
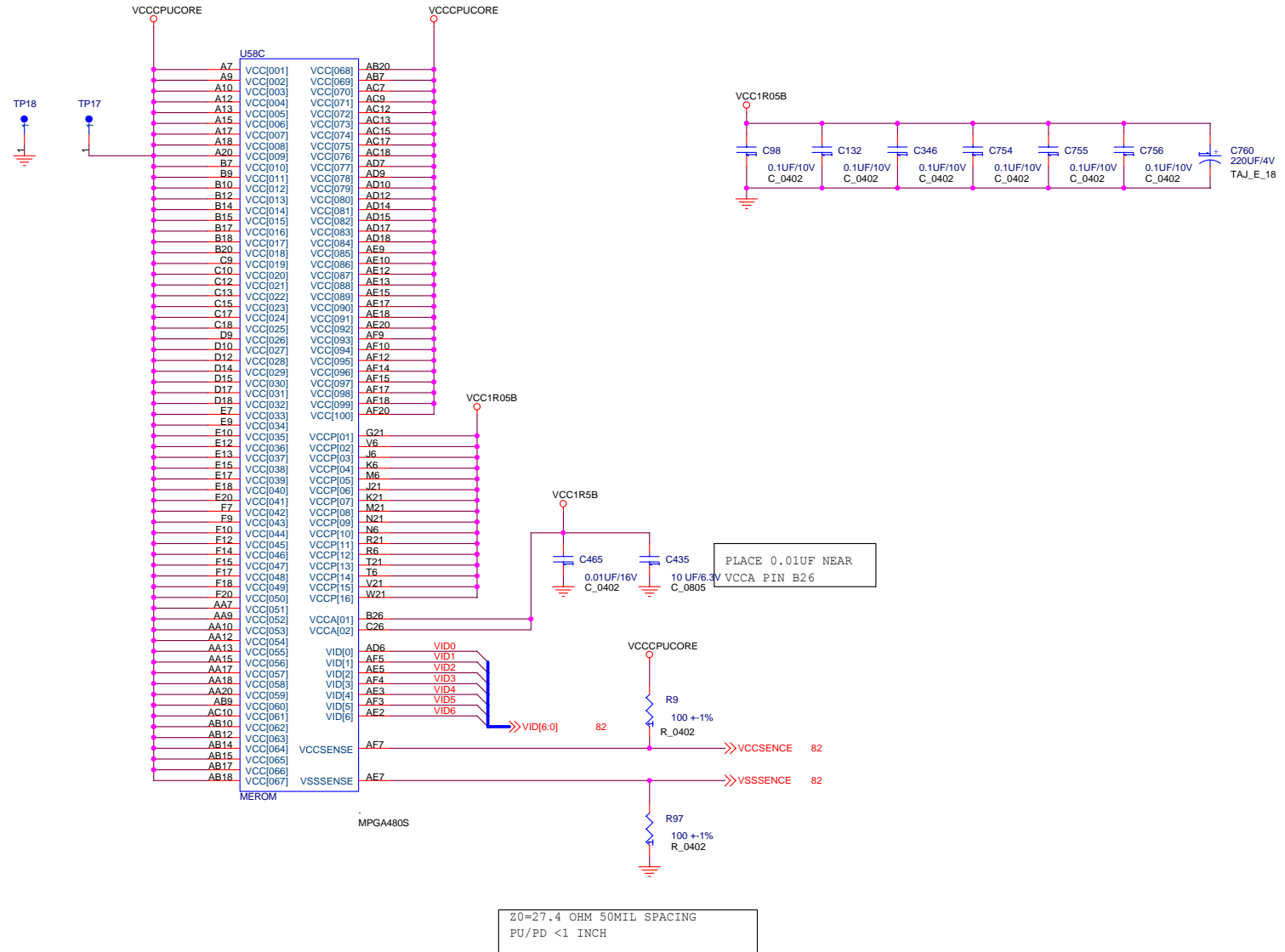


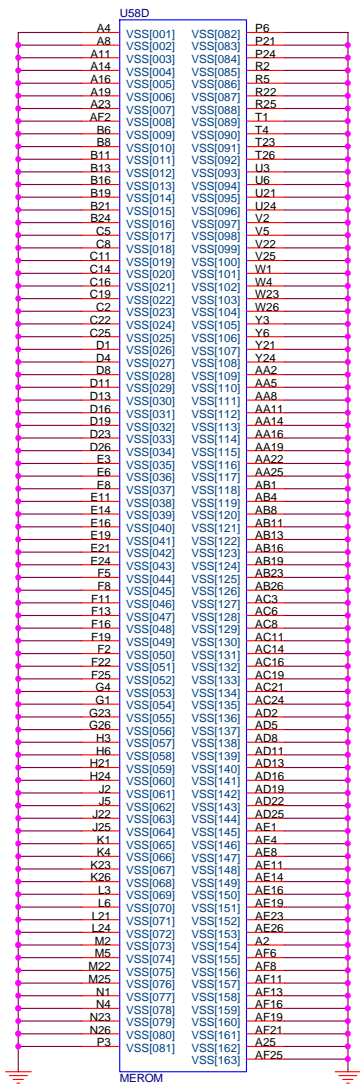
| | | |
|--|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | BLOCK DIAGRAM |
| | | sheet 1 of 100 |
| | | Wednesday, February 14, 2007 |

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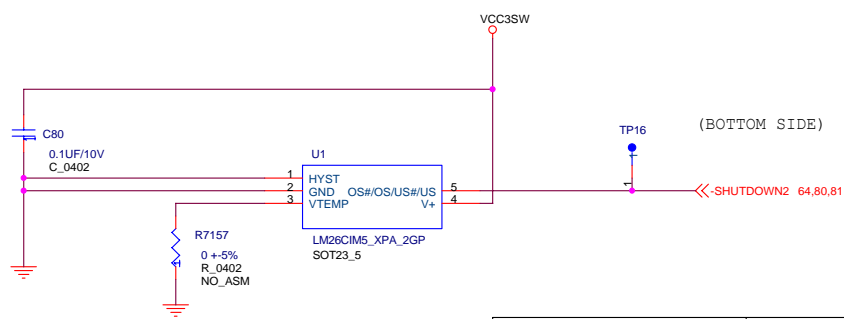
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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | EC HISTORY |
| | | sheet 2 of 100 Wednesday, February 14, 2007 |



| | | |
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| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | CPU MEROM-2(Power,GND) |
| | | sheet 4 of 100 Wednesday, February 14, 2007 |

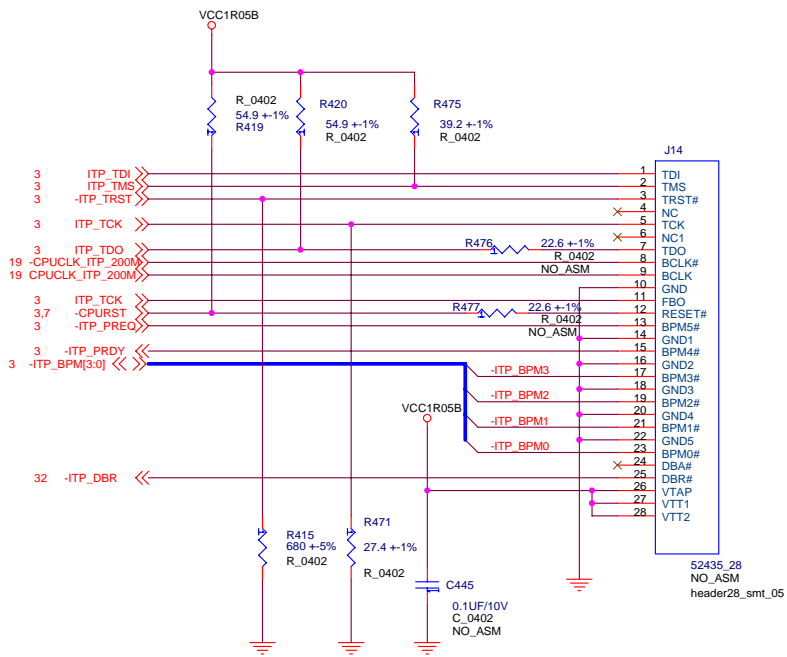


MPGA480S



| | |
|------------------------------|----------------|
| U1 | R7157 |
| NS LM26 MAXIM MAX6519 | NOASM NOASM |
| MAXIM MAX6501 ADI ADT6501 | ASM ASM |

| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | CPU-3 |
| | | sheet 5 of 100 |
| | | Wednesday, February 14, 2007 |

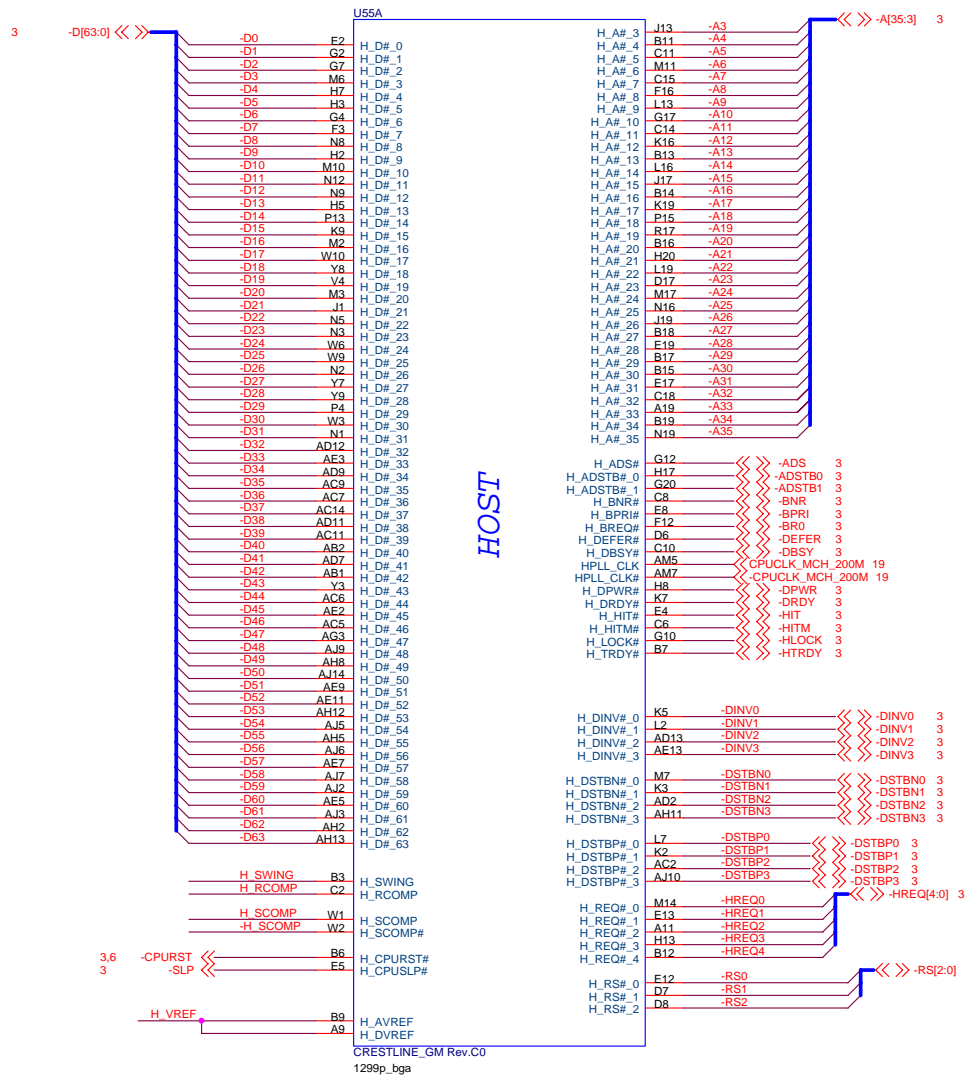


| REF DES | FOR ITP700FLEX | FOR ITP-->XDP |
|---------|----------------|-------------------|
| J4 | NO_ASM---->ASM | NO_ASM---->ASM |
| C445 | ASM---->ASM | ASM---->ASM |
| R717 | ASM(NO CHANGE) | ASM---->51 5% ASM |
| R476 | ASM---->ASM | ASM---->ASM |
| R477 | ASM---->ASM | ASM---->1K 5% ASM |
| R415 | ASM(NO CHANGE) | ASM(NO CHANGE) |
| R419 | ASM(NO CHANGE) | ASM-->NO_ASM |
| R420 | ASM(NO CHANGE) | ASM(NO CHANGE) |
| R471 | ASM(NO CHANGE) | ASM---->51 5% ASM |
| R475 | ASM(NO CHANGE) | ASM---->51 5% ASM |

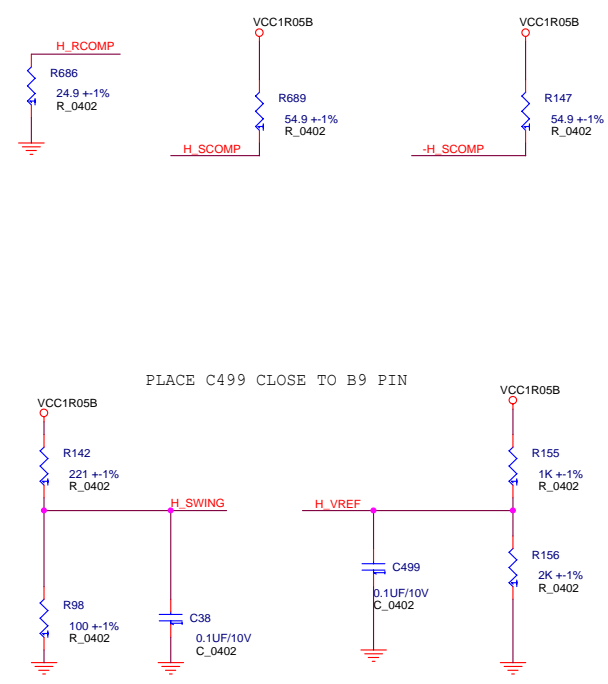
NOTE: C445,R476 AND R477 "ASM" BEFORE SIT, "NO_ASM" FROM SIT.

(*1) TCK SIGNAL IS BRANCHED AT YONAH PIN
 (*2) -CPURST SIGNAL IS BRANCHED AT CRESTLINE PIN

| | | |
|--|-------------|--|
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| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | ITP CONN |
| | | sheet 6 of 100 Wednesday, February 14, 2007 |

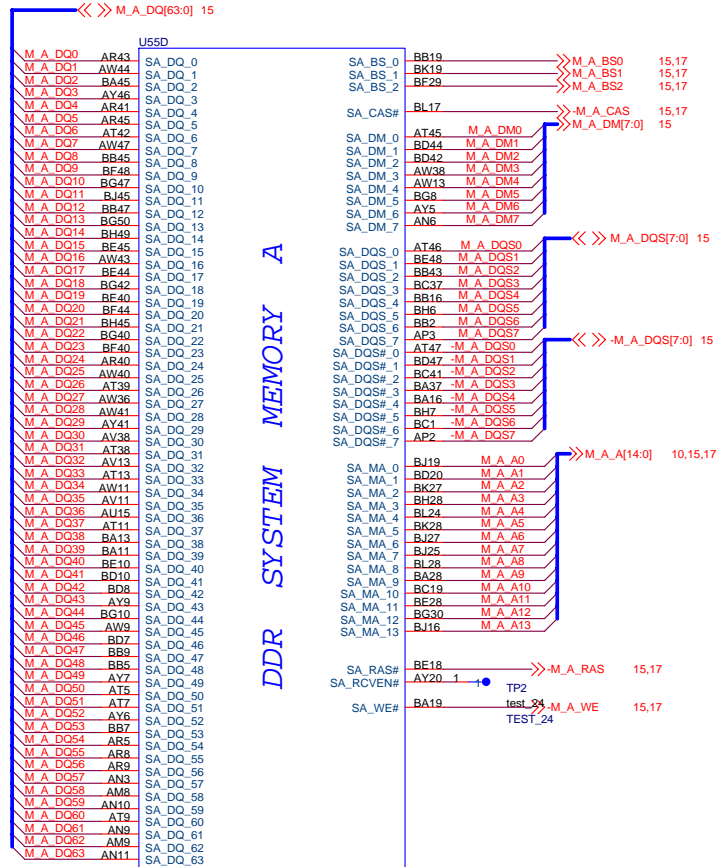


CRESTLINE_GM Rev.C0
1299p_bga



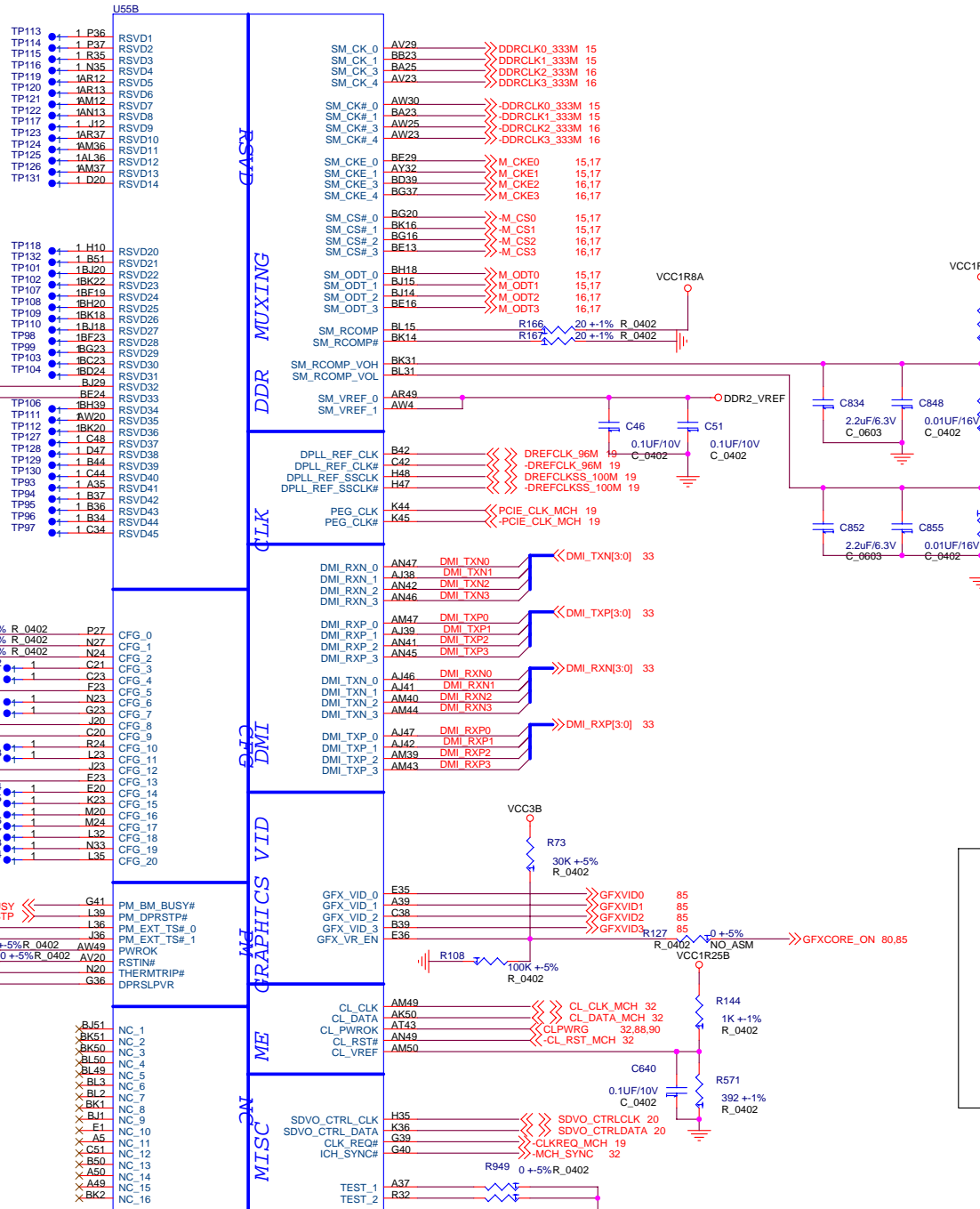
PLACE C499 CLOSE TO B9 PIN

| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No . XXXXXX |
| CLASS | CHUJUO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | NB 965GM-1(HOST CFG) |
| sheet 7 of 100 | | Wednesday, February 14, 2007 |

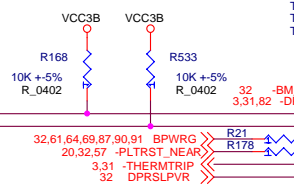
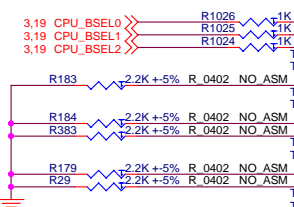


CRESTLINE_GM Rev.C0
1299p_bga

| | | |
|---|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | 965 DDR2-A |
| | | sheet 8 of 100 |
| | | Wednesday, February 14, 2007 |



15,17 M.A_A14
16,17 M.B_A14



| | BSEL2 | BSEL1 | BSEL0 |
|------|-------|-------|-------|
| 533M | 0 | 0 | 1 |
| 667M | 0 | 1 | 1 |
| 800M | 0 | 1 | 0 |

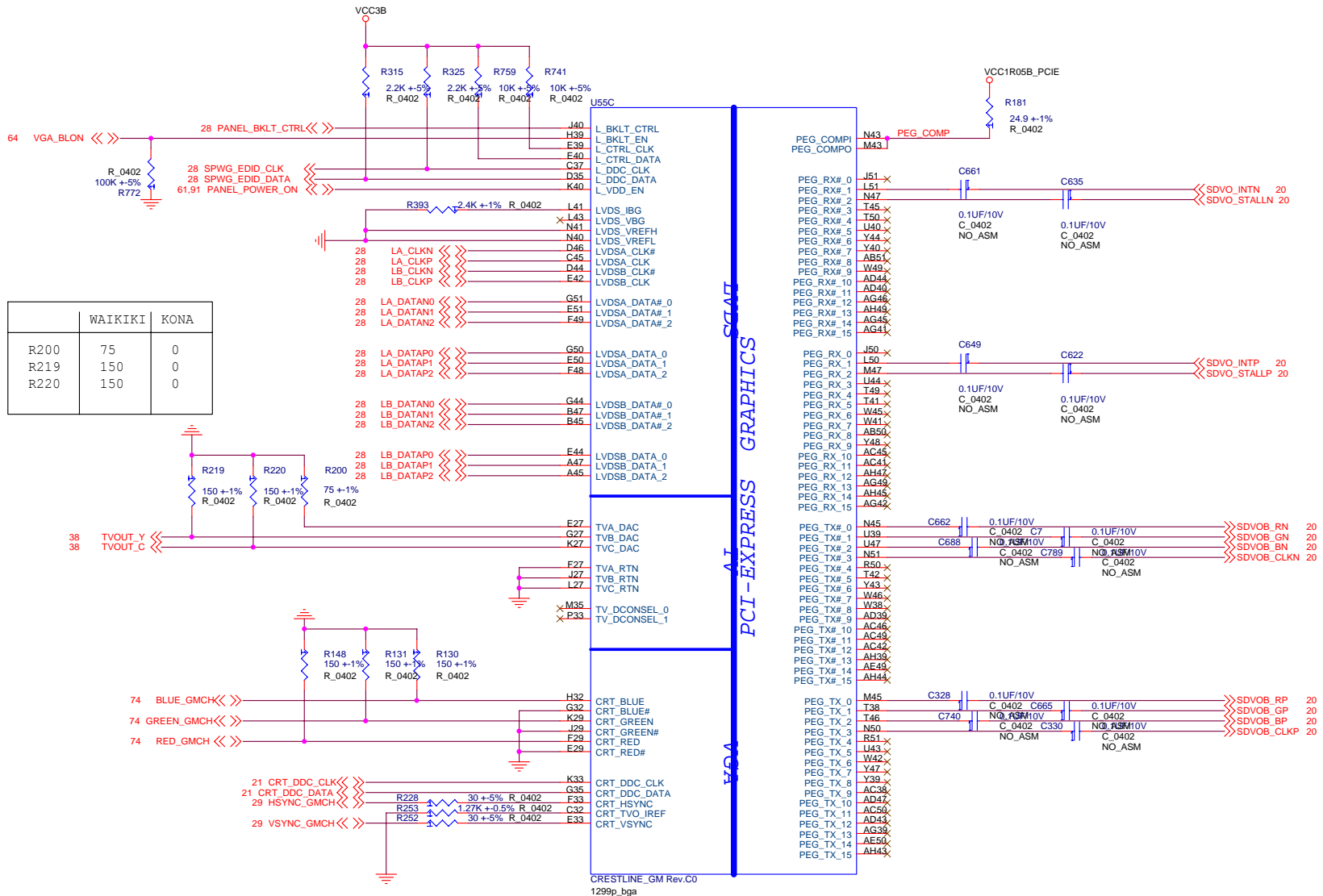
CFG[17:3] INTERNAL PULLUP
CFG[20:18] INTERNAL PULLDOWN

| | |
|-------------------|------------|
| DMI | R183 |
| | X2:ASM |
| | X4:NO_ASM |
| LOW POWER PCIE | R184 |
| | NOMAL :ASM |
| LOW POWER PCIE | :NO_ASM |
| LANE REVERSEL | R383 |
| LANE REVERSEL:ASM | |
| NORMAL:NO_ASM | |

| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| | | TITLE: Waikiki_1.1 Ver. V3.04 |
| | | 965 DMI |
| LENOVO CONFIDENTIAL | | sheet 10 of 100 Wednesday, February 14, 2007 |

CRESTLINE_GM Rev.C0
1299p_bga

R950 20K +5%
R_0402

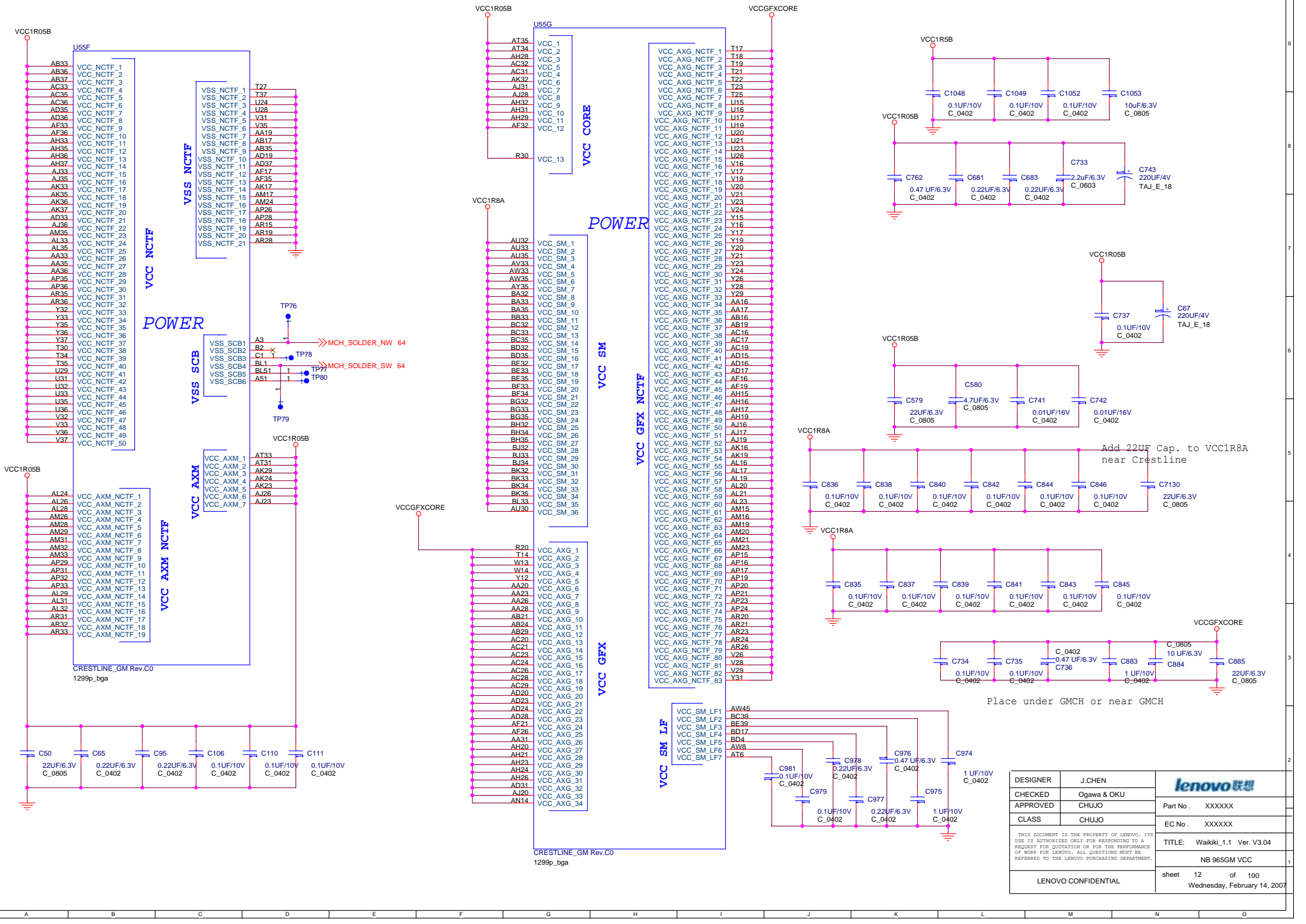


| | WAIKIKI | KONA |
|------|---------|------|
| R200 | 75 | 0 |
| R219 | 150 | 0 |
| R220 | 150 | 0 |

PCI-EXPRESS GRAPHICS

CRESTLINE_GM Rev.C0
1299p_bga

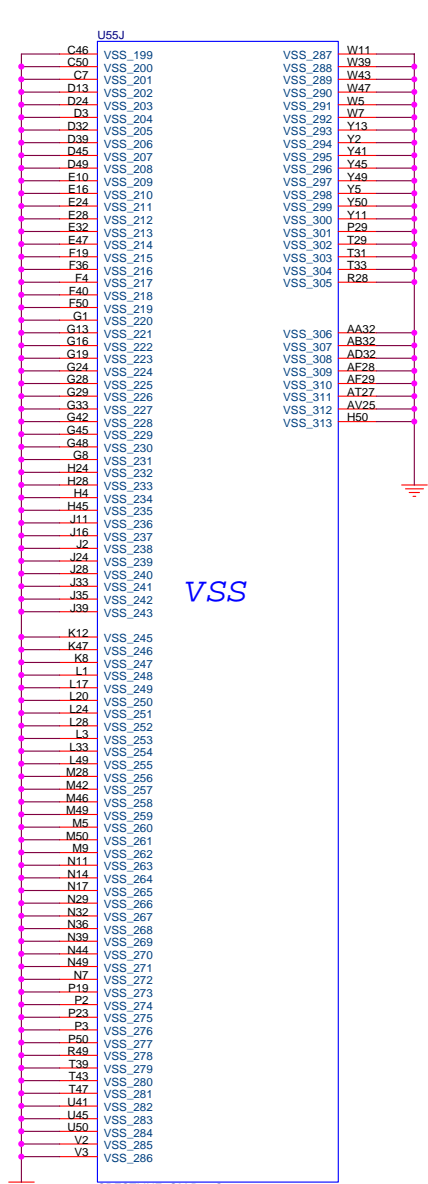
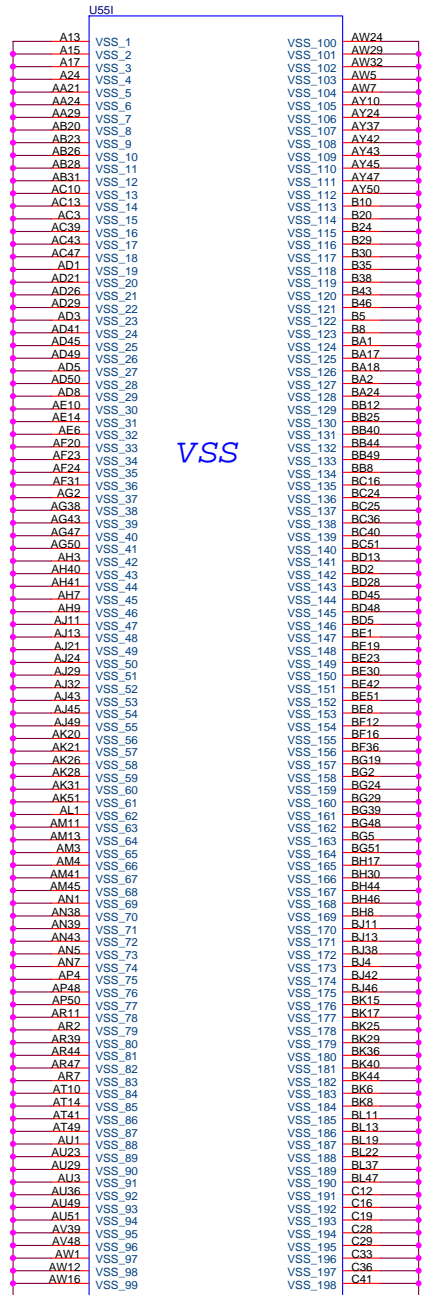
| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | GRAPHICS |
| | | sheet 11 of 100 Wednesday, February 14, 2007 |



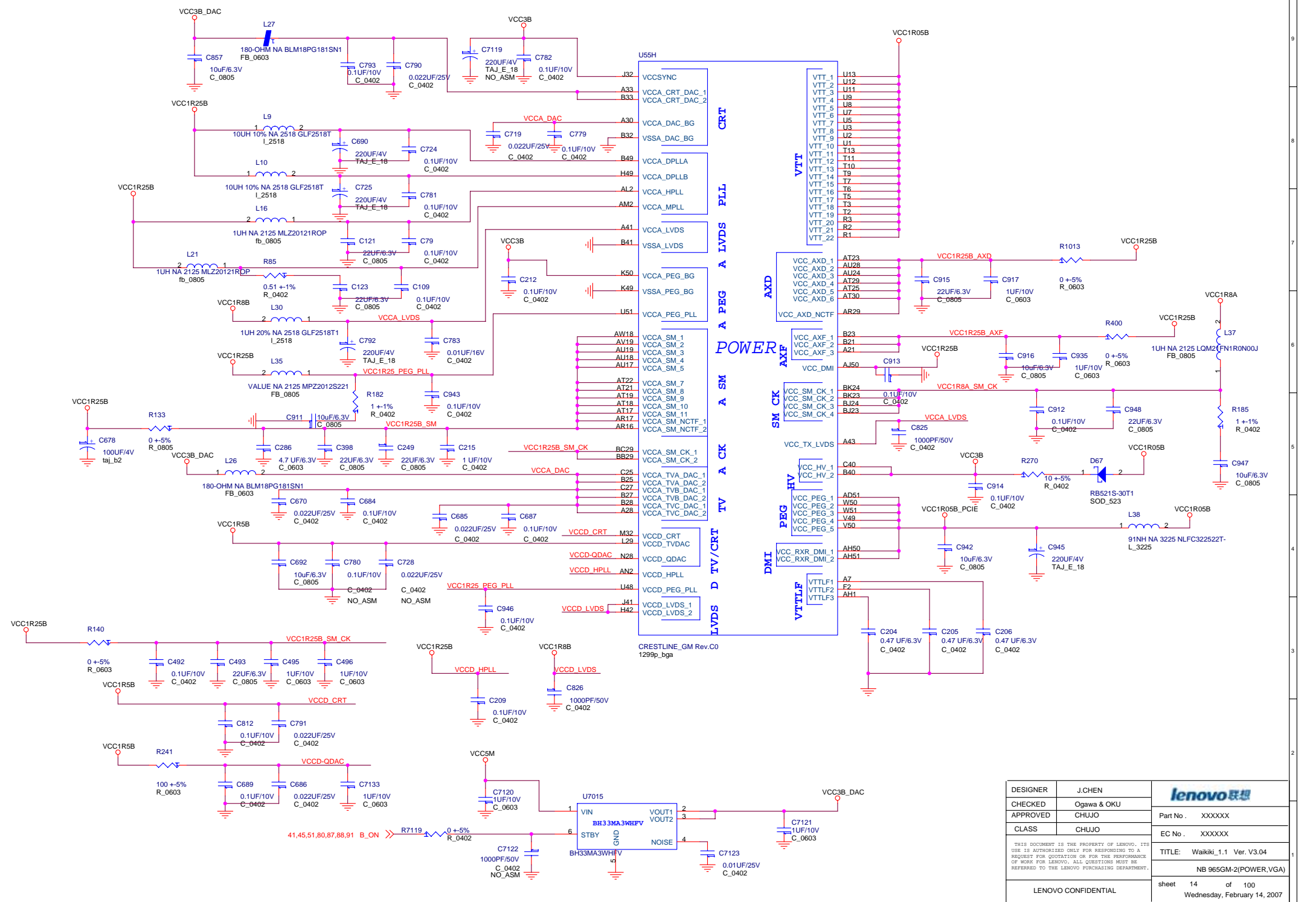
CRESTLINE_GM Rev.C0
1299p_bga

CRESTLINE_GM Rev.C0
1299p_bga

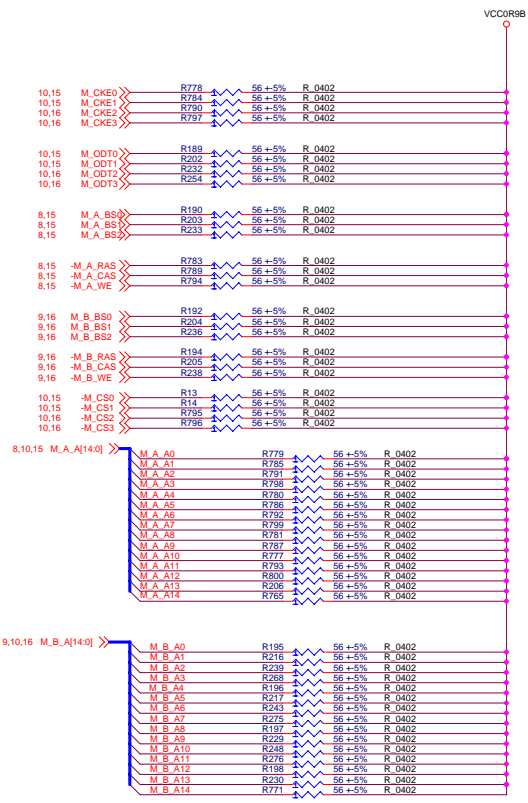
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|--|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | NB 965GM VCC |
| sheet 12 of 100 | | Wednesday, February 14, 2007 |



| | | |
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| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| | | TITLE: Waikiki_1.1 Ver. V3.04 |
| GND | | |
| LENOVO CONFIDENTIAL | | sheet 13 of 100 Wednesday, February 14, 2007 |

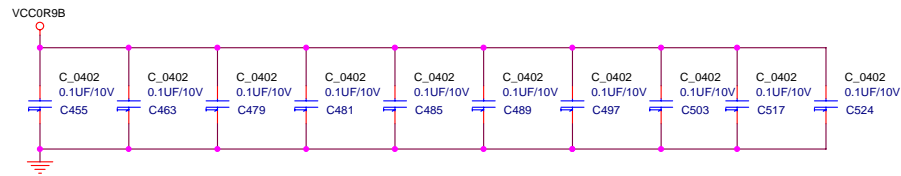
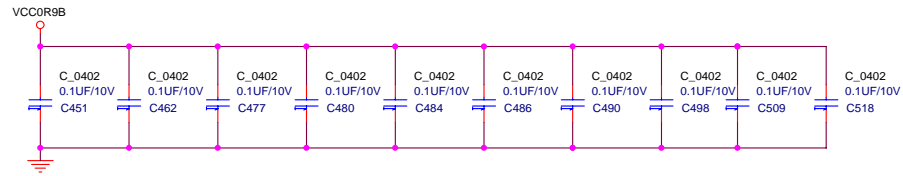



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|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No. XXXXXX |
| CLASS | CHUJUO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | NB 965GM-2(POWER,VGA) |
| | | sheet 14 of 100 |
| | | Wednesday, February 14, 2007 |

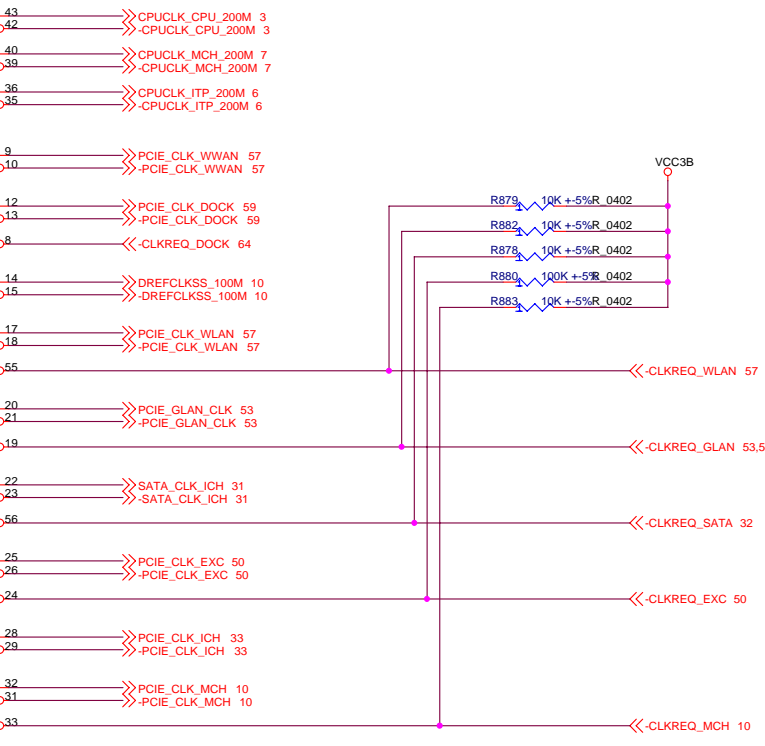
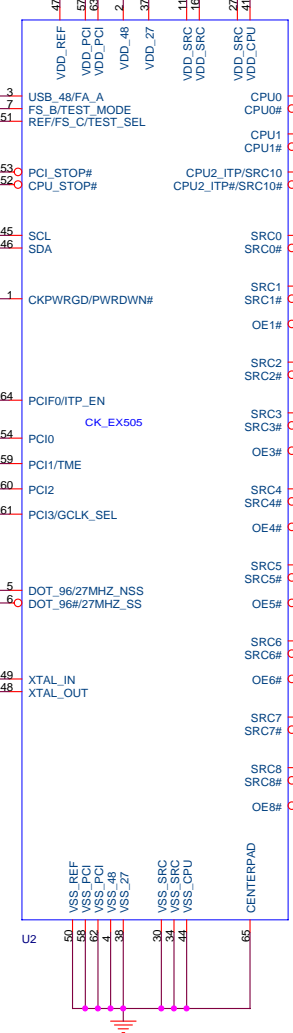
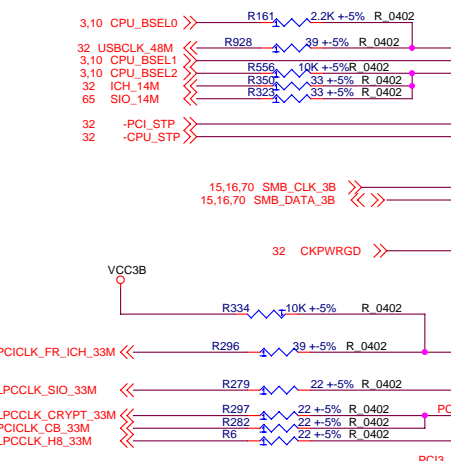
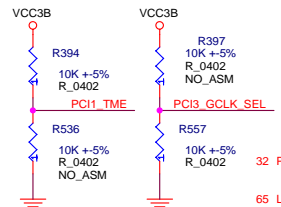
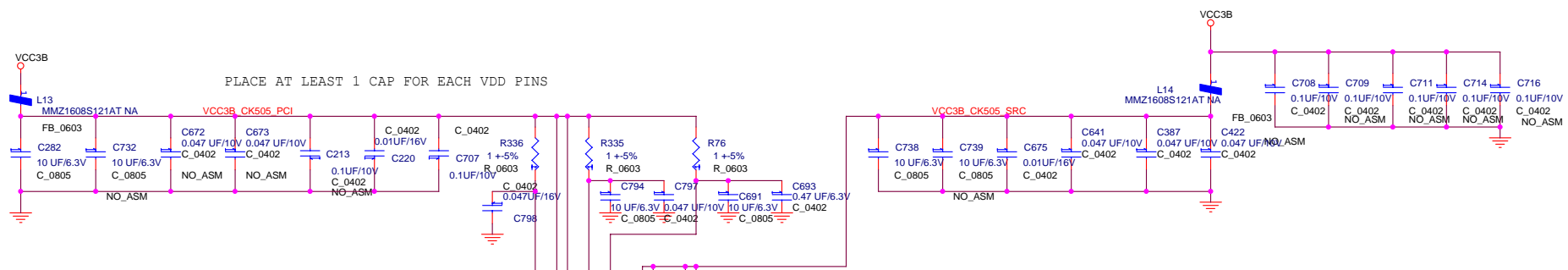


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| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| | | DDR2 TERMINATION |
| LENOVO CONFIDENTIAL | | sheet 17 of 100 Wednesday, February 14, 2007 |

PLACE 1 CAP FOR EVERY 2 BITS TERMINATED TO VCC0R9B.



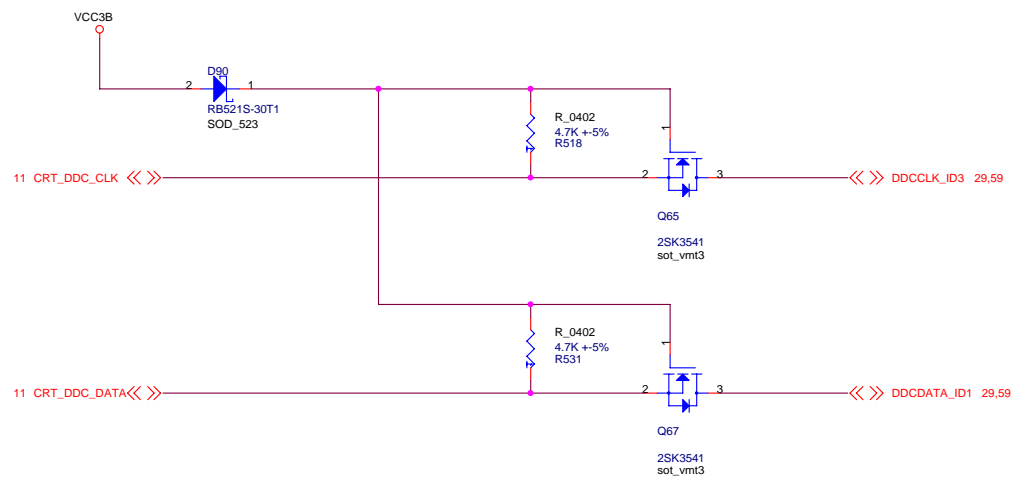
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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | DDR2 DECOUPLING |
| | | sheet 18 of 100 Wednesday, February 14, 2007 |



| FSC | FSB | FSA | CPU |
|-------|-------|-------|------|
| BSEL2 | BSEL1 | BSEL0 | |
| 0 | 1 | 1 | 166M |
| 0 | 1 | 0 | 200M |
| 0 | 0 | 0 | 266M |
| 1 | 0 | 0 | 333M |

| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No. XXXXXX |
| CLASS | CHUJUO | EC No. XXXXXX |
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| TITLE: Waikiwi_1.1 Ver. V3.04 | | |
| CLOCK GENERATOR | | |
| sheet 19 of 100 | | |
| Wednesday, February 14, 2007 | | |

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| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | CRT DDC CLK/DATA |
| | | sheet 21 of 100 Wednesday, February 14, 2007 |

28 LED_BDC_IN >>

R_0402
0 +5%
R126

>>LED_WPAN 28


| | | |
|--|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | WPAN LED CONTROL |
| | | sheet 22 of 100 Wednesday, February 14, 2007 |

Notic:Change LED to right-angle type.


D7006
SML_A10MT
LED_0603_RA

DAN222
SOT_416


XD D[7..0],-XD_RE,-XD_WE should be the same trace length
-XD_RE(SD_CLK and MS_CLK) need GND guard

| | | |
|--|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | DAV3_INTEG_SIV_W |
| | | sheet 23 of 100 Wednesday, February 14, 2007 |


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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | BLANK |
| | | sheet 24 of 100 Wednesday, February 14, 2007 |


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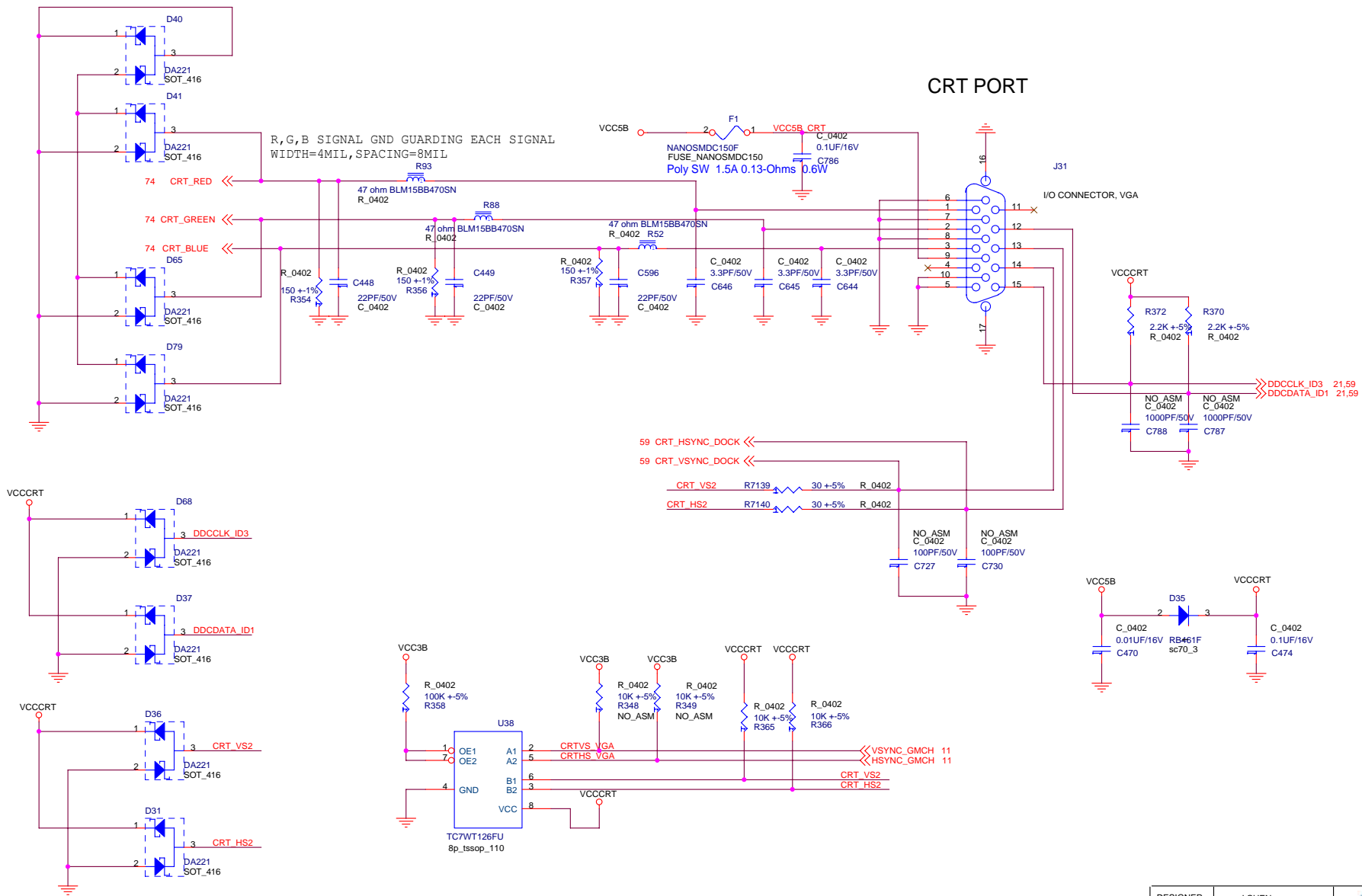
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | BLANK |
| | | sheet 25 of 100 Wednesday, February 14, 2007 |

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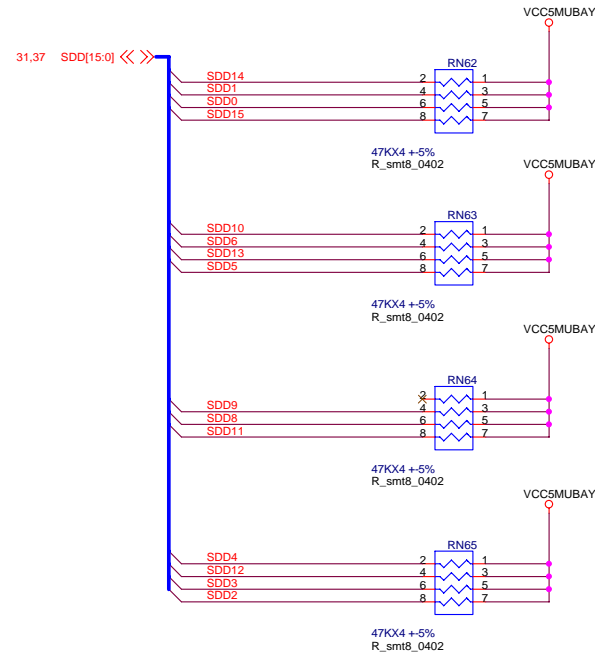
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | BLANK |
| | | sheet 26 of 100 Wednesday, February 14, 2007 |

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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | Check Point Card |
| | | sheet 27 of 100 Wednesday, February 14, 2007 |

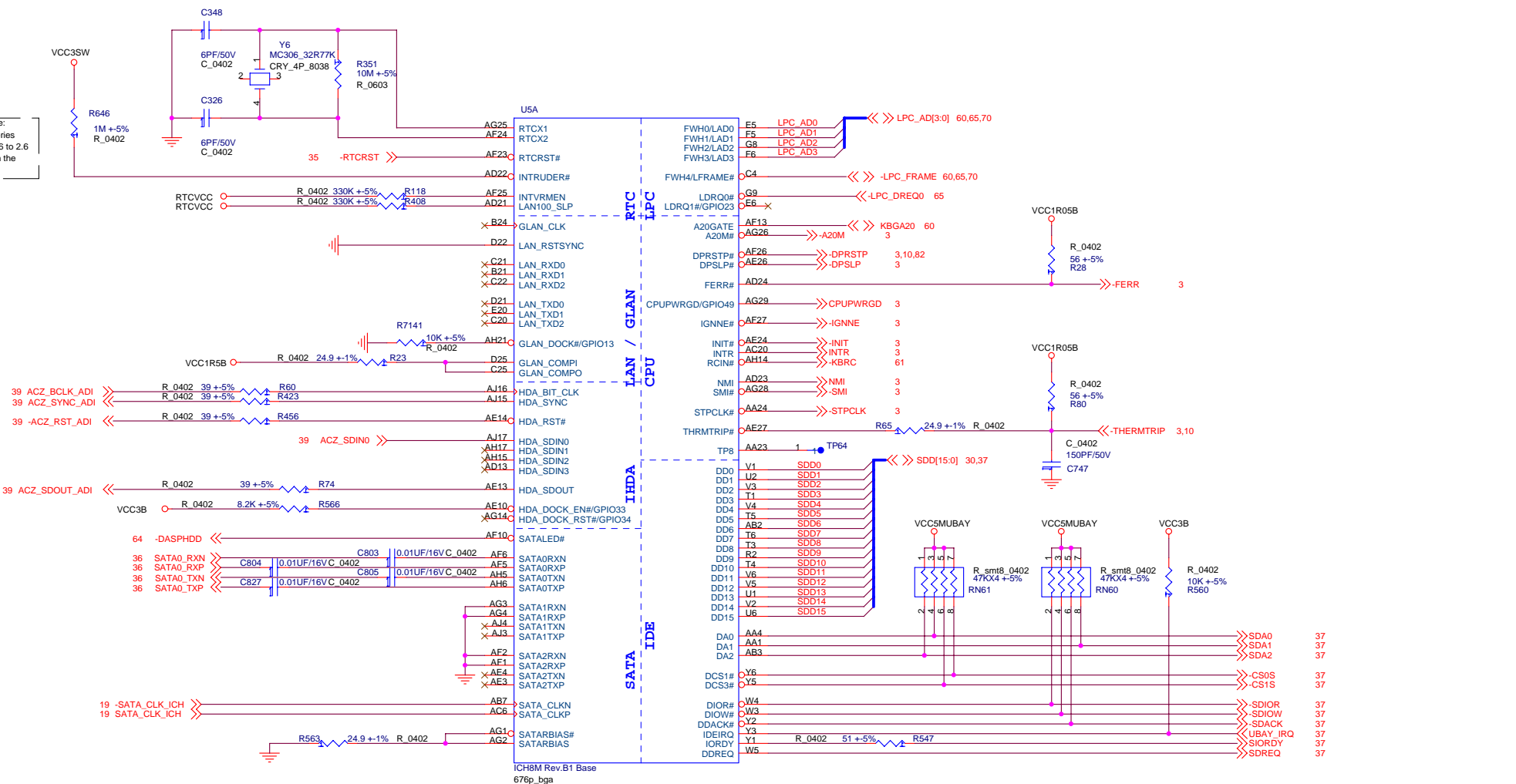


| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | VGA_CONN |
| | | sheet 29 of 100 |
| | | Wednesday, February 14, 2007 |

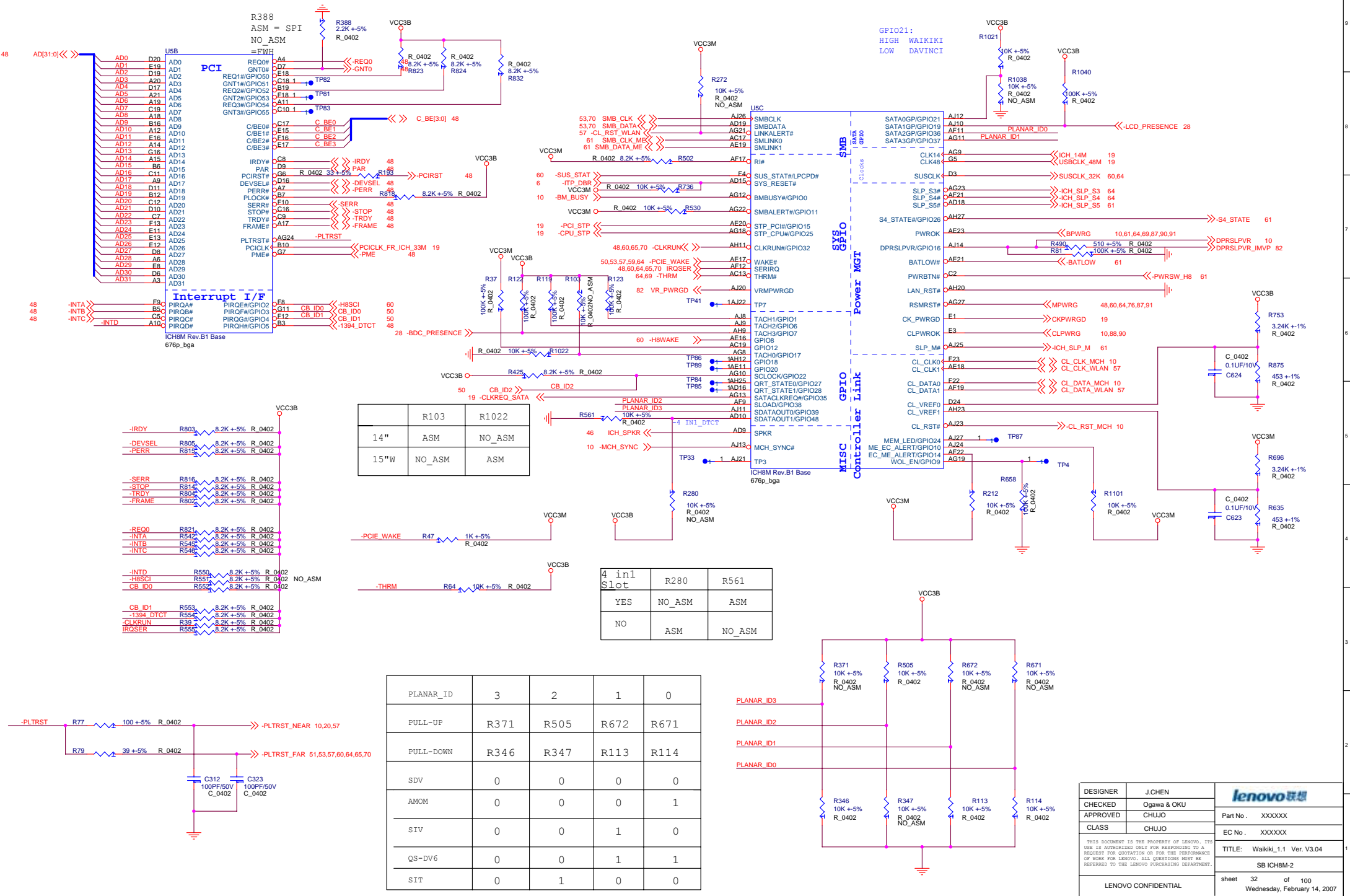


| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | PATA I/F PU |
| | | sheet 30 of 100 |
| | | Wednesday, February 14, 2007 |

Layout Note:
Place all series resistors 0.6 to 2.6 inches from the ICH



| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | SB ICH8M-1 |
| sheet 31 of 100 | | Wednesday, February 14, 2007 |

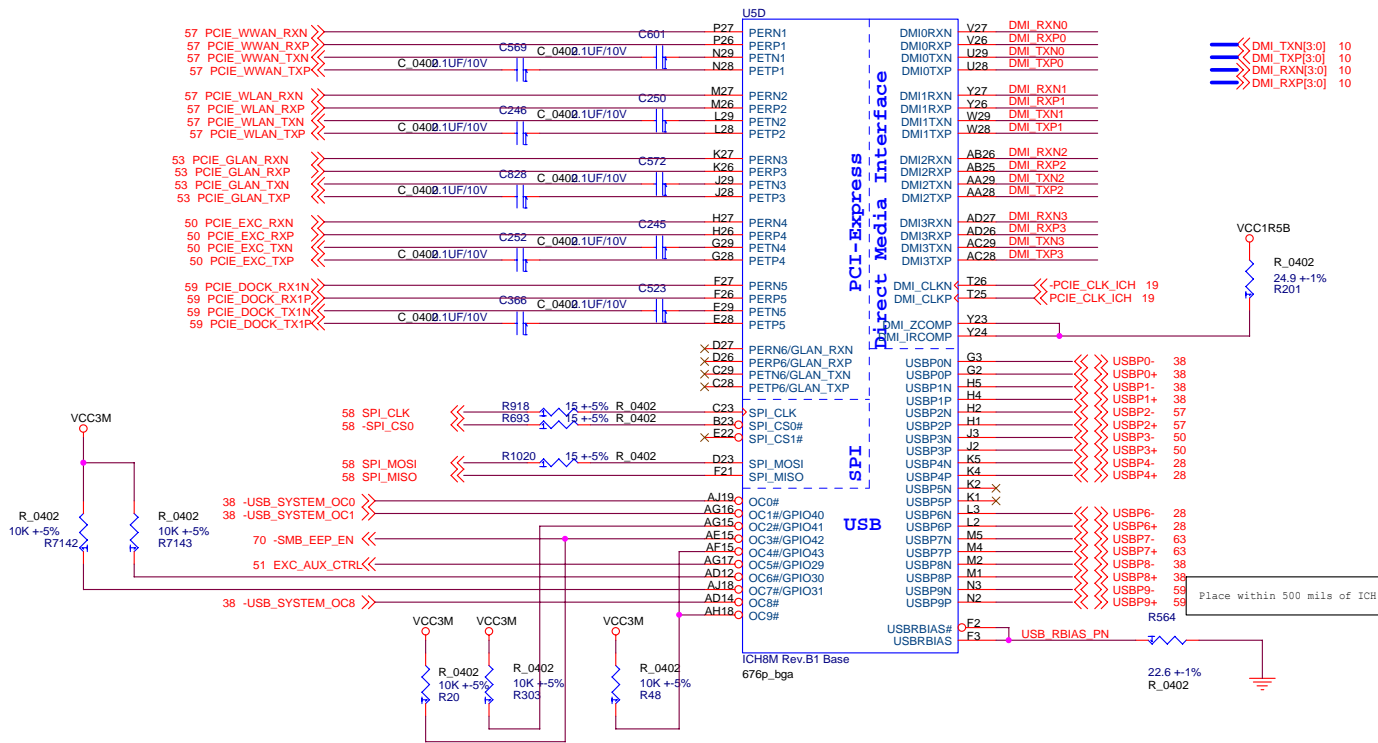


| | | |
|------|--------|--------|
| | R103 | R1022 |
| 14" | ASM | NO_ASM |
| 15"W | NO_ASM | ASM |

| | | |
|------------|--------|--------|
| 4 in1 Slot | R280 | R561 |
| YES | NO_ASM | ASM |
| NO | ASM | NO_ASM |

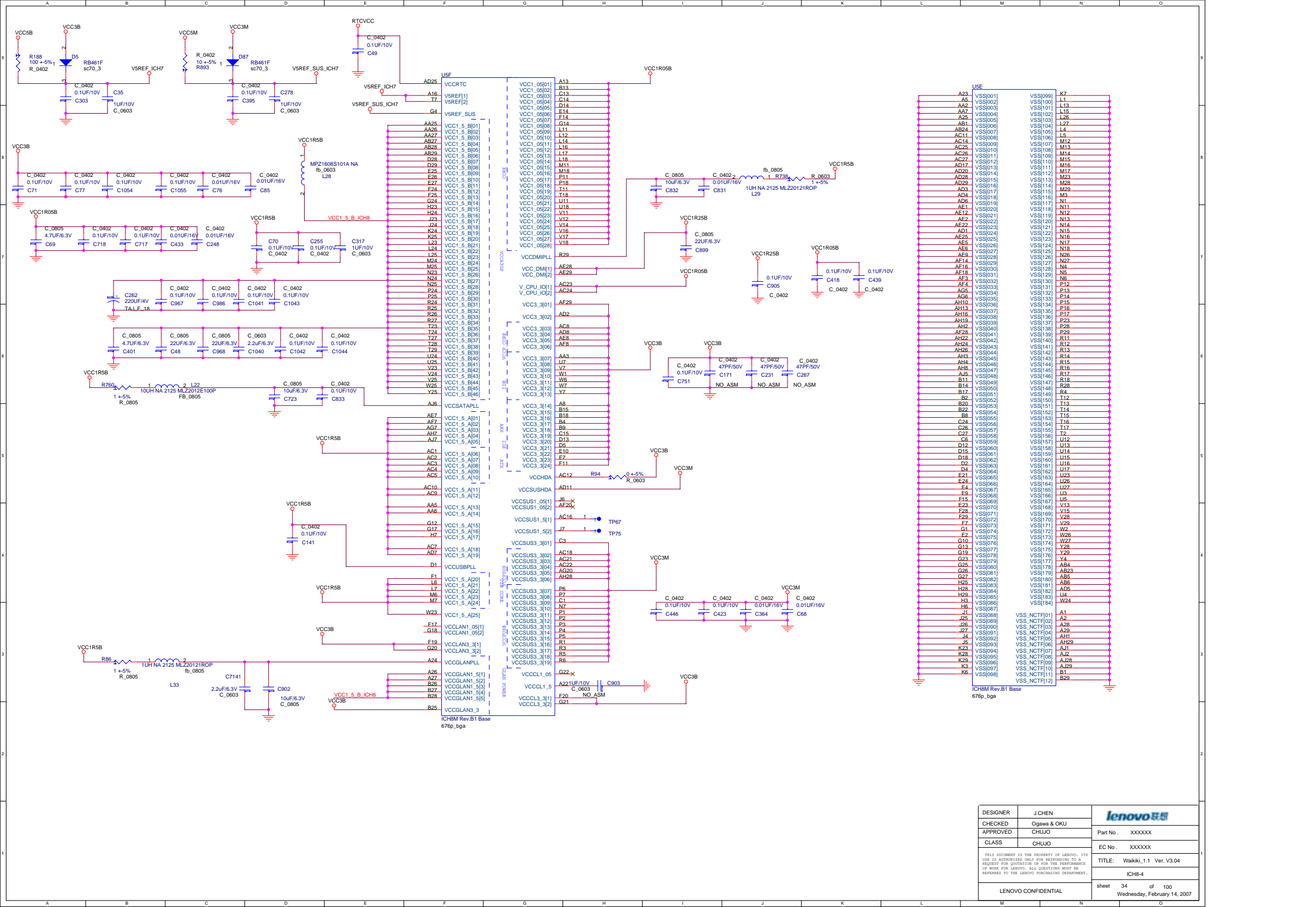
| | | | | |
|-----------|------|------|------|------|
| PLANAR_ID | 3 | 2 | 1 | 0 |
| PULL-UP | R371 | R505 | R672 | R671 |
| PULL-DOWN | R346 | R347 | R113 | R114 |
| SDV | 0 | 0 | 0 | 0 |
| AMOM | 0 | 0 | 0 | 1 |
| SIV | 0 | 0 | 1 | 0 |
| QS-DV6 | 0 | 0 | 1 | 1 |
| SIT | 0 | 1 | 0 | 0 |


| | | |
|--|-------------|--|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | |
| CLASS | CHUJO | |
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| LENOVO CONFIDENTIAL | | Part No. XXXXXX EC No. XXXXXX TITLE: Waikiki_1.1 Ver. 03.04 SB ICH8M-2 sheet 32 of 100 Wednesday, February 14, 2007 |

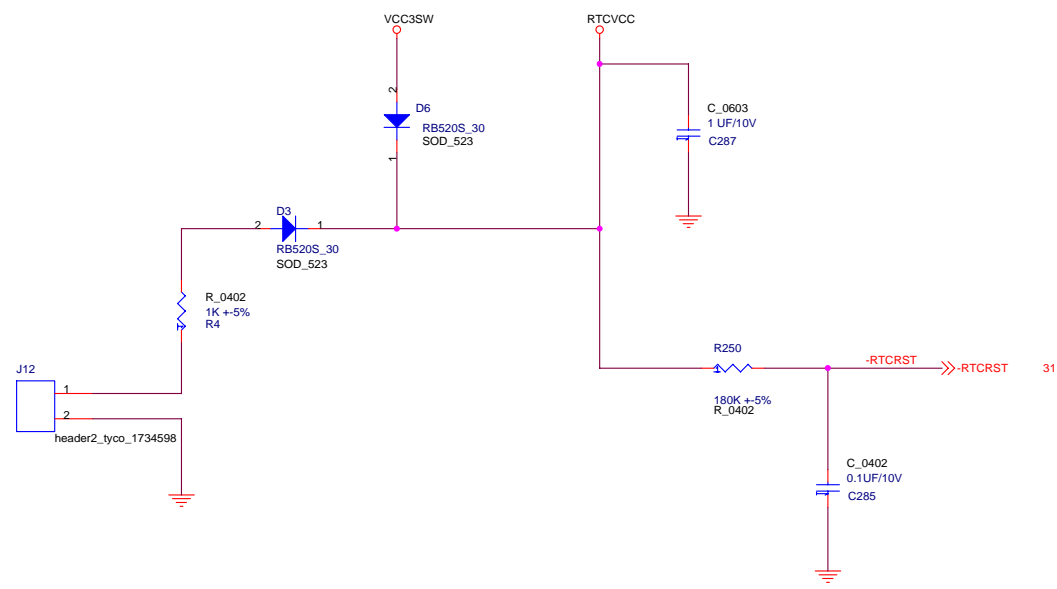


- 0 : USB Port
- 1 : USB Port
- 2 : PCIE MINICARD
- 3 : TO PCI EXPRESS CARD
- 4 : TO CAMERA (LCD CONN)
- 5 : NC
- 6 : TO BLUETOOTH
- 7 : TO FINGER PRINT
- 8 : USB PORT3
- 9 : TO DOCKING USB HUB

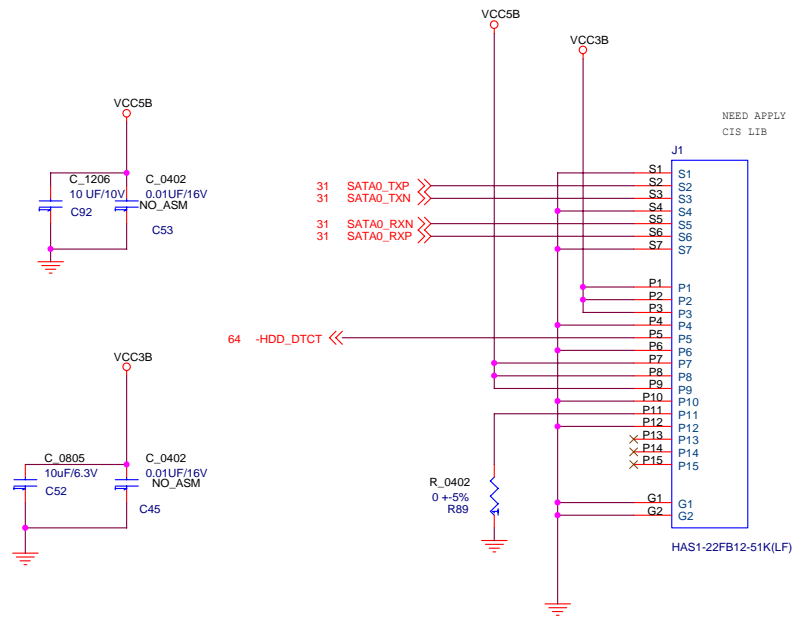
| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | IC8-3 |
| | | sheet 33 of 100 |
| | | Wednesday, February 14, 2007 |



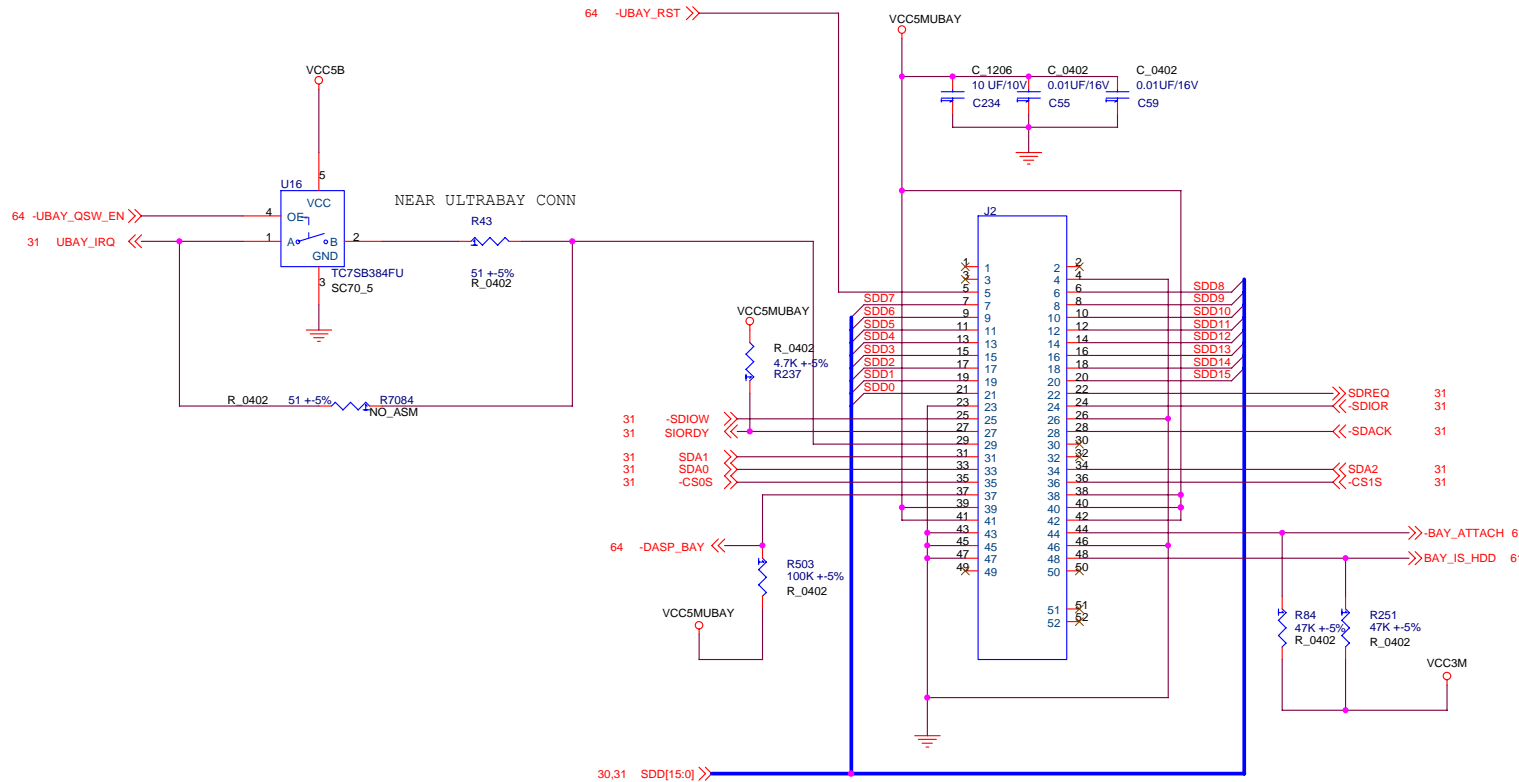
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|---|-------------|---|------------------------------|
| DESIGNER | J.CHEN |  | |
| CHECKED | Ogawa & OKU | | |
| APPROVED | CHUJO | | Part No. XXXXXX |
| CLASS | CHUJO | | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF Lenovo. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR Lenovo. ALL QUESTIONS MUST BE REFERRED TO THE Lenovo FORWARDING CENTER.</small> | | | TITLE: Waikiki_1.1 Ver.V3.04 |
| <small>Lenovo Confidential</small> | | IC8M Rev.B1 Base 67fp_bga | |
| <small>sheet 34 of 100 Wednesday, February 14, 2007</small> | | IC8M Rev.B1 Base 67fp_bga | |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | FWH,RTC BATTERY |
| | | sheet 35 of 100 Wednesday, February 14, 2007 |



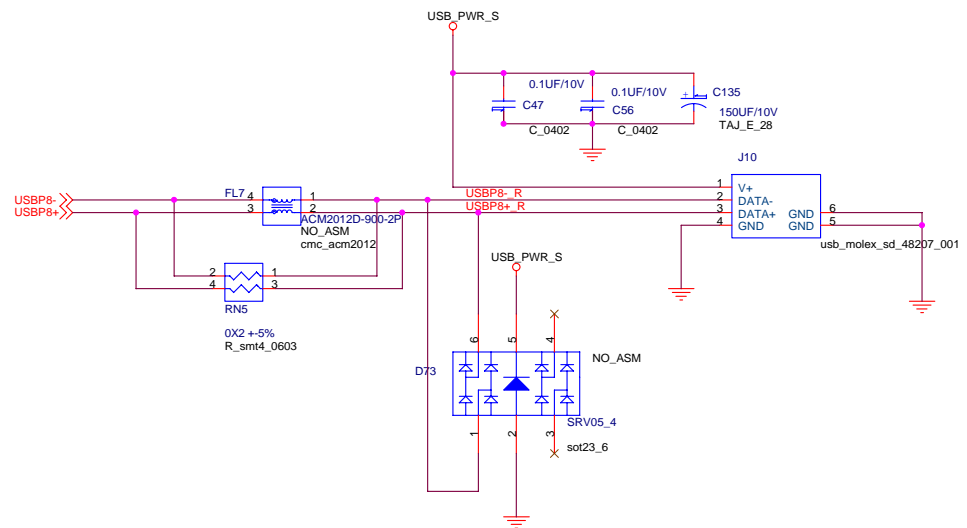
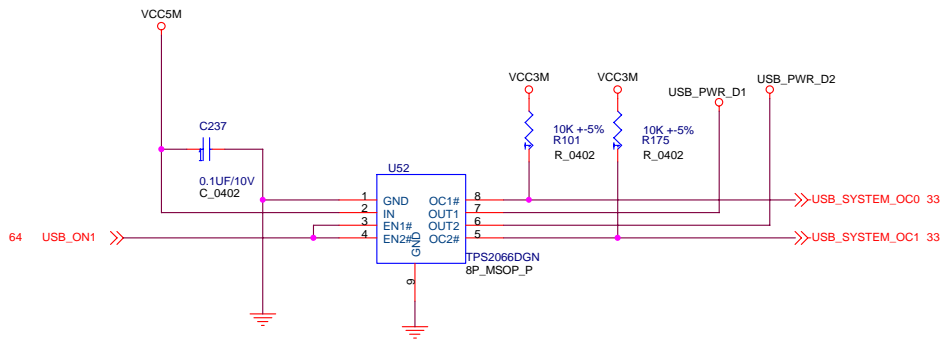
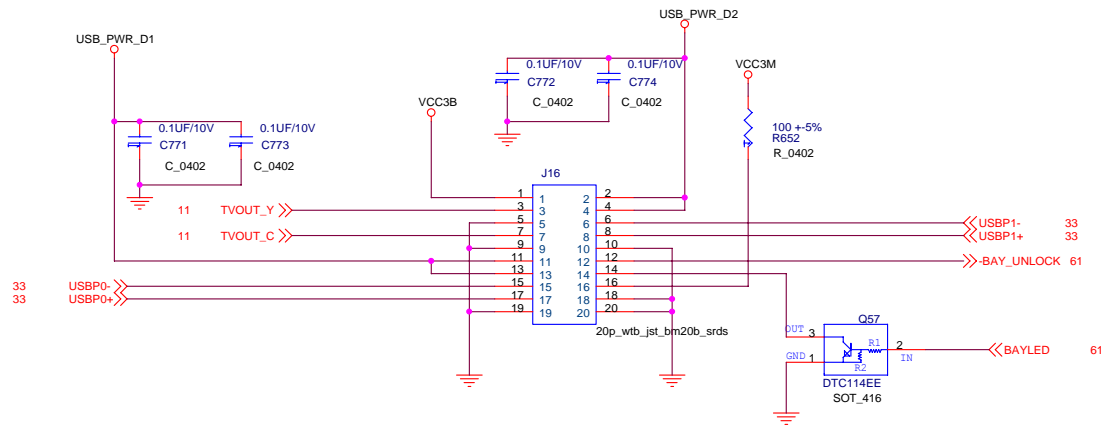
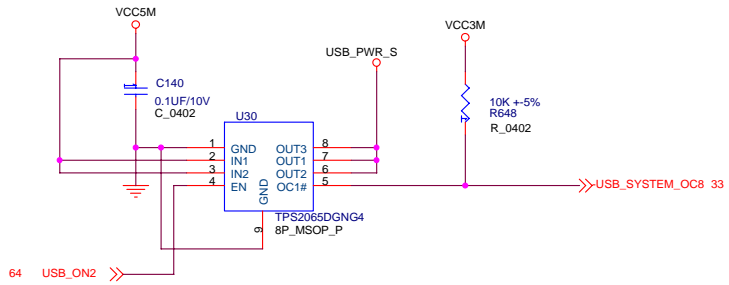
| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | |
| CLASS | CHUJO | Part No . XXXXXX |
| THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT. | | EC No . XXXXXX |
| LENOVO CONFIDENTIAL | | TITLE: Waikiki_1.1 Ver. V3.04 |
| | | SATA HDD CONN |
| | | sheet 36 of 100 |
| | | Wednesday, February 14, 2007 |



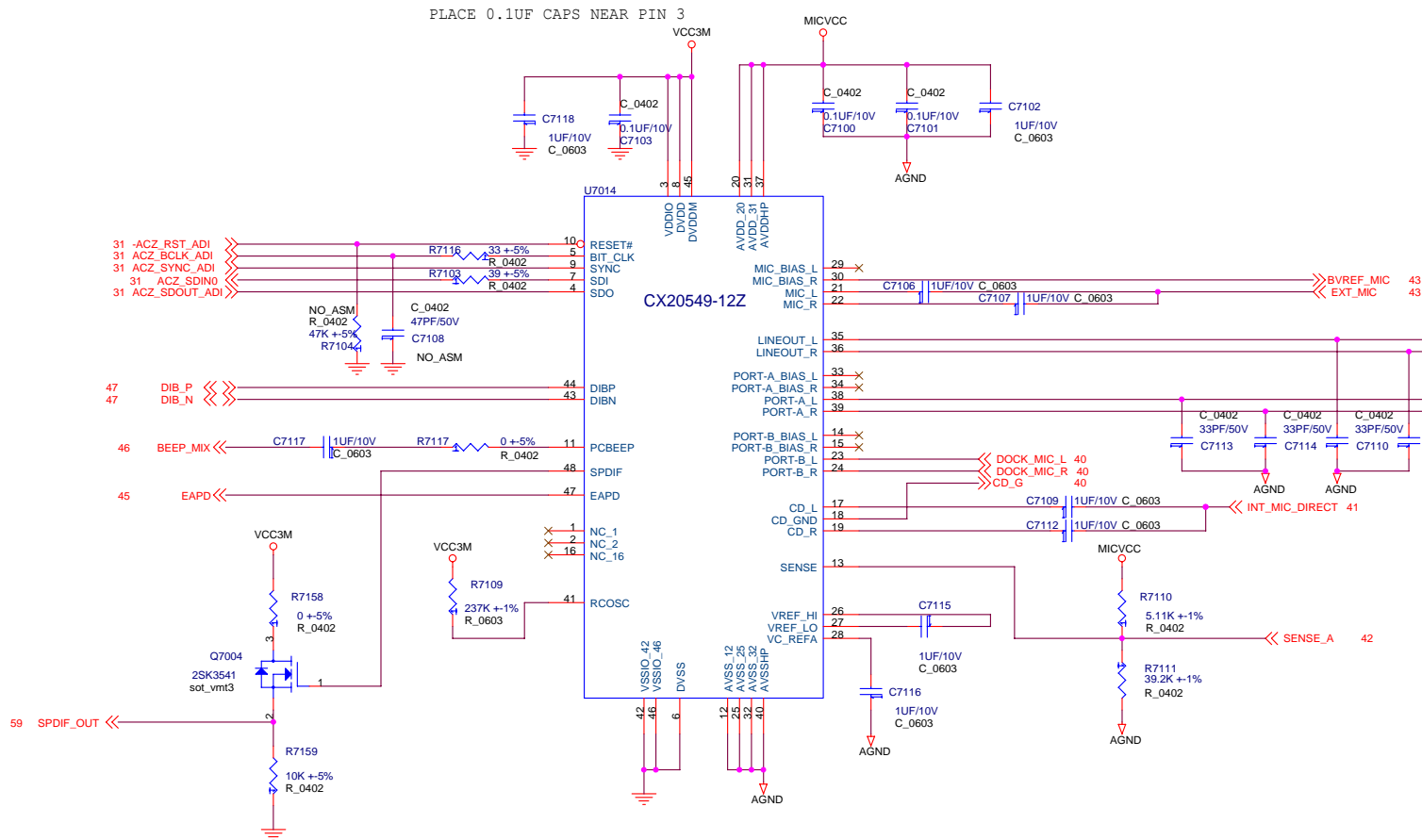
| | SWAP BAY | FIXED BAY |
|-------|----------|-----------|
| U16 | ASM | NO_ASM |
| R43 | ASM | NO_ASM |
| R7084 | NO_ASM | ASM |

| | -BAY_ATTACH | BAY_IS_HDD |
|-----------|-------------|------------|
| NO DEVICE | H | DON'T CARE |
| OPTICAL | L | L |
| HDD | L | H |

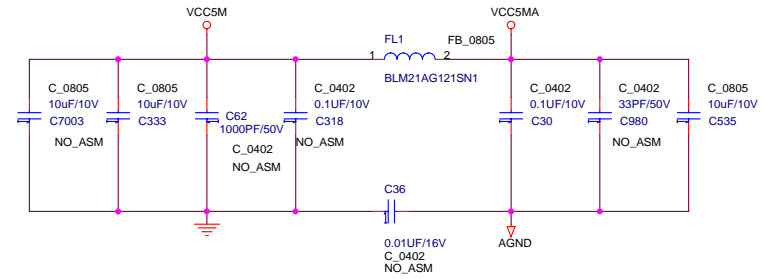
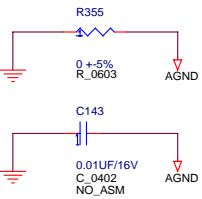
| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | |
| TITLE: Waikiki_1.1 Ver. V3.04 | | |
| BAY I/F CONN | | |
| sheet 37 of 100 | | |
| Wednesday, February 14, 2007 | | |
| LENOVO CONFIDENTIAL | | |



| | | |
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| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | USB PWR/CONN |
| | | sheet 38 of 100 |
| | | Wednesday, February 14, 2007 |



PLACE UNDER CX20549



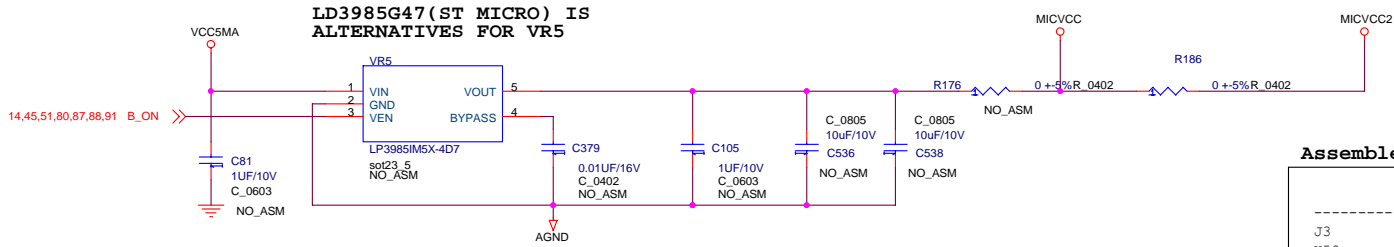
Assemble Option

| | Wnote-1.1 | Kona-1.1 |
|-------|-----------|----------------|
| R7158 | ASM | NOASM |
| R7159 | ASM | NOASM |
| Q7004 | ASM | NOASM |
| Q89 | ASM | NOASM (Page42) |
| R608 | ASM | NOASM (Page42) |
| R225 | ASM | NOASM (Page42) |
| R290 | ASM | NOASM (Page42) |
| Q30 | ASM | NOASM (Page42) |
| R49 | ASM | NOASM (Page43) |
| R473 | ASM | NOASM (Page43) |
| C283 | ASM | NOASM (Page43) |
| C469 | ASM | NOASM (Page43) |
| U11 | ASM | NOASM (Page43) |
| R631 | ASM | NOASM (Page45) |
| R632 | ASM | NOASM (Page45) |

| | | |
|---|-------------|------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | |
| TITLE: Waikiki_1.1 Ver. V3.04 | | |
| AUDIO CODEC CX20549 | | |
| sheet 39 of 100 | | |
| Wednesday, February 14, 2007 | | |
| LENOVO CONFIDENTIAL | | |

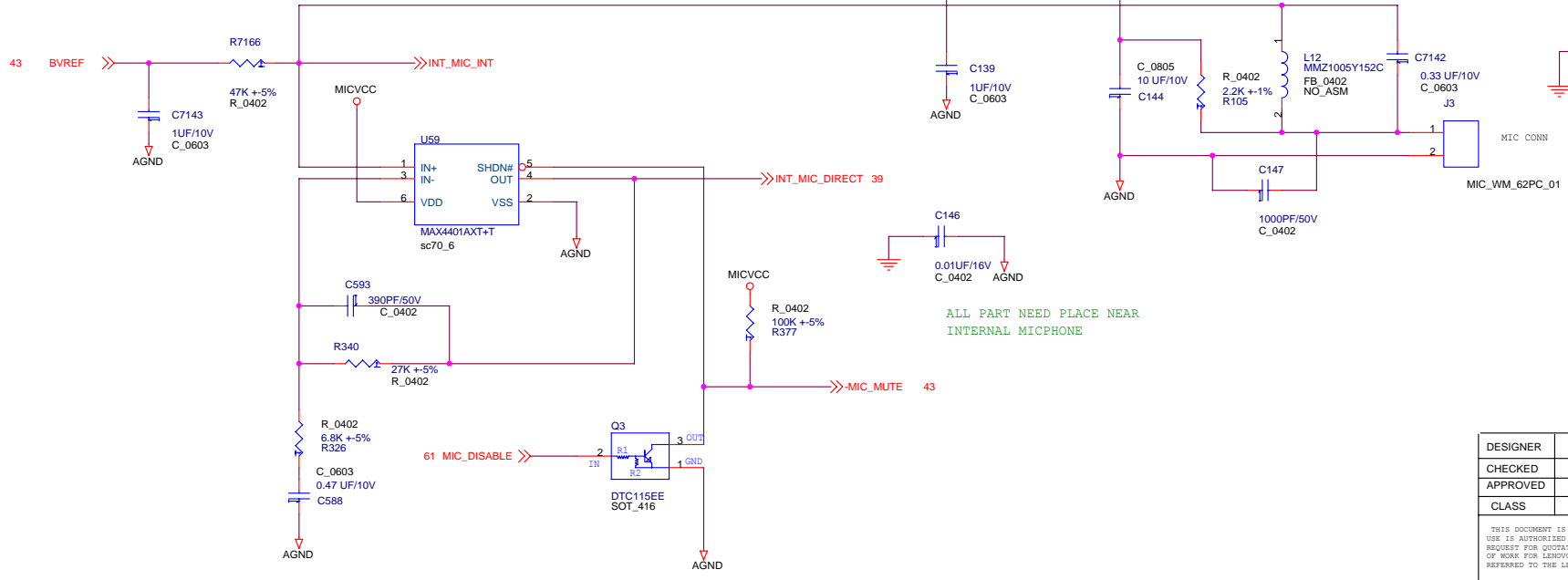
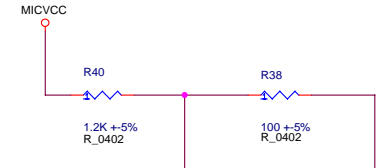
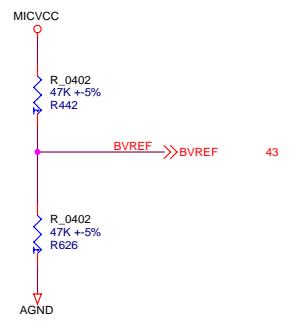


| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | AUDIO MISC |
| | | sheet 40 of 100 Wednesday, February 14, 2007 |



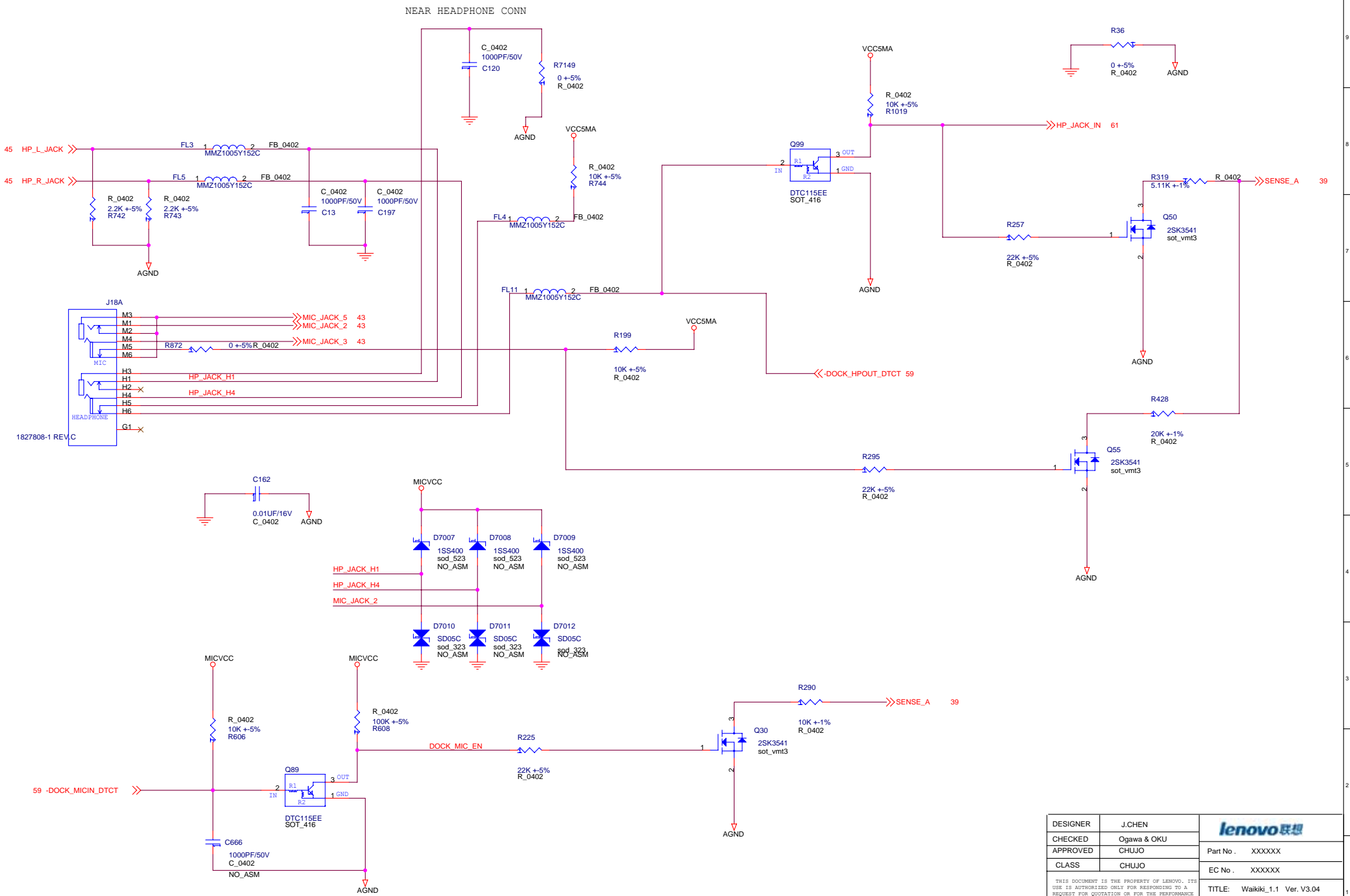
Assemble Option

| | Wnote-1.1 | Kona-1.1 |
|-------|-----------|----------------|
| J3 | ASM | NOASM |
| U59 | ASM | NOASM |
| L12 | NOASM | NOASM |
| C147 | ASM | NOASM |
| C144 | ASM | NOASM |
| C139 | ASM | NOASM |
| C593 | ASM | NOASM |
| C588 | ASM | NOASM |
| C7109 | ASM | NOASM (page39) |
| C7112 | ASM | NOASM (page39) |
| R105 | ASM | NOASM |
| R38 | ASM | NOASM |
| R40 | ASM | NOASM |
| R340 | ASM | NOASM |
| R326 | ASM | NOASM |
| C7142 | ASM | NOASM |
| C7143 | ASM | NOASM |
| R7166 | ASM | NOASM |

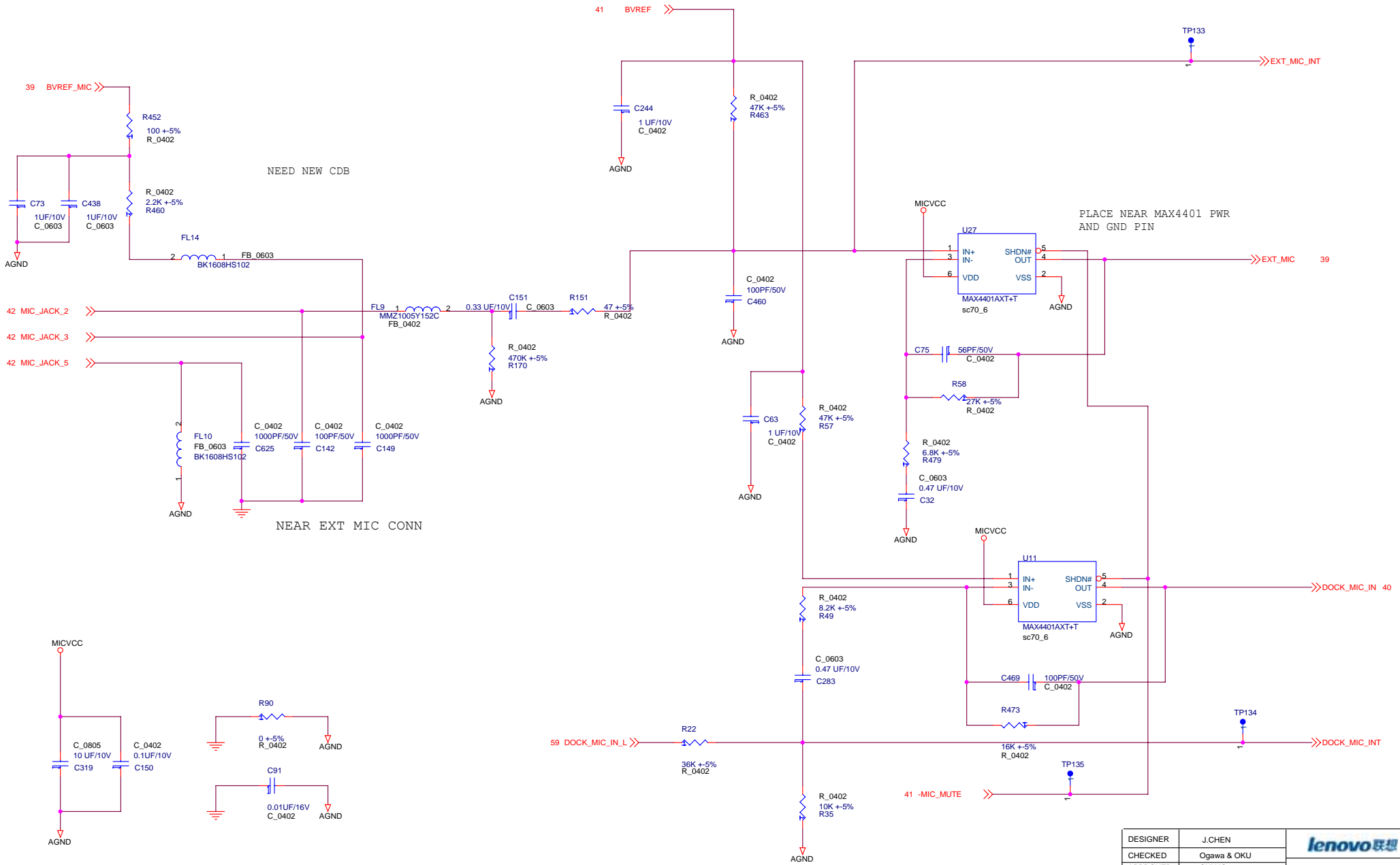


ALL PART NEED PLACE NEAR INTERNAL MICROPHONE

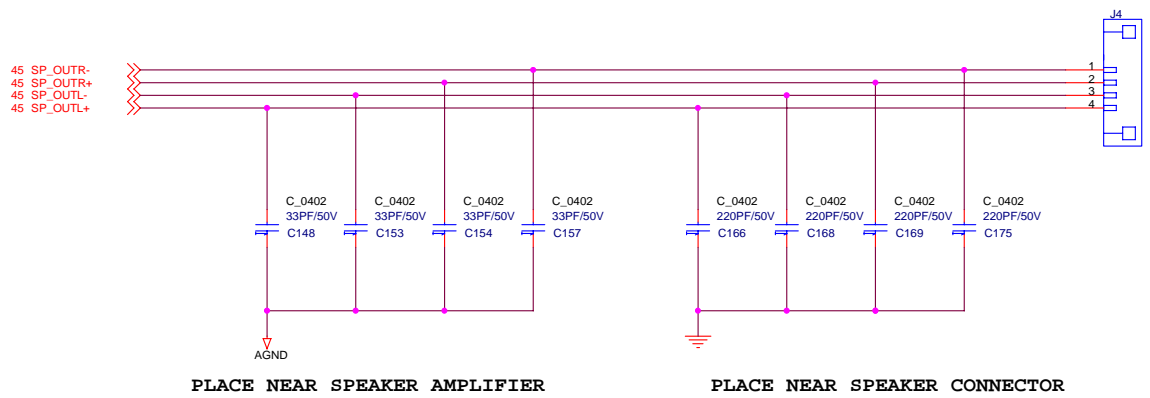
| | | |
|--|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No . XXXXXX |
| CLASS | CHUJUO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | AUDIO INT MIC |
| | | sheet 41 of 100 |
| | | Wednesday, February 14, 2007 |



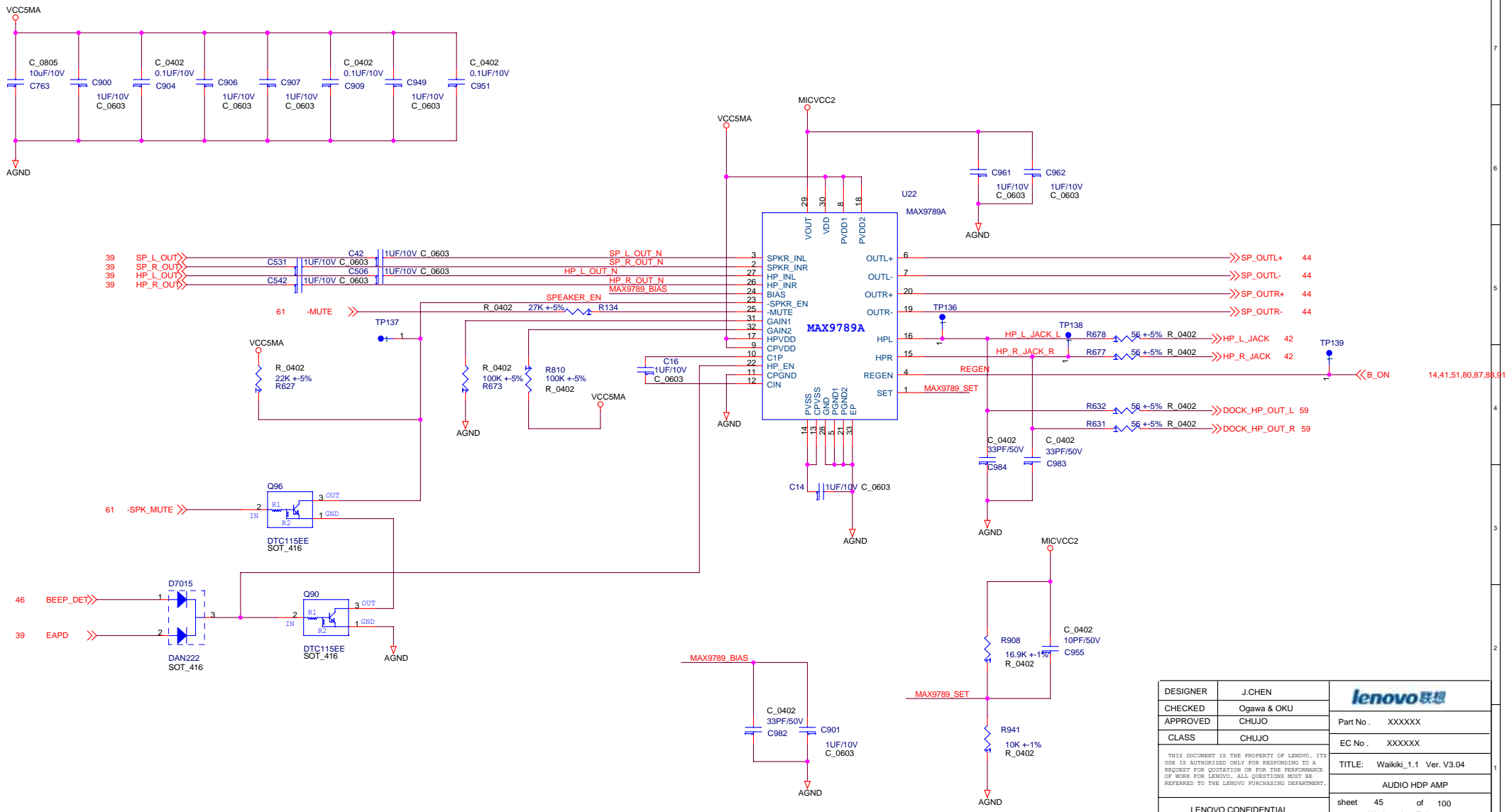
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|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No . XXXXXX |
| CLASS | CHUJUO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | EXT MIC JACK |
| | | sheet 42 of 100 |
| | | Wednesday, February 14, 2007 |



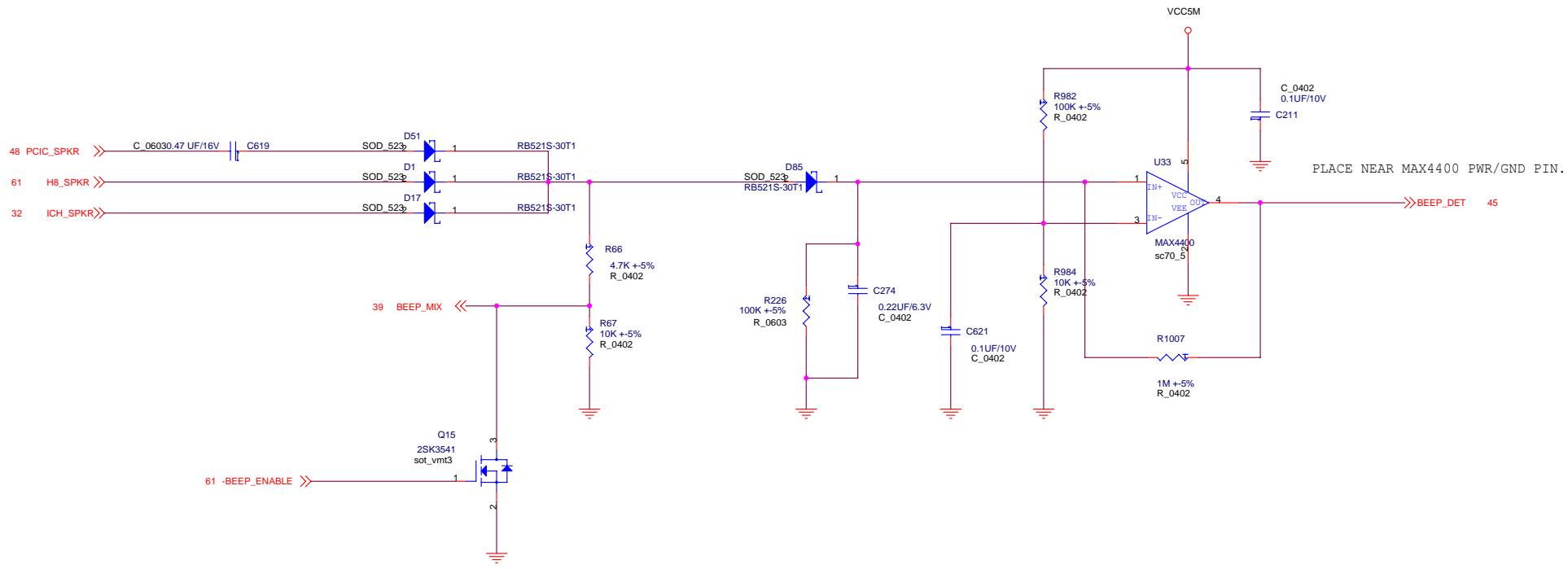
| | | |
|---|-------------|--------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | AUDIO EXT MIC AMP |
| | | sheet 43 of 100 |
| | | Wednesday, February 14, 2007 |



| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | |
| CLASS | CHUJO | Part No . XXXXXX |
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| LENOVO CONFIDENTIAL | | TITLE: Waikiki_1.1 Ver. V3.04 |
| | | AUDIO SPEAKER |
| | | sheet 44 of 100 |
| | | Wednesday, February 14, 2007 |

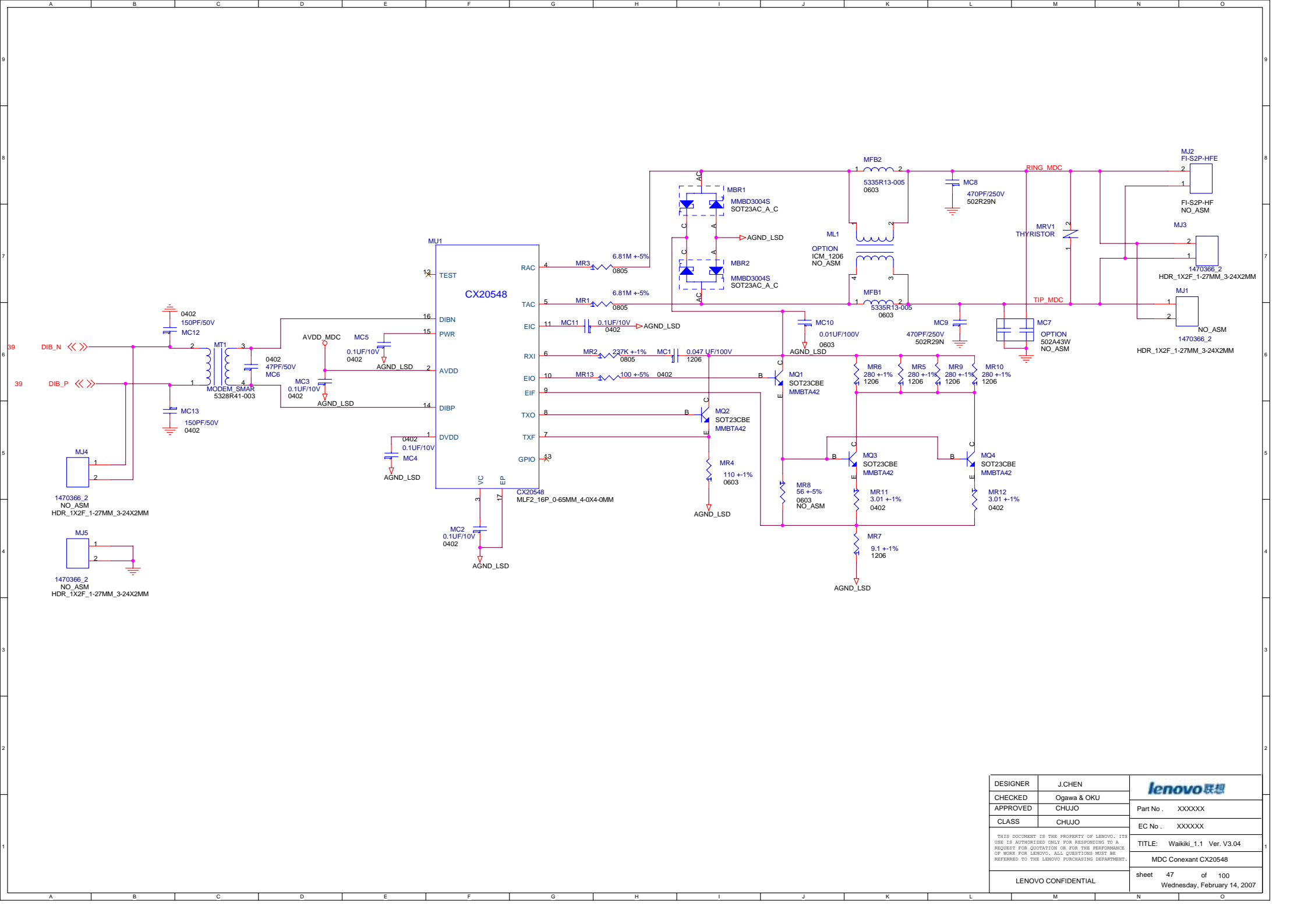


| | | |
|---|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | AUDIO HDP AMP |
| | | sheet 45 of 100 |
| | | Wednesday, February 14, 2007 |

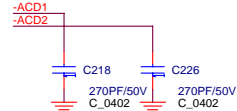
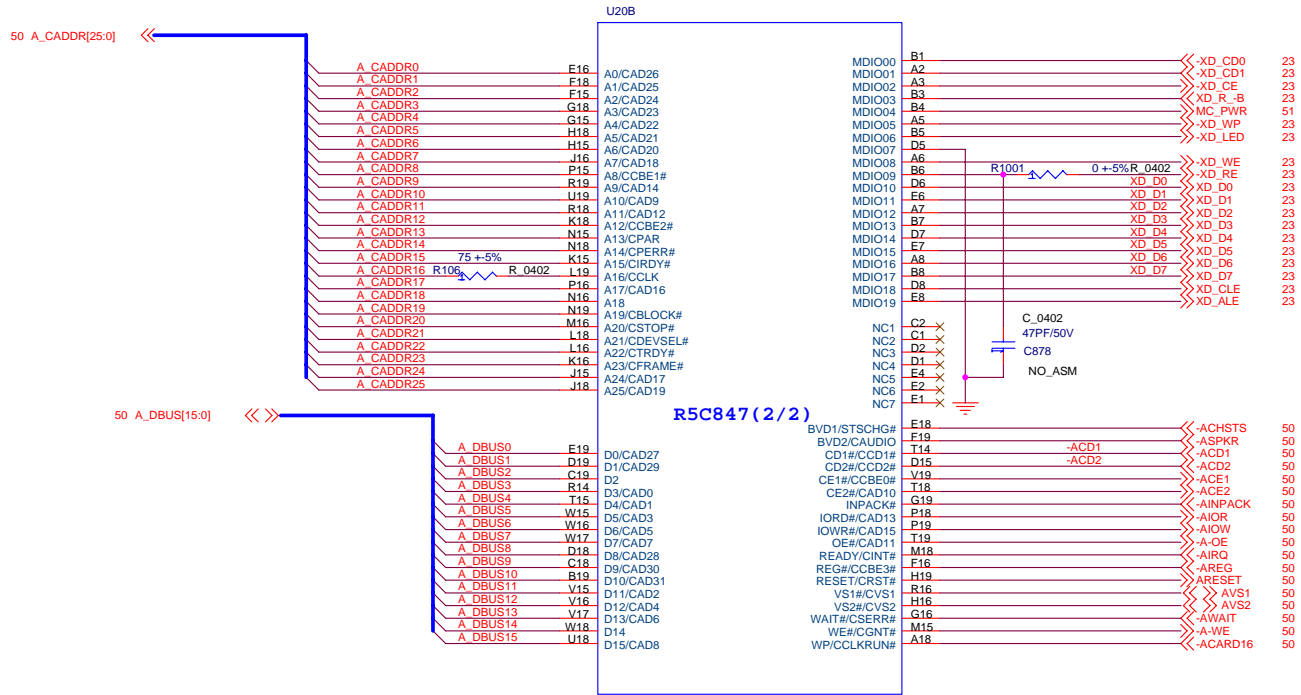


PLACE NEAR MAX4400 PWR/GND PIN.

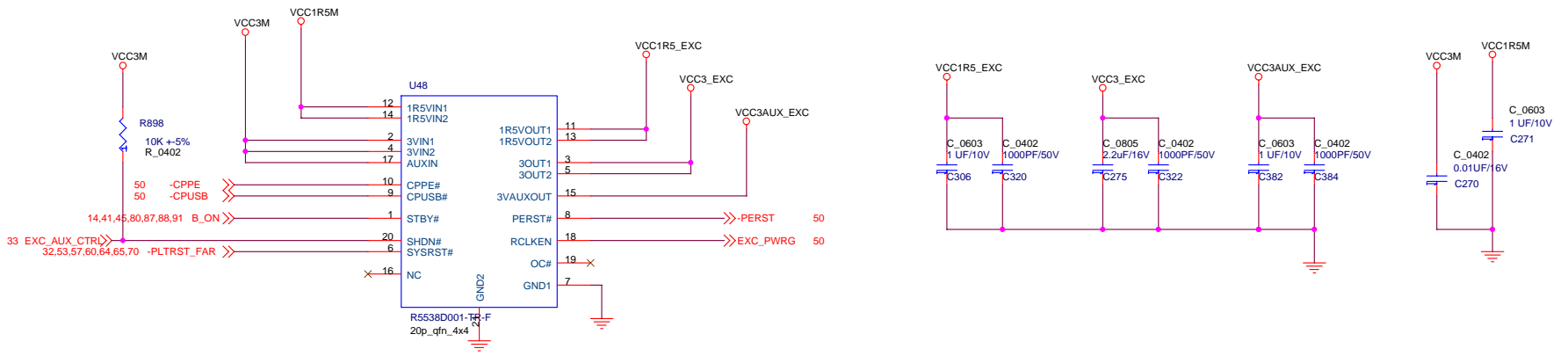
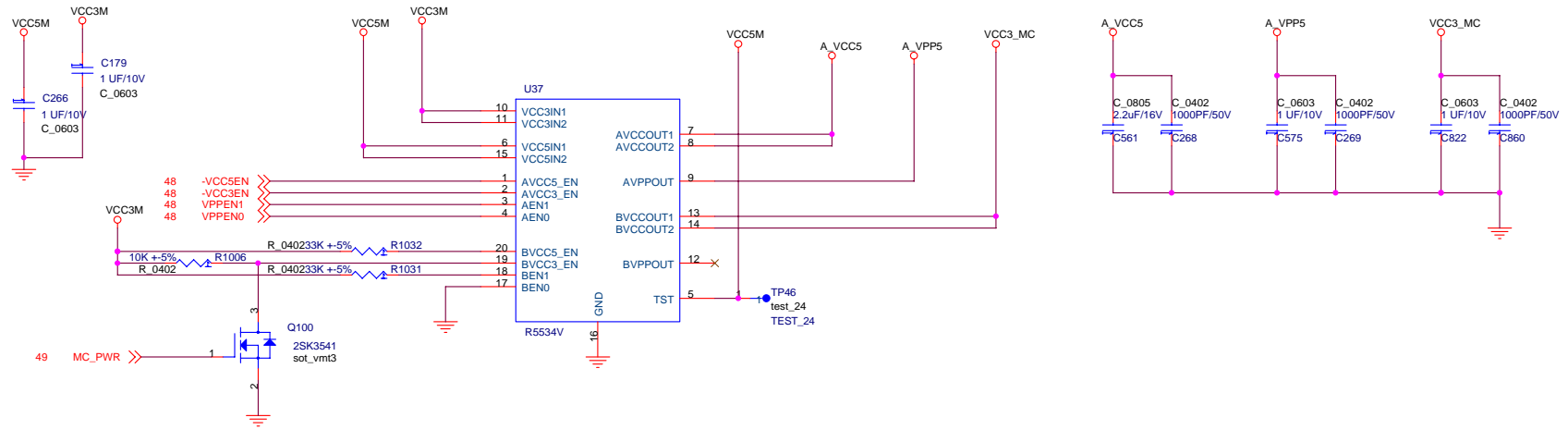
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|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | AUDIO HDP BEEP |
| | | sheet 46 of 100 Wednesday, February 14, 2007 |



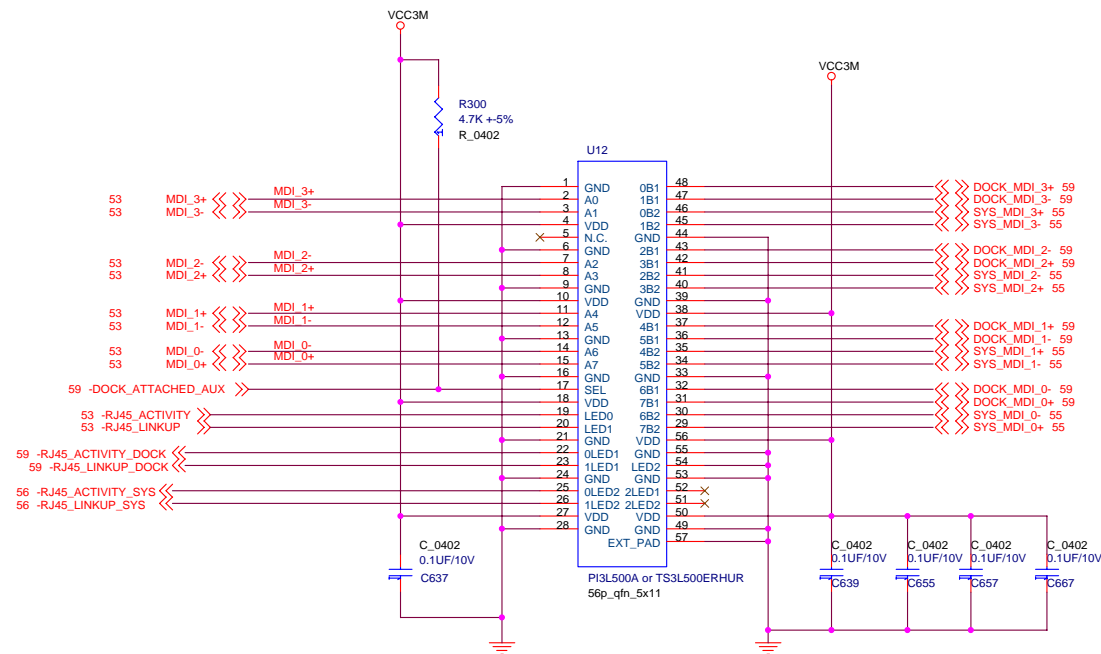
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|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | MDC Conexant CX20548 |
| | | sheet 47 of 100 Wednesday, February 14, 2007 |



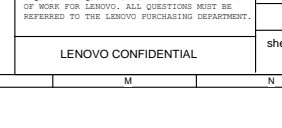
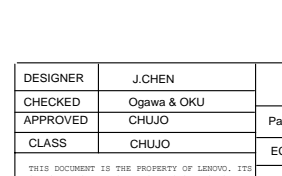
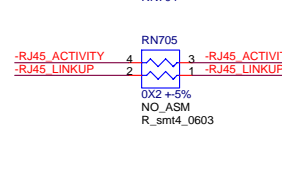
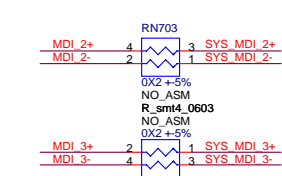
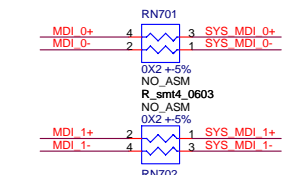
| | | |
|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | CARD BUS CONTROLLER(2/2) |
| sheet 49 of 100 | | Wednesday, February 14, 2007 |



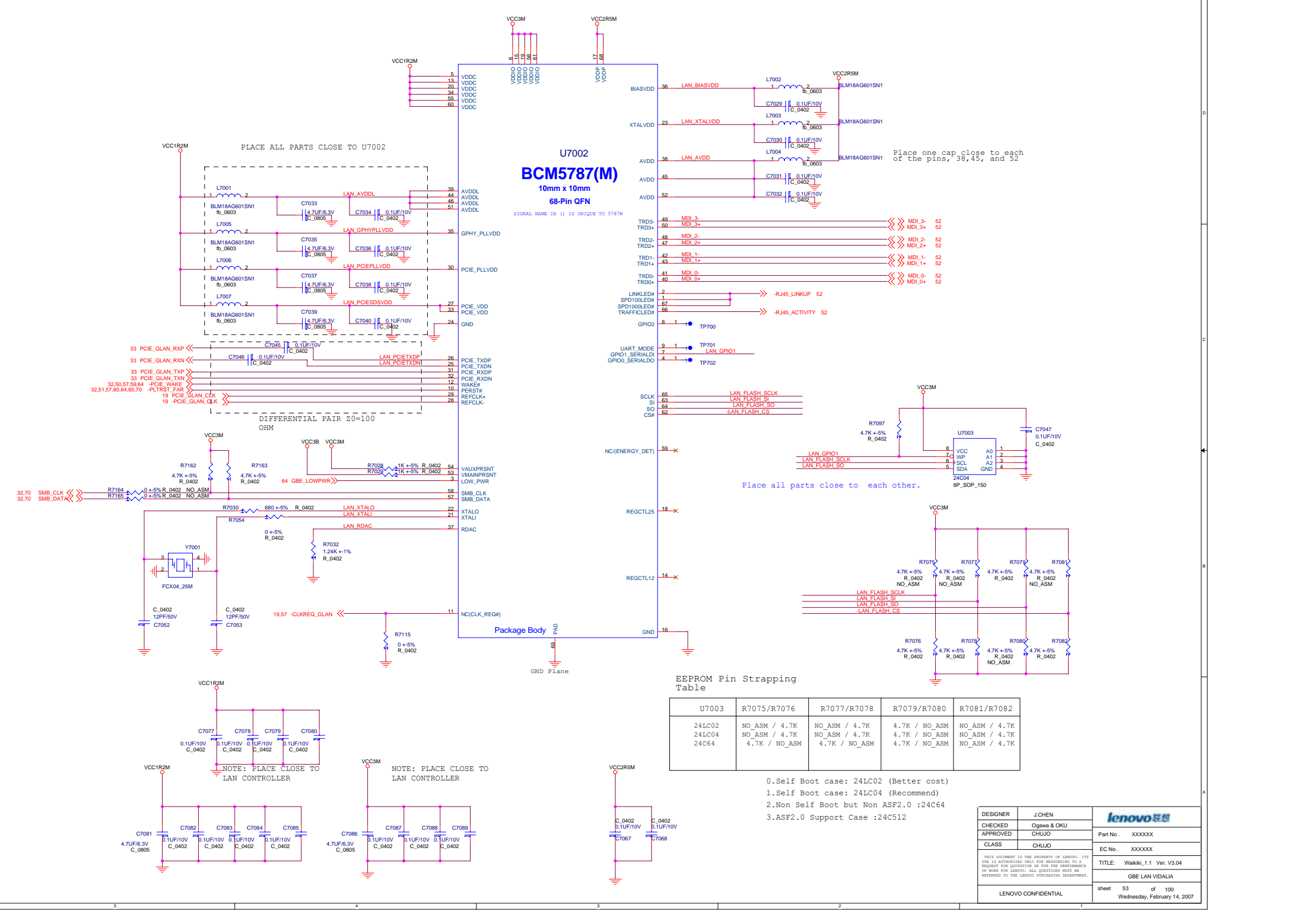
| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | CARBUS PWR CONTROL |
| | | sheet 51 of 100 Wednesday, February 14, 2007 |



| | DOCK | NO DOCK |
|-------|--------|---------|
| U12 | ASM | NO_ASM |
| C639 | ASM | NO_ASM |
| C655 | ASM | NO_ASM |
| C657 | ASM | NO_ASM |
| R300 | ASM | NO_ASM |
| RN701 | NO_ASM | ASM |
| RN702 | NO_ASM | ASM |
| RN703 | NO_ASM | ASM |
| RN704 | NO_ASM | ASM |
| RN705 | NO_ASM | ASM |
| C637 | ASM | NO_ASM |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | sheet 52 of 100 Wednesday, February 14, 2007 |



U7002
BCM5787(M)
 10mm x 10mm
 68-Pin QFN

SIGNAL NAME IN () IS UNIQUE TO 5787M

Place one cap close to each of the pins, 38, 45, and 52

Place all parts close to each other.


EEPROM Pin Strapping Table

| U7003 | R7075/R7076 | R7077/R7078 | R7079/R7080 | R7081/R7082 |
|--------|---------------|---------------|---------------|---------------|
| 24LC02 | NO_ASM / 4.7K | NO_ASM / 4.7K | 4.7K / NO_ASM | NO_ASM / 4.7K |
| 24LC04 | NO_ASM / 4.7K | NO_ASM / 4.7K | 4.7K / NO_ASM | NO_ASM / 4.7K |
| 24C64 | 4.7K / NO_ASM | 4.7K / NO_ASM | 4.7K / NO_ASM | NO_ASM / 4.7K |

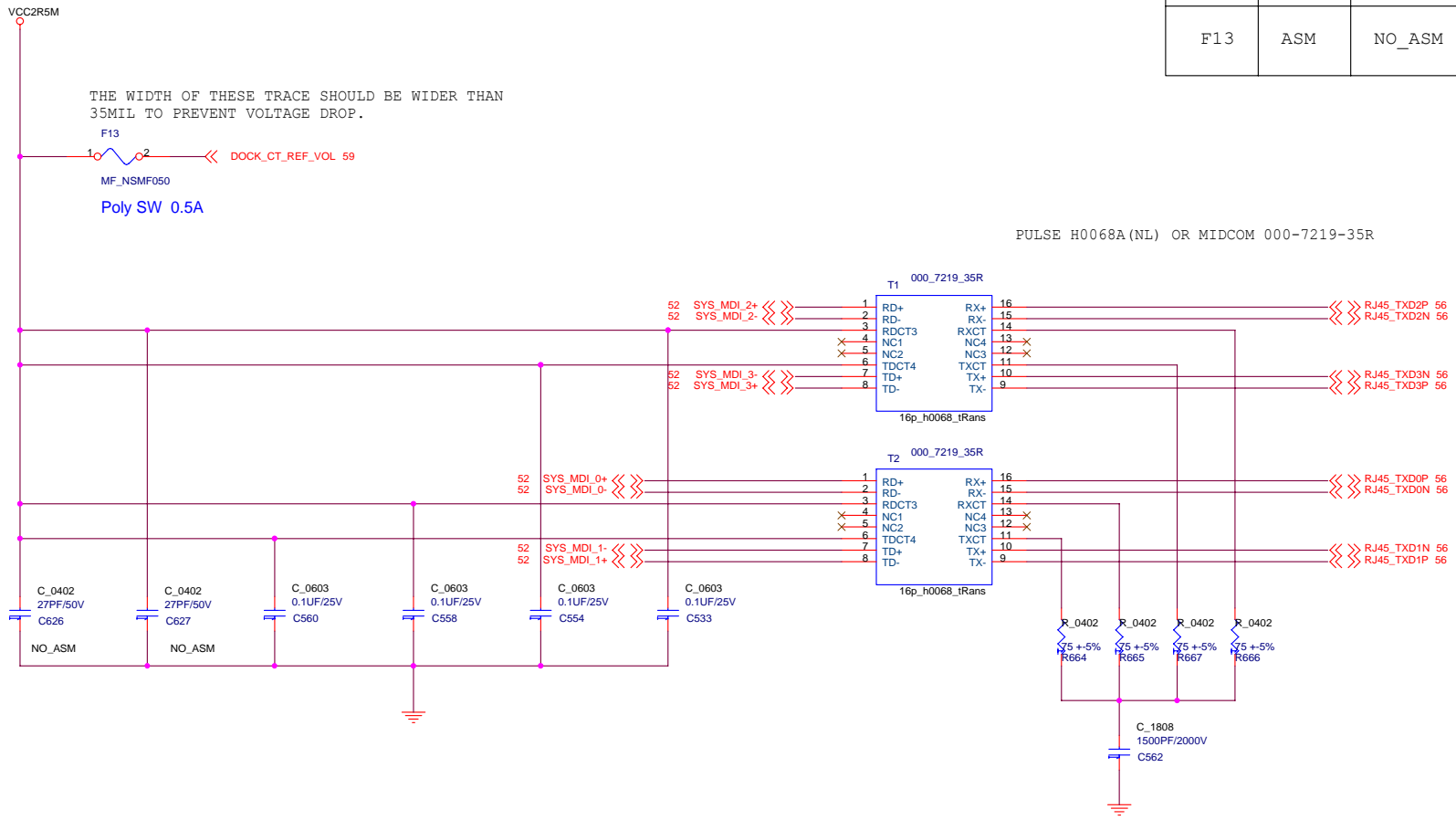
- 0. Self Boot case: 24LC02 (Better cost)
- 1. Self Boot case: 24LC04 (Recommend)
- 2. Non Self Boot but Non ASF2.0 :24C64
- 3. ASF2.0 Support case :24C512

| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| TITLE: Waikui_1.1 Ver. V3.04 | | |
| GBE LAN VIDALIA | | |
| sheet 53 of 100 | | |
| Wednesday, February 14, 2007 | | |

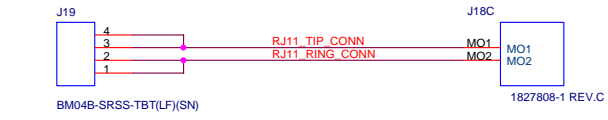
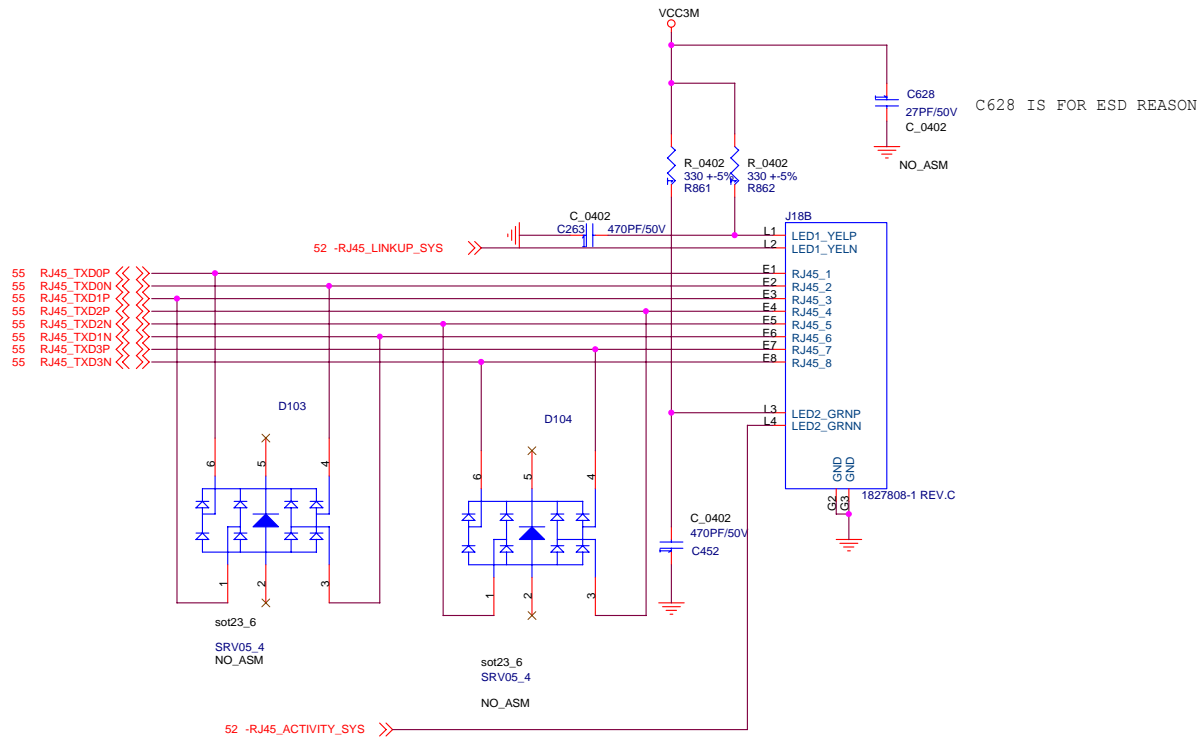
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| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | MICRO PCIE CONN |
| | | sheet 54 of 100 Wednesday, February 14, 2007 |

| | | |
|-----|------|---------|
| | DOCK | NO DOCK |
| F13 | ASM | NO_ASM |



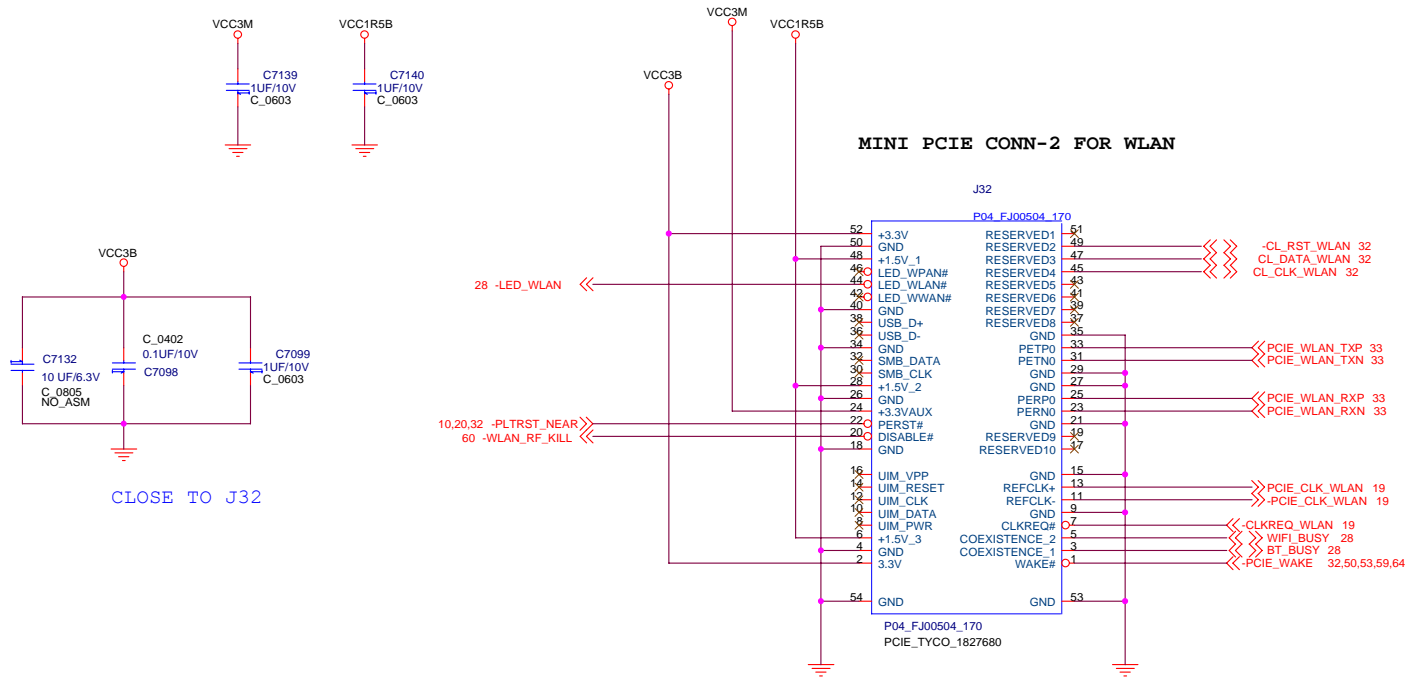
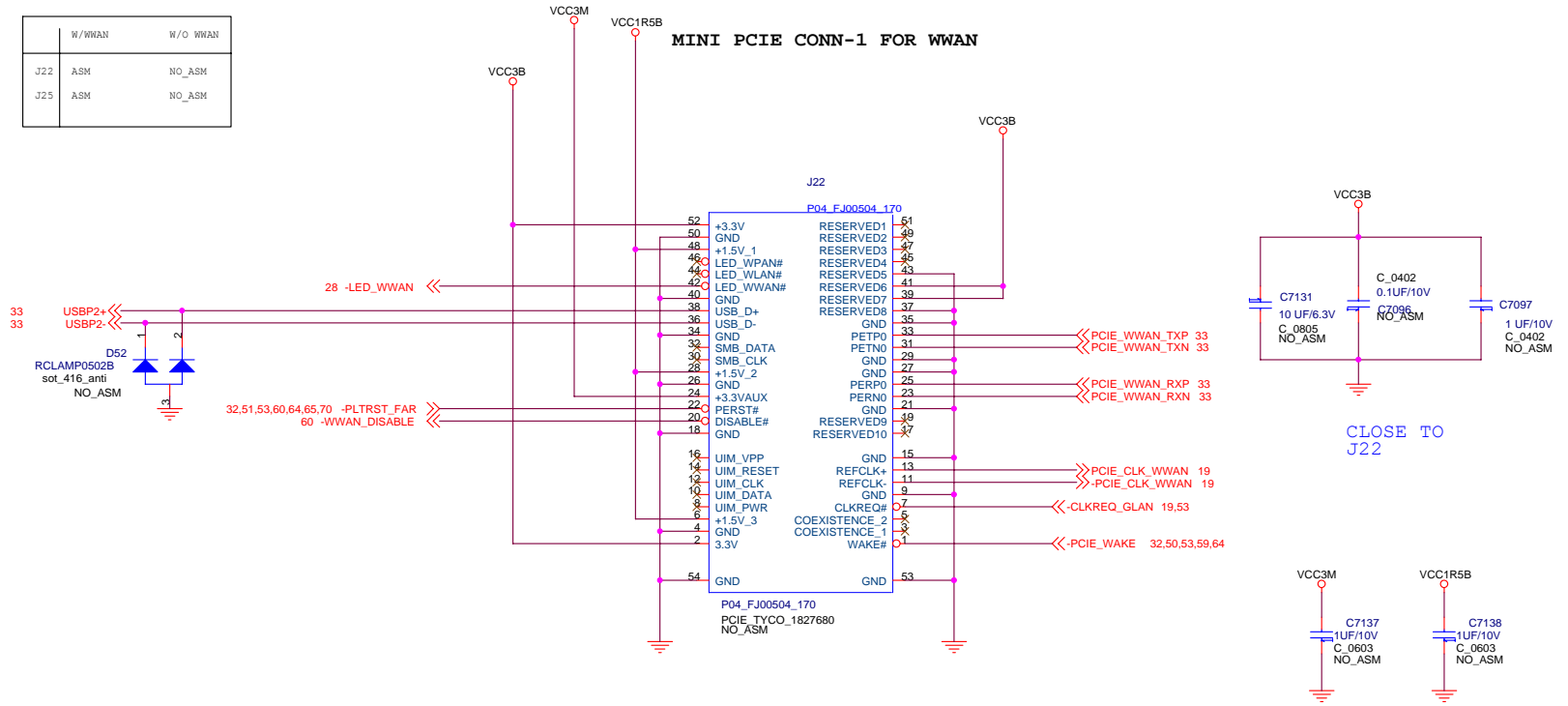
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | GBE MAGNETICS |
| | | sheet 55 of 100 Wednesday, February 14, 2007 |



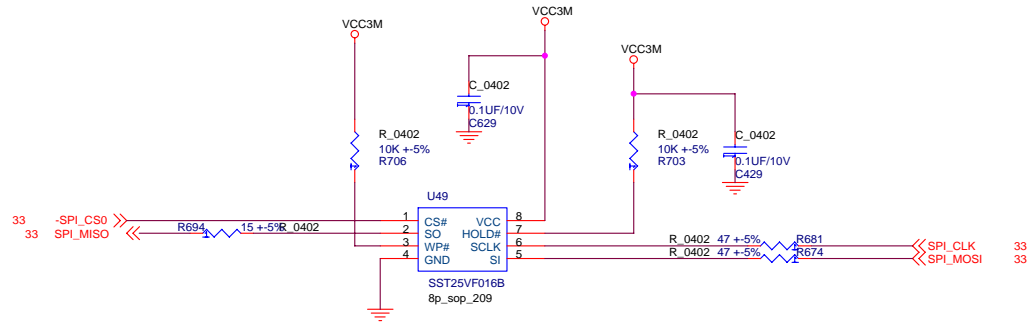
| | | |
|-----|------|---------|
| | DOCK | NO DOCK |
| J11 | ASM | NO_ASM |

| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | RJ45 CONN |
| | | sheet 56 of 100 Wednesday, February 14, 2007 |

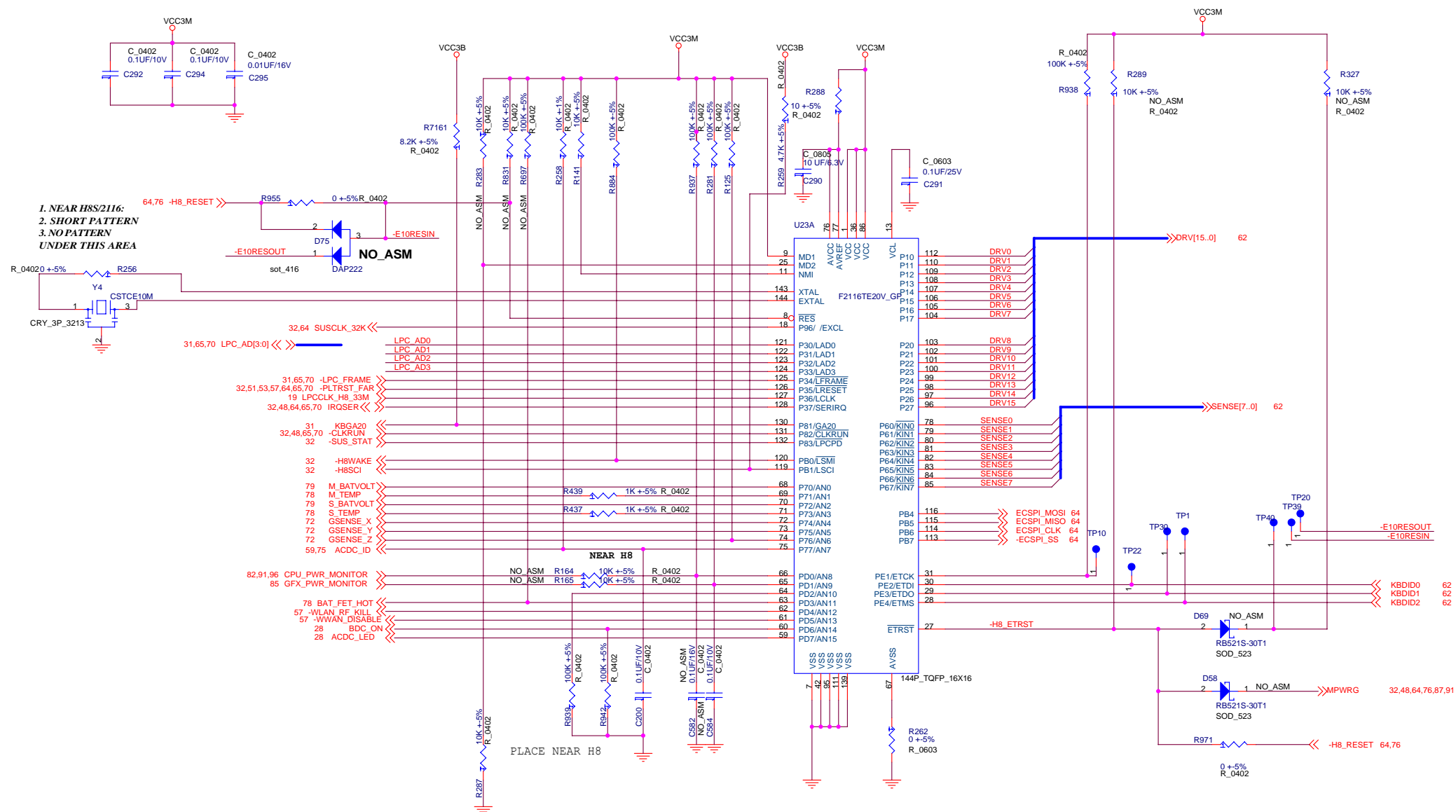
| | W/WLAN | W/O WLAN |
|-----|--------|----------|
| J22 | ASM | NO_ASM |
| J25 | ASM | NO_ASM |



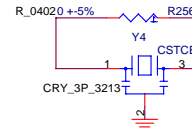
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | MINI PCIE SLOT(WWAN/WLAN) |
| | | sheet 57 of 100 Wednesday, February 14, 2007 |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | EEPROM/FLASH/SHARED |
| | | sheet 58 of 100 Wednesday, February 14, 2007 |



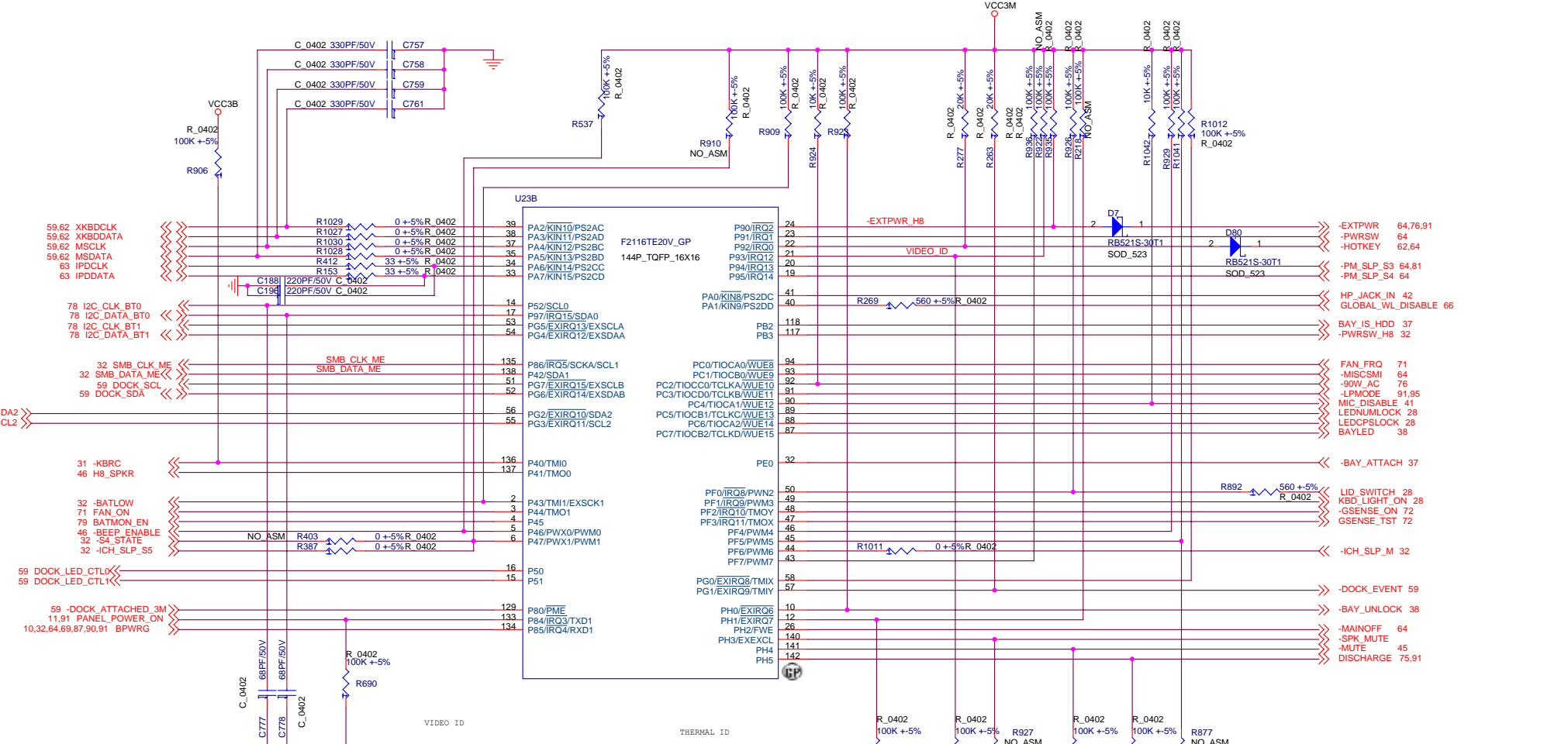
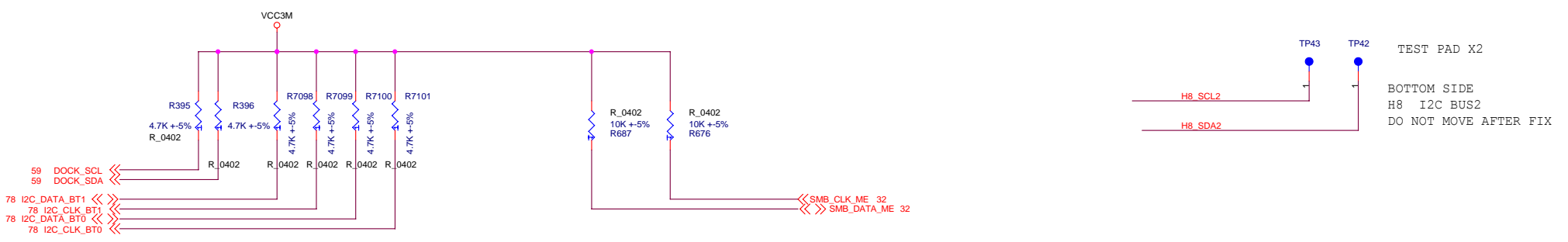
1. NEAR H8S2116;
2. SHORT PATTERN
3. NO PATTERN
UNDER THIS AREA

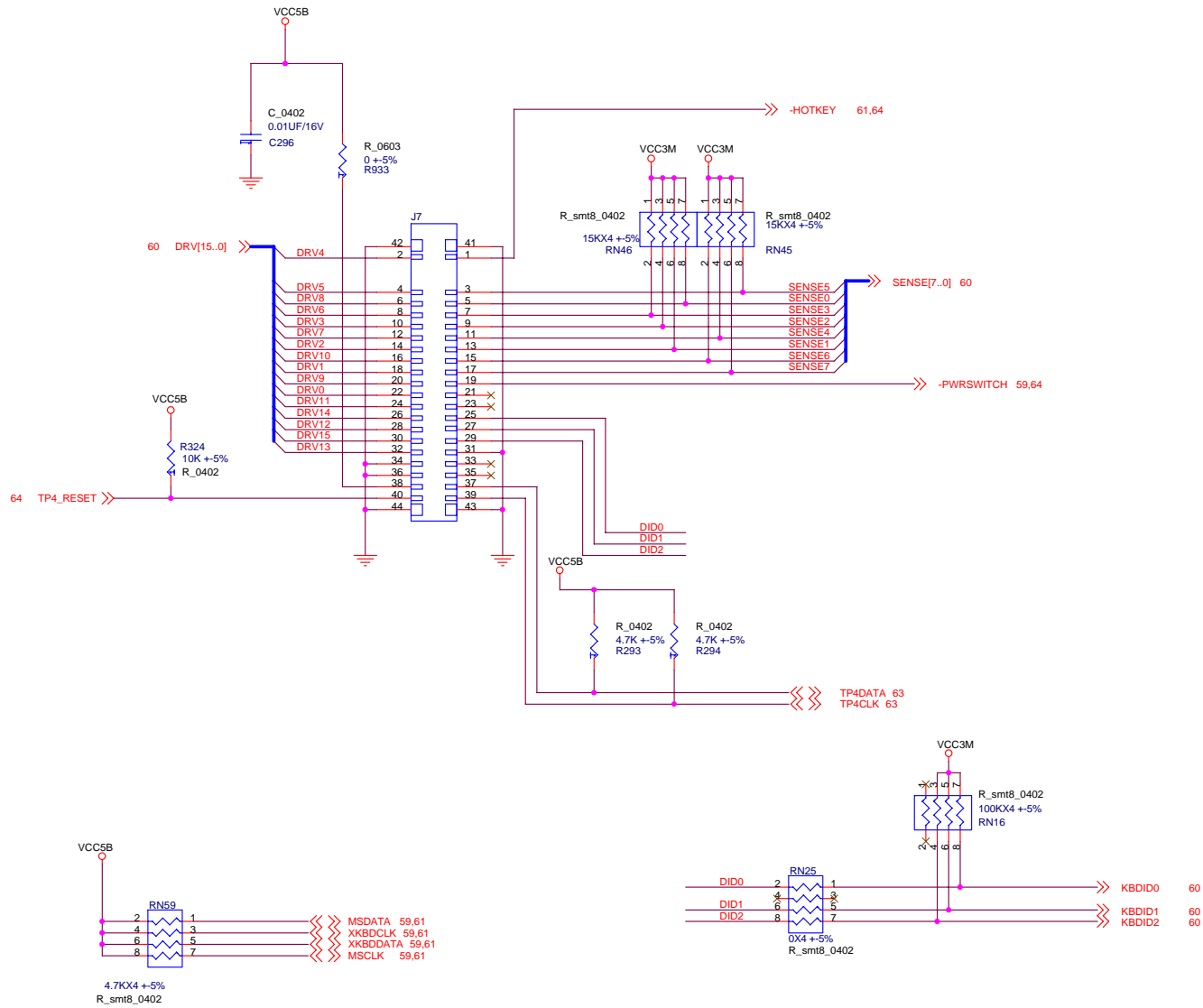


- 31,65,70 -LPC_FRAME
- 32,51,53,57,64,65,70 -PLRST_FAR
- 19 LPCCLK_H8_33M
- 32,48,64,65,70 IROSER
- 31 KBGA20
- 32,48,65,70 -CLKRUN
- 32 -SUS_STAT
- 32 -H8WAKE
- 32 -H8SCI
- 79 M_BATVOLT
- 78 M_TEMP
- 79 S_BATVOLT
- 78 S_TEMP
- 72 GSENSE_X
- 72 GSENSE_Y
- 72 GSENSE_Z
- 59,75 ACDC_ID
- 82,91,96 CPU_PWR_MONITOR
- 85 GFX_PWR_MONITOR
- 78 BAT_FET_HOT
- 57 -WLAN_RF_KILL
- 57 -WWAN_DISABLE
- 28 BDC_ON
- 28 ACDC_LED

| E10A DEBUG I/F | ENABLE | DISABLE (FINAL LOGIC) |
|----------------|--------|-----------------------|
| P05 | NO_ASM | ASM |
| P06 | NO_ASM | NO_ASM |
| P07 | ASM | NO_ASM |
| P08 | NO_ASM | NO_ASM |
| P09 | ASM | NO_ASM |
| P10 | ASM | NO_ASM |
| P11 | ASM | NO_ASM |
| P12 | ASM | NO_ASM |
| P13 | ASM | NO_ASM |

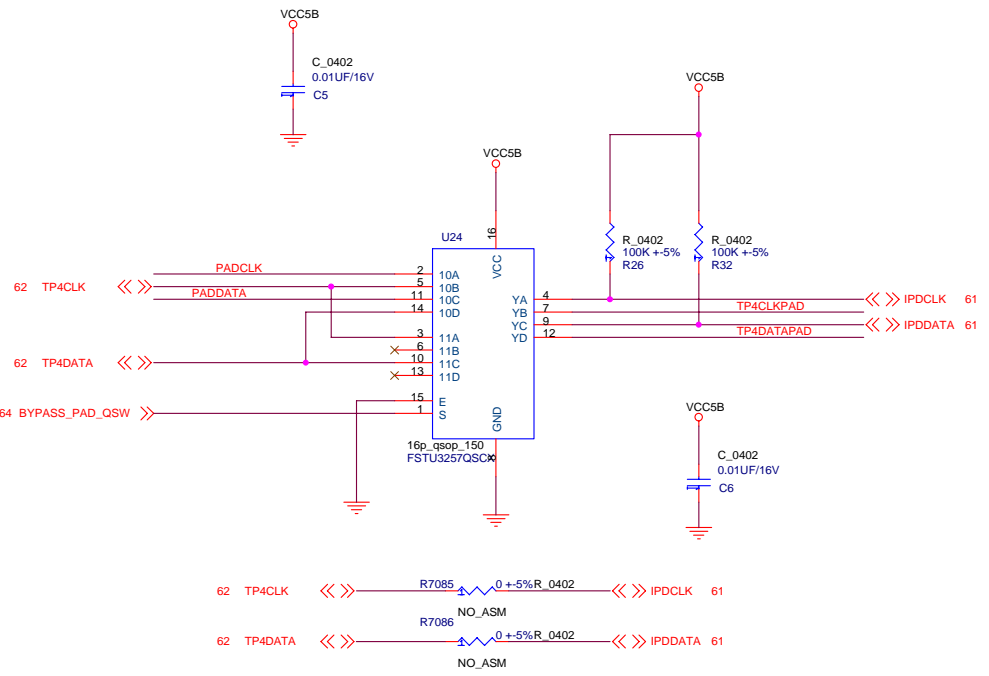
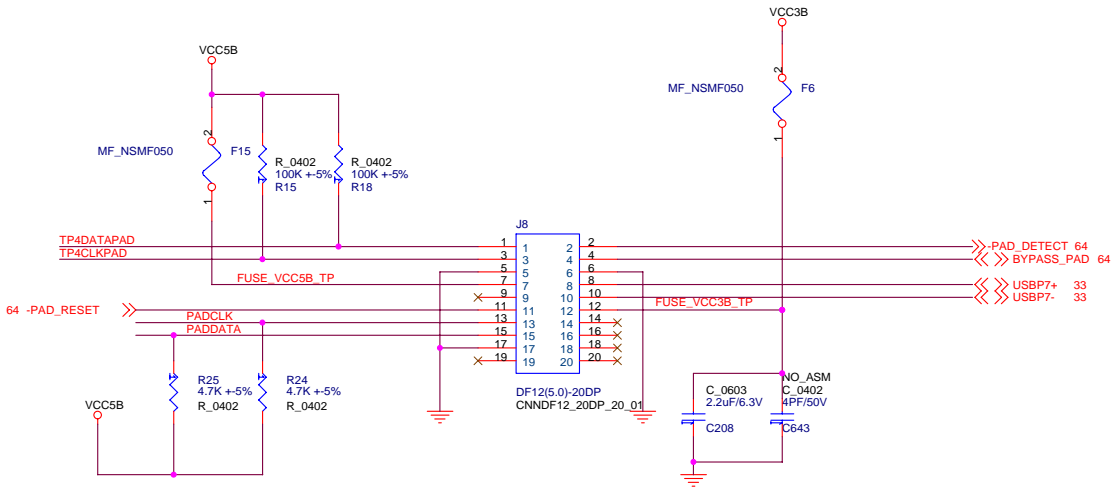
| | | |
|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No. XXXXXX |
| CLASS | CHUJUO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | H8S(1/2) |
| | | sheet 60 of 100 |
| | | Wednesday, February 14, 2007 |



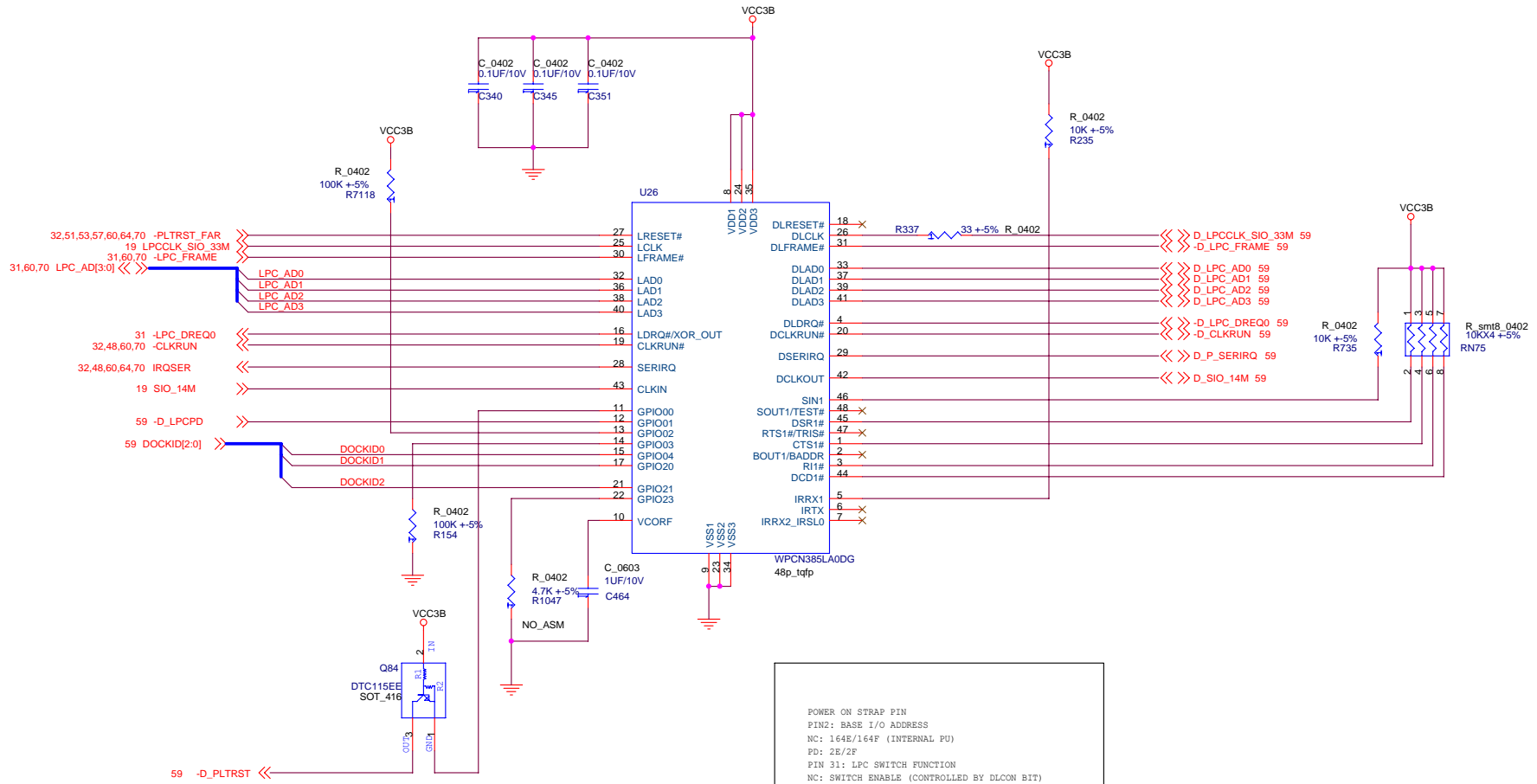


| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | KB CONN |
| sheet 62 of 100 | | Wednesday, February 14, 2007 |

| TouchPad/FingerPrint Support | | |
|------------------------------|---------|------------|
| | SUPPORT | NO SUPPORT |
| F15 | ASM | NO-ASM |
| R15 | ASM | NO-ASM |
| R18 | ASM | NO-ASM |
| R24 | ASM | NO-ASM |
| R25 | ASM | NO-ASM |
| J8 | ASM | NO-ASM |
| F6 | ASM | NO-ASM |
| C208 | ASM | NO-ASM |
| C643 | NO-ASM | NO-ASM |
| | | |
| C5 | ASM | NO-ASM |
| C6 | ASM | NO-ASM |
| U24 | ASM | NO-ASM |
| R26 | ASM | ASM |
| R32 | ASM | ASM |
| R7085 | NO-ASM | ASM |
| R7086 | NO-ASM | ASM |



| | | |
|--|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | TP CONN |
| | | sheet 63 of 100 |
| | | Wednesday, February 14, 2007 |

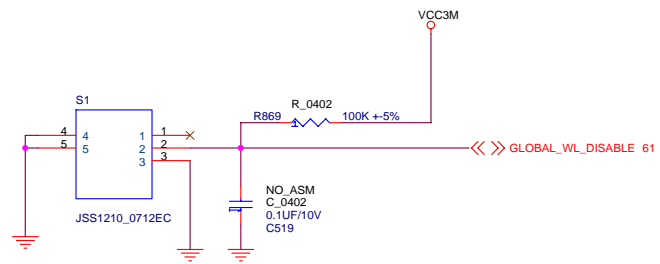



NO DOCKING SUPPORT:
All parts in this page are NO_ASM

GPIO23: RESERVED (INTERNAL PULLUP ENABLE)
GPIO03: LPC POWER DOWN FOR LEGACY IO BAY
GPIO02: LPC RESET# FOR LEGACY IO BAY
GPIO01: LPC POWER DOWN FOR DOCKING LPC DEVICE
GPIO00: LPC RESET# FOR DOCKING LPC DEVICE
GPIO ASSIGNMENT LIST
GPIO21: DOCK ID 2
GPIO20: DOCK ID 1
GPIO04: DOCK ID 0


POWER ON STRAP PIN
PIN2: BASE I/O ADDRESS
NC: 164E/164F (INTERNAL PU)
PD: 2E/2F
PIN 31: LPC SWITCH FUNCTION
NC: SWITCH ENABLE (CONTROLLED BY DLCON BIT)
PD: SWITCH DISABLE (FORCED TO BE DISCONNECTED)
PIN 47: TRISTATE
NC: NORMAL OPERATION
PD: ALL PINS FLOATING
PIN 48: TEST
NC: NORMAL OPERATION
PD: TEST MODE

| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | SIO WPCN385SDG |
| | | sheet 65 of 100 Wednesday, February 14, 2007 |




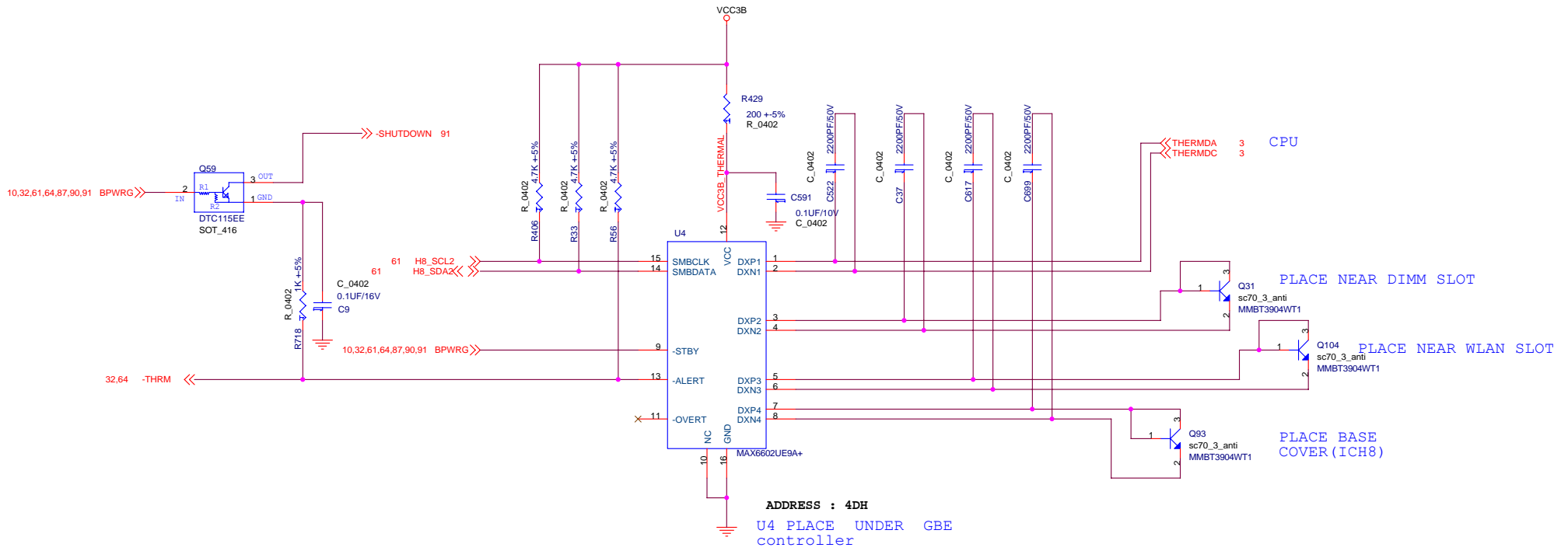
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | WIRELESS DISABLE SW |
| | | sheet 66 of 100 Wednesday, February 14, 2007 |

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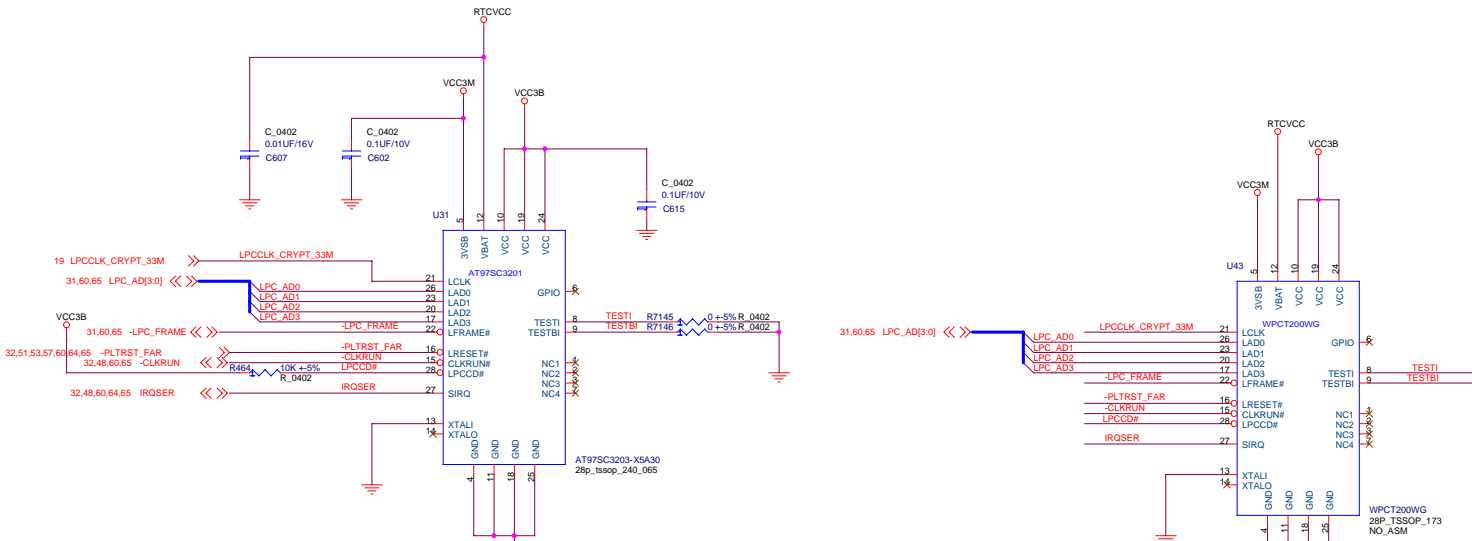
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | SERIAL INTERFACE |
| | | sheet 67 of 100 Wednesday, February 14, 2007 |

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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | BLANK PAGE |
| | | sheet 68 of 100 Wednesday, February 14, 2007 |

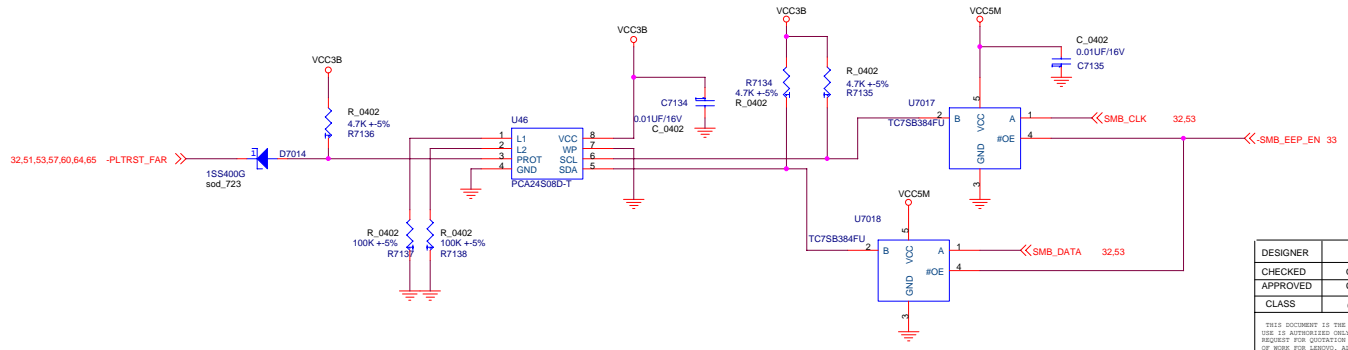
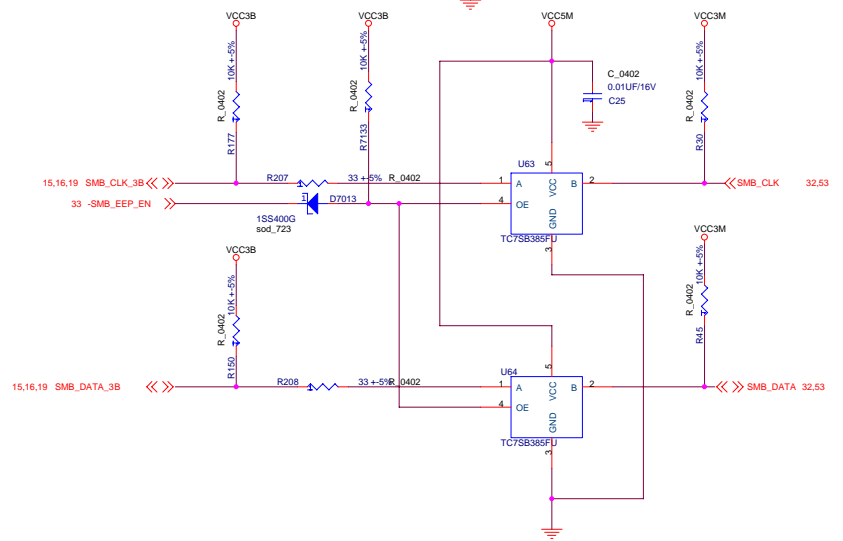


| | | |
|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| LENOVO CONFIDENTIAL | | THERMAL SENSOR |
| | | sheet 69 of 100 |
| | | Wednesday, February 14, 2007 |



| TPM FUNCTION | 9.7X6.1MM | 9.7X4.4MM |
|--------------|-----------|-----------|
| U31 | ASM | NO_ASM |
| U43 | NO_ASM | ASM |

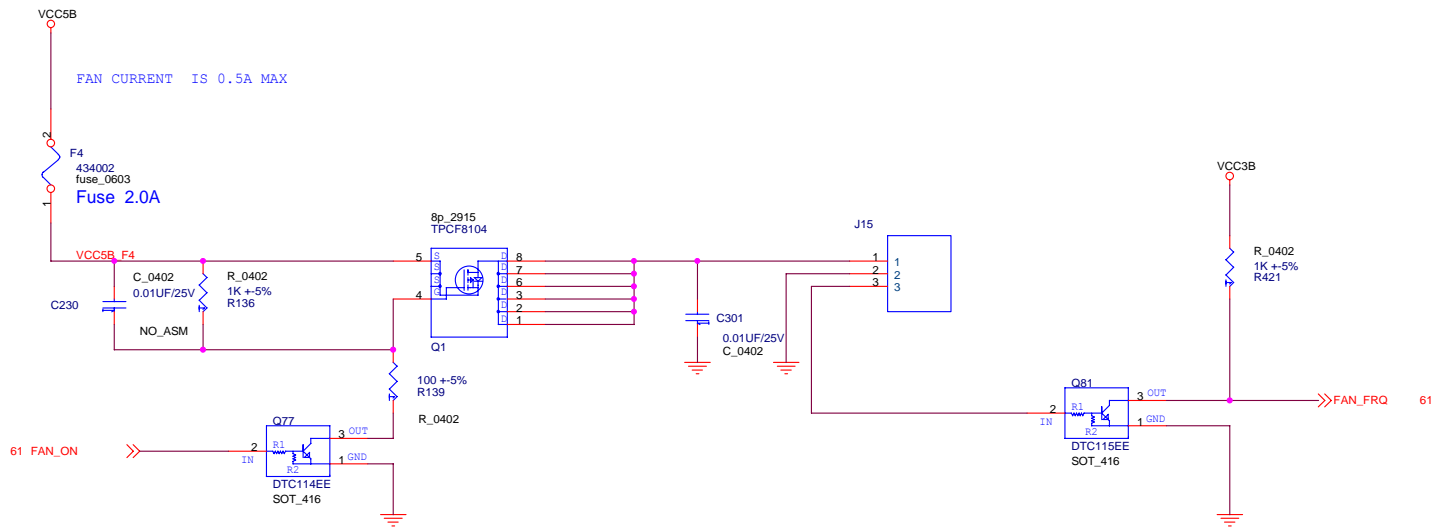
| | TPM support | |
|---------|-------------|----------------|
| | YES | NO |
| R297 | ASM | NOASM (page19) |
| U31/U43 | ASM | NOASM |
| C602 | ASM | NOASM |
| C607 | ASM | NOASM |
| C615 | ASM | NOASM |
| R464 | ASM | NOASM |
| R7145 | ASM | NOASM |
| R7146 | ASM | NOASM |



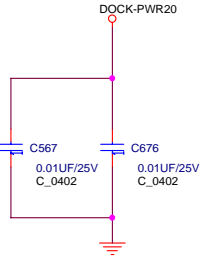
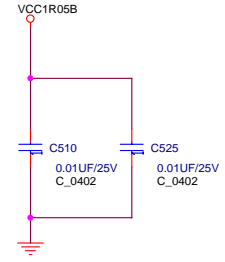
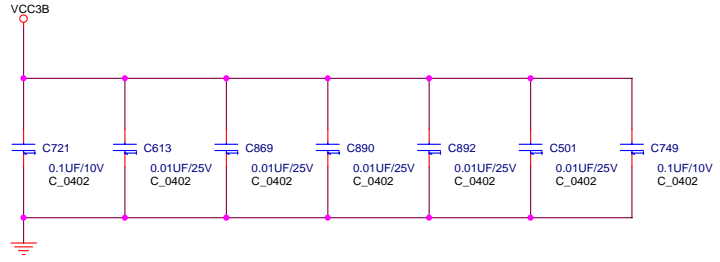
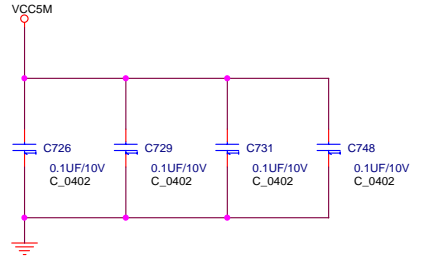
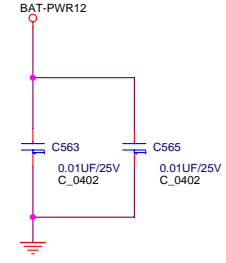
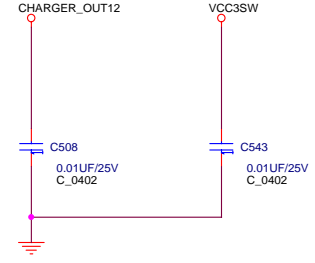
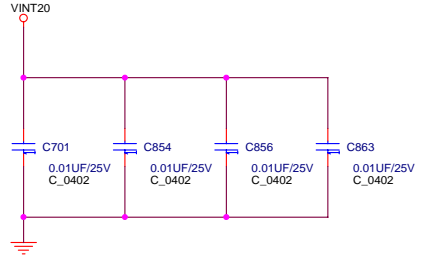
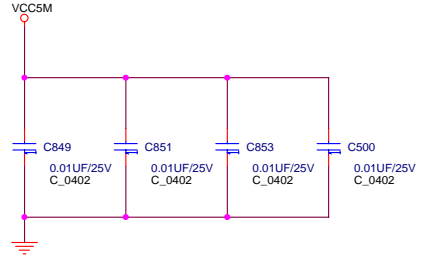
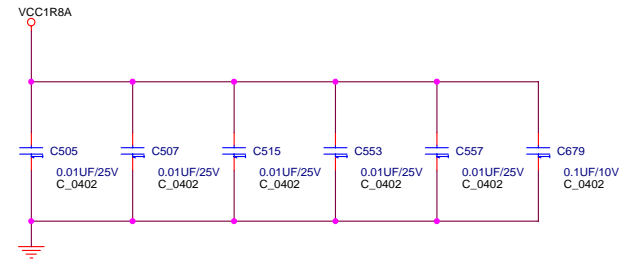
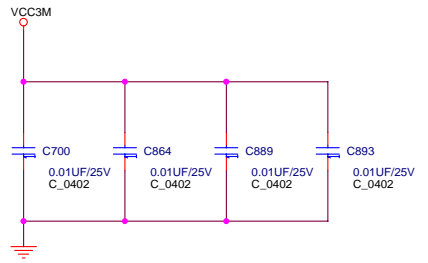
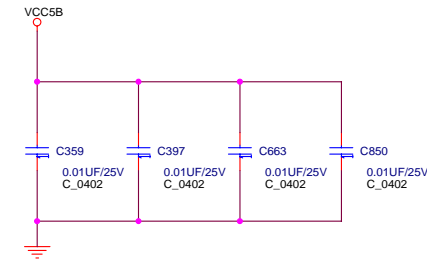
| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| TITLE: Waikiki_1.1 Ver. V3.04 | | I2C BUS/SMBUS |
| sheet 70 of 100 Wednesday, February 14, 2007 | | |

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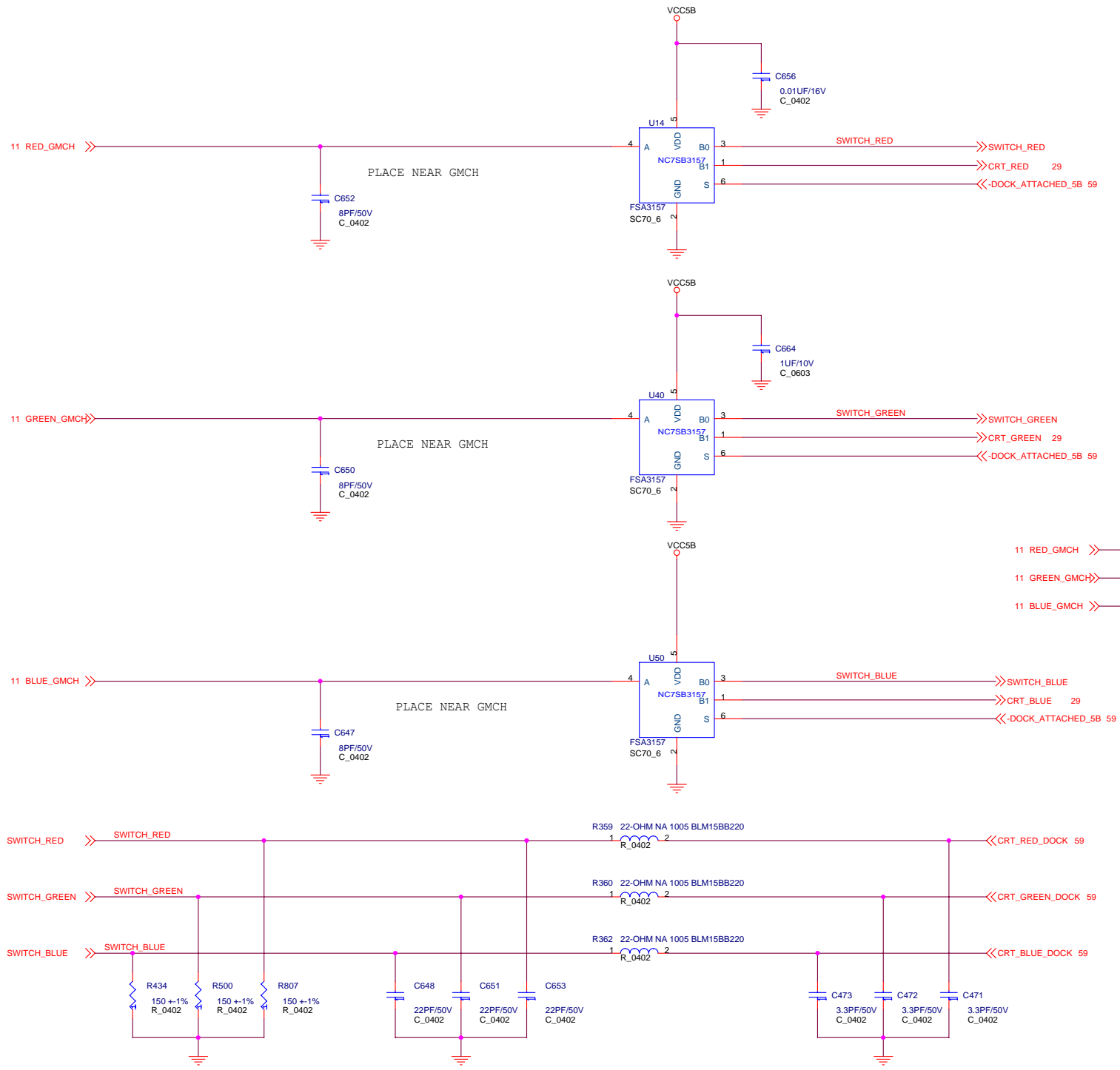
LENOVO CONFIDENTIAL



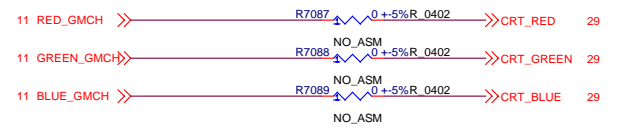
| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT. | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | FAN CONN |
| | | sheet 71 of 100 Wednesday, February 14, 2007 |



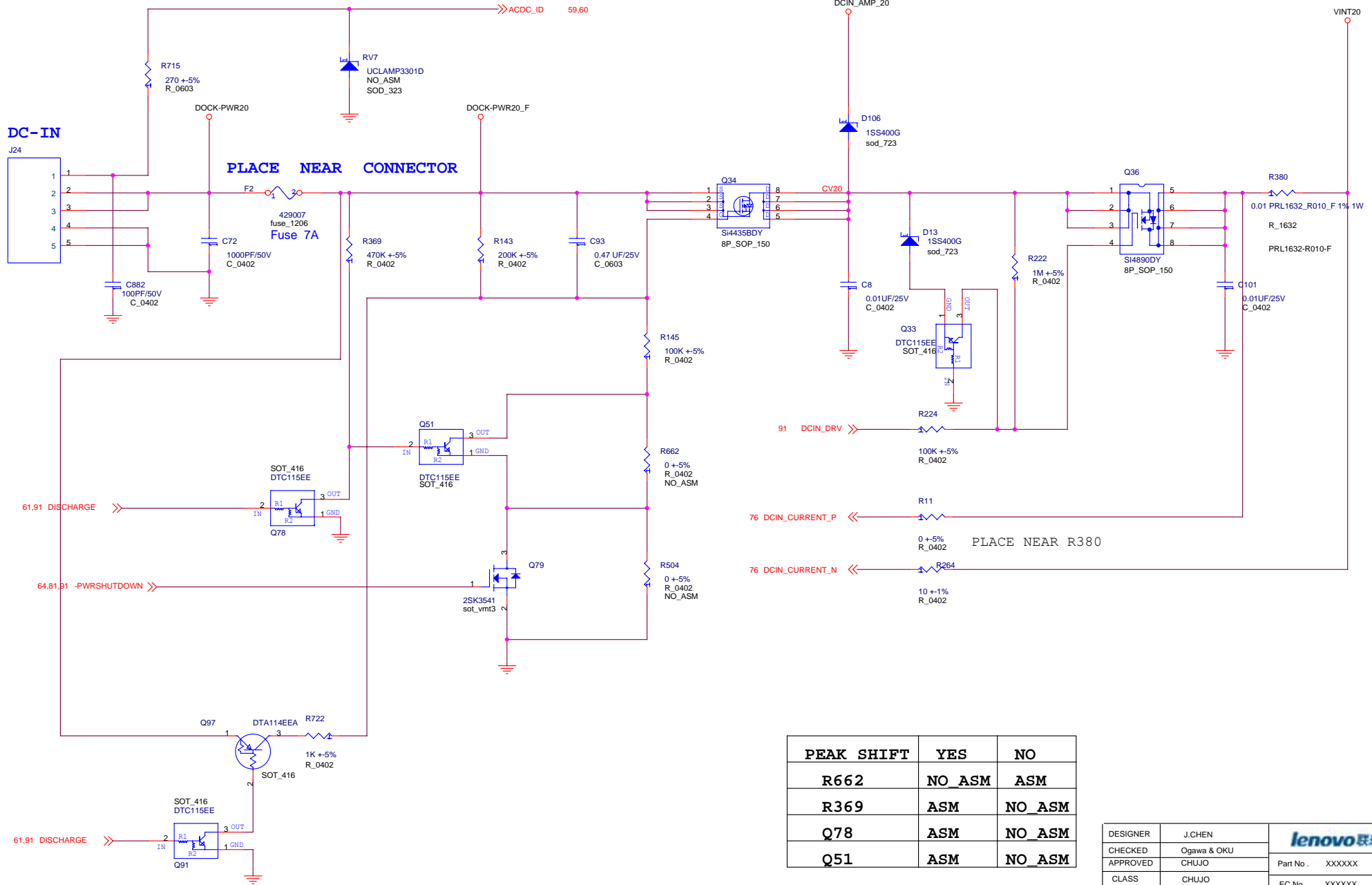
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | EMC DECOUPLING |
| | | sheet 73 of 100 Wednesday, February 14, 2007 |



| | DOCK | NO DOCK |
|-------|--------|---------|
| C471 | ASM | NO_ASM |
| C472 | ASM | NO_ASM |
| C473 | ASM | NO_ASM |
| C648 | ASM | NO_ASM |
| C651 | ASM | NO_ASM |
| C653 | ASM | NO_ASM |
| C656 | ASM | NO_ASM |
| C664 | ASM | NO_ASM |
| R359 | ASM | NO_ASM |
| R360 | ASM | NO_ASM |
| R362 | ASM | NO_ASM |
| R434 | ASM | NO_ASM |
| R500 | ASM | NO_ASM |
| R807 | ASM | NO_ASM |
| U14 | ASM | NO_ASM |
| U40 | ASM | NO_ASM |
| U50 | ASM | NO_ASM |
| R7087 | NO_ASM | ASM |
| R7088 | NO_ASM | ASM |
| R7089 | NO_ASM | ASM |

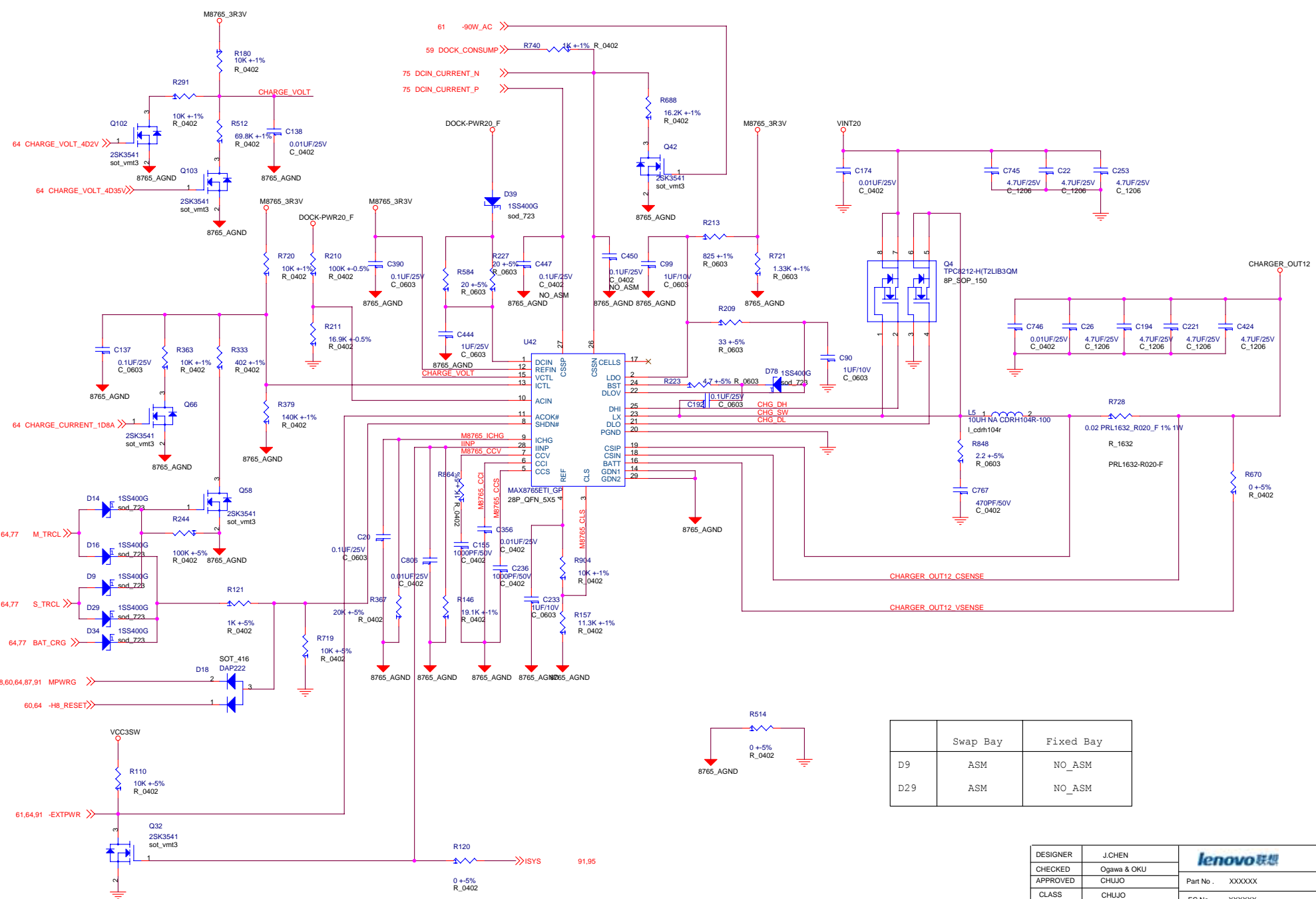


| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | sheet 74 of 100 Wednesday, February 14, 2007 |




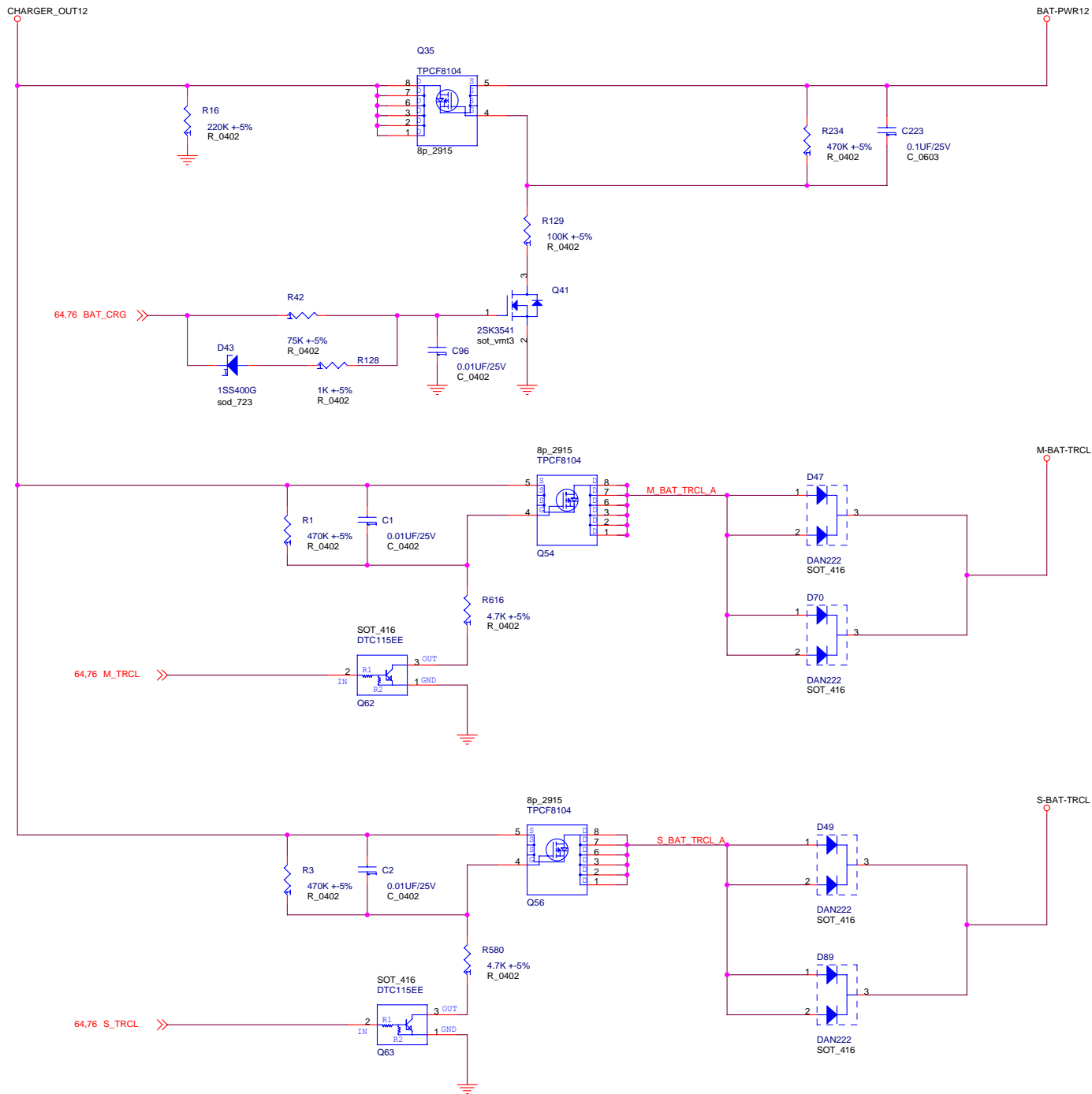
| PEAK SHIFT | YES | NO |
|------------|--------|--------|
| R662 | NO_ASM | ASM |
| R369 | ASM | NO_ASM |
| Q78 | ASM | NO_ASM |
| Q51 | ASM | NO_ASM |

| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | |
| TITLE: Waikiwi_1.1 Ver. V3.04 | | |
| DC-IN | | |
| LENOVO CONFIDENTIAL | | |
| sheet 75 of 100 Wednesday, February 14, 2007 | | |



| | Swap Bay | Fixed Bay |
|-----|----------|-----------|
| D9 | ASM | NO_ASM |
| D29 | ASM | NO_ASM |

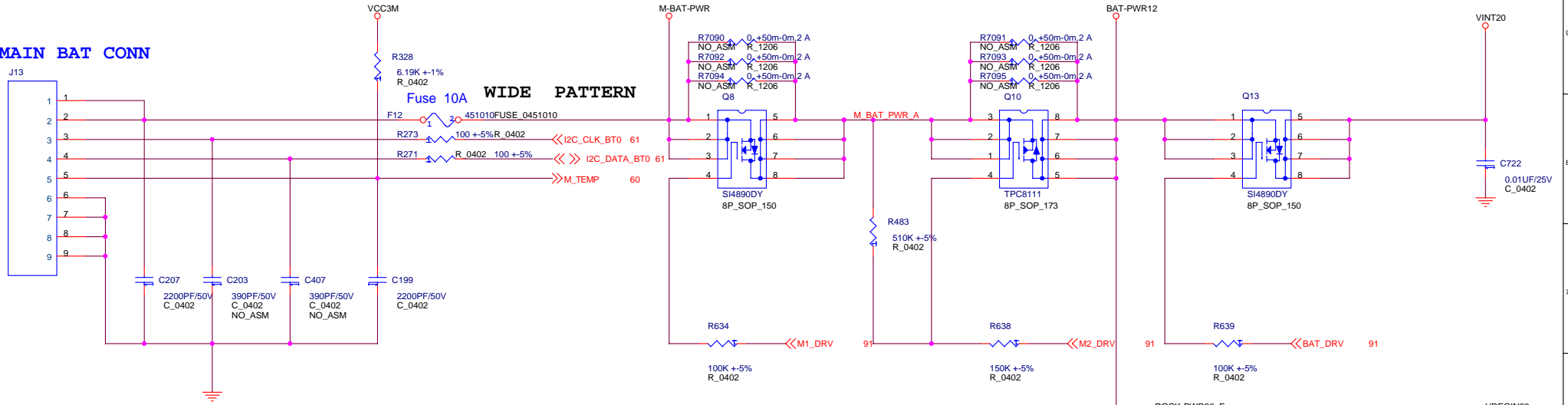
| | | |
|--|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | |
| CLASS | CHUJO | |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL OTHERS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | Part No. XXXXXX |
| | | EC No. XXXXXX |
| | | TITLE: Waikiki_1.1 Ver.V3.04 |
| | | BATTERY CHARGER(MAX8765) |
| LENOVO CONFIDENTIAL | | sheet 76 of 100 Wednesday, February 14, 2007 |



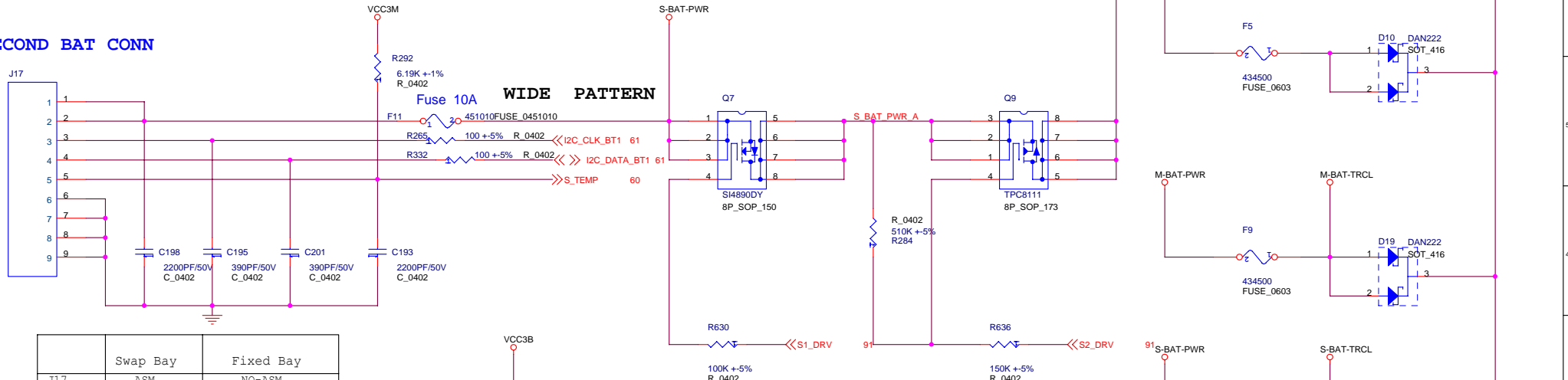
| | Swap Bay | Fixed Bay |
|------|----------|-----------|
| R3 | ASM | NO-ASM |
| C2 | ASM | NO-ASM |
| Q56 | ASM | NO-ASM |
| Q63 | ASM | NO-ASM |
| R580 | ASM | NO-ASM |
| D49 | ASM | NO-ASM |
| D89 | ASM | NO-ASM |

| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | CHARGE SELECTOR |
| | | sheet 77 of 100 Wednesday, February 14, 2007 |

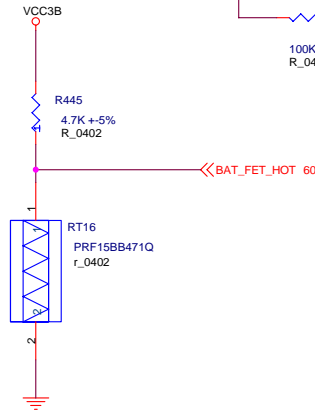
MAIN BAT CONN



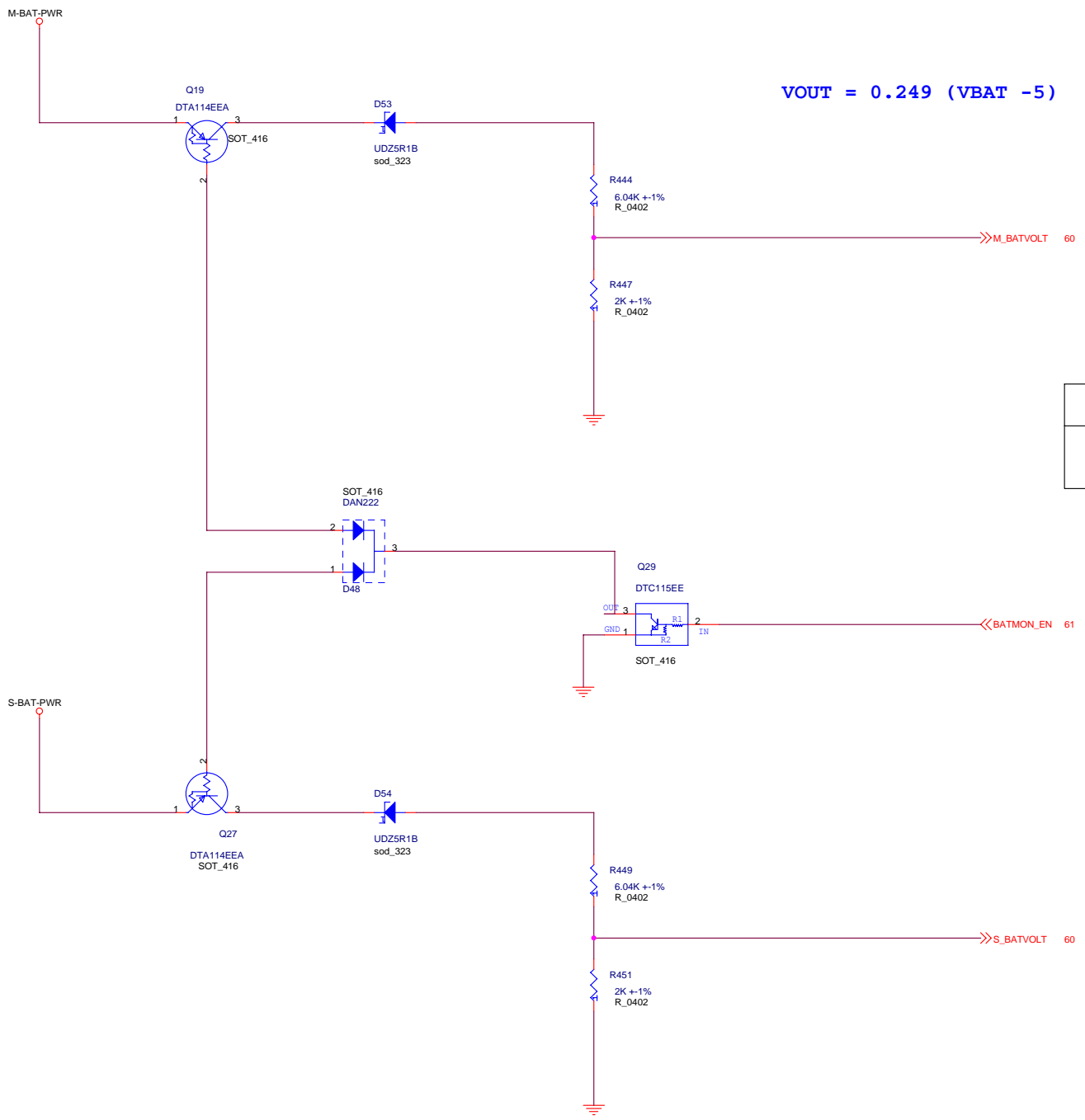
SECOND BAT CONN



| | Swap Bay | Fixed Bay |
|-------|----------|-----------|
| J17 | ASM | NO-ASM |
| F11 | ASM | NO-ASM |
| R265 | ASM | NO-ASM |
| R332 | ASM | NO-ASM |
| C198 | ASM | NO-ASM |
| C195 | ASM | NO-ASM |
| C201 | ASM | NO-ASM |
| Q7 | ASM | NO-ASM |
| Q9 | ASM | NO-ASM |
| Q8 | ASM | NO-ASM |
| Q10 | ASM | NO-ASM |
| R630 | ASM | NO-ASM |
| R284 | ASM | NO-ASM |
| R636 | ASM | NO-ASM |
| R7090 | NO-ASM | ASM |
| R7091 | NO-ASM | ASM |
| R7092 | NO-ASM | ASM |
| R7093 | NO-ASM | ASM |
| R7094 | NO-ASM | ASM |
| R7095 | NO-ASM | ASM |
| F10 | ASM | NO-ASM |
| D23 | ASM | NO-ASM |



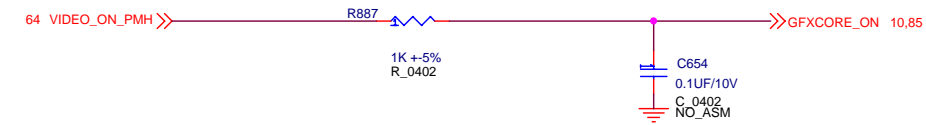
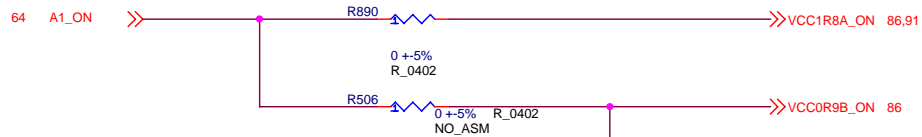
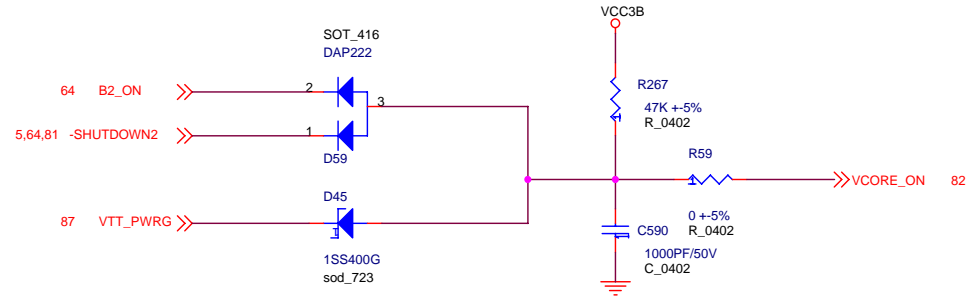
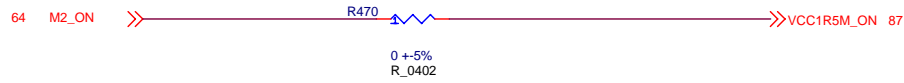
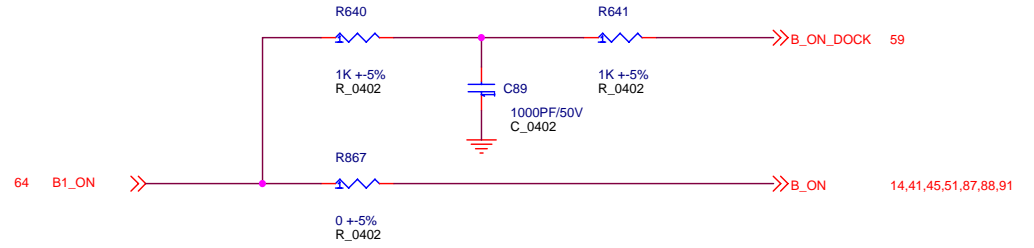
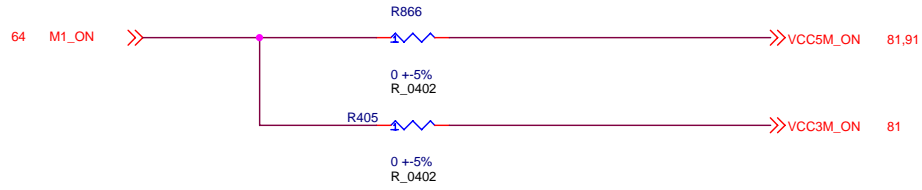
| | | |
|---|-------------|-----------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No. XXXXXX |
| CLASS | CHUJUO | EC No. XXXXXX |
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| TITLE: Waikiki_1.1 Ver. V3.04 | | |
| BATTERY INPUT | | |
| LENOVO CONFIDENTIAL | | |
| sheet 78 of 100 Wednesday, February 14, 2007 | | |



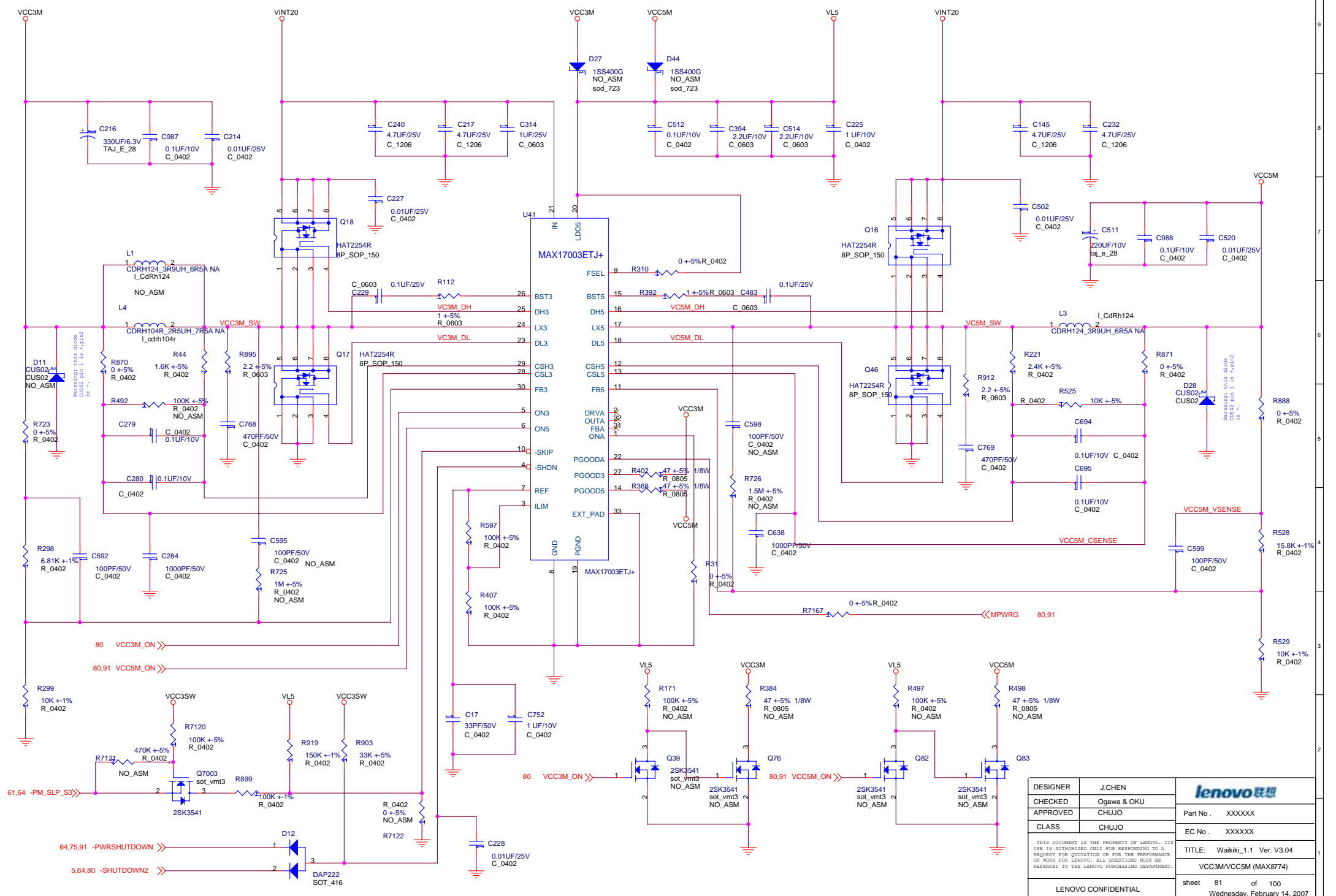
VOUT = 0.249 (VBAT - 5)


| | Swap Bay | Fixed Bay |
|------|----------|-----------|
| Q27 | ASM | NO-ASM |
| D54 | ASM | NO-ASM |
| R449 | ASM | NO-ASM |

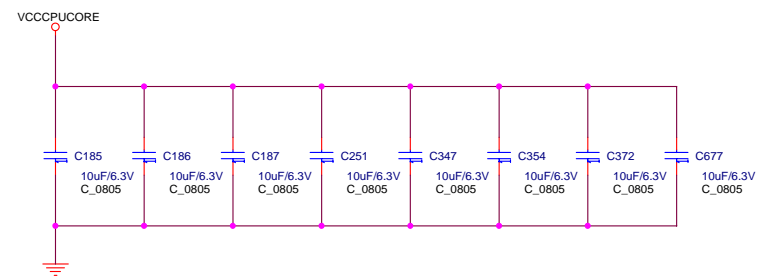
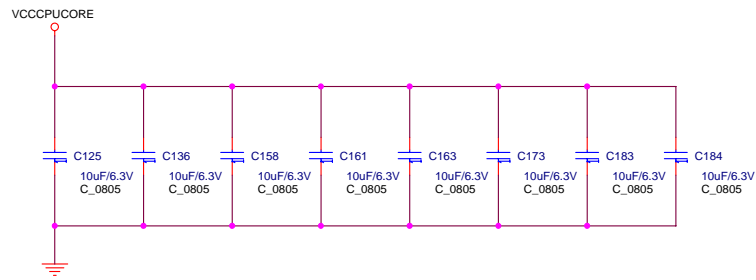
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | BATTERY MONITOR |
| | | sheet 79 of 100 Wednesday, February 14, 2007 |



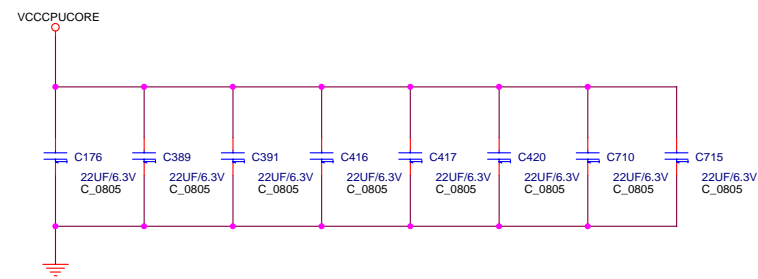
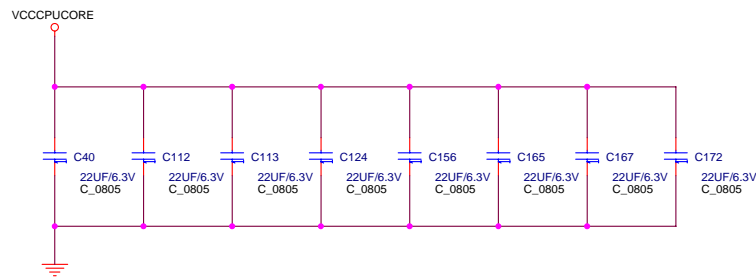
| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No . XXXXXX |
| CLASS | CHUJUO | EC No . XXXXXX |
| THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT. | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | POWER SEQUENCE |
| | | sheet 80 of 100 Wednesday, February 14, 2007 |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJUO | Part No. XXXXXX |
| CLASS | CHUJUO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiiki_1.1 Ver. V3.04 |
| | | VCC3M/VCC5M (MAX8774) |
| LENOVO CONFIDENTIAL | | sheet 81 of 100 Wednesday, February 14, 2007 |




10UF 6.3V X5R 0805 1/16W X 16PCS

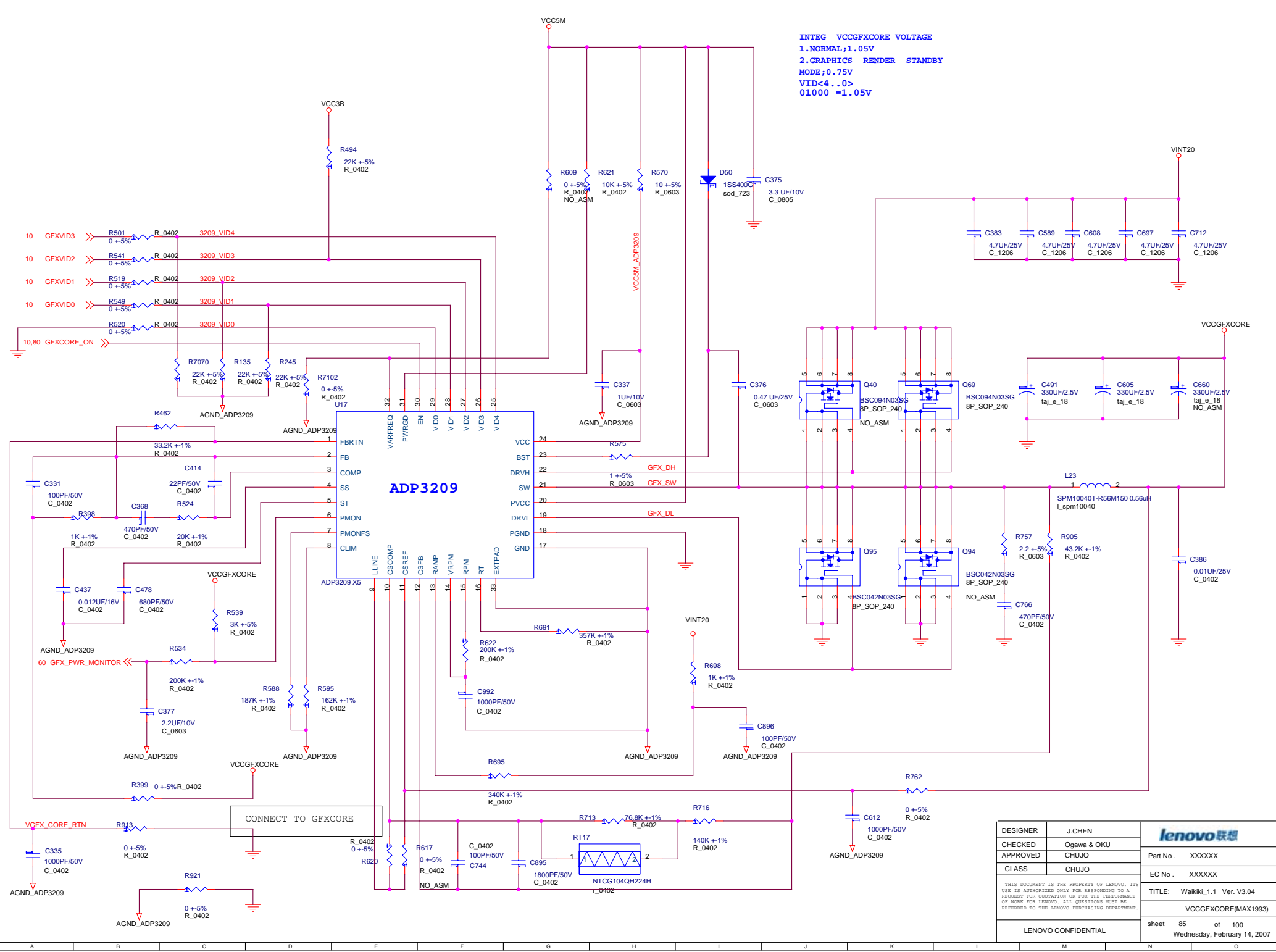


22UF 6.3V X5R 0805 1/16W X 16PCS

| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | VCCCPUCORE DECOUPLING |
| | | sheet 83 of 100 Wednesday, February 14, 2007 |


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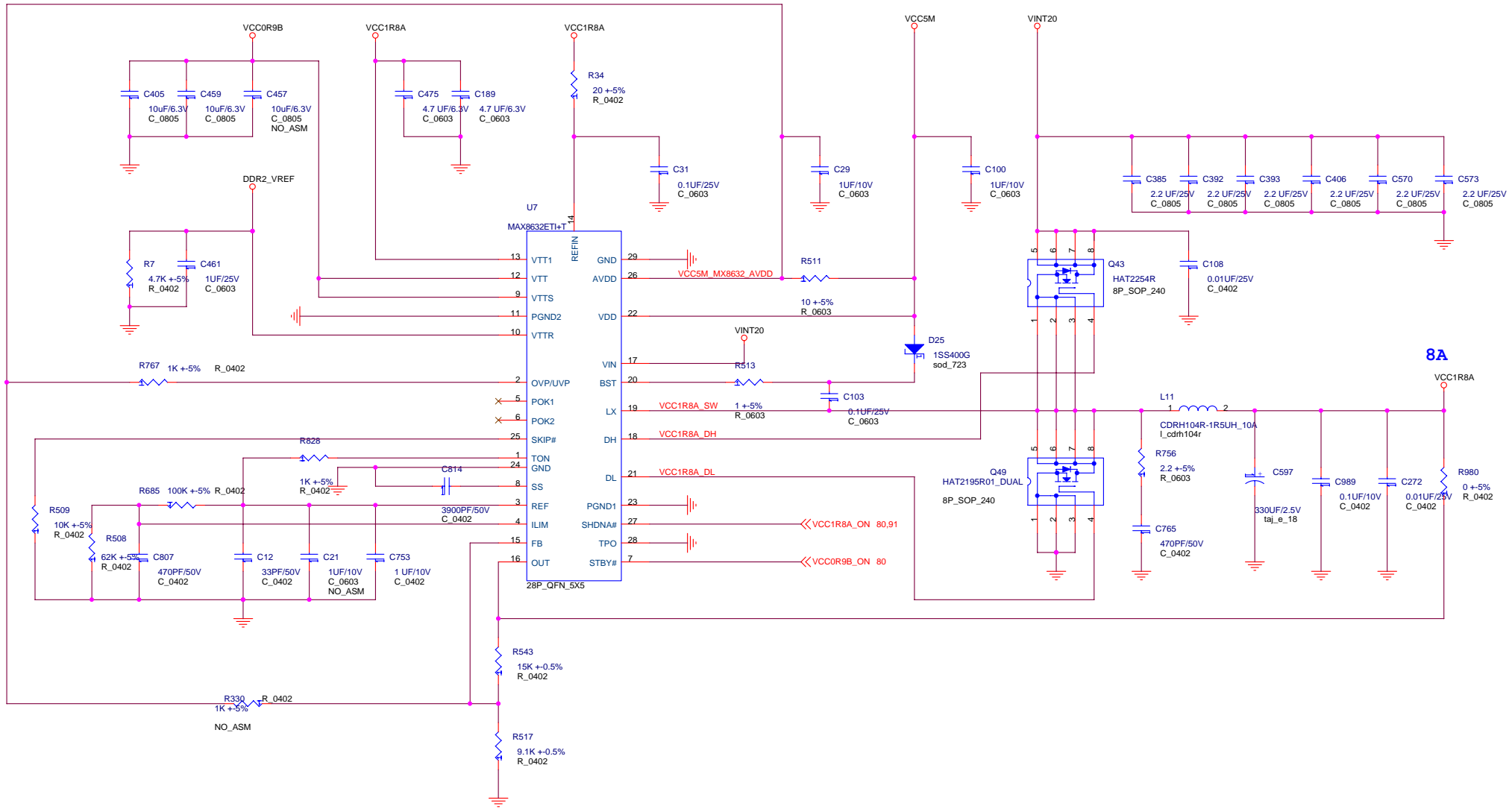
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | VCC1R5M |
| | | sheet 84 of 100 Wednesday, February 14, 2007 |



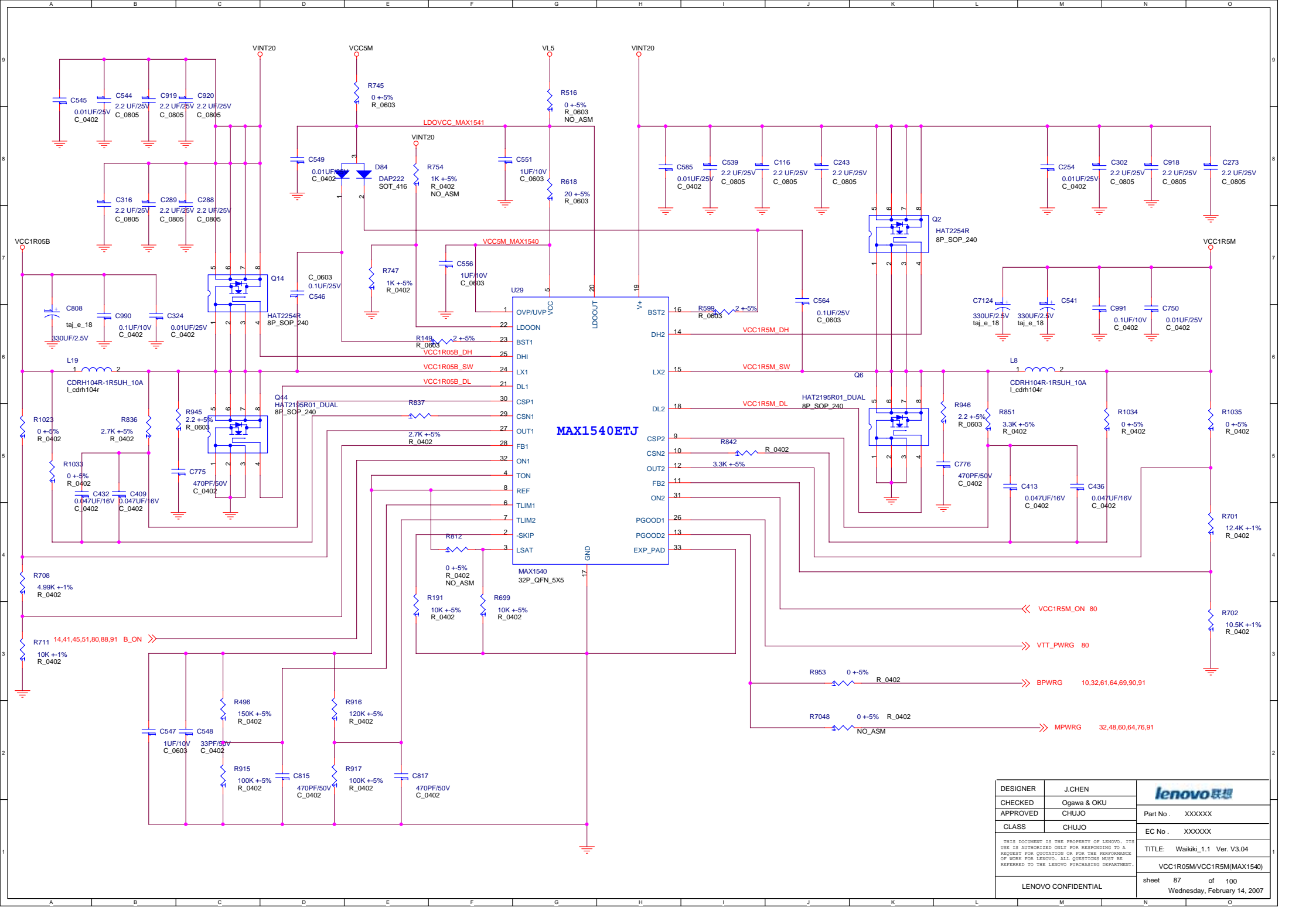
INTEG VCCGFXCORE VOLTAGE
 1.NORMAL;1.05V
 2.GRAPHICS RENDER STANDBY
 MODE;0.75V
 VID<4..0>
 01000 =1.05V

ADP3209

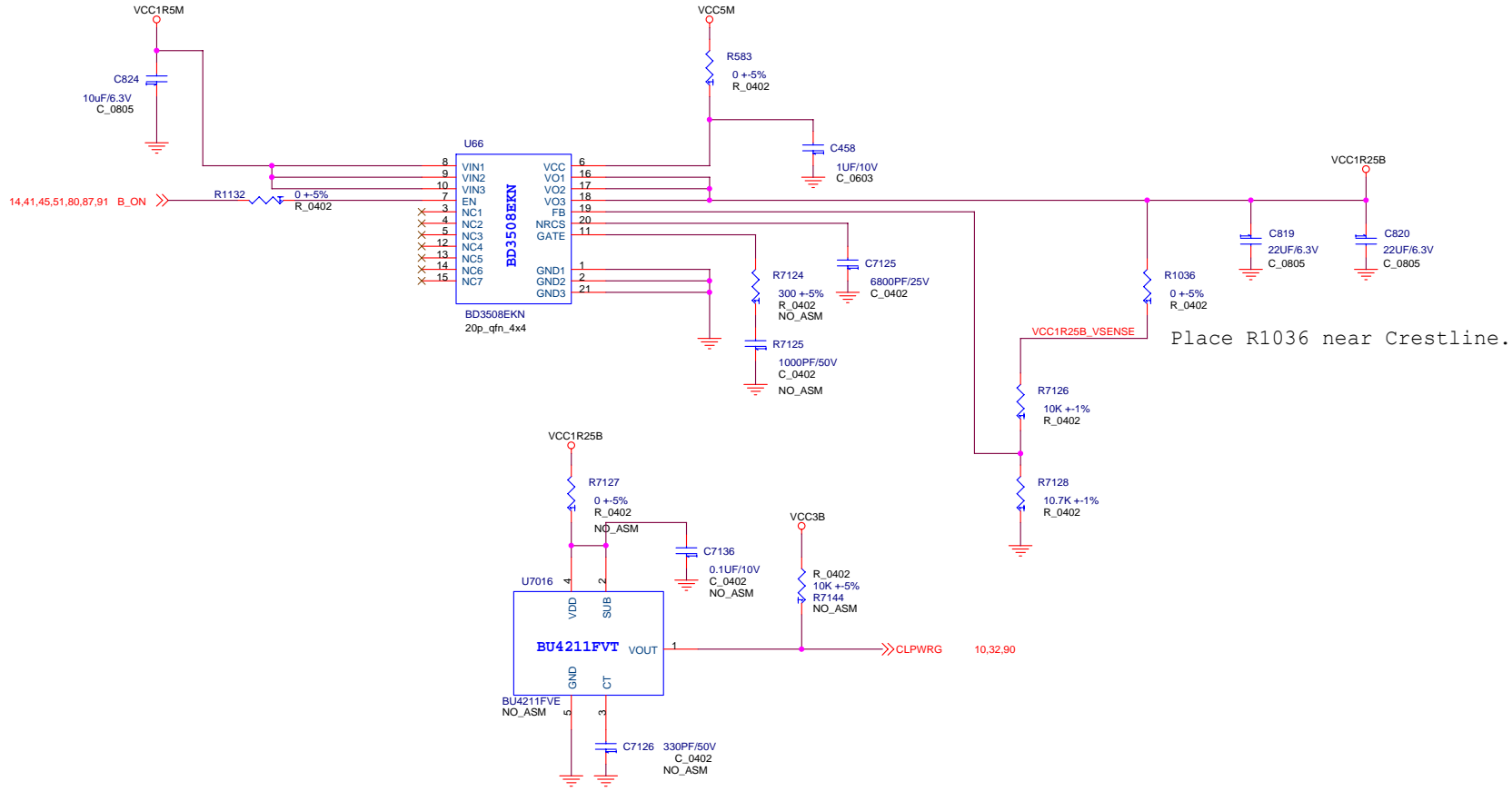
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| | | VCCGFXCORE(MAX1993) |
| LENOVO CONFIDENTIAL | | sheet 85 of 100 Wednesday, February 14, 2007 |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | VCC1R8A/VCC09RA(MAX8632) |
| | | sheet 86 of 100 Wednesday, February 14, 2007 |




| | | |
|--|-------------|------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT. | | TITLE: Waiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | VCC1R05M/VCC1R5M(MAX1540) |
| sheet 87 of 100 | | Wednesday, February 14, 2007 |

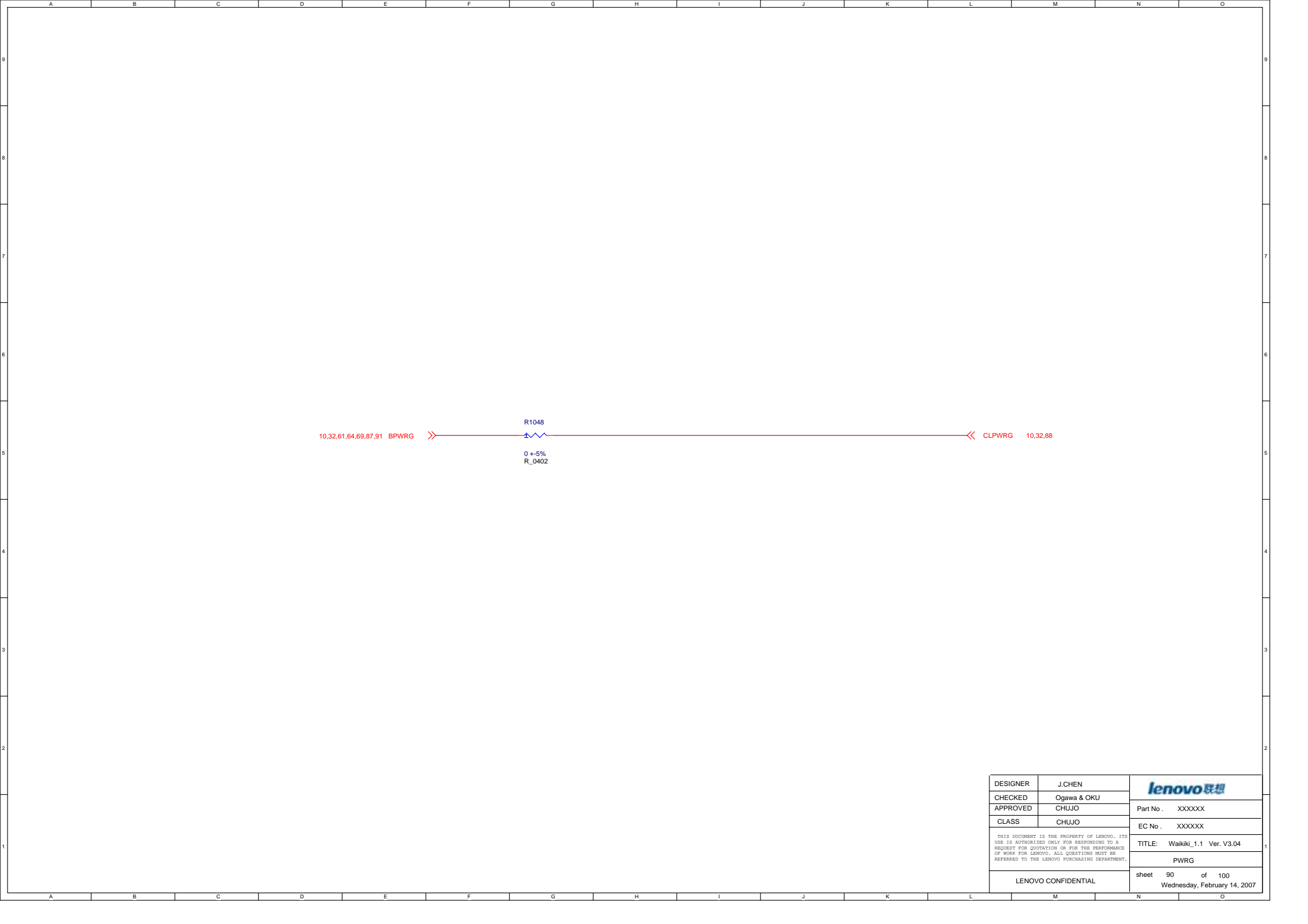


Place R1036 near Crestline.

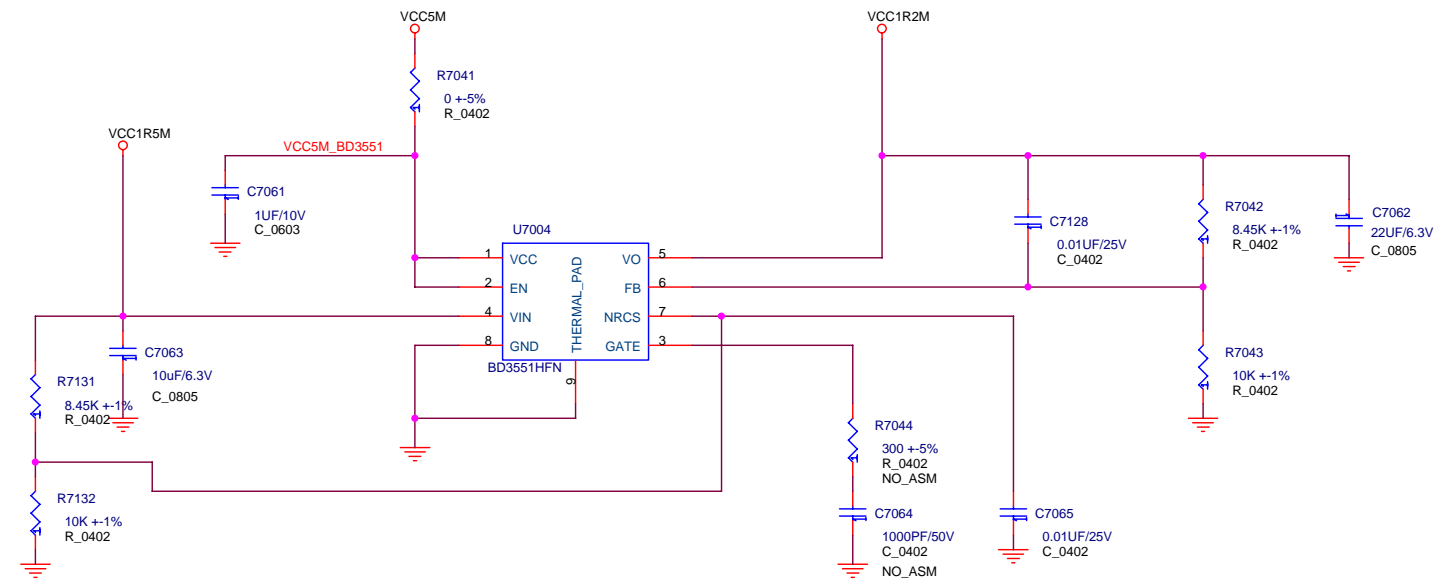
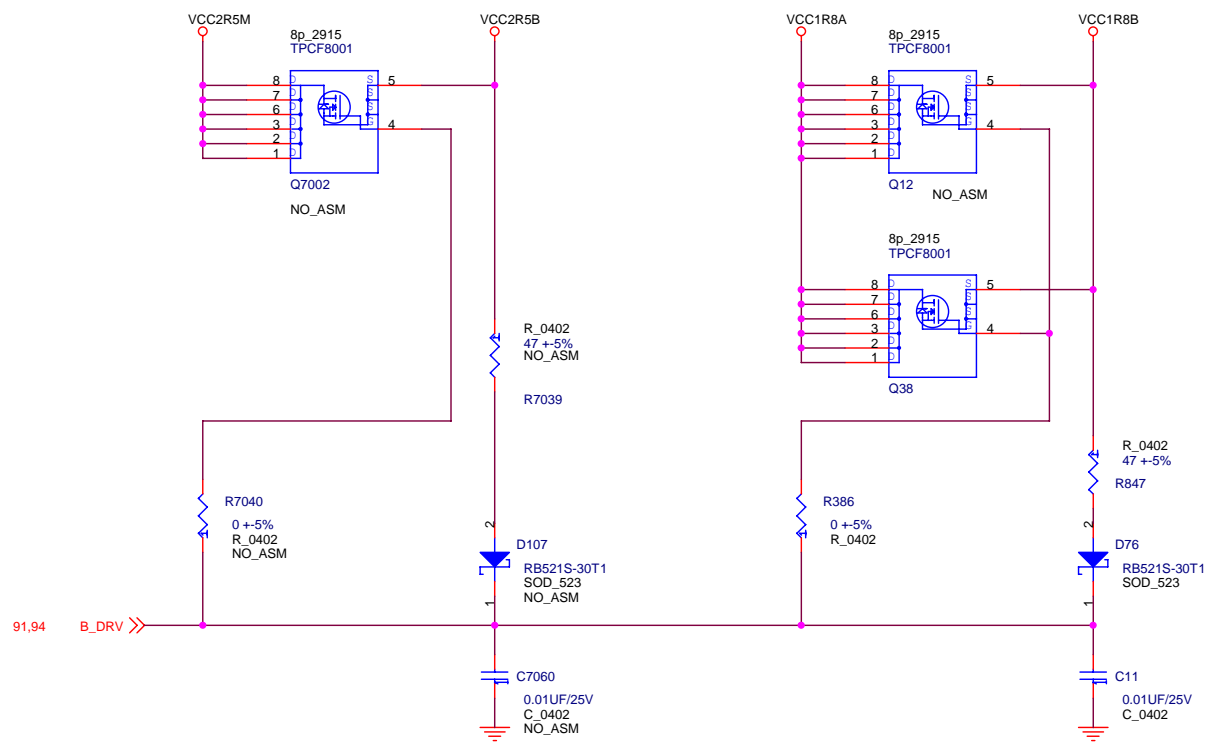
| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| | | VCC1R25B(VT322) |
| LENOVO CONFIDENTIAL | | sheet 88 of 100 Wednesday, February 14, 2007 |

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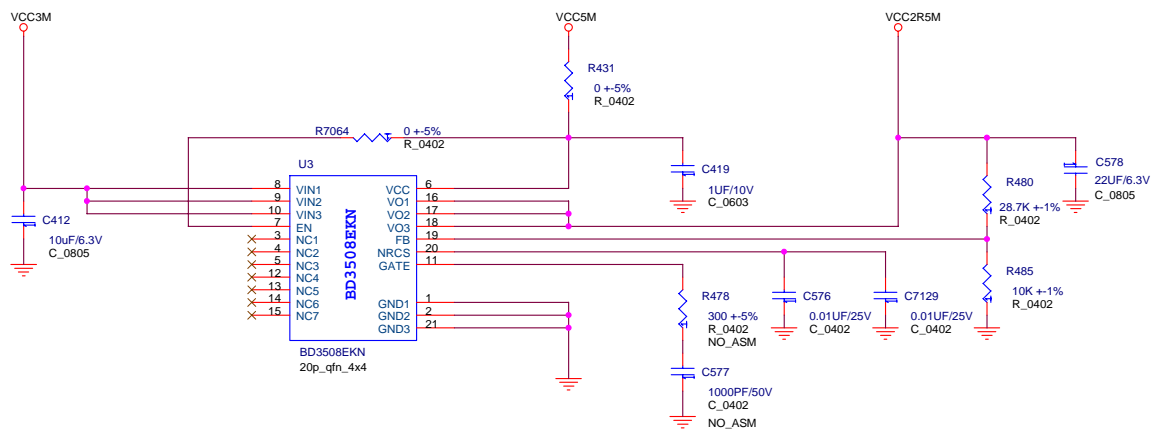
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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | LOAD SW AMT |
| | | sheet 89 of 100 Wednesday, February 14, 2007 |



| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | PWRG sheet 90 of 100 Wednesday, February 14, 2007 |

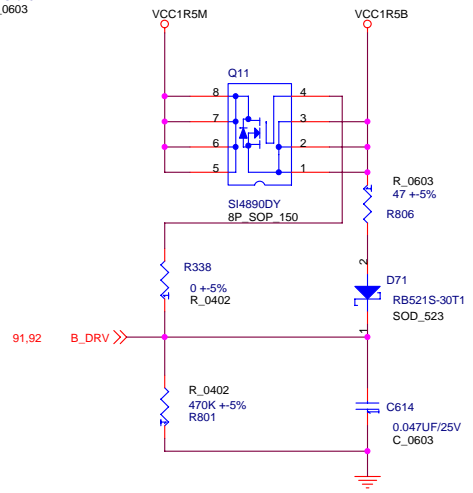
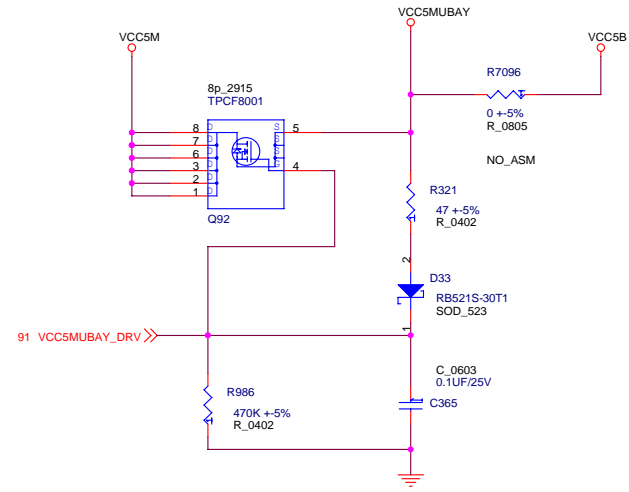
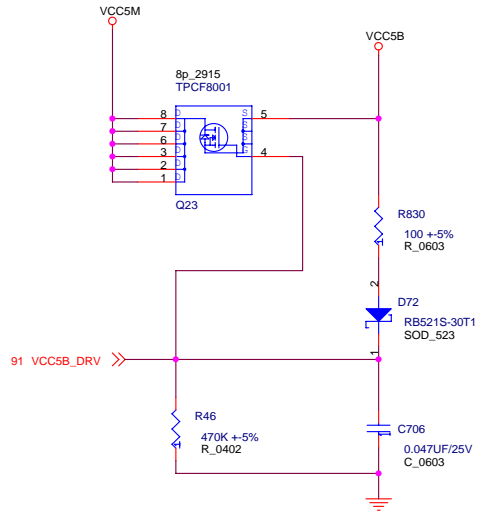
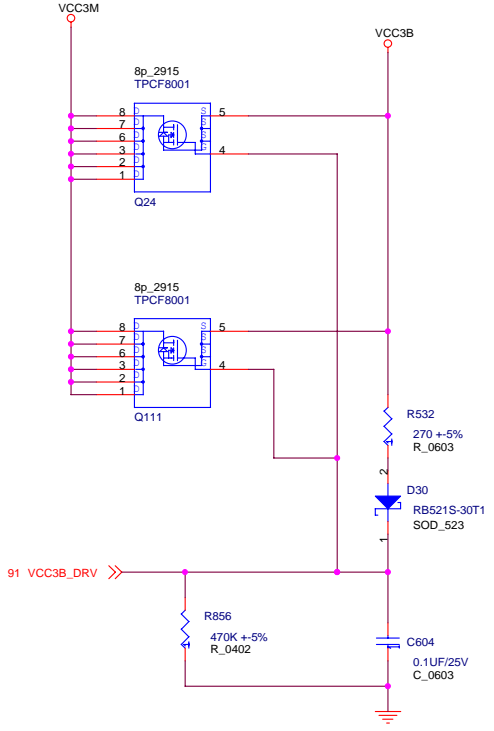


| | | |
|--|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| LENOVO CONFIDENTIAL | | LOAD SW VIDEO |
| | | sheet 92 of 100 Wednesday, February 14, 2007 |

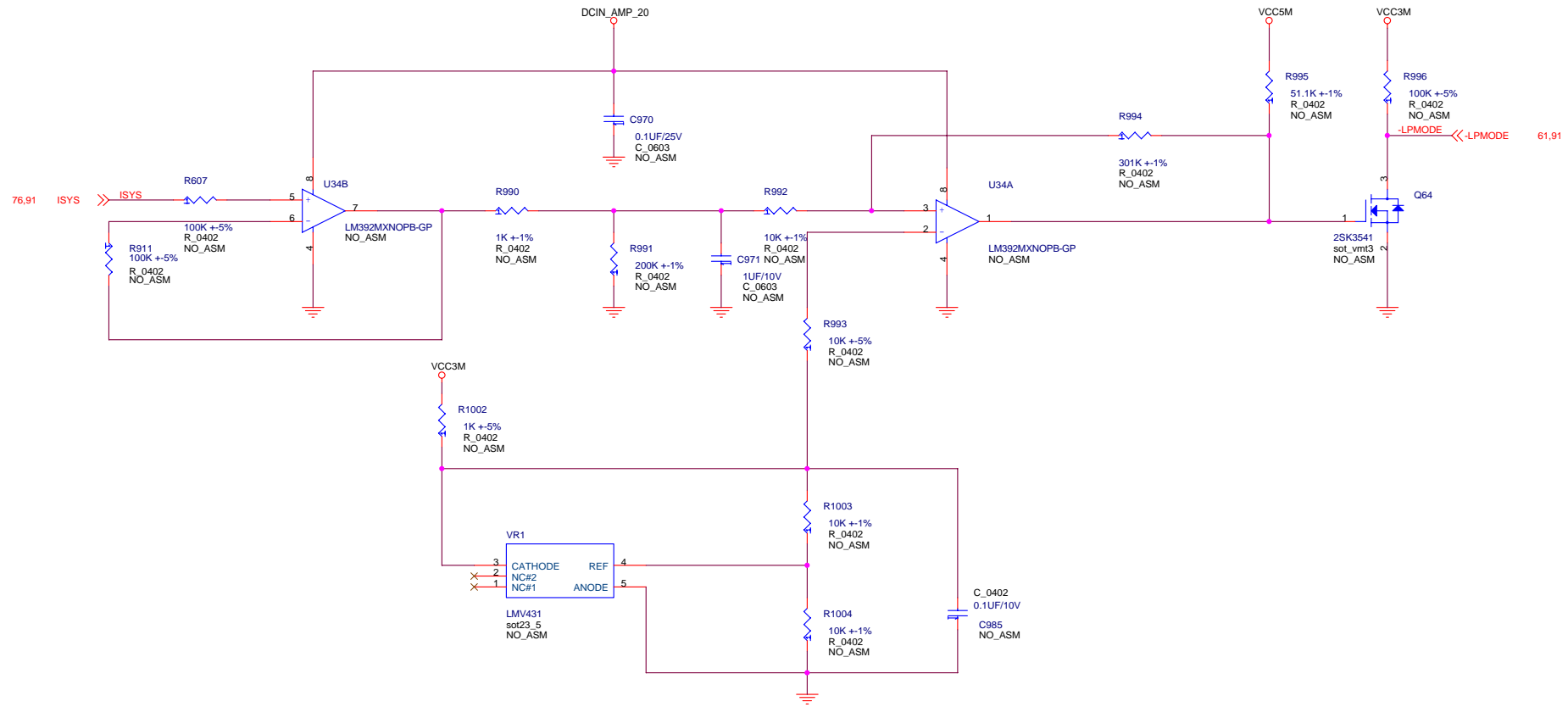


| | | |
|---|-------------|---|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
| <small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small> | | TITLE: Waikiki_1.1 Ver. V3.04 |
| LENOVO CONFIDENTIAL | | LOAD SW AUX1 AUX2 |
| | | sheet 93 of 100 Wednesday, February 14, 2007 |

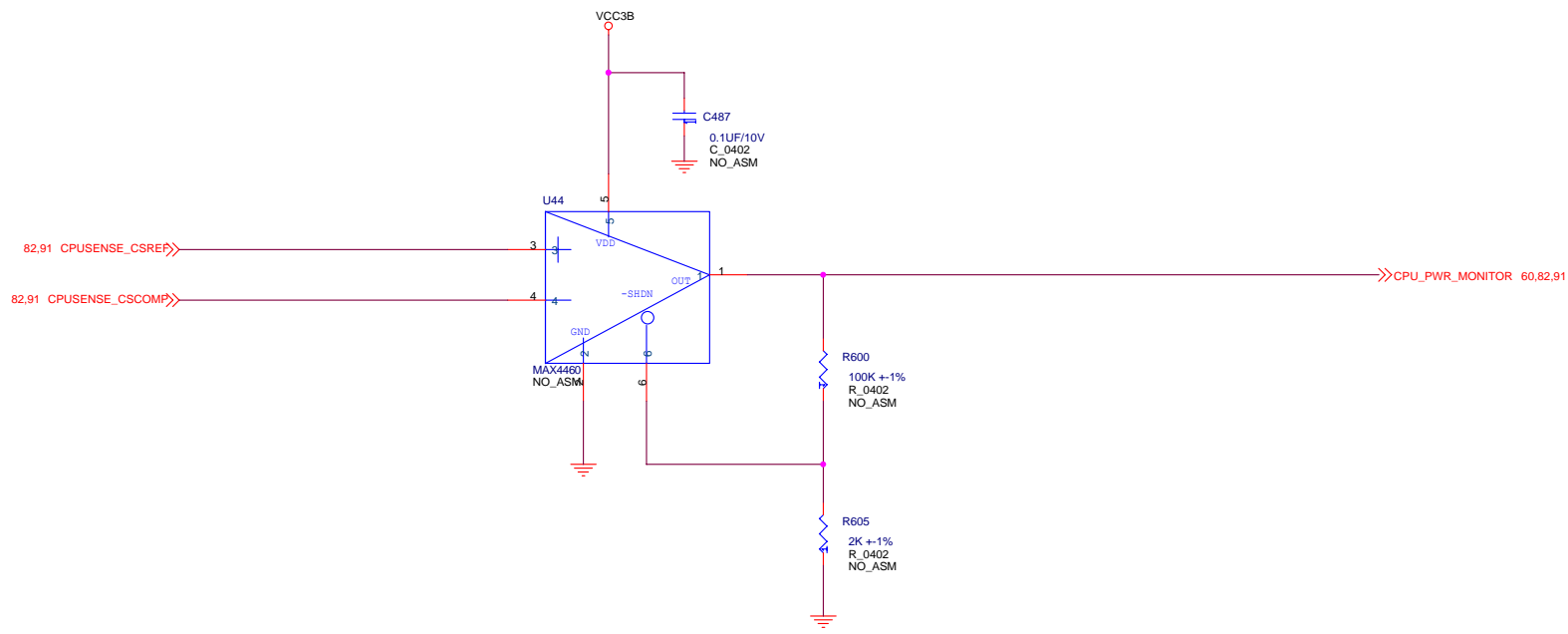
| | SWAP BAY | FIXED BAY |
|-------|----------|-----------|
| Q92 | ASM | NO_ASM |
| R986 | ASM | NO_ASM |
| R321 | ASM | NO_ASM |
| D33 | ASM | NO_ASM |
| C365 | ASM | NO_ASM |
| R7096 | NO_ASM | ASM |



| | | |
|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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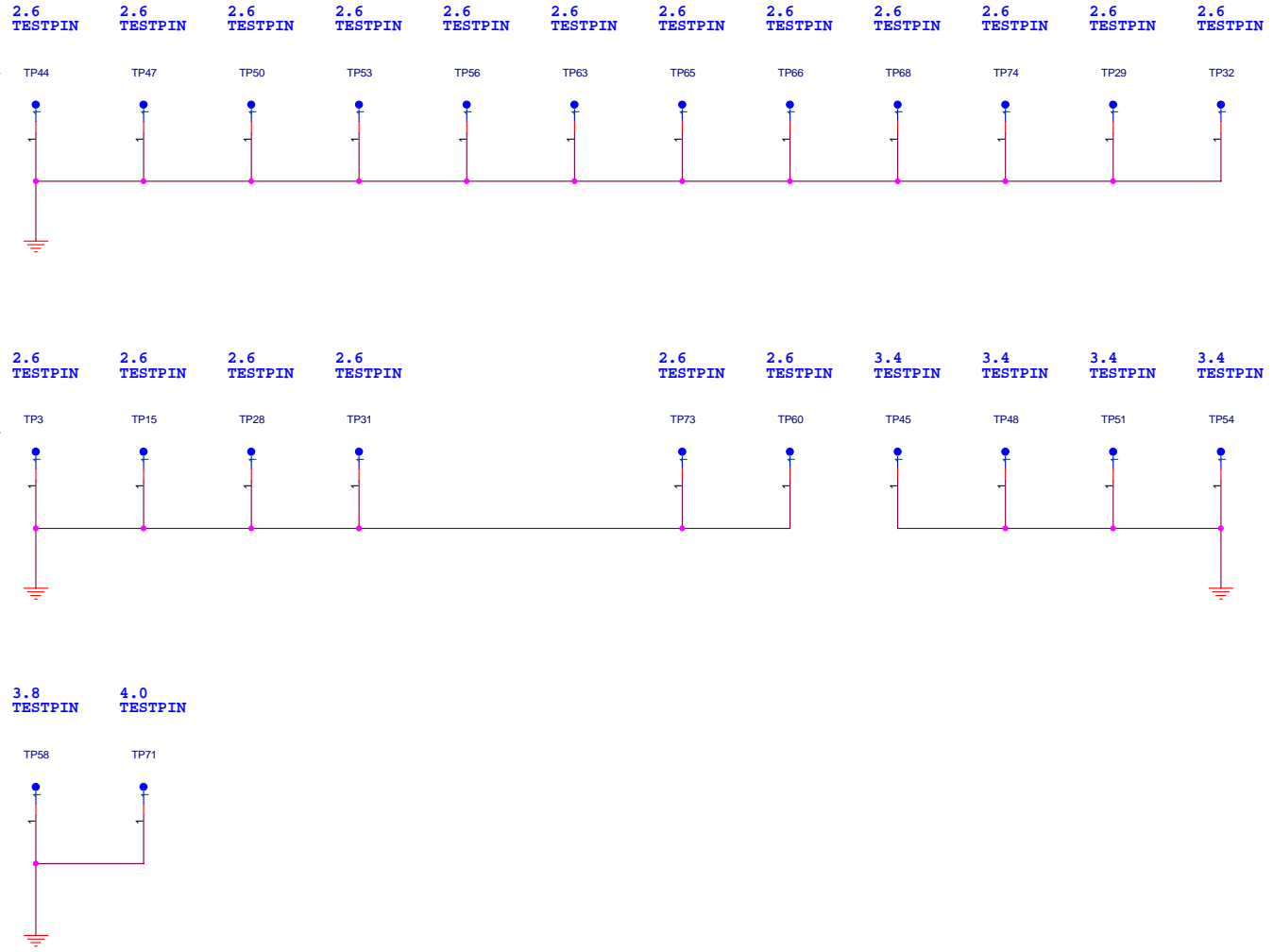


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|---|-------------|-------------------------------|
| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
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| LENOVO CONFIDENTIAL | | MAX POWER CTRL |
| | | sheet 95 of 100 |
| | | Wednesday, February 14, 2007 |



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| DESIGNER | J.CHEN | |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
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| LENOVO CONFIDENTIAL | | POWER MONITOR |
| | | sheet 96 of 100 Wednesday, February 14, 2007 |

PTH FOR SCREW HOLE




| | | |
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| LENOVO CONFIDENTIAL | | PTH SCREW HOLES |
| | | sheet 97 of 100 Wednesday, February 14, 2007 |

EC History List

SDV Phase ----->

| EC# | PAGE | Description |
|--------------|-------------|---|
| WK_SDV_EC001 | 20 | R341 & R27 : 2.2K => 4.7K for DVI ID read fail W /A EC; SDVO_CTRL_DATA/CLK Pullup value change. |
| WK_SDV_EC002 | 88 | R598 : 47K 5% => 43.2K 1%,C819 & C820 : 22UF => 10UF/6.3V/10%/2125, to correct value of VCC 1R25AMT |
| WK_SDV_EC003 | 10 | R184 : ASM=>NO ASM,to set default to LOW POWER PCIE (same as DaV -1-Integ/Disc, DaV-3-Disc) |
| WK_SDV_EC004 | 12 | C762 : 0.1UF => 0.47UF/6.3V/10%/1005,C681, C683 : 0.1UF => 0.22UF/6.3V/10%/1005, C733 : 0.1UF => 2.2UF/6.3V/10%/1608, C579 : 10UF =>2.2UF/6.3V/20%/2125, C580 : 10UF => 4.7UF/6.3V/10%/2125,to meet Intel Design Review results |
| WK_SDV_EC005 | 84 | R829 : 6.19K 1% 1005 to adjust voltage of VCC 1R05M |
| WK_SDV_EC006 | 48 | Change R1005 from pull down to pull up in order to support MS card |
| WK_SDV_EC007 | 60 | R939 ASM(100kΩ) -> No ASM |
| WK_SDV_EC008 | 63 | R690 : NOASM => 100K ASM,Add 100Kohm pulldown to PANEL_POWER_ON (to meet Intel D.G) |
| WK_SDV_EC009 | 45 | R908 : 27K => 16.2K/1%/1005,to change MICVCC from 4.7V to 3.3V for AD1984 |
| WK_SDV_EC010 | 32 | R345 ASM -> NO_ASM (0ohm),R1009 NO_ASM -> ASM (0ohm, 83G3823) to enable GbE Disabling from BIOS Setup Menu |
| WK_SDV_EC012 | 28 | Remove Q108 and nets to remove Security LED Completely |
| WK_SDV_EC013 | 22 | Q45 : Change NchMOSFET from 2SK3019 to 2SK3541 |
| WK_SDV_EC014 | 11 | Add R772 100K/1% pulldown resistor to VGA_BLON (to meet Intel D.G) |
| WK_SDV_EC015 | 59 | Add C764,C879,C880,C881,(1000pF x 4) at audio lines near the Dock connector. |
| WK_SDV_EC016 | 75 | Add C882 100pF at ACDC_ID near the DC connector(J24) |
| WK_SDV_EC017 | 75 | Add Q91,Q97,R773 to prevent inrush current from AC adapter to Battery |
| WK_SDV_EC018 | 75 | Change placement note of R11 and R264 in order to prevent connection with VINT 20 |
| WK_SDV_EC019 | 85 | Remove Q15,R403,R425,R429,R521,R537,R538,R540,R579,R586,R587,R590,R602,r73 change R494 to 22K 5%, ASM, Change R501,R541,R519,R549,R520 from No_ASM to ASM, for GFX_VID PULLUP W/A until BIOS start for Crestline ES1, ES2(Parmanent EC) |
| WK_SDV_EC020 | 44 | Delete R1014,R1015, R1017, R1018, This resiser prevent to on these FET due to low voltage level. |
| WK_SDV_EC022 | 61 | Add R943 100K 5% pullup |
| WK_SDV_EC023 | 14 | Change Cap. Parameter C204,C205,C205 from 10V 10% TO 6.3V, 10% |
| WK_SDV_EC024 | 12 | ADD C883,C884,C885,C886,C887,C888, AND Remove C734,C735,C736, FOR Add de-cap to VCCGFXCORE |
| WK_SDV_EC025 | 19 | Change C732,C672,C673,C213,C739,C708,C716 to NO_ASM, and change R335,R336,R76 to 1 Ohm to follow supplier 's recommendation |
| WK_SDV_EC026 | 28 | Change R668 to NO_ASM and R764 to ASM, because GMCH PWM problem was fixed by BIOS correction |
| WK_SDV_EC027 | 88 | add five 0 ohm resistors: R1053,R1054,R403,R425,R429 in order to follow AMT NON Support |
| WK_SDV_EC028 | 26,27 | Insert two blank pages between Page 26 and Page27. |
| WK_SDV_EC029 | 52,56,59,74 | Add Docking BOM Option Tables |
| WK_SDV_EC030 | 63 | Add R540,R579, 0 Ohm NO_ASM for no Touch Pad support |
| WK_SDV_EC031 | 65,67 | Change R305,C293,J26 to NO_ASM for no Legacy IO |
| WK_SDV_EC032 | 37,94 | Add R586,R587, and add FixedBay or SwapBay BOM Option tables |
| WK_SDV_EC033 | 73 | Change Q97 from DTC115EE to DTC114EE. |
| WK_SDV_EC034 | 19 | Change C672 C213 to NO_ASM |
| WK_SDV_EC035 | 69,91 | Change Q59.3PIN from PWRSHUTDOWN to -SHUTDOWN,add net -SHUTDOWN on U61.16PIN for to divide -pwrshutdown signal into IN and OUT |
| WK_SDV_EC036 | 28,32,61 | Del GPIO_BT signal and add -S4_STATE signal between H8 and ICH8 for detect S4 state. |
| WK_SDV_EC037 | 94 | Change Q11 from HAT2195R01 to Si4890DY for cost reduction |
| WK_SDV_EC038 | 29,74 | Change RGB signal CAP C448, C449, C596,C648, C651, C653 from 10pF to 22pF. |
| WK_SDV_EC039 | 32 | Change R79 from 100ohm 5% to 39ohm 5% to improve waveform of -PLTRST_FAR |
| WK_SDV_EC040 | 85 | Change R462 =>ASM,R595 100K=>200K,C744=>ASM,C895 2200PF=>1800PF,R905 59K=>43.2K,C660 =>NO_ASM,L23 0.88uh=>0.56uh for meet INTEL GMCH SPEC. |
| WK_SDV_EC041 | 78,81 | CHANGE C722 0.01uF 25V 1005 10%,C214 C520 C386 C272 C324 C549 C750: 0.01uF 25V 1005 10% in order to reflect cap. |
| WK_SDV_EC042 | 86 | Change R330 =>NO_ASM,R685 150K=>100K,Q43,Q49 =>HAT2195R01_DUAL in order to raise OCP point and output voltage of VCC 1R8M for DDR2 |
| WK_SDV_EC043 | | Delete AMT support circuit,Include change AMT power rail to B power rail,modify AMT signal,detail information please see EC_FOR_AMT_DISABLE_2.PDF |
| WK_SDV_EC044 | 63 | ADD TouchPad/FingerPrint Support information. |
| WK_SDV_EC045 | 78,79,80 | ADD SWAP BAY/FIXED BAY BATTERY option information when built bom |
| WK_SDV_EC046 | 11,14 | Add ASM/NOASM table for S -Video support when built bom. |
| WK_SDV_EC047 | 11 | change R253 from 1.3K to 1.27K, 0.5% |
| WK_SDV_EC048 | 80 | change R507 from 12K to 24K,and change R507 to R7035 |
| WK_SDV_EC049 | 91 | R855 change to NO_ASM, R852 chang to 49.9K 1%, change R855 to R9036 |
| WK_SDV_EC050 | 32 | Add Cardbus ID |
| WK_SDV_EC051 | 53,71 | Add R7034, 200ohm, chang C591(C7051) to 0.1UF, 1V, 10%, change C301(C7059) to 0.01UF, 25V, 10% |
| WK_SDV_EC052 | 61 | Change H8 pin assign of S4_STATE# |
| WK_SDV_EC053 | 72 | Change default APS logic for ADXL322. |
| WK_SDV_EC054 | 32 | Change to Waikiki ID from Davinci ID, R1021 NO_ASM to ASM, and R1038 ASM to NO_ASM |
| WK_SDV_EC055 | 32 | Planar ID 0000b for SDV, R113 NO_ASM to ASM, and R672 ASM to NO_ASM |
| WK_SDV_EC056 | 45 | Co-Layout Headphone amplifier AN12946A |
| WK_SDV_EC057 | 45 | Replace Ethernet from Nineveh to BCM 5787M (U7002). |

| EC# | PAGE | Description |
|--------------|-------------|---|
| WK_SDV_EC058 | 46 | Change system speaker function with BEEP. |
| WK_SDV_EC059 | | Add comments for rating of power components. |
| WK_SDV_EC060 | 42 | C7002 : should be 4.7uF 10V XSR,Q99 : 2SK3541 -> DTC115 |
| WK_SDV_EC061 | 61,32 | Delete 0ohm jumpers and connect directly of H8,and Delete NETDETECT signal. |
| WK_SDV_EC062 | 70 | Change from DI to R7052 0ohm and Delete R212. |
| WK_SDV_EC063 | 48 | To remove hook for R5C584, and circuit for 2nd port of IEED1394 termination and non-internal regulator |
| WK_SDV_EC064 | 48 | To update ASM option for IEED1394 support case(R5C847, R5C803) and non support case (R5C804) |
| WK_SDV_EC065 | 32 | Pull-up R272 for CL_RST_WLAN# -> NO_ASM : Intel's recommendation |
| WK_SDV_EC066 | 31 | Add 4in1 Slot Presence Detection ID. |
| WK_SDV_EC067 | 48 | To implement feedback of Circuit review by Ricoh |
| WK_SDV_EC068 | 60 | ADD RC circuit for fix G-sensor noise problem |
| WK_SDV_EC069 | 70 | DEL C41 to remove stub of LPCCLK for TATER |
| WK_SDV_EC070 | 81 | ADD R7051 R7052 in order to support MAX17003 for Discharge function of VCC3M and VCC5M |
| WK_SDV_EC071 | 91 | ADD R7045 DEL R868,R820,R876,R900 for change RINKAN-1 circuit for correction. |
| WK_SDV_EC072 | 70 | Change TC7WB125FK to TC7SB384FU,TC7WB126FK to TC7SB385FU due to cost reduction |
| WK_SDV_EC073 | 55 | Change C626,C627 to 0402. |
| WK_SDV_EC074 | 59,61 | Change F14 : ASM -> NOASM,C7073,C7074,C7075,C7076 from 470pf to 330pf. |
| WK_SDV_EC075 | 76 | Change C99,C90,C233 from 1uF/16V -> 1uF/10V in order to reflect cap. |
| WK_SDV_EC076 | 86 | U7.5 add MPWRG signal workaround for backup |
| WK_SDV_EC077 | 55 | Remove MDI_DETECT circuit and Change the power source of Magnetics from VCC1R8AUX to VCC2R5M. |
| WK_SDV_EC078 | 53 | Modify NVRAM strapping and Connect ENERGY_DET to MDI_DETECT. |
| WK_SDV_EC079 | 53 | Change BCM power source and add some decoupling Cap. |
| WK_SDV_EC080 | 53 | VMAINPRNST connects VCC3B through R7029,LOW_PWR connects -GBE_DISABLE,Add 0ohm on LAN_XTALI. |
| WK_SDV_EC081 | 92 | Add VCC1R2M Logic for Broadcom BCM5787M support |
| WK_SDV_EC082 | 93 | Add VCC2R5M Logic for Broadcom BCM5787M support |
| WK_SDV_EC083 | 86,87,91,93 | Delete VCC1R8AUX and VCC1R8M,ADD VCC1R8A. |
| WK_SDV_EC084 | 72 | Make device option for G-SENSOR. |
| WK_SDV_EC085 | 32 | Follow EC043 correct some signal. |
| WK_SDV_EC086 | 92 | Del Q86 for del VCC3VIDEO power. |
| WK_SDV_EC087 | 32,64 | ADD -PHY_PD_ICH signal then use it and -GBE_DISABLE to generate AUX_ON. |
| WK_SDV_EC088 | 7 | Del R135,R387. |
| WK_SDV_EC089 | 64 | Change SPI interface signal jumper resistor from 0 ohm to 33 ohm. |
| WK_SDV_EC090 | 85 | Add pull-down resistor on Gfx_VID signal. |
| WK_SDV_EC091 | 11 | change R772 to 100k +-5%,change R7071/R7072 to 33 +-5% for cost reduce. |
| WK_SDV_EC092 | 38 | change FL7 to ACM2012-900-2P,R650/651 to 0 ohm 0603. |
| WK_SDV_EC093 | 10 | Add R7073/R7074 on GFXCORE_ON signal for INTEL comment. |
| WK_SDV_EC094 | 50 | Change PCMCIA Slot to new one. |
| WK_SDV_EC095 | 80,93 | Change Q12.1 to VCC1R8A,add R7064 0ohm between U3.7 to U3.6,del R373 and VCC1R8M_ON |
| WK_SDV_EC096 | 53 | Correct the broadcom lan circuit,like change Ferrite bead to bigger type. |
| WK_SDV_EC097 | 31,32,64 | Terminate opened pin and unused pin on ICH8M, and del -GBE_DISABLE net. |
| WK_SDV_EC098 | 84 | Delete of VCC1R05M power rail. |
| WK_SDV_EC099 | 84 | Change assignment of PC card slot connector. |
| WK_SDV_EC100 | 19,33,54 | Modify PCIE interface of BCM5787M,remove Robson interface. |
| WK_SDV_EC101 | 63 | Del C631 and C636 on the FPR USB lines. |
| WK_SDV_EC102 | 54,57 | Add bypass capacitors for VCC3B at miniPCIE slots. |
| WK_SDV_EC103 | 32 | Change R7006 from NO_ASM to ASM. |
| WK_SDV_EC104 | 52,53,54,57 | Change MID* netname to MDI* ,correct PCIE slot connect,add Lan eeprom table. |
| WK_SDV_EC105 | 37 | Del CD_IN function on ODD. |
| WK_SDV_EC106 | 23 | Change R7083 to 130 ohm,D7006 to SML_A10MT.TC7WB125AFK to TC7SBL384AFU. |
| WK_SDV_EC108 | 32 | Correct 4_in_1 slot ID. |
| WK_SDV_EC109 | 91 | Enable Rinkan_1 -LPMORE function. |
| WK_SDV_EC110 | 53 | Follow WK_SDV_EC096. Add strap option for Broadcom. |
| WK_SDV_EC111 | 50 | Delete VCC3_MC at PC card slot. |
| WK_SDV_EC112 | 23 | Add comments for xd function route. |
| WK_SDV_EC113 | | Location ID to be consistent to DaVinci-3.Only change Location IDs . NO CHANGE in connection in schematics. |
| WK_SDV_EC114 | 86 | Change L11 to CDRH104R_1R5UH_10A follow DV3. |
| WK_SDV_EC115 | 31,53 | Connect LAN_RSTSYNC on ICH8 to GND, and modify LAN strapping table. |

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|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No . XXXXXX |
| CLASS | CHUJO | EC No . XXXXXX |
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| | | TITLE: Waikiki_1.1 Ver. V3.04 |
| EC History 1 | | |
| LENOVO CONFIDENTIAL | | sheet 98 of 100 Wednesday, February 14, 2007 |

EC History List 2

| EC# | PAGE | Description |
|---------------|----------|--|
| WK_SDV_EC0116 | 45,46,61 | Add beep enable circuit and correct connection. |
| WK_SDV_EC0117 | 53 | Add pull-up resistor R7097 for EEPROM WP signal. |
| WK_SDV_EC0118 | 23 | Change J29 to Tyco from FOXCONN. |
| WK_SDV_EC0119 | 85 | Correct discription. |
| WK_SDV_EC0120 | 85 | Change R7062 rename to R212. |
| WK_SDV_EC0121 | 86 | Del R17 and not connect MPWRG on U7.5 PIN |
| WK_SDV_EC0122 | 23 | Correct slot pin. |
| WK_SDV_EC0123 | 38 | R650/R651 marge to 1 network resistor RN5. |
| WK_SDV_EC0124 | 52,53,55 | Change pin definition of T1/T2/U12. |
| WK_SDV_EC0125 | 61 | Change RN54 to discrete resistor . |
| WK_SDV_EC0126 | | Parameter change and Error Correction. |
| WK_SDV_EC0127 | 84 | R598,R601,C819,C820 Part value change. |
| WK_SDV_EC0128 | 58 | DEL U53,U6 function for Live SPI rom one chip only. |
| WK_SDV_EC0129 | 95 | No asm R996,Q64 change LPMODE EC. |
| WK_SDV_EC0130 | 52 | ADD C637 ASSEMBLE STATION ON TABLE. |
| WK_SDV_EC0131 | 45 | Move Panasonicamplifier from planar layout to dummy subcard. |
| WK_SDV_EC0132 | 36 | BOM change,J1 change to HAS1-2DFB12-51K. |
| WK_SDV_EC0133 | 81 | BOM change,ADP3209 update to X5 version. |
| WK_SDV_EC0134 | 81 | Change C482 to R1072 for use ADP3209 X5. |
| WK_SDV_EC0135 | 61 | Change R1042 to 10K 5%. |
| WK_SDV_EC0136 | 91 | Change C609 1U 0603 to 2.2U 0805 for prevent power shutdown when AC Adapter attached. |
| WK_SDV_EC0137 | 41 | Disconnect U8 centerpad from AGND. |
| WK_SDV_EC0138 | 53 | Add test point to U8 pin4,8,9. |
| WK_SDV_EC0139 | 52 | RC termination should be NO_ASM.R611, R613, R615, R661, R610, R612, R660, R614, C528, C532, C527, C529 -> NO_ASM |
| WK_SDV_EC0140 | 56 | Please stuff the TVS diode D103,D104 of Ethernet. |
| WK_SDV_EC0141 | 53 | Change U7003 to 24C64 for the evaluation on DV4.After the evaluation without any issue, we plan to use 24L01 for Volume production to reduce the cost.stuff R7075 R7077, no asm R7076 R7078. |
| WK_SDV_EC0142 | 45 | Change R655,R833,R700,R66 to 47K 5%,R67 No_asm. |
| WK_SDV_EC0143 | 85 | Change ADP3209 X5 P/N to #DV3190. |
| WK_SDV_EC0144 | 72 | Update logic table to support new G_sensor ST Micro LIS244AL. |
| WK_SDV_EC0145 | 85 | Update L23 to #DV3127 SPM10040T-R56M150 |
| WK_SDV_EC0146 | 85 | Update L11 to #DV3014 |
| WK_SDV_EC0147 | | Update #DV3123 description to CHIP 0.6UH +/-20% 8.2A SMT 2PIN . |
| WK_SDV_EC0148 | | Just correct/update description of schematic. |
| WK_SDV_EC0149 | 23 | Change J29 P/N to 42W3121. |
| WK_SDV_EC0150 | | BOM correction /update |
| WK_SDV_EC0151 | | BOM correction /update |
| WK_SDV_EC0152 | | Correction of Schematics description |
| WK_SDV_EC0153 | | Change C11 from 0.01uF to 0.022uF for Capacitance of B_DRV being 0.05uF |
| WK_SDV_EC0154 | | to change Integ GFXCORE DC-DC in order to meet Intel GMCH spec. |
| WK_SDV_EC0155 | 91 | Change R72 to NO_ASM to prevent power shutdown problem when AC is attached. |
| WK_SDV_EC0156 | 46 | Change R984 to 10k 5%. |
| WK_SDV_EC0157 | 85 | Change R905 from 59k to 43.2k for shortstage of factory. |
| WK_SDV_EC0158 | 59 | F14 NO_ASM to ASM,41A9437 |

AMOM Phase ----->

| EC# | PAGE | Description |
|---------------|----------------------|--|
| WK_AMOM_EC001 | 32 | Planar ID : 0000b -> 0001b.R671 : NOASM -> ASM,R114 : ASM -> NOASM |
| WK_AMOM_EC002 | 23 | Correction design symbol of 4-in-1 slot,MemoryStick signal assignments were reversed. |
| WK_AMOM_EC003 | 70 | Add logic to fix 187 error.Use location ID Q113 for 2SK354land Q114 for DTAll4EEA for consistency with Coronado-3. |
| WK_AMOM_EC004 | | Correction Layout design error in SDV |
| WK_AMOM_EC005 | | Correct design error as symbol of MMBT3904WT1 in SDV |
| WK_AMOM_EC006 | 32 | Add 100k ohm pull-up to VCC3M at GPIO12 of ICH8M. |
| WK_AMOM_EC007 | 53 | Add 0ohm R7115 tie-down resister at pin#11 of U7002 |
| WK_AMOM_EC008 | | EC for Modem,include Add modem DAA logic, delete UWB slot, delete WPAN LED logic, delete MDC Connector |
| WK_AMOM_EC009 | 28 | Change power source F16 for USB camera from VCC 5B to VCC3B. |
| WK_AMOM_EC010 | 32,65,67 | DEL Legacy I/O support. Del R305,Q86,R214,J26,and add R7118. |
| WK_AMOM_EC011 | 39,40,41,42,43,45,46 | EC for Audio portion of AMOM. |
| WK_AMOM_EC012 | 39 | Pull up U7014 pin RCOSC to VCC3M for wake up event. |
| WK_AMOM_EC013 | 47 | Modem connector change to same as RTC battery connector. |

V1.50 (2006/10/24)

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|---------------|----|--|
| WK_AMOM_EC014 | 39 | Add R7111 39.2k for enable speaker channel. |
| WK_AMOM_EC015 | 47 | Add modem connector to follow Conexant design. |
| WK_AMOM_EC016 | | Silkscreen:"KONA-A"-->"KONA-B". |
| WK_AMOM_EC017 | | ADD insulation sheet to BOM. |
| WK_AMOM_EC018 | 45 | DEL Panasonic amplifier circuit. |

SIV Phase ----->


| EC# | PAGE | Description |
|----------------------|-------|--|
| V2_00 (2006/11/16) | | |
| WK_SIV_EC001 | 52 | Planar ID : 0001b -> 0010b |
| WK_SIV_EC002 | 48,49 | Change R5C847 to revised part (Ricoh P/N : R5C847-CSP208Q, Lenovo P/N : #DV3209) |
| WK_SIV_EC003 | 93 | Add Cap C7129 0.01uF to NRCS pin of BD3508 for no overshoot of VCC 2R5M. |
| WK_SIV_EC004 | 92 | Add tracking circuit to BD 3551HFN for no overshoot of VCC 1R2M. |
| WK_SIV_EC005 | 81 | Add level shift circuit (3.3V -> 5V) to ""-PM_SLP_S3""(High Level 3.3V) in order to meet Skip functionspec of MAX 8744 IC. |
| WK_SIV_EC006 | 32 | To change VCC1R25B DC-DC Switching -> LDO for Cost reduction |
| WK_SIV_EC007 | 81 | No asm MAX8744 discharge circuit |
| WK_SIV_EC008 | 90 | Add c7127 0.033uF 1005 to CLPWRG circuit in order to terminate an unexpected pulse,and change digital-transistor to 2SC4617. |
| WK_SIV_EC009 | 88 | - to correct "DAV3_SIT_EC057". |
| WK_SIV_EC010 | 14 | VCCA_CRT_DAC, VCCA_TV_DAC Power is changed to Linear Regulator (3.3V, 300mA) |
| WK_SIV_EC011 | 32 | in order to improve efficiency of VCC5M and VCC3M during Power-on low power mode |
| WK_SIV_EC012 | 85 | to change R691,R716 resistor size for downsizing. |
| WK_SIV_EC013 | 20 | Add C631 on net SDVO_CTRLDATA for reduce noise. |
| WK_SIV_EC014 | 49,50 | Follow RICOH review to change C218,C226,C415. To add Drive signal name on each DC-DC |
| WK_SIV_EC015 | 57 | To add 10uF cap. for VCC3B of PCIe Cards (No-ASM) |
| WK_SIV_EC016 | 70 | Add D7013,R7133 to fix voltage leakage from VCC3M to VCC3AMT,and add eeprom for asset ID option circuit. |
| WK_SIV_EC018 | | to change maker P/N because of EOL Page76 Q4 : FDS6990A -> FDS8978 (Fairchild) Page59 Q85, Page75 Q34 :SI4435ADY -> SI4435BDY. |
| WK_SIV_EC019 | 32,62 | To add SLP_S5# to H8 for AMT function |
| WK_SIV_EC020 | | "WK_SIV_EC020 To add BEFCD0D21MX (2V 220uF 15mΩ) Panasonic on BOM as an alternative of C67# C262# C743C760 C945# (77P1928)." |
| WK_SIV_EC021 | 28 | Add capacitor C23 between -BDC_PRESENCE and GND. |
| WK_SIV_EC022 | 14 | 1)MOW WW39 VCCD_QDAC Design change.2)GMCH-H/VSINC 33=>30 R change.3)Intel Review decap change to 0.001uF |
| WK_SIV_EC023 | 29 | H/VSYNQ to CRT L25,L24 change to 30ohm resistor. |
| WK_SIV_EC024 | 10 | GFXCORE_ON Pullup R73 change to 30K ohm |
| WK_SIV_EC025 | 85 | GFXVID2 Pullup R494.2 change to VCC3B |
| WK_SIV_EC026 | 34 | to change AMT power architecture for power reduction |
| WK_SIV_EC027 | 12 | Add 22uF Cap.C7130 to VCC1R8A near Crestline (Intel Recommendation) |
| WK_SIV_EC028 | 82 | to change C190= 390PF 10% 1005 in order to meet the requirement of GCM |
| WK_SIV_EC029 | 14 | to change C690, C725 from 470uF to 220uF. |
| WK_SIV_EC030 | 42 | To add ESD protection on audio jack for new ESD standard as NO ASM. |
| WK_SIV_EC031 | 97 | Change J20(OG_363040) to NO ASM. |
| WK_SIV_EC032 | 30,31 | change pull-up RN on PATA bus |
| WK_SIV_EC033 | 20 | to change C631 from 56pF to 68pF and change R341 from 4.7K to 5.6K for W/A for DVI detection fail withROM 18, 19, 20WW." |

V2_01 (2006/11/21)

| | | |
|--------------|----|--|
| WK_SIV_EC034 | 70 | Delete WATER chip (AT8356908),Add new TPM chip WPCT200WG,U46 and nearby parts : NOASM -> ASM |
| WK_SIV_EC035 | 81 | to change from MAX8744 to MAX17003 |
| WK_SIV_EC036 | 31 | Add pull down R7141 to un-used GPIO pin |
| WK_SIV_EC037 | 97 | Delete Hole (TP34 & TP35) and GND Pad |
| WK_SIV_EC038 | 81 | Correction for WK_SIV_EC005 |
| WK_SIV_EC039 | 88 | Correction for WK_SIV_EC006 |
| WK_SIV_EC040 | 85 | Correction for WK_SIV_EC015 |
| WK_SIV_EC041 | 29 | follow up for WK_SIV_EC023 |
| WK_SIV_EC042 | 6 | Change C445, R476 and R477 on ITP interface to NO ASM. |
| WK_SIV_EC043 | 91 | Change CLPWRG connection |
| WK_SIV_EC044 | 57 | Delete SIM Socket,NOASM WWAN Socket |
| WK_SIV_EC045 | 20 | NOASM DVI I/F chip CH7307C. |
| WK_SIV_EC046 | 31 | Disconnect "-CPUSB" & "-CPPE" from ICH |
| WK_SIV_EC047 | 57 | To add luF cap. for VCC3M and VCC1R5B of PCIe Cards |

V2_02 (2006/11/23)

| | | |
|--------------|----|--|
| WK_SIV_EC048 | 01 | to change R221 2.4K, R44 1.6K in order to adjust OCP point. |
| WK_SIV_EC049 | 95 | to make all parts of Max power control(LPMODE) circuit NO_ASM because RINKAN-1 has this function inside. |
| WK_SIV_EC050 | 20 | R27 : 4.7Kohm -> 3.9Kohm (NOASM) |
| WK_SIV_EC051 | 70 | U31: Change to Lenovo P/N 41R0763 (Atmel AT975C3203-X5A30) Revision 1.2.D.05 from Lenovo P/N 41A1090 |
| WK_SIV_EC052 | 47 | Change AMoM components to Lenovo P/N |
| WK_SIV_EC053 | 91 | in order to prevent to be applied over stress to input N-channel MOSFET Gate |
| WK_SIV_EC054 | 92 | to no_asm VCC2R5B circuit and change C614 and C11 for DVI no_asm |
| WK_SIV_EC055 | 80 | to elete VCC3VIDEIO circuit for not use. |
| WK_SIV_EC056 | 70 | to Correction for WK_SIV_EC034 |
| WK_SIV_EC057 | 88 | Follow-up for WK_SIV_EC043 |
| WK_SIV_EC058 | 57 | Correction for WK_SIV_EC047,asm C7139 C7140. |
| WK_SIV_EC059 | | Change Audio AMP from MAX9789 to AN12946A. |

| | | |
|---|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | Part No. XXXXXX |
| CLASS | CHUJO | EC No. XXXXXX |
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| TITLE: Waikiki_1.1 Ver. V3.04 | | EC History 2 |
| LENOVO CONFIDENTIAL | | sheet 99 of 100 Wednesday, February 14, 2007 |

EC History List 3

EC# PAGE Description

V2.03 (2006/11/27)

WK_SIV_EC060 45 Audio AMP schematics Review Comment by Panasonic
 WK_SIV_EC061 81 Correction for WK_SIV_EC048
 WK_SIV_EC062 94 Correction for WK_SIV_EC054
 WK_SIV_EC063 Change VCC0R9A to VCC0R9B to reduce suspend power consumption
 WK_SIV_EC064 47 MBR1, MBR2 : Update Lenovo PN TMP-51 -> 41U5466
 WK_SIV_EC065 70 2 TPM solution dual lay.
 WK_SIV_EC066 27 Add check ponit card circuit.

V2.04 (2006/12/04)

WK_SIV_EC067 5 Add R7157 to support alternate source of U1.
 WK_SIV_EC068 19 Change some resistor fr each clk signal base on signal test.
 WK_SIV_EC069 97 Del J20(EMI finger)
 WK_SIV_EC070 39 ADD driver ability circuit for SPDIF
 WK_SIV_EC071 47 Follow Conexant advice add MJ4,MJ5.

V2.05 (2006/12/07)

WK_SIV_EC072 20 R72 change bigger to increase SPD High Voltage and decrease SPD Low Voltag at SPC setup timing
 WK_SIV_EC073 30 Change pull-up on PATA bus and change to ASM.□□□
 WK_SIV_EC074 19 BOM update : Clock Gen new revision (2 sources, alternate) on U2□□□
 WK_SIV_EC075 61 Change signal name to correct the polarity.□□□
 WK_SIV_EC076 46 Q15 ASM <- NO ASM□□□
 WK_SIV_EC077 65 Change P/N of NS SuperI/O to Winbond P/N□□□
 WK_SIV_EC078 91 Rinkan-1 Revision update (U61): Lenovo P/N may be changed .□
 WK_SIV_EC079 56 BOM change J19: 42W3188 (JST, BM04B-SRSS-TBT (LF) (SN)) from 91P9290 (tyco, 1734595-4)□□□
 WK_SIV_EC080 76 to change R211: 12.7K -> 16.9K 0.5% in order to make -EXTPWR signal Low when 16V Adapter is attached.
 WK_SIV_EC081 Add ASM/NOASM table for TPM and integrated mic

V2.06 (2006/12/13)

WK_SIV_EC082 75 change R715 -> 270 5% 0603
 WK_SIV_EC083 56 BM04B-SRSS-TBT (LF) (SN) <- BM04B-SRSS-TBT (LFXSN)
 WK_SIV_EC084 Insulation Sheet, Bottom_CPU: 42W2759 from 42R9976
 WK_SIV_EC085 Lenovo P/N update:TMP-93-> #DV3107 : R5C804,TMP-90 -> 38L5170 : PCA24S08D-T
 Rev:LATEST,TMP-98 -> #DV3254 : MAX17003EJT+
 WK_SIV_EC086 55 Add ASM/NO ASM table to page 55.
 WK_SIV_EC087 46 R66: 4.7k ohm 5% <- 47K 5%
 WK_SIV_EC088 53 tuning parameter for Y 7001

V2.07 (2006/12/15)

WK_SIV_EC089 Insulation Sheet 42W2759 from 42R9976
 WK_SIV_EC090 Add Dock/Audio asm table.

QS-DV6 Phase ----->

EC# PAGE Description

V2.50 (2007/01/05)

WK_QS_EC001 32 Planar ID : 0011b <- 0010b
 WK_QS_EC002 48 J28 : Change to Molex higher one.
 WK_QS_EC003 69 U4: MAX6602UE9A+ <- MAX6689,Delete C33/Q21/R404
 WK_QS_EC004 75 To change C72 -> 1000pF to reduce ringing voltage of DC-IN
 WK_QS_EC005 85 To change R595 from140K to 162K for VCCGFXCORE OCP adjustment.
 WK_QS_EC006 82 to change R746,R750 from 165K to 150K for VCCCPUCORE loadline adjusting ,to change R246 from 215k to 195k for VCCCPUCORE OCP adjusting.
 WK_QS_EC007 32 Correct Pull-up of R37 : VCC3M <- VCC3B
 WK_QS_EC008 34 To add 2.2uF Capacitor C7141 between VCCGLANPLL and GND. This is Intel's strong recommendation.
 WK_QS_EC009 23 J29 (4-in-1 slot) changes to improved one Lenovo P/N 42W3192 (tyco 1981456-1) from 42W3121
 WK_QS_EC010 61 Change R218,R7160 to indicate Thermal sensor ID.

V2.51 (2007/01/10)

WK_QS_EC011 BOM change to QS samples of Intel Chipset
 WK_QS_EC012 53 Broadcom EEPROM size change for Self -boot code
 WK_QS_EC013 61 Add pull-up R7161 for KBGA20# from Intel AMT workshop feedback
 WK_QS_EC014 48 Follow WK_QS_EC002: Apply to change 1394 connector to Molex 48126-1211
 WK_QS_EC015 69 Apply WK_QS_EC003 assessment
 WK_QS_EC016 32 Follow WK_QS_EC001 Update BOM: R114 -> NOASM, R671 -> ASM
 WK_QS_EC017 23 J29: #DV3283 (tyco 1989456-1) <- 42W3121
 WK_QS_EC018 86 To change R508 to 62K 5% 1/16W 1005 for VCC1R8A OCP adjusting.
 WK_QS_EC019 87 To change R149 from 1ohm to 2ohm for VCC1R05B ringing fail.to change R599 from 1ohm to 2ohm for VCC1R5M ringing fail.
 WK_QS_EC020 27 Del small debug card circuit.

V2.52 (2007/01/12)

WK_QS_EC021 48,49 U20: #DV3293 (Ricoh R5C847-CSP209Q(Lotcode 7Ax0FQ or later)) <- #DV3209
 WK_QS_EC022 82 to change R246 to 196K 1% for VCCCPUCORE OCP adjusting.
 WK_QS_EC023 23 J29: #DV3283 (tyco 1981456-1) <- tyco 1989456-1
 WK_QS_EC024 32 C7122 : 41A9849 1000pF 10% X7R 50V <- 04P9749 1000pF 10% X7R 25V
 WK_QS_EC025 65 U26 : 41R0755 (Winbond WPCN385LA0DG) <- #DV3104 (Winbond WPCN385CDG) 41R0755 doesn't support CIR.

V2.53 (2007/01/25)

WK_QS_EC026 87 To connect PGOOD2 to BPWRG to reduce the affection of VCC1R5M's undershoot.

SIT Phase ----->

EC# PAGE Description

V3.00 (2007/01/29)

WK_SIT_EC001 32 Planar ID chagne 0010b-->0100b
 WK_SIT_EC002 87 To connect "PGOOD2" to "BPWRG" to reduce the affection of VCC1R5M's undershoot.
 WK_SIT_EC003 31 Del comments.
 WK_SIT_EC004 29 To change RGB line's Beads value in order o minimize undershoot voltage.
 WK_SIT_EC005 53 Cut the SM BUS to Broadcom.
 WK_SIT_EC006 53 To support low_pwr mode of BCM5787M.
 WK_SIT_EC007 41 To separate bias voltage of mic amp from int mic.
 WK_SIT_EC008 For cost, change Lan EEPROM to 24C04.

WK_SIT_EC010 43,45 To adjust sound quality om microphone,to optimize Mute circuit

WK_SIT_EC011 81 To connect U41-22PIN to MPWRG for workaround of Toshiba Rinkan MPWRG problem.
 WK_SIT_EC012 5 To add second source of U1.

V3.01 (2007/01/30)

WK_SIT_EC013 52 Remove the temination for Ethernet.

V3.02 (2007/02/01)


WK_SIT_EC014 94 To change C706 to 0.047uf for quick ramp-up of VCC5B in order to delete a little of VR_PWRGD foR CPU CORE.
 WK_SIT_EC015 41 Add ASM/NOASM table for KONA config.
 WK_SIT_EC015 28 Change C313 to 41A1111 1UF/25V 0603.
 WK_SIT_EC016 Update ASM option table for waikiki_1.1_low and Kona-1.1.

V3.03 (2007/02/07)

WK_SIT_EC018 41 Follow WK_SIT_EC015,correct typo in description
 WK_SIT_EC019 86 To change comment of U7 to MAX8632.
 WK_SIT_EC020 51 U7003 : Lenovo P/N 41R0777
 WK_SIT_EC021 ADD revised R5C804 in Kona-1.1 BOM
 WK_SIT_EC022 ADD Crestline-GL in USI KONA BOM
 WK_SIT_EC023 Additional insulation sheet.
 WK_SIT_EC024 To drop ISL88550A (Intersil) as U7 alternate component because it has some issues

V3.04 (2007/02/13)

WK_SIT_EC025 1 To modify title Page.
 WK_SIT_EC026 To drop RJK)#!^DSP from all bom at SIT phase.
 WK_SIT_EC027 F3 change to 0 ohm 0603,F7 change to 0 ohm 1206
 WK_SIT_EC029 U61 Toshiba Rinkan version change to 1.5.
 WK_SIT_EC030 D103,D104 change to NO_ASM,U12 use TS3L500ERHUR or PI13L500A.

| | | |
|--|-------------|---|
| DESIGNER | J.CHEN |  |
| CHECKED | Ogawa & OKU | |
| APPROVED | CHUJO | |
| CLASS | CHUJO | Part No . XXXXXX |
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| | | EC History 2 |
| LENOVO CONFIDENTIAL | | sheet 100 of 100 Wednesday, February 14, 2007 |