECTOR

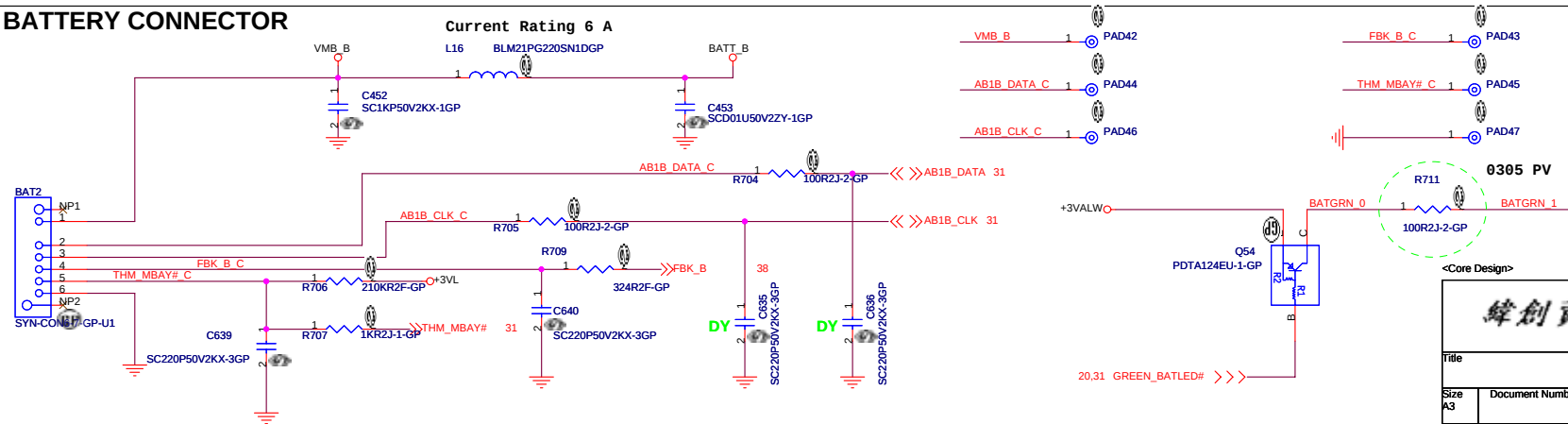
Current Rating 6 A

1017 SI1

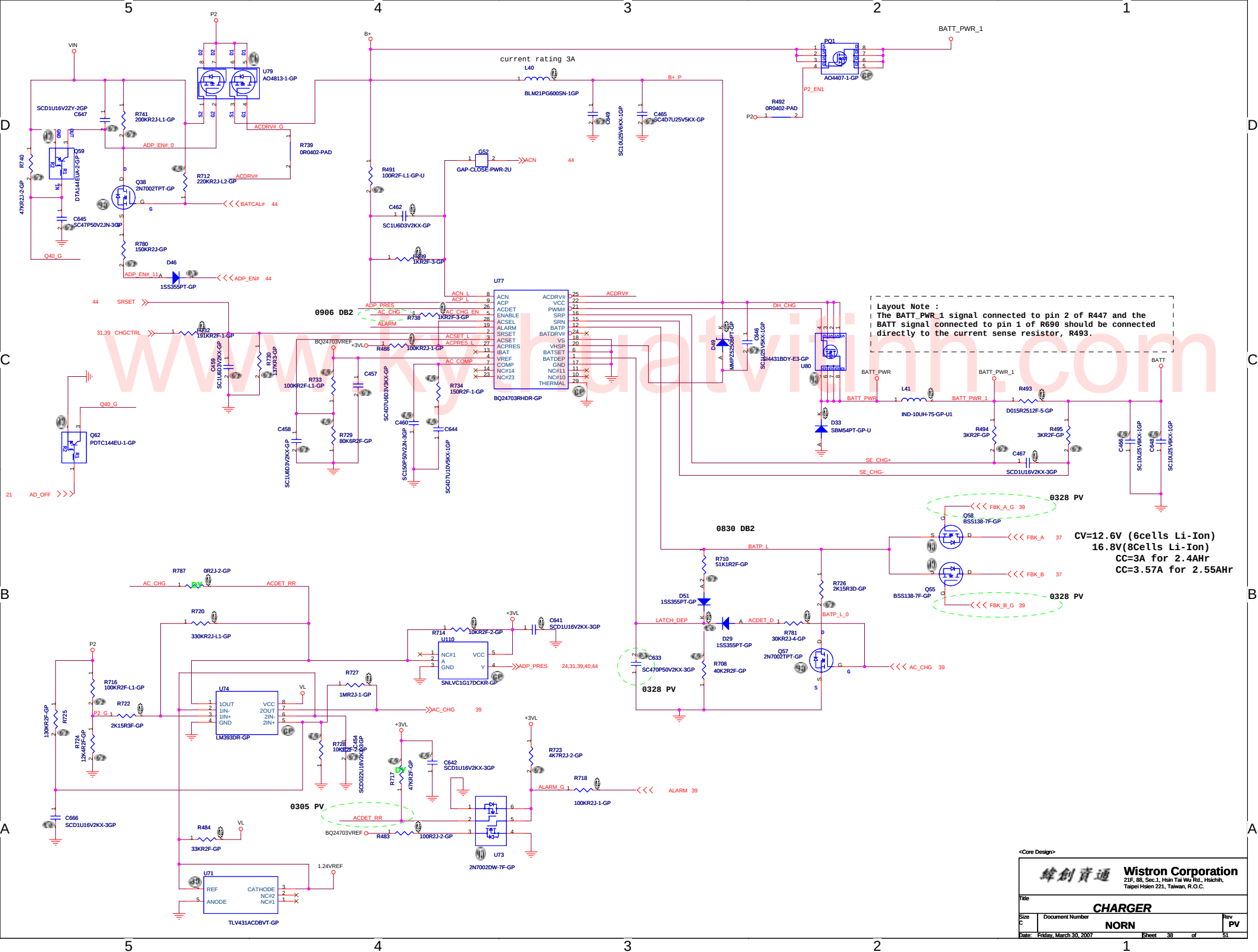


BAY BATTERY CONNECTOR

Current Rating 6 A

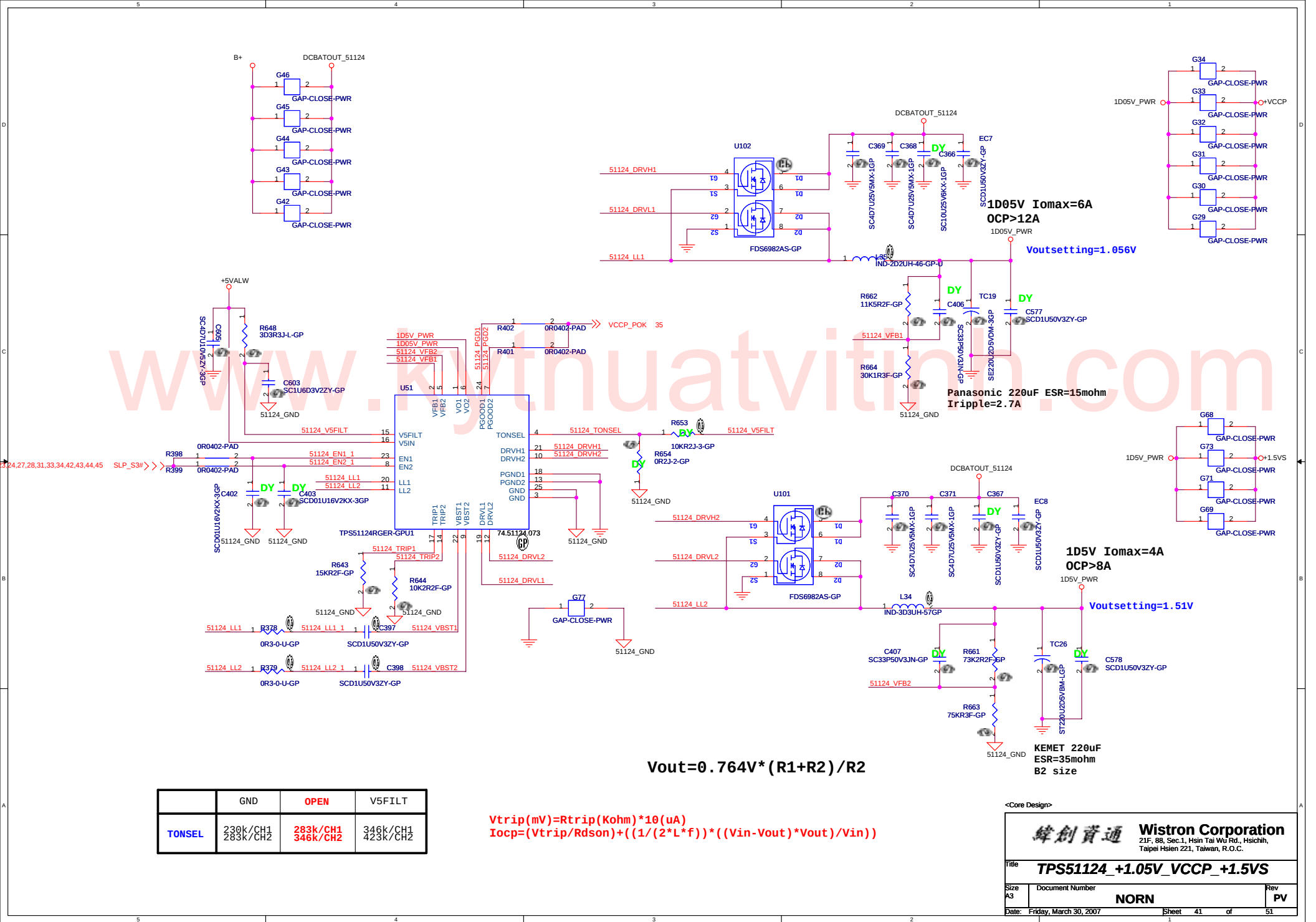


緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.			
Title DC & BATTERY CONN.			
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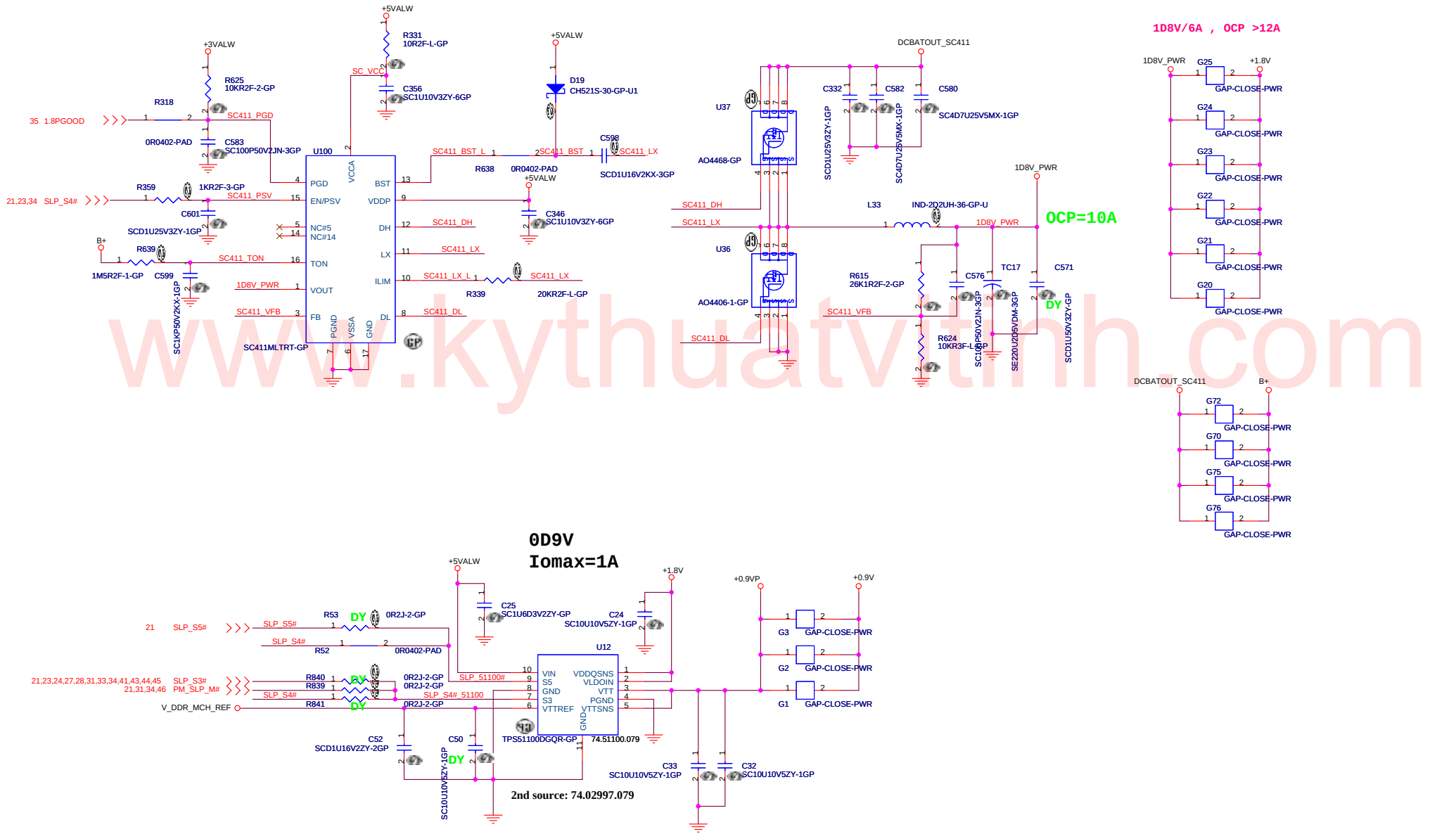


Layout Note :
The BATT_PWR_1 signal connected to pin 2 of R447 and the
BATT signal connected to pin 1 of R690 should be connected
directly to the current sense resistor, R493.

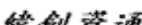
CV=12.6V (6cells Li-Ion)
16.8V(8Cells Li-Ion)
CC=3A for 2.4Ahr
CC=3.57A for 2.55Ahr

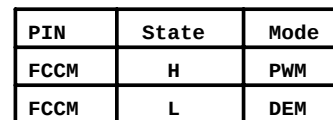


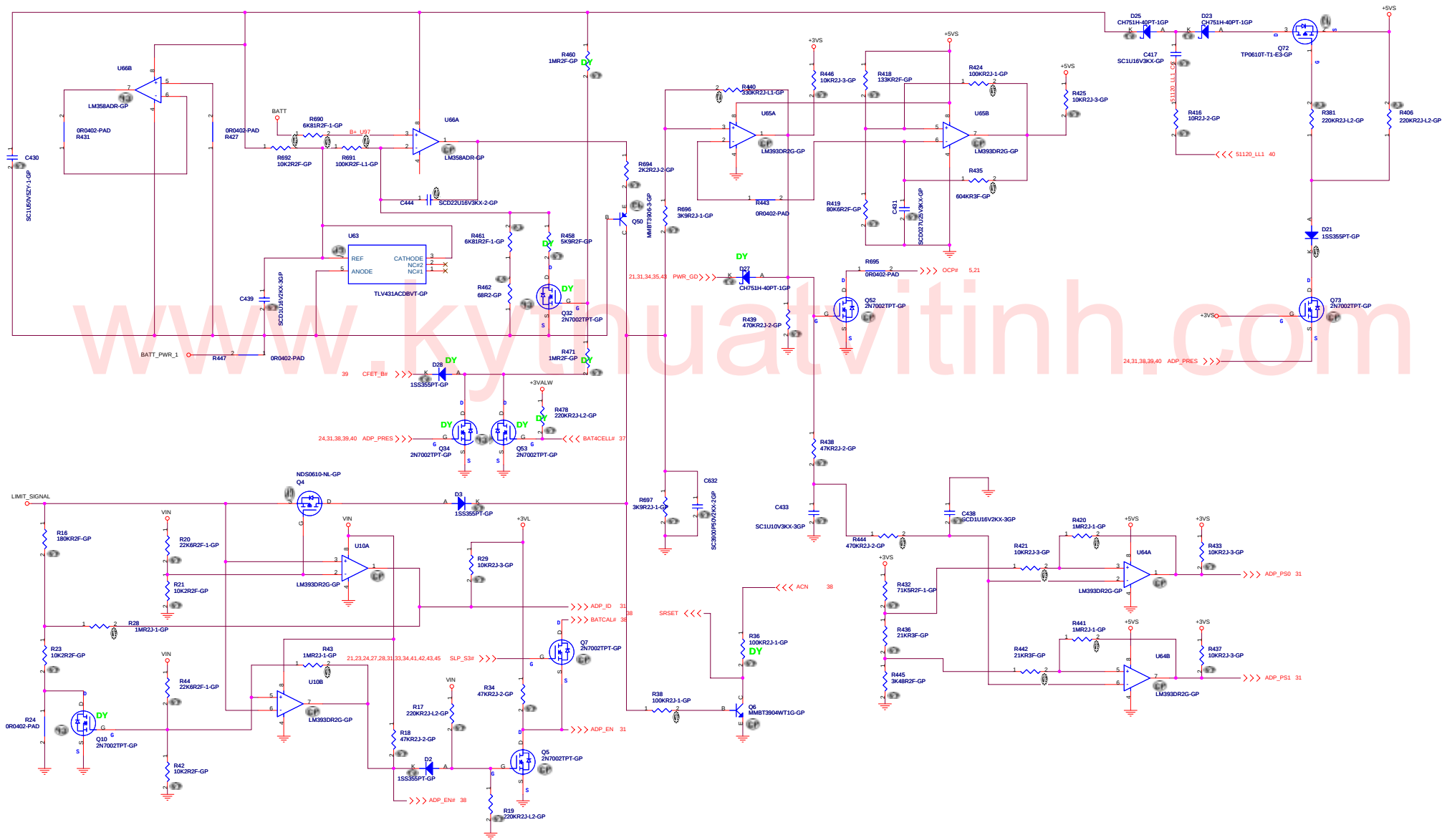
SC411 for 1D8V /TPS51110_0D9V



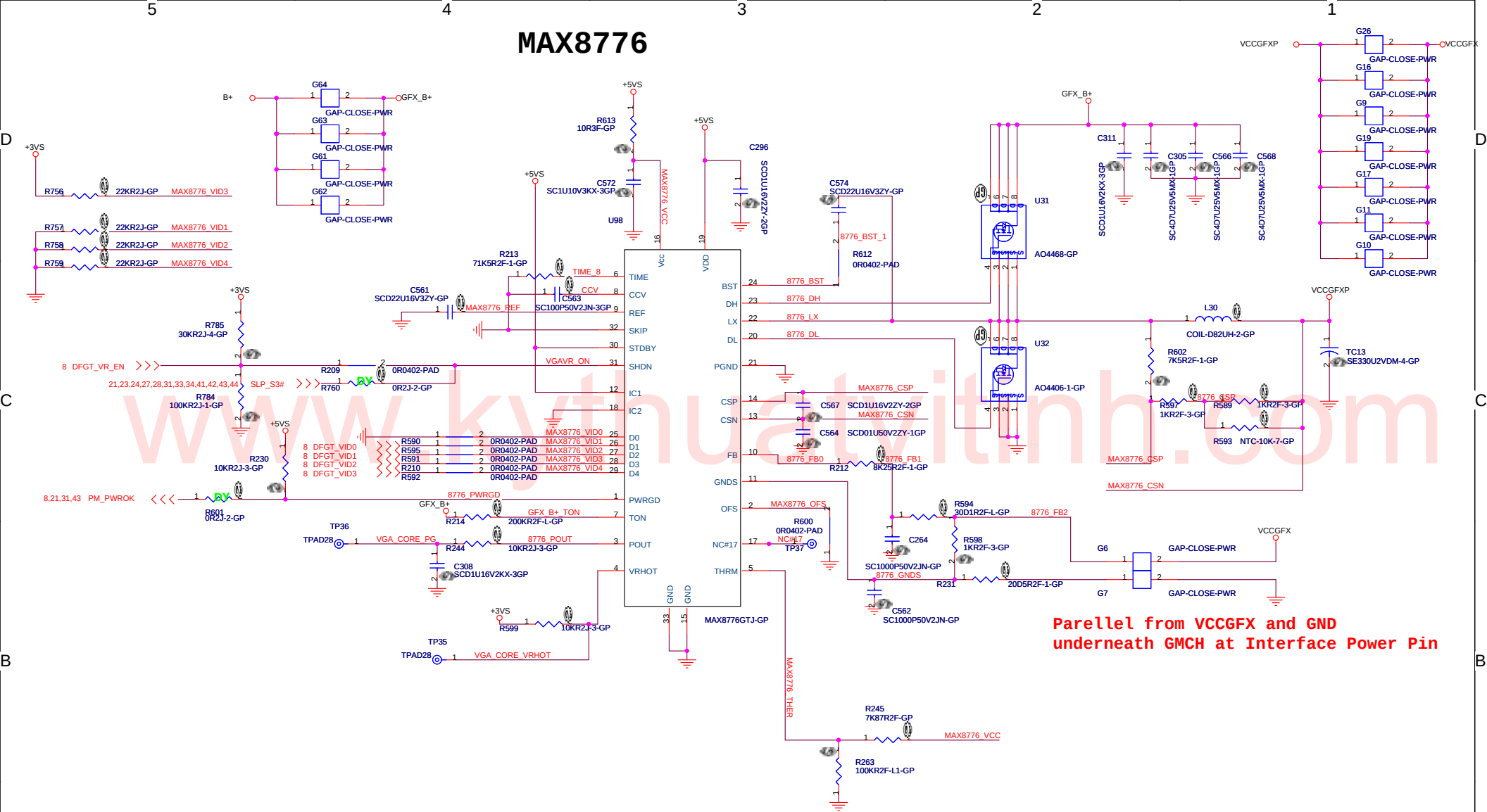
<Core Design>

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Title			
SC 411 1D8V/0.9VP TPS51100			
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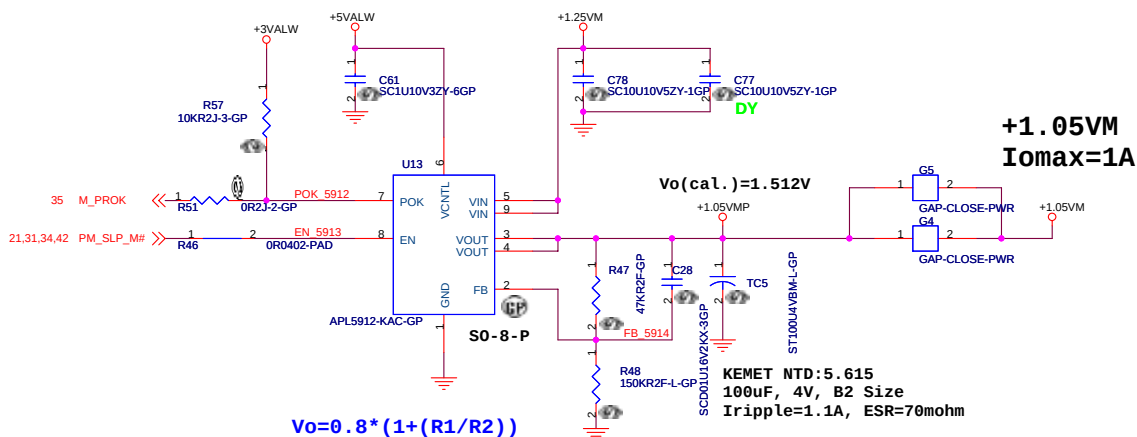
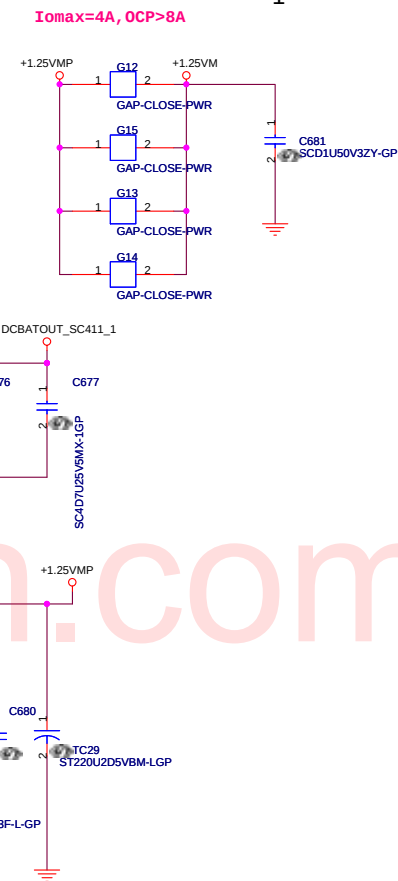
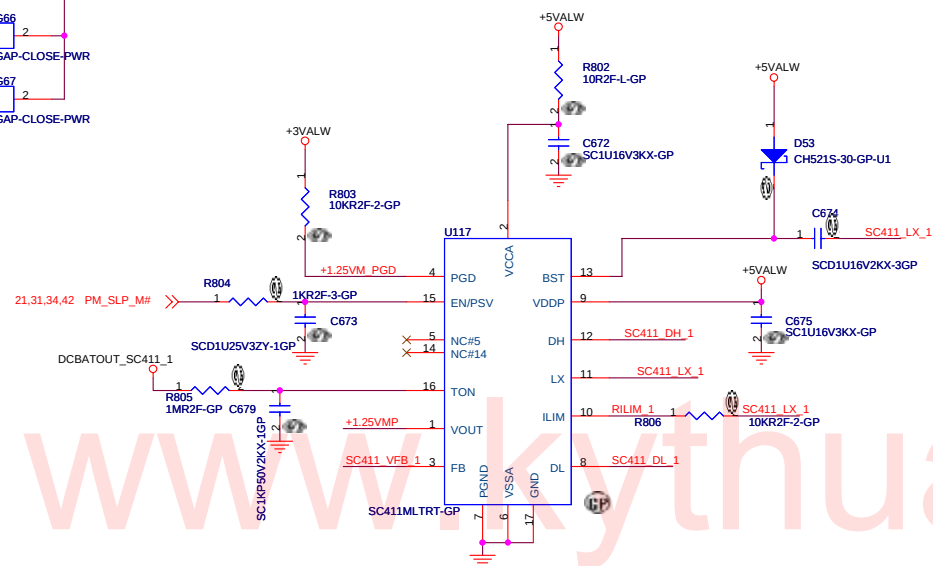
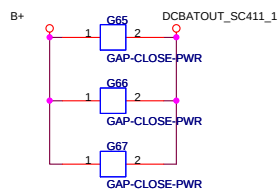
MAX8776



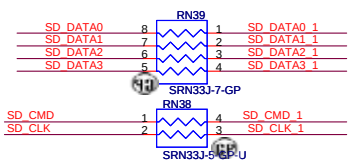
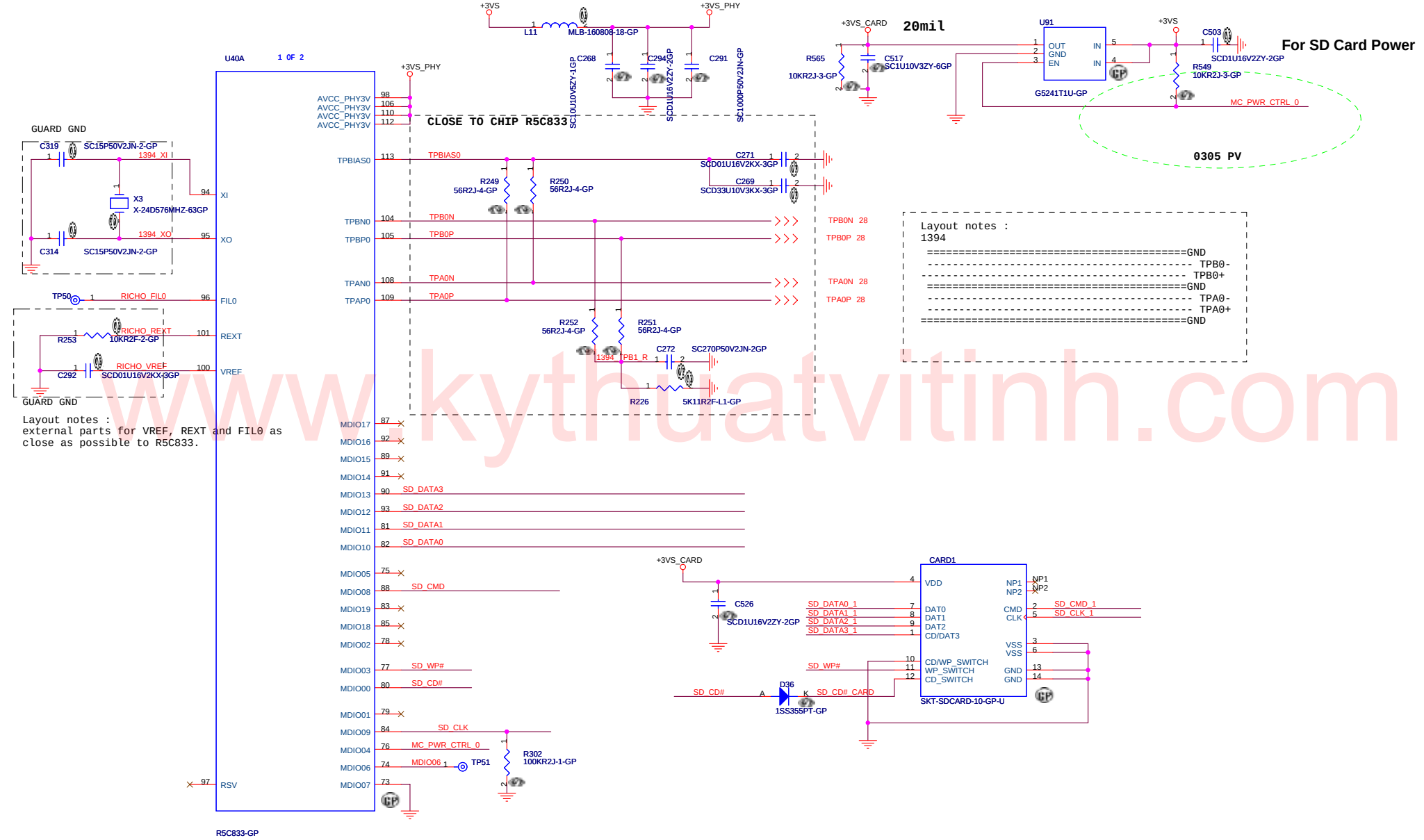
Parallel from VCCGFX and GND
underneath GMCH at Interface Power Pin

<Core Design>

緯創資通		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
MAX8776_VCCGFX			
Size	Document Number	Rev	
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<Core Design>				
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title				
SC411 +1.25VM/+1.05VM				
Size A3	Document Number			Rev
	NORN			PV
Date:	Friday, March 30, 2007	Sheet	46 of	51



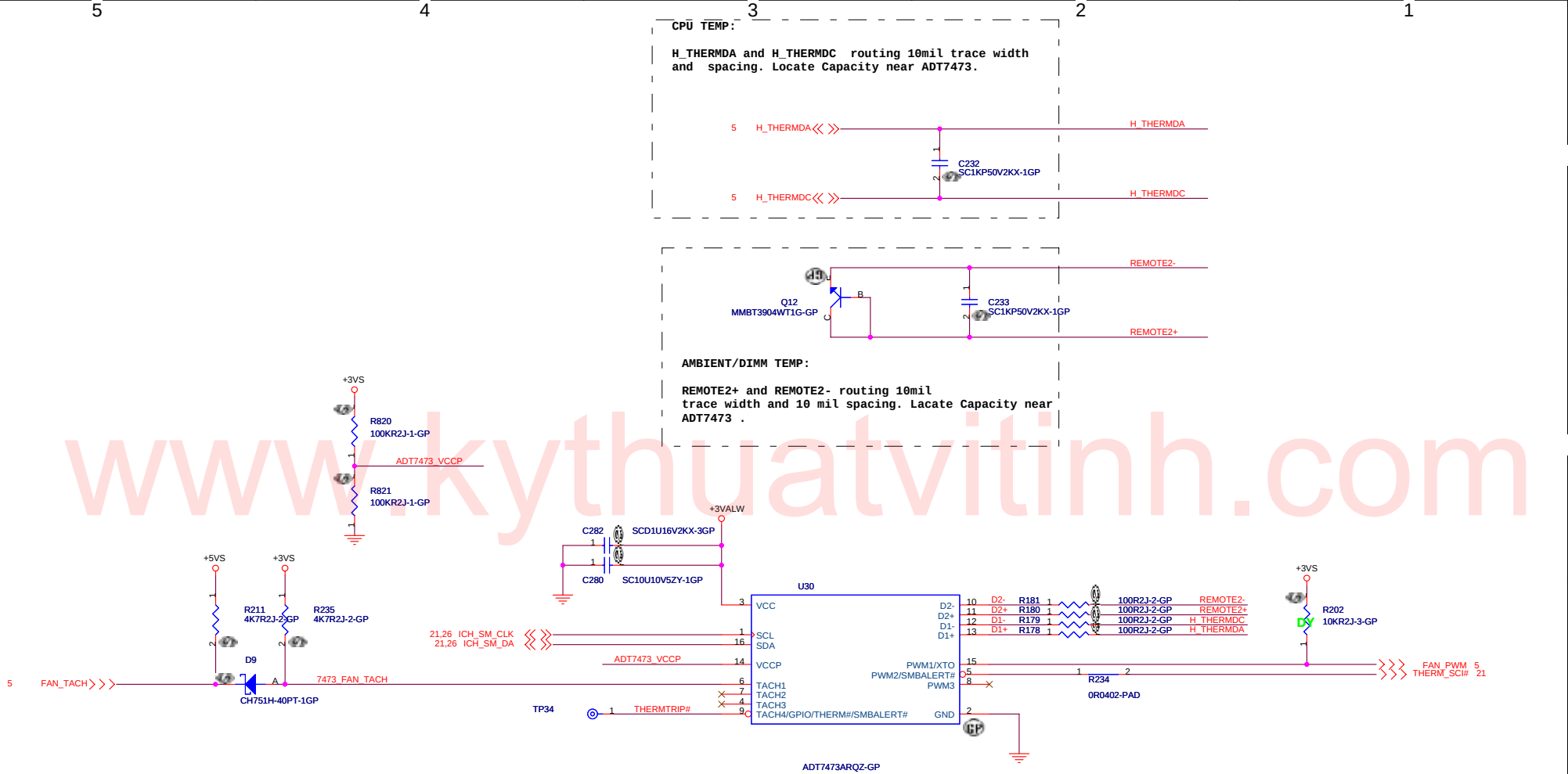
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Taipei Hsien 221, Taiwan, R.O.C.

Title: **R5C833/IEEE1394/SD**

Size: A3	Document Number: NORN	Rev: PV
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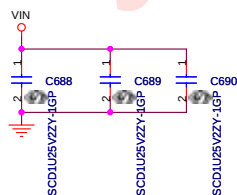
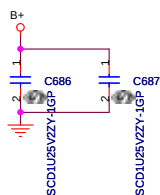
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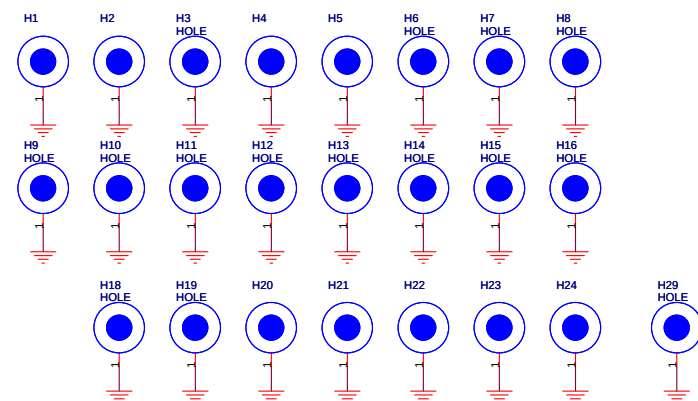
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緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
ADT7473 Thermal Sensor	
Size	Document Number
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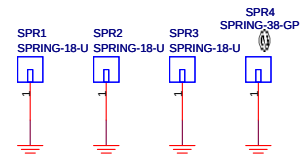
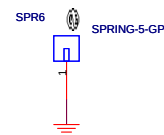


1101 HOLE H1,H2 change part to 34.4R836.001
1101 HOLE H4,H5 change part to 34.4R837.001
1101 HOLE H17 change part to 34.4R838.001
1101 HOLE H20,H21 change part to 34.4R841.001
1101 HOLE H22,H23,H24,H25 change part to 34.4R840.001
1101 HOLE H26,H27 change part to 34.4R839.001



0829 change to 34.49Q01.002

0814 ME update drawing



1018 change SPR4 to 34.47R31.001
DY

Title		Wistron Corporation	
Size		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.	
Document Number		UNUSED PARTS/EMI Capacitors	
Date: Tuesday, March 27, 2007		Norn	
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