Z80CPUOUT1
Conn_02x22_Odd_Even

Z0
Z80CPU_LCC

R131 10k
R130 10k
R25 220k
R110 10k
R24 10k
C7 1uF
R8 270R
C4 47pF
R7 1K
Q2 2N2369

Z1-2
SST39SF010A-45-4I-NHE

Z301B
SN74AS21N
R141 10k
Added Pull up

Z3-4
IS62C256AL-45ULI

Z309
IS62C256AL-45ULI

J306
Conn_01x03

J307
Conn_02x05

J309
Conn_01x09_Female

J308
Conn_01x12_Female

X1
C1 30pF
R1 4k7
R2 47k
C2 100pF
Q1 2N3904
Z25C
SN74AHCT02N

Z306D
SN74AHCT04N

Z307A
SN74AHCT139N

Z308A
SN74ALS30AN

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

KIO
File: KIO.kicad_sch

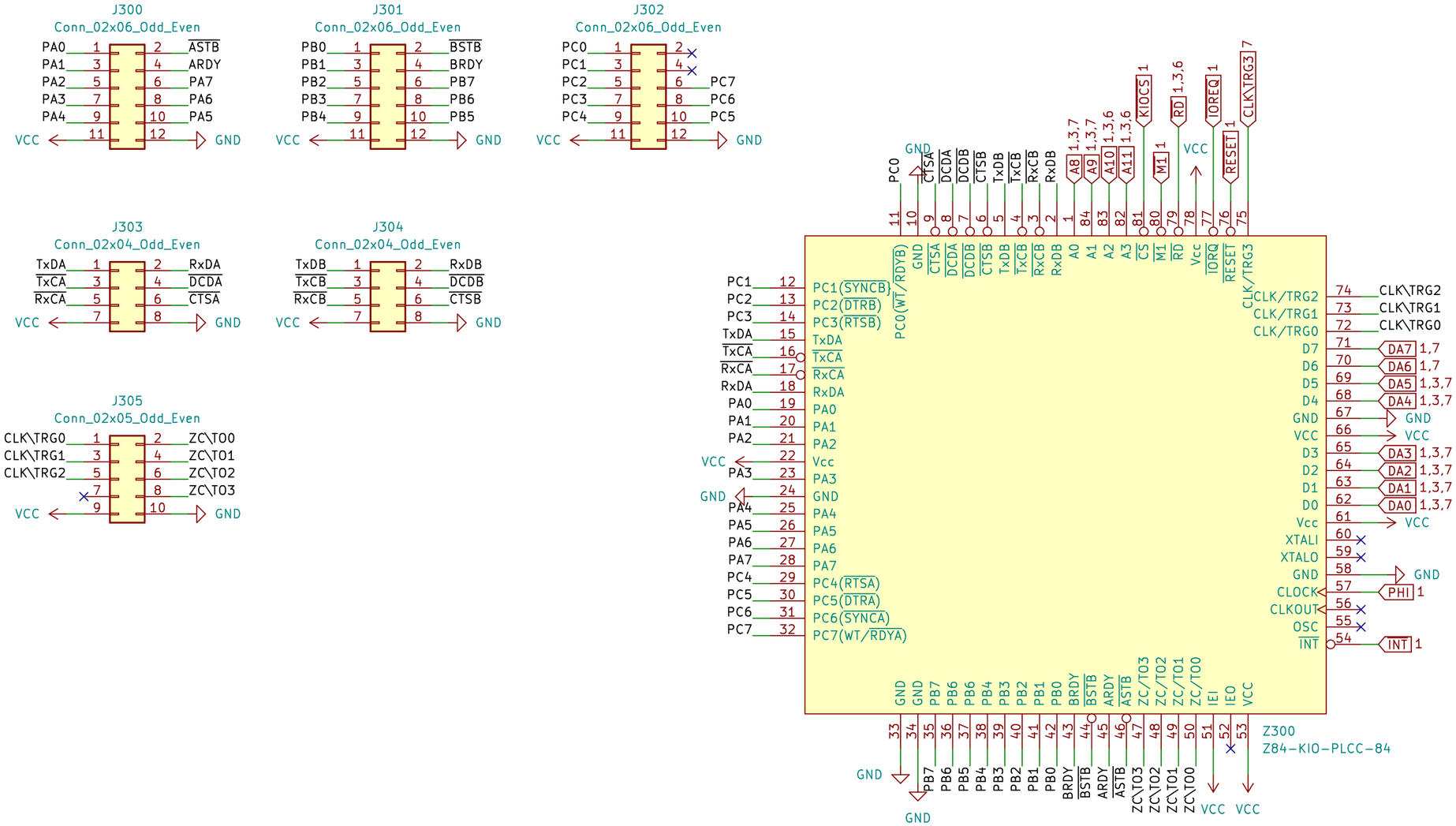
IO&Speaker
File: IO&Speaker.kicad_sch

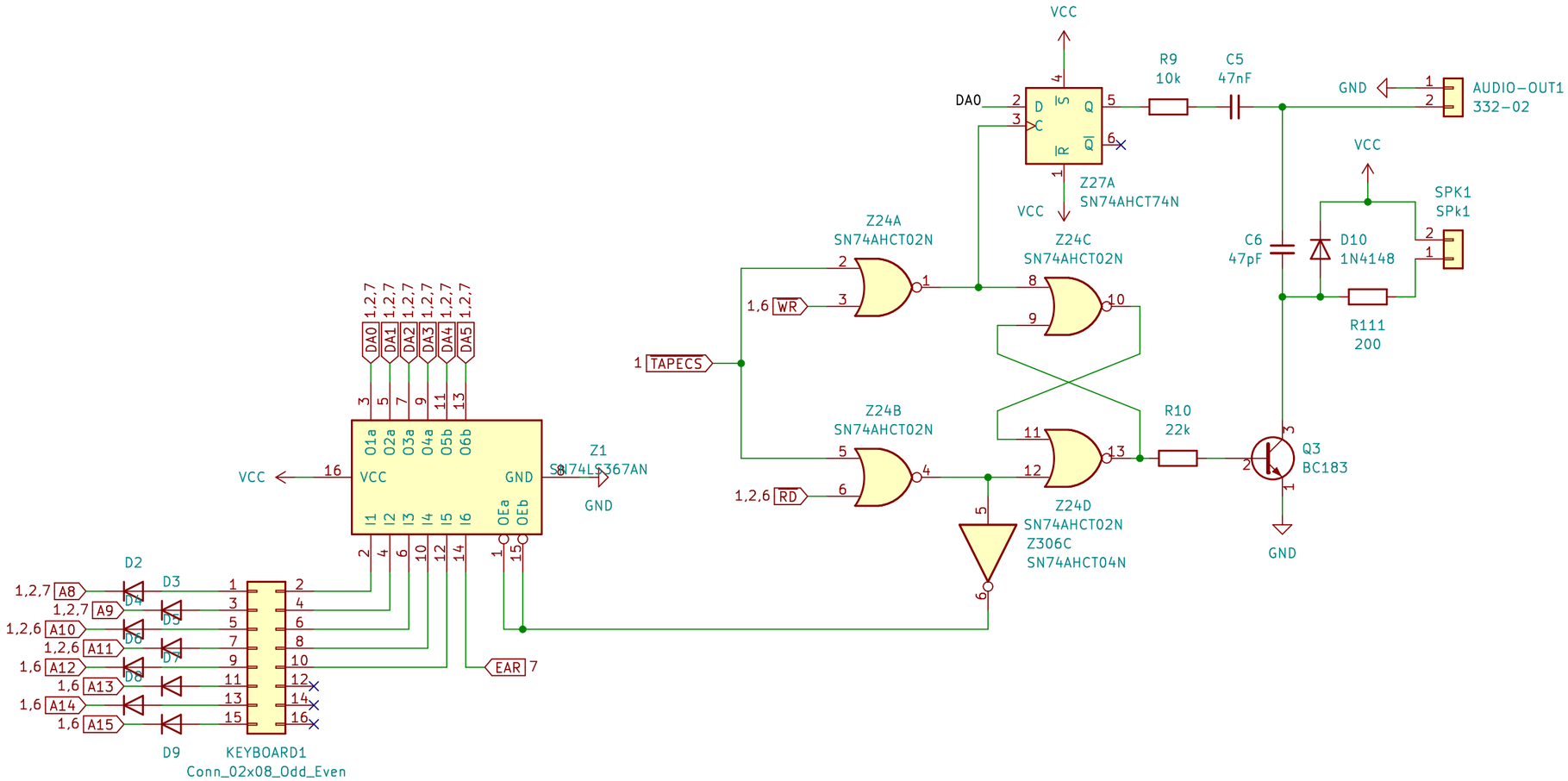
Cascade
File: Cascade4040.kicad_sch

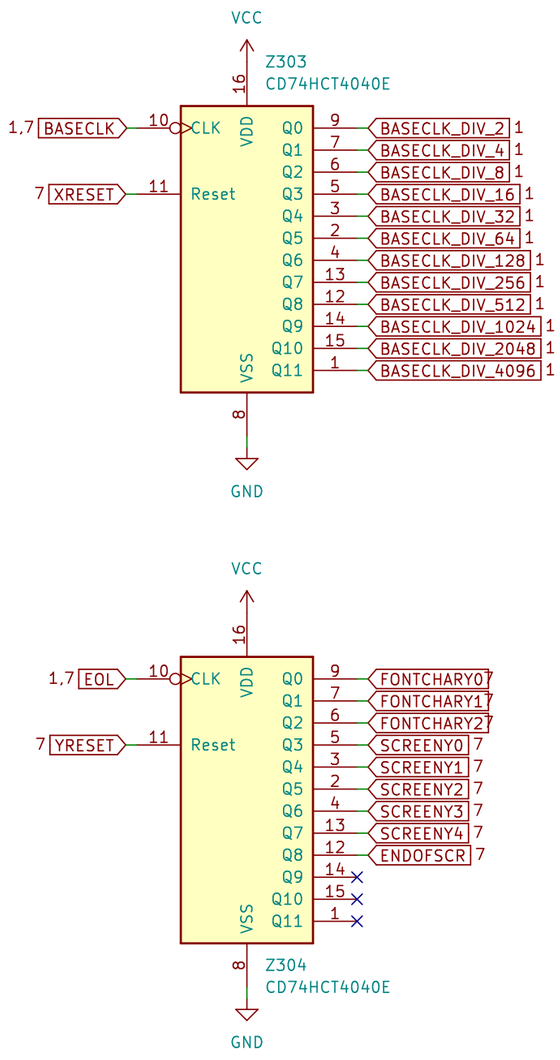
PSU
File: PSU.kicad_sch

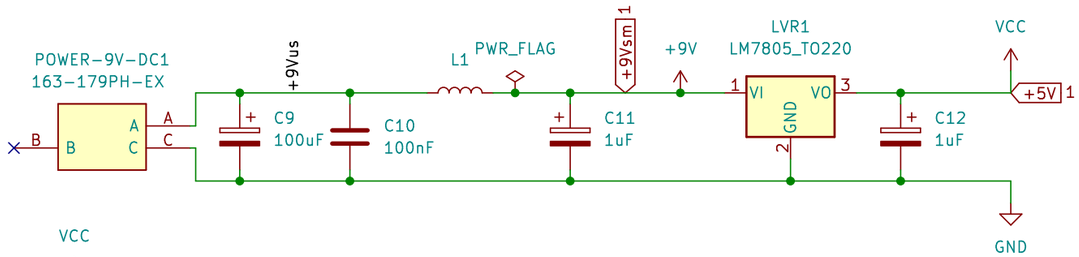
ADDRDECODE
File: ADDRDECODE.kicad_sch

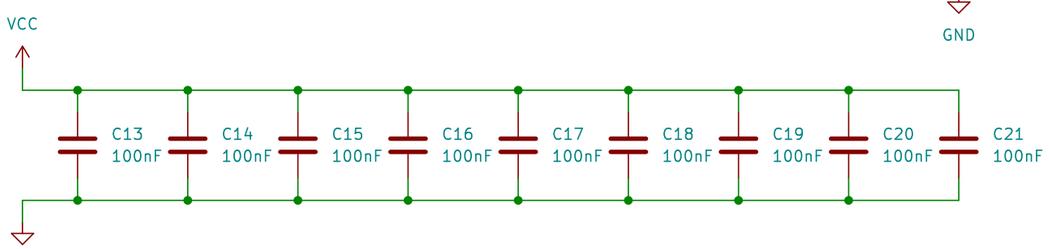
VDG
File: VDG.kicad_sch

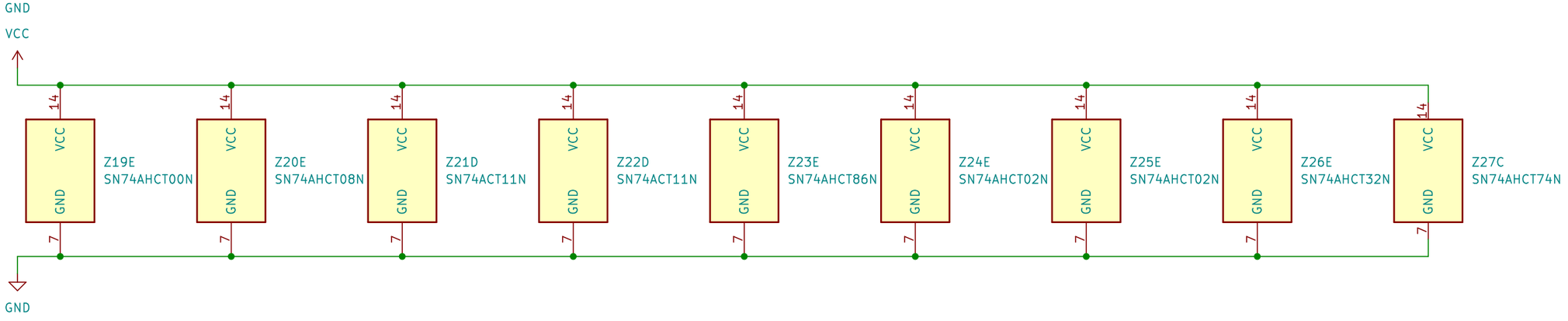

J300
Conn_02x06_Odd_Even
PA0 1
2 ASTB
PA1 3
4 ARDY
PA2 5
6 PA7
PA3 7
8 PA6
PA4 9
10 PA5
VCC 11
12 GND
J301
Conn_02x06_Odd_Even
PB0 1
2 BSTB
PB1 3
4 BRDY
PB2 5
6 PB7
PB3 7
8 PB6
PB4 9
10 PB5
VCC 11
12 GND
J302
Conn_02x06_Odd_Even
PC0 1
2
PC1 3
4
PC2 5
6 PC7
PC3 7
8 PC6
PC4 9
10 PC5
VCC 11
12 GND
J303
Conn_02x04_Odd_Even
TxDA 1
2 RxDA
TxCA 3
4 DCDA
RxCA 5
6 CTSA
VCC 7
8 GND
J304
Conn_02x04_Odd_Even
TxDB 1
2 RxDB
TxCB 3
4 DCDB
RxCB 5
6 CTSB
VCC 7
8 GND
J305
Conn_02x05_Odd_Even
CLK\TRG0 1
2 ZC\TO0
CLK\TRG1 3
4 ZC\TO1
CLK\TRG2 5
6 ZC\TO2
7
8 ZC\TO3
VCC 9
10 GND
PC0 11
GND 10
CTSA 9
DCDA 8
DCDB 7
CTSB 6
TxDB 5
TxCB 4
RxCB 3
RxDB 2
A8 1 1,3,7
A9 84 1,3,7
A10 83 1,3,6
A11 82 1,3,6
KIOCS 81 1
M1 80 1
RD 79 1,3,6
Vcc 78
IORQ 77 1
RESET 76 1
CLK\TRG3 75 7
PC1 12
PC2 13
PC3 14
TxDA 15
TxCA 16
RxCA 17
RxDA 18
PA0 19
PA1 20
PA2 21
VCC 22
PA3 23
GND 24
PA4 25
PA5 26
PA6 27
PA7 28
PC4 29
PC5 30
PC6 31
PC7 32
PC1(SYNCB)
PC2(DTRB)
PC3(RTSB)
TxDA
TxCA
RxCA
RxDA
PA0
PA1
PA2
Vcc
PA3
GND
PA4
PA5
PA6
PA7
PC4(RTSA)
PC5(DTRA)
PC6(SYNCA)
PC7(WT/RDYA)
PC0(WT/RDYB)
GND
CTSA
DCDA
DCDB
CTSB
TxDB
TxCB
RxCB
RxDB
A0
A1
A2
A3
CS
M1
RD
Vcc
IORQ
RESET
CLK/TRG3
CLK/TRG2 74 CLK\TRG2
CLK/TRG1 73 CLK\TRG1
CLK/TRG0 72 CLK\TRG0
D7 71 DA7 1,7
D6 70 DA6 1,7
D5 69 DA5 1,3,7
D4 68 DA4 1,3,7
GND 67 GND
VCC 66 VCC
D3 65 DA3 1,3,7
D2 64 DA2 1,3,7
D1 63 DA1 1,3,7
D0 62 DA0 1,3,7
Vcc 61 VCC
XTALI 60
XTALO 59
GND 58 GND
CLOCK 57 PHI 1
CLKOUT 56
OSC 55
INT 54 INT 1
GND 33
GND 34
PB7 35
PB6 36
PB5 37
PB4 38
PB3 39
PB2 40
PB1 41
PB0 42
BRDY 43
BSTB 44
ARDY 45
ASTB 46
ZC\TO3 47
ZC\TO2 48
ZC\TO1 49
ZC\TO0 50
IEI 51
IEO 52
VCC 53
GND
PB7
PB6
PB5
PB4
PB3
PB2
PB1
PB0
BRDY
BSTB
ARDY
ASTB
ZC\TO3
ZC\TO2
ZC\TO1
ZC\TO0
IEI
IEO
VCC
GND
VCC
VCC
Z300
Z84-KIO-PLCC-84

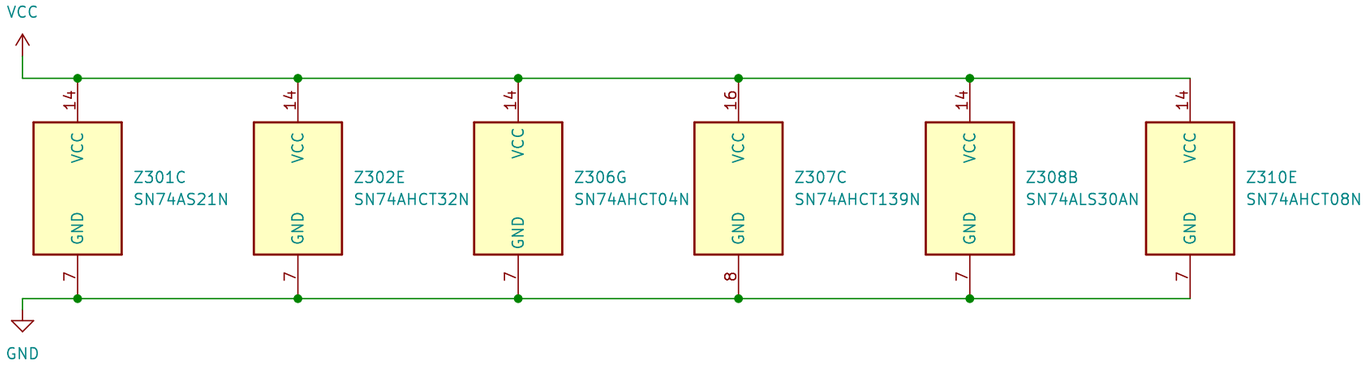

VCC
R9
10k
C5
47nF
DA0
D
C
S
R
Q
Q
Z27A
SN74AHCT74N
GND
AUDIO-OUT1
332-02
VCC
SPK1
SPk1
C6
47pF
D10
1N4148
R111
200
Z24A
SN74AHCT02N
Z24C
SN74AHCT02N
1,6 WR
1 TAPECS
Z24B
SN74AHCT02N
R10
22k
Q3
BC183
1,2,6 RD
Z24D
SN74AHCT02N
Z306C
SN74AHCT04N
GND
DA0 1,2,7
DA1 1,2,7
DA2 1,2,7
DA3 1,2,7
DA4 1,2,7
DA5 1,2,7
O1a O2a O3a O4a O5b O6b
VCC
GND
I1 I2 I3 I4 I5 I6 OEa OEb
Z1
SN74LS367AN
VCC
GND
EAR 7
D2
D3
D4
D5
D6
D7
D8
D9
1,2,7 A8
1,2,7 A9
1,2,6 A10
1,2,6 A11
1,6 A12
1,6 A13
1,6 A14
1,6 A15
KEYBOARD1
Conn_02x08_Odd_Even


VCC
16
Z303
CD74HCT4040E
1,7
BASECLK
10
CLK
VDD
Q0
9
BASECLK_DIV_2
1
Q1
7
BASECLK_DIV_4
1
Q2
6
BASECLK_DIV_8
1
7
XRESET
11
Reset
Q3
5
BASECLK_DIV_16
1
Q4
3
BASECLK_DIV_32
1
Q5
2
BASECLK_DIV_64
1
Q6
4
BASECLK_DIV_128
1
Q7
13
BASECLK_DIV_256
1
Q8
12
BASECLK_DIV_512
1
Q9
14
BASECLK_DIV_1024
1
Q10
15
BASECLK_DIV_2048
1
Q11
1
BASECLK_DIV_4096
1
VSS
8
GND
VCC
16
1,7
EOL
10
CLK
VDD
Q0
9
FONTCHARY0
7
Q1
7
FONTCHARY1
7
Q2
6
FONTCHARY2
7
7
YRESET
11
Reset
Q3
5
SCREENY0
7
Q4
3
SCREENY1
7
Q5
2
SCREENY2
7
Q6
4
SCREENY3
7
Q7
13
SCREENY4
7
Q8
12
ENDOFSCR
7
Q9
14
Q10
15
Q11
1
VSS
8
Z304
CD74HCT4040E
GND


POWER-9V-DC1
163-179PH-EX
A
B
C
B
+9Vus
C9
100uF
C10
100nF
L1
PWR_FLAG
+9Vsm
1
+9V
LVR1
LM7805_TO220
1
VI
GND
2
VO
3
C11
1uF
C12
1uF
VCC
+5V
1
GND


VCC
C13
100nF
C14
100nF
C15
100nF
C16
100nF
C17
100nF
C18
100nF
C19
100nF
C20
100nF
C21
100nF
GND


VCC
14
VCC
GND
7
Z19E
SN74AHCT00N
Z20E
SN74AHCT08N
Z21D
SN74ACT11N
Z22D
SN74ACT11N
Z23E
SN74AHCT86N
Z24E
SN74AHCT02N
Z25E
SN74AHCT02N
Z26E
SN74AHCT32N
Z27C
SN74AHCT74N
GND


VCC
14
VCC
GND
7
Z301C
SN74AS21N
Z302E
SN74AHCT32N
Z306G
SN74AHCT04N
16
8
Z307C
SN74AHCT139N
Z308B
SN74ALS30AN
Z310E
SN74AHCT08N
GND

Z310A
SN74AHCT08N
CPUVRAM 1
7 CPU2FONTRAM 2
3 CPUINVDGRAM

Z306A
SN74AHCT04N
CPUVRAM 1
2 CSFONTRAM 7

Z306F
SN74AHCT04N
7 CPU2FONTRAM 13
12 CSVIDEORAM 7

Z302D
SN74AHCT32N
CPUFONT 12
1,3 WR 13
11 CPU2FONTRAM 7

Z302C
SN74AHCT32N
CPUFONT 9
1,2,3 RD 10
8 CPUFONTROM 1

Z302A
SN74AHCT32N
3800-3FFF 1
A10 2
3 3800-3BFF

Z302B
SN74AHCT32N
3800-3FFF 4
A10 11
10 5
6 3C00-3FFF

Z306E
SN74AHCT04N

Z19C
SN74AHCT00N
1,2,3 A10 9
7 VIDEN 10
8

VHOLD 7

Z26A
SN74AHCT32N
1
CPUINVDGRAM 2
3 WAIT

WAIT Should be global.

C8
2200pF
Capacitor_THT:C_Disc_D5.0mm_W2.5mm_P2.50mm

GND

Z26D
SN74AHCT32N
1,3 WR 12
CPUINVDGRAM 13
11 CPUVDGRAMWR 7

This resistor may allow feed back from Z16 to Pull line high.

R26
330R

7 CPU2VDGACCES

Z306B
SN74AHCT04N
7 CPUVDGRAMWR 3
4 CPUVDGRAMRD 7

R32
10k

1 WE

Z307B
SN74AHCT139N
1,3 A12 13
1,2,3 A11 14
15 E
A1 O0 12 CPUVRAM
A0 O1 11 CPUFONT
O2 10 3000-37FF 1
O3 9 3800-3FFF

VCC

Z29
SN74AHCT138N
16
1,3 A13 1
1,3 A14 2
1,3 A15 3
A0 VCC O0 15 0000-1FFF 1
A1 O1 14
A2 O2 13
O3 12
O4 11
VCC 6 E3 O5 10
1 MREQ 5 E2 O6 9
1 MREQ 4 E1 GND O7 7
8
GND

Z301A
SN74AS21N
3C00-3FFF 1
2
4
5
6 BOTTOM32K 1
9
10
8 TOP32K 1
11

Z22C
SN74ACT11N

VIDEN is wrong should be line that goes to Z19B pin 5

These chips are twice the size of orginal.
Keep A10 low so always using same half.