| | OUTPUT ATMEGA32 | | | | INPUT ATMEGA32 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | PA 3 | PA 2 | PA 1 | PA 0 | PA 7 | PA 6 | PA 5 | PA 4 | |
| | 8 | 4 | 2 | 1 | 8 | 4 | 2 | 1 | |
| Key | A | B | C | D | 1 | 2 | 3 | 4 | HEX |
| 7 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 12 |
| 8 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 22 |
| 9 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 42 |
| / | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 82 |
| 4 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 14 |
| 5 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 24 |
| 6 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 44 |
| * | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 84 |
| 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 18 |
| 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 28 |
| 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 48 |
| - | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 88 |
| ON/C | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 11 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 21 |
| = | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 41 |
| + | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 81 |

ATMEGA32 — OUTPUT ATMEGA32

| | PC 0 | PB 7 | PB 6 | PB 5 | PB 4 | PB 3 | PB 2 | PB 1 | PB 0 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 8 | 4 | 2 | 1 | 8 | 4 | 2 | 1 | |
| | dp | NULL | g | f | e | d | c | b | a | HEX |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| 8 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7F |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| / | 0 | 0 | | | | | | | | 01-20 |
| 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 08 |
| 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 20 |
| * | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 01 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 02 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 04 |
| - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| ON/C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| = | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |
| + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 |



a
b
c
d
e
f
g

dp



| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| INPUT 0 — A | 7 | 8 | 9 | / |
| INPUT 1 — B | 4 | 5 | 6 | X |
| INPUT 2 — C | 1 | 2 | 3 | - |
| INPUT 3 — D | ON/C | 0 | = | + |

OUTPUT 0  OUTPUT 1  OUTPUT 2  OUTPUT 3