```
U0    MC68HC11E9FN     Microcontroller
U1    62256LP-12       32K Static Ram
U2    68B21            Motorola PIA
U3    EPM7032          Altera 7032 PLD
RP1   10K Resistor     Pull-up resistors for AD0-7 and EXP_EN
J1    CON24            Connector for PIA Ports A and B
JP1   HEADER 1X2       EXP_EN jumper
C1    0.1UF
C2    0.1UF
C3    0.1UF
C4    0.1UF

VCC
C1-1 C3-1 C4-1 C2-1 RP1-16 U3-3 U3-35 U3-23 U3-15 U2-24 U2-22 U2-20 U1-28

GND
C1-2 C3-2 C4-2 C2-2 JP1-1 U3-10 U3-30 U3-42 U3-22 U2-1 U1-14 J1-23 J1-24
J1-18 J1-17

*EXP_EN
JP1-2 U3-11 RP1-9

E
U0-5 U2-25 U3-9

R/W
U0-6 U2-21 U3-12

AS
U0-4 U3-18

*RESET
U0-17 U2-34

*IRQ
U0-19 U2-38 U2-37

*CS_PIA
U3-24 U2-23

*CS_MEM
U3-25 U1-20

*WE
U3-27 U1-27

*OE
U3-28 U1-22

AD0
U0-9 U3-8 RP1-8 U2-33 U1-11

AD1
U0-10 U3-21 RP1-7 U2-32 U1-12

AD2
U0-11 U3-20 RP1-6 U2-31 U1-13

AD3
U0-12 U3-19 RP1-5 U2-30 U1-15

AD4
U0-13 U3-13 RP1-4 U2-29 U1-16

AD5
U0-14 U3-14 RP1-3 U2-28 U1-17

AD6
U0-15 U3-16 RP1-2 U2-27 U1-18

AD7
U0-16 U3-17 RP1-1 U2-26 U1-19

A0
U3-32 U2-36 U1-10
```



```
A1
U3-36 U2-35 U1-9

A2
U3-37 U1-8

A3
U3-31 U1-7

A4
U3-40 U1-6

A5
U3-41 U1-5

A6
U3-33 U1-4

A7
U3-38 U1-3

A8
U0-42 U3-4 U1-25

A9
U0-41 U3-5 U1-24

A10
U0-40 U3-6 U1-21

A11
U0-39 U3-7 U1-23

A12
U0-38 U3-43 U1-2

A13
U0-37 U3-44 U1-26

A14
U0-36 U3-1 U1-1

A15
U0-35 U3-2
---------------------------------------------------
CA1                       |    CB1                 |
U2-40 J1-19               |    U2-18 J1-20         |
                          |                        |
CA2                       |    CB2                 |
U2-39 J1-21               |    U2-19 J1-22         |
                          |                        |
PA0                       |    PB0                 |
U2-2 J1-1                 |    U2-10 J1-2          |
                          |                        |
PA1                       |    PB1                 |
U2-3 J1-3                 |    U2-11 J1-4          |
                          |                        |
PA2                       |    PB2                 |
U2-4 J1-5                 |    U2-12 J1-6          |     D
                          |                        |     O
PA3                       |    PB3                 |
U2-5 J1-7                 |    U2-13 J1-8          |     T
                          |                        |     H
PA4                       |    PB4                 |     E
U2-6 J1-9                 |    U2-14 J1-10         |     S
                          |                        |     E
PA5                       |    PB5                 |
U2-7 J1-11                |    U2-15 J1-12         |     L
                          |                        |     A
PA6                       |    PB6                 |     S
U2-8 J1-13                |    U2-16 J1-14         |     T
                          |                        |
PA7                       |    PB7                 |
U2-9 J1-15                |    U2-17 J1-16         |
```