

# Dasher-2 Block Diagram

LDB-2 91.4RA01.001

Mar. 09, 2012

## PCB Layer Stackup

L1:Component  
L2:GND  
L3:Signal 1  
L4:VCC  
L5:Signal 2  
L6:Signal 3  
L7:GND  
L8:Component

## Battery Charger/Selector

BQ24760 74  
INPUTS OUTPUTS  
DOCK\_PWR20 CHARGER\_OUT12

System DC/DC  
TPS51220ARSN 78  
VINT20 VCC5M  
VCC3M

CPU DC/DC  
VT1318M/VT1324S 79  
VCC5M\_OUT VCCPUCORE

GMCH GFX CORE  
VT1324S 80  
VCC5M\_OUT VCCGFXCORE

VCC1R5A  
VT357FCX 85  
VCC5M\_OUT VCC1R5A

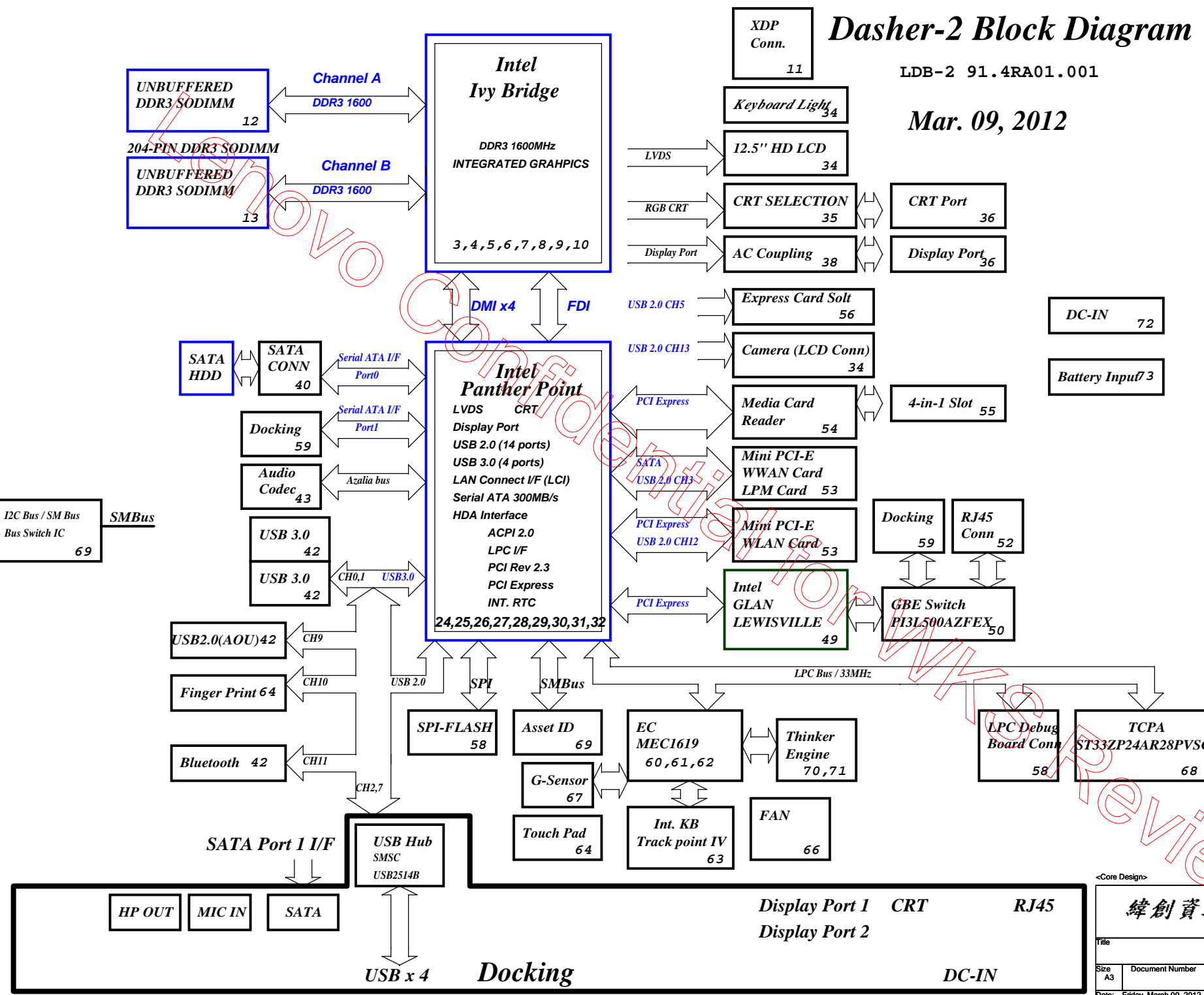
VCC0R75B  
TPS51200DRCR 86  
VCC1R5A VCC0R75B

VCC1R8B  
BD9139 89  
VCC5M\_OUT VCC1R8B

VCC1R05AMT  
VT356FCX 84  
VCC5M\_OUT VCC1R05LAN

VCC1R05B\_VTT  
VT356 83  
VCC5M\_OUT VCC1R05B\_VTT

VCCSA  
VT370 90  
VCC5M\_OUT VCCSA



<Core Design>

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

| Block Diagram                |                 |        |  |
|------------------------------|-----------------|--------|--|
| File                         | Document Number | Rev    |  |
| A3                           | Dasher-2        | -1     |  |
| Date: Friday, March 09, 2012 | Sheet 1         | of 101 |  |

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Maintenance and Service Guide,Service Manual,Motherboard Schematics for Laptop/notebook http://faqp.ru/

RESISTOR

| Symbol name | Value | Tolerance<br><br>(J: 5%, F: 1%, D: 0.5%, B: 0.1 %) | Rating<br>0402=> 1/16W, 25V<br>0603 => 1/16W, 75V<br>0805 => 1/10W, 100V | Size<br>2=>>0402, 3=>>0603, 5=>>0805,<br>6=>>1206, 0=>>1210 |
|-------------|-------|--|--|---|
|             |       |  |  |   |
|             |       |  |  |   |
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The naming rule is value + R + size + tolerance  
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|             |       |   |        |   |
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|             |       |   |        |   |

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SC=> SMT Ceramic, TC=> POS cap or SP cap  
D1U => 0.1uF  
10V => the voltage rating is 10V  
2=> 0402, 3=>0603, 5=>0805  
M=>tolerance M, K, Z  
X=> X7R/X5R, Y=> Y5V  
-1 => symbol version, nonsense to EE characteristic

PLANAR\_ID[3..0]

| IBEXPEAK-M | 39 | 38 | 48 | 49 | Planar ID Version | Planar PCB Version |
|------------|----|----|----|----|-------------------|--------------------|
| PLANAR_IDn | 3  | 2  | 1  | 0  |                   |                    |
|            | 0  | 0  | 0  | 0  | Dasher-2 initial  | N/A                |
|            | 0  | 0  | 0  | 1  | Dasher-2 PreDV    | SA                 |
|            | 0  | 0  | 1  | 0  | Dasher-2 SDV      | SA                 |
|            | 0  | 0  | 1  | 1  | Dasher-2 FVT      | SB                 |
|            | 0  | 1  | 0  | 0  | Dasher-2 PreSIT   | SC                 |
|            | 0  | 1  | 0  | 1  | Dasher-2 SIT      | SD                 |
|            | 0  | 1  | 1  | 0  | Dasher-2 SVT      | -1                 |
|            | 0  | 1  | 1  | 1  |                   |                    |
|            | 1  | 0  | 0  | 0  |                   |                    |
|            | 1  | 0  | 0  | 1  |                   |                    |
|            | 1  | 0  | 1  | 0  |                   |                    |

EC HISTORY

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<Core Design>

緯創資通 Wistron Corporation

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

TitleReference

Size A3Document NumberDasher-2Rev -1

Date: Tuesday, February 21, 2012Sheet 2 of 101E

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Maintenance and Service Guide,Service Manual,Motherboard Schematics for Laptop/notebook http://faqp.ru/

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|------------|----|----|----|----|-------------------|--------------------|
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|            | 0  | 0  | 0  | 0  | Dasher-2 initial  | N/A                |
|            | 0  | 0  | 0  | 1  | Dasher-2 PreDV    | SA                 |
|            | 0  | 0  | 1  | 0  | Dasher-2 SDV      | SA                 |
|            | 0  | 0  | 1  | 1  | Dasher-2 FVT      | SB                 |
|            | 0  | 1  | 0  | 0  | Dasher-2 PreSIT   | SC                 |
|            | 0  | 1  | 0  | 1  | Dasher-2 SIT      | SD                 |
|            | 0  | 1  | 1  | 0  | Dasher-2 SVT      | -1                 |
|            | 0  | 1  | 1  | 1  |                   |                    |
|            | 1  | 0  | 0  | 0  |                   |                    |
|            | 1  | 0  | 0  | 1  |                   |                    |
|            | 1  | 0  | 1  | 0  |                   |                    |

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<Core Design>

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

TitleReference

SizeA3Document NumberDasher-2Rev-1

Date: Tuesday, February 21, 2012Sheet 2 of 101E

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|            | 1  | 0  | 1  | 0  |                   |                    |

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TitleReference

SizeA3Document NumberDasher-2Rev-1

Date: Tuesday, February 21, 2012Sheet 2 of 101

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|            | 1  | 0  | 0  | 1  |                   |                    |
|            | 1  | 0  | 1  | 0  |                   |                    |

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TitleReference

Size A3Document NumberDasher-2Rev -1

Date: Tuesday, February 21, 2012Sheet 2of 101E

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|            | 0  | 1  | 1  | 1  |                   |                    |
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|            | 1  | 0  | 0  | 1  |                   |                    |
|            | 1  | 0  | 1  | 0  |                   |                    |

EC HISTORY

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<Core Design>

緯創資通

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

TitleReference

SizeA3

Document NumberDasher-2

Rev-1

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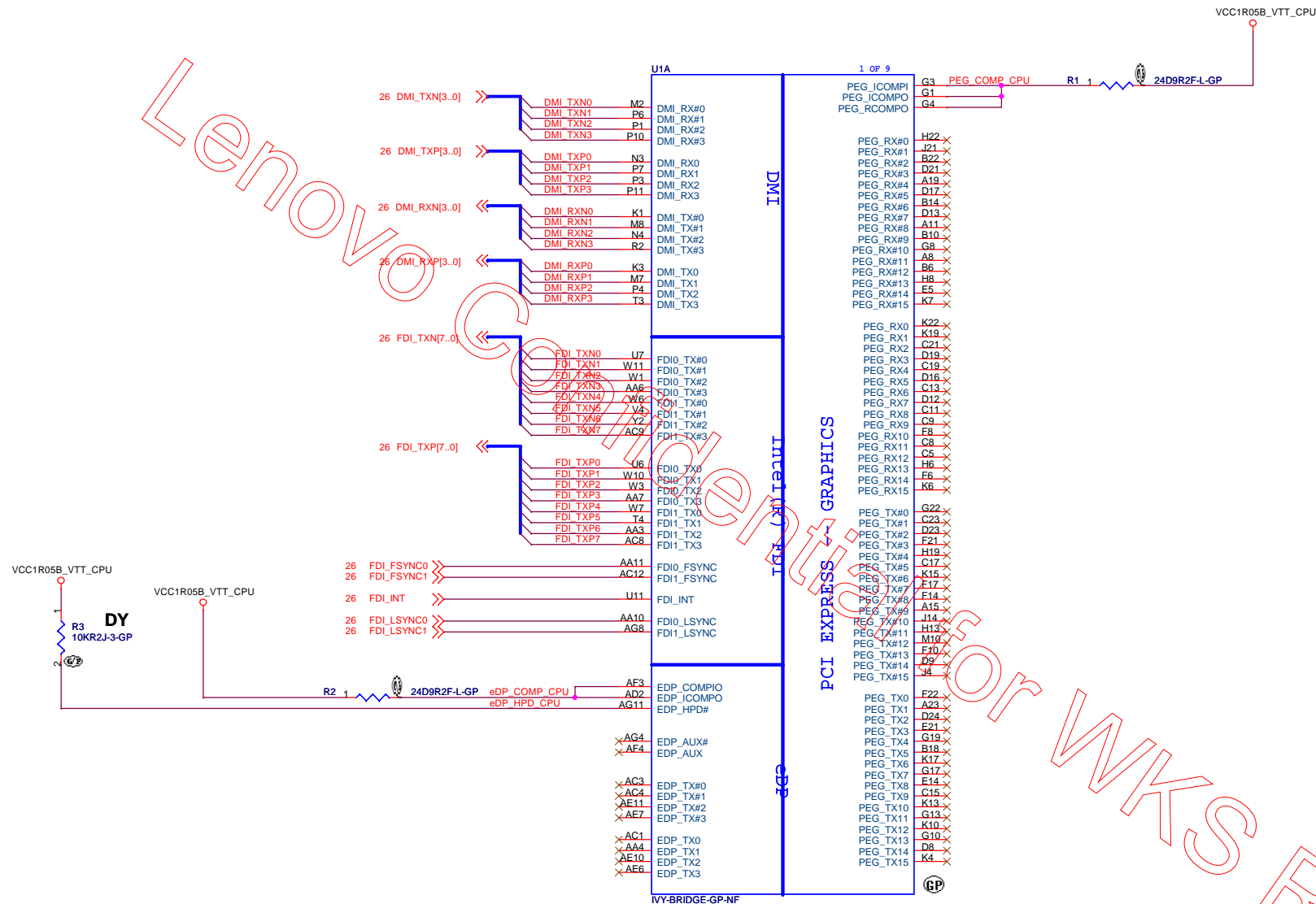
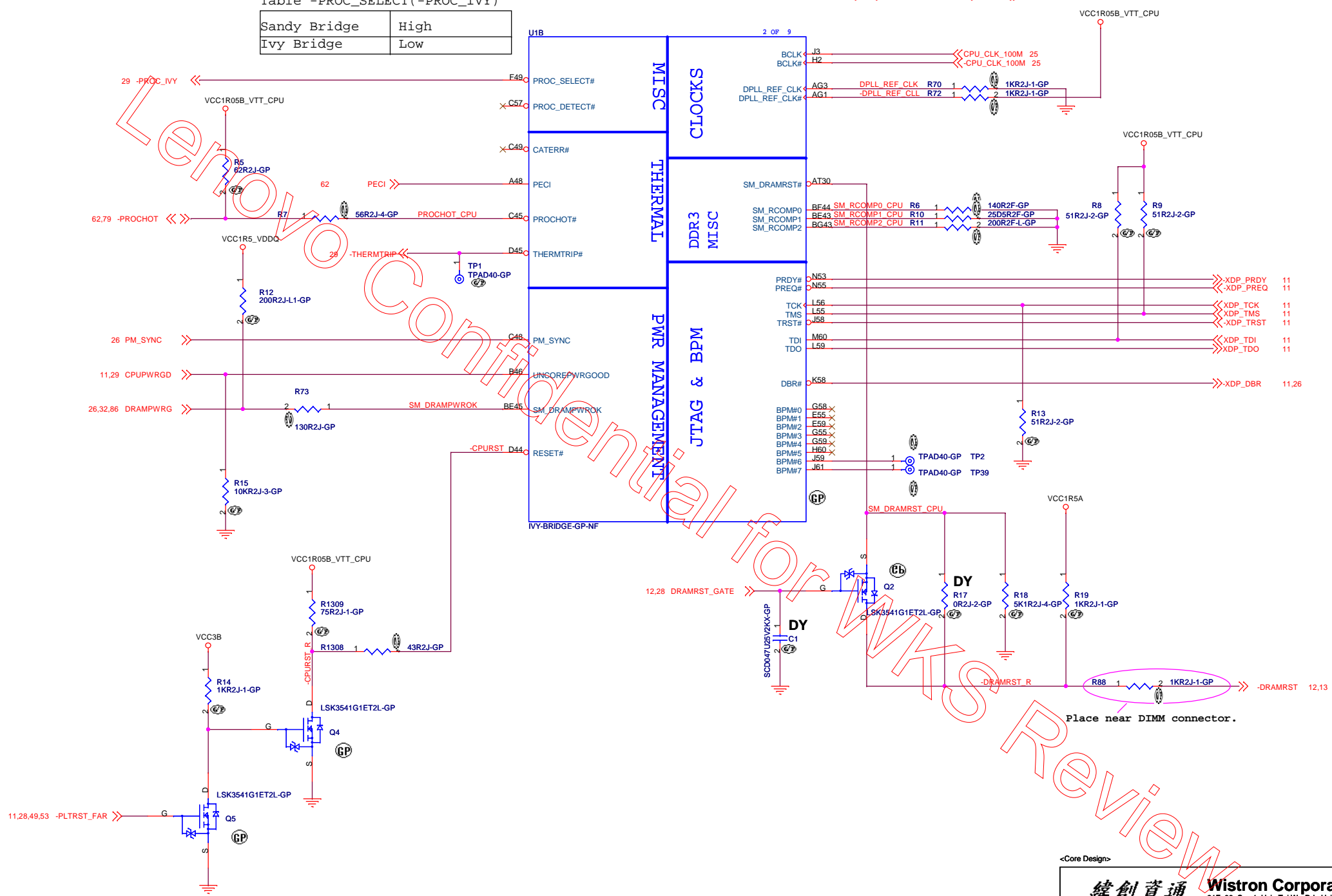
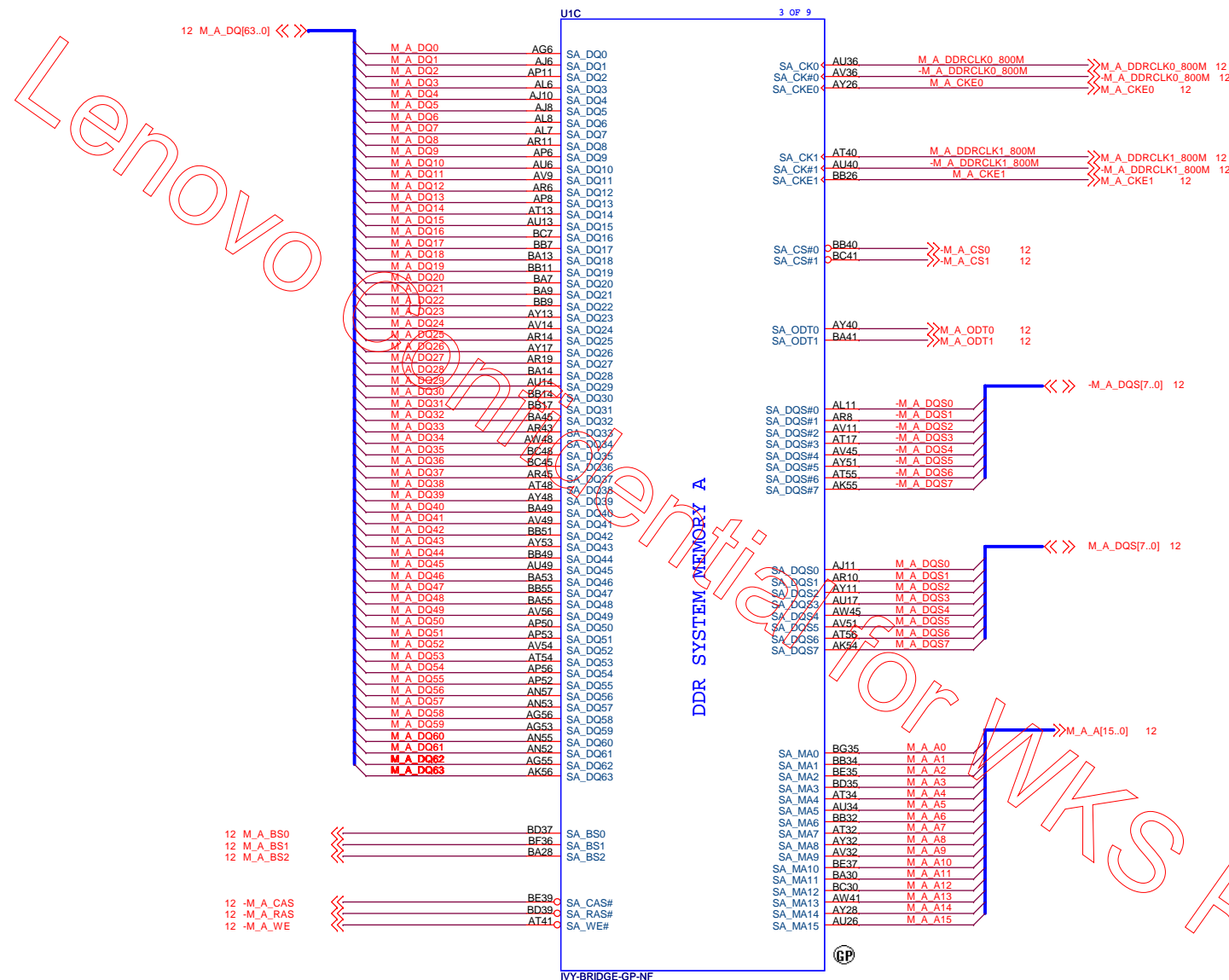
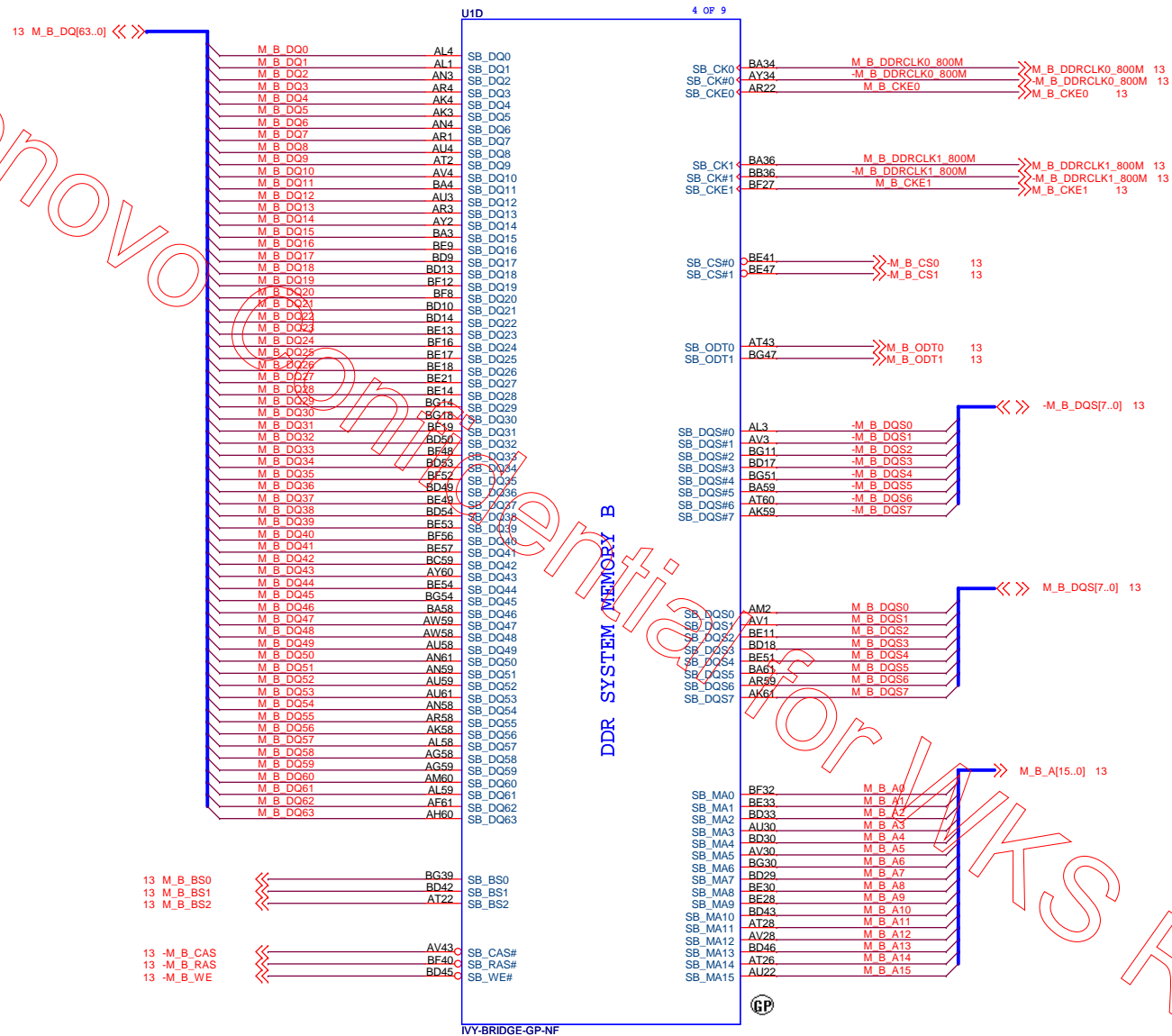


Table -PROC\_SELECT(-PROC\_IVY)

|              |      |
|--------------|------|
| Sandy Bridge | High |
| Ivy Bridge   | Low  |







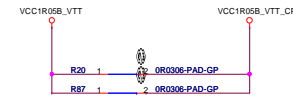
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Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
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CPU(4/8);DDR3 Channel-B

Size A3 Document Number Dasher-2 Rev -1

Date: Friday, March 09, 2012 Sheet 6 of 101

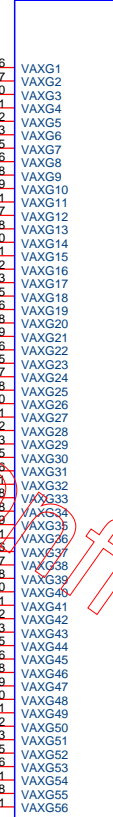
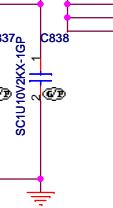
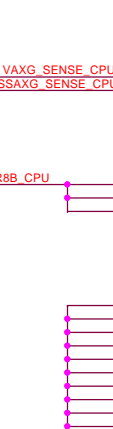
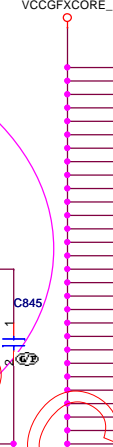


no 0.01 ohm 1% 0402 RES

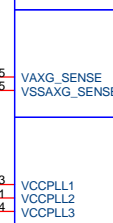
Z0 = 27.4 OHM  
PU/PD < 1inch

|       |                        |                |
|-------|------------------------|----------------|
| A2    | <b>Dasher-2</b>        | -1             |
| Date: | Friday, March 09, 2012 | Sheet 7 of 101 |

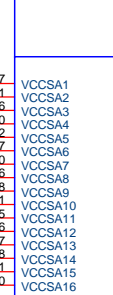




VAXG30  
VAXG31  
VAXG32  
VAXG33  
VAXG34  
VAXG35  
VAXG36  
VAXG37  
VAXG38



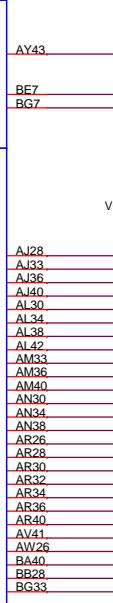
|   |              |
|---|--------------|
| 5 | VAXG_SENSE   |
| 5 | VSSAXG_SENSE |



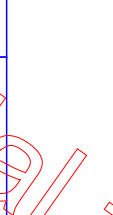
|   |         |
|---|---------|
| 2 | VCCSA5  |
| 7 | VCCSA6  |
| 0 | VCCSA7  |
| 6 | VCCSA8  |
| 8 | VCCSA9  |
| 1 | VCCSA10 |
| 5 | VCCSA11 |
| 6 | VCCSA12 |



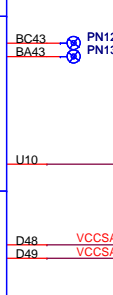
①



AJ33  
AJ36  
AJ40  
AL30  
AL34  
AL38  
AL42  
AM33  
AM36  
AM40  
AN30  
AN34  
AN38  
AR26  
AR28  
AR30  
AR32  
AR34



AM28  
AN26



D48 VCCSA  
D49 VCCSA



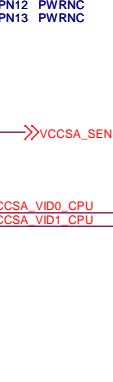
Place near CPU



\_\_\_\_\_



|              | VCCSA_SEL0 | VCCSA_SEL1 | VCCSA            |
|--------------|------------|------------|------------------|
| Sandy Bridge | LOW        | 0<br>1     | 0.90V<br>0.80V   |
| Ivy Bridge   | High       | 0<br>1     | 0.725V<br>0.675V |



<Core Design>

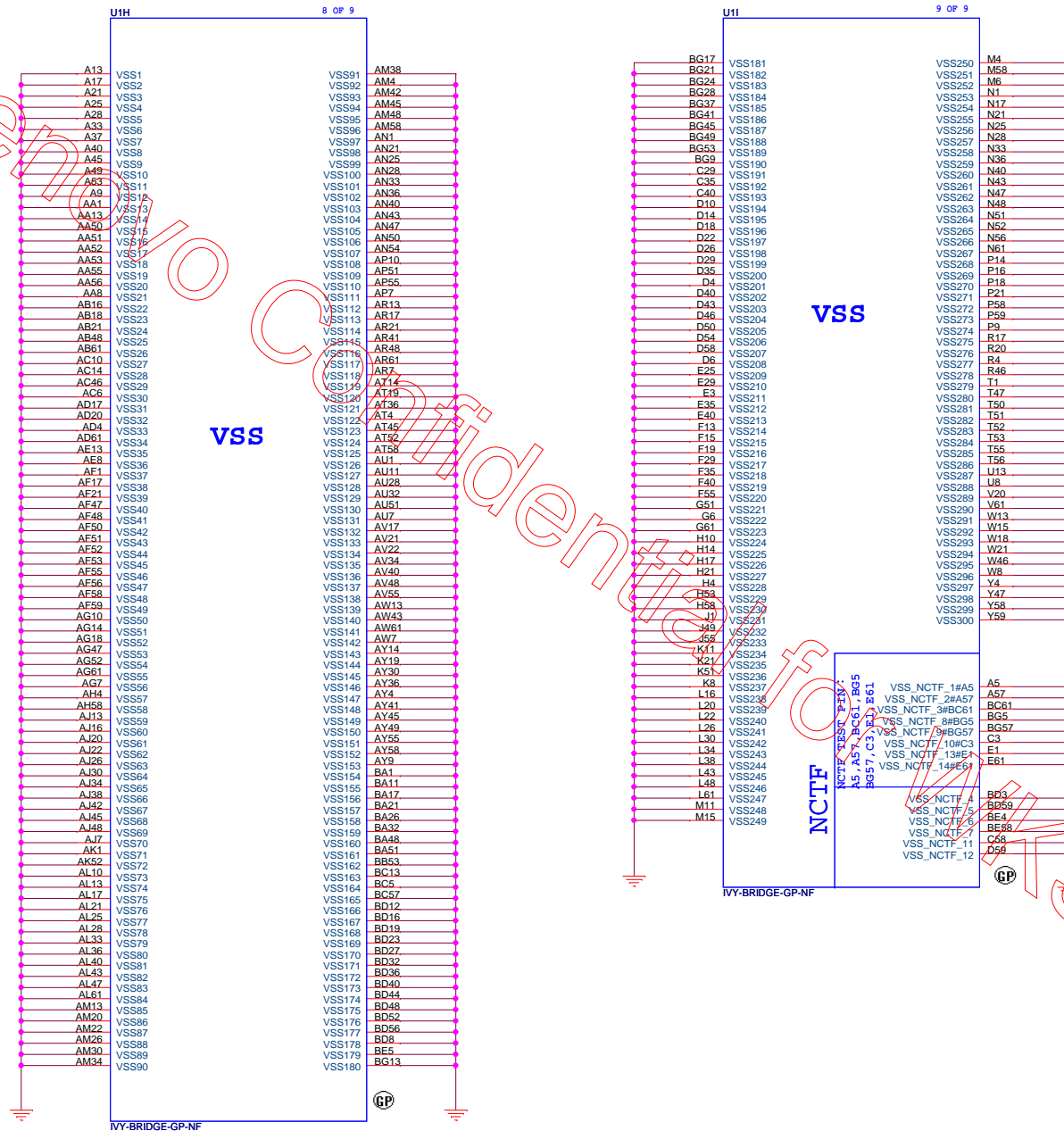
**緯創資通** **Wistron Corporation**  
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Taipei Hsien 221, Taiwan, R.O.C.

|       |                                |
|-------|--------------------------------|
| Title | <b>CPU(6/8):Graphics Power</b> |
|-------|--------------------------------|

|            |                                    |                  |
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| Size<br>A3 | Document Number<br><b>Dasher-2</b> | Rev<br><b>-1</b> |
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| Date: Friday, March 09, 2012 |  | Sheet 8 of 101 |
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Title CPU(7/8):GND

Size Custom

Document Number

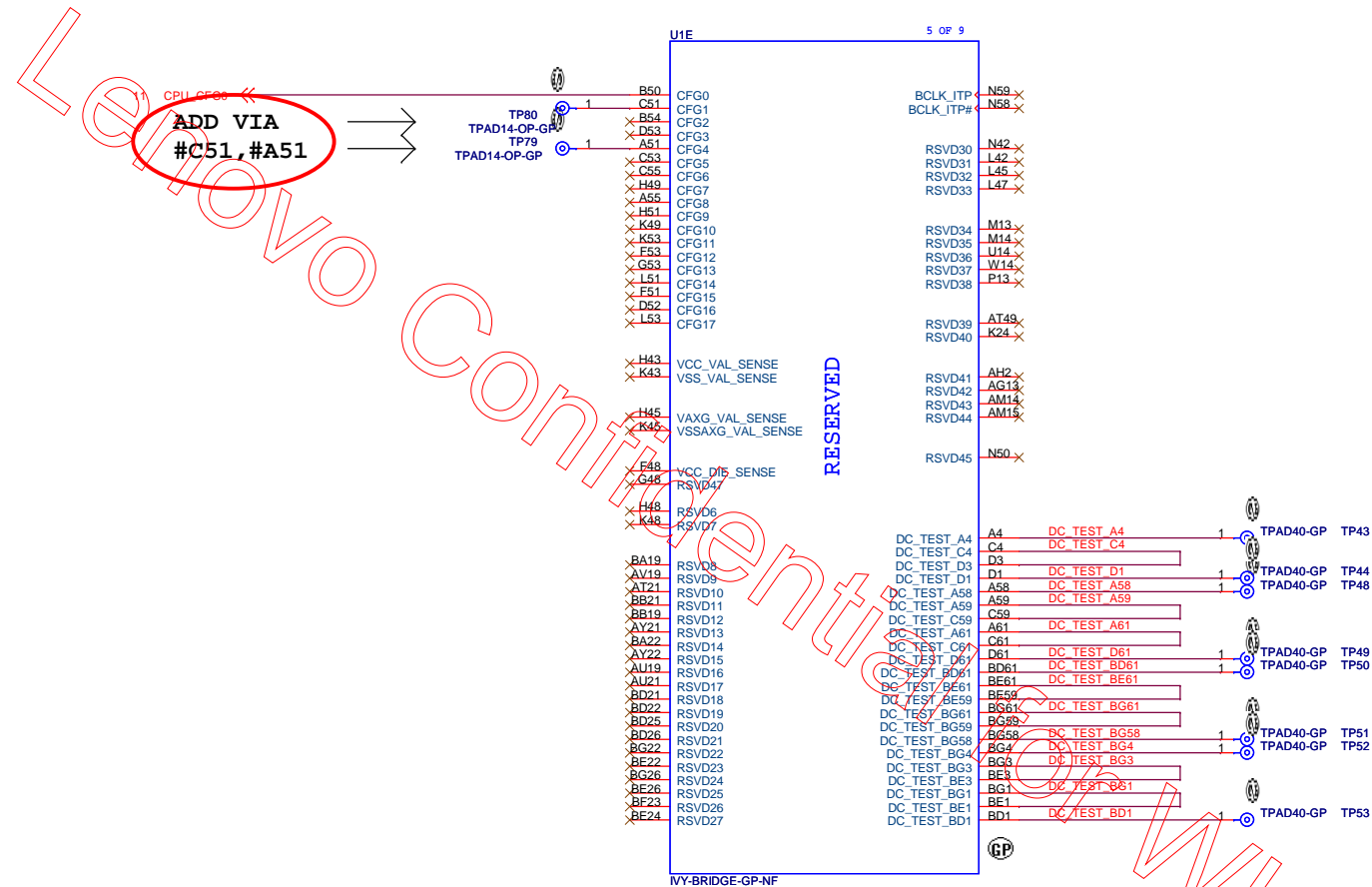
Dasher-2

Rev

-1

Date: Tuesday, February 21, 2012

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Title

**CPU(8/8):CFG/Reserved**

Size

A3 Document Number

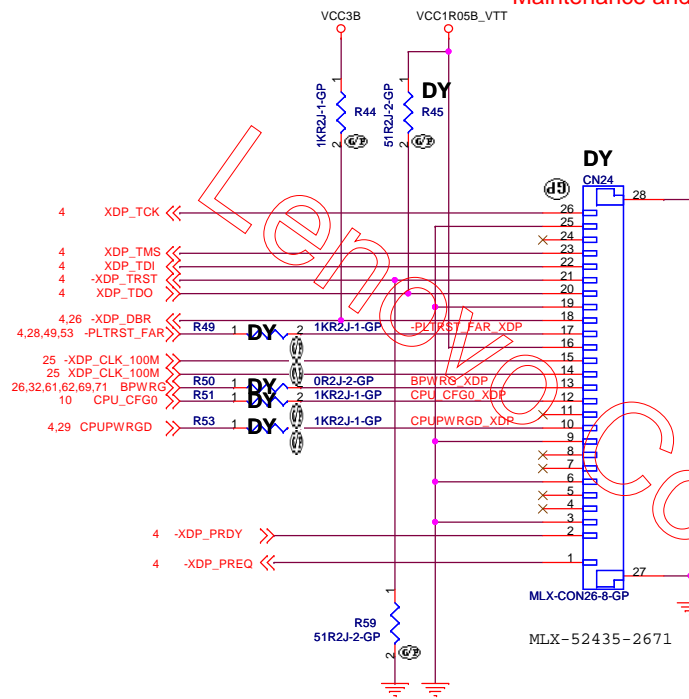
**Dasher-2**

Rev

**-1**

Date: Friday, March 09, 2012

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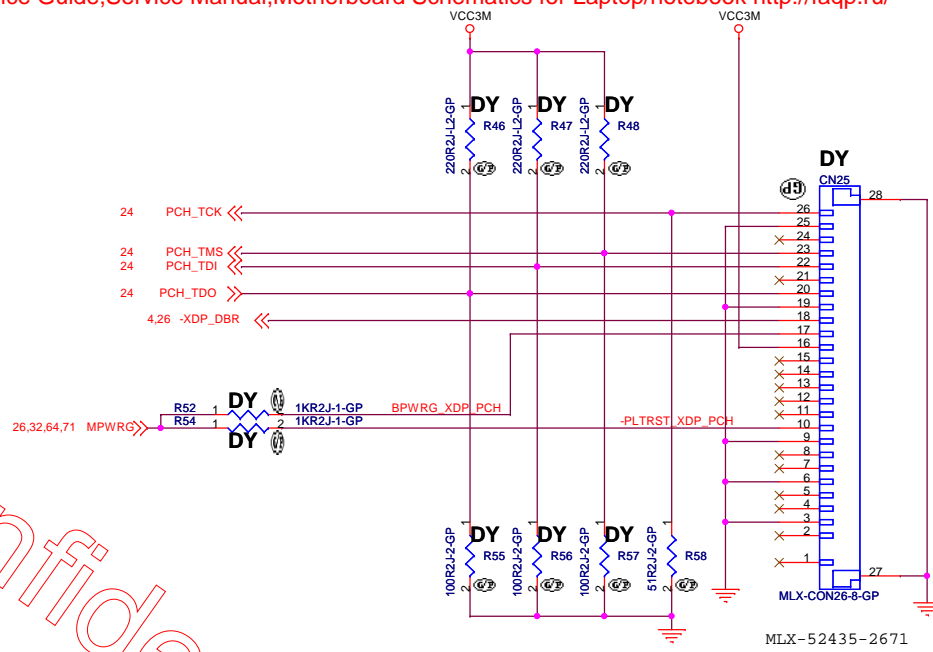


**DEBUG Interface for Processor.**

**XDP1** NOTE:"ASM" FOR PDV/SDV ONLY

|        |      | ENABLE | DISABLE |
|--------|------|--------|---------|
| TDO    | R45  | ASM    | DY      |
| TRST#  | R59  | ASM    | ASM     |
| DBRST# | R44  | ASM    | ASM     |
| RESET# | R49  | ASM    | DY      |
| CFG0   | R51  | ASM    | DY      |
| PWRGD  | R53  | ASM    | DY      |
| BPWRG  | R50  | ASM    | DY      |
|        | CN24 | ASM    | DY      |

FVT Logic



**DEBUG Interface for PCH.**

**XDP2** NOTE:"ASM" FOR PDV/SDV ONLY

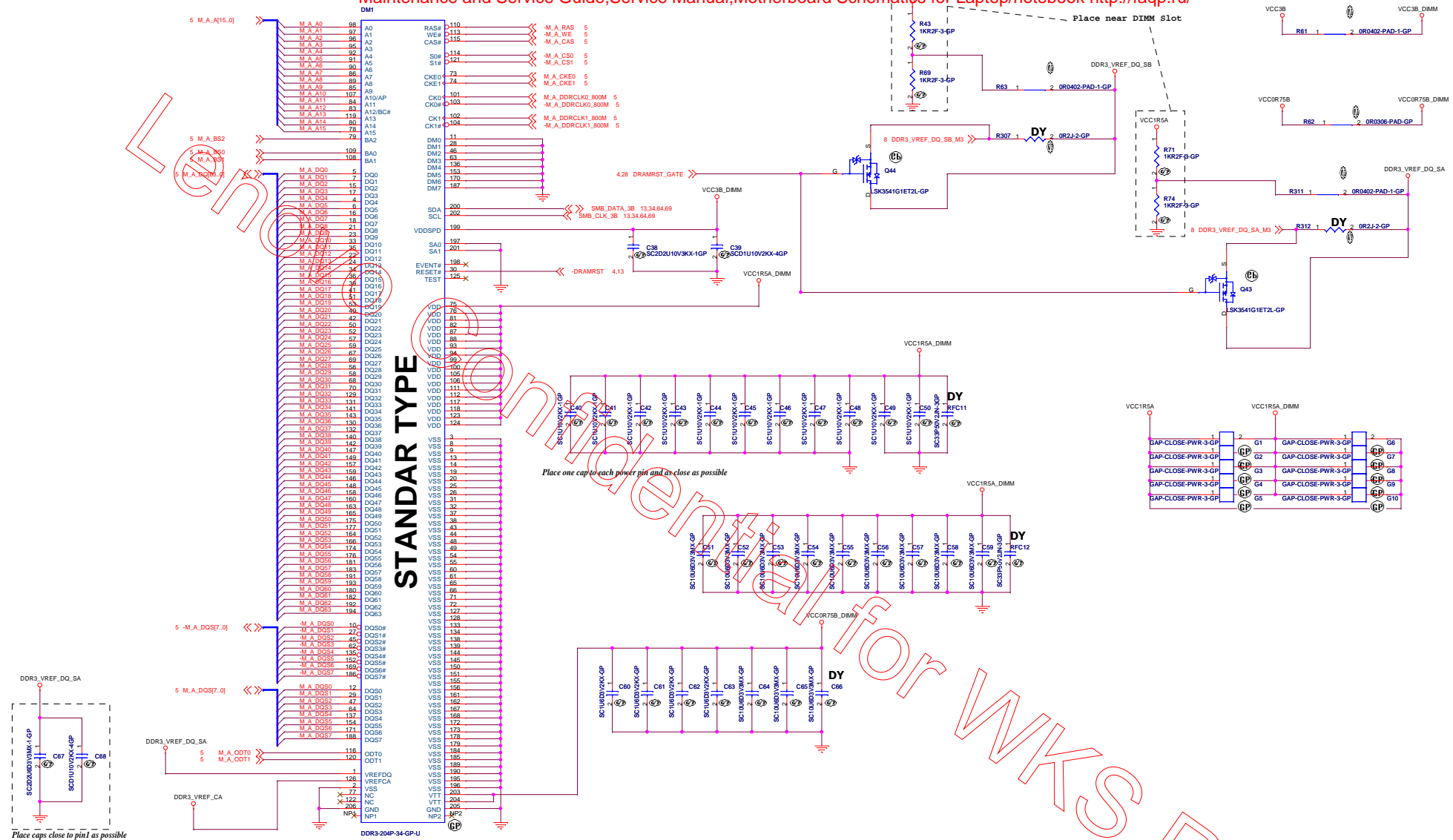
|       |      | ENABLE | DISABLE |
|-------|------|--------|---------|
| TDO   | R46  | 220    | DY      |
|       | R55  | 100    | DY      |
| TMS   | R48  | 220    | DY      |
|       | R57  | 100    | DY      |
| TDI   | R47  | 220    | DY      |
|       | R56  | 100    | DY      |
| TCK   | R58  | 51     | 51      |
| MPWRG | R52  | ASM    | DY      |
|       | R54  | ASM    | DY      |
|       | CN25 | ASM    | DY      |

FVT Logic

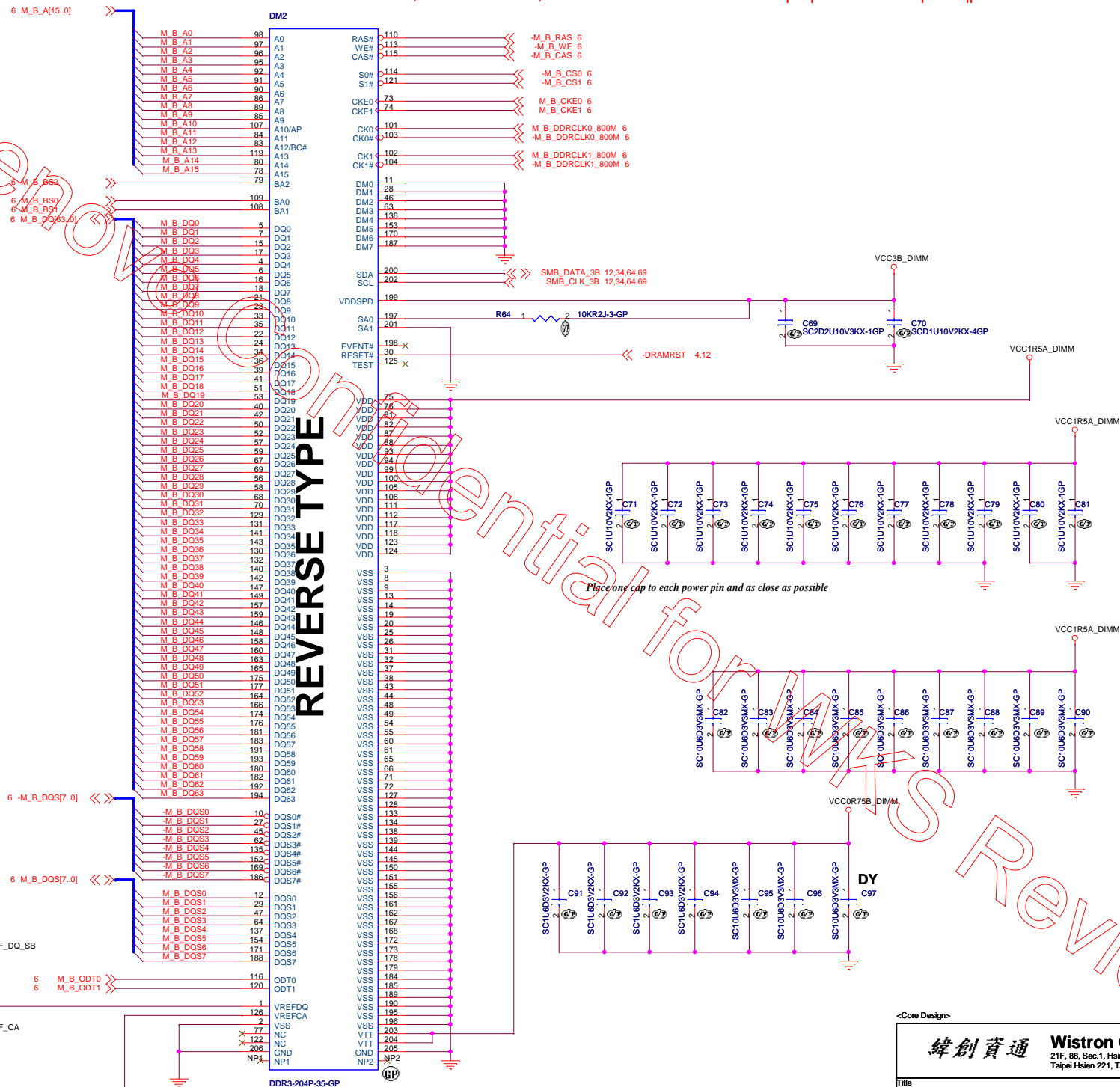
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|       |                        |          |                      |        |
|-------|------------------------|----------|----------------------|--------|
| Title |                        |          | <b>XDP Connector</b> |        |
| Size  | Document Number        | Dasher-2 |                      | Rev    |
| A3    |                        |          |                      | -1     |
| Date: | Friday, March 09, 2012 | Sheet    | 11                   | of 101 |



**<Core Design>**



*Place one cap to each power pin and as close as possible*

*Place caps close to pin126 as possible*

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| Size                             | Document Number |  | Rev |
| A3                               | Dasher-2        |  | -1  |
| Date: Tuesday, February 21, 2012 |                 | Sheet 14 of  | 101 |

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| Size  | Document Number            |  | Rev       |
| A3    | Dasher-2                   |  | -1        |
| Date: | Tuesday, February 21, 2012 | Sheet  | 15 of 101 |



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| Size  | Document Number            |  | Rev       |
| A3    | Dasher-2                   |  | -1        |
| Date: | Tuesday, February 21, 2012 | Sheet  | 16 of 101 |

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| Size  | Document Number            |  | Rev       |
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| Date: | Tuesday, February 21, 2012 | Sheet  | 17 of 101 |

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| Title                            |                 |  |     |
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| Size                             | Document Number |  | Rev |
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| Date: Tuesday, February 21, 2012 |                 | Sheet 18 of  | 101 |

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| Title                            |                 |  |     |
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| Size                             | Document Number |  | Rev |
| A3                               | Dasher-2        |  | -1  |
| Date: Tuesday, February 21, 2012 |                 | Sheet 19 of  | 101 |

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| Size  | Document Number            |  | Rev |
| A3    | Dasher-2                   |  | -1  |
| Date: | Tuesday, February 21, 2012 | Sheet 20 of 101  |     |

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| Size<br>A3                       | Document Number<br><b>Dasher-2</b> |   | Rev<br><b>-1</b> |
| Date: Tuesday, February 21, 2012 |                                    | Sheet 21 of   | 101              |

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| Date: | Tuesday, February 21, 2012 | Sheet 22 of 101  |     |

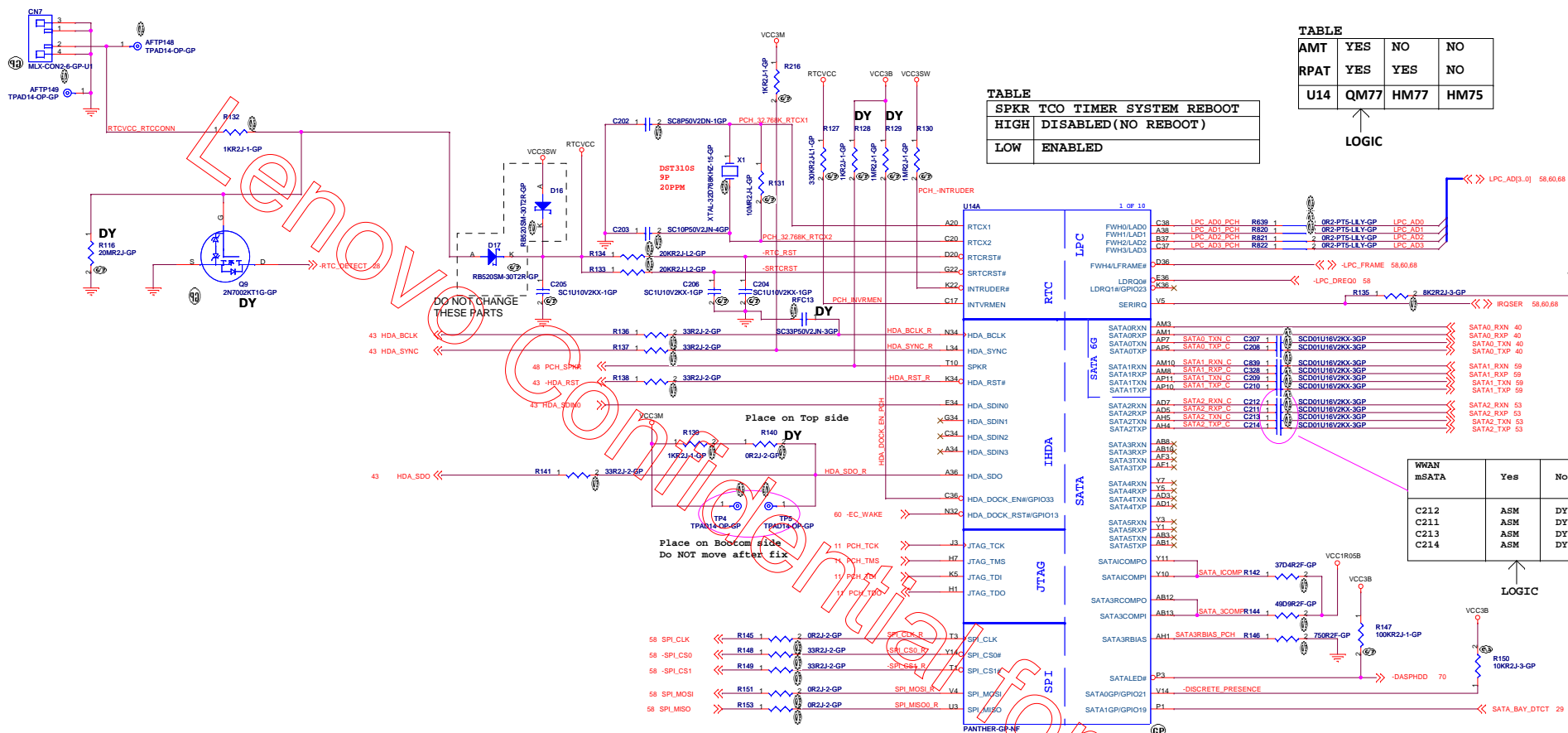


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| <div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,<br/>Taipei Hsien 221, Taiwan, R.O.C.</div> |                                    |                  |
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| Size<br>A4   | Document Number<br><b>Dasher-2</b> | Rev<br><b>-1</b> |
| Date: Tuesday, February 21, 2012   |                                    | Sheet 23 of 101  |



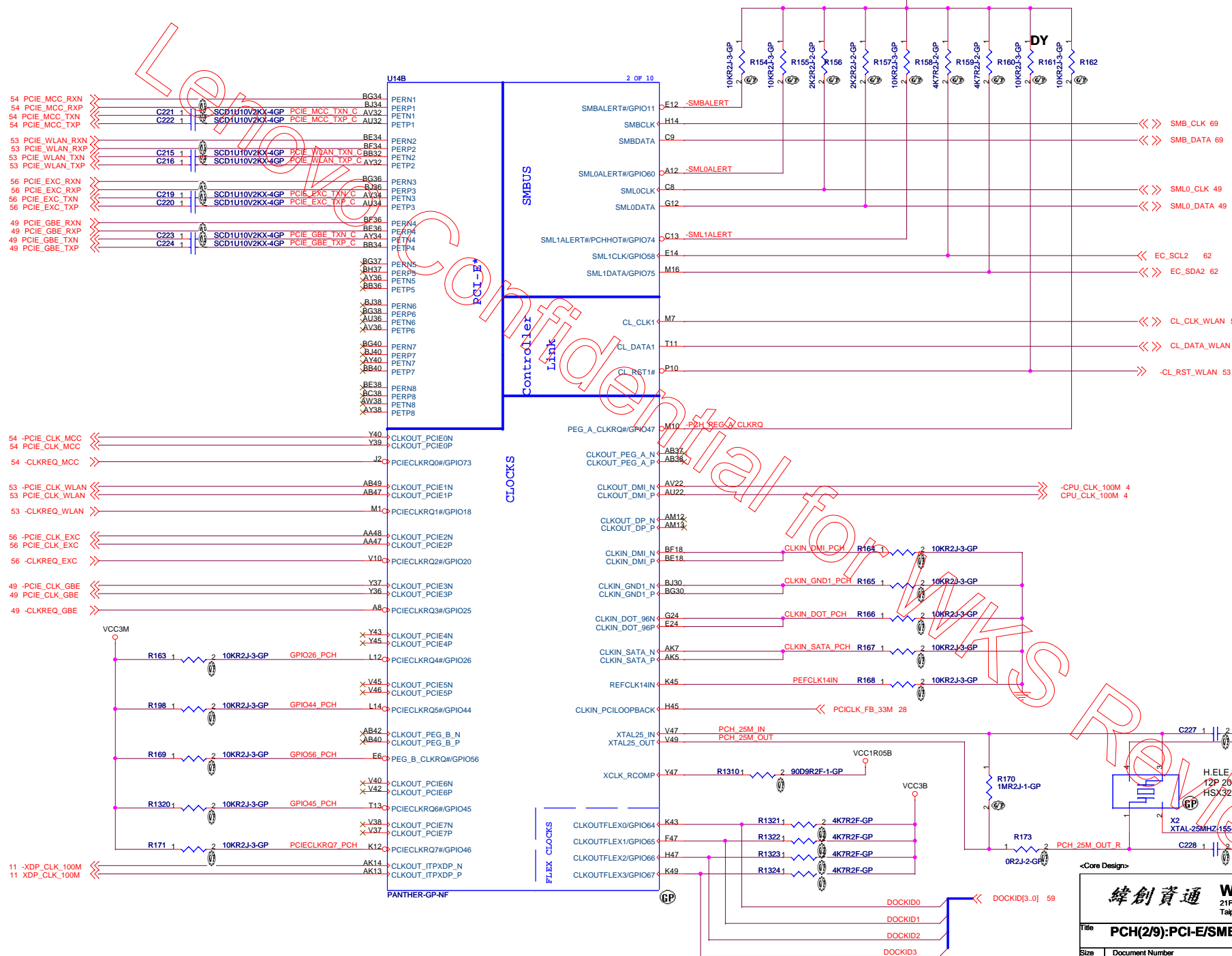
| TABLE |      |      |      |
|-------|------|------|------|
| AMT   | YES  | NO   | NO   |
| RPAT  | YES  | YES  | NO   |
| U14   | QM77 | HM77 | HM75 |

LOGIC

|                              |                     |
|------------------------------|---------------------|
| SPKR TCO TIMER SYSTEM REBOOT |                     |
| HIGH                         | DISABLED(NO REBOOT) |
| LOW                          | ENABLED             |

| WWAN<br>mSATA | Yes | No |
|---------------|-----|----|
| C212          | ASM | DY |
| C211          | ASM | DY |
| C213          | ASM | DY |
| C214          | ASM | DY |

LOGIC



### <Core Design>

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|       |                            |
|-------|----------------------------|
| Title | <b>PCH(3/9):DMI/FDI/PM</b> |
|-------|----------------------------|

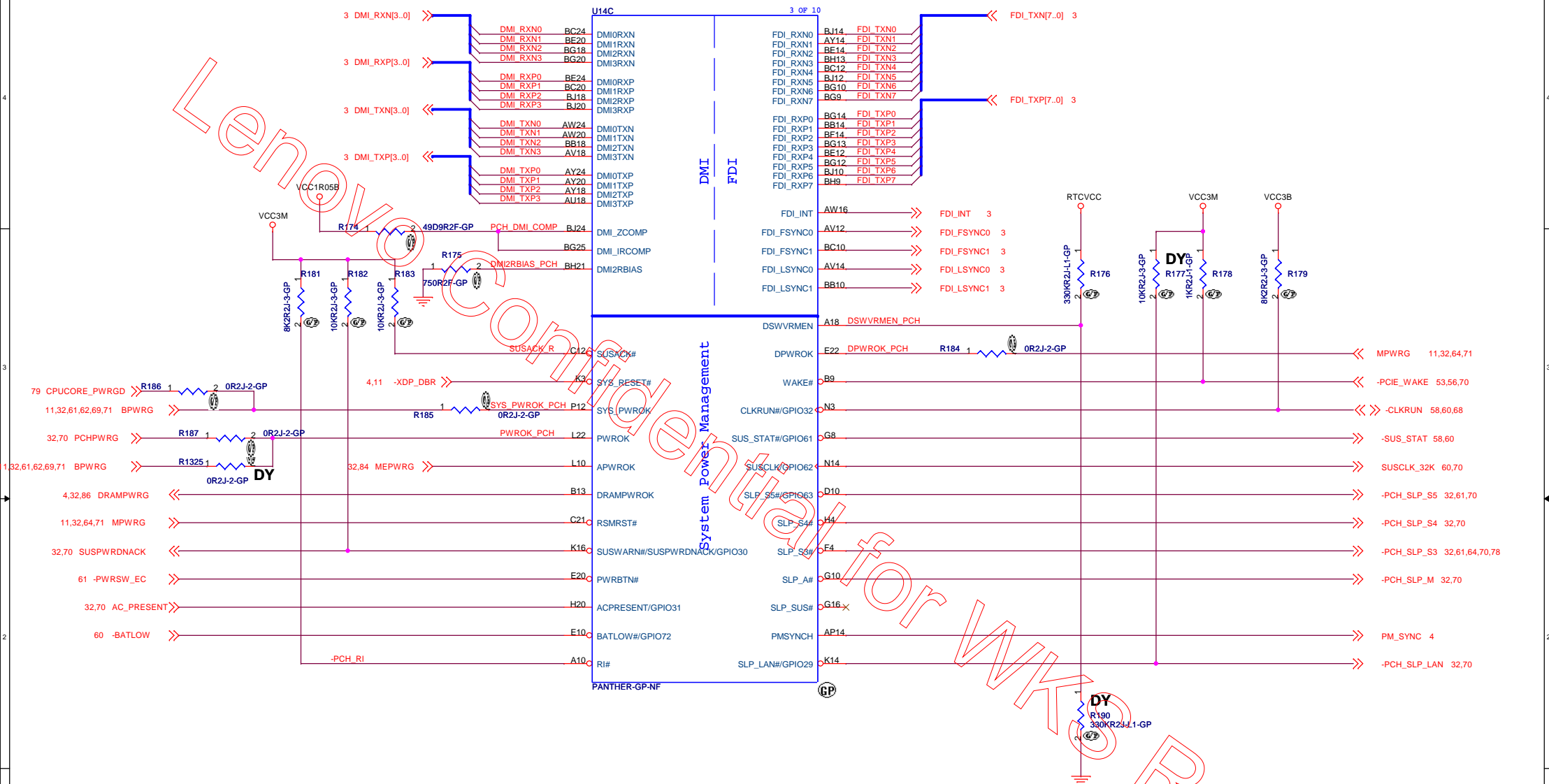
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|------|-----------------|

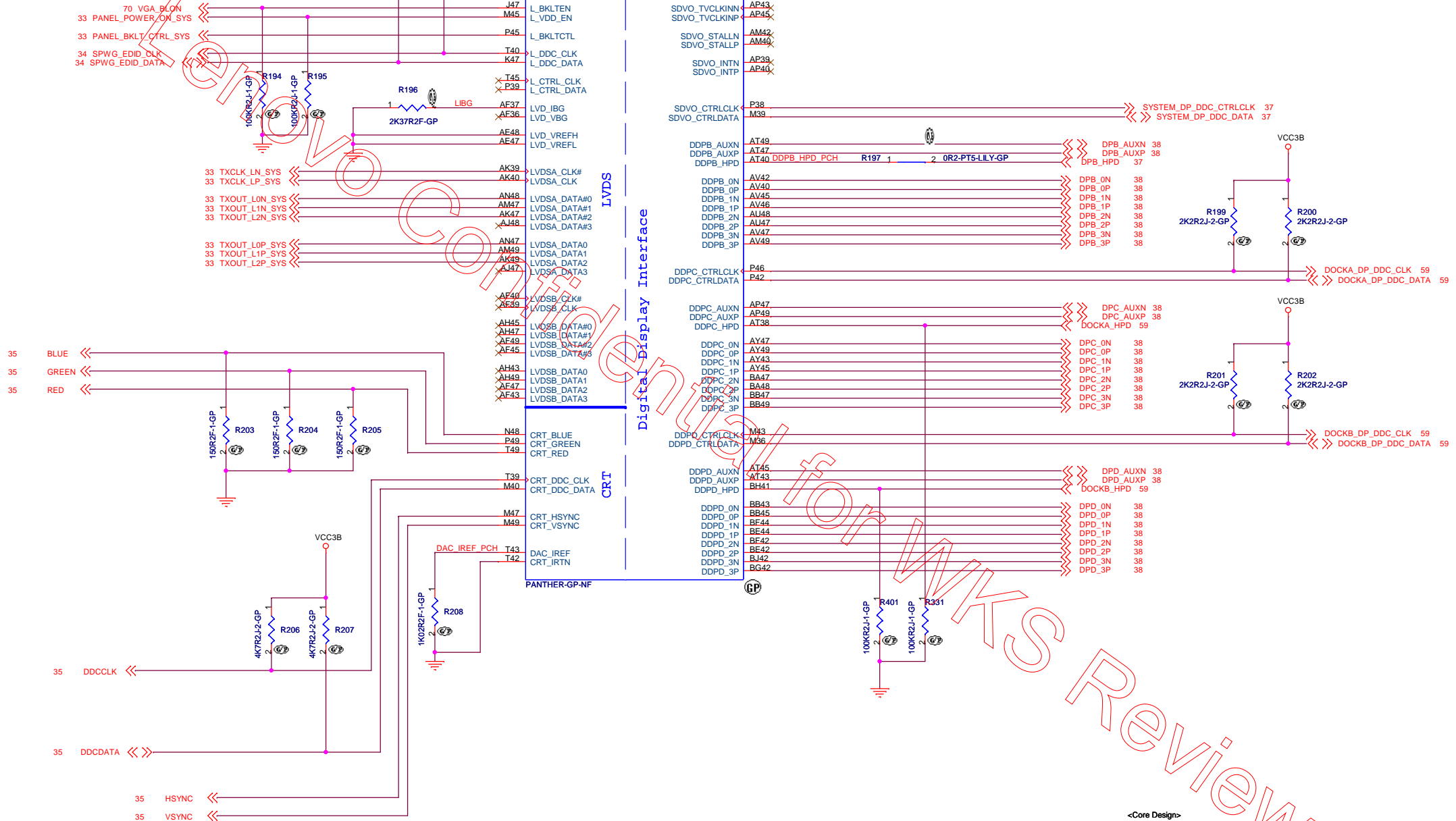
## Dasher-2

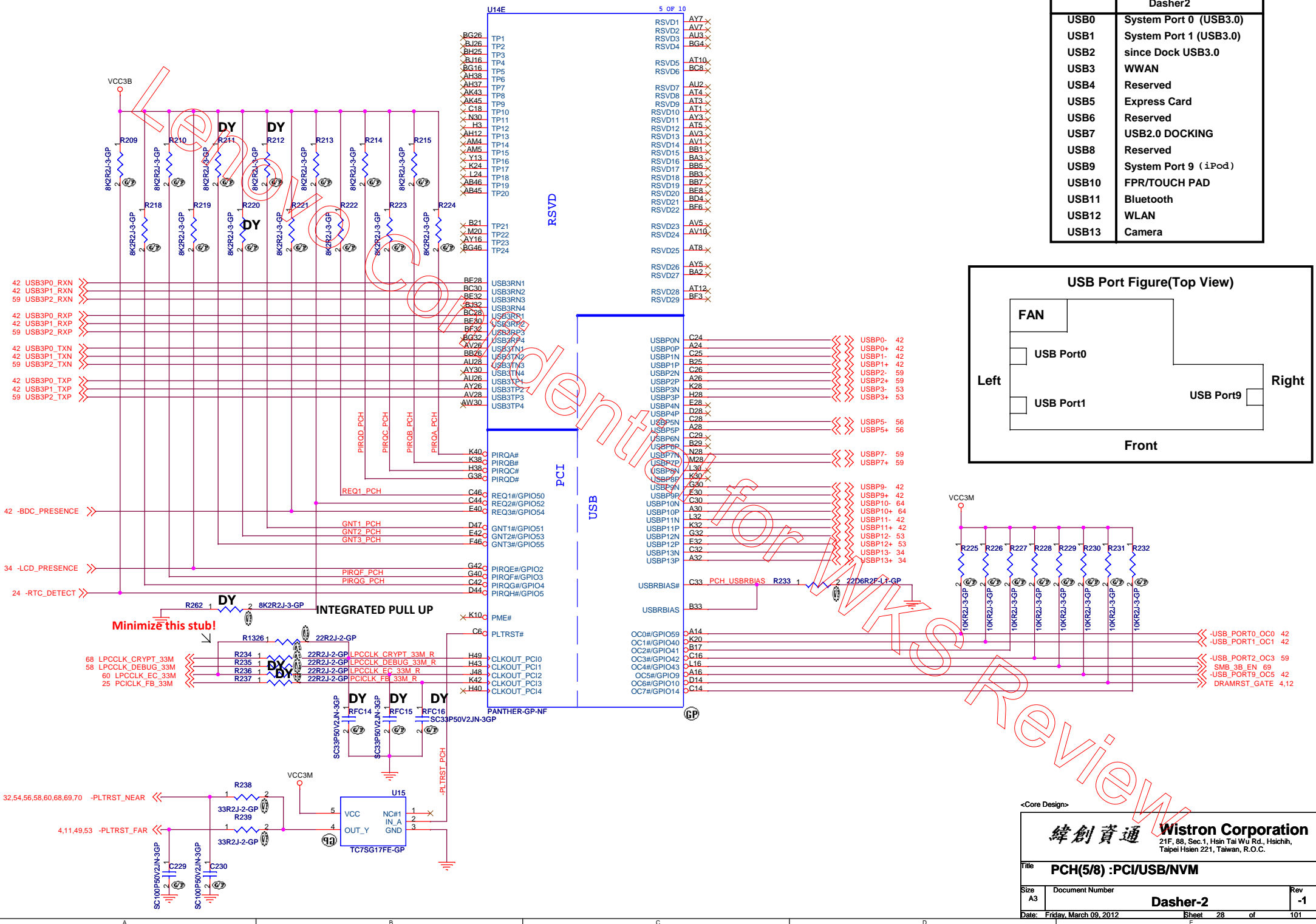
|     |
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| Rev |
| -1  |

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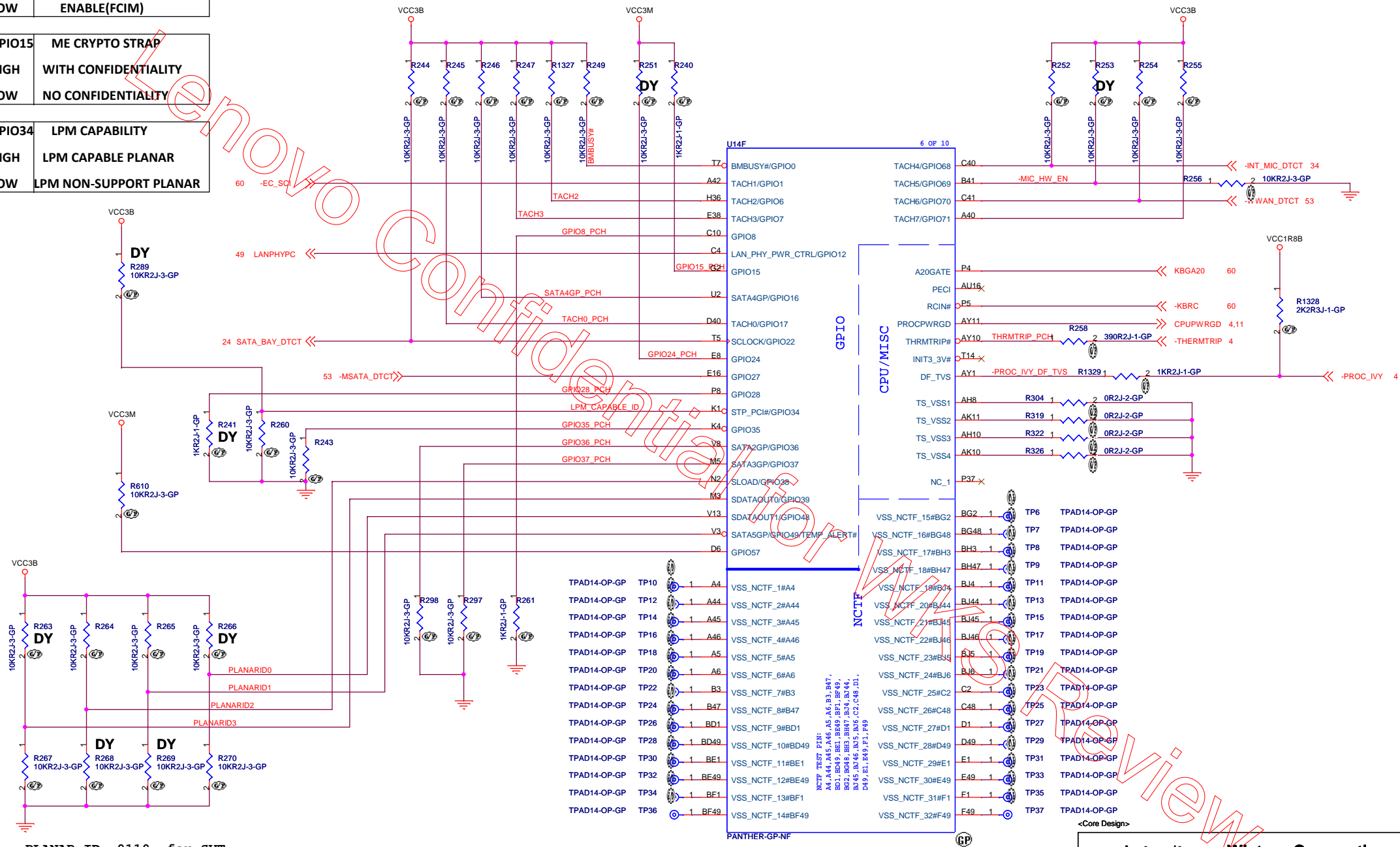




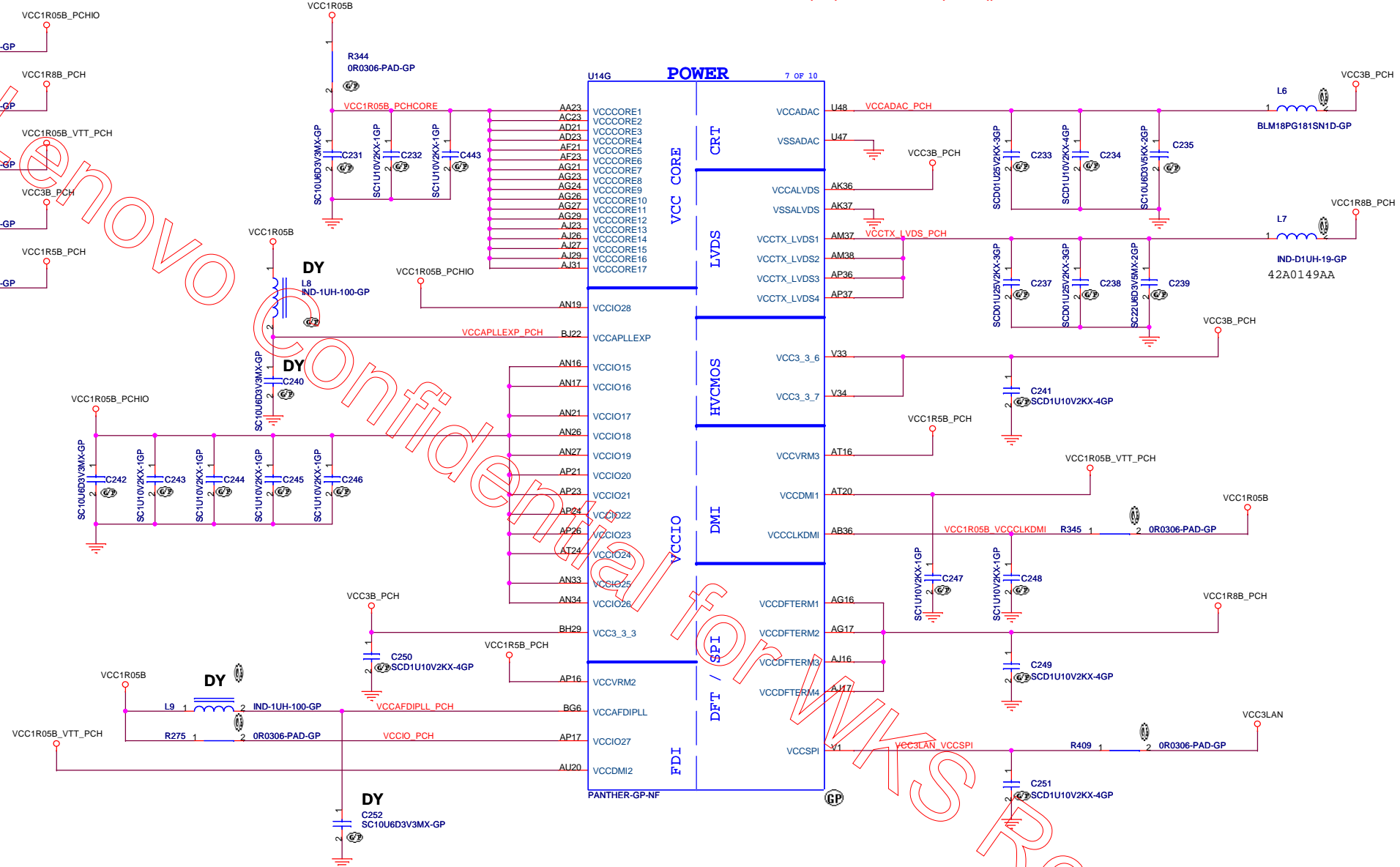
| GPIO8 | INTEGRATED CLOCKING |
|-------|---------------------|
| HIGH  | DISABLE(BTM)        |
| LOW   | ENABLE(FCIM)        |

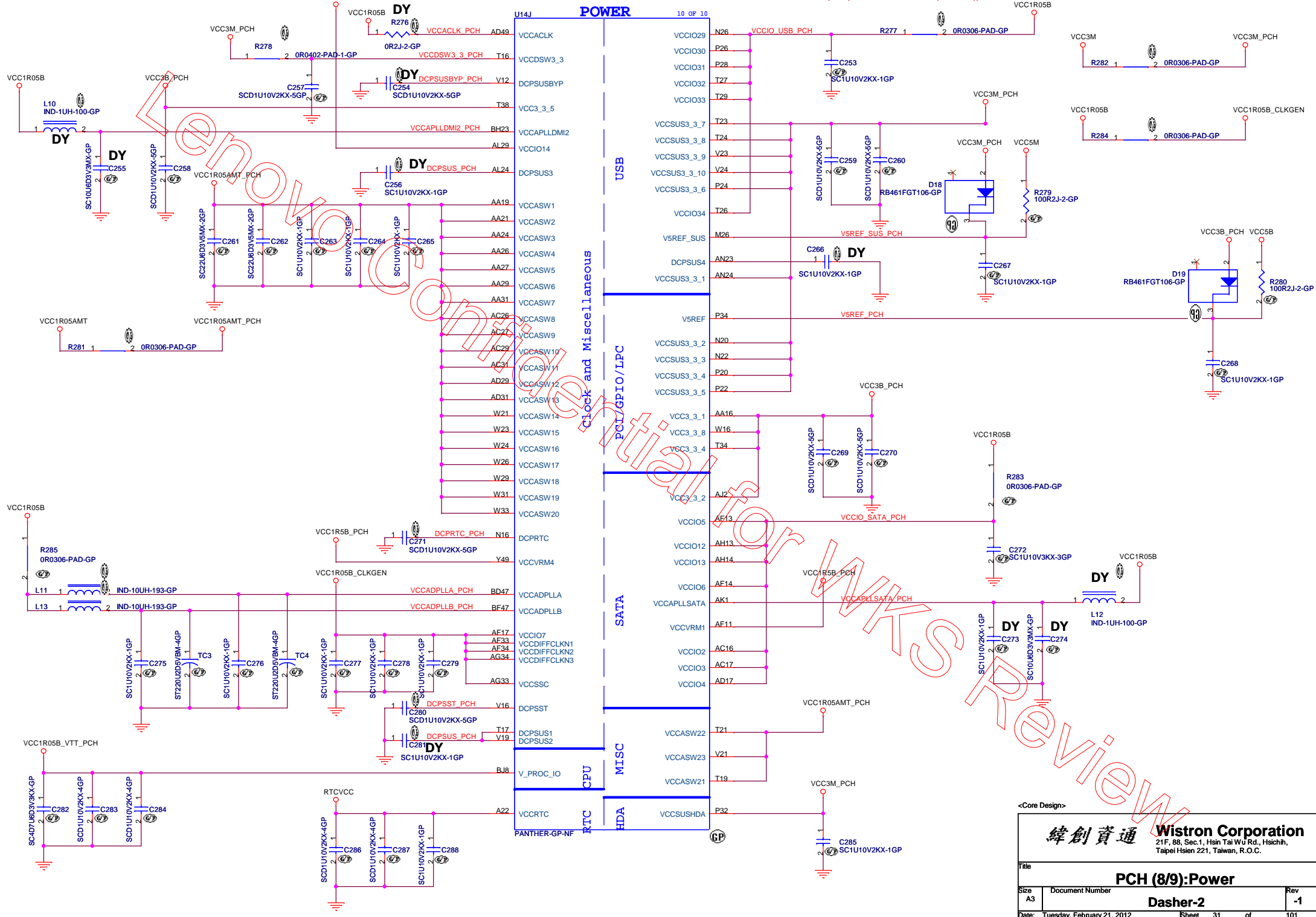
| GPIO15 | ME CRYPTO STRAP      |
|--------|----------------------|
| HIGH   | WITH CONFIDENTIALITY |
| LOW    | NO CONFIDENTIALITY   |

| GPIO34 | LPM CAPABILITY         |
|--------|------------------------|
| HIGH   | LPM CAPABLE PLANAR     |
| LOW    | LPM NON-SUPPORT PLANAR |

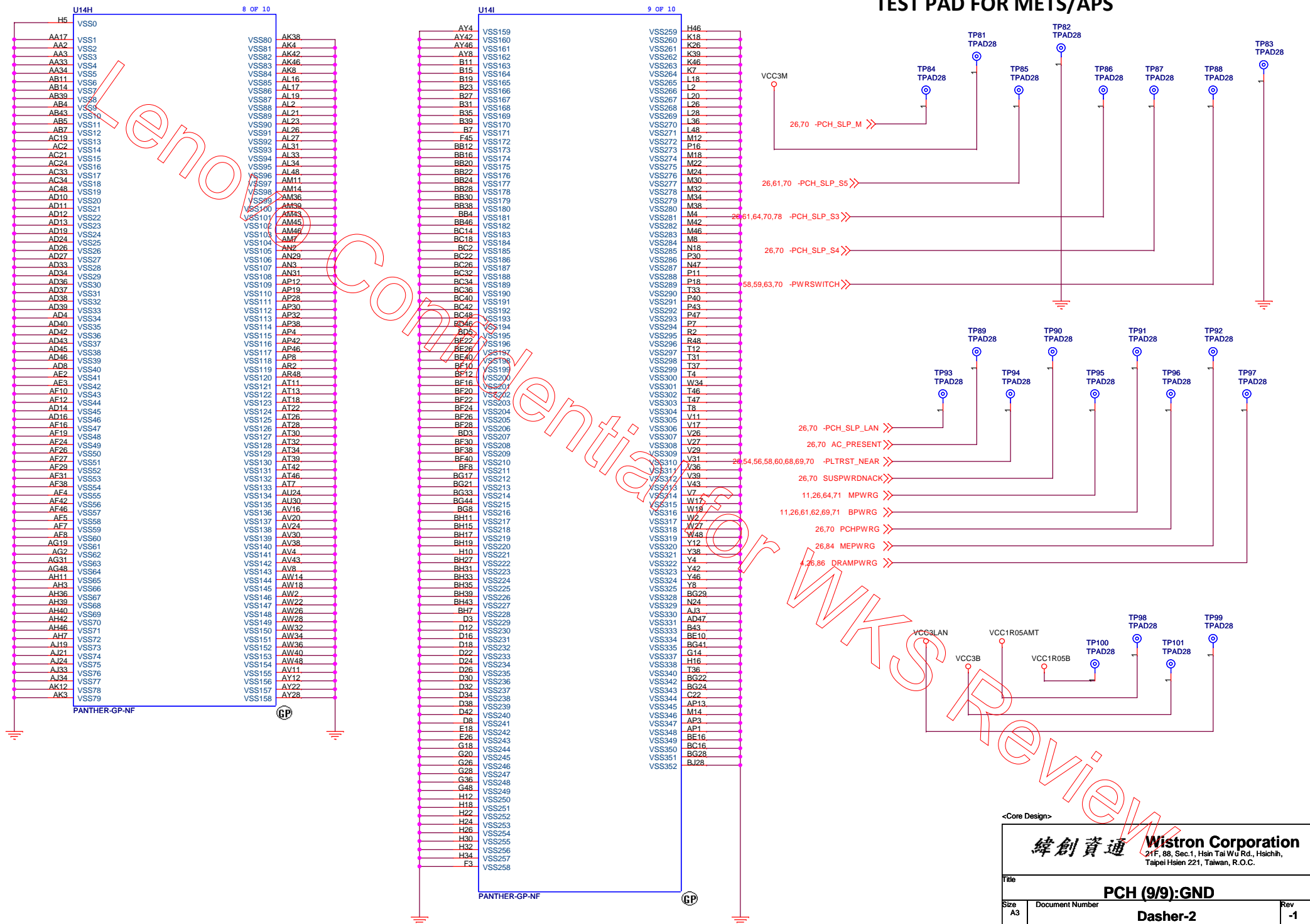




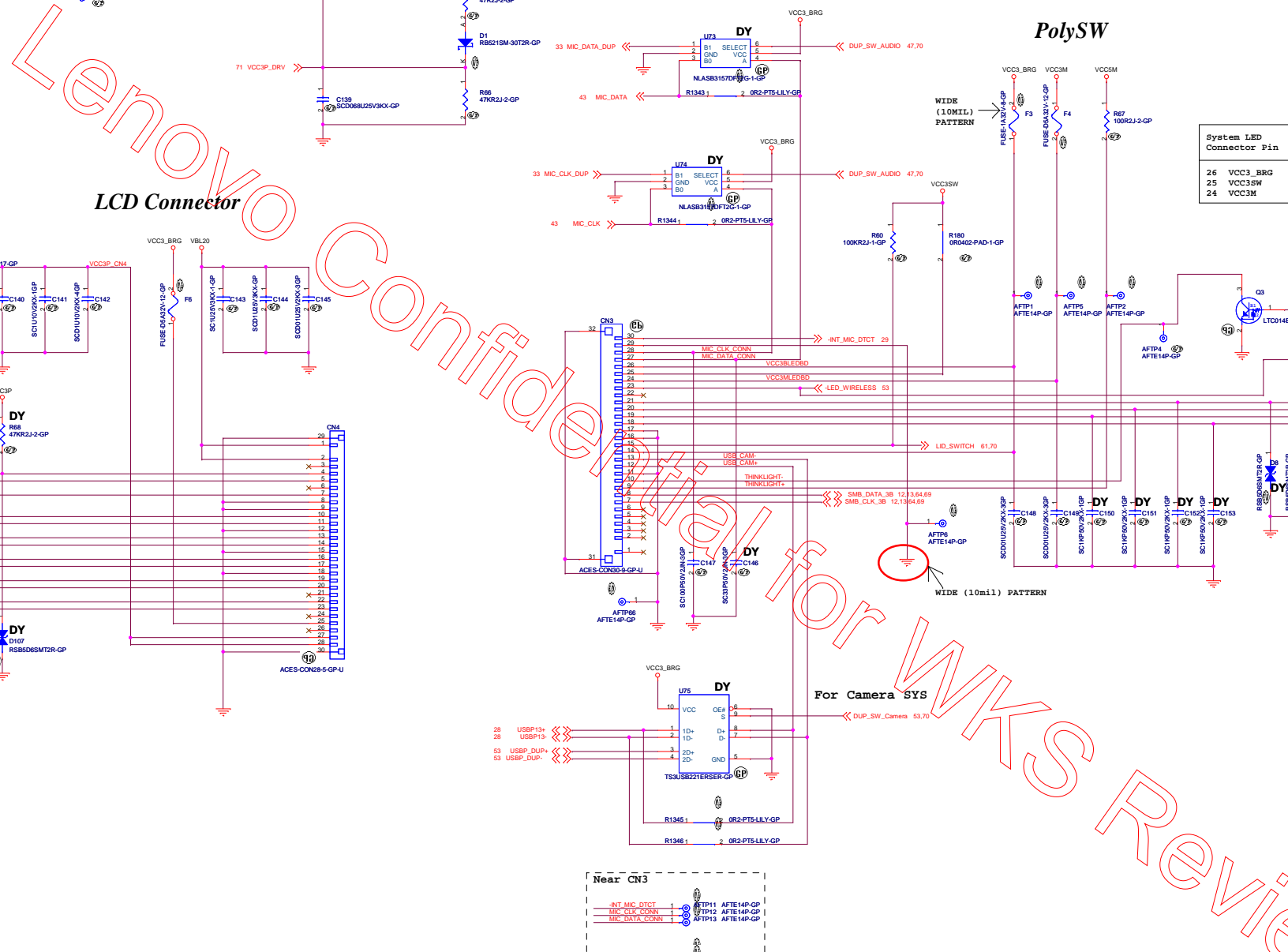


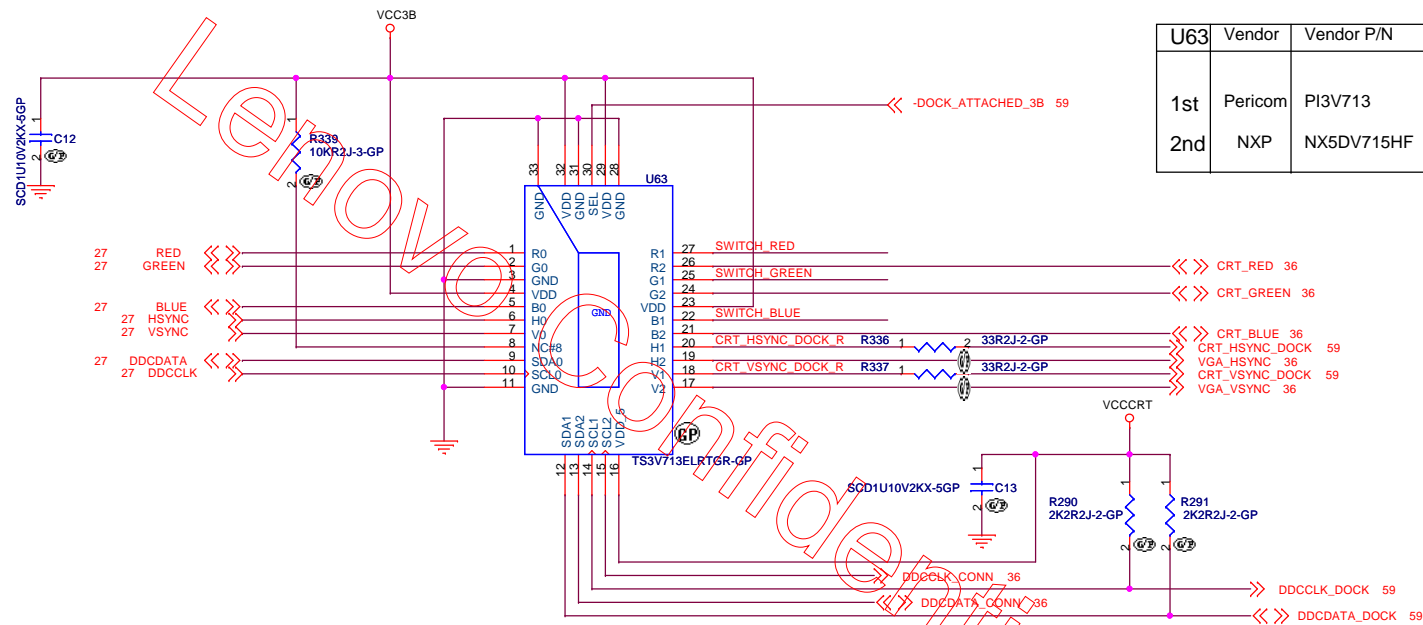


## TEST PAD FOR METS/APS

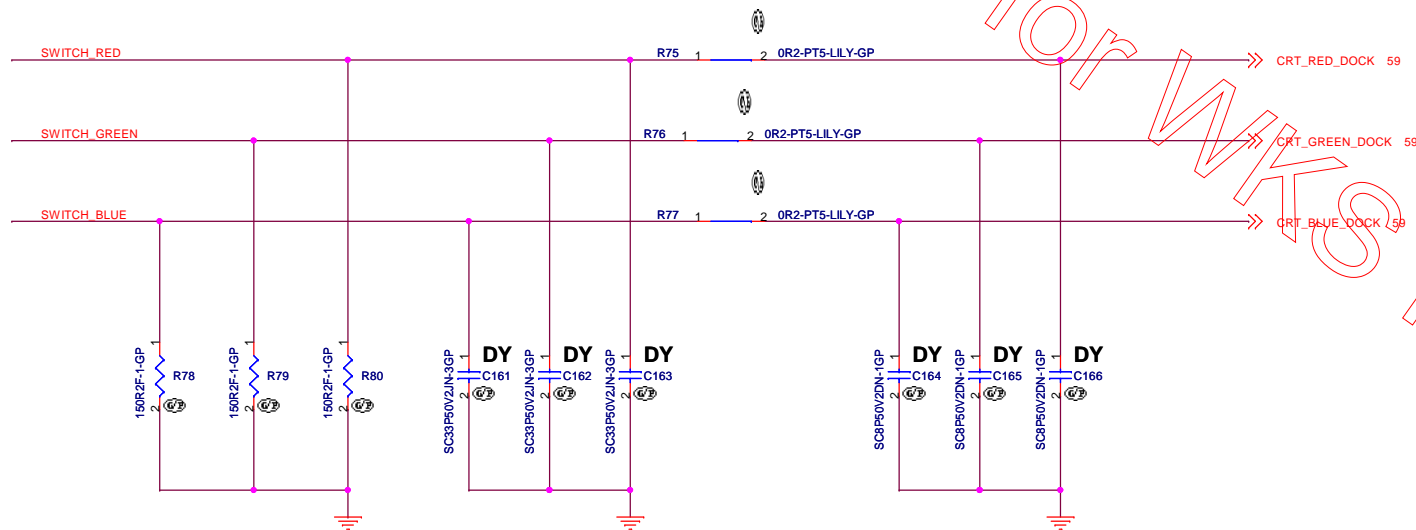








| U63 | Vendor  | Vendor P/N | Wistron P/N  |
|-----|---------|------------|--------------|
| 1st | Pericom | PI3V713    | 73.3V713.A0I |
| 2nd | NXP     | NX5DV715HF | 73.05715.003 |



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Title

CRT SELECTOR

Size  
A3

Document Number

Dasher-2

Rev  
-1

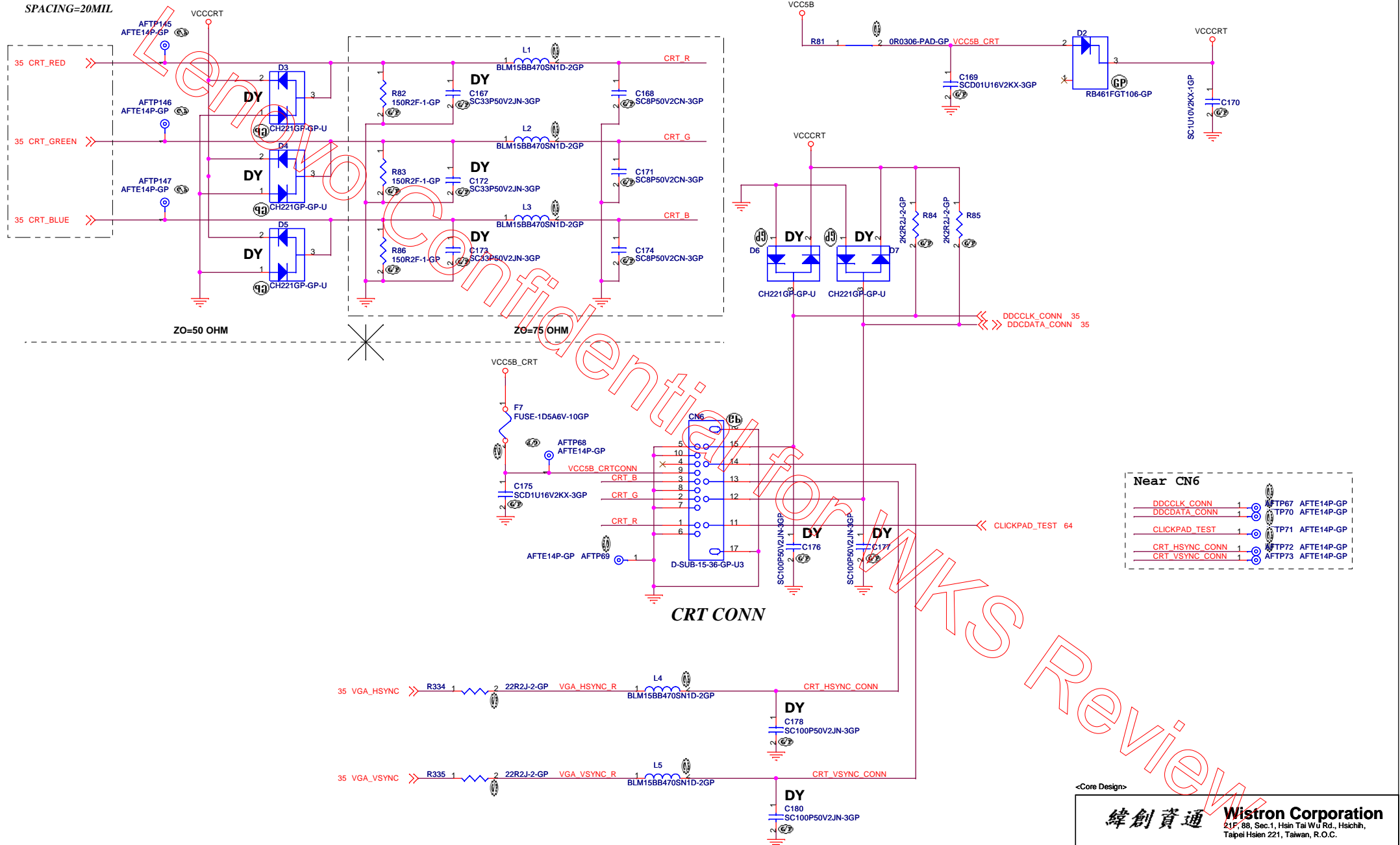
Date: Friday, March 09, 2012

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**GND GUARDING**

EACH SIGNAL WIDTH DEPENDS ON ZO(TRACE IMPEDANCE)

SPACING=20MIL

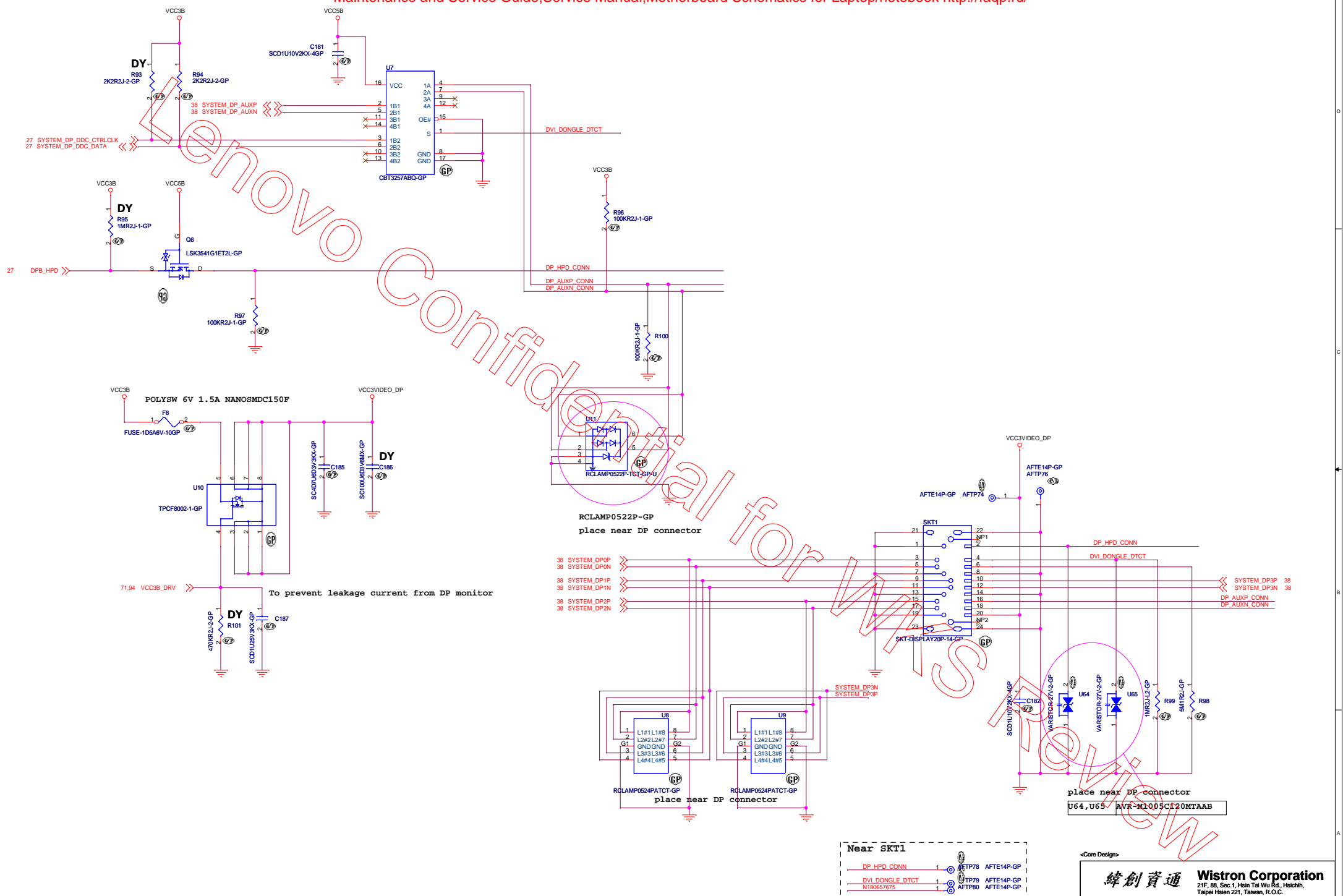


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| Title                        |                                    |       |           |
|------------------------------|------------------------------------|-------|-----------|
| Ext CRT Interface            |                                    |       |           |
| Size<br>A3                   | Document Number<br><b>Dasher-2</b> |       | Rev<br>-1 |
| Date: Friday, March 09, 2012 | Sheet                              | 36 of | 101       |





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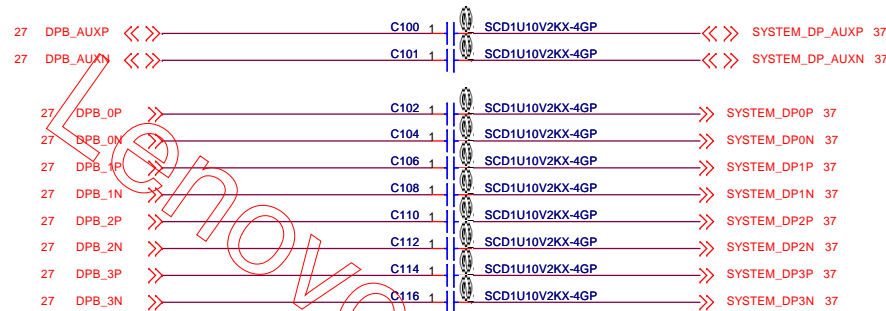
緯創資通

Wistron Corporation  
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin,  
Taipei Hsien 221, Taiwan, R.O.C.Title  
**Display Port Connector**Size  
CustomDocument Number  
**Dasher-2**Rev  
-1

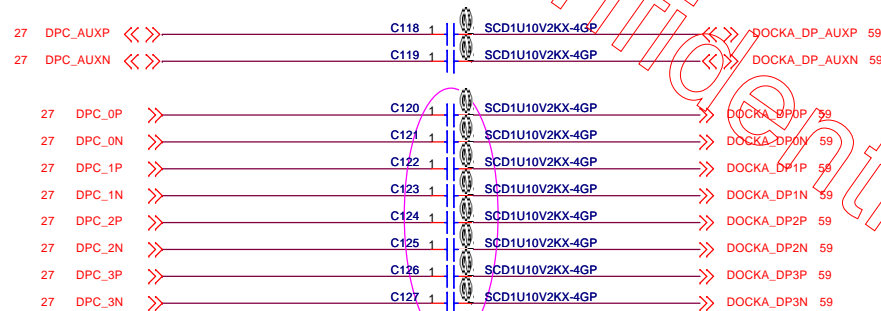
Date: Friday, March 09, 2012

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## System DP Connector

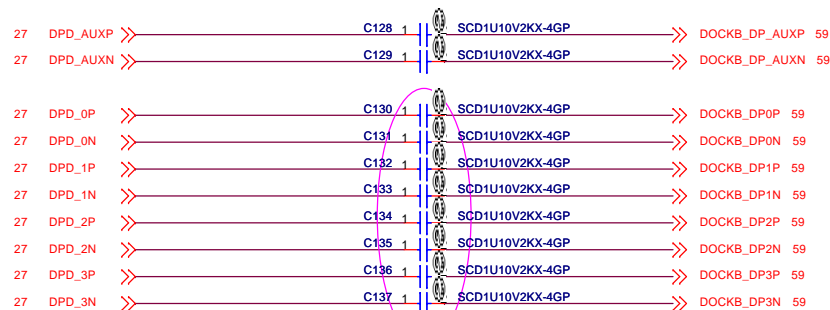


## Docking DP Connector A



Place Near Docking Connector

## Docking DP Connector B



Place Near Docking Connector

&lt;Core Design&gt;

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Title

**Display Port AC Coupling**Size  
A3

Document Number

**Dasher-2**Rev  
-1

Date: Friday, March 09, 2012

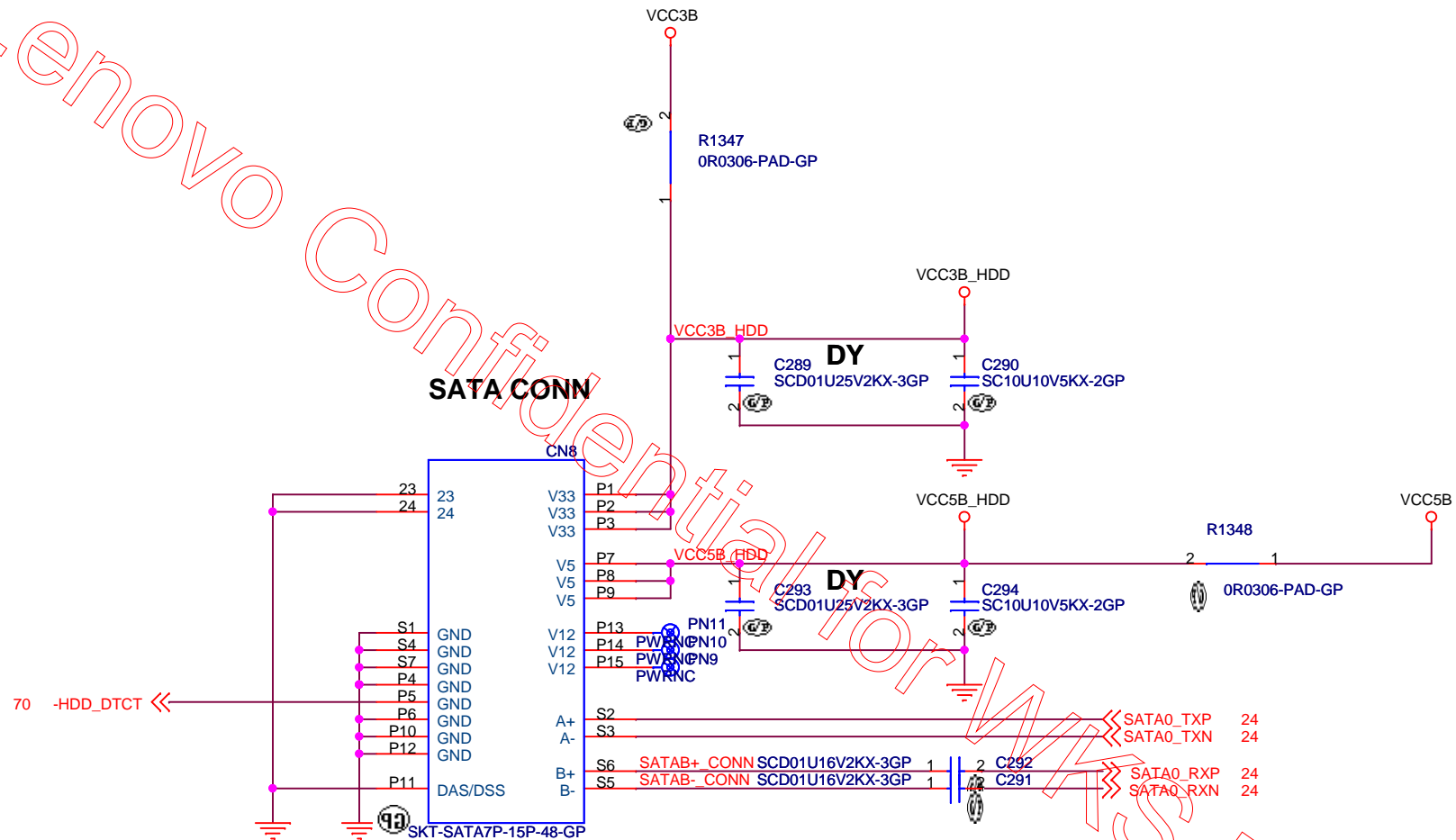
Sheet 38 of 101

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| Size                             | Document Number |  | Rev |
| A3                               | Dasher-2        |  | -1  |
| Date: Tuesday, February 21, 2012 |                 | Sheet 39 of  | 101 |



緯創資通

### **SATA Connector**

## Dasher-2

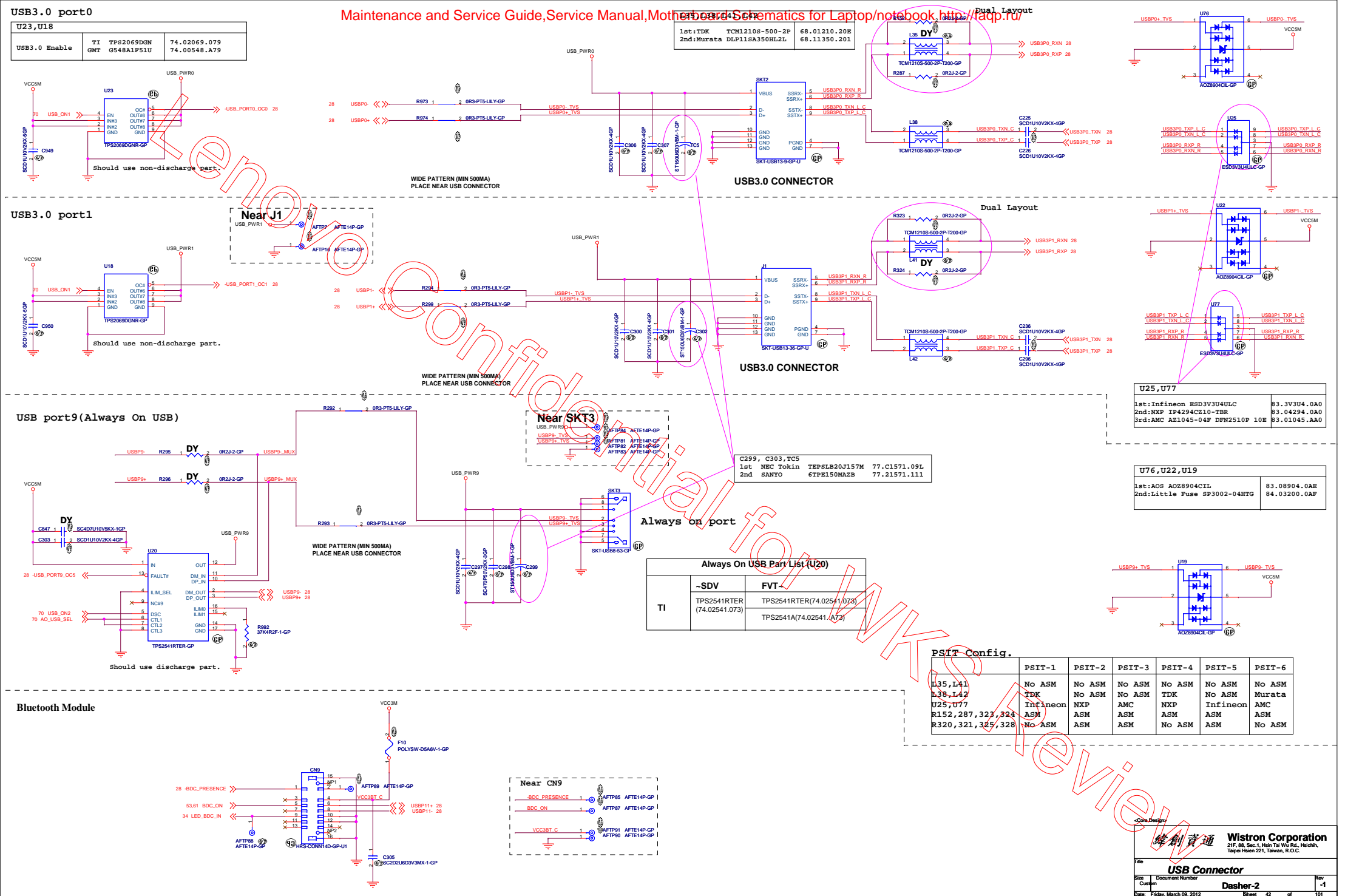
Sheet 40 of 101

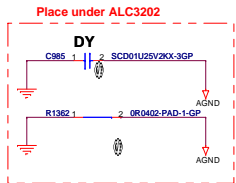
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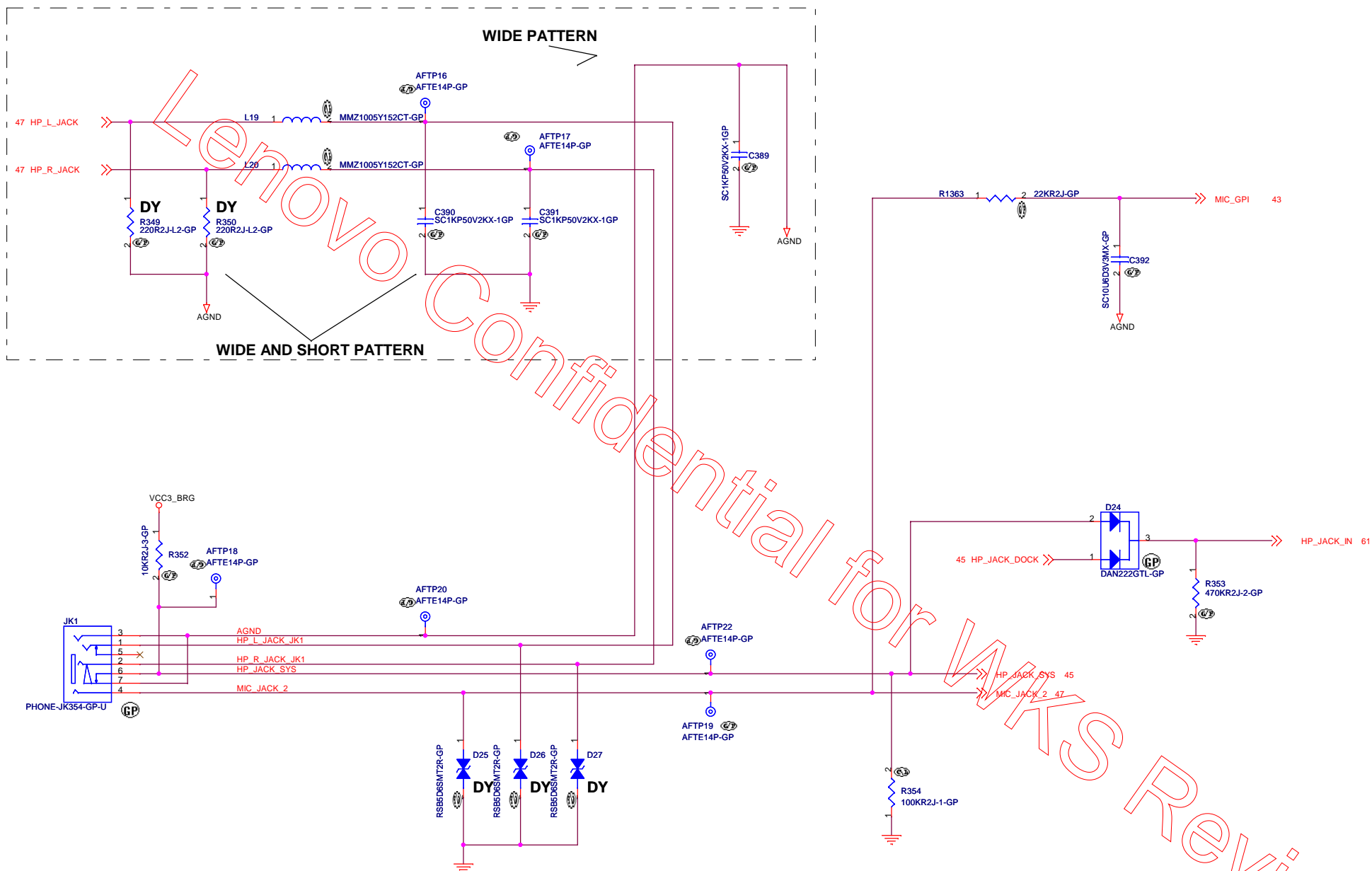
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| Size  | Document Number            |  | Rev |
| A3    | Dasher-2                   |  | -1  |
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## NEAR HEADPHONE CONN



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Title

**Audio Connector**Size  
A3

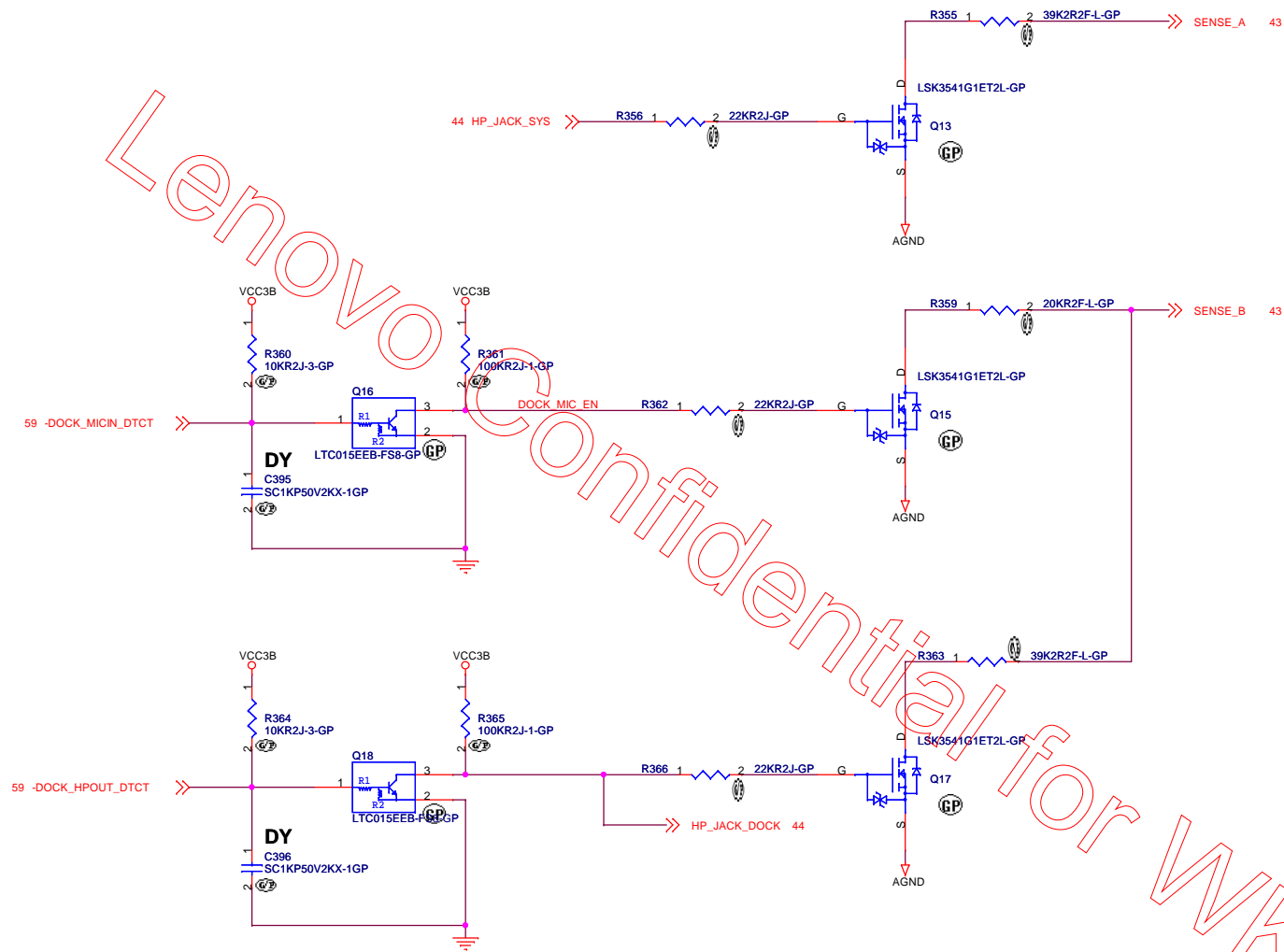
Document Number

**Dasher-2**Rev  
-1

Date: Friday, March 09, 2012

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&lt;Core Design&gt;

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

Title

**Audio Jack Sense**

Size

Document Number

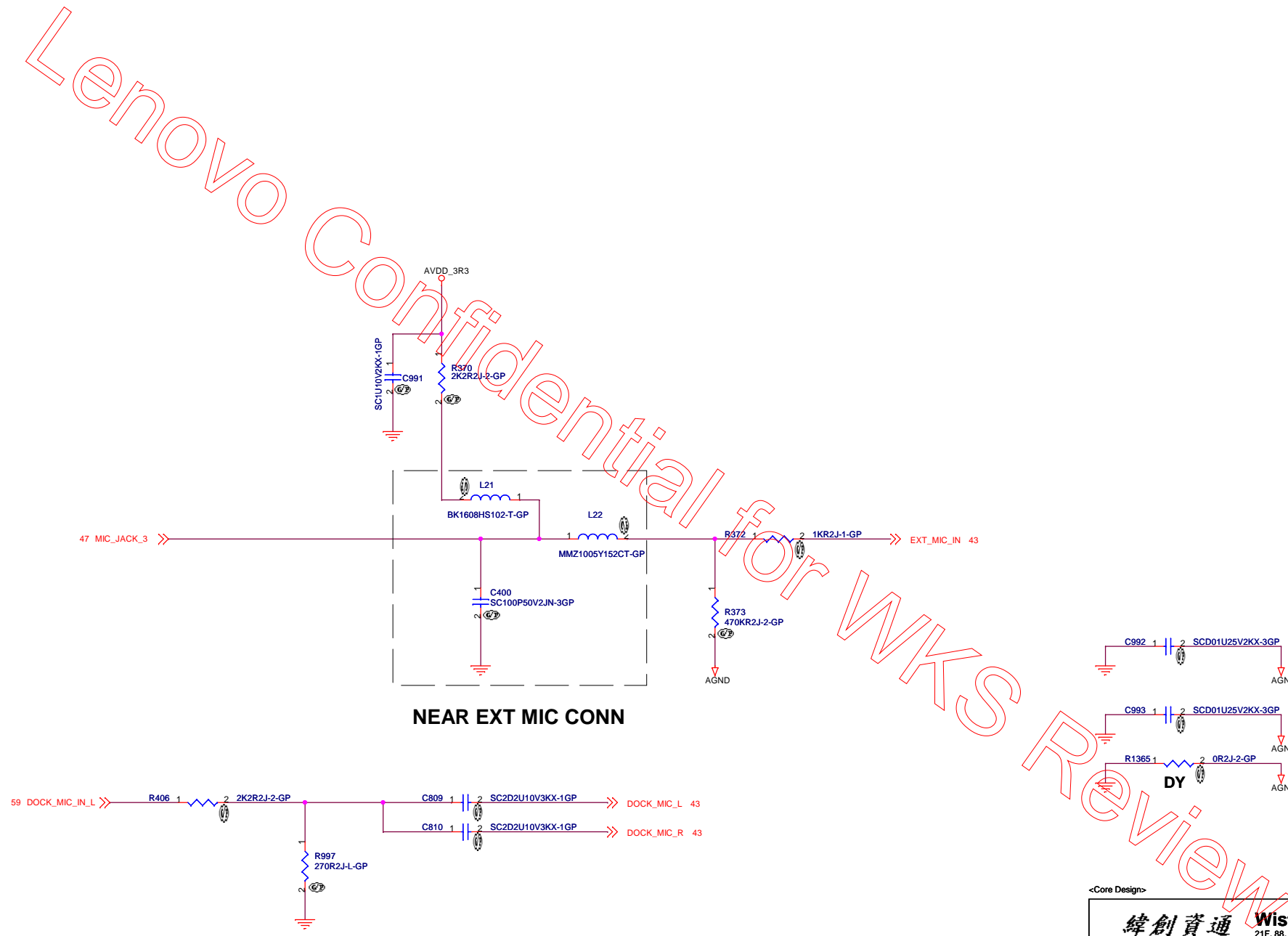
**Dasher-2**

Rev

**-1**

Date: Friday, March 09, 2012

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&lt;Core Design&gt;

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Title

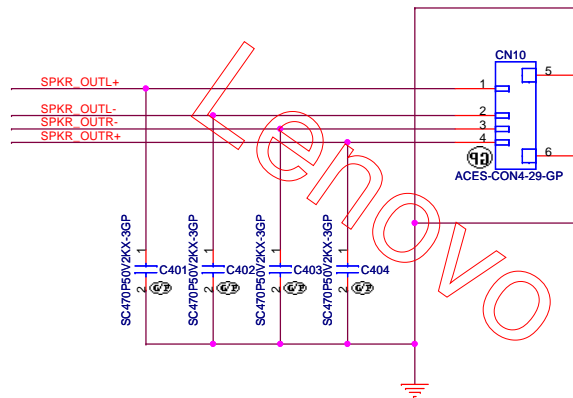
**Audio Ext MIC I/F**Size  
A3

Document Number

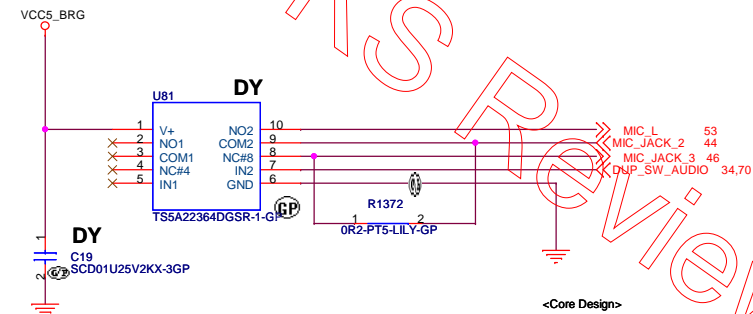
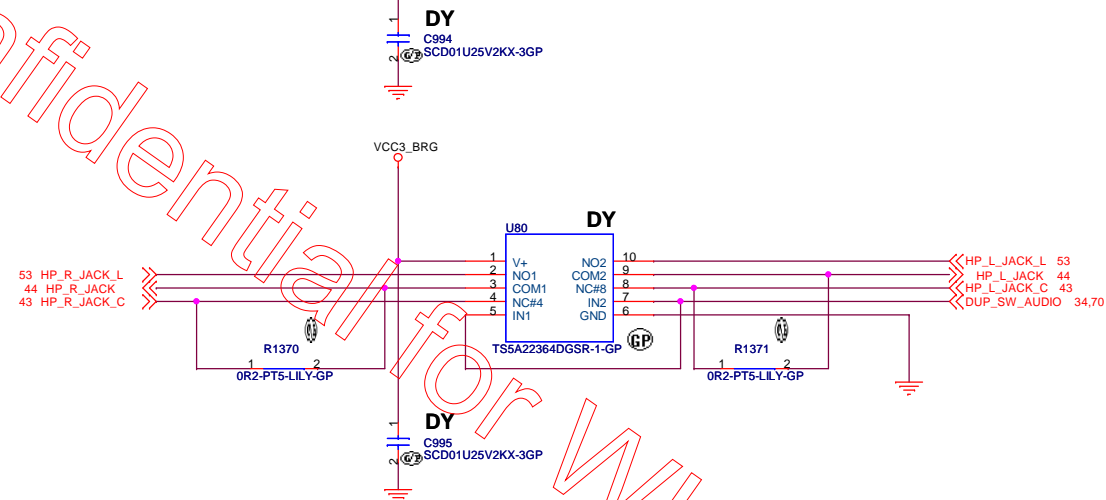
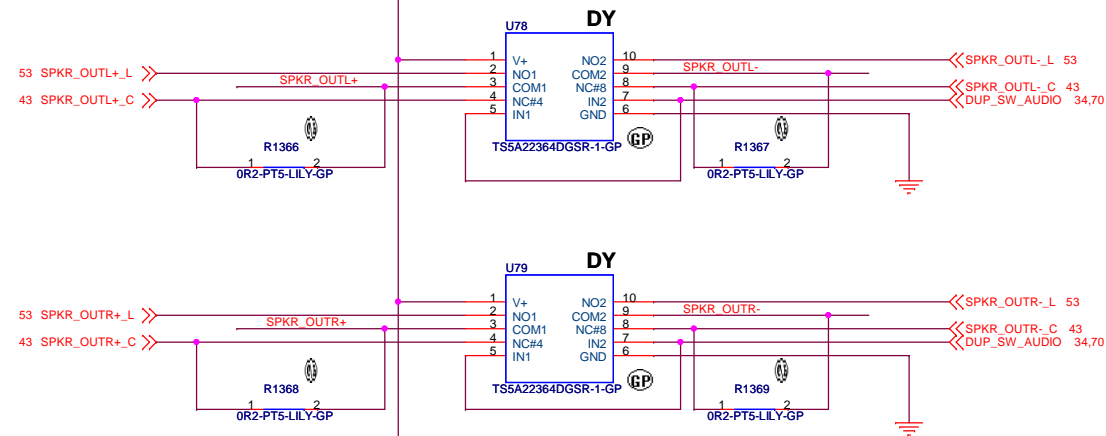
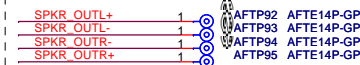
**Dasher-2**Rev  
-1

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Near CN10

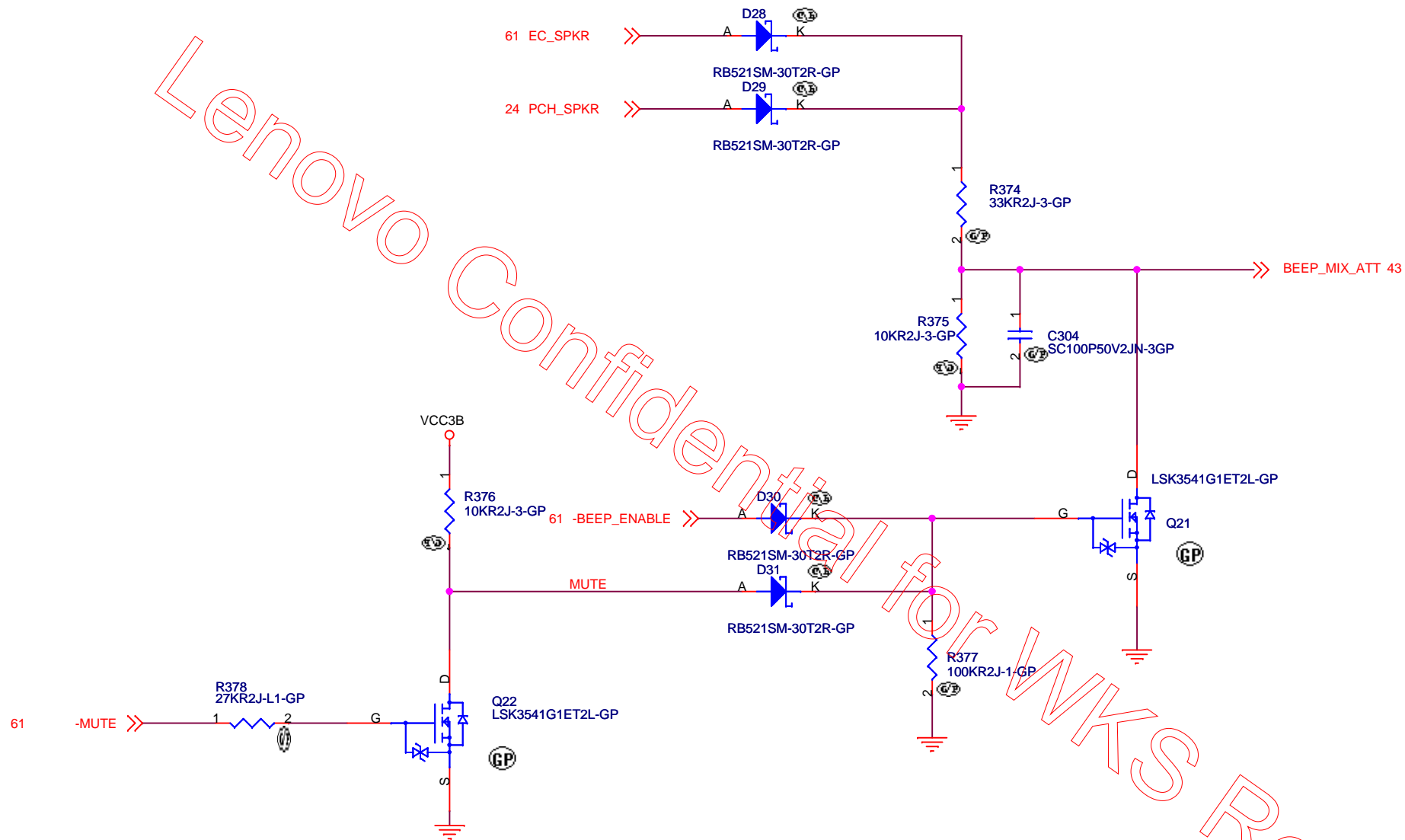


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| Title |                        |          | AUDIO SPEAKER |
|-------|------------------------|----------|---------------|
| Size  | Document Number        | Dasher-2 |               |
| A3    |                        | Rev -1   |               |
| Date: | Friday, March 09, 2012 | Sheet    | 47 of 101     |



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

Title

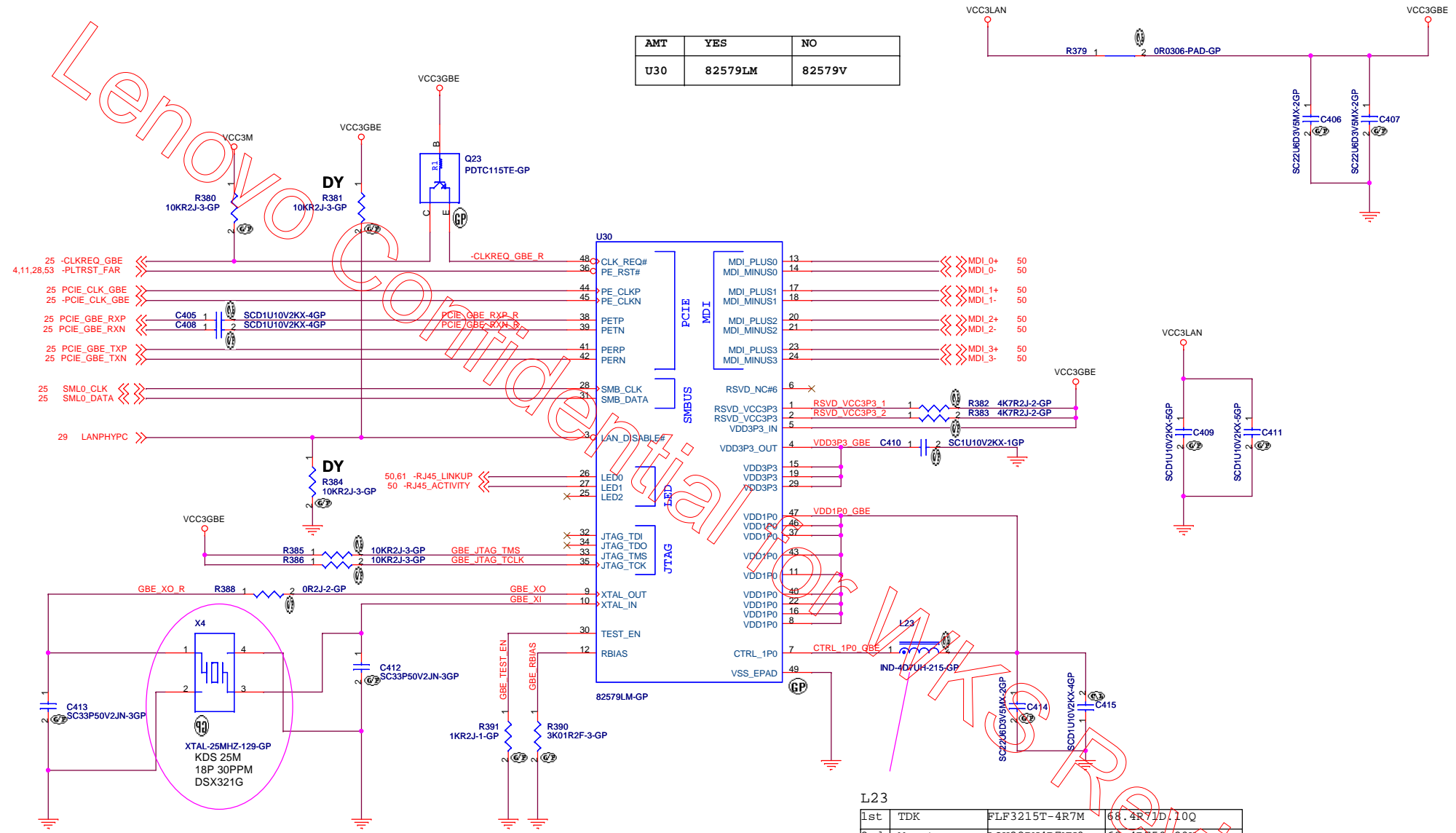
**Audio BEEP**Size  
A4

Document Number

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X4

|     |       |                          |              |
|-----|-------|--------------------------|--------------|
| 1st | KDS   | DSX321G 25M 18P 30PPM    | 82.30020.B11 |
| 2nd | H.ELE | HSX321S 25M 18P 30PPM    | 82.30020.B21 |
| 3rd | TXC   | 7V25020001 25M 18P 30PPM | 41U6141AA    |

&lt;Core Design&gt;

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Title

GBE Lewisville

Size

Document Number

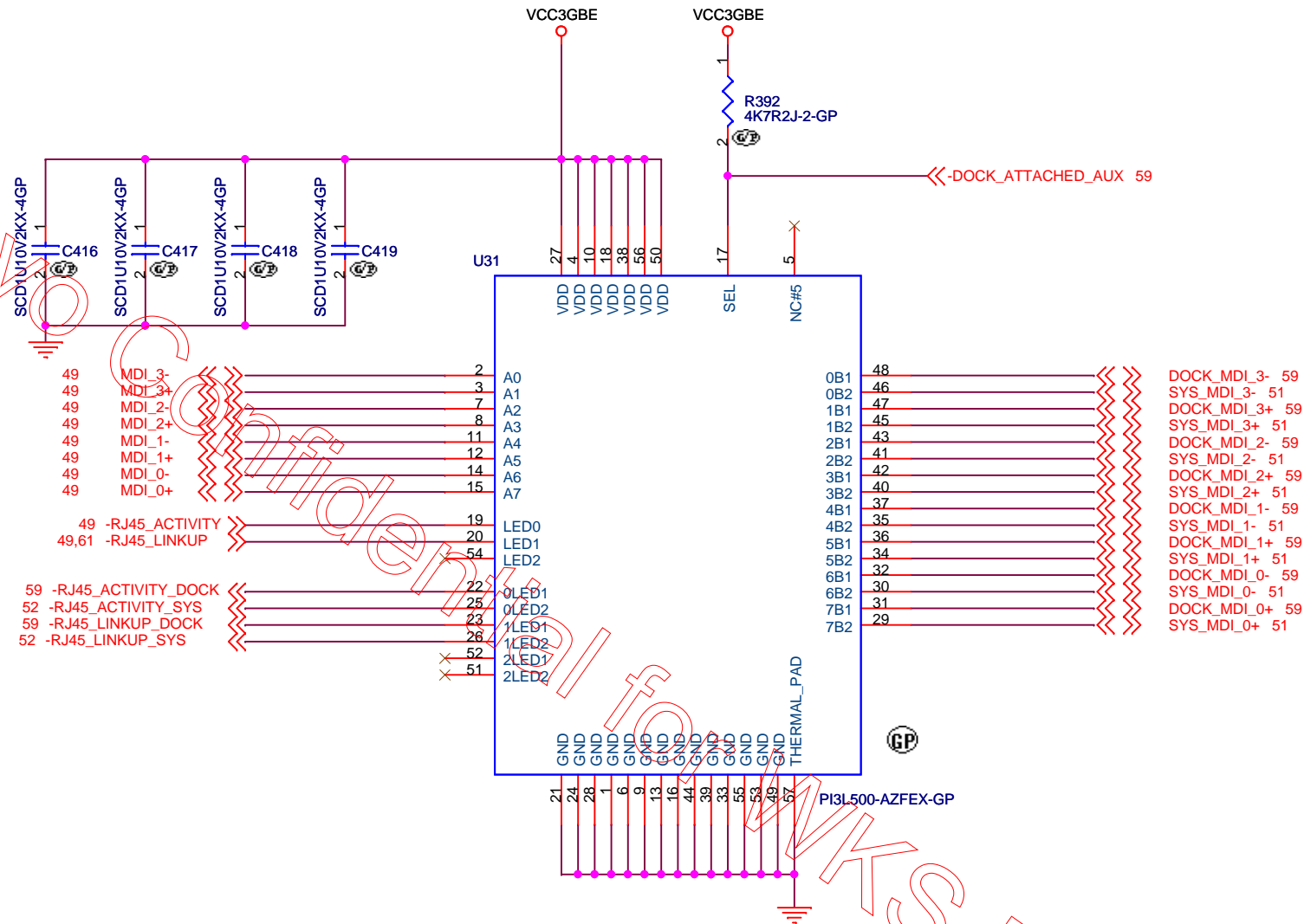
Dasher-2

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|     |         | Vendor P/N    | Wistron P/N  |
|-----|---------|---------------|--------------|
| 1st | Pericom | PI3L500AZFEX  | 73.3L500.003 |
| 2nd | TI      | TS3L500AERHUR | 73.3L500.A0V |
| 3rd | ST      | STMUX1800LQTR | 73.01800.003 |

&lt;Core Design&gt;

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

Title

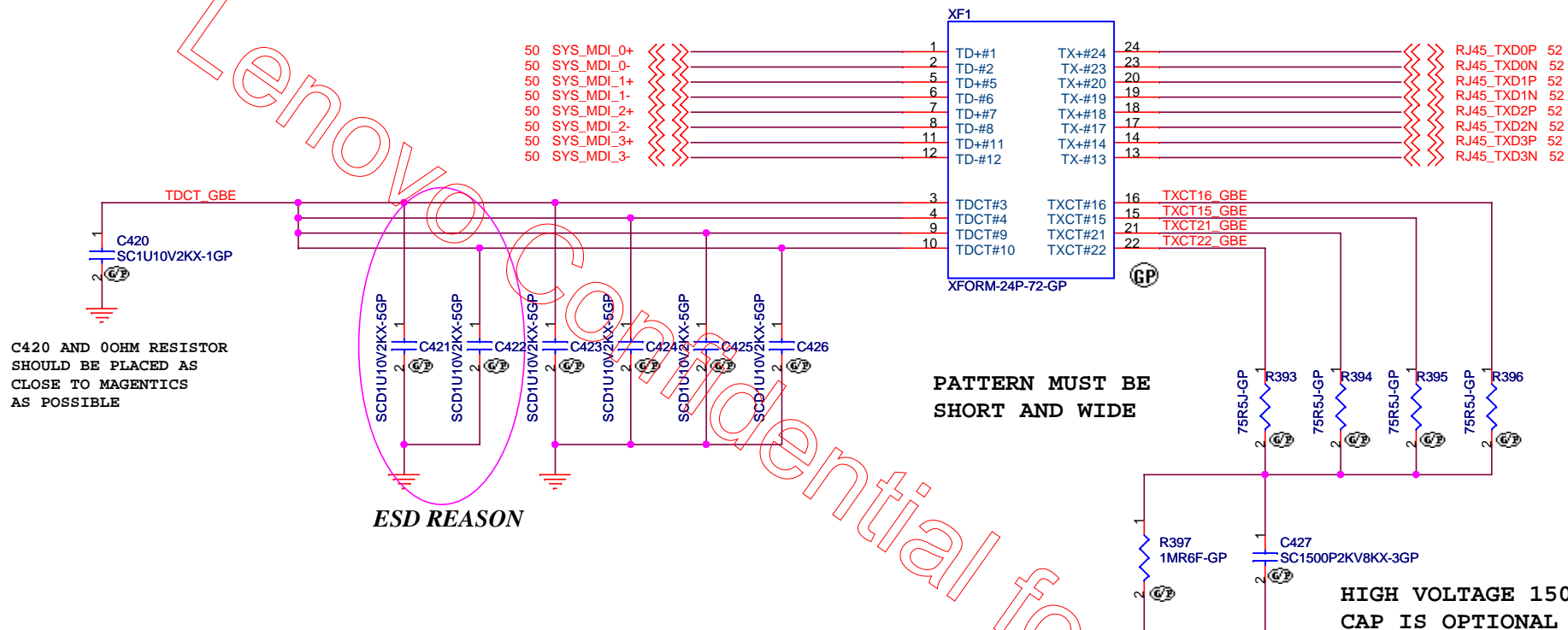
**GBE LAN Switch**Size  
A4

Document Number

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-1

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

Title

GBE MAGNETICS

Size

Document Number

Custom

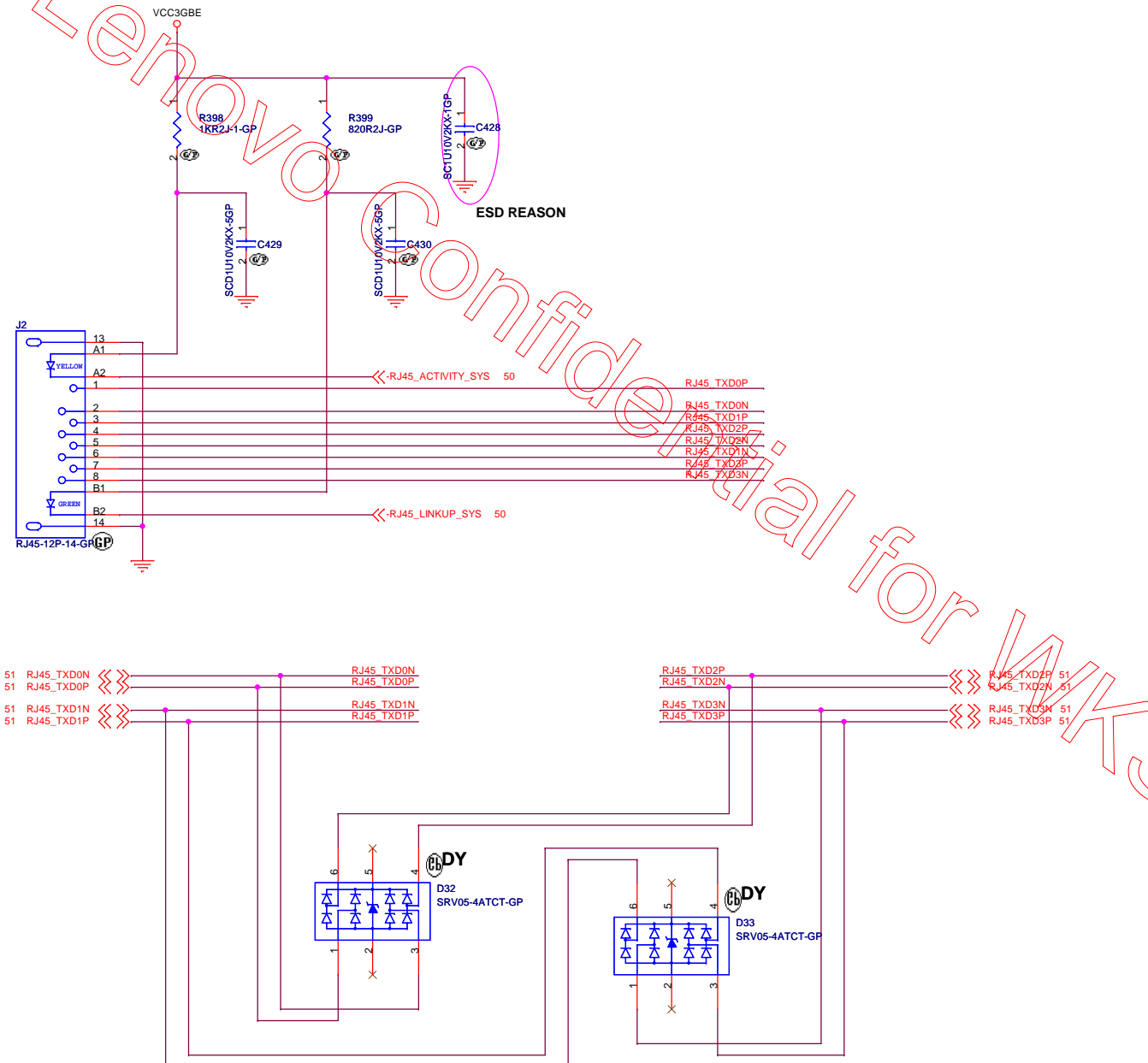
Dasher-2

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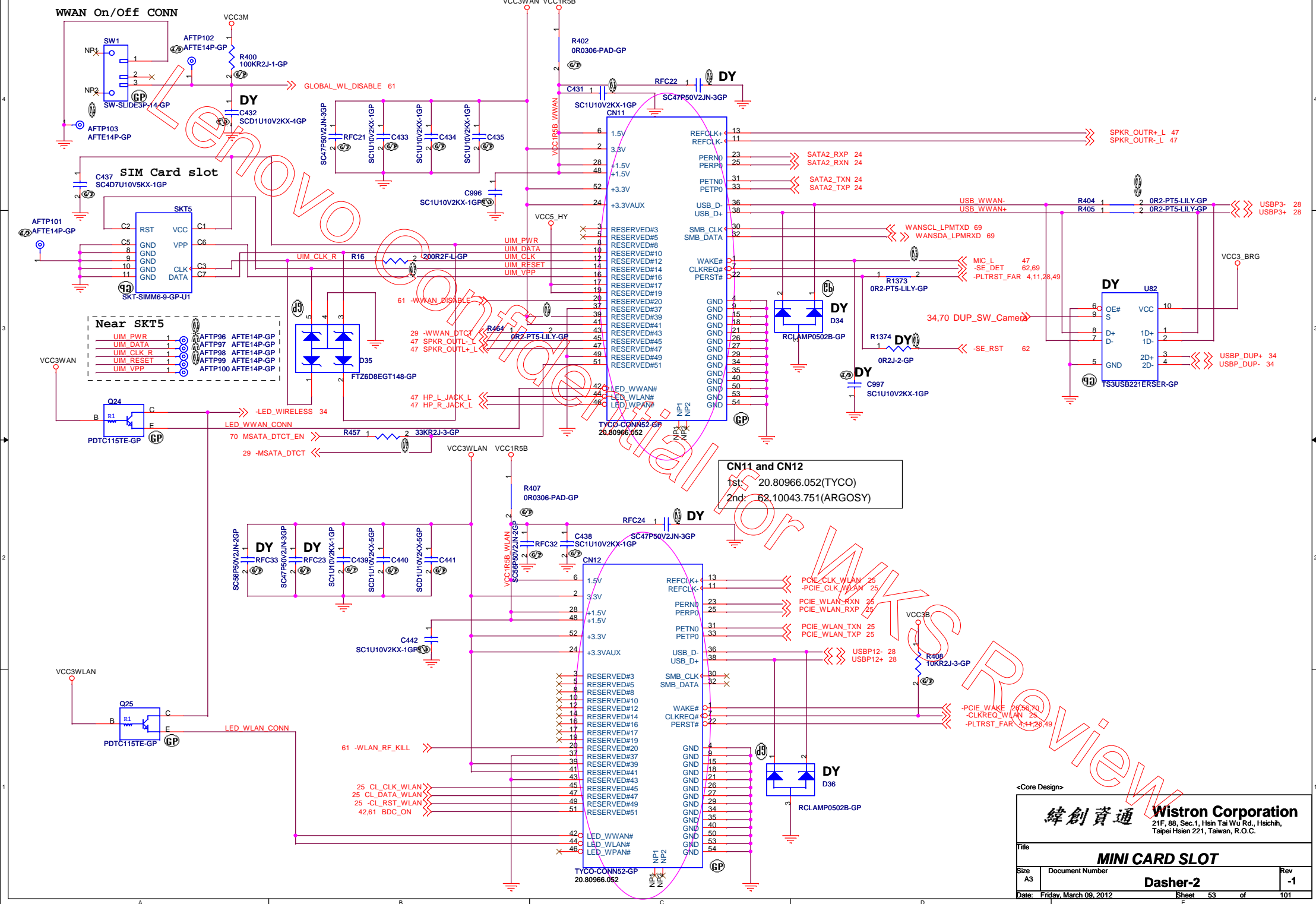
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緯創資通

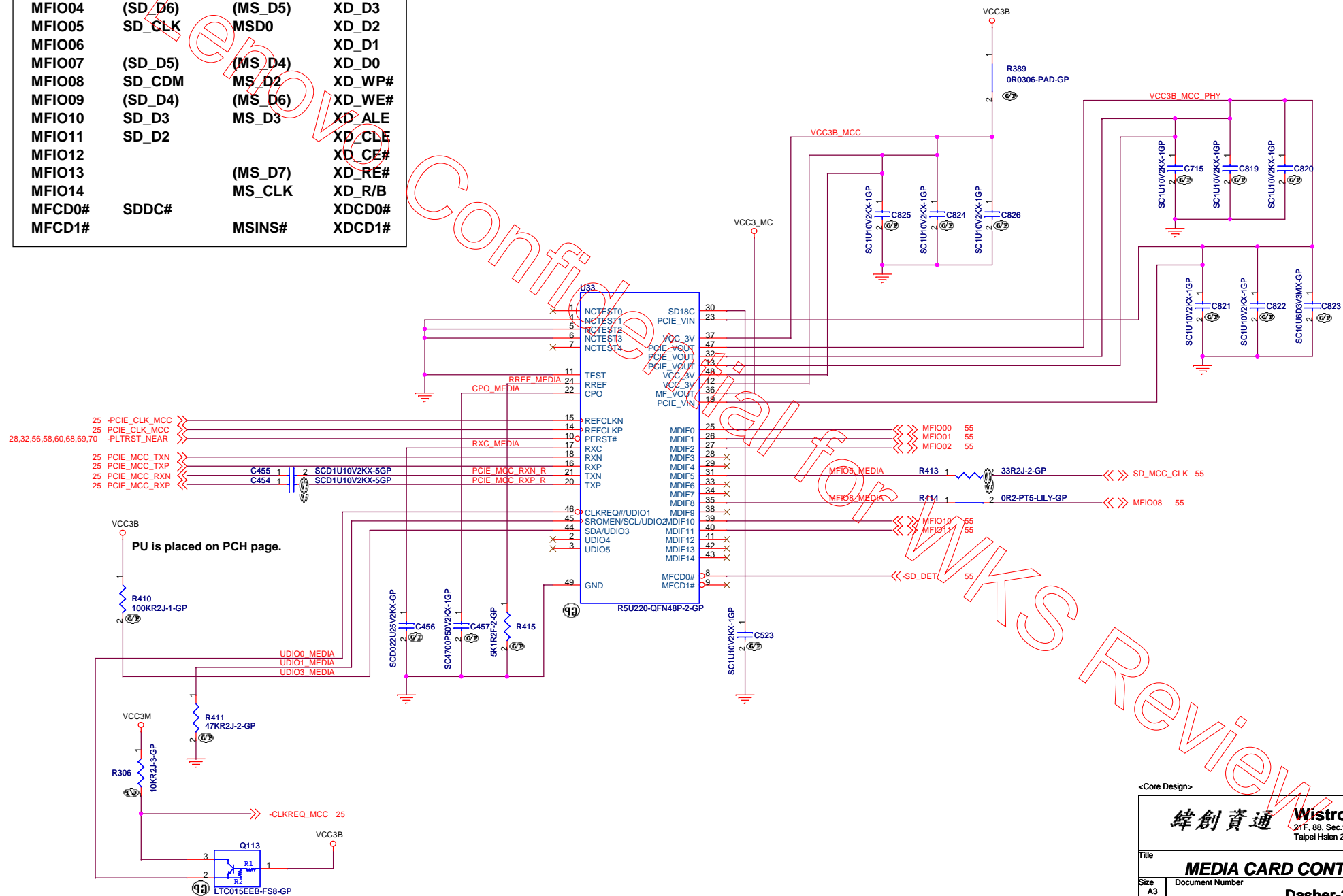
**Wistron Corporation**  
24/F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.

| Title                        |                 |     |
|------------------------------|-----------------|-----|
| RJ45 CONNECTOR               |                 |     |
| Size                         | Document Number | Rev |
| A3                           | Dasher-2        | -1  |
| Date: Friday, March 09, 2012 |                 |     |
| Sheet 52 of 101              |                 |     |





| <b>MEDIA I/F</b> | <b>SD/MMC</b> | <b>MEMORYSTICK</b> | <b>XD</b> |
|------------------|---------------|--------------------|-----------|
| MFIO00           | SDWP#         | MSBS               | XD_D7     |
| MFIO01           | SD_D1         |                    | XD_D6     |
| MFIO02           | SD_D0         | MS_D1              | XD_D5     |
| MFIO03           | (SD_D7)       |                    | XD_D4     |
| MFIO04           | (SD_D6)       | (MS_D5)            | XD_D3     |
| MFIO05           | SD_CLK        | MSD0               | XD_D2     |
| MFIO06           |               |                    | XD_D1     |
| MFIO07           | (SD_D5)       | (MS_D4)            | XD_D0     |
| MFIO08           | SD_CDM        | MS_D2              | XD_WP#    |
| MFIO09           | (SD_D4)       | (MS_D6)            | XD_WE#    |
| MFIO10           | SD_D3         | MS_D3              | XD_ALE    |
| MFIO11           | SD_D2         |                    | XD_CLE    |
| MFIO12           |               |                    | XD_CE#    |
| MFIO13           |               | (MS_D7)            | XD_RE#    |
| MFIO14           |               | MS_CLK             | XD_R/B    |
| MFCD0#           | SDDC#         |                    | XDCD0#    |
| MFCD1#           |               | MSINS#             | XDCD1#    |



**<Core Design>**

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| No. | Title   | Date | Page |
|-----|---|------|------|
| 1   | The first part of the book is a history of the...   | 1901 | 10   |
| 2   | The second part of the book is a history of the...  | 1902 | 20   |
| 3   | The third part of the book is a history of the...   | 1903 | 30   |
| 4   | The fourth part of the book is a history of the...  | 1904 | 40   |
| 5   | The fifth part of the book is a history of the...   | 1905 | 50   |
| 6   | The sixth part of the book is a history of the...   | 1906 | 60   |
| 7   | The seventh part of the book is a history of the... | 1907 | 70   |
| 8   | The eighth part of the book is a history of the...  | 1908 | 80   |
| 9   | The ninth part of the book is a history of the...   | 1909 | 90   |
| 10  | The tenth part of the book is a history of the...   | 1910 | 100  |

**MEDIA CARD CONTROLLER**

Size

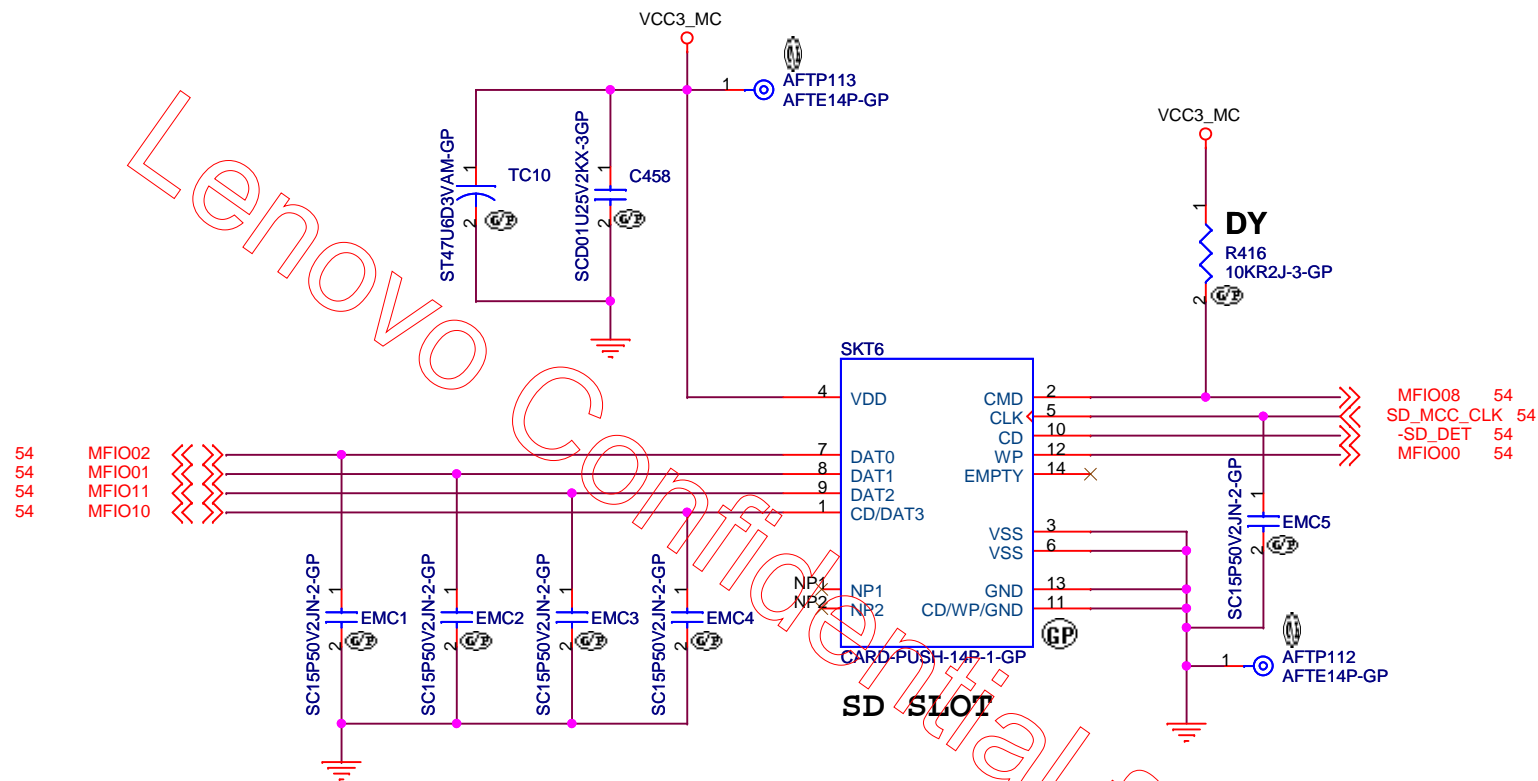
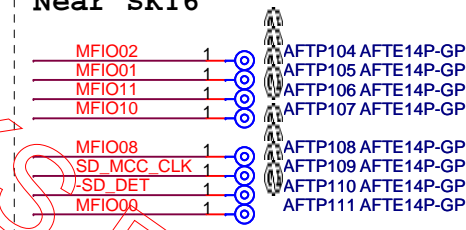
Document Number

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**Near SKT6**

&lt;Core Design&gt;

緯創資通

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

Title

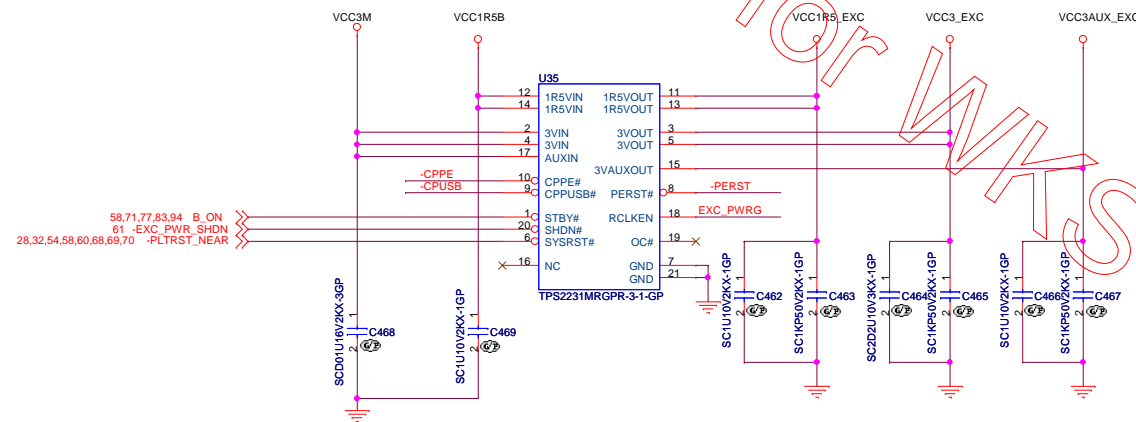
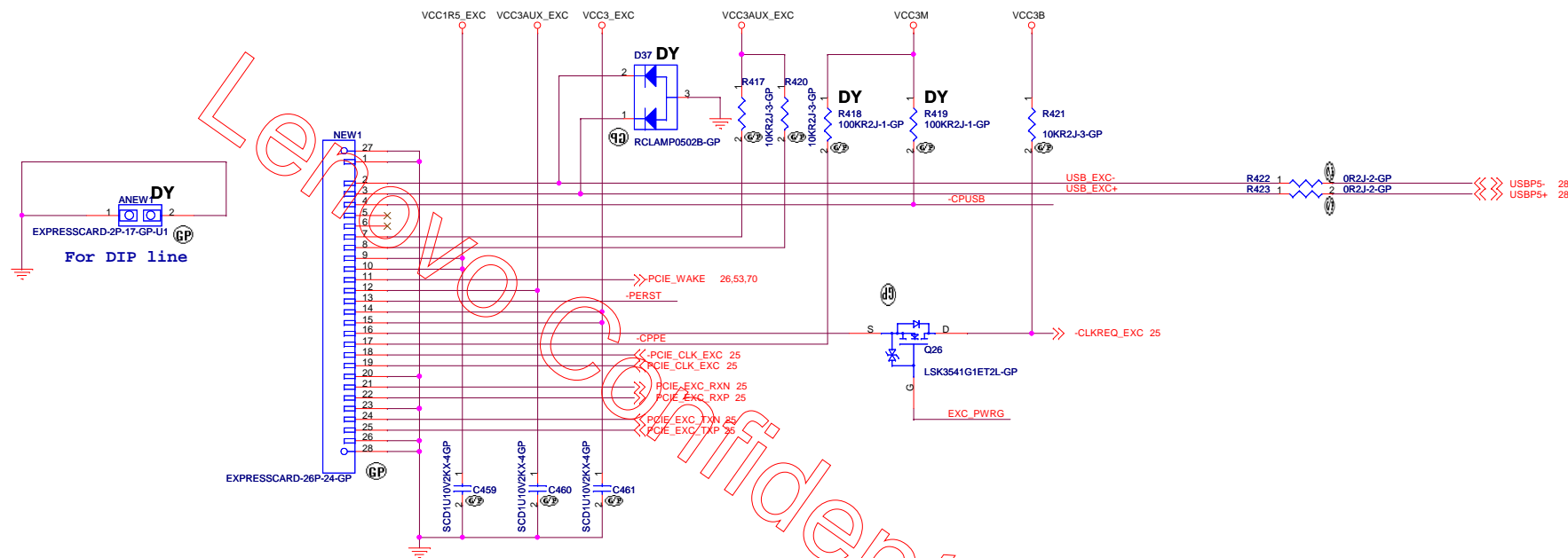
**Media Card Slot**Size  
A4

Document Number

**Dasher-2**Rev  
-1

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|     |      |               |              |
|-----|------|---------------|--------------|
| U35 | TI   | TPS2231MRGP-3 | 45K0234BA    |
|     | Rohm | BD4156MUV-GTR | 74.04156.A73 |
|     | Rohm | BD4157MUV-GE2 | 74.04157.A73 |

&lt;Core Design&gt;

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**Express Card Connector**Size  
Custom Document Number  
**Dasher-2** Rev  
-1

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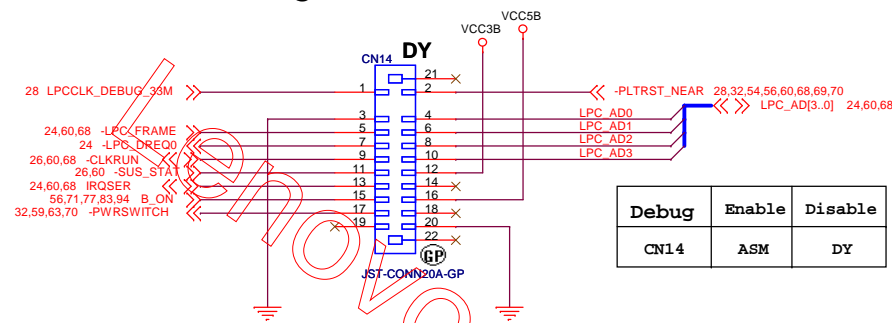
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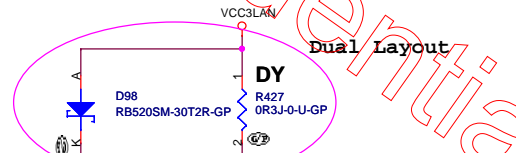
|                                  |                 |  |     |
|----------------------------------|-----------------|--|-----|
| 緯創資通                             |                 | Wistron Corporation  |     |
|                                  |                 | 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C. |     |
| Title                            |                 |  |     |
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| Size                             | Document Number |  | Rev |
| A                                | Dasher-2        |  | -1  |
| Date: Tuesday, February 21, 2012 |                 | Sheet 57 of  | 101 |

## Debug card connector



Put "easy-to-access" place

| 4MB |          |                   |              |  |
|-----|----------|-------------------|--------------|--|
| SO8 | Marconix | MX25L3206EM2I-12G | 72.25320.C01 |  |
|     | Winbond  | W25Q032BVSSIG     | 72.25Q32.A01 |  |
|     | Eon      | EN25QH32-104HIP   | 72.02532.B01 |  |
|     | Numonyx  | N25Q032A13ESEC0   | 72.25Q32.C01 |  |
| 8MB |          |                   |              |  |
| SO8 | Marconix | MX25L6406EM2I-12G | 72.25640.D01 |  |
|     | Winbond  | W25Q064CVSSIG     | 72.25Q64.B01 |  |
|     | Eon      | EN25QH64-104HIP   | 72.02564.001 |  |
|     | Numonyx  | N25Q064A13ESEC0   | 72.25Q64.G01 |  |
|     | Winbond  | W25Q64FVSSIG      | 72.25Q64.F01 |  |

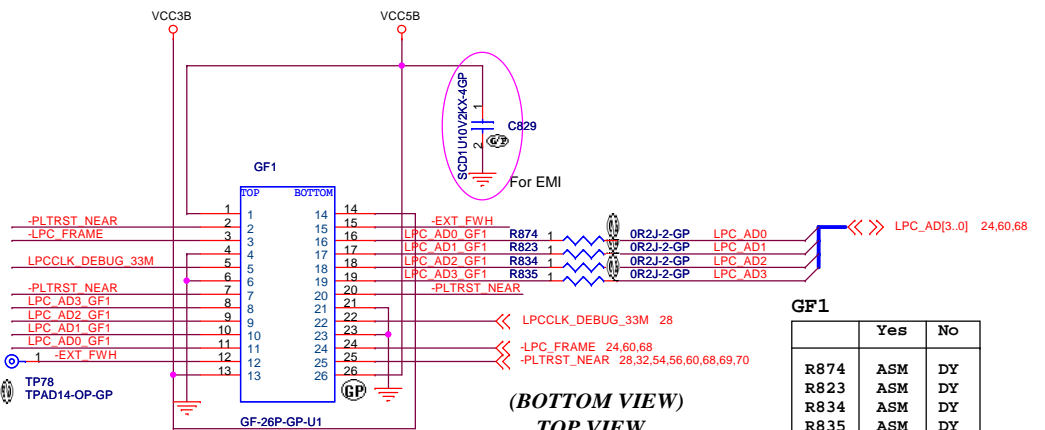


Dual Layout

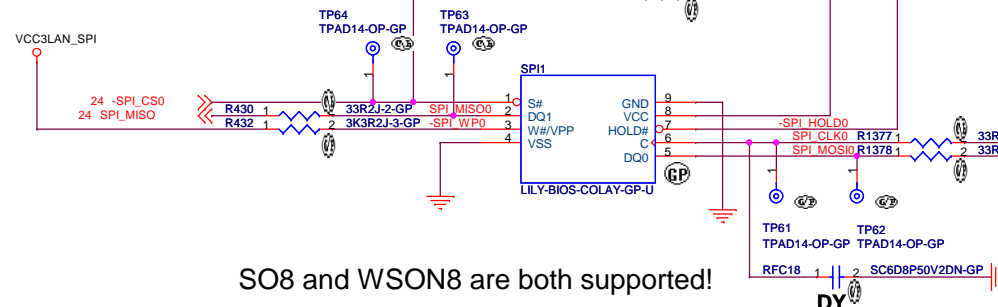
Configuration Table

|             | CONFIG-1<br>16MB | CONFIG-2<br>12MB | CONFIG-3<br>8MB |
|-------------|------------------|------------------|-----------------|
| SPI1        | 16MB             | 8MB              | 8MB             |
| SPI2        | DY               | 4MB              | DY              |
| R429        | DY               | ASM              | DY              |
| R431        | DY               | ASM              | DY              |
| R433        | DY               | ASM              | DY              |
| R1375       | DY               | ASM              | DY              |
| R1376       | DY               | ASM              | DY              |
| C471        | DY               | ASM              | DY              |
| R149 (P.24) | DY               | ASM              | DY              |
| R122        | DY               | ASM              | DY              |

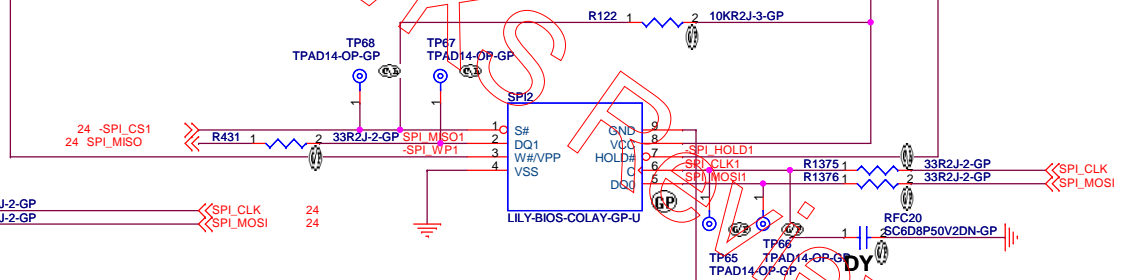
Logic



VCC3LAN\_SPI



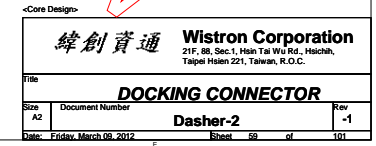
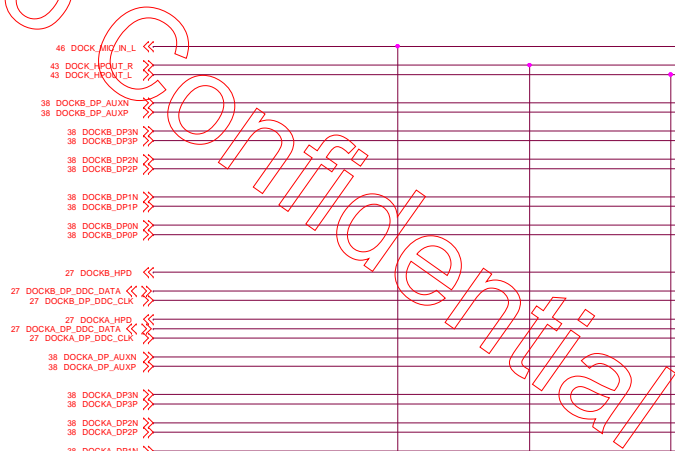
SO8 and WSON8 are both supported!

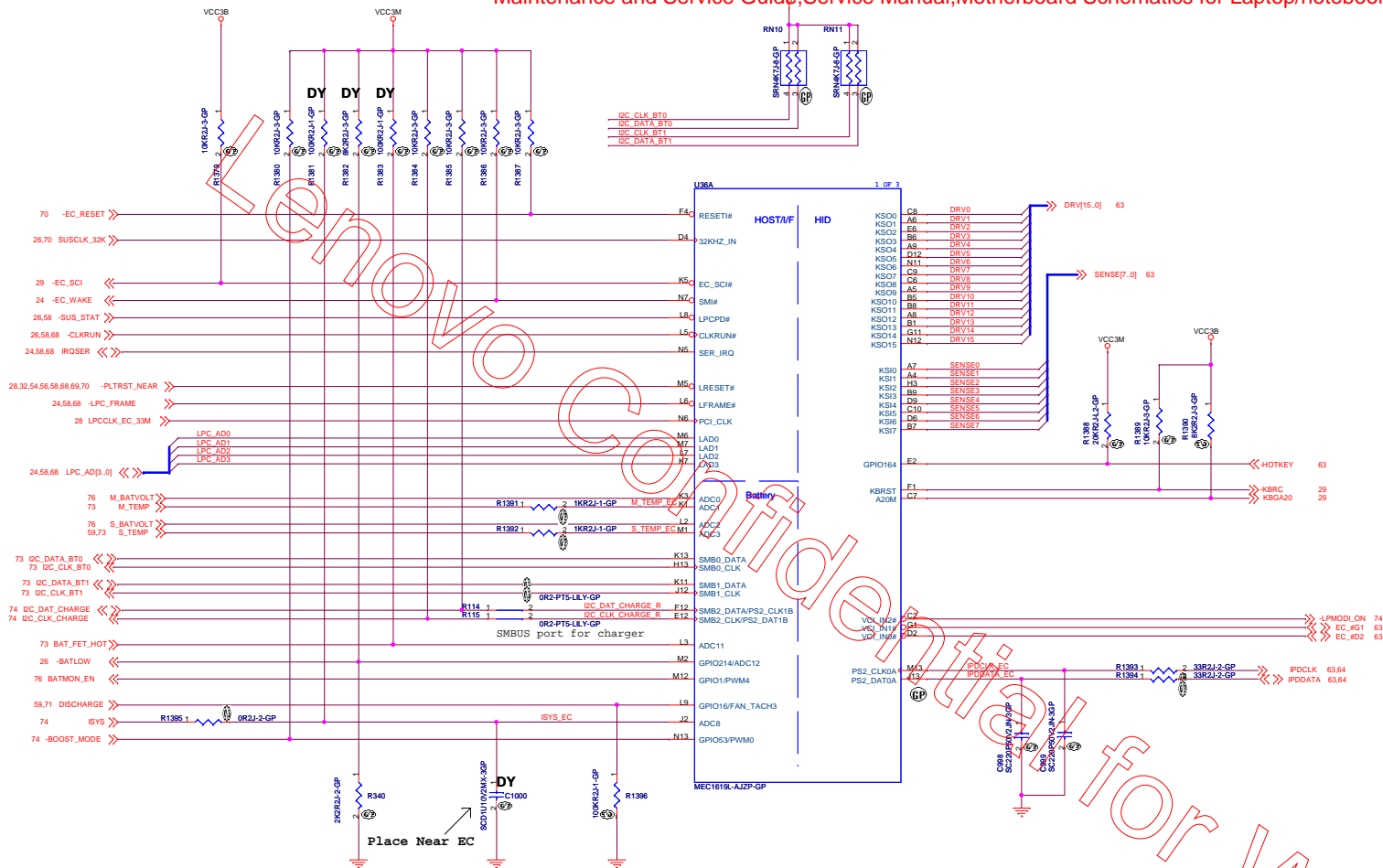


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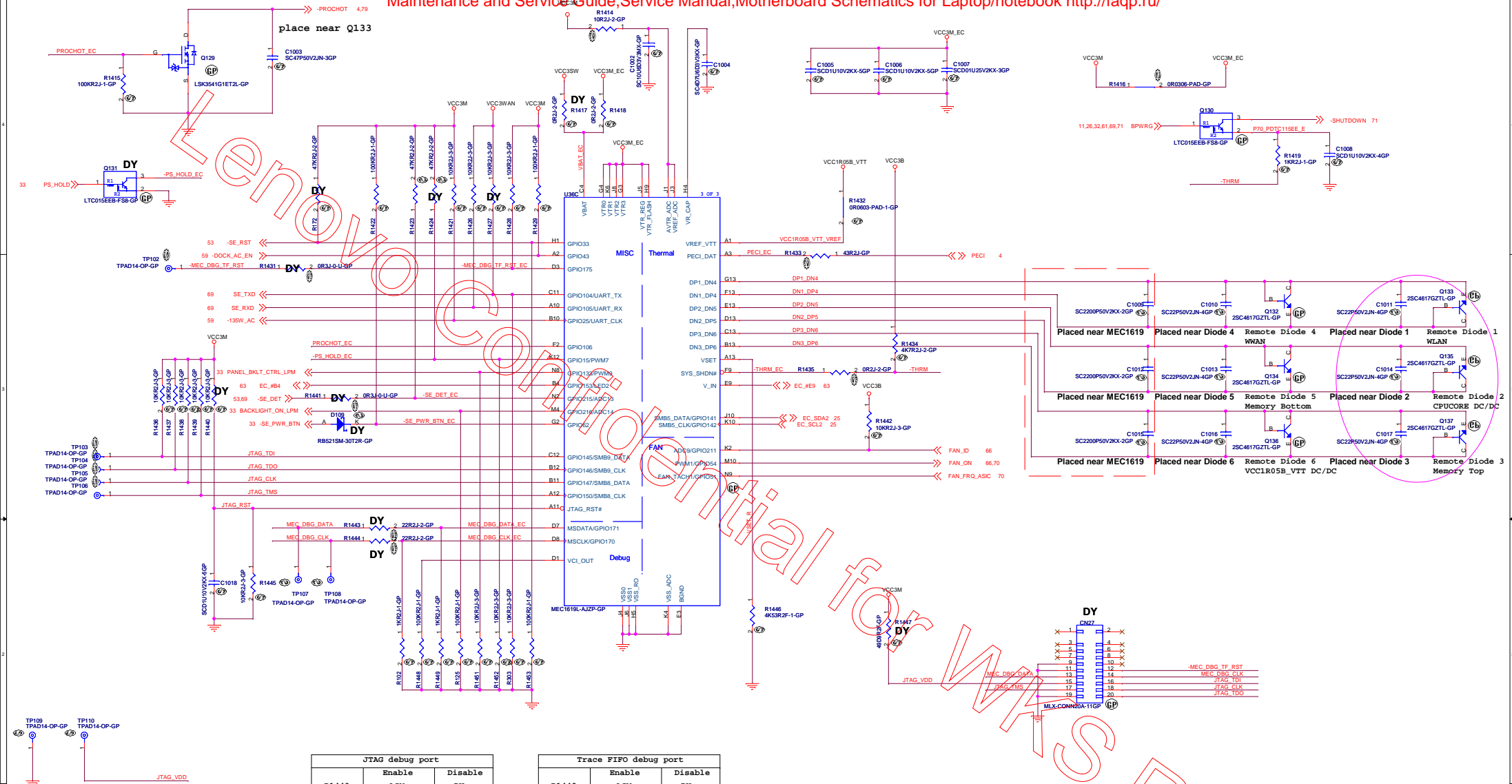
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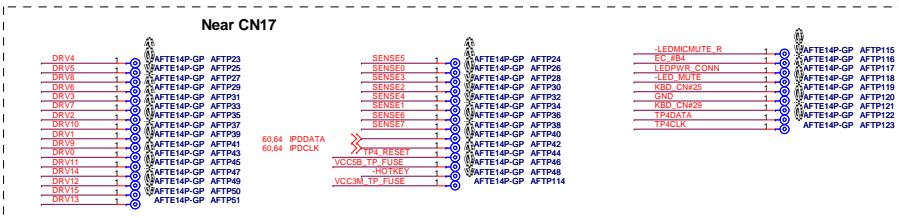
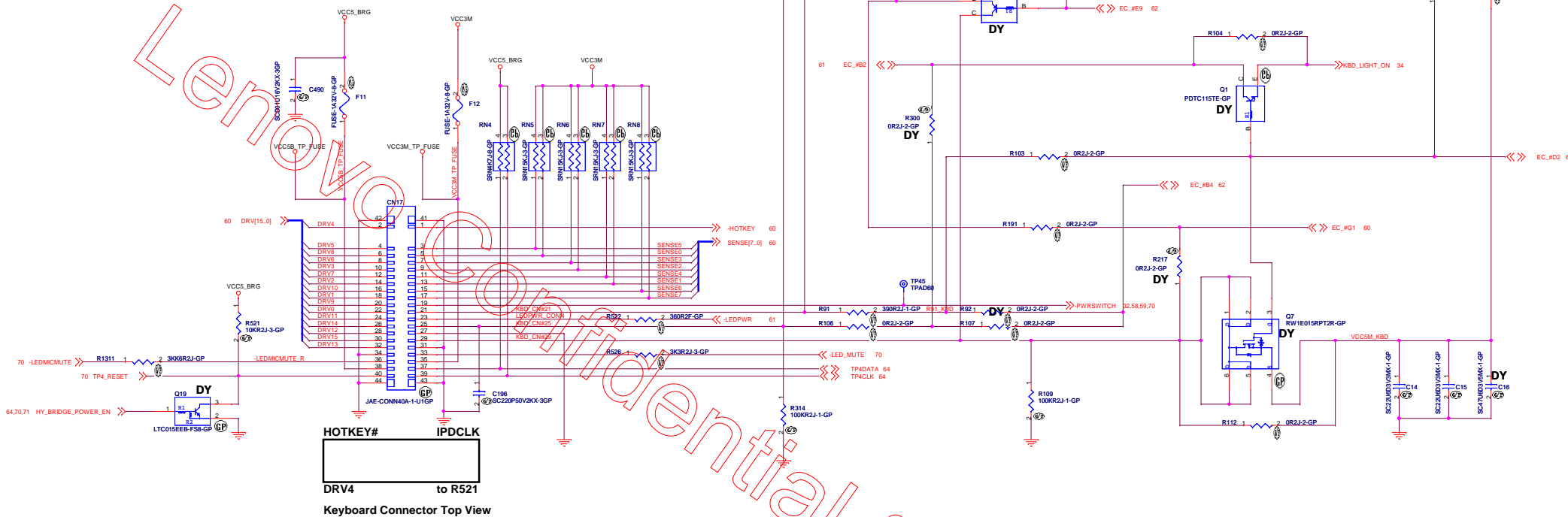






| JTAG debug port |        |         |
|-----------------|--------|---------|
|                 | Enable | Disable |
| R1440           | ASM    | DY      |
| R1445           | DY     | ASM     |
| R1447           | ASm    | DY      |

| Trace FIFO debug port |        |         |
|-----------------------|--------|---------|
|                       | Enable | Disable |
| R1443                 | ASM    | DY      |
| R1444                 | ASM    | DY      |
| R102                  | DY     | ASM     |



KBD Table1

|                 |                | case1 | case2 | case3 | case4 |
|-----------------|----------------|-------|-------|-------|-------|
| CS12 KBD w/o BL |                | v     | v     | v     |       |
| CS12 KBD w BL   |                |       | v     | v     |       |
| CS09            |                |       | v     | v     | v     |
| Parts#          | parts          | case1 | case2 | case3 | case4 |
| R108            | 10k_5%_0402    | DY    | DY    | ASM   | ASM   |
| R104            | 0_5%_0402      | ASM   | ASM   | DY    | DY    |
| R89             | 100k_5%_0402   | ASM   | ASM   | ASM   | ASM   |
| R105            | 1k_5%_0402     | ASM   | DY    | ASM   | ASM   |
| R111            | 10k_5%_0402    | ASM   | ASM   | ASM   | ASM   |
| R110            | 10k_5%_0402    | DY    | ASM   | ASM   | ASM   |
| R92             | 0_5%_0402      | DY    | DY    | ASM   | ASM   |
| R91             | 390_5%_0402    | DY    | ASM   | ASM   | ASM   |
| R107            | 0_5%_0402      | DY    | ASM   | DY    | DY    |
| R103            | 0_5%_0402      | ASM   | ASM   | DY    | DY    |
| R106            | 0_5%_0402      | DY    | ASM   | ASM   | ASM   |
| R112            | 0_5%_0402      | DY    | ASM   | DY    | DY    |
| R109            | 100k_5%_0402   | DY    | ASM   | ASM   | DY    |
| R191            | 0_5%_0402      | ASM   | ASM   | DY    | ASM   |
| R217            | 0_5%_0402      | DY    | DY    | ASM   | DY    |
| R300            | 0_5%_0402      | DY    | DY    | ASM   | ASM   |
| C16             | 47uF_6.3V_0805 | DY    | DY    | DY    | DY    |
| C15             | 10uF_6.3V_0603 | DY    | ASM   | ASM   | DY    |
| C14             | 10uF_6.3V_0603 | DY    | ASM   | ASM   | DY    |
| Q1              | LTC015TE       | DY    | DY    | ASM   | ASM   |
| Q8              | LTA015TE       | DY    | DY    | ASM   | DY    |
| Q7              | RW1E015RP      | DY    | DY    | ASM   | DY    |
| F5              | 1.5A/6A Fuse   | DY    | ASM   | DY    | DY    |
|                 | 1.5A/6V PolySW | DY    | DY    | ASM   | DY    |
| R314            | 100K_5%_0402   | DY    | ASM   | DY    | DY    |

### KBD Table2

|        |       |
|--------|-------|
| Pre-DV | case4 |
| SDV    | case2 |
| FVT    | case2 |
| PreSIT | case2 |
| SIT    | case2 |

← Logic

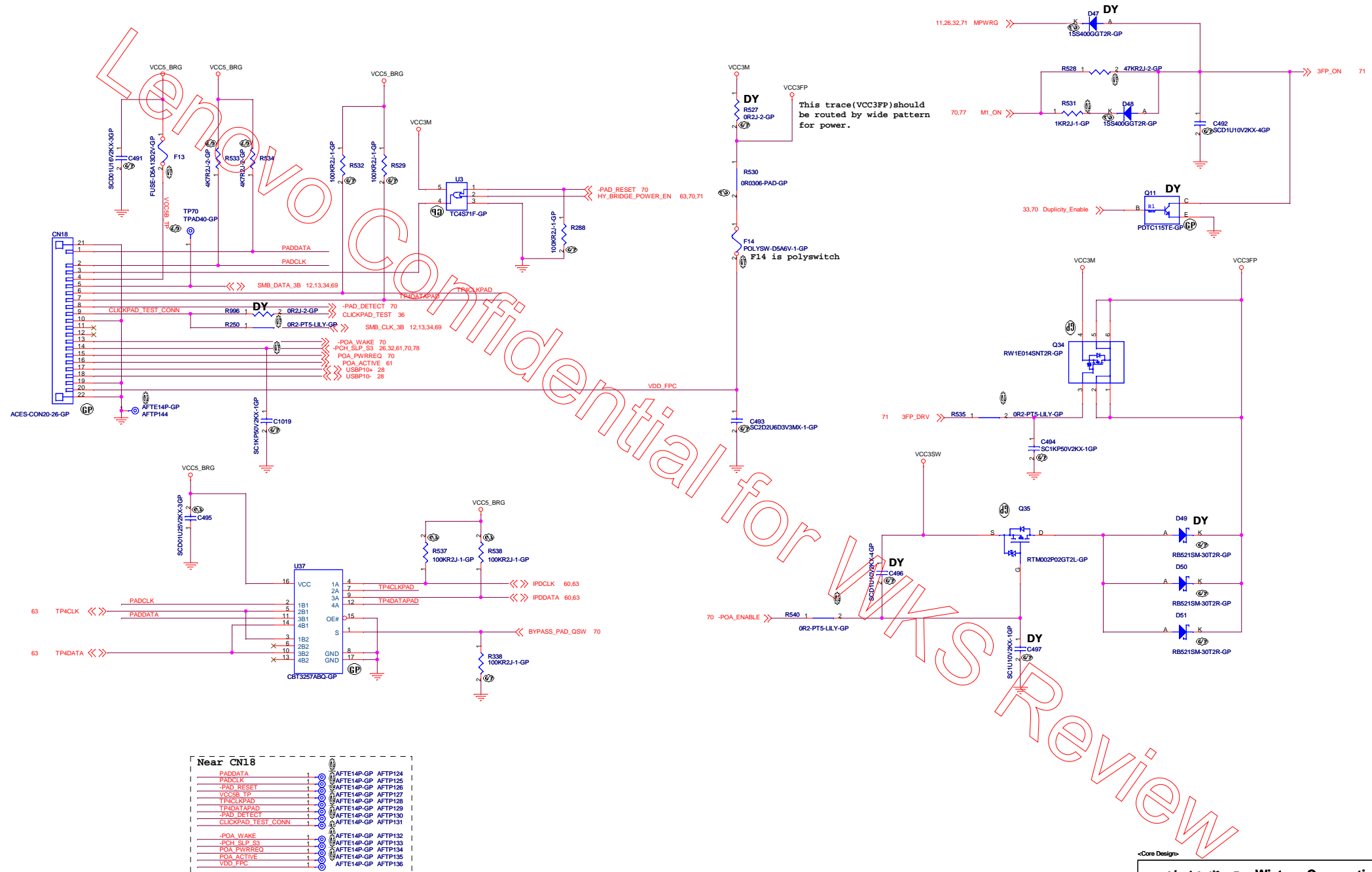
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|                           |                        |             |           |
|---------------------------|------------------------|-------------|-----------|
| Title                     |                        |             |           |
| <b>KEYBOARD CONNECTOR</b> |                        |             |           |
| Size<br>A2                | Document Number        |             | Rev       |
|                           | <b>Dasher-2</b>        |             | <b>-1</b> |
| Date:                     | Friday, March 09, 2012 | Sheet 83 of | 101       |

**Fingerprint Reader / Touch PAD**



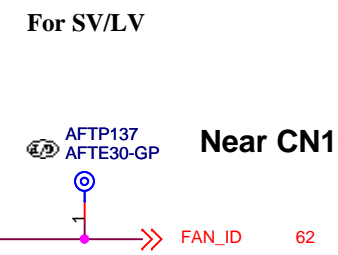
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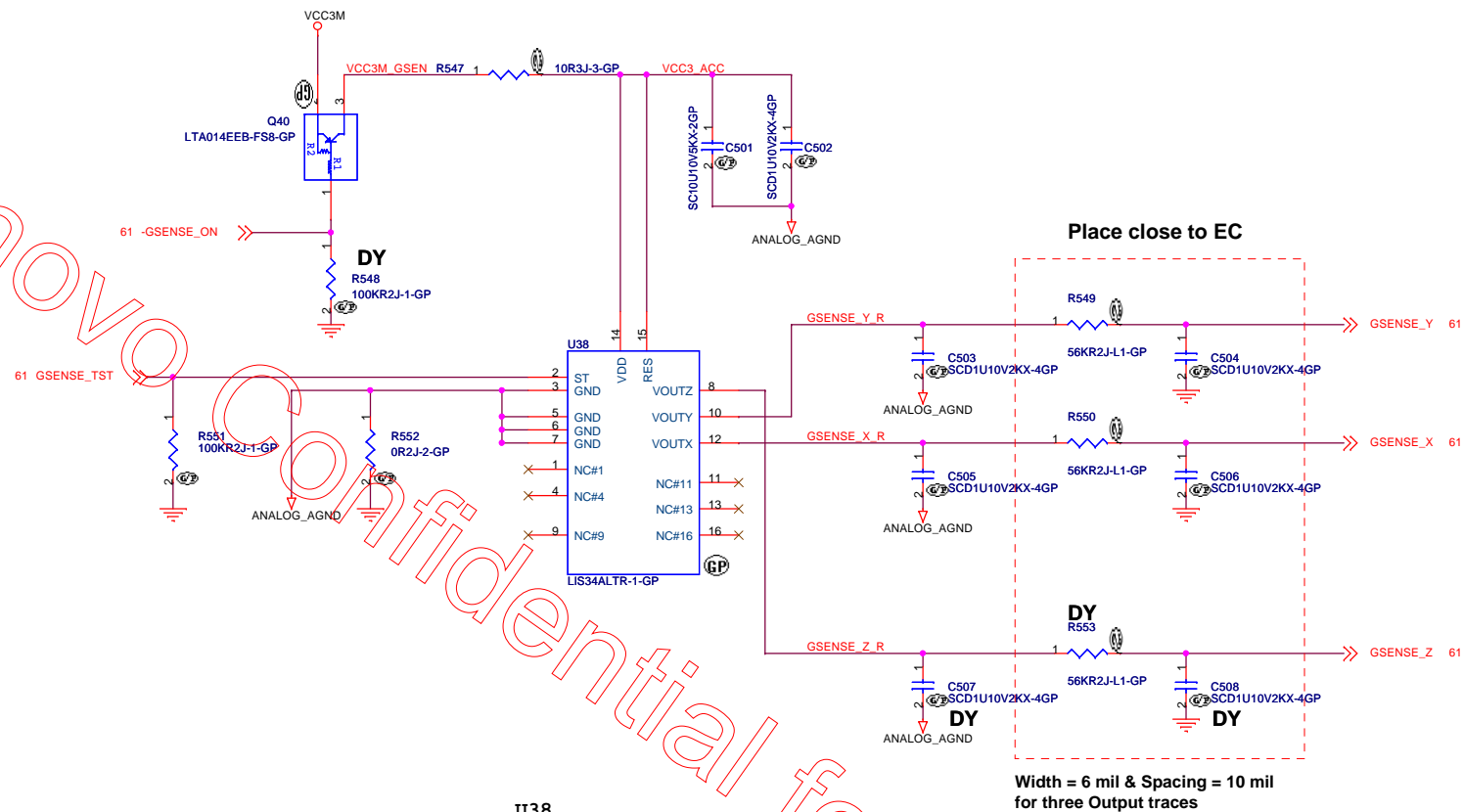
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| <div>緯創資通</div> <div>Wistron Corporation</div> <div>21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,<br/>Taipei Hsien 221, Taiwan, R.O.C.</div> |                                     |                   |
| Title <div>BLANK</div>   |                                     |                   |
| Size <div>A</div>  | Document Number <div>Dasher-2</div> | Rev <div>-1</div> |
| Date: Tuesday, February 21, 2012   |                                     | Sheet 65 of 101   |



| FAN_ID | Thermal module |
|--------|----------------|
| 1      | Toshiba        |
| 0      | AVC or DELTA   |



U38

|         |                   |              |
|---------|-------------------|--------------|
| Primary | STMicro LIS34AL   | 41R0828AA    |
| Second  | Kionix KXTC8-2850 | 74.KXTC8.0BZ |
| Third   |                   |              |

## Layout Comment :

(1) Avoid routing under DCDC switching area.

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Title

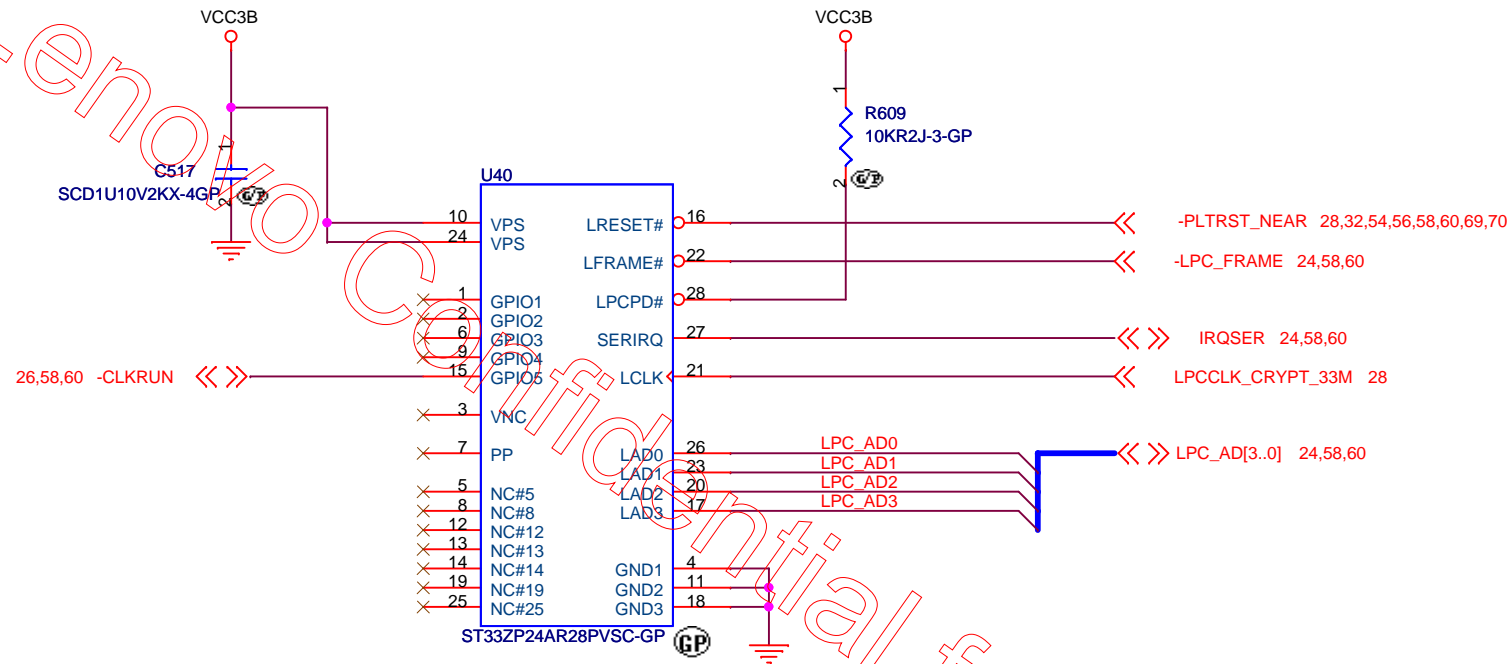
**G-SENSOR**Size  
A3

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| BU                                 | After SDV   |
|------------------------------------|---|
| ST19NP18ER28PVMO<br>(71.19N18.T0W) | ST33ZP24AR28PVxx<br>xx="OG" for SDV(71.03324.A0W),<br>"RC" for FVT, PreSIT (FW 1.2.C.0)(71.03324.C0W)<br>SC for SIT (not PreSIT) FW 1.2.D.0(71.03324.D0W) |

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Title

**TPM**Size  
A4

Document Number

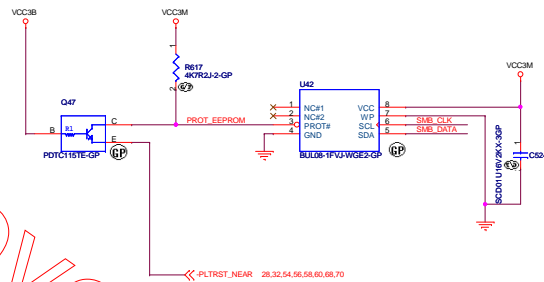
**Dasher-2**Rev  
-1

Date: Friday, March 09, 2012

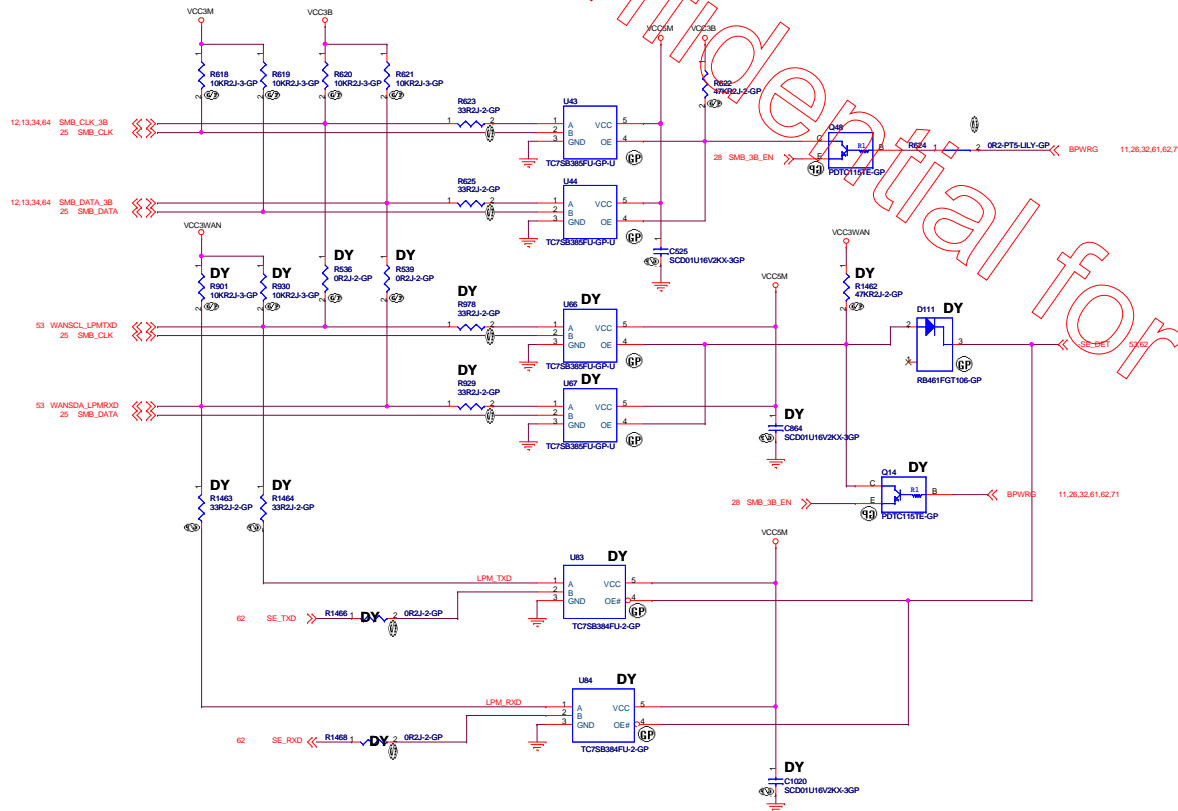
Sheet 68 of 101

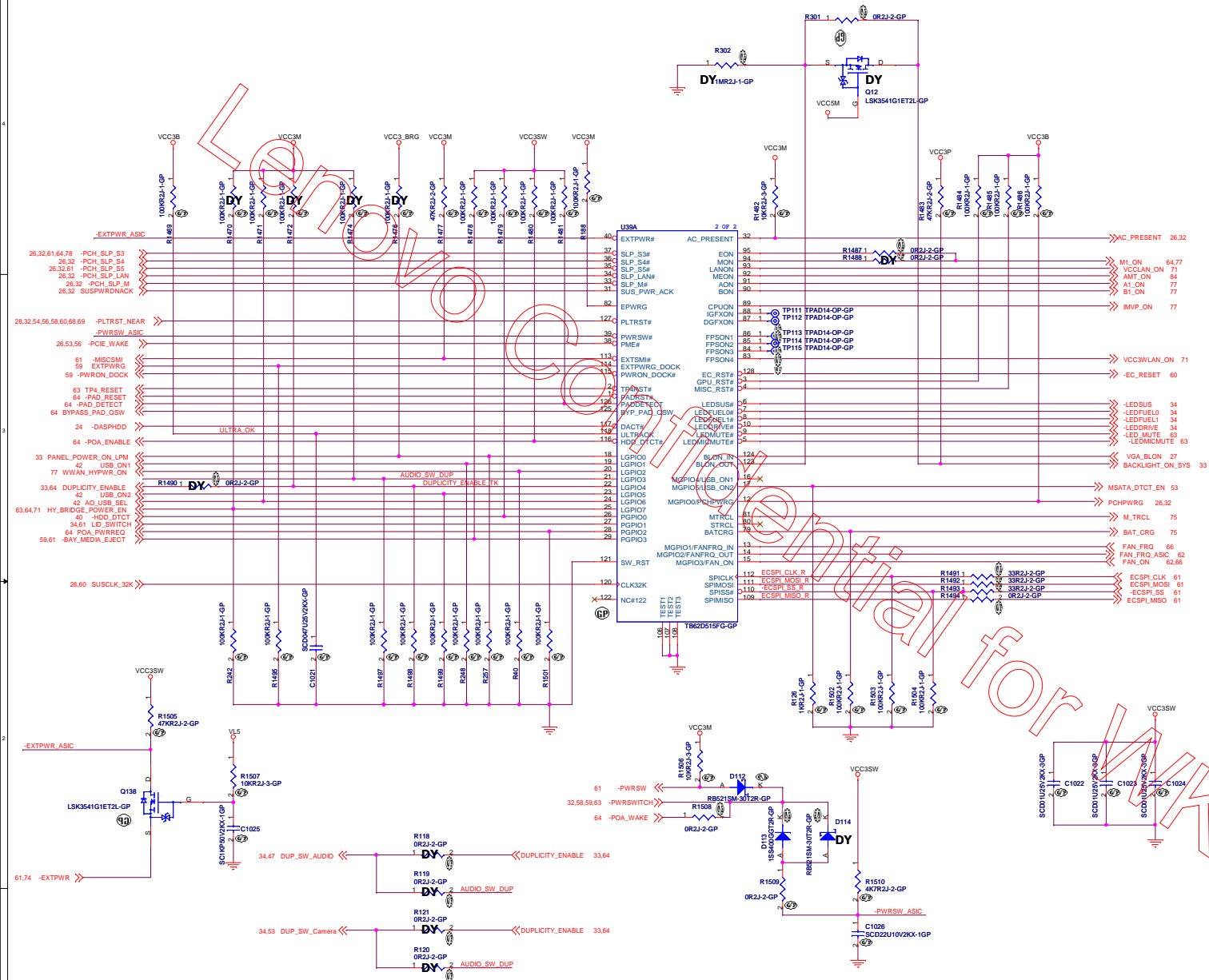


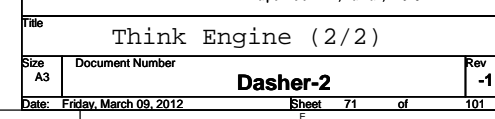
# EEPROM



| Vendor | U42   | Part Number  |
|--------|-------|--------------|
| 1st    | ROHM  | BUL08-1FVJ-W |
| 2nd    | NXP   | PCA24S08ADP  |
| 3rd    | Sanyo | LE26CAP08TT  |

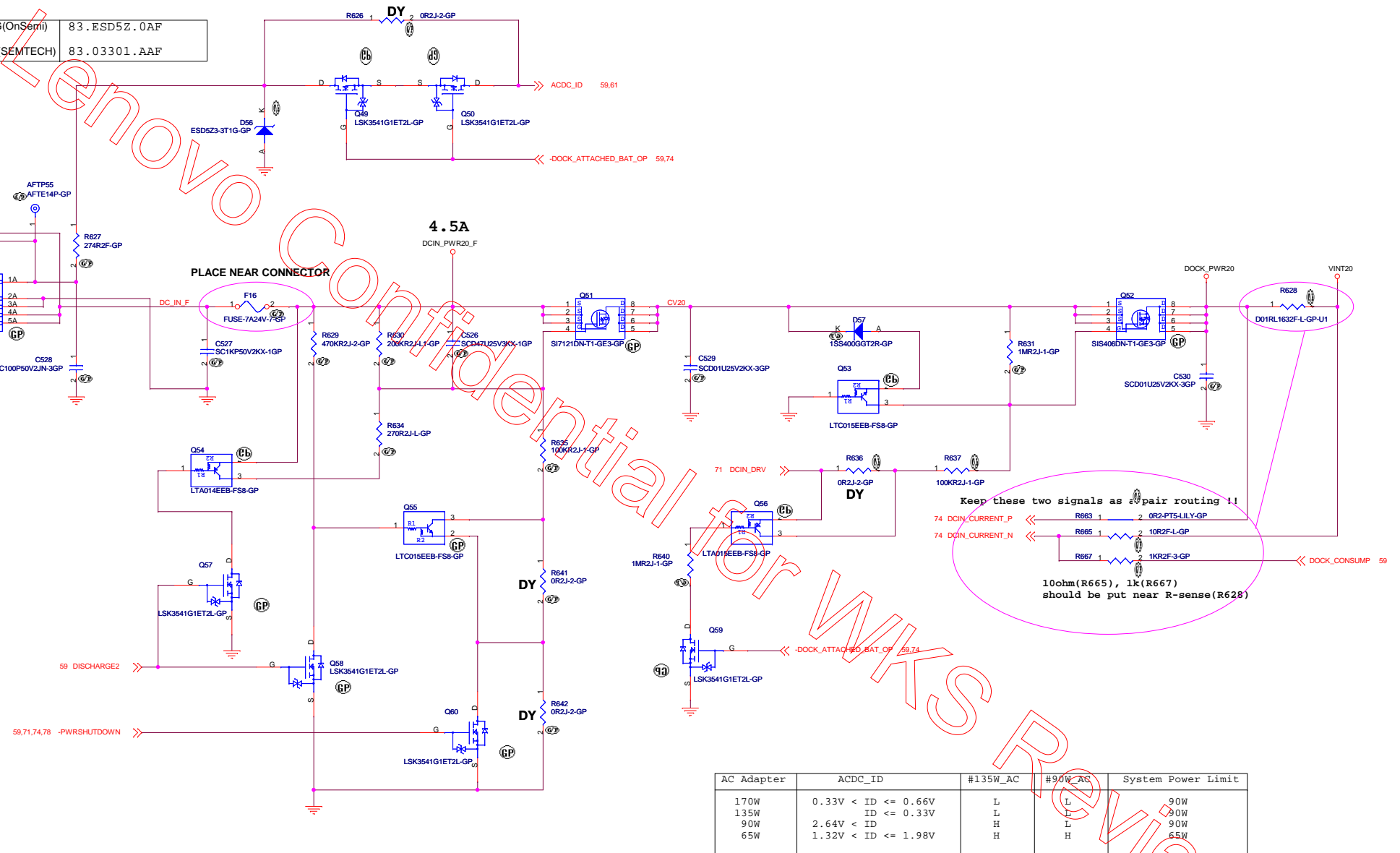






D56

|                      |              |
|----------------------|--------------|
| ESD5Z3.3T1G(OnSemi)  | 83.ESD5Z.0AF |
| uClamp3301H(SEMTECH) | 83.03301.AAF |



| PEAK SHIFT | YES    | NO     |
|------------|--------|--------|
| R641       | NO-ASM | ASM    |
| R629       | ASM    | NO-ASM |
| Q58        | ASM    | NO-ASM |
| Q55        | ASM    | NO-ASM |

Logic

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|--|-----------------|---------------------|--|
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| Title  |                 | DC-IN               |  |
| Size   | Document Number | Rev                 |  |
| Custom   | Dasher-2        | -1                  |  |
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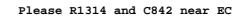
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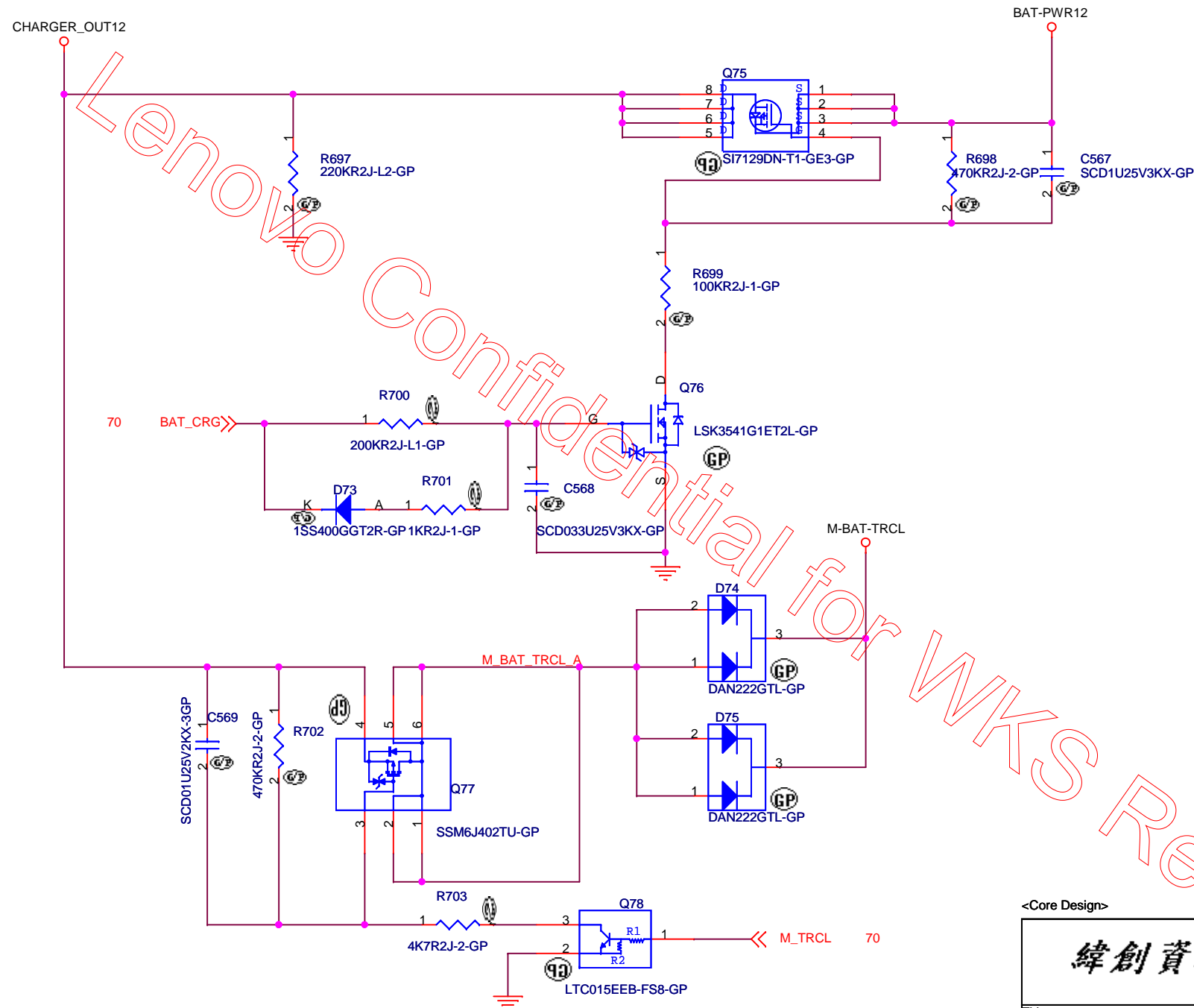
## BATTERY INPUT

## Dasher-2

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Rev





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緯創資通

**Wistron Corporation**21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
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Title

**CHARGER SELECT**Size  
A4

Document Number

**Dasher-2**Rev  
-1

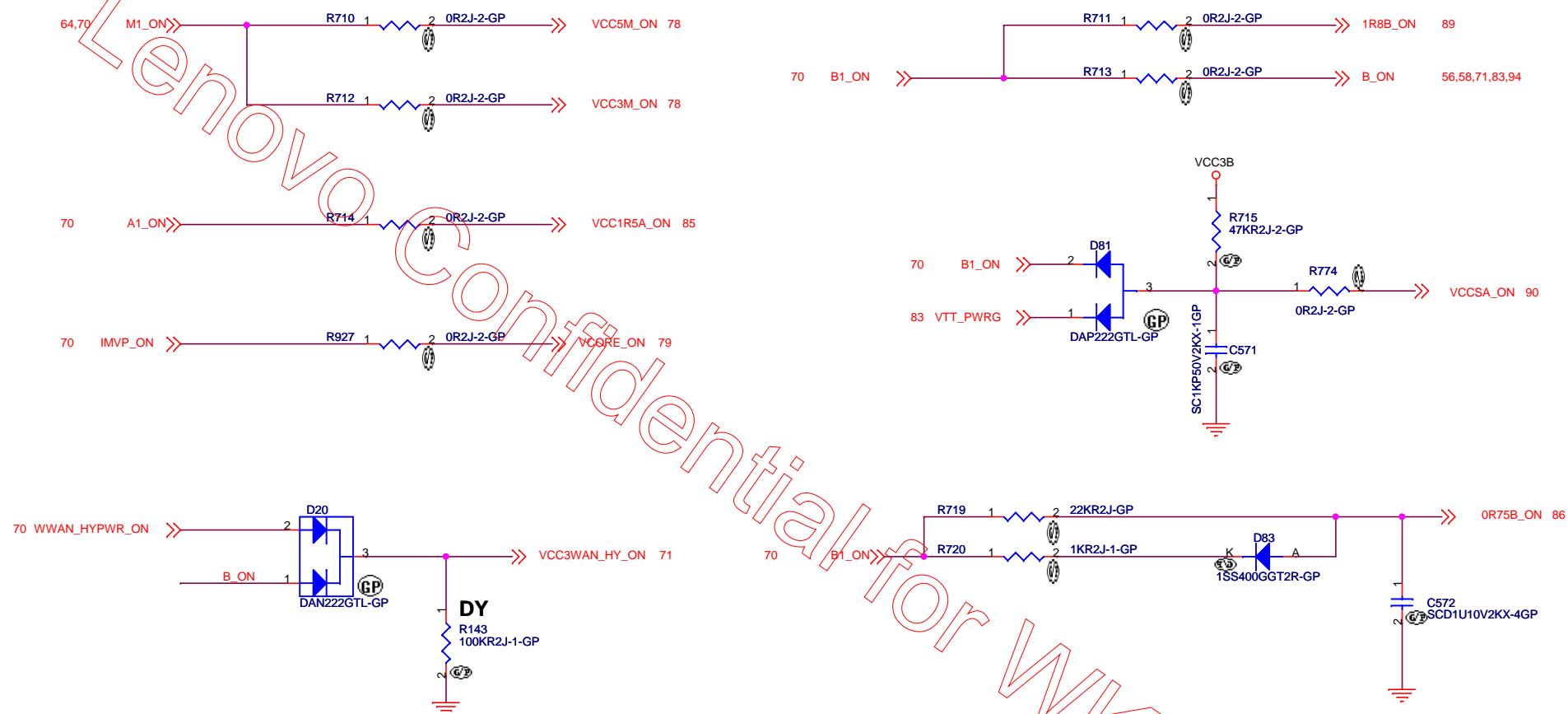
Date: Friday, March 09, 2012

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|                |         |        |        |        |
|----------------|---------|--------|--------|--------|
| AOAC Duplicity | YES YES | YES NO | NO YES | NO NO  |
| D20 R143       | ASM DY  | ASM DY | ASM DY | DY ASM |

↑  
Logic

&lt;Core Design&gt;

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Size

Document Number

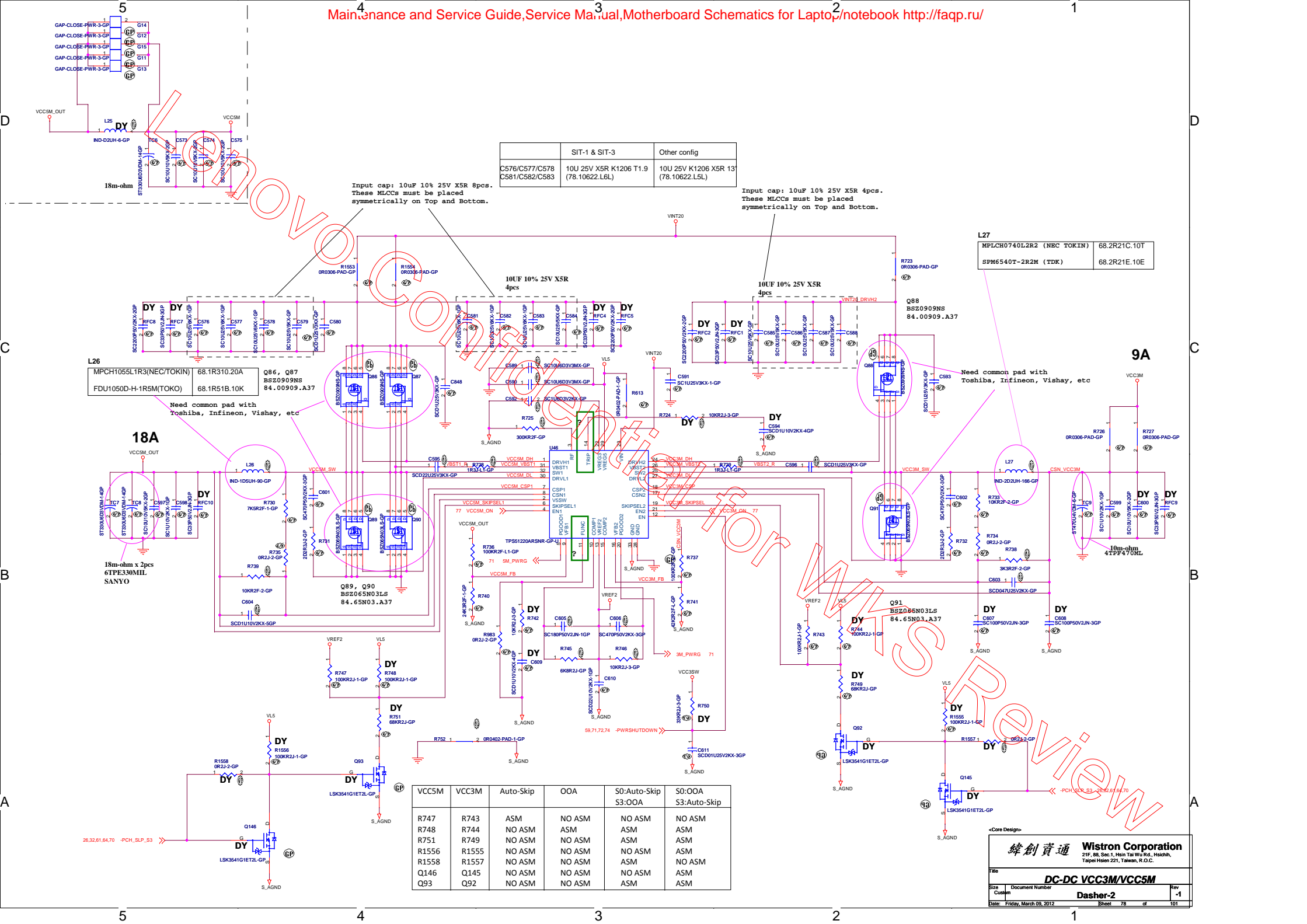
Rev

Custom

**Dasher-2****-1**

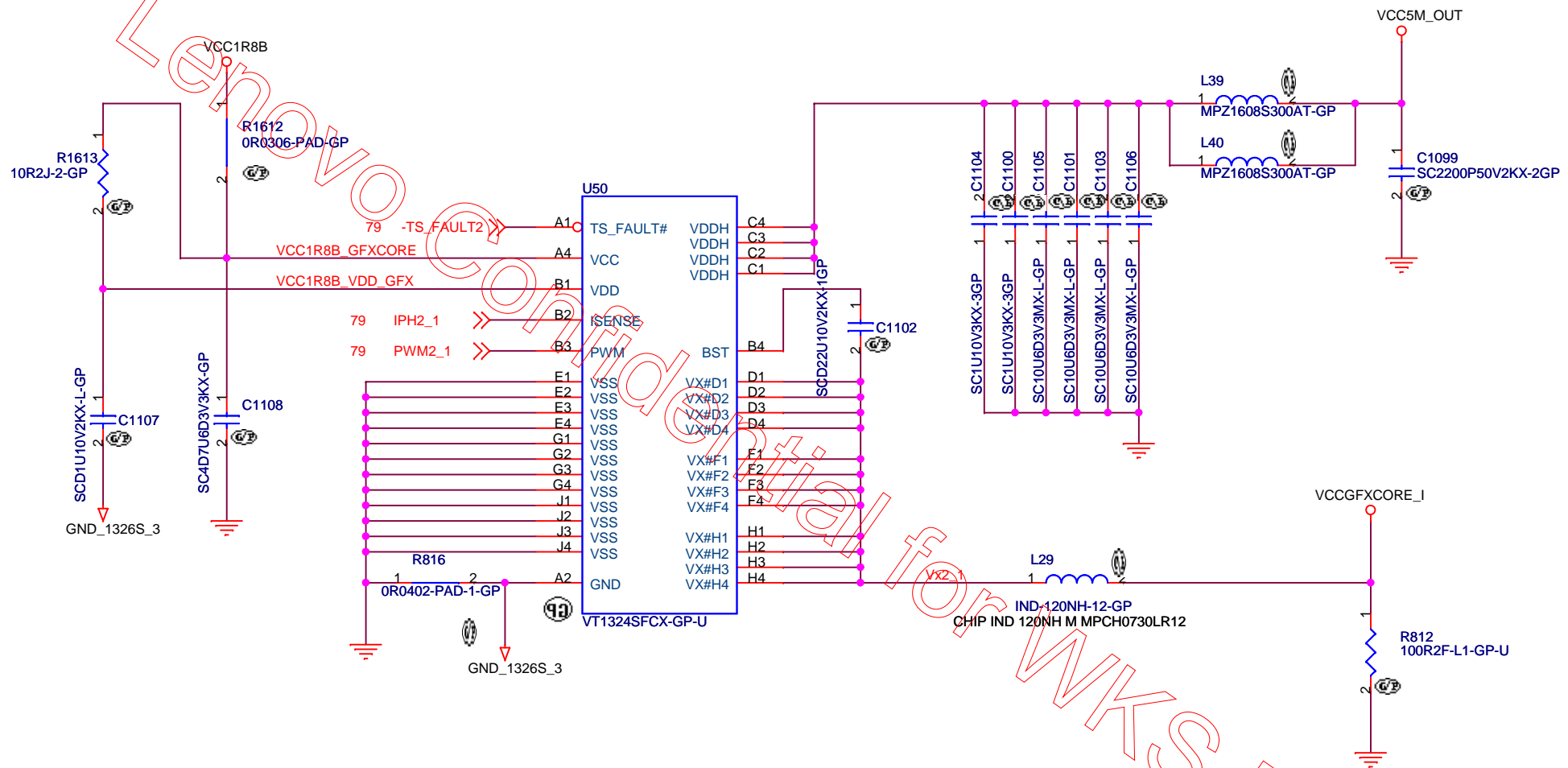
Date: Friday, March 09, 2012

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| VCC5M | VCC3M | Auto-Skip | OOA    | S0:Auto-Skip<br>S3:OOA | S0:OOA<br>S3:Auto-Skip |
|-------|-------|-----------|--------|------------------------|------------------------|
| R747  | R743  | ASM       | NO ASM | NO ASM                 | NO ASM                 |
| R748  | R744  | NO ASM    | ASM    | ASM                    | ASM                    |
| R751  | R749  | NO ASM    | NO ASM | ASM                    | ASM                    |
| R1556 | R1555 | NO ASM    | NO ASM | NO ASM                 | ASM                    |
| R1558 | R1557 | NO ASM    | NO ASM | ASM                    | NO ASM                 |
| Q146  | Q145  | NO ASM    | NO ASM | NO ASM                 | ASM                    |
| Q93   | Q92   | NO ASM    | NO ASM | ASM                    | ASM                    |





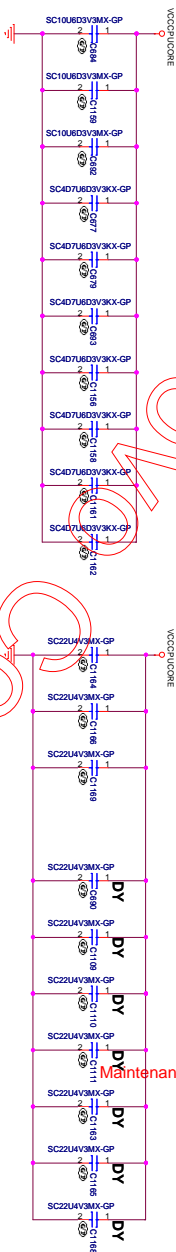
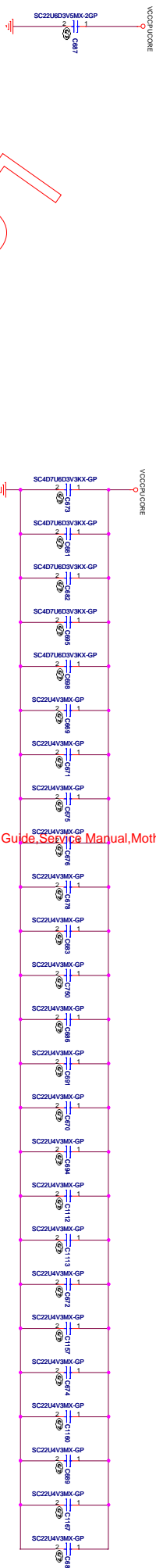
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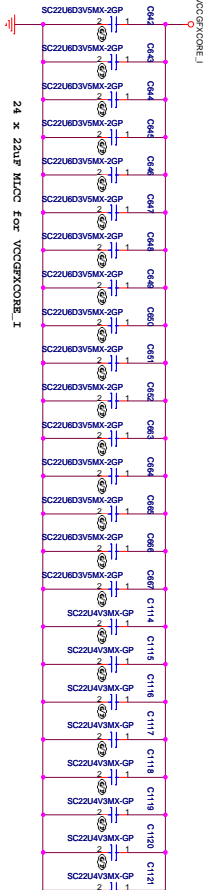
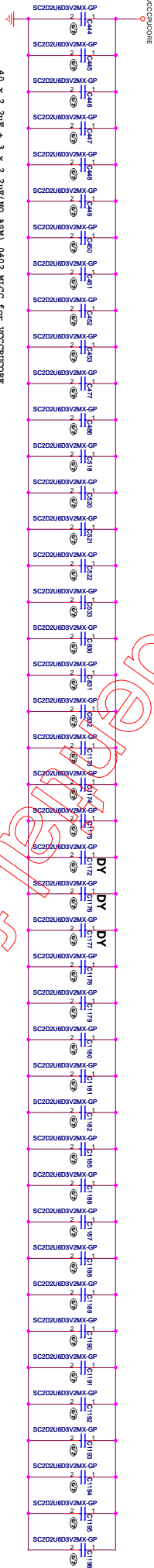
**Wistron Corporation**21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,  
Taipei Hsien 221, Taiwan, R.O.C.Title  
**VCCGFXCORE**Size  
A4 Document Number**Dasher-2**Rev  
**-1**

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3 x 10uF + 7 x 4.7uF 0603 MLCC (No ASM) for VCCCPUCORE



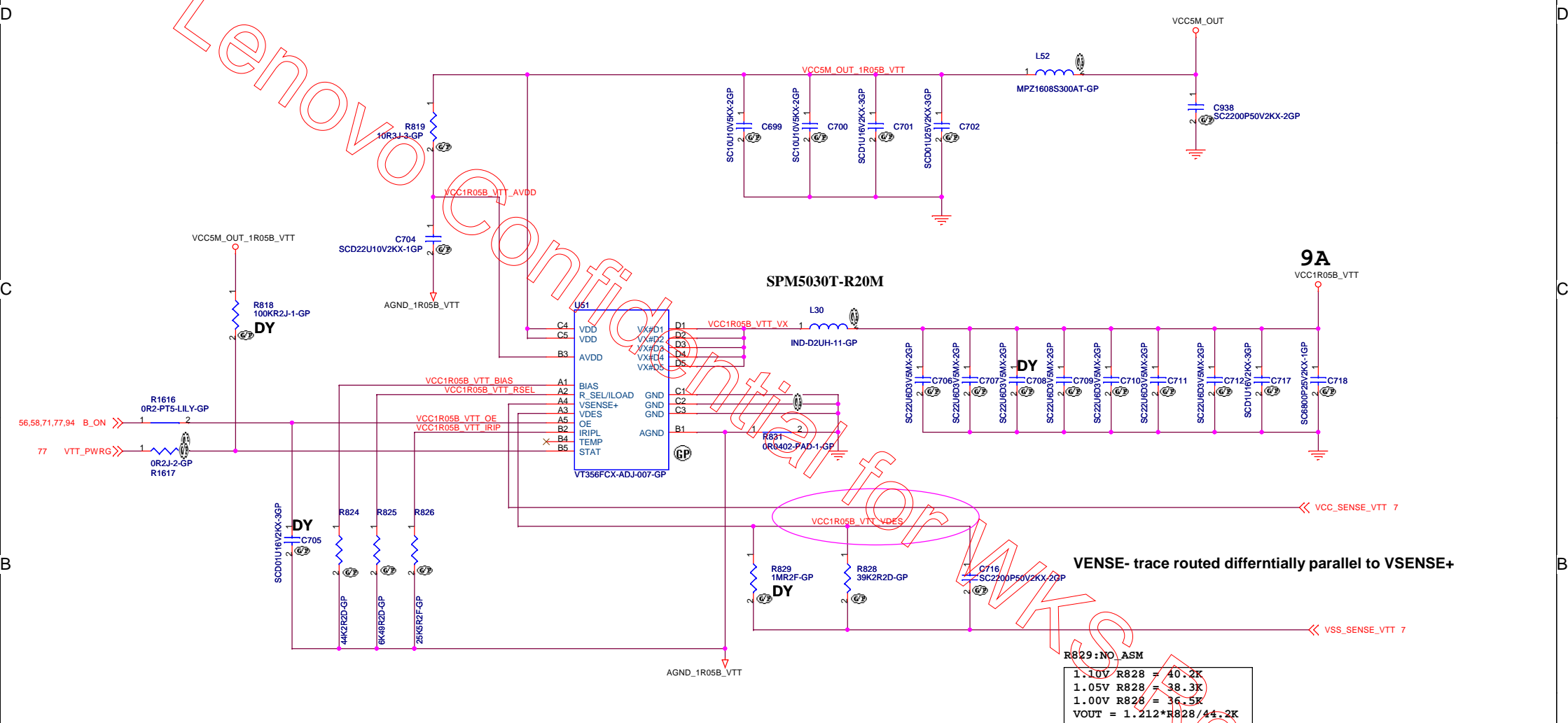
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| A3                               | Dasher-2        |   | -1  |
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Title

### DC-DC VCC1R05B\_VTT

Size

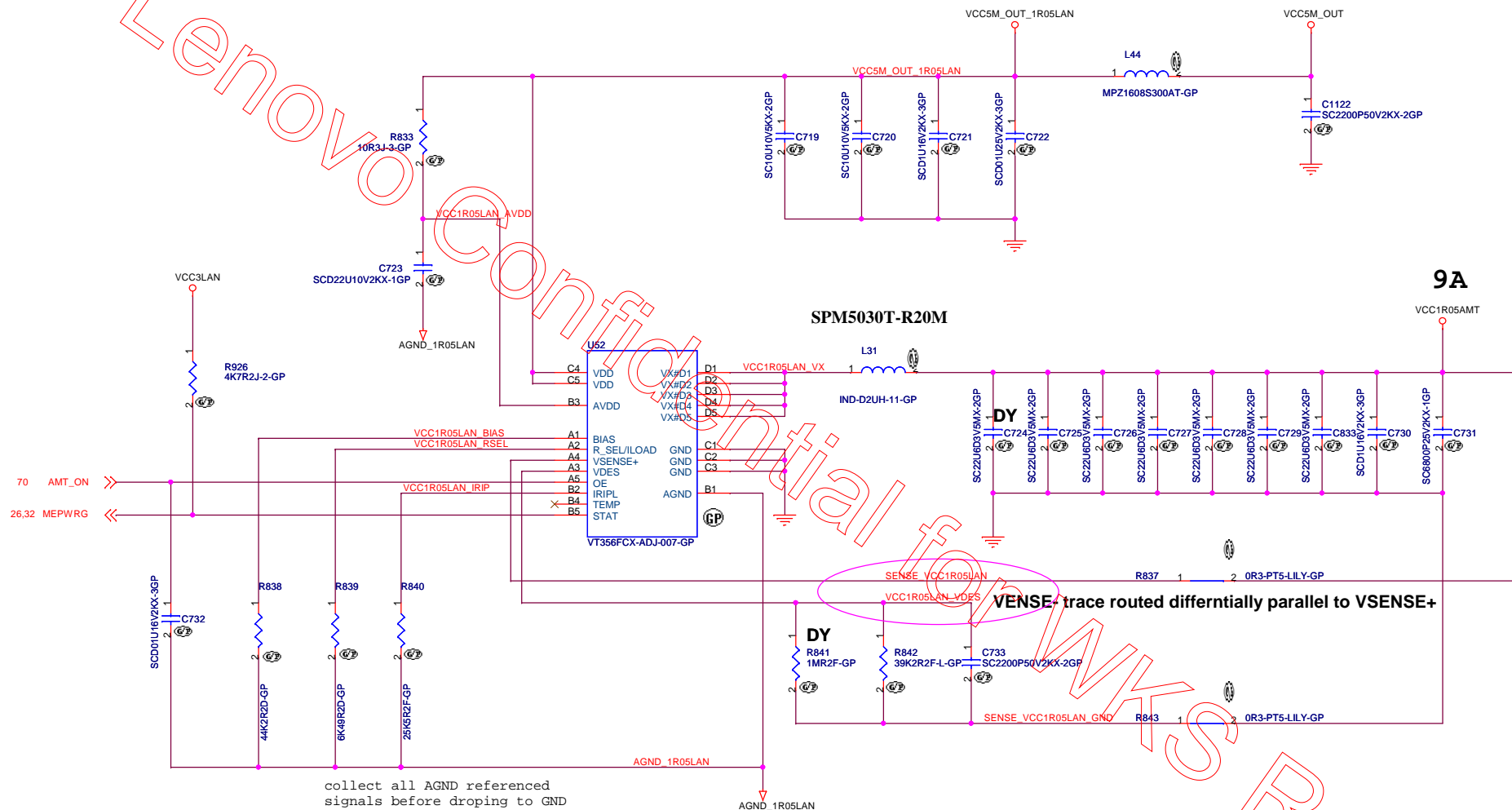
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## Dasher-2

Rev

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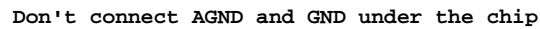
Sheet 83 of 101

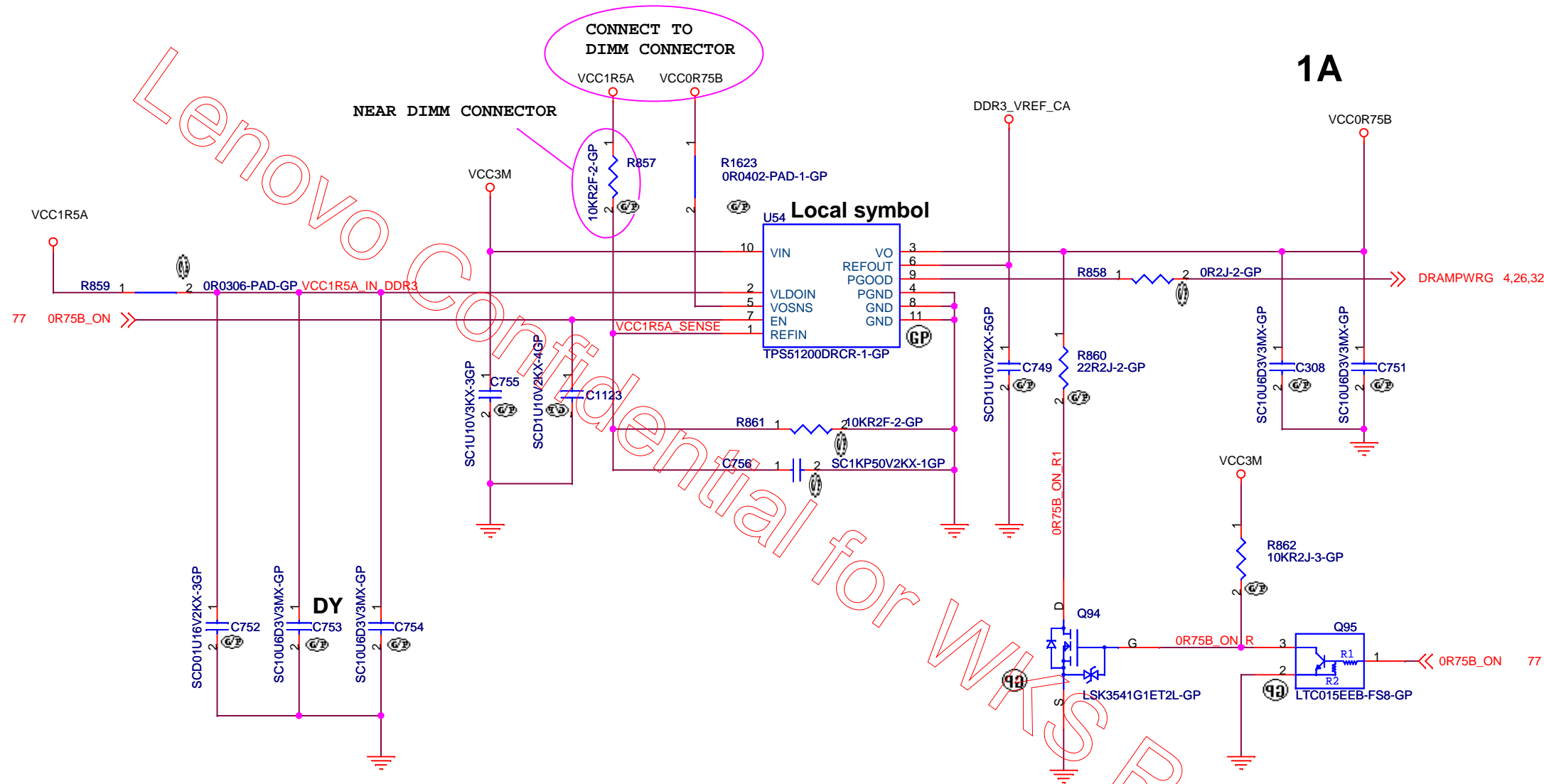


Don't connect AGND and GND under the chip










<Core Design>

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| Size<br>A4  | Document Number<br><b>Dasher-2</b> |   | Rev<br><b>-1</b> |
| Date:   | Friday, March 09, 2012             | Sheet 86 of 101   |                  |

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| Size<br>A4   | Document Number<br><b>Dasher-2</b> | Rev<br><b>-1</b> |
| Date: Tuesday, February 21, 2012   |                                    | Sheet 87 of 101  |

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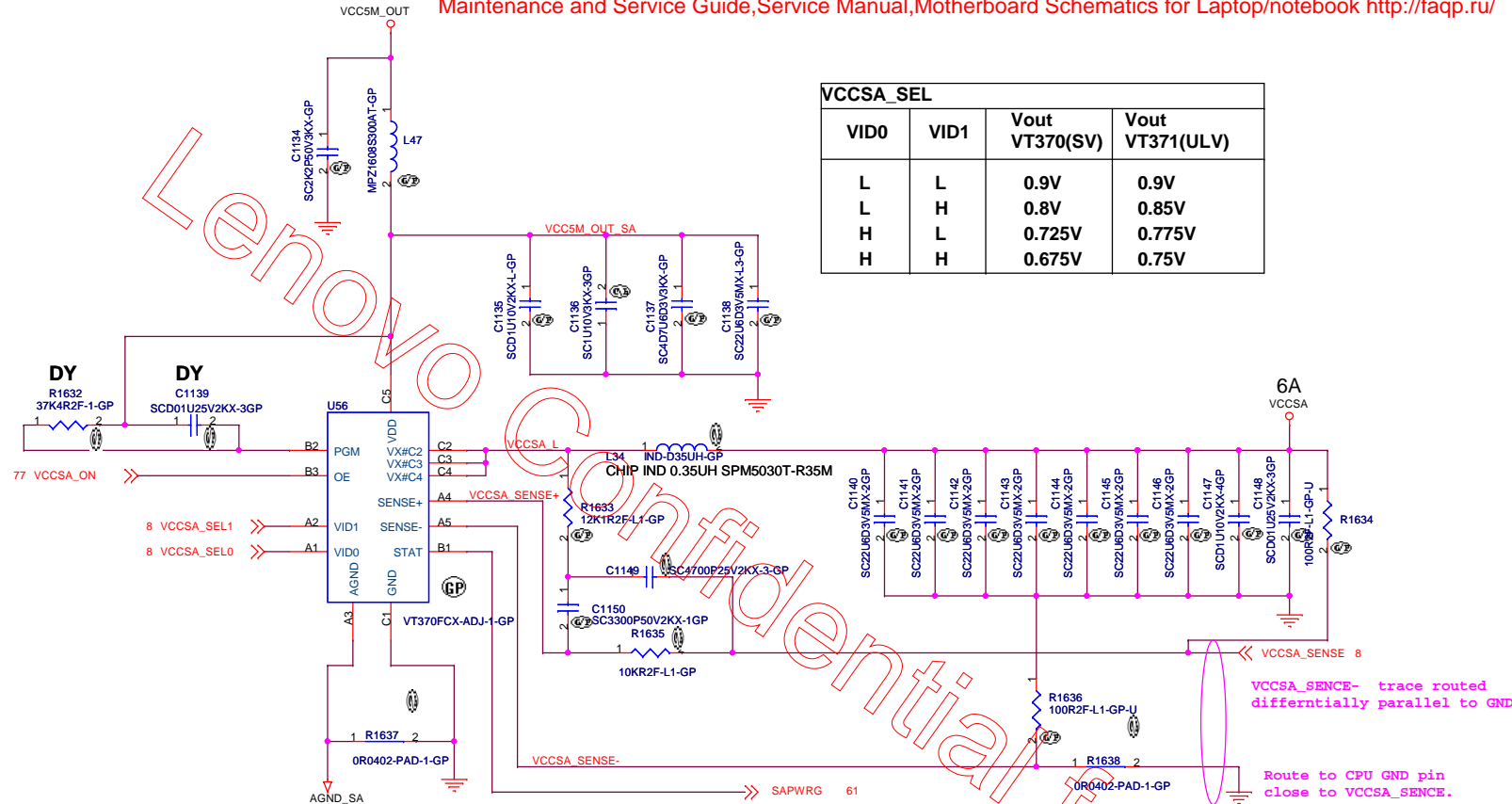
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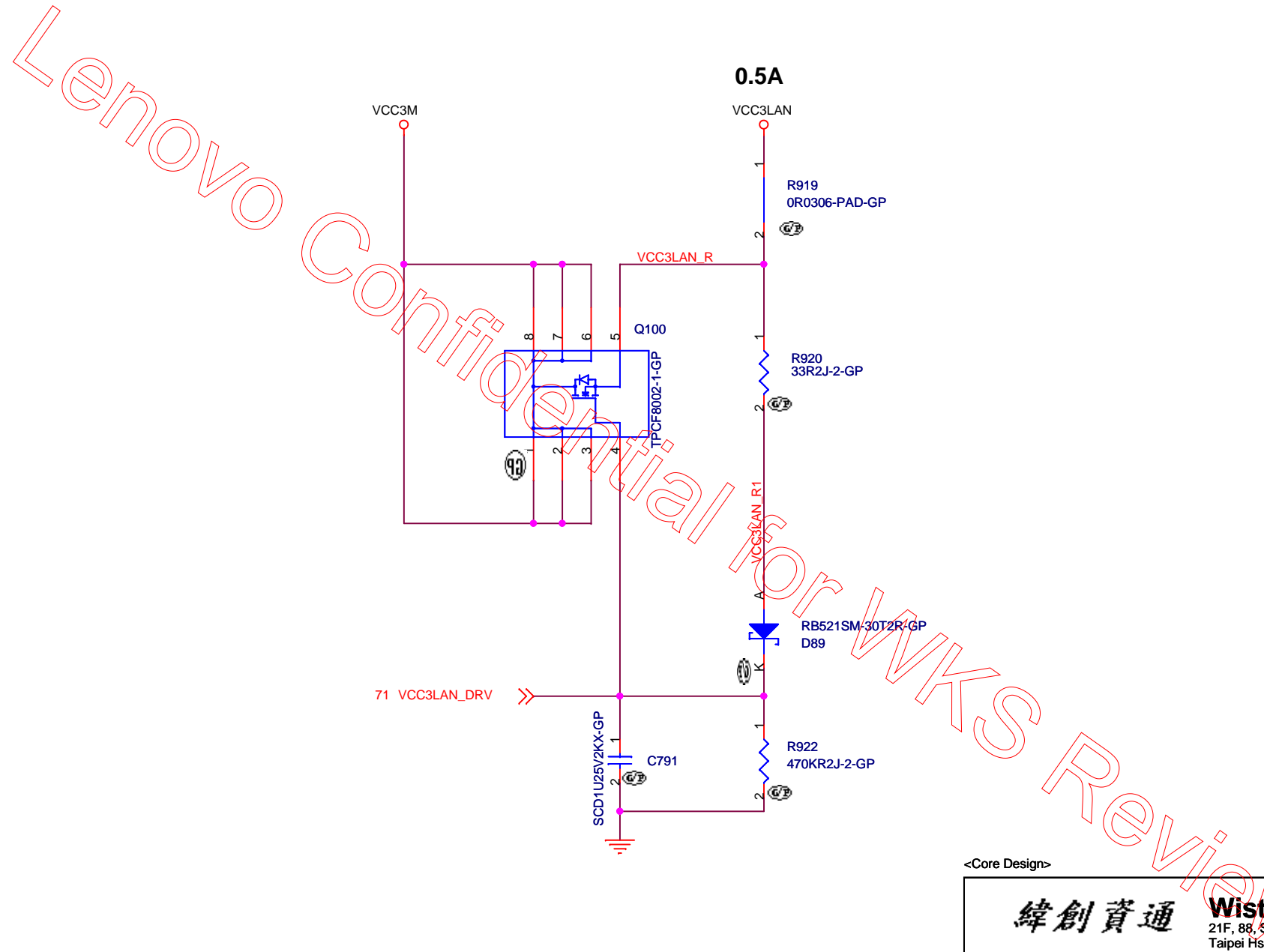
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| Size<br>A3  | Document Number        | <b>Dasher-2</b>   | Rev<br>-1 |
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**-1**

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| Date: Tuesday, February 21, 2012   |                                     | Sheet 92 of 101   |

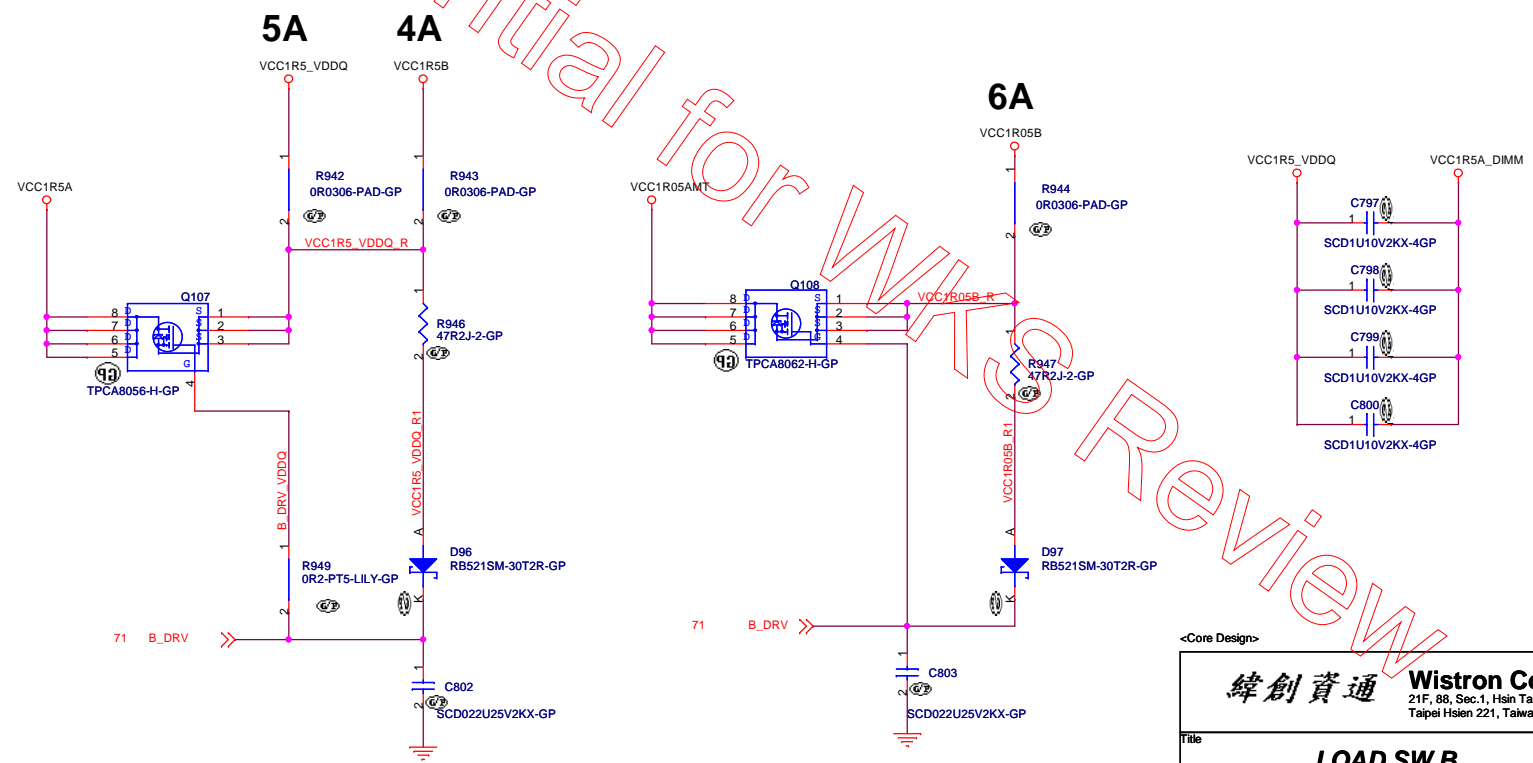
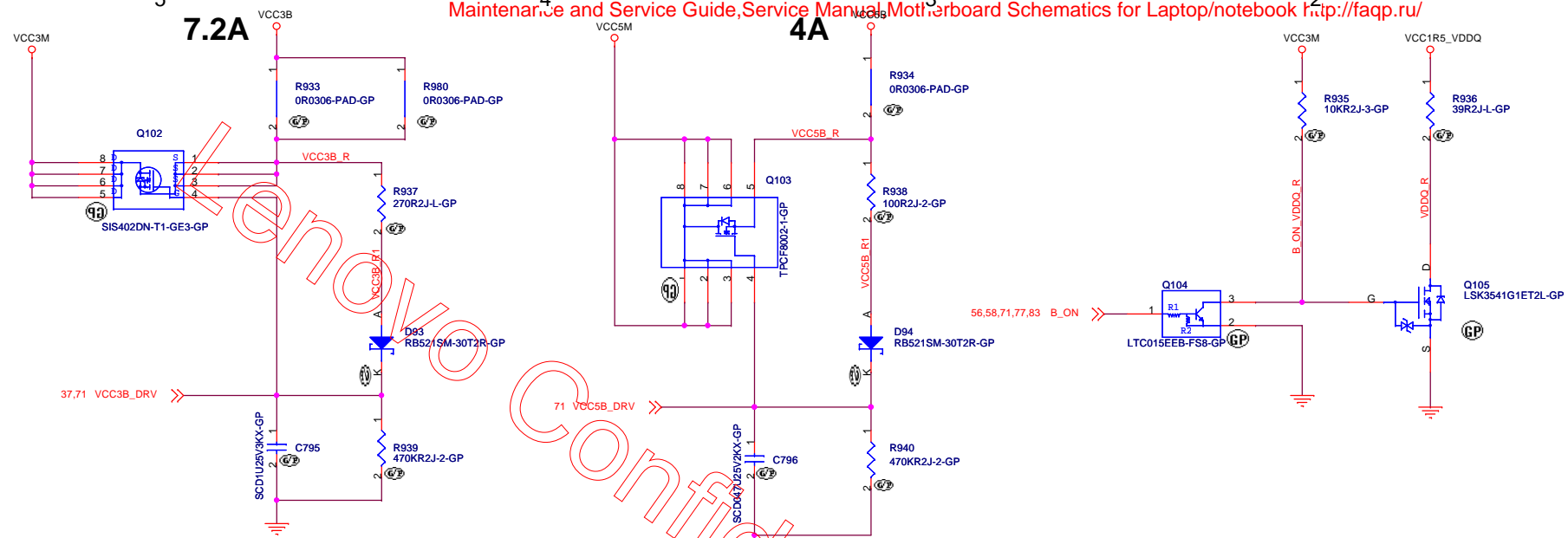


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| Size   | Document Number | Rev |
| A4   | Dasher-2        | -1  |
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| Document Number              |  | Dasher-2   |  |
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Document Number

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Rev  
**-1**

Date: Tuesday, February 21, 2012

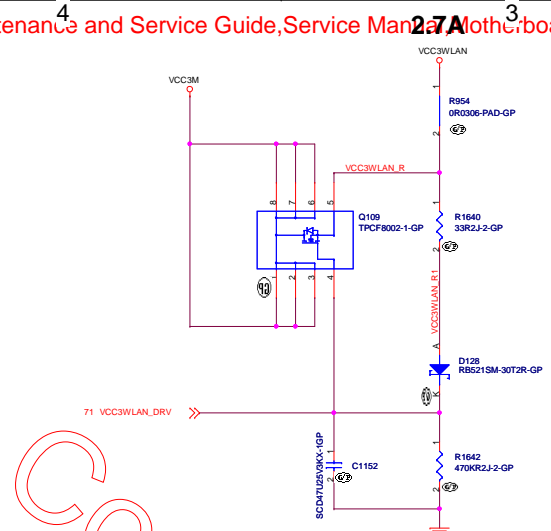
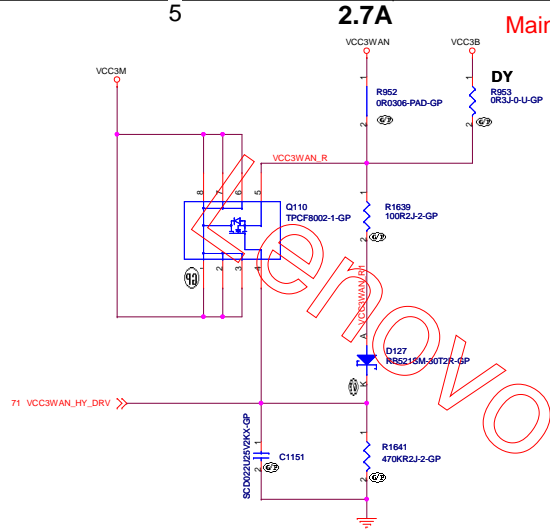
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C

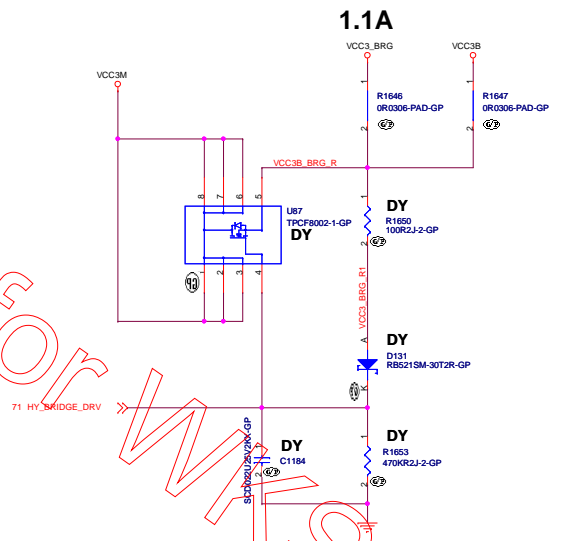
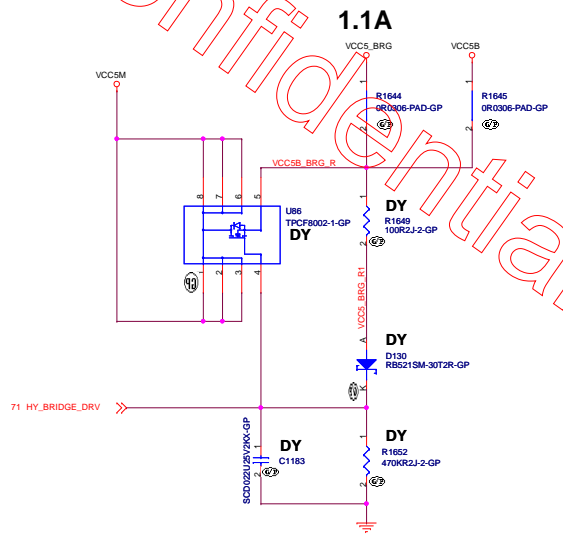
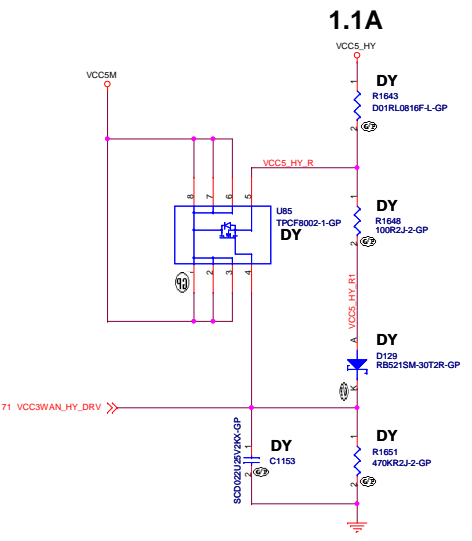
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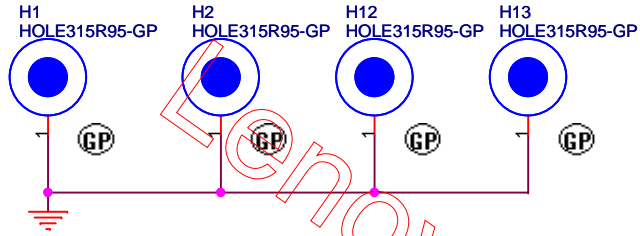


|           |     |     |     |     |
|-----------|-----|-----|-----|-----|
| AOAC      | YES | YES | No  | No  |
| Duplicity | YES | No  | YES | No  |
| Q110      | ASM | ASM | ASM | DY  |
| D127      | ASM | ASM | ASM | DY  |
| R1639     | ASM | ASM | ASM | DY  |
| R1641     | ASM | ASM | ASM | DY  |
| C1151     | ASM | ASM | ASM | DY  |
| R953      | DY  | DY  | DY  | ASM |

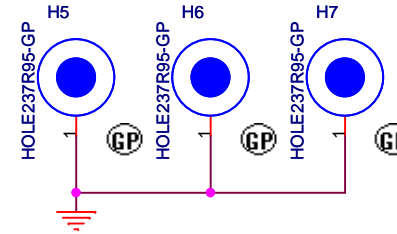
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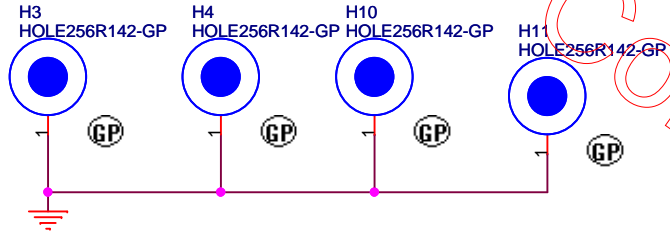
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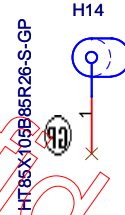
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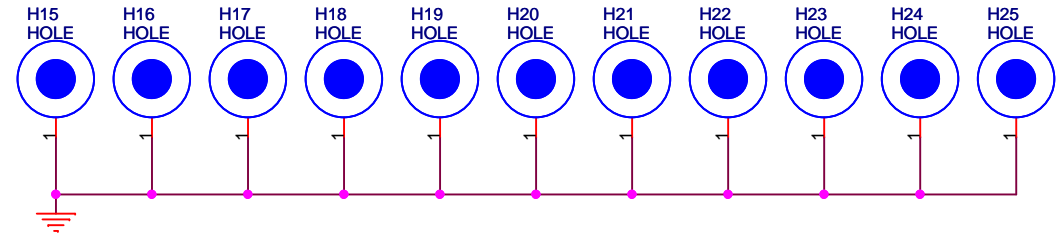
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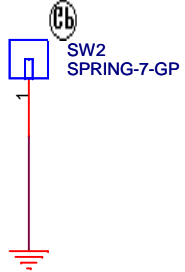


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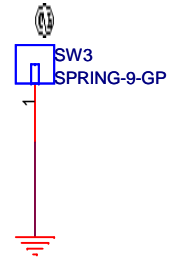
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GND pad for docking connector



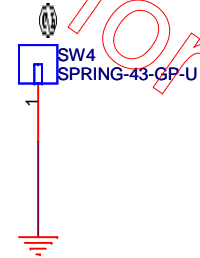
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GND pad for docking connector



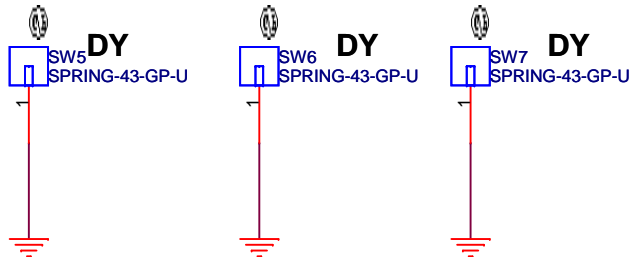
34.15J03.001

spring for EMI



34.15J03.001

spring for RF (SW5~SW7)



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Title

HOLES/GND/PADS

Size

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-1

Date: Tuesday, February 21, 2012

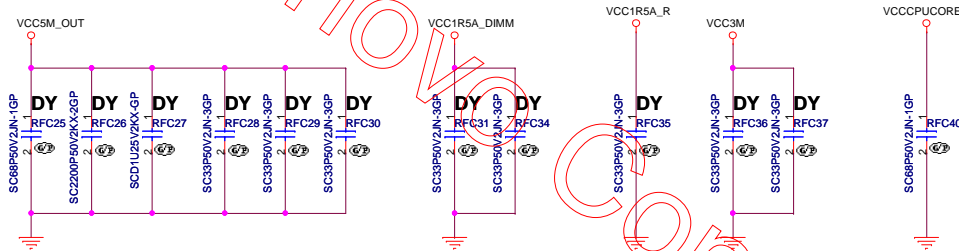
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| Page | Parts | LPM2.0   | LPM1.1   | Disable     |
|------|-------|----------|----------|-------------|
| 47   | U78   | ASM      | ASM      | DY          |
|      | U79   | ASM      | ASM      | DY          |
|      | U80   | ASM      | ASM      | DY          |
|      | U81   | ASM      | ASM      | DY          |
|      | C994  | ASM      | ASM      | DY          |
|      | C995  | ASM      | ASM      | DY          |
|      | C19   | ASM      | ASM      | DY          |
|      | R1366 | DY       | DY       | ASM         |
|      | R1367 | DY       | DY       | ASM         |
|      | R1368 | DY       | DY       | ASM         |
|      | R1369 | DY       | DY       | ASM         |
|      | R1370 | DY       | DY       | ASM         |
|      | R1371 | DY       | DY       | ASM         |
|      | R1372 | DY       | DY       | ASM         |
| 53   | U82   | ASM      | ASM      | DY          |
|      | R404  | DY       | DY       | ASM         |
|      | R405  | DY       | DY       | ASM         |
|      | R1374 | ASM      | ASM      | DY          |
|      | R1373 | DY       | DY       | ASM         |
| 61   | R1450 | DY       | DY       | ASM         |
|      | R1420 | ASM      | ASM      | DY          |
|      | R313  | ASM      | ASM      | DY          |
|      | R117  | DY       | DY       | ASM         |
| 62   | Q131  | ASM      | ASM      | DY          |
|      | D109  | ASM      | ASM      | DY          |
|      | R1441 | ASM      | ASM      | DY          |
|      | R1424 | ASM      | ASM      | DY          |
|      | R1452 | DY       | DY       | ASM         |
|      | R172  | ASM      | ASM      | DY          |
|      | R1453 | DY       | DY       | ASM         |
| 63   | Q19   | ASM      | ASM      | DY          |
| 64   | Q11   | DY       | DY       | DY          |
| 69   | U83   | ASM      | ASM      | DY          |
|      | U84   | ASM      | ASM      | DY          |
|      | R1463 | ASM      | ASM      | DY          |
|      | R1464 | ASM      | ASM      | DY          |
|      | R1466 | ASM      | ASM      | DY          |
|      | R1468 | ASM      | ASM      | DY          |
|      | R901  | DY       | DY       | Ref to P101 |
|      | R930  | DY       | DY       | Ref to P101 |
|      | R536  | DY       | DY       | Ref to P101 |
|      | R539  | DY       | DY       | Ref to P101 |
|      | C1020 | ASM      | ASM      | DY          |
|      | D111  | Ref P101 | Ref P101 | DY          |
|      | U42   | ASM      | ASM      | Ref to P101 |
|      | Q47   | ASM      | ASM      | Ref to P101 |
|      | R617  | ASM      | ASM      | Ref to P101 |
|      | C524  | ASM      | ASM      | Ref to P101 |
|      | Q48   | ASM      | ASM      | Ref to P101 |

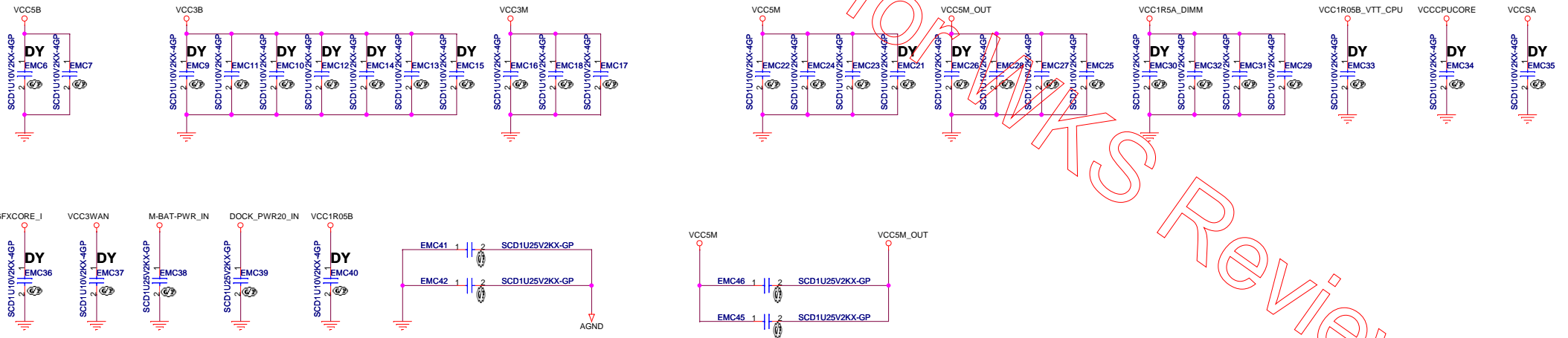
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| Size<br>A3              | Document Number            | <b>Dasher-2</b>  | Rev<br>-1 |
| Date:                   | Tuesday, February 28, 2012 | Sheet 98 of  | 101       |

# RF decoupling caps

named as RFCxxx



## Long power trace EMI decoupling caps



<Core Design>

緯創資通

**Wistron Corporation**  
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Title **EMI DECOUPLING**

Size Document Number **Dasher-2** Rev **-1**

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|                    |  | SV  |              | ULV          |  |
|--------------------|--|-----|--------------|--------------|--|
| Master IC          |  | U48 | VT1318M      | VT1318M      |  |
| # of slave for CPU |  | 2   |              | 3            |  |
| Slave for CPU      |  | U47 | VT1324S      | VT1324S      |  |
| Inductor for CPU   |  | U49 | VT1324S      | no stuff     |  |
|                    |  | L28 | BFW10040     | no stuff     |  |
|                    |  | L14 | no stuff     | MPCH0730LR12 |  |
| # of slave for GPU |  | U50 | VT1324S      | 1            |  |
| Slave for GPU      |  | L29 | MPCH0730LR12 | VT1324S      |  |
| Inductor for GPU   |  |     |              | MPCH0730LR12 |  |

|          |        |       | SV   |      | ULV   |      |
|----------|--------|-------|------|------|-------|------|
| R_SEL[0] | pin 38 | R1574 | 715  | 0.5% | 280   | 1.0% |
| R_SEL[1] | pin 37 | R1575 | 887  | 0.5% | 825   | 0.5% |
| R_SEL[2] | pin 36 | R1576 | 0    | 5.0% | 0     | 5.0% |
| R_SEL[3] | pin 35 | R1577 | 196  | 0.5% | 196   | 0.5% |
| R_SEL[4] | pin 44 | R1571 | 825  | 0.5% | 825   | 0.5% |
| R_SEL[5] | pin 32 | R1579 | 475  | 1.0% | 402   | 0.5% |
| R_SEL[6] | pin 48 | R1567 | 21.5 | 1.0% | 21.5  | 1.0% |
| R_REF    | pin 34 | R1578 | 20K  | 0.5% | 20K   | 0.5% |
| ROSC     | pin 39 | R1572 | 75K  | 1.0% | 61.9K | 1.0% |

|              |                 | SV    |          | ULV  |          |      |
|--------------|-----------------|-------|----------|------|----------|------|
| LL_R1_CPU    | pin 15 - pin 16 | R1599 | 10K      | 0.5% | 10K      | 0.5% |
| LL_R2_CPU    | pin 16 - pin 17 | R1600 | 20K      | 0.5% | 7.5K     | 0.5% |
|              | pin 16 - pin 17 | R1601 | 787      | 1.0% | 453      | 1.0% |
| LL_C1_CPU    | pin 15 - pin 16 | C1086 | 56pF     |      | 33pF     |      |
| LL_C2_CPU    | pin 16 - pin 17 | C1087 | 22pF     |      | 22pF     |      |
| LL_RLEAD_CPU | pin 15 - pin 16 | R1595 | 30.1K    | 1.0% | 15K      | 1.0% |
| LL_CLEAD_CPU | pin 15 - pin 16 | C1091 | 220pF    |      | 680pF    |      |
| LL_RLAG_CPU  | pin 16 - pin 17 | R1596 | no stuff |      | no stuff |      |
| LL_CLAG_CPU  | pin 16 - pin 17 | C1092 | no stuff |      | no stuff |      |
| RDES_CPU     | pin 17 - pin 18 | R1592 | 845      | 0.5% | 487      | 0.5% |
| RINT_CPU     | pin 18 - pin 19 | R1593 | 1.3K     | 1.0% | 2.74K    | 1.0% |
| CINT_CPU     | pin 18 - pin 19 | C1088 | 4700PF   |      | 3300pF   |      |
| RPH11        | IPH1_1 - pin 18 | R1598 | 499      | 1.0% | 750      | 1.0% |
| RPH12        | IPH1_2 - pin 18 | R1594 | 499      | 1.0% | no stuff | 1.0% |
| IPHF11_R     | pin 11          | R1582 | 1.96K    | 1.0% | 1.96K    | 1.0% |
| IPHF11_C     | pin 11          | C1076 | 10pF     |      | no stuff | 1.0% |
| IPHF12_R     | pin 10          | R1581 | 1.96K    | 1.0% | no stuff | 1.0% |
| IPHF12_C     | pin 10          | C1075 | 10pF     |      | no stuff | 1.0% |
| R_MRAMP1     | pin 12          | R1584 | 15.8K    | 1.0% | 13K      | 1.0% |
| R_MRAMP1_PU  | pin 12          | R1587 | 60.4K    | 1.0% | 43.2K    | 1.0% |
| R_PWM2       | Pin 6           | R4    | no stuff |      | 0        | 5.0% |
|              |                 |       |          |      |          |      |
| LL_R1_GPU    | pin 24 - pin 23 | R1609 | 10K      | 0.5% | 10K      | 0.5% |
| LL_R2_GPU    | pin 23 - pin 22 | R1610 | 7.5K     | 0.5% | 7.87K    | 0.5% |
|              | pin 23 - pin 22 | R1611 | 237      | 1.0% | 0        | 5.0% |
| LL_C1_GPU    | pin 24 - pin 23 | C1094 | 22pF     |      | 22pF     |      |
| LL_C2_GPU    | pin 23 - pin 22 | C1095 | 22pF     |      | 22pF     |      |
| LL_RLEAD_GPU | pin 24 - pin 23 | R1606 | 30K      | 1.0% | 30K      | 1.0% |
| LL_CLEAD_GPU | pin 24 - pin 23 | C1097 | 1200pF   |      | 1000pF   |      |
| LL_RLAG_GPU  | pin 23 - pin 22 | R1607 | no stuff |      | no stuff |      |
| LL_CLAG_GPU  | pin 23 - pin 22 | C1098 | no stuff |      | no stuff |      |
| RDES_GPU     | pin 22 - pin 21 | R1604 | 665      | 0.5% | 665      | 0.5% |
| RINT_GPU     | pin 21 - pin 20 | R1605 | 3.24K    | 1.0% | 3.24K    | 1.0% |
| CINT_GPU     | pin 21 - pin 20 | C1096 | 10nF     |      | 10nF     |      |
| RPH21        | IPH2_1 - pin 21 | R1608 | 1K       | 1.0% | 1K       | 1.0% |
| IPHF21_R     | pin 28          | R1580 | 1.96K    | 1.0% | 1.96K    | 1.0% |
| IPHF21_C     | pin 28          | C1077 | no stuff |      | no stuff |      |
| R_MRAMP2     | pin 27          | R1586 | 15.4K    | 1.0% | 15.4K    | 1.0% |
| R_MRAMP2_PU  | pin 27          | R1590 | 56.2K    | 1.0% | 56.2K    | 1.0% |

## Vcore Coutput

|       |       | SV   |       | ULV  |  |
|-------|-------|------|-------|------|--|
| C687  | 22uF  | 0805 | 22uF  | 0805 |  |
| C669  | 22uF  | 0603 | 22uF  | 0603 |  |
| C671  | 22uF  | 0603 | 22uF  | 0603 |  |
| C673  | 4.7uF | 0603 | 22uF  | 0603 |  |
| C675  | 22uF  | 0603 | 22uF  | 0603 |  |
| C676  | 22uF  | 0603 | 22uF  | 0603 |  |
| C678  | 22uF  | 0603 | 22uF  | 0603 |  |
| C695  | 4.7uF | 0603 | 22uF  | 0603 |  |
| C681  | 4.7uF | 0603 | 22uF  | 0603 |  |
| C682  | 4.7uF | 0603 | 22uF  | 0603 |  |
| C683  | 22uF  | 0603 | 22uF  | 0603 |  |
| C750  | 22uF  | 0603 | 22uF  | 0603 |  |
| C686  | 22uF  | 0603 | 22uF  | 0603 |  |
| C691  | 22uF  | 0603 | 22uF  | 0603 |  |
| C670  | 22uF  | 0603 | 22uF  | 0603 |  |
| C694  | 22uF  | 0603 | 22uF  | 0603 |  |
| C698  | 4.7uF | 0603 | 22uF  | 0603 |  |
| C1112 | 22uF  | 0603 | 22uF  | 0603 |  |
| C1113 | 22uF  | 0603 | 22uF  | 0603 |  |
| C672  | 22uF  | 0603 | 22uF  | 0603 |  |
| C1157 | 22uF  | 0603 | 22uF  | 0603 |  |
| C674  | 22uF  | 0603 | 22uF  | 0603 |  |
| C1160 | 22uF  | 0603 | 22uF  | 0603 |  |
| C689  | 22uF  | 0603 | 22uF  | 0603 |  |
| C1167 | 22uF  | 0603 | 22uF  | 0603 |  |
| C680  | 22uF  | 0603 | 22uF  | 0603 |  |
| C679  | 4.7uF | 0603 | 10uF  | 0603 |  |
| C677  | 4.7uF | 0603 | 10uF  | 0603 |  |
| C1156 | 4.7uF | 0603 | 10uF  | 0603 |  |
| C684  | 10uF  | 0603 | 10uF  | 0603 |  |
| C693  | 4.7uF | 0603 | 10uF  | 0603 |  |
| C1159 | 10uF  | 0603 | 10uF  | 0603 |  |
| C692  | 10uF  | 0603 | 10uF  | 0603 |  |
| C1158 | 4.7uF | 0603 | 10uF  | 0603 |  |
| C1161 | 4.7uF | 0603 | 10uF  | 0603 |  |
| C1162 | 4.7uF | 0603 | 10uF  | 0603 |  |
| C690  | N/A   | 0603 | N/A   | 0603 |  |
| C1109 | N/A   | 0603 | N/A   | 0603 |  |
| C1110 | N/A   | 0603 | N/A   | 0603 |  |
| C1111 | N/A   | 0603 | N/A   | 0603 |  |
| C1163 | N/A   | 0603 | N/A   | 0603 |  |
| C1164 | 22uF  | 0603 | N/A   | 0603 |  |
| C1165 | N/A   | 0603 | N/A   | 0603 |  |
| C1166 | 22uF  | 0603 | N/A   | 0603 |  |
| C1168 | N/A   | 0603 | N/A   | 0603 |  |
| C1169 | 22uF  | 0603 | N/A   | 0603 |  |
| C444  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C445  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C446  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C447  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C448  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C449  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C450  | 2.2uF | 0402 | N/A   | 0402 |  |
| C451  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C452  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C453  | 2.2uF | 0402 | 2.2uF | 0402 |  |

|       |       | SV   |       | ULV  |  |
|-------|-------|------|-------|------|--|
| C477  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C486  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C518  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C520  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C521  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C522  | 2.2uF | 0402 | N/A   | 0402 |  |
| C533  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C830  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C831  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C832  | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1172 | N/A   | 0402 | N/A   | 0402 |  |
| C1173 | 2.2uF | 0402 | N/A   | 0402 |  |
| C1174 | 2.2uF | 0402 | N/A   | 0402 |  |
| C1175 | 2.2uF | 0402 | N/A   | 0402 |  |
| C1176 | N/A   | 0402 | N/A   | 0402 |  |
| C1177 | N/A   | 0402 | N/A   | 0402 |  |
| C1178 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1179 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1180 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1181 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1182 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1185 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1186 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1187 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1188 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1189 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1190 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1191 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1192 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1193 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1194 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1195 | 2.2uF | 0402 | 2.2uF | 0402 |  |
| C1196 | 2.2uF | 0402 | 2.2uF | 0402 |  |

&lt;Core Design&gt;

|      |                         |  |            |
|------|-------------------------|--|------------|
| 緯創資通 |                         | Wistron Corporation  |            |
|      |                         | 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C. |            |
| File |                         | VT1318M TABLE  |            |
| Size | Document Number         | Dasher-2   | Rev        |
| A2   |                         |  | -1         |
| Date | Tuesday, March 06, 2012 | Sheet  | 100 of 101 |



| Config          | Capability |     |     |     |     |     |     |    |     |     |     |     |
|-----------------|------------|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
|                 | 1          | 2   | 3   | 4   | 5   | 6   | 7   | 8  | 9   | 10  | 11  | 12  |
| AOAC            | Yes        | Yes | Yes | Yes | No  | No  | No  | No | Yes | No  | Yes | No  |
| Anti-Theft      | Yes        | Yes | No  | No  | Yes | Yes | No  | No | Yes | Yes | No  | No  |
| External EEPROM | Yes        | No  | Yes | No  | Yes | No  | Yes | No | Yes | Yes | Yes | Yes |
| Duplicity       | No         | No  | No  | No  | No  | No  | No  | No | Yes | Yes | Yes | Yes |
| U66             | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| U67             | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| C864            | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R978            | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R929            | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R901            | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R930            | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R1462           | ASM        | ASM | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| Q14             | ASM        | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| Q48             | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| R624            | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| R536            | DY         | DY  | DY  | DY  | ASM | ASM | DY  | DY | DY  | DY  | DY  | DY  |
| R539            | DY         | DY  | DY  | DY  | ASM | ASM | DY  | DY | DY  | DY  | DY  | DY  |
| U42             | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| Q47             | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| R617            | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| C524            | ASM        | DY  | ASM | DY  | ASM | DY  | ASM | DY | ASM | ASM | ASM | ASM |
| D111            | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | DY  | DY  |
| R1463           | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| R1464           | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| U83             | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| U84             | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| C1020           | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| R1466           | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |
| R1468           | DY         | DY  | DY  | DY  | DY  | DY  | DY  | DY | ASM | ASM | ASM | ASM |

Logic

|                        |   |   |   |   |
|------------------------|---|---|---|---|
| Duplicity              | Y | Y | N | N |
| Battery Authentication | Y | N | Y | N |
| --> External EEPROM    | Y | Y | Y | N |

Logic

&lt;Core Design&gt;

緯創資通

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

|                                  |                                    |                  |
|----------------------------------|------------------------------------|------------------|
| Size<br>A3                       | Document Number<br><b>Dasher-2</b> | Rev<br><b>-1</b> |
| Date: Tuesday, February 21, 2012 | Sheet 101 of 101                   |                  |