3/20/2023 6:49 PM f=0.76 Y:\winapps\prop\schem\h8-8085.sch (Sheet: 1/5)

IC8

A1	Y1	BA7
A2	Y2	BA6
A3	Y3	BA5
A4	Y4	BA4
A5	Y5	BA3
A6	Y6	BA2
A7	Y7	BA1
A8	Y8	BA0

A7 A6 A5 A4 A3 A2 A1 A0

G1
G2

74HCT540N

JP21 BUSEN
BUSEN/GND
GND

IC9

A15 A14 A13 A12 A11 A10 A9 A8

A1	Y1	BA15
A2	Y2	BA14
A3	Y3	BA13
A4	Y4	BA12
A5	Y5	BA11
A6	Y6	BA10
A7	Y7	BA9
A8	Y8	BA8

G1
G2

74HCT540N

IC10

IOR IOW MR MW M1

A1	Y1	BIOR
A2	Y2	BIOW
A3	Y3	BMEMR
A4	Y4	BMEMW
A5	Y5	BM1
A6	Y6	
A7	Y7	
A8	Y8	

G1
G2
GND

74HCT540N

IC14
Use only 74LS640.
74HCT640 is NOT RECOMMENDED.

JP19 BUSEN
BUSEN/GND
GND

IC14

G3
3 EN1 [BA]
3 EN2 [AB]

TX/RX

+5V RN5 1K

D7 BD7
D6 BD6
D5 BD5
D4 BD4
D3 BD3
D2 BD2
D1 BD1
D0 BD0

1 ▽ ◁
2 ▷ ▽

IC11
7805T

+8V VI VO +5V
GND
C19 C22 C21 C23
100uf 33uf 33uf 1uF
GND GND GND GND GND

JP6 DHLDA
BUSEN BHLDA
U$1 DHLDA
DHLDA/DHLDA

1K
RN1

BHLDA
BM1
BMEMW
BMEMR
BIOW
BIOR
GND

R17 1K +5V
Omit R17 if intending to jumper 2-3

BHOLD/BHOLD
IC18D
HOLD
BHOLD BHOLD
74HCT04N JP25

READY JP16
RDYIN READY

CLK JP14
O2
CLK CLK/CLK

+5V
C37 C36 C35 C31 C32 C33 C34
GND GND GND GND GND GND GND

+5V
VC45V VC45V VCC
IC8 IC9 IC10P
GND GND GND
GND GND GND

IC14/+UB
IC14/-UB
GND

U$15 U$16 U$17 U$18 U$19
GND GND GND GND GND

MA25-1
25 P25
24 BMEMW
23 O2
22 BIOW
21 RDYIN
20 BM1
19 SSEL
18 BD7
17 BD6
16 BD5
15 BD4
14 BD3
13 BD2
12 BD1
11 BD0
10 INT2
9 INT1
8 INT7
7 INT6
6 INT5
5 INT4
4 INT3
3 -18V
GND

SJ5
GND

MA25-1
25 P25 +8V
24
23 +18V
22 ROMDIS
21 BA15
20 BA14
19 BA13
18 BA12
17 BA11
16 BA10
15 BA9
14 BA8
13 BA7
12 BA6
11 BA5
10 BA4
9 BA3
8 BA2
7 BA1
6 BA0
5 RESET
4 BMEMR
3 BHOLD
2 BIOR
1 BHLDA

MA25-1SMALL
25 P25
24 BMEMW
23 O2
22 BIOW
21 RDYIN
20 BM1
19 SSEL
18 BD7
17 BD6
16 BD5
15 BD4
14 BD3
13 BD2
12 BD1
11 BD0
10 INT2
9 INT1
8 INT7
7 INT6
6 INT5
5 INT4
4 INT3
3 -18V
GND

MA25-1SMALL
25 +8V
24
23 +18V
22 ROMDIS
21 BA15
20 BA14
19 BA13
18 BA12
17 BA11
16 BA10
15 BA9
14 BA8
13 BA7
12 BA6
11 BA5
10 BA4
9 BA3
8 BA2
7 BA1
6 BA0
5 RESET
4 BMEMR
3 HOLD
2 BIOR
1 BHLDA

MA25-1SMALL
25 P25
24 BMEMW
23 O2
22 BIOW
21 RDYIN
20 BM1
19 SSEL
18 BD7
17 BD6
16 BD5
15 BD4
14 BD3
13 BD2
12 BD1
11 BD0
10 INT2
9 INT1
8 INT7
7 INT6
6 INT5
5 INT4
4 INT3
3 -18V
GND

MA25-1SMALL
25 +8V
24
23 +18V
22 ROMDIS
21 BA15
20 BA14
19 BA13
18 BA12
17 BA11
16 BA10
15 BA9
14 BA8
13 BA7
12 BA6
11 BA5
10 BA4
9 BA3
8 BA2
7 BA1
6 BA0
5 RESET
4 BMEMR
3 HOLD
2 BIOR
1 BHLDA

P201
INT2
EPIE
EPINT1
GND
100 RESIN
R4

RN2

+5V

C14
+5V
GND

IC6
2 A1 Y1 18 D0
3 A2 Y2 17 D1
4 A3 Y3 16 D2
5 A4 Y4 15 D3
6 A5 Y5 14 D4
7 A6 Y6 13 D5
8 A7 Y7 12 D6
9 A8 Y8 11 D7
1 G1
19 G2
74HCT540N

INT0
INT1
INT2
INT3
INT4
INT5
INT6
INT7

IC5
10 0   A0 9
11 1   A1 7
12 2   A2 6
13 3
1   4
2   5
3   6
4   7
5   EI GS 14
        EO 15
74LS148N

GND

+5V R1 GND
     1K

JP1
1
2
3
H37/H37

+5V R2
     1K

H37
JP2 1
     2

INTACK

INT

IC5P IC6P
+5V   +5V
16   20
VCC   VCC

8   10
GND   GND
GNDGND

When Interrupt occurs, CPU sets INTACK
74HCT540 puts a RSTn instruction on bus during INTACK

AS6C1008 should work in place of AS6C4008

ROM

RAM

ORG0

Real Time Clock