LSB

MSB

DIGITVALUE
(to display board)

74HC244
seconds buffer

SECLSB
3
2
6
7
2
4
6
8

SECMSB
3
2
6
7
11
13
15
17

20 Vcc

LSB 18
9

16
7

14
5

MSB 12
3

10

1 15 SECLSBEN
19 14 SECMSBEN

74HC244
minutes buffer

MINLSB
3
2
6
7
2
4
6
8

MINMSB
3
2
6
7
11
13
15
17

20 Vcc

LSB 18
9

16
7

14
5

MSB 12
3

10

1 13 MINLSBEN
19 12 MINMSBEN

74HC244
hours buffer

HORLSB
3
2
6
7
2
4
6
8

HORMSB
3
2
6
7
11
13
15
17

20 Vcc

LSB 18
9

16
7

14
5

MSB 12
3

10

1 11 HORLSBEN
19 10 HORMSBEN

74HC137
digit enable

16 Vcc
6

DIGITSELECT
(to display board)
1 LSB
2
3 MSB

4
5
8

LSB 15 SECLSBEN
14 SECMSBEN
13 MINLSBEN
12 MINMSBEN
11 HORLSBEN
MSB 10 HORMSBEN

CLOCKOUT

74HC192
seconds LSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

12

SECLSB

74HC192
minutes LSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

12

MINLSB

74HC192
hours LSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

12

HORLSB

ICM7242
clock source

Vcc
1
6

7

1.2K

Vcc

3.3µF

4
5

2 ÷2
3 ÷256

CLOCKOUT

74HC192
seconds MSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

74HC08

SECMSB

74HC192
minutes MSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

74HC08

MINMSB

74HC192
hours MSB

Vcc
4
11
16

5

14

1
8
9
10
15

LSB 3
2
6
MSB 7

74HC08

HORMSB

Digit board v1.0
Matthew M. Swann — swannman@mac.com
http://swannman.wordpress.com/projects/povclock