

## Viktiga termer i Tanenbaum, Structured Computer Organization

### Sorterat efter sidnummer

machine language	2
interpreter	2
virtual machine	2
assembler	7
high-level language	7
batch system	11
timesharing system	11
difference engine	13
analytical engine	14
eniac	17
von Neumann machine	18
Moore's law	25
cpu	39
bus	39
program counter	40
instruction register	40
data path	40
ALU	40
control store	45
microinstruction	45
RISC	46
CISC	46
prefetch buffer	48
pipeline	49
pipeline stage	49
processor latency	51
processor bandwidth	51
superscalar architecture	52
array processor	53
vector processor	54
mutiprocessor	55
bit	56
BCD	57
memory address	58
memory cell	58
byte	58
word	58
big endian	59
little endian	59
codeword	61
Hamming distance	61
parity bit	61
Haming code	64
cache	65
locality priniple	66
cache line	67
unified cache	67
split cache	67
SIMM	68
DIMM	68

### Sorterat i alfabetisk ordning

(a)synchronous bus	160
adder	135
ALU	40
ALU	138
amplitude modulation	106
analytical engine	14
array processor	53
ASCII	109
assembler	7
base	118
based-indexed addressing	338
basic block	281
batch system	11
baud rate	107
BCD	57
big endian	59
binary numbers	633
BIOS	74
bit	56
bit rate	107
bit slice	139
Boolean algebra	120
Boolean function	120
branch predction	271
bus	39
bus	156
bus arbiter	90
bus arbitration	165
bus driver	158
bus protocol	156
bus skew	160
bus transceiver	158
bus width	159
busy waiting	357
byte	58
cache	65
cache	265
cache line	67
carrier wave	106
CD-R	84
CD-ROM	80
CD-RW	86
circuit equivalence	123
CISC	46
clocked D latch	143
clocked SR latch	142
codeword	61
collector	118
combinational circuit	129
comparator	131

disk head	70	control store	45
disk sector	70	control store	213
disk track	70	cpu	39
Winchester disk	71	CRT	93
disk cylinder	71	cycle stealing	90
disk seek time	71	cycle stealing	359
disk rotational latency	71	CYMK	104
disk controller	73	daisy chaining	165
diskette	73	data path	40
floppy disk	73	data path	204
IDE disk	74	decoder	130
BIOS	74	demultiplexer	130
SCSI disk	75	difference engine	13
RAID	76	DIMM	68
striping	77	DIP	128
CD-ROM	80	direct addressing	334
High Sierra	83	direct-mapped cache	266
CD-R	84	disk controller	73
CD-RW	86	disk cylinder	71
DVD	86	disk head	70
DMA	90	disk rotational latency	71
interrupt handler	90	disk sector	70
bus arbiter	90	disk seek time	71
cycle stealing	90	disk track	70
ISA bus	91	diskette	73
EISA bus	91	DMA	90
PCI bus	91	DMA	358
CRT	93	dpi	102
LCD	94	duplex	108
UART	98	DVD	86
dpi	102	dynamic branch prediction	273
inkjet printer	102	dynamic RAM	152
laser printer	102	ECL	120
halftoning	104	edge triggered	144
CYMK	104	EDO DRAM	152
gamut	105	EEPROM	153
solid ink printer	105	EISA bus	91
modem	106	emitter	118
carrier wave	106	eniac	17
amplitude modulation	106	EPIC	392
frequency modulation	107	EPROM	153
phase modulation	107	excess 2 <sup>m</sup>	638
baud rate	107	expanding opcode	325
bit rate	107	exponent (float point)	644
duplex	108	fetch-execute cycle	204
ISDN	108	flash memory	153
ASCII	109	flip-flop	144
Latin-1	111	floppy disk	73
UNICODE	111	frequency modulation	107
collector	118	gamut	105
base	118	gate delay	129
emitter	118	half adder	135
NOT	119	halftoning	104
NAND	119	Haming code	64
NOR	119	Hamming distance	61
MOS	120	handshake	164

TTL	120	hexadecimal numbers	633
ECL	120	High Sierra	83
Boolean algebra	120	high-level language	7
Boolean function	120	IDE disk	74
truth table	120	IFU	249
circuit equivalence	123	immediate operand	334
positive logic	127	indexed addressing	336
negative logic	127	inkjet printer	102
integrate circuit	128	instruction register	40
DIP	128	integrate circuit	128
VLSI	128	interpreter	2
gate delay	129	interrupt controller	169
combinational circuit	129	interrupt handler	90
multiplexer	130	interrupt vector	169
demultiplexer	130	ISA bus	91
decoder	130	ISA bus	181
comparator	131	ISDN	108
PLA	132	L2 cache	265
shifter	134	laser printer	102
adder	135	Latin-1	111
half adder	135	LCD	94
ripple carry	137	level triggered	144
ALU	138	little endian	59
bit slice	139	local variable frame	220
SR latch	141	locality priniple	66
clocked SR latch	142	LRU	269
clocked D latch	143	LV	218
flip-flop	144	machine language	2
edge triggered	144	mantissa	644
level triggered	144	MAR	209
tri-state	149	master/slave	157
static RAM	152	MBR	209
dynamic RAM	152	MDR	209
EDO DRAM	152	memory address	58
SDRAM	153	memory cell	58
ROM	153	memory-mapped I/O	195
PROM	153	microinstruction	45
EPROM	153	MIR	215
EEPROM	153	modem	106
flash memory	153	Moore's law	25
pinout	154	MOS	120
bus	156	MPC	215
bus protocol	156	multiplexed bus	160
master/slave	157	multiplexer	130
bus driver	158	mutiprocessor	55
bus transceiver	158	NAND	119
wired-OR	158	negative logic	127
bus width	159	NOR	119
bus skew	160	normalized (float point)	646
multiplexed bus	160	NOT	119
(a)synchronous bus	160	octal numbers	633
handshake	164	one's complement	637
bus arbitration	165	opcode	204
daisy chaining	165	operand stack	219
interrupt controller	169	out-of-order execution	276
interrupt vector	169	parity bit	61

ISA bus	181	partial address decoding	197
PCI bus	183	path length	244
USB bus	189	PCI bus	91
UART	193	PCI bus	183
USART	193	phase modulation	107
PIO	194	pinout	154
memory-mapped I/O	195	PIO	194
partial address decoding	197	pipeline	49
opcode	204	pipeline	256
fetch-execute cycle	204	pipeline stage	49
data path	204	pipeline stage	260
MAR	209	pipeline stalling	258
MDR	209	PLA	132
MBR	209	positive logic	127
sign extension	210	precise interrupt	279
control store	213	prefetch buffer	48
MPC	215	prefetching	253
MIR	215	processor bandwidth	51
LV	218	processor latency	51
SP	218	program counter	40
operand stack	219	PROM	153
local variable frame	220	PSW	310
path length	244	RAID	76
IFU	249	RAW dependence	258
prefetching	253	register indirect addressing	335
pipeline	256	register renaming	280
RAW dependence	258	register window	315
pipeline stalling	258	reverse Polish notation	339
pipeline stage	260	ripple carry	137
cache	265	RISC	46
split cache	265	ROM	153
L2 cache	265	scoreboard	277
spatial locality	266	SCSI disk	75
temporal locality	266	SDRAM	153
direct-mapped cache	266	set-associative cache	269
set-associative cache	269	shifter	134
LRU	269	sign extension	210
write through	270	signed magnitude	637
write back	270	SIMM	68
branch predction	271	solid ink printer	105
dynamic branch prediction	273	SP	218
static branch prediction	275	spatial locality	266
out-of-order execution	276	speculative execution	282
scoreboard	277	speculative load	395
precise interrupt	279	split cache	67
register renaming	280	split cache	265
basic block	281	SR latch	141
speculative execution	282	static branch prediction	275
PSW	310	static RAM	152
register window	315	striping	77
expanding opcode	325	superscalar architecture	52
immediate operand	334	temporal locality	266
direct addressing	334	timesharing system	11
register indirect addressing	335	tri-state	149
indexed addressing	336	truth table	120
based-indexed addressing	338	TTL	120

reverse Polish notation	339	two's complement	637
busy waiting	357	UART	98
DMA	358	UART	193
cycle stealing	359	underflow	645
EPIC	392	UNICODE	111
speculative load	395	unified cache	67
binary numbers	633	USART	193
octal numbers	633	USB bus	189
hexadecimal numbers	633	vector processor	54
signed magnitude	637	Winchester disk	71
one's complement	637	wired-OR	158
two's complement	637	virtual machine	2
excess $2^m$	638	VLSI	128
mantissa	644	von Neumann machine	18
exponent (float point)	644	word	58
underflow	645	write back	270
normalized (float point)	646	write through	270