

Janus Schematic Beema

2014-03-05

REV : A00

www.aitech1.ru

DY : None Installed

UMA: UMA only installed

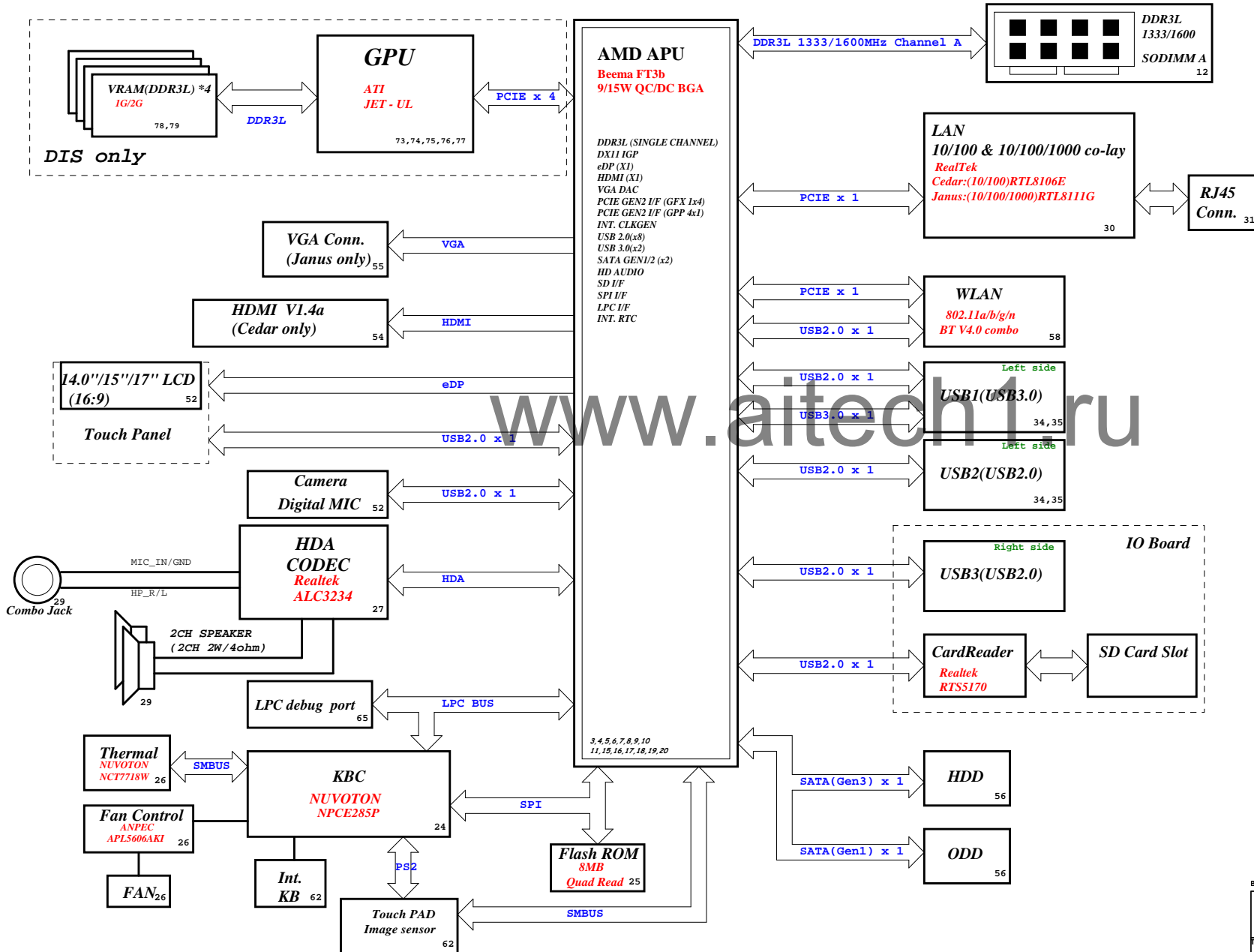
OPS: DISCRTE SG installed

BEMMA

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title			
Cover Page			
Size A3	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 06, 2014		Sheet 1	of 104

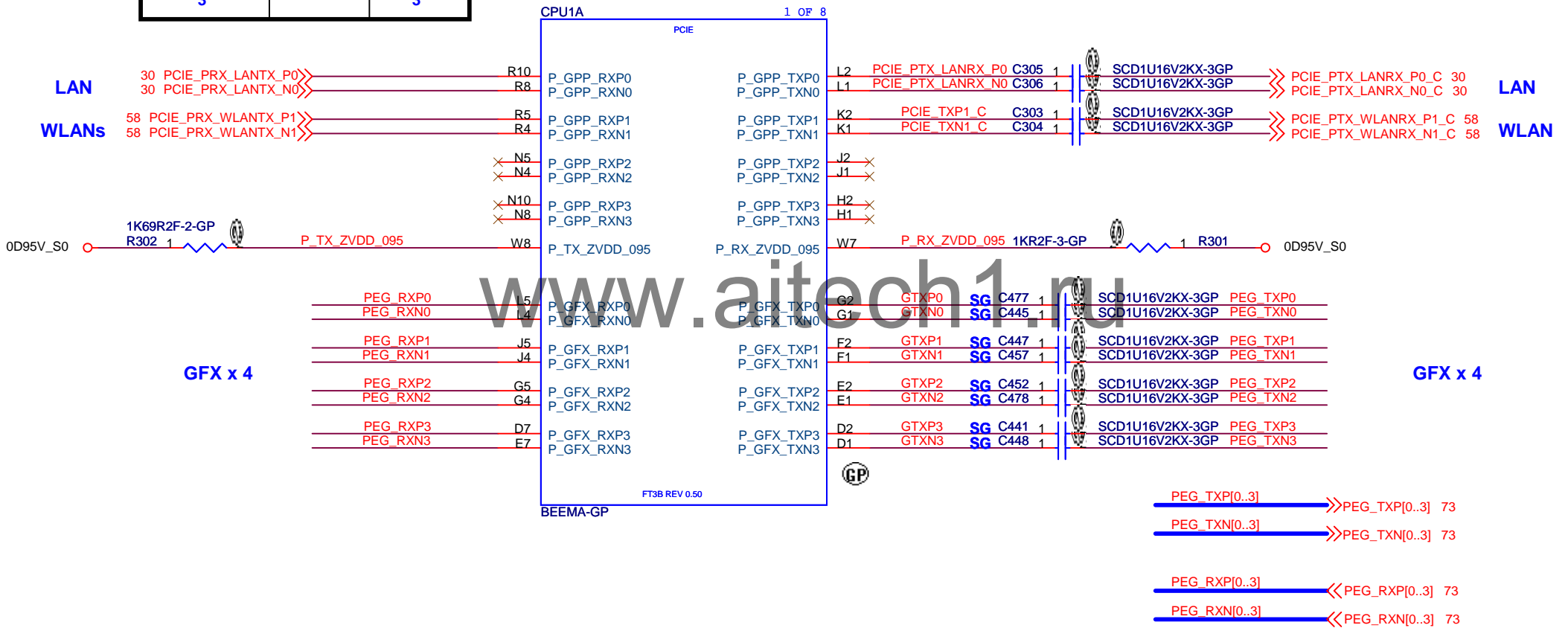
Project code:4PD00G010001
PCB P/N: 13325-1
Revision: A00

Janus Block Diagram



CHARGER	
BQ24727RGR	44
INPUTS	OUTPUTS
AD+	DCBATOUT
BT+	
SYSTEM DC/DC	
TPS51225RUKR-GP	45
INPUTS	OUTPUTS
DCBATOUT	3D3V_AUX_S5 5V_AUX_S5 5V_S5 3D3V_S5
CPU Core Power	
ISL95813HRZ-GP	46,47
INPUTS	OUTPUTS
DCBATOUT	VCC_CORE
DDR3L SUS	
TPS51716RUKR-GP	49
INPUTS	OUTPUTS
DCBATOUT	1D35V_S3 0D65V_S0
CPU 1.05V	
RT8237CZQW-2-GP	48
INPUTS	OUTPUTS
DCBATOUT	1D05V_S0
VDDIO_AZ	
TLV70215DBVR	36
INPUTS	OUTPUTS
3D3V_S5	1D5V_S0
Switches	
36	83
INPUTS	OUTPUTS
1D35V_S3	1D35V_S0
5V_S5	5V_S0
3D3V_S5	3D3V_S0
0D95V_S5	0D95V_VGA_S0
3D3V_S0	3D3V_VGA_S0
1D35V_S3	1D35V_VGA_S0
1D8V_S5	1D8V_VGA_S0
PCB LAYER	
L1:TOP L2:VCC L3:Signal L4:Signal L5:GND L6:BOT	

GPP CLK port	Device	CLKREQ#
0	LAN WLAN	0
1		1
2		2
3		3



BEMMA

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

Title

CPU (PCIE)

Size
A4

Document Number

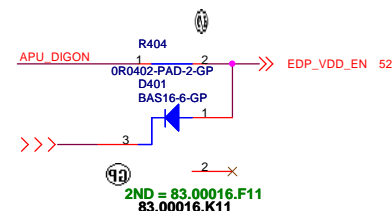
Janus AMD BEEMA

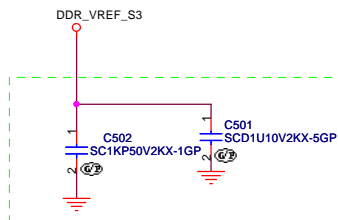
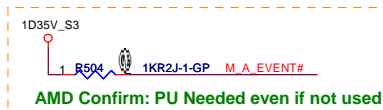
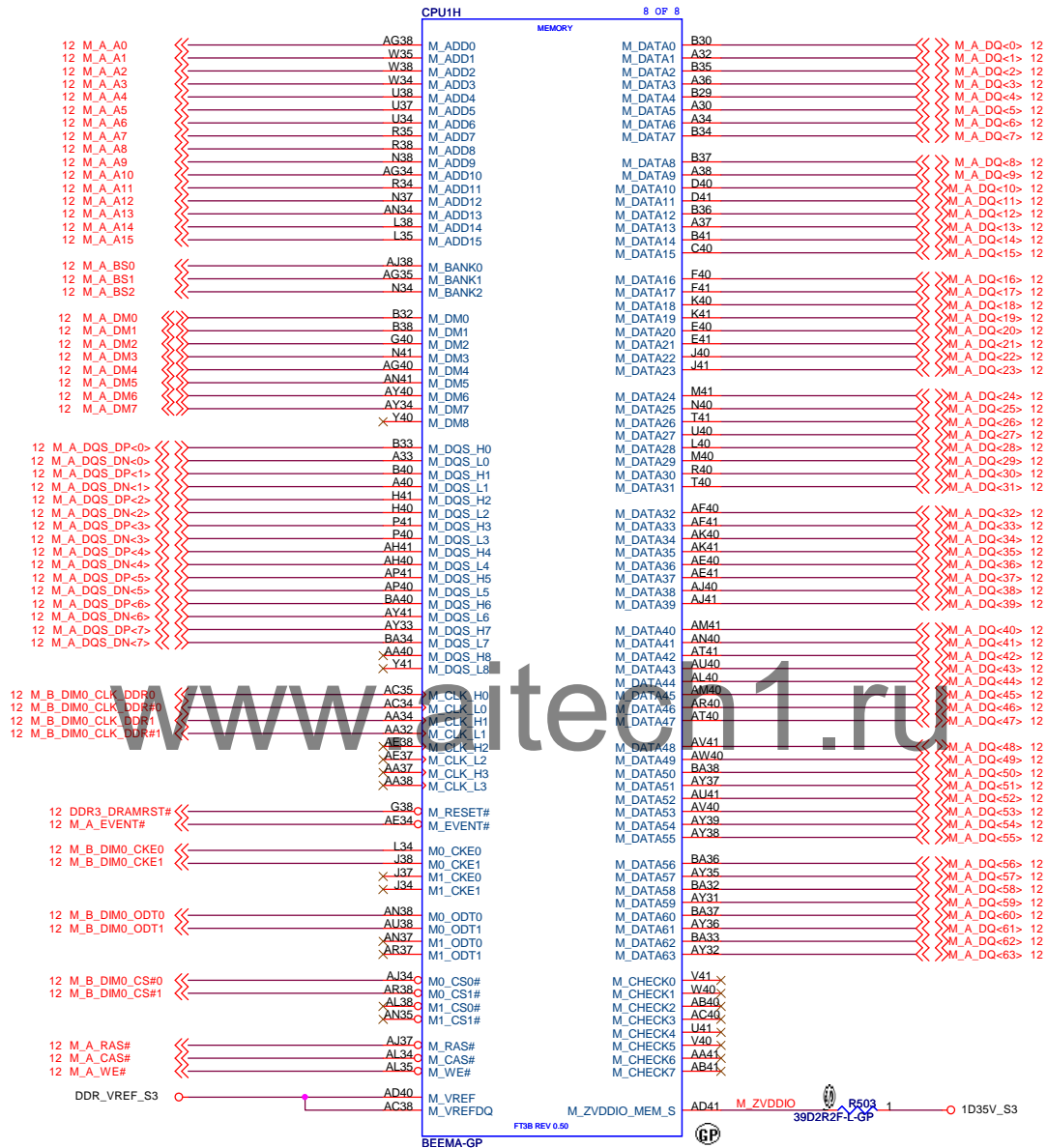
Rev
A00

Date: Wednesday, March 05, 2014

Sheet 3 of 104

SVD	SVC	Output Voltage
0	0	1.1
1	0	1.0
0	1	0.9
1	1	0.8





BEMMA

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

Title CPU (DDR)
Size A3 Document Number Janus AMD BEEMA Rev A00
Date: Wednesday, March 05, 2014 Sheet 5 of 104

3D3V_S0

There are integrated pull-up.

R635 1 10KR2J-3-GP BLUETOOTH_EN

R603 1 10KR2J-3-GP H_A2OGATE

R604 1 10KR2J-3-GP KB_DET#

R601 1 10KR2J-3-GP DBC_EN

24,65 LPC_RST# << 1 2 R602 0R0402-PAD-2-GP LPC_RST#_C

CEDAR_JANUS_ID	
1	CEDAR
0	JANUS

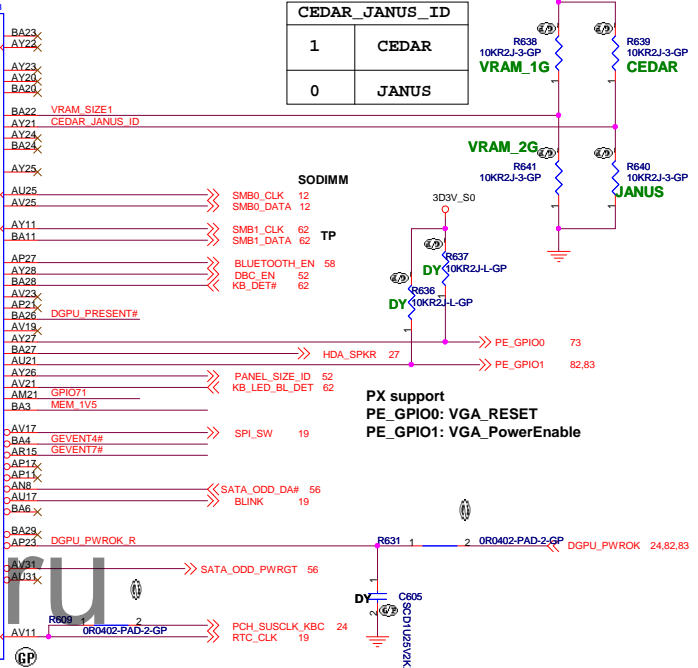
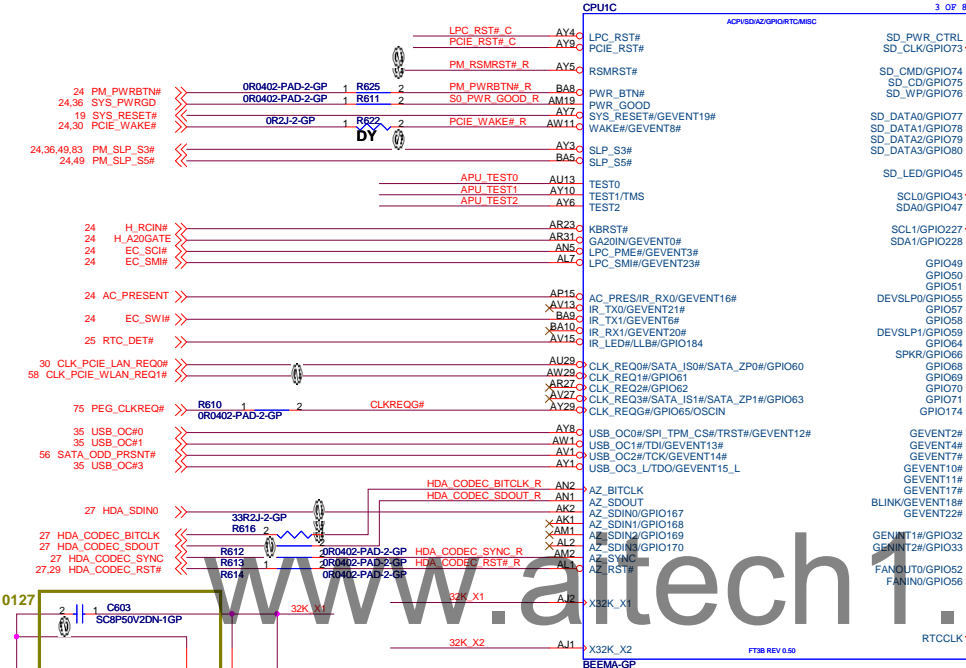
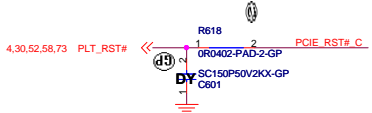
KBC need to use OD Type

1D8V_S5

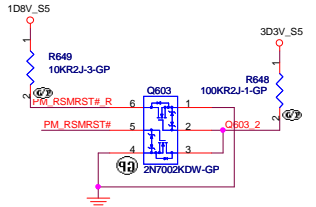
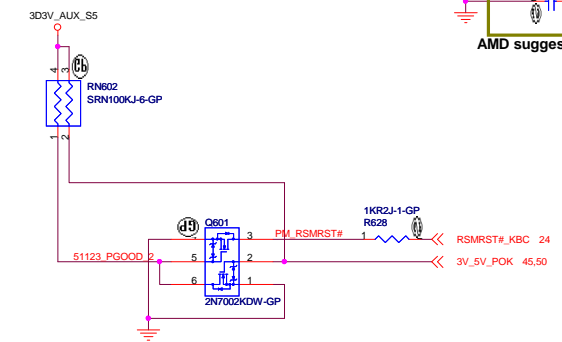
R627

10KR2J-3-GP

S0 PWR GOOD R

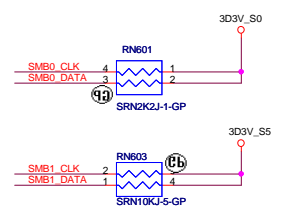
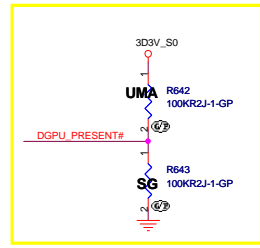


PX support
PE_GPIO0: VGA_RESET
PE_GPIO1: VGA_PowerEnable

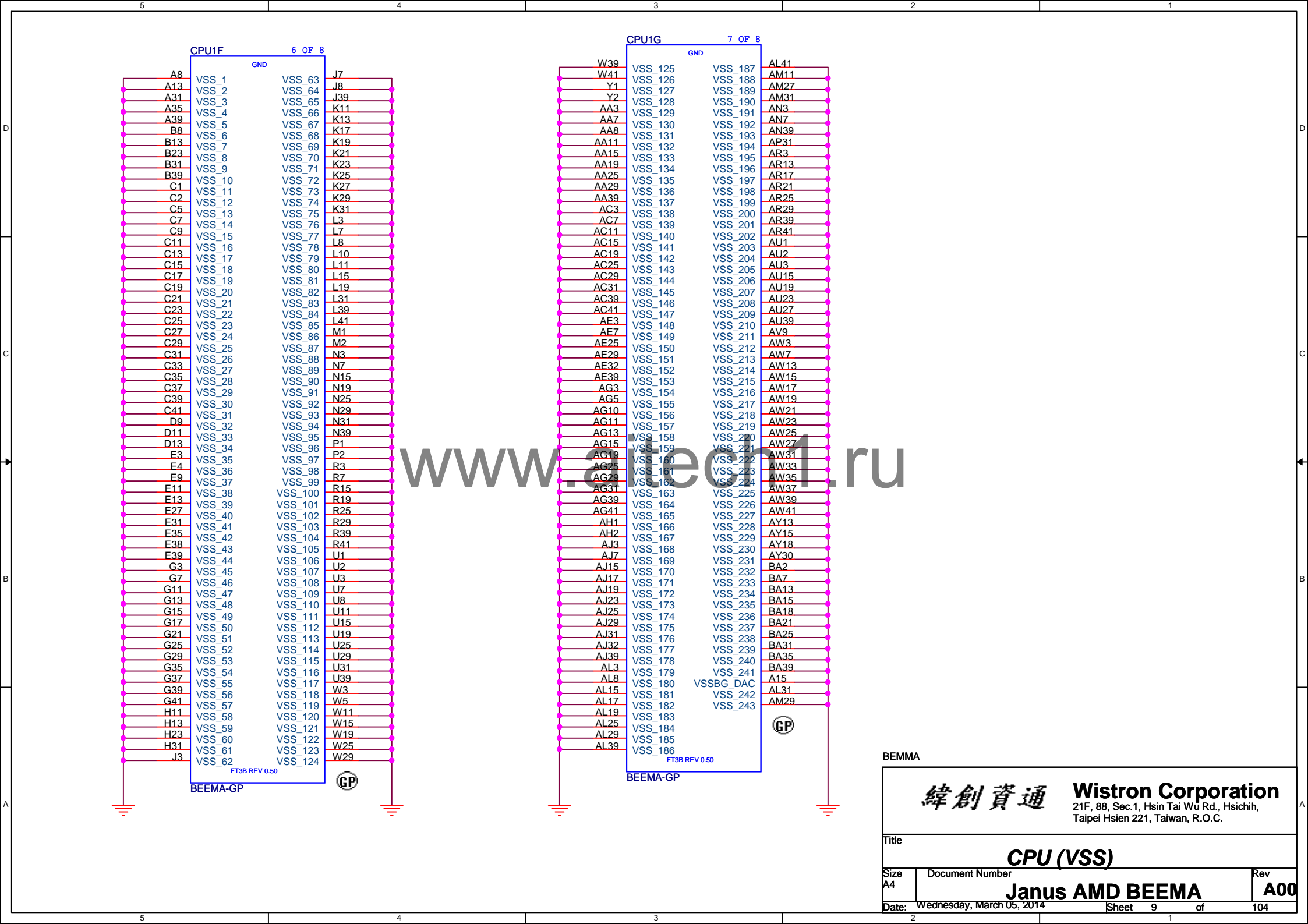


	XTAL	CLK, Hz
0	System & USB	48M
1	RTC	32.768K
2	LAN	25M
3	VGA	27M

AMD suggests Xtal ESR must be less than 65R

Report APU
H=UMA L=DISCRETE

(Blanking)
www.aitech1.ru



BEEMA

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

Title

CPU (VSS)

Size
A4

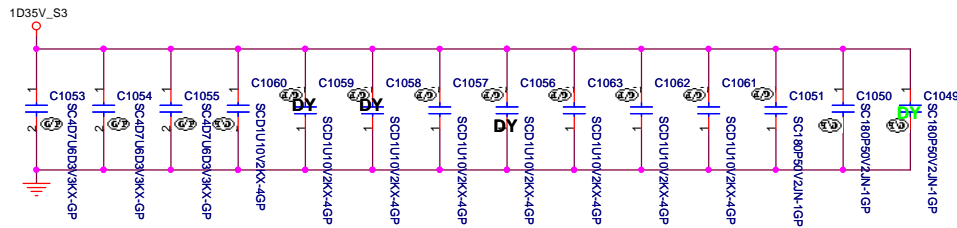
Document Number

Janus AMD BEEMA

Rev
A00

Date: Wednesday, March 05, 2014

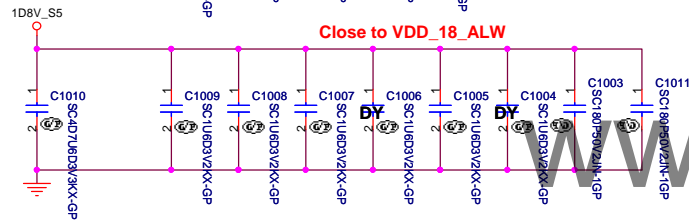
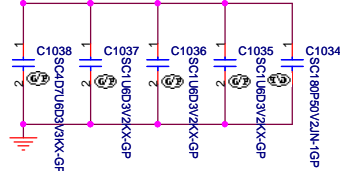
Sheet 9 of 104



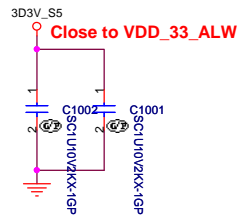
X01 1206

1D5V_S0

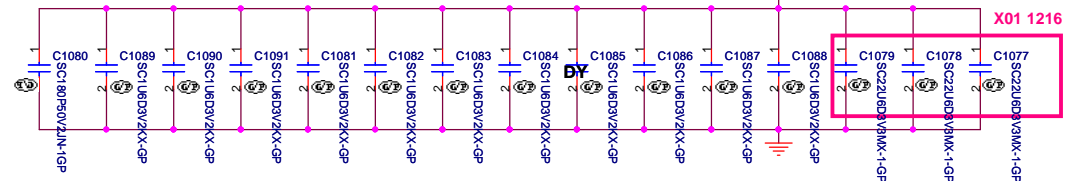
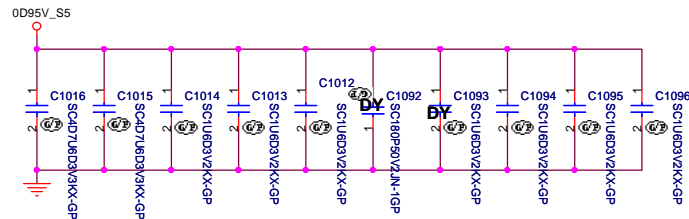
Close to VDDIO_AZ_ALW



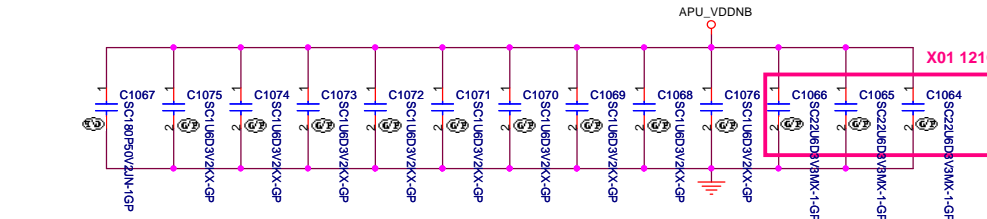
Close to VDD_18_ALW



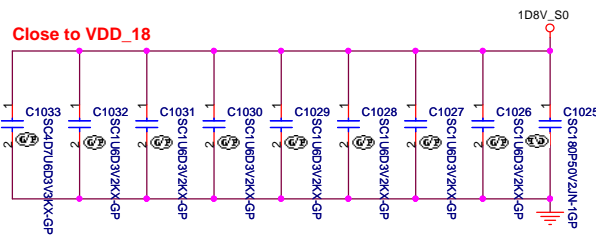
Close to VDD_33_ALW



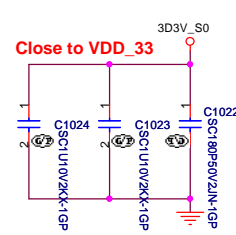
X01 1216



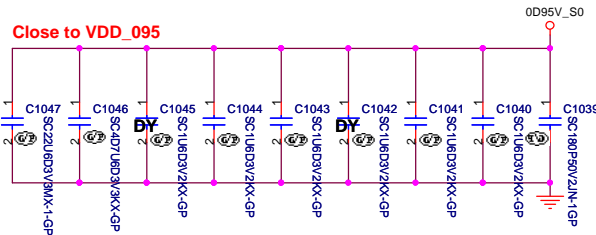
X01 1216



Close to VDD_18



Close to VDD_33



Close to VDD_095

BEMMA

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

Janus AMD BEEMA

Rev

A00

Date: Wednesday, March 05, 2014

Sheet 10 of 104

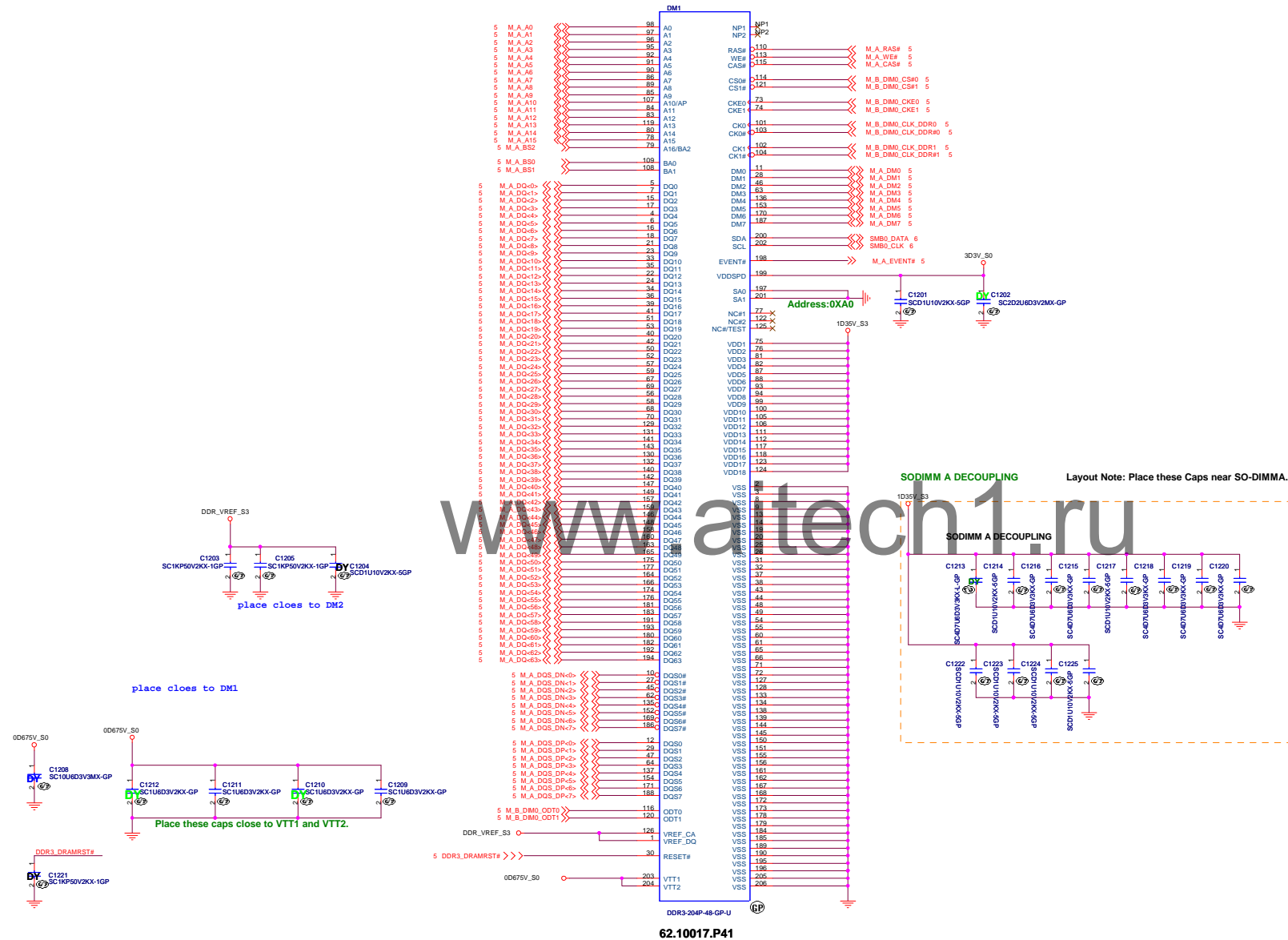
(Blanking)

www.aitech1.ru

BEMMA

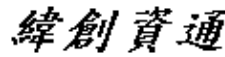
<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>11</div> of <div>104</div>

SSID = MEMORY



(Blanking)
www.aitech1.ru

BEMMA

		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 Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 13 of	104

(Blanking)
www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>14</div> of <div>104</div>

www.aitech1.ru
(Blanking)

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date: Wednesday, March 05, 2014		Sheet 15 of 104

(Blanking)

www.aitech1.ru

BEMMA		
<div>緯創資通Wistron Corporation21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
TitleReserved		
SizeA4	Document NumberJanus AMD BEEMA	RevA00
Date: Wednesday, March 05, 2014	Sheet 16 of	104

(Blanking)

www.altech1.ru

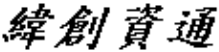
BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet 17 of 104

(Blanking)

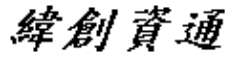
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 18 of	104

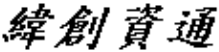
(Blanking)
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Reserved			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 20 of	104

(Blanking)
www.aitech1.ru

BEMMA

		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 A00
Date: Wednesday, March 05, 2014		Sheet 21 of	104

(Blanking)
www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date: Wednesday, March 05, 2014		Sheet 22 of 104

(Blanking)

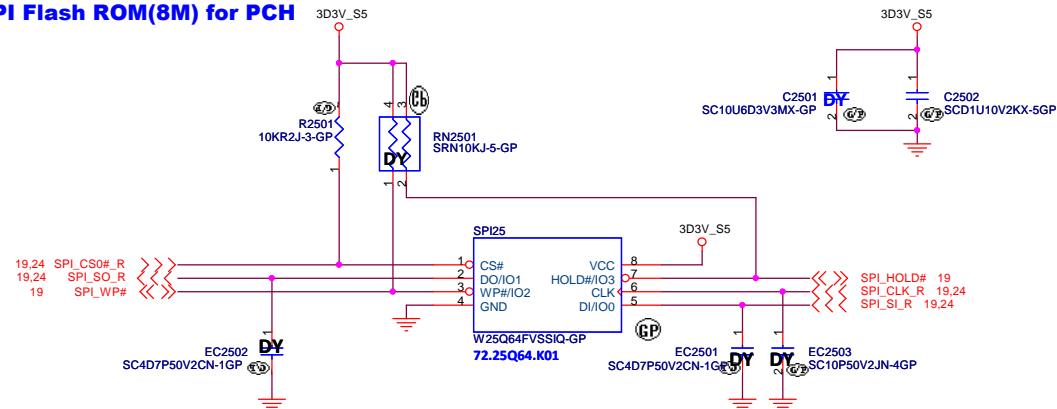
www.altech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>23</div> of <div>104</div>

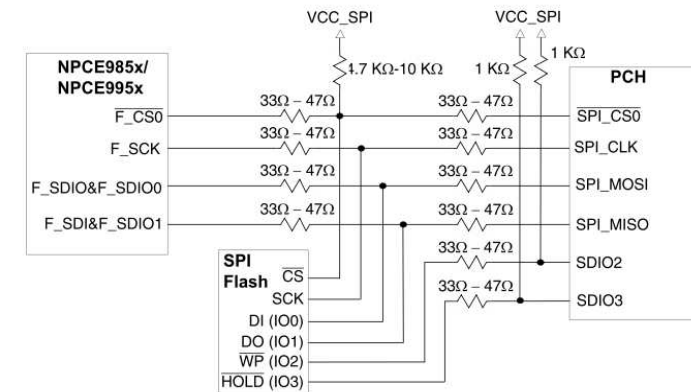

```
SSID = Flash.ROM
```

SPI Flash ROM(8M) for PCH



Source	QUAD/DUAL fast read	DUAL fast read
72.25Q64.K01	O	O
72.25647.00A	O	O

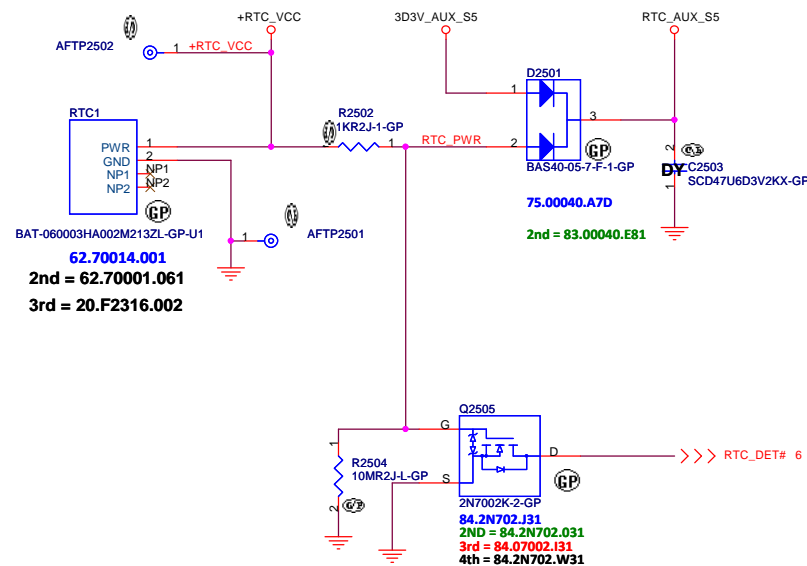
Single SPI shared flash connection (SPI Quad I/O mode)



Refer to "NCPE985x/ NPCE995x board design reference guide"

www.aitech1.ru

SSID = RBATT



BEMMA

緯創資通

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

Title

Flash/RTC

Size

Document Number

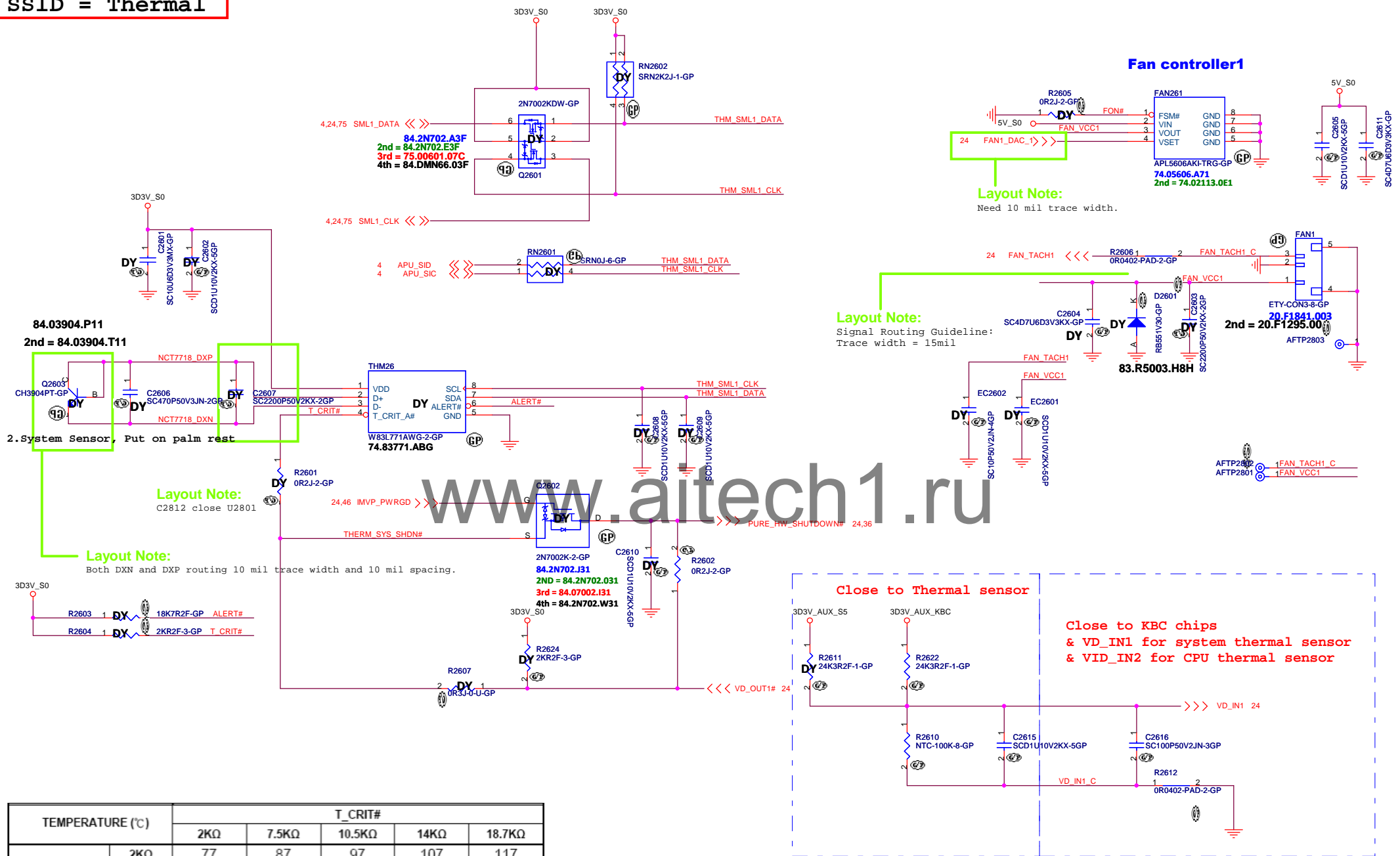
Janus AMD BEEMA

Rev	
-----	--

Date: Wednesday, March 05, 2014

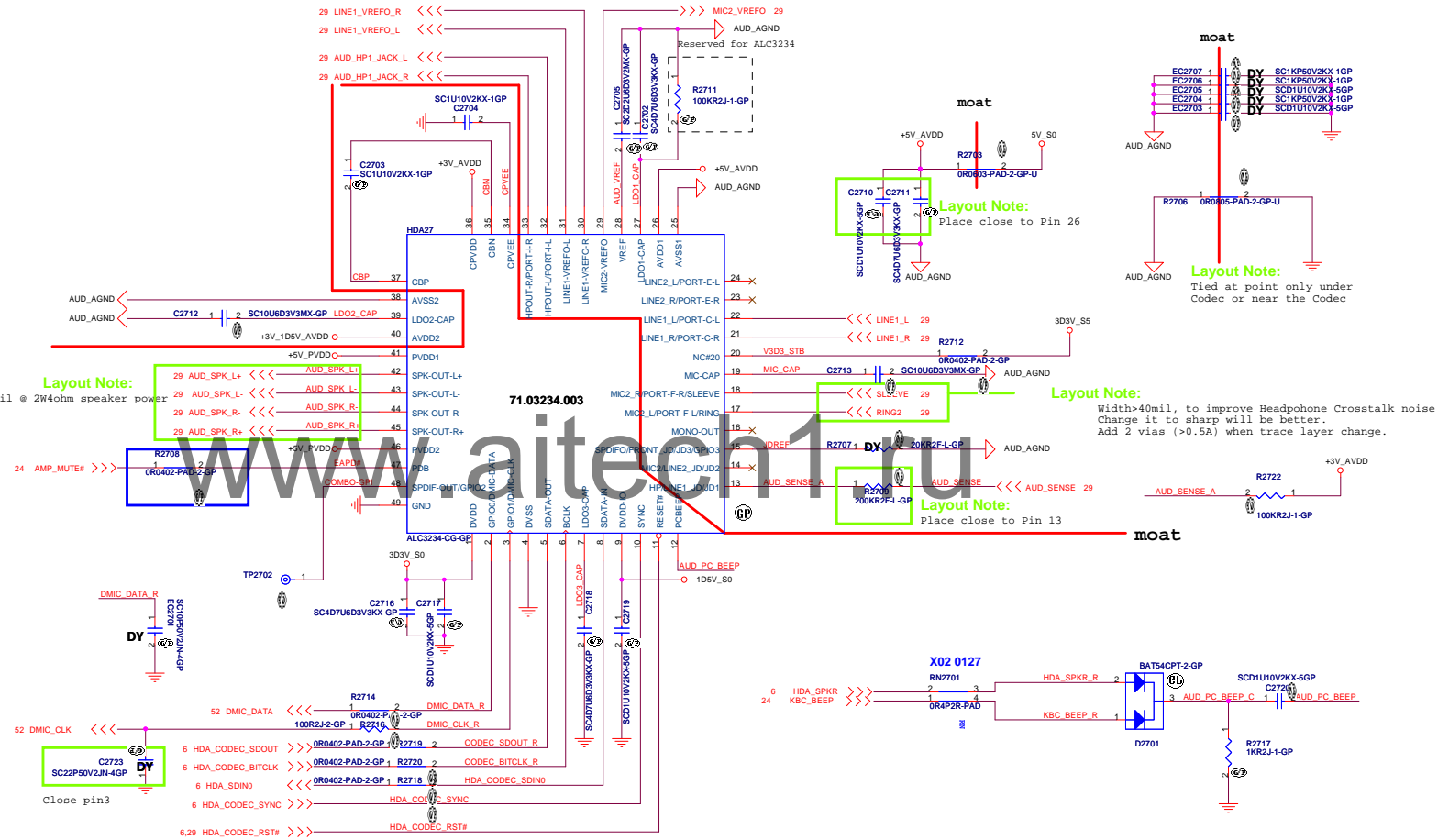
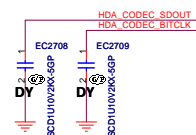
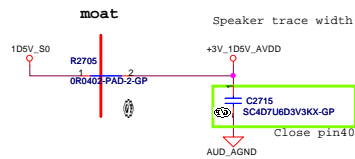
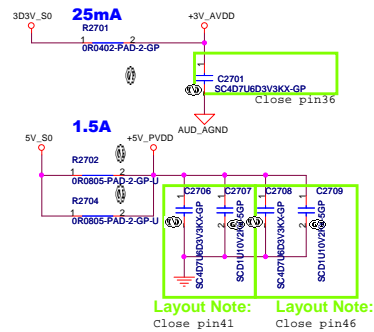
Sheet 25 of 104

SSID = Thermal



TEMPERATURE (°C)		T_CRIT#				
		2KΩ	7.5KΩ	10.5KΩ	14KΩ	18.7KΩ
ALERT#	2KΩ	77	87	97	107	117
	7.5KΩ	79	89	99	109	119
	10.5KΩ	81	91	101	111	121
	14KΩ	83	93	103	113	123
	18.7KΩ	85	95	105	115	125

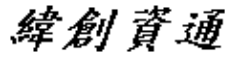
SSID = AUDIO



(Blanking)

www.aitech1.ru

BEMMA

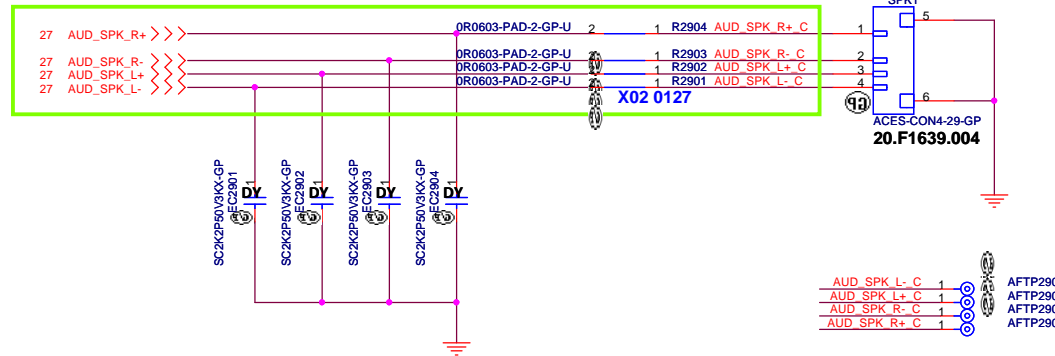
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title		
Reserved		
Size A4	Document Number Janus AMD BEEMA	Rev A00
Date: Wednesday, March 05, 2014		Sheet 28 of 104

SSID = AUDIO

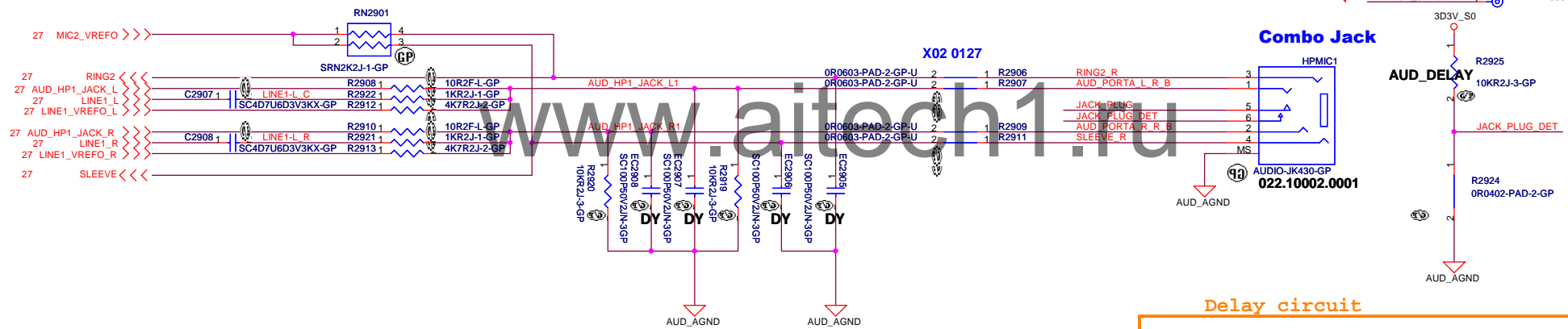
Layout Note:

Speaker trace width >40mil @ 2W4ohm speaker power

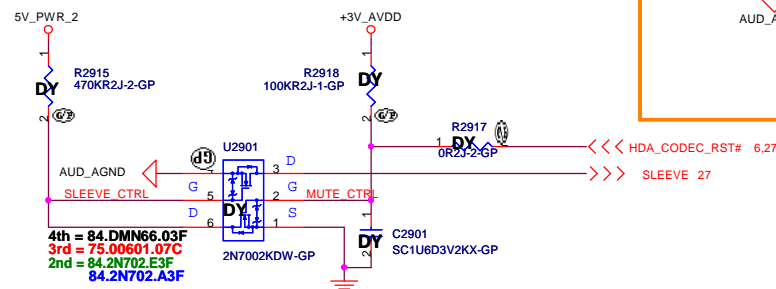
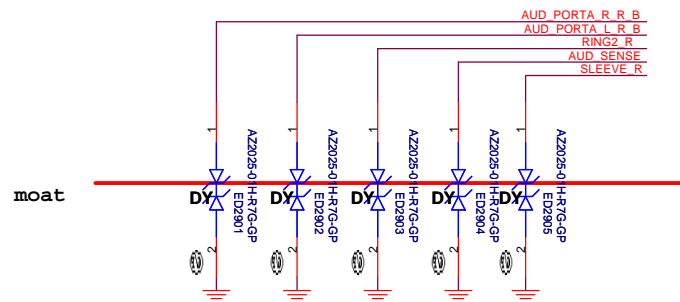
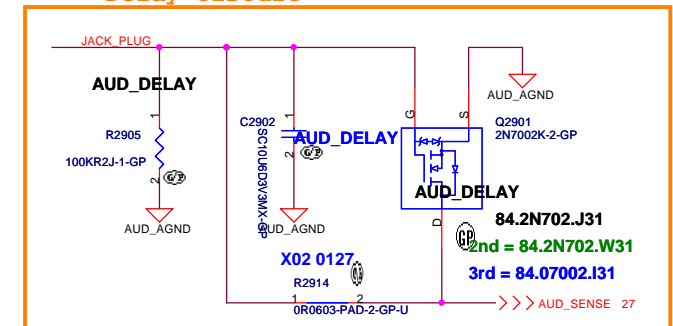
Speaker



CONN Pin	Net name
Pin1	SPK_R+
Pin2	SPK_R-
Pin3	SPK_L+
Pin4	SPK_L-



Delay circuit



BEMMA

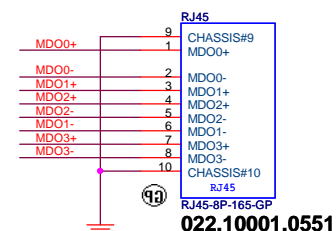
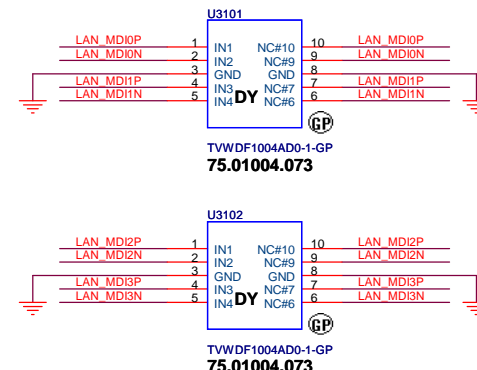
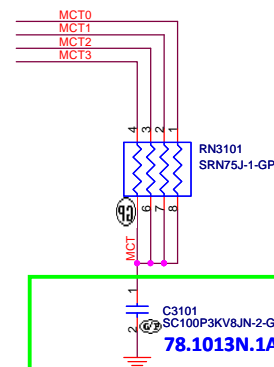
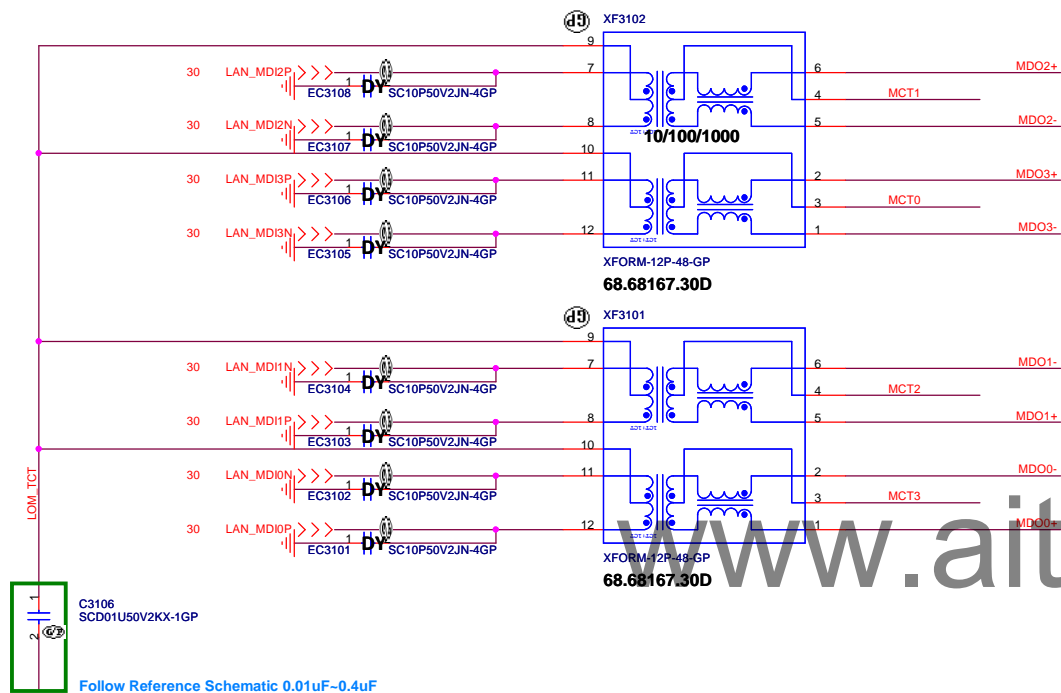
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			
Thermal NCT7718W/Fan Controllor P2793			
Size	Document Number	Rev	
A3	Janus AMD BEEMA	A00	
Date:	Wednesday, March 05, 2014	Sheet	29 of 104

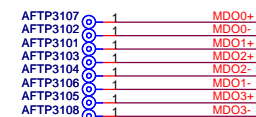
SSID = LOM

LAN TransFormer (10/100/1000M & 10/100M co-lay)

Layout note:
30 mil spacing between MDI differential pairs.



Layout:
Place near RJ45



BEMMA

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

Title

XFOM&RJ45

Size
A3

Document Number

Janus AMD BEEMA

Rev

A00

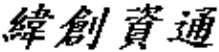
Date: Wednesday, March 05, 2014

Sheet 31 of 104

(Blanking)

www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
(Reserved)Card Reader			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 32 of	104

(Blanking)

www.aitech1.ru

BEMMA

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

Janus AMD BEEMA

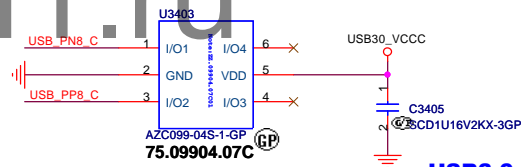
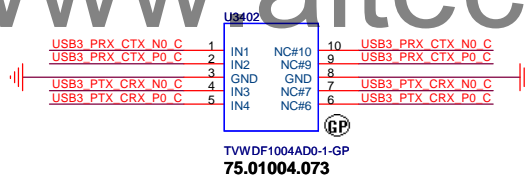
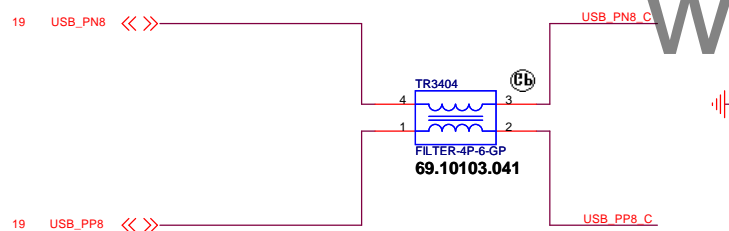
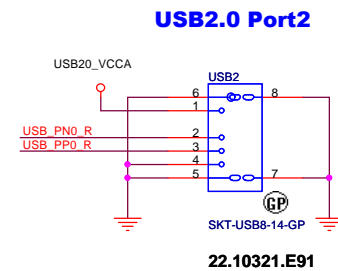
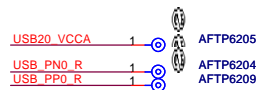
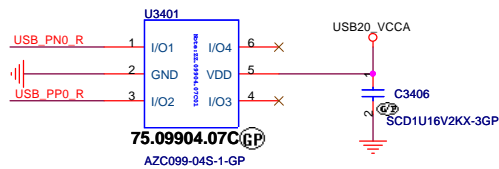
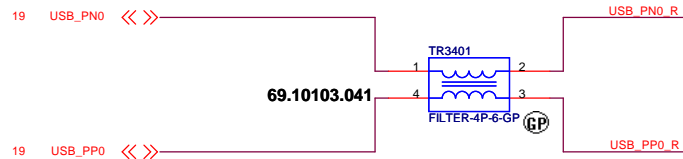
Rev

A00

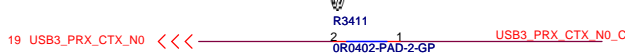
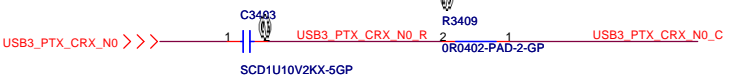
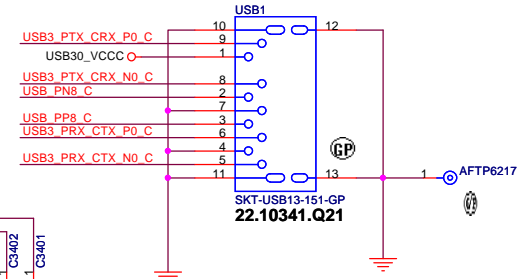
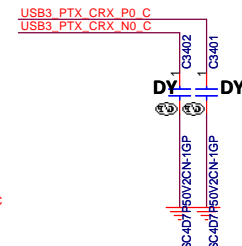
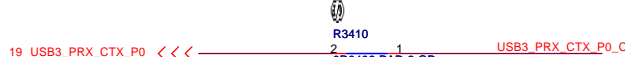
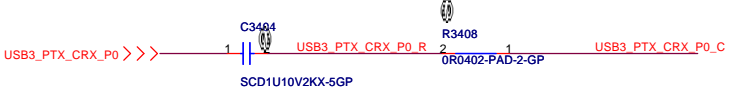
Date: Wednesday, March 05, 2014

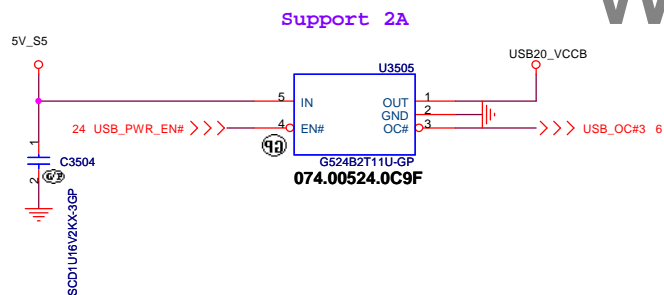
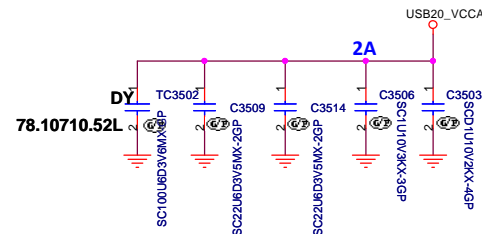
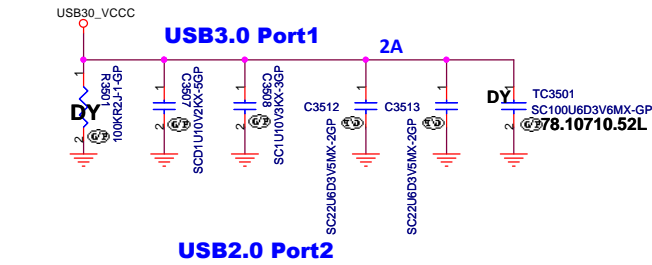
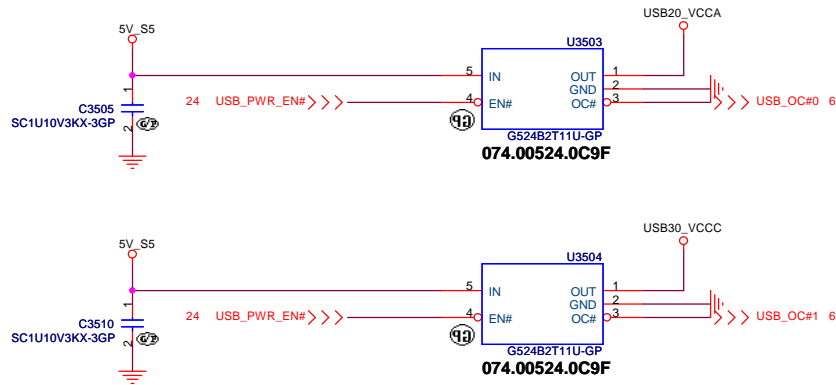
Sheet 33 of 104

SSID = USB

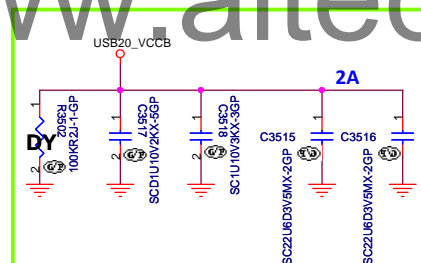


USB3.0 Port1





Layout Note: Close CON1



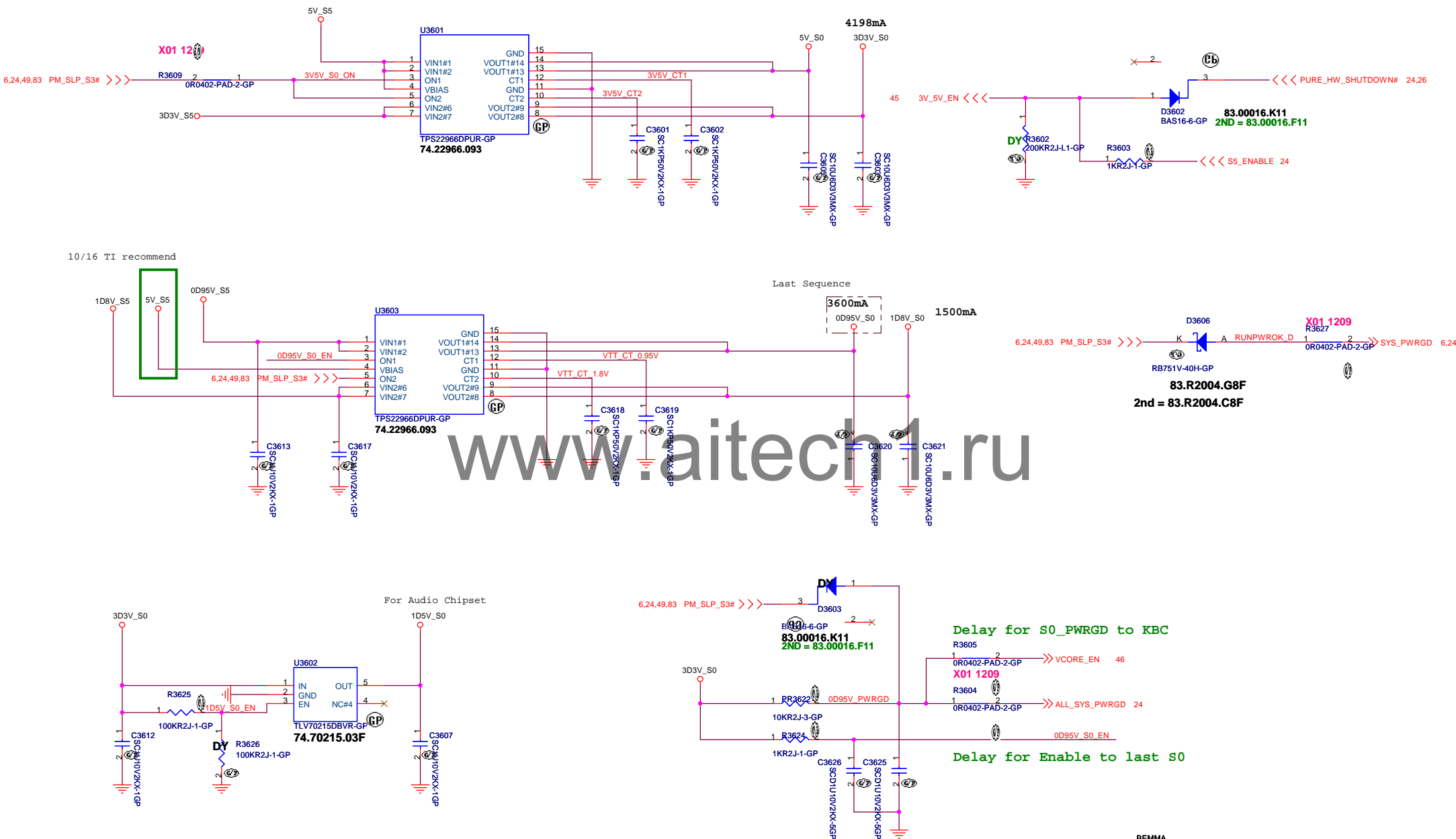
USB2.0 Port3 (IO Board)

BEMMA

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 SW		
Size	Document Number	Rev
	Janus AMD BEEMA	A00
Date: Wednesday, March 05, 2014		
Sheet 35 of 104		

Power Sequence



SSID = Reset.Suspend

(Blanking)

www.altech1.ru

(Blanking)

www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date: Wednesday, March 05, 2014		Sheet 38 of 104

(Blanking)

www.aitech1.ru


BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved) 1D05_M</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date: Wednesday, March 05, 2014		Sheet 39 of 104

(Blanking)

www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Reserved			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 40 of	104

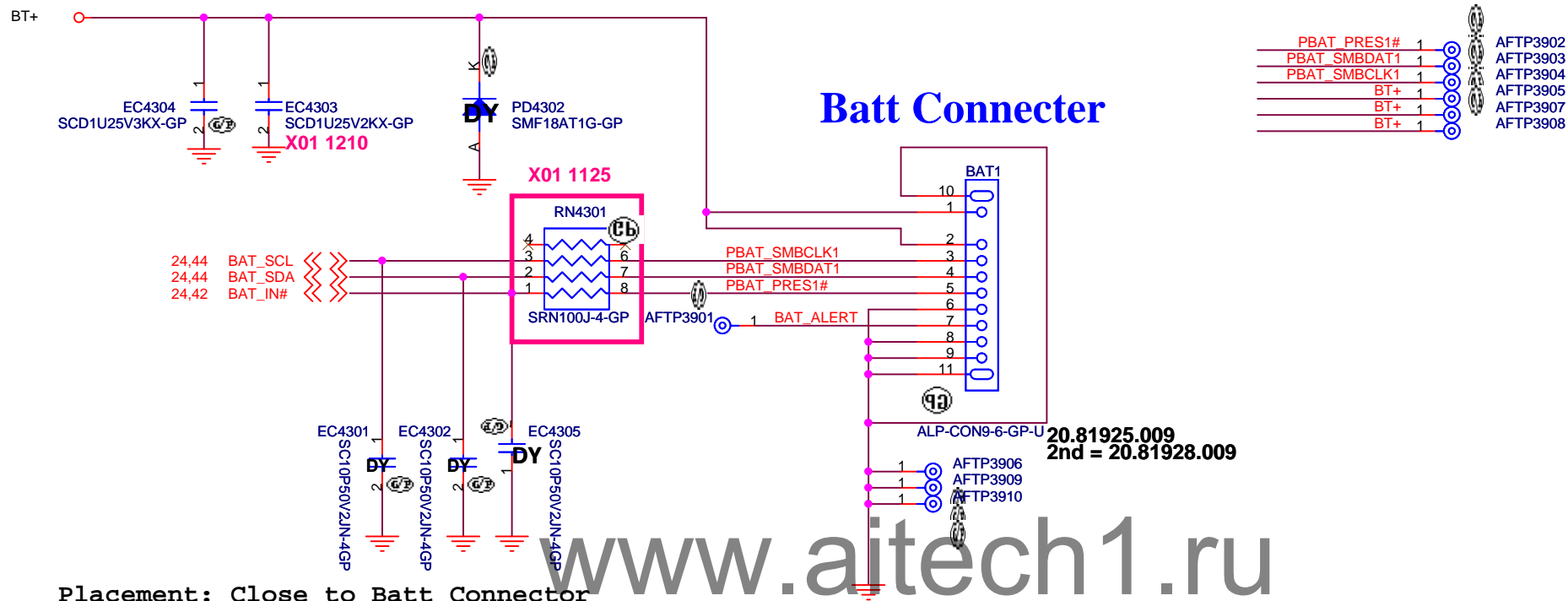
(Blanking)

www.aitech1.ru

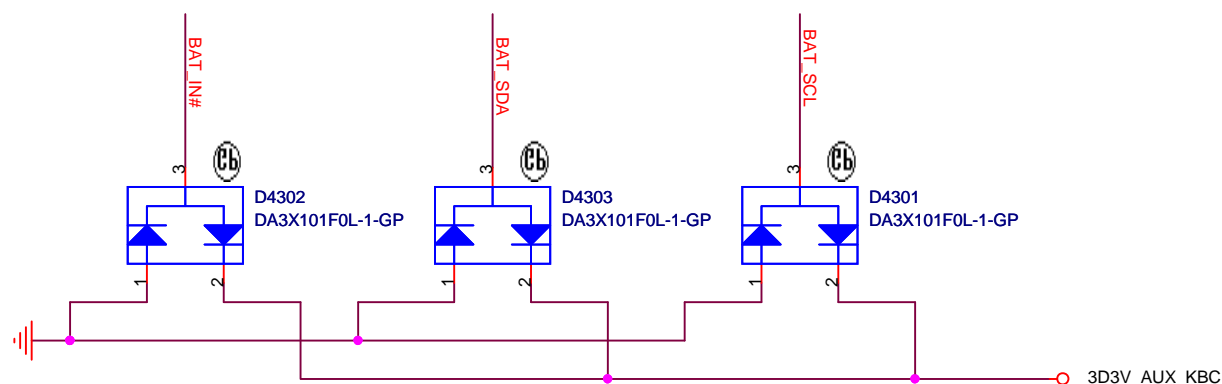
BEMMA

<div>緯創資通</div>		<div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>	
Title			
<div>Reserved</div>			
Size	Document Number		Rev
A4	<div>Janus AMD BEEMA</div>		A00
Date:	Wednesday, March 05, 2014	Sheet 41 of	104


```
SSID = PWR.Support
```



Placement: Close to Batt Connector



75.03101.07D

2nd = 75.00099.E7D

3rd = 75.00099.Q7D

75.03101.07D

2nd = 75.00099.E7D

3rd = 75.00099.Q7D

75.03101.07D

2nd = 75.00099.E7D

3rd = 75.00099.Q7D

BEMMA

緯創資通

Wistron Corporation

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

[illegible]

BATT CONN

Size	A4
------	----

Document Number

Janus AMD BEEMA

Rev

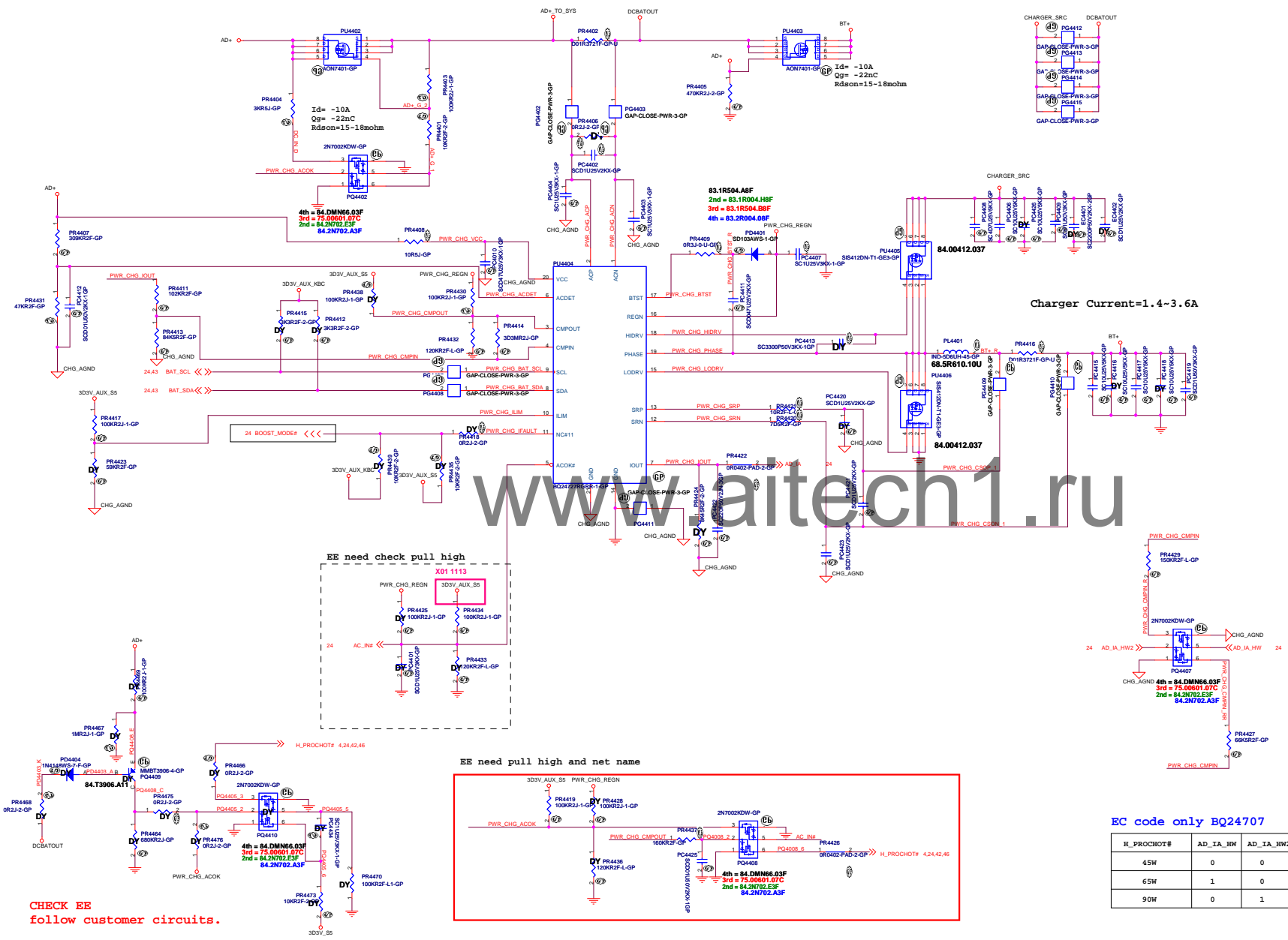
A00

Date: Wednesday, March 05, 2014

Sheet 43 of 104

104

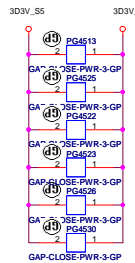
SSID = Charger



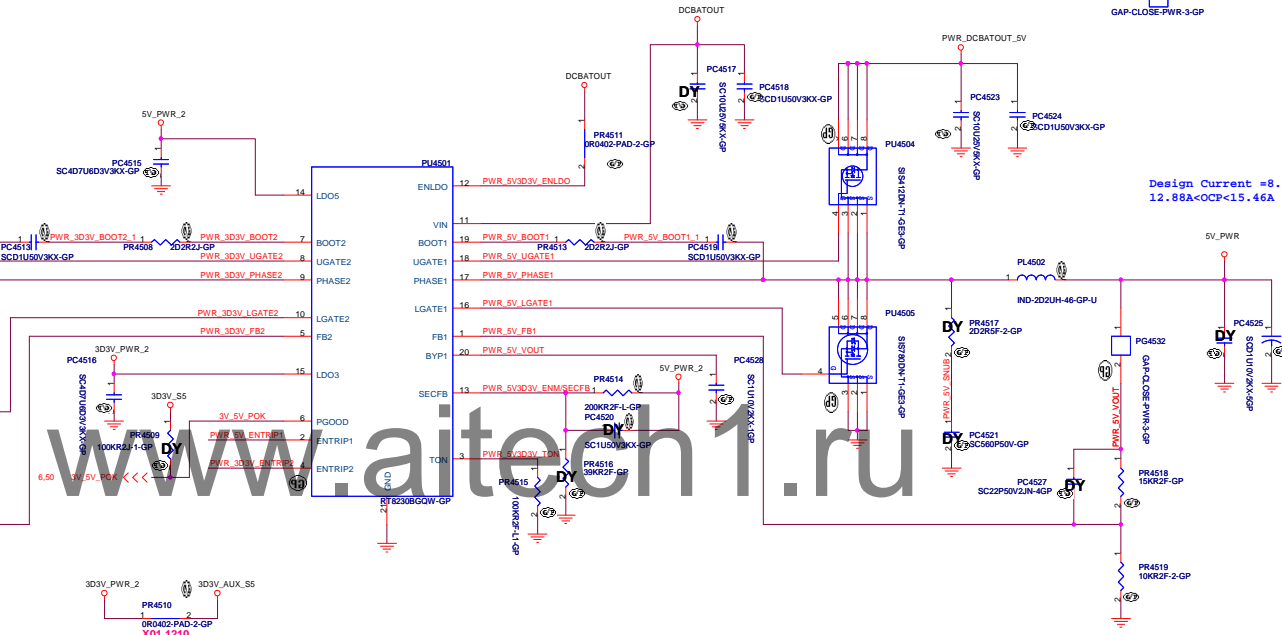
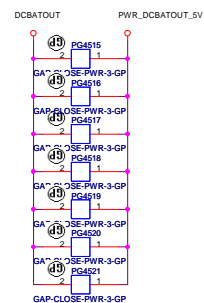
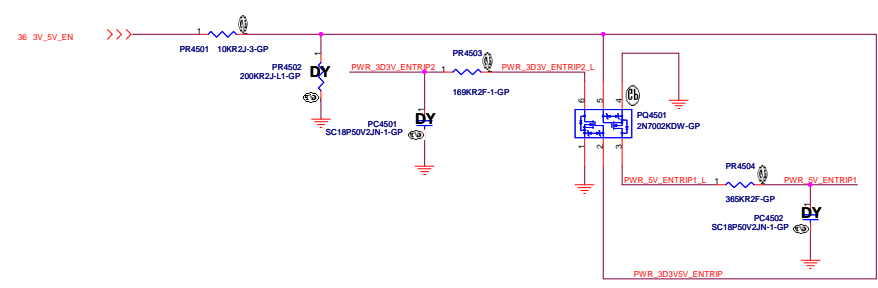
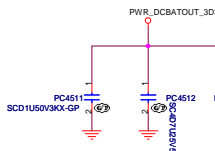
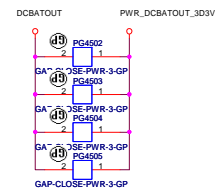
EC code only BQ24707

H_PROCHOT#	AD_IA_HW	AD_IA_HW2
45W	0	0
65W	1	0
90W	0	1

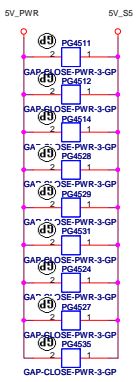
SSID = PWR.Plane.Regulator_5v3p3v



Design Current =3.5A
5.25A<OCP<6.3A



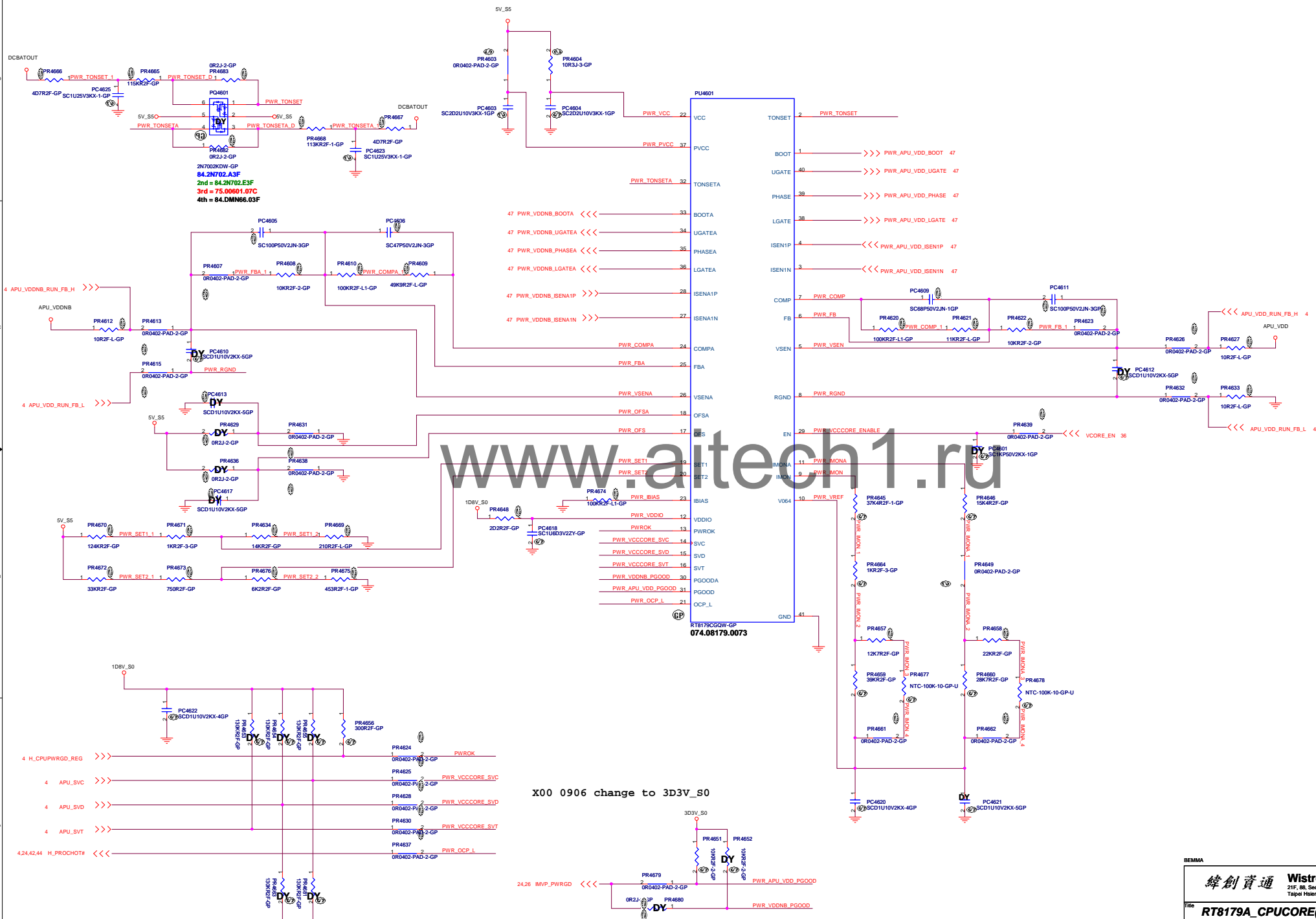
Design Current =8.6A
12.88A<OCP<15.46A




I/P cap: CHIP CAP C 10U 25V K0805 X5R/ 78.10622.51L
Inductor: CHIP IND 3.3UH PCMC063T-3R3MN Cynotec 28mohm/30mohm Isat =13.5Arms 68.3R310.20A
O/P cap:CHIP CAP EL 220U 6.3V M6.3*4.4 /Cheml-con/ 18mOhm / 79.22710.3KL
H/S: SIS412 / 24mOhm/30mOhm@4.5Vgs / 84.00412.037
L/S: SIS780 / 14.5mOhm/17.5mOhm@4.5Vgs / 84.00780.037

I/P cap: CHIP CAP C 10U 25V K0805 X5R/ 78.10622.51L
Inductor: CHIP CHOK 2.2U PCMC063T-2R2MN 18mohm/20mohm Isat =14Arms 68.2R210.20B
O/P cap:CHIP CAP EL 220U 6.3V M6.3*4.4 /Cheml-con/ 18mOhm / 79.22710.3KL
H/S: SIS412 / 24mOhm/30mOhm@4.5Vgs / 84.00412.037
L/S: SIS780 / 14.5mOhm/17.5mOhm@4.5Vgs / 84.00780.037

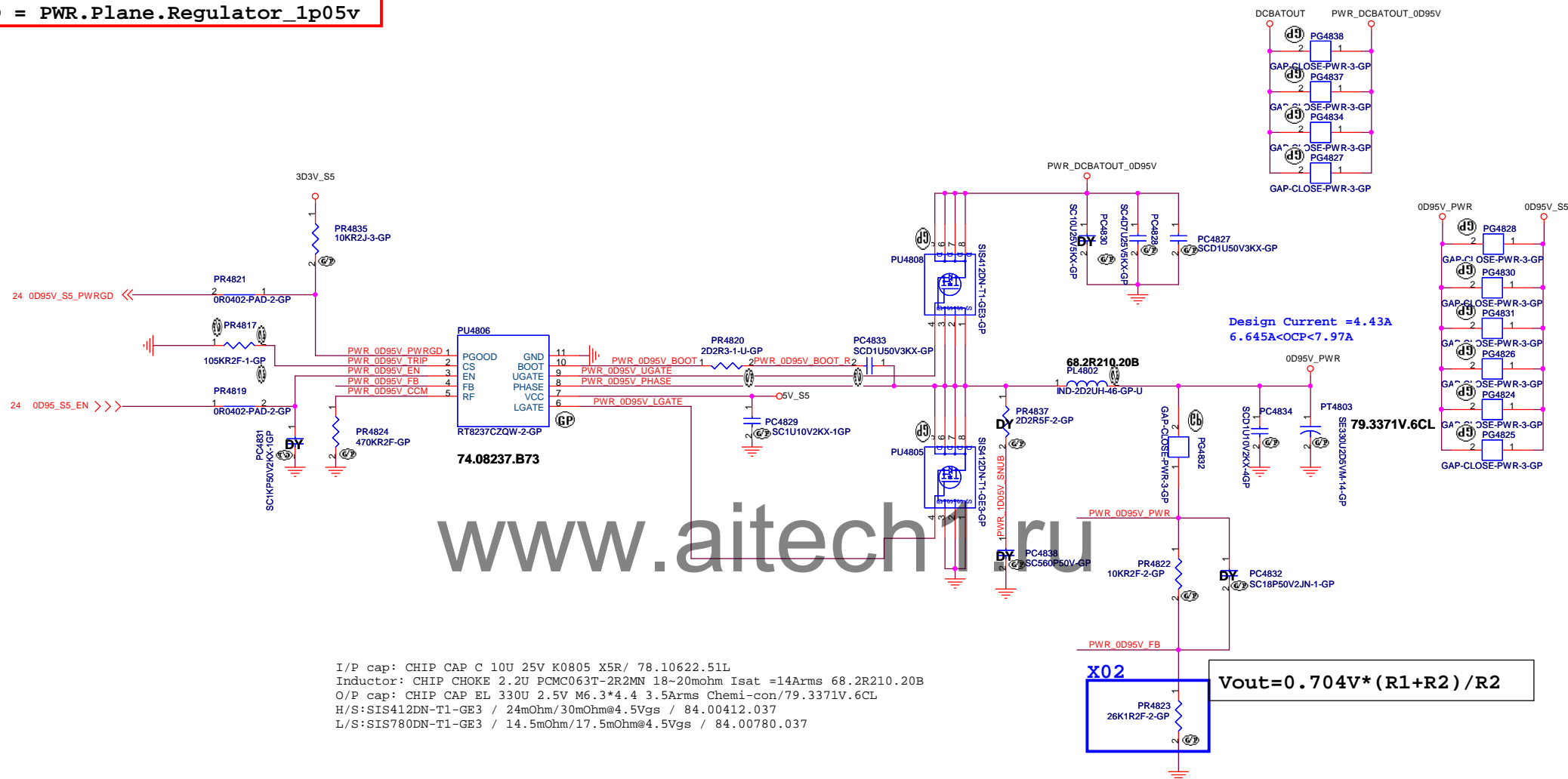
```
SSID = CPU.Regulator
```





BEMMA		 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		RT8179A_CPUCORE(2/2)	
Size A2	Document Number	Rev	
	Janus AMD BEMMA	A00	
Date:	Wednesday, March 05, 2014	Sheet	47 of 104

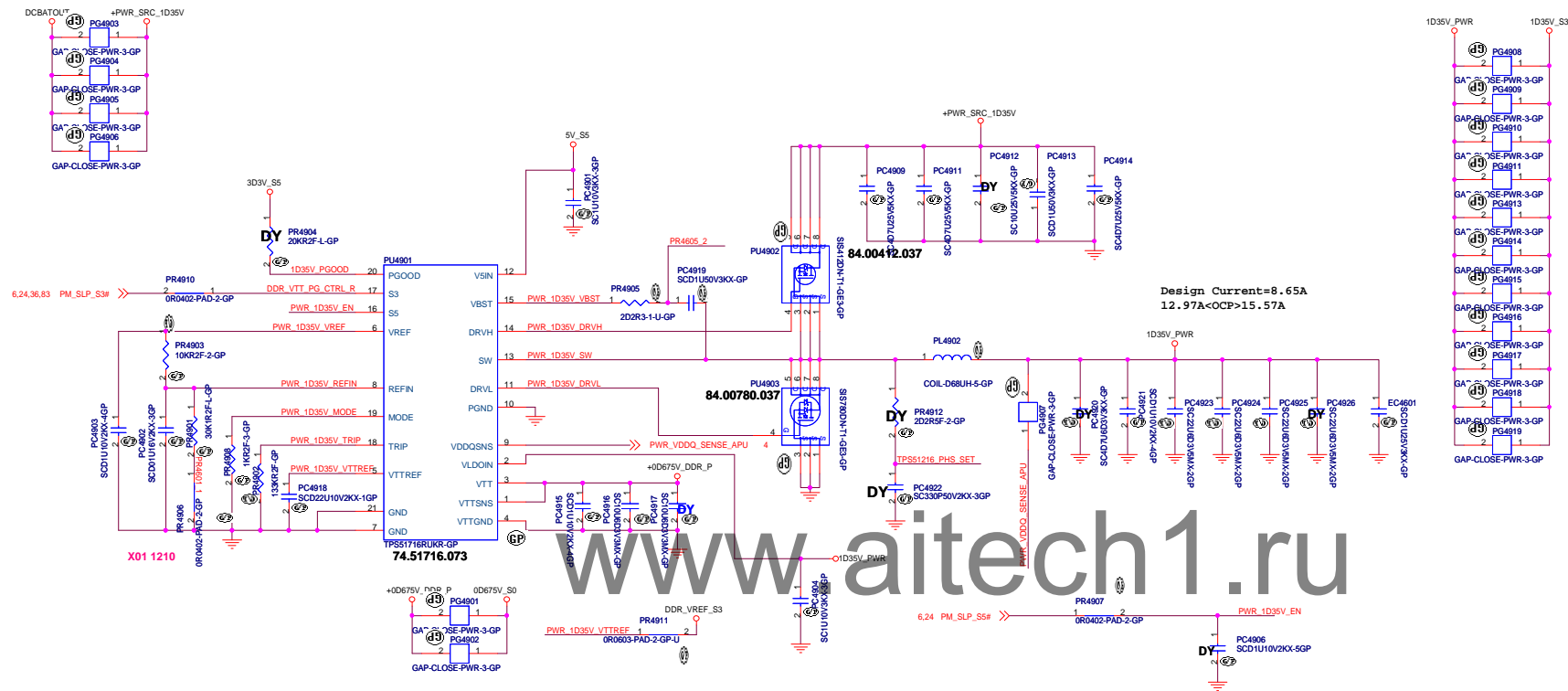
```
SSID = PWR.Plane.Regulator_1p05v
```



I/P cap: CHIP CAP C 10U 25V K0805 X5R/ 78.10622.51L
Inductor: CHIP CHOKE 2.2U PCMC063T-2R2MN 18-20mohm Isat =14Arms 68.2R210.20B
O/P cap: CHIP CAP EL 330U 2.5V M6.3*4.4 3.5Arms Chemi-con/79.3371V.6CL
H/S: SIS412DN-T1-GE3 / 24mOhm/30mOhm@4.5Vgs / 84.00412.037
L/S: SIS780DN-T1-GE3 / 14.5mOhm/17.5mOhm@4.5Vgs / 84.00780.037

$$V_{out} = 0.704V * (R1 + R2) / R2$$

SSID = PWR.Plane.Regulator 1p35v0p675v



State	S3	S5	VDDR	VTTREF	VTT
S0	Hi	Hi	On	On	On
S3	Lo	Hi	On	On	Off (Hi-Z)
S4/S5	Lo	Lo	Off	Off	Off

TPS51716 MODE

PR4608	Frequency	Discharge Mode
33k ohm	500kHz	Non-tracking Discharge
22k ohm	670kHz	
12k ohm	670kHz	
1k ohm	500kHz	Tracking Discharge

I/P cap: 10U 25V K0805 X5R / 78.10622.51L
Inductor: CHIP IND 0.1UH M PCMC063T-R10MN 1.5-1.7mohm Isat =60Arms 68.R1010.10T
O/P cap: CHIP CAP C 22U 6.3V M0805 X5R /78.22610.51L
H/S:SIS412 / 24mOhm/30mOhm@4.5Vgs / 84.00412.037
L/S:SIS780 / 14.5mOhm/17.5mOhm@4.5Vgs / 84.00780.037

BEMMA

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

File TPS51716_1D35V_S3

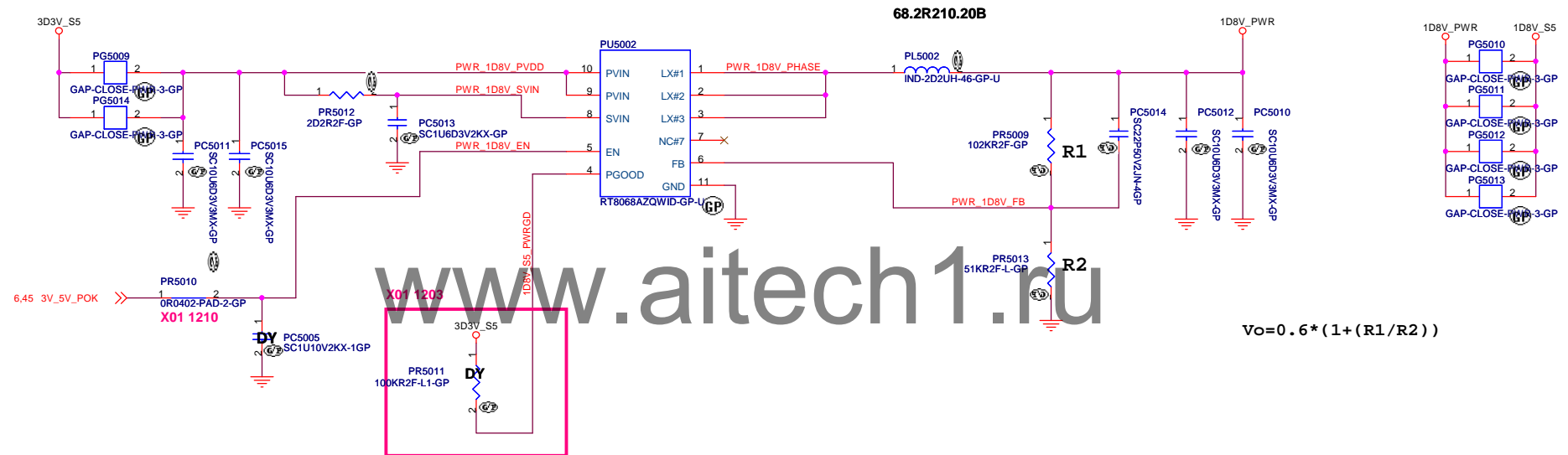
Size C Document Number Janus AMD BEEMA Rev A00

Date: Wednesday, March 05, 2014 Sheet 49 of 104

```
SSID = PWR.Plane.Regulator_1p8v
```

RT8068A for 1D8V_S5

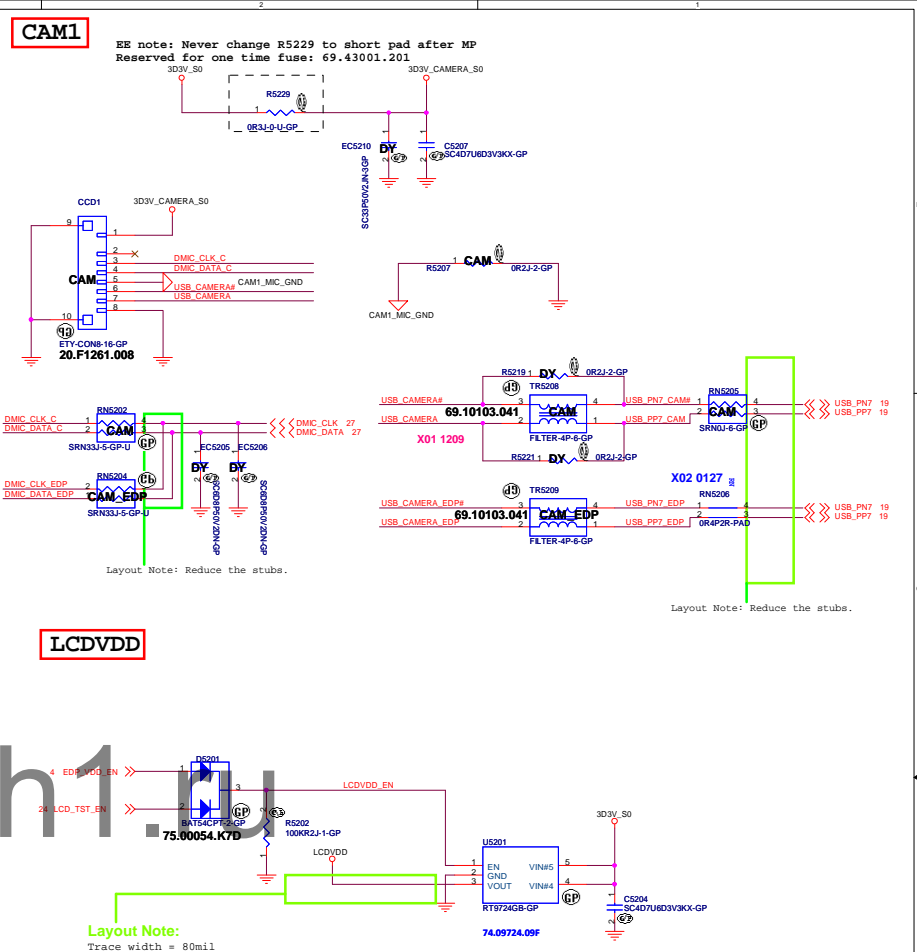
Design Current=1.62A



$$V_o = 0.6 * (1 + (R1/R2))$$

SSID = PWR.Plane.Regulator_1p5v

(Blanking)
www.aitech1.ru



(Blanking)
www.aitech1.ru

BEMMA

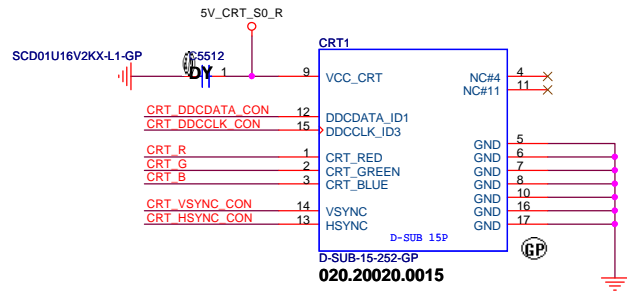
緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
(Reserved)			
Size	Document Number		Rev
A3	Janus AMD BEEMA		A00
Date: Wednesday, March 05, 2014		Sheet 53 of 104	

SSID = VIDEO

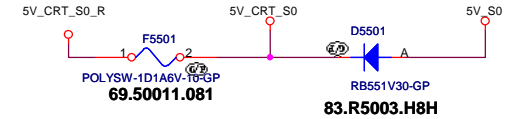
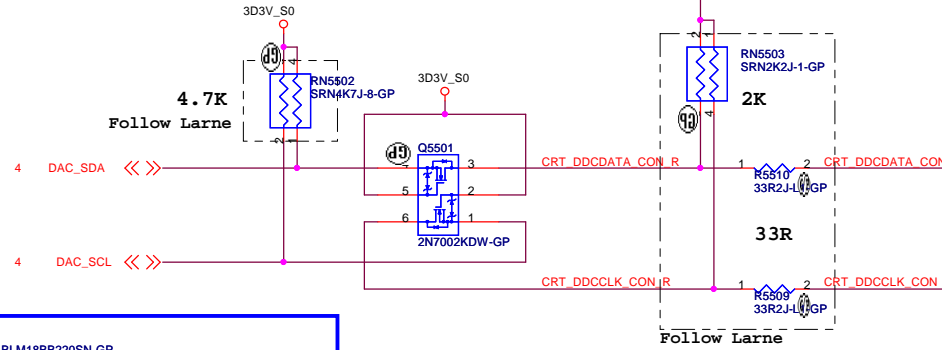
(Blanking)

www.aitech1.ru

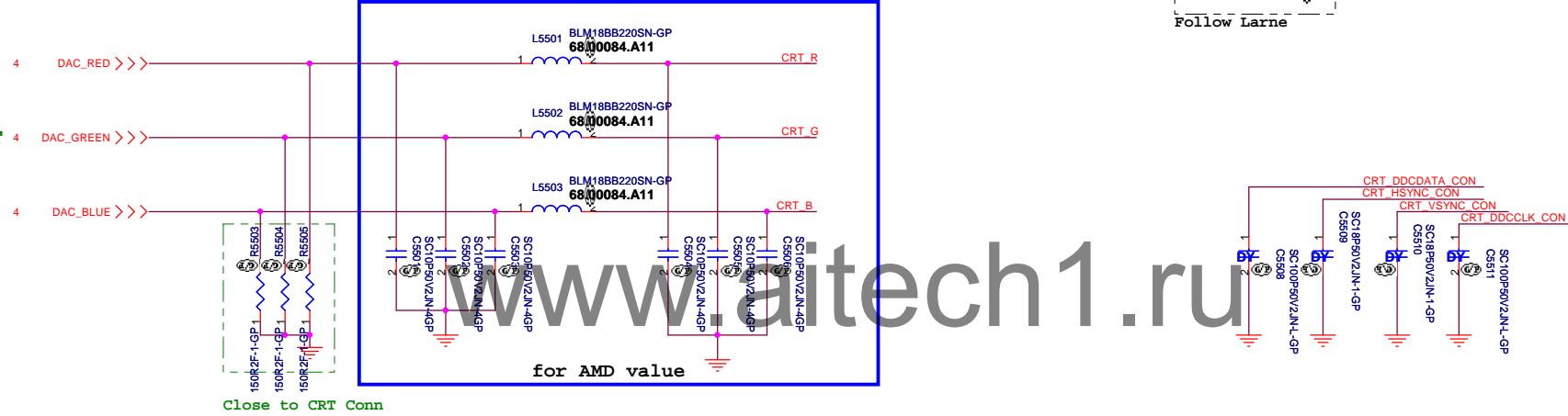
CRT Board Connector



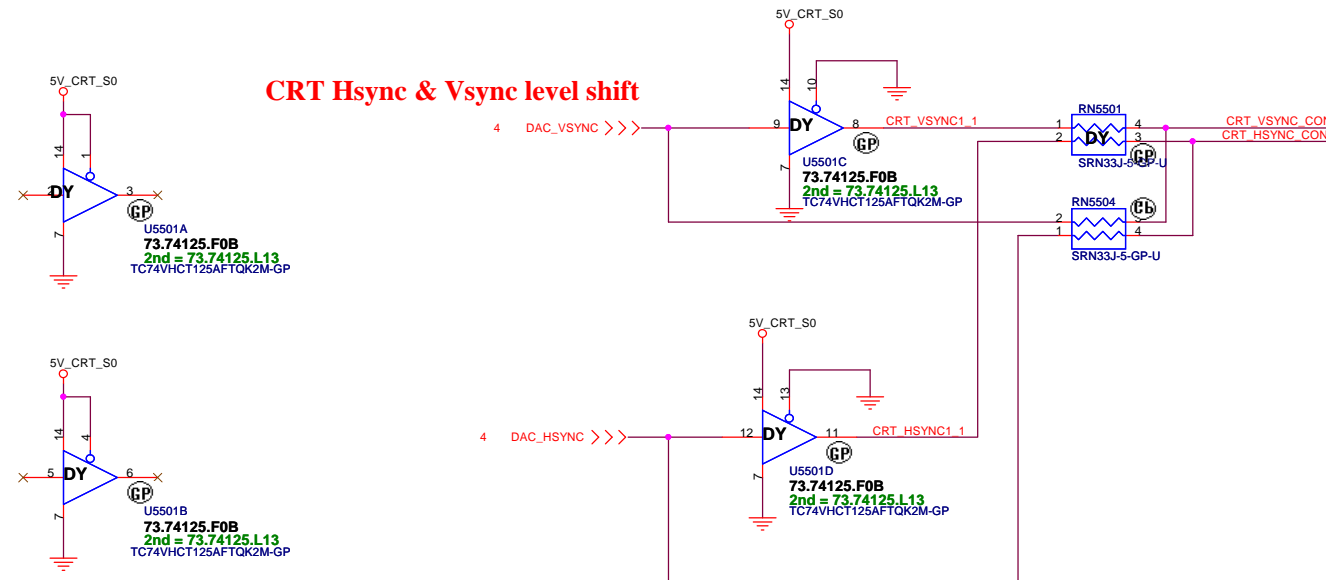
CRT DDCDATA & DDCCLK level shift



APU to CRT

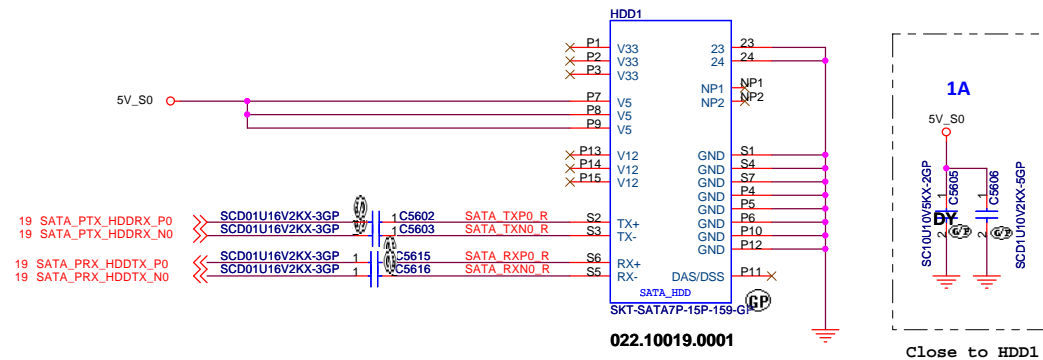


CRT Hsync & Vsync level shift



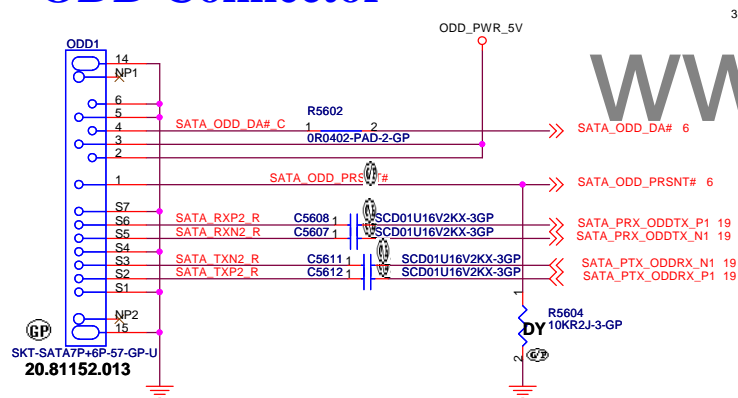
SSID = SATA

SATA HDD Connector



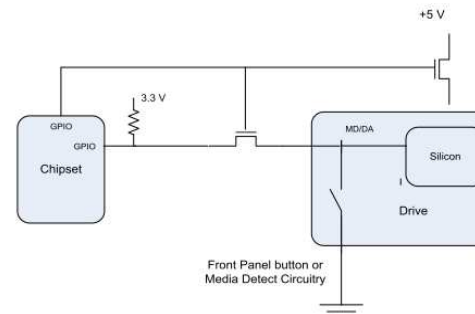
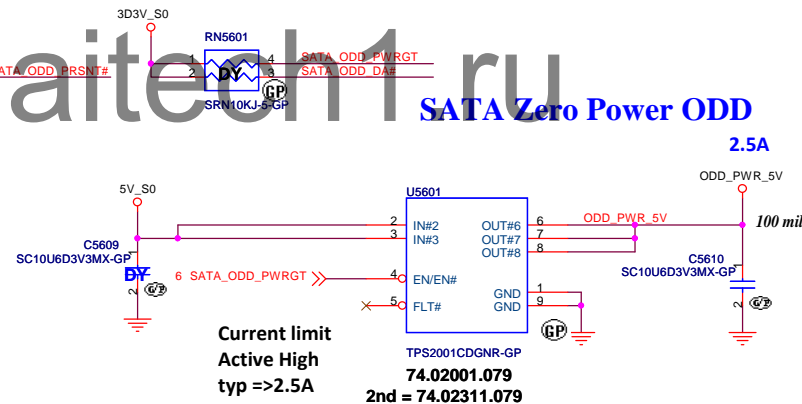
ME Note: New HDD conn symbol is not ready,
we will use original OAK HDD conn (22.10300.991) and shift to the correct position.

ODD Connector



www.aitech1.ru

SATA Zero Power ODD



BEMMA

緯創資通

Wistron Corporation

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

Title

HDD/ODD

Size
A3

Document Number

Janus AMD BEEMA

Rev
A00

Date: Wednesday, March 05, 2014

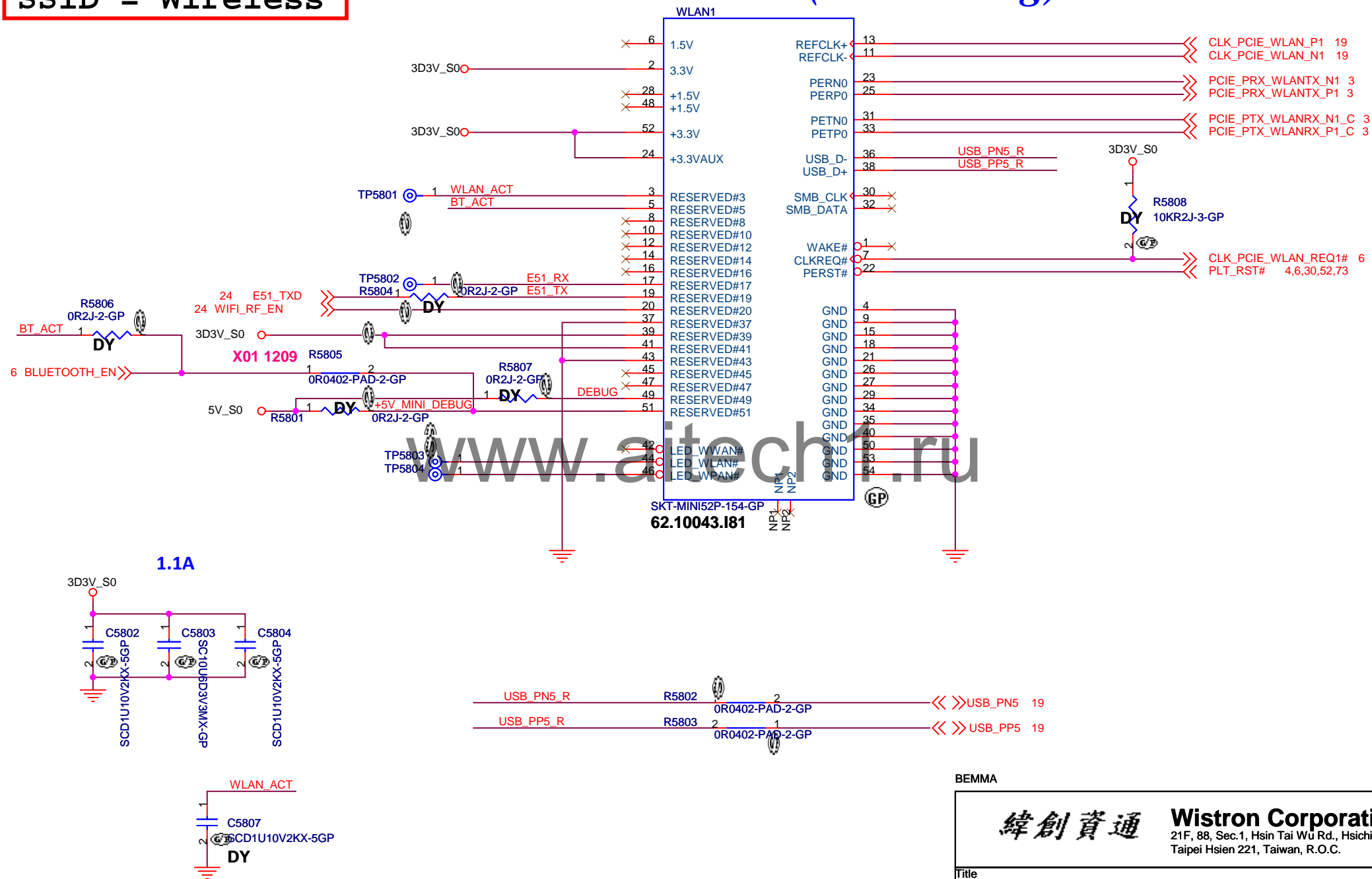
Sheet 56 of 104

SSID = ESATA

www.aitech1.ru
(Blanking)

SSID = Wireless

Mini Card Connector(802.11a/b/g)



BEMMA

緯創資通

Wistron Corporation

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

Title	Author	Year	Journal	Volume	Issue	Page
1. The Effect of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	1-15
2. The Impact of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	16-30
3. The Effect of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	31-45
4. The Impact of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	46-60
5. The Effect of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	61-75
6. The Impact of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	76-90
7. The Effect of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	91-105
8. The Impact of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	106-120
9. The Effect of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	121-135
10. The Impact of the 1997 Asian Financial Crisis on the U.S. Economy	John H. Coatsworth	1998	Journal of International Economics	50	1	136-150

WLAN CONN

Size	A4
------	----

Document Number

Janus AMD BEEMA

Rev	A00
-----	------------

Date: Wednesday, March 05, 2014


Sheet 58 of 104

104

(Blanking)

www.aitech1.ru

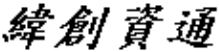
BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title		
Reserved		
Size A4	Document Number Janus AMD BEEMA	Rev A00
Date: Wednesday, March 05, 2014		Sheet 59 of 104

(Blanking)

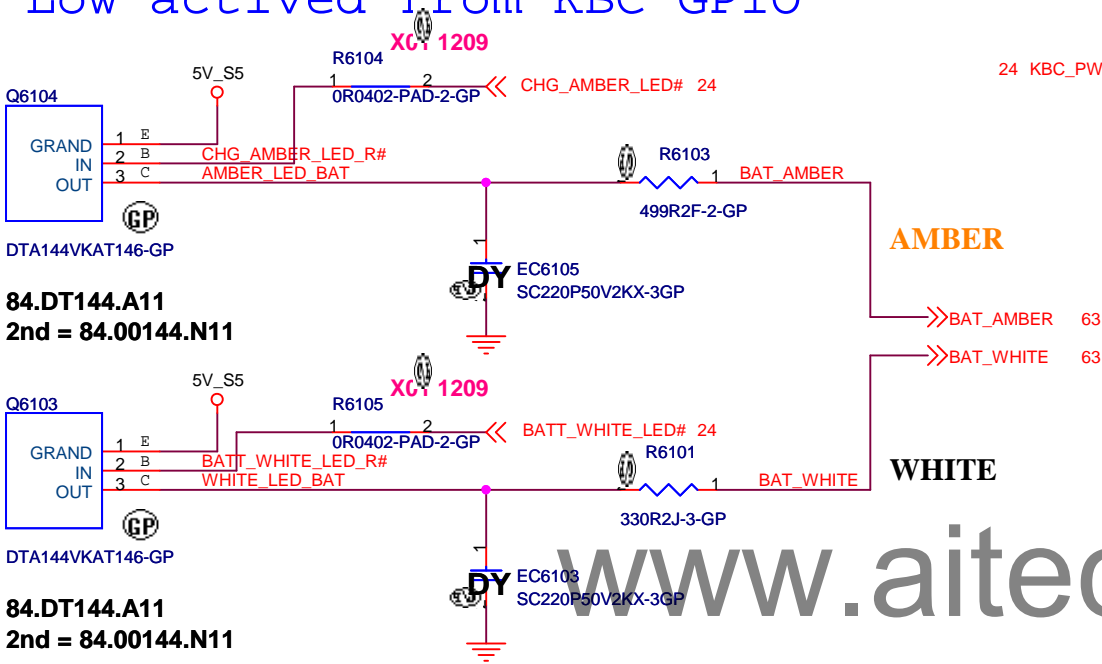
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title (Reserved)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 60 of	104

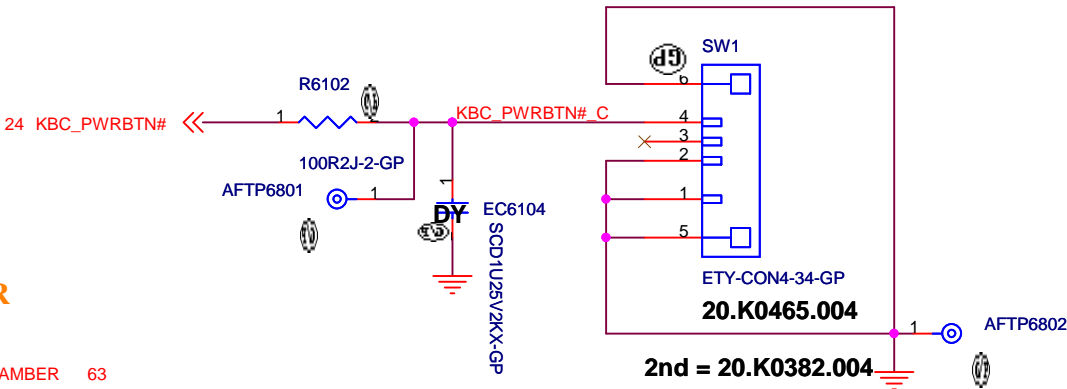
SSID = User.Interface

Battery LED1 (AMBER_LED)
Low activated from KBC GPIO



Battery LED2 (WHITE_LED)
Low activated from KBC GPIO

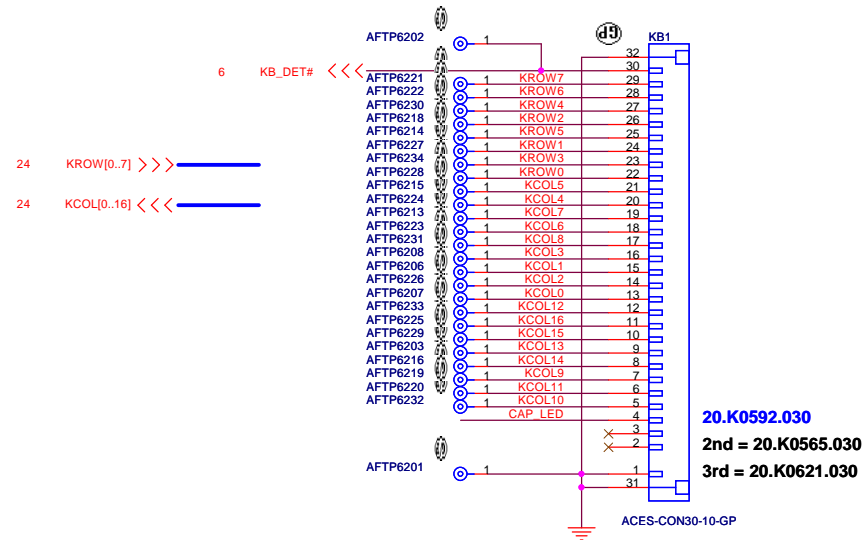
Power button



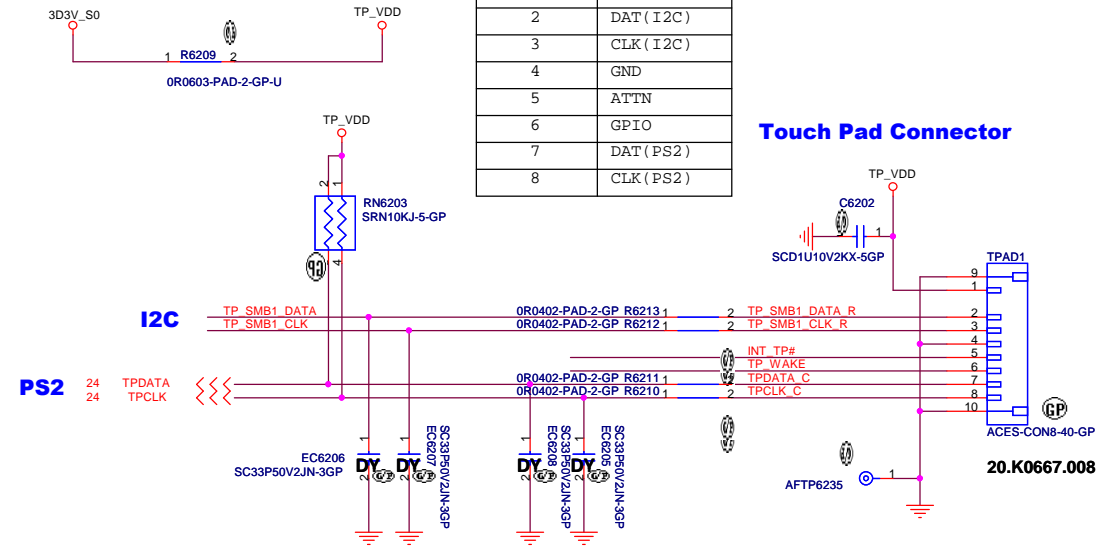
www.aitech1.ru

SSID = KBC

Internal Keyboard Connector (DVC40)

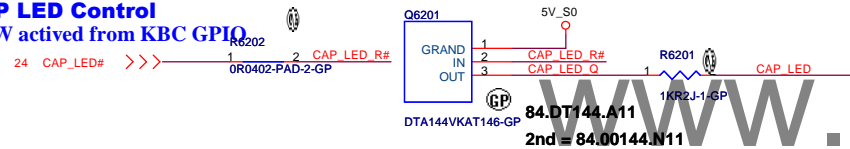


```
SSID = Touch.Pad
```

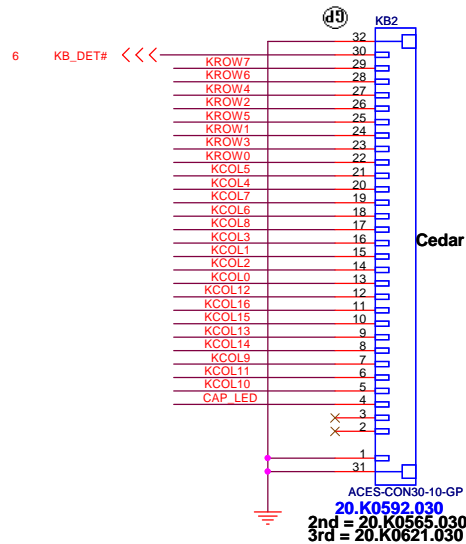


Pin number	Pin name
1	VDD
2	DAT(I2C)
3	CLK(I2C)
4	GND
5	ATTN
6	GPIO
7	DAT(PS2)
8	CLK(PS2)

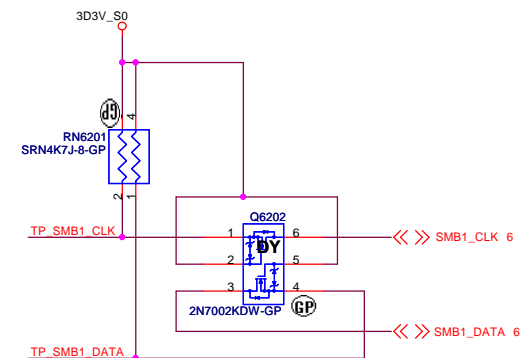
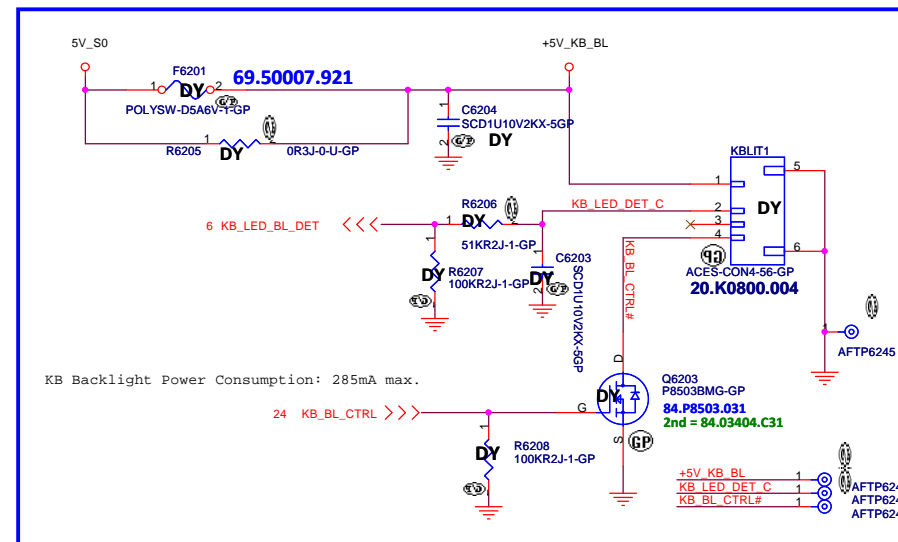
CAP LED Control
LOW actived from KBC GPIO

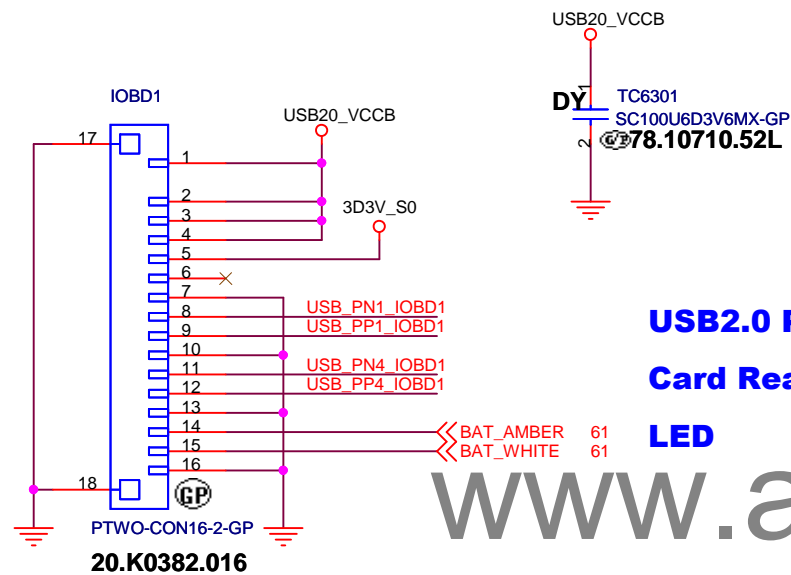


Internal Keyboard Connector (DVC50)



Keyboard Backlight (DVC50)

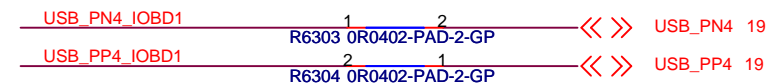
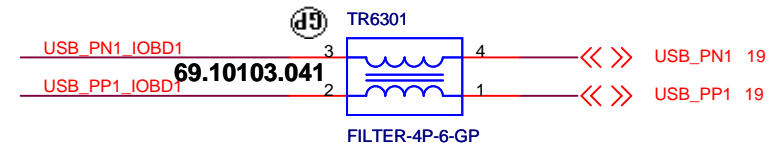




USB2.0 Port3

Card Reader

LED



The maximum range of the PMOS output current in RTS5170 (Card Reader IC) is 400mA

BEMMA

緯創資通

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

Title

IO Board Connector

Size
A4

Document Number

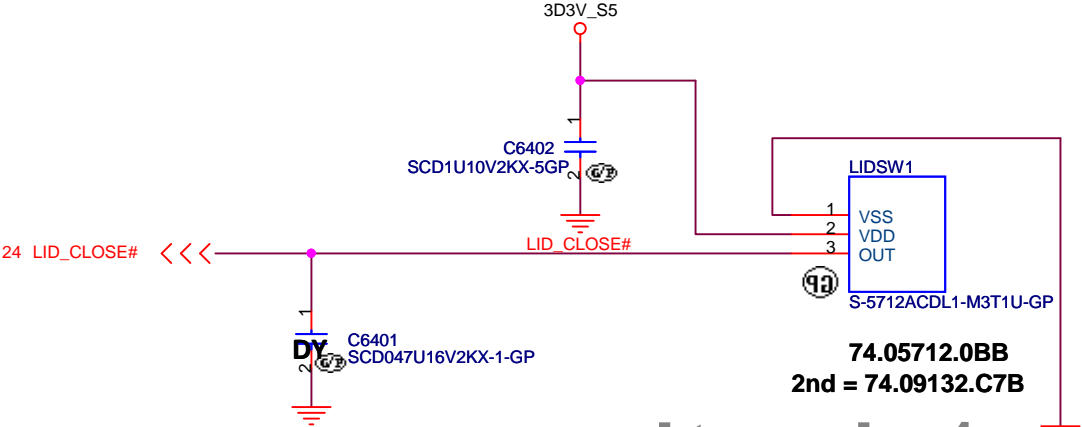
Janus AMD BEEMA

Rev
A00

Date: Wednesday, March 05, 2014

Sheet 63 of 104

SSID = User.Interface



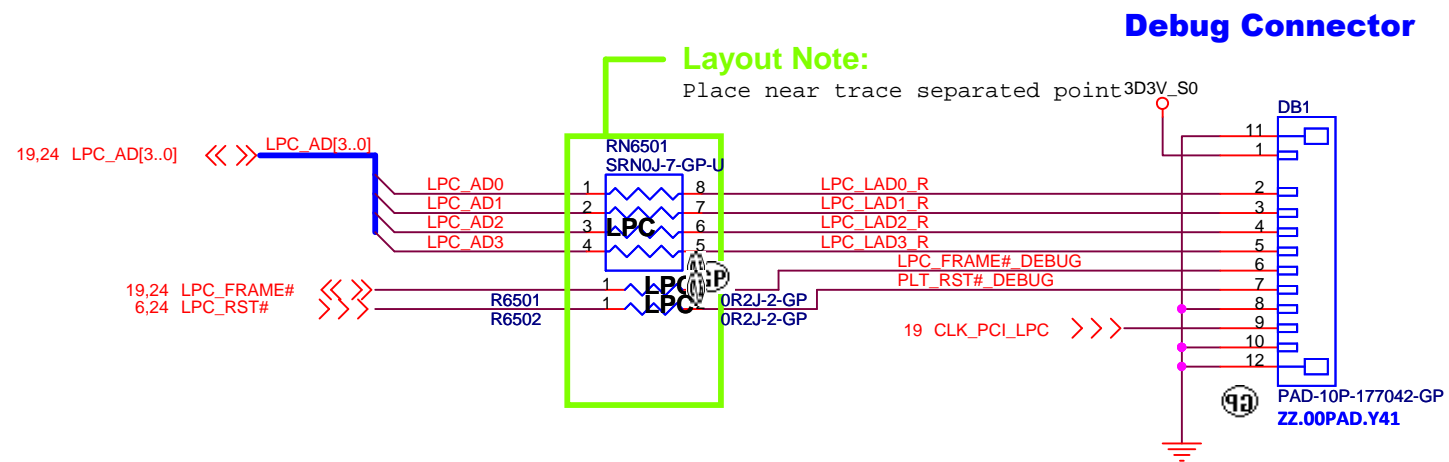
www.aitech1.ru

BEMMA

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	Document Number		Rev	
A4	Janus AMD BEEMA		A00	
Date:	Wednesday, March 05, 2014		Sheet	64 of 104

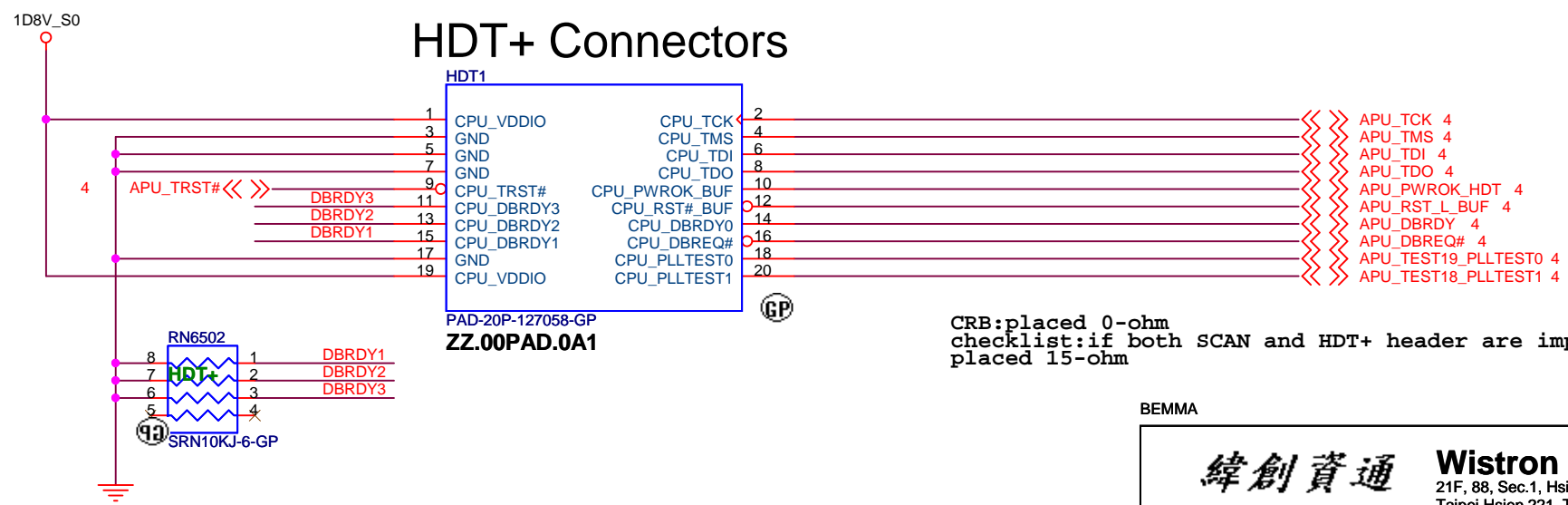
SSID = DEBUG PORT



20.D0075.110: Dummy Pad with solder mask is ZZ.00PAD.Y41
DB1 Optional: New one smaller LPC connector is 20.F1180.010.

www.aitech1.ru

HDT+ Connectors



(Blanking)

www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title		
Reserved		
Size	Document Number	Rev
A4	Janus AMD BEEMA	A00
Date: Wednesday, March 05, 2014		Sheet 66 of 104

www.aitech1.ru
(Blanking)

BEMMA

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
A3

Document Number
Janus AMD BEEMA

Rev
A00

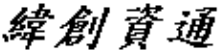
Date: Wednesday, March 05, 2014

Sheet 67 of 104

1

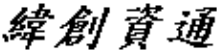
(Blanking)
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Thunderbolt (1/5)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014	Sheet 68	of	104

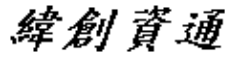
(Blanking)
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Thunderbolt (2/5)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 69 of	104

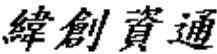
(Blanking)
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Thunderbolt (3/5)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 70 of	104

(Blanking)
www.aitech1.ru

BEMMA

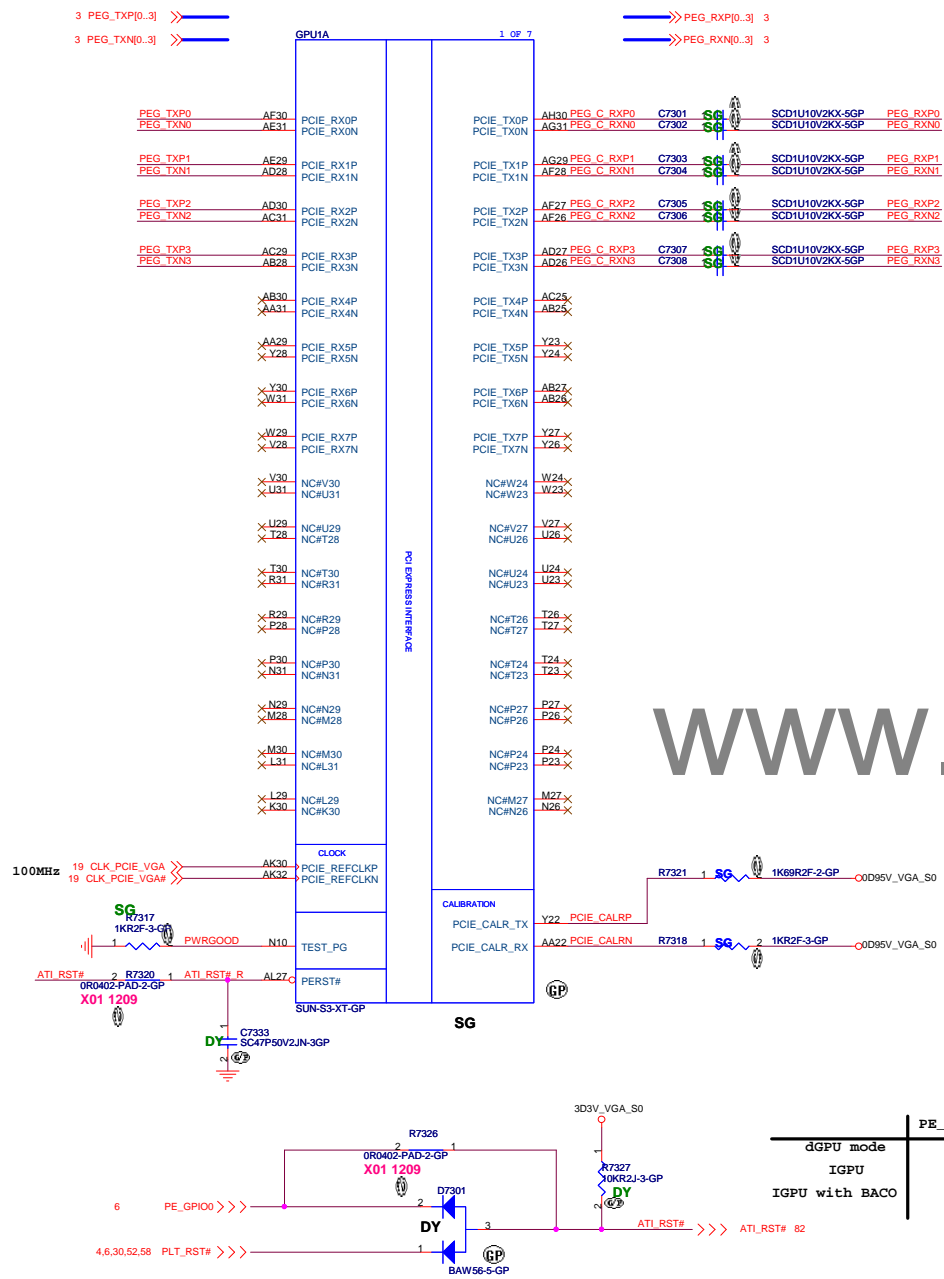
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Thunderbolt (4/5)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014	Sheet 71	of	104

(Blanking)

www.aitech1.ru

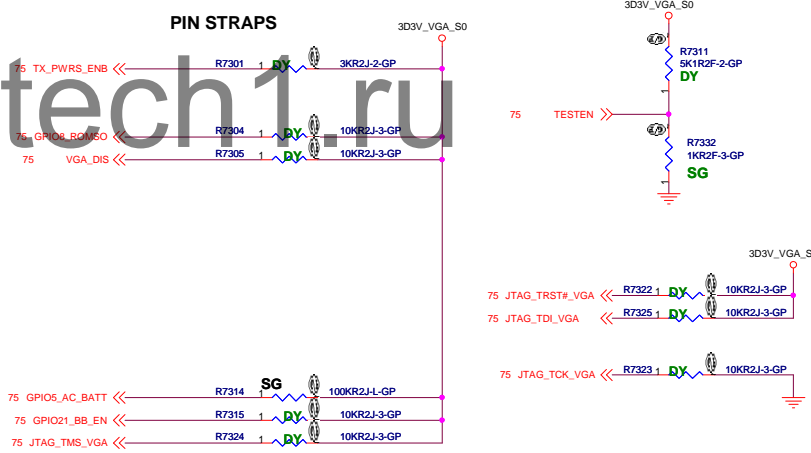
BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Thunderbolt (5/5)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>72</div> of <div>104</div>



CONFIGURATION STRAPS			RECOMMENDED SETTINGS	
ALLOW FOR PULLUP PADS FOR THESE STRAPS AND IF THESE GPIOs ARE USED, THEY MUST NOT CONFLICT DURING RESET			0= DO NOT INSTALL RESISTOR 1= INSTALL 3K RESISTOR X = DESIGN DEPENDANT NA = NOT APPLICABLE	
STRAPS	PIN	DESCRIPTION OF DEFAULT SETTINGS	RECOMMEND	PLATFORM SETTING
TX_PWRS_ENB	GPIO0	Transmitter Power Savings Enable 0: 50% Tx output swing 1: Full Tx output swing	X	1
TX_DEEMPH_EN	GPIO1	PCIe TRANSMITTER DE-EMPHASIS ENABLED 0:Tx de-emphasis disabled 1:Tx de-emphasis enabled	X	1
BIF_GEN2_EN_A	GPIO2	0:Advertises the PCIe device as 2.5GT/s capable at power on. 1:Advertises the PCIe device as 5.0GT/s capable at power on.	0	0
GPIO5_AC_BATT	GPIO5	optional input allow the system to request a fast power reduction by setting GPIO5 to low.	?	0
RESERVED	GPIO8	RESERVED	0	0
VGA_DIS	GPIO9	0:VGA Controller capacity enabled 1:The device won't be recognized as the system's VGA controller	0	0
ROMIDCFG[2:0]	GPIO[13:11]	BIOS_ROM_EN=1, Config[2:0] defines the ROM type BIOS_ROM_EN=0, Config[2:0] defines the primary memory aperture size	X X X	0 0 1 (256MB)
RESERVED	GPIO21	RESERVED	0	0
BIOS_ROM_EN	GPIO_22_ROMCSB	0:Disable external BIOS ROM device 1:Enable external BIOS ROM device	X	0
VIP_DEVICE_STRAP_EN	V2SYNC	VIP Device Strap Enable indicates to the software driver that it sense whether or not a VIP device is connected on the VIP Host interface.	X	0
RSVD	H2SYNC	RESERVED	0	0
RSVD	GENERICC	RESERVED	0	0
AUD[1]	HSYNC	AUD[1:0]:11-Audio for both DisplayPort and HDMI	X	1
AUD[0]	VSXNC		X	1

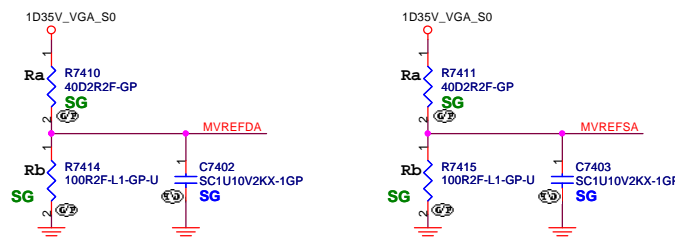
www.aitech1.ru



JTAG SIGNAL OPTION			
Signal	Normal mode	Debug mode	pilot run mode
TESTEN	"1" (PU)	"1" (PU)	"0" (PD)
JTAG_TRST#	"0" (PD)	"1" (PU)	NC
JTAG_TCK	CLK	"1" (PU)	NC
JTAG_TMS	"1" (PU)	"1" (PU)	NC

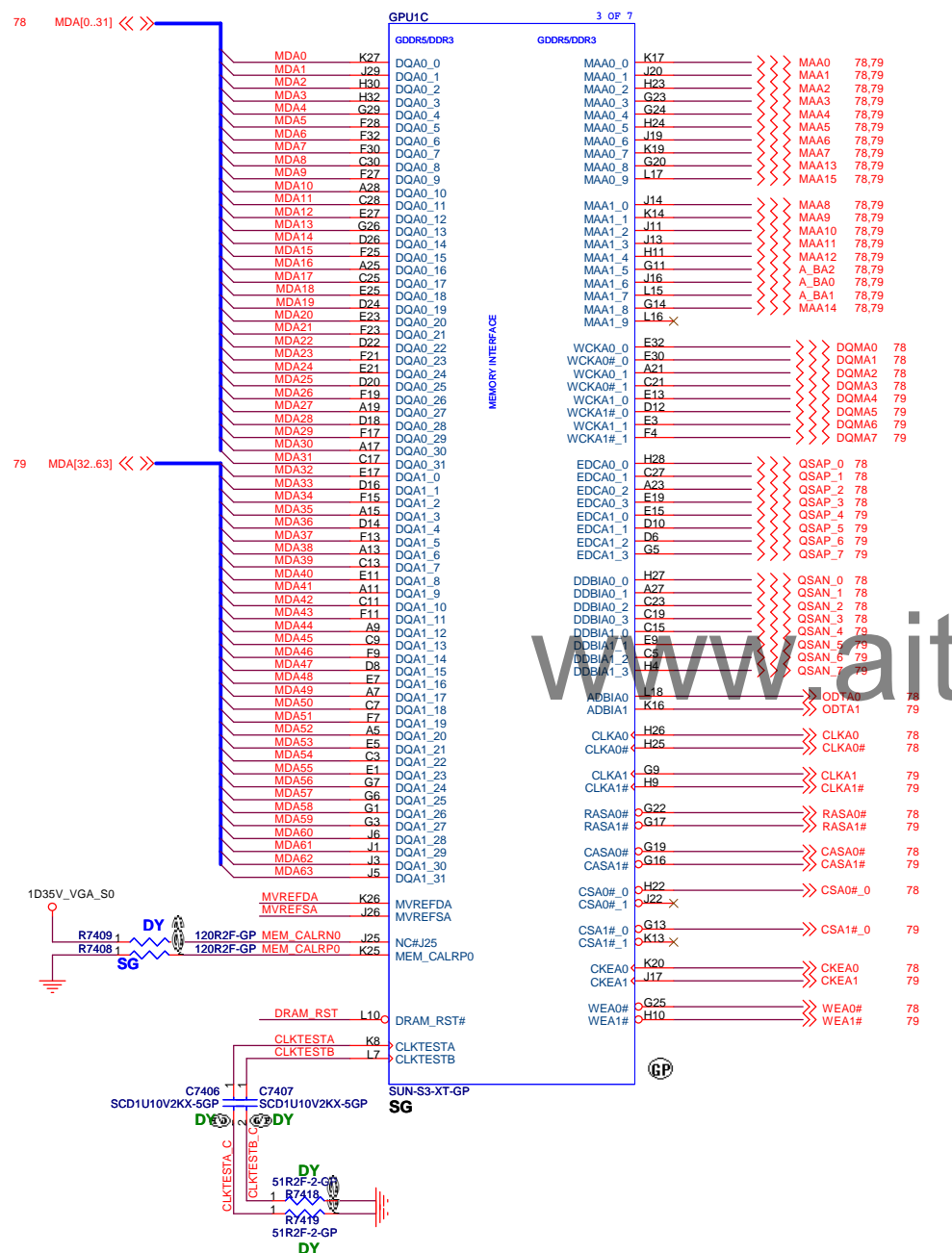
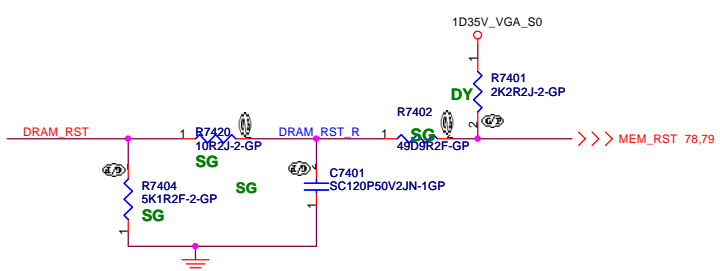
	PE_GPIO0
dGPU mode	H
IGPU	L
IGPU with BACO	H

PLACE MVREF DIVIDERS AND CAPS CLOSE TO ASIC

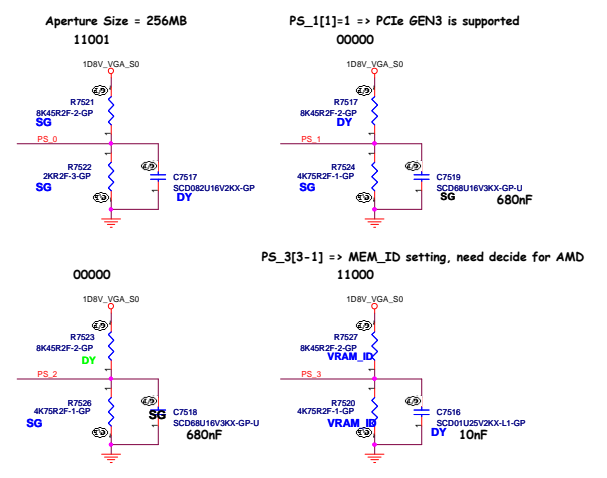


DDR3/GDDR3 Memory Stuff Option(Mad/Park)

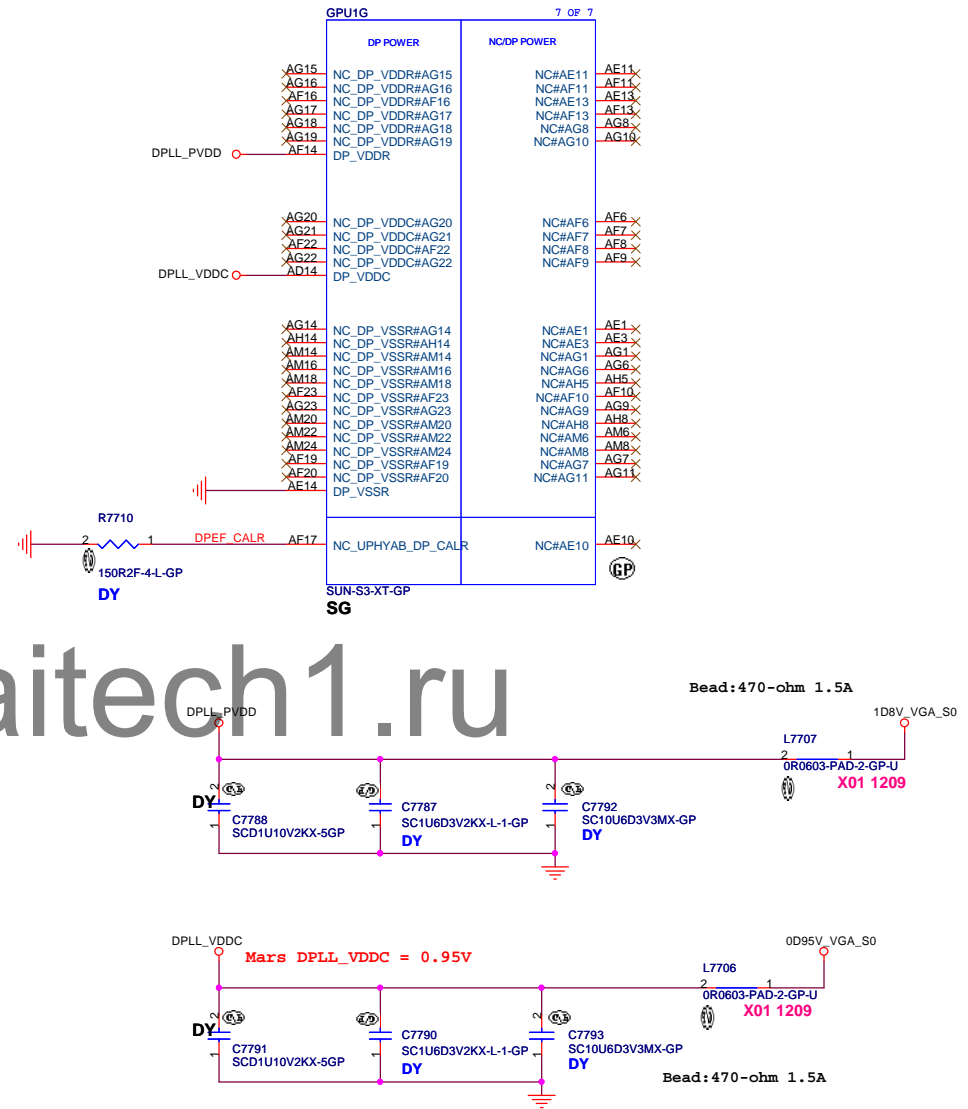
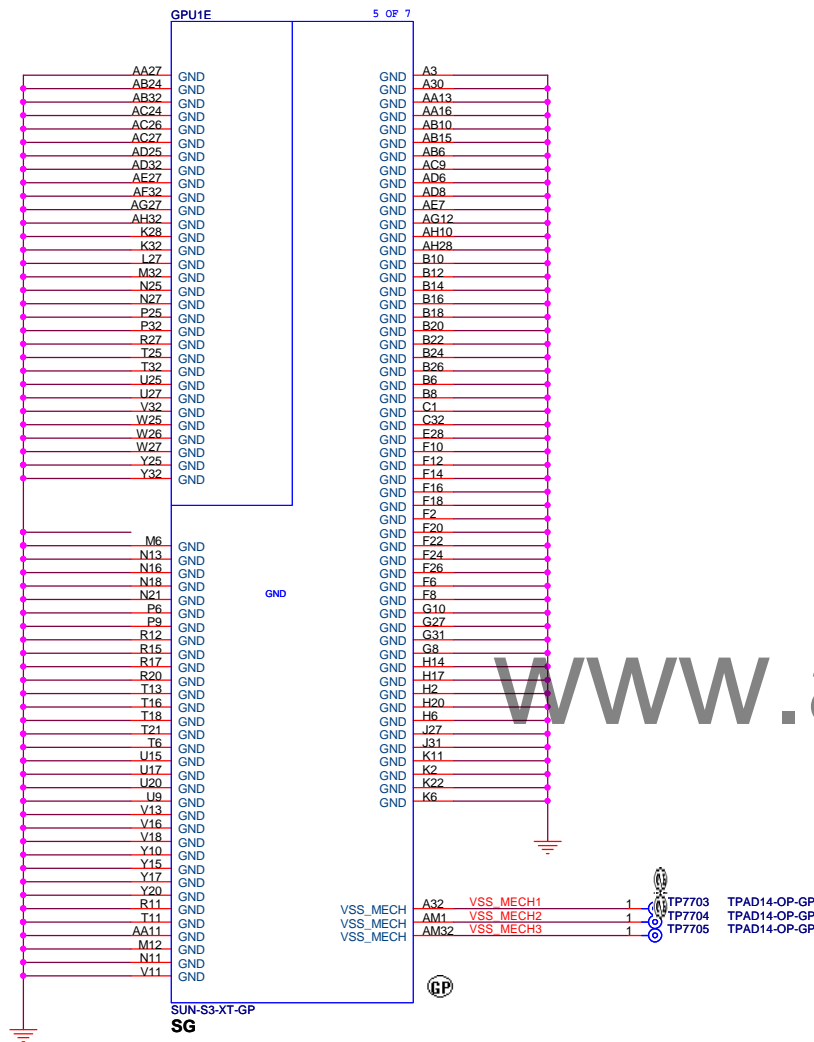
	GDDR5	GDDR3	DDR3
MVDDQ	1.5V	1.8V/1.5V	1.35V
Ra	40.2R	40.2R	40.2R
Rb	100R	100R	100R



www.aitech1.ru



	Bit5,4		Bit3,2,1			
	C	nF	R_pu	K Ohm	R_pd	K Ohm
FS0	C8517	NC	R8521	8.45	R8522	2
FS1	C8519	680	R8517	NC	R8524	4.75
FS2	C8518	680	R8523	NC	R8526	4.75
FS3	C8516	NC	R8527	NC	R8520	4.75



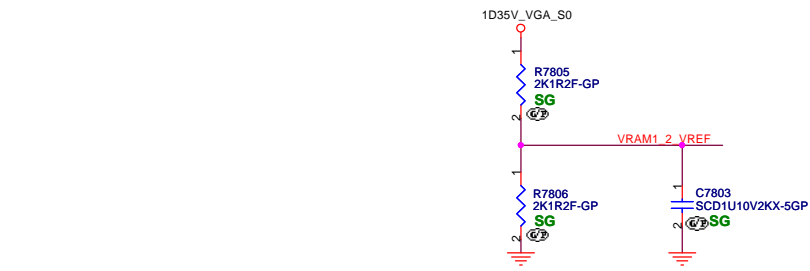
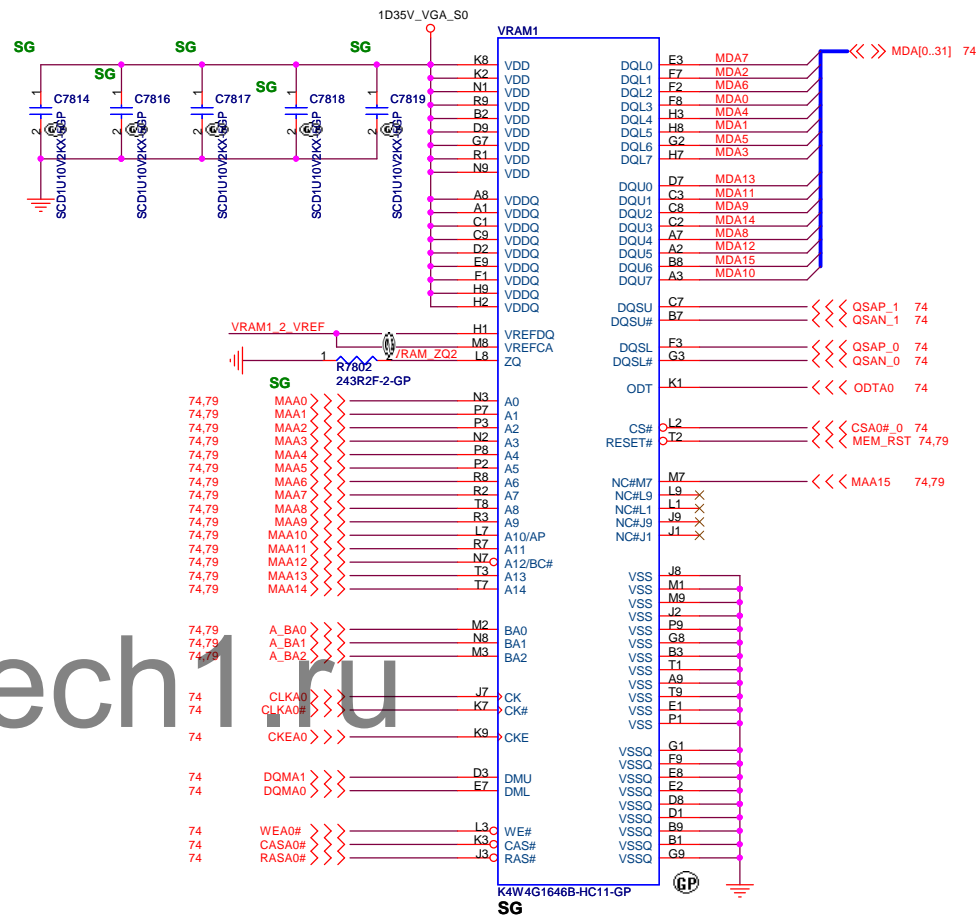
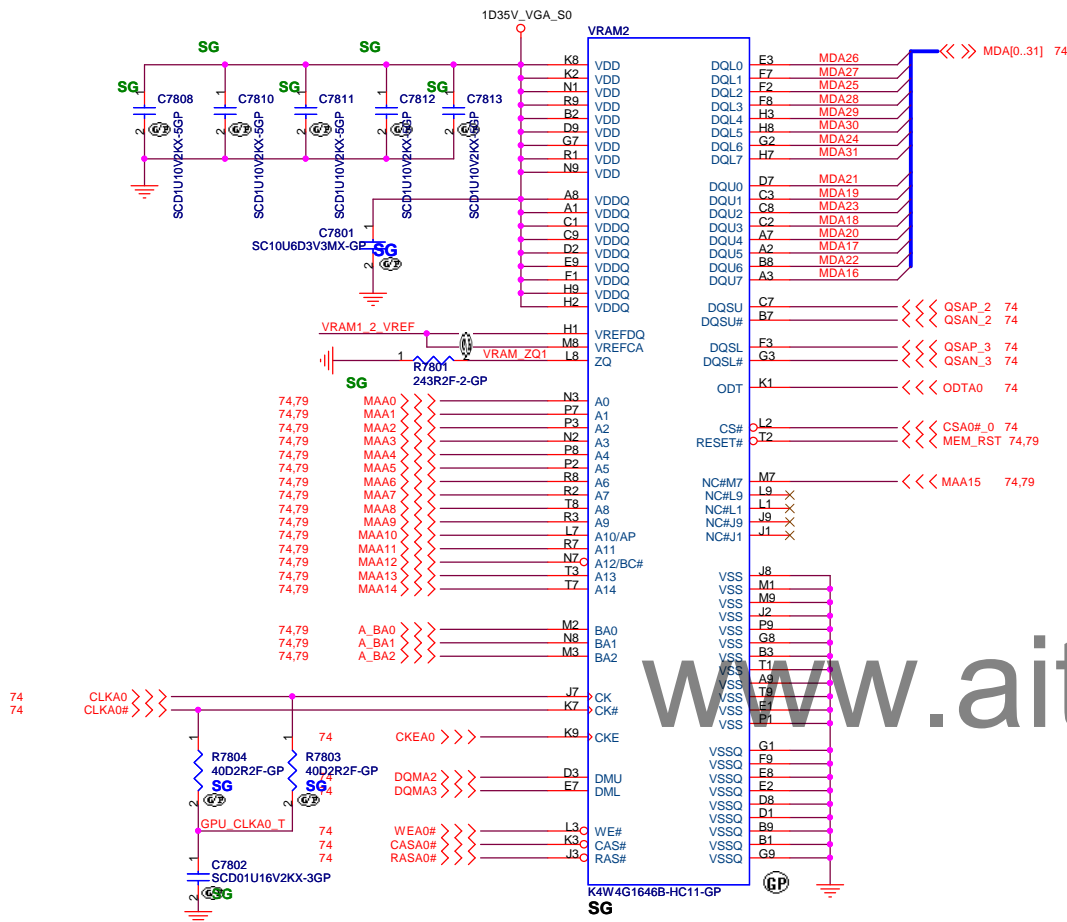
BEMMA

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

Title **GPU_POWER/GND**

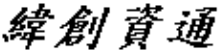
Size Project Name **<Project Name>** Rev **<Rev>**

Date: Wednesday, March 05, 2014 Sheet 77 of 104



www.aitech1.ru

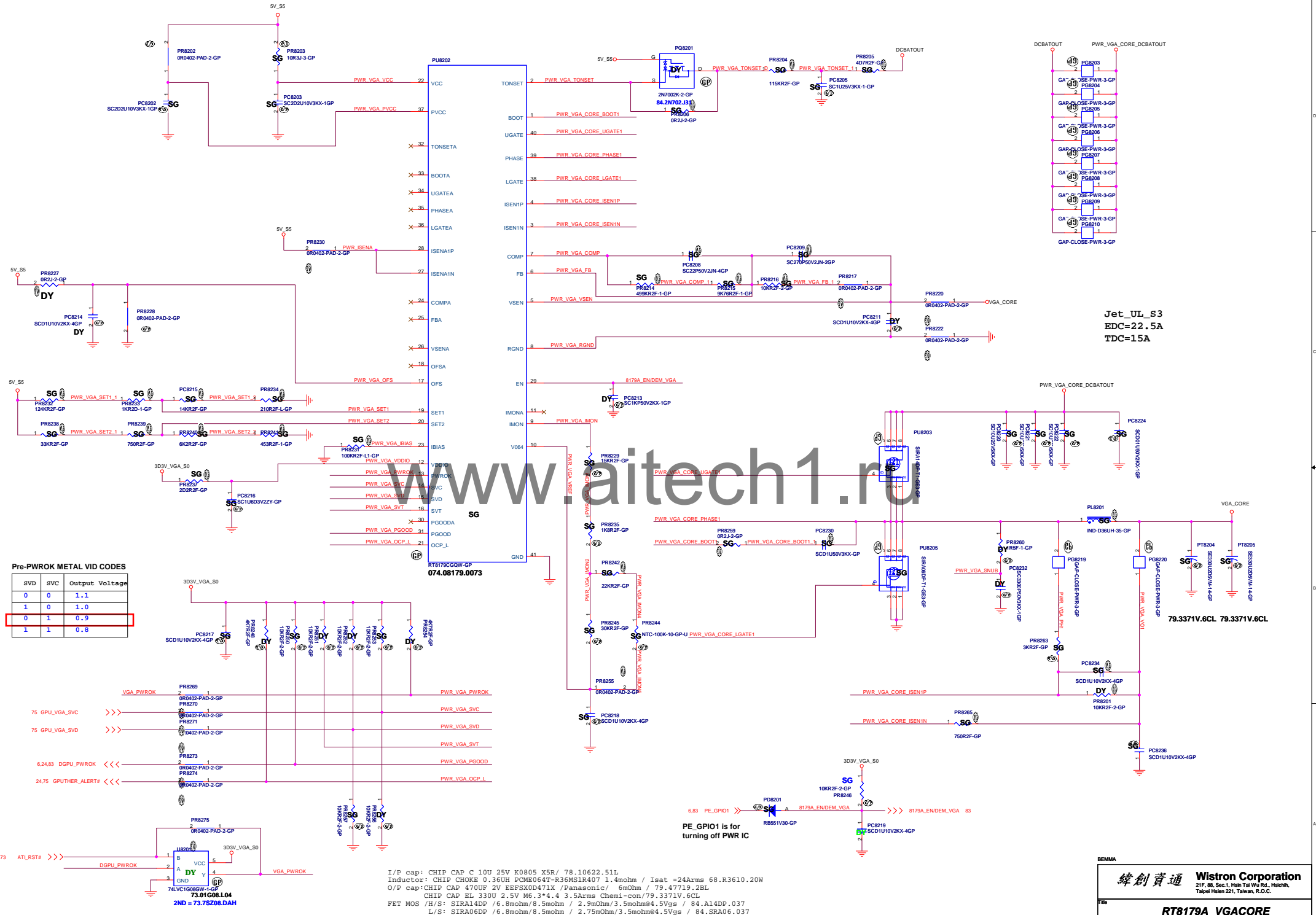
BEMMA

		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
Janus AMD BEEMA		A00	
Date:	Wednesday, March 05, 2014		Sheet 80 of 104

www.aitech1.ru

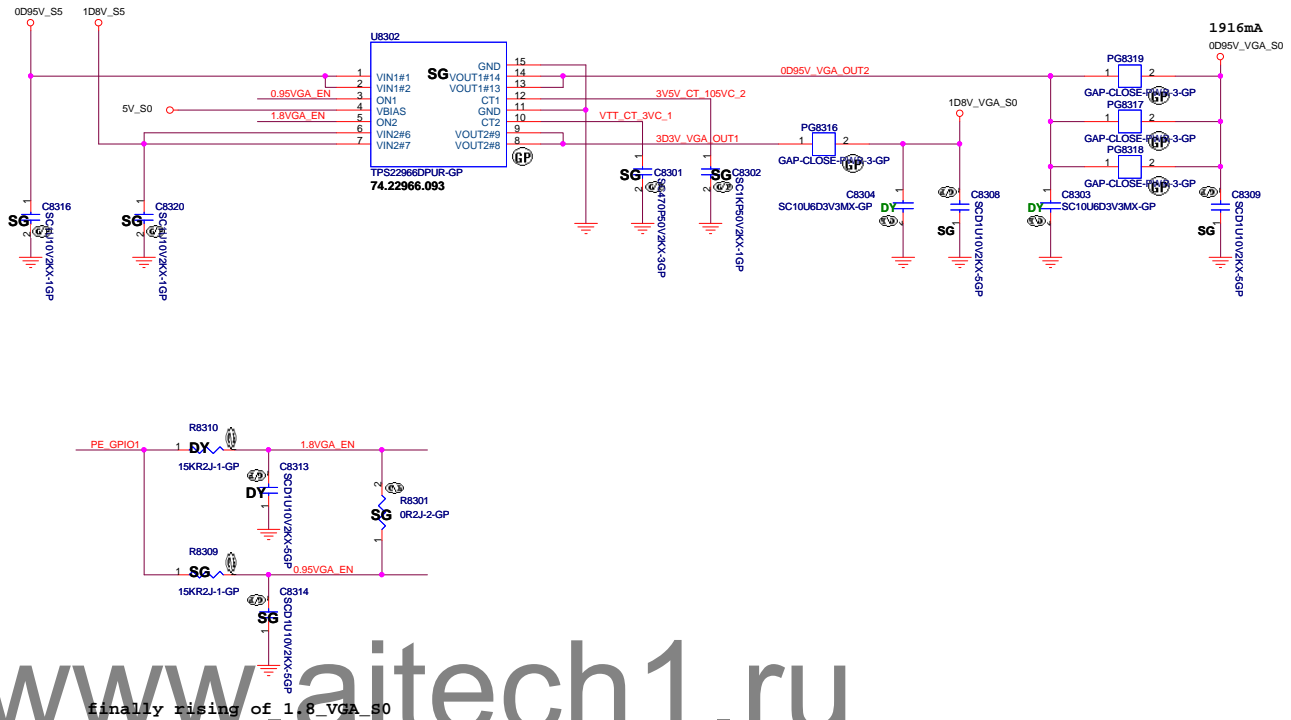
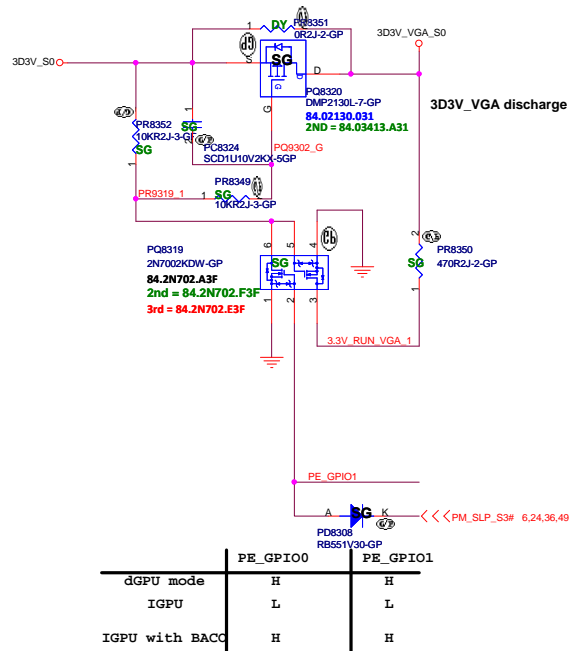
BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>Reserved</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>81</div> of <div>104</div>



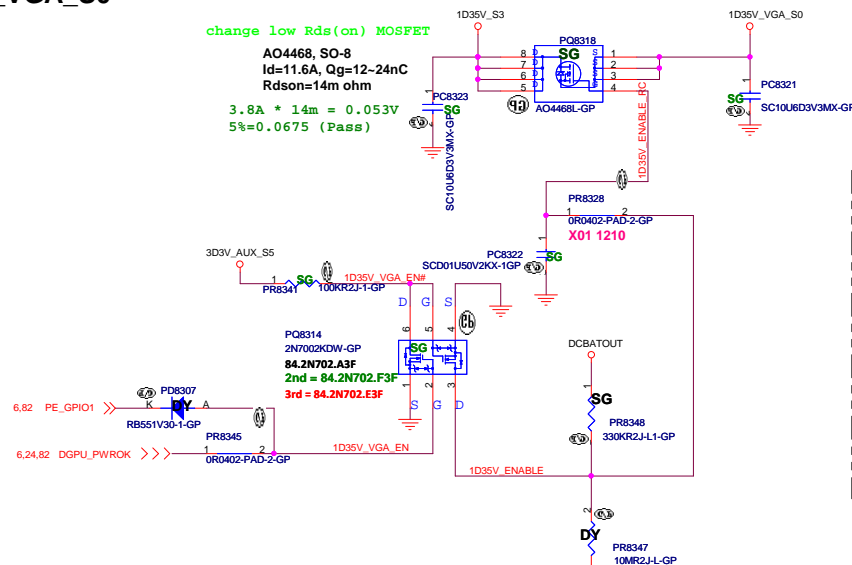
3D3V_S0 to 3D3V_VGA_S0 Transfer

Change DUMMY Reference Name to PX_BACO

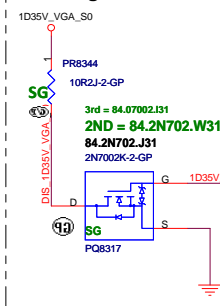


1D5V_VGA_S0

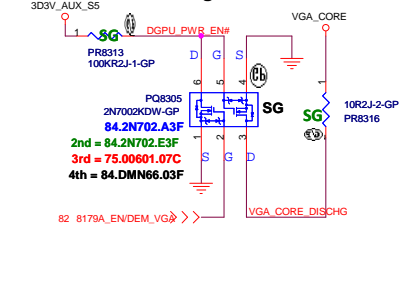
change low Rds(on) MOSFET
AO4468, SO-8
Id=11.6A, Qg=12-24nC
Rdson=14m ohm
 $3.8A * 14m = 0.053V$
5%=0.0675 (Pass)



Discharge Circuit



VGA CORE Discharge Circuit



BEMMA

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

Title DISCRETE VGA POWER
Size Custom Document Number Janus AMD BEEMA Rev A00
Date: Wednesday, March 05, 2014 Sheet 83 of 104

(Blanking)
www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>84</div> of <div>104</div>

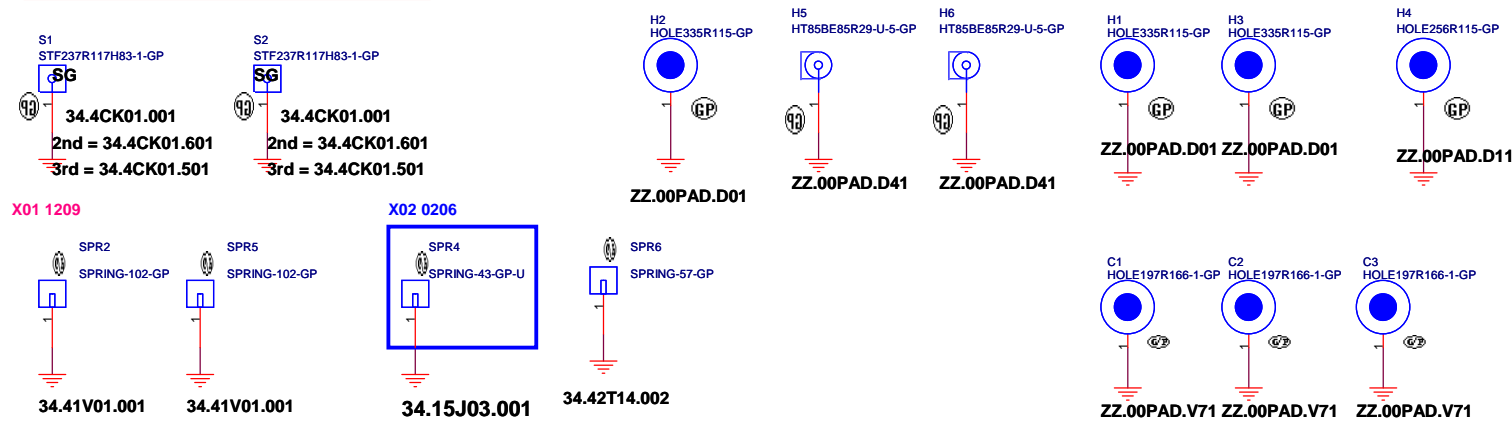
(Blanking)

www.aitech1.ru

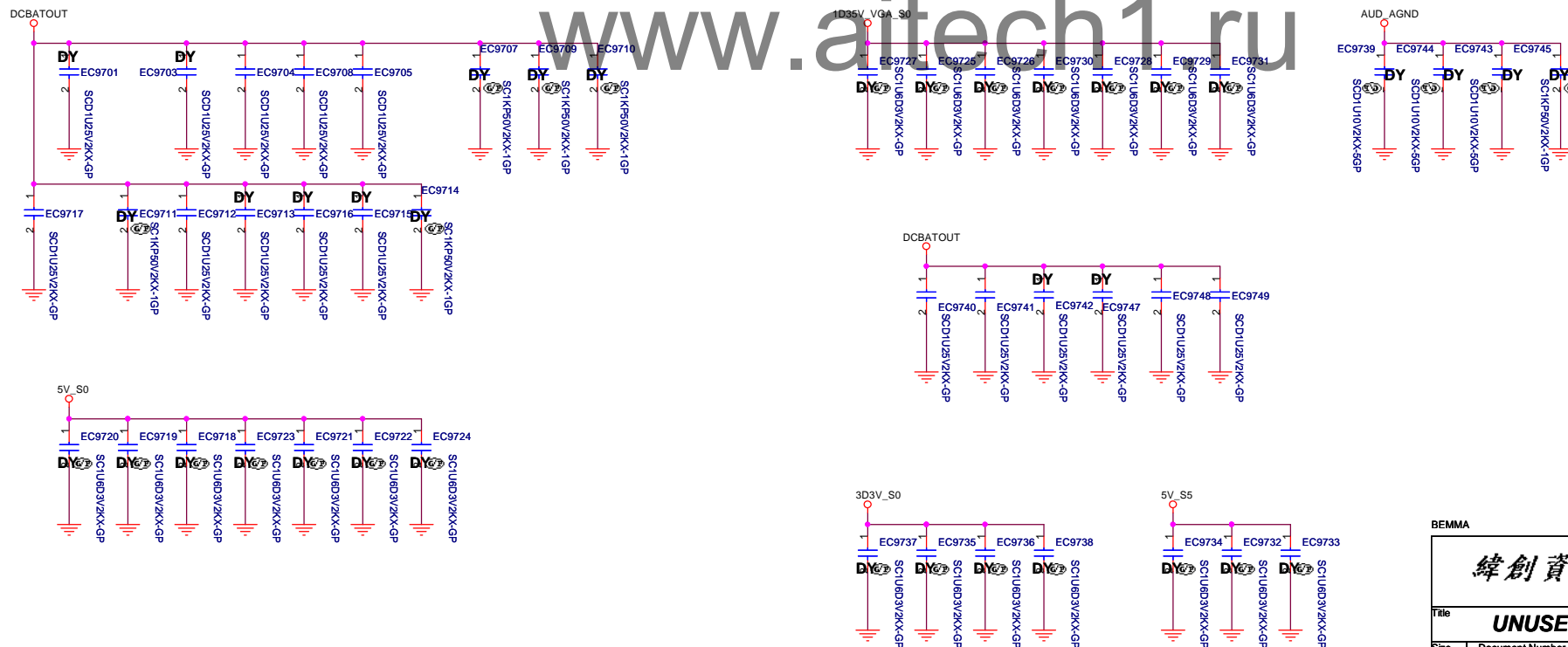
BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>85</div> of <div>104</div>

SSID = Mechanical



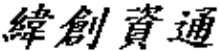
SSID = EMI



(Blanking)

www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title NFC(Reserved)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 87 of	104

(Blanking)

www.aitech1.ru

(Blanking)

www.aitech1.ru

(Blanking)
www.aitech1.ru

BEMMA	
<div>緯創資通Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>	
TitleTEST PAD	
SizeC	Document NumberJanus AMD BEEMA
Date: Wednesday, March 05, 2014	Sheet 90 of 104

(Blanking)
www.altech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>91</div> of <div>104</div>

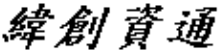
(Blanking)
www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title		
(Reserved)		
Size	Document Number	Rev
A4	Janus AMD BEEMA	A00
Date:	Wednesday, March 05, 2014	Sheet 92 of 104

(Blanking)
www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title (Reserved)			
Size A4	Document Number Janus AMD BEEMA		Rev A00
Date: Wednesday, March 05, 2014		Sheet 93 of	104

(Blanking)
www.aitech1.ru

BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>94</div> of <div>104</div>

www.aitech1.ru
(Blanking)

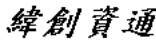
BEMMA

<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title <div>(Reserved)</div>		
Size <div>A4</div>	Document Number <div>Janus AMD BEEMA</div>	Rev <div>A00</div>
Date <div>Wednesday, March 05, 2014</div>		Sheet <div>95</div> of <div>104</div>

(Blanking)

www.aitech1.ru

BEMMA

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
MCP CPU XDP HDT+			
Size	Document Number		Rev
A3	Janus AMD BEEMA		A00
Date: Wednesday, March 06, 2014		Sheet 96 of	104

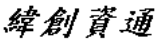
(Blanking)
www.aitech1.ru

BEMMA

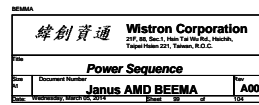
<div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.</div>		
Title		
Table of Content		
Size	Document Number	Rev
A4	Janus AMD BEEMA	A00
Date:	Wednesday, March 05, 2014	Sheet 97 of 104

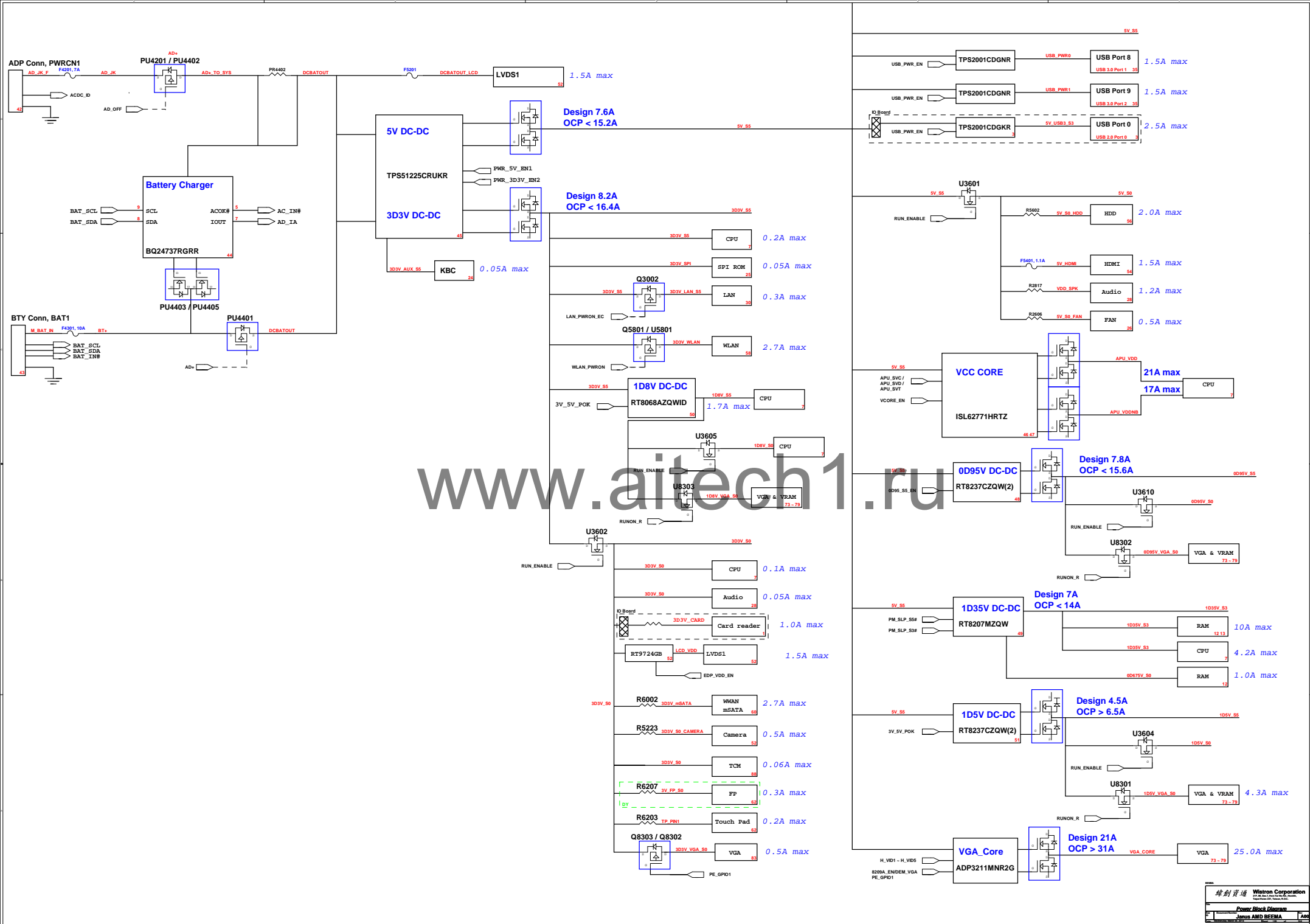
www.aitech1.ru

BEMMA

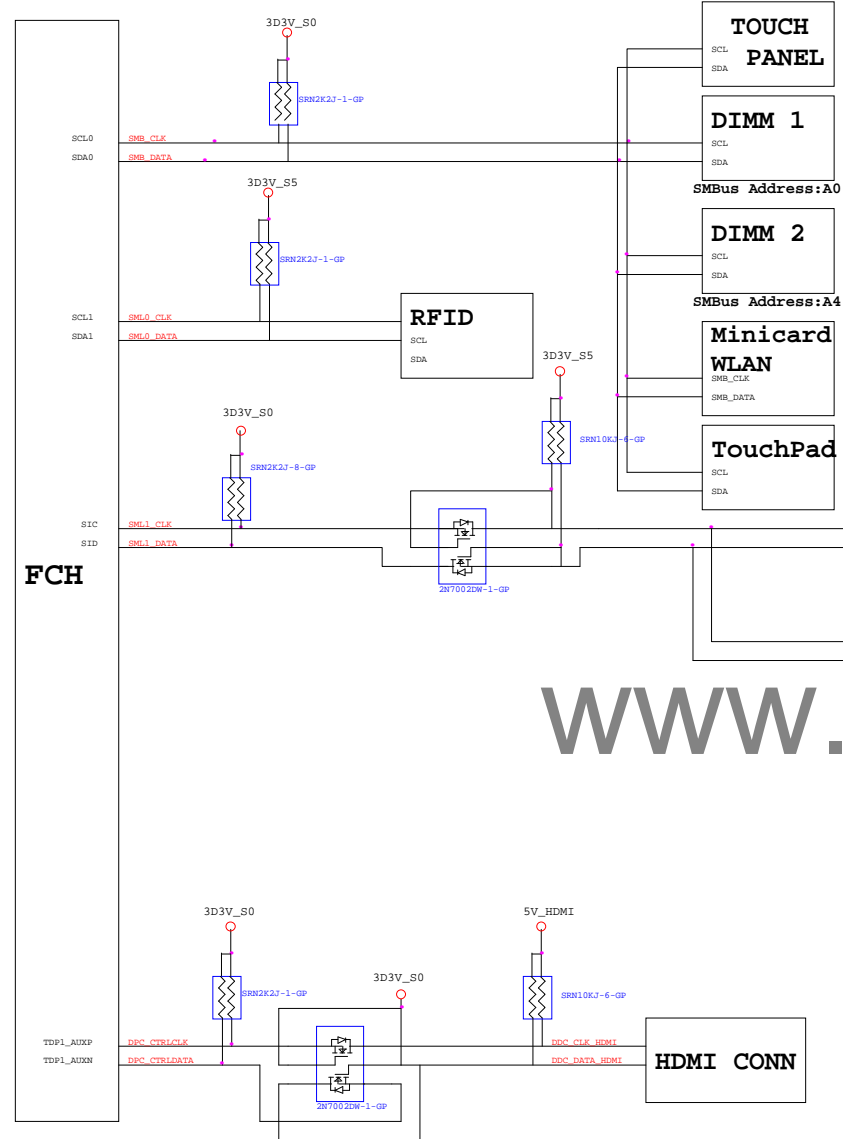
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Change History			
Size	Document Number		Rev
A3	Janus AMD BEEMA		A00
Date:	Wednesday, March 05, 2014		Sheet 98 of 104

Tb

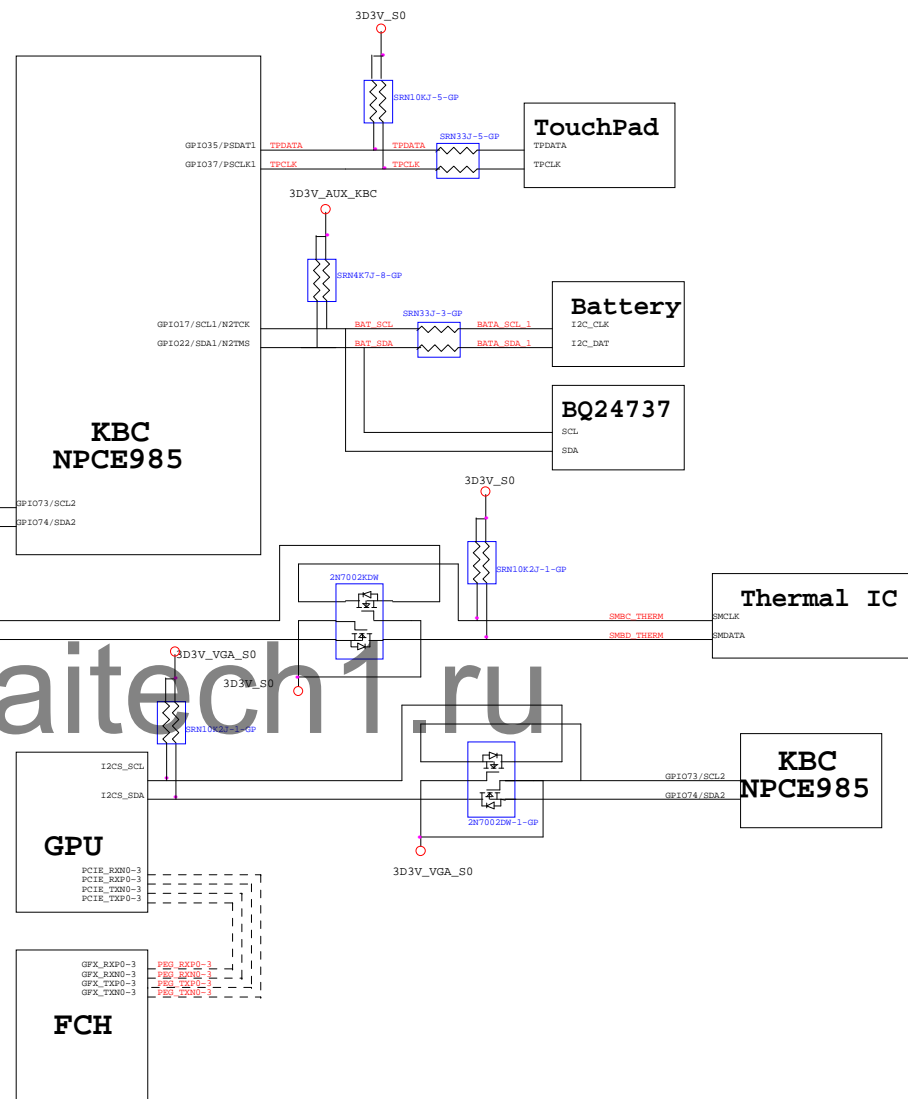




PCH SMBus Block Diagram

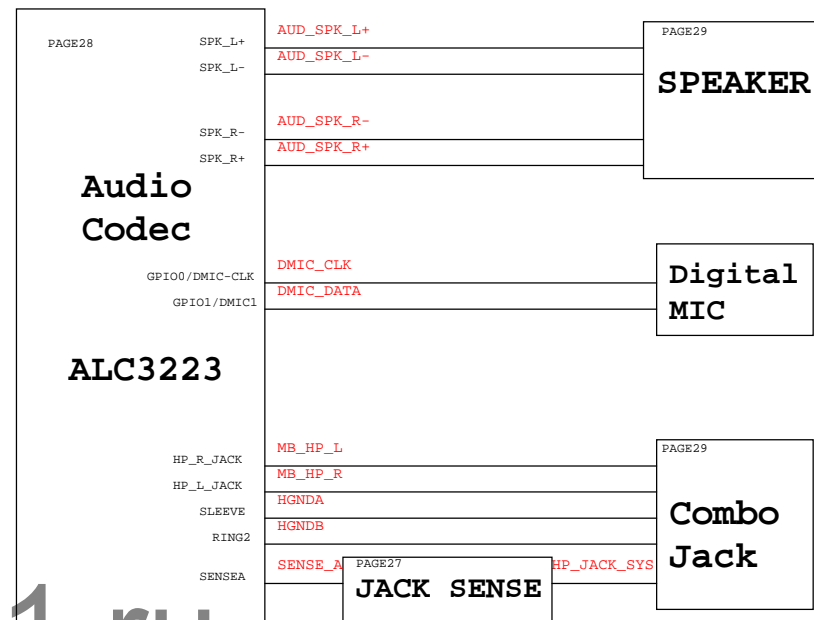
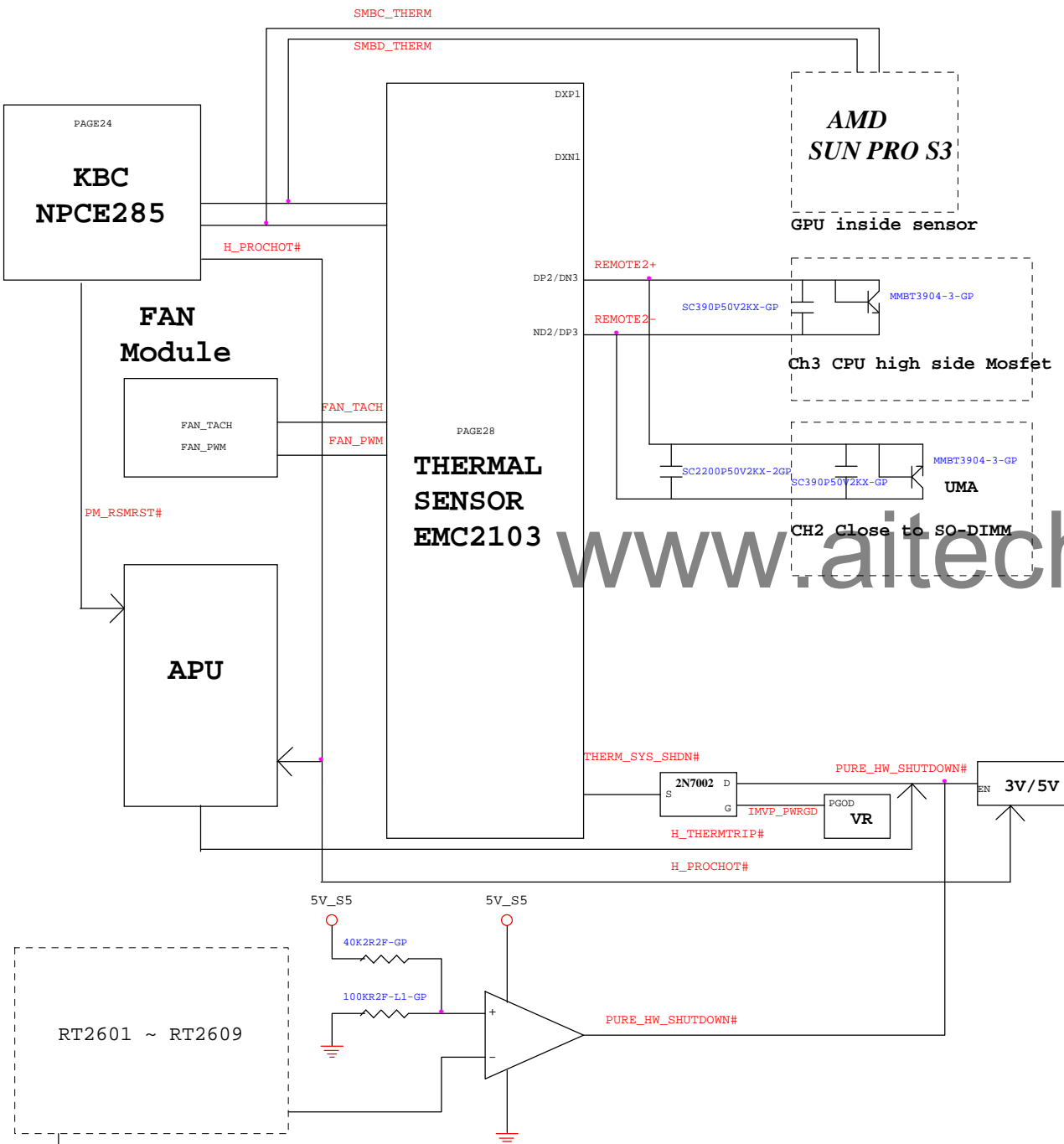


KBC SMBus Block Diagram



Thermal Block Diagram

Audio Block Diagram



Change notes -

	VERSION	DATE	Page	Modify List	OWNER
	X01	2013/12/3	83	R8309 = 15Kohm ,C8301/C8313 = DY,C8302 = 1000pF	
	X01	2013/12/3	43 44	RN4301 to 100ohm, AC_IN# change to Pull-H 3D3V_AUX_S5(PR4434)	
	X01	2013/12/3	27	HDA27 change from ALS3223 to ALC3234	
	X01	2013/12/3	24 25	Swap BATT_WHITE_LED# and EC_BRIGHTNESS. BATT_WHITE_LED# to GPIO13 and EC_BRIGHTNESS to GPIO15. Change R2404 from 10K to 20K ohm for PCB VERSION strap , Del SKT25	
	X01	2013/12/3	52	Reserve 0805 0 ohm R5211 between LCDVDD and LCD1.F5201 change from 69.50007.A31 to 69.60040.001	
	X01	2013/12/3	Power	Change C5205,EC4304,EC4601,PC4409,PC4419,PC4511.PC4518,PC4524,PC4720,PC4722,PC4827,PC4913 to 78.10422.2BL (0.1U 25V K0603 X7R) from 78.10424.2BL (0.1U 50V K0603 X7R).	
	X01	2013/12/3	54 55	Add HDMI SMBUS use 0 ohm DUMMY co-lay ,Add Hsync Vsync 0ohm DUMMY co-lay	
	X01	2013/12/3	29	Change HPMIC1 to 022.10002.0001 from 22.10270.G61 SPK1 change to 20.F1639.004	
	X01	2013/12/3	34 63	Change USB1 to 22.10341.Q21 / Change KBLIT1 to 20.K0800.004	
	X01	2013/12/3	19 26	Change C1904 and C1905 from 10pf to 6.8pf / Q2601 RN2602 DUMMY, RN2601 install	
	X01	2013/12/3	30	R3004 CLK_LAN_REQ0#_R change pull high to 3D3V_S0	
	X01	2013/12/3	EMI	DMIC_CLK mount R2716 100ohm resistance,Mount EC9749,Mount EC4304	
	X01	2013/12/3	58	CARD_WLAN_OUT# and CARD_WPAN_OUT# modify to TP change WLAN1 to 62.10043.I81	
	X01	2013/12/3	42 51	DCIN1 change to 20.F1783.007,Del 1D5V_S5 circuit	
	X01	2013/12/4	24 34 35	R2447 change to 63.10334.1DL,Del U3502 and U3501,swap the net U3403.1 and U3403.3	
	X01	2013/12/5	42 46 24 26	Del AFTP3804 AFTP3807, Modify AFTP6241 Add AFTP6242,Change R2447 to 1K , R2622 change to 24.3K	
	X01	2013/12/6	24	R2411 DY D2401 install	
	X01	2013/12/9	31 47 82	RJ45 connector change to 022.10001.0551, PT4701 /PT4704/PT8204 change to 79.3371V.6CL	
	X01	2013/12/10	EMI	Mount EC4303 and change to 0.1u Mount EC9705 EC9748 EC9717 EC9740 EC9741 EC9712 EC9704 EC9708 and change to 0.1u Mount R5415、R5417、R5416、R5414 150ohm resistance Mount TR3401、TR3404、TR6301(69.10103.041、69.10080.011) Mount TR5208、TR5209(69.10103.041、69.10080.011) Mount EC2705、EC2703、EC9739、EC9743、EC9744 0.1u cap Mount SPR2、SPR5、SPR6	
	X01	2013/12/10	0 ohm	change 0 ohm to short pad	
	X01	2013/12/10	54 55	R5501/R5502 change to 33 ohm / Del D5402	
	X01	2013/12/10	24 52 62	R2411 Install D2401 DUMMY ,R5207 BOM control ,BOM control DVC50 to Janus	
	X01	2013/12/12	46 86 62	PR4609 change to 44.2K (64.44225.6DL) from short pad, EMI:Add SPR6(34.42T14.002),KBLIT DUMMY	
	X01	2013/12/16	55 Power	Del HDMI circuit / Modify power schematic BOM	
	X01	2013/12/18	Power	PR8214 change to 499K (64.49935.6DL) / PR8215 change to 9.76K (64.97615.6DL)	

BEMMA

緯創資通

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

Title

Change ListSize
A3

Document Number

Janus AMD BEEMARev
A00

Date: Wednesday, March 06, 2014

Sheet 103 of 104

	VERSION	DATE	Page	Modify List	OWNER
	X02	2014/01/21	48	Change PR4823 to 26.1K. The voltage about 0.97V	
	X02	2014/01/21	83	R8310 change 15Kohm /C8313 change 0.1uF /C8301 change 470pF Add R8301 for power sequence	
	X02	2014/01/27	12,46	EMC request:change EC4601,C1217,C1225,C1214 to 0.1u	
	X02	2014/01/27		Change 0 ohm to short pad	
	X02	2014/01/27	6	DGPU_PRESENT# pull hi to 3D3V_S0	
	X02	2014/01/28	power	1. PD4201 change 1st source to 83.P6SBM.AAG and 2nd source to 83.P6SBM.DAG . 2. PC4202 PC4409 PC4419 PC4519 PC4524 PC4511 PC4513 PC4518 PC4734 PC4720 PC4722 PC4736 PC4833 PC4827 PC4919 PC4913 PC8230 change to 78.10424.2BL. 3. PC4201 change to 78.10594.41L. 4. PC4916,PC4917 change to 78.10610.5BL. 5. PC4408 change to 78.47522.51L (4.7U 25V K0805 X5R). 6. PC4425 change to 78.10324.2FL (0.01U 50V K0402 X7R). 7. PC4512 change to 78.47522.51L (4.7U 25V K0805 X5R). 8. Delete PC4814/PC4714. 9. Dummy PC4718/PC4912/PC4920/PC4204/PC4205/ PC4426/PC4416/PC4830 10.PC4828 change to 78.47522.51L (4.7U 25V K0805 X5R). 11.PC4909 and PC4911 change to 78.47522.51L (4.7U 25V K0805 X5R).	
	X02	2014/02/06	06 19	Change RN1901 R1901 from short pad to 0 ohm Change RN604 to 66.10336.08L	
	X02	2014/02/06	86	Change SPR4 P/N to 34.15J03.001	
	X02	2014/02/07	26	THM26 DUMMY, Add R2602 for VD_OUT1# connect PURE_HW_SHUTDOWN#	
	A00	2014/02/25		Change PR4911 PR4649 R3016 R6209 R1901 RN5404 RN1901 to short pad	
	A00	2014/02/25	82	Modify schematic PWR_VGA_COMP connecte to PWR_VGA_FB	
	A00	2014/02/25	24	PCB VERSION A/D(PIN98) R2404 change to 64.64925.6DL	