# *Sapporo 300P Rev 0.3 Schematics Document*

## Intel Prescott uFCPGA-478 / P4 Northwood

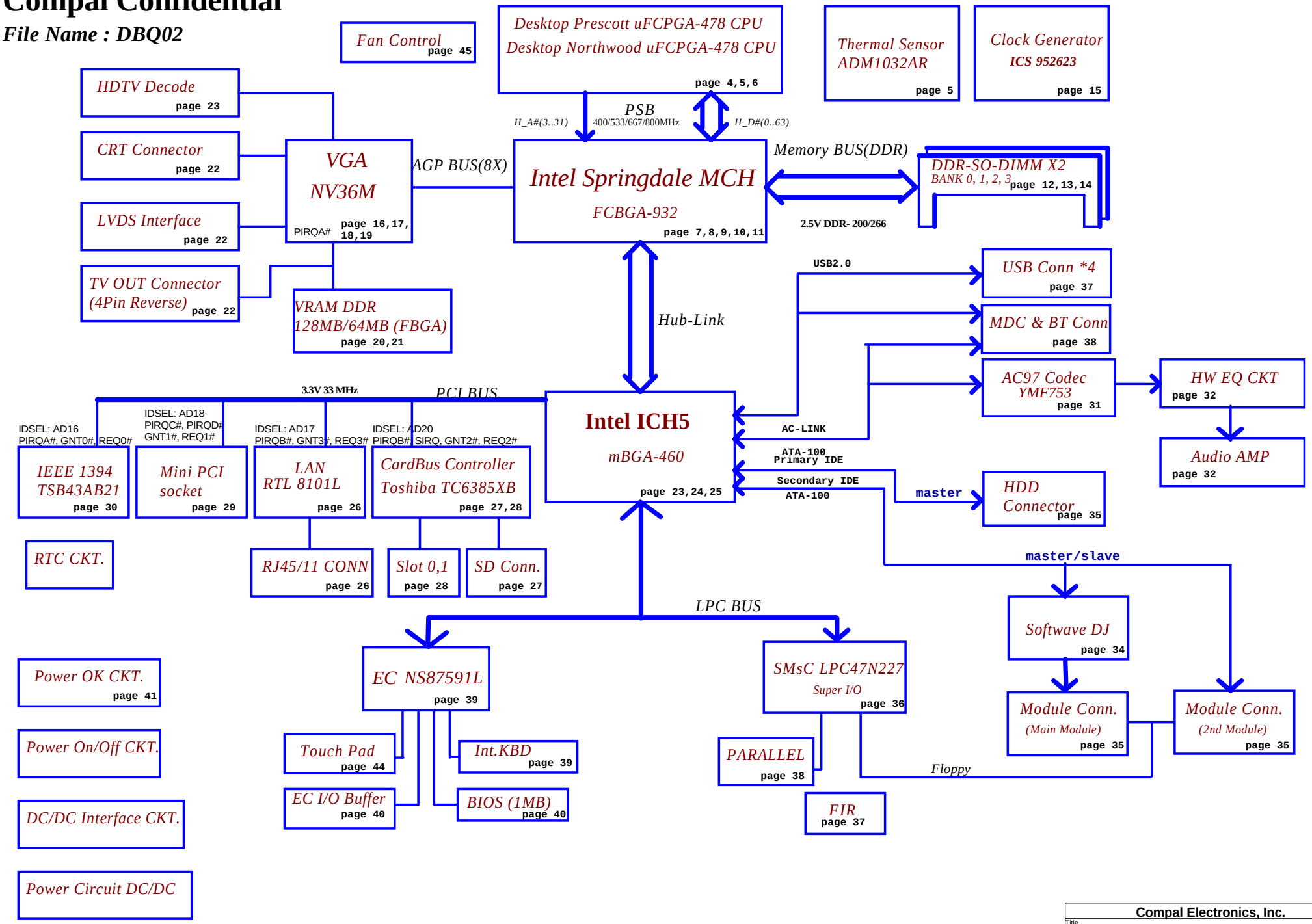
## with Springdale / ICH5 / nVIDIA NV36M / HDTV chipset

**2003 / 11 / 25**

| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: Cover Sheet | | |
| Size: B | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 1 of 57 | |

# Compal Confidential

***File Name : DBQ02***






| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: Block Diagram | | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 2 of 57 | |

## Voltage Rails

| Power Plane | Description | S1 | S3 | S5 |
|---|---|---|---|---|
| VIN | Adapter power supply (19V) | N/A | N/A | N/A |
| B+ | AC or battery power rail for power circuit. | N/A | N/A | N/A |
| +CPU_CORE | Core voltage for CPU | ON | OFF | OFF |
| +CPU_VID | 1.2V switched power rail for CPU AGTL Bus | ON | OFF | OFF |
| +VTT_GMCH | +1.225V (Prescott) / +1.45V (Northwood) | ON | OFF | OFF |
| +VGA_CORE | 1.3V switched power rail for VGA chip | ON | OFF | OFF |
| +1.25VS | 1.25V switched power rail | ON | OFF | OFF |
| +1.5VS | AGP 4X/8X | ON | OFF | OFF |
| +2.5V | 2.5V power rail | ON | ON | OFF |
| +2.5VS | 2.5V switched power rail | ON | OFF | OFF |
| +3VALW | 3.3V always on power rail | ON | ON | ON* |
| +3V | 3.3V power rail | ON | ON | OFF |
| +3VS | 3.3V switched power rail | ON | OFF | OFF |
| +5VALW | 5V always on power rail | ON | ON | ON* |
| +5V | 5V power rail | ON | ON | OFF |
| +5VS | 5V switched power rail | ON | OFF | OFF |
| +12VALW | 12V always on power rail | ON | ON | ON* |
| +RTCVCC | RTC power | ON | ON | ON |
| | | | | |

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

## External PCI Devices

| Device | IDSEL# | REQ#/GNT# | Interrupts |
|---|---|---|---|
| VGA | | | PIRQA |
| CardBus | AD20 | 2 | PIRQA/PIRQB |
| LAN | AD17 | 3 | PIRQB |
| Mini-PCI | AD18 | 1/4 | PIRQC/PIRQD |
| 1394 | AD16 | 0 | PIRQA |
| SD | AD22 | | |

## EC SM Bus1 address

| Device | Address |
|---|---|
| Smart Battery | 0001 011X b |
| EEPROM(24C16/02) | 1010 000X b |
| (24C04) | 1011 000Xb |

## EC SM Bus2 address

| Device | Address |
|---|---|
| ADM1032 | 1001 110X b |
| OZ168 | 0011 0100 b |

## ICH5 SM Bus address

| Device | Address |
|---|---|
| Clock Generator ( ICS 952623) | 1101 001Xb |
| DDR DIMM0 | 1001 000Xb |
| DDR DIMM2 | 1001 001Xb |

| STATE \ SIGNAL | SLP_S1# | SLP_S3# | SLP_S4# | SLP_S5# | +VALW | +V | +VS | Clock |
|---|---|---|---|---|---|---|---|---|
| Full ON | HIGH | HIGH | HIGH | HIGH | ON | ON | ON | ON |
| S1(Power On Suspend) | LOW | HIGH | HIGH | HIGH | ON | ON | ON | LOW |
| S3 (Suspend to RAM) | LOW | LOW | HIGH | HIGH | ON | ON | OFF | OFF |
| S4 (Suspend to Disk) | LOW | LOW | LOW | HIGH | ON | OFF | OFF | OFF |
| S5 (Soft OFF) | LOW | LOW | LOW | LOW | ON | OFF | OFF | OFF |

## Board ID Table for AD channel

| | |
|---|---|
| Vcc | 3.3V +/- 5% |
| Ra | 100K +/- 5% |

| Board ID | Rb | $V_{AD\_BID}$ min | $V_{AD\_BID}$ typ | $V_{AD\_BID}$ max |
|---|---|---|---|---|
| 0 | 0 | 0 V | 0 V | 0 V |
| 1 | 8.2K +/- 5% | 0.216 V | 0.250 V | 0.289 V |
| 2 | 18K +/- 5% | 0.436 V | 0.503 V | 0.538 V |
| 3 | 33K +/- 5% | 0.712 V | 0.819 V | 0.875 V |
| 4 | 56K +/- 5% | 1.036 V | 1.185 V | 1.264 V |
| 5 | 100K +/- 5% | 1.453 V | 1.650 V | 1.759 V |
| 6 | 200K +/- 5% | 1.935 V | 2.200 V | 2.341 V |
| 7 | NC | 2.500 V | 3.300 V | 3.300 V |

| Board ID | PCB Revision |
|---|---|
| 0 | 0.1 |
| 1 | 0.2 |
| 2 | 0.3 |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |

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Title: Notes

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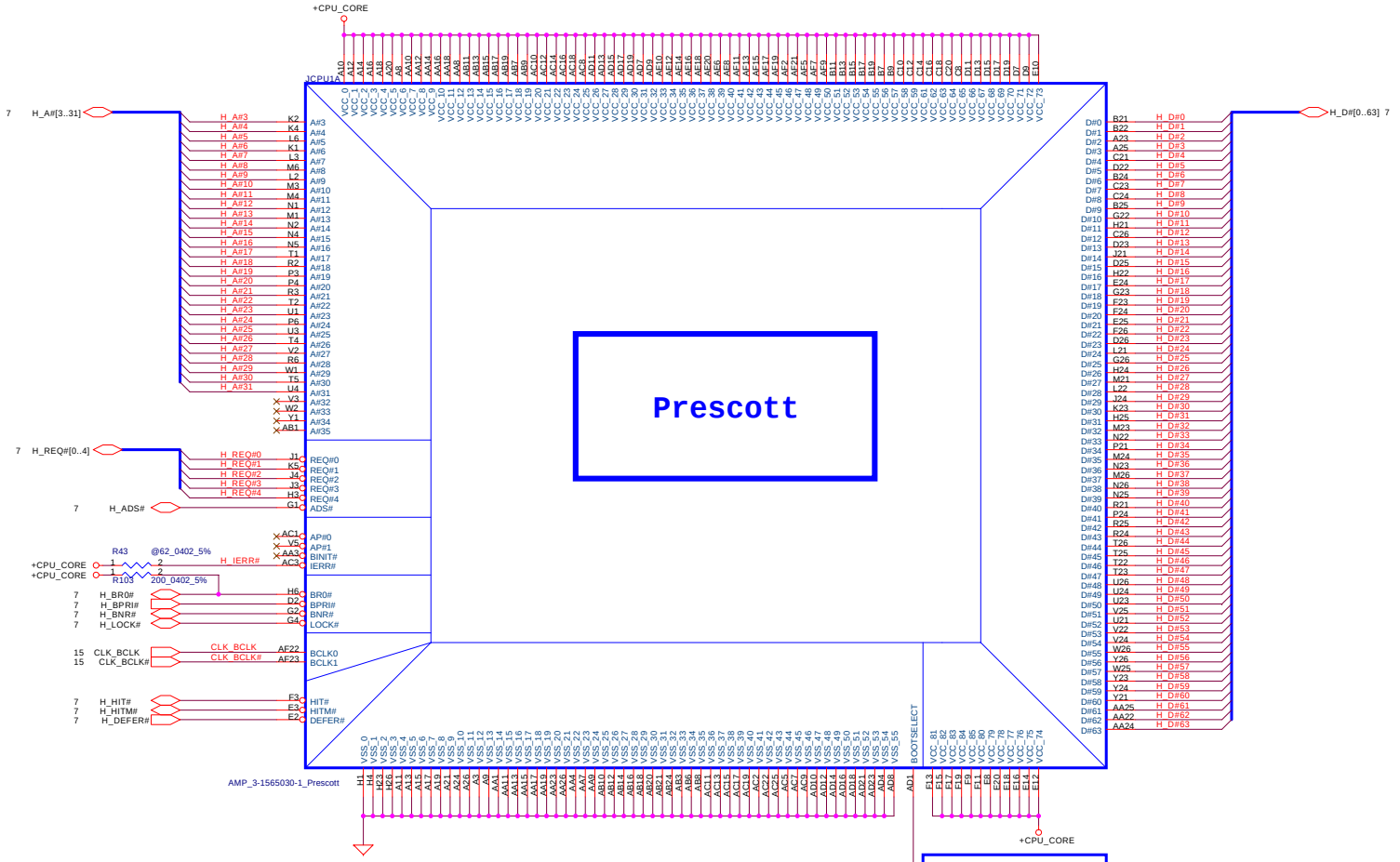


Reference Intel document
Desktop P4 Spec.: 10988 P4 0.13u 512KB L2 EMTS Rev.2.0

Desktop Prescott Spec.: 11910 Prescott EMTS Rev.0.5

| Pin number | Northwood Pin name | Commend | Prescott Pin name | Commend | Northwood | Prescott | |
|---|---|---|---|---|---|---|---|
| B6 | FERR# | Pull-up 62ohm to +VCC_CORE | FERR#/PBE# | Pull-up 62ohm to +VCC_CORE | Pop | Pop | |
| AA20 | ITPCLKOUT0 | Pull-up56ohm to +VCC_CORE | TESTHI6 | Pull-up 62ohm to +VCC_CORE | Pop | Pop | |
| AB22 | ITPCLKOUT1 | Pull-up 56ohm to +VCC_CORE | TESTHI7 | Pull-up 62ohm to +VCC_CORE | Pop | Pop | |
| AD2 | NC | float | VIDPWRGD | Pull-up 8.2Kohm to +VCCVID | Depop | Pop | R_A |
| AD3 | NC | float | VID5 | Pull-up1Kohm to +3VRUN & connect to PWRIC | Depop | Pop | R_B |
| AF3 | NC | float | VCCVIDLB | Connect to +VCCVID | Depop | Pop | R_C |
| AD20 | VCCA | Connect to CPU Filter | VCCIOPLL | Connect to CPU Filter | | | |
| AF23 | VCCIOPLL | Connect to CPU Filter | VCCA | Connect to CPU Filter | | | |
| AD1 | VSS | Connect to GND | BOOTSELECT | CPU determine | Pop | Depop | R_D |
| AE26 | VSS | Connect to GND | OPTIMIZED/ COMPAT# | float | Pop | Depop | R_E |



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Title: Prescott Processor in uFCPGA478 (1/2)

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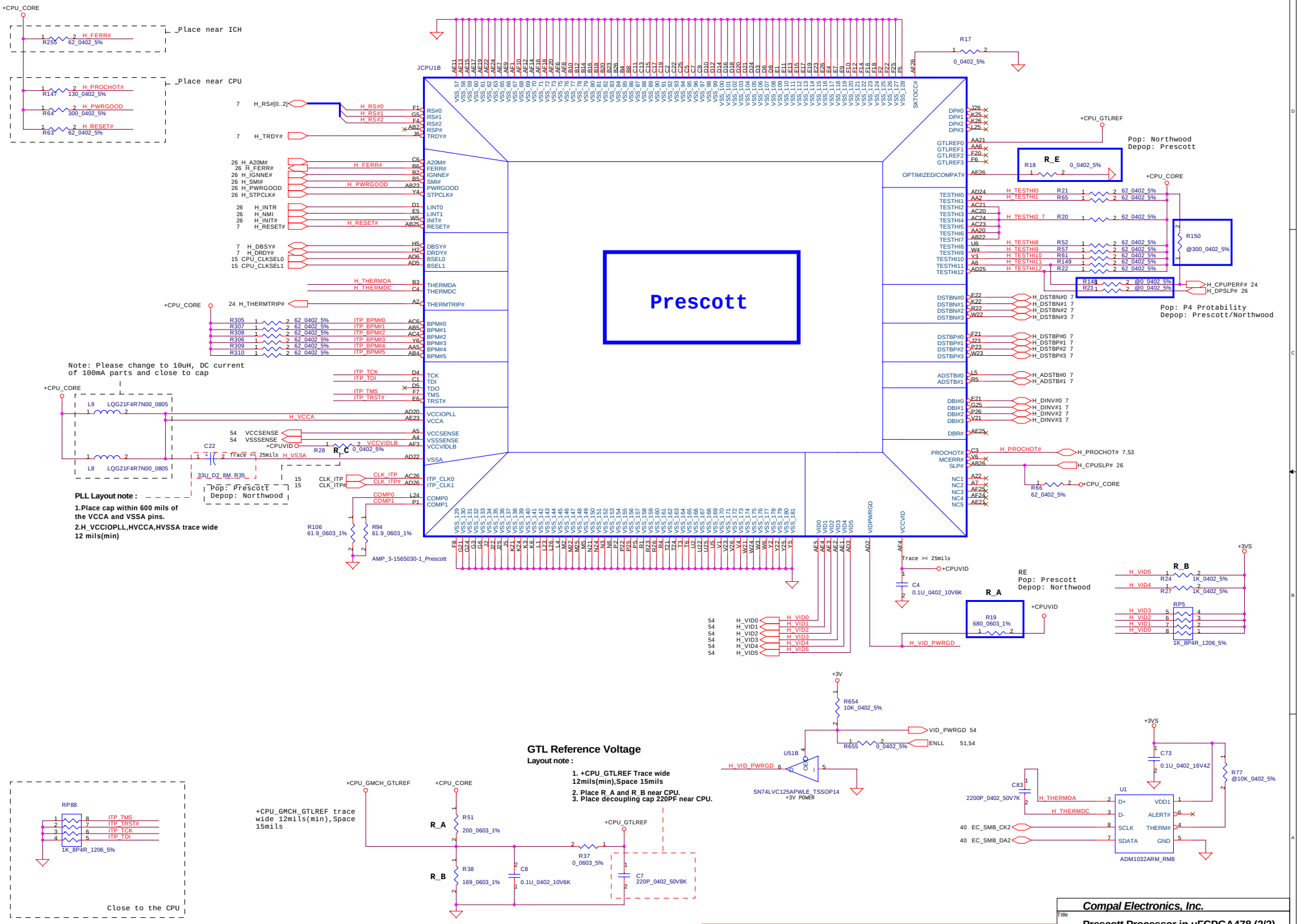
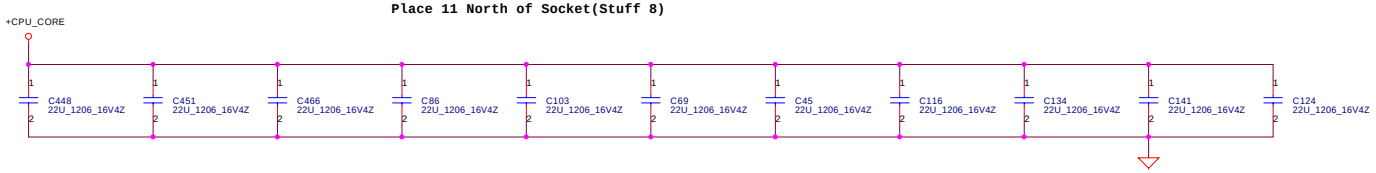
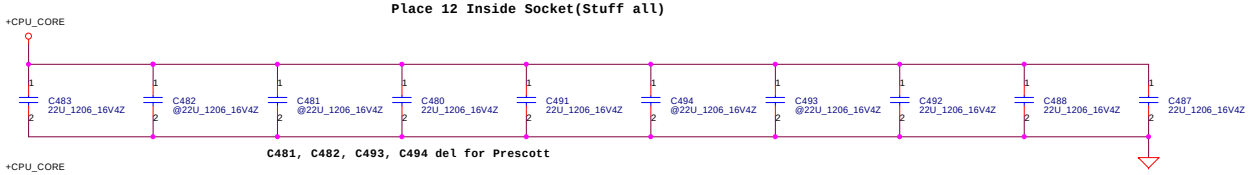


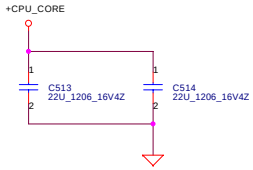
**Place 11 North of Socket(Stuff 8)**




**Place 12 Inside Socket(Stuff all)**



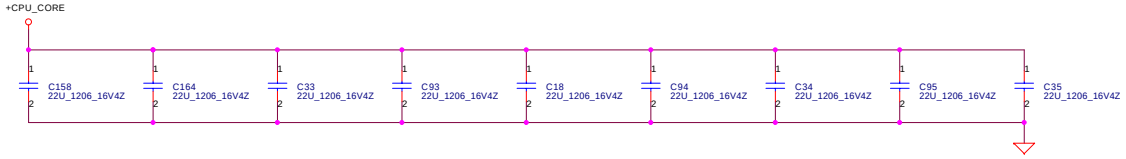

**C481, C482, C493, C494 del for Prescott**



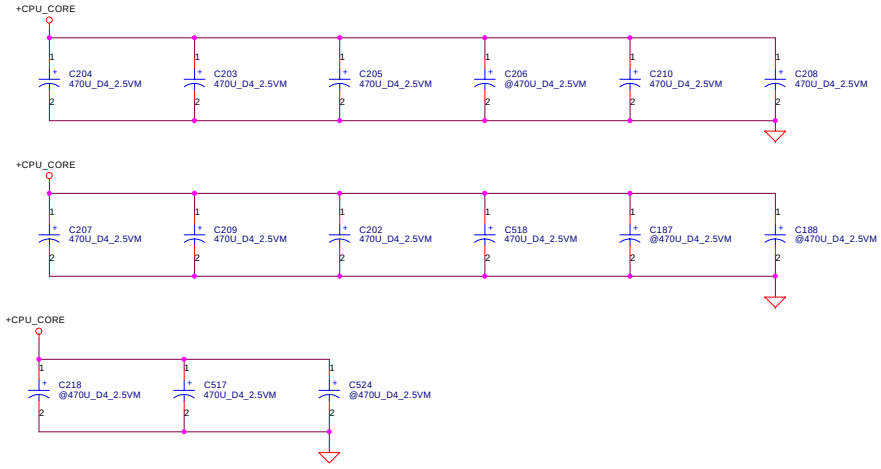

**(H_1.78)**

**22uF depop reference**
**Springdale Customer Schematic R1.2 page82**

**Place 9 South of Socket(Unstuff all)**




**470uF _ERS10m ohm* 15, ESR=0.5m ohm**




**Decoupling Reference Document:**
**Springdale Chipset Platform Design guide Rev1.11 (12474)page239**

**Decoupling Reference Requirement:**
**560uF Polymer, ESR:5m ohm(each) * 10**
**22uF X5R * 32**



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Title: **CPU Decoupling**

Size: C | Document Number: **Sapporo 300P** | Rev: 0.3

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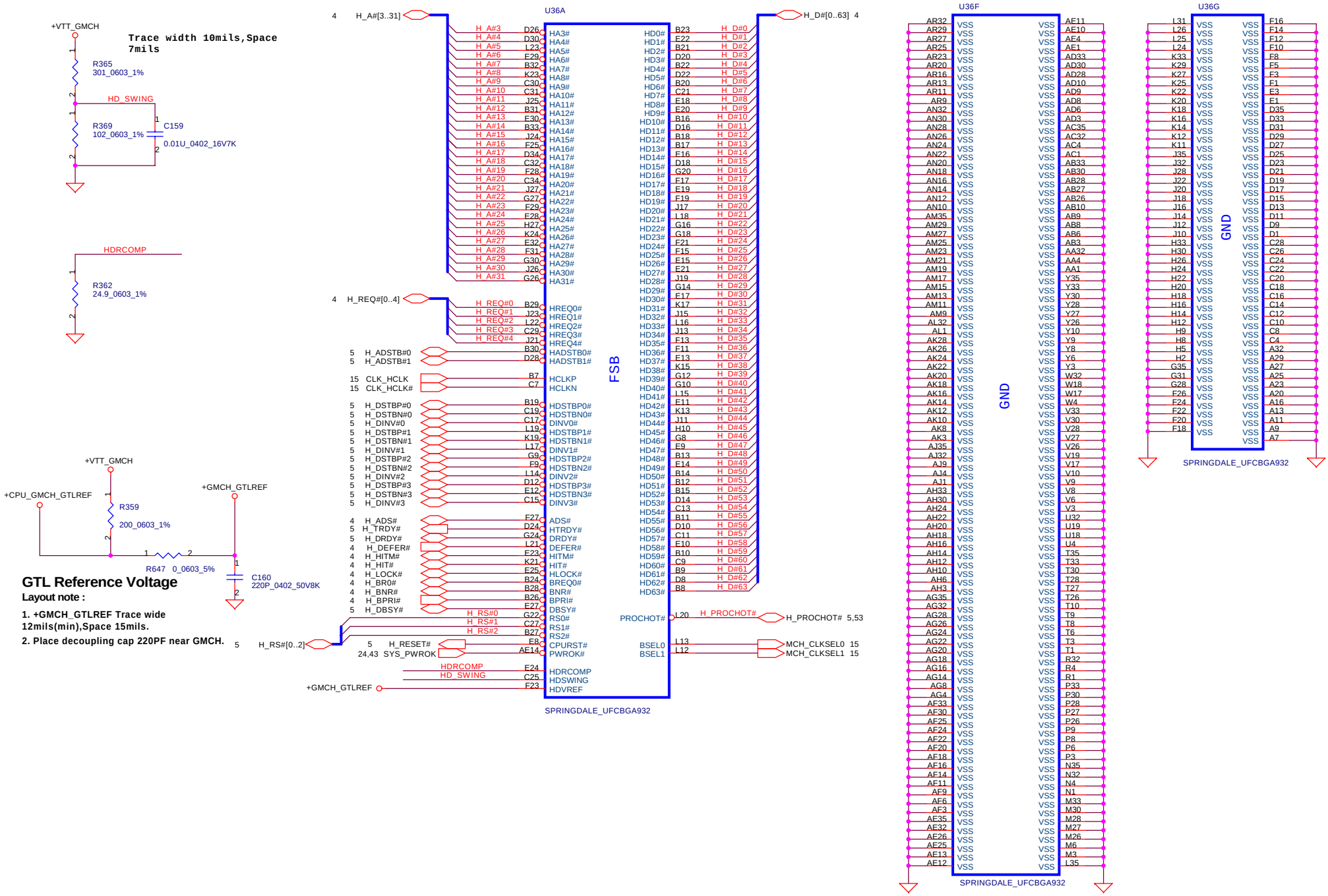




| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | Springdale-Host/GND (1/4) |
| Size B | Document Number: Sapporo 300P |
| Rev | 0.3 |
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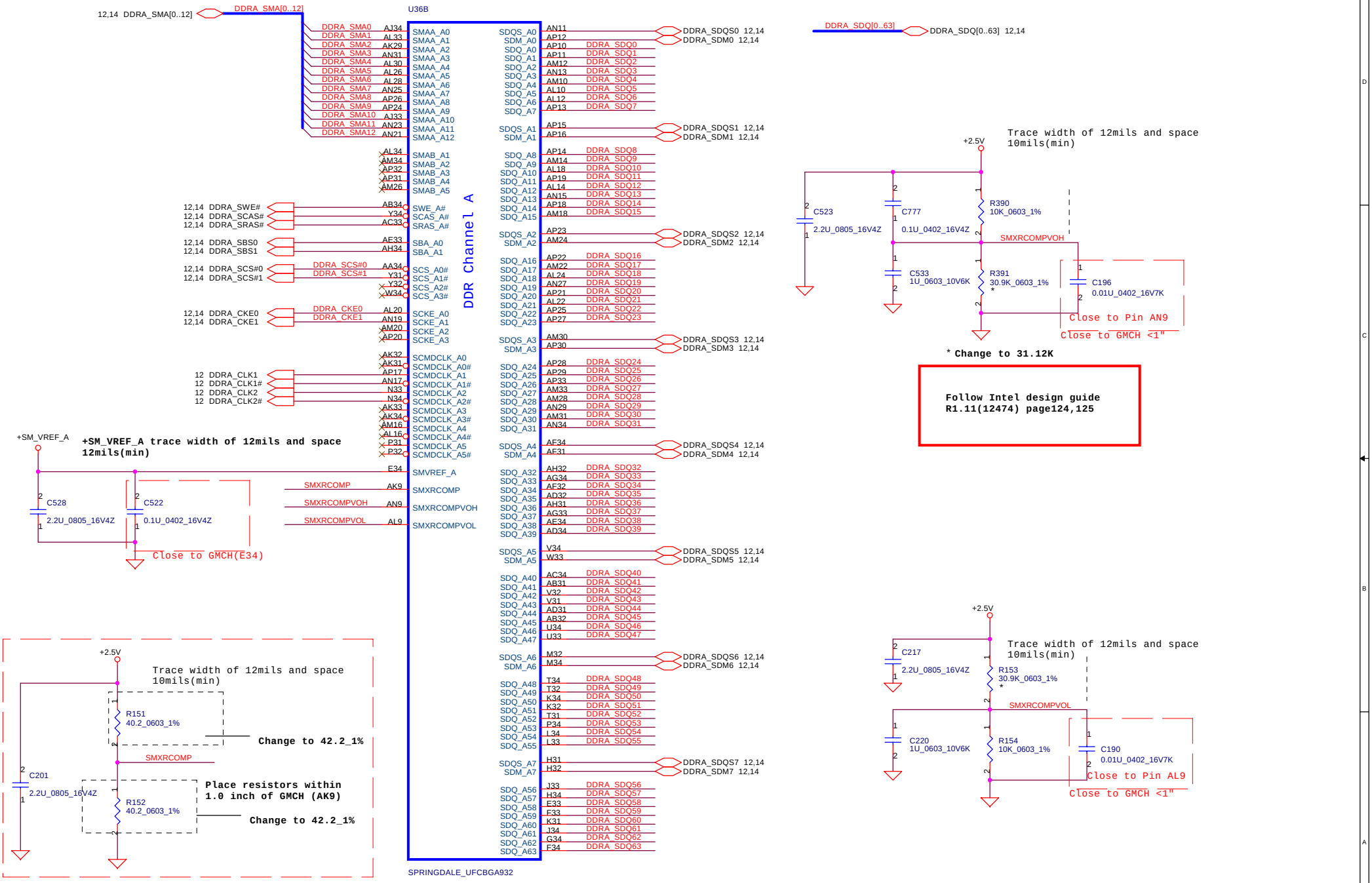
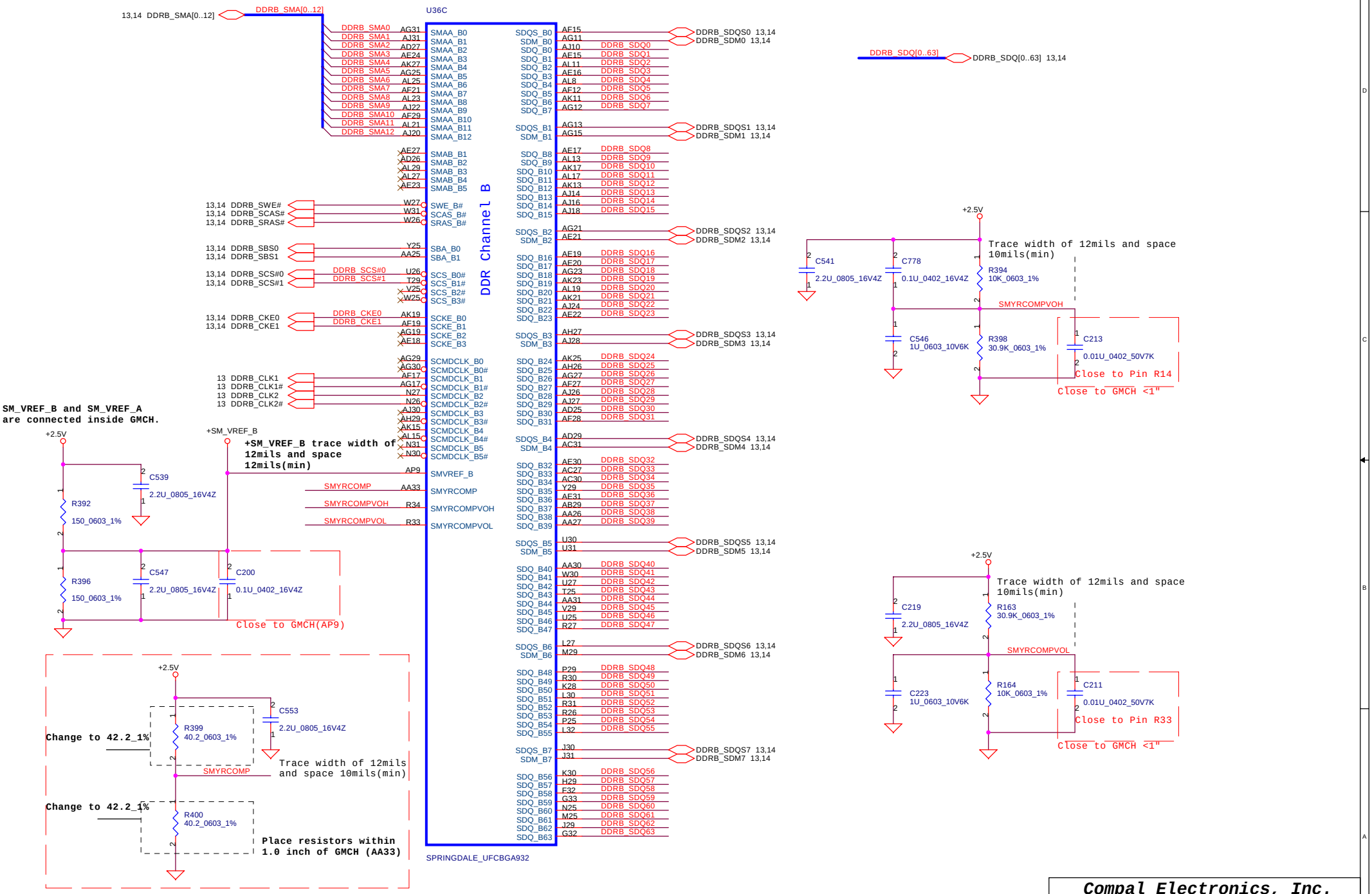





| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: Springdale-DDR Interface-A(2/5) | | |
| Size: B | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 8 of 57 | |






**Compal Electronics, Inc.**

Title: **Springdale-DDR Interface-B(3/5)**

| Size | Document Number | Rev |
|---|---|---|
| B | Sapporo 300P | 0.3 |

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+1.5VS
Change to 43.2_1%
R123
43_0402_5%
GRCOMP

+1.5VS
Change to 52.3_1%
?
R116
51.1_0603_1%
HI_RCOMP_MCH

+1.5VS
R121
@10K_0402_5%
AGP_PAR

1: External AGP
0: Internal Graphics

+1.5VS
Note:
HI_SWING_MCH, HI_VREF_MCH
trace width of 10mils and
space 7mils
R353
226_0603_1%
HI_SWING_MCH
R368
147_0603_1%
C499
0.1U_0402_16V4Z
C498
0.01U_0402_16V7K
Close to GMCH(AE3)
Close to GMCH ball <250mils
HI_VREF_MCH
R372
113_0603_1%
C500
0.1U_0402_16V4Z
C503
0.01U_0402_16V7K
Close to GMCH(AE2)
Close to GMCH ball <250mils

CLK_MCH_66M
R337
@10_0402_5%
C486
@10P_0402_50V8K

+1.5VS
Note:
CI_SWING_MCH, CI_VREF_MCH
trace width of 10mils and
space 20mils
R122
226_0603_1%
0.8V
CI_SWING_GMCH
C147
0.1U_0402_16V4Z
R127
147_0603_1%
C155
0.01U_0402_16V7K
Close to GMCH(AF2)
Close to GMCH ball <250mils
CI_VREF_GMCH
0.35V
C166
0.1U_0402_16V4Z
R130
113_0603_1%
C165
0.01U_0402_16V7K
Close to GMCH(AF4)
Close to GMCH ball <250mils

change to 52.3_1%
+1.5VS
R375
54.9_0603_1%
CI_SWING_GMCH
CI_VREF_GMCH
+3VS
R92
0_0402_5%
24 ICH_SYNC#
R692
10K_0402_5%
13,26,27,28,30,31,37,40 PCIRST#
R134
0_0402_5%

+1.5VS
R31
60.4_0603_1%
Close GMCH ball (AC3) less than 250mils
AGP_SWING
R32
39.2_0603_1%
C9
0.1U_0402_16V4Z
C113
0.01U_0402_16V7K
+AGP_VREF = 0.3535
R56
44.2_0603_1%
+AGP_VREF
R55
100_0603_1%
C127
0.01U_0402_16V7K
Close GMCH ball (AD2)
less than 250mils

Follow Springdale Chipset Platform Design guide Rev1.11(12474)

**Note:**
**Springdale Customer Schematic R1.2 page18**
**AGP_SWING only had 0.1u cap ; But Springdale**
**Chipset Platform Design guide Rev1.11(12474)**
**page138 had a 0.01uf cap. need confirm with**
**Intel.**

U36D

AGP
16 AGP_C/BE#[0..3]
AGP_C/BE#0 Y7
AGP_C/BE#1 W5
AGP_C/BE#2 AA3
AGP_C/BE#3 U2
GCBE0
GCBE1
GCBE2
GCBE3
16 AGP_FRAME# U6
15 CLK_MCH_66M H4
16 AGP_DEVSEL# AB4
16 AGP_IRDY# V11
16 AGP_TRDY# AB5
16 AGP_STOP# W11
16 AGP_PAR AB2
16 AGP_REQ# N6
16 AGP_GNT# M7
GFRAME
GCLKIN
GDEVSEL
GIRDY
GTRDY
GSTOP
GPAR/ADD_DETECT
GREQ
GGNT
GRCOMP AC2
AGP_SWING AC3
+AGP_VREF AD2
GRCOMP/DVOBCGCOMP
GVSWING
GVREF
16 AGP_RBF# R10
16 AGP_WBF# R9
16 AGP_DBIHI M4
16 AGP_DBILO M5
GRBF
GWBF
DBI_HI
DBI_LO
16 AGP_ST[0..2]
AGP_ST0 N3
AGP_ST1 N5
AGP_ST2 N2
GST0
GST1
GST2
26 HUB_HL[0..10]
HUB_HL0 AF5
HUB_HL1 AG3
HUB_HL2 AK2
HUB_HL3 AG5
HUB_HL4 AK5
HUB_HL5 AL3
HUB_HL6 AL2
HUB_HL7 AL4
HUB_HL8 AJ2
HUB_HL9 AH2
HUB_HL10 AJ3
HI0
HI1
HI2
HI3
HI4
HI5
HI6
HI7
HI8
HI9
HI10
26 HUB_HLSTRF AH5
26 HUB_HLSTRS AH4
HISTRF
HISTRS
HUB
HI_RCOMP_MCH AD4
HI_SWING_MCH AE3
HI_VREF_MCH AE2
HI_RCOMP
HI_SWING
HI_VREF
AK7
AH7
AD11
AF7
AD7
AC10
AF8
AG7
AE9
AH9
AG6
AJ6
AJ5
CI0
CI1
CI2
CI3
CI4
CI5
CI6
CI7
CI8
CI9
CI10
CISTRF
CISTRS
CSA
AG2
AF2
AF4
CI_RCOMP
CI_SWING
CI_VREF
G4
AP8
AJ8
AK4
DREFCLK
EXTTS#
ICH_SYNC#
RSTIN#
AG10
AG9
AN35
AP34
AR1
RESERVED_1
RESERVED_2
RESERVED_3
RESERVED_4
RESERVED_5
SPRINGDALE_UFCBGA932

GADSTBF0 AC6
GADSTBS0# AC5
16 AGP_AD_STBF0
16 AGP_AD_STBS0
GAD0 AE6 AGP_AD0
GAD1 AC11 AGP_AD1
GAD2 AD5 AGP_AD2
GAD3 AE5 AGP_AD3
GAD4 AA10 AGP_AD4
GAD5 AC9 AGP_AD5
GAD6 AB11 AGP_AD6
GAD7 AB7 AGP_AD7
GAD8 AA9 AGP_AD8
GAD9 AA6 AGP_AD9
GAD10 AA5 AGP_AD10
GAD11 W10 AGP_AD11
GAD12 AA11 AGP_AD12
GAD13 W6 AGP_AD13
GAD14 W9 AGP_AD14
GAD15 V7 AGP_AD15
16 AGP_AD[0..31]
GADSTBF1 V4
GADSTBS1# V5
16 AGP_AD_STBF1
16 AGP_AD_STBS1
GAD16 AA2 AGP_AD16
GAD17 Y4 AGP_AD17
GAD18 Y2 AGP_AD18
GAD19 W2 AGP_AD19
GAD20 Y5 AGP_AD20
GAD21 V2 AGP_AD21
GAD22 W3 AGP_AD22
GAD23 U3 AGP_AD23
GAD24 T2 AGP_AD24
GAD25 T4 AGP_AD25
GAD26 T5 AGP_AD26
GAD27 R2 AGP_AD27
GAD28 P2 AGP_AD28
GAD29 P5 AGP_AD29
GAD30 P4 AGP_AD30
GAD31 M2 AGP_AD31
GSBSTBF U11
GSBSTBS# T11
16 AGP_SB_STBF
16 AGP_SB_STBS
16 AGP_SBA[0..7]
GSBA0# R6 AGP_SBA0
GSBA1# P7 AGP_SBA1
GSBA2# R3 AGP_SBA2
GSBA3# R5 AGP_SBA3
GSBA4# U9 AGP_SBA4
GSBA5# U10 AGP_SBA5
GSBA6# U5 AGP_SBA6
GSBA7# T7 AGP_SBA7

VGA
DDCA_DATA H3
DDCA_CLK F2
R88 2 1 0_0402_5%
R84 2 1 0_0402_5%
RED F4
RED# E4
GREEN H6
GREEN# G5
BLUE H7
BLUE# G6
R91 2 1 0_0402_5%
R101 2 1 0_0402_5%
R102 2 1 0_0402_5%
HSYNC G3
VSYNC E2
REFSET D2
R322 2 1 0_0402_5%
NC_1 A3
NC_2 A33
NC_3 A35
NC_4 AF13
NC_5 AF23
NC_6 AJ12
NC_7 AN1
NC_8 AP2
NC_9 AR3
NC_10 AR33
NC_11 AR35
NC_12 B2
NC_13 B25
NC_14 B34
NC_15 C1
NC_16 C23
NC_17 C35
NC_18 E26
NC_19 M31
NC_20 R25

Analog RGB/CRT guidelines for Springdale-P



Title: Springdale-AGP/HUB/VGA/CSA (4/5)
Size: B
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**Note:**
**Placed less than 100 mils from ball**
**Route to GMCH ball without via**

U36E

SPRINGDALE_UFCBGA932

POWER

Place at the output of the 1.5V VR

**Place near GMCH**

**Place near ball Y11,routing trace from cap to ball**

**Place near GMCH**

Note: Please change to 0.82uH, DC current of 30mA parts and close to cap

Trace 14mils

L21

LQG21F4R7N00_0805

Close to GMCH

Note: Please change to 1uH(0.54uH-D-IN), DC current of 1000mA parts and close to cap

Trace 50mils

Trace 35mils (under GMCH ball field)

Trace 35mils

Close to GMCH

**Note:**
**Placed less than 100 mils from ball**
**Route to GMCH ball without via**

**Decoupling Reference Document:**
**Springdale Chipset Platform Design guide Rev1.11 (12474)page246,248**

**Decoupling Reference Document:**
**Springdale Customer Schematic R1.2 page84**



**Compal Electronics, Inc.**

Title: **Springdale-Decoupling (5/5)**

Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 11 of 57

DDRA_VREF trace width of
12mils and space 12mils(min)

JP26

Close to SO-DIMM

C305 0.1U_0402_16V4Z

R204 75_0603_1%

R203 75_0603_1%

8,14 DDRA_SDQ[0..63] DDRA_SDQ[0..63]
8,14 DDRA_SDQS[0..7] DDRA_SDQS[0..7]
8,14 DDRA_SMA[0..12] DDRA_SMA[0..12]
8,14 DDRA_SDM[0..7] DDRA_SDM[0..7]

## System Memory Decoupling caps

+2.5V

C331 22U_1206_10V4Z
C314 0.1U_0402_10V6K
C339 0.1U_0402_10V6K
C312 0.1U_0402_10V6K
C337 0.1U_0402_10V6K
C311 0.1U_0402_10V6K
C336 0.1U_0402_10V6K

+2.5V

C310 0.1U_0402_10V6K
C335 0.1U_0402_10V6K
C334 0.1U_0402_10V6K
C308 0.1U_0402_10V6K
C333 0.1U_0402_10V6K
C307 0.1U_0402_10V6K
C332 0.1U_0402_10V6K
C306 0.1U_0402_10V6K

**Decoupling Reference Document:**
**Springdale Customer Schematic R1.2 page22**
**each Channel(two DIMMs) requirement 22uF*1 ; 0.1uF*14**

**Decoupling Reference Document:**
**Springdale Chipset Platform Design guide Rev1.11**
**(12474)pag 271 each DIMM(two) requirement 0.1uF*42**

KEYLINK_5762-3-111

H = 5.2mm

## SO-DIMM 0
## REVERSE



Compal Electronics, Inc.

Title: DDR-SODIMM SLOT1

Size | Document Number: Sapporo 300P | Rev: 0.3

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DDRB_VREF trace width of 12mils and space 12mils(min)

## System Memory Decoupling caps

Decoupling Reference Document:
Springdale Customer Schematic R1.2 page26
each Channel(two DIMMs) requirement 0.1uF*24

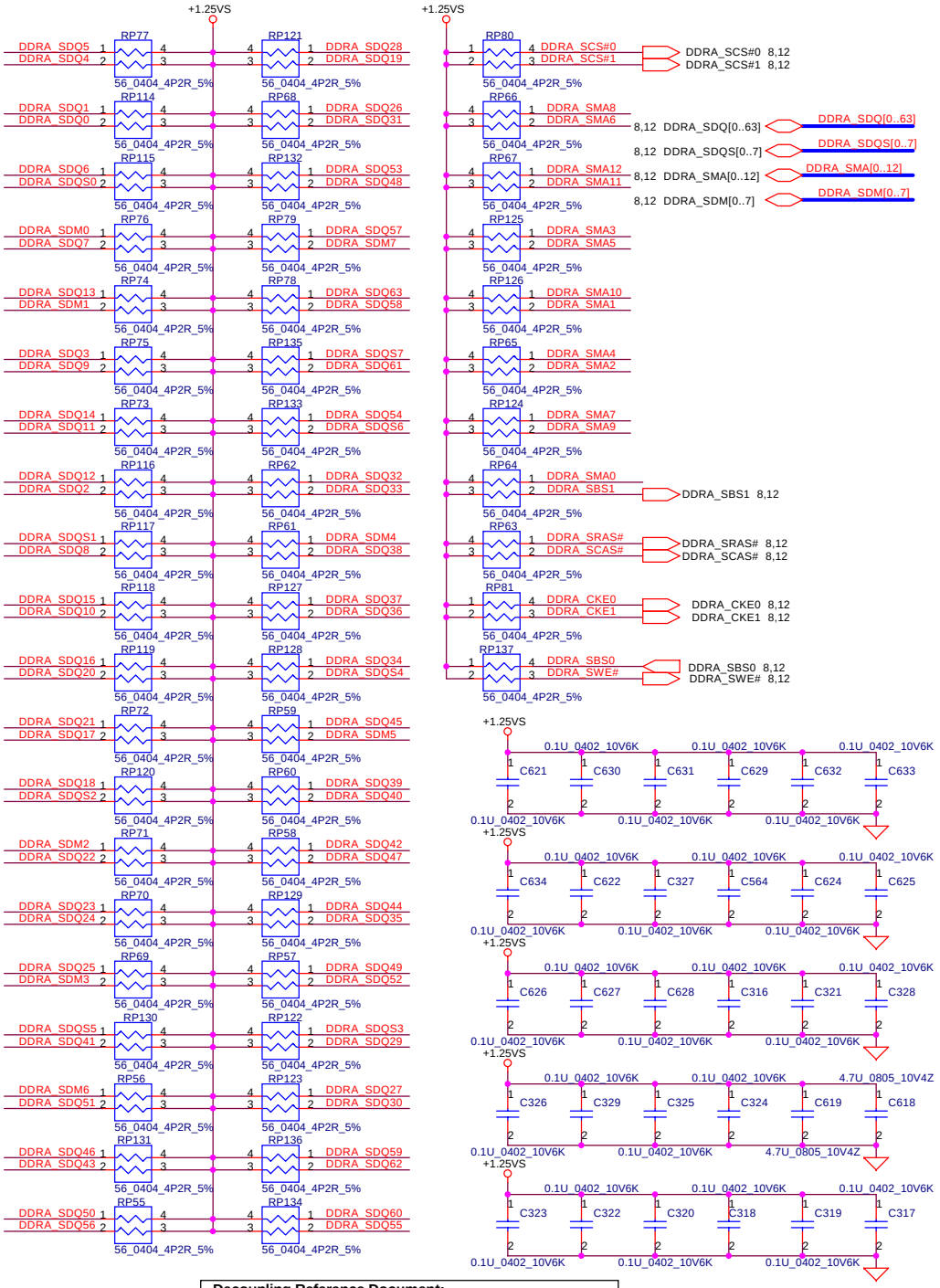
## DEBUG PORT

## SO-DIMM 2 REVERSE

H= 9.2mm

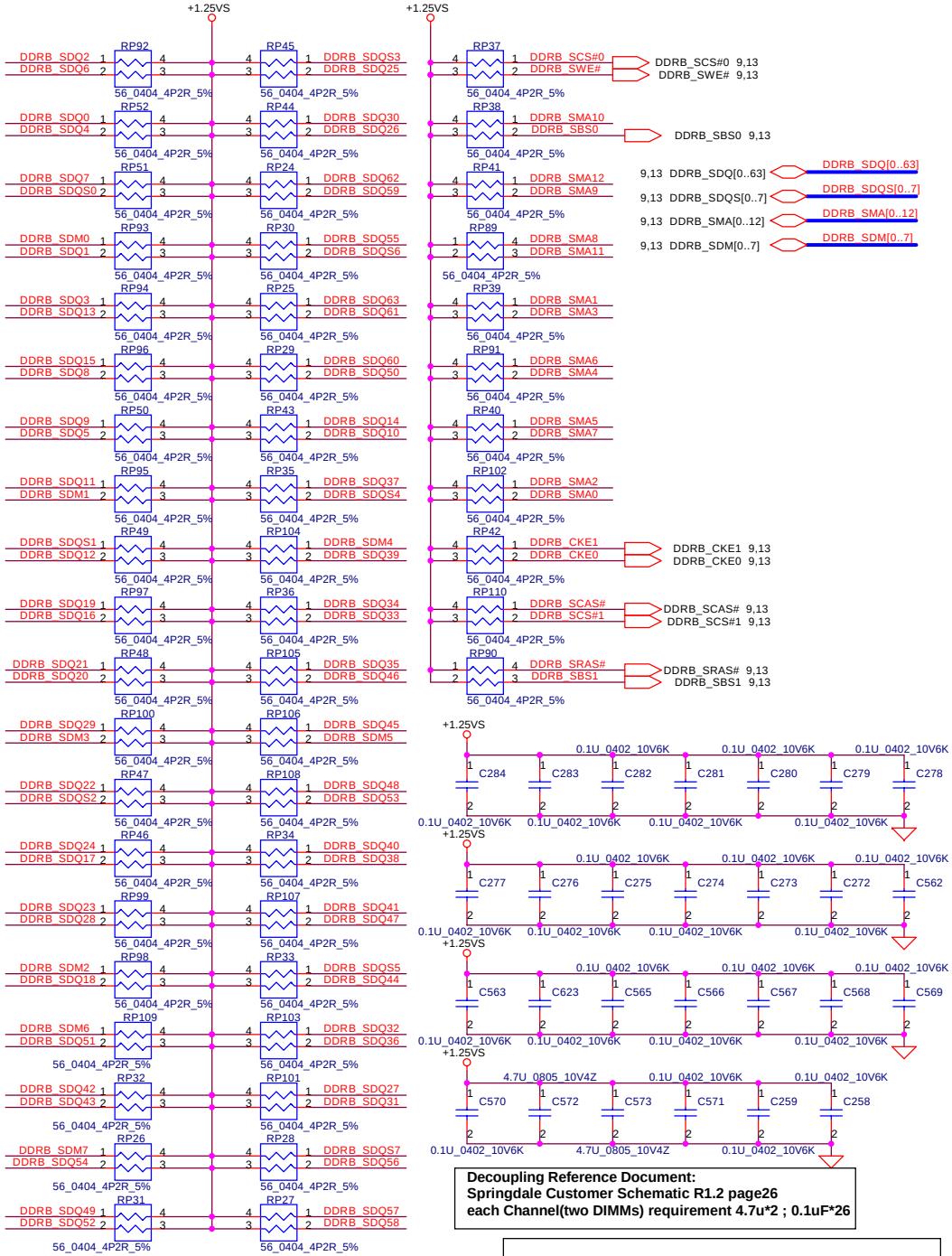
| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | DDR-SODIMM SLOT2 |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 13 of 57 |

# Channel A(DIMM0) Termination resistors & Decoupling caps




Decoupling Reference Document:
Springdale Customer Schematic R1.2 page22
each Channel(two DIMMs) requirement 4.7u*2 ; 0.1uF*28

# Channel B(DIMM1) Termination resistors & Decoupling caps




Decoupling Reference Document:
Springdale Customer Schematic R1.2 page26
each Channel(two DIMMs) requirement 4.7u*2 ; 0.1uF*26



Title: **DDR Termination Resistors**

| Size | Document Number | Rev |
|---|---|---|
| B | Sapporo 300P | 0.3 |

Date: 星期二, 十二月 01, 2003 Sheet 14 of 57

| SEL0 | SEL1 | CPU | 3V66[0..3] | REF0 | REF1 | SRC | USB/Dot |
|---|---|---|---|---|---|---|---|
| 0 | 0 | 100 | 66 | 14.3 | 14.3 | 100/200 | 48 |
| 0 | MID | REF | REF | REF | REF | REF | REF |
| 0 | 1 | 200 | 66 | 14.3 | 14.3 | 100/200 | 48 |
| 1 | 0 | 133 | 66 | 14.3 | 14.3 | 100/200 | 48 |
| 1 | 1 | 166 | 66 | 14.3 | 14.3 | 100/200 | 48 |
| 1 | MID | Hi-Z | Hi-Z | Hi-Z | Hi-Z | Hi-Z | Hi-Z |

Place near each pin
W>40 mil

Trace wide=40 mils

+3VS
+3VS_CLK
L29 BLM21A601SPT_0805
L28 BLM21A601SPT_0805
C591 10U_1206_6.3V7K
C583 C582 C597 C596 C595 C594 C580 0.1U_0402_10V6K
C581 0.1U_0402_10V6K
C592 4.7U_0805_10V4Z

U42 CK409

24 CLK_ICH_14M — R450 33_0402_5%
37 CLK_14M_SIO — R451 33_0402_5%
CLKREF1
CLKREF0
REF_0
REF_1
C602 @10P_0402_50V8K
CLK_XTAL_IN
XTAL_IN
X3 14.31818MHz_20P_1BX14318CC1A~L
C603 @10P_0402_50V8K
CLK_XTAL_OUT
XTAL_OUT
Place crystal within 500 mils of CK409

VDD_REF VDD_PCI VDD_PCI VDD_3V66 VDD_48 VDD_SRC VDD_CPU VDD_CPU
VSS_REF VSS_PCI VSS_PCI VSS_3V66 VSS_48 VSS_SRC VSS_IREF
ICS952623BG_TSSOP56

24 PM_SLP_S1# — R462 @0_0402_5% SLP_S1#
24 STP_PCI# — R425 @0_0402_5% STPPCI#
24,54 STP_CPU# — R424 @0_0402_5% STPCPU#
CLKSEL0
CLKSEL1
SEL0
SEL1

+3VS
R463 1K_0402_5% SLP_S1#
R412 1K_0402_5% STPPCI#
R411 1K_0402_5% STPCPU#
PWRDWN#
PCI_STP#
CPU_STP#

53 CK409_PWRGD# — CLK_VTT_PG# — VTT_PWRGD#

12,13,26 ICH_SMB_CLK — CK_SCLK — SCLK
12,13,26 ICH_SMB_DATA — CK_SDATA — SDATA

SRCLKN_100MHZ
SRCLKP_100MHZ

24 CLK_ICH_48M — R438 33_0402_5% — CLK48M_OUT0 — USB_48MHZ
DOT_48MHZ

Check SPEC (250mA,300 ohm)
R437 475_0603_1% — IREF

+3VS — L27 BLM11A601S_0603 — CLK_VDD_PLL — VDD_PLL
C578 10U_1206_6.3V7K
C579 0.1U_0402_16V4Z
VSS_PLL

+3VS
R421 1K_0603_1%
R444 1K_0603_1%
R420 2K_0603_1%
R443 2K_0603_1%
R185 2.49K_0603_1%
R190 2.49K_0603_1%
R187 @0_0402_5%
R186 0_0402_5% — CPU_CLKSEL0 5
R188 0_0402_5% — CPU_CLKSEL1 5
R189 @0_0402_5%
MCH_CLKSEL0 7
MCH_CLKSEL1 7

VSS_CPU
CPUCLKT2 — CLK_CPU2 — R428 33_0402_5% — R413 49.9_0603_1% — CLK_HCLK — CLK_HCLK 7
CPU_CLKC2 — CLK_CPU2# — R429 33_0402_5% — R414 49.9_0603_1% — CLK_HCLK# — CLK_HCLK# 7
CPUCLKT1 — CLK_CPU1 — R430 33_0402_5% — R415 49.9_0603_1% — CLK_ITP — CLK_ITP 5
CPUCLKC1 — CLK_CPU1# — R431 33_0402_5% — R416 49.9_0603_1% — CLK_ITP# — CLK_ITP# 5
CPUCLKT0 — CLK_CPU0 — R432 33_0402_5% — R417 49.9_0603_1% — CLK_BCLK — CLK_BCLK 4
CPUCLKC0 — CLK_CPU0# — R433 33_0402_5% — R418 49.9_0603_1% — CLK_BCLK# — CLK_BCLK# 4
Place near CK409

48/66MHZ_OUT/3V66_4
66MHZ_OUT3/3V66_3 — CLK66M_OUT3 — R457 33_0402_5% — CLK_AGP_66M 16
66MHZ_OUT2/3V66_2
66MHZ_OUT1/3V66_1 — CLK66M_OUT1 — R456 33_0402_5% — CLK_MCH_66M 10
66MHZ_OUT0/3V66_0 — CLK66M_OUT0 — R455 33_0402_5% — CLK_ICH_66M 26
PCICLK_F2 — R452 33_0402_5% — CLK_PCI_ICH 26
PCICLK_F1 — R713 33_0402_5% — CLK_80H 13
PCICLK_F0

PCICLK6 — R461 33_0402_5% — CLK_PCI_MINI 30
PCICLK5 — R460 33_0402_5% — CLK_PCI_PCM 28
PCICLK4 — R454 33_0402_5% — CLK_PCI_LPC 40
PCICLK3 — R459 33_0402_5% — CLK_PCI_1394 31
PCICLK2 — R458 33_0402_5% — CLK_PCI_LAN 27
PCICLK1 — R453 33_0402_5% — CLK_PCI_SIO 37
PCICLK0



Compal Electronics, Inc.
Title: Clock Generator
Size: Document Number: Sapporo 300P
Rev: 0.3
Date: 星期一, 十二月 01, 2003
Sheet 15 of 57

# nVIDIA NV36M

## Selection Table For W180

| Modulation Setting | SST Ratio |
|---|---|
| SS% | |
| 0 | 1.25% |
| 1 | 3.75% |

**1 PCI_AD_SWAP: 0-RVSERSED 1-NORMAL**

**2 SUB_VENDOR: 0-SYSTEM BIOS 1-ADAPTER BIOS**

**3 RAM_CFG[3:0]**
(1101 = 4Mx32 DDR,0000 =8Mx32 DDR Samsung, 0001 =8Mx32 DDR Hynix, DQS per byte)
0 NV18M
NV31M:NV34M
4
1 NV18M
NV31M:NV34M
5
2
3

**6 CRYSTAL: (10)-27MHz**
0 VIPD2
1 VIPD6

**7 TVMODE: (01)-NTSC**
0 DACB_VSYNC
1 DACB_HSYNC

**8 AGP8X/4X: (0)-8X / (1)-4X**

**9 AGP_SIDEBAND: (0)-ENABLE**

**10 AGP_FASTWRITE: (0)-ENABLE**

**11 PCI_DEVID[3:0]** (1000 NV36M 0100 NV34M 1010 NV31M)
0 VIPD4
1 VIPD5
2 VIPD3
3 DVO_HSYNC

**12 BUS_TYPE: (1)-AGP**

**ROM TYPE: (00)-PARALLEL**
0
1

PLACE COLSE TO VGA Pin AJ5, AJ7,

SWAPRDY_B NV31,NV34 use. NV18, NV36 not use

SWAPRDY_A NV31,NV34 use. NV18, NV36 not use.

only for NV36M

| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | nVIDIA NV36M (AGP BUS) |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 16 of 57 |

20 NDQMA[0..7] NDQMA[0..7]
20 NDQSA[0..7] NDQSA[0..7]
20 NMAA[0..11] NMAA[0..11]
20 NMDA[0..63] NMDA[0..63]

21 NDQMB[0..7] NDQMB[0..7]
21 NDQSB[0..7] NDQSB[0..7]
21 NMAB[0..11] NMAB[0..11]
21 NMDB[0..63] NMDB[0..63]

U35B

MEMORY INTERFACE A

NV36M_BGA701

U35C

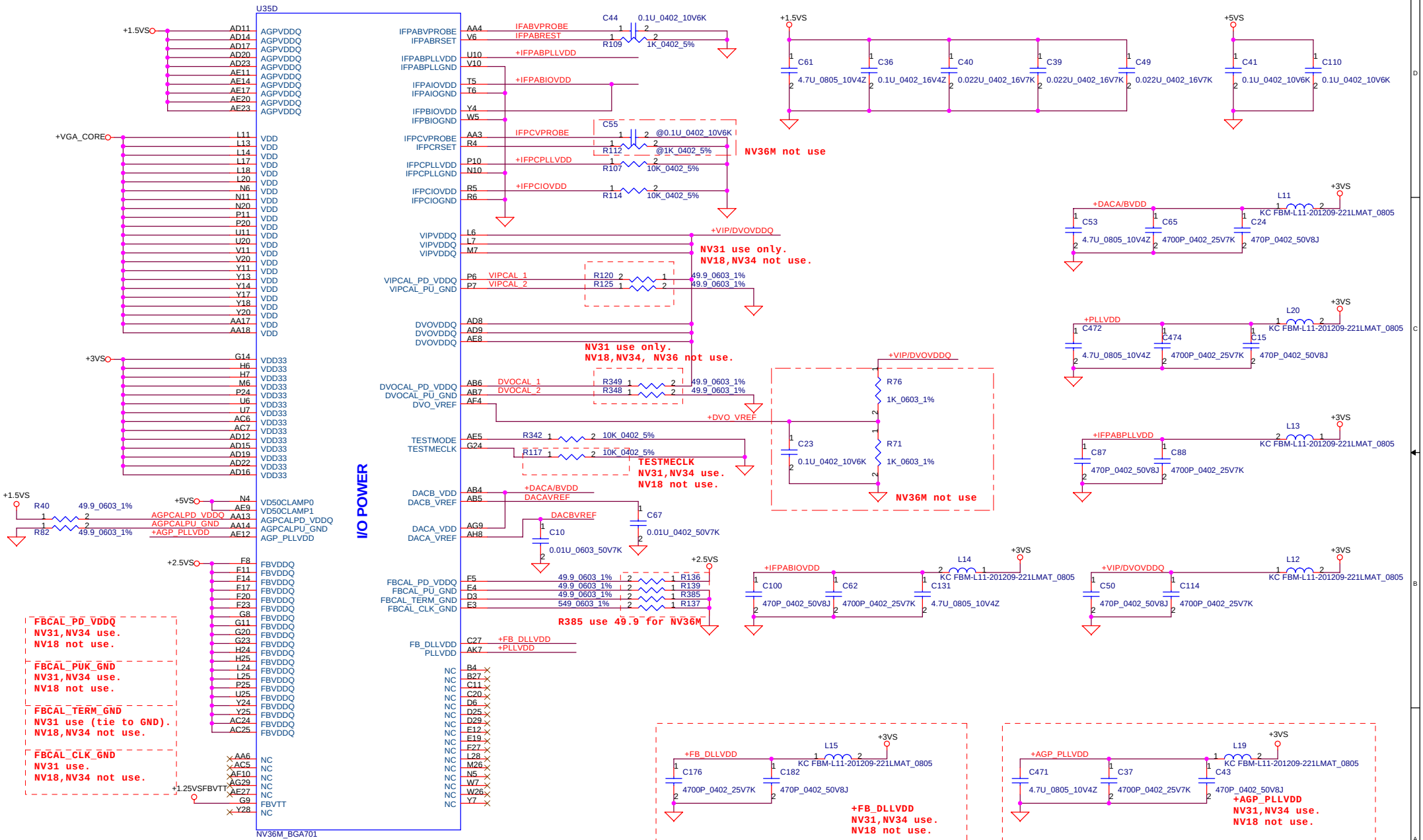
MEMORY INTERFACE B

NV36M_BGA701

R89 @120_0402_5%
R105 @120_0402_5%
R111 @120_0402_5%
R110 @120_0402_5%
R138 1K_0603_1%
R135 1K_0603_1%
C173 0.1U_0402_10V6K
(10 mil)

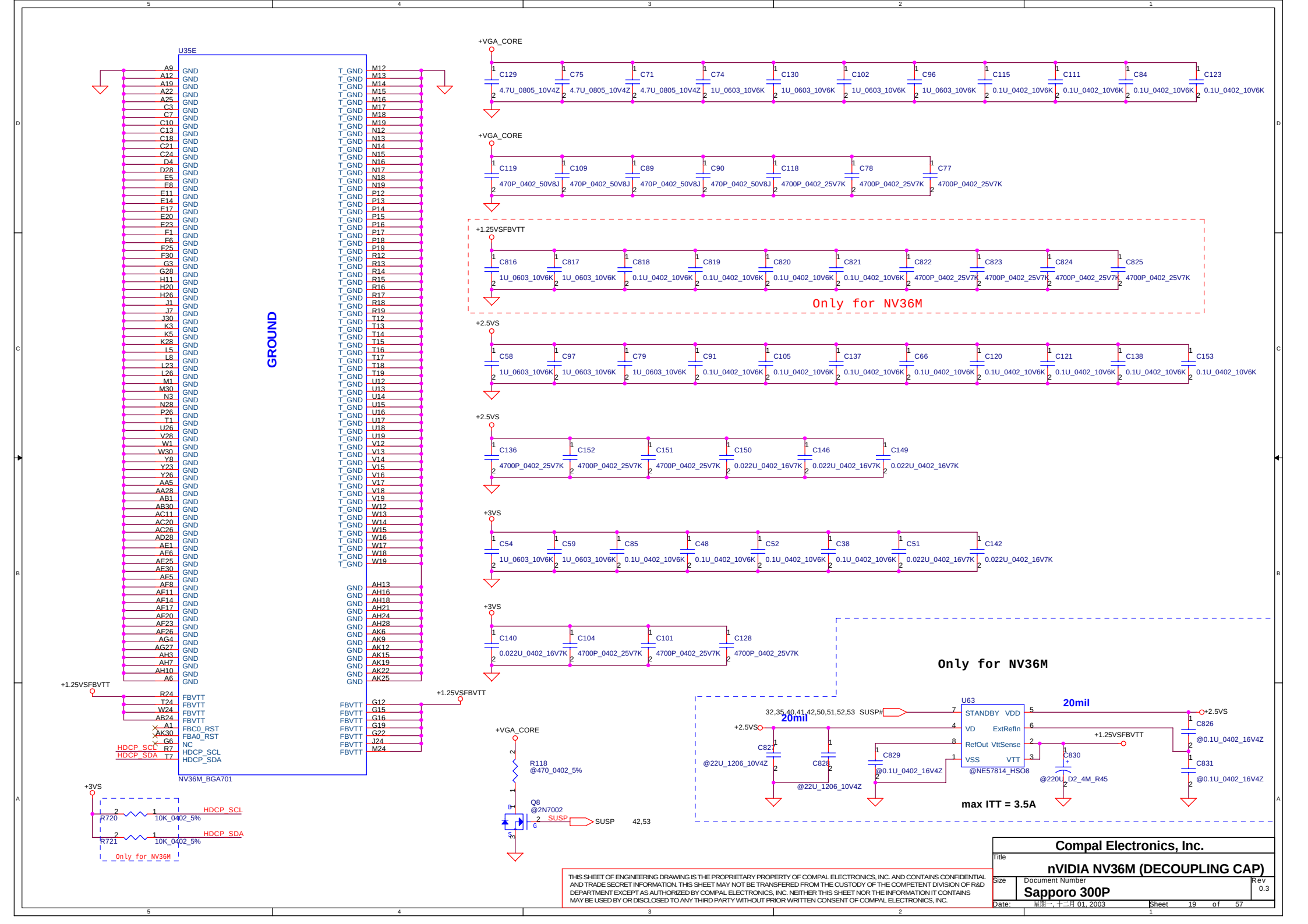
NV36M use 10K
R358 10K_0402_5%
R389 10K_0402_5%

| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | nVIDIA NV36M (DDR) |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 17 of 57 |





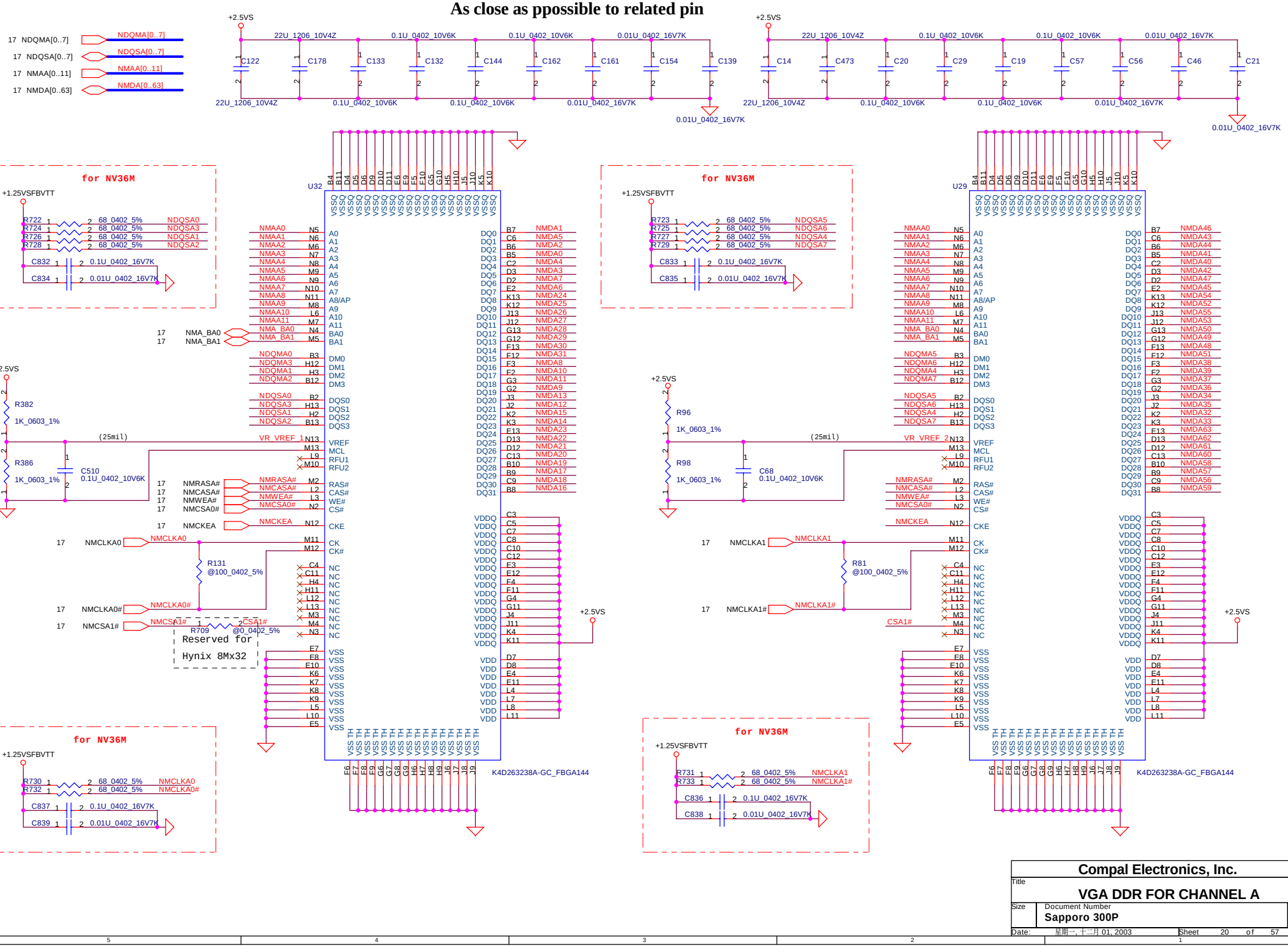

| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | nVIDIA NV36M POWER) |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 18 of 57 |





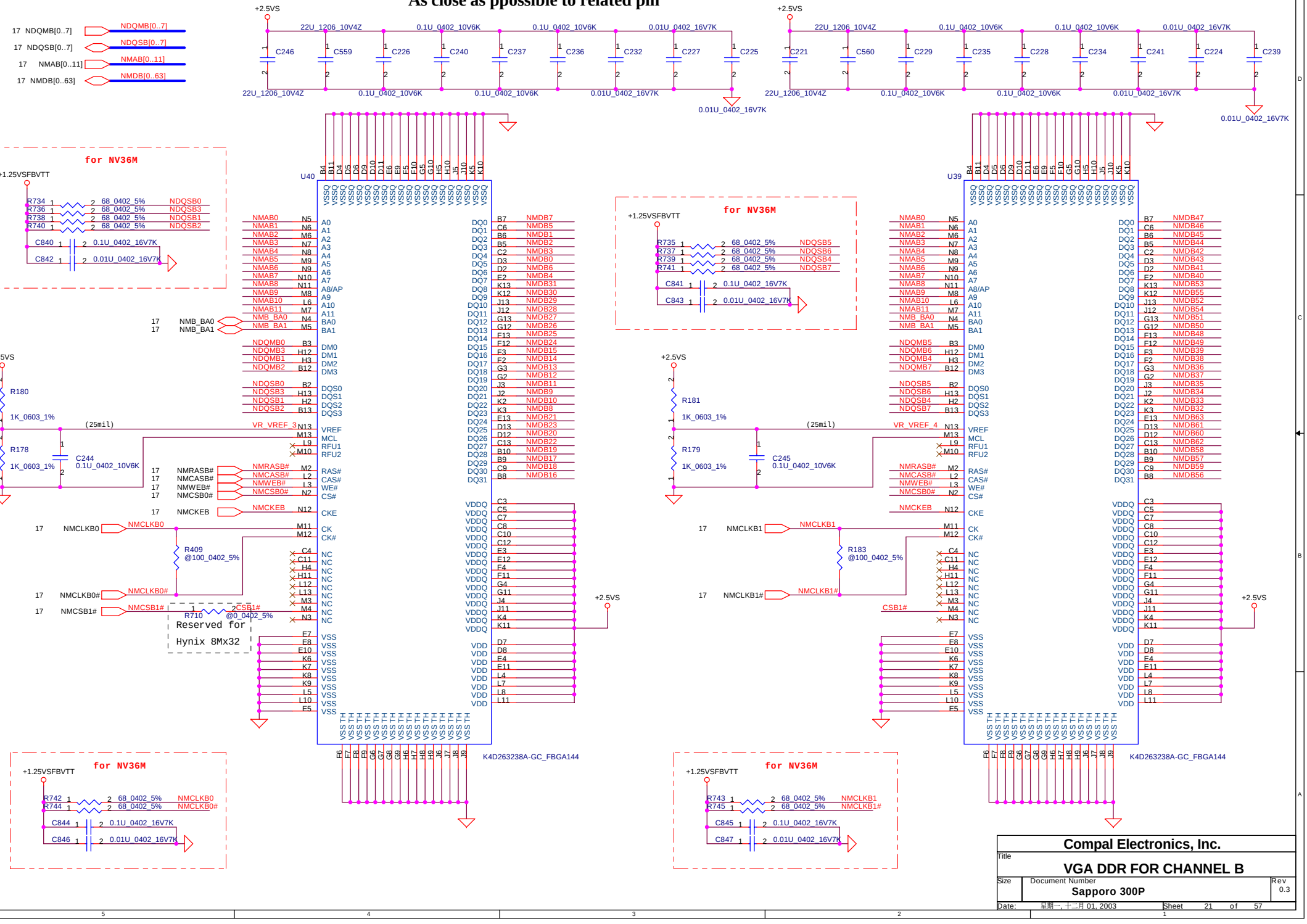

| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | nVIDIA NV36M (DECOUPLING CAP) |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 19 of 57 |

# As close as ppossible to related pin




| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: VGA DDR FOR CHANNEL A | | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 20 of 57 | |

# As close as ppossible to related pin




| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | VGA DDR FOR CHANNEL B |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 21 of 57 |

# CRT, TV-OUT & LVDS CONNECTOR

## TV-OUT Conn.

## LVDS Conn.

## CRT Conn.

R755, R756,R757 need for NV36M

R746, R747,R748 need for NV36M

JP20
1. Y ground
2. C ground
3. Y (luminance+sync)
4. C (crominance)

SUYIN_030008FR004T101ZL

JP1 IPEX_20323-040E-01

JP15 CRT-15P

U13D SN74LVC32APWLE_TSSOP14 +3VALW POWER

U62 TC7SH08FU_SSOP5

U27 SN74AHCT1G125GW_SOT353-5

U26 SN74AHCT1G125GW_SOT353-5

RP6 10K_8P4R_1206_5%

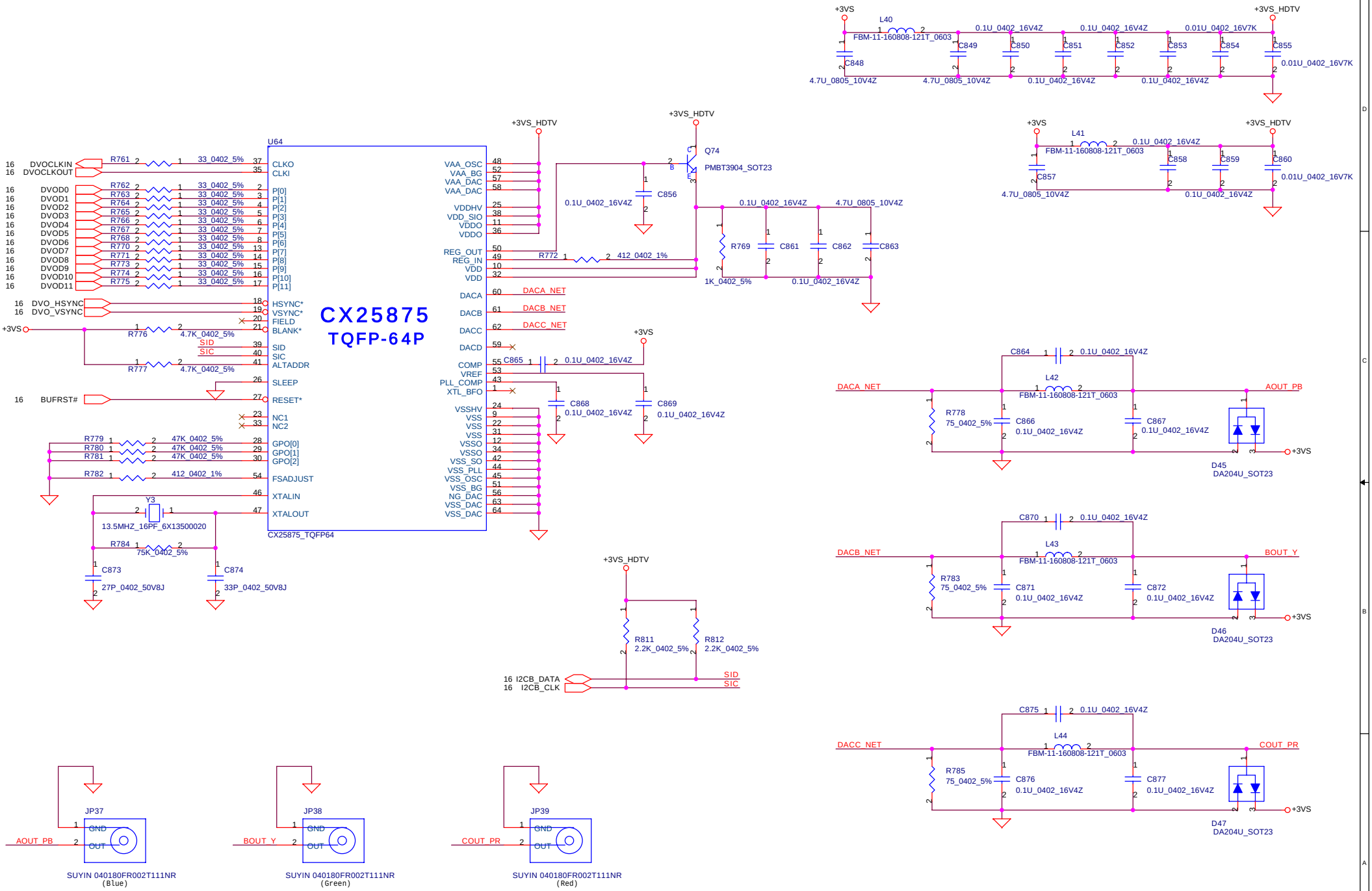


**Compal Electronics, Inc.**

Title: CRT,TV-OUT & LVDS Connector

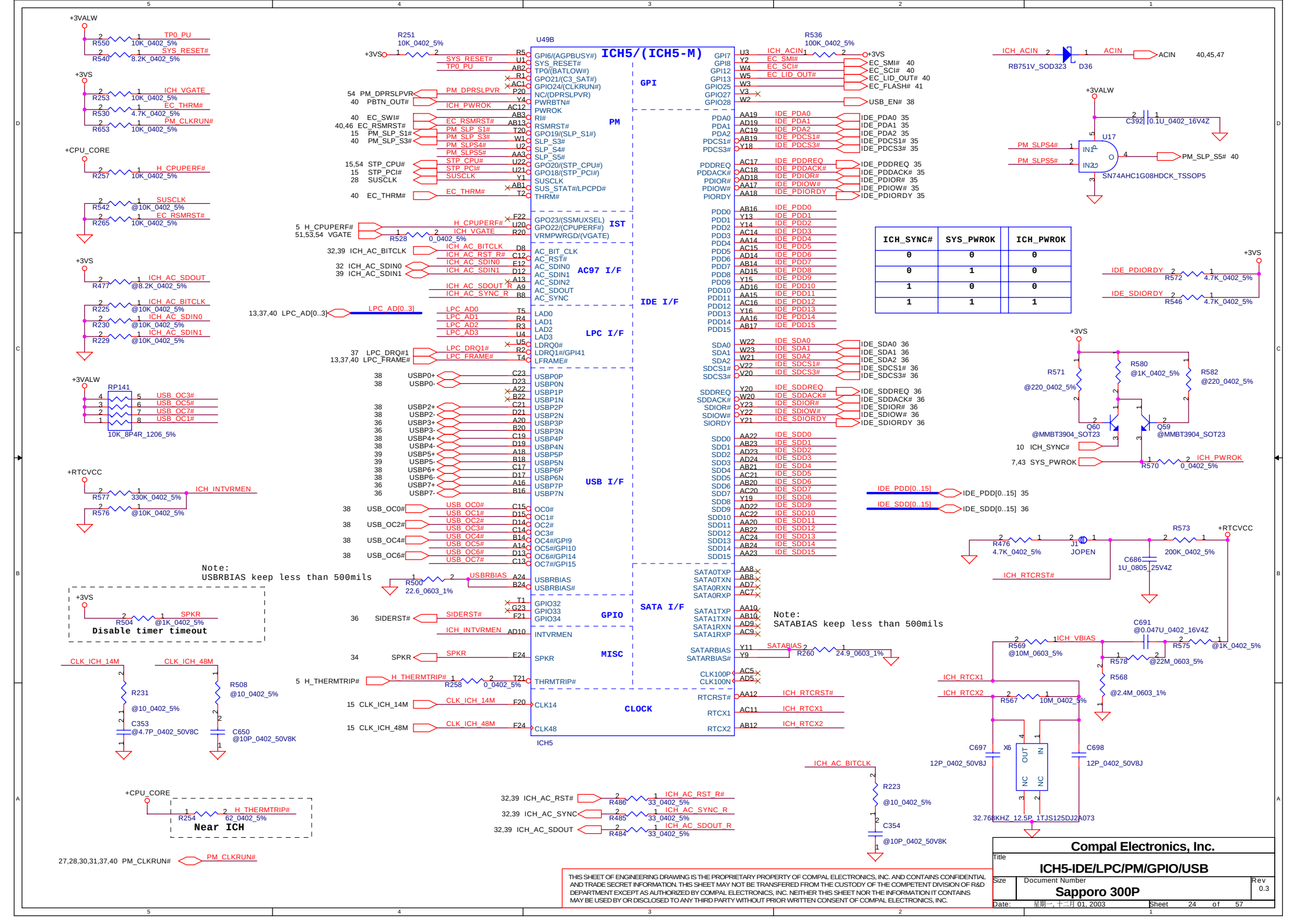
Size: B | Document Number: Sapporo 300P | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 22 of 57

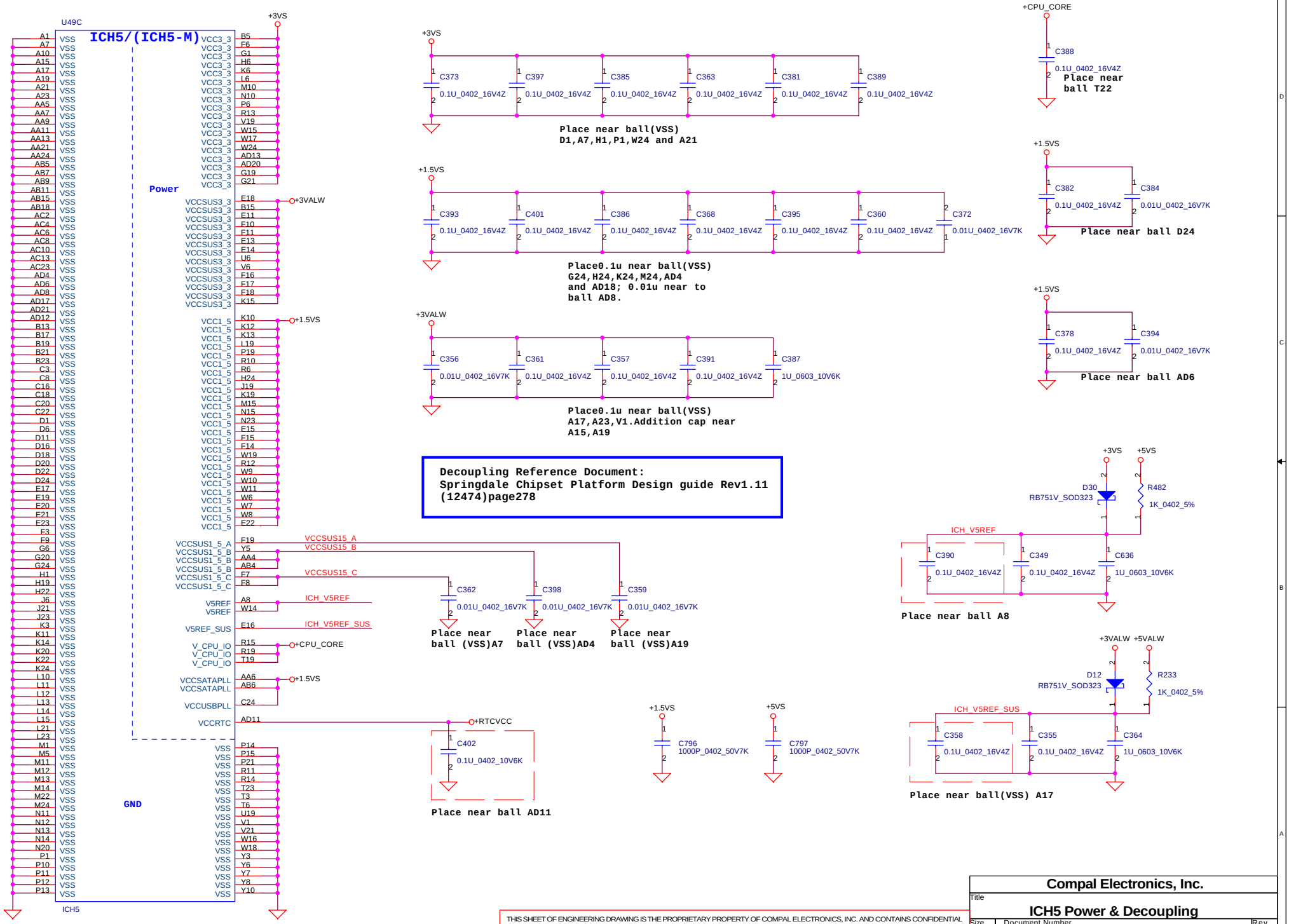





| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: CX75875 HDTV | | |
| Size: Custom | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 23 of 57 | |




| ICH_SYNC# | SYS_PWROK | ICH_PWROK |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

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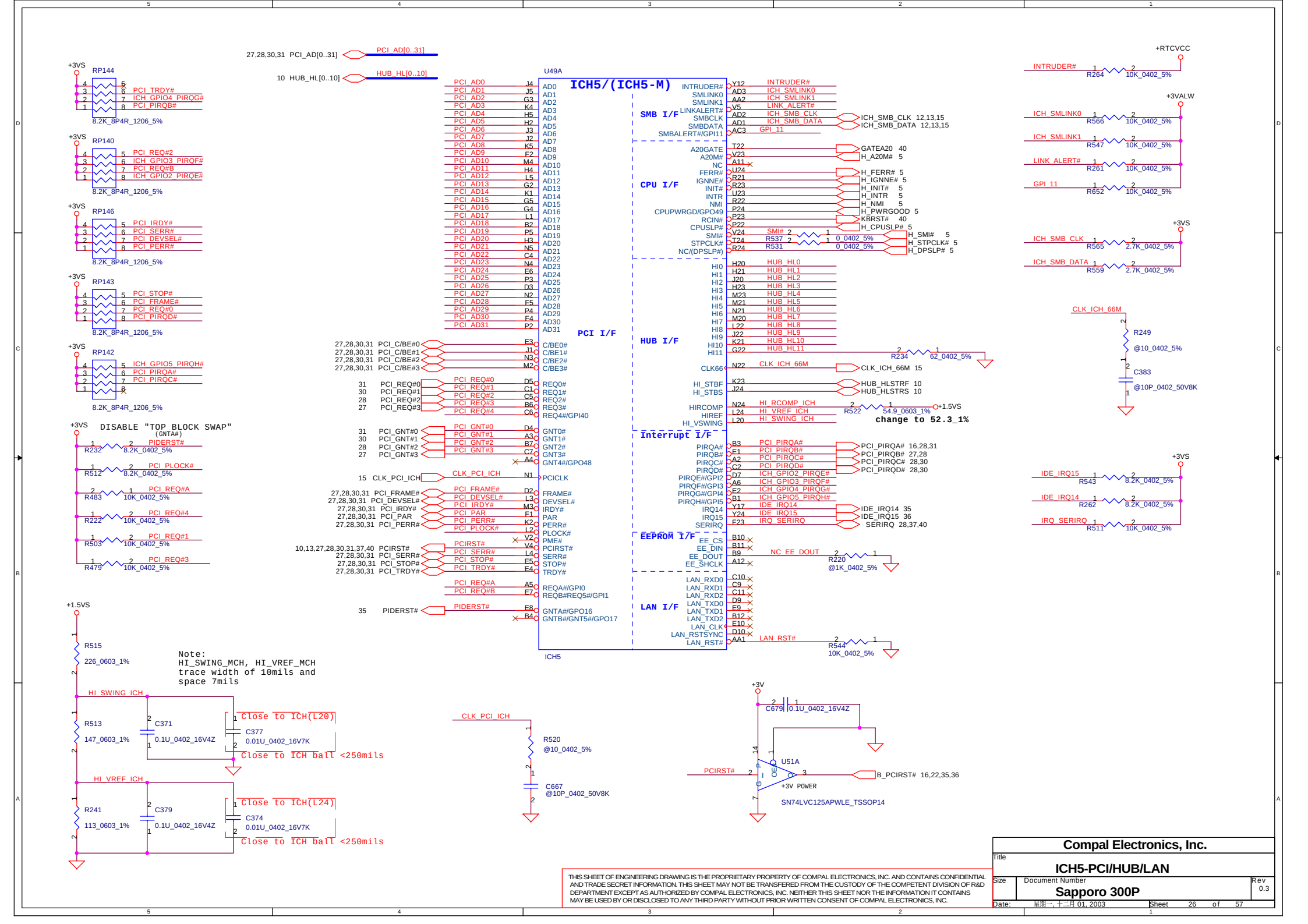
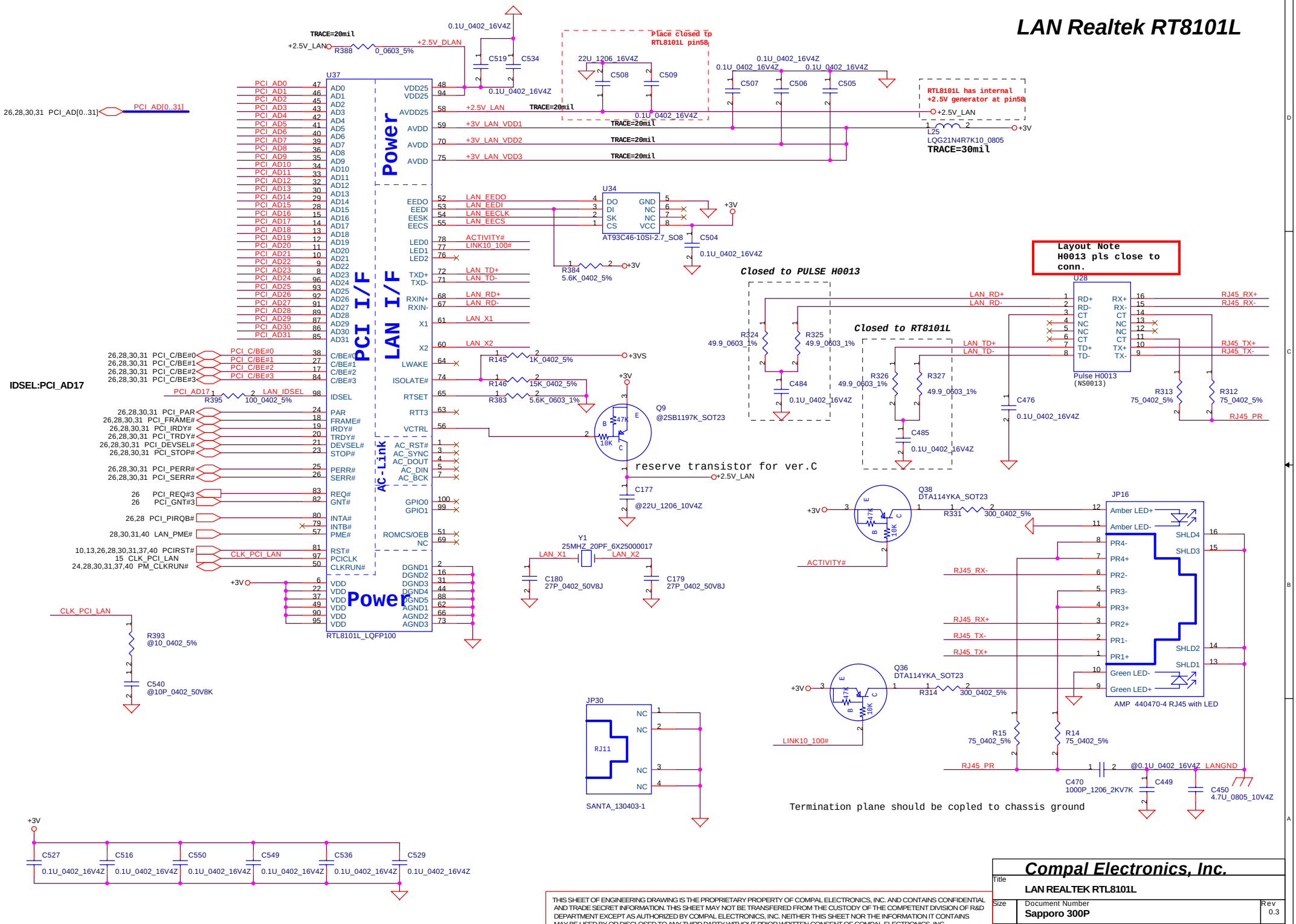
| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: ICH5 Power & Decoupling | | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 25 of 57 | |






| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | ICH5-PCI/HUB/LAN |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 26 of 57 |

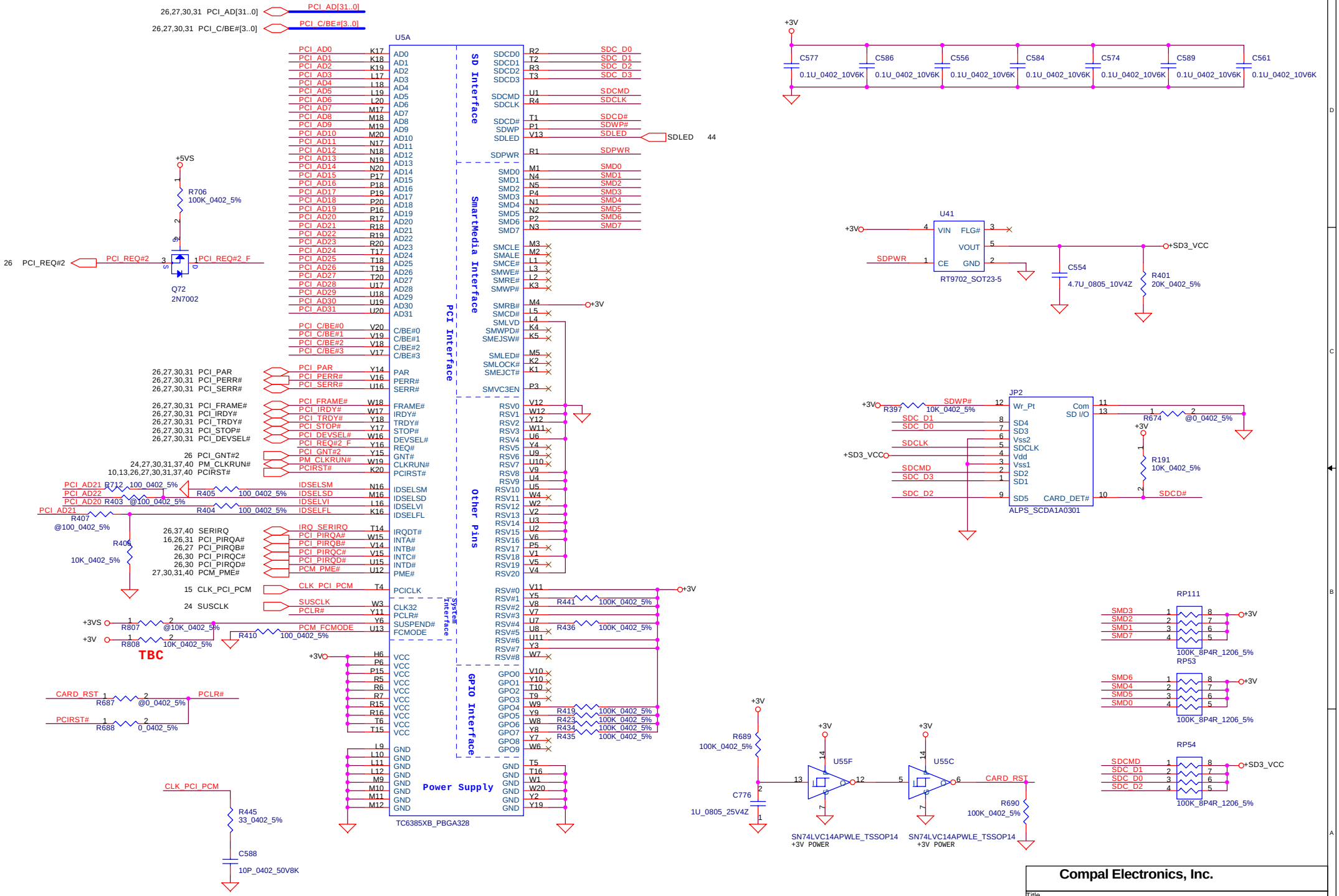
# LAN Realtek RT8101L






**Compal Electronics, Inc.**

| | | |
|---|---|---|
| Title | LAN REALTEK RTL8101L | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 27 of 57 | |


U5A
PCI Interface
SD Interface
SmartMedia Interface
Other Pins
System Interface
GPIO Interface
Power Supply
TC6385XB_PBGA328
TBC
Q72
2N7002
U41
RT9702_SOT23-5
JP2
ALPS_SCDA1A0301
U55F
U55C
SN74LVC14APWLE_TSSOP14
+3V POWER
RP111
RP53
RP54
100K_8P4R_1206_5%
Compal Electronics, Inc.
CARDBUS & SD CONN (1/2)
Document Number
Sapporo 300P
Rev
0.3
Size
B
Date: 星期一, 十二月 01, 2003
Sheet 28 of 57
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# CARDBUS SOCKET

U5B

Slot B

Slot A

System Interface

Test Pins

NC Pins

TC6385XB_PBGA328

U38

Slot A Power Supply

Slot B Power Supply

MIC2563A-0BSM_SSOP28

RP19

RP14

47K_8P4R_1206_5%

JP21

PCMC150PIN

This area close to MIC2563A-0BSM

This area close to TC6385XB

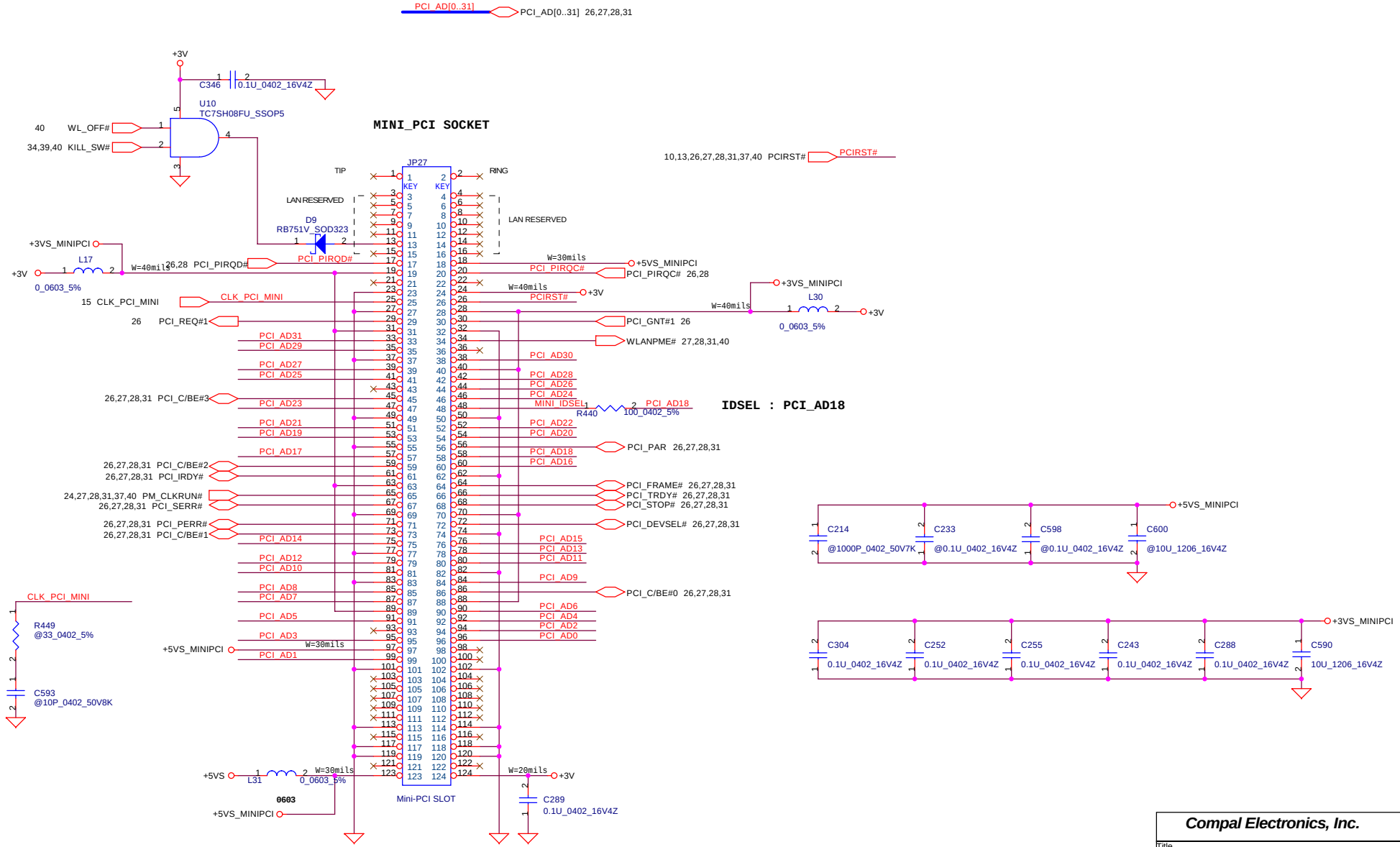


**Compal Electronics, Inc.**

Title: CARDBUS & PCMCIA (2/2)

Size: B | Document Number: Sapporo 300P | Rev: 0.3

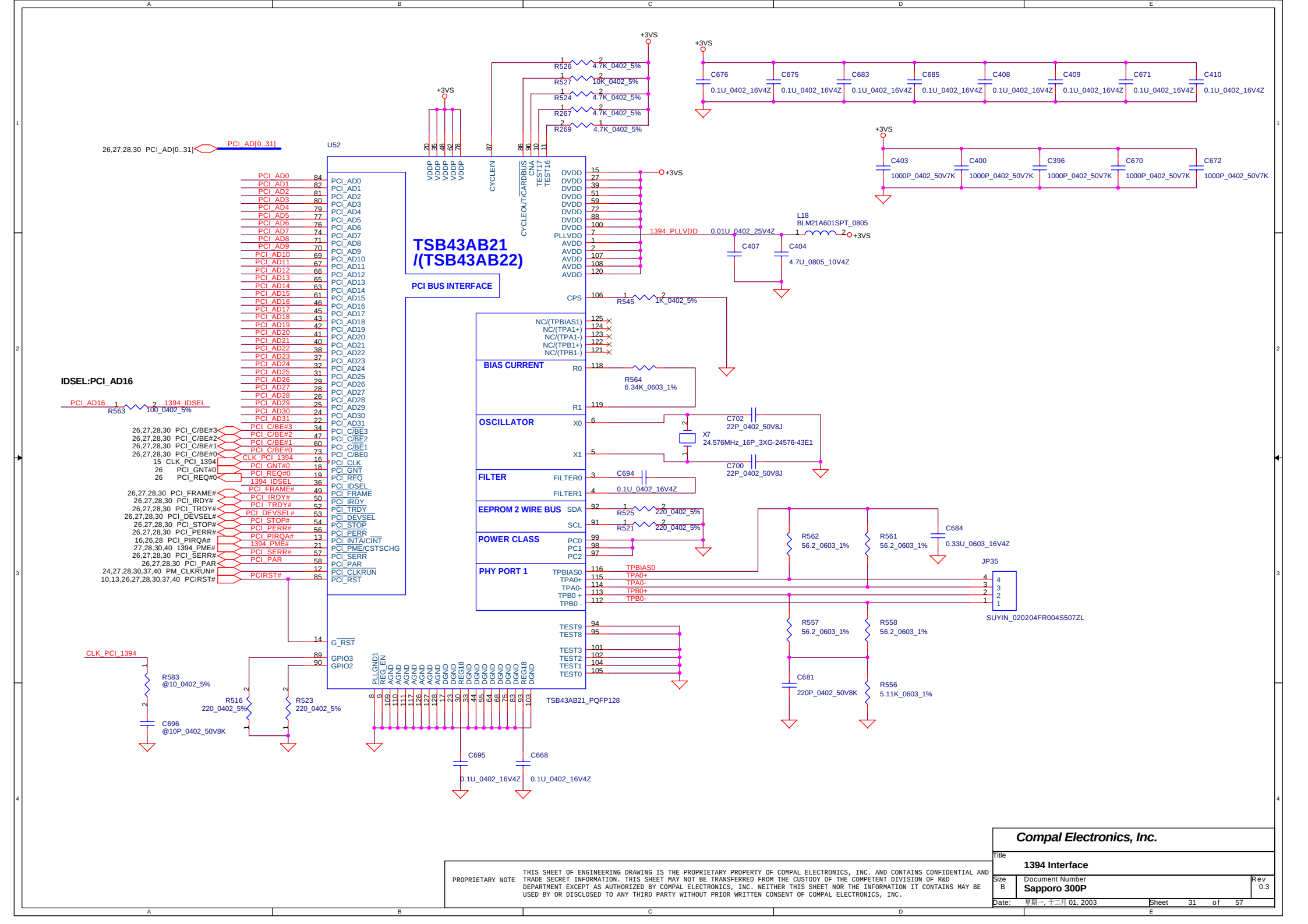
Date: 星期一, 十二月 01, 2003 | Sheet 29 of 57






**Compal Electronics, Inc.**

| | | |
|---|---|---|
| Title | MINI_PCI | |
| Size B | Document Number Sapporo 300P | Rev 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 30 of 57 | |


TSB43AB21
/(TSB43AB22)
PCI BUS INTERFACE
BIAS CURRENT
OSCILLATOR
FILTER
EEPROM 2 WIRE BUS
POWER CLASS
PHY PORT 1
IDSEL:PCI_AD16
TSB43AB21_PQFP128
SUYIN_020204FR004S507ZL
Compal Electronics, Inc.
1394 Interface
Sapporo 300P
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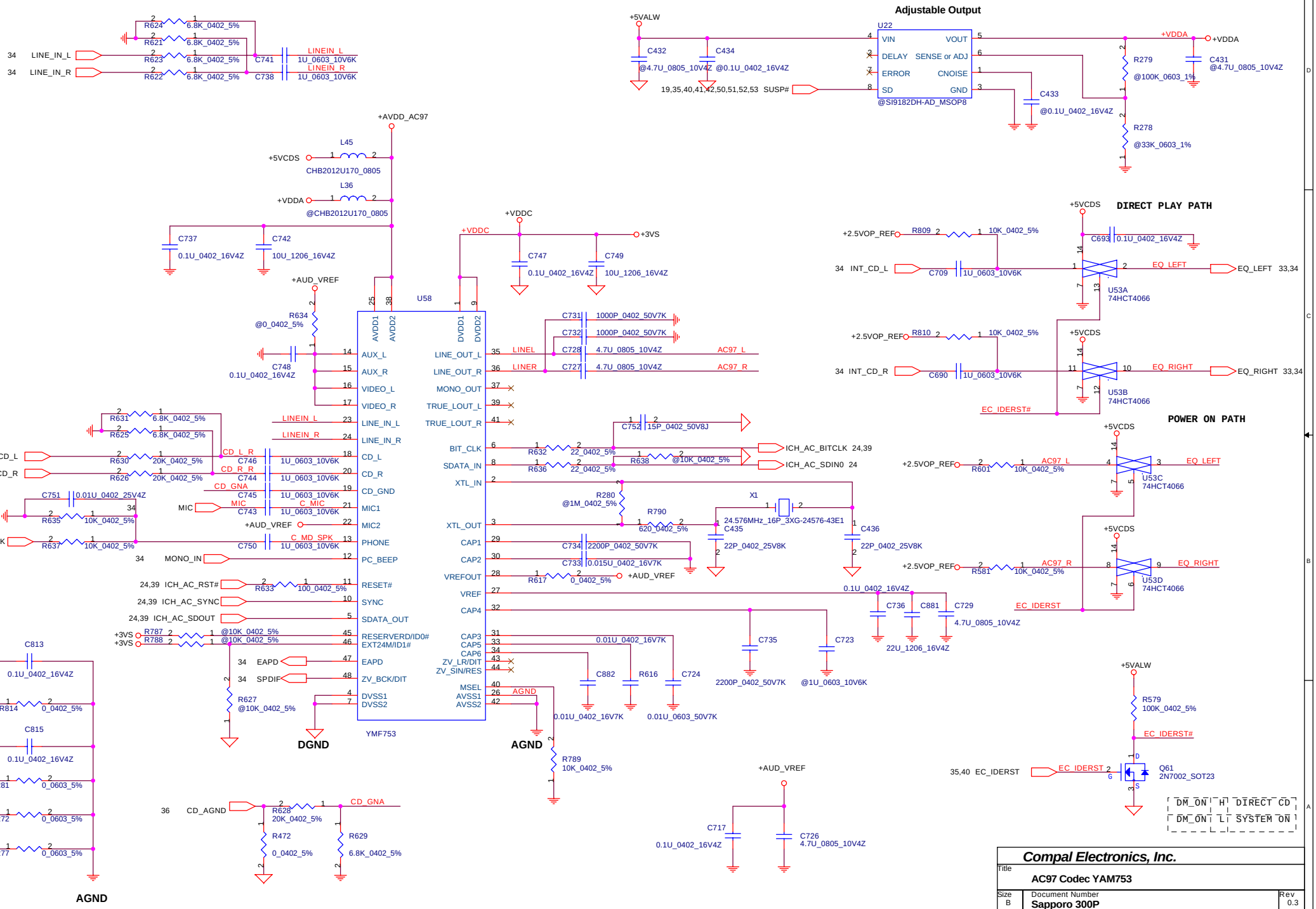
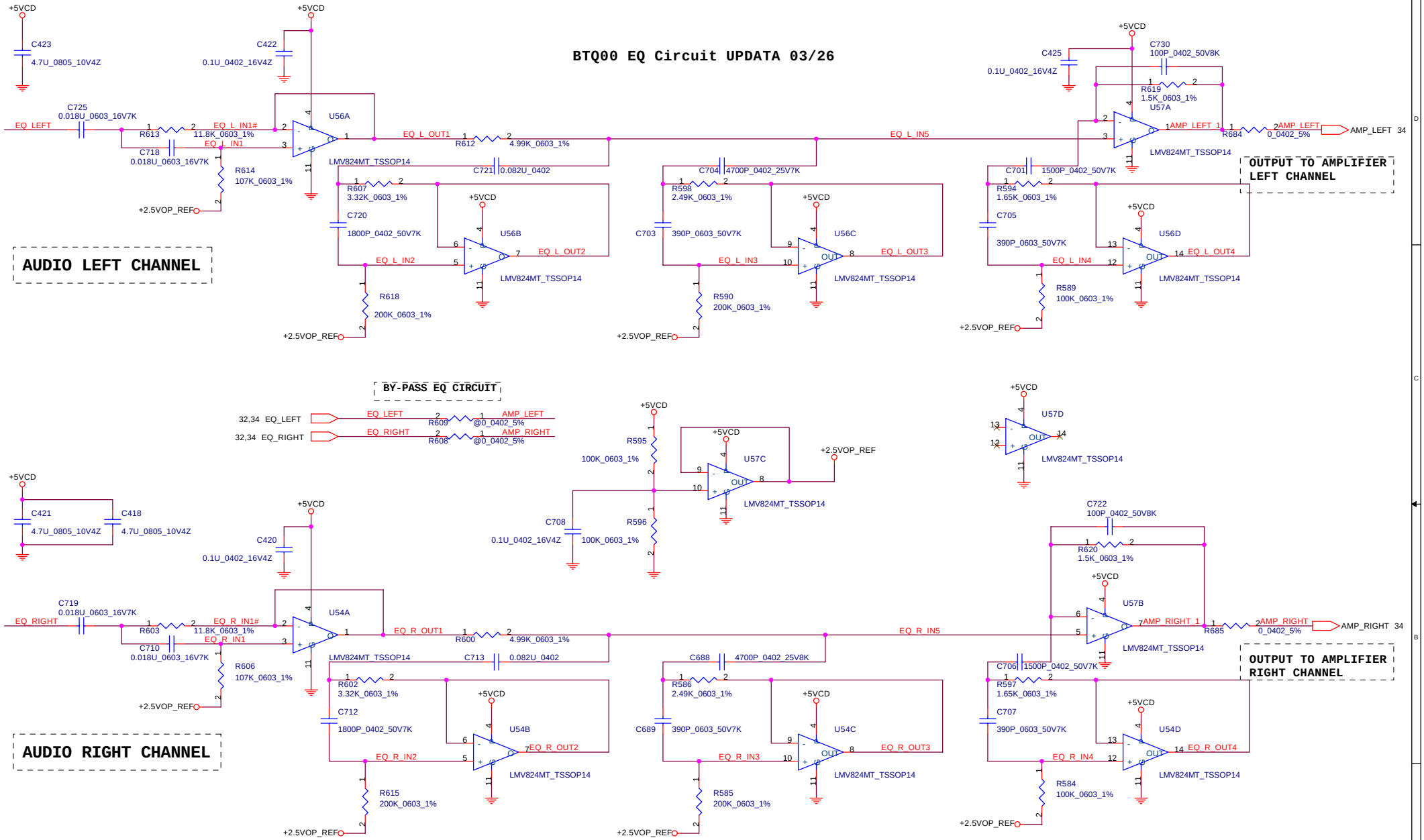
# AC97 Codec






| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | AC97 Codec YAM753 |
| Size B | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 32 of 57 |

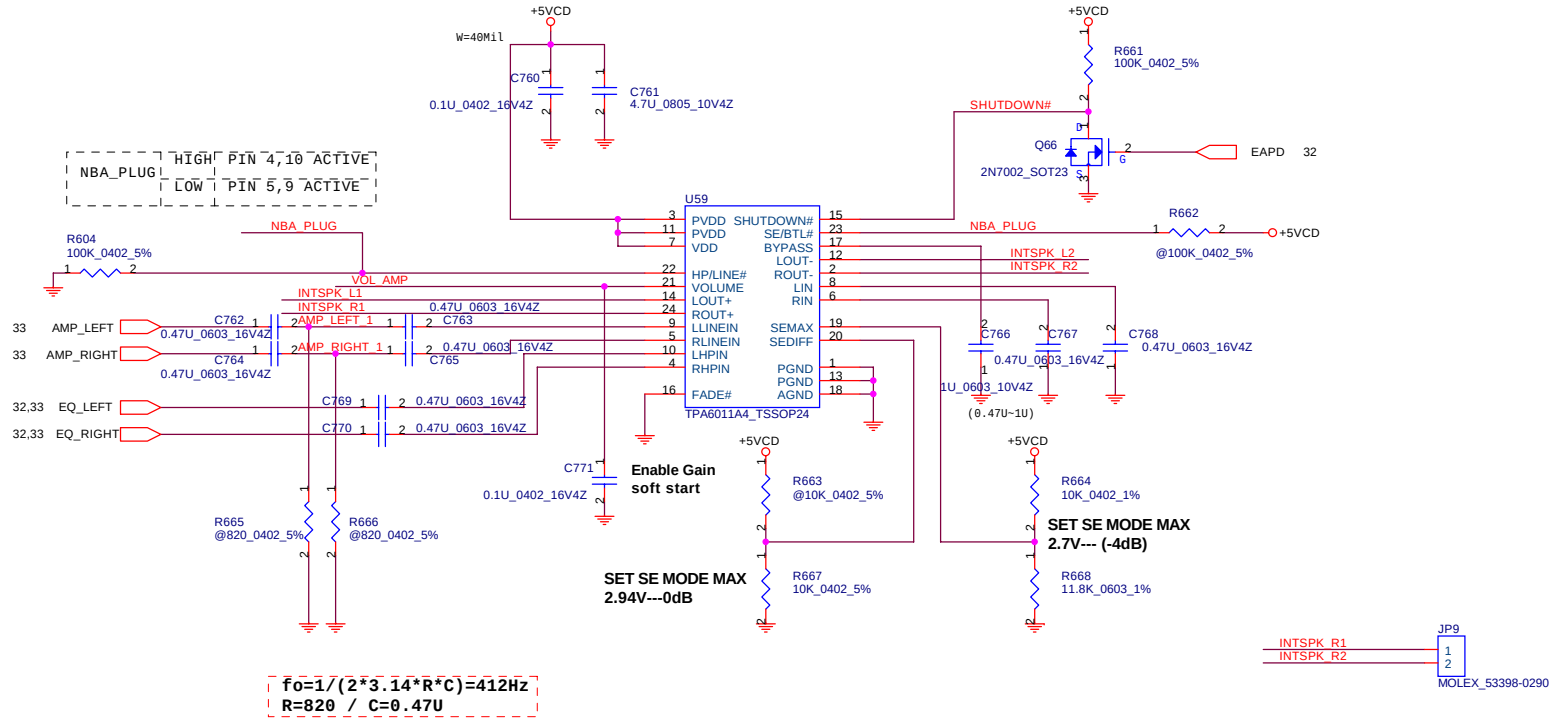
# BTQ00 EQ Circuit UPDATA 03/26






| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: HAREWARE EQ | | |
| Size: B | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 33 of 57 | |

# Audio AMP

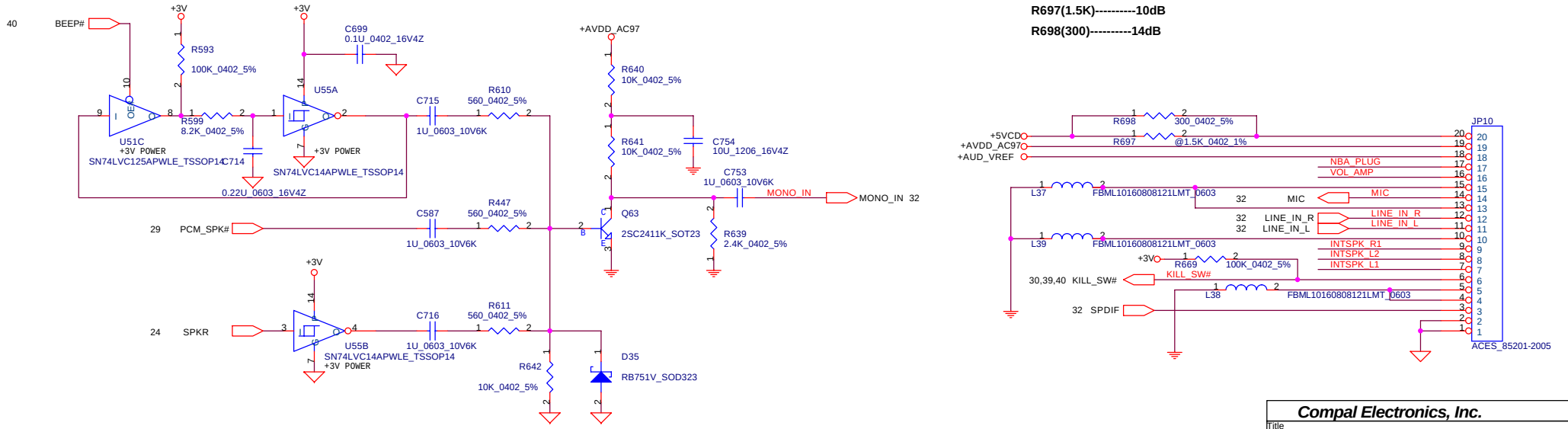



fo=1/(2*3.14*R*C)=412Hz
R=820 / C=0.47U

## AUDIO Board Conn.

R697(1.5K)----------10dB

R698(300)----------14dB





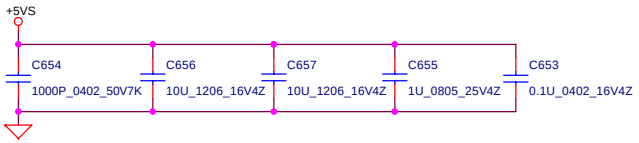

**Compal Electronics, Inc.**

Title: **AMP & Audio Jack**

Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

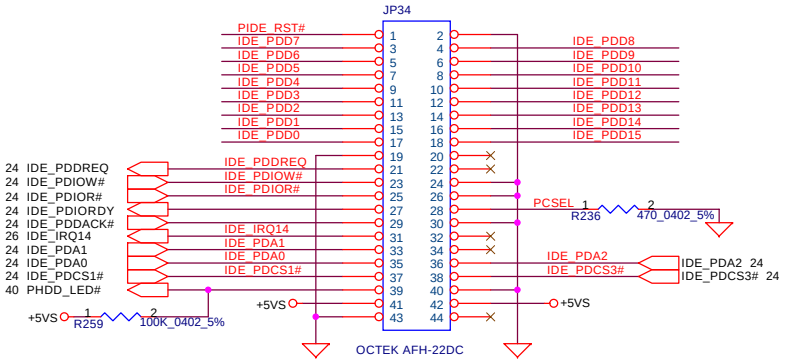
Date: 星期一, 十二月 01, 2003 | Sheet 34 of 57

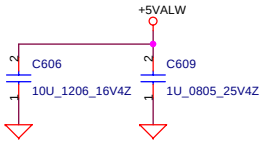
*Placea caps. near HDD CONN.*





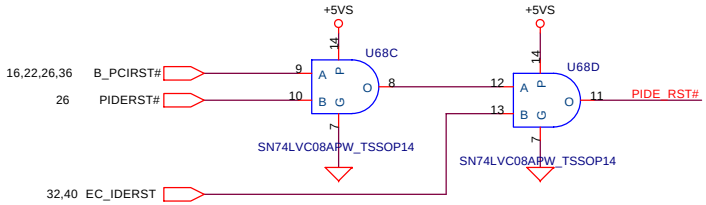
## HDD CONNECTOR



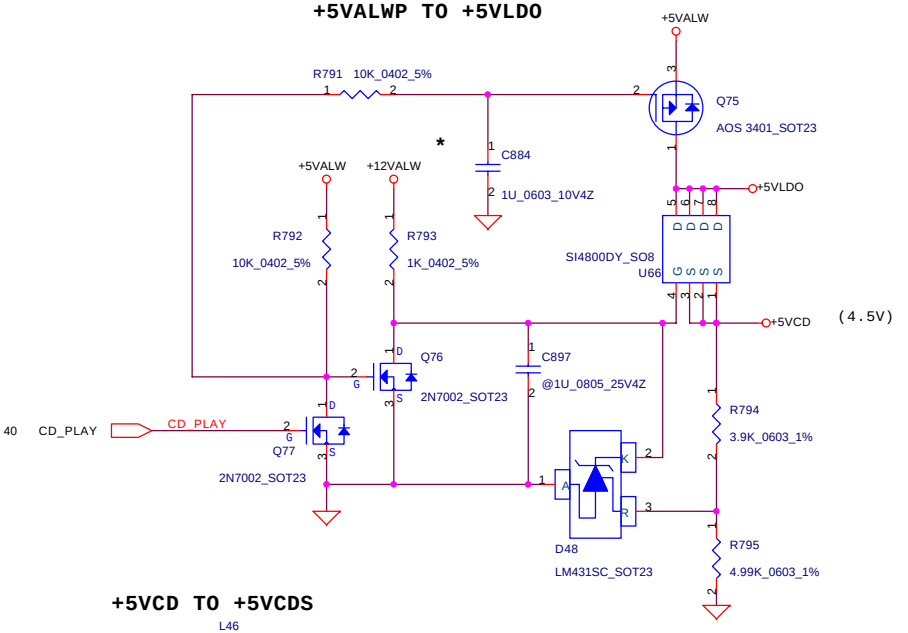





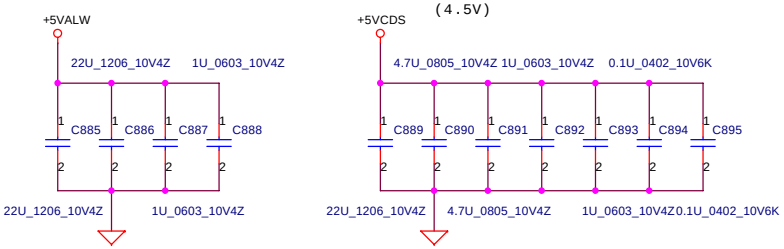




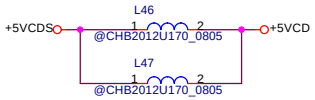

## +5VALWP TO +5VLDO




## +5VCD DECOUPLING
(4.5V)




## +5VCD TO +5VCDS






**Compal Electronics, Inc.**

Title: **Softwave DJ**

Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

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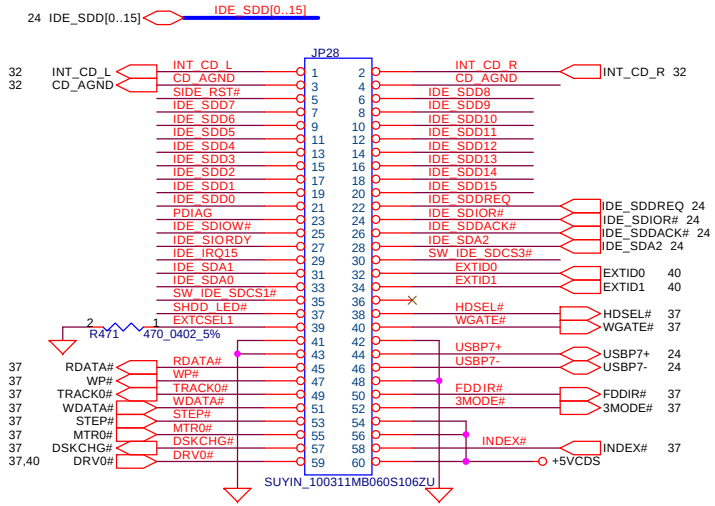
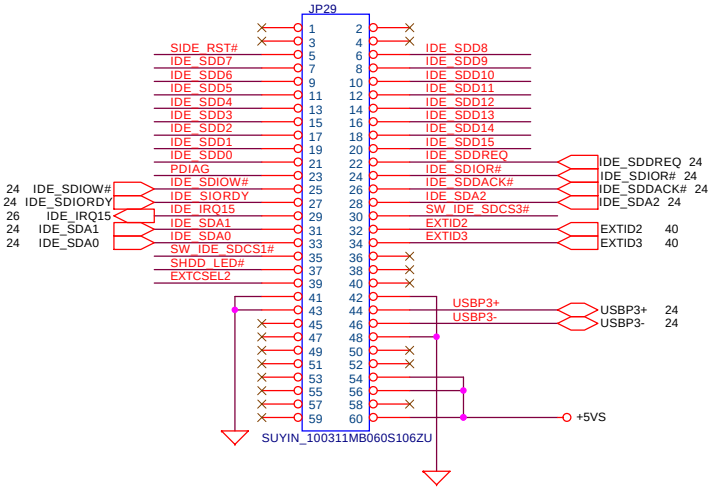
# IDE,CD-ROM Module CONN.

## Main Module Conn. (Master)

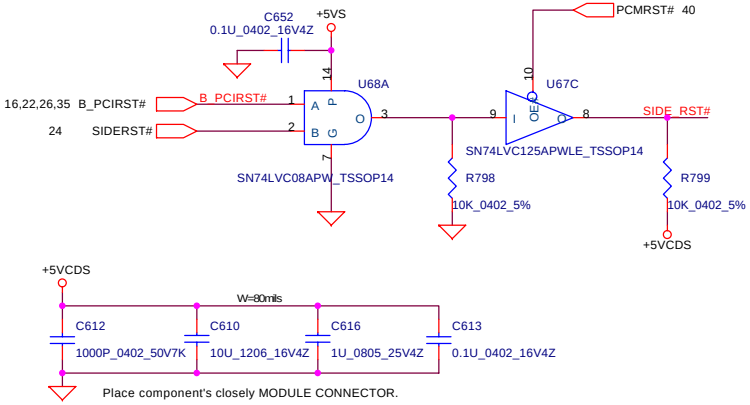


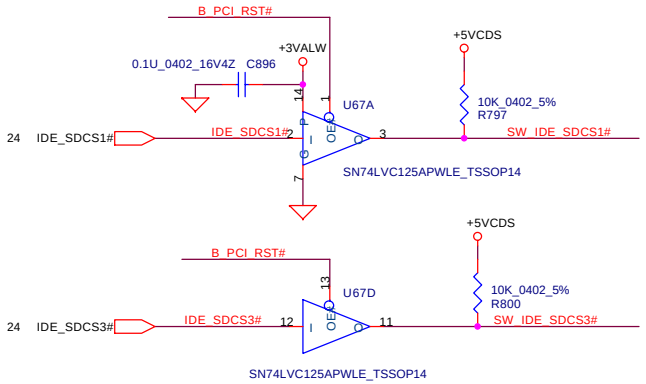

## 2nd Module Conn. (Slave)

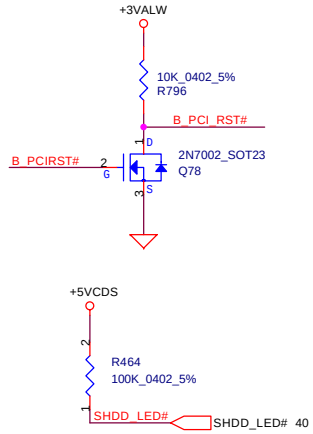


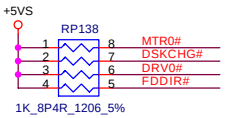

| EXTID1 | EXTID0 | Module |
|---|---|---|
| 0 | 0 | CDROM |
| 0 | 1 | FDD |
| 1 | 0 | HDD |
| 1 | 1 | TV Tuner/No Module |

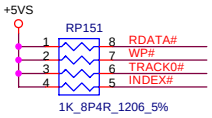
| EXTID3 | EXTID2 | Module |
|---|---|---|
| 0 | 0 | CDROM |
| 0 | 1 | FDD |
| 1 | 0 | HDD |
| 1 | 1 | TV Tuner/No Module |

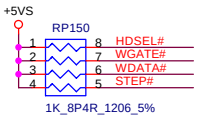


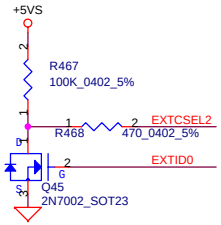



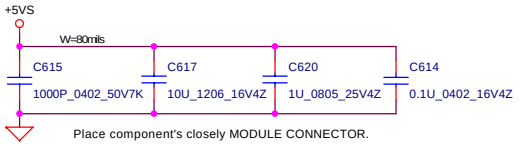



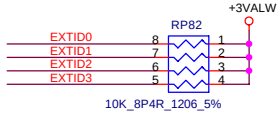






**Compal Electronics, Inc.**

Title: IDE/ FDD MODULE CONN.

Size: B | Document Number: Sapporo 300P | Rev: 0.3

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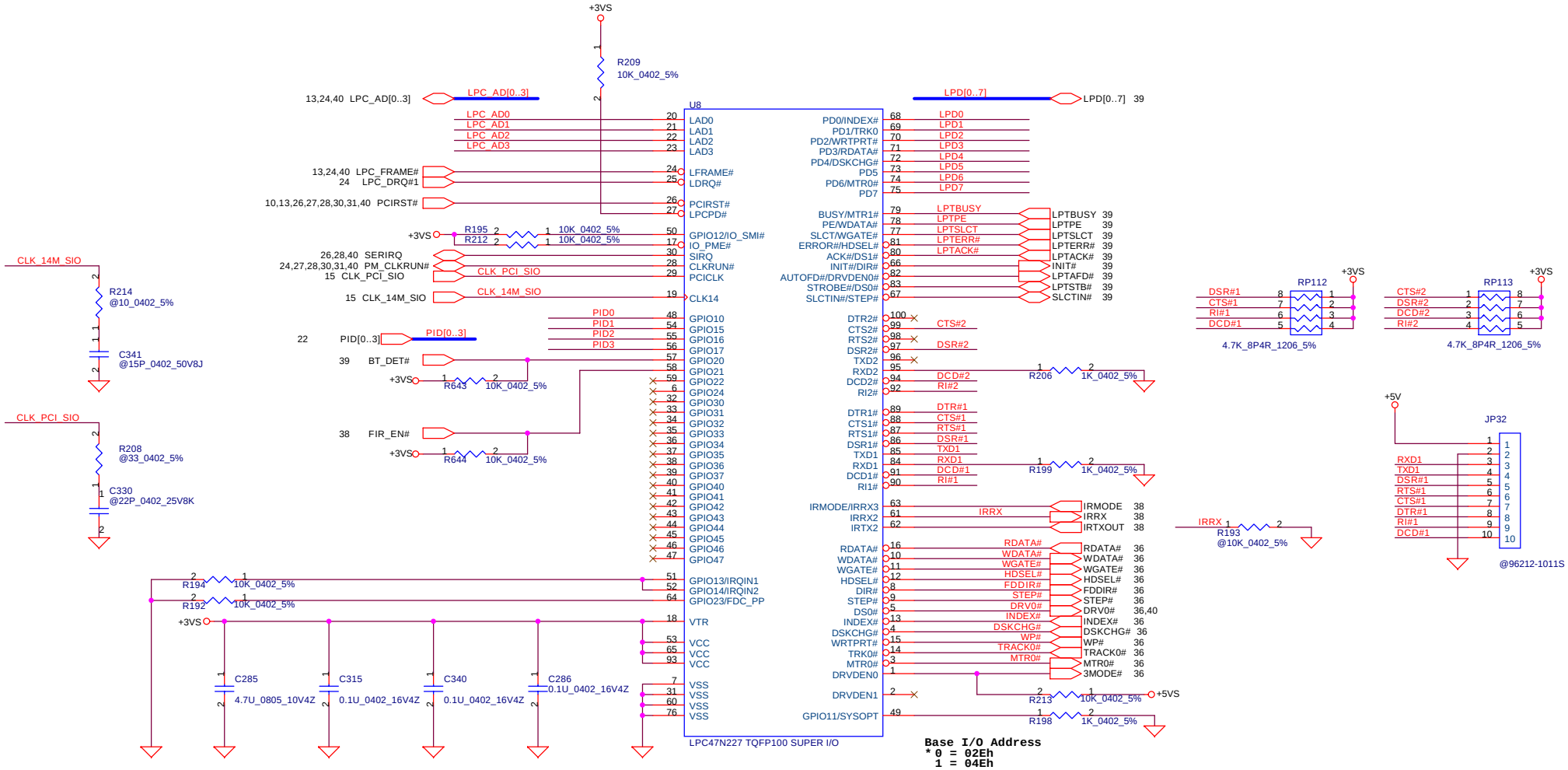
# SUPER I/O SMsC FDC47N227



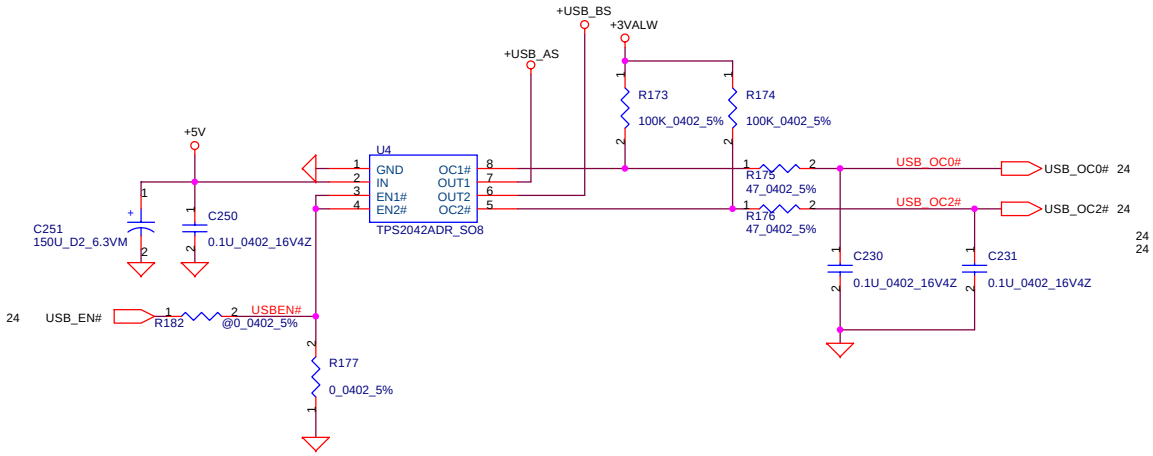


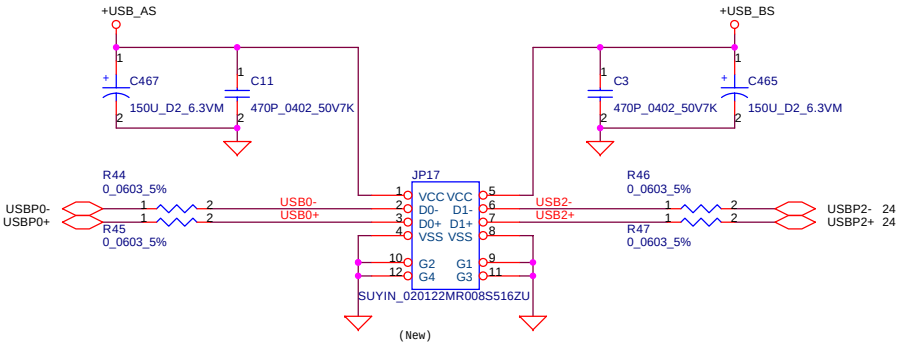

**Compal Electronics, Inc.**

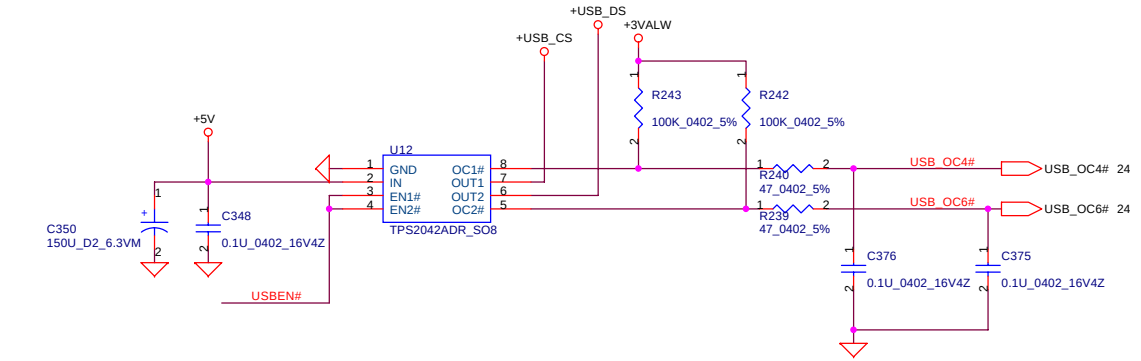
Title: **SUPER I/O**

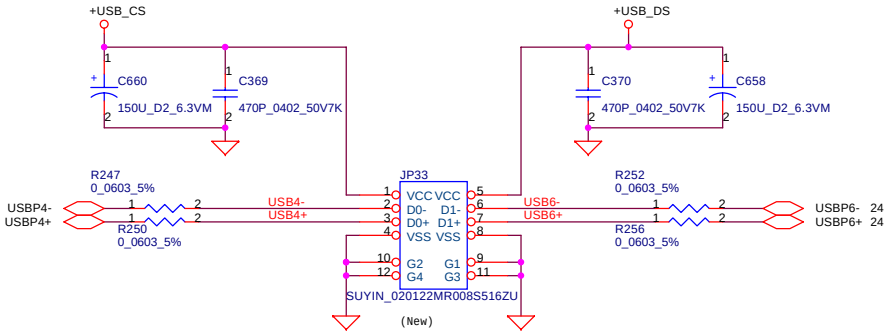
Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 37 of 57

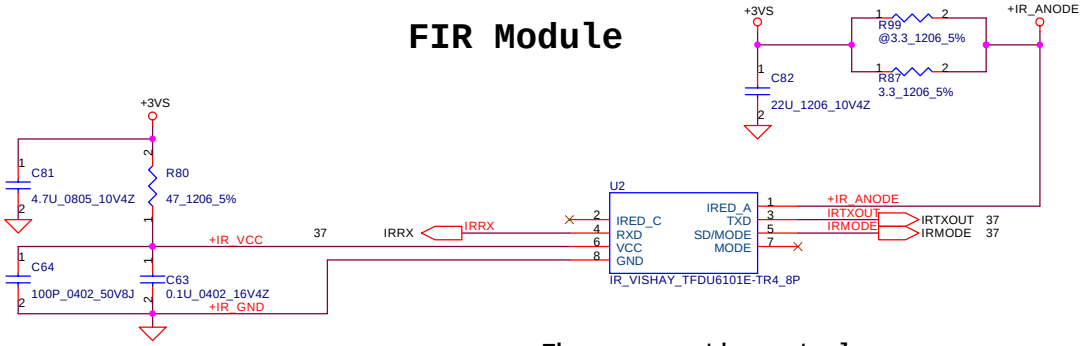



# FIR Module




37 FIR_EN# R645 0_0402_5%

FIR_EN#
LOW FIR Poped
HIGH FIR Un-Poped

**The component's most place cloely IRDA MODULE.**



**Compal Electronics, Inc.**

Title: **USB Conn.**

Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

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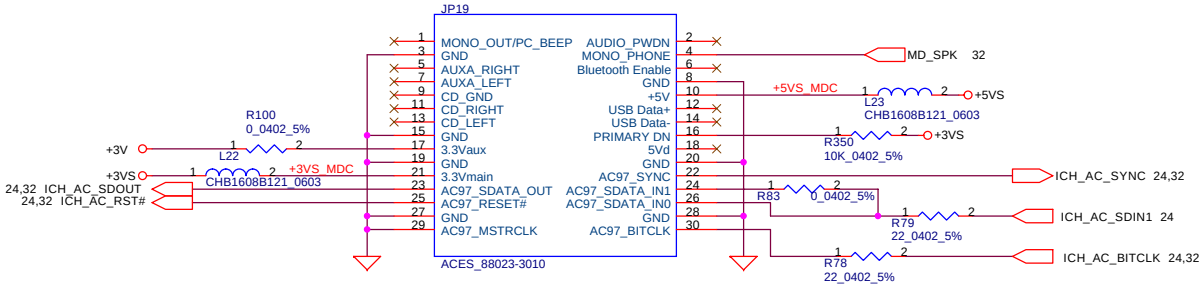
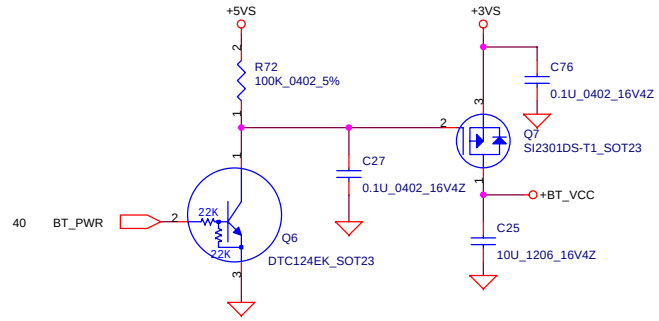
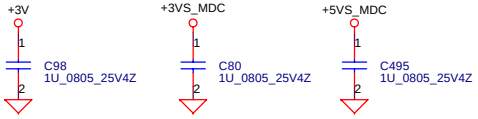
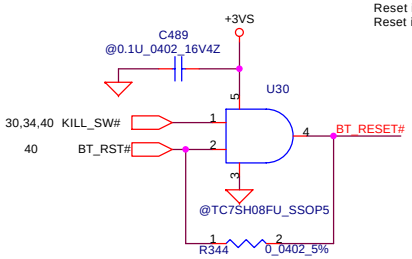
# MDC CONN.



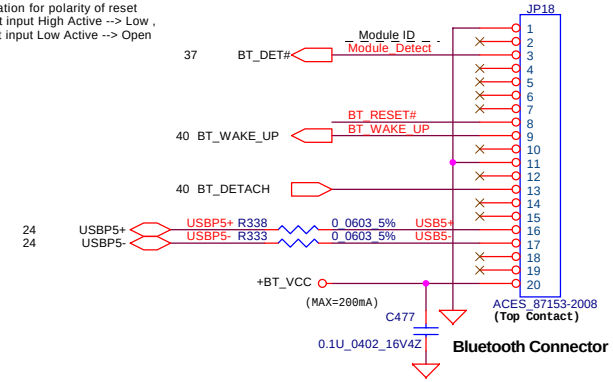

# BlueTooth Interface



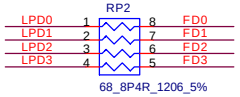



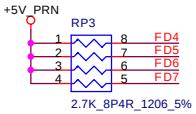



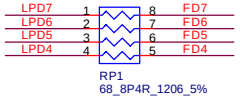

Module ID
Indication for polarity of reset
Reset input High Active --> Low ,
Reset input Low Active --> Open

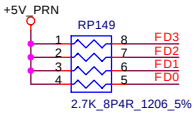


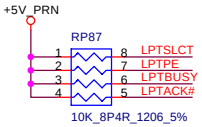

**Bluetooth Connector**

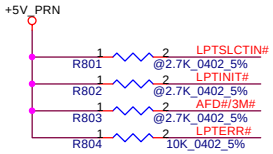


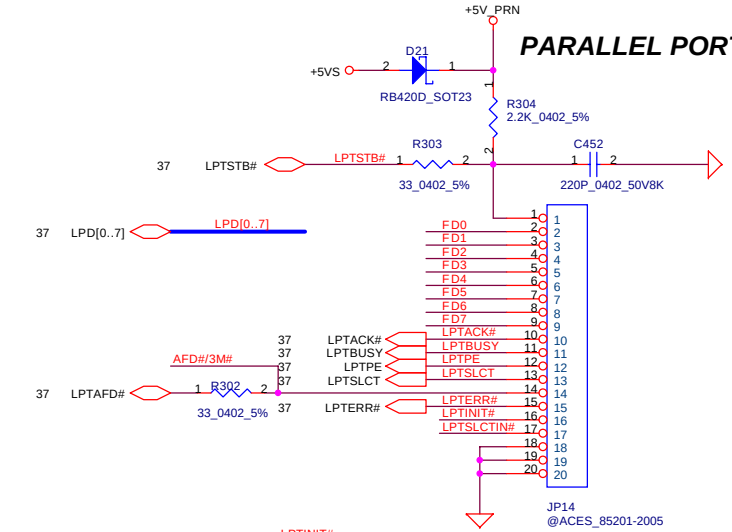



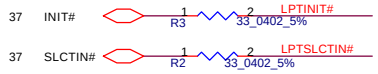



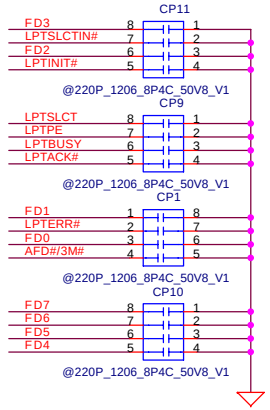




# PARALLEL PORT






**Compal Electronics, Inc.**

Title: **PARALLEL/MDC PORT**

Size | Document Number: **Sapporo 300P** | Rev: 0.3

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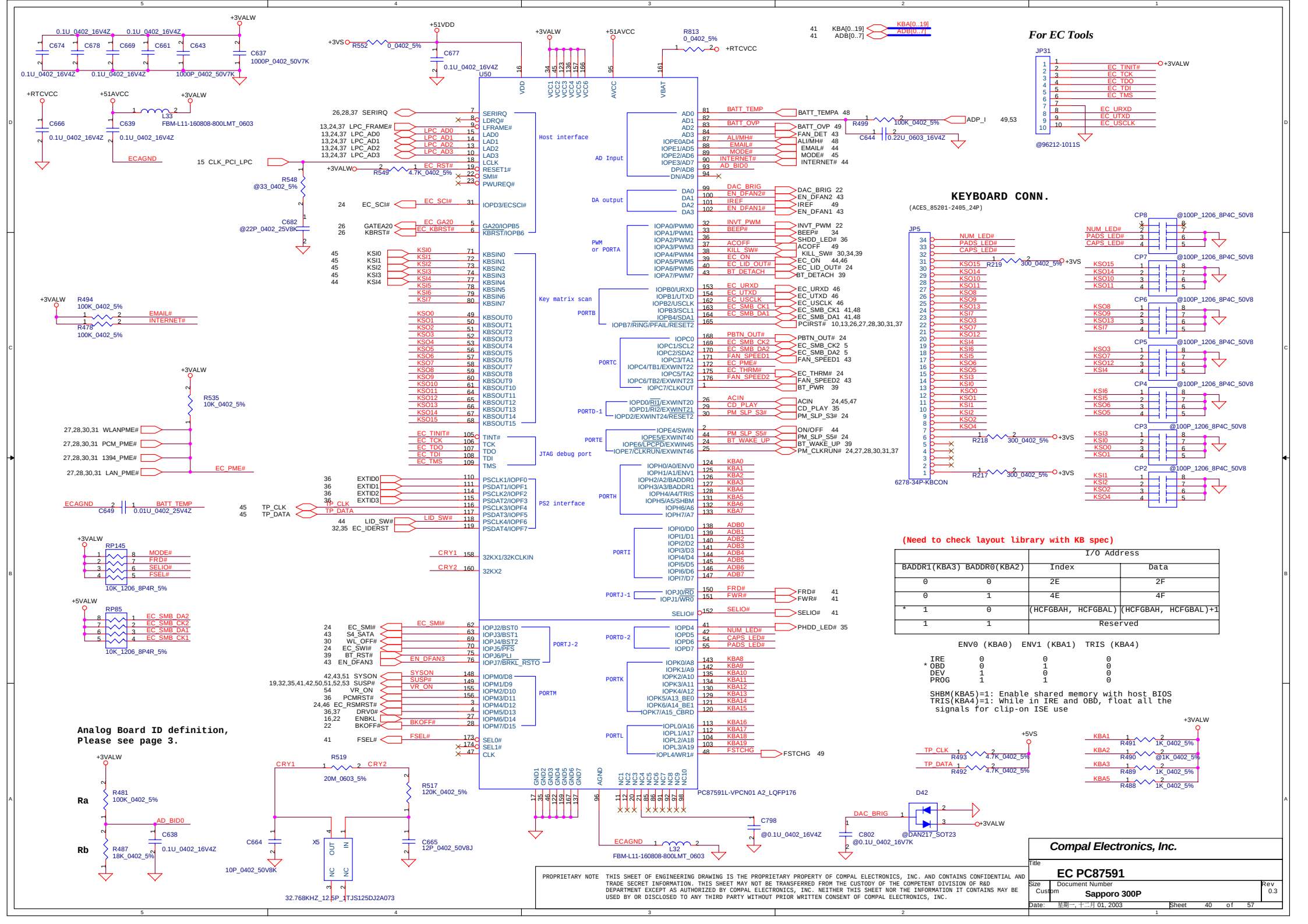


| | I/O Address | |
|---|---|---|
| BADDR1(KBA3) BADDR0(KBA2) | Index | Data |
| 0 0 | 2E | 2F |
| 0 1 | 4E | 4F |
| * 1 0 | (HCFGBAH, HCFGBAL) | (HCFGBAH, HCFGBAL)+1 |
| 1 1 | Reserved | |

| | ENV0 (KBA0) | ENV1 (KBA1) | TRIS (KBA4) |
|---|---|---|---|
| IRE | 0 | 0 | 0 |
| * OBD | 0 | 1 | 0 |
| DEV | 1 | 0 | 0 |
| PROG | 1 | 1 | 0 |



Compal Electronics, Inc.

Title: EC PC87591

Size: Custom | Document Number: Sapporo 300P | Rev: 0.3

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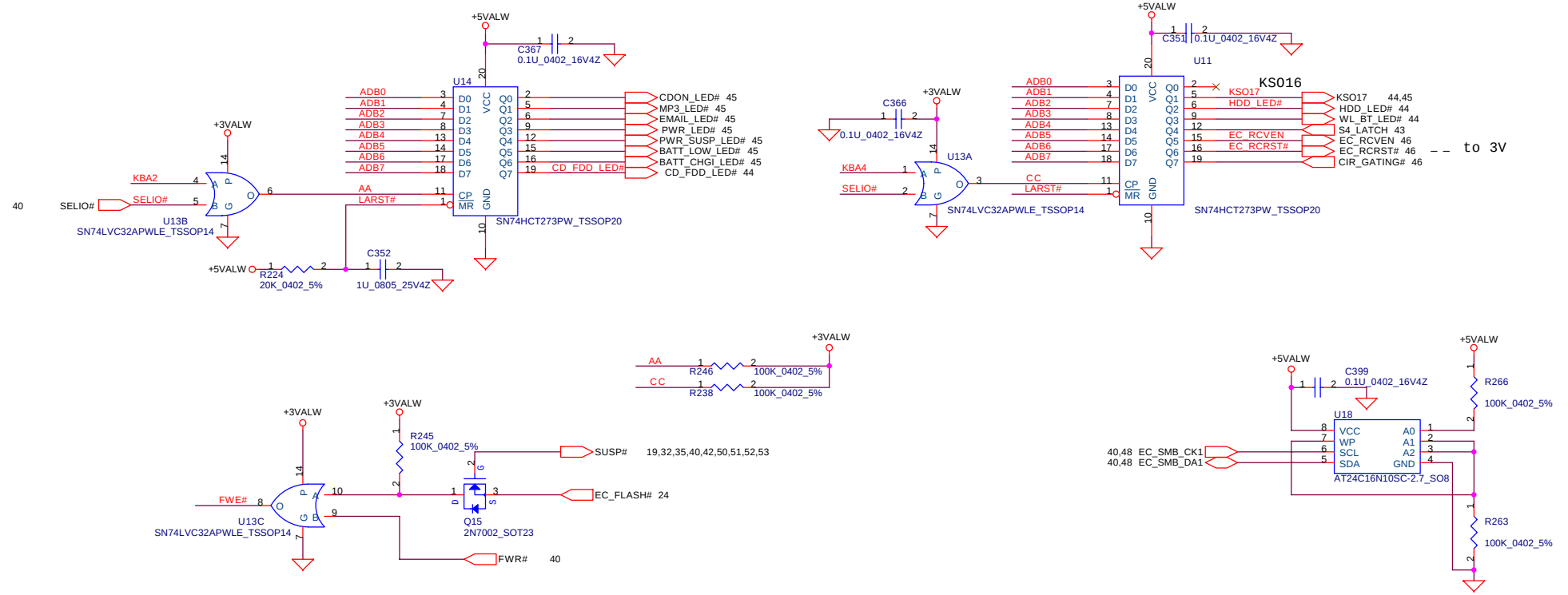
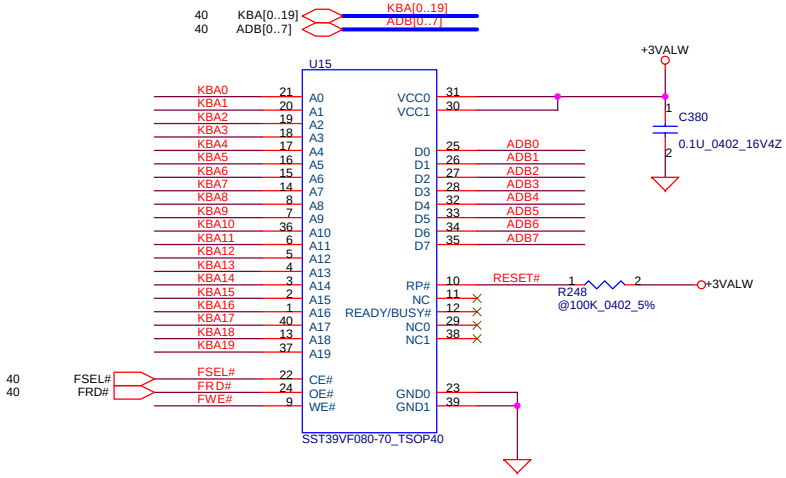
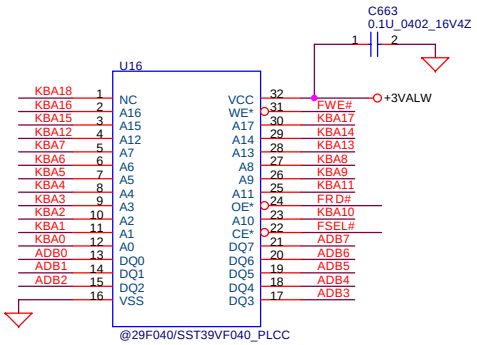


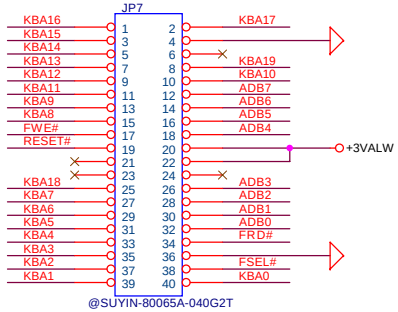

## 1MB Flash ROM




## 512KB Flash ROM




## Flash ROM Socket Conn.





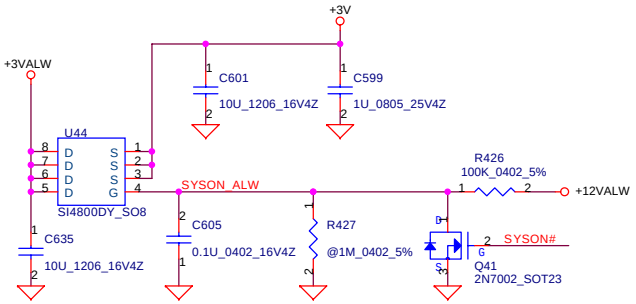

**Compal Electronics, Inc.**

Title: **BIOS & EXT. I/O PORT**

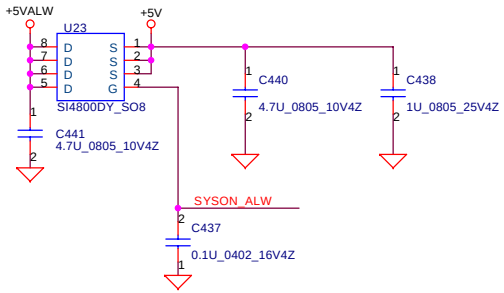
Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

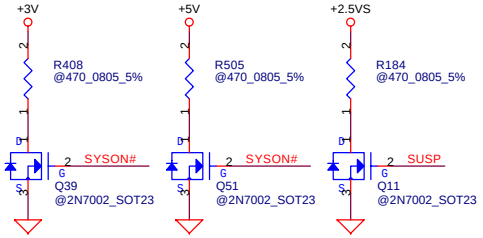
Date: 星期一, 十二月 01, 2003 | Sheet 41 of 57

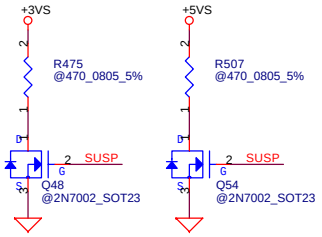
## +3VALW TO +3V



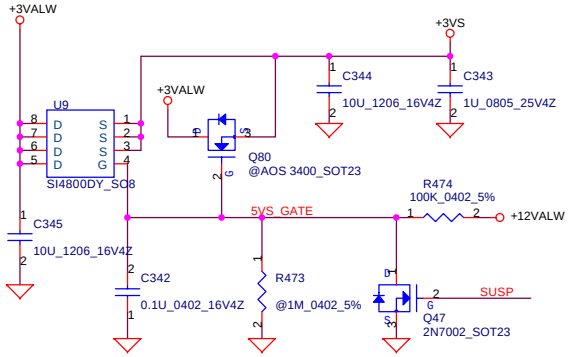

## +5VALW TO +5V



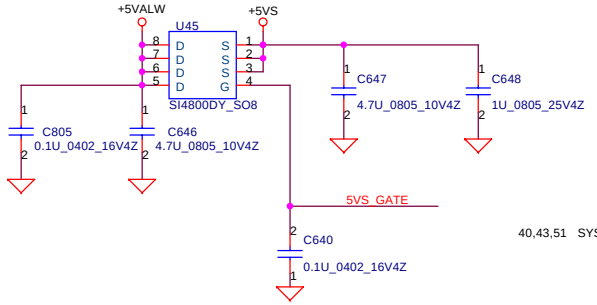



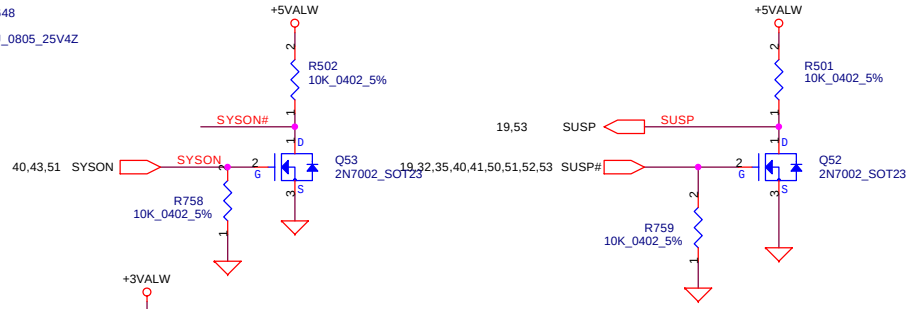




## +3VALW TO +3VS

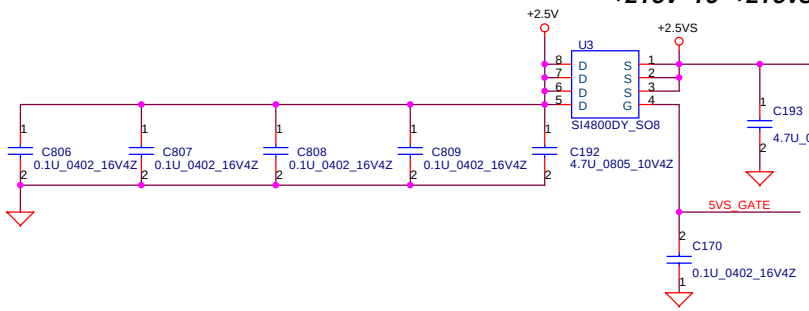


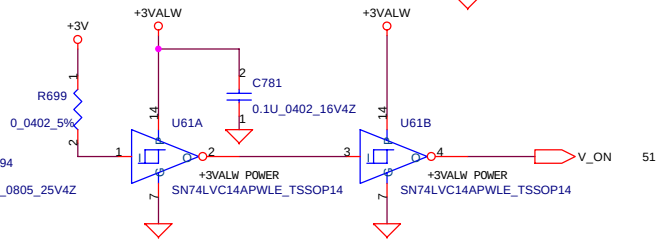

## +5VALW TO +5VS

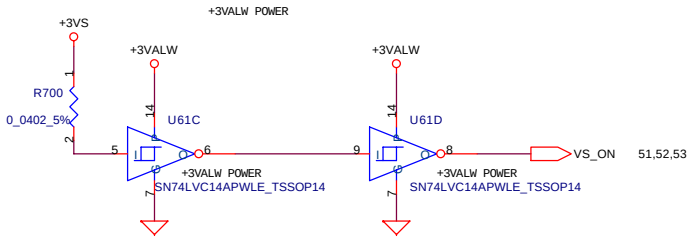



## +2.5V TO +2.5VS





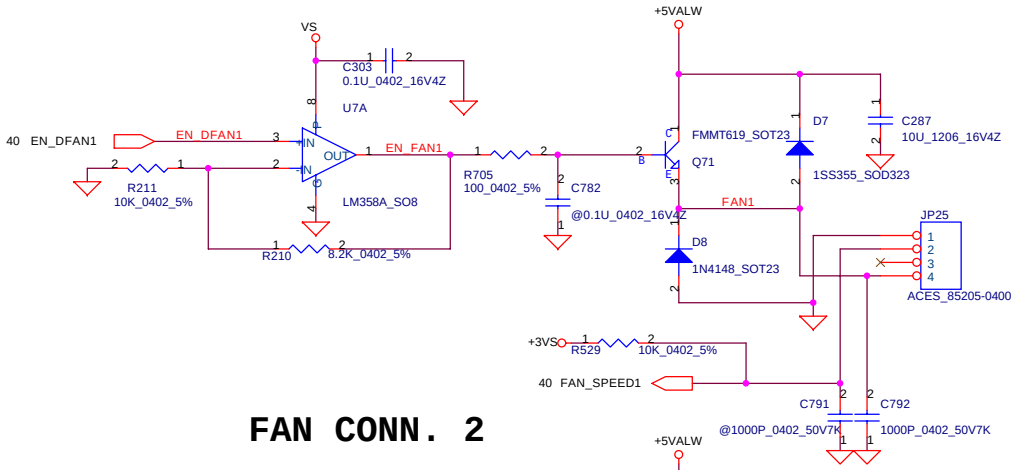

**Compal Electronics, Inc.**

Title: **POWER CONTROL CKT**

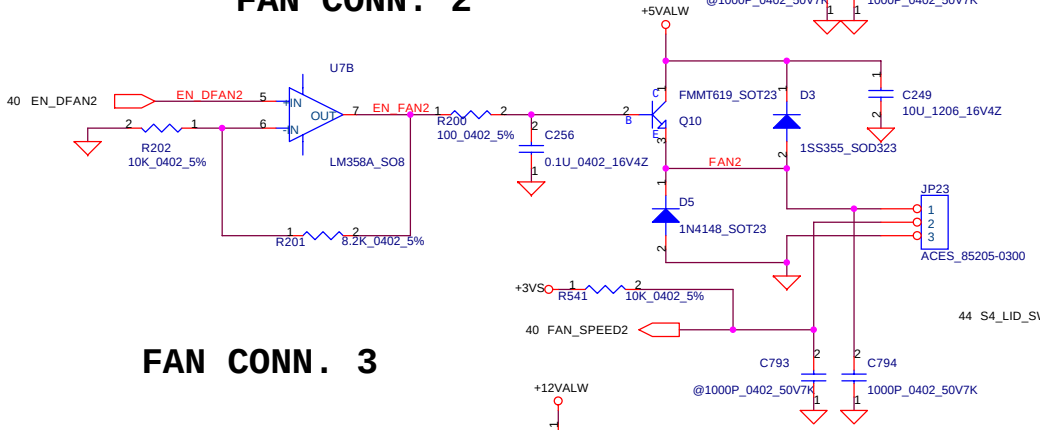
Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 42 of 57

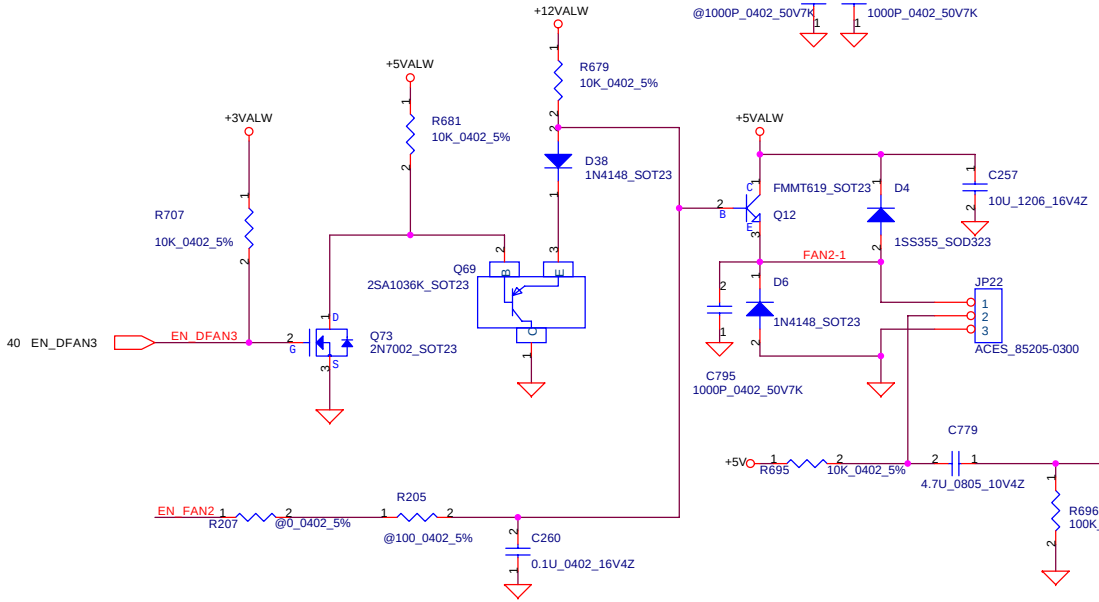
# FAN CONN. 1



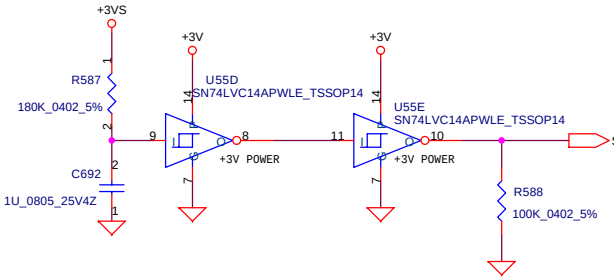

# FAN CONN. 2



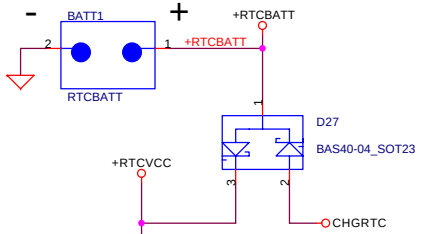

# FAN CONN. 3

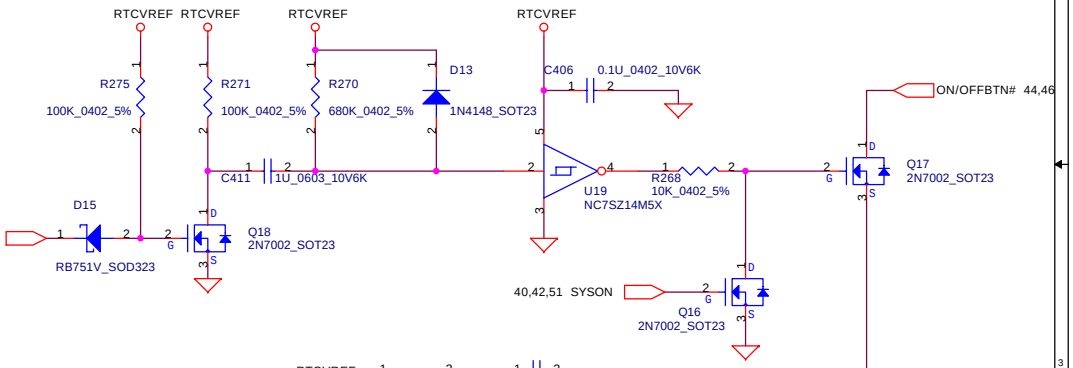


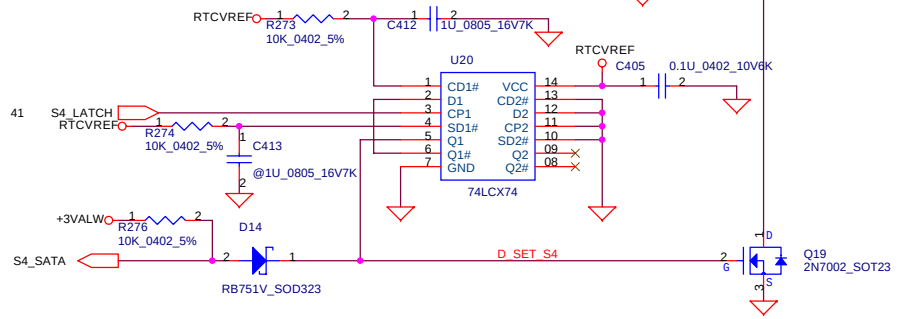

## Power ON Circuit




## RTC Battery

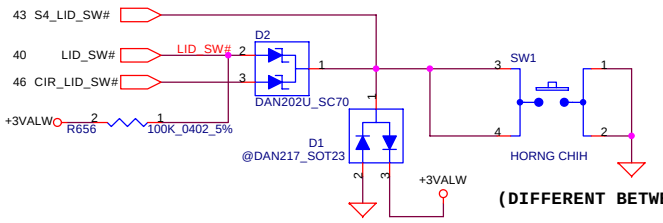


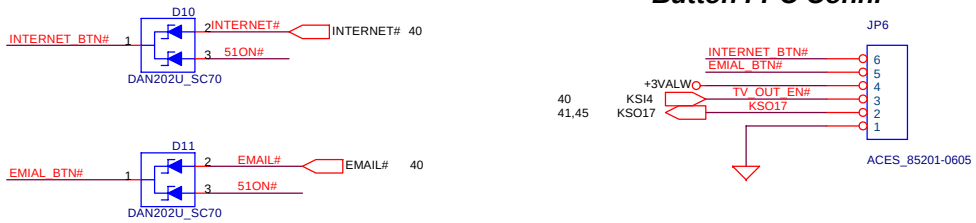

| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: Power OK/Reset/RTC battery/Lid Switch/Int. KB | | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 43 of 57 | |

## LID Switch

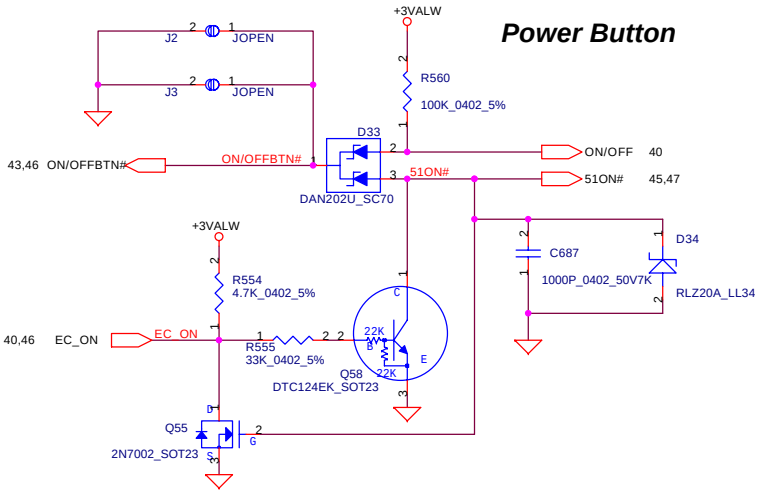


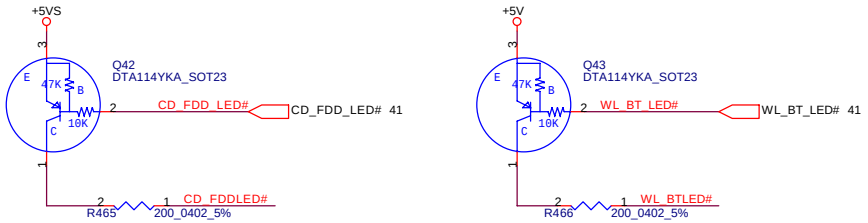

**(DIFFERENT BETWEEN MPU-101-81A)**

## Button FPC Conn.

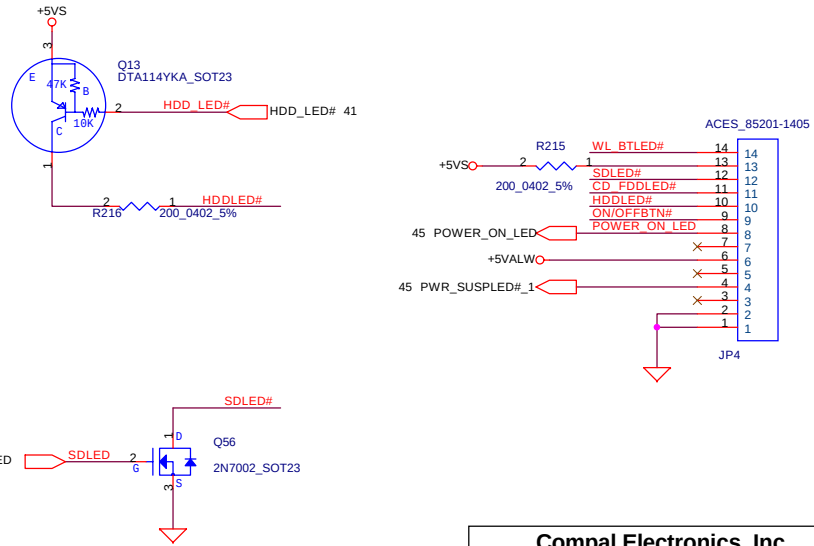



## Power Button




## Power FPC Conn.



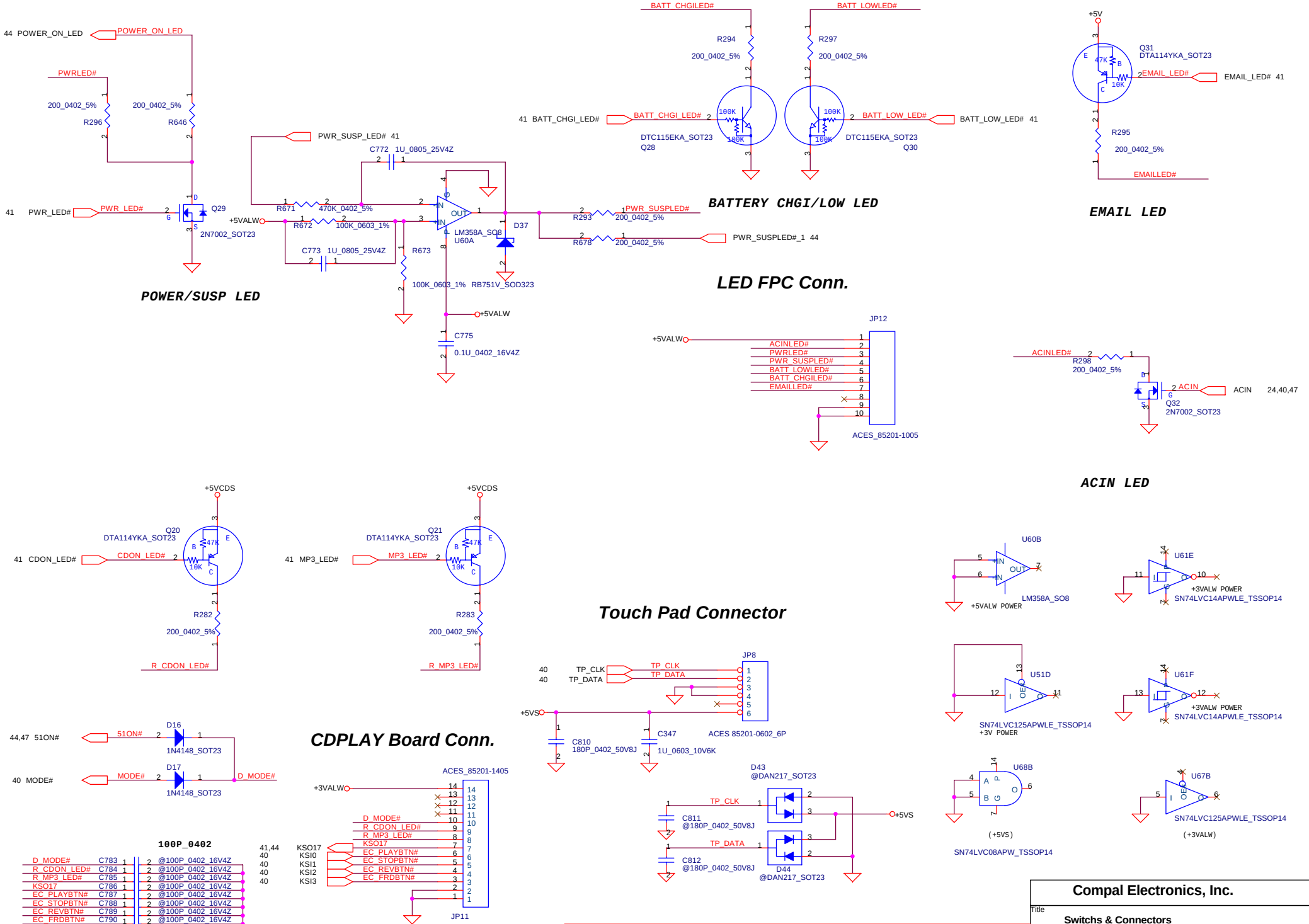



**Compal Electronics, Inc.**

Title: **Switchs & Connectors**

Size: B | Document Number: **Sapporo 300P** | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 44 of 57

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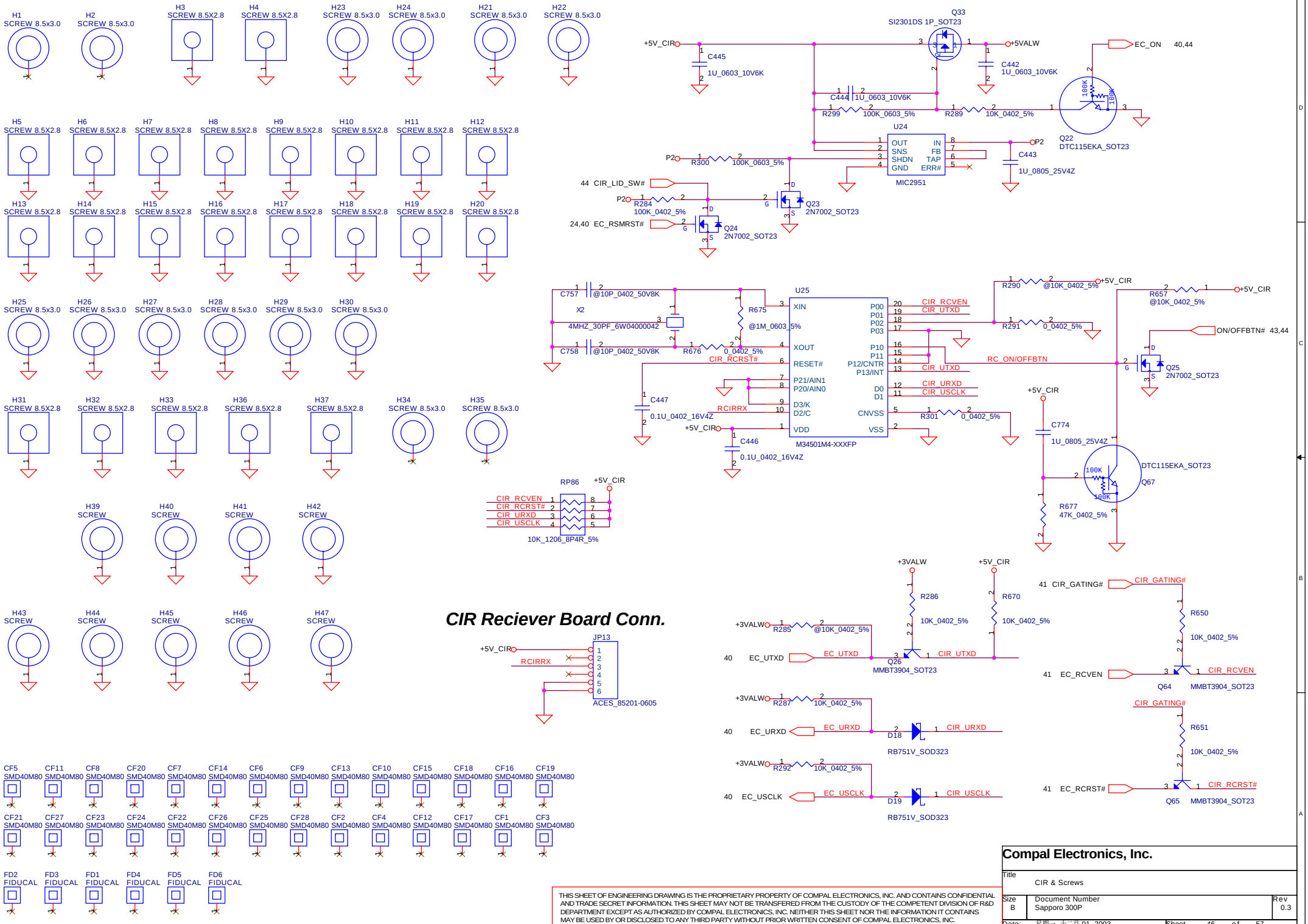
**Compal Electronics, Inc.**

Title: **Switchs & Connectors**

| Size | Document Number | Rev |
|---|---|---|
| B | **Sapporo 300P** | 0.3 |

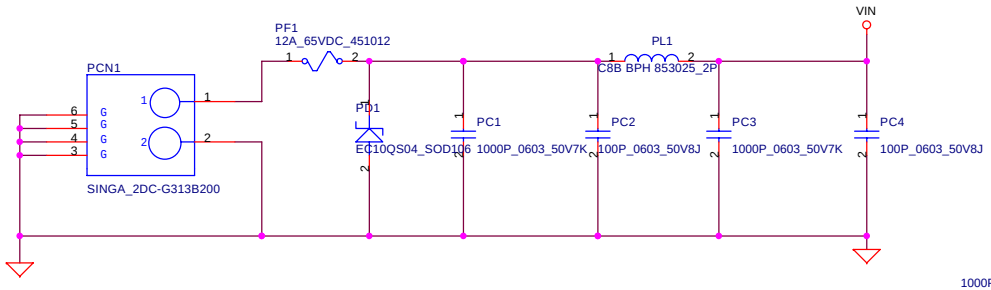
Date: 星期一, 十二月 01, 2003 Sheet 45 of 57

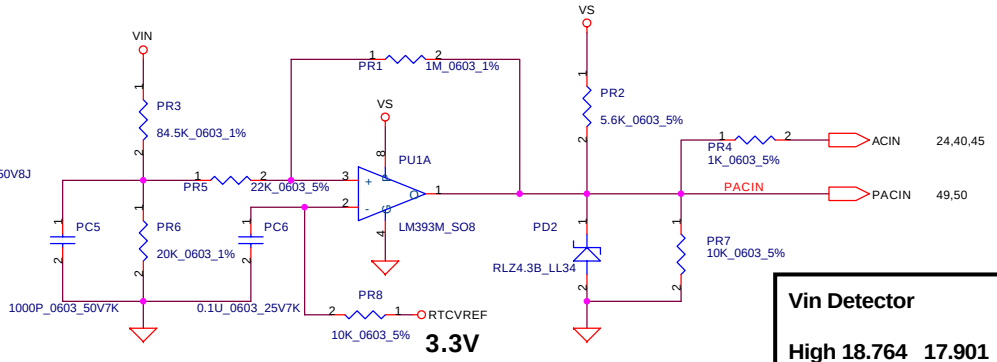





**Compal Electronics, Inc.**

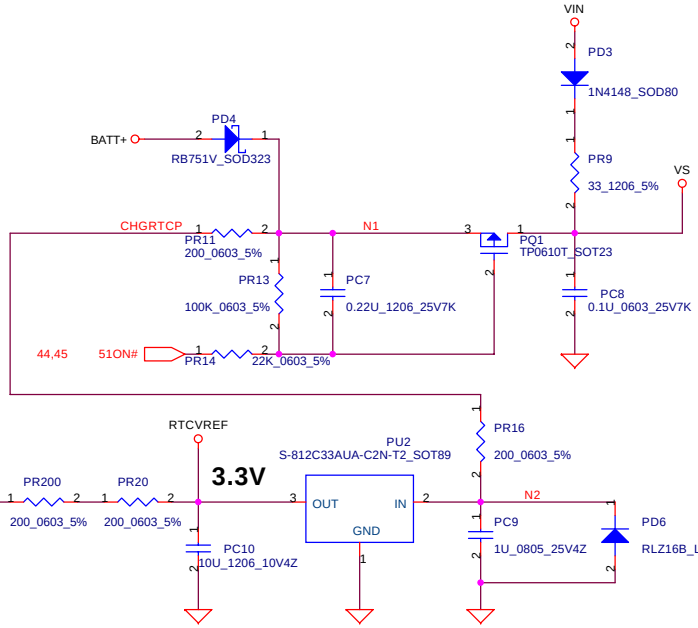
| | | |
|---|---|---|
| Title | CIR & Screws | |
| Size B | Document Number Sapporo 300P | Rev 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 46 of 57 | |

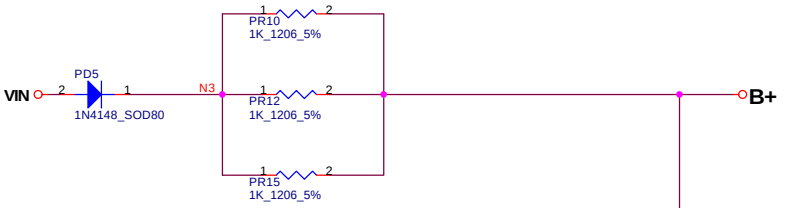



**Vin Detector**

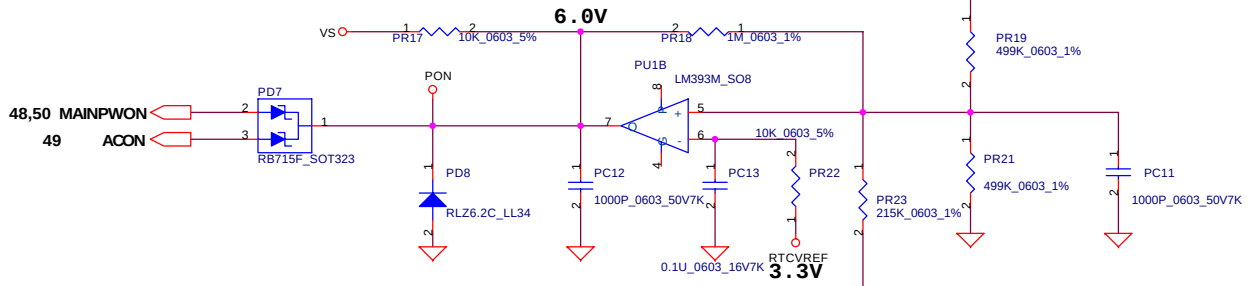
| | | | |
|---|---|---|---|
| High | 18.764 | 17.901 | 17.063 |
| Low | 17.745 | 16.903 | 16.038 |



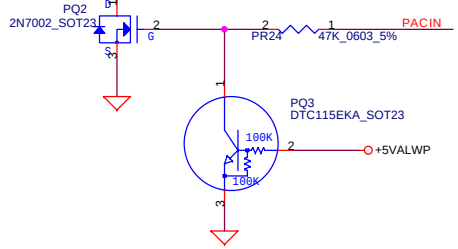


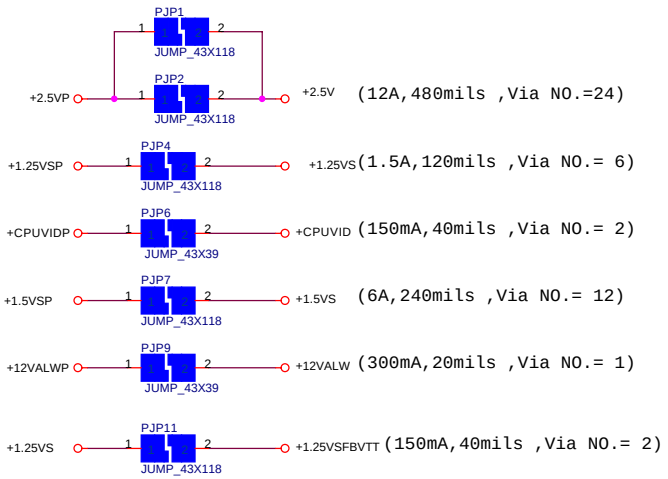


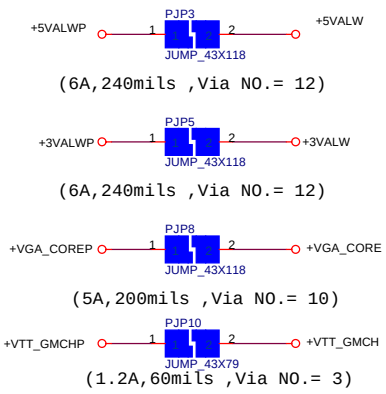



**Precharge detector**

| | | |
|---|---|---|
| 15.34 | 15.90 | 16.48 |
| 13.13 | 13.71 | 14.20 |





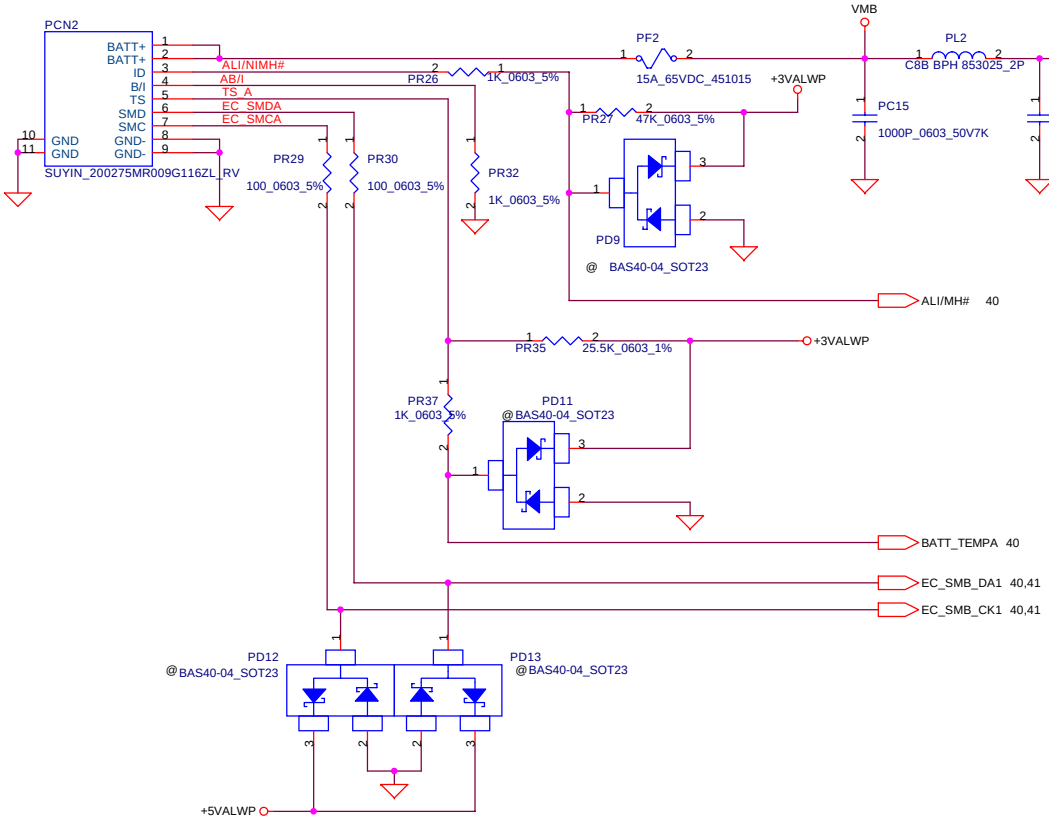

*Compal Electronics, Inc.*

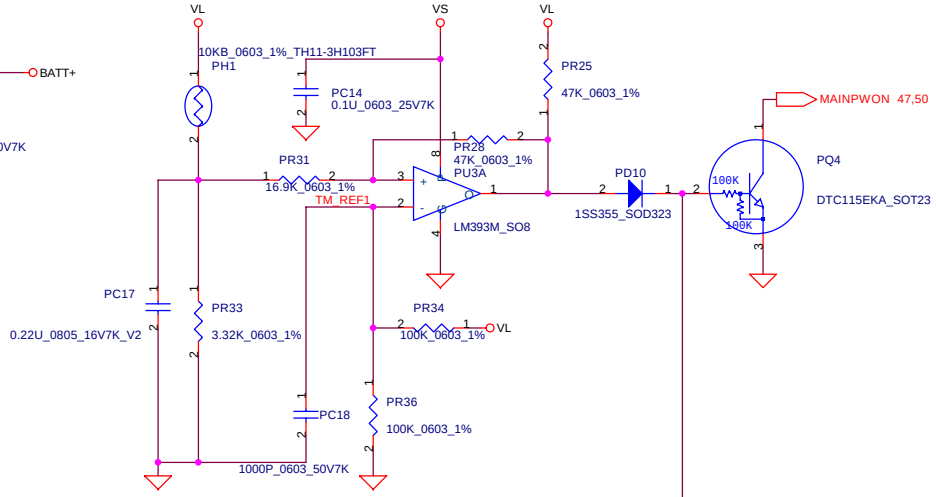
Title: **DCIN & DETECTOR**

Size | Document Number: **Sapporo 300P** | Rev: 0.3

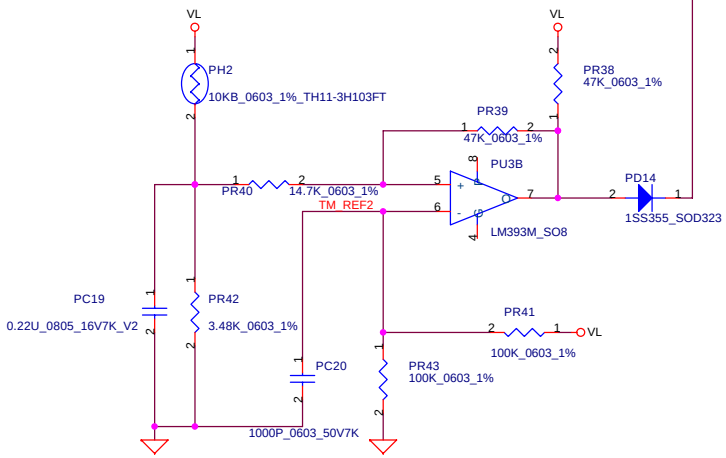
Date: 星期一, 十二月 01, 2003 | Sheet 47 of 57

**PH1 under CPU botten side :**
CPU thermal protection at 84 degree C
Recovery at 45 degree C



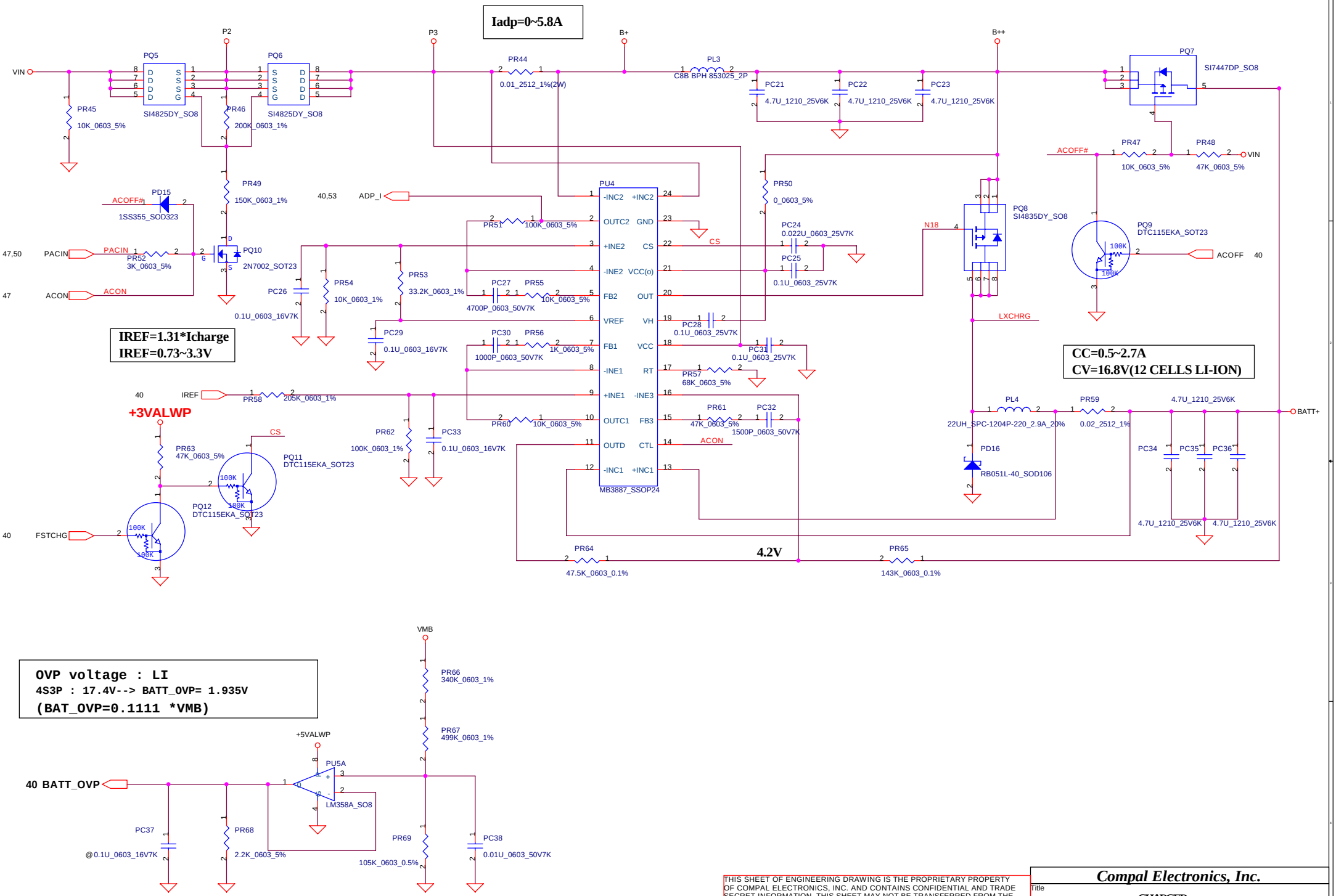




**PH2 near main Battery CONN :**
BAT. thermal protection at 79 degree C
Recovery at 45 degree C



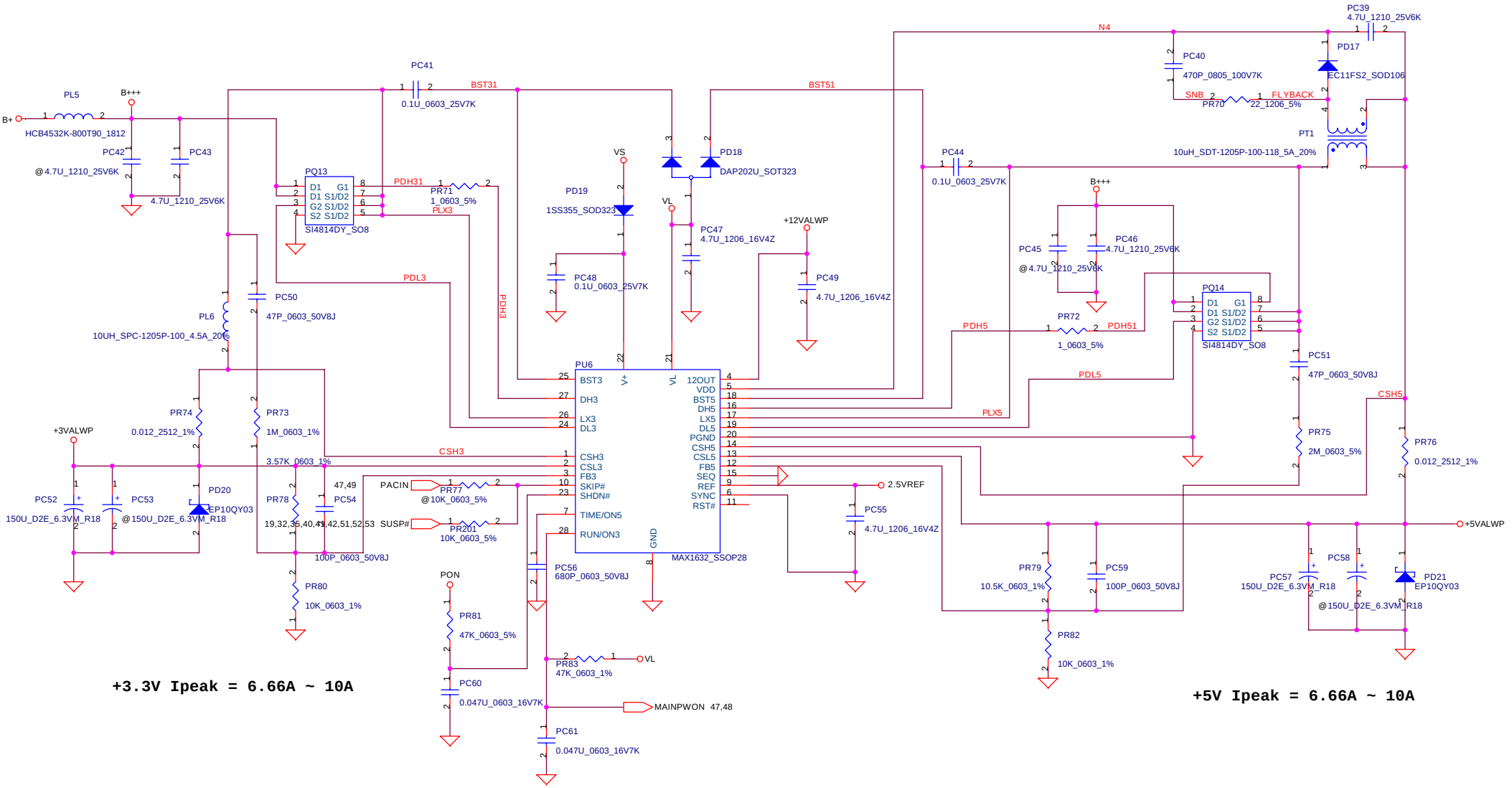



| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | BATTERY CONN / OTP |
| Size | Document Number: Sapporo 300P — Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 48 of 57 |






| | |
|---|---|
| Compal Electronics, Inc. | |
| Title | CHARGER |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 49 of 57 |

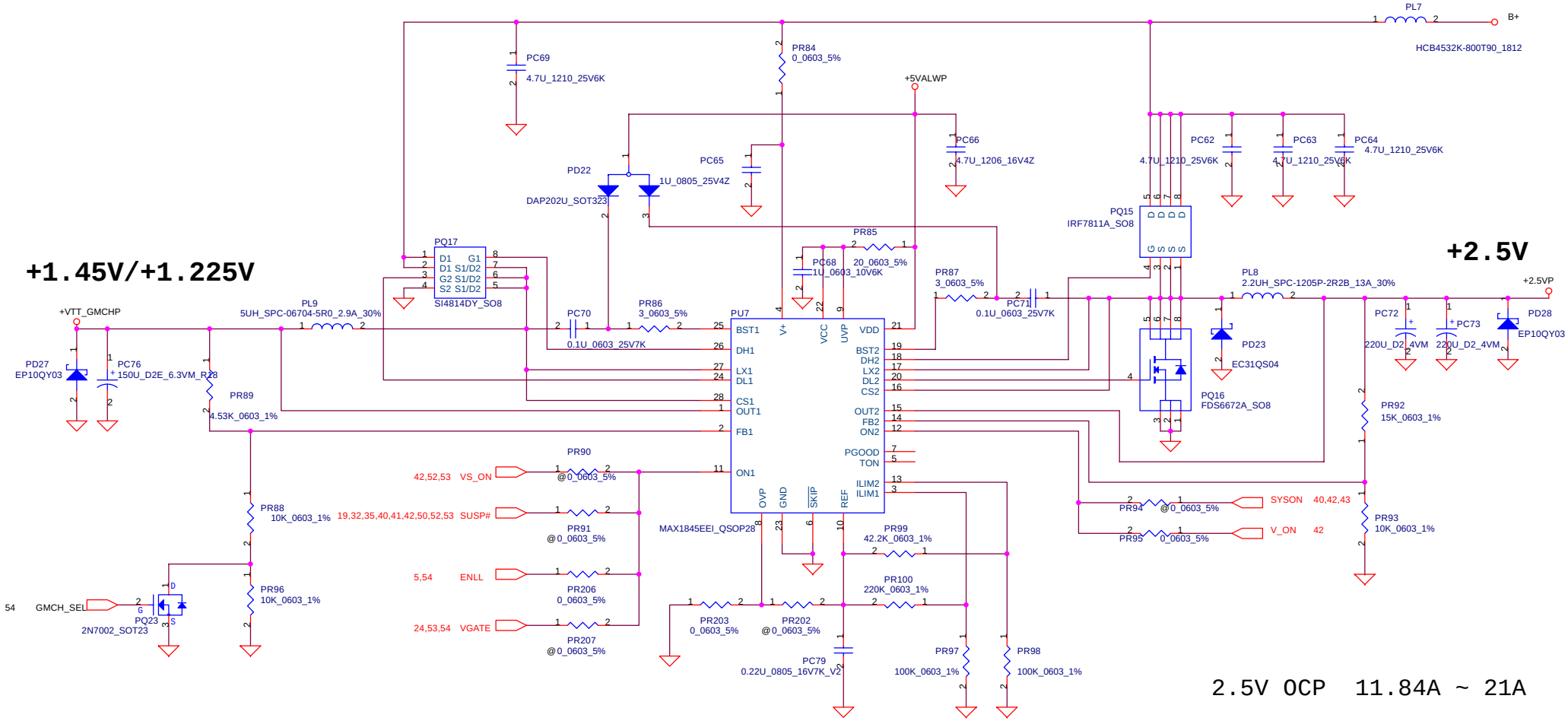





**Compal Electronics, Inc.**

| | | |
|---|---|---|
| Title | 5V/3.3V/12V | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 50 of 57 | |

# +2.5V/+VTT_GMCHP




| | | | |
|---|---|---|---|
| GMCH_SEL=0 | PRESCOTT | VTT_GMCH=1.225V | OCP 1.92A ~ 3.71A |
| GMCH_SEL=1 | NORTHWOOD | VTT_GMCH=1.45V | OCP 1.98A ~ 3.78A |



Compal Electronics, Inc.
Title: DDR_2.5V/VTT_GMCH
Size: Document Number: Sapporo 300P
Rev: 0.3
Date: 星期一, 十二月 01, 2003
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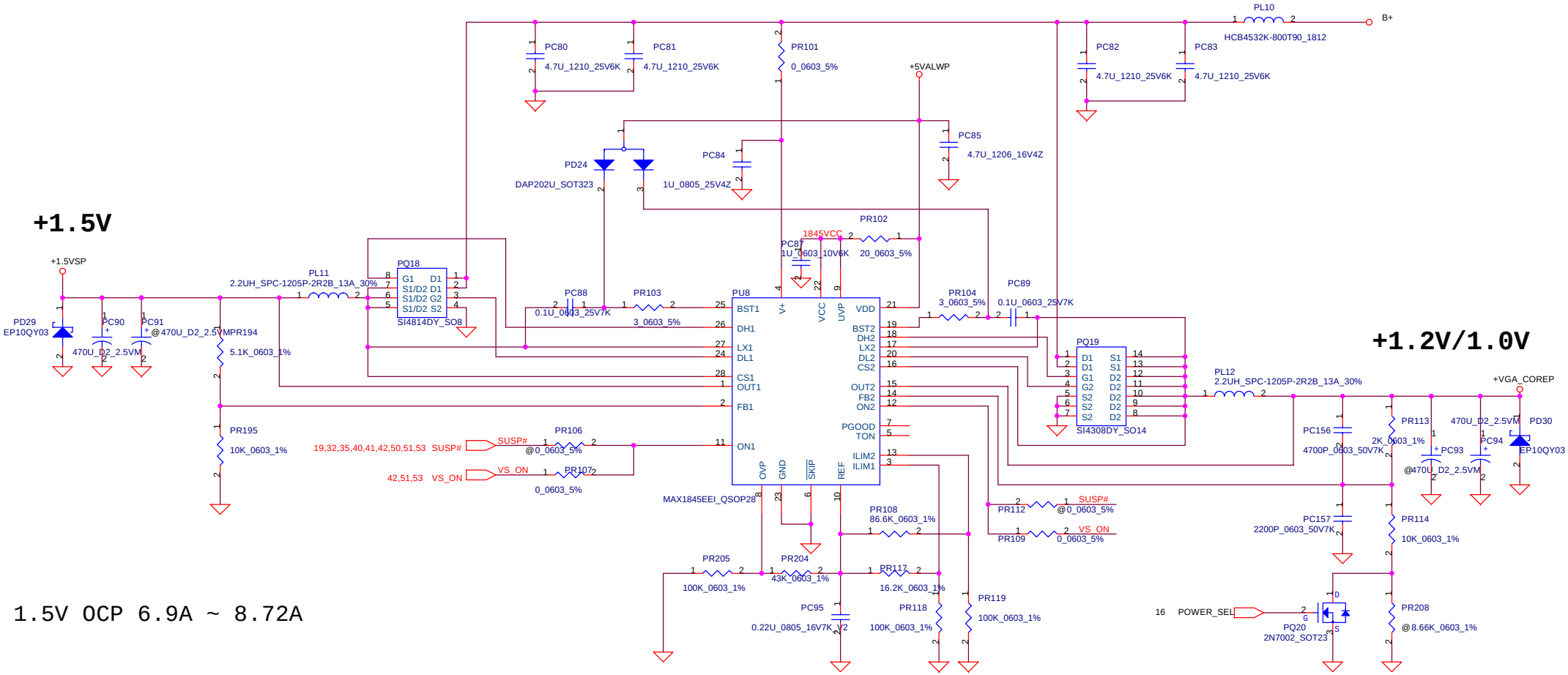
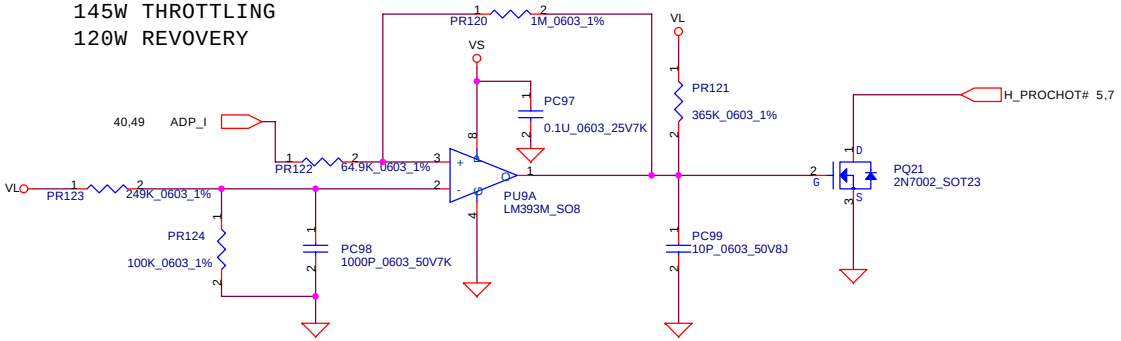



| NV36 | |
|---|---|
| POWER_SEL=1 VOUT=1.27V OCP 7.1A ~ 13.5A | PR113=2K_0603_1% |
| POWER_SEL=0 VOUT=1V OCP 7A ~ 13A | Unpop PR208 |

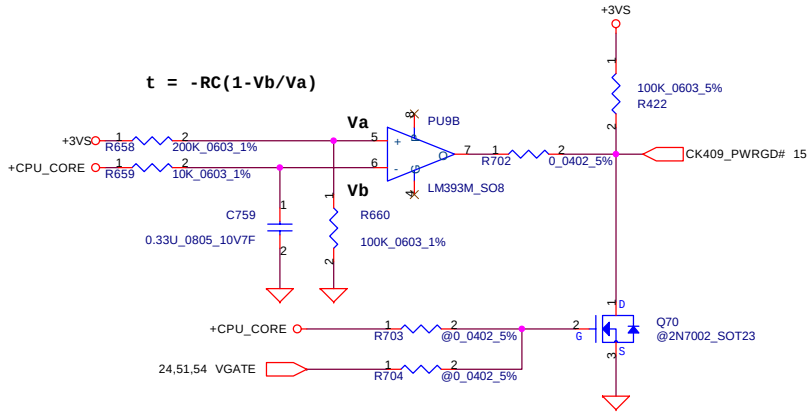


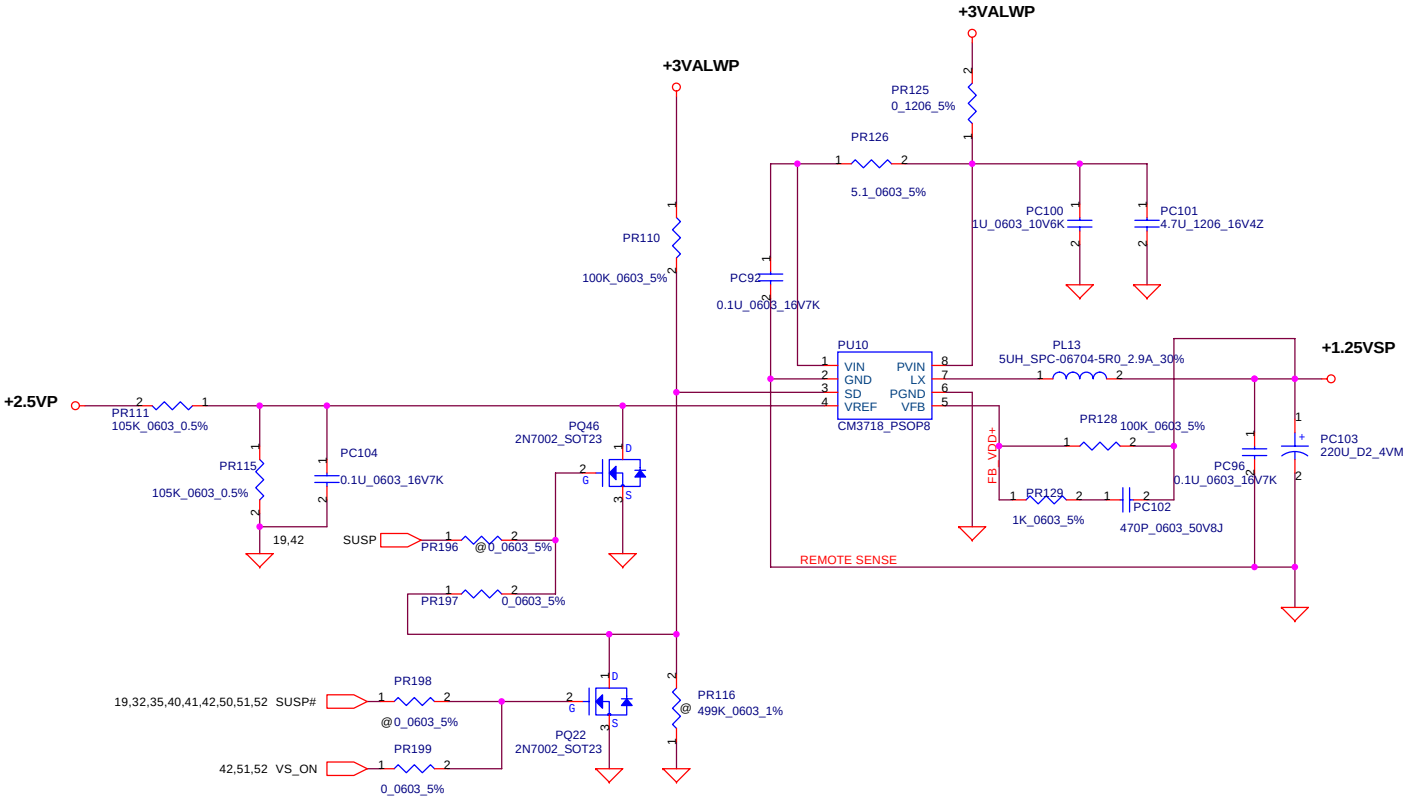
| | | |
|---|---|---|
| Compal Electronics, Inc. | | |
| Title: VGA_CORE/1.5V | | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 52 of 57 | |

145W THROTTLING
120W REVOVERY




t = -RC(1-Vb/Va)



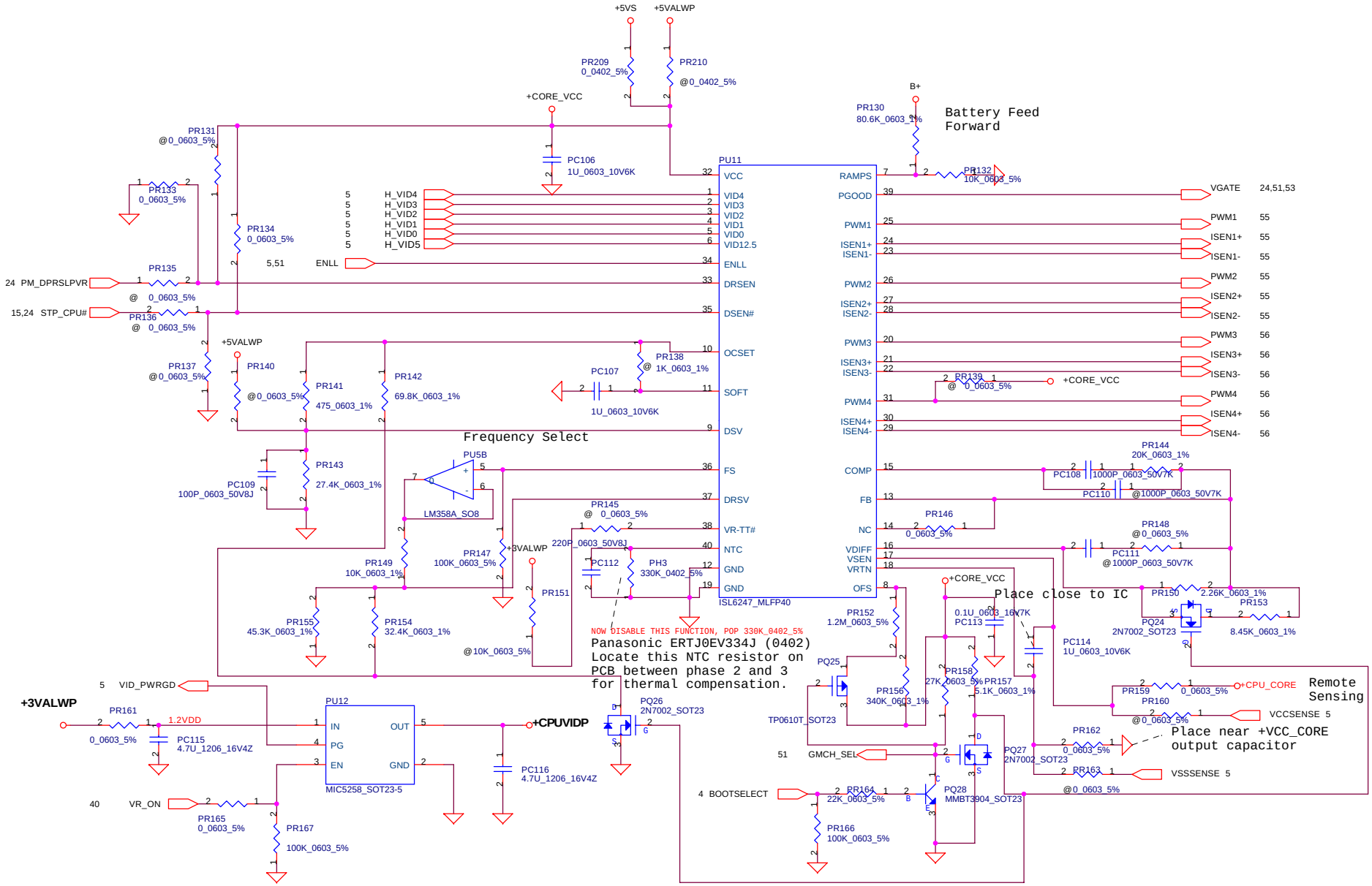



**Compal Electronics, Inc.**

Title: DDR_1.25V/CLOCK THROTTLING

Size | Document Number: Sapporo 300P | Rev: 0.3

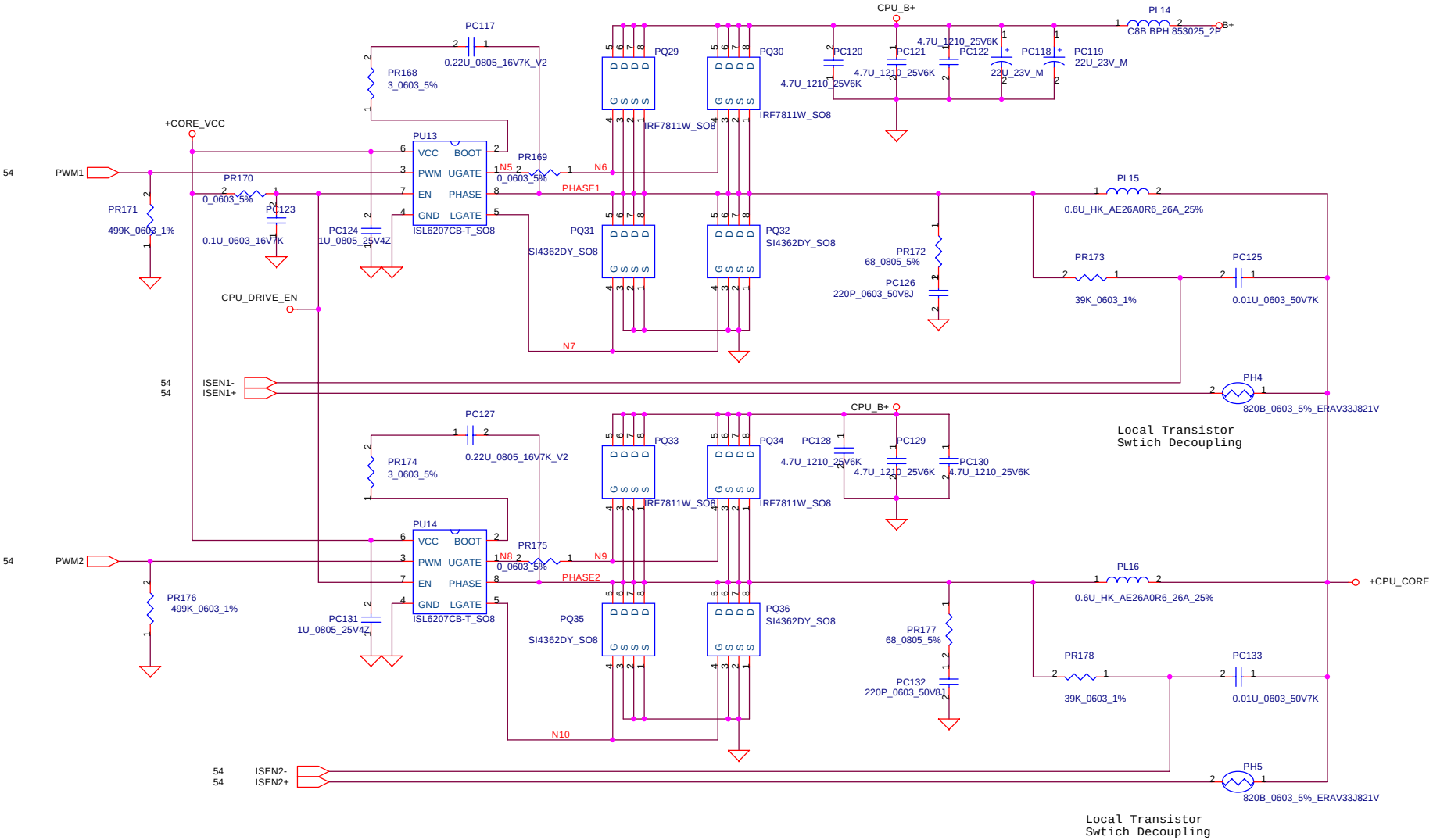
Date: 星期一, 十二月 01, 2003 | Sheet 53 of 57




| |
|---|
| BOOTSELECT=1 PRESCOTT |
| BOOTSELECT=0 NORTHWOOD |



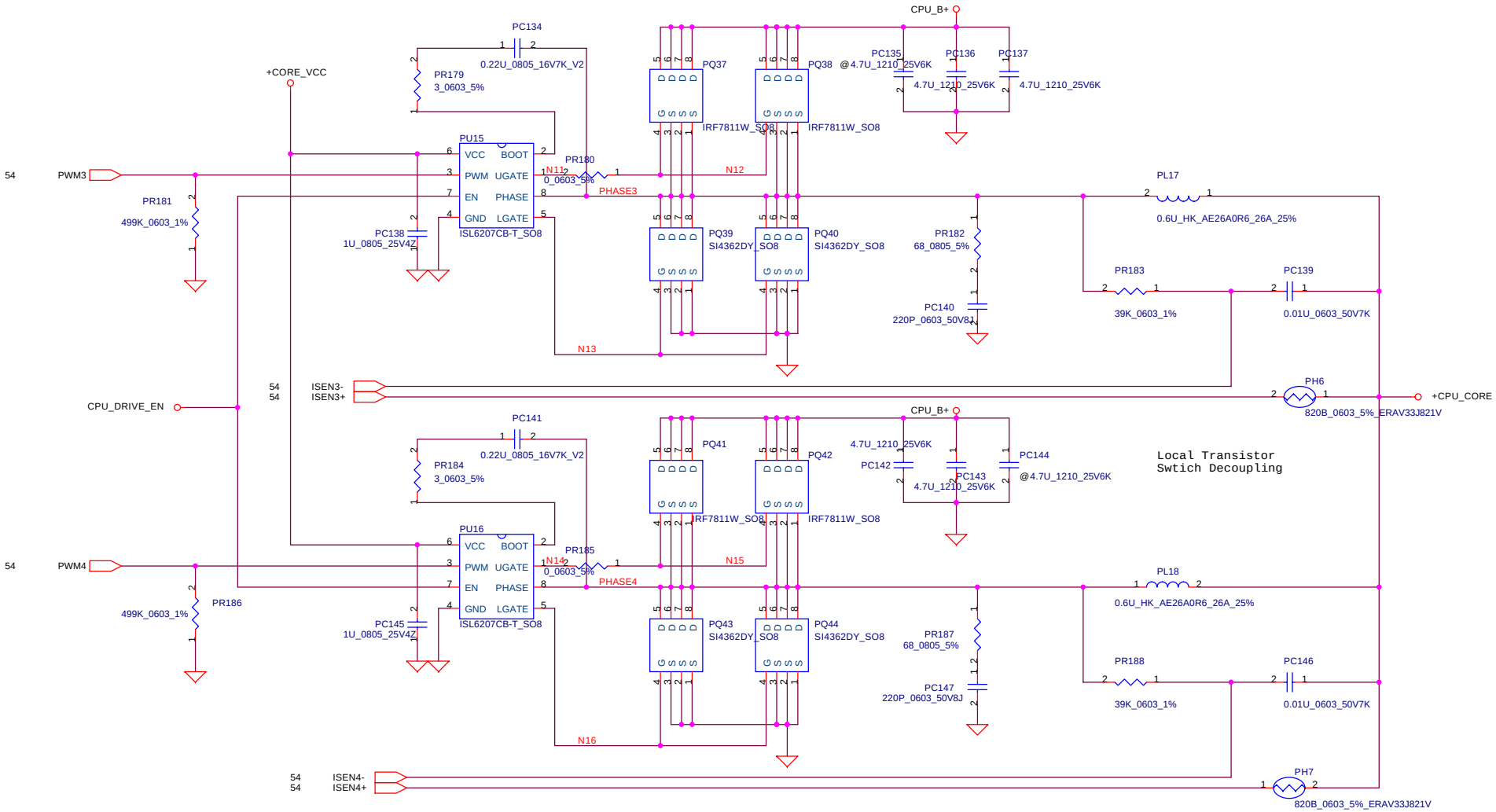
Compal Electronics, Inc.
Title: CPU_CORE_Controller
Size | Document Number: Sapporo 300P | Rev: 0.3
Date: 星期一, 十二月 01, 2003 | Sheet 54 of 57






**Compal Electronics, Inc.**

| | |
|---|---|
| Title | CPU_CORE_Power stage 1 |
| Size | Document Number: Sapporo 300P |
| Rev | 0.3 |
| Date: | 星期一, 十二月 01, 2003 |
| Sheet | 55 of 57 |






**Compal Electronics, Inc.**

| | | |
|---|---|---|
| Title | CPU_CORE_Power stage 2 | |
| Size | Document Number: Sapporo 300P | Rev: 0.3 |
| Date: 星期一, 十二月 01, 2003 | Sheet 56 of 57 | |

# DBQ02 PIR LIST

********** Rev0.1 PIR List **********

10/28/2003 Writen by Jason Shih
Change from DBQ01 LA-2041

P16:New add R749, R750, R751, R752, R753, R754
    Add @ to R41, R343, R701

P17:R358, R389 change from 1K to 10K

P18:Add @ to R71, R76, R112, R348, R349
    Add @ to C23, C55
    Change R385 from 0_0402 to 49.9_0603

P19:New add U63
    Add @ to U63
    New add C826, C827, C828, C829, C830, C831
    Add @ to C826, C827, C828, C829, C830, C831

P20:New add R722 - R733 (12pcs)
    New add C832 ~ R839 (8pcs)

P21:New add R734 - R745 (12pcs)
    New add C840 - R847 (8pcs)

P22:New add R746, R747, R748

********** Rev0.2 PIR List **********

11/03/2003 Writen by Jason Shih

P5:R18 del @
P5:R19 del @, Change to 680_0603_1%  ----------  for Prescott CPU

P22:New add R755, R756, R757

P39:R487 change from 0_0402 to 8.2K_0402

P41:Add new R758, R759

********** Rev0.2A PIR List **********

11/13/2003 Writen by Jason Shih
Add HDTV, SW-DJ, Yamaha AC97 Codec Function

P23:HDTV Function (NewPage)

P32:New add R787, 789, R790, C881, C882, C883

P34:JP10 change from 16pin to 20pin
    JP10.18 new add SPDIF signal

P35: -- Del OZ-168 peripheral circuit --
    Del U46, X4, D31, Q14, Q49, Q50, L34, L35, RP83, RP84
    Del R228, R235, R237, R244, R495, R496, R497, R498, R506, R509, R510, R514, R518, R532,  R533, R534, R538, R539
    Del C365, C641, C642, C651, C659, C662, C673

    Add new U66, U68, Q75, Q76, Q77, D48
    Add new R791, R792, R793, R794, R795
    Add new C884, C885, C886, C887, C888, C889, C890, C891, C892, C893, C894, C895, C897

P36:Del RP139, U47, U48, C645
    Add new RP150, RP151, U67, U68, Q78
    Add new R796, R797, R798, R799, R800
    JP28.60 change from +5VCD to +5VCDS

P39:PR3, PR87 change from 10P8R to 8P4R
    Add new PR149
    Add new R801, R802, R803, R804

11/14/2003 Writen by Jason Shih

P22:R16 change from 100_0402 to 200_0402

11/18/2003 Writen by Jason Shih

P6:Add @ to C481, C482, C493, C494
P34:Add @ to R662
    R604 del @

# PWR PIR LIST

EVT

| page | Reason for change | Modify list |
|---|---|---|
| 47 | Change DC-jack from 3D to 2.5D | Change PCN1 from 2DC-S113L200 to 2DC-G313B200 |



**Compal Electronics, Inc.**

Title: DBQ01 PIR LIST

Size: B | Document Number: Sapporo 300P | Rev: 0.3

Date: 星期一, 十二月 01, 2003 | Sheet 57 of 57