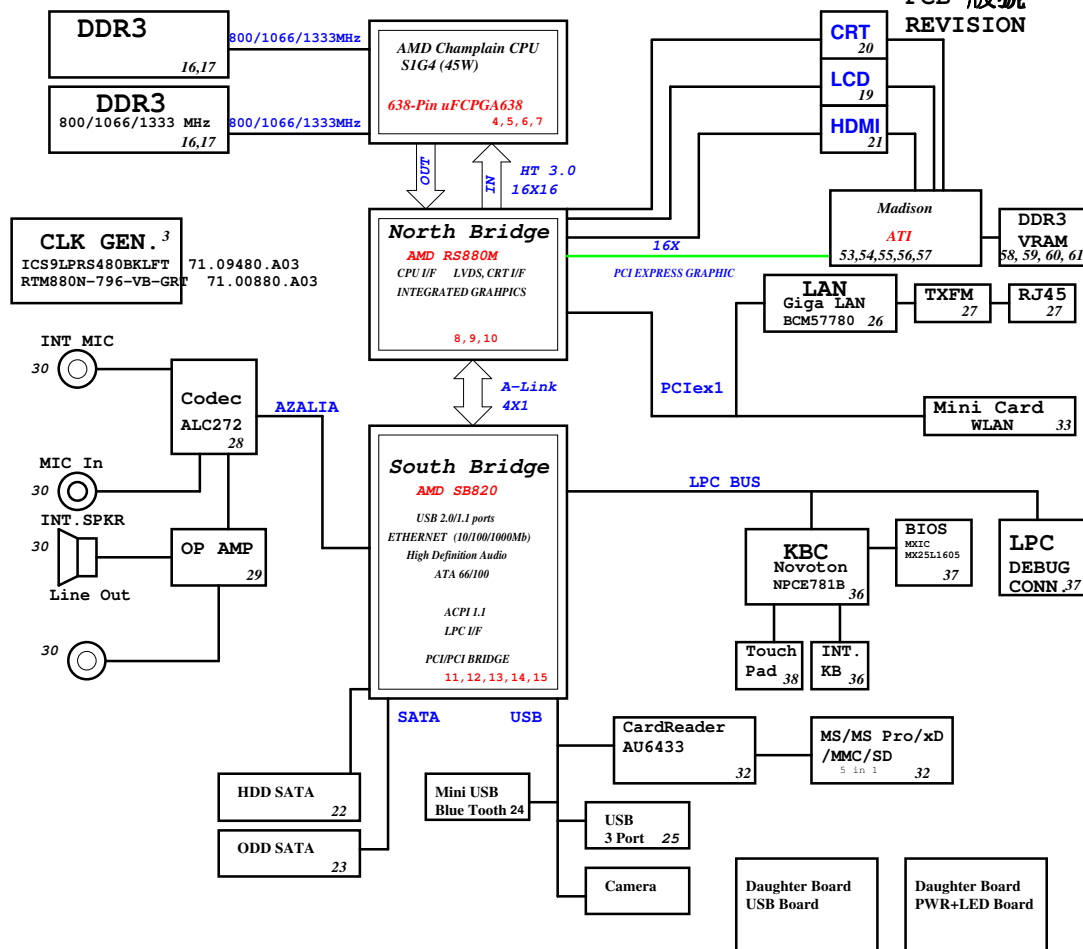
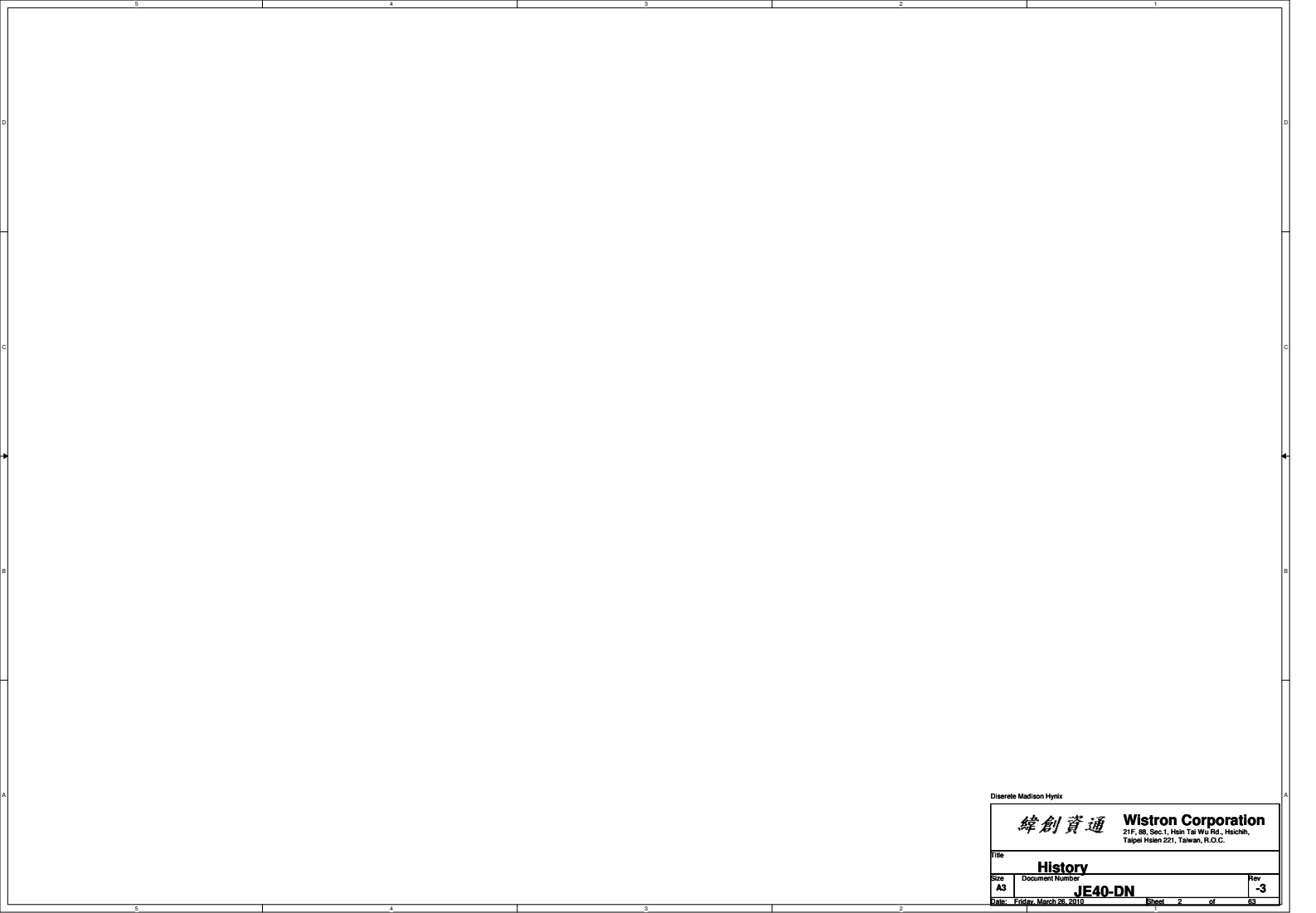


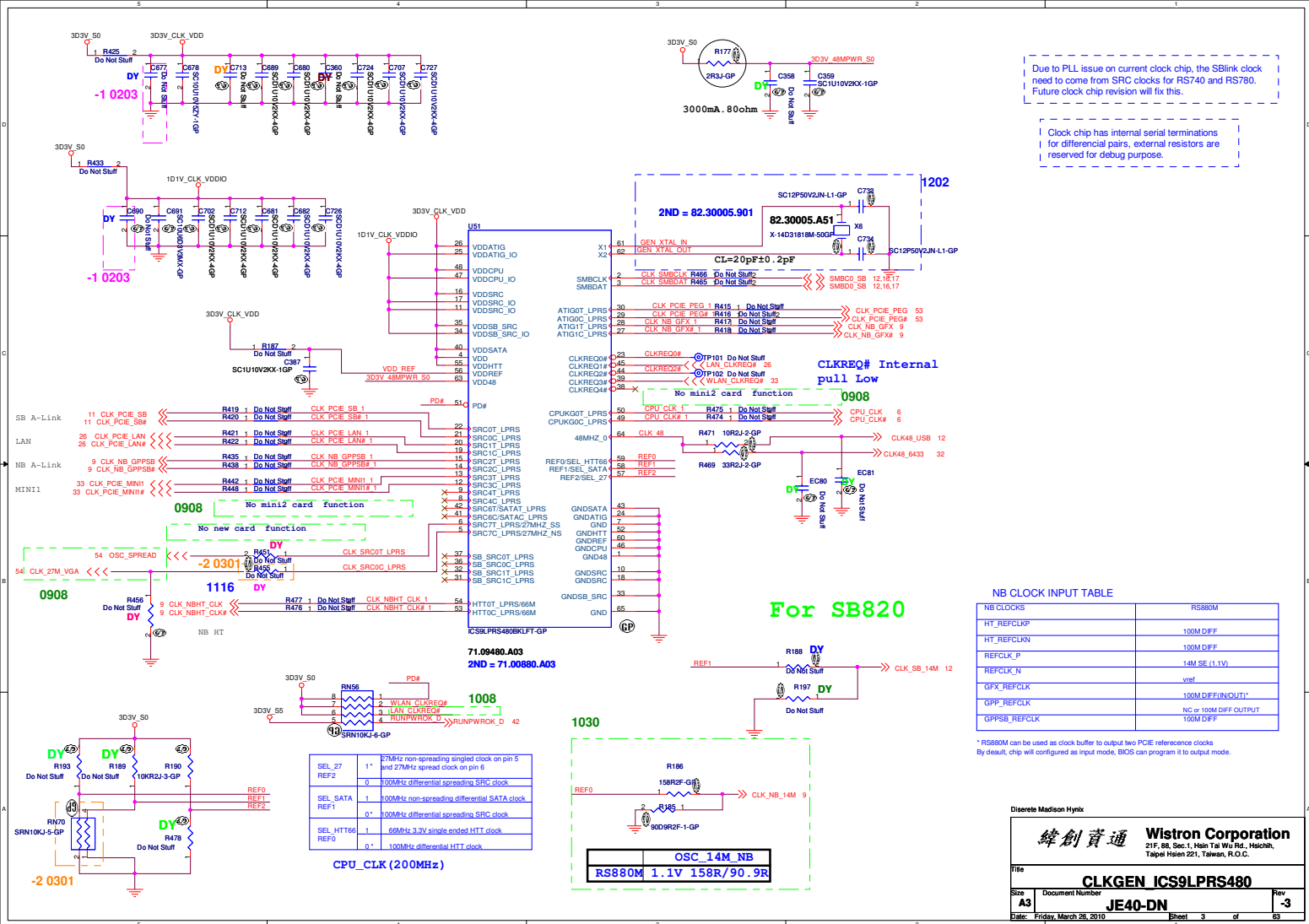
|                                                                                     |                        |                                                                                                              |     |
|-------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------|-----|
| Discrete Madison Hynix                                                              |                        |                                                                                                              |     |
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| Title                                                                               |                        |                                                                                                              |     |
| <b>BLOCK DIAGRAM</b>                                                                |                        |                                                                                                              |     |
| Size                                                                                | Document Number        |                                                                                                              | Rev |
| A3                                                                                  | JE40-DN                |                                                                                                              | -3  |
| Date:                                                                               | Friday, March 28, 2010 | Sheet 1 of                                                                                                   | 63  |

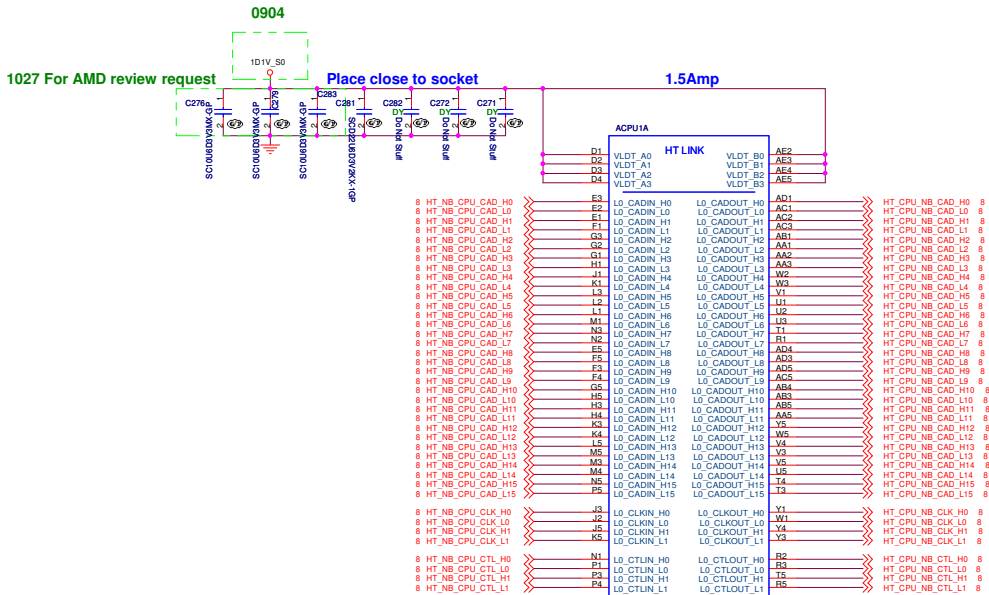




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|                                           |                       |                                  |         |
|-------------------------------------------|-----------------------|----------------------------------|---------|
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| <b>History</b>                            |                       |                                  |         |
| Size                                      | Document Number       | Rev                              |         |
| A3                                        | <b>JE40-DN</b>        | <b>-3</b>                        |         |
| Date:                                     | Fridgy March 28, 2019 | Sheet                            | 2 of 63 |





SKT-CPU638P-GP-U2

62.10055.111

2ND = 62.10055.181(ENG 未上)

SKT-BGA638H176

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File

CPU HT LINK I/F (1/4)

Rev

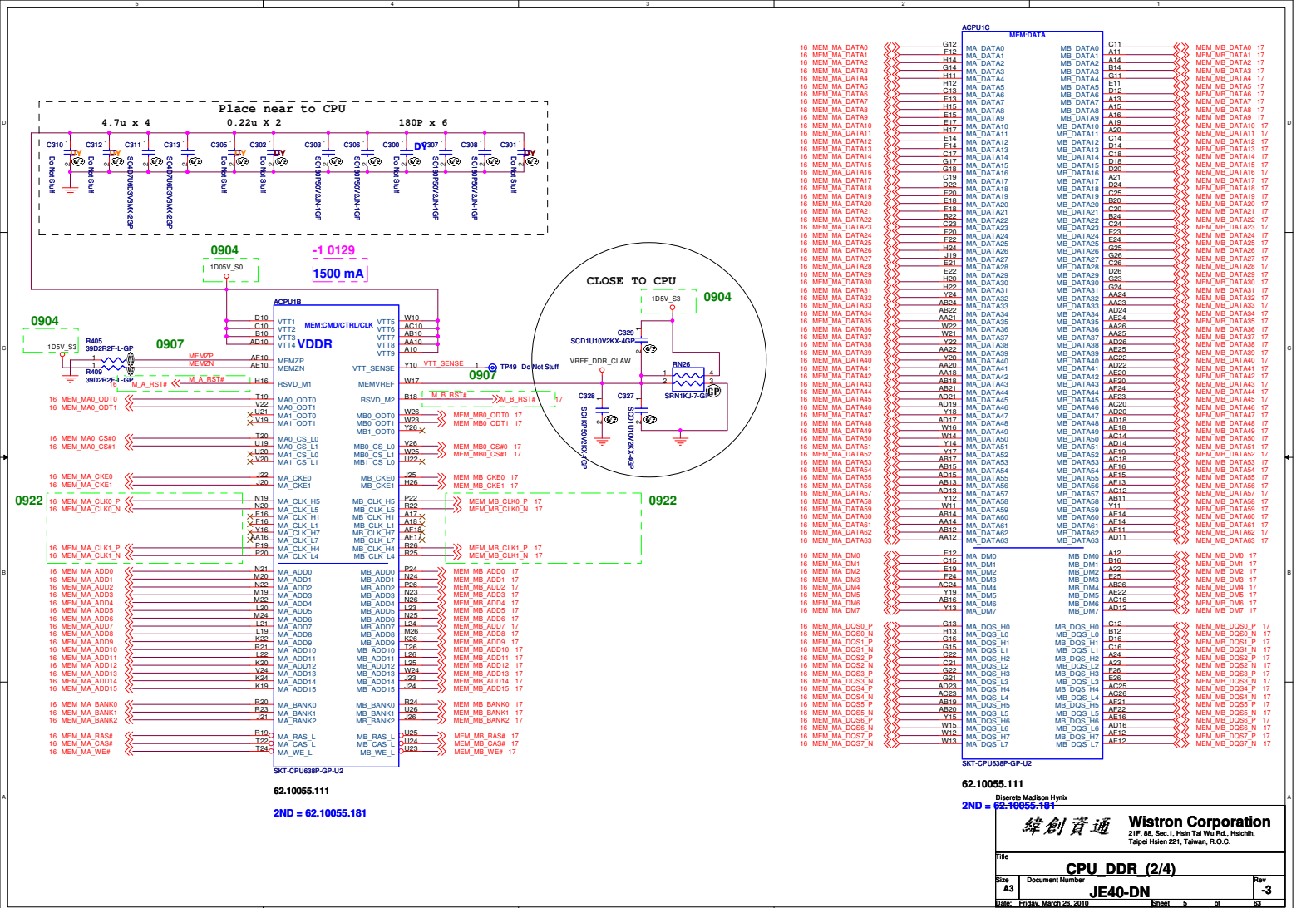
Doc Number

JE40-DN

Date: Friday, March 26, 2010

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Rev -3

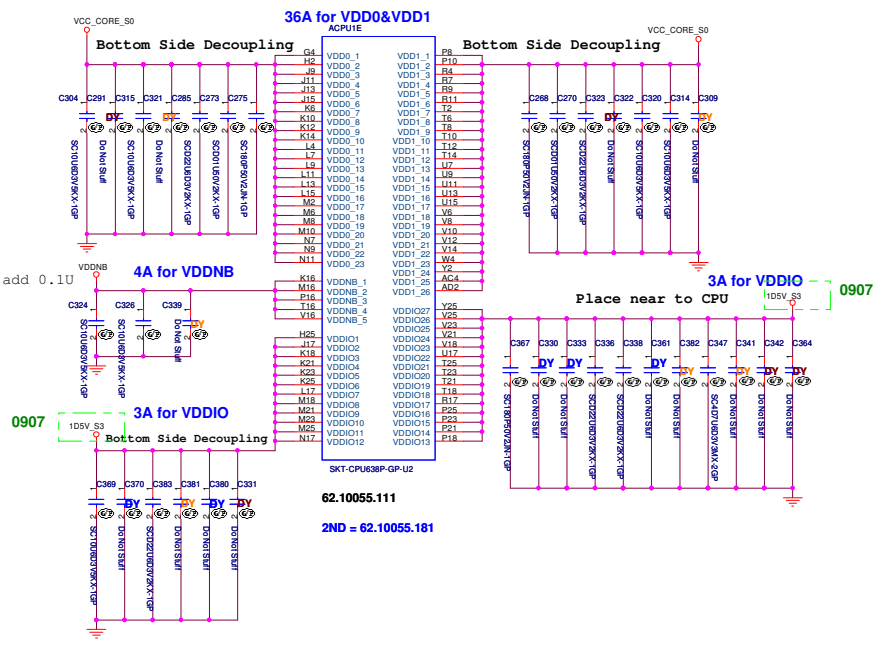




| ACPU1F |       |        |
|--------|-------|--------|
| AA4    | VSS1  | VSS66  |
| AA11   | VSS2  | VSS67  |
| AA13   | VSS3  | VSS68  |
| AA15   | VSS4  | VSS69  |
| AA17   | VSS5  | VSS70  |
| AA19   | VSS6  | VSS71  |
| AB2    | VSS7  | VSS72  |
| AB7    | VSS8  | VSS73  |
| AB9    | VSS9  | VSS74  |
| AB23   | VSS10 | VSS75  |
| AB25   | VSS11 | VSS76  |
| AC11   | VSS12 | VSS77  |
| AC13   | VSS13 | VSS78  |
| AC17   | VSS14 | VSS79  |
| AC19   | VSS15 | VSS80  |
| AC21   | VSS16 | VSS81  |
| AC23   | VSS17 | VSS82  |
| AD6    | VSS18 | VSS83  |
| AD8    | VSS19 | VSS84  |
| AD25   | VSS20 | VSS85  |
| AE11   | VSS21 | VSS86  |
| AE13   | VSS22 | VSS87  |
| AE15   | VSS23 | VSS88  |
| AE17   | VSS24 | VSS89  |
| AE19   | VSS25 | VSS90  |
| AE21   | VSS26 | VSS91  |
| AE23   | VSS27 | VSS92  |
| B4     | VSS28 | VSS93  |
| B6     | VSS29 | VSS94  |
| B8     | VSS30 | VSS95  |
| B9     | VSS31 | VSS96  |
| B11    | VSS32 | VSS97  |
| B13    | VSS33 | VSS98  |
| B15    | VSS34 | VSS99  |
| B17    | VSS35 | VSS100 |
| B19    | VSS36 | VSS101 |
| B21    | VSS37 | VSS102 |
| B23    | VSS38 | VSS103 |
| B25    | VSS39 | VSS104 |
| D6     | VSS40 | VSS105 |
| D8     | VSS41 | VSS106 |
| D9     | VSS42 | VSS107 |
| D11    | VSS43 | VSS108 |
| D13    | VSS44 | VSS109 |
| D15    | VSS45 | VSS110 |
| D17    | VSS46 | VSS111 |
| D19    | VSS47 | VSS112 |
| D21    | VSS48 | VSS113 |
| D23    | VSS49 | VSS114 |
| D25    | VSS50 | VSS115 |
| E4     | VSS51 | VSS116 |
| F2     | VSS52 | VSS117 |
| F11    | VSS53 | VSS118 |
| F13    | VSS54 | VSS119 |
| F15    | VSS55 | VSS120 |
| F17    | VSS56 | VSS121 |
| F19    | VSS57 | VSS122 |
| F21    | VSS58 | VSS123 |
| F23    | VSS59 | VSS124 |
| F25    | VSS60 | VSS125 |
| H7     | VSS61 | VSS126 |
| H9     | VSS62 | VSS127 |
| H21    | VSS63 | VSS128 |
| H23    | VSS64 | VSS129 |
| JA     | VSS65 |        |

SKT-CPU638P-GP-U2

62.10055.111  
2ND = 62.10055.181



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|                                                                                                                         |                        |               |
|-------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
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|                                                                                                                         |                        |               |
| File <b>CPU_Power_(4/4)</b>                                                                                             |                        |               |
| Size                                                                                                                    | Document Number        | JE40-DN       |
| A3                                                                                                                      |                        |               |
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1027 For AMD review request

0.6A per ANT Rev1.1, Page3

0.45A per ANT Rev1.1, Page3

1027 For AMD review request

1027 For AMD review request

MEM\_COMP\_P and MEM\_COMP\_N trace width >=10mils and 10mils spacing from other Signals in X,Y,Z directions

ANB1F

GROUND

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File

ATI-RS880M\_Side Port&PWR&GND(3/3)

Size

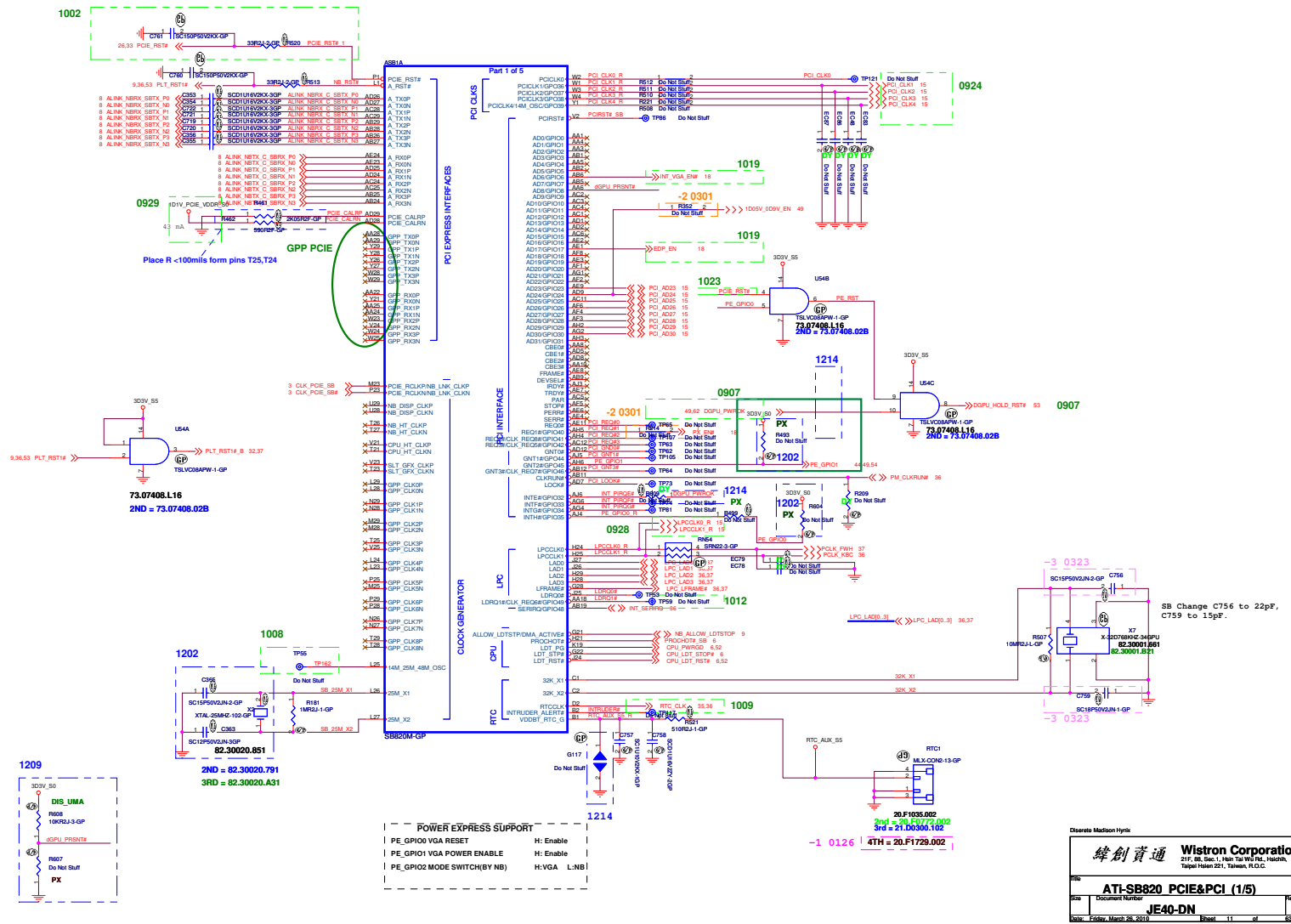
Document Number

JE40-DN

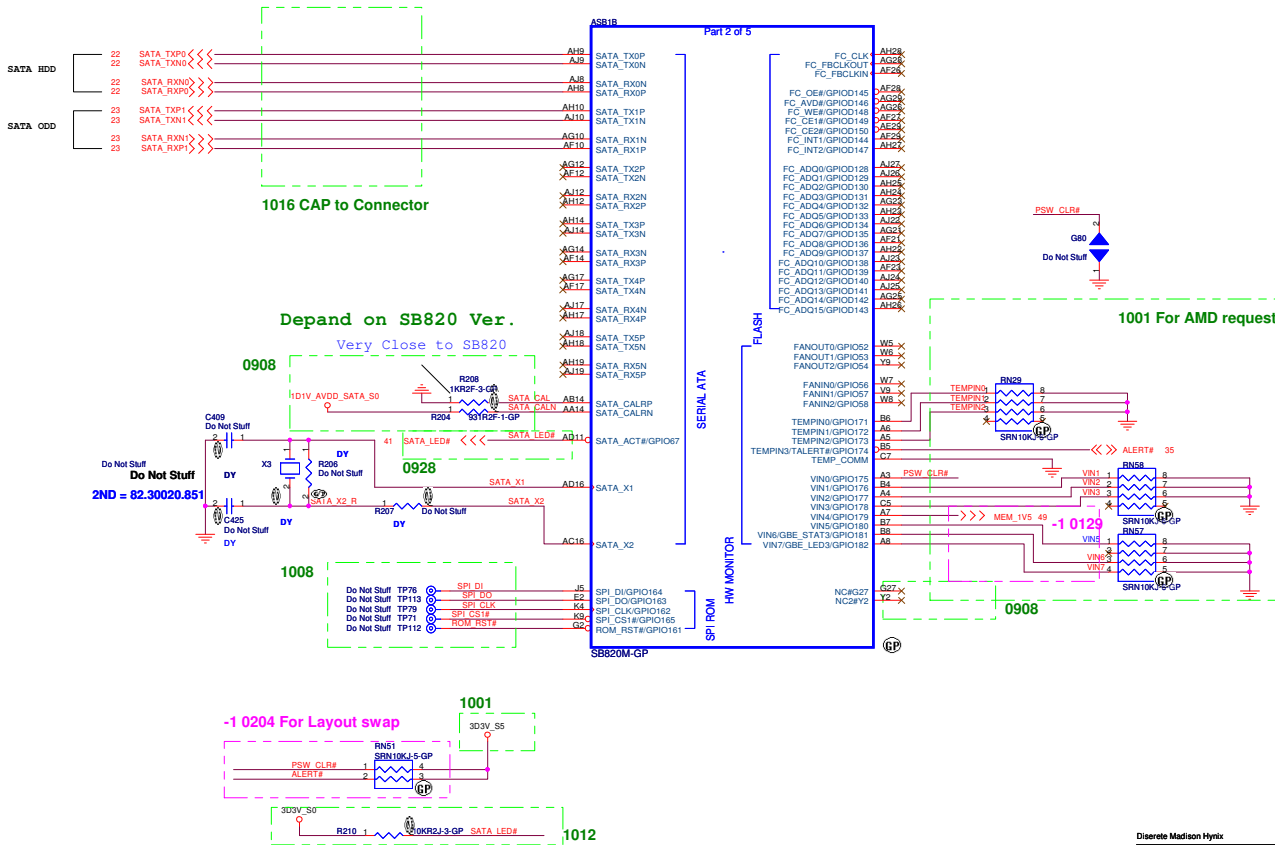
Rev

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File  
Size A3  
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Document Number  
JE40-DN

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## 1115



|              |       |                                                                                     |          |    |
|--------------|-------|-------------------------------------------------------------------------------------|----------|----|
| Do Not Stuff | TP67  |  | PCI_AD23 | 11 |
| Do Not Stuff | TP70  |  | PCI_AD24 | 11 |
| Do Not Stuff | TP66  |  | PCI_AD25 | 11 |
| Do Not Stuff | TP77  |  | PCI_AD26 | 11 |
| Do Not Stuff | TP80  |  | PCI_AD27 | 11 |
| Do Not Stuff | TP110 |  | PCI_AD28 | 11 |
| Do Not Stuff | TP108 |  | PCI_AD29 | 11 |
| Do Not Stuff | TP111 |  | PCI_AD30 | 11 |

|           | PCI_AD27               | PCI_AD26                       | PCI_AD25              | PCI_AD24                           | PCI_AD23                        |
|-----------|------------------------|--------------------------------|-----------------------|------------------------------------|---------------------------------|
| PULL HIGH | USE PCI PLL<br>DEFAULT | DISABLE ILA AUTORUN<br>DEFAULT | USE FC PLL<br>DEFAULT | USE DEFAULT PCIE STRAPS<br>DEFAULT | DISABLE PCI MEM BOOT<br>DEFAULT |
| PULL LOW  | BYPASS PCI PLL         | ENABLE ILA AUTORUN             | BYPASS FC PLL         | USE EEPROM PCIE STRAPS             | ENABLE PCI MEM BOOT             |

緯創資通

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|      |                 |
|------|-----------------|
| Size | Document Number |
|------|-----------------|

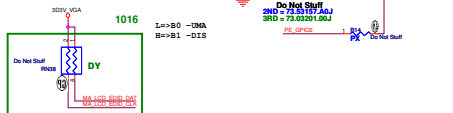
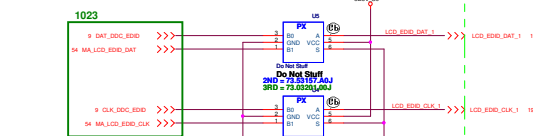
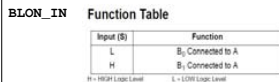
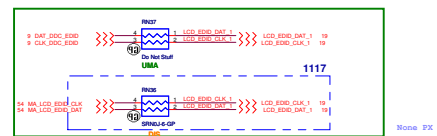
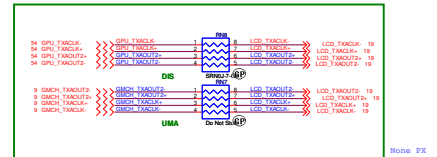
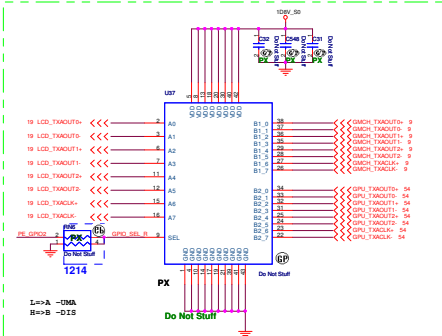
|           |                |
|-----------|----------------|
| <b>A3</b> | <b>JE40-DN</b> |
|-----------|----------------|

|                              |                |
|------------------------------|----------------|
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|------------------------------|----------------|

Rev



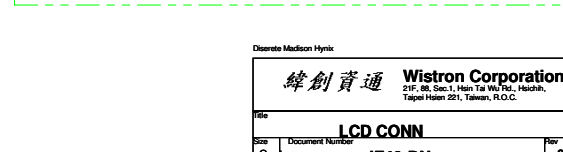




## 0923



0922



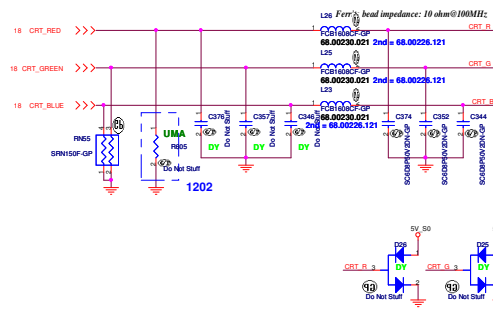
| CCD Pin |         |
|---------|---------|
| Pin     | Symbol  |
| 1       | CCD_PWR |
| 2       | USB-    |
| 3       | USB+    |
| 4       | GND     |
| 5       | GND     |

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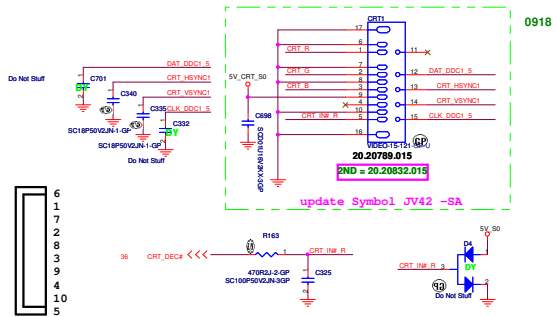
|          |                        |                |     |
|----------|------------------------|----------------|-----|
| Title    |                        |                |     |
| LCD CONN |                        |                |     |
| Size     | Document Number        |                | Rev |
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Design Rule  
Place these resistors  
close to the CRT-conn  
connection



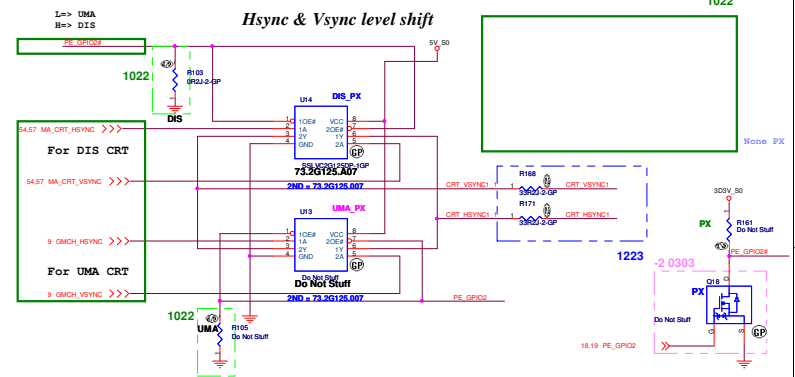
Layout Note:  
\* Must be a ground return path between this ground and the ground on the YGA connector.  
Pi-filter & 150 Ohm pull-down resistors should be as close as to CRT CONN. RGB will hit 75 Ohm first, pi-filter, then CRT CONN.

### CRT I/F & CONNECTOR



0918

1012



Wrote PX

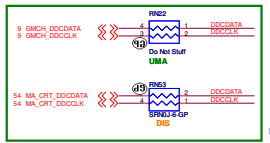
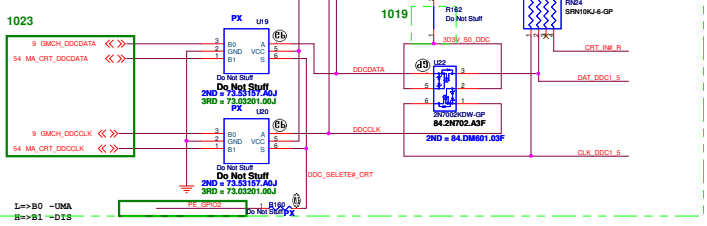
0924

### DDC\_CLK & DATA level shift

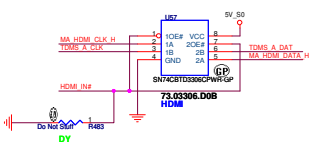
#### Function Table

| Input (S) | Function                      |
|-----------|-------------------------------|
| L         | B <sub>0</sub> Connected to A |
| H         | B <sub>1</sub> Connected to A |

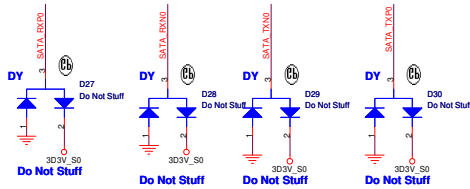
H = HIGH Logic Level  
L = LOW Logic Level



Wrote PX

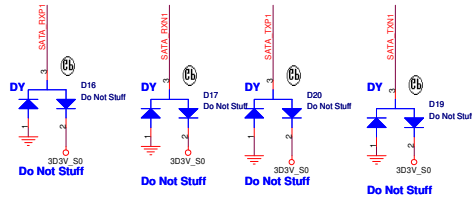
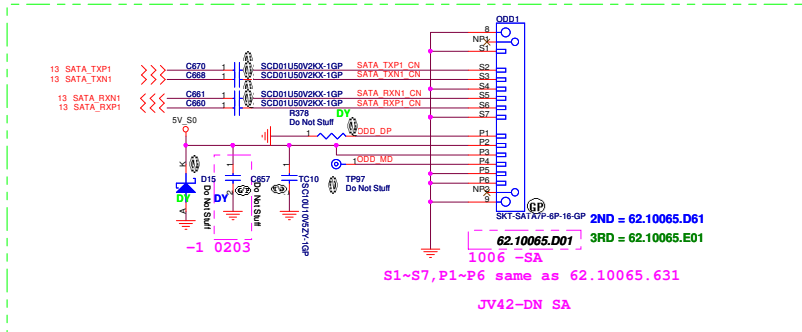


## 0923



# ODD Connector

1009



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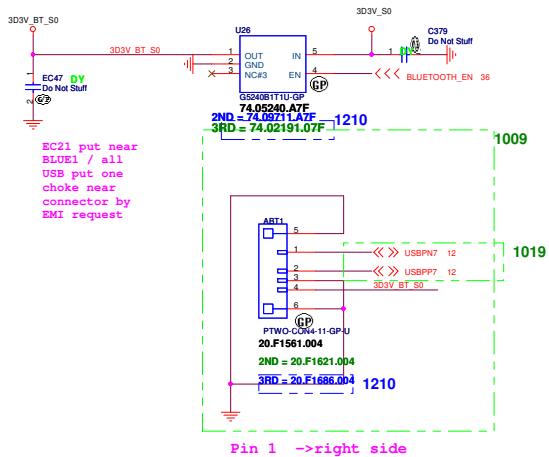
緯創資通

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|       |                        |         |          |
|-------|------------------------|---------|----------|
| Title |                        |         | ODD      |
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## BLUETOOTH MODULE

1.5A / High Active Voltage 2V



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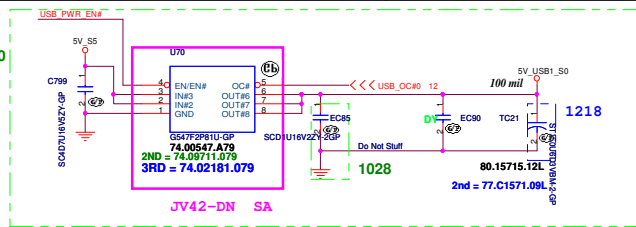
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|       |                  |
|-------|------------------|
| Title | <b>BLUETOOTH</b> |
|-------|------------------|

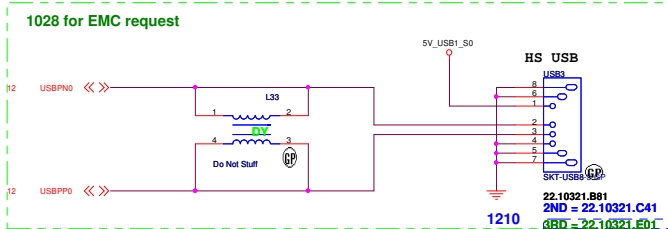
|       |                        |                |
|-------|------------------------|----------------|
| Size  | Document Number        | Rev            |
|       | <b>JE40-DN</b>         | <b>-3</b>      |
| Date: | Friday, March 26, 2010 | Sheet 24 of 63 |



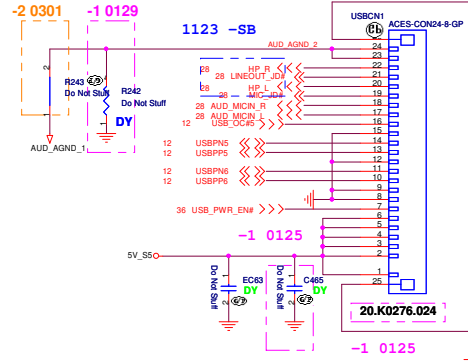
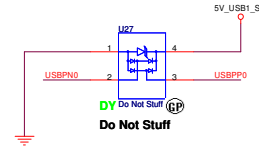
0910



0914



Pin1 -> right side  
22.10218.T51 Pin1 -> left side (JV42-DN)  
change Net sequence



Eng stuff 20.K0216.024 Pin1 -> left side  
PD change to 20.K0276.024 Pin1 -> left side  
so do not swap net



0910

Discrete Madison Hynix

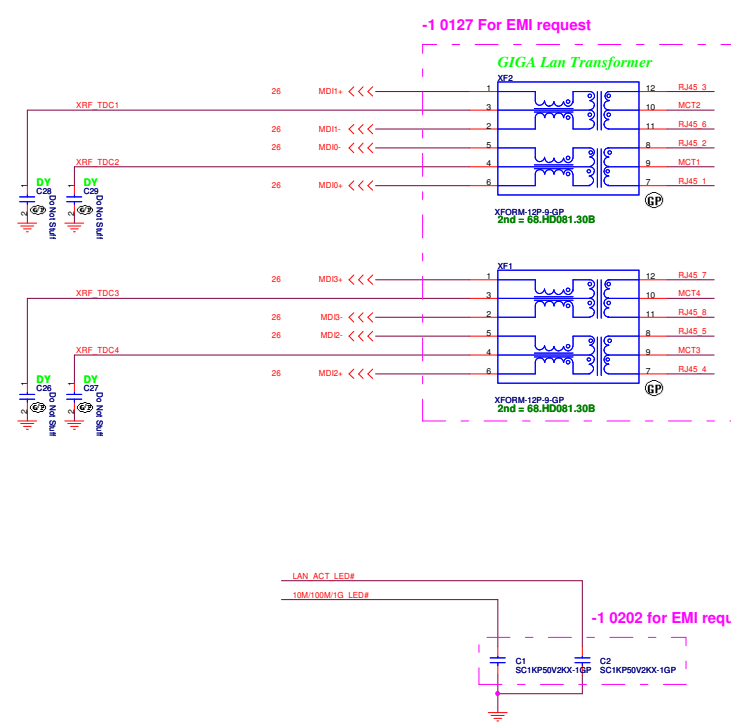
|                                                                                                                   |                  |
|-------------------------------------------------------------------------------------------------------------------|------------------|
| <b>緯創資通</b><br><b>Wistron Corporation</b><br>21F, 88, Sec 1, Hsin Tai Wu Rd., Hsinchu, Taiwan 300, Taiwan, R.O.C. |                  |
| <b>USB</b>                                                                                                        |                  |
| File:                                                                                                             | Document Number: |
| Date: Friday, March 28, 2019                                                                                      | Sheet 25 of 63   |
| Rev -3                                                                                                            |                  |



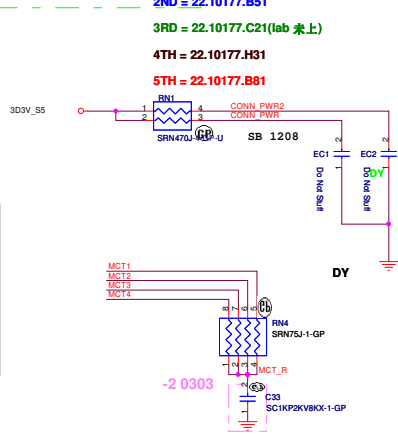
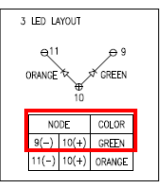
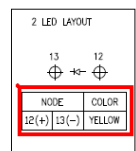
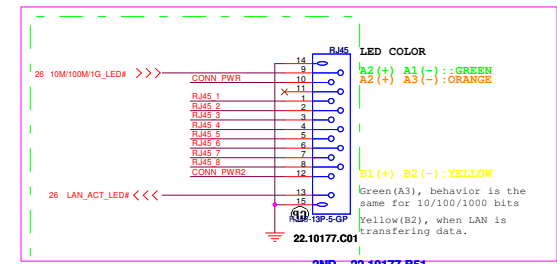
- 1.route on bottom as differential pairs.
- 2.Tx+/Tx- are pairs. Rx+/Rx- are pairs.
- 3.No vias, No 90 degree bends.
- 4.pairs must be equal lengths.
- 5.6mil trace width, 12mil separation.
- 6.36mil between pairs and any other trace.
- 7.Must not cross ground moat,except RJ-45 moat.

LAN Connector

LAN Connector



0923



Discrete Madison Hynix

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File

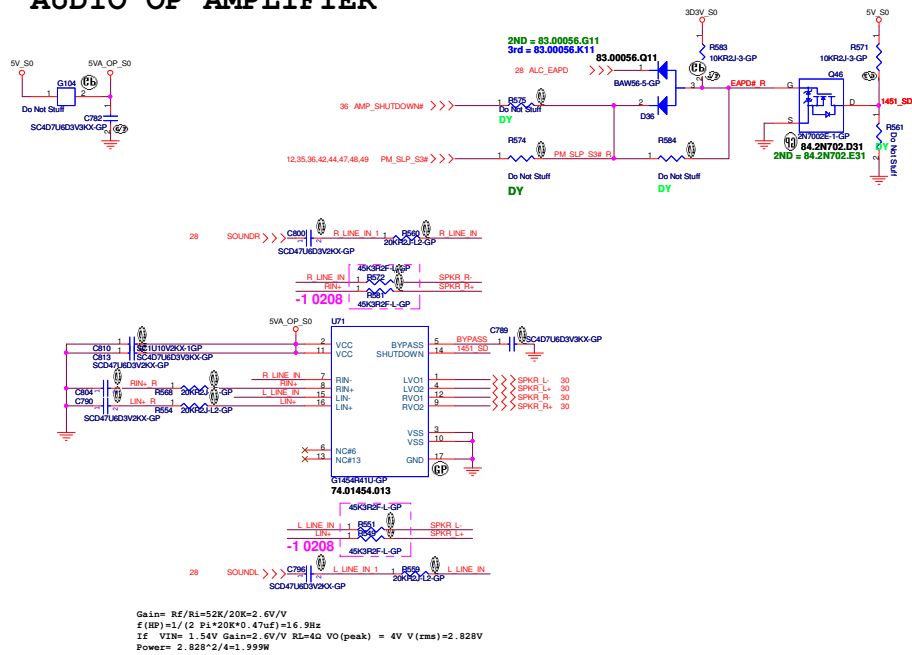
LAN CONN

Size A3 Document Number JE40-DN Rev -3

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AUDIO OP AMPLIFIER



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Rev

**AUDIO AMP**

**JE40-DN**

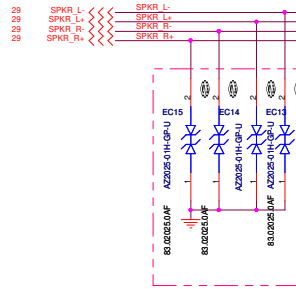
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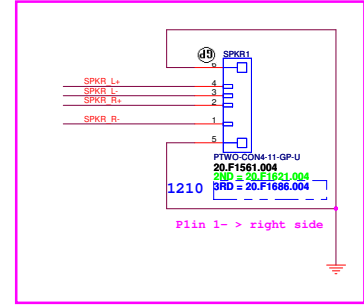
# Internal Speaker

0914

0910



-1 0125 for EMI request



JV42-DN SA

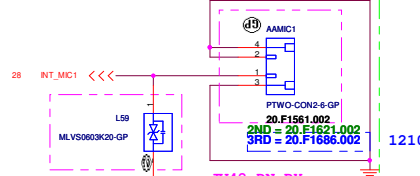
0910

## LINE OUT

0911

1016

## Internal Mic



-1 0209 For MIC issue

JV42-DN PX

Pin 1- >right side

20.F1240.002 Pin1->left side

same as JV70-CP

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緯創資通

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File

**AUDIO JACK**

**JE40-DN**

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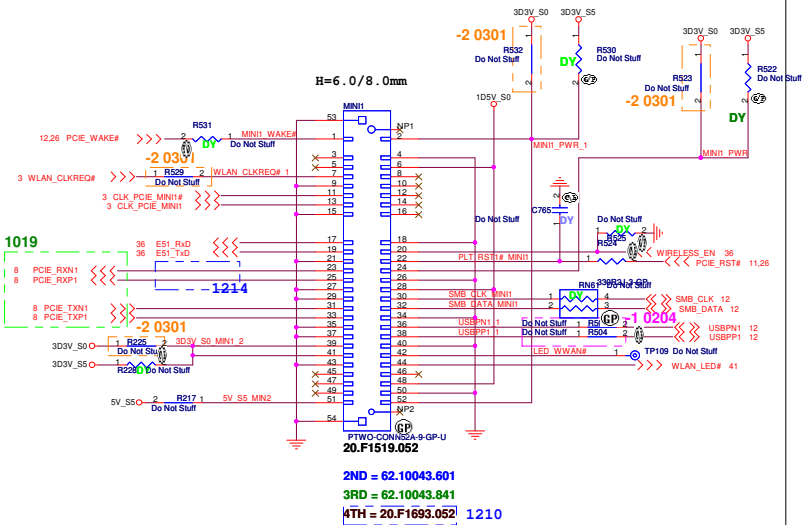
No Modem Function

Discrete Madison Hynix

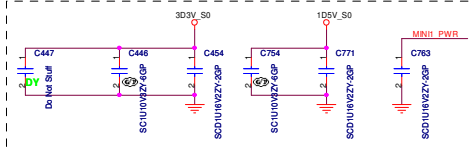
|                              |                 |                                                                                |          |
|------------------------------|-----------------|--------------------------------------------------------------------------------|----------|
| 緯創資通                         |                 | Wistron Corporation                                                            |          |
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| Title                        |                 | MDC                                                                            |          |
| Size                         | Document Number |                                                                                | Rev      |
| JE40-DN                      |                 | -3                                                                             |          |
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0923



Place near MINI1



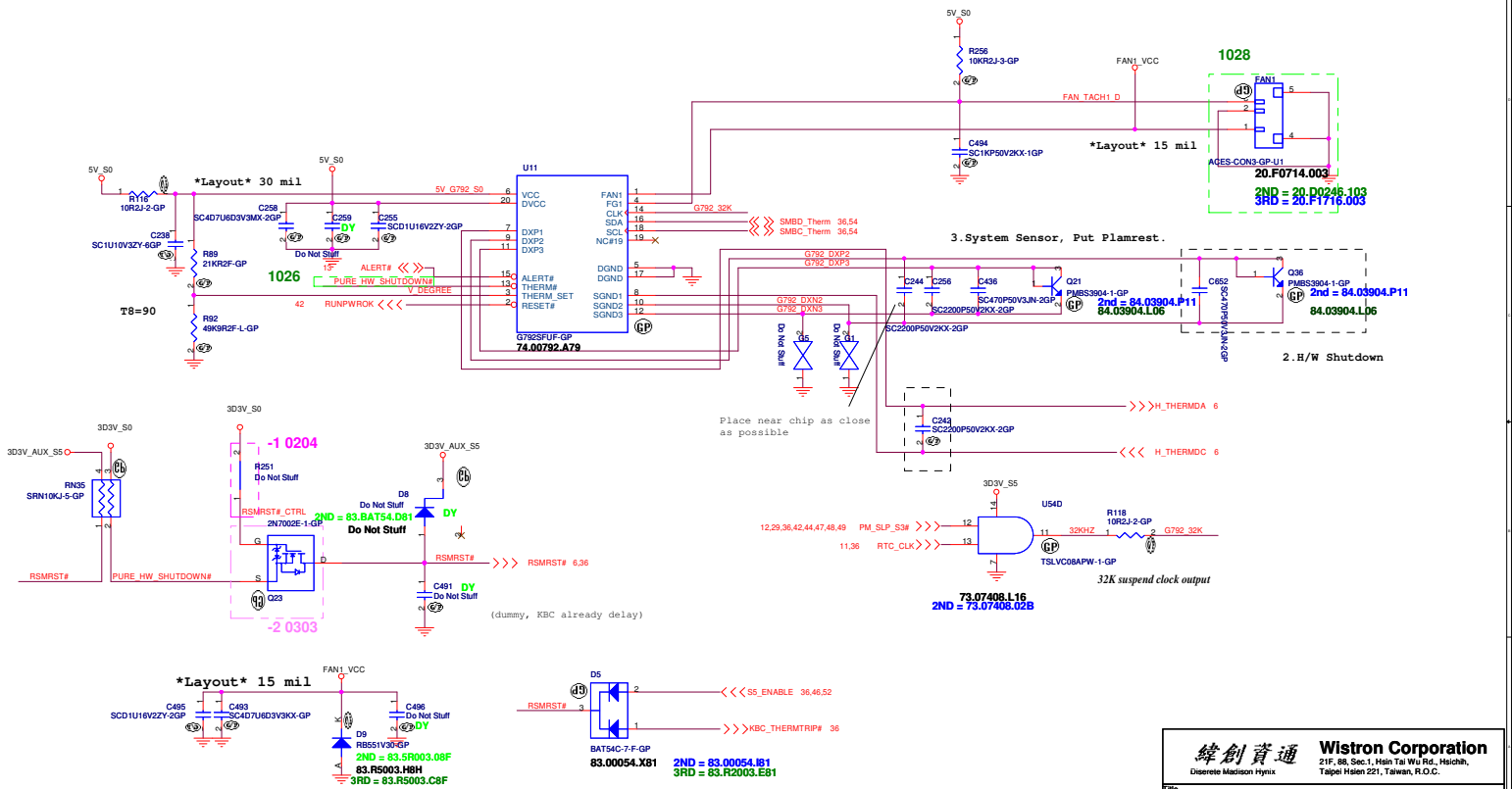
### *No Mini Card Function (Robson2 and 3G)*

|                        |                        |                                                                                                               |               |
|------------------------|------------------------|---------------------------------------------------------------------------------------------------------------|---------------|
| Discrete Madison Hynix |                        |                                                                                                               |               |
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| Title                  |                        |                                                                                                               |               |
| <b>MINI CARD</b>       |                        |                                                                                                               |               |
| Size                   | Document Number        |                                                                                                               | Rev <b>-3</b> |
| <b>JE40-DN</b>         |                        |                                                                                                               |               |
| Date:                  | Friday, March 28, 2010 | Sheet                                                                                                         | 33 of 63      |

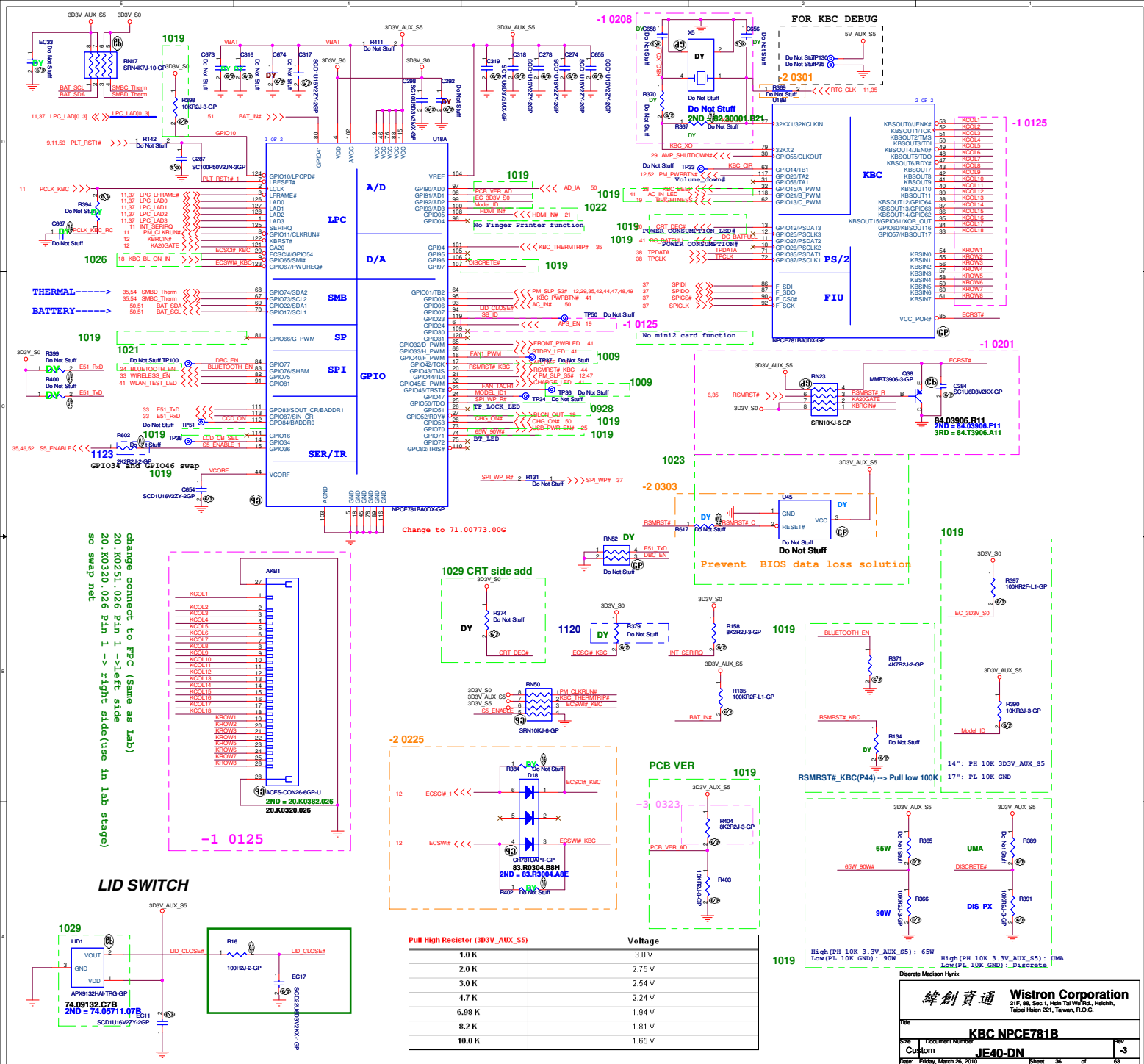
No NEWCARD Function

Discrete Madison Hyinx

|          |                        |                                                                               |          |
|----------|------------------------|-------------------------------------------------------------------------------|----------|
| 緯創資通     |                        | Wistron Corporation                                                           |          |
|          |                        | 21F, 88, Sec 1, Hsin Tai Wu Rd., Hsichih,<br>Taipai Hsien 221, Taiwan, R.O.C. |          |
| NEW CARD |                        |                                                                               |          |
| Size     | Document Number        |                                                                               | Rev      |
| JE40-DN  |                        | -3                                                                            |          |
| Date:    | Friday, March 26, 2010 | Sheet                                                                         | 34 of 63 |



|                               |                 |                                                                           |  |
|-------------------------------|-----------------|---------------------------------------------------------------------------|--|
| <b>緯創資通</b>                   |                 | <b>Wistron Corporation</b>                                                |  |
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| File                          |                 | <b>G792</b>                                                               |  |
| Size                          | Document Number | Rev                                                                       |  |
| Custom                        |                 | <b>-3</b>                                                                 |  |
| Date: Tuesday, March 30, 2010 |                 | Sheet 35 of 63                                                            |  |



for ENE FAE suggest, SPICS# is push-pull pin,  
don't need to pull high

base on FAE Kevin discuss with KBC

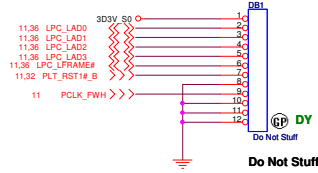
-1 0205  
-2 0303

3rd 4th source LAB ENG未上

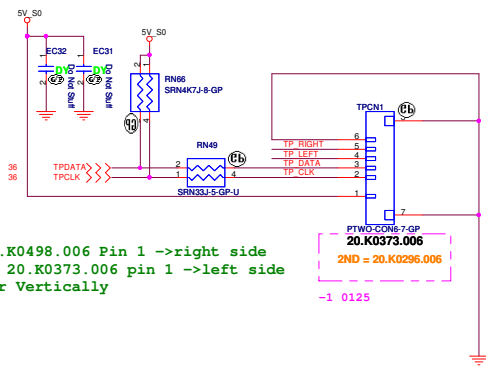
16M Bits  
SPI FLASH ROM

GOLDEN FINGER FOR DEBUG BOARD

11.36 LPC\_LAD[0..3] <<> LPC\_LAD[0..3]

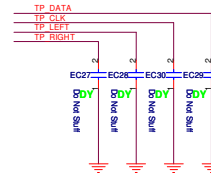


|                                                                            |                 |     |
|----------------------------------------------------------------------------|-----------------|-----|
| Discrete Madison Hynix                                                     |                 |     |
| 緯創資通 Wistron Corporation                                                   |                 |     |
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| File                                                                       |                 |     |
| BIOS                                                                       |                 |     |
| Size                                                                       | Document Number | Rev |
| A3                                                                         | JE40-DN         | -3  |
| Date: Friday, March 26, 2010                                               |                 |     |
| Sheet 37 of 83                                                             |                 |     |

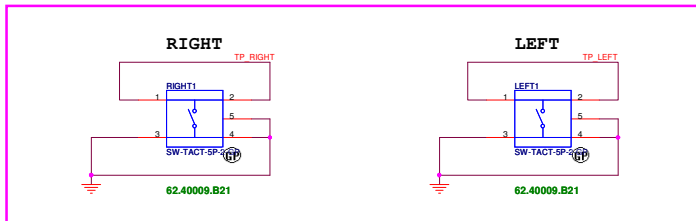


Eng stuff 20.K0498.006 Pin 1 -->right side  
 PD change to 20.K0373.006 pin 1 -->left side  
 so net mirror Vertically

PTWO-COM6-7-GP  
 20.K0373.006  
 2ND = 20.K0296.006  
 -1 0125



-1 0205



No Finger printer Function

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Title

**Touch PAD**

Size

Document Number

**JE40-DN**

Rev

**-3**

Date: Friday, March 28, 2019

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NONE BOARD

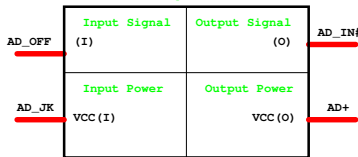
|            |                        |                                                                                |                |
|------------|------------------------|--------------------------------------------------------------------------------|----------------|
| 緯創資通       |                        | Wistron Corporation                                                            |                |
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| Title      |                        |                                                                                |                |
| NONE BOARD |                        |                                                                                |                |
| Size       | Document Number        |                                                                                | Rev            |
| A3         | JE40-DN                |                                                                                | -3             |
| Date       | Friday, March 28, 2010 |                                                                                | Sheet 39 of 63 |



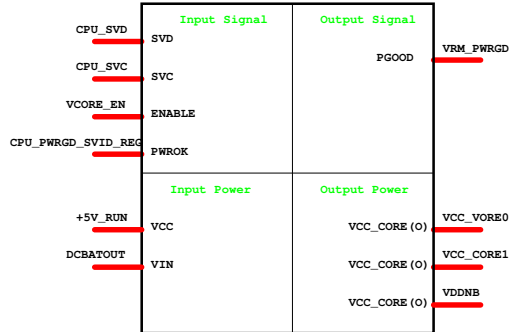




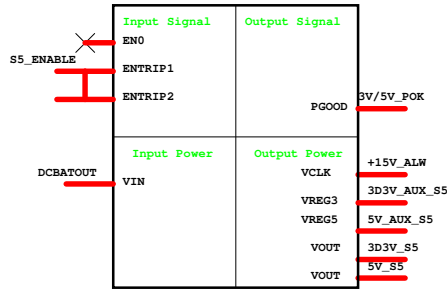
### Adapter



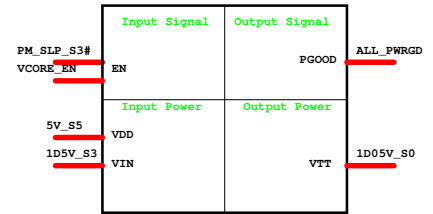
### CPU\_CORE ISL6265HRTZ



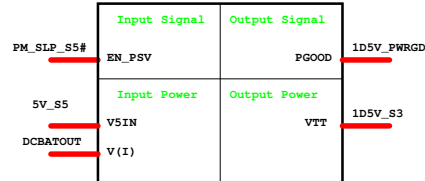
### DCDC 5V/3D3V(RT8223)



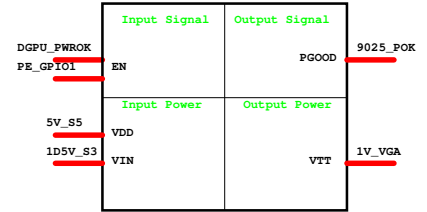
### DCDC 1D05V\_S0(RT9025)



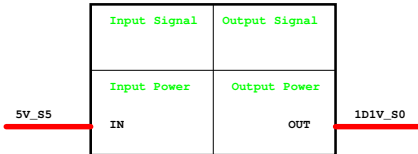
### DCDC 1D5V(RT8209E)



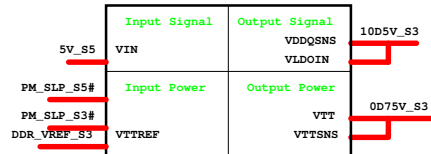
### DCDC 1V\_VGA(RT9025)



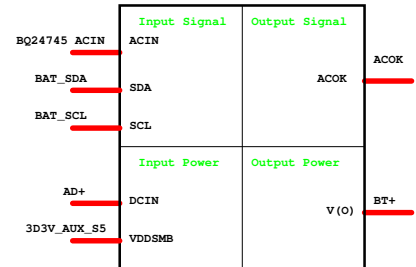
### 1D1V LDO RT8209E



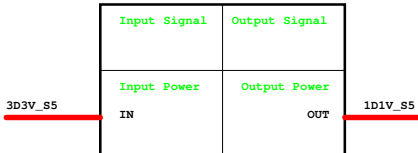
### 0D75V LDO RT9026



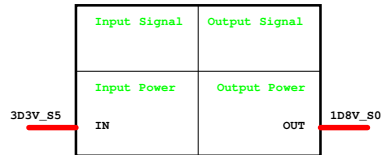
### CHARGER BQ24745



### 1D1V LDO RT9025



### 1D8V LDO RT8015A



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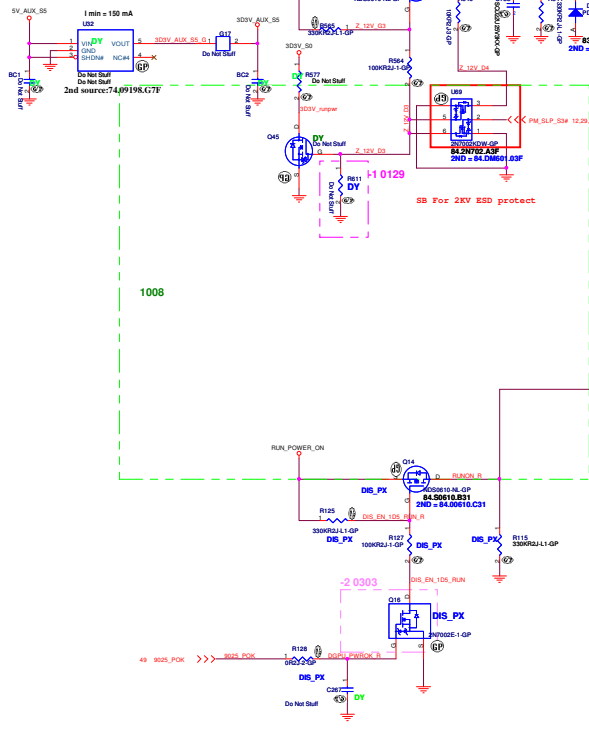
緯創資通

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

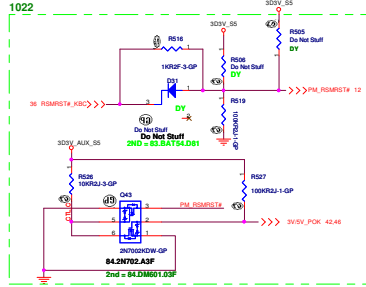
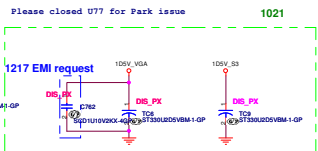
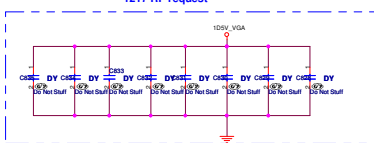
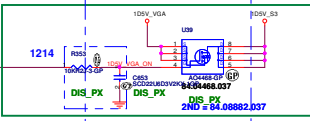
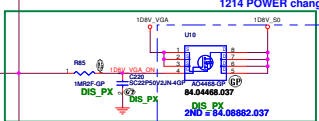
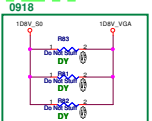
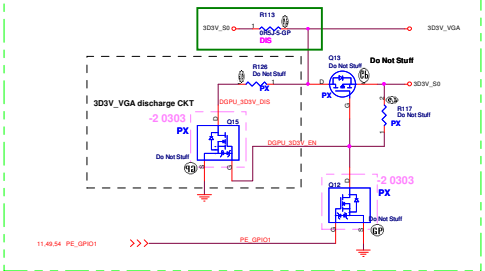
| Power Block Diagram |                        |                |
|---------------------|------------------------|----------------|
| File                | Document Number        | Rev            |
| Size                | JE40-DN                |                |
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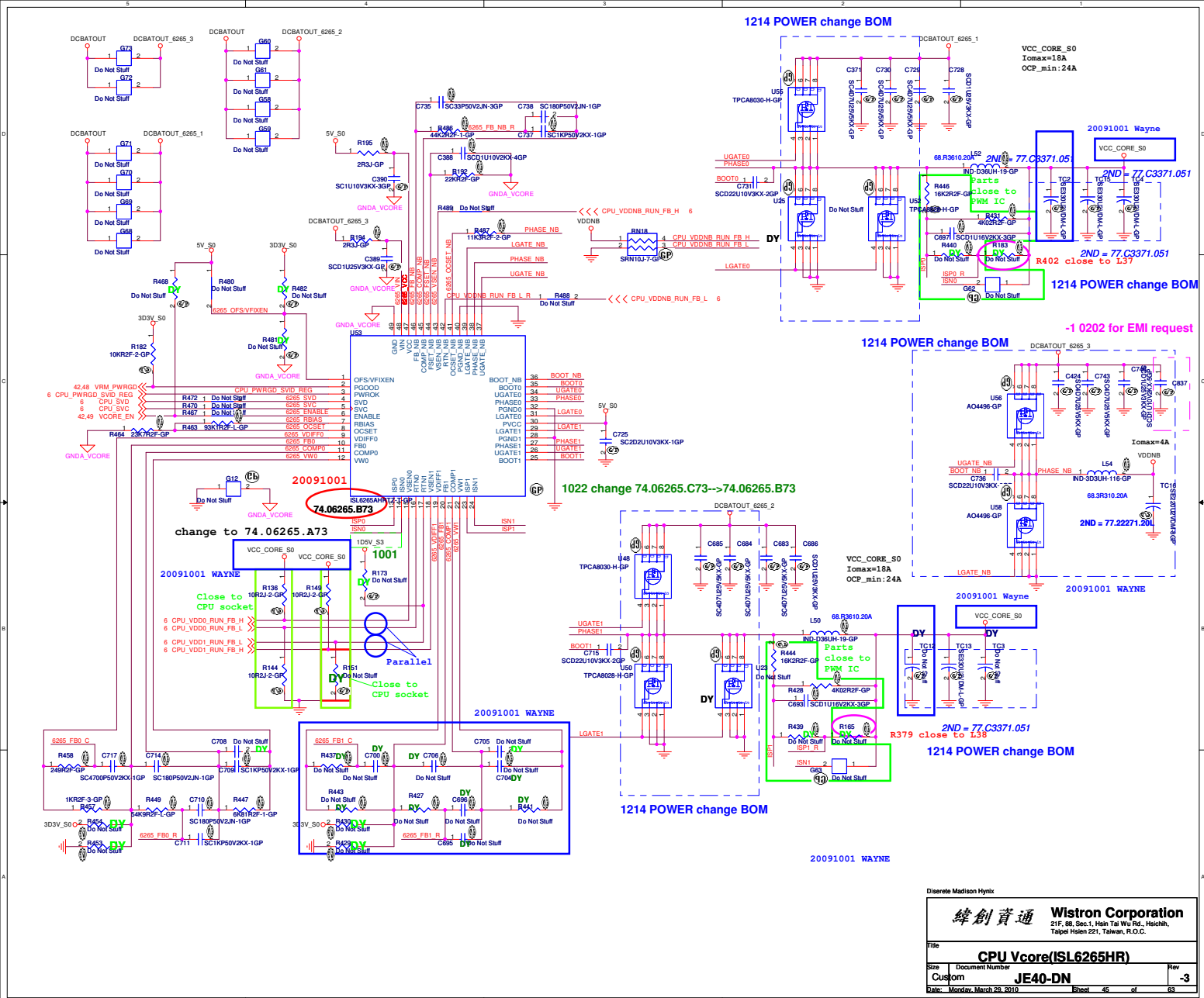
Run Power

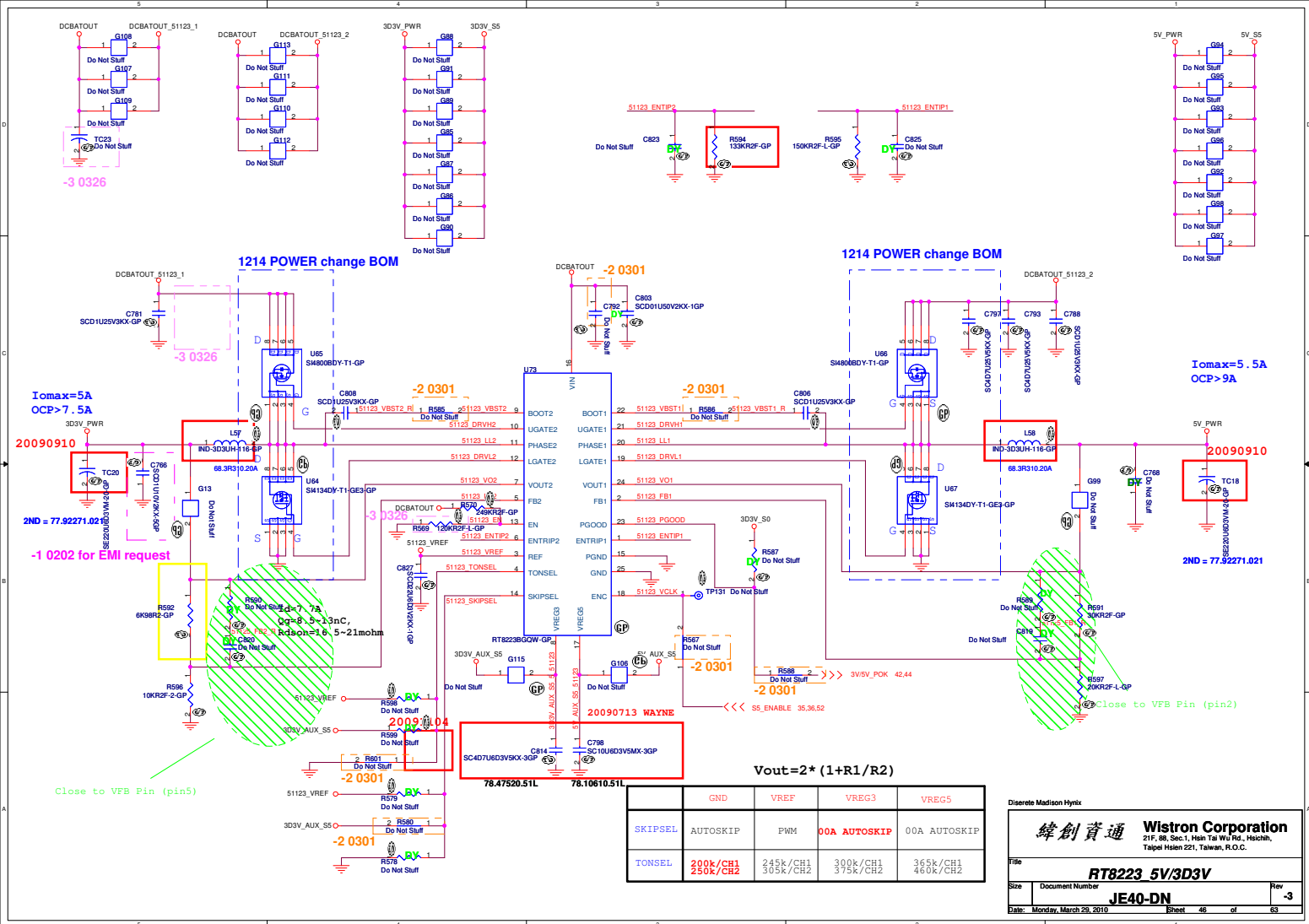
Aux Power 3D3V\_AUX\_S5



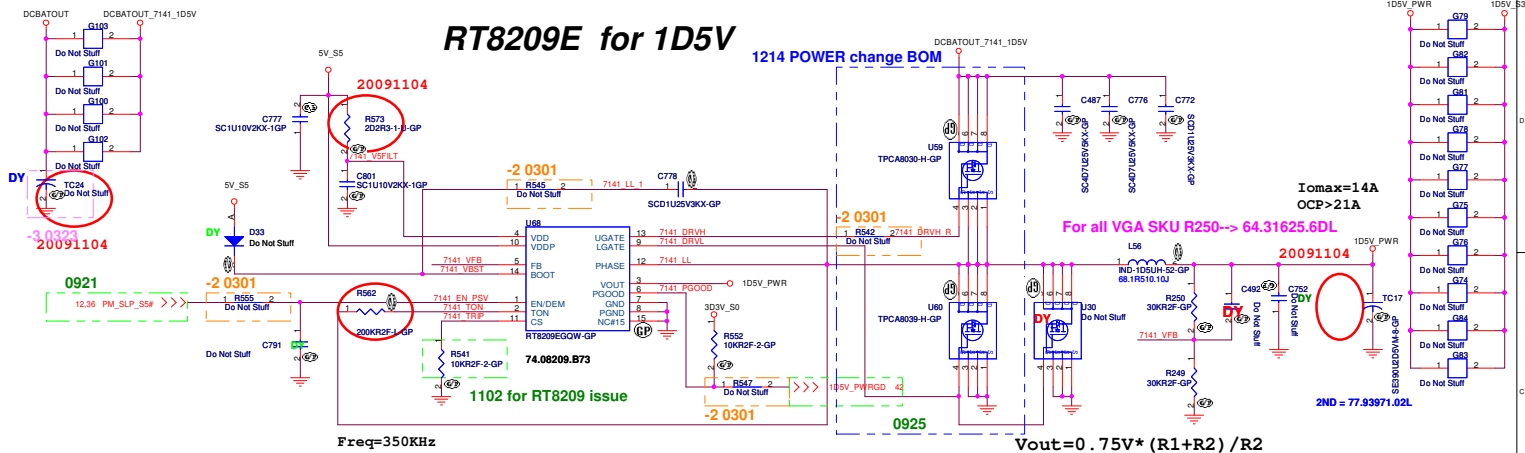
+3VS to 3.3V\_DELAY Transfer



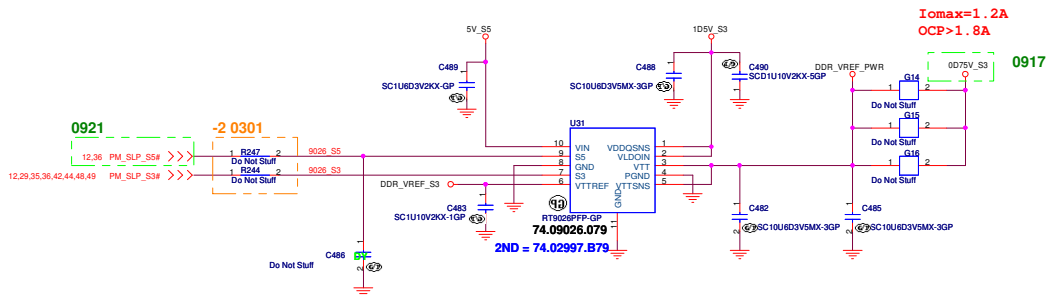




# RT8209E for 1D5V



# RT9026 for 0D75V\_S3



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Title  
**RT8209E 1D5V**  
Size Document Number  
**JE40-DN**  
Date: Monday, March 29, 2011

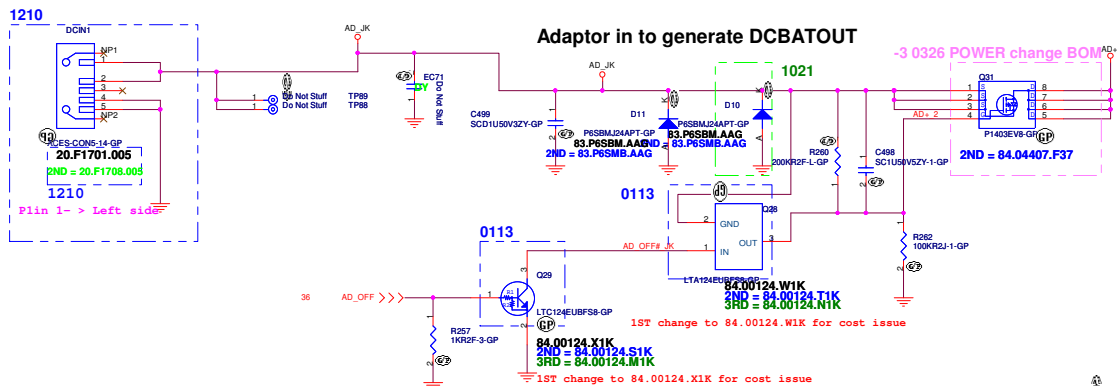
Rev  
-3  
Sheet 47 of 63

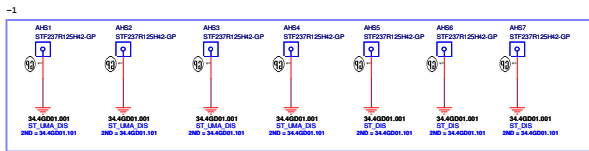
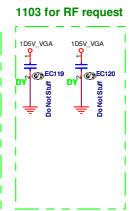
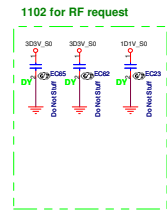
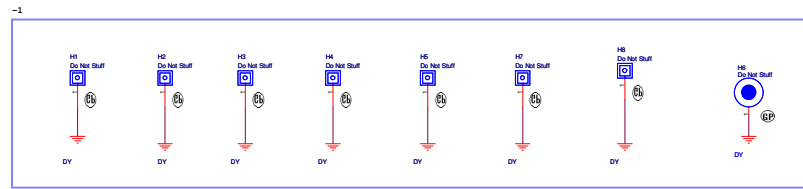
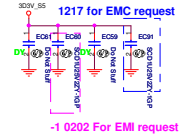
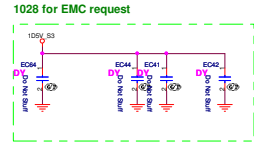
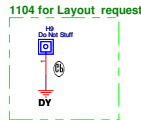
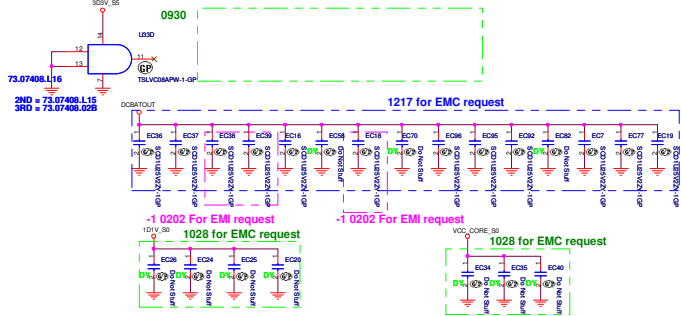
0917







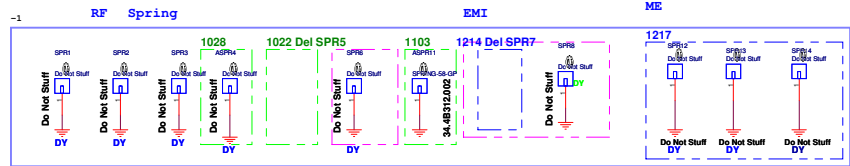




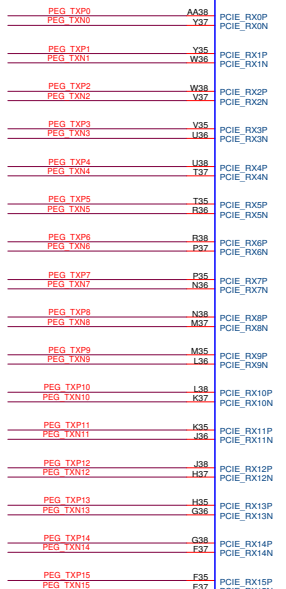
Check test point

- 303V\_S0
- 303V\_AUX\_S5
- 303V\_S5
- SV\_S5
- 12.36 FM\_POWER
- 4.11 CPU\_POWER
- 35.34.46 SS\_ENABLE
- 6.11 CPU\_LED\_RSTA
- TP120
- TP125
- TP123
- TP122
- TP124
- TP127
- TP126
- TP128

Test Point放在Dimm Door打開可量測處



8 PEG\_TXP[15:0] << PEG\_TXP[15:0]  
8 PEG\_TXN[15:0] << PEG\_TXN[15:0]



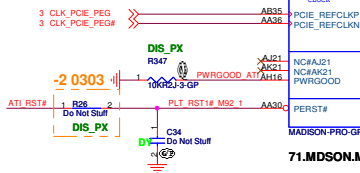
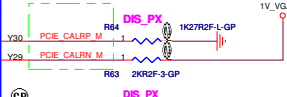
# PCI EXPRESS INTERFACE



8 PEG\_RXP[15:0] << PEG\_RXP[15:0]  
8 PEG\_RXN[15:0] << PEG\_RXN[15:0]

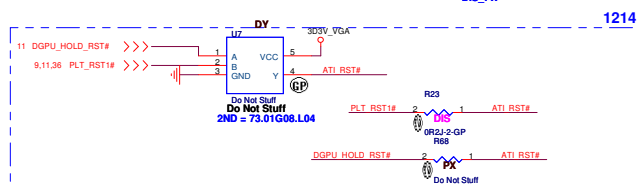


0908



71.MDSON.M01

DIS\_PX



Discrete Madison Hynix

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|                              |                 |              |       |
|------------------------------|-----------------|--------------|-------|
| Title                        |                 | Madison PCIE |       |
| Size                         | Document Number | JE40-DN      | Rev   |
| Date: Friday, March 28, 2019 |                 | Sheet 53     | of 53 |

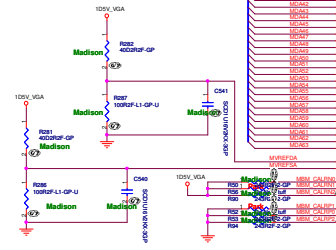




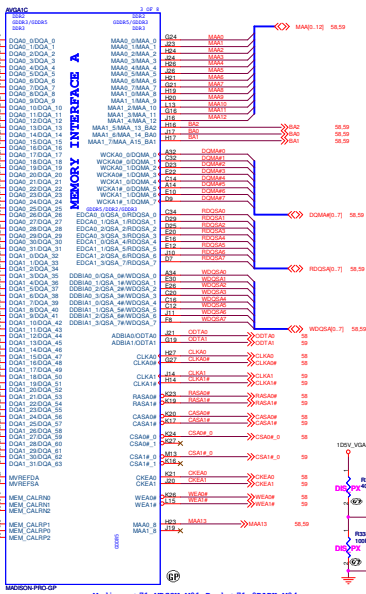


For SSTL-1.8/SSTL-2/DRI/GDDR1: 0.5 \* VDDRI.  
For DOR3/GDDR3/GDDR4/GDDR5: 0.7 \* VDDRI.

| DIVIDER RESISTORS | GDDR5 | DOR3     | DOR3  |
|-------------------|-------|----------|-------|
| MYREF             | 1.5V  | 1.8/1.5V | 1.5V  |
| MYREF TO PWR      | 40.2R | 50.2R    | 40.2R |
| MYREF TO GND      | 100R  | 100R     | 100R  |



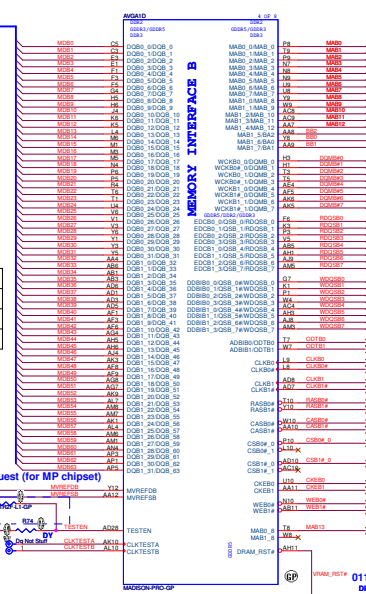
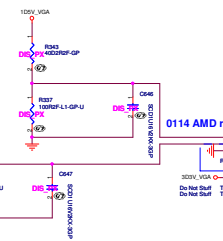
Madison: MEM\_CALRP[0,2] signals are used  
Park: MEM\_CALRP1 and MEM\_CALRP1 are used



71.MDS0N.MD1  
Madison->71.MDS0N.MD1, Park->71.GPARK.MD4

For SSTL-1.8/SSTL-2/DRI/GDDR1: 0.5 \* VDDRI.  
For GDDR3/GDDR3/GDDR4/GDDR5: 0.7 \* VDDRI.

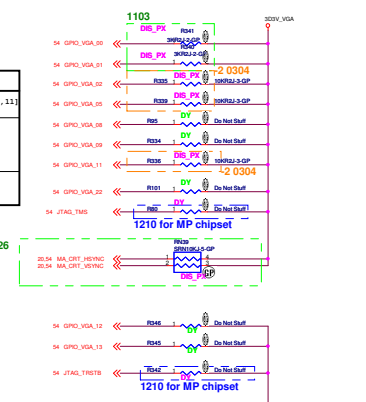
| DIVIDER RESISTORS | GDDR5 | DOR3     | DOR3  |
|-------------------|-------|----------|-------|
| MYREF             | 1.5V  | 1.8/1.5V | 1.5V  |
| MYREF TO PWR      | 40.2R | 50.2R    | 40.2R |
| MYREF TO GND      | 100R  | 100R     | 100R  |



71.MDS0N.MD1  
Madison->71.MDS0N.MD1, Park->71.GPARK.MD4

| STRAPS                                | PIN                    | DESCRIPTION                                                                                                                                                                                    | RECOMMENDED SETTINGS<br>S: DO NOT RETAIL RESISTOR<br>1: RETAIL RESISTOR<br>X: DESIGN DEPENDENT<br>NA: NOT APPLICABLE |
|---------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| TX_PWR_ENB<br>(Internal PD)           | GP100                  | FOR FULL TX OUTPUT SWING<br>Transmitter Power Savings Enable<br>= 50k Tx output swing<br>= Full Tx output swing                                                                                | X                                                                                                                    |
| TX_DEEMP_EN<br>(Internal PD)          | GP101                  | Transmitter De-emphasis Enable<br>= 0: 2x de-emphasis disabled<br>= 1: 2x de-emphasis enabled                                                                                                  | X                                                                                                                    |
| RESERVED                              | GP108                  | RESERVED                                                                                                                                                                                       | 0                                                                                                                    |
| BIF_VGA_DIS                           | GP109                  | VGA ENABLED                                                                                                                                                                                    | 0                                                                                                                    |
| RESERVED                              | GP1021                 | RESERVED                                                                                                                                                                                       | 0                                                                                                                    |
| BIOS_ROM_EN                           | GP1022_ROMCS           | ENABLE EXTERNAL BIOS ROM                                                                                                                                                                       | 0                                                                                                                    |
| VIP_DEVICE_STRAP_ENA<br>(Internal PD) | GP10[13,12,11]         | SERIAL ROM TYPE OR MEMORY APERTURE SIZE SELECT<br>If BIOS_ROM_EN=1, then Config[3:0]<br>Defines the ROM type<br>If BIOS_ROM_EN=0, then Config[3:0]<br>Defines the primary memory aperture size | X X X                                                                                                                |
| RSVD                                  | V2SYNC                 |                                                                                                                                                                                                | 0                                                                                                                    |
| RSVD                                  | R2SYNC                 |                                                                                                                                                                                                | 0                                                                                                                    |
| AUD[1]<br>AUD[0]<br>(Internal PD)     | VGA_HSYNC<br>VGA_VSYNC | AUD[1:0]<br>0:No audio function<br>1:Audio for DisplayPort and HDMI<br>(1 if adapter is detected)<br>10:Audio for DisplayPort only<br>11:Audio for both DisplayPort and HDMI                   | X<br>X                                                                                                               |

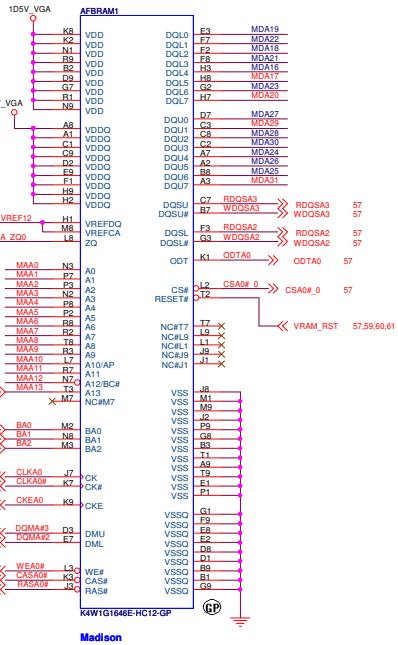
| AMD RESERVED CONFIGURATION STRAPS<br>ALLOW FOR PULLED PADS FOR THESE STRAPS AND IF THESE GPIOs ARE USED,<br>THEY MUST NOT CONFLICT DURING RESET |                |                             |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|--------------------------|
| H2SYNC, GENERRIC, GPIO2, GPIO21                                                                                                                 |                |                             |                          |
| If BIOS_ROM_EN (GPIO22) = 0                                                                                                                     |                | If BIOS_ROM_EN (GPIO22) = 1 |                          |
| Size of the primary<br>memory aperture                                                                                                          | GPIO[13,12,11] | Manufacturer                | Part Number              |
| 128MB                                                                                                                                           | x000           | ST                          | M25P05A                  |
| 256MB                                                                                                                                           | x001           | Microelectronics            | M25P10A                  |
| 512MB                                                                                                                                           | x010           |                             | M25P20                   |
| 1GB                                                                                                                                             | x011           |                             | M25P40                   |
| 2GB                                                                                                                                             | x012           |                             | M25P80                   |
| 4GB                                                                                                                                             | x013           |                             |                          |
|                                                                                                                                                 |                | Chingis<br>(Formerly PMC)   | PH2SLV102A<br>PH2SLV103A |



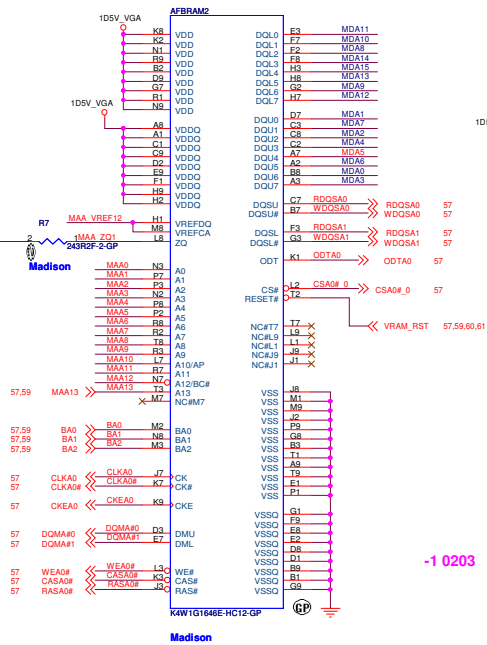
| Designator | For M97-M2 | For Mannheim |
|------------|------------|--------------|
| R_MEM_1    | 10K        | 10K          |
| R_MEM_2    | 40R/Short  | 51R          |
| R_MEM_3    | DY         | DY           |
| C_MEM      | 2.2nF      | 68pF         |

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Madison Memory / Straps  
JE40-DN  
3

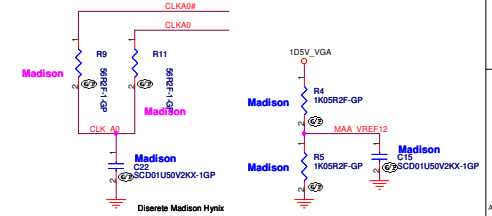
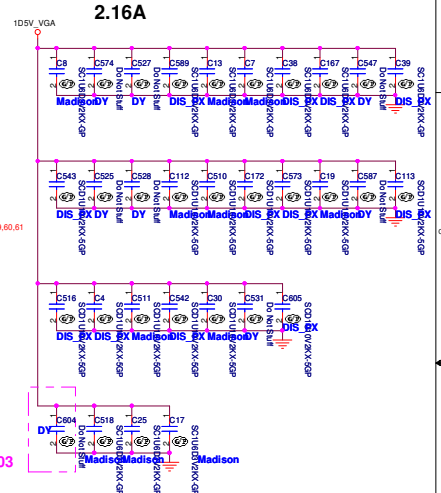
## DDR3



```
SAMSUNG: 72.41164.H0U
HYNIX:   72.51G63.C0U
```



### 2.16A

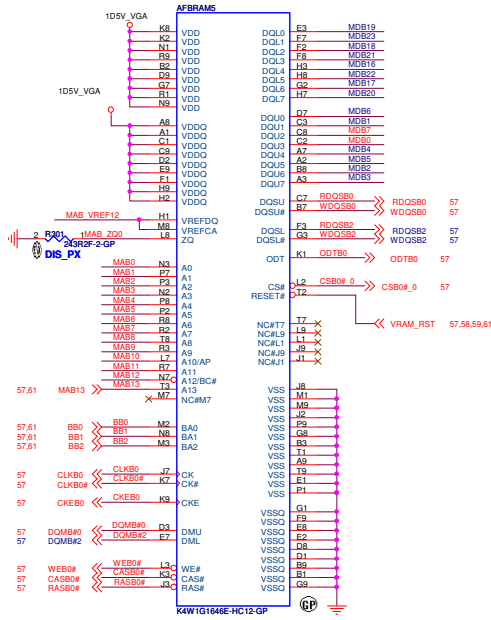


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Taipei Hsien 221, Taiwan, R.O.C.

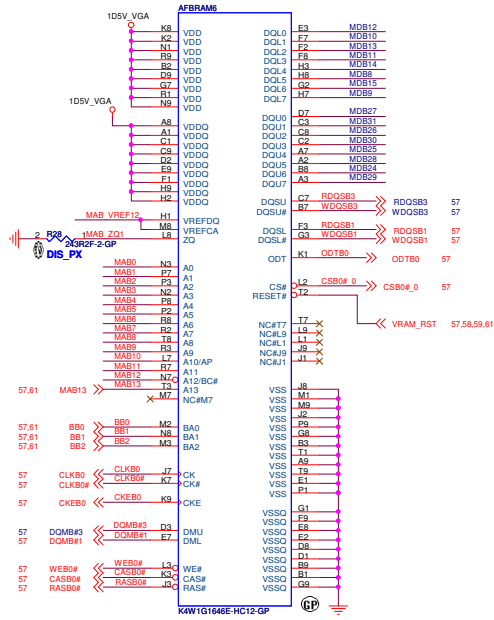
|           |                        |       |          |
|-----------|------------------------|-------|----------|
| Title     |                        |       |          |
| VRAM(1/4) |                        |       |          |
| Size      | Document Number        | Rev   |          |
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# DDR3



DIS\_PX  
72.41164.H0U



DIS\_PX  
72.41164.H0U

SAMSUNG: 72.41164.H0U  
HYNIX: 72.51G63.C0U

57.61 DOMB0[0..7] <<>

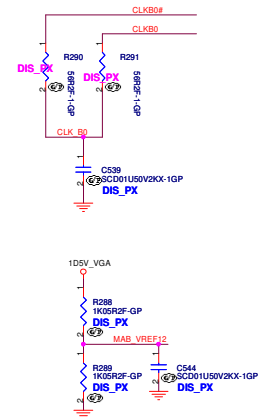
57.61 RDQSB[0..7] <<>

57.61 WDQSB[0..7] <<>

57.61 MAB[0..12] <<>

57.61 MAB[0..12] <<>

57.61 MAB[0..63] <<>



Discrete Madison Hynix

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Title: **VRAM(3/4)**

Size: A0 Document Number: **JE40-DN** Rev: -3

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*NB*  
RS780-->RS880M  
71.RS780.M02-->71.RS880.M02

*BOM*  
1st -> All SKU

*SB*  
SB820M-1-GP  
71.SB820.00U-->71.SB820.M03

*SATA\_CALRP*  
A11: 80歐姆 1% resistor to GND  
A12: TBD歐姆 1% resistor to GND

*SATA\_CALRN*  
A11:A11: 931歐姆 1% resistor to VDDAN\_11\_SATA  
A12: TBD歐姆 1% resistor to VDDAN\_11\_SATA.

*VGA*  
Madison--> PN:71.MDSON.M01  
Park--> PN:71.0PARK.M04

*VRAM*  
Samsung-->VRAM FBRAM1~8 PN:VR.1GB0B.006  
Hynix--> VRAM FBRAM1~8 PN:VR.1GB0G.004  
ATI--> VRAM FBRAM1~8 PN: VR.1GB0T.002

*CRT*  
UMA-->L1-->2R 0603  
C62-->47U/6.3V  
DIS-->L1-->Bead(L1 68.00217.711 L1608-UH38 SBK160808T-221Y-N-GP)  
C62-->DY  
PX--> 133 歐姆 (R58 63.10334.1DL R402H16 133R2F-GP)

*R605(MAD/PARK/PX)*  
Madison-->R605 64.15005.6DL R402H16150R2F-L-GP  
Park -->R605 64.15005.6DL R402H16150R2F-L-GP  
PX -->R605 64.15005.6DL R402H16150R2F-L-GP

*HDMI*  
UMA -->R612 R613 R618 R619 R620 R621 R624 R625 64.71505.6DL R402H16715R2F-2-GP

*R432(MAD/PARK)*  
Madison-->15KR2F 64.15025.6DL  
Park-->R432 64.68115.6DL R402H16 6.81KR2F

*R250*  
Madison-->R250 64.32425.6DL R402H16 32K4R2F  
Park -->R250 64.32425.6DL R402H16 32K4R2F  
PX -->R250 64.32425.6DL R402H16 32K4R2F

|                        |                        |                                                                               |       |
|------------------------|------------------------|-------------------------------------------------------------------------------|-------|
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| Title                  |                        |                                                                               |       |
| NOTE                   |                        |                                                                               |       |
| Size                   | Document Number        |                                                                               | Rev   |
| A3                     | JV42-DN                |                                                                               | -3    |
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