

00002 count - initialize
 "for" loop
 mask - shift

00003 count - initialize
 for loop
 mask two bits + shift

$0x01 \ll i$
 $0x01 \ll (7-i)$

00005 count - initialize
 for loop
 mask + shift

Gray code

binary
 000
 001
 010
 011
 100
 101
 110
 111

reflected gray code

0 0000
 1 0001
 2 0011
 3 0010
 4 0110
 5 0111
 6 0101
 7 0100
 8 1100
 9 1101
 10 1111
 11 1110
 12 1010
 13 1011
 14 1001
 15 1000

