

ZyBook

- Sections

15.13

Binary

- Binary: two values
 - 0 or 1
 - 1 bit
- Byte: 8 bits
 - 2^8 patterns: 256
- 4 bits:
 - 2^4 patterns: 16
 - hexadecimal: 0-9,a-f

Decimal	Hexadecimal	Binary
0	0	0000
1	1	0001
2	2	0010
3	3	0011
4	4	0100
5	5	0101
6	6	0110
7	7	0111
8	8	1000
9	9	1001
10	a	1010
11	b	1011
12	c	1100
13	d	1101
14	e	1110
15	f	1111

Bit Operators

- And
 & 0x0f & 0x03
- Or
 | 0x10 & 0x01
- Shift Left
 << 0x10 << 1
- Shift Right
 >> 0x10 >> 1
- Negation
 ~ ~ 0x10