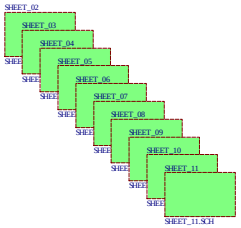
# RDCLIENT

# STPC CLIENT REFERENCE DESIGN
# REV 1.3

SAA00022AAXX

SEPTEMBER 8th, 1999




## BOARD DESCRIPTION:

- Motherboard in ATX format.
- STPC Client interfaces:
  - * Standard Super-VGA monitor output..
  - * 3 PCI slot.
  - * 3 ISA slots.
  - * Primary and Secondary EIDE.
  - * Video Input Port.
  - * Digital TVOuput.
- Memory:
  - * 4 DRAM SIMM Socket.
- SUPER I/O:
  - * 1 Parallel port.
  - * 2 Serial ports.
  - * Keyboard/Mouse interface.
  - * 1 Floppy Disk interface.
- Other:
  - * NTSC/PAL Encoder.
  - * ATX Power supply.
  - * Reset and Power on switch.
  - * Speaker.

| FILENAME | SHEET DESCRIPTION |
|---|---|
| RDCLIENT.SCH | COVER |
| SHEET_02.SCH | STPC CLIENT |
| SHEET_03.SCH | DRAM 0,1,2,3 |
| SHEET_04.SCH | VGA, VIDEO INPUT PORT |
| SHEET_05.SCH | NTSC/PAL ENCODER |
| SHEET_06.SCH | ROM BIOS, CONFIGURATIONS STRAPS |
| SHEET_07.SCH | PCI SLOTS A, B, C |
| SHEET_08.SCH | 3 ISA SLOTS + IRQ, DRQ, DACK MUX |
| SHEET_09.SCH | SIO, PARALLEL AND SERIAL PORT, KBD, MOUSE |
| SHEET_10.SCH | FLOPPY, EIDE CONNECTORS |
| SHEET_11.SCH | RESET, POWER SUPPLY AND SPEAKER |



REVISION HISTORY

| | | |
|---|---|---|
| REV 0.1 : | Initial release | |
| REV 1.0 : | | |
| REV 1.1 : | 07/22/1999 | |
| REV 1.2 : | 06/18/1999 | |
| REV 1.3 : | 09/08/1999 | |

NOTES

The text with no border are for misc and layout informations

Comments about the schematics are with dashed lines border.

The Config straps is necessary to config the STPC during the reset.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01630 SAINT-GENIS POUILLY FRANCE

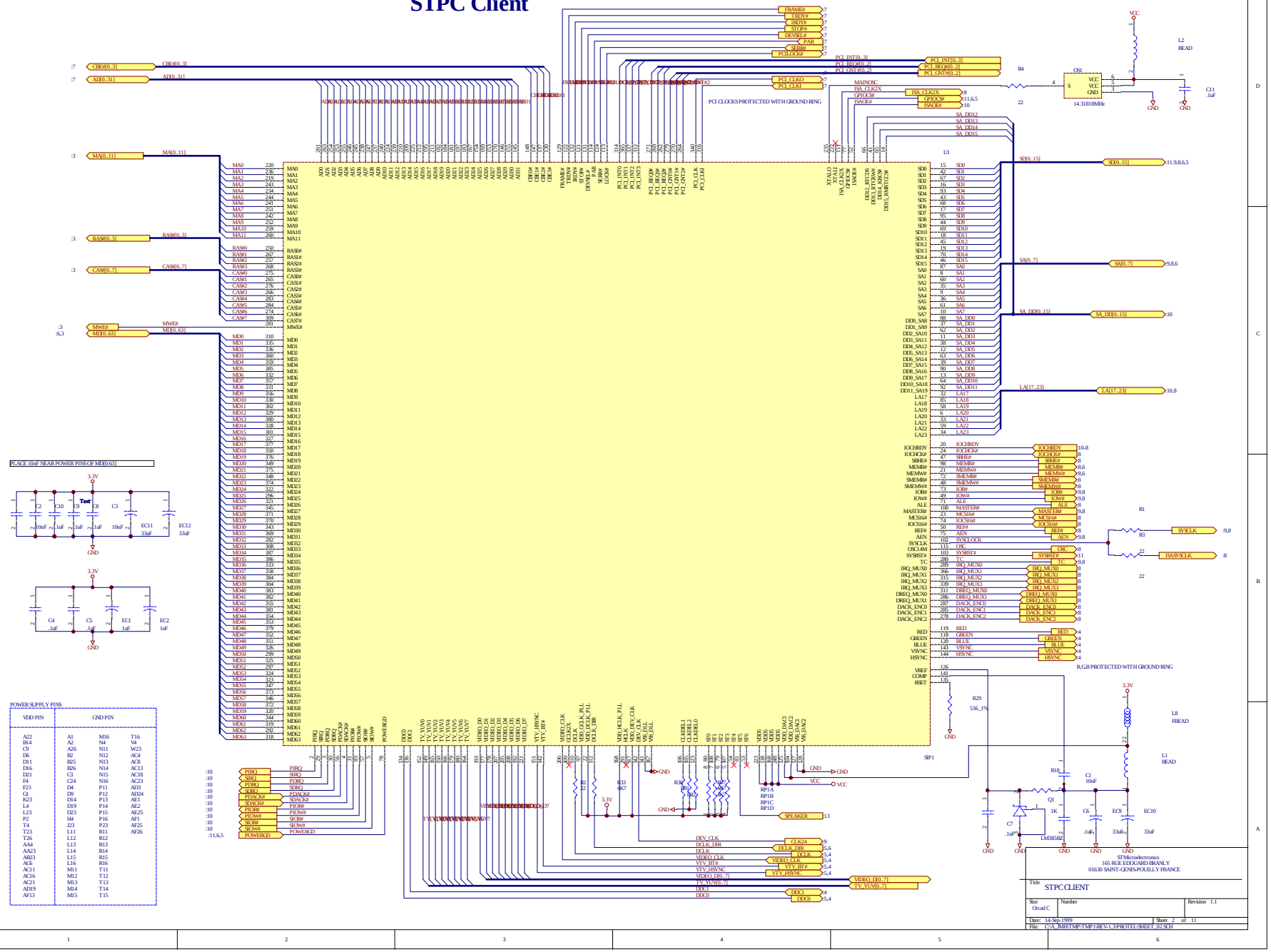

Title: COVER

Size: Orcad C | Number: | Revision: 1.0

Date: 14-Sep-1999 | Sheet 1 of 11

File: C:\A_IM\HTMP\TMP1\REV-1.3\PROTEL\RDCLIENT.SCH

# STPC Client


PLACE 10nF NEAR POWER PINS OF MD[0:63]
POWER SUPPLY PINS
VDD PIN
GND PIN
PCI CLOCKS PROTECTED WITH GROUND RING
R,G,B PROTECTED WITH GROUND RING
SPEAKER
14.31818MHz
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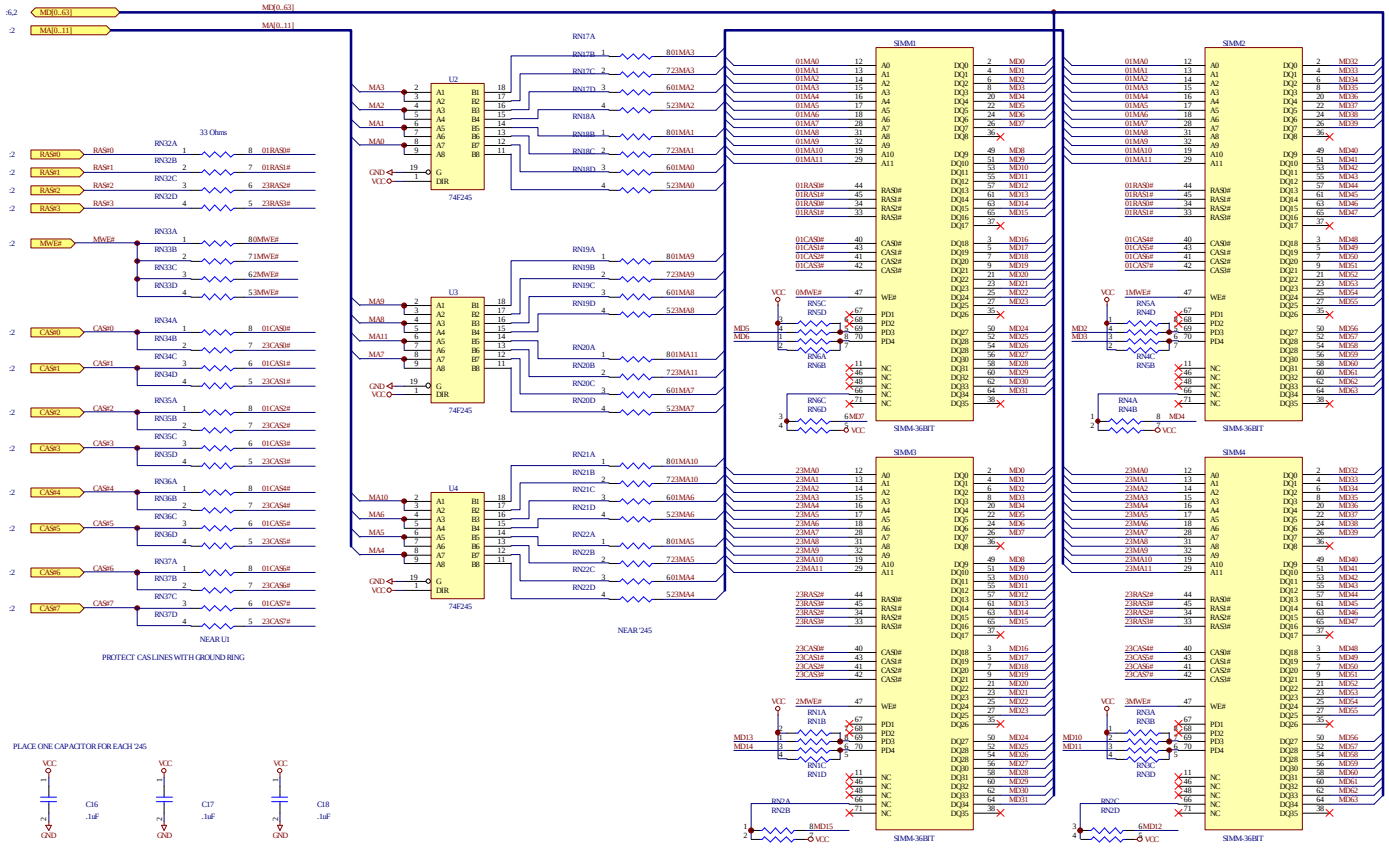
STPC CLIENT
Size
Orcad C
Number
Revision 1.1
Date: 14-Sep-1999
Sheet 2 of 11
File: C:\A_IMH\TMP\TMP1\REV-1.3\PROTEL\SHEET_02.SCH

# DRAM 0,1,2,3





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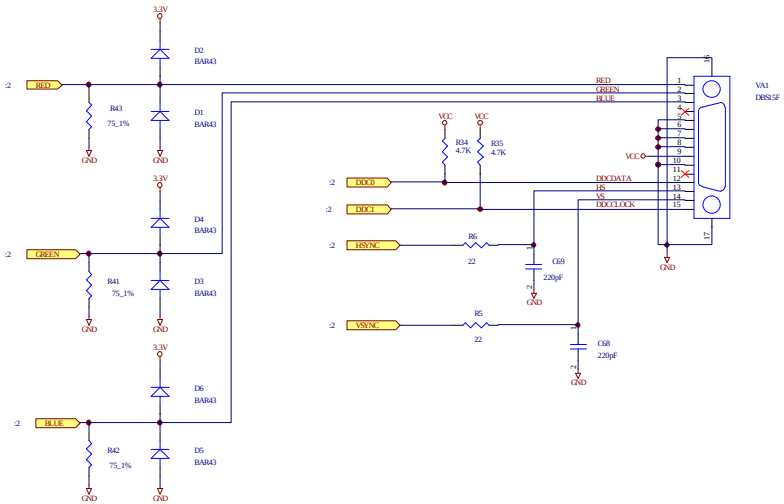
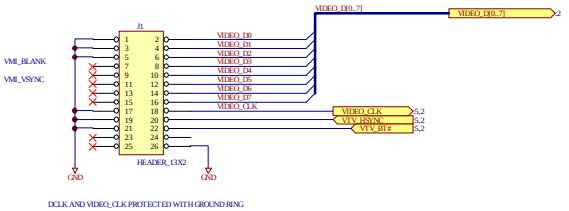
| | |
|---|---|
| Title | DRAM 0, 1, 2, 3 |
| Size | Orcad C |
| Number | |
| Revision | 1.0 |
| Date | 14-Sep-1999 |
| Sheet | 3 of 11 |
| File | C:\A_IMH\TMP\TMP1\REV-1.0\PROTEL\SHEET_03.SCH |

# VGA




# VIDEO INPUT PORT




DCLK AND VIDEO_CLK PROTECTED WITH GROUND RING

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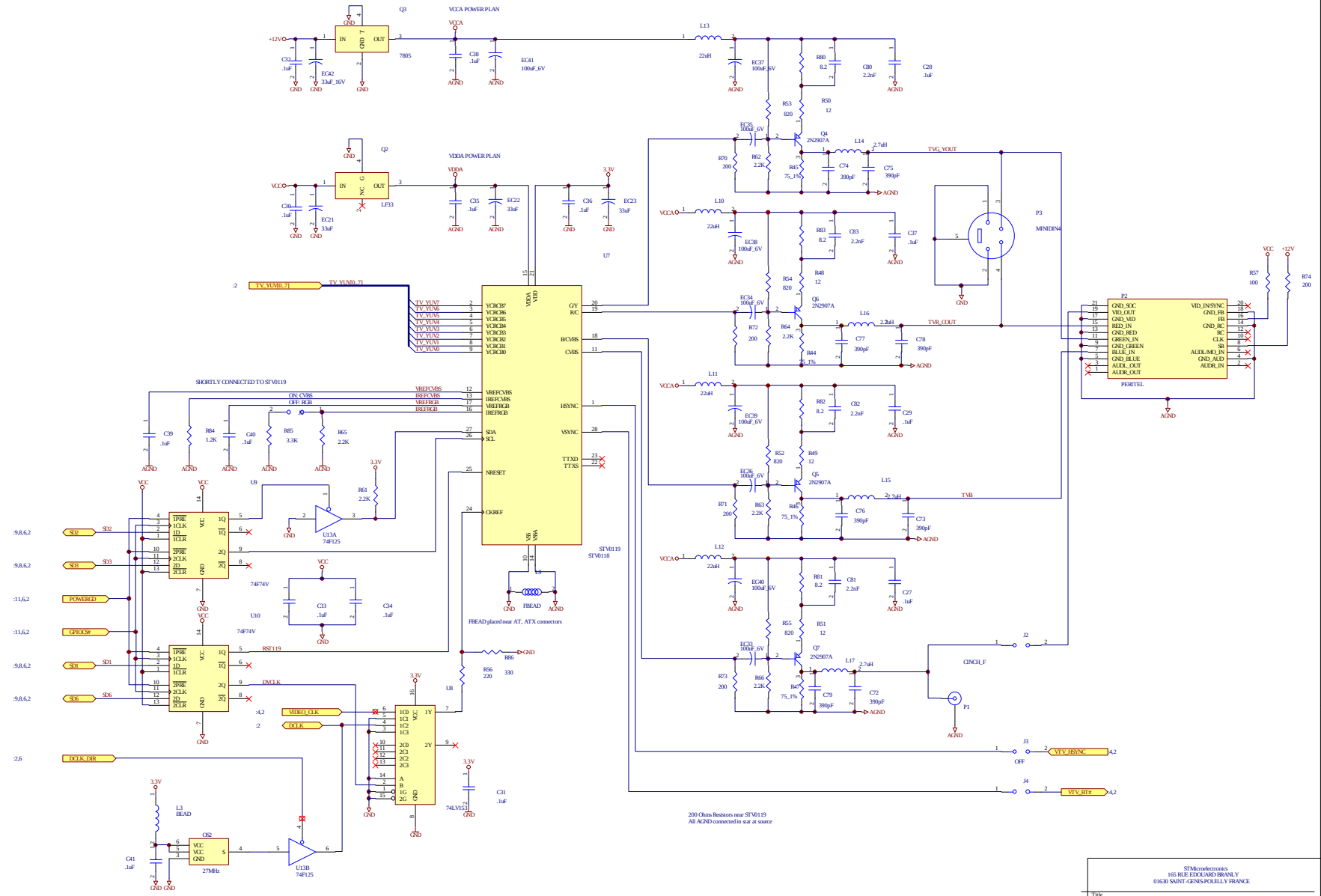
Title: VGA, VIDEO INPUT PORT

| Size | Number | Revision |
|---|---|---|
| Orcad C | | 1.0 |

Date: 14-Sep-1999 Sheet 4 of 11

File: C:\A_IMH\TMP\TMP1\REV-1.0\PHOTELS\SHEET_04.SCH

# NTSC/PAL ENCODER





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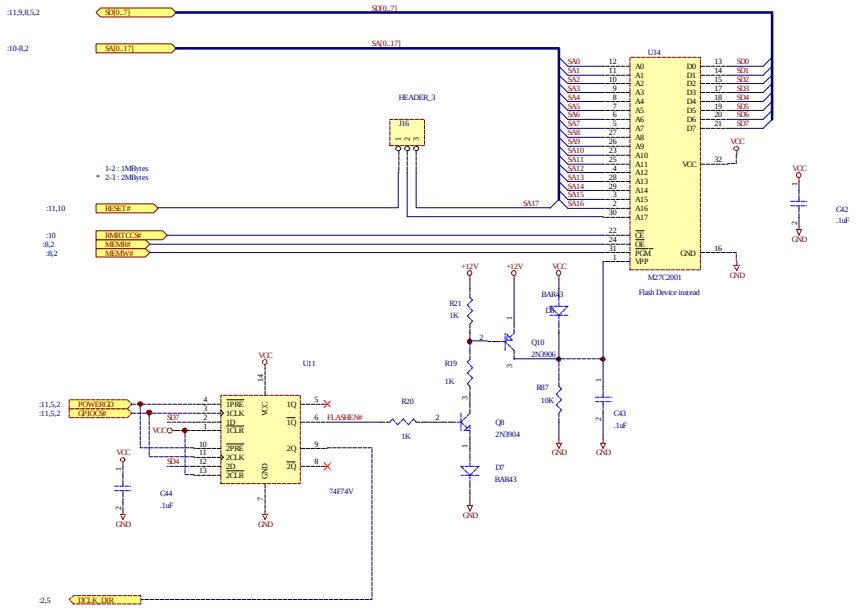
| | | | |
|---|---|---|---|
| Title | NTSC/PAL ENCODER | | |
| Size: Orcad C | Number | | Revision: 1.0 |
| Date: 14-Sep-1999 | | Sheet 5 of 11 | |
| File: C:\A_IMHTMP\TMP1\REV-1.0\PHOTELS\SHEET_05.SCH | | | |

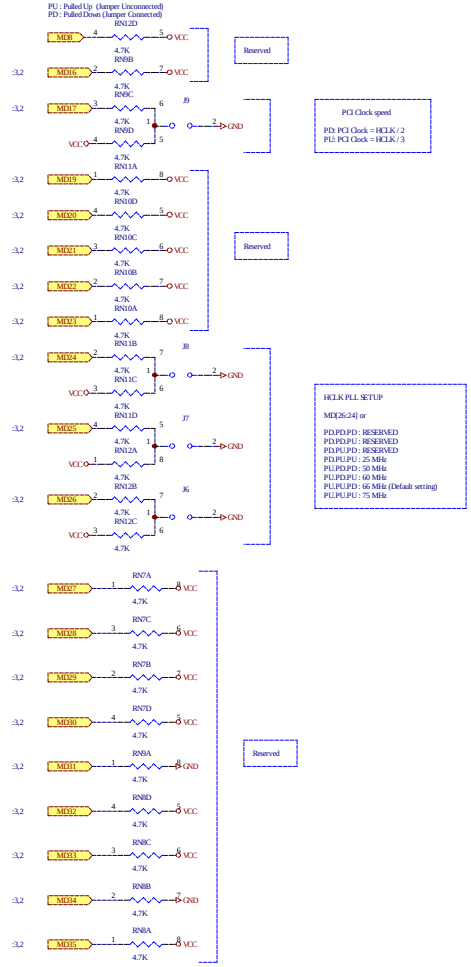
# ROM BIOS




# CONFIGURATION STRAPS

ALL CONFIGURATION STRAPS HAVE TO BE IMPLEMANTED TO INITIALIZE THE SPTC DURING THE RESET (Reserved or not).

PU : Pulled Up (Jumper Unconnected)
PD : Pulled Down (Jumper Connected)





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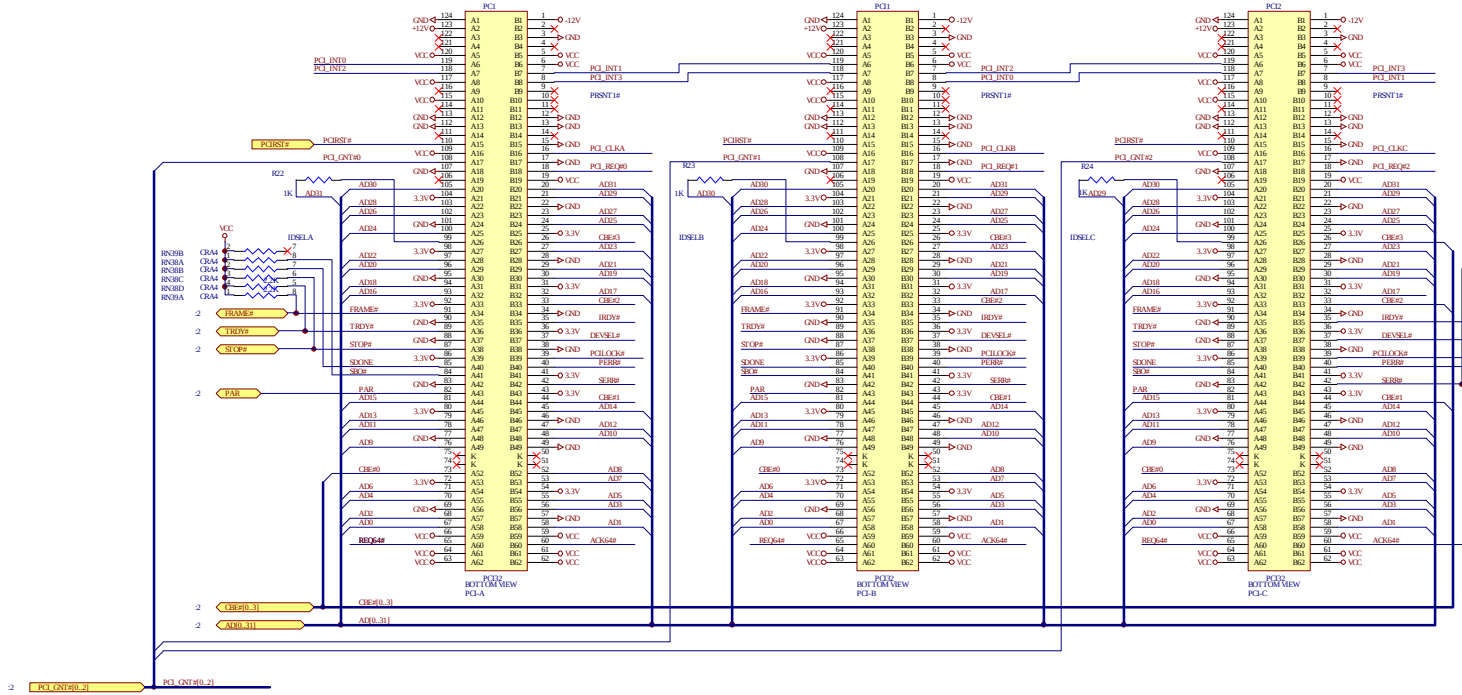
Title: ROM BIOS, CONFIGURATIONS STRAPS

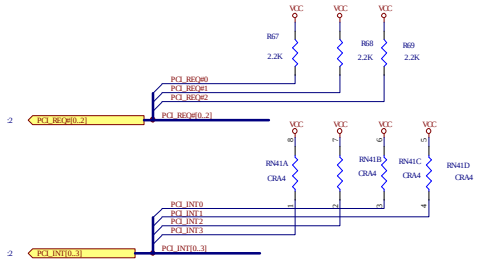
| Size | Number | Revision |
|---|---|---|
| Orcad C | | 1.0 |

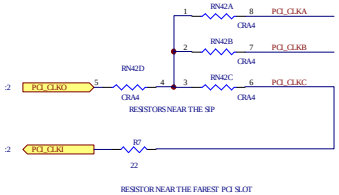
Date: 14-Sep-1999 Sheet 6 of 11

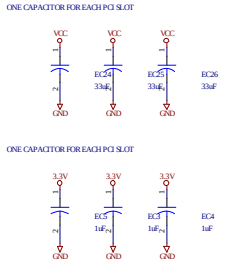
File: C:\A_IMH\TMP\TMP1\REV-1.3\PHOTELS\SHEET_06.SCH

# PCI SLOTS A, B, C

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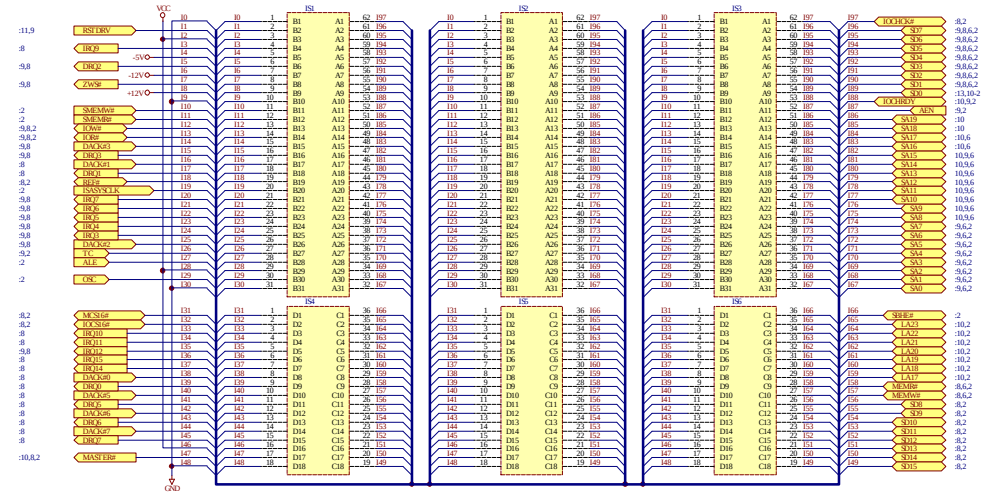
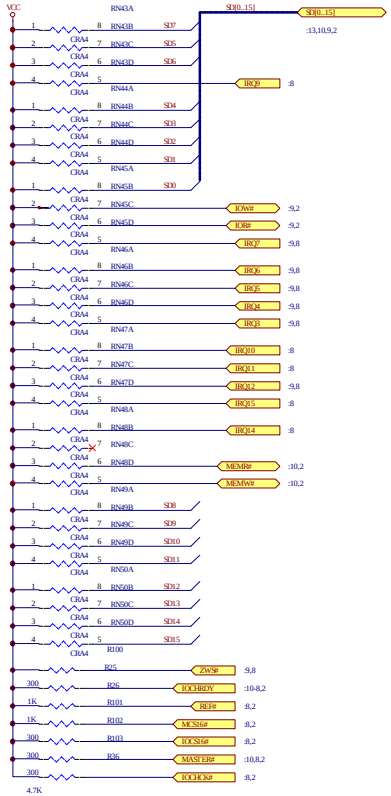
| | | |
|---|---|---|
| Title | PCI SLOTS A, B, C | |
| Size: Orcad C | Number | Revision: 2.0 |
| Date: 14-Sep-1999 | Sheet 7 of 11 | |
| File: C:\A_IMH\TMP\TMP1\REV-1.0\PHOTELS\SHEET_07.SCH | | |

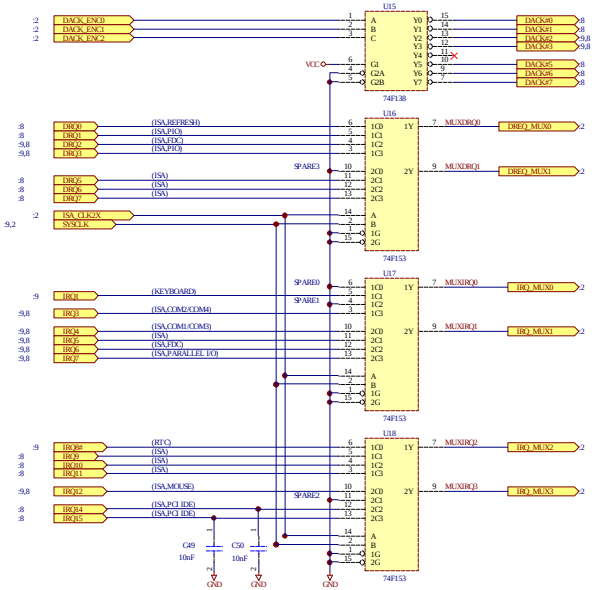
# 3 ISA SLOTS

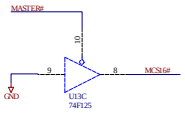



ONE CAPACITOR FOR EACH ISA SLOT

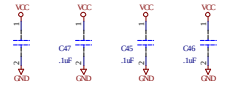



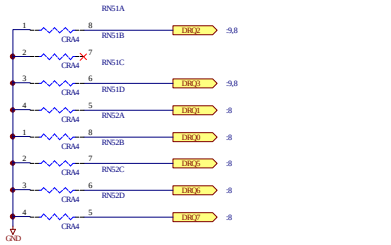

# IRQ, DRQ, DACK MUX




ONE CAPACITOR FOR EACH COMPONENT




| | | |
|---|---|---|
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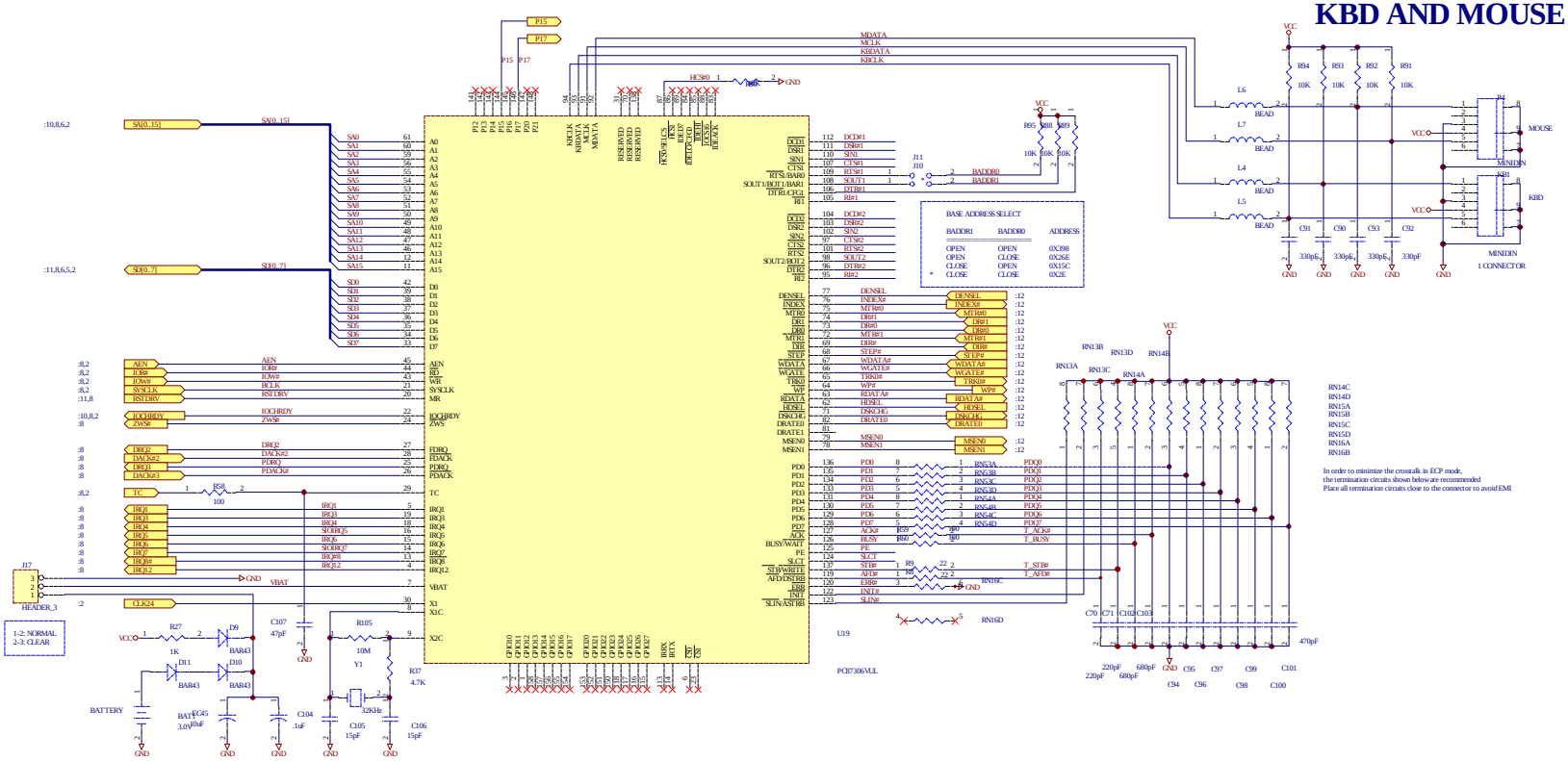
| Title: 3 ISA SLOTS + IRQ, DRQ, DACK MUX | | |
| Size: Orcad C | Number | Revision: 2.0 |
| Date: 14-Sep-1999 | Sheet 8 of 11 | |
| File: C:\A_IMH\TMP\TMP1\REV-1.3\PHOTELS\SHEET_08.SCH | | |

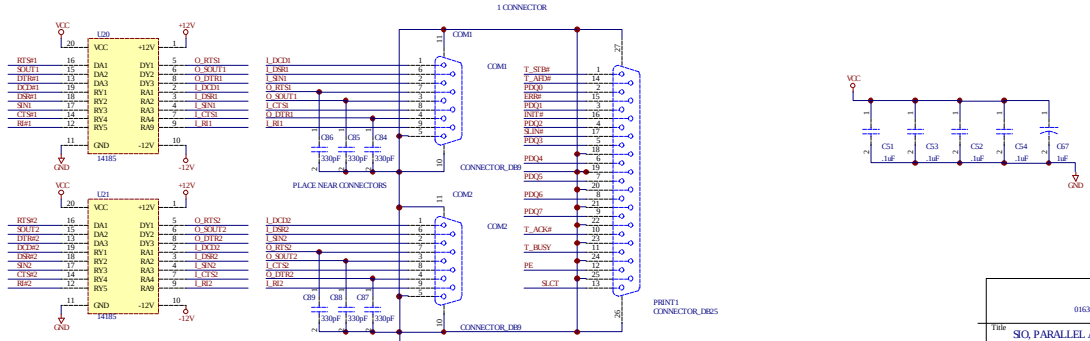
# SUPER I/O




# KBD AND MOUSE




# PARALLEL AND SERIAL PORT





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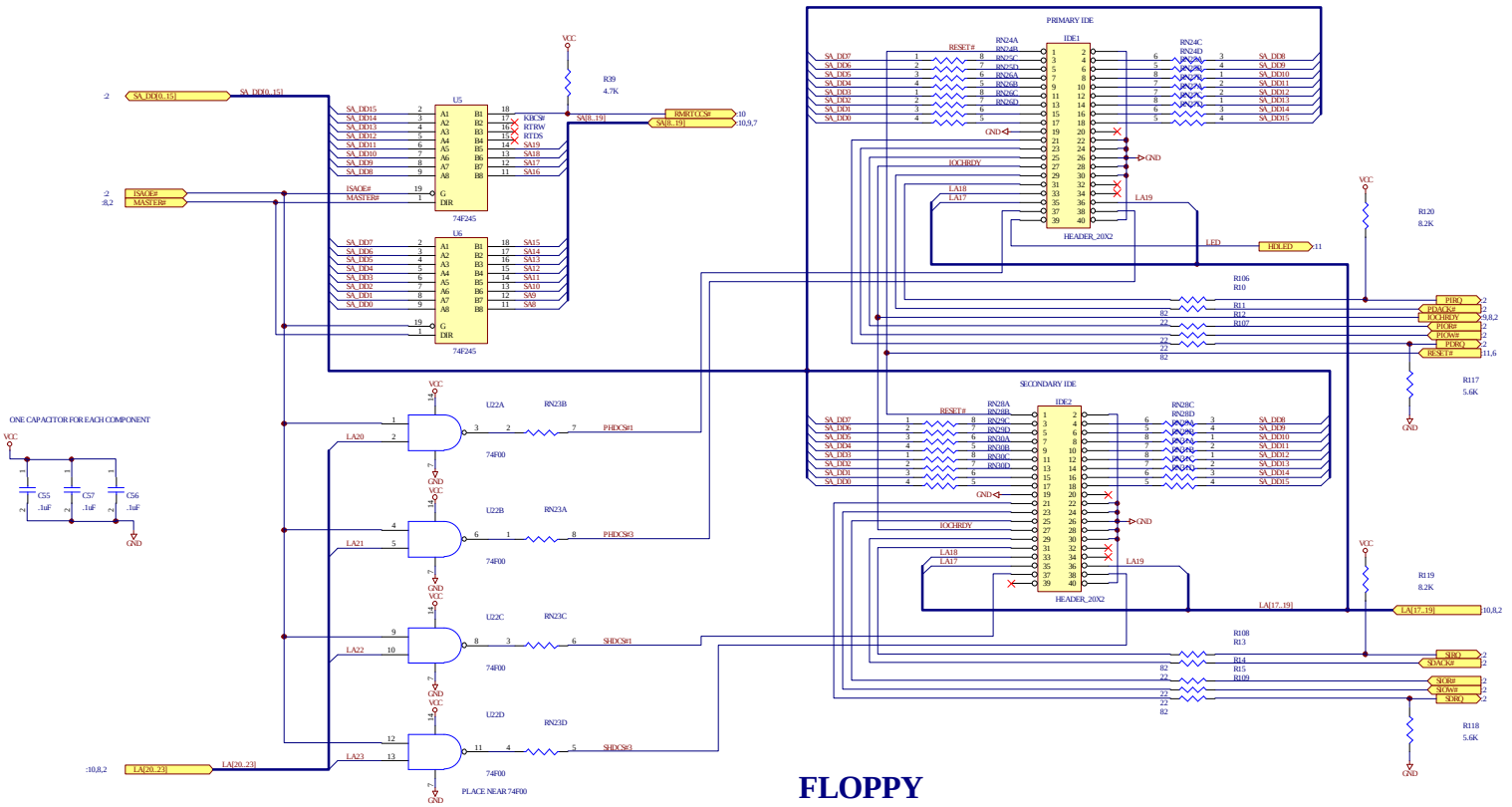
Title: SIO, PARALLEL AND SERIAL PORT, KBD, MOUSE

| Size | Number | Revision |
|---|---|---|
| Orcad C | | 2.0 |

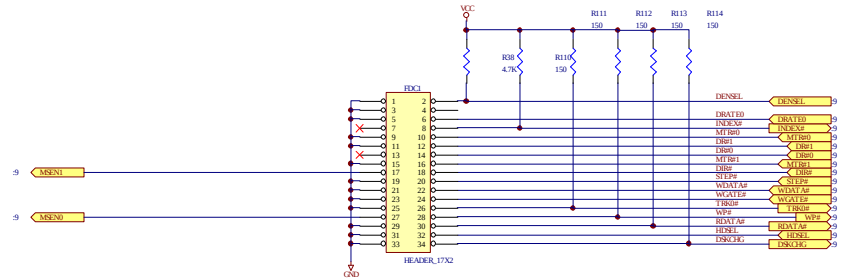
Date: 14-Sep-1999 Sheet 9 of 11

File: C:\A_IMHTMP\TMP1\REV-1.3\PROTEL\SHEET_09.SCH

# EIDE CONNECTORS




# FLOPPY




Media Sense and DRATE Options
Determined by Floppy Drive Model
and Preference of System Designer

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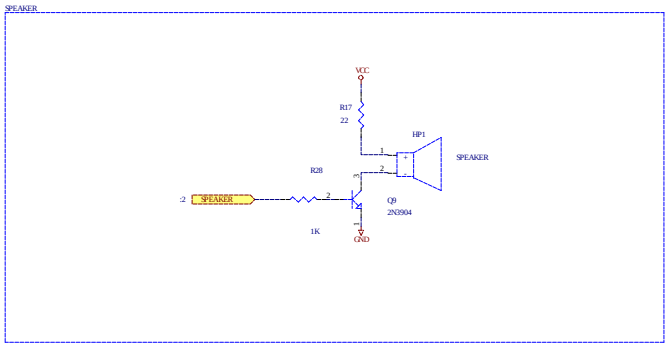
Title: FLOPPY, EIDE CONNECTORS

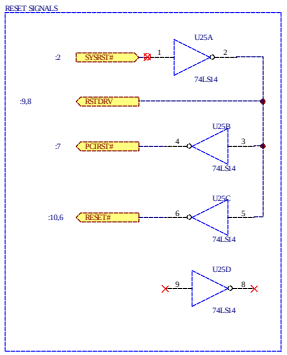
| Size | Number | Revision |
|---|---|---|
| Orcad C | | 1.0 |

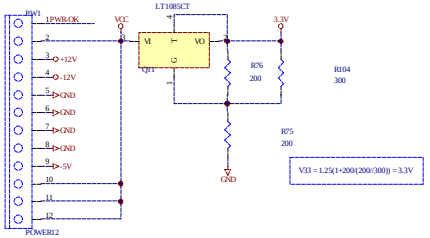
Date: 14-Sep-1999 Sheet 10 of 11

File: C:\A_IMH\TMP\TMP1\REV-1.3\PHOTELS\SHEET_10.SCH

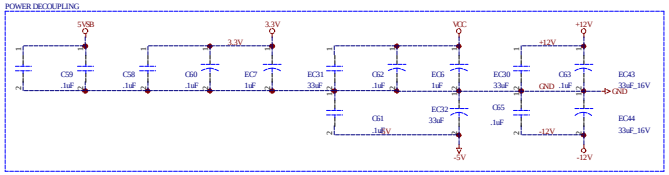
# POWER SUPPLY, SPEAKER

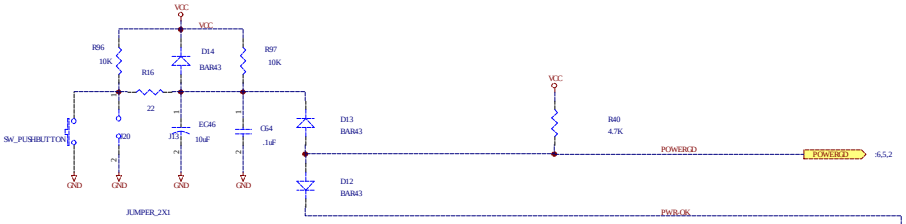


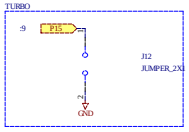



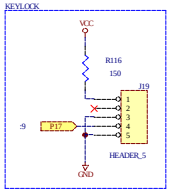



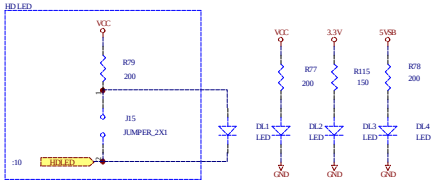

USE A LOCAL POWER PLAN TO CONNECT VI TO VCC

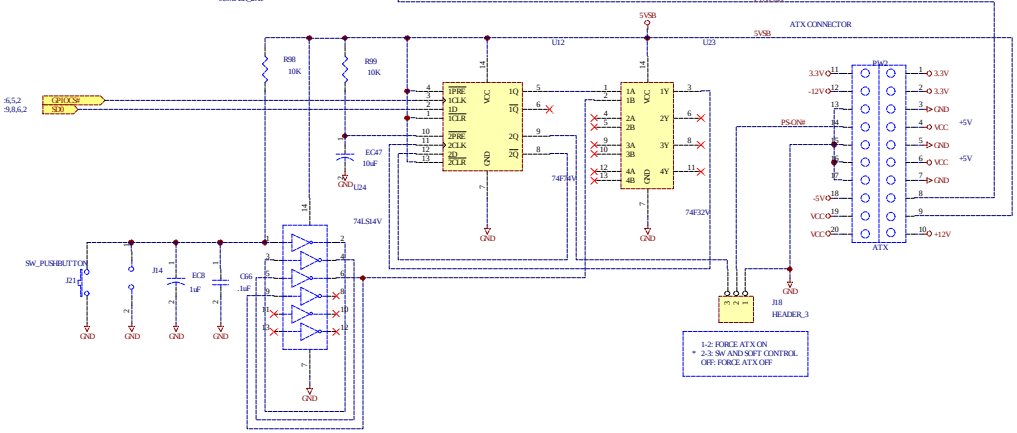




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| | | |
|---|---|---|
| Title: Power Supply, Speaker, Bat | | |
| Size: Orcad C | Number | Revision: 1.0 |
| Date: 14-Sep-1999 | Sheet 11 of 11 | |
| File: C:\A_IMH\TMP\TMP1\REV-1.0\PHOTELS\SHEET_11.SCH | | |