

A+ Topics

IRQ	Function
1	Keyboard Controller
2	Available
3	Serial Port 2 (COM2:)
4	Serial Port 1 (COM1:)
5	Hard Disk Controller
6	Floppy disk controller
7	Parallel Port (LPT1:)
0	System Timer

I/O Address	Address
System Timer	040-043
Keyboard	060-064
IRQ Controller	0A0-0A1
Real-Time Clock	070-07F
Motherboard Mouse Port	238-23B
Math coprocessor	0F8-OFF
Sound Parallel Port (LPT2)	220-22F
Floppy Disk Controller	3F0-3F7

CD Drive	Speed
1X	150 kbps
2X	300 kbps
3X	450 kbps

Dos Commands

Dos=High	Moves DOS to HM
cd\	Go to Root directory

Memory

Conventional Memory	0 - 640K
Upper Memory Area (384k)	640 - 1 MB
Extended Memory	Mem > 1gb
Himem.sys	Ext Mem
Static RAM	Faster
Expanded Memory	64k of UMA
Emm386.exe	Exp Mem
Rom shadowing	Bios 2 RAM

Serial Port

Baud rate	Bits per second
UART	(Universal Asynchronous Receiver Transmitter) - translates serial data to parallel data
Cable length	Limited to 50 feet

Serial	COM Assignments
COM1	3F8 IRQ4
COM2	2F8 IRQ3
COM3	3E8 IRQ4
COM4	2E8 IRQ3

LPT Parallel	Connector
PC	DB25 male
Cable	DB25 fema

Dos System

Protected Mode
Limits an application to its memory space
Program's memory space is protected
Used by all Windows versions after 3.x

Real mode
Restricts applications to addressing 1 MB of RAM
DOS programs

Multitasking
Operating system supports more than one program at a time.

Cooperative Multitasking
One program should give way if another program requests a resource (3.x)

Preemptive Multitasking -
The OS has authority to give our resources (95 and 98)

Multithreading
A single program can create several programs under its control (pagination, spell checker, etc.)

Bus	Function
Data bus	Moves information.
Address bus	Identifies storage location
Control bus	Controls data movement

Parallel Ports

Transmits	8 bits at a time
Ports	LPT1 and LPT2
Cable Length	Up to 10 Feet
Connector	DB25

Parallel Ports

	Ability
Unidirectional	8 bits, Receives Standard Mode
Bi-directional	Sends & Receives Used w/ Ext. Drives

IEEE1284 Standards

Enhanced Capability Port (ECP)
Uses DMA channel.
10 times faster than bi-directional.

Enhanced Parallel Port (EPP)
Increases throughput 10 times over bi-directional.
Does not use DMA channel.

CD-Rom	Key
Disable Auto rum	Shift