

CHELSEA DJ2 UMA Schematics Document

AMD Danube CPU S1G4

RS880M + SB820M

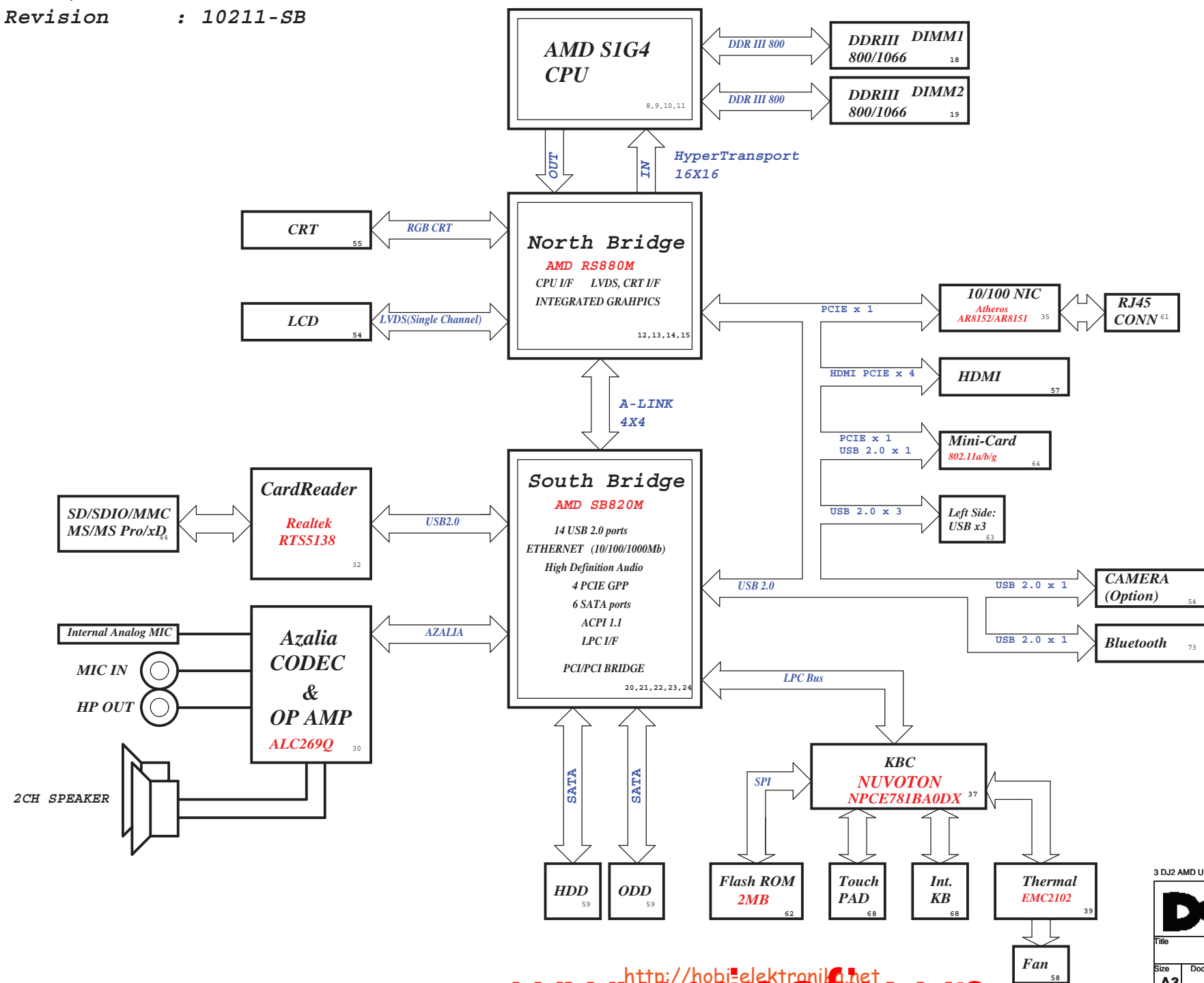
2010-04-13

REV : X01

DY : Nopop Component
HDMI : Pop for HDMI function
GIGA : Pop for GIGA LAN
10/100 : Pop for 10/100 LAN

Project code : 91.4EM01.001
PCB P/N : 48.4EM18.0SA
Revision : 10211-SB

Chelsea DJ2 AMD UMA Block Diagram



CHARGER BQ24745RHDR	
INPUTS	OUTPUTS
+DC_IN_SS +CHAGER_SRC	+PWR_SRC
SYSTEM DC/DC RT8205BGQW-GP 46	
INPUTS	OUTPUTS
+PWR_SRC	+5V_ALW2 +3.3V_RTC_LDO +5V_ALW +3.3V_ALW
SYSTEM DC/DC RT8209EGQW 50	
INPUTS	OUTPUTS
+PWR_SRC	+1.1V_RUN
CPU CORE ISL6265AHTZ-T-GP 47	
INPUTS	OUTPUTS
+PWR_SRC	+VCC_CORE +VDDNB
DDR III SUS&VTT TPS51116RGER 49	
INPUTS	OUTPUTS
+PWR_SRC	+1.5V_SUS
SYSTEM DC/DC APL5930KAI 52	
INPUTS	OUTPUTS
+3.3V_ALW	+1.8V_RUN
SYSTEM DC/DC Switces/RT9013 42,53	
INPUTS	OUTPUTS
+3.3V_ALW +5V_ALW +1.5V_SUS +3.3V_RUN	+3.3V_RUN +5V_RUN +1.5V_RUN +2.5V_RUN
SYSTEM DC/DC TPS51125RGER 48,51	
INPUTS	OUTPUTS
+3.3V_ALW +1.5V_SUS	+1.1V_ALW +CPU_VDDR
PCB LAYER	
L1: Top L2: VCC L3: Signal L4: Signal L5: GND L6: Bottom	

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Title Block Diagram		
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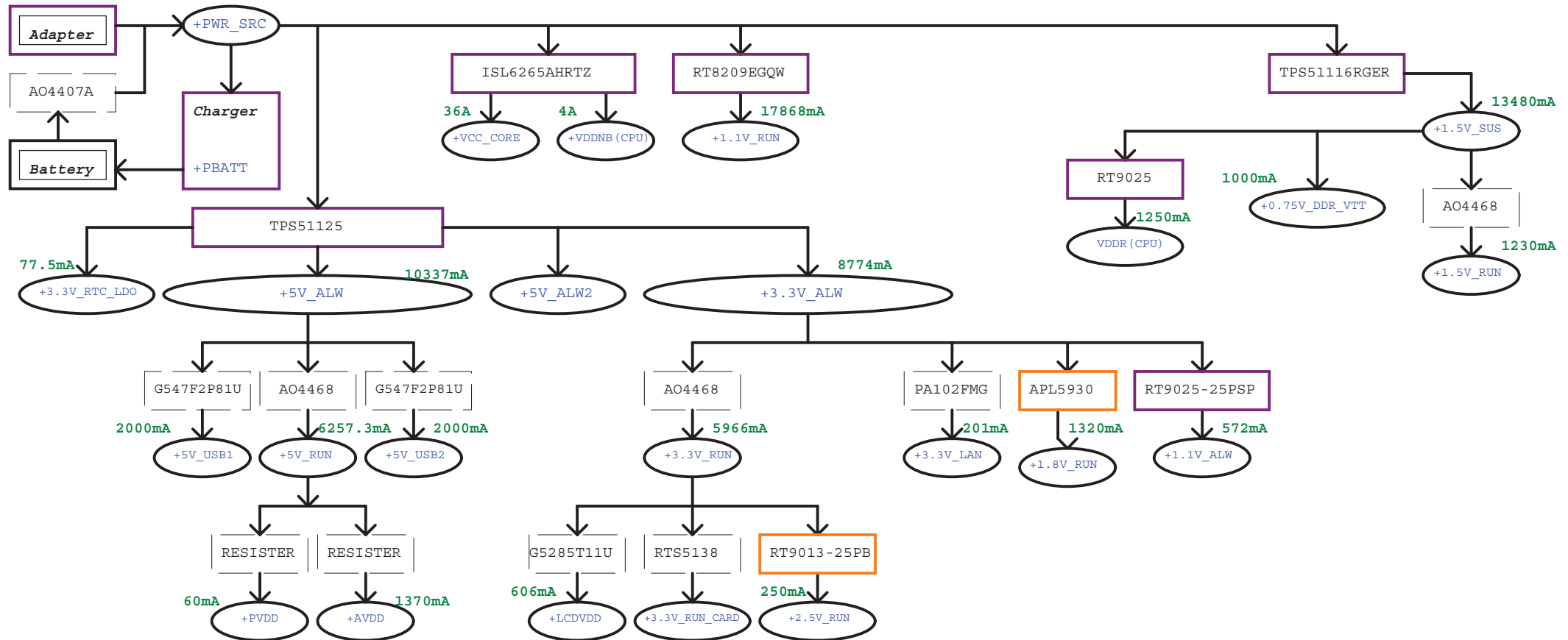
Power Block Diagram

Power Shape

Regulator

LDO

Switch



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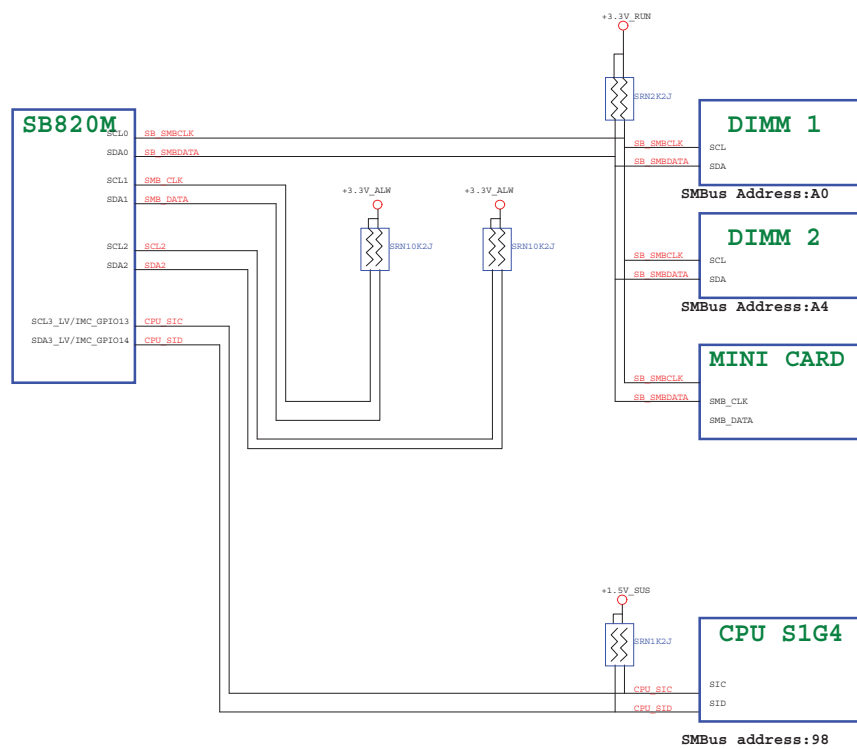


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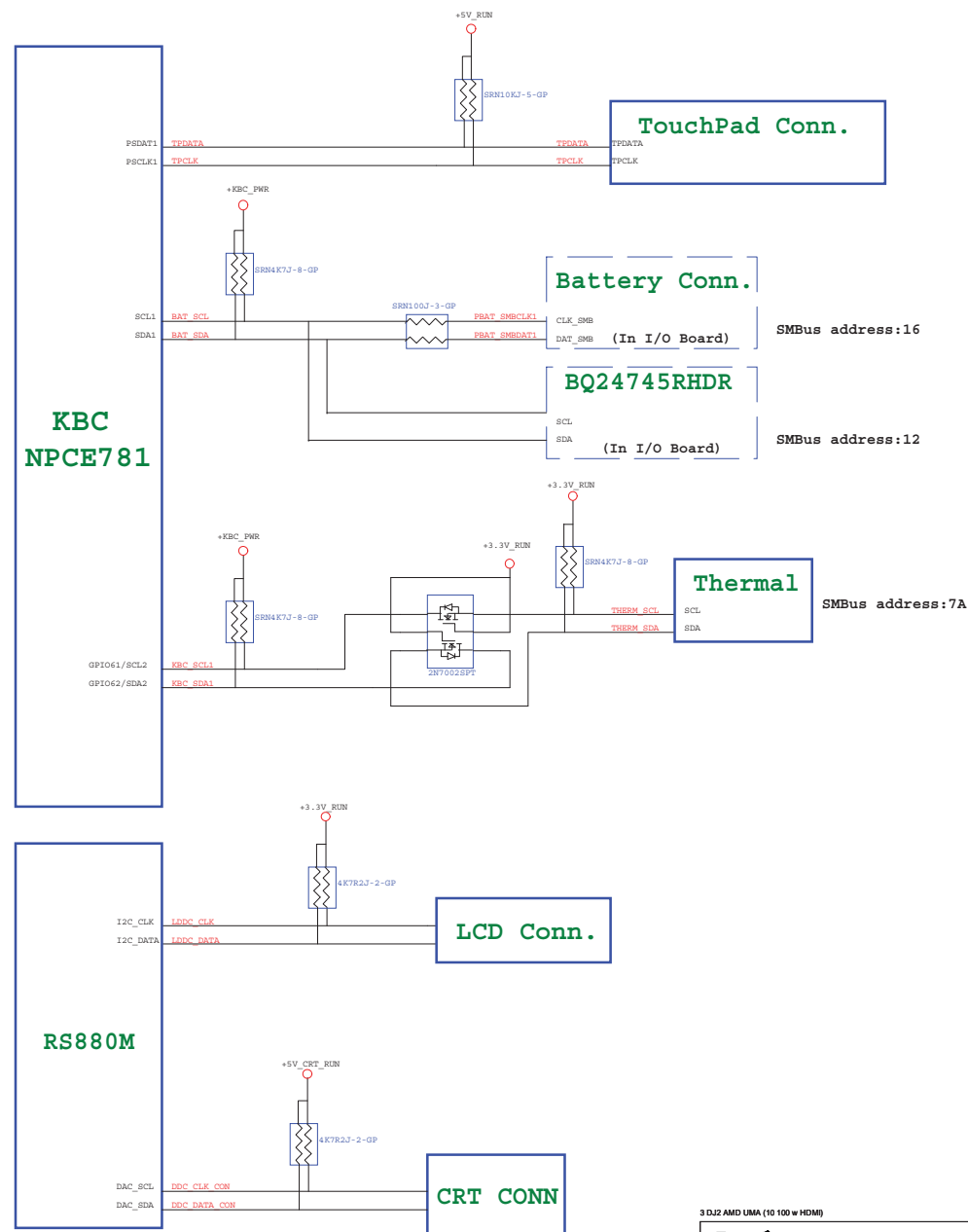
Title Power Block Diagram		
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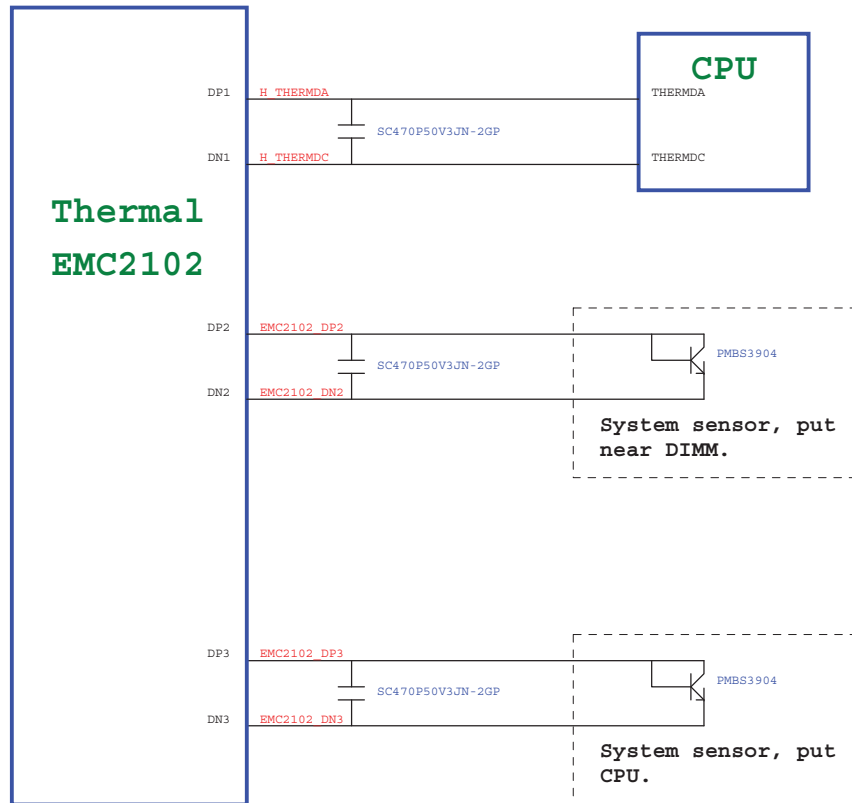
SB820M SMBus Block Diagram



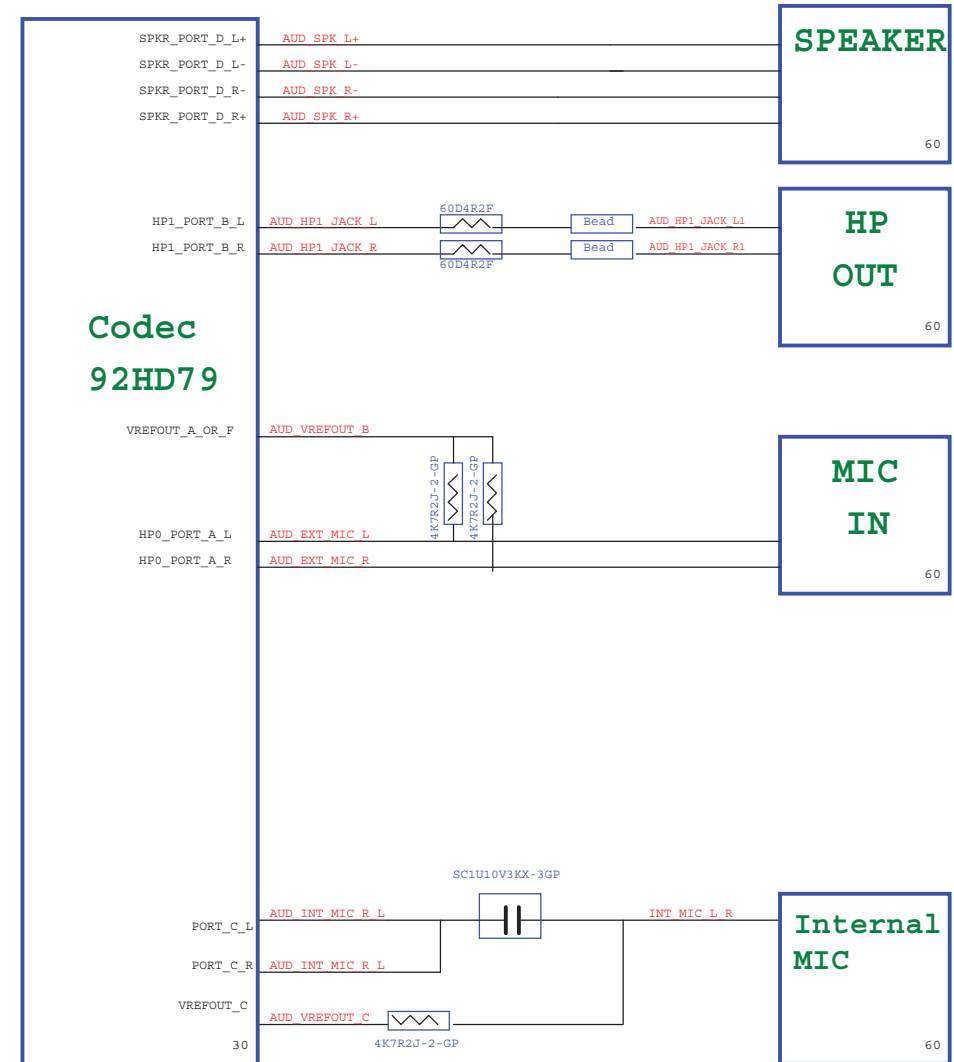
KBC SMBus Block Diagram



Thermal Block Diagram



Audio Block Diagram



SB820M Strapping

Capture from 45484 Rev. 1.02 AMD SB8xx-Series Southbridge Design Guide

Name	Strap Name	Schematic Note
LPCCLK0	ECEnableStrap	Embedded Controller (EC) * 0 V - Disabled 3.3 V - Enabled
EC_PWM3 EC_PWM2	{ROMTYPE_1, ROMTYPE_0 }	ROMTYPE_1 ROMTYPE_0 ROM TYPE 3.3V 0V SPI ROM 3.3V 3.3V Reserved 0V 0V Firmware Hub 0V 3.3V LPC ROM * (supports both LPC and PMC ROM types)
LPCCLK1	CLKGEN	Defines clock generator 0V - External clock mode: Use 100-MHz PCIeR clock as reference clock and generate i nternal clocks only. * 3.3V- Integrated clock mode: Use 25-MHz crystal clock and generate both internal and external clocks
PCICLK1	BIF_GEN2 COMPLIANCE_Strap	Set PCIe to Gen II mode 0V- Force PCIe interface at Gen I mode * 3.3V- PCIe interface is at Gen II mode Not Applicable to SB820M but provision for pull-down is required.
PCICLK2	BootFailTmrEn	Watchdog function * 0V- Disable the boot fail timer function 3.3V- Enable the boot fail timer function
PCICLK3	DefaultStrapMode	Default Debug Straps * 0V- Disable Debug Straps. 3.3V- Select external Debug Straps
PCICLK4	CPUClkSel	CPU/NB HT Clock Selection 0V- Reserved. * 3.3V- Required setting for integrated clock mode. This strap is not used if the strap CLKGEN is configured for external clock generator mode.
AZ_SDOUT	CoreSpeedMode	Slow down core clock for low power platform. * 0V- Performance mode 3.3V- Low Power mode

NB880M Strapping

Capture from 46113 rs880m ds nda 1.03

Name	Strap Function	Schematic Note
DAC_VSYNC	STRAP_DEBUG_BUS_GPIO _ENABLE#	Enables debug bus access through memory I/O pads and GPIOs. 0: Enable * 1: Disable
DAC_HSYNC	SIDE_PORT_EN#	Indicates if memory side-port is available or not 0: Available * 1: Not available
SUS_STAT#	LOAD_EEPROM_STRAPS#	Selects loading of strap values from EEPROM. 0: I2C master can load strap values from EEPROM if connected, or use default values if EEPROM is not connected. Please refer to RS880M's reference schematics for system level implementation details. * 1: Use default values


USB Table

USB	
Pair	Device
0	USB1
1	USB3
2	USB2
3	USB1 (I/O Board, 17")
4	WLAN
5	Reserve
6	Reserve
7	Reserve
8	Reserve
9	Reserve
10	CARD READER
11	CAMERA
12	BLUETOOTH
13	Reserve

PCIe Routing

LANE0	MiniCard WLAN
LANE1	LAN

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Title

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Chelsea DJ2 AMD UMA

Rev

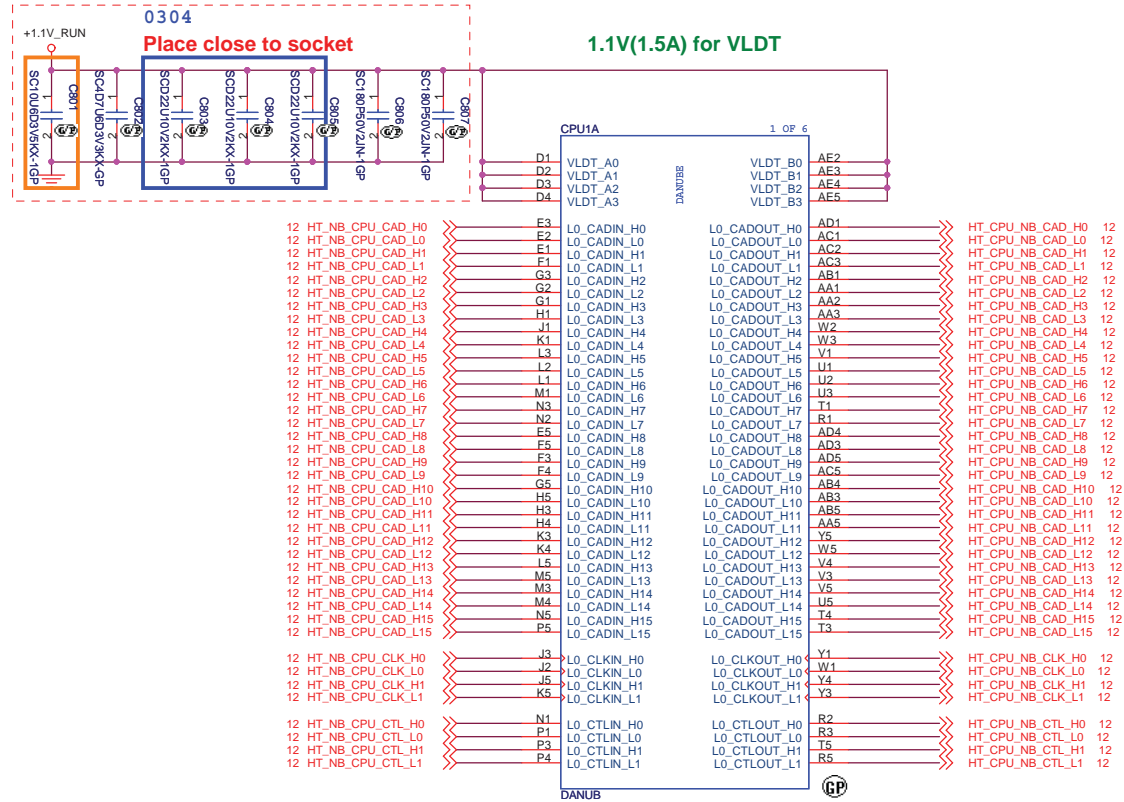
X01

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SSID = CPU



SKT-BGA638H176

1'nd 62.10055.111

2'nd 62.10055.181

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Title CPU_HT_LINK I/F_(1/4)			
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SSID = CPU

4.70UF*4
0.22UF*4
1000PF*4
180PF*4

Place near to CPU

0.9V(1.25A) for VDDR
0.9V--DDR1066
1.05V--DDR1333 (1.75A)

CLOSE TO CPU

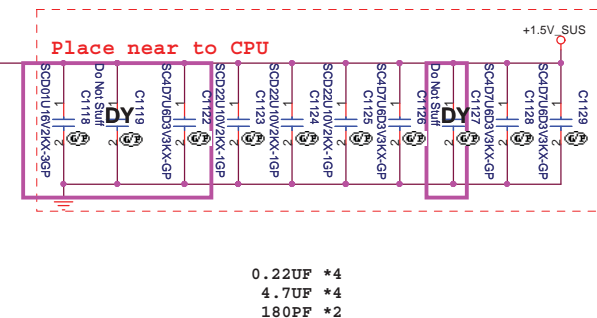
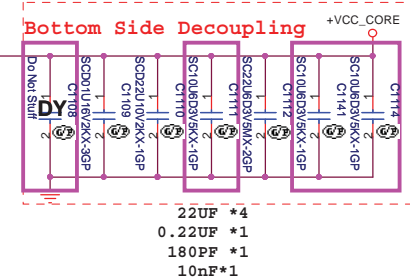
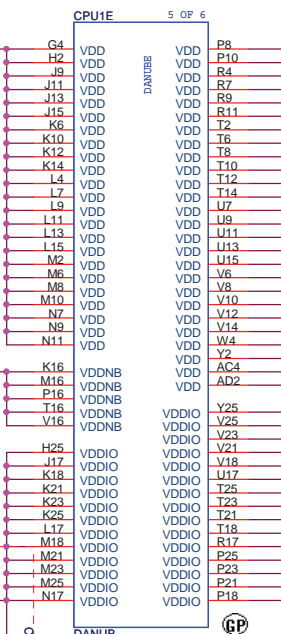
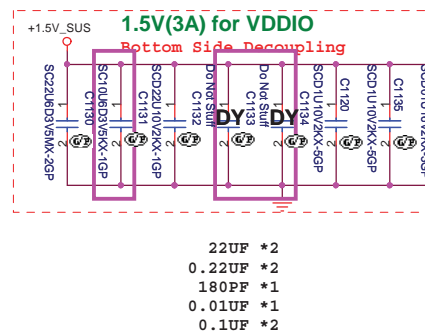
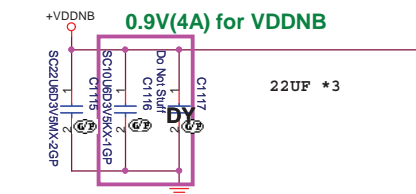
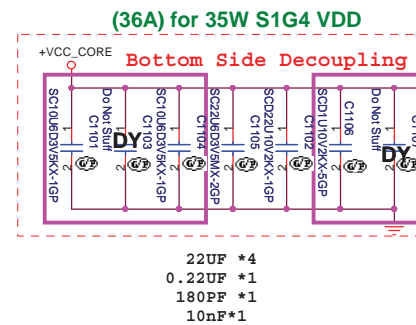
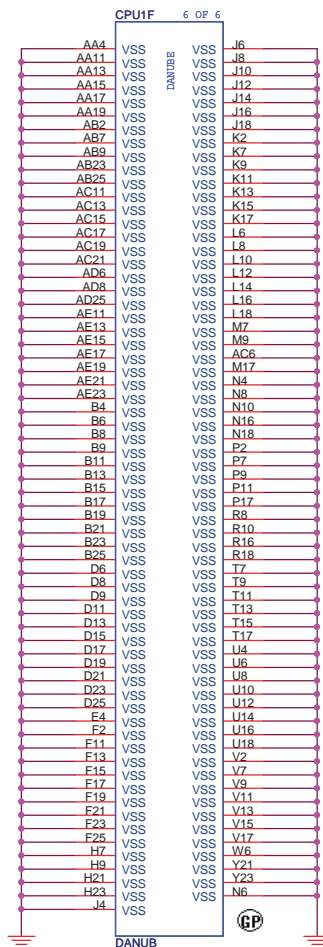
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Title
CPU DDR(2/4)
Size Document Number
Custom **Chelsea DJ2 AMD UMA** Rev **X01**
Date: Tuesday, April 13, 2010 Sheet 9 of 90

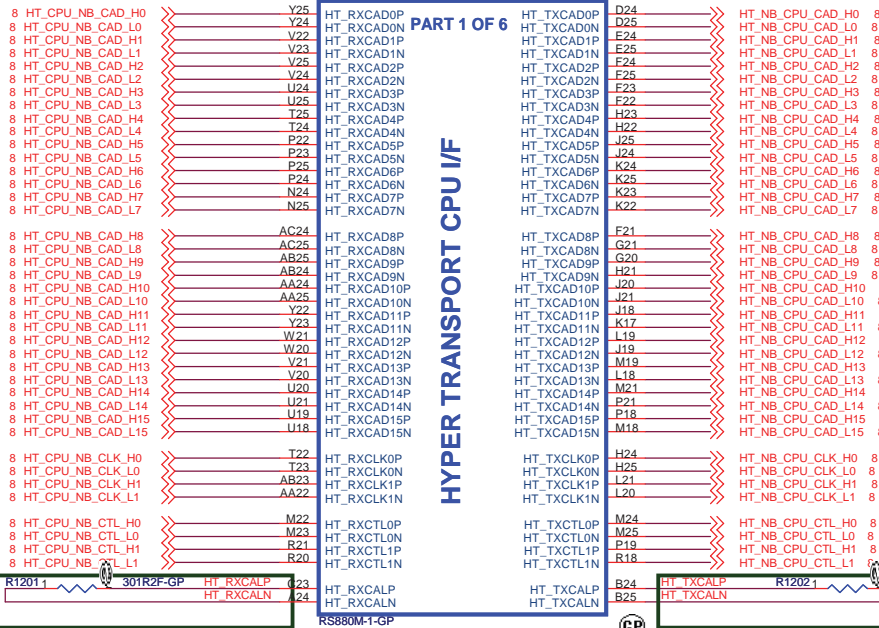
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SSID = CPU



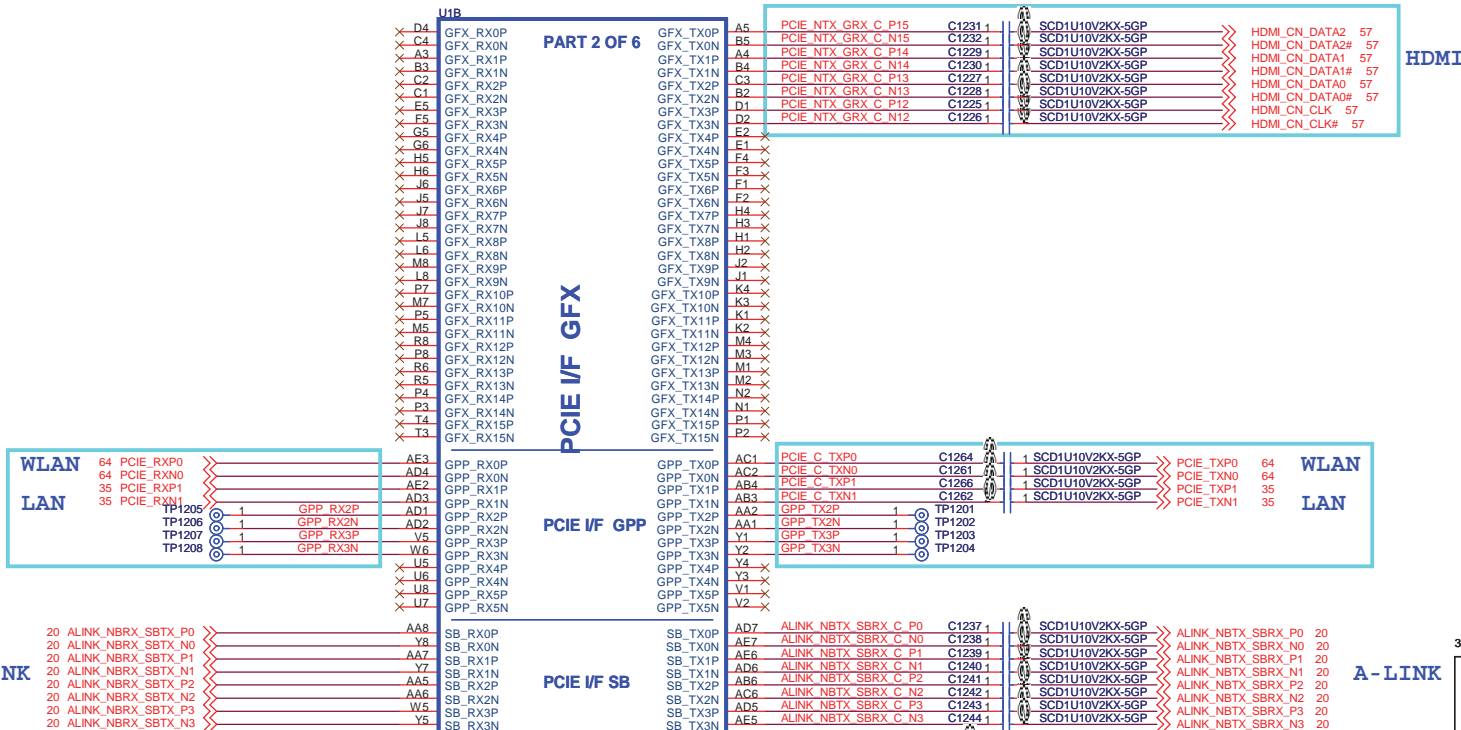
SSID = N.B

RS880M : 71.RS880.M05



Place < 1000mils from pin C23 and A24

Place < 1000mils from pin B25 and B24



A-LINK

A-LINK

Place < 1000mils from pin A4 and A8

3 D32 AMD UMA (10 100 w HDMI)

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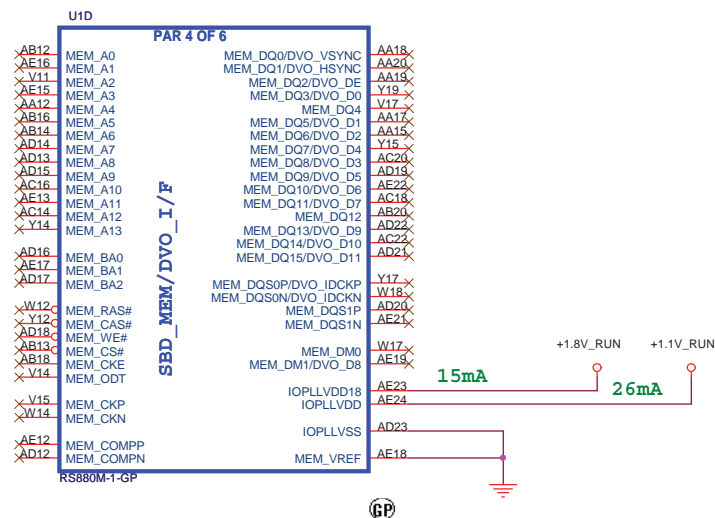
AMD-RS880M HT LINK&PCIe(1/4)

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SSID = N.B



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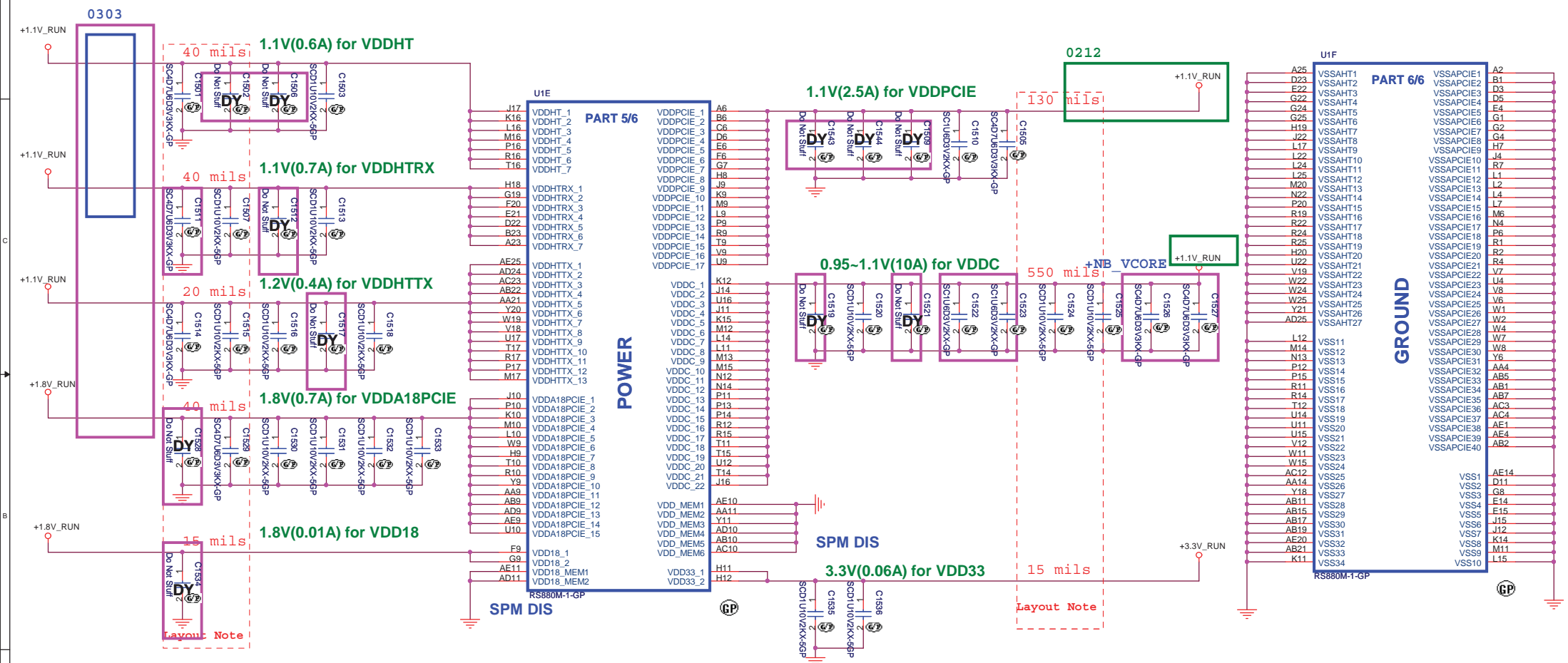
Title
AMD-RS880M_SidePort_(3/4)

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SSID = N.B



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Title AMD-RS880M_PWR&GD_(4/4)			
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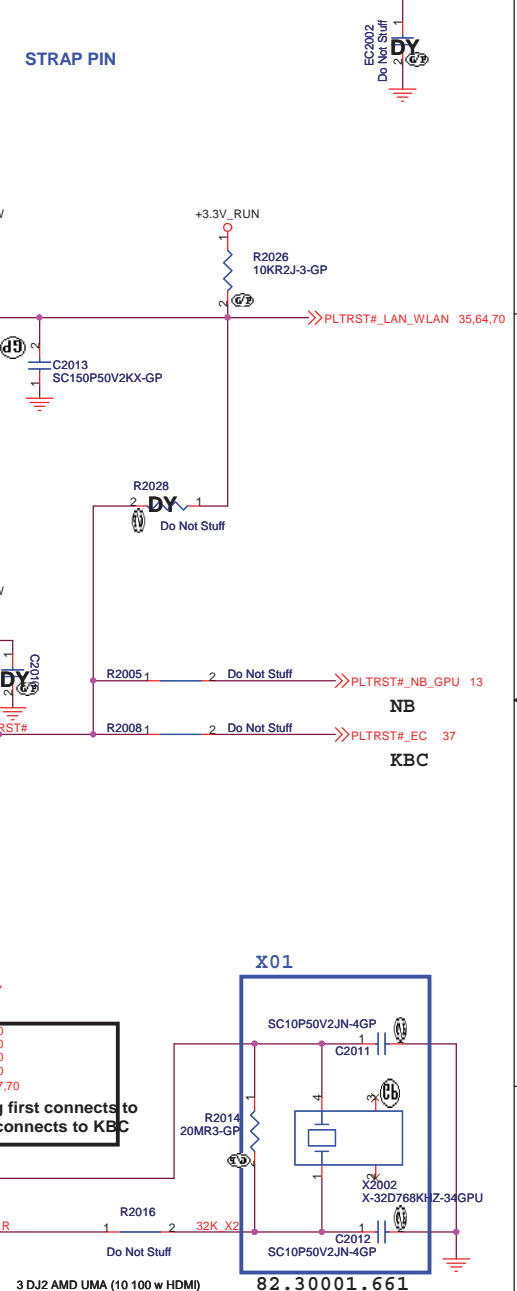
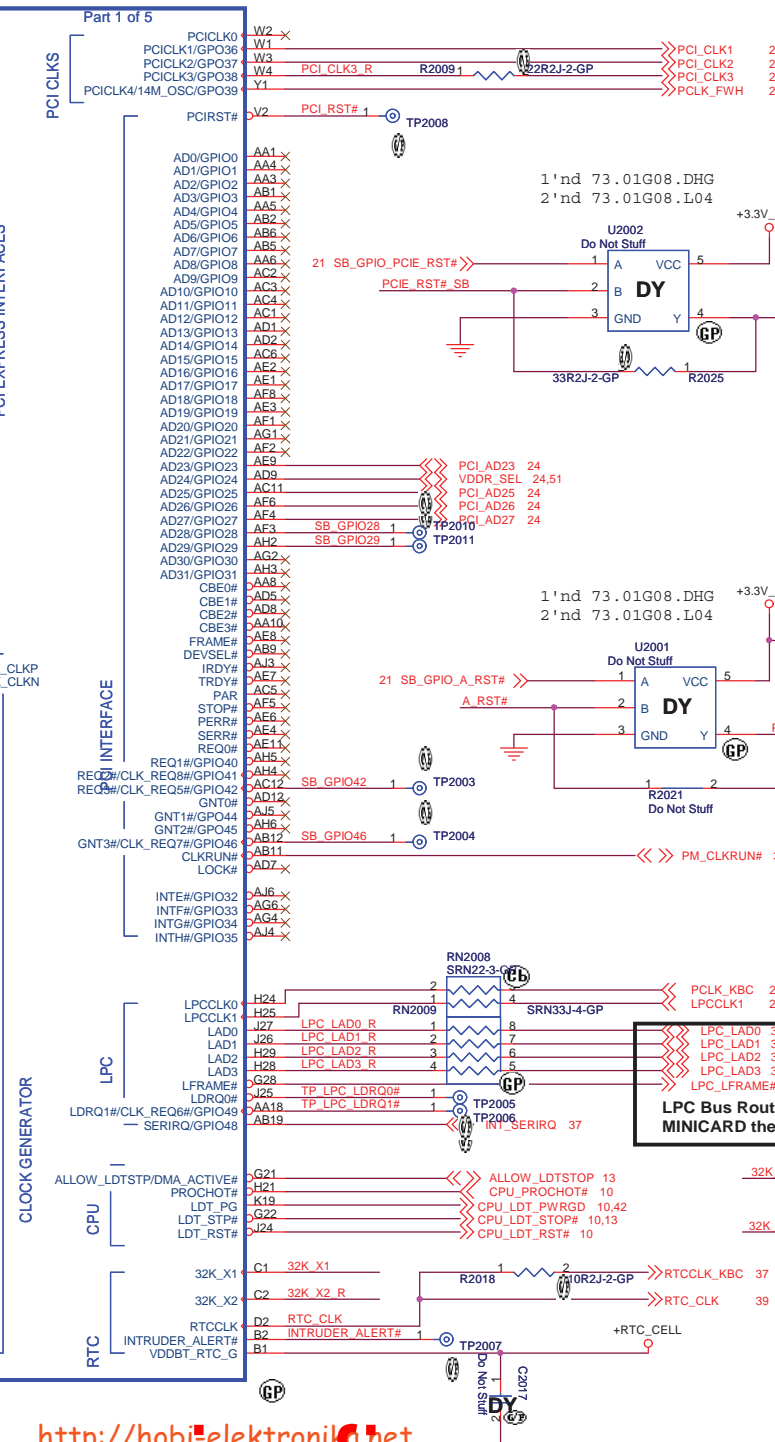
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SB700 A12 : 71.SB800.M02



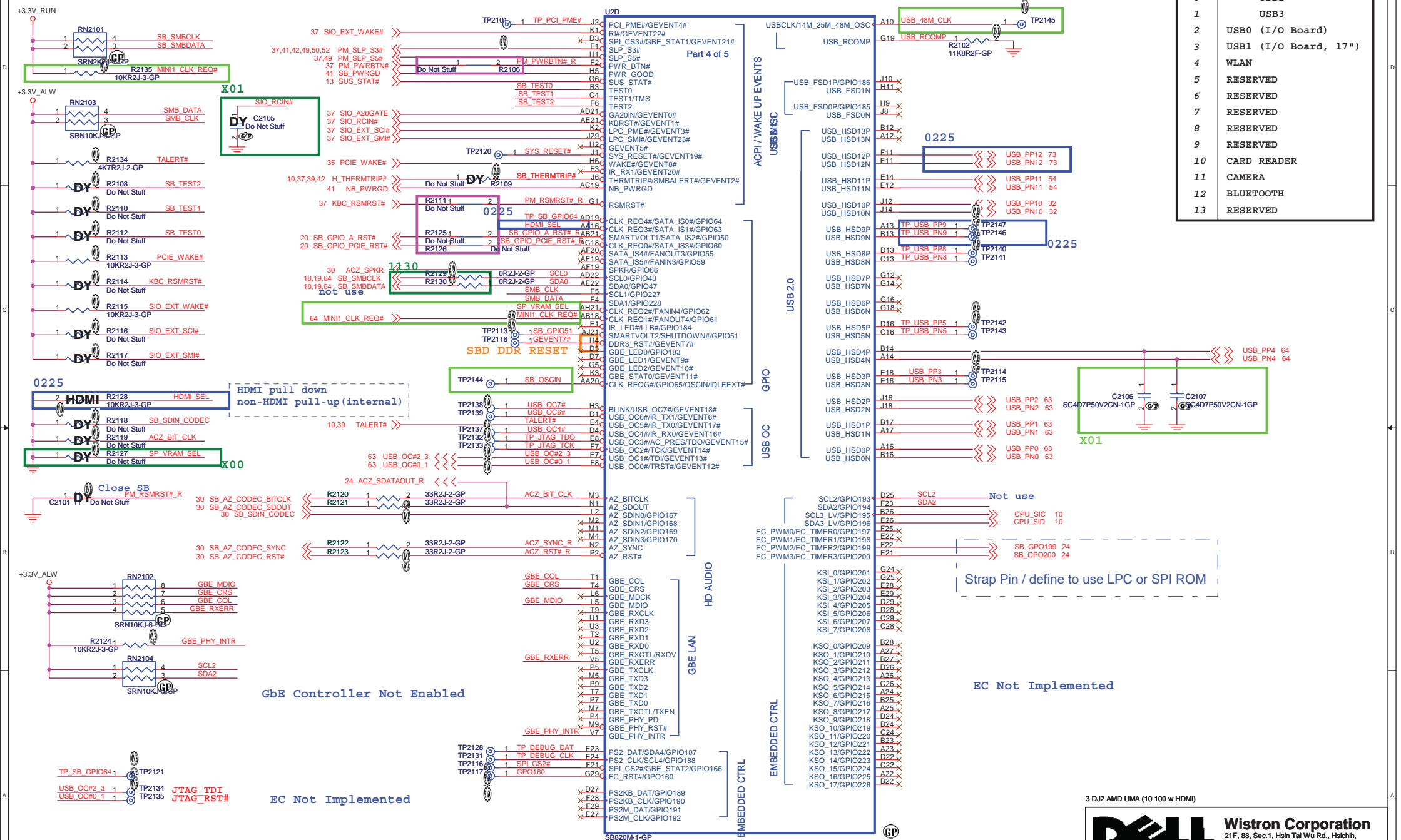
Pin	Signal	Device	Pin	Signal	Device
13	NB_GPPSB_CLK	RN2001	2	SB_PCIE_CLK	M23
13	NB_GPPSB_CLK#	SRN0J-6-GP	1	SB_PCIE_CLK#	P23
13	NB_REFCLK_P	RN2002	2	DISP_CLKP_R	U29
13	NB_REFCLK_N	SRN22-3-GP	1	DISP_CLKN_R	U28
13	CLK_NBHT_CLK	RN2003	2	CLK_NBHT_CLK_R	T26
13	CLK_NBHT_CLK#	SRN0J-6-GP	1	CLK_NBHT_CLK#_R	T27
10	CPU_CLK	RN2004	2	CPU_HT_CLK	V21
10	CPU_CLK#	SRN0J-6-GP	1	CPU_HT_CLK#	T21
		TP2012	1	CLK_NB_GFX_SB	V23
		TP2013	1	CLK_NB_GFX#_SB	T23
					X129
					X128
64	CLK_PCIE_MINI1	RN2005	2	CLK_MINI1_R	N29
64	CLK_PCIE_MINI1#	SRN0J-6-GP	1	CLK_MINI1#_R	N28
					X129
					X128
35	CLK_PCIE_LAN	RN2006	2	LAN_CLK_R	T25
35	CLK_PCIE_LAN#	SRN0J-6-GP	1	LAN_CLK#_R	V25



Title **SB820M_PCIE&PCI_(1/5)**

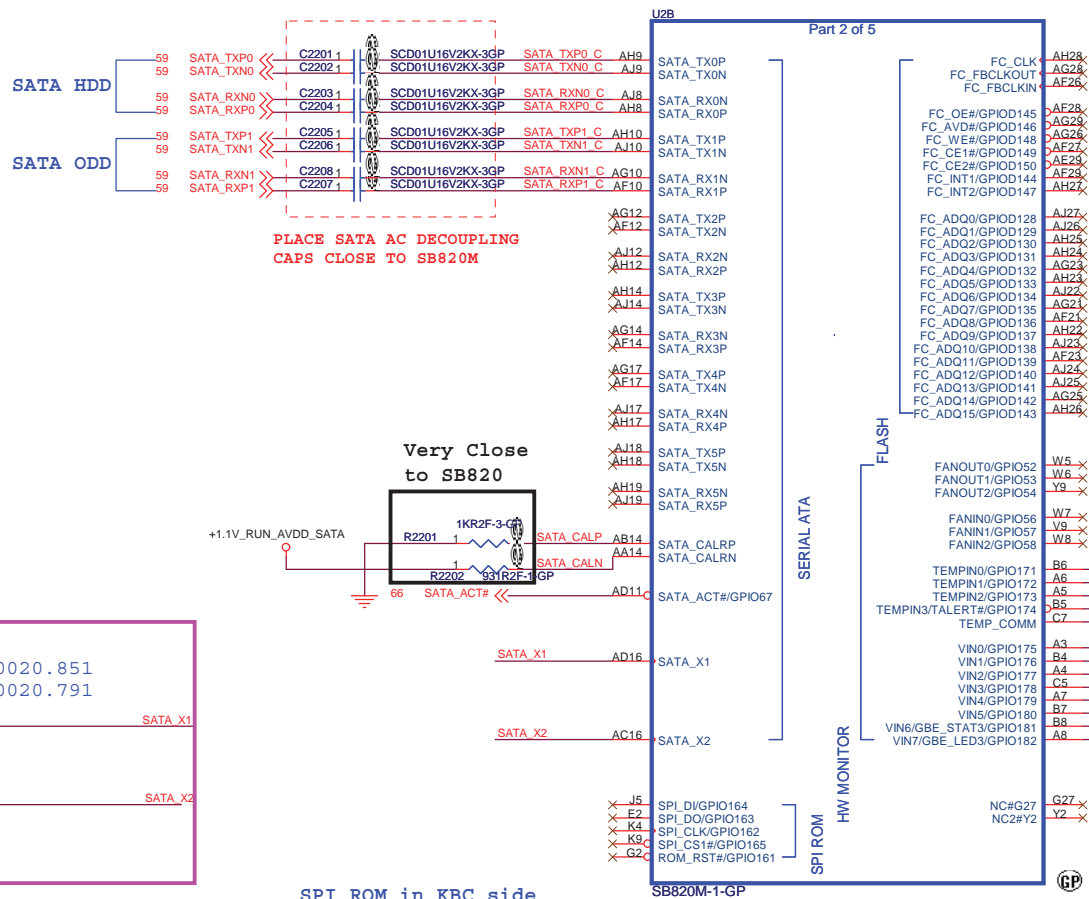
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SSID = S.B



USB	
Pair	Device
0	USB2
1	USB3
2	USB0 (I/O Board)
3	USB1 (I/O Board, 17")
4	WLAN
5	RESERVED
6	RESERVED
7	RESERVED
8	RESERVED
9	RESERVED
10	CARD READER
11	CAMERA
12	BLUETOOTH
13	RESERVED

SSID = S.B

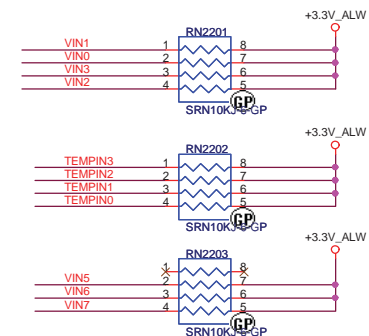


GPIO[150:128] are open drain GPIO pins where as GPO160 is an open drain GPO pin. These pins are not programmed to GPIO mode by default.

If use as GPIO, need to pull up to 1.8V_RUN

suggest not use HW monitor

MEM_1V5 51



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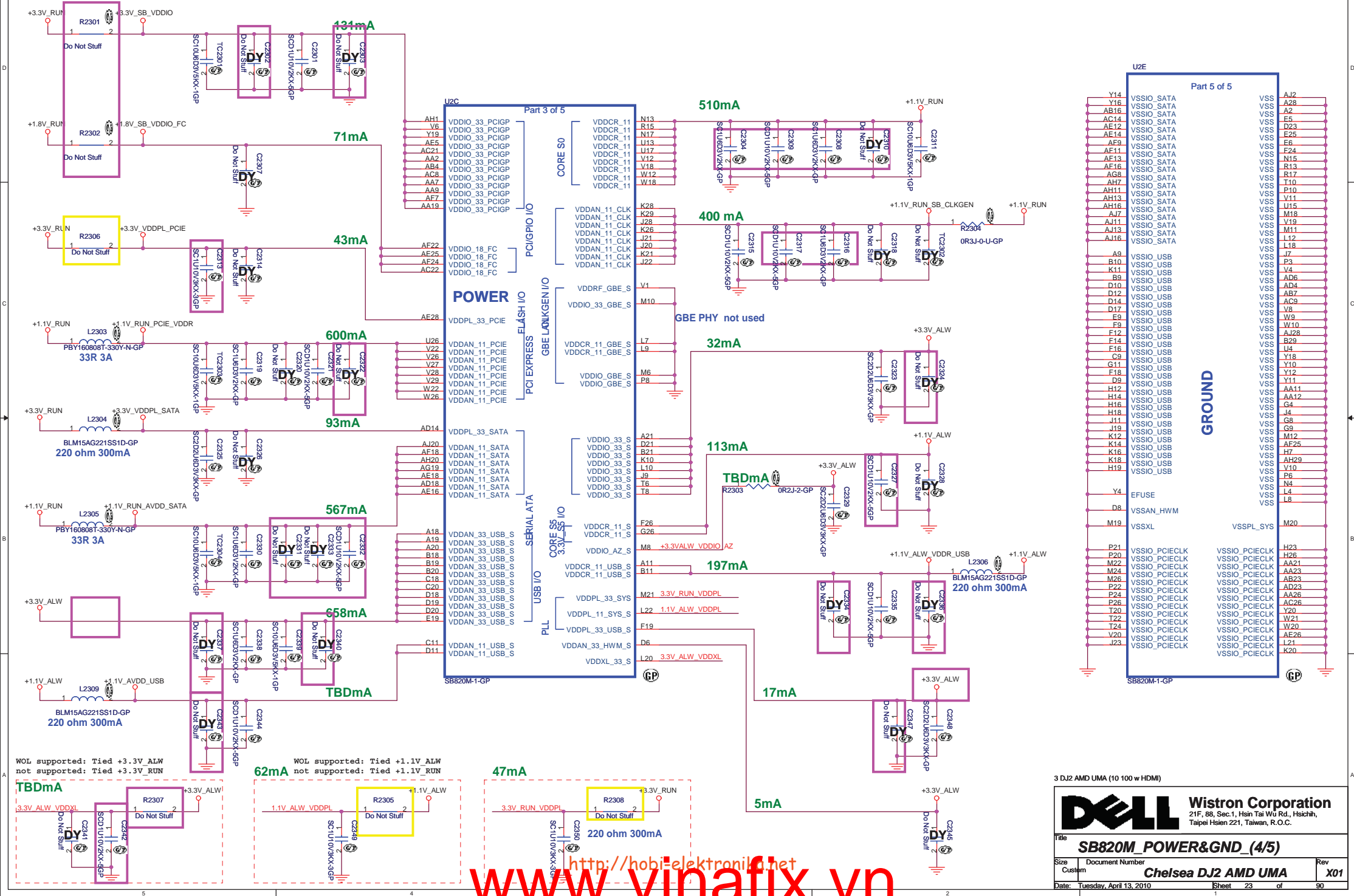


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Title			Rev
SB820M_SATA-IDE_(3/5)			X01
Size	Document Number	Cheslea DJ2 AMD UMA	
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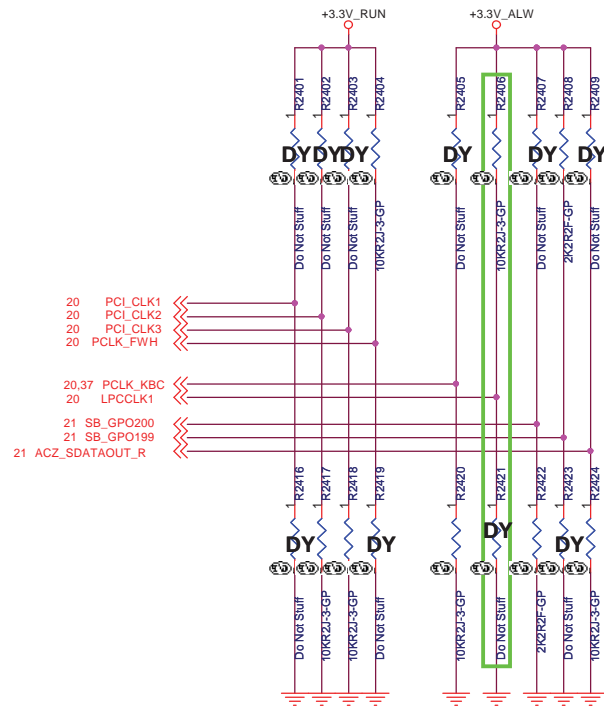
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SSID = S.B

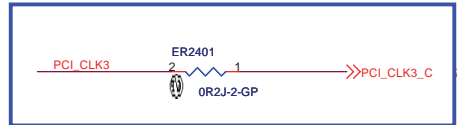


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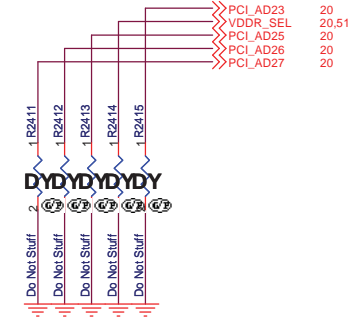
REQUIRED STRAPS



0309



DEBUG STRAPS



REQUIRED SYSTEM STRAPS

USE this pin to determine INT/EXT CLK

	AZ_SDOUT#	PCI_CLK1	PCI_CLK2	PCI_CLK3	PCLK_FWH (PCI_CLK4)	PCLK_KBC (LPCCLK0)	LPCCLK1	SB_GPO200, SB_GPO199 ROM TYPE:
PULL HIGH	LOW POWER MODE	Allow PCIE GEN2 DEFAULT	WatchDOG (NB_PWRGD) ENABLED	USE DEBUG STRAPS	non_Fusion CLOCK mode DEFAULT	ENABLE EC	DEFAULT CLKGEN ENABLED (Use Internal)	H, H = Reserved H, L = SPI ROM
PULL LOW	PERFORMANCE MODE DEFAULT	Force PCIE GEN1	WatchDog (NB_PWRGD) DISABLED DEFAULT	IGNORE DEBUG STRAPS DEFAULT	Fusion CLOCK mode	DISABLE EC DEFAULT	CLKGEN DISABLED (Use External)	L, H = LPC ROM L, L = FWH ROM

Not Applicable to SB820M
but provision for pull-down is required.


	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE PCI PLL (DEFAULT)	Disable ILA AUTORUN (DEFAULT)	USE FC PLL (DEFAULT)	USE DEFAULT PCIE STRAPS (DEFAULT)	Disable PCI MEM BOOT (DEFAULT)
PULL LOW	BYPASS PCI PLL	Enable ILA AUTORUN	BYPASS FC PLL	USE EEPROM PCIE STRAPS	Enable PCI MEM BOOT

Note: SB820 has 15K internal PU FOR PCI_AD[27:23]

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Title

CPU (VCC CORE)

Size

Document Number

Rev

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Title			
<i>CPU (VCC GFXCORE)</i>			
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Title		CPU (VSS)	
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Title

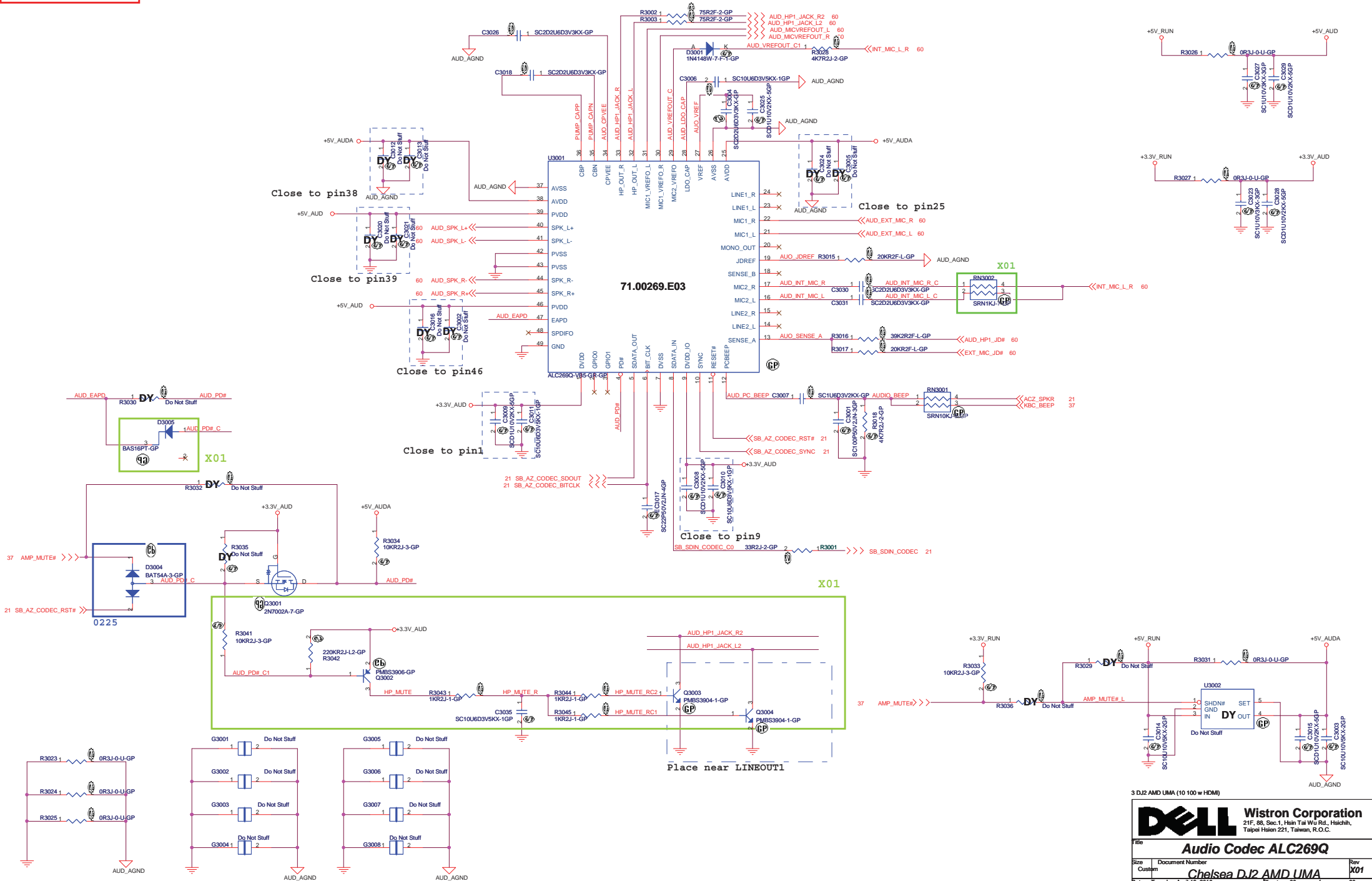
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```
SSID = AUDIO
```



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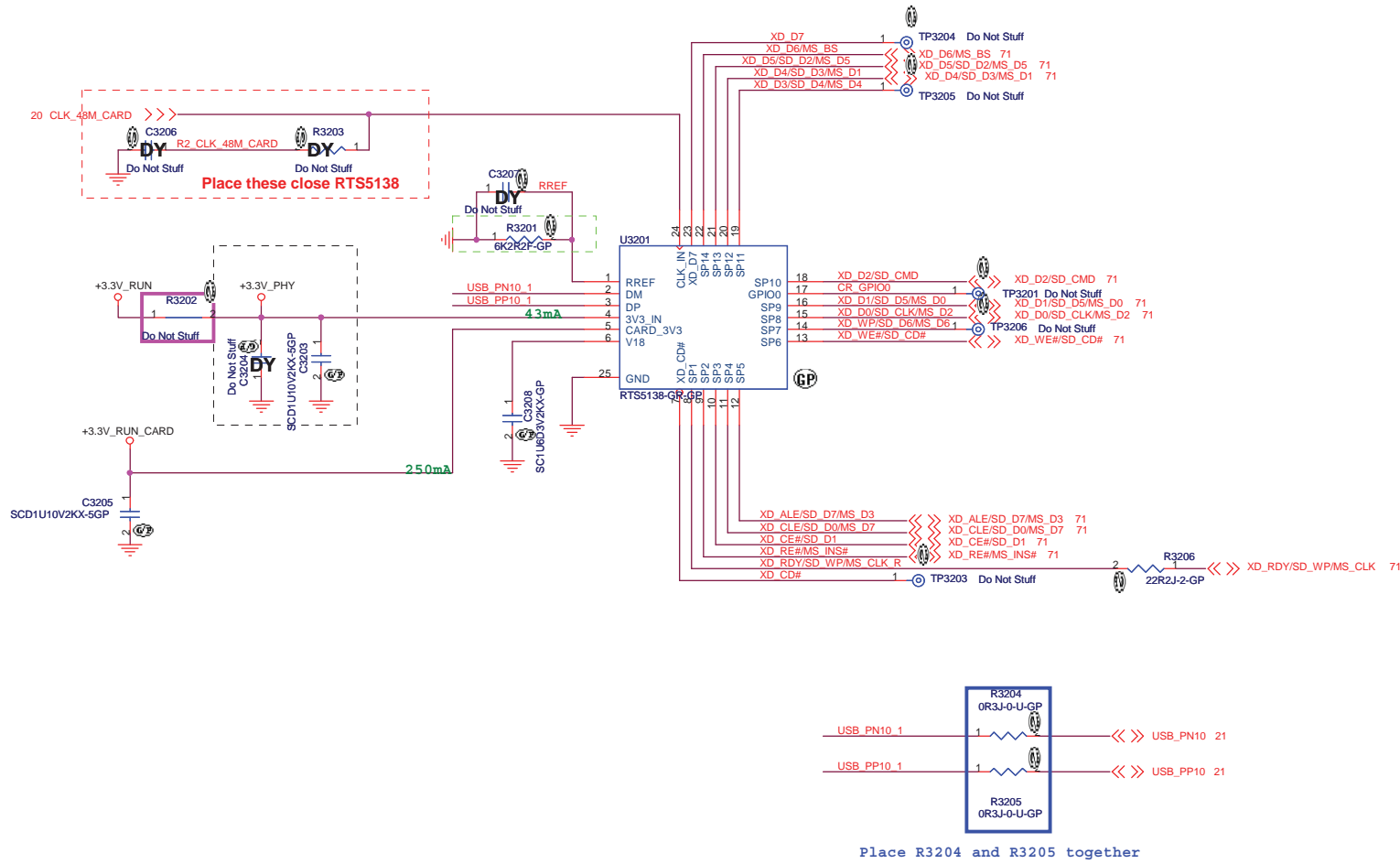
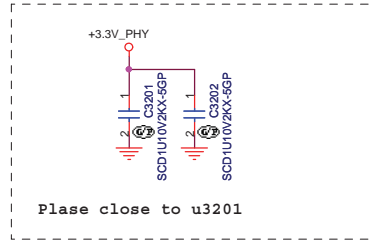
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Title	Audio Codec ALC269Q
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Size	Document Number	Rev
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SSID = SDIO



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Title			
Card Reader-RTS5138			
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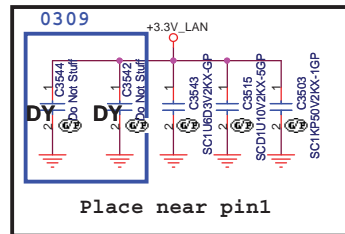
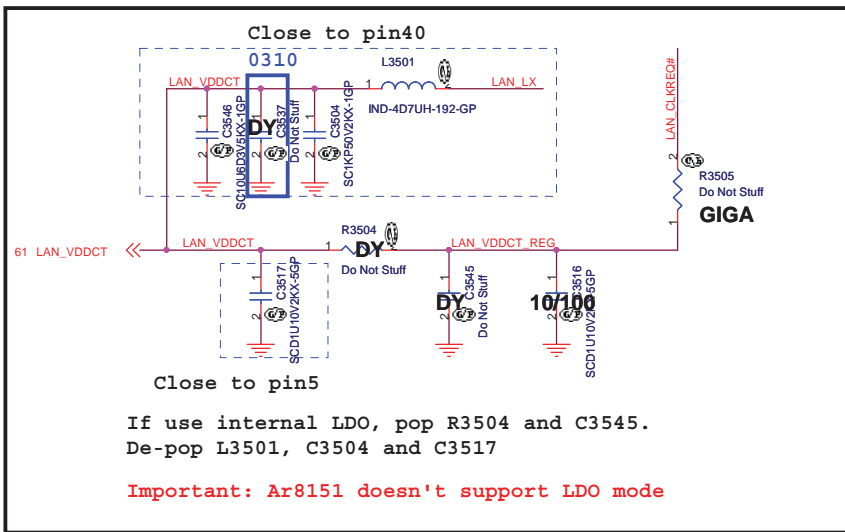
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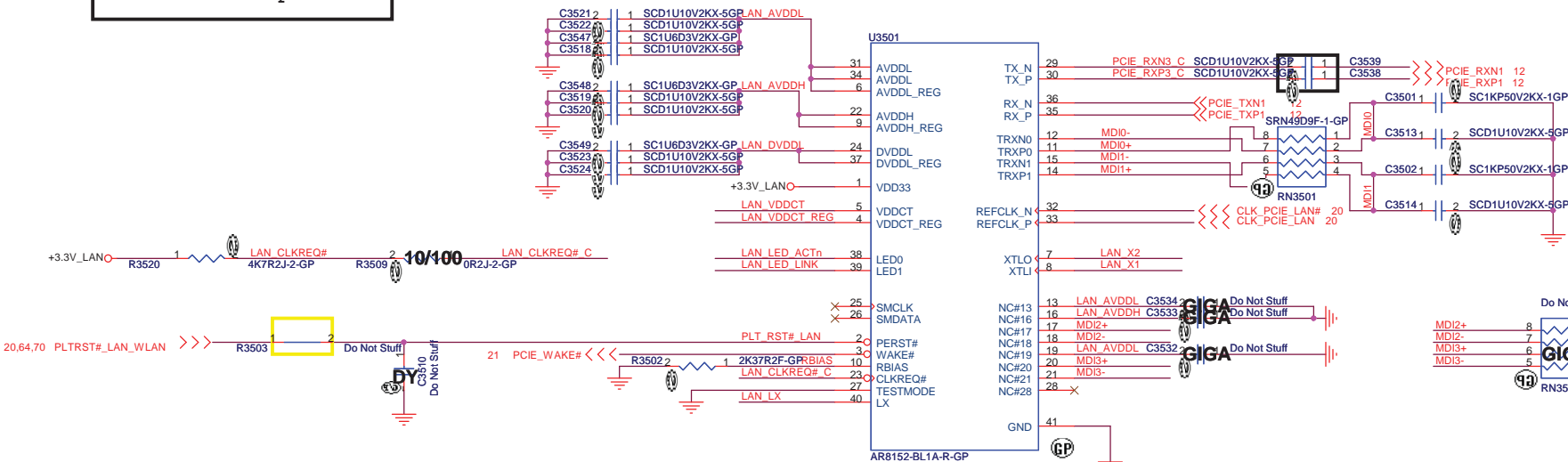
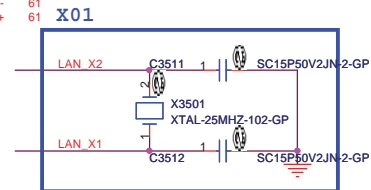
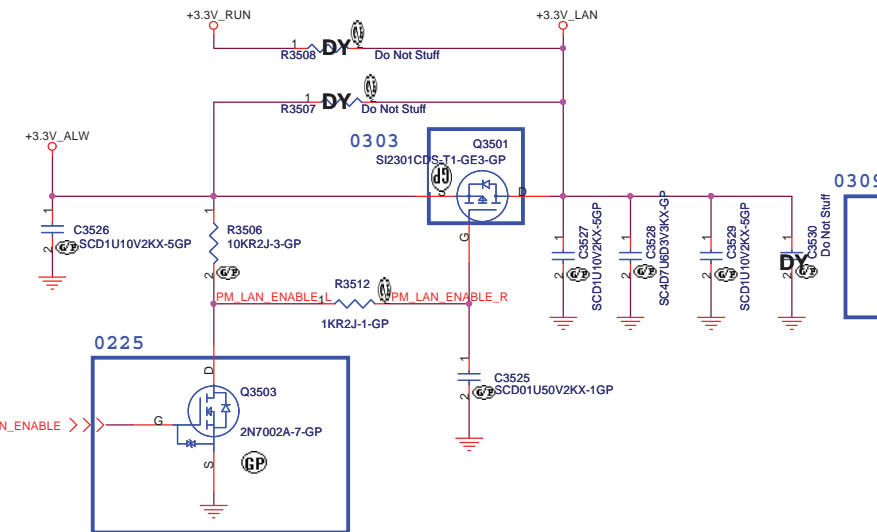
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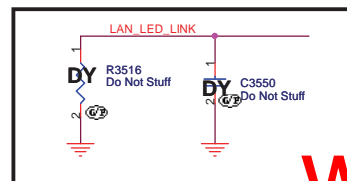
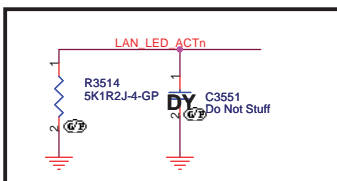
Pin6 is the AVDDL LDO output, 1uF+0.1uF(C3547 and C3518) close to Pin6;
C3522, C3521 close to Pin31, Pin34 respectively.
Pin9 is the AVDDH LDO output, 1uF+0.1uF(C3548 and C3519) close to Pin9;
C3520 close to Pin22.
Pin37 is the DVDDL LDO output, 1uF+0.1uF(C3549 and C3523) close to Pin37;
C3524 close to Pin24.



If overclocking, de-pop R3514 and C3551

If use LDO mode, pop R3516 and C3550

GIGA LAN use 71.08151.003



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

Title: **AR8152/AR8151**


Size: A3 Document Number: **Chelsea DJ2 AMD UMA** Rev: **X01**

Date: Tuesday, April 13, 2010 Sheet 35 of 90

<http://hobi-elektronik.net>
www.vinafix.vn

(Blanking)

3 DJ2 AMD UMA (10 100 w HDMI)



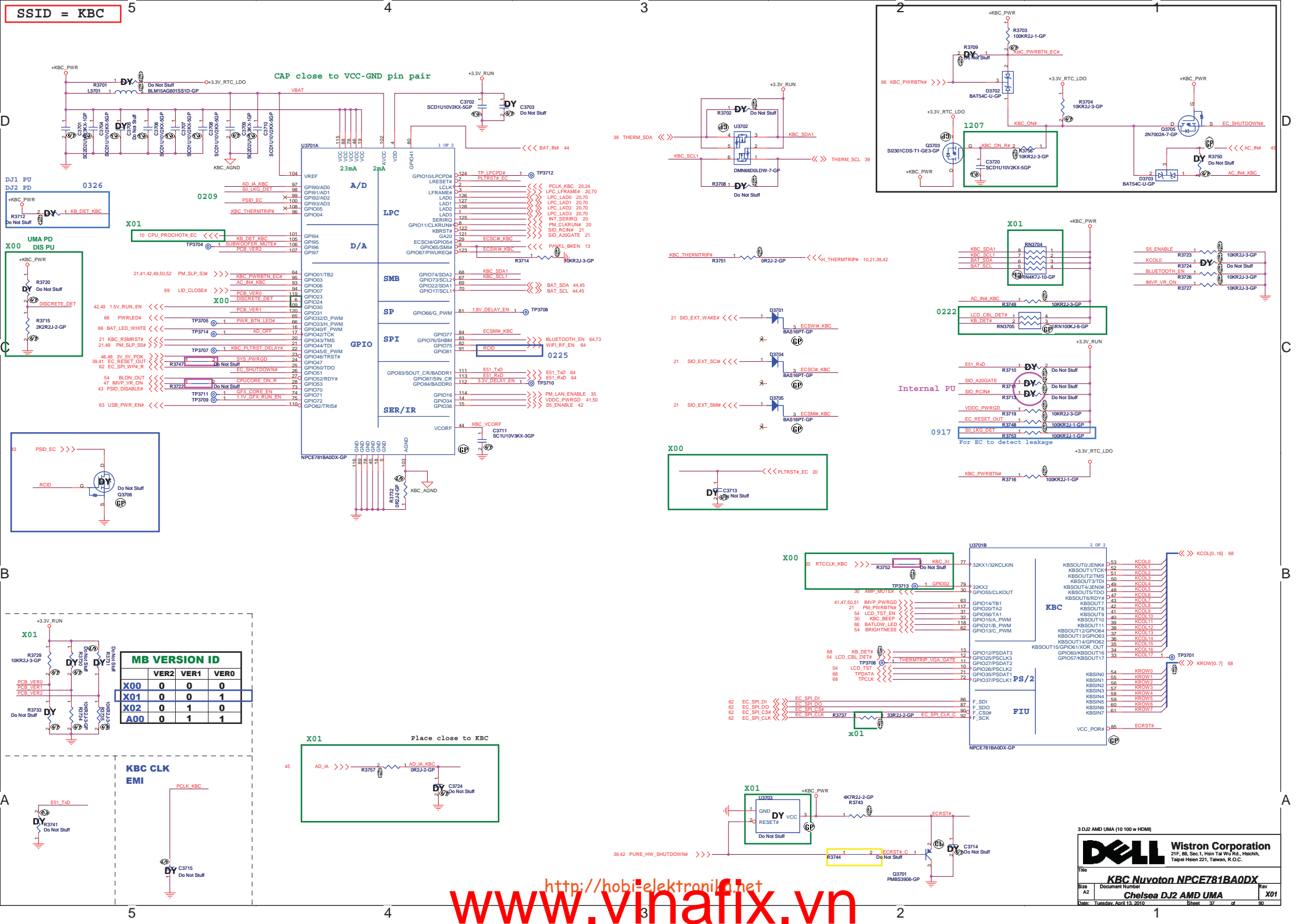
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

Reserved

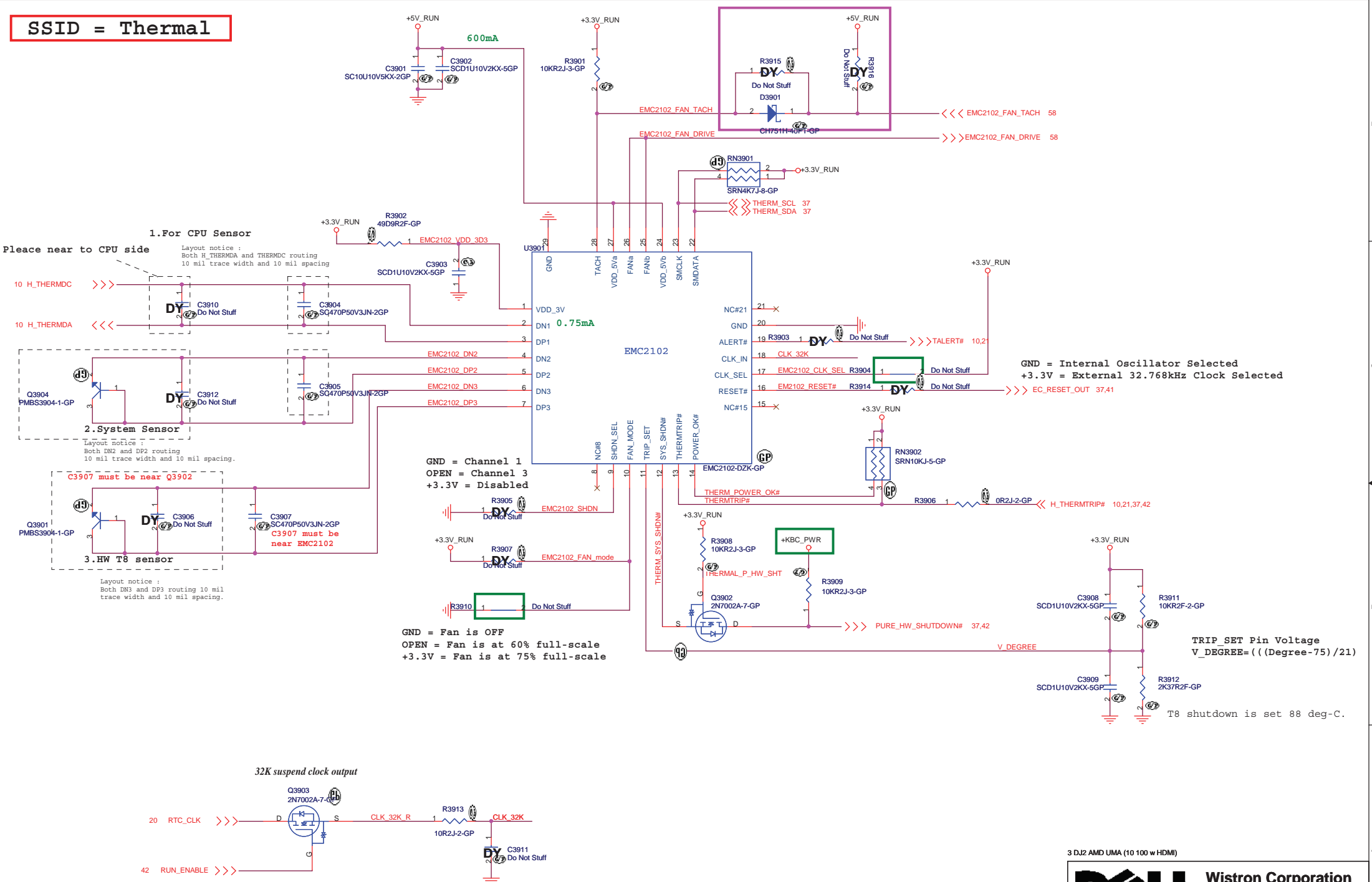
Size A3	Document Number Chelsea DJ2 AMD UMA	Rev X01
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Date: Tuesday, April 13, 2010	Sheet 36 of 90
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(Blanking)

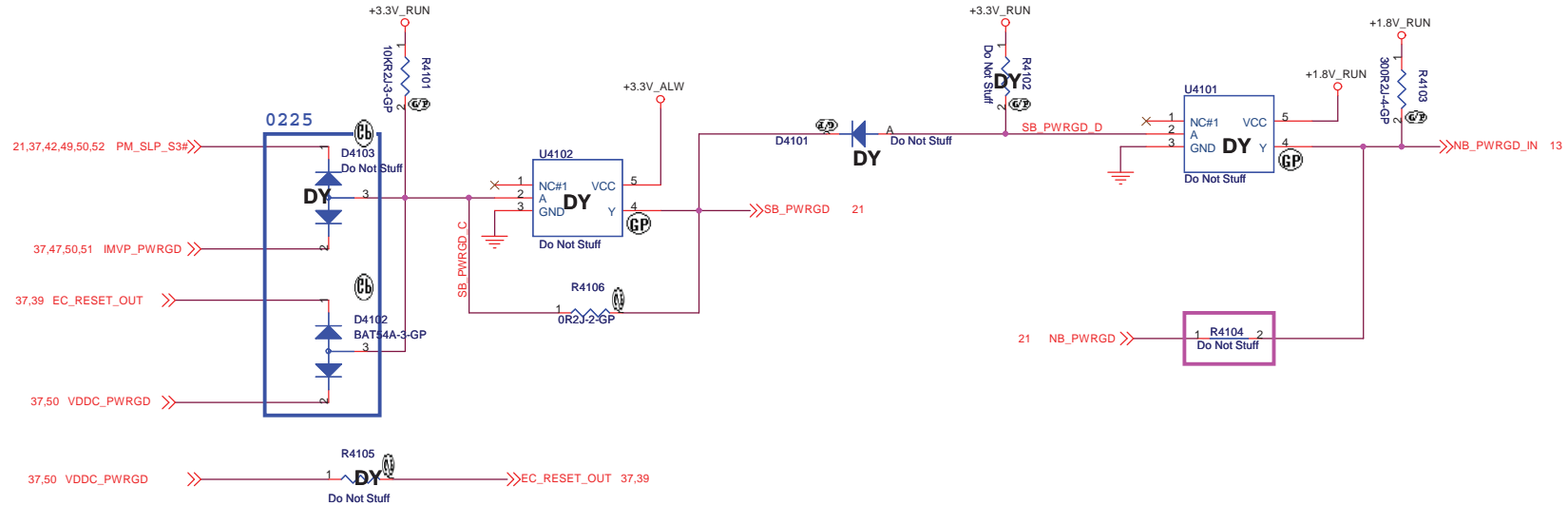
SSID = Thermal



http://hobi-elektronik.net
 www.vinafix.vn

(Blanking)

SSID = Reset.Suspend

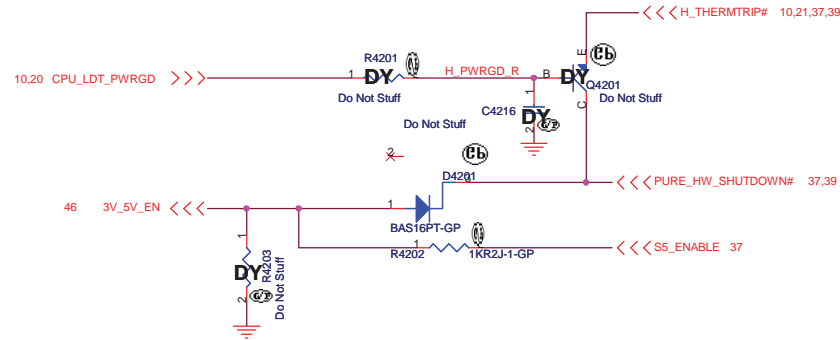


3 DJ2 AMD UMA (10 100 w HDMI)

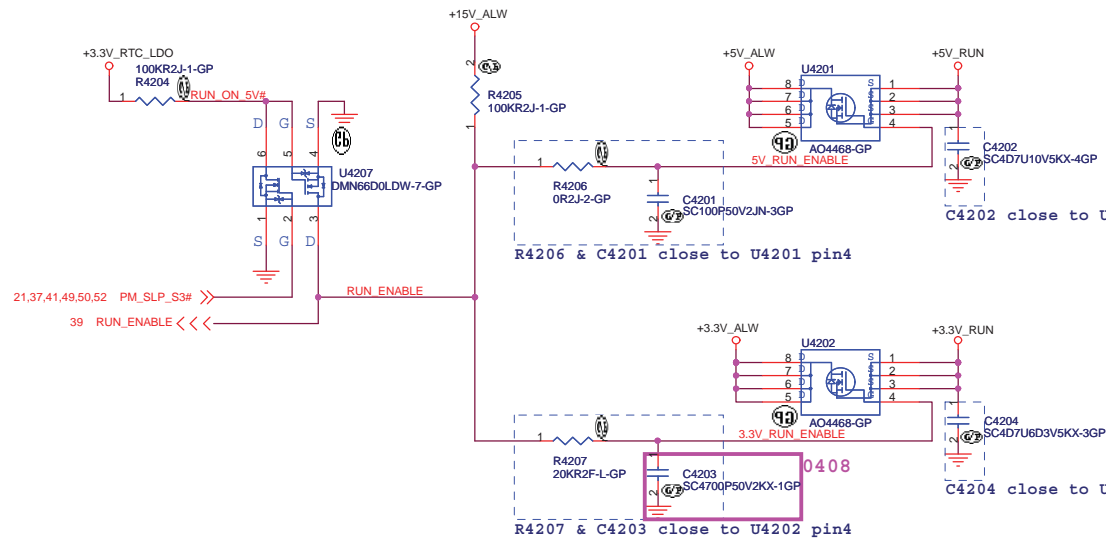
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
		Title Power On Logic	
Size A3	Document Number Chelsea DJ2 AMD UMA	Rev X01	
Date: Tuesday, April 13, 2010		Sheet 41 of 90	

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SSID = Reset.Suspend

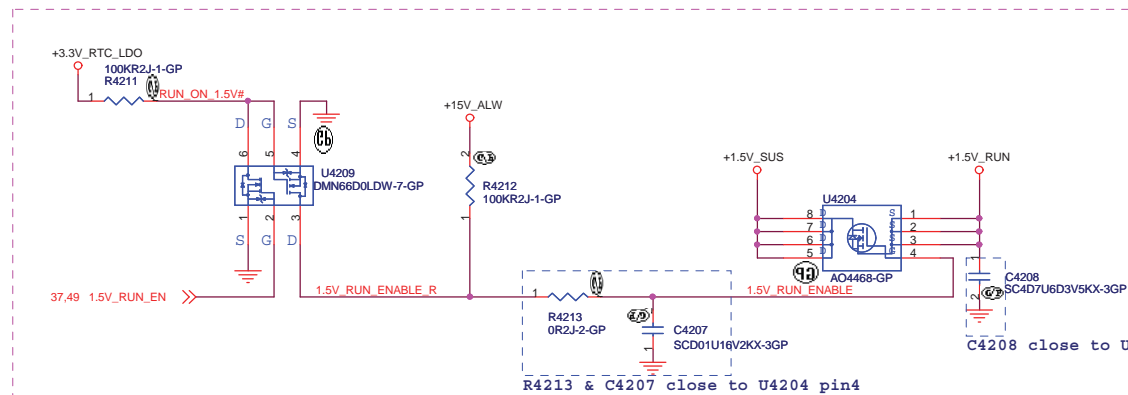


Run Power

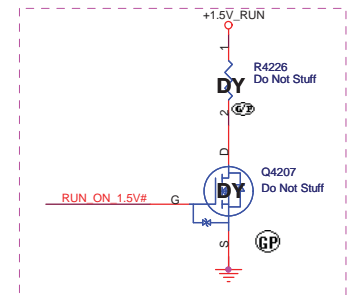


Peak current: 6257.3mA (HD:1100 ODD:2500)
Design current: 4380.11 mA
11.6A
Rds=14m ohm

Peak current: 5966mA
Design current: 4177 mA
11.6A
Rds=14m ohm



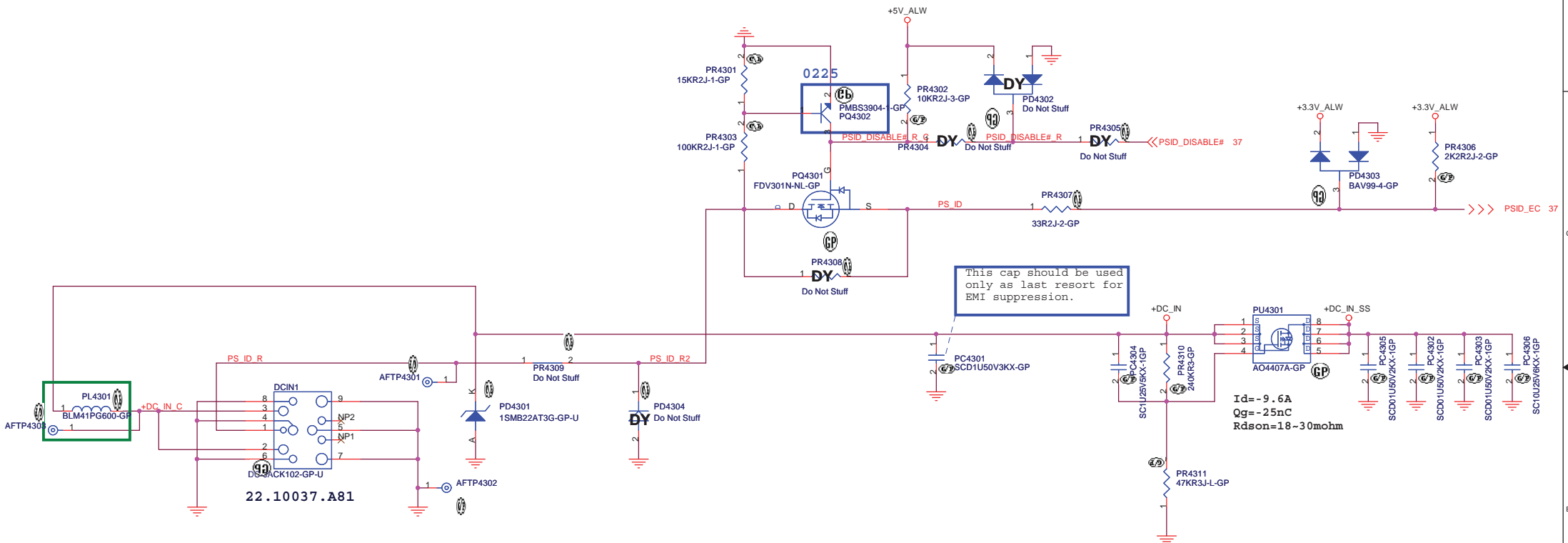
Peak current: 1230mA
Design current: 861 mA
11.6A
Rds=14m ohm



3 DJ2 AMD UMA (10 100 w HDMI)

SSID = PWR.Support

DCIN CONN



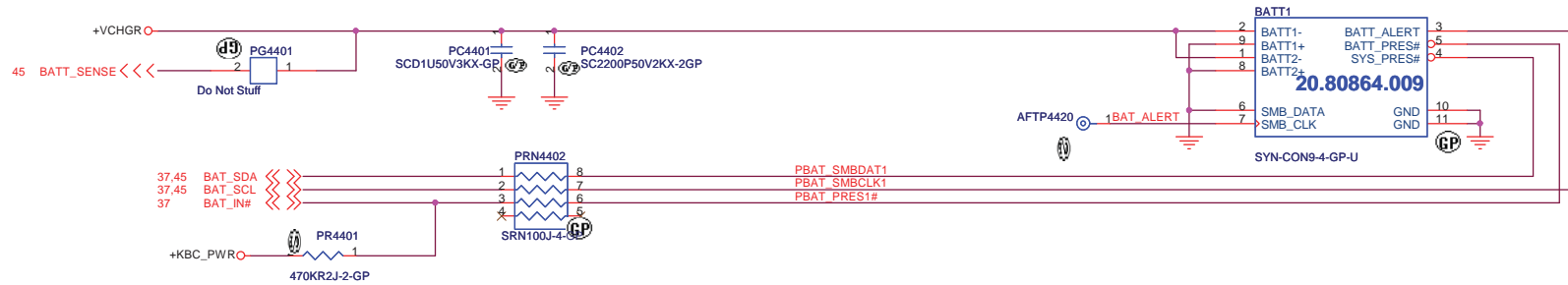
3 DJ2 AMD UMA (10 100 w HDMI)

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

Title		DCIN	
Size	A3	Document Number	Chelsea DJ2 AMD UMA
Date:	Tuesday, April 13, 2010	Sheet	43 of 90

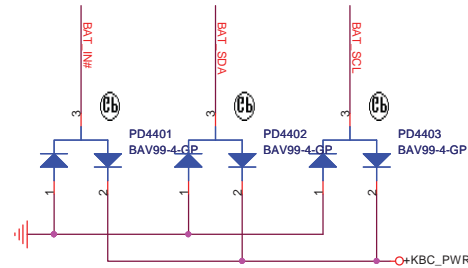
<http://hobi-elektronik.net>
www.vinafix.vn

Batt Connector



0303

AFTP4419 1 PBAT_PRE#1#
 AFTP4421 1 PBAT_SMBDAT1#
 AFTP4418 1 PBAT_SMBCLK1#
 AFTP4422 1 +VCHGR

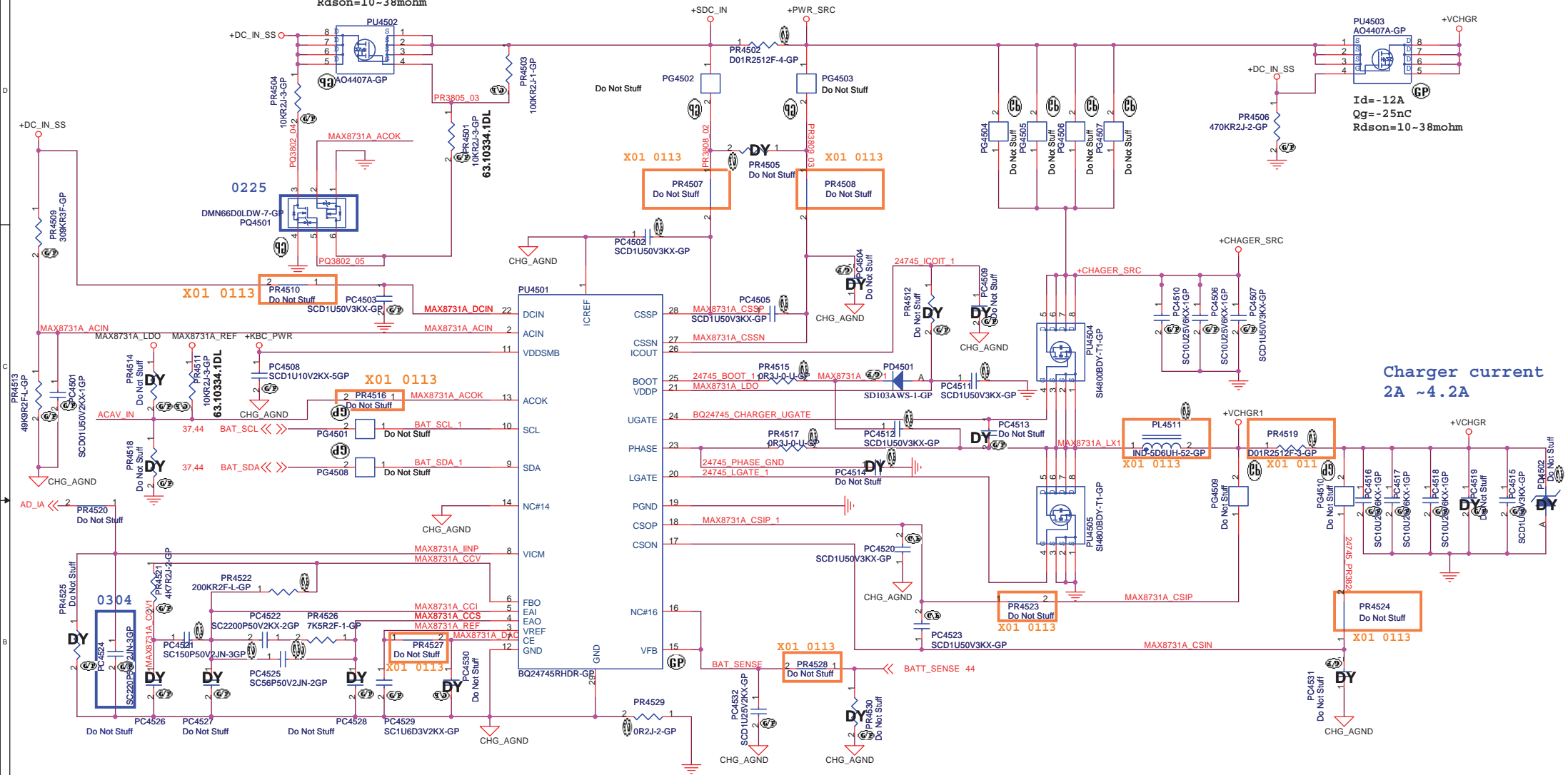


3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		BATT CONN	
Size A3	Document Number	Chelsea DJ2 AMD UMA	Rev X01
Date: Tuesday, April 13, 2010	Sheet	44	of 90

SSID = Charger

Id=-12A
Qg=-25nC
Rdson=10~38mohm



Charger current
2A ~4.2A

I/P cap: 10U 25V K1206 X5R/ 78.10622.52L
Inductor: 5.8UH SIL104R-5R8A-R DCR:24mohm Isat =7Arms Delta / 68.5R850.101
O/P cap: 10U 25V K1206 X5R/ 78.10622.52L
H/S: SI4800BDY/ 23mOhm/30mohm@4.5Vgs/ 84.04800.D37
L/S: SI4800BDY/ 23mOhm/30mohm@4.5Vgs/ 84.04800.D37

3 DJ2 AMD UMA (10 100 w HDMI)

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

Title **CHARGER BQ24745**

Size A3 Document Number **Chelsea DJ2 AMD UMA** Rev **X01**

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Design Current = 7.57A
11.89A < OCP < 14.053A

Design Current = 7.3A
11.45A < OCP < 16A

I/P cap: 10U 25V K1206 X5R/ 78.10622.52L
Inductor: 3.3uH PCMC063T-3R3MN Cynotec 28mohm/30mohm Isat =13.5Arms 68.3R310.20A
O/P cap: 220U 6.3V PSLV0J227M(25) 25mohm 2.236Arms NEC_TOKIN/77.C2271.00L
O/P cap: 100U 6.3V TEPSLB20J107M(45) 8R 45mohm 1.374Arms NEC_TOKIN/77.C1071.081
H/S: FDS8884 23mohm/30mohm@4.5Vgs/ 84.08884.037
L/S: FDS6690AS 12mohm/15mohm@4.5Vgs/ 84.06690.537

I/P cap: 10U 25V K1206 X5R/ 78.10622.52L
Inductor: 2.2uH PCMC063T-2R2MN Cynotec 18mohm/20mohm Isat =14Arms 68.2R210.20B
O/P cap: 220U 6.3V PSLV0J227M(25) 25mohm 2.236Arms NEC_TOKIN/77.C2271.00L
O/P cap: 100U 6.3V TEPSLB20J107M(45) 8R 45mohm 1.374Arms NEC_TOKIN/77.C1071.081
H/S: FDS8884 23mohm/30mohm@4.5Vgs/ 84.08884.037
L/S: FDS6690AS 12mohm/15mohm@4.5Vgs/ 84.06690.537

RT8205B(T4.08205.A73):

TONSEL	CH1	CH2
GND	200kHz	265kHz
VREF	245kHz	305kHz
VRBG3	300kHz	375kHz
VRBG5	365kHz	460kHz

RT8205B(T4.08205.B73):

TONSEL	CH1	CH2
GND	200kHz	250kHz
VREF	300kHz	375kHz
VRBG3	365kHz	460kHz
VRBG5	365kHz	460kHz

TPSS1125	74.51125.073
RT8205BQGW	74.08205.B73

SKIPSEL	VREG3 or VRBG5	VREF(2V)	GND
Operating Mode	OOA Auto Skip	Auto Skip	PWM only

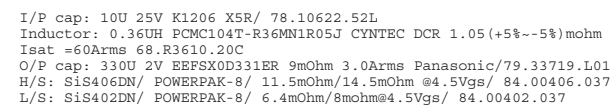
EN0	Open	820k to GND	GND
Operating Mode	enable both LDOs, VCLK on and ready to turn on switcher channels	enable both LDOs, VCLK off and ready to turn on switcher channels	disable all circuit

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3 DJ2 AMD UMA (10 100 w HDMI)

DELL Wistron Corporation	
21F, 8th, Sec. 1, Hsin Tai Wu Rd., Hsichia, Taipei Hsien 221, Taiwan, R.O.C.	
Title TPSS1125 5V/3DV	
Size A2	Document Number Cheslea DJ2 AMD UMA
Date: Tuesday, April 13, 2010	Sheet 46 of 90
	Rev X01

ISL6265HRTZ-T for +VCC_CORE&+VDDNB

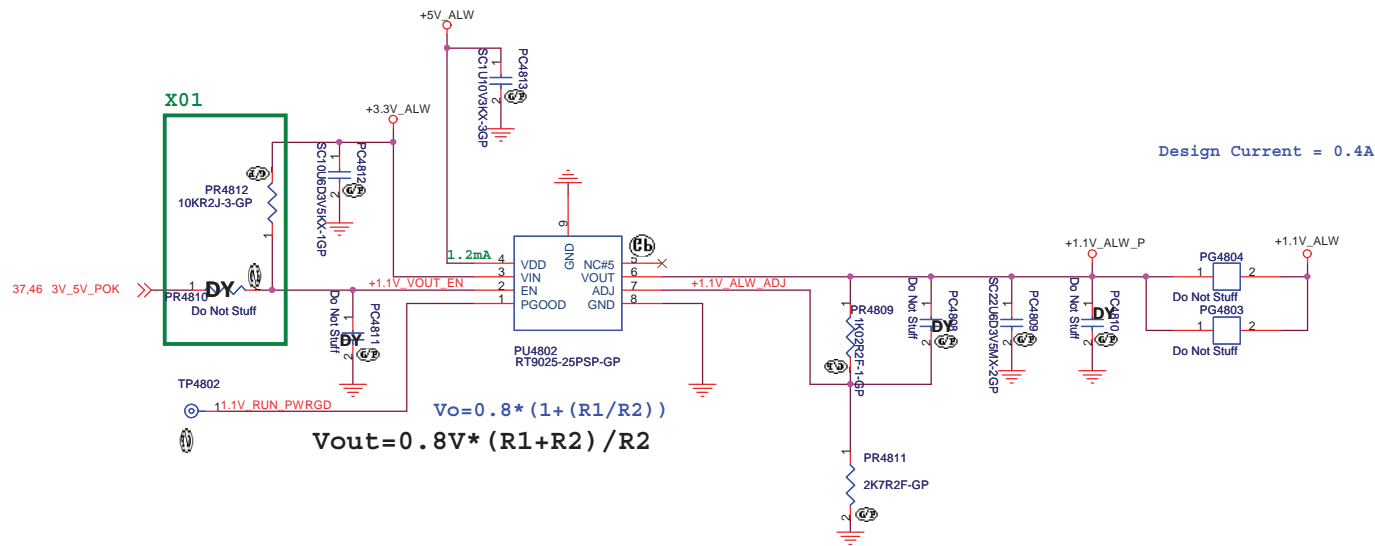


Title VREG : +VCC_CORE&+VDDNB			
Size A2	Document Number Chelsea DJ2 AMD UMA	Rev X01	
Date: Tuesday, April 13, 2010		Sheet 47 of	90

<http://hobielektronika.net>
www.vinafix.vn

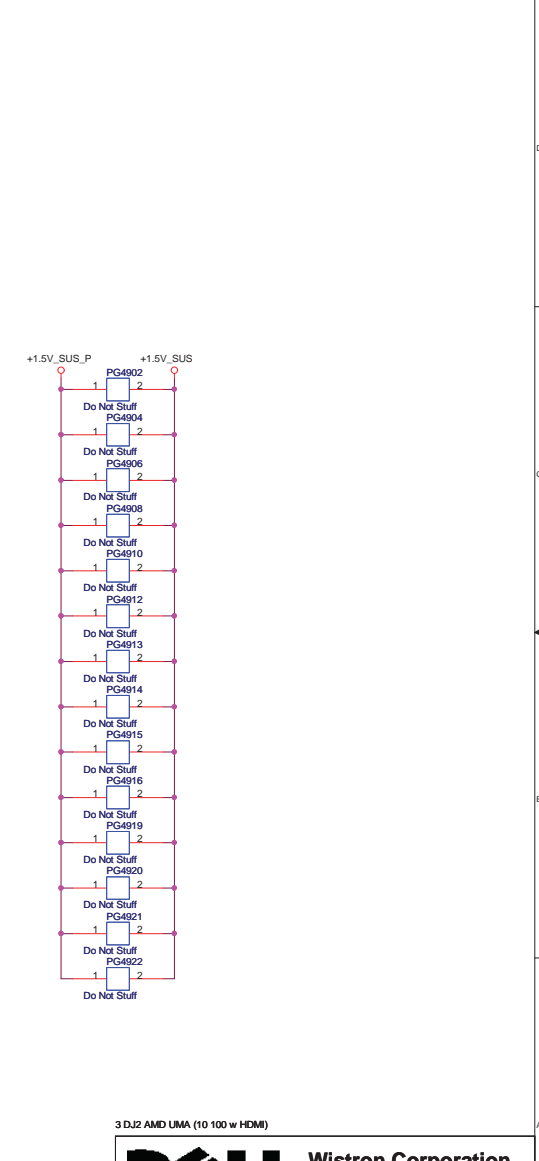
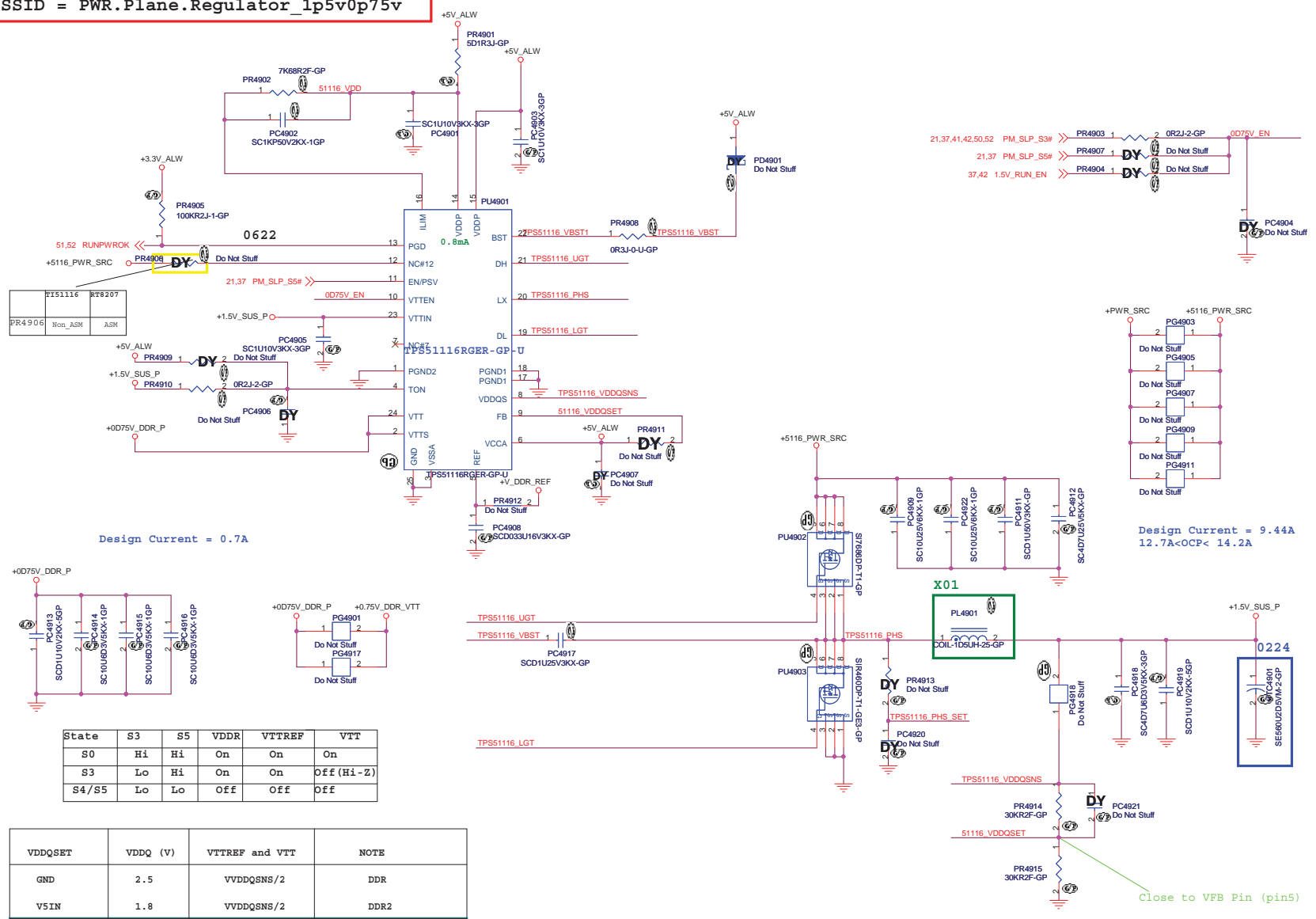
SSID = PWR.Plane.Regulator_+1.1V_RUN

RT9025 for +1.1V_ALW



3 DJ2 AMD UMA (10 100 w HDMI)

SSID = PWR.Plane.Regulator_1p5v0p75v



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

VDDQSET	VDDQ (V)	VTTREF and VTT	NOTE
GND	2.5	VVDDQSNS/2	DDR
V5IN	1.8	VVDDQSNS/2	DDR2
FB Resistors	Adjustable	VVDDQSNS/2	1.5 V < VVDDQ < 3 V

I/P cap: 10U 25V K1206 X5R/ 78.10622.52L
Inductor: 1.5UHPMC104T-1R5MN DCR:3.8/4.2mohm Isat =33Arms Cyntec/ 68.1R510.10J
O/P cap: 220U 2V EEFX0D221R 15mOhm 2.7Arms PANASONIC/ 79.22719.20L
H/S: FDS8880 9.6mohm/12mOhm@4.5Vgs/ 84.08880.037
L/S: FDS6676AS 5.9mOhm/7.25mOhm@4.5Vgs/ 84.06676.A37

3 DJ2 AMD UMA (10 100 w HDMI)

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

Title

TPS51116RGER +1.5V SUS

Size

Custom

Document Number

Chelsea DJ2 AMD UMA

Rev

X01

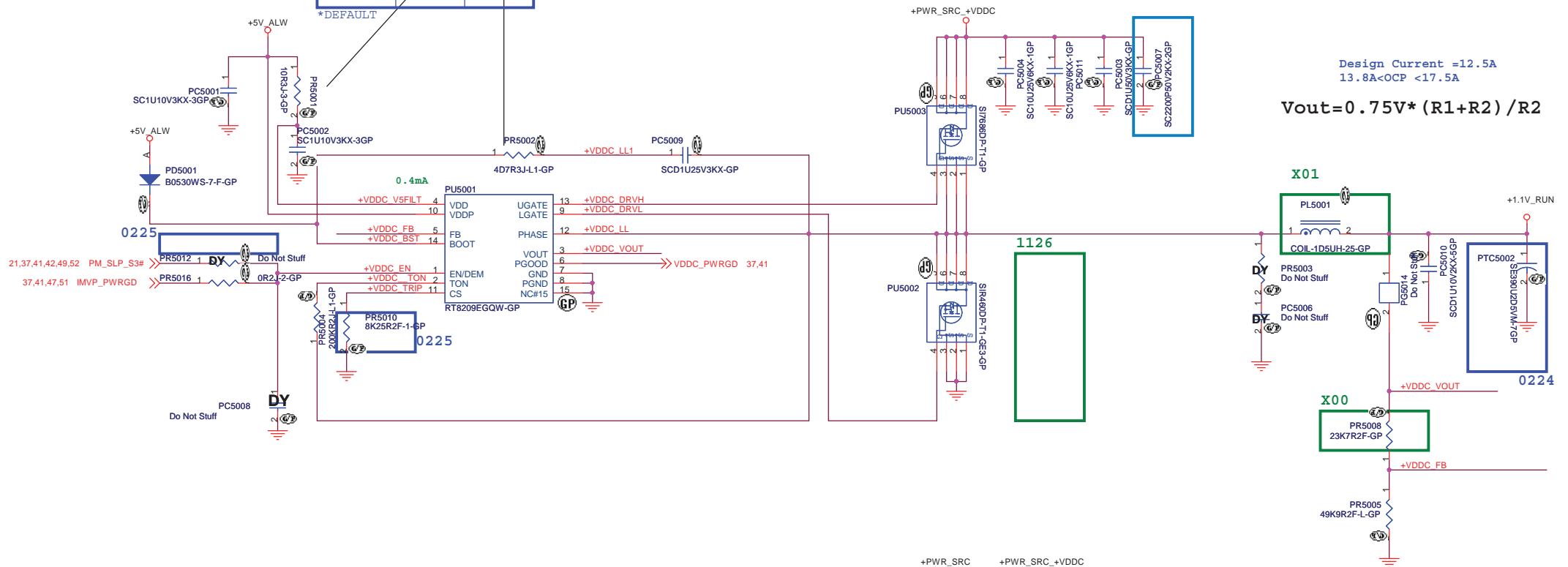
Date: Tuesday, April 13, 2010

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SSID = PWR.Plane.Regulator_VDDC

PWM TYPE	PR5001	PR5002
*RT8209E	10 ohm	4.7 ohm
TPS51117	300 ohm	0 ohm

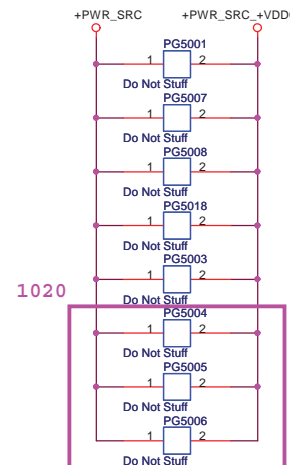
*DEFAULT



Design Current =12.5A
13.8A<OCP <17.5A

$$V_{out}=0.75V \cdot (R1+R2) / R2$$

I/P cap: 10U 25V K1206 X5R/ 78.10622.52L
Inductor: 1.5UHPCMC104T-1R5MN DCR:3.8/4.2mohm Isat =33Arms Cyntec/ 68.1R510.10
O/P cap: 330U 2.5V PSLV0E337M(15) 15mOhm 2.886Arms NEC_TOKIN/ 77.C3371.10L
H/S: SI7686DP/ POWERPAK-8/11mOhm/14mOhm@4.5Vgs/ 84.07686.037
L/S: SiR460DP/ POWERPAK-8/ 4.9mOhm/6.1mohm@4.5Vgs/ 84.00460.037



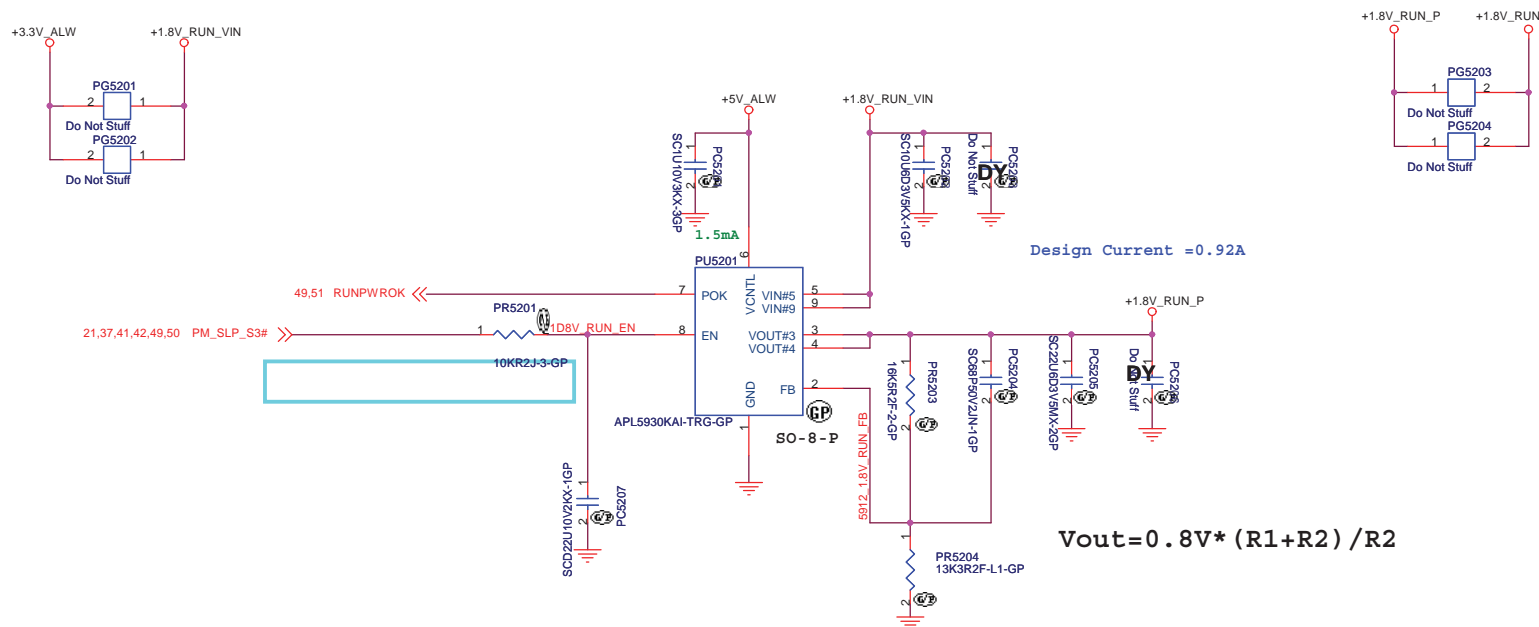
3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title: RT8209 +1.1V RUN			
Size: A3	Document Number: Chelsea DJ2 AMD UMA	Rev: X01	
Date: Tuesday, April 13, 2010	Sheet: 50	of: 90	

<http://hobi-elektronik.net>
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```
SSID = PWR.Plane.Regulator_1p8v
```

APL5930 for +1.8V_RUN


$$V_{out} = 0.8V * (R1 + R2) / R2$$

3 DJ2 AMD UMA (10 100 w HDMI)

DELL

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

Title

APL5930 +1.8V RUN

Size

Document Number

Chelsea DJ2 AMD UMA

Rev

X01

Date: Tuesday, April 13, 2010

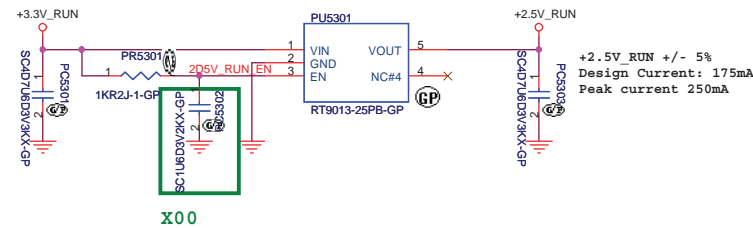
Sheet 52 of

of	90
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www.vinafix.vn

SSID = PWR.Plane.Regulator_2p5v

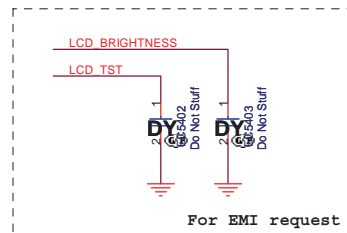
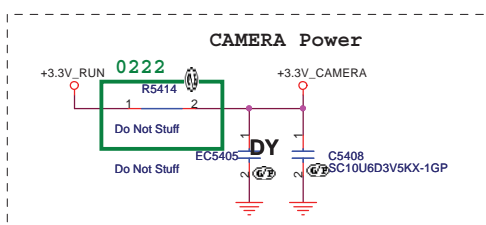
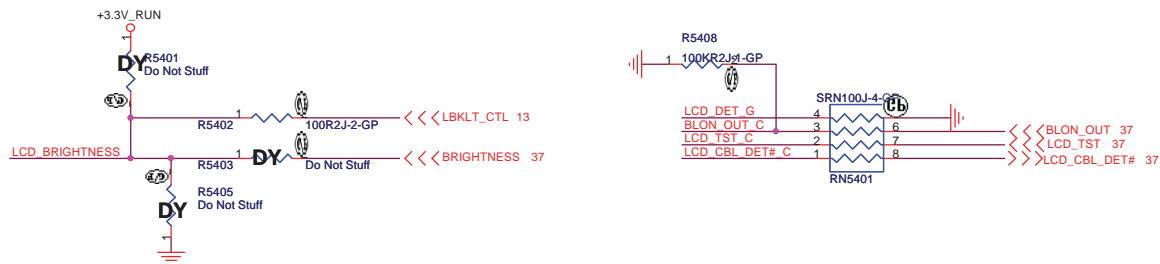
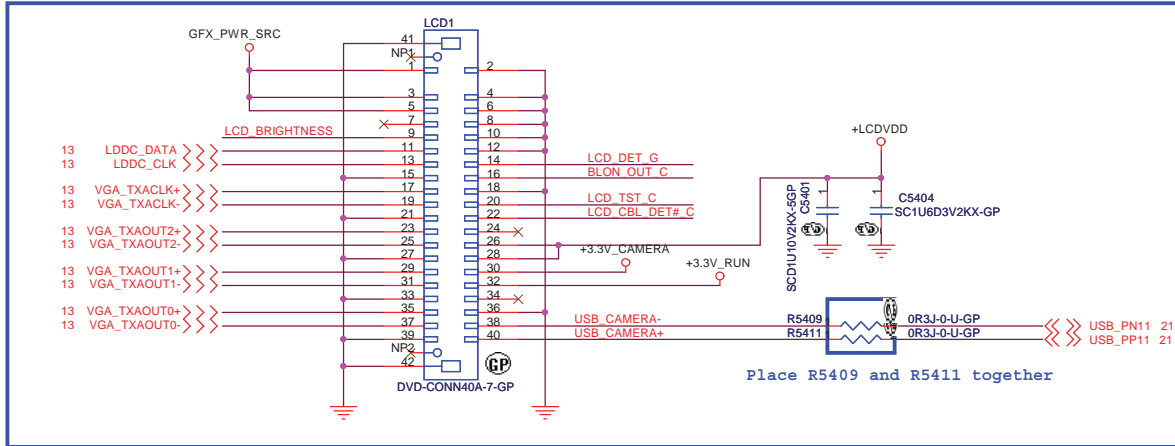
RT9013-25PB for +2.5V_RUN



SSID = VIDEO

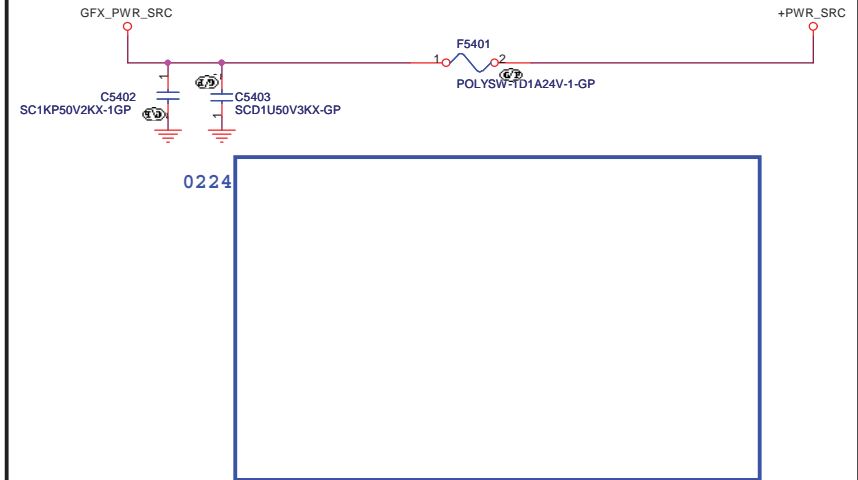
LVDS CONNECTOR

0225



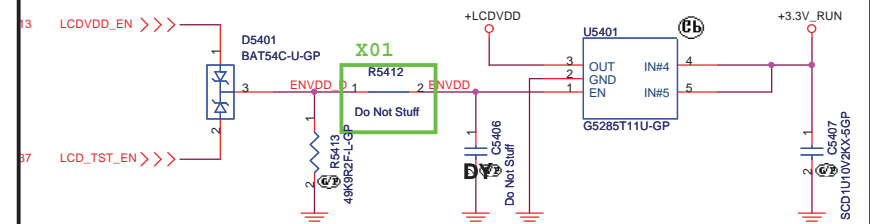
SSID = Inverter

INVERTER POWER



SSID = VIDEO

LCD POWER



3 DJ2 AMD UMA (10 100 w HDMI)



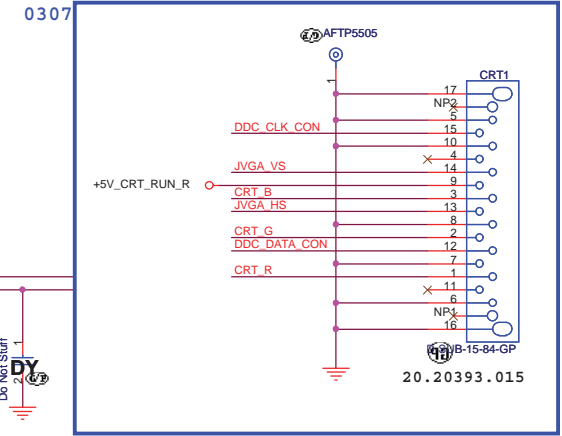
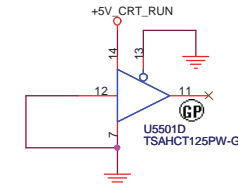
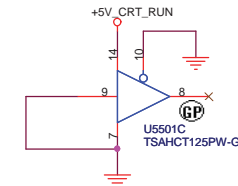
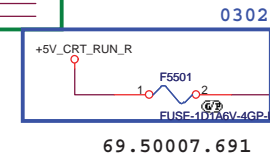
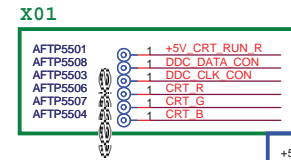
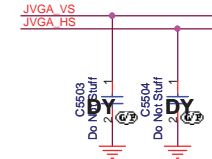
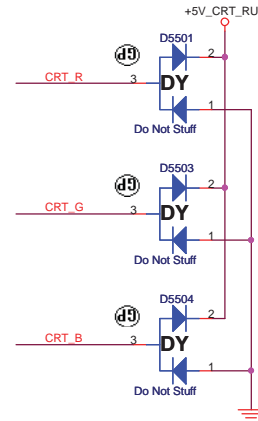
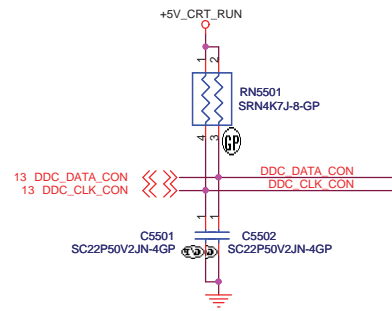
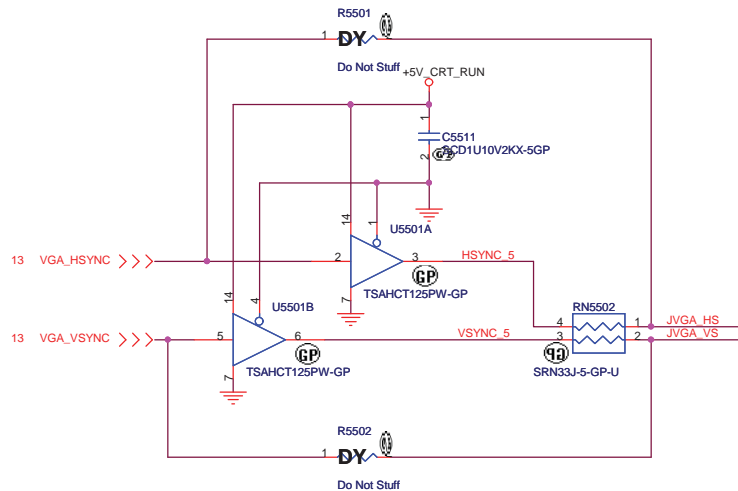
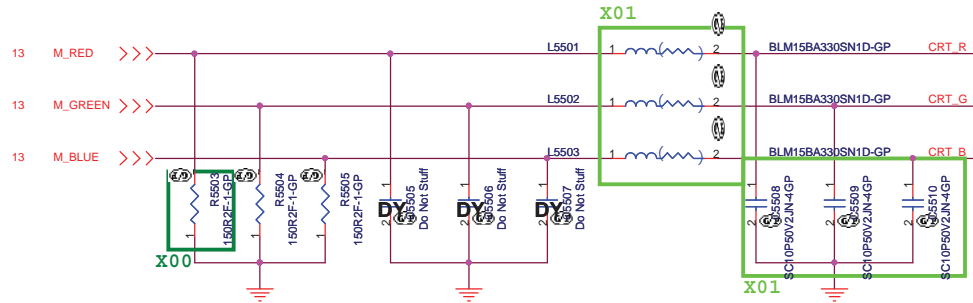
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			
LCD/Inverter Connector			
Size	Document Number	Rev	
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SSID = VIDEO

Layout Note:

- *Pi-filter & 150 Ohm pull-down resistors should be as close as to CRT CONN.
- * RGB signal will hit 75 Ohm first, then pi-filter, finally CRT CONN.



3 DJ2 AMD UMA (10 100 w HDMI)


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

Title CRT Connector		
Size	Document Number Chelsea DJ2 AMD UMA	Rev X01
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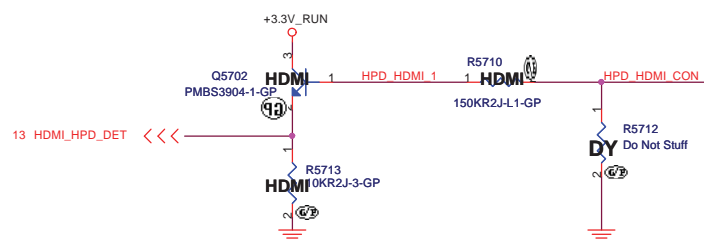
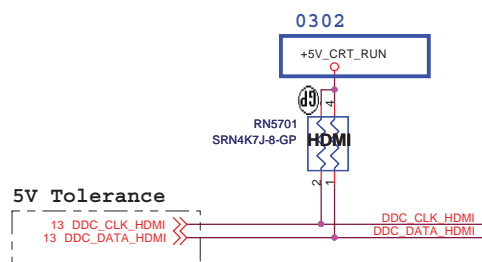
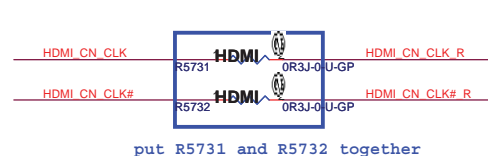
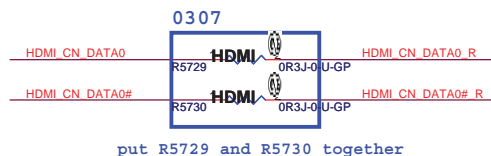
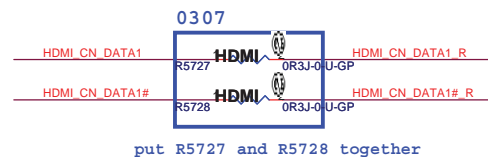
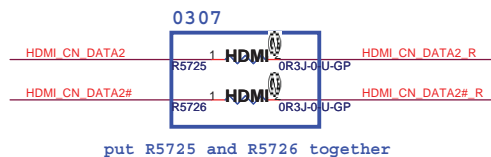
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3 DJ2 AMD UMA (10 100 w HDMI)

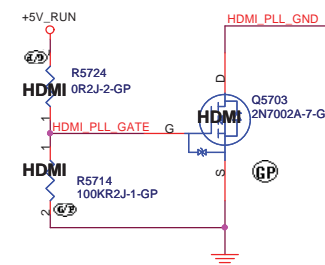
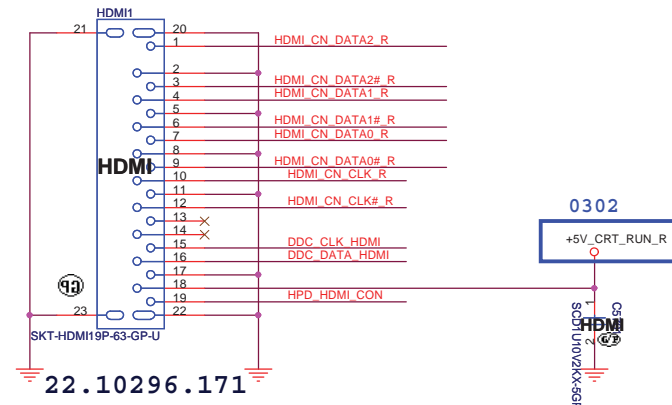
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Reserved			
Size A3	Document Number Chelsea DJ2 AMD UMA		Rev X01
Date: Tuesday, April 13, 2010	Sheet 56	of 90	

SSID = VIDEO

HDMI CONNECTOR



HDMI CONN



3 DJ2 AMD UMA (10 100 w HDMI)

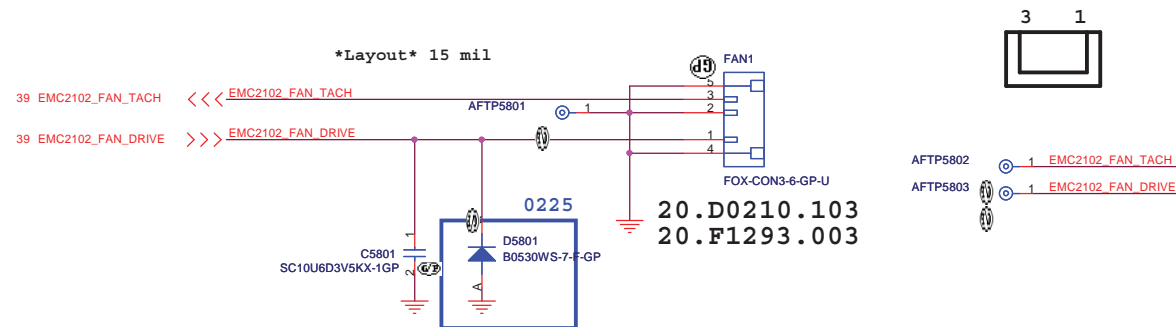
DELL Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			HDMI Level Shifter/Connector	
Size	Document Number		Rev	
A3	Chelsea DJ2 AMD UMA		X01	
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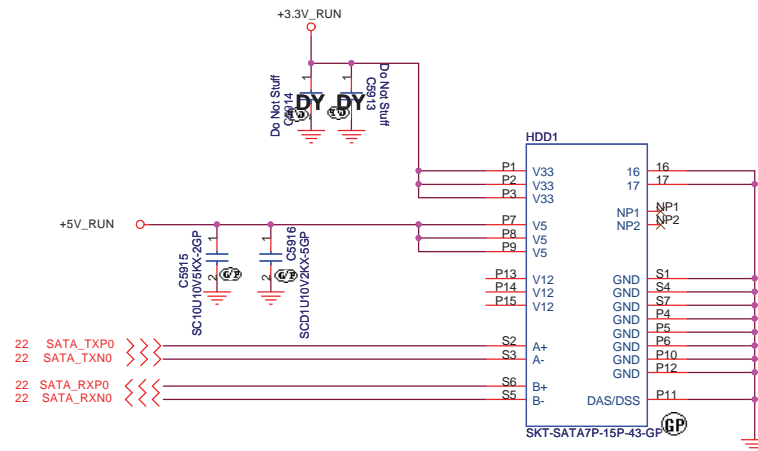
<http://hobi-elektronik.net>
www.vinafix.vn

SSID = Thermal

Fan Connector

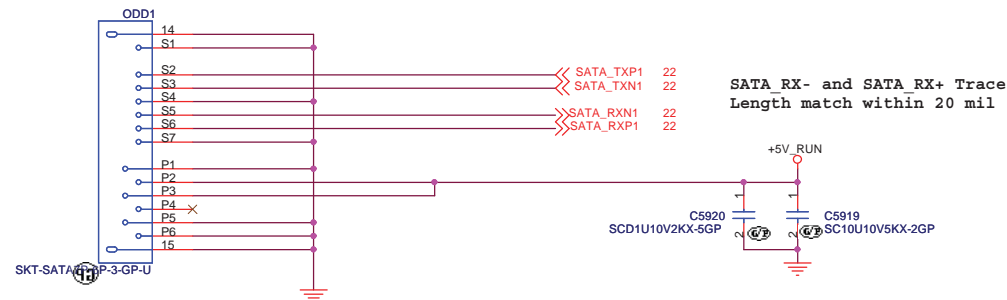


SATA HDD Connector



22.10300.A81

ODD Connector



22.10300.801

3 DJ2 AMD UMA (10 100 w HDMI)



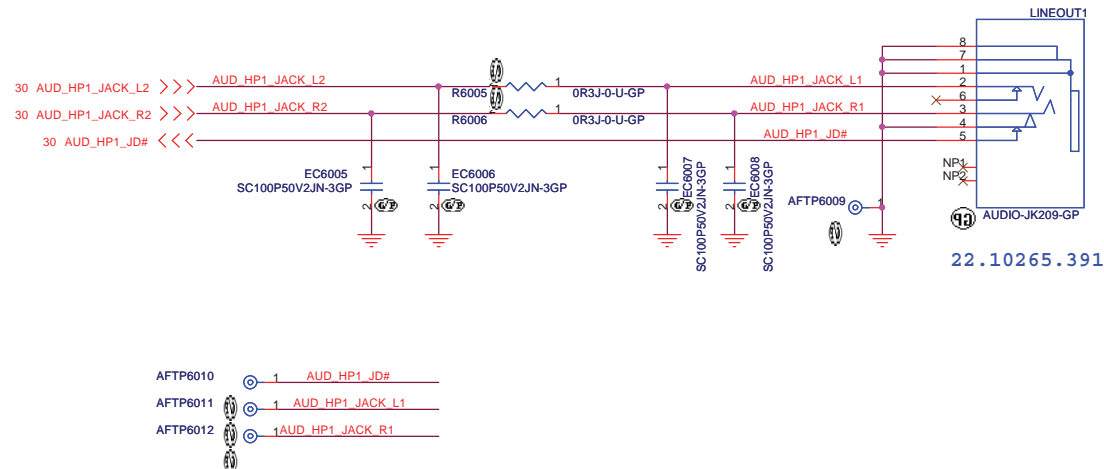
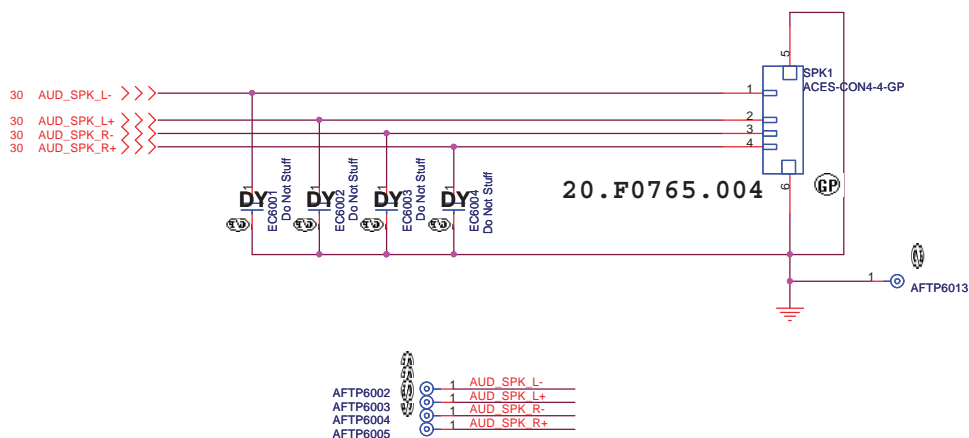
Wistron Corporation
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Taipei Hsien 221, Taiwan, R.O.C.

Title		
HDD/ODD		
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SSID = AUDIO

Speaker Connector

LINE1 OUT

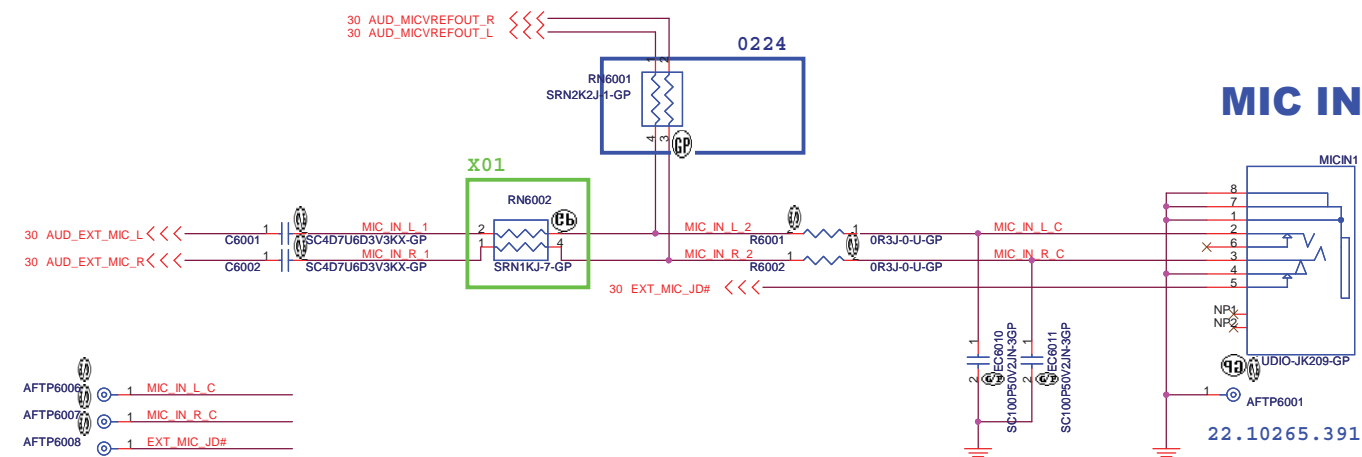


Internal Microphone

MIC1 is in DIP

MIC1 Do Not Stuff

23.42143.001



3 DJ2 AMD UMA (10 100 w HDMI)

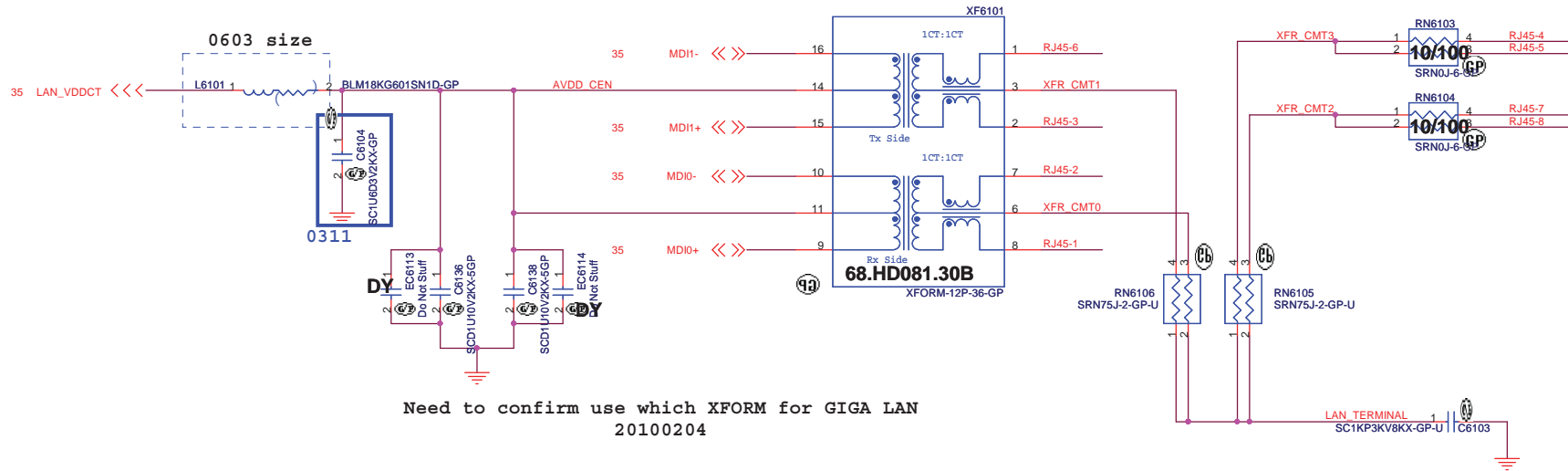
DELL Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			Audio Jack	
Size	Document Number	Rev		
A3	Chelsea DJ2 AMD UMA	X01		
Date:	Tuesday, April 13, 2010	Sheet	60	of 90

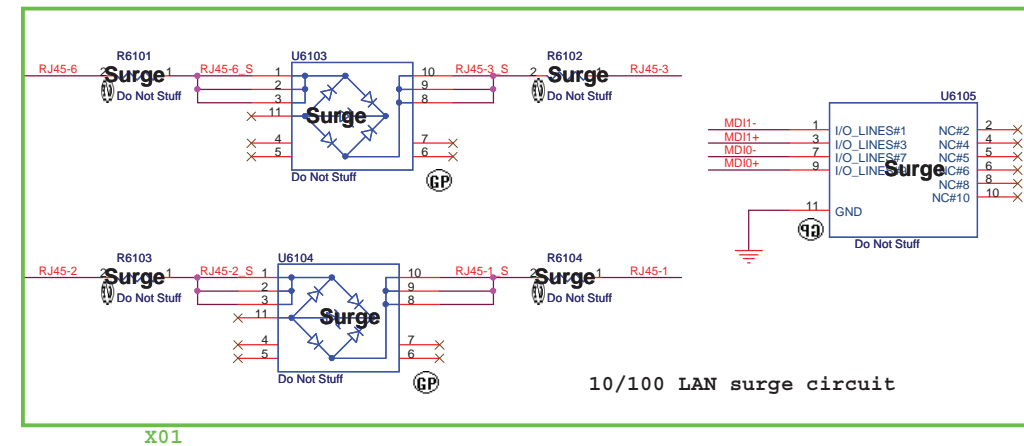
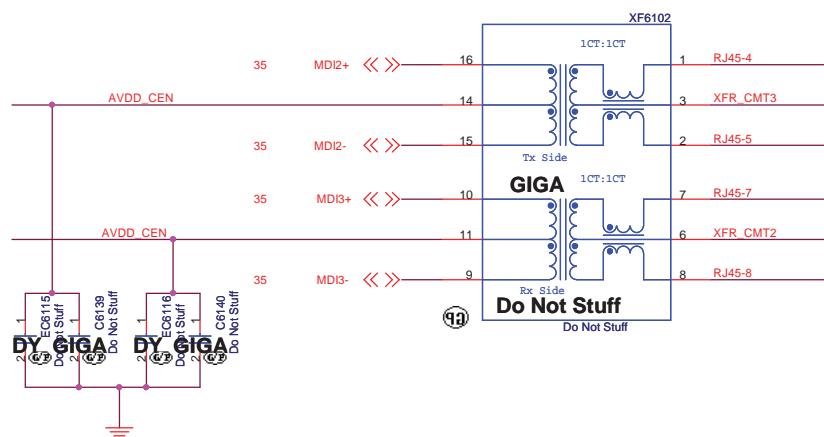
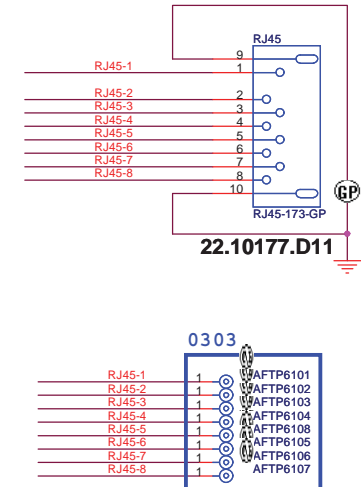
2009-10-1 Change MDI1+ (XF601.16) to MDI1+ (XF601.15)
 Change MDI1- (XF601.15) to MDI1- (XF601.16)
 Change MDI0+ (XF601.10) to MDI0+ (XF601.9)
 Change MDI0- (XF601.9) to MDI0- (XF601.10)
 Change RJ45-3 (XF601.1) to RJ45-3 (XF601.2)
 Change RJ45-6 (XF601.2) to RJ45-6 (XF601.1)
 Change RJ45-1 (XF601.7) to RJ45-1 (XF601.8)
 Change RJ45-2 (XF601.8) to RJ45-2 (XF601.7)

1. route on bottom as differential pairs.
2. Tx+/Tx- are pairs. Rx+/Rx- are pairs.
3. No vias, No 90 degree bends.
4. pairs must be equal lengths.
5. 6mil trace width, 12mil separation.
6. 36mil between pairs and any other trace.
7. Must not cross ground moat, except RJ-45 moat.

10/100M Lan Transformer



RJ45 Connector



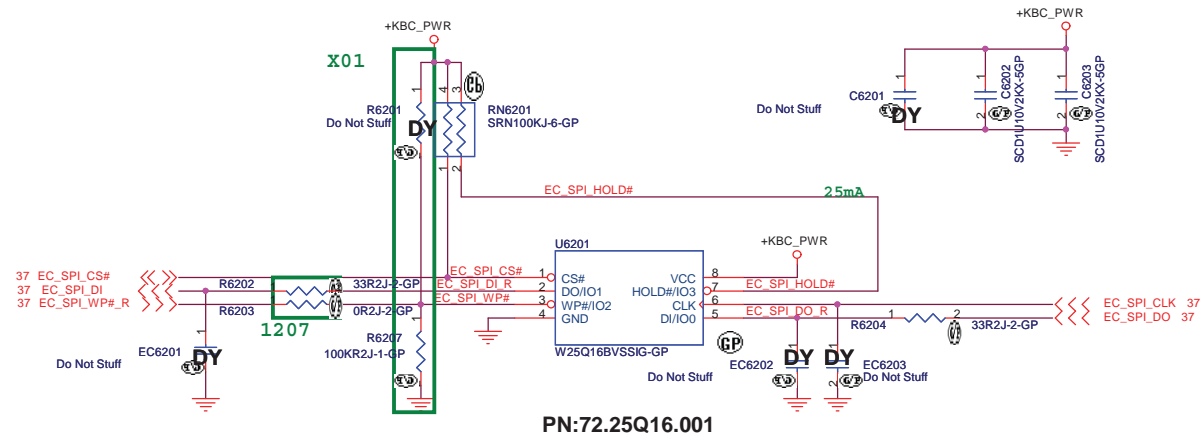
3 DJ2 AMD UMA (10 100 w HDMI)

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

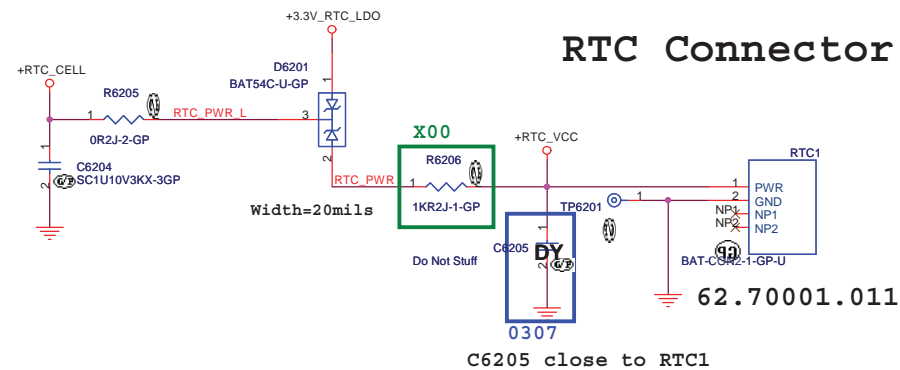
Title			Rev
XFORM/RJ45			X01
Size A3	Document Number	Chelsea DJ2 AMD UMA	
Date: Tuesday, April 13, 2010	Sheet 61	of 90	

SSID = Flash.ROM

SPI FLASH ROM (16M bits) for KBC



SSID = RBATT



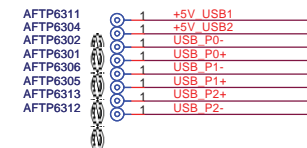
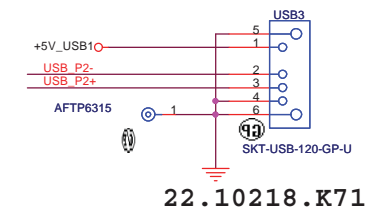
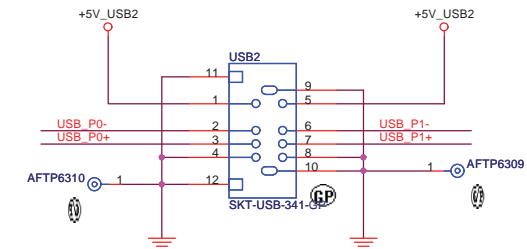
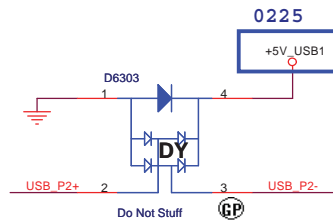
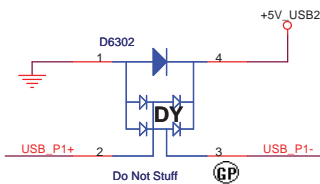
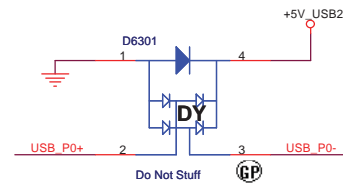
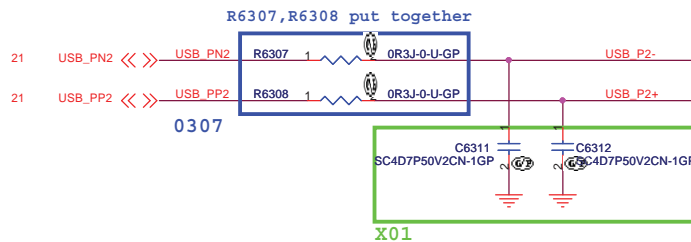
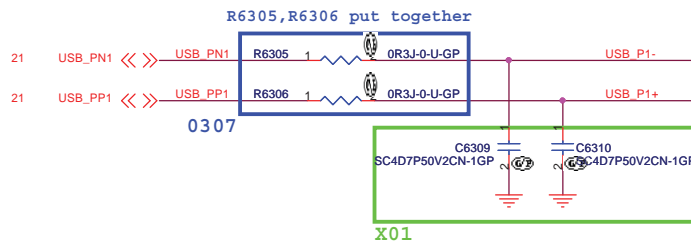
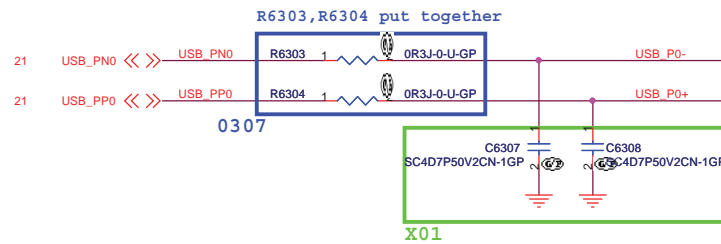
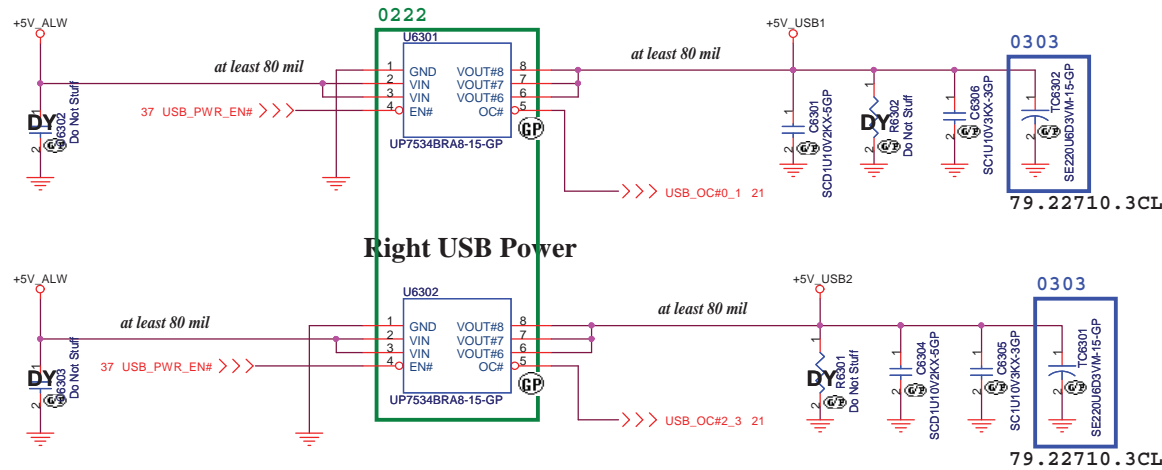
<http://hobi-elektronika.net>
www.vinafix.vn

3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Flash/RTC			
Size	Document Number	Rev	
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SSID = USB

USB Power



3 DJ2 AMD UMA (10 100 w HDMI)



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Title	Author	Date	Page	Page	Page	Page	Page	Page	Page	Page	Page	Page
Title	Author	Date	Page	Page	Page	Page	Page	Page	Page	Page	Page	

USB

Size	Document Number
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Document Number
Chelsea DJ2 AMD UMA

Rev	
X01	

Date: Wednesday, April 14, 2010

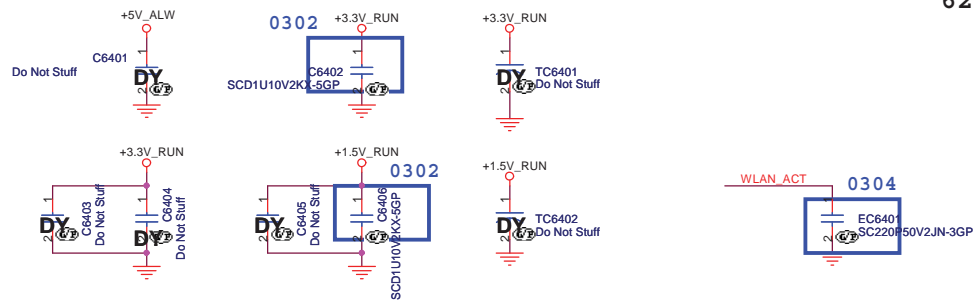
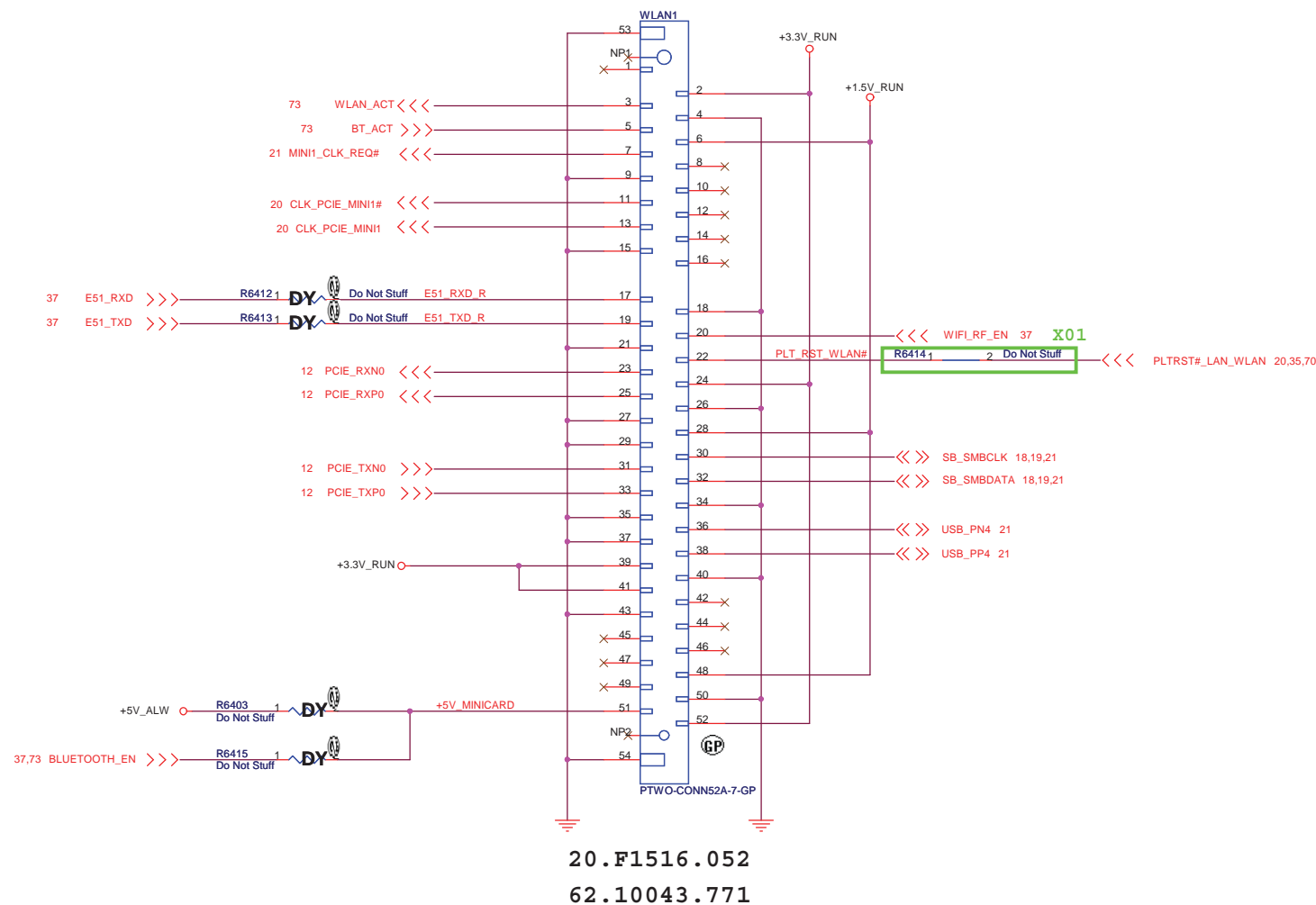
Sheet 63 of

of	90
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SSID = Wireless

Mini Card Connector(802.11a/b/g)



3 DJ2 AMD UMA (10 100 w HDMI)


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Title: **MINICARD**
Size: **A3** Document Number: **Chelsea DJ2 AMD UMA** Rev: **X01**
Date: Tuesday, April 13, 2010 Sheet 64 of 90

<http://hobi-elektronika.net>
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3 DJ2 AMD UMA (10 100 w HDMI)



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Title

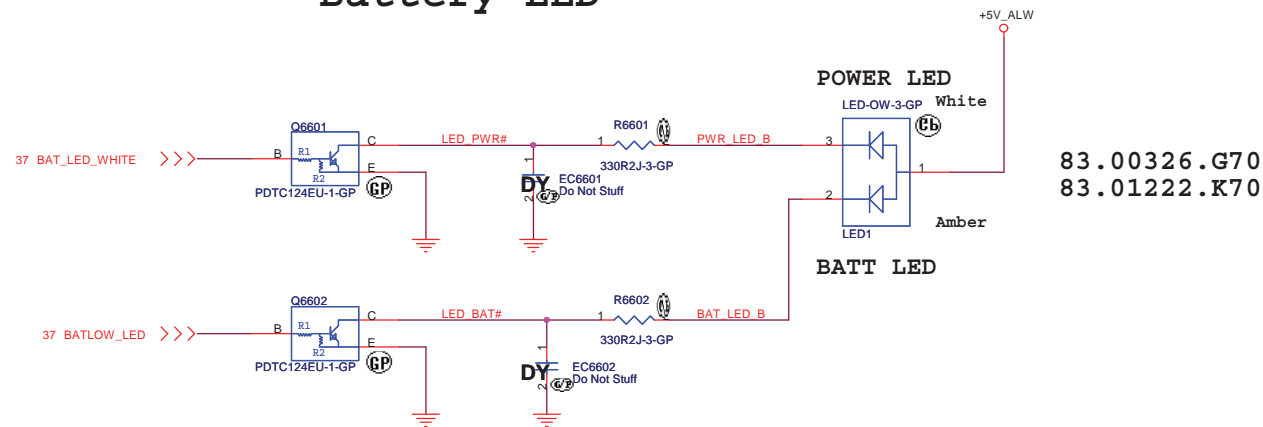
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Size A3	Document Number Chelsea DJ2 AMD UMA	Rev X01
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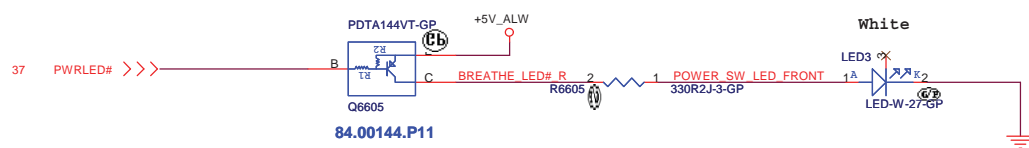
Date: Tuesday, April 13, 2010	Sheet 65 of 90
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SSID = User.Interface

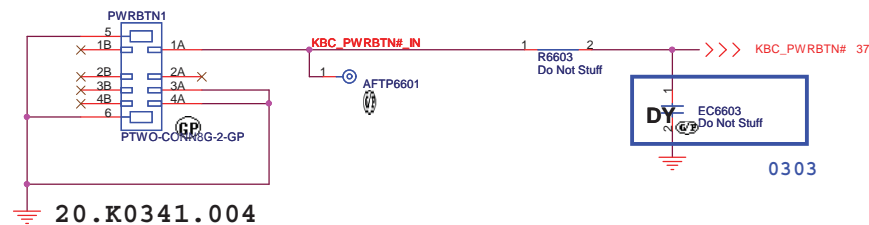
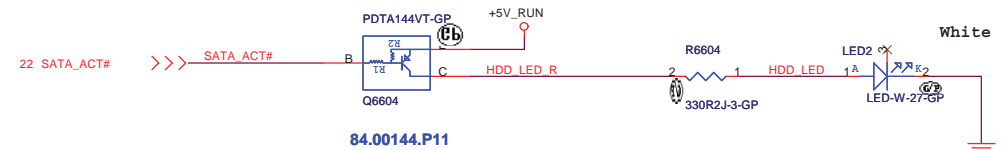
Battery LED



BREATHE PWR LED (Front)



HDD LED



3 DJ2 AMD UMA (10 100 w HDMI)

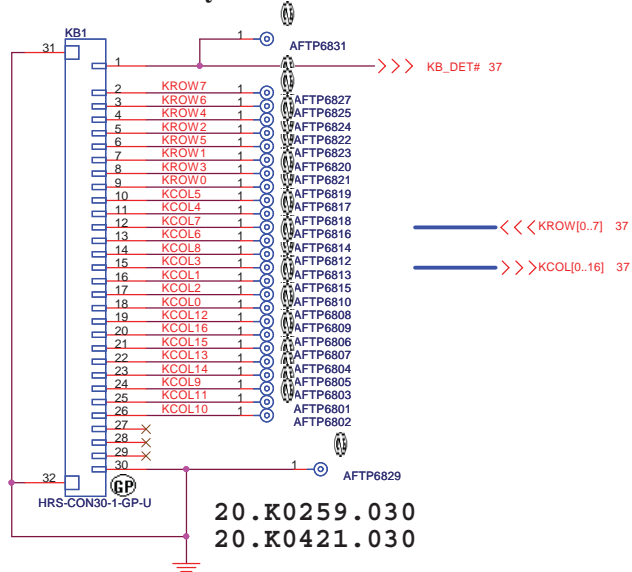
DELL Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			LED/PWRBTN	
Size	Document Number	Rev		
A3	Chelsea DJ2 AMD UMA	X01		
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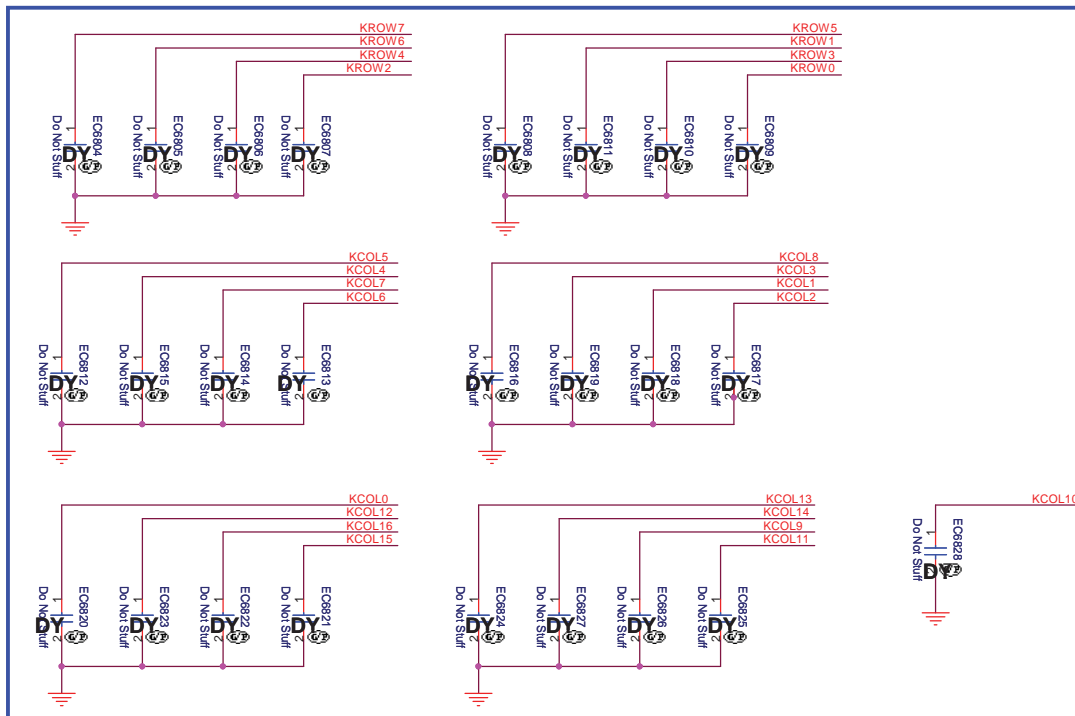
(Blanking)

SSID = KBC

Internal Keyboard Connector

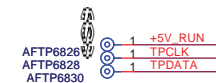
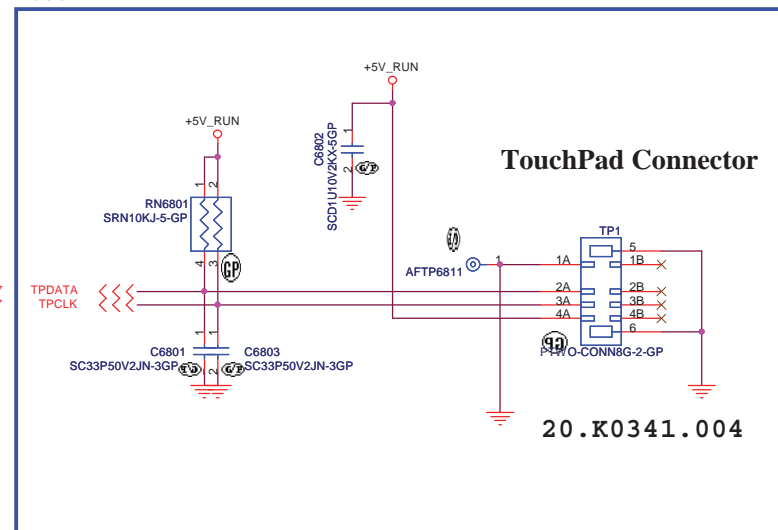


0304



SSID = Touch.Pad

0302



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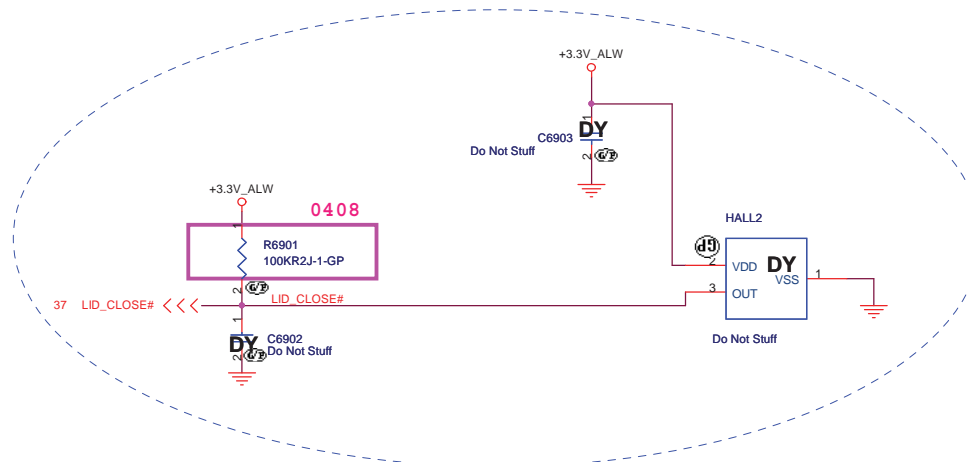
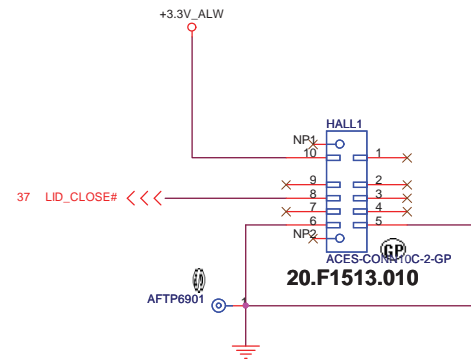
3 DJ2 AMD UMA (10 100 w HDMI)



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

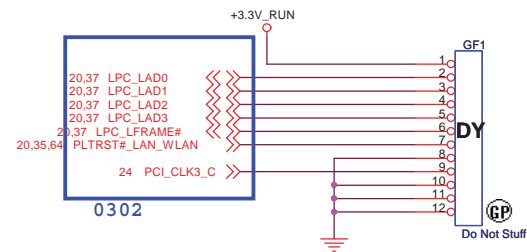
Title		
Key Board/Touch Pad		
Size A3	Document Number	Rev
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SSID = User. Interface



3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation	
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Title			
Hall Sensor			
Size A3	Document Number Chelsea DJ2 AMD UMA		Rev X01
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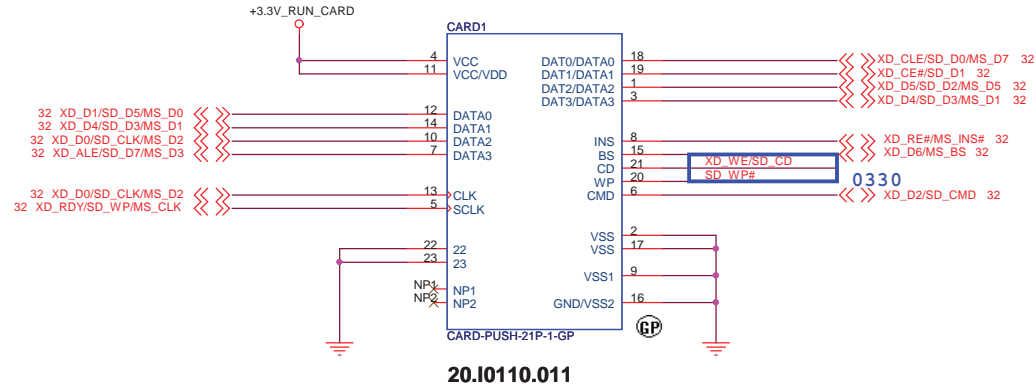
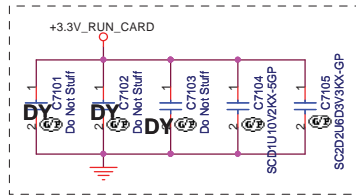


3 DJ2 AMD UMA (10 100 w HDMI)

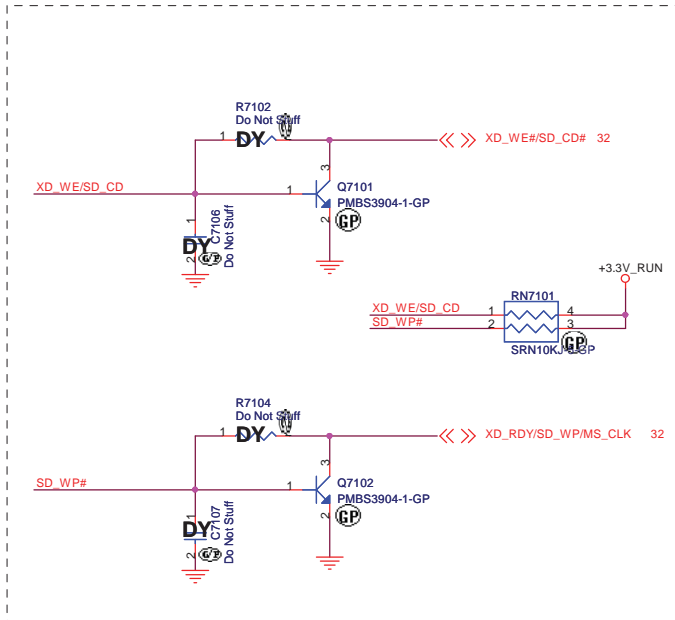
DELL		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Reserved			
Size A3	Document Number Chelsea DJ2 AMD UMA	Rev X01	
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SSID = SDIO

SD/XD/MS Card Reader



For reverse card connector 0330



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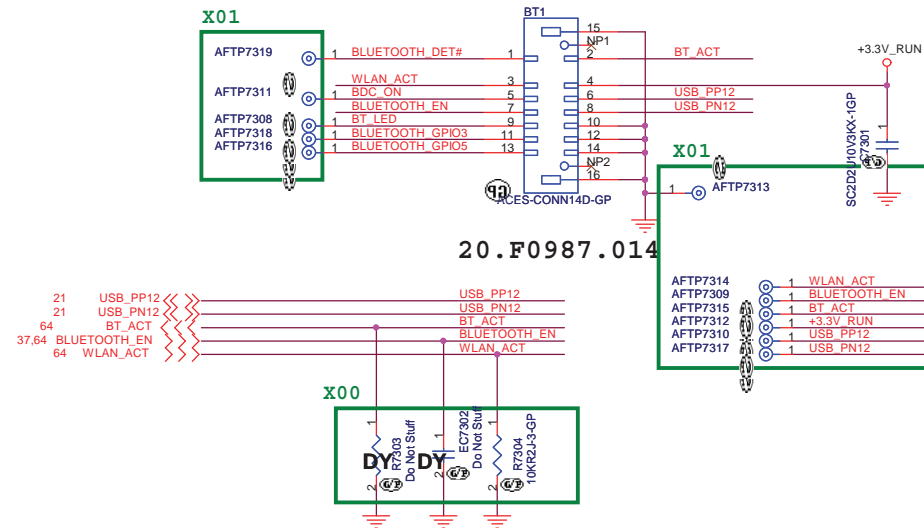
3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
CARD Reader Connector			
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SSID = User.Interface

Bluetooth Module conn.




3 DJ2 AMD UMA (10 100 w HDMI)

DELL		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Bluetooth			
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3 DJ2 AMD UMA (10 100 w HDMI)



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Title


Reserved

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3 DJ2 AMD UMA (10 100 w HDMI)



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Title


IO Board Connector

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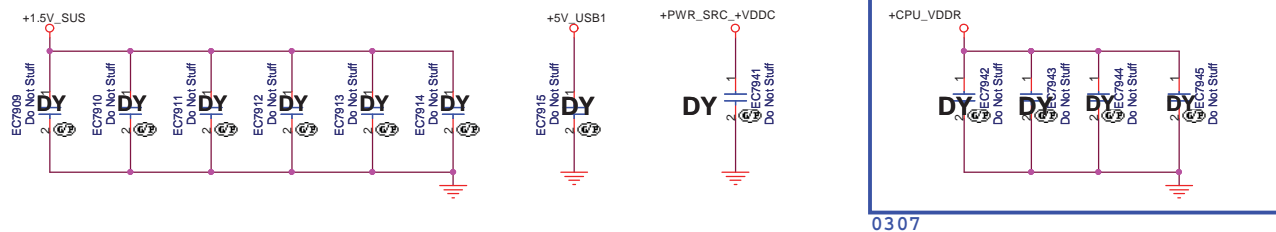
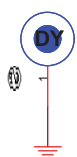
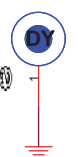
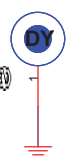
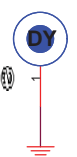
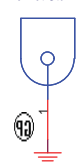
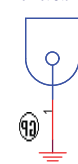
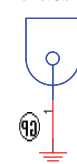
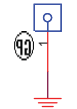
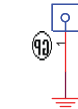
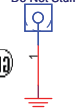
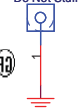
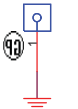
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3 DJ2 AMD UMA (10 100 w HDMI)

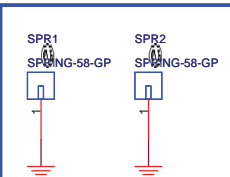
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Size A3	Document Number Chelsea DJ2 AMD UMA		Rev X01
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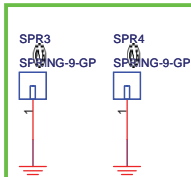
EMI Request

H10
Do Not StuffH11
Do Not StuffH12
Do Not StuffH9
Do Not StuffH1
Do Not StuffH2
Do Not StuffH3
Do Not StuffH4
Do Not StuffH5
Do Not StuffHMI1
STF256R117H119-GPHTH1
STF237R117H83-1-GPH6
Do Not StuffH7
Do Not StuffH8
Do Not StuffHBT1
STF237R115H123-GP

0311



X01



3 DJ2 AMD UMA (10 100 w HDMI)



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Title		
UNUSED PARTS/EMI Capacitors		
Size	Document Number	Rev
A3	Chelsea DJ2 AMD UMA	X01
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3 DJ2 AMD UMA (10 100 w HDMI)



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Title

VGA PCIE(1/4)

Size
A3

Document Number

Chelsea DJ2 AMD UMA

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		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		VGA LVDS/TV/CRT(2/4)	
Size A3	Document Number Chelsea DJ2 AMD UMA		Rev X01
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3 DJ2 AMD UMA (10 100 w HDMI)



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Title

VGA POWER/GND(3/4)

Size

A3

Document Number

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Date: Tuesday, April 13, 2010

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3 DJ2 AMD UMA (10 100 w HDMI)

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
VGA MEMORY/STRAPS(4/4)			
Size	Document Number	Rev	
A3	Chelsea DJ2 AMD UMA	X01	
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3 DJ2 AMD UMA (10 100 w HDMI)



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Title

GPU-VRAM (1/2)

Size
A3

Document Number

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3 DJ2 AMD UMA (10 100 w HDMI)


		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
TPS51117 +VCC GFXCORE			
Size A3	Document Number Chelsea DJ2 AMD UMA		Rev X01
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3 DJ2 AMD UMA (10 100 w HDMI)

		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title		Reserved	
Size A3	Document Number	Chelsea DJ2 AMD UMA	Rev X01
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3 DJ2 AMD UMA (10 100 w HDM!)			
		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
<i>Change History</i>			
Size	Document Number	Rev	
Custom	Chelsea DJ2 AMD UMA	X01	
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DELL

Title			
Change History			
Size	Document Number		Rev
Custom	Chelsea DJ2 AMD UMA		X01
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