IC1P

+3V3

16 VCC   GND 8
IC1
+3V3
SER_IN   11 SER   QH 9
32   12 A
31   13 B
30   14 C
29   3 D
28   4 E
27   5 F
26   6 G   QH 7
25   H

GND   2 CLK
      15 INH
CS   1 SH/LD

74AC165D

JP3

5 +3V3
4
3 SER_IN
2 CS
1 CLK

JP4
+3V3
1
SER_OUT 2
         3 CS
CLK   4
         5

GND

IC1P
16 VCC   GND 8
IC2
+3V3
24 11 SER   QH 9
23 12 A
22 13 B
21 14 C
20   3 D
19   4 E
18   5 F
17   6 G   QH 7
        H

GND   2 CLK
      15 INH
CS   1 SH/LD

74AC165D

IC3P
16 VCC   GND 8
IC3
+3V3
16 11 SER   QH 9
15 12 A
14 13 B
13 14 C
12   3 D
11   4 E
10   5 F
 9   6 G   QH 7
        H

GND   2 CLK
      15 INH
CS   1 SH/LD

74AC165D

IC4P
16 VCC   GND 8
IC4
+3V3
 8 11 SER   QH 9   SER_OUT
 7 12 A
 6 13 B
 5 14 C
 4   3 D
 3   4 E
 2   5 F
 1   6 G   QH 7
        H

GND   2 CLK
      15 INH
CS   1 SH/LD

74AC165D

+3V3
1μ C4
GND

+3V3
1μ C3
GND

+3V3
1μ C1
GND

+3V3
1μ C2
GND

JP1
32 2   18
31 3   17 16 GND
30 4   16 15
29 5   15 14
28 6   14 13
27 7   13 12
26 8   12 11
25 9   11 10
24 10   10   9
23 11   9   8
22 12   8   7
21 13   7   6
20 14   6   5
19 15   5   4
18 16   4   3
17 17   3   2
   18   2   1
GND   JP2   GND

R1
32 R2 10k   +3V3
31 R3 10k
30 R4 10k
29 R5 10k
28 R6 10k
27 R7 10k
26 R8 10k
25 R9 10k
24 R10 10k
23 R11 10k
22 R12 10k
21 R13 10k
20 R14 10k
19 R15 10k
18 R16 10k
17 R17 10k
16 R18 10k
15 R19 10k
14 R20 10k
13 R21 10k
12 R22 10k
11 R23 10k
10 R24 10k
 9 R25 10k
 8 R26 10k
 7 R27 10k
 6 R28 10k
 5 R29 10k
 4 R30 10k
 3 R31 10k
 2 R32 10k
 1   10k