

Discrete/UMA Schematics Document

Sandy Bridge

Intel PCH

2011-01-19

REV : XXX

DY :None Installed
UMA:UMA platform installed
PARK:DIS PARK platform installed
MADISON:DIS MADISON platform installed
Colay :Manual modify BOM
MUX : PX

BOM

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

Title

Cover Page

Size

A3

Document Number

LZ57

Rev

-1

Date:

Tuesday, March 29, 2011

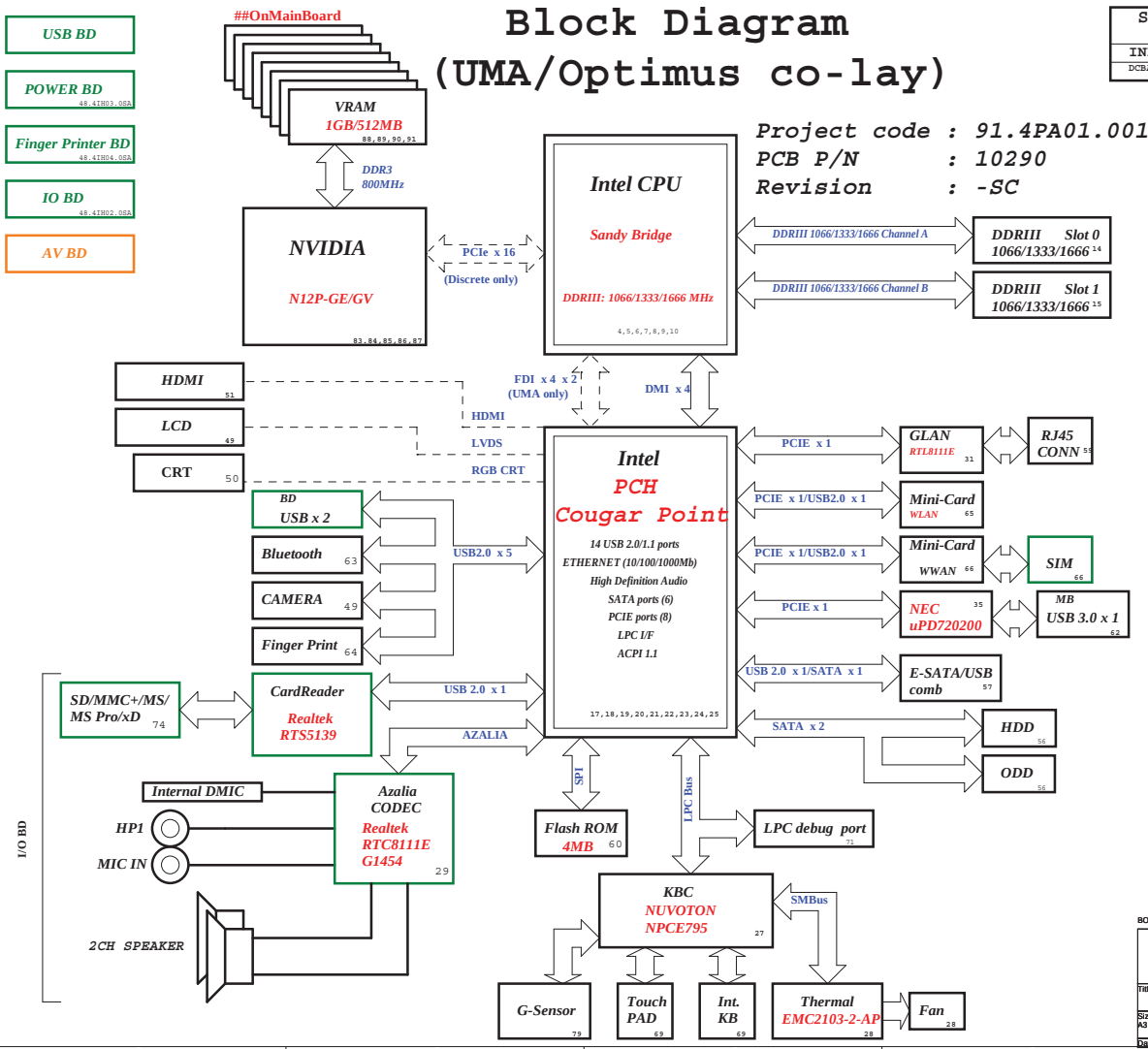
Sheet

1

of

102

SYSTEM DC/DC RT8208B 48		CPU DC/DC NCP6131 42-44	
INPUTS	OUTPUTS	INPUTS	OUTPUTS
DCBATOUT	GD85V_S0	DCBATOUT	VCC_CORE
SYSTEM DC/DC UP6111CQHC 45		INPUTS	OUTPUTS
		DCBATOUT	ID05V_VTT
SYSTEM DC/DC UP6183AQAG 41		INPUTS	OUTPUTS
		DCBATOUT	SV_AUX_S5 3D3V_AUX_S5 SV_S5 3D3V_S5
SYSTEM DC/DC UP6111C 46		INPUTS	OUTPUTS
		DCBATOUT	ID05V_S3 DDR_VREF_S3
SYSTEM DC/DC NCP5911 44		INPUTS	OUTPUTS
		DCBATOUT	VCC_GFXCORE
VGA RT8208B 92		INPUTS	OUTPUTS
		DCBATOUT	VGA_CORE
TI CHARGER BQ24745 40		INPUTS	OUTPUTS
		+DC_IN_S5 +PRATT	DCBATOUT
LDO RT9025 47		INPUTS	OUTPUTS
		3D3V_S5	ID0V_S0
SYSTEM DC/DC G9091-180T11U 24, 93		INPUTS	OUTPUTS
		3D3V_S5	ID0V_S5
		3D3V_S0	- ID0V_VGA_S0
LDO RT9026 46		INPUTS	OUTPUTS
		SV_S5	OD75V_S0
PCB LAYER		L1:Top	L5:VCC
		L2:GND	L6:Signal
		L3:Signal	L7:GND
		L4:Signal	L8:Signal



1

1D05V_VTT

[illegible]

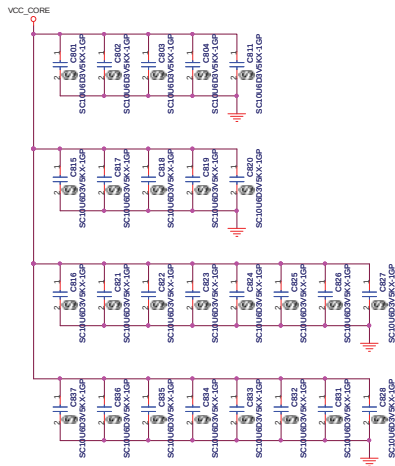
BOM	
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Ta Wu Rd., Hsichui, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
CPU (PCIe/DMI/FDI)	
Size	Rev
Document Number LZ57	-1
Date	
1/25/03, Milan 29, 2013	Sheet 4 of 102

[illegible]

SSID = CPU

PROCESSOR CORE POWER

53A

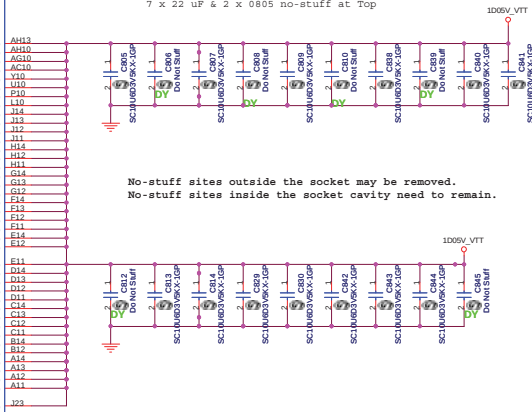


VCC Output Decoupling Recommendation:
4 x 470 uF at Bottom Socket Edge
8 x 22 uF at Top Socket Cavity
8 x 22 uF at Top Socket Edge
8 x 22 uF at Bottom Socket Cavity

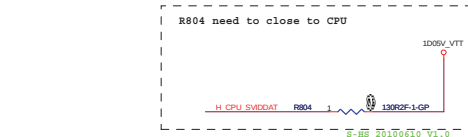
POWER

6 OF 9

VCCIO Output Decoupling Recommendation:
 2 x 330 uF (3 x 330 uF for 2012 capable designs)
 5 x 22 uF & 5 x 0805 no-stuff at Bottom
 7 x 22 uF & 2 x 0805 no-stuff at Top



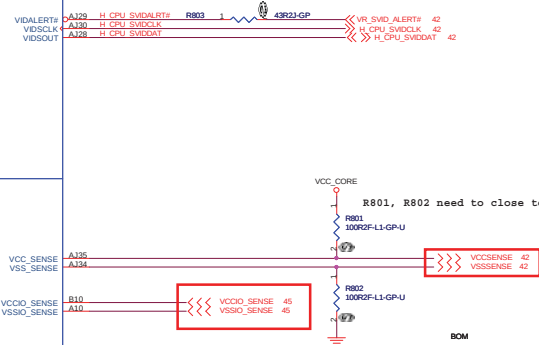
No-stuff sites outside the socket may be removed.
No-stuff sites inside the socket cavity need to remain.



CORE SUPPLY

VID

SENSE LINES



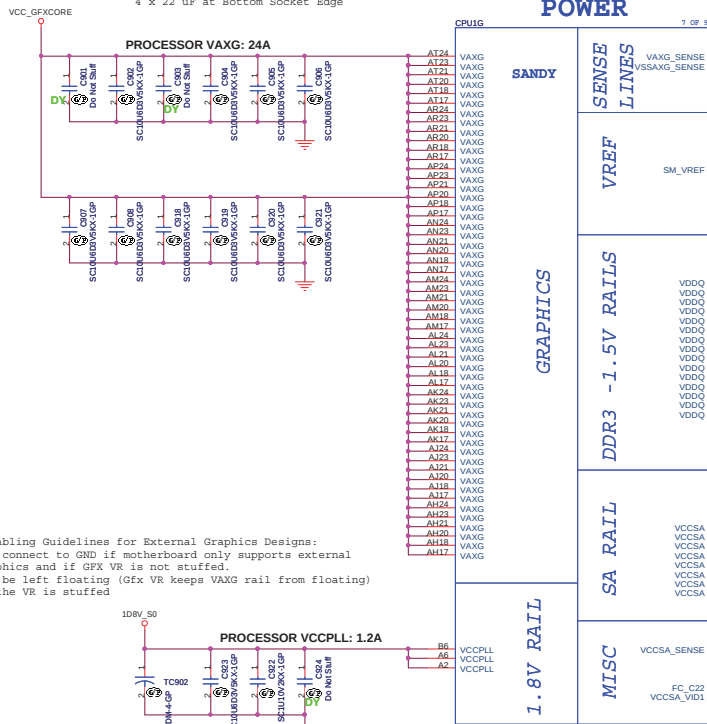
BOM

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

Title			
CPU (VCC CORE)			
Size	Document Number	Rev	
Custom	LZ57	-1	
Inter	10/24/98, March 2011	Sheet	8 of 117

SSID = CPU

VAXG Output Decoupling Recommendation:
2 x 470 uF at Bottom Socket Edge
2 x 22 uF at Top Socket Cavity
4 x 22 uF at Top Socket Edge
2 x 22 uF at Bottom Socket Cavity
4 x 22 uF at Bottom Socket Edge

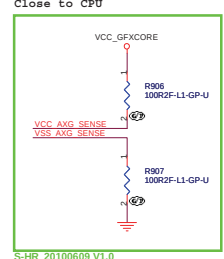


Disabling Guidelines for External Graphics Designs:
Can connect to GND if motherboard only supports external graphics and if GFX VR is not stuffed.
Can be left floating (Gfx VR keeps VAXG rail from floating) if the VR is stuffed

VCCPLL Output Decoupling Recommendation:
1 x 330 uF
2 x 1 uF
1 x 10 uF

Refer to the latest Huron River Mainstream PDG (Doc# 436735) for more details on S3 power reduction implementation.
+V_SM_VREF_CNT should have 10 mil trace width

Routing Guidelines:
Power from DDR VREF_S3 and +V_SM_VREF_CNT should have 10 mils trace width.

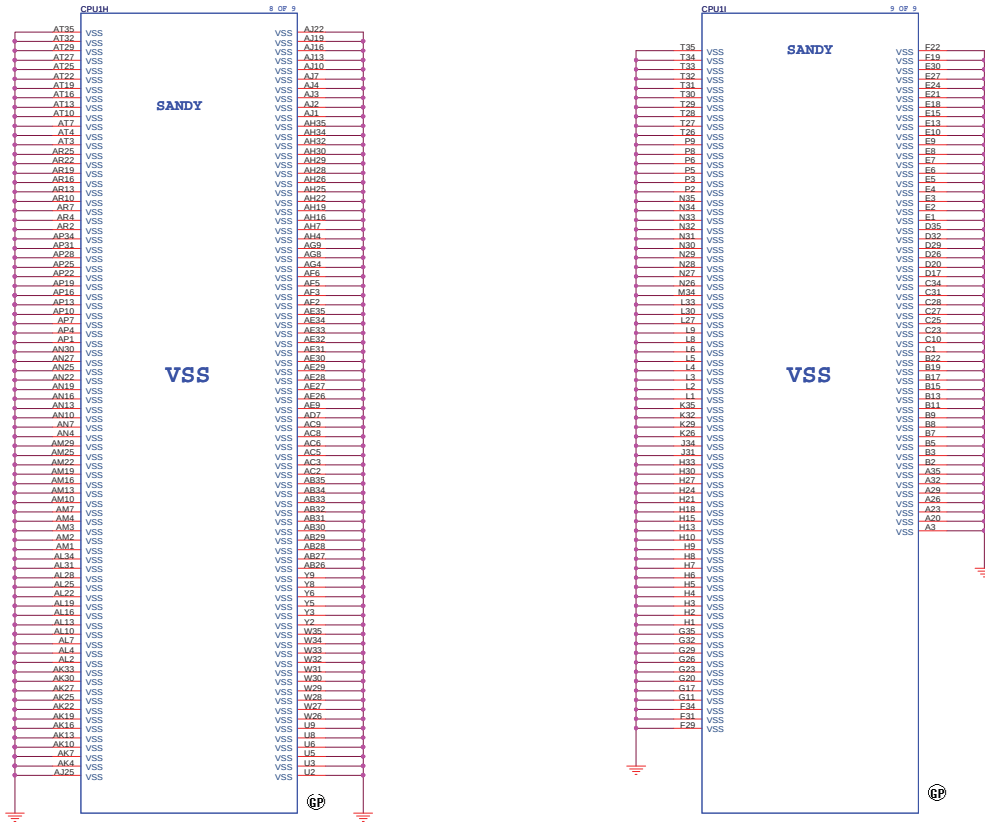


S-HR_20100609 V1.0

20100721 standard schematic update

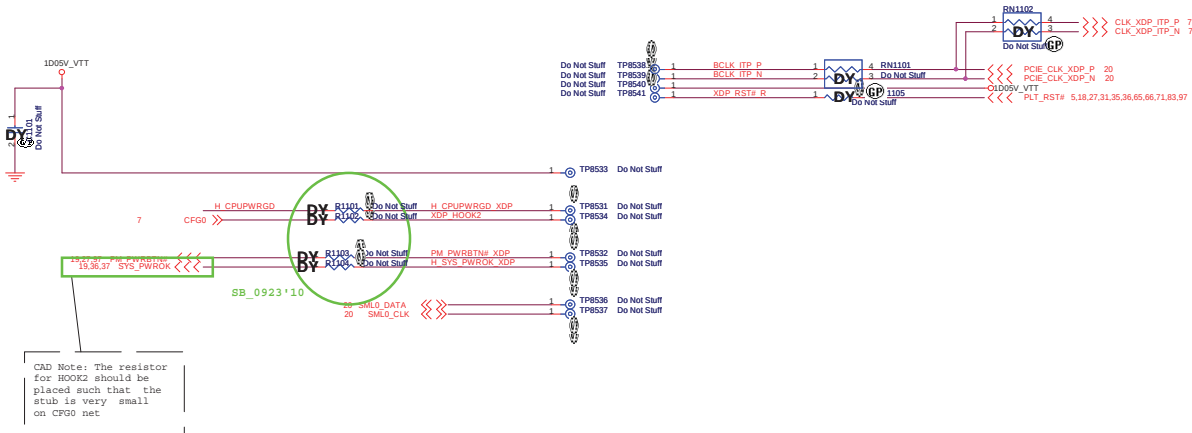
BOM

緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
File	CPU (VCC GFXCORE)
Size	Document Number
A3	LZ57
Date: Tuesday, March 29, 2011	Sheet 9 of 102
Rev	-1



BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
File			
Size		Document Number	
A3		CPU (VSS)	
Date:		Rev	
Tuesday, March 29, 2011		-1	
Sheet		of	
10		102	



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

Title			
XDP			
Size A3	Document Number		Rev
	LZ57		-1
Date:	Tuesday, March 29, 2011	Sheet 11 of	102

(Blanking)

BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Reserved			
Size	Document Number		Rev
A4	LZ57		-1
Date:	Tuesday, March 29, 2011		Sheet 12 of 102
2			1

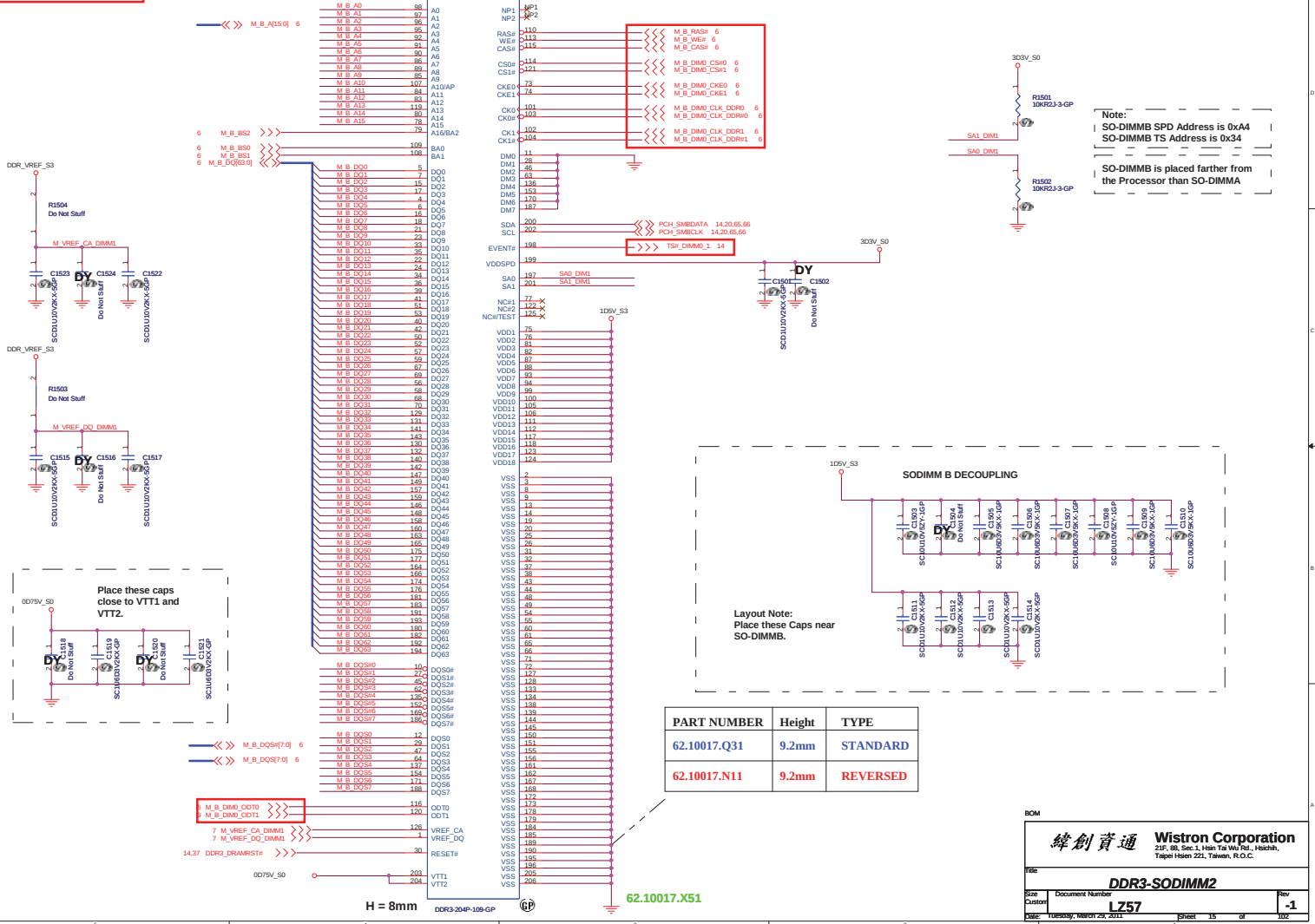
5	4	3	2	1
D				
C				
B				
A				
5	4	3	2	1

(Blanking)

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title Reserved		
Size A4	Document Number LZ57	Rev -1
Date: Tuesday, March 29, 2011		Sheet 13 of 102
2	1	

SSID = MEMORY



PART NUMBER	Height	TYPE
62.10017.Q31	9.2mm	STANDARD
62.10017.N11	9.2mm	REVERSED

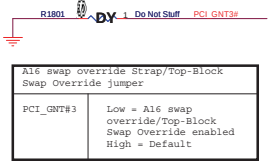
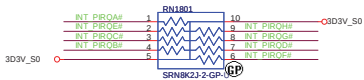
(Blanking)

BOM

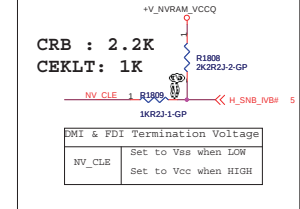
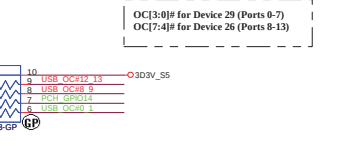
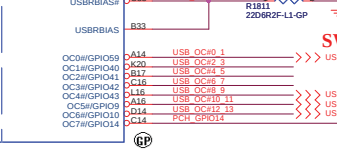
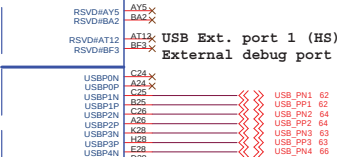
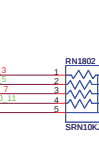
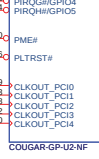
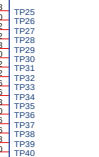
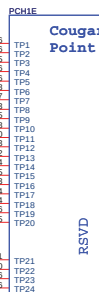
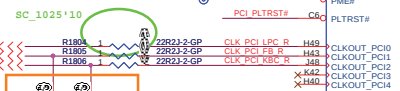
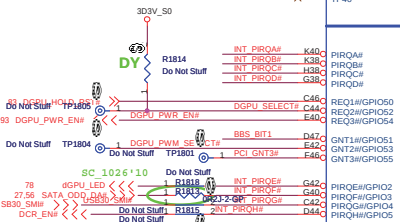
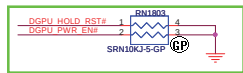
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title DDR3-SODIMM2	
Size A4	Document Number LZ57
Date: Tuesday, March 29, 2011	Rev -1
Sheet 16 of 102	

SSID = PCH

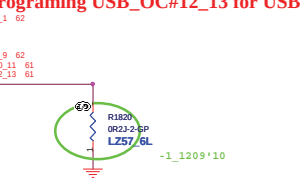
20100725 Annie modify



BOOT BIOS Strap	
INT1#/GPIO1	SATA1GP/GPIO19
0	0
0	1
1	0
1	1



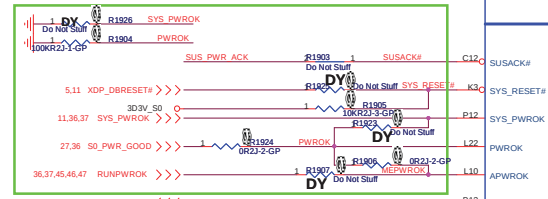
Pair	Device
0	X
1	USB Ext. port 1 (Left Side)
2	Fingerprint
3	BLUETOOTH
4	Mini Card2 (WWAN)
5	CARD READER
6	X
7	X
8	E-SATA /USB Ext. port 4
9	USB Ext. port 2(CardReader BD)
10	USB Ext. port 3(RJ45_BD)
11	Mini Card1 (WLAN)
12	CAMERA
13	X



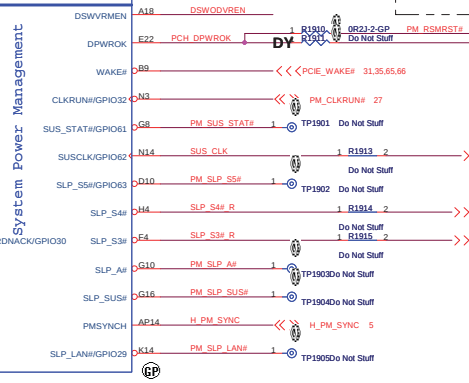
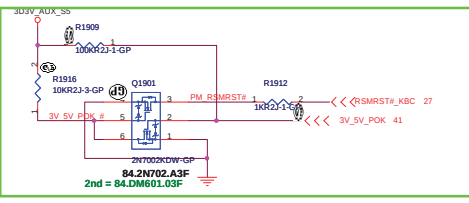
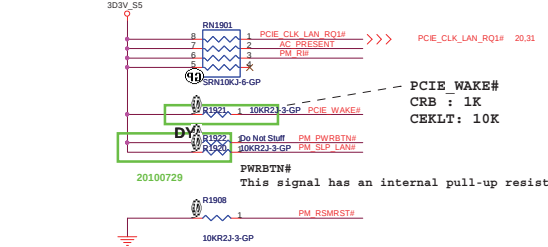
SSID = PCH



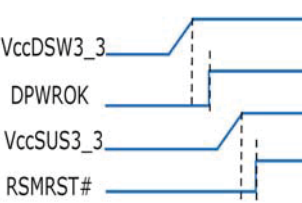
Signal Routing Guideline:
DMI_ZCOMP keep W=4 mils and routing length less than 500 mils.
DMI_IRCOMP keep W=4 mils and routing length less than 500 mils.



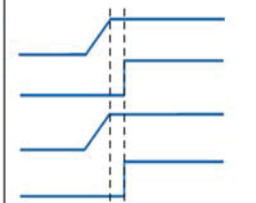
S0_PWR_GOOD after PM_SLP_S3# delay 200 ms



Deep S4/S5 Supported



Deep S4/S5 Not Supported



- For platforms not supporting Deep S4/S5
- 1.VccSUS3_3 and VccDSW3_3 will rise at the same time (connected on board)
 - 2.DPWROK and RSMRST# will rise at the same time (connected on board)
 - 3.SLP_SUS# and SUSACK# are left as 'no connect'
 - 4.SUSWARN# used as SUSPWRDNACK/GPIO30

DSWODVREN - On Die DSW VR Enable	
HIGH	Enabled (DEFAULT)
LOW	Disabled



Wistron Corporation

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

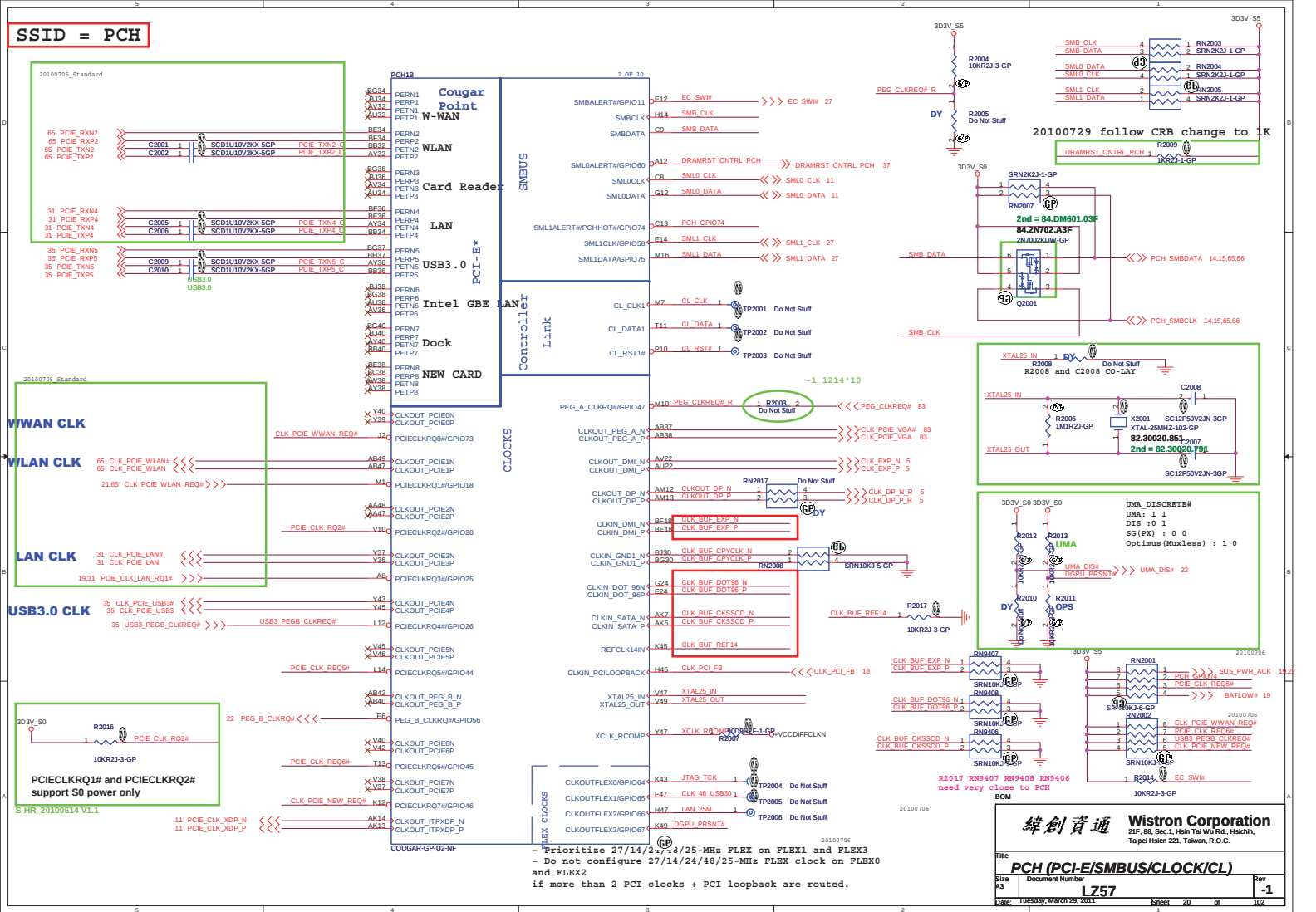
File: PCH (DM I/FDI/PM)

Size A3 Document Number: LZ57

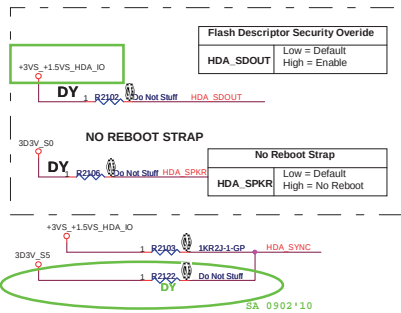
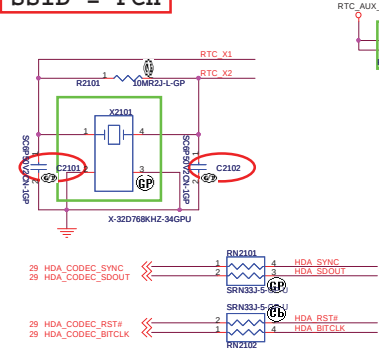
Date: Tuesday, March 29, 2011 Sheet 19 of 102

Rev -1

SSID = PCH

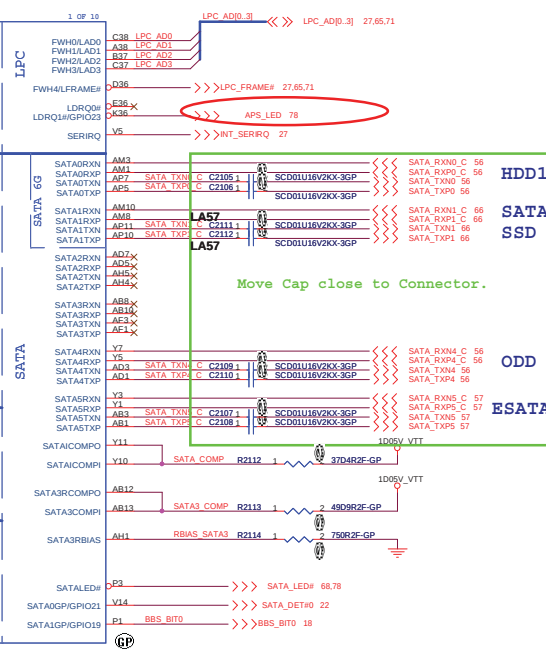
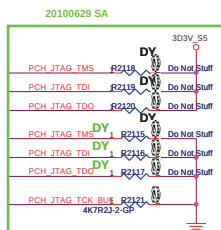
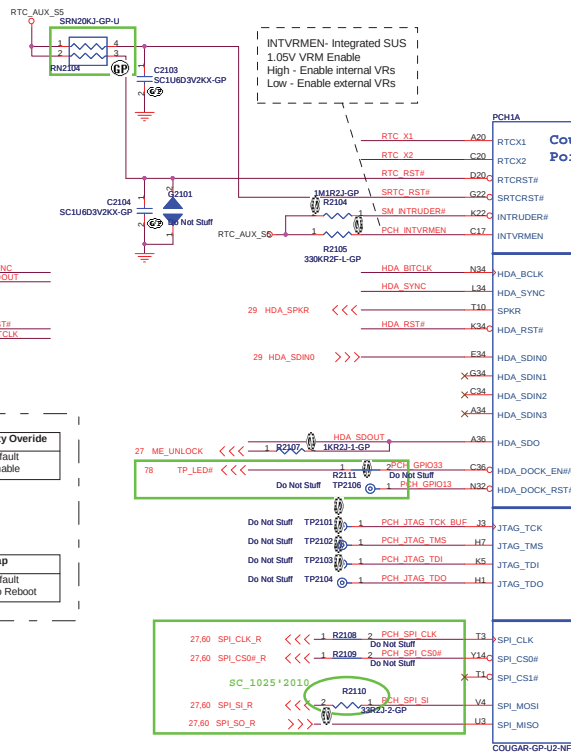


SSID = PCH



This signal has a weak internal pull down.
On Die FLL VR is supplied by 1.5V when
sampled high, 1.8 V when sampled low.
Needs to be pulled high for Huron River platform.
co-operate with R2310

PLL ODVR VOLTAGE	
HDA_SYNC	Low = 1.8V (Default) High = 1.5V



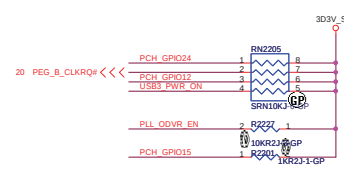
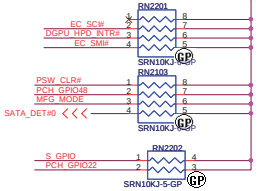
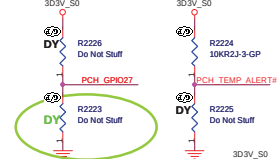
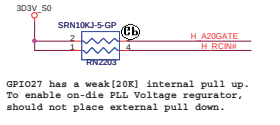
BOM

 緯創資通		Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichin, Taipei Hsein 221, Taiwan, R.O.C.	
Title			
PCH (SPI/RTC/LPC/SATA/IHDA)			
Size	Document Number		Rev
	LZ57		
Date:	Tuesday, March 23, 2011	Sheet	21 of 102

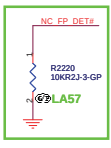
SSID = PCH

Note:
For PCH debug with XDP, need to NO STUFF R2218

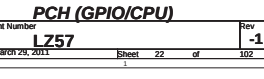
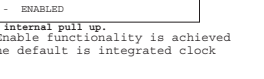
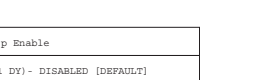
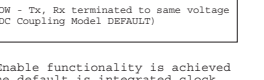
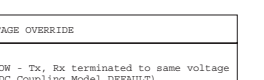
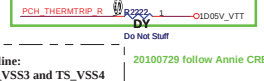
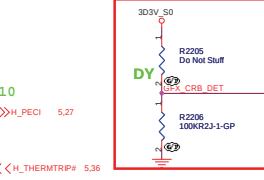
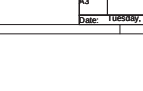
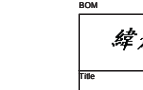
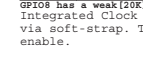
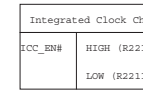
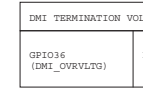
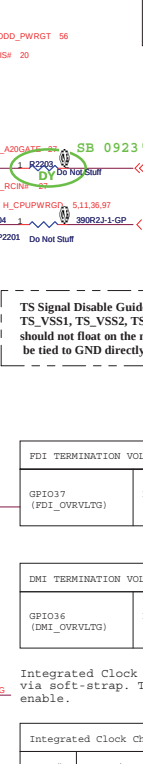
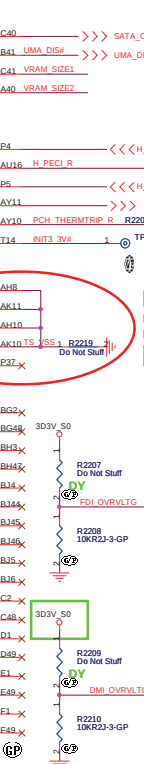
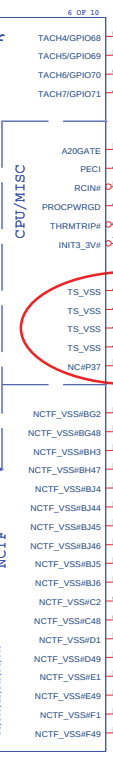
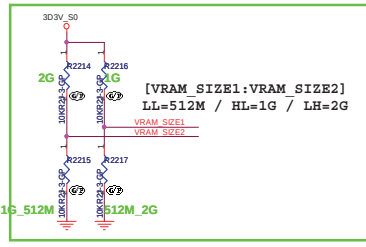
	INTERNAL GFX	EXTERNAL GFX
R2205	DY	10K
R2206	100K	DY



20100720 SW



20100725



緯創資通

Wistron Corporation

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

File

Size

A3

Document Number

PCH (GPIO/CPU)

L757

Date

Tuesday, March 29, 2011

Sheet

22

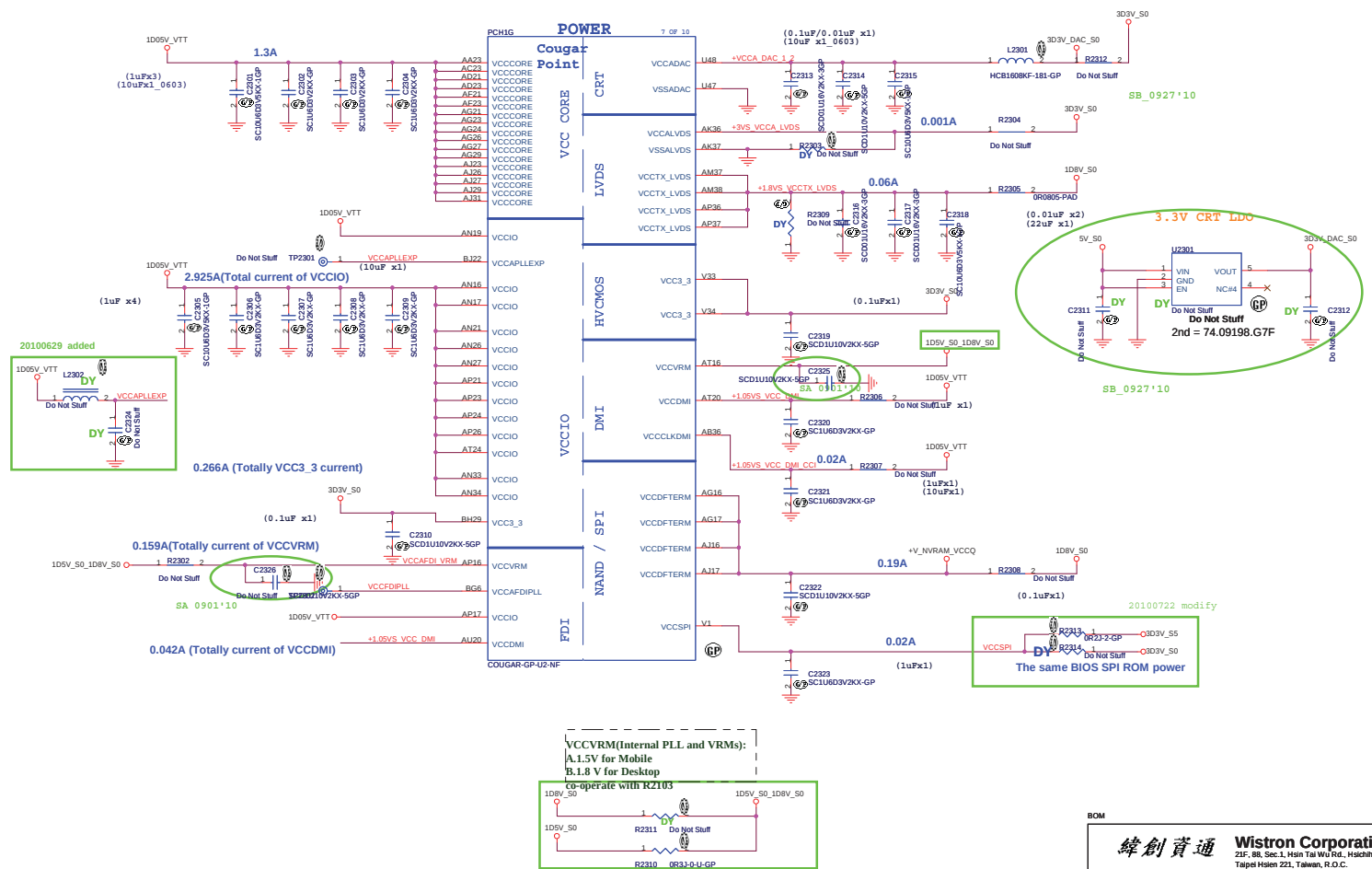
of

102

Rev

-1

SSID = PCH 6A

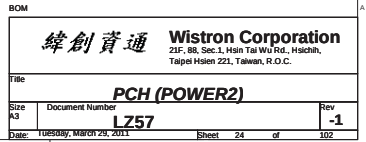


BOM

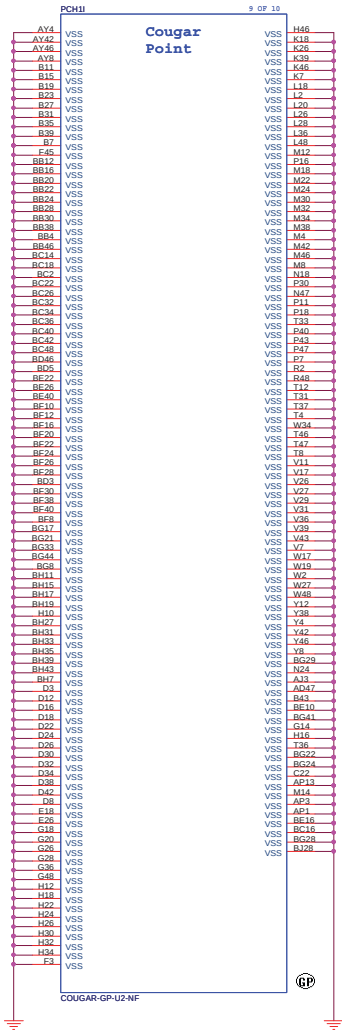
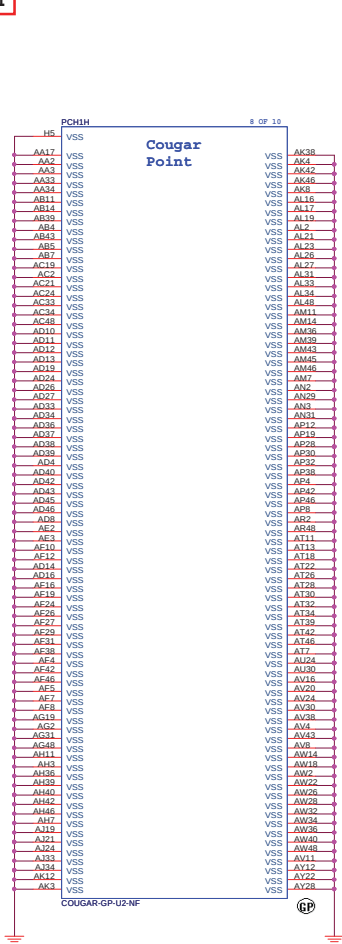
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			
PCH (POWER1)			
Size A3	Document Number		Rev
	LZ57		-1
Date:	Tuesday, March 29, 2011	Sheet 23 of	102

The schematic diagram illustrates the power supply section of the AD9230 evaluation board. It features two main input supplies: 30V AUX_SS and 100V_VTT. The 30V AUX_SS supply is connected to a network of resistors (R2418, R2420, R2428) and decoupling capacitors (C2439, C2440). The 100V_VTT supply is connected to a network of resistors (R2419, R2417, R2420) and decoupling capacitors (C2442, C2440). The diagram shows the distribution of these supplies to various components, including the AD9230 chip and the ground connection. Key voltage labels include +VCCPDSW, +VCCSUSBP, +VCCSUSLP, +VCCADLK, +VCCAPLL_CPY_PCH, and +VCCAPLL_CPY_PCH. The diagram also indicates the connection to the AD9230 chip and the ground connection.



SSID = PCH



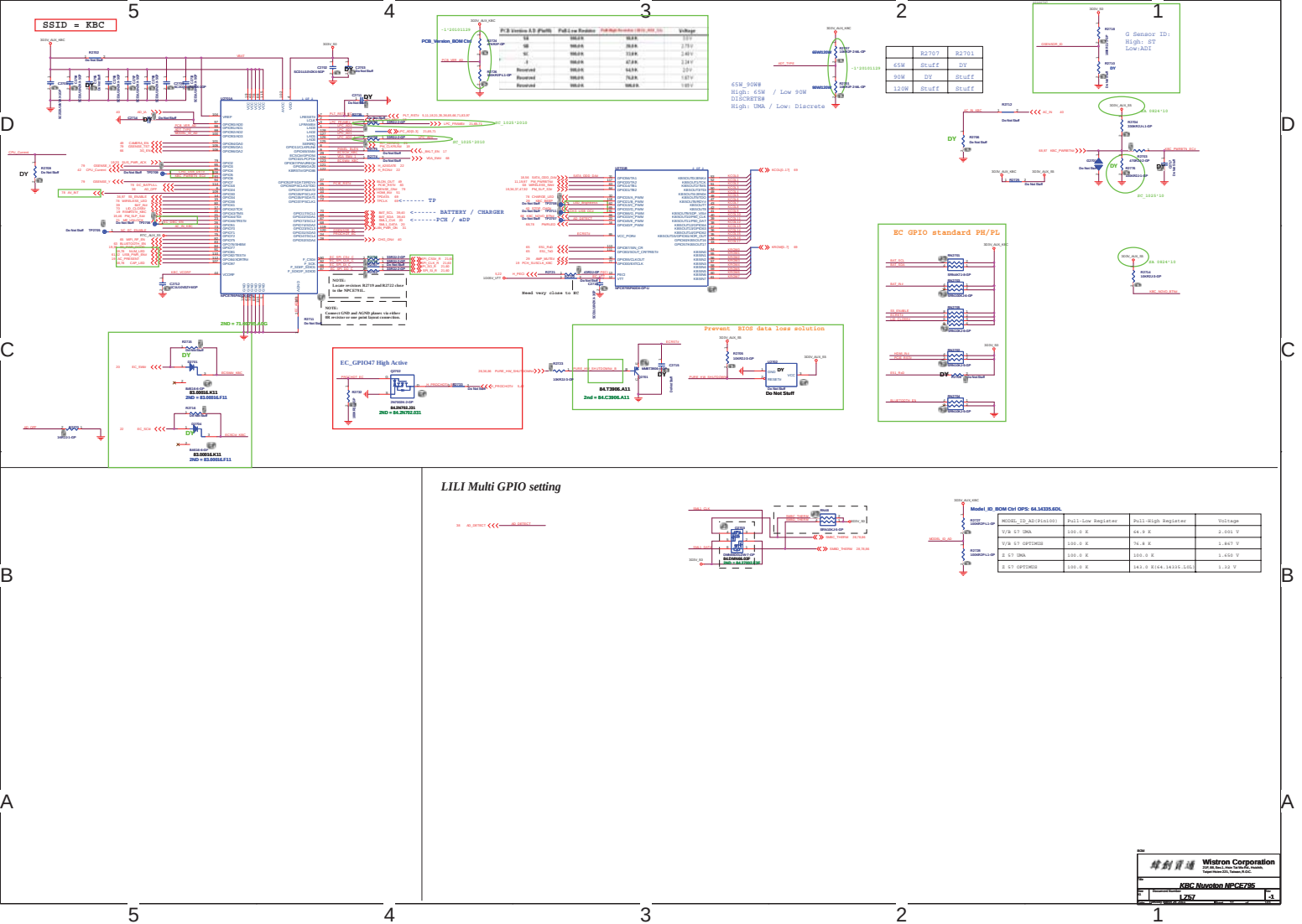
BOM

緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsinchu, Taipei Hsein 221, Taiwan, R.O.C.	
File	
Size	Document Number
A3	PCH (VSS)
Date: Tuesday, March 29, 2011	
Sheet	25 of 102
Rev	-1

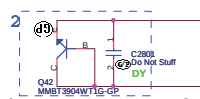
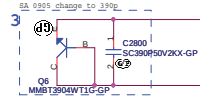
(Blanking)

BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
Reserved			
Size	Document Number		Rev
A4	LZ57		-1
Date: Tuesday, March 29, 2011		Sheet 26 of 102	

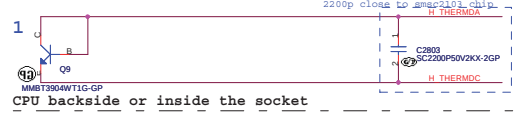


Close to PCH on top side.

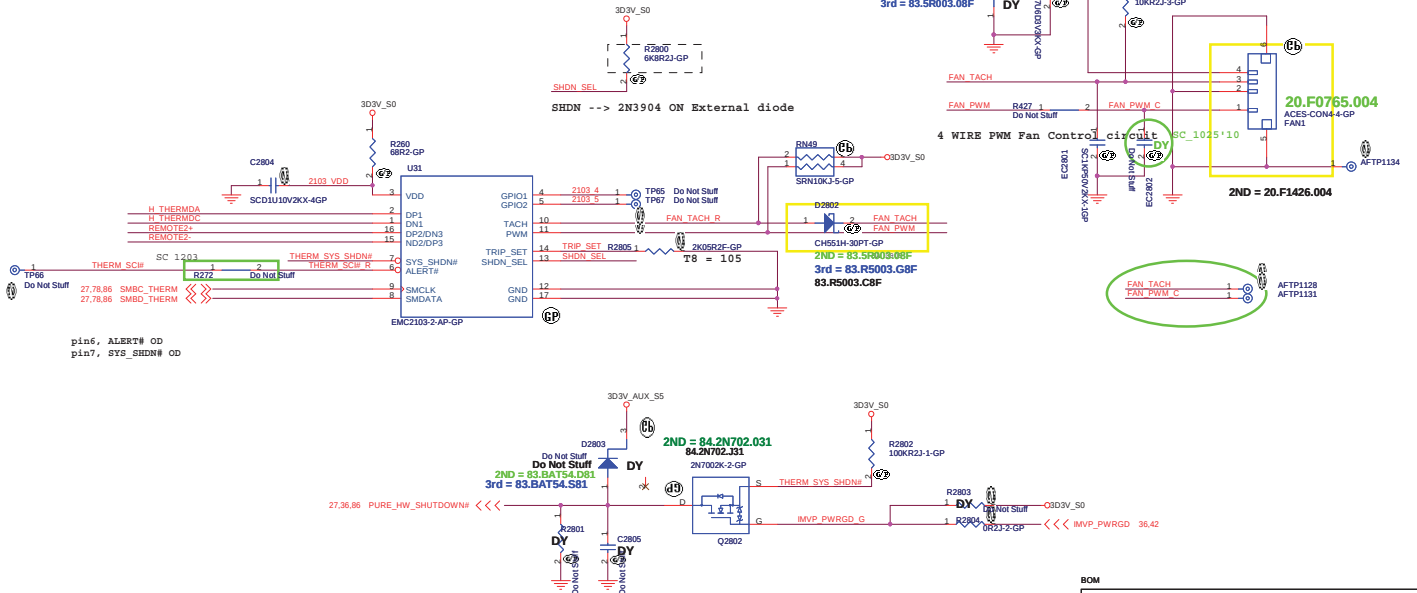


between CPU, VGA and DIMM on bottom side

T8



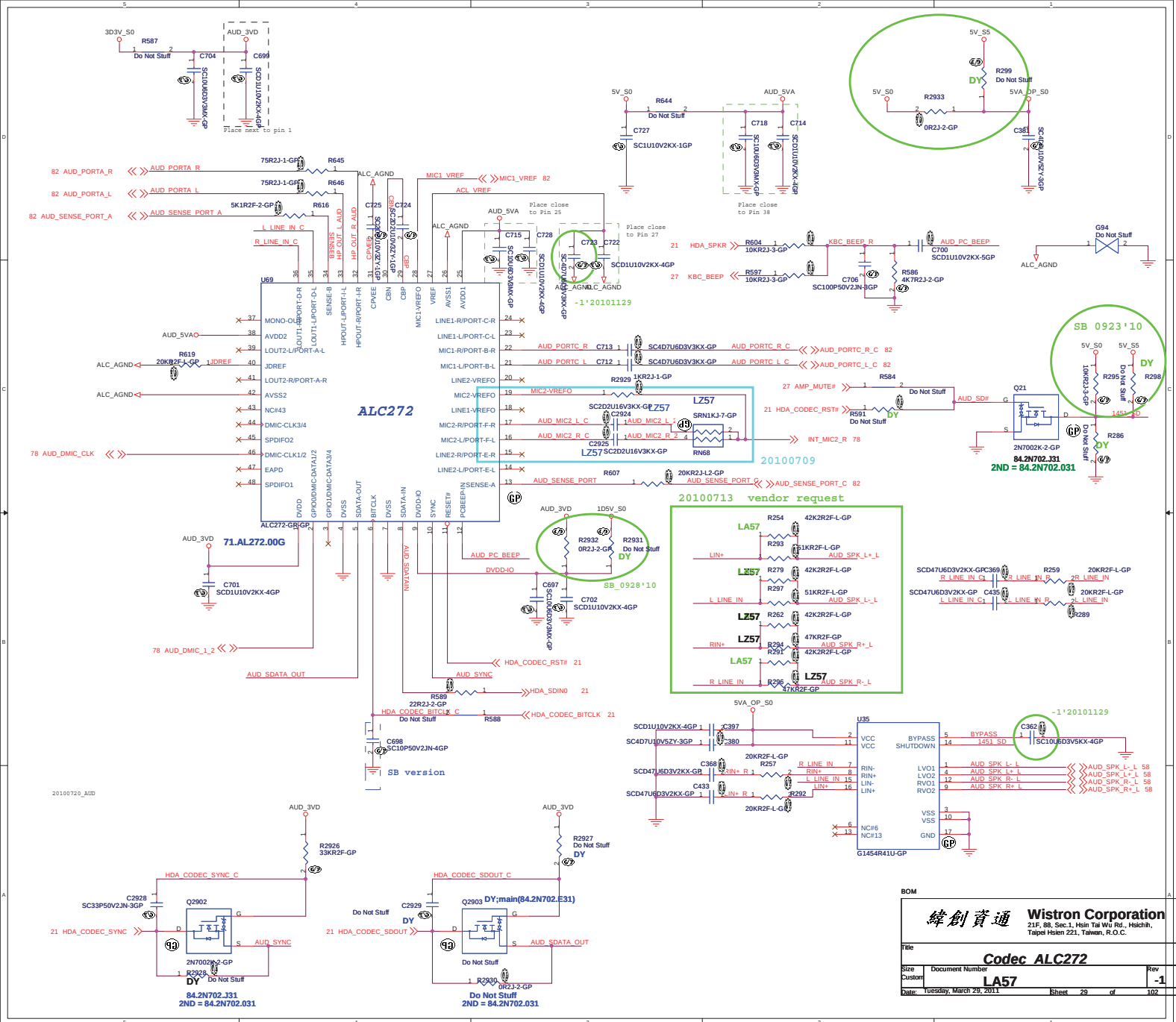
CPU TEMP:
H_THERMDA and H_THERMDC routing 10mil trace width
and spacing. Locate Capacity near Thermal diode.



BOM

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

File Thermal P2800/Fan Controller P2793
Size 43 Document Number
Date: Tuesday, March 29, 2011 Sheet 28 of 102
LZ57 -1



blanking

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title reserved	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Sheet 30 of 102	

5		4		3		2		1	
D									
C									
B									
A									
5		4		3		2		1	

BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichlin, Taipei Hsien 221, Taiwan, R.O.C.	
Title		RTS5159 (CARD READER)	
Size	Document Number	Rev	
A3	LZ57	-1	
Date:	Tuesday, March 29, 2011	Sheet	32 of 102

(Blanking)

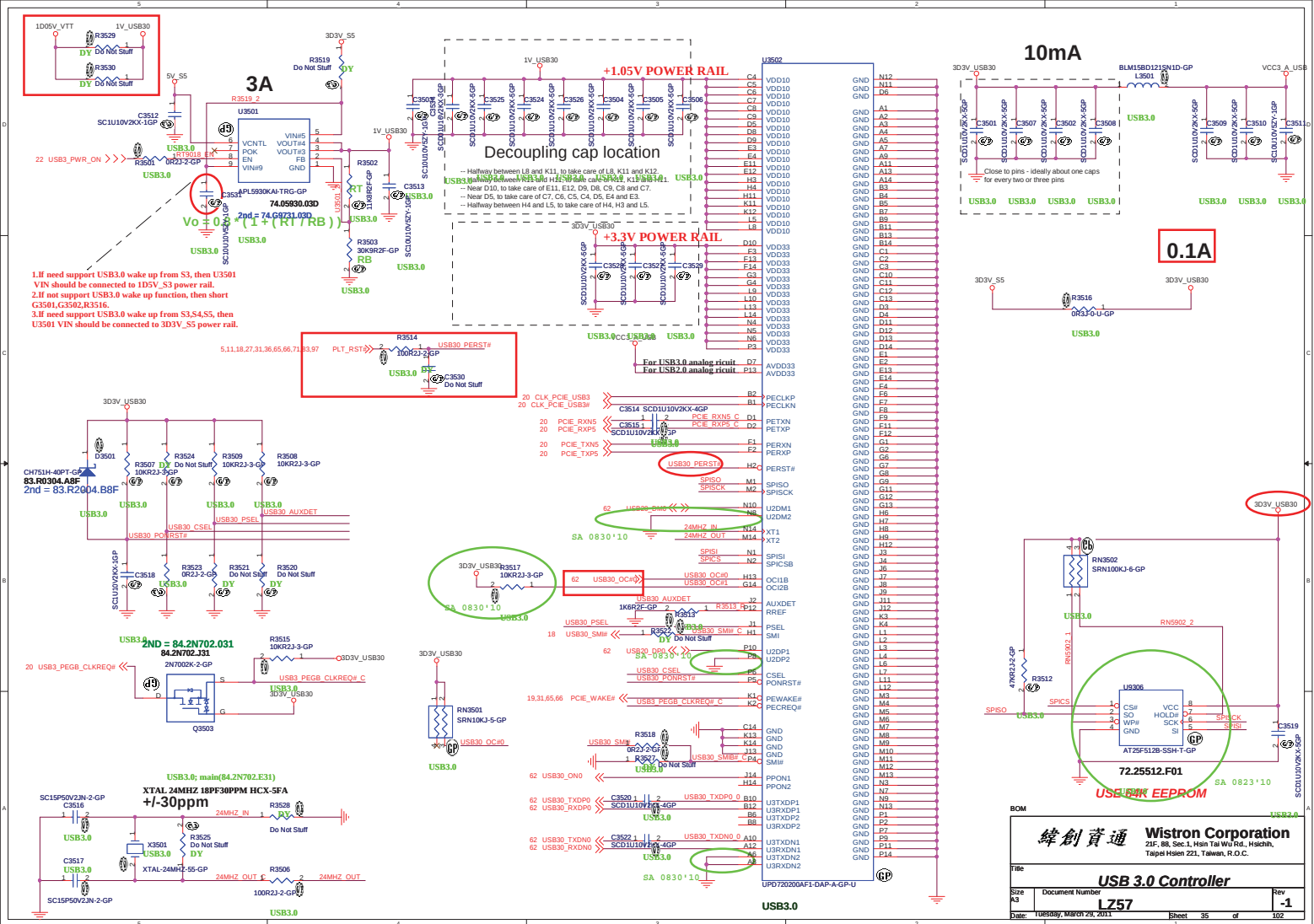
BOM

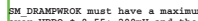
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title Reserved		
Size A4	Document Number LZ57	Rev -1
Date: Tuesday, March 29, 2011		Sheet 33 of 102

(Blanking)

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Sheet 34 of 102	

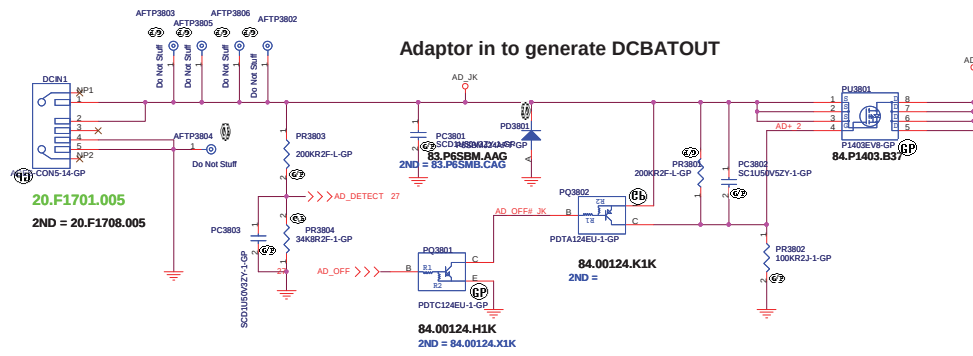




E	



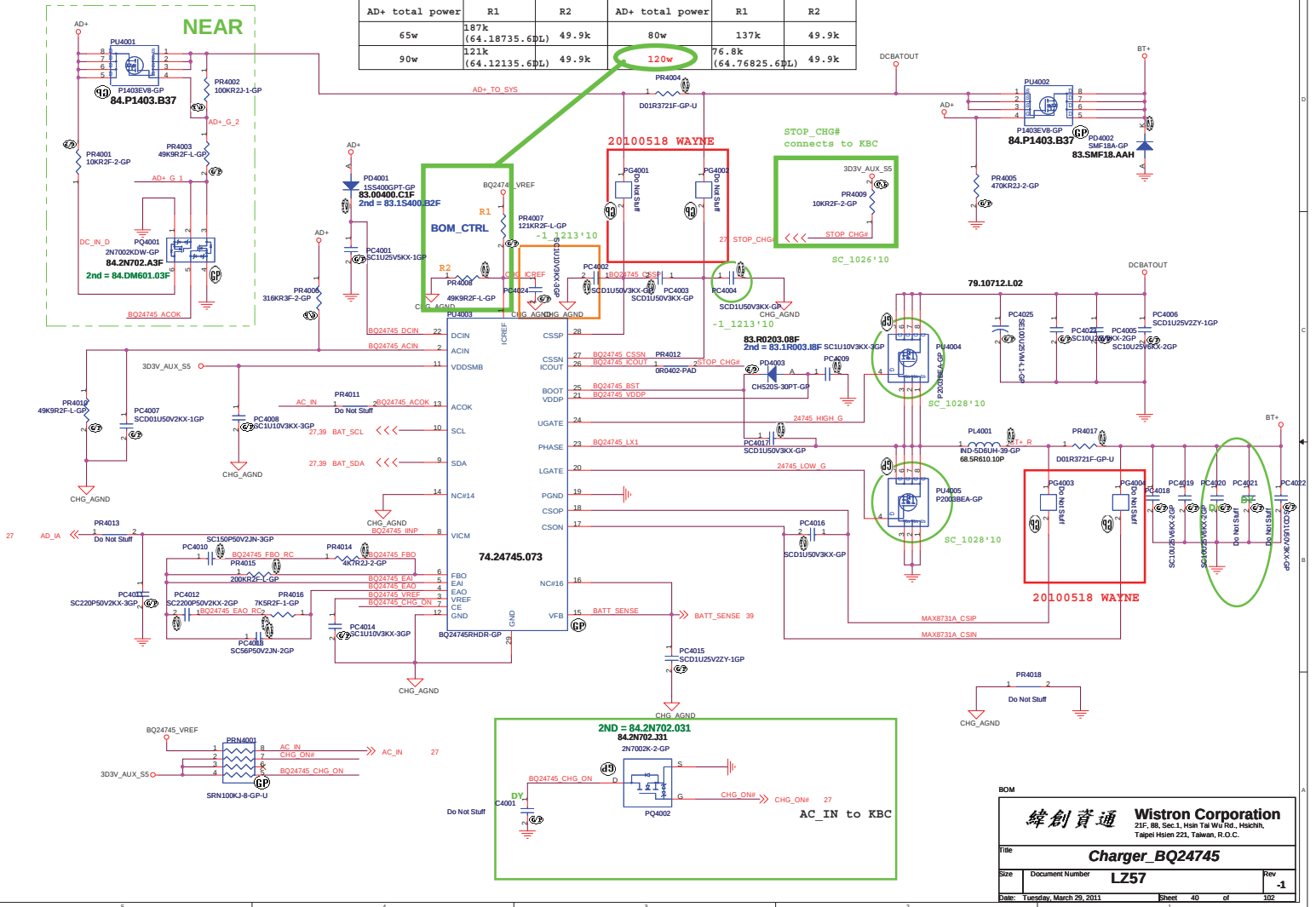
ADAPTER		
Size	Document Number	Rev



BCM

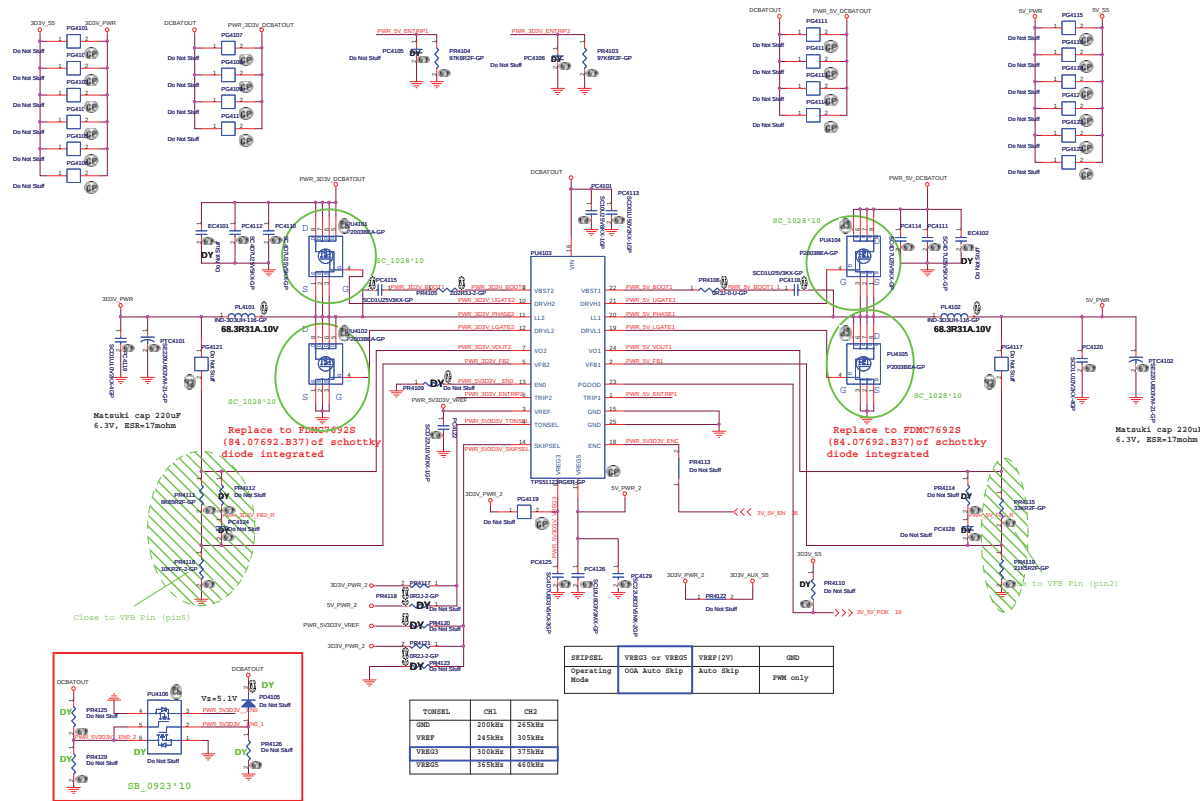
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsinchu, Taipei Hsien 221, Taiwan, R.O.C.	
File DCIN_JACK	
Size	Document Number LZ57
Date: Tuesday, March 29, 2011	Rev -1
Sheet 38 of 102	

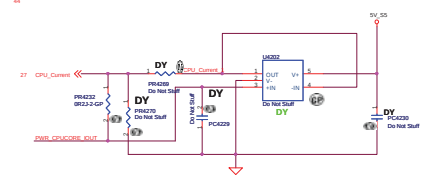
AD+ total power	R1	R2	AD+ total power	R1	R2
65w	187k (64.18735.6DL)	49.9k	80w	137k (64.76825.6DL)	49.9k
90w	121k (64.12135.6DL)	49.9k	120w	76.8k (64.76825.6DL)	49.9k

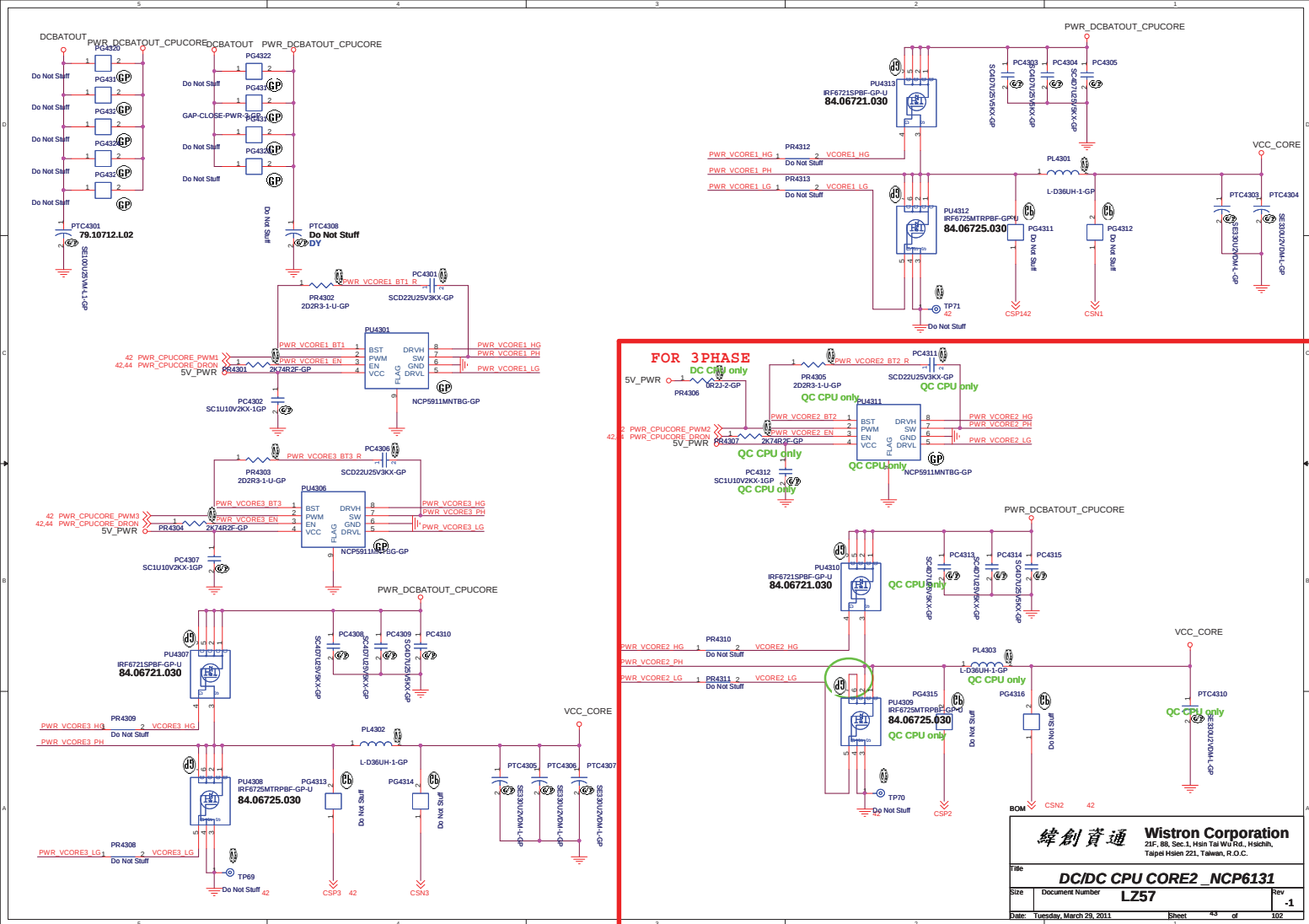


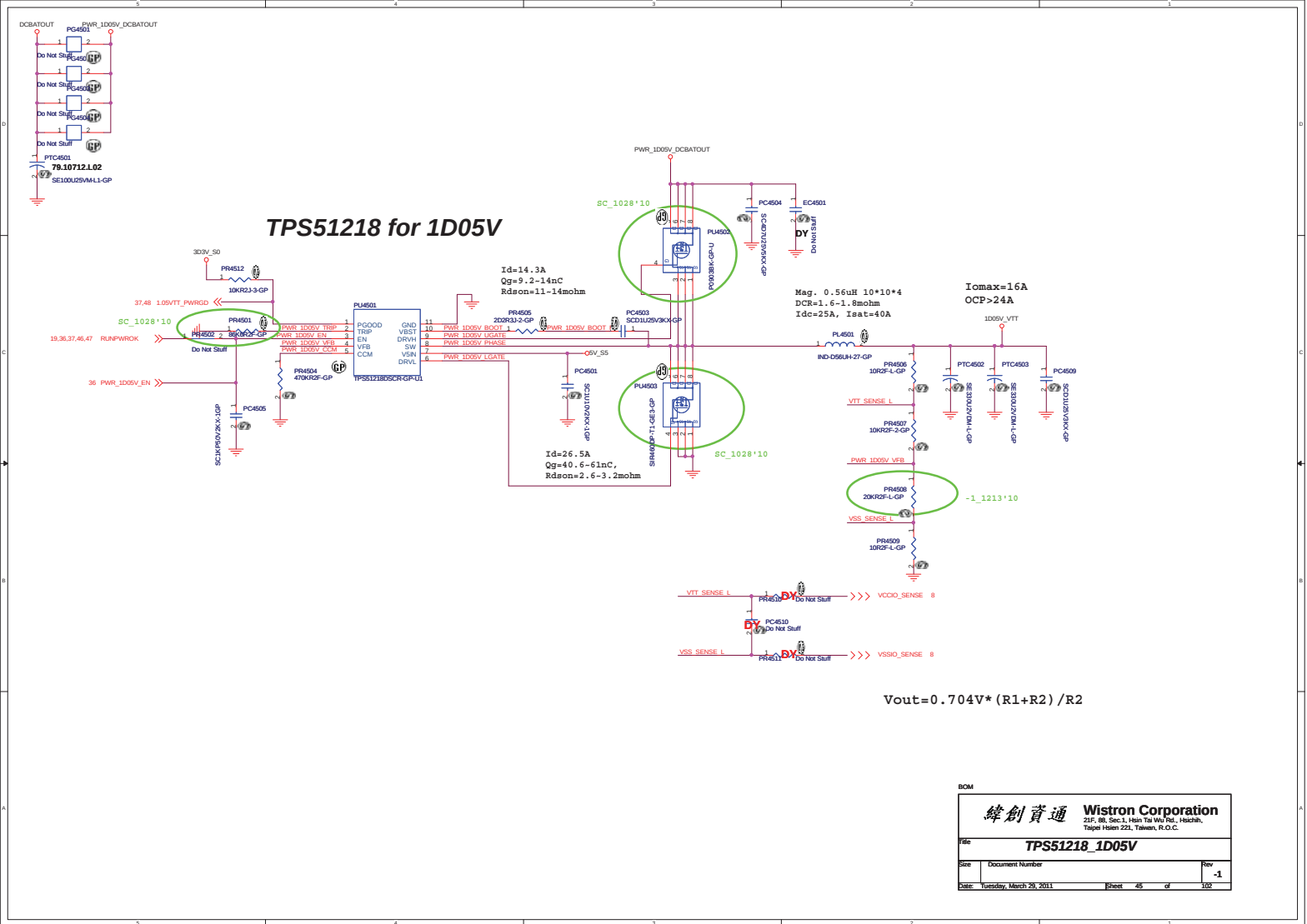
緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsien Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
File	Size	Document Number	Rev
Charger_BQ24745	LZ57	-1	
Date: Tuesday, March 29, 2011	Sheet	40	of 102

SSID = PWR.Plane.Regulator_5v3p3v



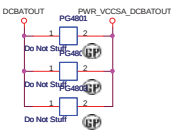




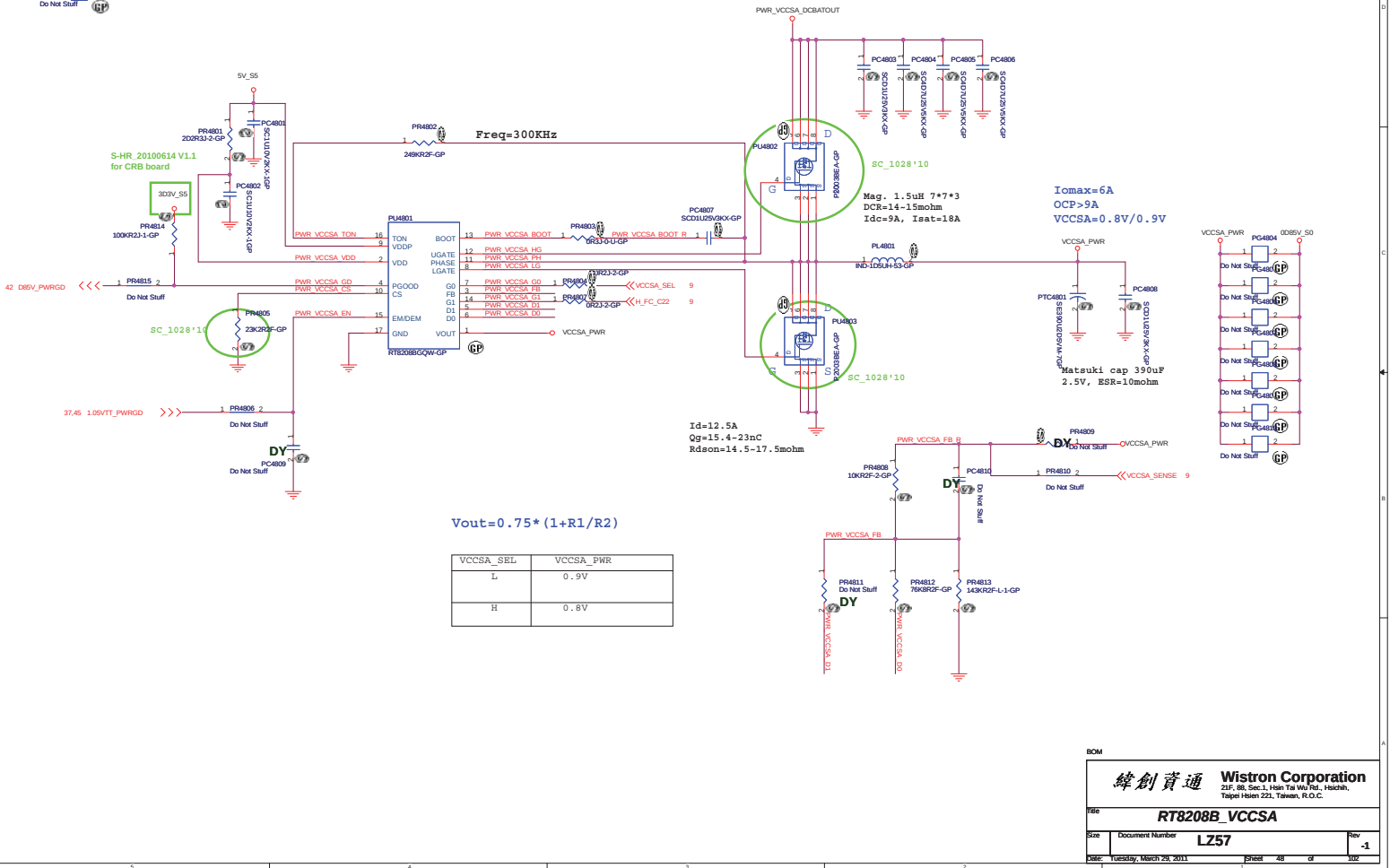


RT8015B for 1D8V_S0

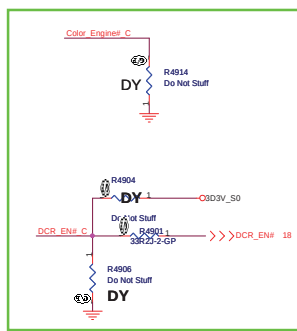
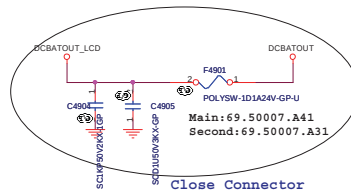
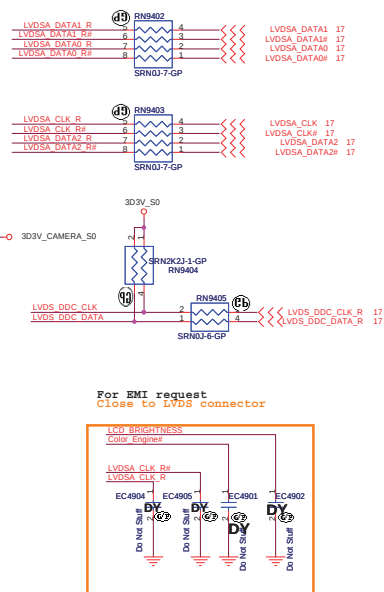
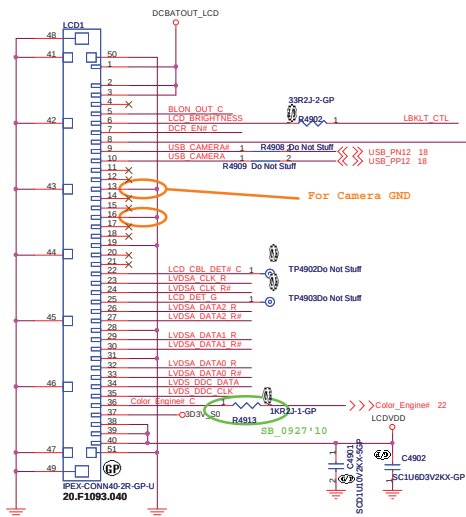




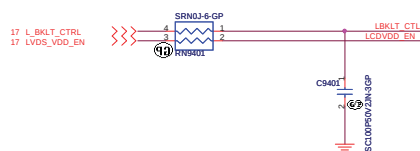
RT8208A for VCCSA



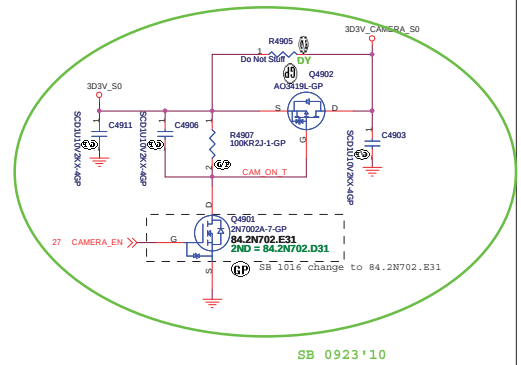
LVDS CONNECTOR



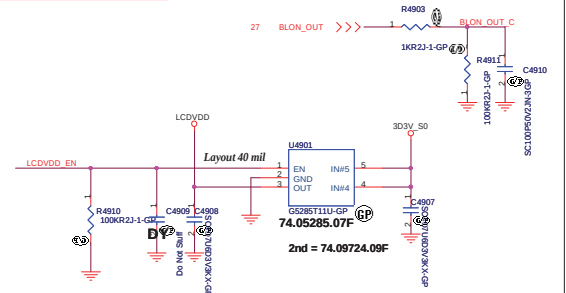
Panel BL brightness/Power En/BL En



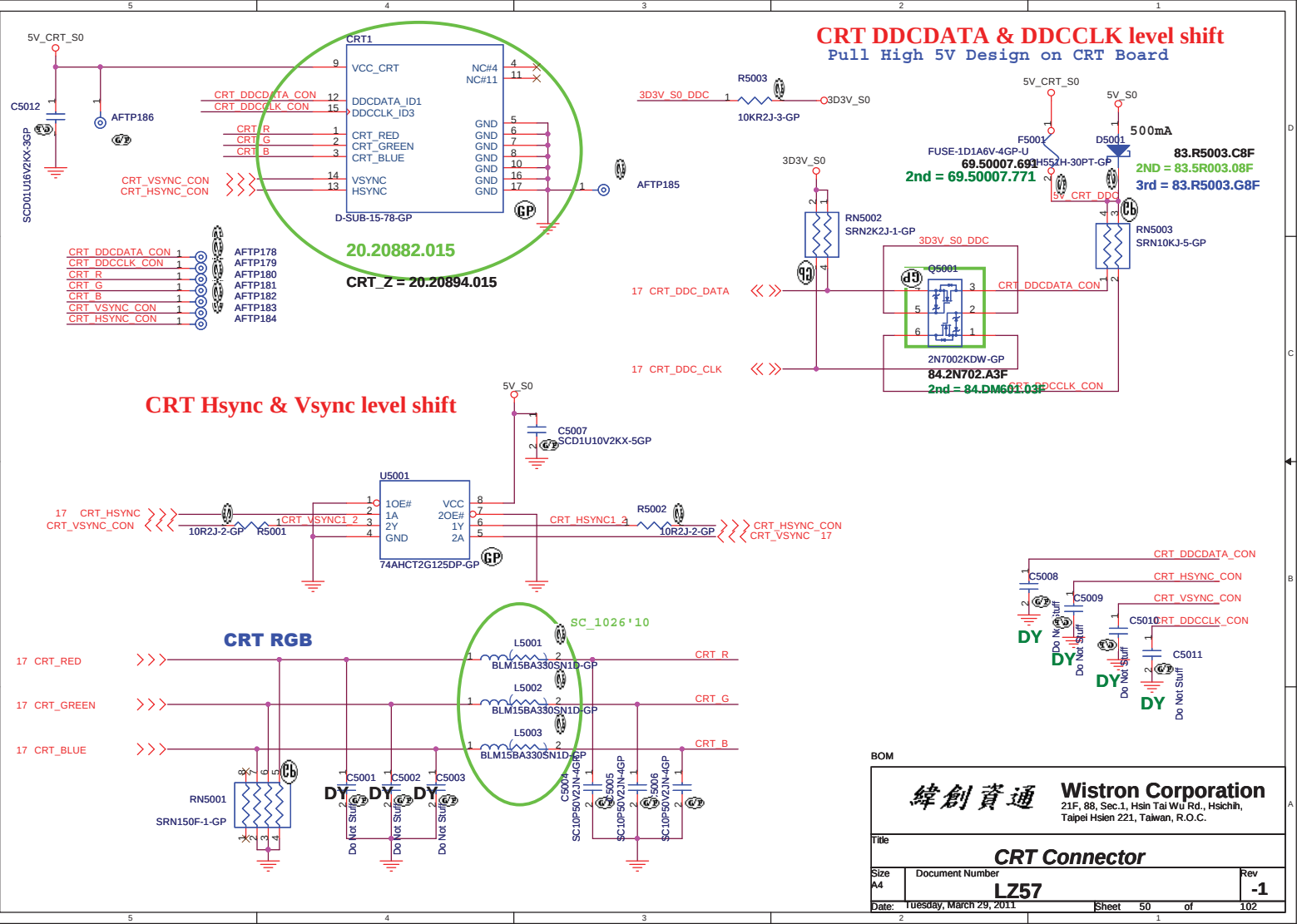
CAMERA POWER



SSID = VIDEO

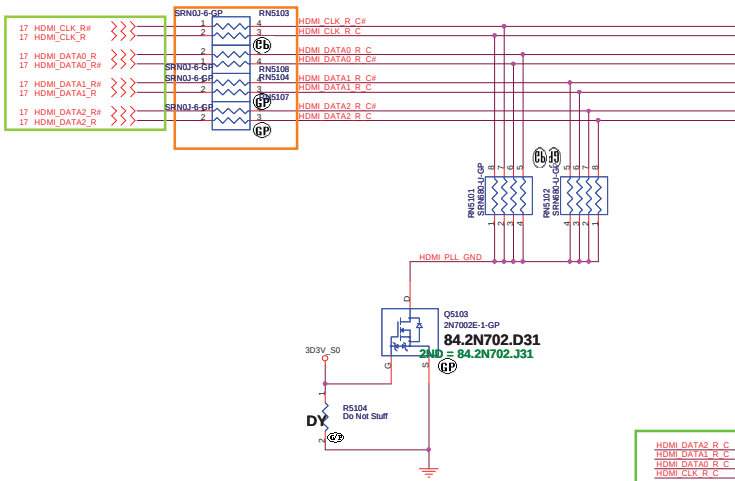


BOM			
緯創資通		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
LCD Connector			
Size A3	Document Number	L57	Rev -1
Date:	Issued: March 25, 2011	Sheet 49 of	102



HDMI Passive Level Shifter

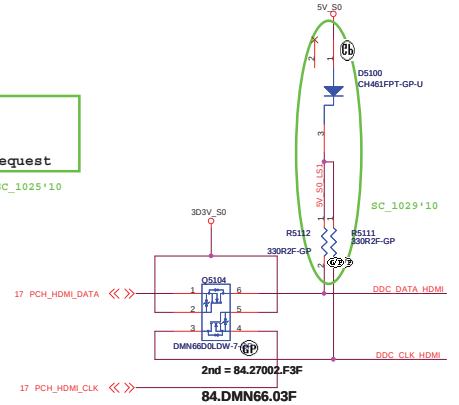
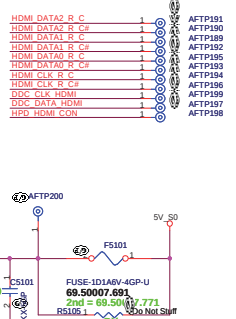
Close to HDMI Connector



HDMI DDC Passive Level Shifter

22.10296.281
2nd = 22.10296.291
HDMI_Z = 22.10296.491

SC_1027'10



BOM	
緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsin 221, Taiwan, R.O.C.	
File	
HDMI Level Shifter/Connector	
Size	
A3	
Date: Tuesday, March 29, 2011	
Sheet 51 of 102	
Rev -1	

(Blanking)

(Blanking)

BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
S-VIDEO			
Size	Document Number		Rev
A4	LZ57		-1
Date: Tuesday, March 29, 2011		Sheet 53 of 102	

(Blanking)

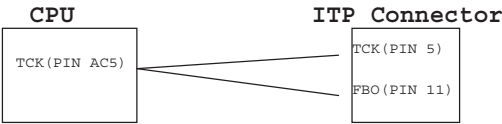
BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
Reserved			
Size	Document Number		Rev
A4	LZ57		-1
Date:	Tuesday, March 29, 2011		Sheet 54 of 102
2			1

SSID = User.Interface

ITP Connector

H_CPURST# use pull-up Resistor close
ITP connector 500 mil (max),
others place near CPU side.

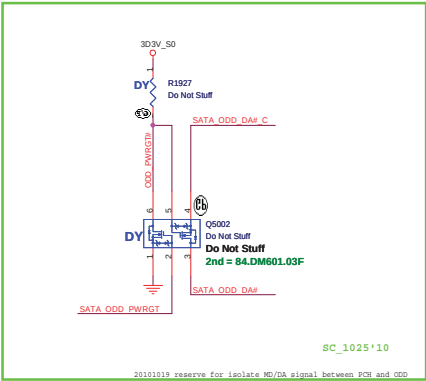
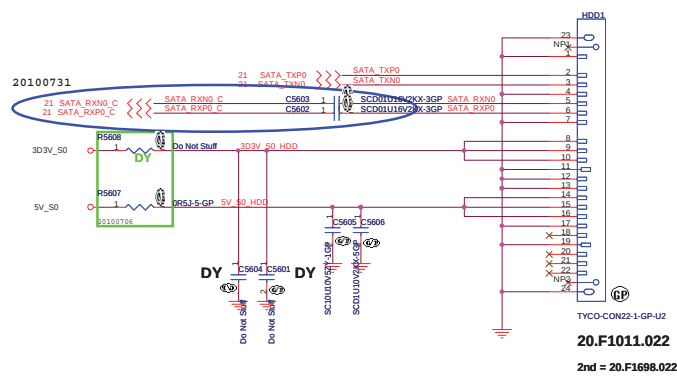


BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title ITP	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Sheet 55 of 102	

SSID = SATA

SATA HDD Connector

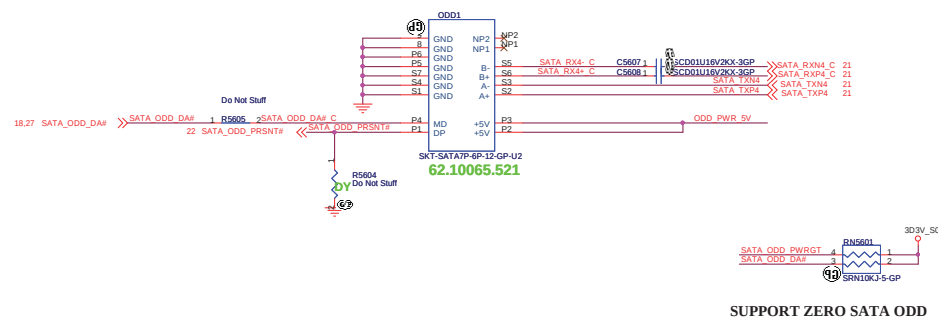


ODD Connector

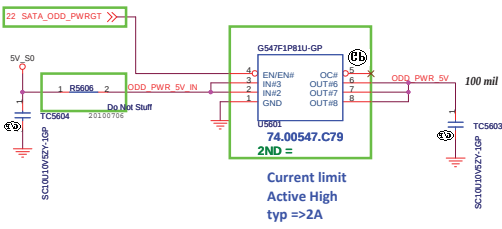
SATA_RX- and SATA_RX+ Trace
Length match within 20 mil

Mars:

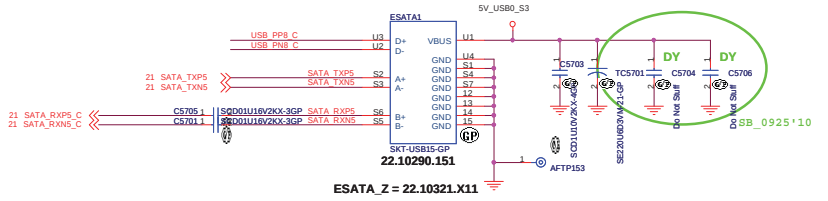
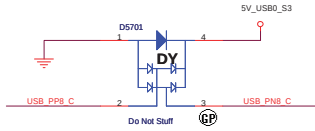
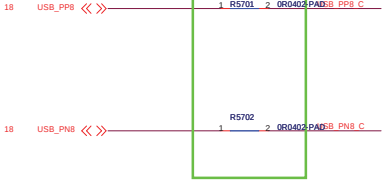
Exchange ODD and ESATA differential pair each other.



SATA Zero Power ODD

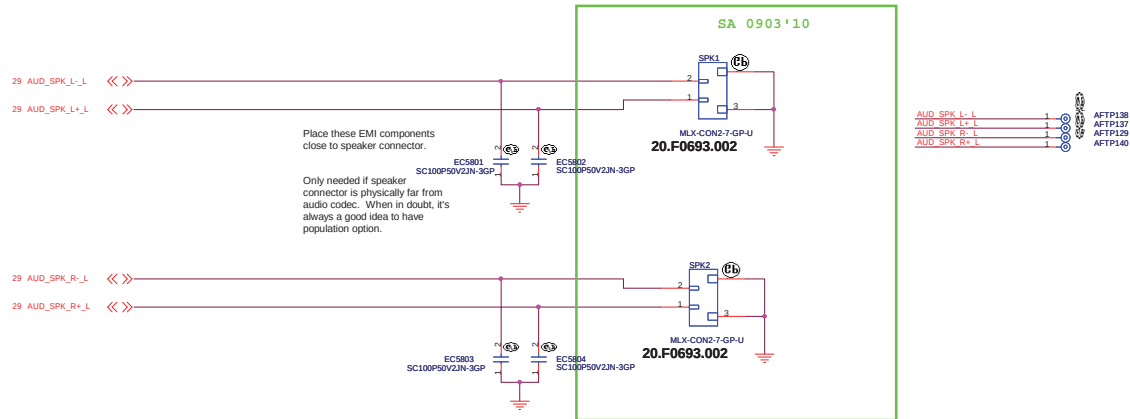


BOM			
緯創資通 Wistron Corporation			
21F, 88, Sec.1, Neim Tai Wu Rd., Hsinchu, Taipei Hsien 221, Taiwan, R.O.C.			
File			
HDD/ODD			
Size	Document Number		Rev
A3	LZ57		-1
Date:	Tuesday, March 28, 2011	Sheet 56 of	102



BOM		緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title		E-SATA/USB	
Size		Document Number	
A3		LZ57	
Date		Rev	
Tuesday, March 29, 2011		-1	
		Sheet 57 of 102	

INTERNAL STEREO SPEAKERS



BOM			
緯創資通		Wistron Corporation	
		21F, 8B, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
MIC/SPEAKER/AUDIO JACK			
Size	Document Number	Rev	
A3	L757	-1	
Date: Tuesday, March 29, 2011		Sheet 58	of 102

Reserved

BOM

緯創資通

Wistron Corporation

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

Title

Reserved

Size

Document Number

Rev

A3

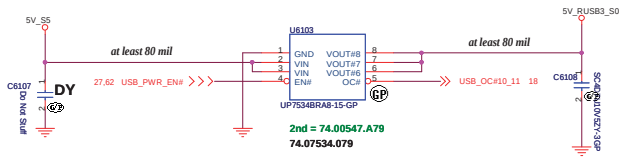
LZ57

-1

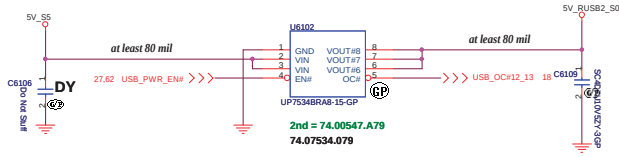
Date: Tuesday, March 25, 2014

Sheet 59 of 102

RJ45_USB Board USB Power



I/O Board USB Power



BOM		緯創資通 Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichlin, Taipei Hsien 221, Taiwan, R.O.C.	
Title		USB Power SW	
Size A3	Document Number	LZ57	Rev -1
Date: Tuesday, March 29, 2011		Sheet 61 of 102	

The diagram illustrates a complex PCB layout for a USB 2.0/3.0 port. Key components and their connections include:

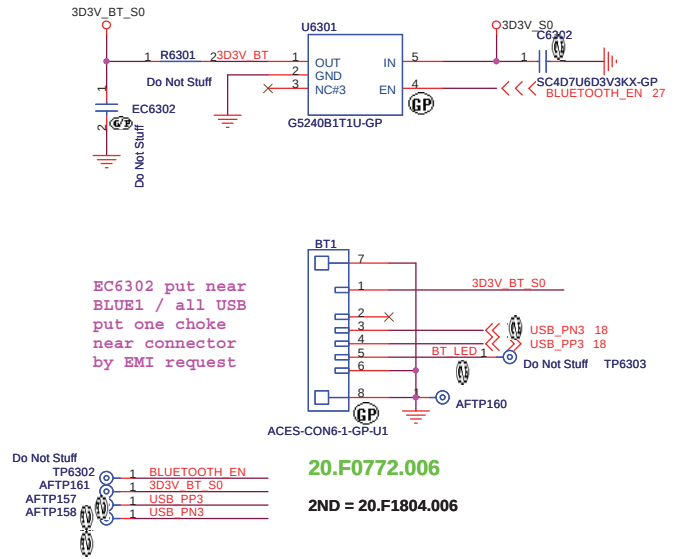
- Power Management:** A 303V USB30 power source is connected to a USB3.0 main controller (84.2N702.E31) via a 2N7002K-2-GP MOSFET. The circuit includes a 5V_5S regulator and a 5V_LUSB1_50 output.
- Signal Processing:** The USB3.0 main controller is connected to a USB2.0 controller (74.00546.A7D) via a 100 mil trace. The USB2.0 controller is connected to a USB1 controller (U6204) via a 100 mil trace.
- Connectors:** The layout includes connectors for USB3.0 (USB30_DM0_C, USB30_RXDN0_C, USB30_RXDP0_C, USB30_TXDN0_C, USB30_TXDP0_C), USB2.0 (USB20_DM0_C, USB20_RXDN0_C, USB20_RXDP0_C, USB20_TXDN0_C, USB20_TXDP0_C), and USB1 (USB1_DM0_C, USB1_RXDN0_C, USB1_RXDP0_C, USB1_TXDN0_C, USB1_TXDP0_C).
- Passive Components:** Various resistors (R6201, R6202, R6203, R6204, R6205, R6206, R6207, R6208, R6209, R6210, R6211, R6212, R6213, R6214, R6215, R6216, R6217, R6218, R6219, R6220, R6221, R6222, R6223, R6224, R6225, R6226, R6227, R6228, R6229, R6230, R6231, R6232, R6233, R6234, R6235, R6236, R6237, R6238, R6239, R6240, R6241, R6242, R6243, R6244, R6245, R6246, R6247, R6248, R6249, R6250, R6251, R6252, R6253, R6254, R6255, R6256, R6257, R6258, R6259, R6260, R6261, R6262, R6263, R6264, R6265, R6266, R6267, R6268, R6269, R6270, R6271, R6272, R6273, R6274, R6275, R6276, R6277, R6278, R6279, R6280, R6281, R6282, R6283, R6284, R6285, R6286, R6287, R6288, R6289, R6290, R6291, R6292, R6293, R6294, R6295, R6296, R6297, R6298, R6299, R6300, R6301, R6302, R6303, R6304, R6305, R6306, R6307, R6308, R6309, R6310, R6311, R6312, R6313, R6314, R6315, R6316, R6317, R6318, R6319, R6320, R6321, R6322, R6323, R6324, R6325, R6326, R6327, R6328, R6329, R6330, R6331, R6332, R6333, R6334, R6335, R6336, R6337, R6338, R6339, R6340, R6341, R6342, R6343, R6344, R6345, R6346, R6347, R6348, R6349, R6350, R6351, R6352, R6353, R6354, R6355, R6356, R6357, R6358, R6359, R6360, R6361, R6362, R6363, R6364, R6365, R6366, R6367, R6368, R6369, R6370, R6371, R6372, R6373, R6374, R6375, R6376, R6377, R6378, R6379, R6380, R6381, R6382, R6383, R6384, R6385, R6386, R6387, R6388, R6389, R6390, R6391, R6392, R6393, R6394, R6395, R6396, R6397, R6398, R6399, R6400, R6401, R6402, R6403, R6404, R6405, R6406, R6407, R6408, R6409, R6410, R6411, R6412, R6413, R6414, R6415, R6416, R6417, R6418, R6419, R6420, R6421, R6422, R6423, R6424, R6425, R6426, R6427, R6428, R6429, R6430, R6431, R6432, R6433, R6434, R6435, R6436, R6437, R6438, R6439, R6440, R6441, R6442, R6443, R6444, R6445, R6446, R6447, R6448, R6449, R6450, R6451, R6452, R6453, R6454, R6455, R6456, R6457, R6458, R6459, R6460, R6461, R6462, R6463, R6464, R6465, R6466, R6467, R6468, R6469, R6470, R6471, R6472, R6473, R6474, R6475, R6476, R6477, R6478, R6479, R6480, R6481, R6482, R6483, R6484, R6485, R6486, R6487, R6488, R6489, R6490, R6491, R6492, R6493, R6494, R6495, R6496, R6497, R6498, R6499, R6500, R6501, R6502, R6503, R6504, R6505, R6506, R6507, R6508, R6509, R6510, R6511, R6512, R6513, R6514, R6515, R6516, R6517, R6518, R6519, R6520, R6521, R6522, R6523, R6524, R6525, R6526, R6527, R6528, R6529, R6530, R6531, R6532, R6533, R6534, R6535, R6536, R6537, R6538, R6539, R6540, R6541, R6542, R6543, R6544, R6545, R6546, R6547, R6548, R6549, R6550, R6551, R6552, R6553, R6554, R6555, R6556, R6557, R6558, R6559, R6560, R6561, R6562, R6563, R6564, R6565, R6566, R6567, R6568, R6569, R6570, R6571, R6572, R6573, R6574, R6575, R6576, R6577, R6578, R6579, R6580, R6581, R6582, R6583, R6584, R6585, R6586, R6587, R6588, R6589, R6590, R6591, R6592, R6593, R6594, R6595, R6596, R6597, R6598, R6599, R6600, R6601, R6602, R6603, R6604, R6605, R6606, R6607, R6608, R6609, R6610, R6611, R6612, R6613, R6614, R6615, R6616, R6617, R6618, R6619, R6620, R6621, R6622, R6623, R6624, R6625, R6626, R6627, R6628, R6629, R6630, R6631, R6632, R6633, R6634, R6635, R6636, R6637, R6638, R6639, R6640, R6641, R6642, R6643, R6644, R6645, R6646, R6647, R6648, R6649, R6650, R6651, R6652, R6653, R6654, R6655, R6656, R6657, R6658, R6659, R6660, R6661, R6662, R6663, R6664, R6665, R6666, R6667, R6668, R6669, R6670, R6671, R6672, R6673, R6674, R6675, R6676, R6677, R6678, R6679, R6680, R6681, R6682, R6683, R6684, R6685, R6686, R6687, R6688, R6689, R6690, R6691, R6692, R6693, R6694, R6695, R6696, R6697, R6698, R6699, R6700, R6701, R6702, R6703, R6704, R6705, R6706, R6707, R6708, R6709, R6710, R6711, R6712, R6713, R6714, R6715, R6716, R6717, R6718, R6719, R6720, R6721, R6722, R6723, R6724, R6725, R6726, R6727, R6728, R6729, R6730, R6731, R6732, R6733, R6734, R6735, R6736, R6737, R6738, R6739, R6740, R6741, R6742, R6743, R6744, R6745, R6746, R6747, R6748, R6749, R6750, R6751, R6752, R6753, R6754, R6755, R6756, R6757, R6758, R6759, R6760, R6761, R6762, R6763, R6764, R6765, R6766, R6767, R6768, R6769, R6770, R6771, R6772, R6773, R6774, R6775, R6776, R6777, R6778, R6779, R6780, R6781, R6782, R6783, R6784, R6785, R6786, R6787, R6788, R6789, R6790, R6791, R6792, R6793, R6794, R6795, R6796, R6797, R6798, R6799, R6800, R6801, R6802, R6803, R6804, R6805, R6806, R6807, R6808, R6809, R6810, R6811, R6812, R6813, R6814, R6815, R681

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

Title			
USB 2.0/3.0 Port			
Size A3	Document Number	Rev	
	LZ57	-1	
Date:	Tuesday, March 29, 2011	Sheet 62 of 102	

```
SSID = User.Interface
Bluetooth Module conn.
```

Bluetooth Module



BOM

通資創緯

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

Title

Bluetooth

Size

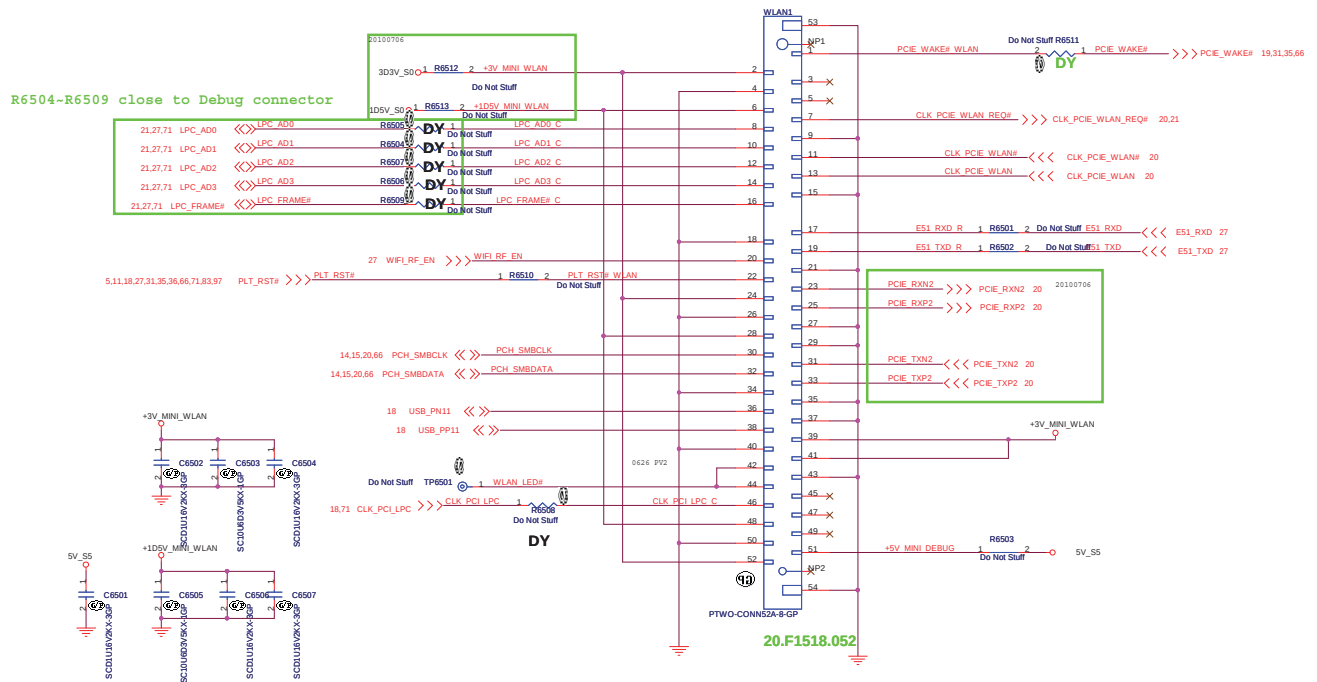
Size A4	Document Number LZ57	Rev -1
Date: Tuesday, March 29, 2011	Sheet 63 of 102	

Date:

Date: Tuesday, March 29, 2011 Sheet 63 of 102

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
RESERVED			
Size A4	Document Number	Rev	
	LZ57	-1	
Date:	Tuesday, March 29, 2011	Sheet	64 of 102

Mini Card Connector(802.11a/b/g/n)



BOM

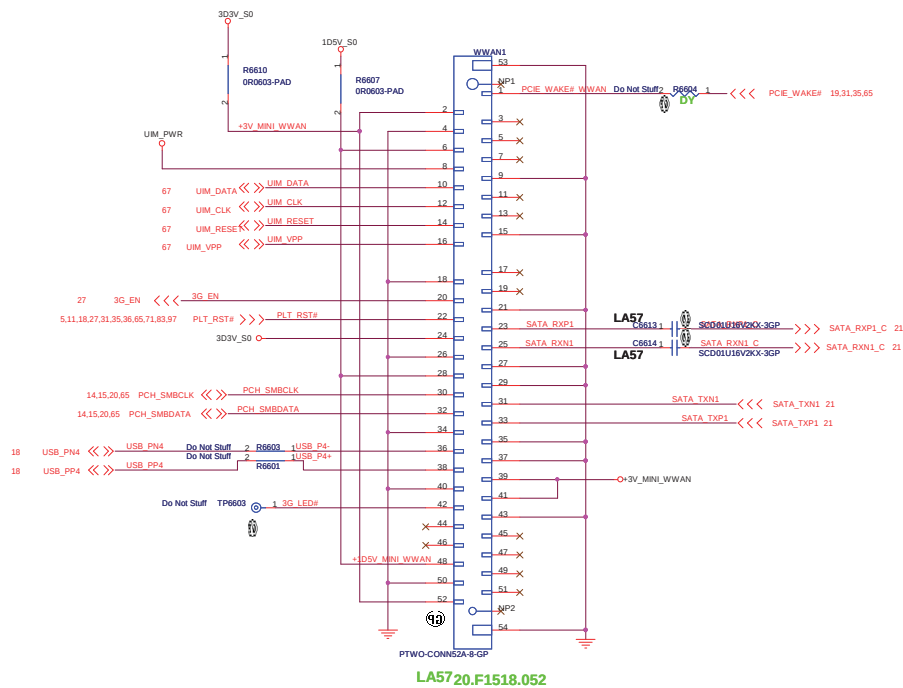
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title **MINICARD/WI ANV/ITP CONN**

Size A3	Document Number 1757
------------	-------------------------

Date:	Tuesday, March 29, 2011	Sheet	65	of	102
-------	-------------------------	-------	----	----	-----

Mini Card Connector(WWAN)



LA5720.F1518.052

BOM

緯創資通

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

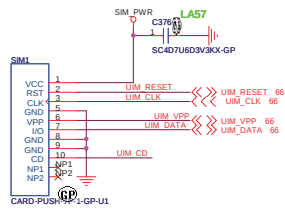
[illegible]

	WWAN Connector
--	-----------------------

Size A3	Document Number LZ57
------------	--------------------------------

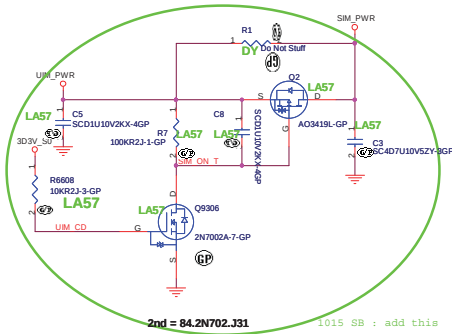
Date:

Price:	1	Price:	55	55	102
--------	---	--------	----	----	-----



LA57

20.10073.001



2nd = 84.2N702.J31

1015 SB : add this

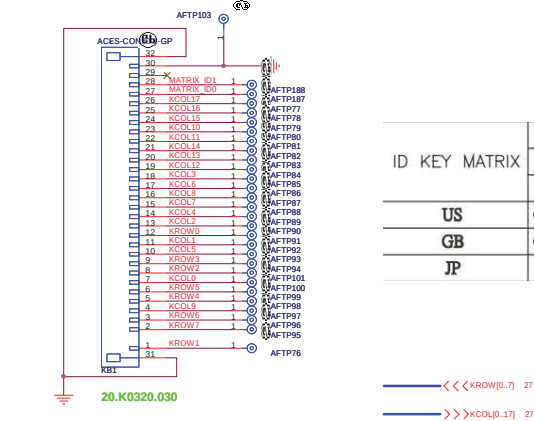
84.2N702.E31

BOM

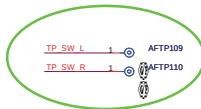
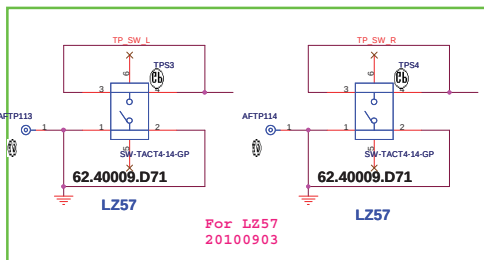
緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		SIM CARD	
Size	Document Number	Rev	
A3	LZ57	-1	
Date:	Tuesday, March 29, 2011	Sheet	67 of 102

SSID = KBC

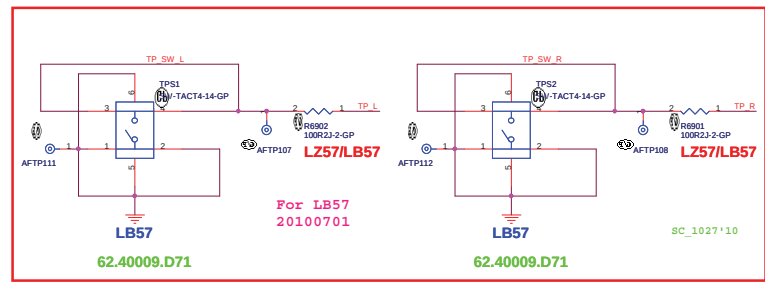
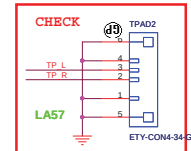
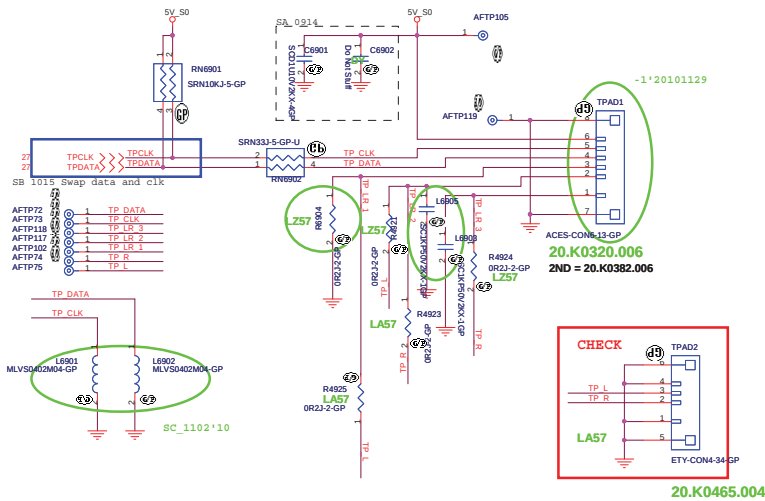
Internal KeyBoard Connector

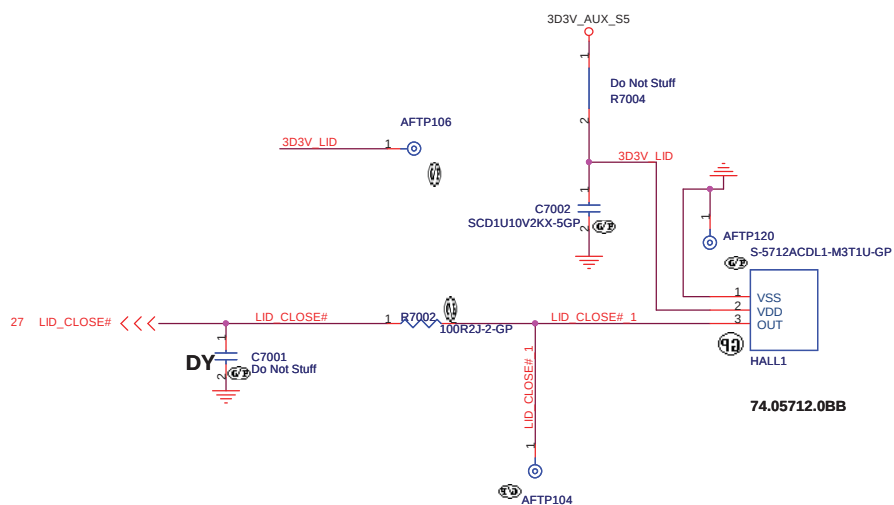


ID KEY MATRIX	SENSE			
	27	28	29	30
US	GND	GND	X	GND
GB	GND	X	X	GND
JP	X	GND	X	GND



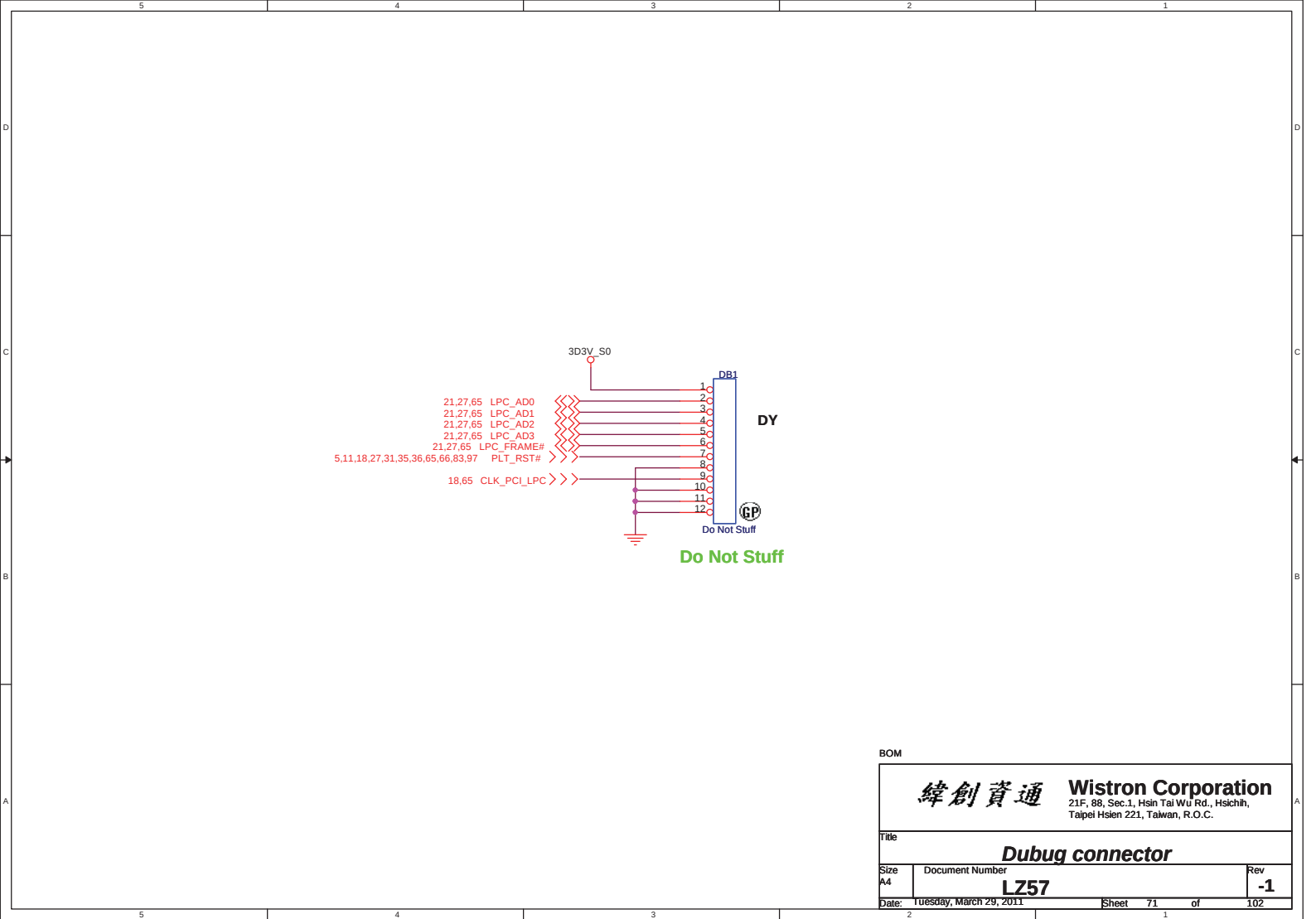
SSID = Touch.Pad





BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Hall Sensor			
Size A4	Document Number		Rev
	LZ57		-1
Date:	Tuesday, March 29, 2011		
2	Sheet	70 of	102



BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
<i>Dubug connector</i>			
Size A4	Document Number LZ57		Rev -1
Date:	tuesday, March 29, 2011	Sheet 71 of	102
2		1	

(Blanking)

BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
Reserved			
Size	Document Number		Rev
A4	LZ57		-1
Date: Tuesday, March 29, 2011		Sheet 72 of 102	

(Blanking)

BOM

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
Reserved			
Size	Document Number		Rev
A4	LZ57		-1
Date:	Tuesday, March 29, 2011		Sheet 73 of 102
2			1

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title CARD Reader CONN		
Size A4	Document Number LZ57	Rev -1
Date: Tuesday, March 29, 2011		Sheet 74 of 102
2		1

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

BOM

緯創資通		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title New Card			
Size A4	Document Number LZ57		Rev -1
Date: Tuesday, March 29, 2011	Sheet 75	of 102	

(Blanking)

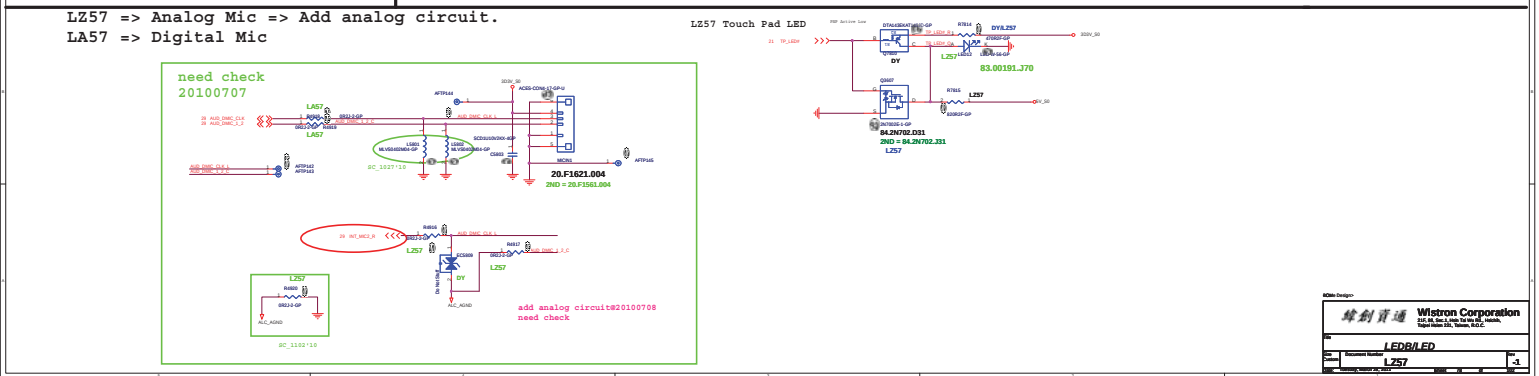
BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Sheet 76 of 102	

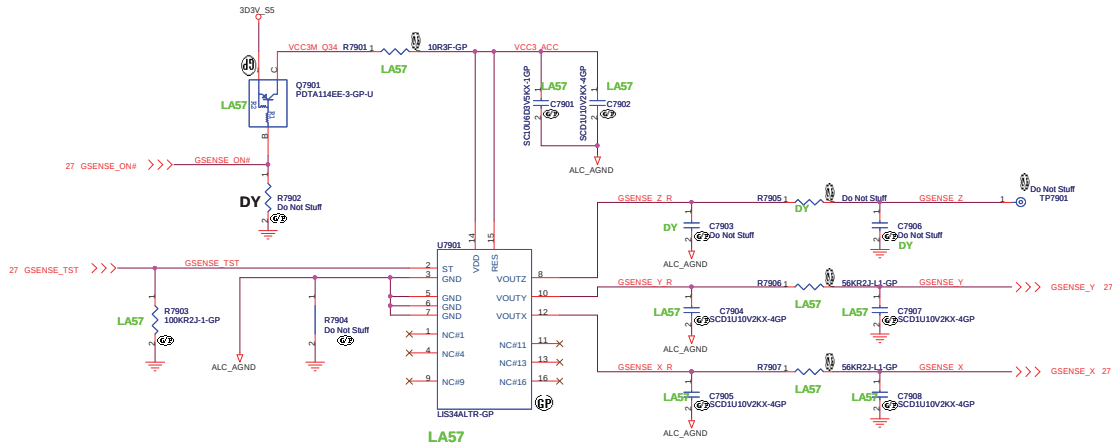
(Blanking)

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Sheet 77 of 102	



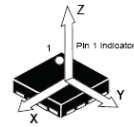
G-Sensor



STMicro LIS34AL: 74.00034.0BZ
ADXL335 : 74.00335.0BZ

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

BOM

緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
G-Sensor	
Size	
Custom	
Date: Tuesday, March 29, 2011	
Sheet 79 of 102	
Rev	
-1	

(Blanking)

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved	
Size A4	Document Number LZ57
Date Tuesday, March 29, 2011	Rev -1
Date: 2 Tuesday, March 29, 2011 Sheet 80 of 102	

(Blanking)

BOM

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title Reserved		
Size A4	Document Number LZ57	Rev -1
Date: Tuesday, March 29, 2011		Sheet 81 of 102

SA 0819'10

5V_RUSB3_S0

AFTP1153

3.3V_LAN_S5

AFTP1155

ECB201

ECB202

SQZLWV204-4GP

SQZLWV204-4GP

ACES-CON28-3-GP

1 SPEED 1000M
2 SPEED 100M
3 LAN_ACT_LED+
4 USB_PN10
5 USB_PP10
6 MDI+
7 MDI-
8 MDI+
9 MDI-
10 MDI+
11 MDI-
12 MDI+
13 MDI-
14 MDI+
15 MDI-
16 MDI+
17 MDI-
18 MDI+
19 MDI-
20 MDI+
21 MDI-
22 MDI+
23 MDI-
24 MDI+
25 MDI-
26 MDI+
27 MDI-
28 MDI+
29 MDI-
30 MDI+

20.K0315.02
2ND = 20.K0392.02

Card Reader Board CONN.

The diagram illustrates the connections for the Card Reader Board CONN. The central component is the ACES-CONN30C-1-GP connector, which is a 30-pin connector. The connections are as follows:

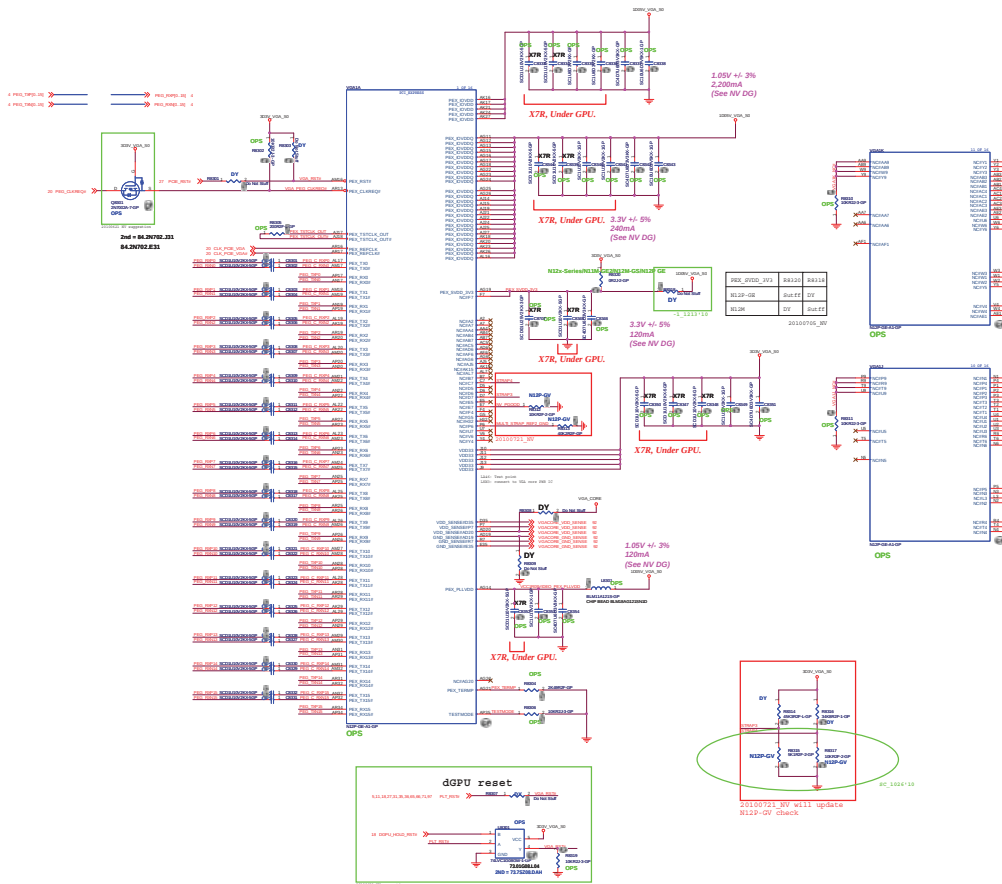
- Pin 1:** MIC1_VREF
- Pin 2:** AUD_SENSE_PORT_A
- Pin 3:** AUD_SENSE_PORT_C
- Pin 4:** AUD_PORTA_L
- Pin 5:** AUD_PORTA_R
- Pin 6:** AUD_PORTC_L
- Pin 7:** AUD_PORTC_R
- Pin 8:** USB_PNS
- Pin 9:** USB_PPS
- Pin 10:** USB_PNS
- Pin 11:** USB_PPS
- Pin 12:** USB_PNS
- Pin 13:** USB_PPS
- Pin 14:** USB_PNS
- Pin 15:** USB_PPS
- Pin 16:** USB_PNS
- Pin 17:** USB_PPS
- Pin 18:** USB_PNS
- Pin 19:** USB_PPS
- Pin 20:** USB_PNS
- Pin 21:** USB_PPS
- Pin 22:** USB_PNS
- Pin 23:** USB_PPS
- Pin 24:** USB_PNS
- Pin 25:** USB_PPS
- Pin 26:** USB_PNS
- Pin 27:** USB_PPS
- Pin 28:** USB_PNS
- Pin 29:** USB_PPS
- Pin 30:** USB_PNS

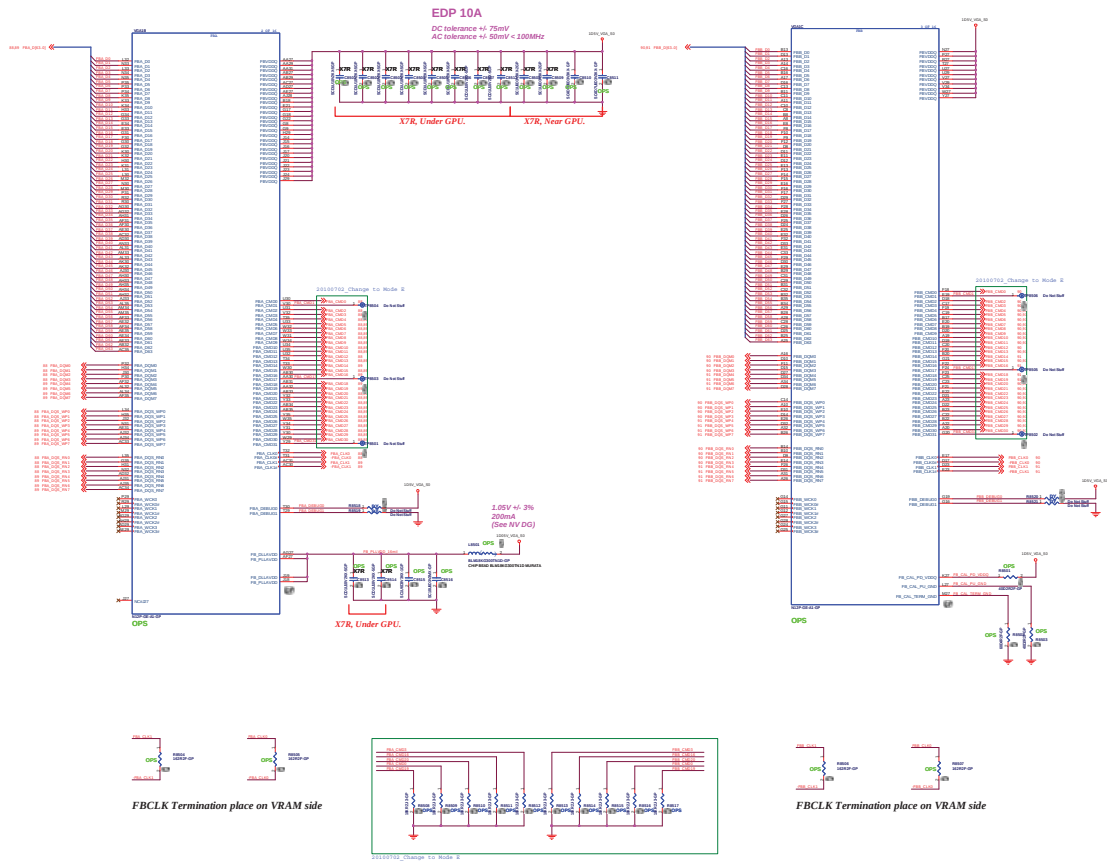
The board components and their connections are:

- FTPT115:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT116:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT117:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT118:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT119:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT120:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT121:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT122:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT123:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT124:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT125:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT126:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT127:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT128:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT129:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT130:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT131:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT132:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT133:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT134:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT135:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT136:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT137:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT138:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT139:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT140:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
- FTPT141:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 1



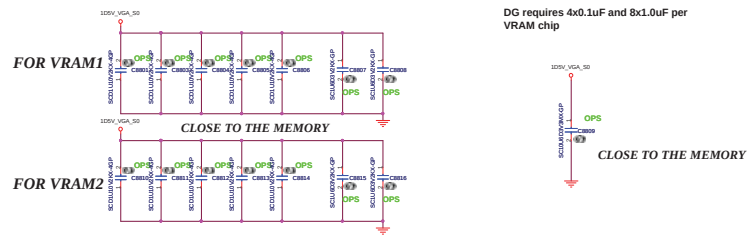
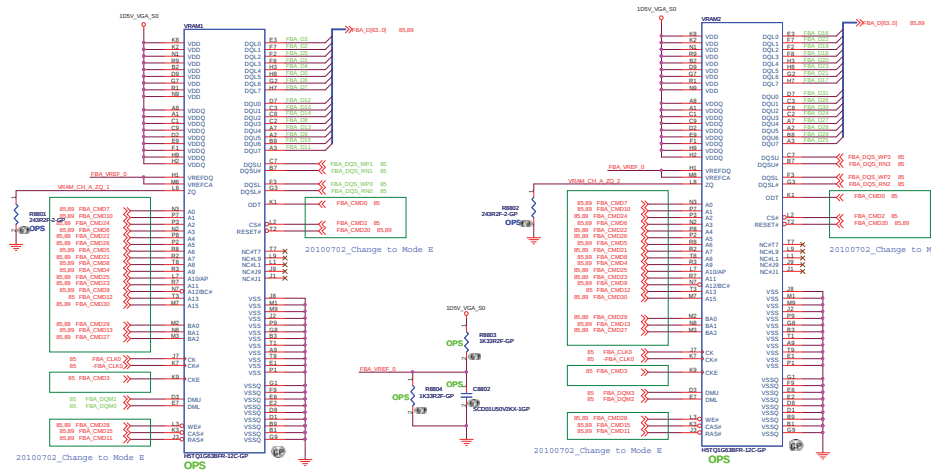
Title			
IO Board Connector			
Size A3	Document Number		Rev
	LZ57		-1
Date:	Tuesday, March 29, 2011	Sheet 82 of	102

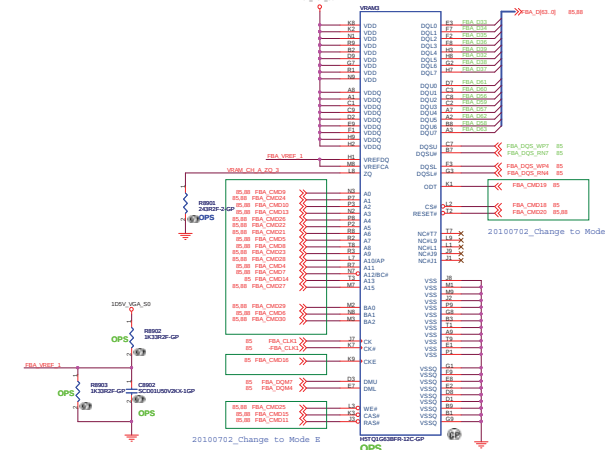




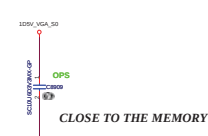
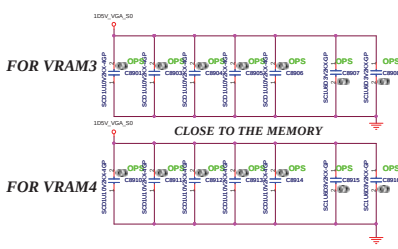
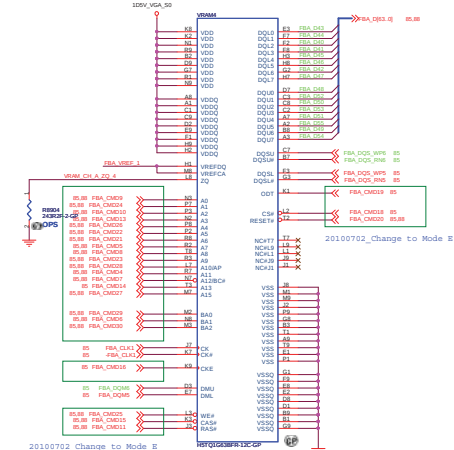
VGA_CORE





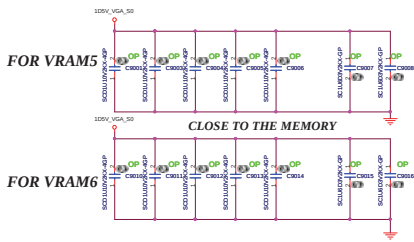
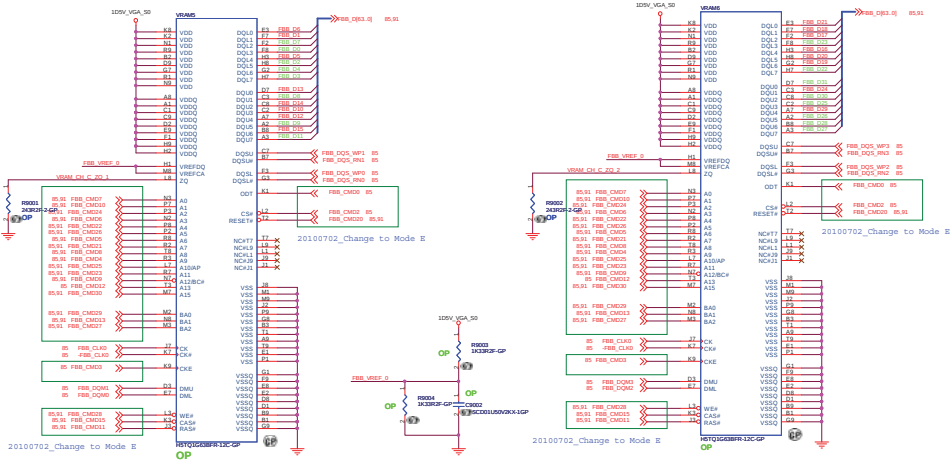


FB CMD mapping Mode D-N12x



VIDEO FRAME BUFFER PORT A

Wistron Corporation			
220, St. Louis, Mo, 63103, USA			
Tel: 314.221.1234, Fax: 314.221.1235			
E-mail: sales@wistron.com			
Date: March 20, 2011			
Rev: 1.0			
Page: 1 of 1			



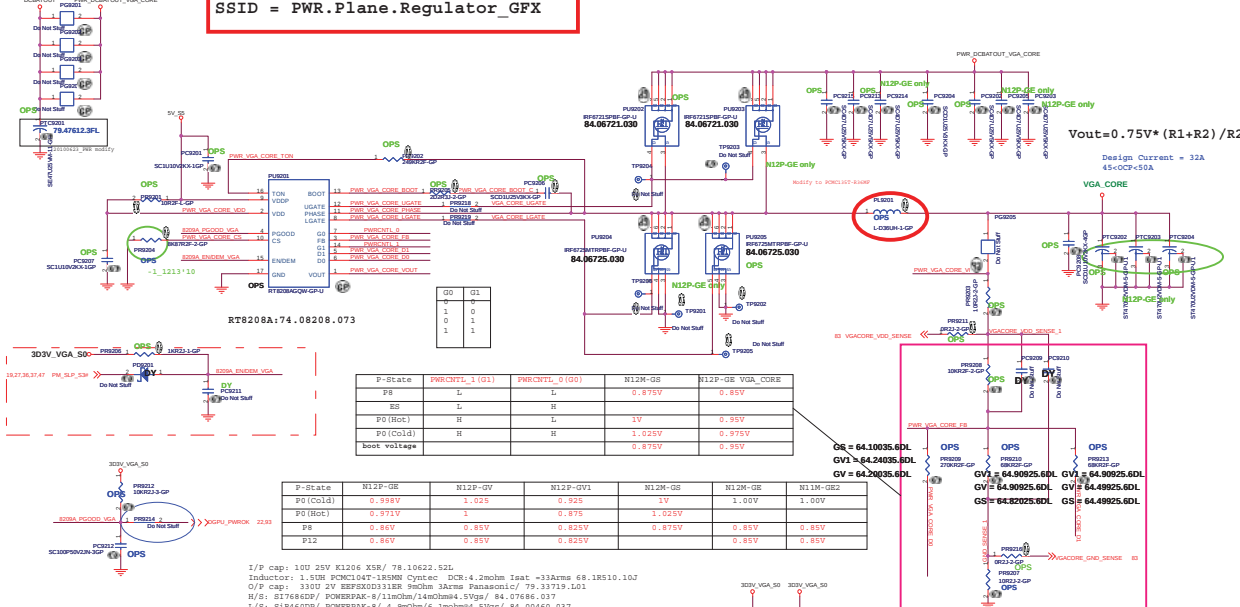
DG requires 4x0.1uF and 8x1.0uF per VRAM chip



VIDEO FRAME BUFFER PORT C

Wistron Corporation	
2/F, 88, Sec. 2, Wenhua Rd., Neihu, Taipei 115, Taiwan, R.O.C.	
VRAM CHANNEL-C	
Document Number	L257
Date	Transfer, March 29, 2011
Rev	1

SSID = PWR.Plane.Regulator_GFX

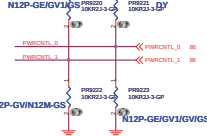
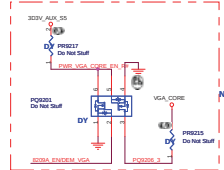


P-State	PWRCTRL_1 (G1)	PWRCTRL_2 (G2)	N12M-GS	N12P-GS VGA_CORE
PS	L	L	1.875V	0.85V
SS	L	L	1V	0.95V
P0 (Hot)	H	H	1.025V	0.975V
P0 (Cold)	H	H	0.875V	0.85V
boot voltage			0.875V	0.95V

P-State	N12P-GS	N12P-GV	N12P-GV1	N12M-GS	N12M-GS	N12M-GS2
P0 (Cold)	0.988V	1.025V	0.925V	1V	1.00V	1.00V
PS (Hot)	0.971V	1V	0.875V	1.025V	0.85V	0.85V
PS	0.86V	0.85V	0.825V	0.875V	0.85V	0.85V
P12	0.86V	0.85V	0.825V	0.875V	0.85V	0.85V

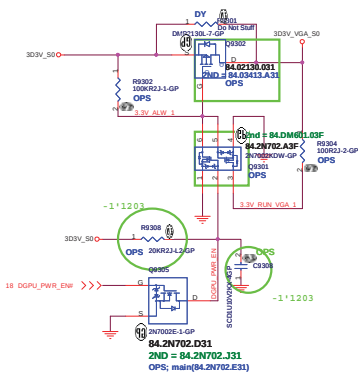
I/P cap: 100 25V K1206 XSR/ 78.10622.52L
 Inductor: 1.50H PCMC1047-18MM Cyntec DCB: 4.2mohm Isat: +33Arms 68.18510.10J
 O/P cap: 3300 2V XEPFX033328 360m 3Arms Panasonic/ 79.33719.10J
 H/S: S176862D/ POWERPAK-8/130m/140m/4.5Vgs/ 84.07686.037
 L/S: S18460D/ POWERPAK-8/ 4.9mohm/6.1mohm/4.5Vgs/ 84.00460.037
 Switching freq: >350KHz

Frequency setting
 470K -->165KHz
 200K -->323KHz
 100K -->500KHz

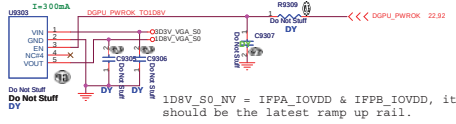


	N12P-GS	N12P-GV1	N12P-GV	N12P-GS
P0 (Cold)	0.988V	0.946V	1.048V	
PS (Hot)	0.971V	0.915V	1.011V	
PS/P12	0.86V	0.85V	0.85V	
Boot Voltage	0.971V	0.915V	0.84V	
PS209	270K (64.27035.6DL)	240K (64.24035.6DL)	200K (64.20035.6DL)	
PS210	88K (64.68025.6DL)	80K (64.80925.6DL)	68K (64.68025.6DL)	
PS213	88K (64.68025.6DL)	80K (64.80925.6DL)	49.9K (64.49925.6DL)	

+3VS to 3.3V_DELAY Transfer

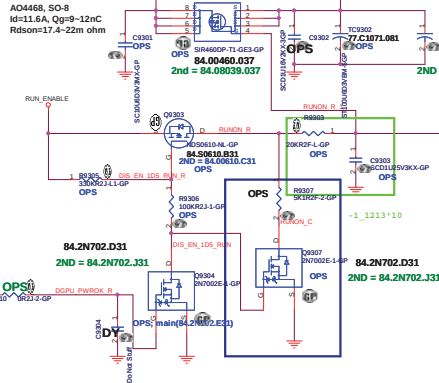


+3VS to 1.8V Transfer



1D8V_S0_NV = IPFA_I0VDD & IPFB_I0VDD, it should be the latest ramp up rail.

1D5V_VGA_S0



(Blanking)

(Blanking)

BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		CRT Switch	
Size	Document Number	Rev	
A3	LZ57	-1	
Date:	Tuesday, March 29, 2011	Sheet	95 of 102

5		4		3		2		1	
D									
C									
B									
A									
5		4		3		2		1	

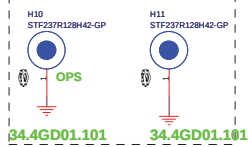
BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
TOUCH PANEL			
Size A4	Document Number LZ57		Rev -1
Date:	Tuesday, March 29, 2011	Sheet 96 of	102

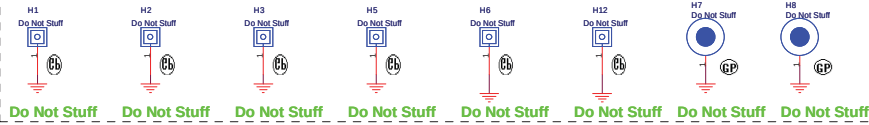
CPU Plate



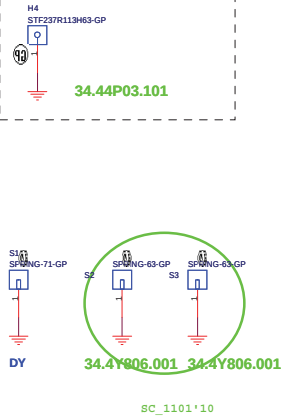
VGA Std-Off



Structure boss



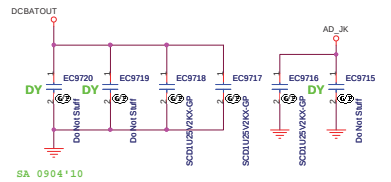
MiniPCI Std-Off



POWER TESTING POINT--TOP



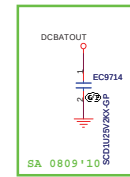
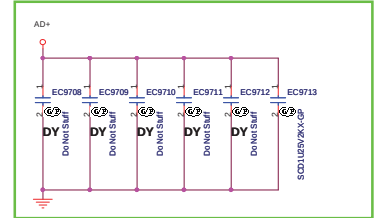
POWER TESTING POINT--Bottom



Check test point



Test Point放在Dimm Door打開可量測處



BOM

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

File
Size
A3
Document Number
L757
Date: Tuesday, March 25, 2014
Sheet 97 of 102
Rev
-1

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

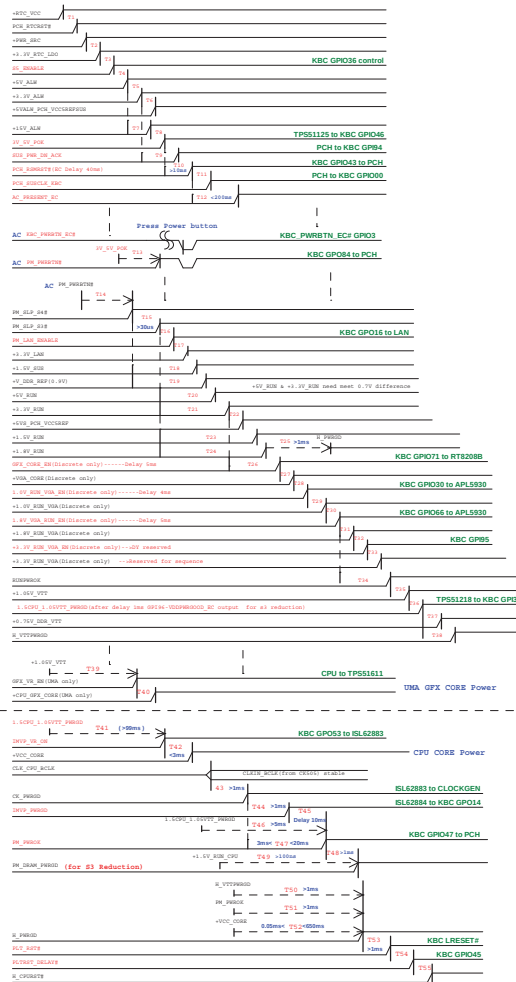
(Blanking)

BOM

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Change History			
Size A4	Document Number LZ57		Rev -1
Date: Tuesday, March 29, 2011	2	Sheet 98 of 102	1

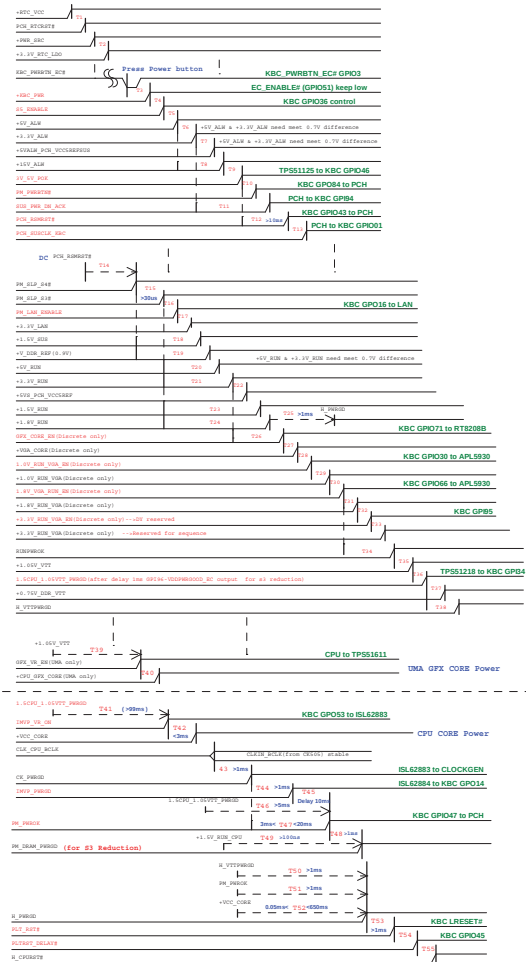
(AC mode)

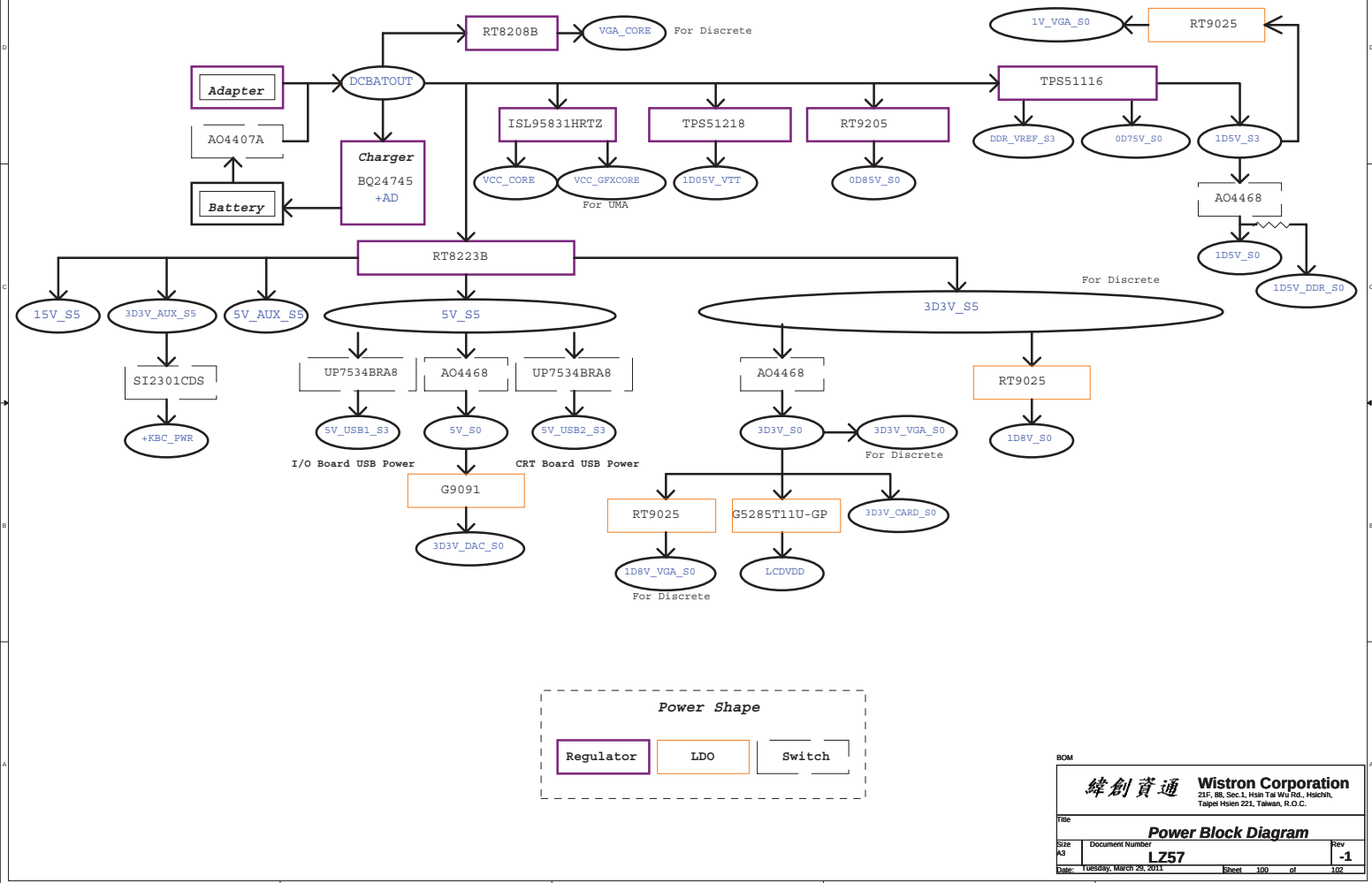
red word: KBC GPIO



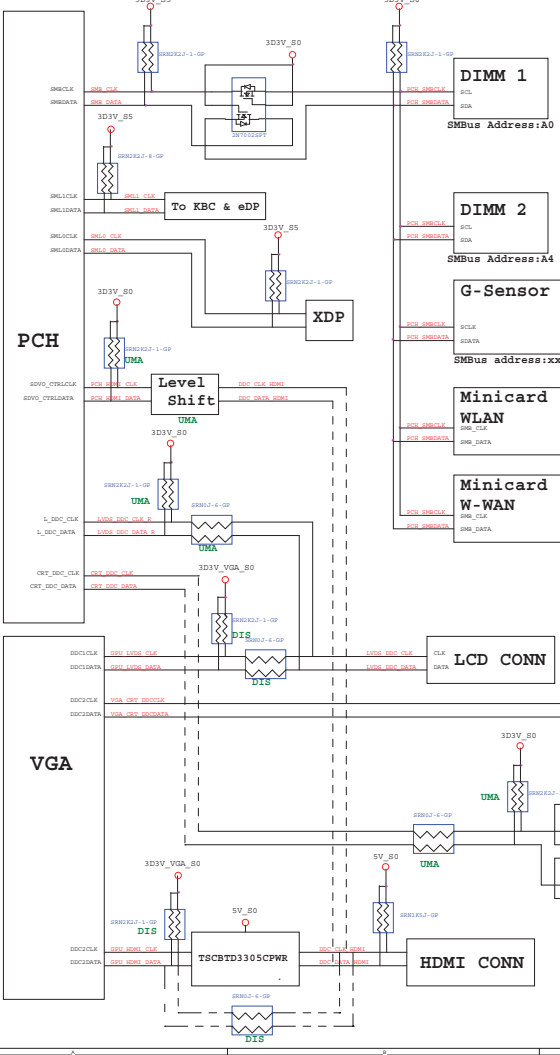
(DC mode)

red word: KBC GPIO

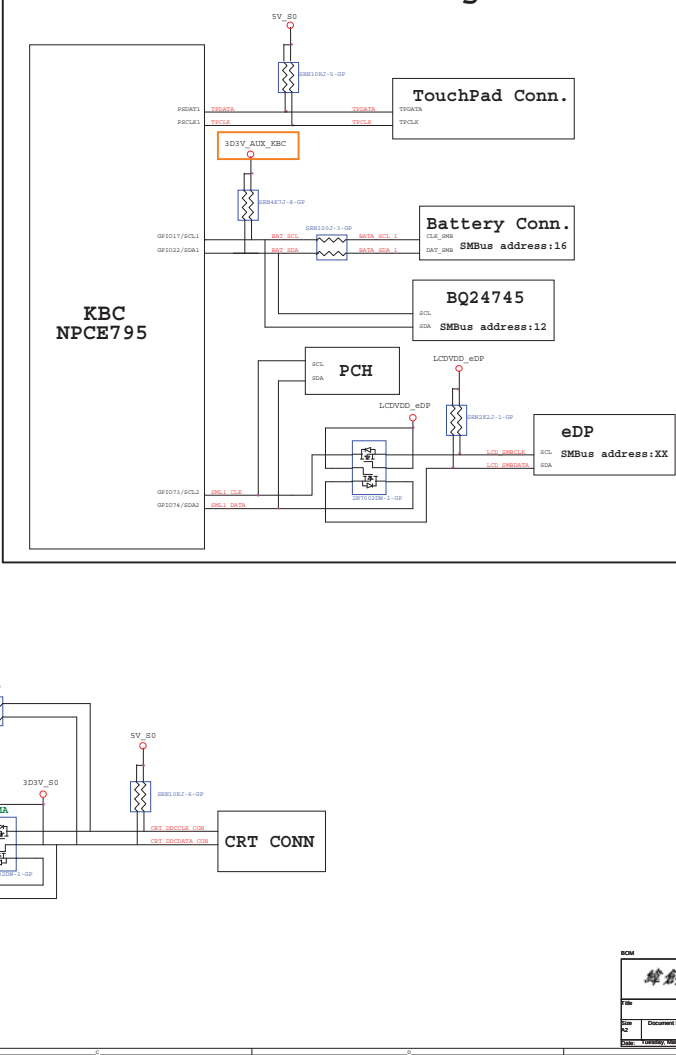




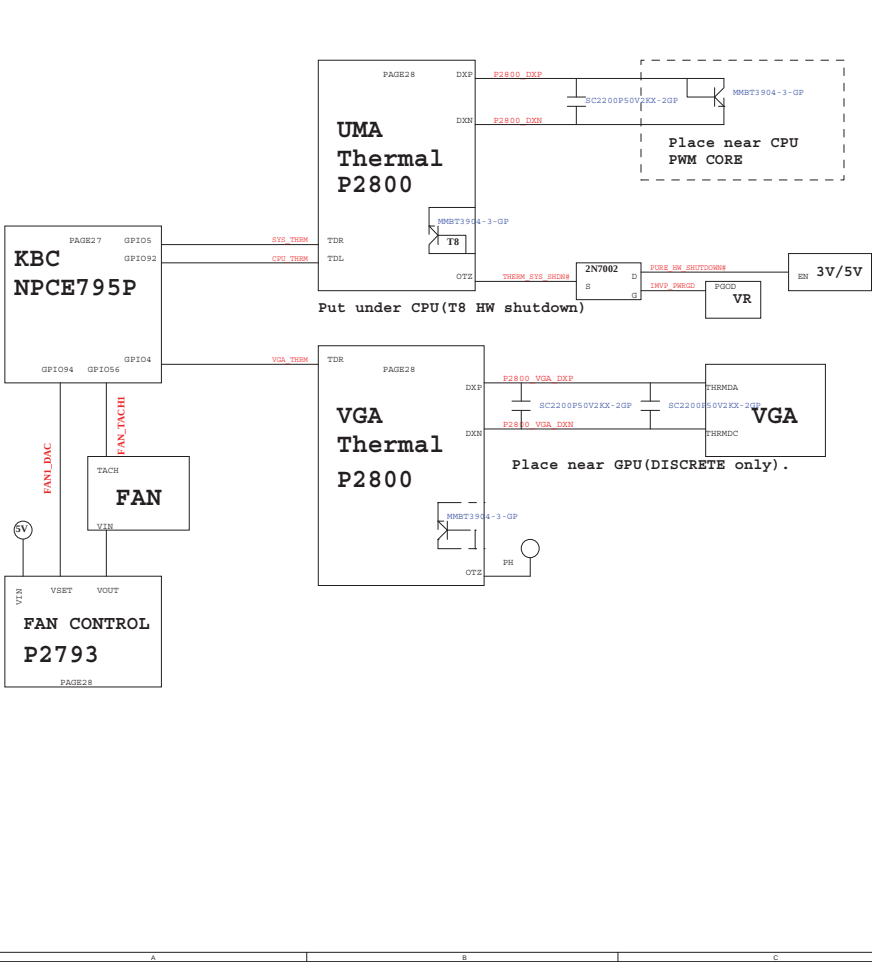
PCH SMBus Block Diagram



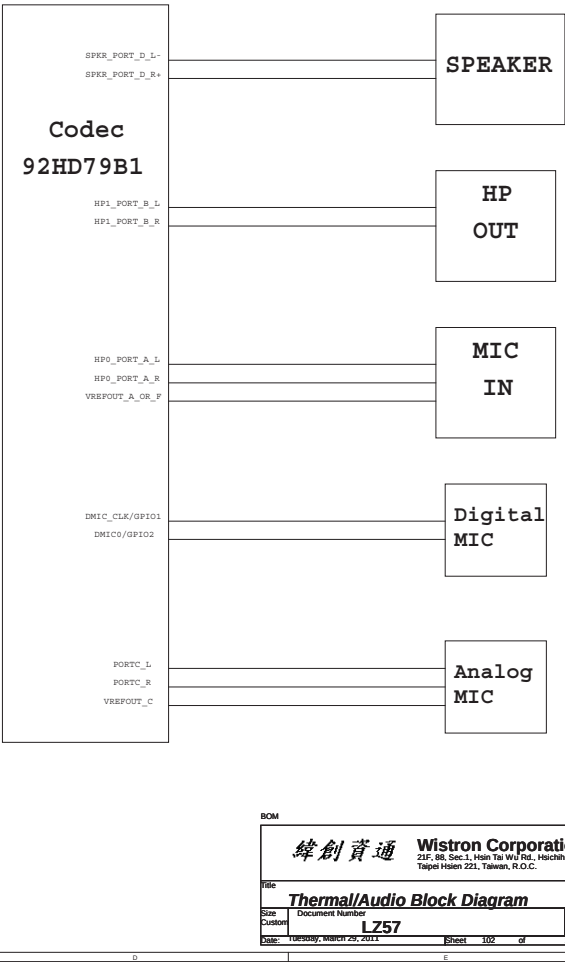
KBC SMBus Block Diagram



Thermal Block Diagram



Audio Block Diagram



BOM		緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsuehshih, Taipei Hsien 221, Taiwan, R.O.C.		Date: 19 January 2014	
File		Thermal/Audio Block Diagram	
Rev	Document Number	Rev	-1
Custom	LZ57	Sheet	102 of 102