Zero Page $000X Mirror Decode / Latches

RAM/ROM/IO DECODING

LOW RAM ENABLE - $0000-$9EFF
IF !IOEN & !ROMEN & !HRAMEN THEN LRAMEN=0

ROM ENABLE
$C000-$FFFF

HIGH RAM ENABLE (BANKED)
$A000-$BFFF

RWB Decoding for RAM/ROM

I/O ENABLE - $9F00-$9FFF
MATCH ON 9FXX IO RANGE

8 Banks of I/O - 32 bytes each
$9F00-$9F1F $9F80-$9F9F
$9F20-$9F3F $9FA0-$9FBF
$9F40-$9F5F $9FC0-$9FDF
$9F60-$9F7F $9FE0-$9FFF

MEMORY MAP
LOW RAM - $0000 - $9EFF (39.75K)
IO SPACE - $9F00 - $9FFF (0.25K)
HIGH RAM - $A000 - $BFFF (8K)
ROM SPACE - $C000 - $FFFF (16K)
47.75K FREE RAM TOTAL

RAM BANK SELECTOR

ROM BANK SELECTOR

\RWB = Normally High
IF High - CPU READ IE OE
IF LOW - CPU WRITE IE WE
\MEMWE = 0 IF RWB LOW & SYSCL HI
\MEMOE = 0 IF RWB HIGH & SYSCL HI

CPU
CPU W65C02_DIP40

6522 VIA W65C22_DIP40

6522 VIA W65C22_DIP40

ROM IC SST39SF040

RAM ICs

RAM ICs AS6C1008-55PCN

BANK RAM SOCKET 0 (0-512K)   AS6C4008-55PCN
BANK RAM SOCKET 1 (512K-1MB) AS6C4008-55PCN
BANK RAM SOCKET 2 (1MB-1.5MB) AS6C4008-55PC4
BANK RAM SOCKET 3 (1.5MB-2MB) AS6C4008-55PCN

IEC SECTION
DIN-6-conn C01 623-2773001111

IEC SERIAL BUS - LINE DRIVER CIRCUIT
May work with 74LS04 or 74ACT04

RTC Section
B1 CR2025/32 Battery
815-AB26T-32.768K-6 ID: 0x6F
32.768KHz

YM,SAA,RTC & IRQ SELECT DECODER
There will be some dup addresses which
trigger this range, but I would need another
gate or a 138 to fix it.

YM2151 CLOCK X2 3.579545MHz

SOUND HARDWARE

MIXERS

MUTE Active while Reset.

Audio Option Header

DAC

Stretched IO for bus

MASTER SYSTEM CLOCK
Can divide base crystal speed by
1x, 2x or 4x

Front Panel Header

NMI BUTTON

Power LED

INTEL PANEL PINOUT
1,3 - HDD LED
2,4 - POWER LED
5,7 - RESET BUTTON
6,8 - POWER BUTTON
9 - +5V

Microcontroller Section

RESET

POWER

U8 ATtiny861A-PU

I2C HEADER
Leave jumpered, remove for programming.

DB25/Parallel Notes

SNES P3/P4 HEADER

VERA VIDEO HEADER

REAR PANEL CONNECTIONS

REAR SNES CONNECTORS

Audio Output Jack

EXP1 5530843-7
EXP2 5530843-7
EXP3 5530843-7
EXP4 5530843-7
EXPANSION SLOTS

BYPASS CAPS

AUDIO LOW-PASS POWER FILTER

CPU PULLUP RESISTORS RN6 4.7K

SNES / PS2 PULLUP RESISTORS RN4 4.7K

PARALLEL/USER PORT
PULLUP RESISTORS

PROTECTION DIODES
TVS1 SP720APP
TVS2 SP720APP

IC POWER

MOUNTING HOLES

Generate PHI1 from inverter
to maintain 65816 pin compat.