

Offset Hex	Offset Dec	BIOS Service	Field Size	Function
00h	0	Int 14h	2 bytes	Base I/O address for serial port 1 (communications port 1 - COM 1)
02h	2	Int 14h	2 bytes	Base I/O address for serial port 2 (communications port 2 - COM 2)
04h	4	Int 14h	2 bytes	Base I/O address for serial port 3 (communications port 3 - COM 3)
06h	6	Int 14h	2 bytes	Base I/O address for serial port 4 (communications port 4 - COM 4)
08h	8	Int 17h	2 bytes	Base I/O address for parallel port 1 (printer port 1 - LPT 1)
0Ah	10	Int 17h	2 bytes	Base I/O address for parallel port 2 (printer port 2 - LPT 2)
0Ch	12	Int 17h	2 bytes	Base I/O address for parallel port 3 (printer port 3 - LPT 3)
0Eh	14	POST	2 bytes	Base I/O address for parallel port 4 (printer port 4 - LPT 4) (Only found in PC/XT systems)
10h	16	Int 11h	2 bytes	Equipment Word
				Bits 15-14 indicate the number of parallel ports installed
				00b = 1 parallel port
				01b = 2 parallel ports
				03b = 3 parallel ports
				Bits 13-12 are reserved
				Bits 11-9 indicate the number of serial ports installed
				000b = none
				001b = 1 serial port
				002b = 2 serial ports
				003b = 3 serial ports
				004b = 4 serial ports
				Bit 8 is reserved
				Bit 7-6 indicate the number of floppy drives installed
				0b = 1 floppy drive
				1b = 2 floppy drives
				Bits 5-4 indicate the video mode
				00b = EGA or later
				01b = color 40x25
				10b = color 80x25
				11b = monochrome 80x25
				Bit 3 is reserved
				Bit 2 indicates if a PS/2 mouse is installed
				0b = not installed
				1b = installed
				Bit 1 indicates if a math coprocessor is installed
				0b = not installed
				1b = installed
				Bit 0 indicates if a boot floppy is installed
				0b = not installed
				1b = installed
12h	18	POST	1 byte	Interrupt flag - Manufacturing test
13h	19	Int 12h	2 bytes	Memory size in Kb
15h	21		2 bytes	Error codes for AT+; Adapter memory size for PC and XT
17h	22	Int 16h	1 byte	Keyboard shift flags 1
				Bit 7 indicates if Insert is on or off
				0b = Insert off
				1b = Insert on
				Bit 6 indicates if CapsLock is on or off
				0b = CapsLock off
				1b = CapsLock on
				Bit 5 indicates if NumLock is on or off
				0b = NumLock off
				1b = NumLock on
				Bit 4 indicates if ScrollLock is on or off
				0b = ScrollLock off
				1b = ScrollLock on
				Bit 3 indicates if the Alt key is up or down
				0b = Alt key is up
				1b = Alt key is down
				Bit 2 indicates if the Control key is up or down
				0b = Control key is up
				1b = Control key is down
				Bit 1 indicates if the Left Shift key is up or down
				0b = Left Shift key is up
				1b = Left Shift key is down
				Bit 0 indicates if the Right Shift key is up or down

				0b = Right Shift key is up
				1b = Right Shift key is down
18h	23	Int 16h	1 byte	Keyboard shift flags 2
				Bit 7 indicates if the Insert key is up or down
				0b = Insert key is up
				1b = Insert key is down
				Bit 6 indicates if the CapsLock key is up or down
				0b = CapsLock key is up
				1b = CapsLock key is down
				Bit 5 indicates if the NumLock key is up or down
				0b = NumLock key is up
				1b = NumLock key is down
				Bit 4 indicates if the ScrollLock key is up or down
				0b = ScrollLock key is up
				1b = ScrollLock key is down
				Bit 3 indicates if the Pause key is active or inactive
				0b = pause key is inactive
				1b = Pause key is active
				Bit 2 indicates if the SysReg key is up or down
				0b = SysReg key is up
				1b = SysReg key is down
				Bit 1 indicates if the Left Alt key is up or down
				0b = Left Alt key is up
				1b = Left Alt key is down
				Bit 0 indicates if the Right Alt key is up or down
				0b = Right Alt key is up
				1b = Right Alt key is down
19h	24	Int 09h	1 byte	Alt Numpad work area
1Ah	26	Int 16h	2 bytes	Pointer to the address of the next character in the keyboard buffer
1Ch	28	Int 16h	2 bytes	Pointer to the address of the last character in the keyboard buffer
1Eh	60	Int 16h	32 bytes	Keyboard buffer
3Eh	61	Int 13h	1 byte	Floppy disk drive calibration status
				Bits 7-4 are reserved
				Bit 3 = floppy drive 3 (PC, XT)
				Bit 2 = floppy drive 2 (PC, XT)
				Bit 1 = floppy drive 1
				Bit 0 = floppy drive 0
				0b indicates not calibrated
				1b indicates calibrated
3Fh	62	Int 13h	1 byte	Floppy disk drive motor status
				Bit 7 indicates current operation
				0b = read or verify operation
				1b = write or format operation
				Bit 6 is not used
				Bit 5-4 indicates drive select
				00b = Drive 0
				01b = Drive 1
				10b = Drive 2 (PC, XT)
				11b = Drive 4 (PC, XT)
				Bit 3 indicates drive 3 motor
				0b = motor off
				1b = motor on
				Bit 2 indicates drive 2 motor
				0b = motor off
				1b = motor on
				Bit 1 indicates drive 0 motor
				0b = motor off
				1b = motor on
				0b = motor off
				1b = motor on
40h	63	Int 13h	1 byte	Floppy disk drive motor time-out
41h	64	Int 13h	1 byte	Floppy disk drive status
				Bit 7 indicates drive ready status
				0b = drive ready
				1b = drive not ready (time out)
				Bit 6 indicates seek status
				0b = no seek error detected

				1b = indicates a seek error was detected
				Bit 5 indicates floppy disk controller test
				0b = floppy disk controller passed
				1b = floppy disk controller failed
				Bit 4-0 error codes
				00000b = no errors
				00001b = illegal function requested
				00010b = address mark not found
				00011b = write protect error
				00100b = sector not found
				00110b = diskette change line active
				01000b = DMA overrun
				01001b = DMA boundary error
				01100b = unknown media type
				10000b = CRC error during read
42h	65	Int 13h	1 byte	Hard disk and floppy controller status register 0
				Bit 7-6 indicate the interrupt code
				00b = command completed normally
				01b = command terminated abnormally
				10b = abnormal termination, ready line on, or diskette changed
				11b = seek command not completed
				Bit 5 indicated seek command
				0b = seek command not completed
				1b = seek command completed
				Bit 4 indicated drive fault
				0b = no drive fault
				1b = drive fault
				Bit 3 indicates drive ready
				0b = drive ready
				1b = drive not ready
				Bit 2 indicates head state when interrupt occurred
				00b = drive 0
				01b = drive 1
				10b = drive 2 (PC, XT)
				11b = drive 3 (PC, XT)
				Bit 1-0 indicates drive select
				00b = drive 0
				01b = drive 1
				10b = drive 2 (PC, XT)
				11b = drive 3 (PC, XT)
43h	66	Int 13h	1 byte	Floppy drive controller status register 1
				Bit 7-0 indicates no error
				Bit 7, 1b = indicates attempted access beyond last cylinder
				Bit 6, 0b = not used
				Bit 5, 1b = CRC error during read
				Bit 4, 1b = DMA overrun
				Bit 3, 0b = not used
				Bit 2, 1b = Sector not found or reading diskette ID failed
				Bit 1, 1b = medium write protected
				Bit 0, 1b = missing address mark
44h	67	Int 13h	1 byte	Floppy drive controller status register 2
				Bit 7, 0b = not used
				Bit 6, 1b = deleted data address mark
				Bit 5, 1b = CRC error detected
				Bit 4, 1b = wrong cylinder
				Bit 3, 1b = condition of equal during verify
				Bit 2, 1b = sector not found during verify
				Bit 1, 1b = bad cylinder
				Bit 0, 1b = address mark not found during read
45h	68	Int 13h	1 byte	Floppy disk controller: cylinder number
46h	69	Int 13h	1 byte	Floppy disk controller: head number
47h	70	Int 13h	1 byte	Floppy disk controller: sector number
48h	71		1 byte	Floppy disk controller: number of byte written
49h	72	Int 10h	1 byte	Active video mode setting
4Ah	74	Int 10h	2 bytes	Number of textcolumns per row for the active video mode
4Ch	76	Int 10h	2 bytes	Size of active video in page bytes
4Eh	78	Int 10h	2 bytes	Offset address of the active video page relative to the start of video RAM

50h	80	Int 10h	2 bytes	Cursor position for video page 0
52h	82	Int 10h	2 bytes	Cursor position for video page 1
54h	84	Int 10h	2 bytes	Cursor position for video page 2
56h	86	Int 10h	2 bytes	Cursor position for video page 3
58h	88	Int 10h	2 bytes	Cursor position for video page 4
5Ah	90	Int 10h	2 bytes	Cursor position for video page 5
5Ch	92	Int 10h	2 bytes	Cursor position for video page 6
5Eh	94	Int 10h	2 bytes	Cursor position for video page 7
60h	96	Int 10h	2 bytes	Cursor shape
62h	97	Int 10h	1 byte	Active video page
63h	99	Int 10h	2 bytes	I/O port address for the video display adapter
65h	100	Int 10h	1 byte	Video display adapter internal mode register
				Bit 7, 0b = not used
				Bit 6, 0b = not used
				Bit 5
				0b = attribute bit controls background intensity
				1b = attribute bit controls blinking
				Bit 4, 1b = mode 6 graphics operation
				Bit 3 indicates video signal
				0b = video signal disabled
				1b = video signal enabled
				Bit 2 indicates color operation
				0b = color operation
				1b = monochrome operation
				Bit 1, 1b = mode 4/5 graphics operation
				Bit 0, 1b = mode 2/3 test operation
66h	101	Int 10h	1 byte	Color palette
				Bit 7, 0b = not used
				Bit 6, 0b = not used
				Bit 5 indicates mode 5 foreground colors
				0b = green/red/yellow
				1b = cyan/magenta/white
				Bit 4 indicates background color
				0b = normal background color
				1b = intensified background color
				Bit 3 indicates intensified border color (mode 2) and background color (mode 5)
				Bit 2 indicates red
				Bit 1 indicates green
				Bit 0 indicates blue
67h	103		2 bytes	Adapter ROM offset address
69h	106		2 bytes	Adapter ROM segment address
6Bh	107		1 byte	Last interrupt (not PC)
				Bit 7 indicates IRQ 7 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 6 indicates IRQ 6 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 5 indicates IRQ 5 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 4 indicates IRQ 4 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 3 indicates IRQ 3 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 2 indicates IRQ 2 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 1 indicates IRQ 1 hardware interrupt
				0b = did not occur
				01 = did occur
				Bit 0 indicates IRQ 0 hardware interrupt
				0b = did not occur
				01 = did occur
6Ch	111	Int 1Ah	4 bytes	Counter for Interrupt 1Ah

70c	112	Int 1Ah	1 byte	Timer 24 hour flag
71h	113	Int 16h	1 byte	Keyboard Ctrl-Break flag
72h	115	POST	2 bytes	Soft reset flag
74h	116	Int 13h	1 byte	Status of last hard disk operation
				00h = no errors
				01h = invalid function requested
				02h = address mark not found
				04h = sector not found
				05h = reset failed
				06h = removable media changed
				07h = drive parameter activity failed
				08h = DMA overrun
				09h = DMA boundary overrun
				0Ah = bad sector flag detected
				0Bh = bad track detected
				0Dh = invalid number of sectors on format
				0Eh = control data address mark detected
				0Fh = DMA arbitration level out of range
				10h = uncorrectable ECC or CRC error
				11h = ECC corrected data error
				20h = general controller failure
				40h = seek operation failed
				80h = timeout
				AAh = drive not ready
				BBh = undefined error occurred
				CCh = write fault on selected drive
				E0h = status error or error register is zero
				FFh = sense operation failed
75h	117	Int 13h	1 byte	Number of hard disk drives
76h	118	Int 13h	1 byte	Hard disk control byte
				Bit 7
				0b = enables retries on disk error
				1b = disables retries on disk error
				Bit 6
				0b = enables retries on disk error
				1b = enables retries on disk error
				Bit 5, 0b = not used
				Bit 4, 0b = not used
				Bit 3
				0b = drive has less than 8 heads
				1b = drive has more than 8 heads
				Bit 2, 0b = not used
				Bit 1, 0b = not used
				Bit 0, 0b = not used
77h	119	Int 13h	1 byte	Offset address of hard disk I/O port (XT)
78h	120	Int 17h	1 byte	Parallel port 1 timeout
79h	121	Int 17h	1 byte	Parallel port 2 timeout
7Ah	122	Int 17h	1 byte	Parallel port 3 timeout
7Bh	123		1 byte	Parallel port 4 timeout (PC, XT) support for virtual DMA services (VDS)
				Bit 7, 0b = not used
				Bit 6, 0b = not used
				Bit 5 indicates virtual DMA services
				0b = not supported
				1b = supported
				Bit 4, 0b = not used
				Bit 3 indicates chaining on interrupt 4Bh
				0b = not required
				1b = required
				Bit 2, 0b = not used
				Bit 1, 0b = not used
				Bit 0, 0b = not used
7Ch	124	Int 14h	1 byte	Serial port 1 timeout
7Dh	125	Int 14h	1 byte	Serial port 2 timeout
7Eh	126	Int 14h	1 byte	Serial port 3 timeout
7Fh	127	Int 14h	1 byte	Serial port 4 timeout
80h	129	Int 16h	2 bytes	Starting address of keyboard buffer
82h	131	Int 16h	2 bytes	Ending address of keyboard buffer

84h	132	Int 10h	1 byte	Number of video rows (minus 1)
85h	134	Int 10h	2 bytes	Number of scan lines per character
87h	135	Int 10h	1 byte	Video display adapter options
				Bit 7 indicates bit 7 of the last video mode
				0b = clear display buffer when setting mode
				1b = do not clear the display buffer
				Bit 6-4 indicates the amount of memory on the video display adapter
				000b = 64Kb
				001b = 128Kb
				010b = 192Kb
				011b = 256Kb
				100b = 512Kb
				110 = 1024Kb or more
				Bit 3 indicates video subsystem
				0b = not active
				1b = active
				Bit 2 is reserved
				Bit 1 indicates monitor type
				0b = color
				1b = monochrome
				Bit 0 indicates alphanumeric cursor emulation
				0b = disabled
				1b = enabled
88h	136	Int 10h	1 byte	Video display adapter switches
				Bit 7 indicates state of feature connector line 1
				Bit 6 indicates state of feature connector line 0
				Bit 5-4 not used
				Bit 3-0 indicate adapter type switch settings
				0000b = MDA/color 40x25
				0001b = MDA/color 80x25
				0010b = MDA/high-resolution 80x25
				0011b = MDA/high-resolution enhanced
				0100b = CGA 40x25/monochrome
				0101b = CGA 80x25/monochrome
				0110b = color 40x25/MDA
				0111b = color 80x25/MDA
				1000b = high-resolution 80x25/MDA
				1001b = high-resolution enhanced/MDA
				1010b = monochrome/CGA 40x25
				1011b = monochrome/CGA 80x25
89h	137	Int 10h	1 byte	VGA video flags 1
				Bit 7 and 4 indicate scanline mode
				00b = 350-line mode
				01b = 400-line mode
				10b = 200-line mode
				Bit 6 indicates display switch
				0b = disabled
				1b = enabled
				Bit 5 is reserved
				Bit 3 indicates default palette loading
				0b = disabled
				1b = enabled
				Bit 2 indicates monitor type
				0b = color
				1b = monochrome
				Bit 1 indicates gray scale summing
				0b = disabled
				1b = enabled
				Bit 0 indicates VGA active state
				0b = VGA inactive
				1b = VGA active
8Ah	138	Int 10h	1 byte	VGA video flags 2
8Bh	139	Int 13h	1 byte	Floppy disk configuration data
				Bit 7-6 indicate last data sent to the controller
				00b = 500 Kbit/sec/sec
				01b = 300 Kbit/sec
				10b = 250 Kbit/sec

				11b = rate not set or 1 Mbit/sec
				Bit 5-4 indicate last drive step rate sent to the controller
				00b = 8ms
				01b = 7ms
				10b = 6ms
				11b = 5ms
				Bit 3-2 indicate data rate, set at start of operation (Bits 7-6)
				Bit 1-0 not used
8Ch	140	Int 13h	1 byte	Hard disk drive controller status
				Bit 7 indicates controller state
				0b = controller not busy
				1b = controller busy
				Bit 6 indicates drive ready state
				0b = drive selected not ready
				1b = drive selected ready
				Bit 5 indicates write fault
				0b = write fault did not occur
				1b = write error occurred
				Bit 4 indicates seek state
				0b = drive selected seeking
				1b = drive selected seek complete
				Bit 3 indicates data request
				0b = data request is inactive
				1b = data request is active
				Bit 2 indicates data correction
				0b = data not corrected
				1b = data corrected
				Bit 1 indicates index pulse state
				0b = index pulse inactive
				1b = index pulse active
				Bit 0 indicates error
				0b = no error
				1b = error in previous command
8Dh	141	Int 13h	1 byte	Hard disk drive error
				Bit 7 indicates bad sector
				0b = not used
				1b = bad sector detected
				Bit 6 indicates ECC error
				0b = not used
				1b = uncorrectable ECC error occurred
				Bit 5 indicates media state
				0b = not used
				1b = media changed
				Bit 4 indicates sector state
				0b = not used
				1b = ID or target sector not found
				Bit 3 indicates media change request state
				0b = not used
				1b = media change requested
				Bit 2 indicates command state
				0b = not used
				1b = command aborted
				Bit 1 indicates drive track error
				0b = not used
				1b = track 0 not found
				Bit 0 indicates address mark
				0b = not used
				1b = address mark not found
8Eh	142	Int 13h	1 byte	Hard disk drive task complete flag
8Fh	143	Int 13h	1 byte	Floppy disk drive information
				Bit 7 not used
				Bit 6 indicates drive 1 type determination
				0b = not determined
				1b = determined
				Bit 5 indicates drive 1 multirate status
				0b = no
				1b = yes

				Bit 4 indicates diskette 1 change line detection
				0b = no
				1b = yes
				Bit 3 not used
				Bit 2 indicates drive 0 type determination
				0b = not determined
				1b = determined
				Bit 1 indicates drive 0 multirate status
				0b = no
				1b = yes
				Bit 0 indicates diskette 0 change line detection
				0b = no
				1b = yes
90h	144	Int 13h	1 byte	Diskette 0 media state
				Bit 7-6 indicate transfer rate
				00b = 500 Kbit/sec
				01b = 300 Kbit/sec
				10b = 250 Kbit/sec
				11b = 1 Mbit/sec
				Bit 5 indicates double stepping
				0b = not required
				1b = required
				Bit 4 indicates media in floppy drive
				0b = unknown media
				1b = known media
				Bit 3 not used
				Bit 2-0 indicates last access
				000b = trying 360k media in 360K drive
				001b = trying 360K media in 1.2M drive
				010b = trying 1.2M media in 1.2M drive
				011b = known 360K media on 360K drive
				100b = known 360K media in 1.2M drive
				101b = known 1.2M media in 1.2M drive
				110b = not used
				111b = 720K media in 720K drive or 1.44M media in 1.44M drive
91h	145	Int 13h	1 byte	Diskette 1 media state
				Bit 7-6 indicate transfer rate
				00b = 500 Kbit/sec
				01b = 300 Kbit/sec
				10b = 250 Kbit/sec
				11b = 1 Mbit/sec
				Bit 5 indicates double stepping
				0b = not required
				1b = required
				Bit 4 indicates media in floppy drive
				0b = unknown media
				1b = known media
				Bit 3 not used
				Bit 2-0 indicates last access
				000b = trying 360k media in 360K drive
				001b = trying 360K media in 1.2M drive
				010b = trying 1.2M media in 1.2M drive
				011b = known 360K media on 360K drive
				100b = known 360K media in 1.2M drive
				101b = known 1.2M media in 1.2M drive
				110b = not used
				111b = 720K media in 720K drive or 1.44M media in 1.44M drive
92h	146	Int 13h	1 byte	Diskette 0 operational starting state
				Bit 7 indicates data transfer rate
				00b = 500 Kbit/sec
				01b = 300 Kbit/sec
				10b = 250 Kbit/sec
				11b = 1 Mbit/sec
				Bits 5-3 not used
				Bit 2 indicates drive determination
				0b = drive type not determined
				1b = drive type determined

				Bit 1 indicates drive multirate status
				0b = drive is not multirate
				1b = drive is multirate
				Bit 0 indicates change line detection
				0b = no change line detection
				1b = change line detection
93h	147	Int 13h	1 byte	Diskette 1 operational starting status
				Bit 7 indicates data transfer rate
				00b = 500 Kbit/sec
				01b = 300 Kbit/sec
				10b = 250 Kbit/sec
				11b = 1 Mbit/sec
				Bits 5-3 not used
				Bit 2 indicates drive determination
				0b = drive type not determined
				1b = drive type determined
				Bit 1 indicates drive multirate status
				0b = drive is not multirate
				1b = drive is multirate
				Bit 0 indicates change line detection
				0b = no change line detection
				1b = change line detection
94h	148	Int 13h	1 byte	Diskette 0 current cylinder
95h	149	Int 13h	1 byte	Diskette 1 current cylinder
96h	150	Int 16h	1 byte	Keyboard status flags 3
				Bit 7, 1b = reading two byte keyboard ID in progress
				Bit 6, 1b = last code was first ID character
				Bit 5, 1b = forced Numlock on
				Bit 4 indicates presence of 101/102 key keyboard
				0b = present
				1b = not present
				Bit 3 indicates right alt key active
				0b = not active
				1b = active
				Bit 2 indicates right control key active
				0b = not active
				1b = active
				Bit 1, 1b = last scancode was E0h
				Bit 0, 1b = last scancode was E1h
97h	151	Int 16h	1 byte	Keyboard status flags 4
				Bit 7, 1b = keyboard transmit error
				Bit 6, 1b = LED update in progress
				Bit 5, 1b = re-send code received
				Bit 4, 1b = acknowledge code received
				Bit 3, 1b = reserved
				Bit 2 indicates CapsLock LED state
				0b = CapsLock LED off
				1b = CapsLock LED on
				Bit 1 indicates NumLock LED state
				0b = NumLock LED off
				1b = NumLock LED on
				Bit 0 indicates ScrollLock LED state
				0b = ScrollLock LED off
				1b = ScrollLock LED on
98h	155		4 bytes	Segment:Offset address of user wait flag pointer
9Ch	159		4 bytes	User wait count
A0h	160		1 byte	User wait flag
				Bit 7, 1b = wait time has elapsed
				Bit 6-1 not used
				Bit 0 indicates wait progress
				0b = no wait in progress
				1b = wait in progress
A1h	167		7 bytes	Local area network (LAN) bytes
A8h	171		4 bytes	Segment:Offset address of video parameter control block
ACH	239		68 bytes	Reserved
F0h	255		16 bytes	Intra-applications communications area