

Interruptvektoren

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Die nachfolgende Tabelle zeigt eine Übersicht über alle Interruptvektoren.

Der Hinweis in der **ersten Spalte** bezieht sich auf den Programmabschnitt, der den jeweiligen Interrupt erstmals initialisiert:

- B BIOS-Interrupt
- H BIOS-Hardwareinterrupt
- M MSDOS-Interrupt
- N Netzwerk-Interrupt
- P Programm-Interrupt

Allerdings sind die endgültigen Verhältnisse nicht ganz so einfach, denn bestehende Interruptvektoren werden von nachfolgend geladenen Programmen vielfach umgelenkt und dessen Funktionen erweitert oder ersetzt.

Die **zweite Spalte** gibt die Interruptnummer an und die **dritte Spalte** die Unterfunktionen, die man im AH-Register einstellt. (Bei den Hardwareinterrupts 8..F und 70..7F kann es keine Unterfunktionen geben.

Den aktuellen Wert eines Interrupts kann man mit Debug so feststellen: In einem DOS-Fenster ruft man DEBUG auf und berechnet den Offset des gewünschten Vektors, z.B. 5 (=Printscreen). Offset = 4x5=20=14H. Der DEBUG-Befehl **D 0:14** zeigt den Speicherinhalt ab Adresse 14H. Die ersten 4 Bytes sind der Wert des Print-Screen-Interrupts, allerdings muss man die Bytes verkehrt herum lesen, denn zuerst kommt der 16-Bit Offset-Wert und dann erst der 16-Bit Segment-Wert; bei beiden kommt das niederwertige Byte zuerst.

H	0B	IRQ-3 COM2	6F	Video7 VGA,VEGA VGA	
H	0C	IRQ-4 COM1	70	Get video ram address (TANDY 1000)	
H	0D	IRQ-5 Fixed disk (PC), LPT (AT/PS)	71	Get incram addresses (TANDY 1000)	
H	0E	IRQ-6 Diskette	72	Scroll screen right (TANDY 1000)	
H	0F	IRQ-7 LPT	73	Scroll screen left (TANDY 1000)	
B	10	Video	BF	Compaq Portable Extensions	
	00	Set video mode	EF	MSHERC.COM	
	01	Set cursor characteristics	F0	Read one register (Microsoft Mouse EGA support)	
	02	Set cursor position	F1	Write one register (Microsoft Mouse EGA support)	
	03	Read cursor position	F2	Read register range (Microsoft Mouse EGA support)	
	04	Read light pen position (all but PS)	F3	Write register range (Microsoft Mouse EGA support)	
	05	Select display page	F4	Read register set (Microsoft Mouse EGA support)	
	06	Scroll page up	F5	Write register set (Microsoft Mouse EGA support)	
	07	Scroll page down	F6	Revert to def. registers (Microsoft Mouse EGA support)	
	08	Read attributes/character at cursor position	F7	Define def. register table (Microsoft Mouse EGA support)	
	09	Write attributes/characters at cursor position	FA	Interrogate driver (Microsoft Mouse EGA support)	
	0A	Write characters only at cursor position	FE	Get video buffer (TopView)	
	0B	Set color palette	FF	Update real screen from video buffer (TopView)	
	0C	Write dot on screen	B	11	Equipment determination
	0D	Read dot on screen	B	12	Memory size
	0E	Write character and advance cursor (TTY write)	B	13	Disk
	0F	Get current video mode		00	Reset disk system
	10	Set palette register		01	Status of disk system
	11	Text-mode character generator functions		02	Read sectors into memory
	12	Alternate function select/Get EGA info		03	Write sectors from memory
	13	Write string		04	Verify sectors
	14	Load user-specified LCD character font (CONVERTIBLE)		05	Format track
	15	Get physical display parameters		06	Format track and set bad sector flags
	1A	Display combination (PS,VGA/MCGA)		07	Format drive starting at given track
	1B	Functionality/state information (PS,VGA/MCGA)		08	Get current drive parameters
	1C	Save/restore video state (PS50+,VGA)		09	Initialize two fixed disk base tables
	30	Locate 3270PC configuration table		0A	Read long
	40	Set graphics mode (Hercules GRAFIX)		0B	Write long
	41	Set text mode (Hercules GRAFIX)		0C	Seek to cylinder
	42	Clear current page (Hercules GRAFIX)		0D	Alternate disk reset
	43	Select drawing page (Hercules GRAFIX)		0E	Read sector buffer
	44	Select drawing function (Hercules GRAFIX)		0F	Write sector buffer
	45	Select page to display (Hercules GRAFIX)		10	Test for drive ready
	46	Draw one pixel (Hercules GRAFIX)		11	Recalibrate drive
	47	Find pixel value (Hercules GRAFIX)		12	Controler RAM diagnostic
	48	Move to point (Hercules GRAFIX)		13	Drive diagnostic
	49	Draw to point (Hercules GRAFIX)		14	Controller diagnostics
	4A	Block fill (Hercules GRAFIX)		15	Get type
	4B	Display character (Hercules GRAFIX)		16	Change of disk status
	4C	Draw arc (Hercules GRAFIX)		17	Set type
	4D	Draw circle (Hercules GRAFIX)		18	Set media type for format
	4E	Fill area (Hercules GRAFIX)			
	4F	VESA SuperVGA BIOS			
	6A	Direct Graphics Interface Standard (DGIS)			

INT	FKT	Function
B	00	Divide error
B	01	Single-step
B	01	Debugging exceptions
B	02	Hardware NMI
B	03	One-byte
B	04	Overflow
B	05	Print-screen
B	05	Bound check failed (80186+)
B	06	Undefined opcode (80286+)
B	07	No math unit available (80286+)
H	08	IRQ-0 Timer 8253, Double fault (80286+ protected mode)
H	09	IRQ-1 Keyboard, Math unit protection
H	0A	IRQ-2 Cascade IRQ 8..15 EGA vertical retrace

19	Park heads	00	Turn on motor (PC,Jr)	84	Read joystick (AT,XT2,XT286,PS)
1a	Format unit (ESDI fixed disk)	00	Installation check??? (VMiX v2+)	85	System request key pressed (AT,XT2,XT286,CONV,PS)
1b	Get manufacturing header (ESDI fixed disk)	01	Turn off motor (PC,Jr)	86	Wait (AT,XT2,XT286,CONV,PS)
1c	Get information (ESDI fixed disk)	01	I/O channel object manager (VMiX)	87	Block move (AT,XT286,PS)
1d	Cache status (IBMCACHE.SYS)	02	Read data blocks (PC,Jr)	88	Get memory size (AT,XT286,PS)
20	Dismount (QCACHE)	02	Memory object manager (VMiX)	89	Switch to virtual mode (AT,XT286,PS50+)
21	Flush cache (QCACHE)	03	Write data blocks (PC,Jr)	90	Device busy loop (AT,XT2,XT286,CONV,PS)
22	Enable/disable cache (QCACHE)	03	Prompted console input (VMiX)	91	Set flag and complete interrupt (AT,XT2,XT286,CONV,PS)
24	Set sectors (QCACHE)	04	Build BIOS system parameter table (PS)	C0	Get configuration
25	Set flush interval (QCACHE)	04	VPRINTF (VMiX)	C1	Return extended-bios data-area segment address (PS)
27	Installation check (QCACHE)	05	Build BIOS initialisation table (PS)	C2	Pointing device BIOS interface (PS)
2a	Set buffer size (QCACHE)	05	Get process ID of current process (VMiX)	C3	Enable/disable watchdog timeout (PS50+)
2c	Set buffered writes (QCACHE)	06	Get ROS version number (Amstrad PC1512)	C4	Programmable option select (PS50+)
2d	Set buffered read (QCACHE)	06	Get pointer to process control block (VMiX)	DE	DESQview functions
2e	Set flush count (QCACHE)	07	Get pointer to object control block (VMiX)	B 16	Keyboard
30	Get info (QCACHE)	08	Get channel control block (VMiX)	00	Read char from buffer, wait if empty
EE	Set 1024 cylinder flag (SWBIOS)	09	Get id of queued element (VMiX)	01	Check buffer, do not clear
F9	Installation check (SWBIOS)	0A	Get id of next queued element (VMiX)	02	Get shift status
FE	Get extended cylinder count (SWBIOS)	0B	Get total number of active processes (VMiX)	03	Set delays (Jr,AT model 339,XT286,PS)
B 14	Serial I/O	0C	Get pointer to process TSS stack (VMiX)	04	Keyclick (Jr,CONV)
00	Initialize USART	0D	Start a child process job shell (VMiX)	05	Write to keyboard buffer (AT model 339,XT2,XT286,PS)
01	Transmit character	0E	Terminate process (VMiX)	10	Get enhanced keystroke (AT model 339,XT2,XT286,PS)
02	Receive character	0F	Format unit periodic interrupt (PS ESDI drives only)	11	Check enhanced keystroke (AT model 339,XT2,XT286,PS)
03	Get USART status	0F	Get key field of queued element (VMiX)	12	Get enhanced shift flags (AT model 339,XT2,XT286,PS)
04	Extended initialize (CONVERTIBLE,PS)	10	Execute function in protected mode (VMiX)	F1	Read current cpu speed (Compaq 386)
05	Extended communication port control (CONVERTIBLE,PS)	10	TopView functions	F2	Determine attached keyboard type (Compaq 386)
06	Raise/lower DTR (FOSSIL)	10	DESQview 2.0 functions	FE	Set CPU speed (Compaq 386)
07	Return timer tick parameters (FOSSIL)	11	Execute shell system commands (VMiX)	B 17	Printer
08	Flush output buffer (FOSSIL)	11	TopView functions	00	Output Character
09	Purge output buffer (FOSSIL)	11	DESQview 2.2+ functions	01	Initialize
0A	Purge input buffer (FOSSIL)	12	Put process to sleep (VMiX)	02	Get Status
0B	Transmit no wait (FOSSIL)	12	TopView functions (BH = 00h - 04h)	B 18	Transfer to ROM BASIC
0C	Non-destructive read ahead (FOSSIL)	12	TopView functions (BH = 05h)	B 19	Disk boot
0D	Keyboard read without wait (FOSSIL)	12	TopView functions (BH = 05h) Cont'd	B 1A	Clock
0E	Keyboard read with wait (FOSSIL)	12	TopView functions (BH = 08h - 15h)	00	Get time of day
0F	Enable/disable flow control (FOSSIL)	12	DESQview 2.2 functions	01	Set time of day
10	Extended /K checking and transmit on/off (FOSSIL)	13	Wake process (VMiX)	02	Read real time clock (AT,XT286,CONV,PS)
11	Set current cursor location (FOSSIL)	14	Clear window (VMiX)	03	Set real time clock (AT,XT286,CONV,PS)
12	Read current cursor location (FOSSIL)	15	Set banner window message (VMiX)	04	Read date from real time clock (AT,XT286,CONV,PS)
13	Single character ANSI write to screen (FOSSIL)	16	Set root window size and home cursor (VMiX)	05	Set date in real time clock (AT,XT286,CONV,PS)
14	Enable or disable watchdog processing (FOSSIL)	17	Get console window colors (VMiX)	06	Set alarm (AT,XT286,CONV,PS)
15	Write character to screen using BIOS (FOSSIL)	18	Set console colors (VMiX)	07	Reset alarm (AT,XT286,CONV,PS)
16	Insert/delete function from timer tick chain (FOSSIL)	20	Misc. (PRINT.COM,OS hook)	08	Set RTC activated power on mode (CONVERTIBLE)
17	Reboot system (FOSSIL)	21	Power-on self-test error log (PS50+)	09	Read RTC alarm time and status (CONV,PS30)
18	Read block (FOSSIL)	40	Read/modify profiles (CONVERTIBLE)	0A	Read system-timer day counter (XT2,PS)
19	Write block (FOSSIL)	41	Wait on external event (CONVERTIBLE)	0B	Set system-timer day counter (XT2,PS)
1A	Break begin or end (FOSSIL)	42	Request power off (CONVERTIBLE)	80	Set up sound multiplexor (PCjr)
1B	Return information about the driver (FOSSIL)	43	Read system status (CONVERTIBLE)	FE	Read time and date (AT&T 6300)
7E	Install an external application function (FOSSIL)	44	Activate/deactivate internal modem power (CONVERTIBLE)		
7F	Remove an external application function (FOSSIL)	4F	Keyboard intercept (AT model 3x9,XT2,XT286,CONV,PS)		
B 15	PC/AT, Cassette, VMiX, TopView, DESQview, Misc.	80	Device open (AT,XT2,XT286,PS)		
		81	Device close (AT,XT2,XT286,PS)		
		82	Device program terminate (AT,XT2,XT286,PS)		
		83	Event wait (AT,XT286,CONV,PS)		

FF	Set time and date (AT&T 6300)	31	Terminate but stay resident	69	Get/set disk serial number
B 1B	Ctrl-Break key	32	Get drive parameter block	6A	???
B 1C	Clock tick	33	Extended control-break checking/Get boot drive	6B	???
B 1D	(NOT a vector!) 6845 video init tables	34	Return CritSectFlag (InDOS) pointer	6C	Extended open/create
B 1E	(NOT a vector!) Diskette params (base table)	35	Get interrupt vector	B6	Extended file attributes
B 1F	(NOT a vector!) Graphics set 2	36	Get disk space	B8	Print jobs
M 20	Program termination	37	Get/set SWITCHAR / device availability	BB	Set end of job status
M 21	MSDOS	38	Get/set country information	BC	Log/lock physical record
00	Program termination	39	Create a subdirectory (MKDIR)	BD	Release physical record
01	Keyboard input	3A	Remove a directory entry (RMDIR)	BE	Clear physical record
02	Display output	3B	Change the current directory (CHDIR)	BF	Log/lock record
03	AUX input	3C	Create a file with handle (CREAT)	C0	Release record
04	AUX output	3D	Open disk file with handle	C1	Clear record
05	Printer output	3E	Close a file with handle	C2	Lock physical record set
06	Direct console I/O	3F	Read from file with handle	C3	Release physical record set
07	Direct STDIN input, no echo	40	Write to file with handle	C4	Clear physical record set
08	Keyboard input, no echo	41	Delete a file (UNLINK)	C5	Semaphores
09	Print string	42	Move file read/write pointer (LSEEK)	C6	Get or set lock mode
0A	Buffered keyboard input	43	Get/put file attributes	C7	TTS
0B	Check standard input status	44	IOCTL	C8	Begin logical file locking
0C	Clear keyboard buffer	45	Create duplicate handle (DUP)	C9	End logical file locking
0D	Disk reset	46	Force duplicate handle (FORCDUP,DUP2)	CA	Log/lock personal file
0E	Select disk	47	Get current directory	CB	Lock file set
0F	Open disk file	48	Allocate memory	CC	Release file
10	Close disk file	49	Free memory	CD	Release file set
11	Search first using fcb	4A	Adjust memory block size (SETBLOCK)	CE	Clear file
12	Search next using fcb	4B	Load or execute (EXEC)	CF	Clear file set
13	Delete file via FCB	4C	Quit with exit code (EXIT)	D0	Lock logical record (Novell, VINES)
14	Sequential disk file read	4D	Get exit code of subprogram (WAIT)	D1	Lock logical record set (Novell, VINES)
15	Sequential disk record write	4E	Find first ASCIZ (FINDFIRST)	D2	Unlock logical record (Novell, VINES)
16	Create a disk file	4F	Find next asciz (FINDNEXT)	D3	Unlock logical record set (Novell, VINES)
17	Rename file via FCB	50	Set PSP segment	D4	Clear logical record (Novell, VINES)
18	Unused (DOS internal)	51	Get PSP segment	D5	Clear logical record set (Novell, VINES)
19	Get default disk number	52	Get list of lists	D6	End of job
1A	Set disk transfer area address	53	Translate BIOS parameter block	D7	System logout
1B	Get allocation table information for default drive	54	Get verify flag	D8	Allocate resource
1C	Get allocation table information for specific drive	55	Create PSP	D9	Deallocate resource (Novell, VINES)
1D	Unused (DOS internal)	56	Rename a file	DA	Get volume statistics
1E	Unused (DOS internal)	57	Get/set file's date/time	DB	Get number of local drives
1F	Get default drive parameter block (DOS internal)	58	Get/set memory allocation strategy	DC	Get station number (Novell, VINES)
20	Unused (DOS internal)	59	Get extended error code	DD	Set error mode
21	Random disk record read	5A	Create unique file	DE	Set broadcast mode
22	Random disk record write	5B	Create new file	DF	Capture
23	Get file size	5C	Lock/unlock file access	E0	Print spooling
24	Set random record field	5D	Misc. DOS internal functions	E1	Broadcast messages
25	Set interrupt vector	5E	DOS 3.1 + Microsoft Networks functions	E2	Directory functions
26	Create PSP	5F	Network (DOS 3.1 + Microsoft Networks, Banyan VINES)	E3	Connection control
27	Random block read	5F	Network (LANtastic)	E4	Set file attributes
28	Random block write	60	Resolve path string to canonical path string	E5	Update file size
29	Parse filename	61	Unused	E6	Copy file to file
2A	Get current date	62	Get psp address	E7	Get file server date and time (Novell, VINES)
2B	Set current date	63	Asian 2-byte character support	E8	Set FCB re-open mode
2C	Get current time	64	Get/set ???	E9	Shell's "get base status"
2D	Set current time	65	Country-dependent language support / YES/NO response	EA	Return shell version
2E	Set verify flag	66	Get/set global code page table	EB	Log file
2F	Get disk transfer area address	67	Set handle count	EC	Release file
30	Get DOS version	68	Commit file, write all buffered data to disk	ED	Clear file
				EE	Get physical station number
				EF	Get drive info

F0	Connection ID	CD	Intel Image Processing Interface	P 67	Virtual Control Program Interface
F1	File server connection	D7	Banyan VINES v4+	P 67	EMS
F2	???	DE	DESQview 2.26 External Dev Interface	40	Get EMM status
F3	File server file copy	FB	Borland international	41	Get frame segment address
F8	Set OEM int 21 handler	M 30	FAR JMP instruction for CP/M-style calls	42	Get memory total/available
F9-FF	OEM functions	M 31	DPMI/DOS Protected Mode Interface 0.9 API	43	Open handle/allocate pages
M 22	Terminate address			44	Map memory
M 23	Control-C exit address	P 32	Reserved	45	Close handle/free pages
M 24	Fatal error handler address	P 33	Mouse	46	Get EMM version number
M 25	Absolute disk read	M 34-3E	Borland/Microsoft languages - Floating Point emulation	47	Save mapping context
M 26	Absolute disk write			48	Restore mapping context
M 27	Terminate but stay resident	M 3F	Overlay / dynamic link	49	(reserved)
M 28	Keyboard busy loop	B 40	Hard disk - Relocated Floppy Handler	4a	(reserved)
M 29	Fast putchar (TTY Output)	B 41	Fixed disk params	4b	Count handle's pages
M 2A	Microsoft/LANtastic/NETBIOS network functions	B 42	Video handler relocated (by EGA)	4c	Count active handles
		B 43	User font table	4d	Get page info (all handles)
M 2B	IRET	B 44	EGA/PCjr fonts, characters 00h to 7Fh	4e	Get/Set entire page map
M 2C	IRET	B 44	Novell NetWare high-level language API	P 68	APPC/PC
M 2D	IRET	B 46	Secondary Fixed Disk Params	P 69	DECnet DOS data link layer program
M 2E	Execute command	P 47	SQL Base - database engine API	P 6A	DECnet DOS local area transport program
M 2F	Multiplex-Interrupt	P 48	Pcjr cordless keyboard translation	P 6C	System resume / realtime clock
00	PRINT.COM	P 49	Pcjr non-keyboard scan code translation table	P 6D	VGA / DECnet DOS
01	PRINT.COM			P 6E	DECnet DOS - network process API
02	PC LAN program redir/redirifs internal	P 4A	User alarm	P 6F	10-NET
05	Critical error handler - DOS 3+	P 4B	DMA services interface	H 70	IRQ8 Real Time Clock
06	ASSIGN	B 50	AT Alarm Interrupt	H 71	IRQ9 redirected to IRQ2
08	DRIVER.SYS support	B 51	Mouse-Functions	H 72	IRQ10
10	SHARE.EXE - DOS 4.0 internal	B 52-57	IRQ2-IRQ7 relocated	H 73	IRQ11
11	Network redirector	P 58	Reserved	H 74	IRQ12
11	IFSFUNC.EXE - DOS 4	P 59	GSS Computer Graphics Interface (GSS*CGI)	H 75	IRQ13 80287 NPX
12	DOS internal functions			H 76	IRQ14 Harddisk
13	Set disk interrupt handler	N 5A	Cluster adapter BIOS entry address, Net Functions	H 77	IRQ15
14	NLSFUNC.COM			P 7A	IBM 3270 workstation program API
15	Microsoft CD-ROM Extensions (MSCDEX)	N 5B	Cluster adapter, Boot chain	P 7A	IBM PC3270 emul prog v3
15	GRAPHICS.COM	N 5C	NETBIOS interface	P 7B	Btrieve API
16	MS-Windows functions	P 5C	TOPS interface	P 7F	Halo88 API
16	DOS Protected-Mode Interface (DPMI)	P 5D	Reserved	P 7F	IBM 3270 High-Level Language API
17	MS-Windows "WinOldAp"	P 5E	Reserved	P 7F	Convergent Technologies ClusterShare CTOS access vector
19	SHELLB/SHELLC/COMMAND.COM - DOS 4.x only	P 5F	Reserved	P 80-85	Reserved for BASIC
1A	ANSI.SYS - DOS 4+ internal	P 60	User interrupt	B 86-F0	BASIC interpreter
1B	XMA2EMS.SYS - DOS 4+ extension internal	P 61	User interrupt	P 86	NETBIOS - relocated Int 18
40	OS/2 compatibility box	P 62	User interrupt	P 8C	Clear screen memory
43	Extended Memory Specification (XMS)	P 63	User interrupt	B EF	Compiled BASIC - original int 09 vector
46	MS-Windows 3.x	P 64	User interrupt	P EF	GEM interface
54	TesSeRact RAM-resident program interface	P 65	User interrupt	B F0	Compiled BASIC original int 08 vector
7A	Novell NetWare	P 66	User interrupt	P F1-FF	Reserved for user interrupt
80	EASY-NET	P 67	LIM EMS		
AD	DISPLAY.SYS	M 67	EEMS		
AD	KEYB.COM				
AE	DOS 3.3+ internal installable command				
B0	GRAFTABL.COM				
B4	IBM PC3270 EMUL PROG v3				
B7	APPEND				
B8	Network				
B8	LANtastic Network				
B9	PC Network RECEIVER.COM				
BF	PC LAN program REDIRIFS.EXE internal				
CB	Communicating Applications Spec				

*Ein gelehrter Dummkopf ist ein größerer Dummkopf
als ein unwissender Dummkopf.*

Molière

*Ein richtiger Dummkopf wird nur,
wer sich das Fragen abgewöhnt hat.*

Anonym