Overview of operating system calls on Atari and compatible machines

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1   GEMDOS

Dec.	Hex	Name	By	Description
0	0x00	Pterm0	TOS	Exit process with a return code of 0.
1	0x01	Cconin	TOS	Fetch a character from the console device and echo it.
2	0x02	Cconout	TOS	Output a character to the console device processing control codes.
3	0x03	Cauxin	TOS	Fetch character from the auxiliary device.
4	0x04	Cauxout	TOS	Output a character to the auxiliary device.
5	0x05	Cprnout	TOS	Output a character to the printer device.
6	0x06	Crawio	TOS	Perform input and output on the console device.
7	0x07	Crawcin	TOS	Output a character to the console device.
8	0x08	Cnecin	TOS	Fetch a character from the console device.
9	0x09	Cconws	TOS	Write a string to the console device.
10	0x0A	Cconrs	TOS	Read a string from the console device.
11	0x0B	Cconis	TOS	Determine if a character is waiting to be received from the console device.
14	0x0E	Dsetdrv	TOS	Set the current drive.
16	0x10	Cconos	TOS	Determine if a character may be sent to the console.
17	0x11	Cprnos	TOS	Determine if a character may be sent to the printer device.
18	0x12	Cauxis	TOS	Determine if a character is waiting to be received from the auxiliary device.
19	0x13	Cauxos	TOS	Determine if a character may be sent to the auxiliary device.
20	0x14	Maddalt	TOS	Notify GEMDOS of additional memory.
21	0x15	?	Magic	Used for shared libraries
22	0x16	?	Magic	Used for shared libraries
25	0x19	Dgetdrv	TOS	Get the current drive.
26	0x1A	Fsetdta	TOS	Set the address of the DTA.
32	0x20	Super	TOS	Switch between user and supervisor status.
42	0x2A	Tgetdate	TOS	Get the current date.
43	0x2B	Tsetdate	TOS	Set the current date.
44	0x2C	Tgettime	TOS	Get the current time.
45	0x2D	Tsettime	TOS	Set the current time.
47	0x2F	Fgetdta	TOS	Return a pointer to the current DTA.
48	0x30	Sversion	TOS	Obtain the GEMDOS version.
49	0x31	Ptermres	TOS	Exit process leaving some data resident in memory.
51	0x33	Sconfig	Magic	Get/Set Magic Configuration.
54	0x36	Dfree	TOS	Determine the free space on a drive.
57	0x39	Dcreate	TOS	Create a directory.
58	0x3A	Ddelete	TOS	Delete a directory.
59	0x3B	Dsetpath	TOS	Set the current path.
60	0x3C	Fcreate	TOS	Create a file.
61	0x3D	Fopen	TOS	Open a file.
62	0x3E	Fclose	TOS	Close a file.
63	0x3F	Fread	TOS	Read binary data from a file.
64	0x40	Fwrite	TOS	Write binary data to a file.
65	0x41	Fdelete	TOS	Delete a file.
66	0x42	Fseek	TOS	Move a file pointer.
67	0x43	Fattrib	TOS	Get or set the attributes of a file.
68	0x44	Mxalloc	TOS	Allocate memory with preference.

Dec.	Hex	Name	By	Description
69	0x45	Fdup	TOS	Duplicate a file handle.
70	0x46	Fforce	TOS	Redirect one handle to another.
71	0x47	Dgetpath	TOS	Return the current path.
72	0x48	Malloc	TOS	Allocate memory.
73	0x49	Mfree	TOS	Free allocated memory.
74	0x4A	Mshrink	TOS	Shrink or expand a block of memory.
75	0x4B	Pexec	TOS	Execute another process.
76	0x4C	Pterm	TOS	Exit process with the specified return code.
78	0x4E	Fsfirst	TOS	Find a file with the specified mask.
79	0x4F	Fsnext	TOS	Find subsequent files with the specified mask.
86	0x56	Frename	TOS	Rename a file or directory.
87	0x57	Fdatime	TOS	Get or set the time/date flags of a file.
92	0x5C	Flock	?	Set or remove a file lock.
255	0xFF	Syield	MiNT	
256	0x100	Fpipe	MiNT	
260	0x104	Fcntl	MiNT	
261	0x105	Finstat	MiNT	
262	0x106	Foutstat	MiNT	
263	0x107	Fgetchar	MiNT	
264	0x108	Fputchar	MiNT	
265	0x109	Pwait	MiNT	
266	0x10A	Pnice	MiNT	
267	0x10B	Pgetpid	MiNT	
268	0x10C	Pgetppid	MiNT	
269	0x10D	Pgetpgrp	MiNT	
270	0x10E	Psetpgrp	MiNT	
271	0x10F	Pgetuid	MiNT	
272	0x110	Psetuid	MiNT	
273	0x111	Pkill	MiNT	
274	0x112	Psignal	MiNT	
275	0x113	Pvfork	MiNT	
276	0x114	Pgetgid	MiNT	
277	0x115	Psetgid	MiNT	
278	0x116	Psigblock	MiNT	
279	0x117	Psigsetmask	MiNT	
280	0x118	Pusrval	MiNT	
281	0x119	Pdomain	MiNT	
282	0x11A	Psigreturn	MiNT	
283	0x11B	Pfork	MiNT	
284	0x11C	Pwait3	MiNT	
285	0x11D	Fselect	MiNT	
286	0x11E	Prusage	MiNT	
287	0x11F	Psetlimit	MiNT	
288	0x120	Talarm	MiNT	
289	0x121	Pause	MiNT	
290	0x122	Sysconf	MiNT	
291	0x123	Psigpending	MiNT	
292	0x124	Dpathconf	MiNT	
293	0x125	Pmsg	MiNT	
294	0x126	Fmidipipe	MiNT	
295	0x127	Prenice	MiNT	
296	0x128	Dopendir	MiNT	
297	0x129	Dreaddir	MiNT	

Dec.	Hex	Name	By	Description
298	0x12A	Drewinddir	MiNT	
299	0x12B	Dclosedir	MiNT	
300	0x12C	Fxattr	MiNT	
301	0x12D	Flink	MiNT	
302	0x12E	Fsymlink	MiNT	
303	0x12F	Freadlink	MiNT	
304	0x130	Dcntl	MiNT	
305	0x131	Fchown	MiNT	
306	0x132	Fchmod	MiNT	
307	0x133	Pumask	MiNT	
308	0x134	Psemaphore	MiNT	
309	0x135	Dlock	MiNT	
310	0x136	Psigpause	MiNT	
311	0x137	Psigaction	MiNT	
312	0x138	Pgeteuid	MiNT	
313	0x139	Pgetegid	MiNT	
314	0x13A	Pwaitpid	MiNT	
315	0x13B	Dgetcwd	MiNT	
316	0x13C	Salert	MiNT	
336	0x150	Ssync	Magic	sync mounted filesystems.

2 BIOS

Dec.	Hex	Name	By	Description
0	0x00	Getmpb	TOS	Initialise MPB structure.
1	0x01	Bconstat	TOS	Check if a device has characters to read.
2	0x02	Bconin	TOS	Read a character from a device.
3	0x03	Bconout	TOS	Write a character to a device.
4	0x04	Rwabs	TOS	Read/write logical sectors.
5	0x05	Setexc	TOS	Set or read an exception vector.
6	0x06	Tickcal	TOS	Return the system timer calibration.
7	0x07	Getbpb	TOS	Return pointer to BPB for a device.
8	0x08	Bcostat	TOS	Determine if a device is ready to receive a character.
9	0x09	Mediach	TOS	Check if media has been changed on drive.
10	0x0A	Drvmap	TOS	Return a bitmap of known drives.
11	0x0B	Kbshift	TOS	Get the state of the modifier keys.
17	0x11			Assigned for DIAB630?

3 XBIOS

Dec.	Hex	Name	By	Description
0	0x00	Initmous	TOS	initialize the mouse handler.
1	0x01	Ssbrk	TOS	Reserve memory at the top of RAM.
2	0x02	Physbase	TOS	Return the base address of the physical screen.
3	0x03	Logbase	TOS	Return the base address of the logical screen.
4	0x04	Getrez	TOS	Return the current video screen resolution code.
5 [†]	0x05 [†]	Setscreen	TOS	Set the current screen address and mode.
5 [†]	0x05 [†]	VsetScreen	TOS	Set the current screen address and mode (Falcon).
6	0x06	Setpalette	TOS	Set entries in the ST compatible palette.
7	0x07	Setcolor	TOS	Set an entry in the ST compatible palette.
8	0x08	Floprd	TOS	Read sector(s) from a floppy disk.
9	0x09	Flopwr	TOS	Write sector(s) to a floppy disk.
10	0x0A	Flopfmt	TOS	Format a track on a floppy disk.
11	0x0B	Dbmsg	TOS	Send a message to a resident debugger.
12	0x0c	Midiws	TOS	Write a string to the MIDI port.
13	0x0D	Mfpint	TOS	Set a MFP interrupt vector.

Dec.	Hex	Name	By	Description
14	0x0E	Iorec	TOS	Get the address of the IOREC structure for a BIOS device.
15	0x0F	Rsconf	TOS	Configure the currently mapped serial port.
16	0x10	Keytbl	TOS	Return the addresses of the current keyboard mapping tables.
17	0x11	Random	TOS	Return a 24-bit (pseudo-)random number.
18	0x12	Protobt	TOS	Create a floppy boot sector in memory.
19	0x13	Flopver	TOS	Verify sector(s) on a floppy disk.
20	0x14	Scrdump	TOS	Generate a screen dump on printer.
21	0x15	Cursconf	TOS	Configure the text mode cursor.
22	0x16	Settime	TOS	Set time/date in RTC.
23	0x17	Gettime	TOS	Read time/date from RTC.
24	0x18	Bioskeys	TOS	Reset the keyboard mapping tables to default values.
25	0x19	Ikbdws	TOS	Write a string to the IKBD chip.
26	0x1A	Jdisint	TOS	Disable a MFP interrupt.
27	0x1B	Jenabint	TOS	Enable a MFP interrupt.
28	0x1C	Giaccess	TOS	Read/Write a register in the PSG sound chip.
29	0x1D	Offgibit	TOS	Turn off bits on PSG Port A.
30	0x1E	Ongibit	TOS	Turn on bits on PSG Port A.
31	0x1F	Xbtimer	TOS	Set a MFP timer (value/vector).
32	0x20	Dosound	TOS	Start a PSG sound routine.
33	0x21	Setprt	TOS	Get/Set printer configuration.
34	0x22	Kbdvbase	TOS	Return the address of the KBDVECS IKBD/MIDI vector table.
35	0x23	Kbrate	TOS	Get/Set the keyboard repeat rate.
36	0x24	Prtblk	TOS	Print a block of memory using the built-in screen dump routines.
37	0x25	Vsync	TOS	Wait until the next vertical lank.
38	0x26	Supexec	TOS	Execute a subroutine in supervisor mode.
39	0x27	Puntaes	TOS	Remove AES (and reboot).
41	0x29	Floprate	TOS 1.04	Get/Set the floppy drive seek rates.
42	0x2A	DMAread	TOS	Read sectors from a DMA/SCSI device.
43	0x2B	DMAwrite	TOS	Write sectors to a DMA/SCSI device.
44	0x2C	Bconmap	TOS 2	Read or modify the BIOS device mapping table.
46	0x2E	NVMaccess	TOS 3	Read/Write non-volatile RAM.
47	0x2F	Waketime	TOS 2	Set Wakeup time in RTC (used by power.prg).
48	0x30	Minit	Meta-	Get MetaDOS version/drive map.
49	0x31	Mopen	DOS	
50	0x32	Mclose	Meta-	
51	0x33	Mread	DOS	
52	0x34	Mwrite	Meta-	
53	0x35	Mseek	DOS	
54	0x36	Mstatus	Meta-	
55	0x37		DOS	reserved for MetaDOS.
56	0x38		Meta-	reserved for MetaDOS.
57	0x39		DOS	reserved for MetaDOS.
58	0x3A	CDread_aud	Meta-	
59	0x3B	CDstart_aud	DOS	
60	0x3C	CDstop_aud	Meta-	
61	0x3D	CDset_songtime	DOS	
62	0x3E	CDget_toc	Meta-	

Dec.	Hex	Name	By	Description
63	0x3F	CDdisc_info	DOS	
64	0x40	Blitmode	TOS	Get or set the state of the Blitter chip.
80	0x50	EsetShift	TOS	Set the TT030 shift mode registers.
81	0x51	EgetShift	TOS	Get the TT030 shift mode registers.
82	0x52	EsetBank	TOS	Set the current TT030 color bank.
83	0x53	EsetColor	TOS	Get or set a colour in the TT030 palette.
84	0x54	EsetPalette	TOS	Set the TT030 palette.
85	0x55	EgetPalette	TOS	Read the TT030 palette.
86	0x56	EsetGray	TOS	Set the TT030 gray mode register.
87	0x57	EsetSmear	TOS	Set the TT030 smear mode register.
88	0x58	VsetMode	TOS	Set the Falcon030 video mode.
89	0x59	VgetMonitor	TOS	Identify the kind of monitor attached to the Falcon030.
90	0x5A	VsetSync	TOS	Set the Falcon030 sync mode.
91	0x5B	VgetSize	TOS	Get the required size of screen memory in bytes.
92	0x5C	VsetMask	TOS	Set the mask assigned to each true colour plotted.
93	0x5D	VsetRGB	TOS	Set the Falcon030 video palette.
94	0x5E	VgetRGB	TOS	Get the Falcon030 video palette.
95	0x5F	VcheckMode	TOS	modify video mode to match the possibilities of the attached monitor.
96	0x60	Dsp_DoBlock	TOS	Transfer byte-wise packed data to/from the DSP.
97	0x61	Dsp_BlkHandshake	TOS	Handshakes byte-wise packed data to/from the DSP.
98	0x62	Dsp_BlkUnpacked	TOS	Transfers data stored in a longword array to/from the DSP.
99	0x63	Dsp_lnStream	TOS	Transfers data to the DSP via an interrupt handler.
100	0x64	Dsp_OutStream	TOS	Transfers data from the DSP via an interrupt handler.
101	0x65	Dsp_lOStream	TOS	Transfers data to/from the DSP via concurrent interrupt handlers.
102	0x66	Dsp_RemovelInterrupts	TOS	Disable the generation of DSP interrupts.
103	0x67	Dsp_GetWordSize	TOS	Get the current size of a DSP word.
104	0x68	Dsp_Lock	TOS	Lock the DSP system.
105	0x69	Dsp_Unlock	TOS	Unlock the DSP system.
106	0x6A	Dsp_Available	TOS	Determines the amount of free X and Y memory available in the DSP.
107	0x6B	Dsp_Reserve	TOS	Reserves a portion of DSP memory for a user program
108	0x6C	Dsp_LoadProg	TOS	Loads a '.LOD' file from disk, transmits it to the DSP, and executes it.
109	0x6D	Dsp_ExecProg	TOS	Transfers a DSP program in memory to the DSP and executes it.
110	0x6E	Dsp_ExecBoot	TOS	Resets the DSP and loads a new bootstrap program into the first 512 words of DSP memory.
111	0x6F	Dsp_LodToBinary	TOS	Converts a '.LOD' file to binary format.
112	0x70	Dsp_TriggerHC	TOS	Causes a host command set aside for DSP programs to execute.
113	0x71	Dsp_Request-UniqueAbility	TOS	Requests a unique DSP ability identifier.
114	0x72	Dsp_GetProgAbility	TOS	Returns the ability code for the program residing in DSP memory.
115	0x73	Dsp_FlushSubroutines	TOS	Removes all DSP subroutines from memory.
116	0x74	Dsp_LoadSubroutine	TOS	Loads a DSP subroutine into memory.

Dec.	Hex	Name	By	Description
117	0x75	Dsp_lnqSubrAbility	TOS	Determines if a subroutine with the specified ability code is currently loaded into the DSP.
118	0x76	Dsp_RunSubroutine	TOS	Execution the specified subroutine in the DSP.
119	0x77	Dsp_Hf0	TOS	Reads/writes bit #3 of the HSR.
120	0x78	Dsp_Hf1	TOS	Reads/writes bit #4 of the HSR.
121	0x79	Dsp_Hf2	TOS	Reads bit #5 of the HSR.
122	0x7A	Dsp_Hf3	TOS	Reads bit #6 of the HSR.
123	0x7B	Dsp_BlkWords	TOS	Transfers an array of WORDs to/from the DSP.
124	0x7C	Dsp_BlkBytes	TOS	Transfers an array of bytes to/from the DSP.
125	0x7D	Dsp_Hstat	TOS	Returns the value of the DSP's ICR register.
126	0x7E	Dsp_SetVectors	TOS	Defines interrupt handlers to be called when DSP data is ready to be sent or received.
127	0x7F	Dsp_MultBlocks	TOS	Transmits multiple blocks to/from the DSP.
128	0x80	Locksnd	TOS	Lock the sound system.
129	0x81	Unlocksnd	TOS	Unlock the sound system.
130	0x82	Soundcmd	TOS	Execute a sound system specific function.
131	0x83	Setbuffer	TOS	Set the record and playback buffers.
132	0x84	Setmode	TOS	Set the playback/record mode.
133	0x85	Settracks	TOS	Set the playback/record tracks.
134	0x86	Setmontracks	TOS	Set the track to be output over the speaker/headphone output.
135	0x87	Setinterrupt	TOS	Set the sound system interrupts.
136	0x88	Buffoper	TOS	Enable or disable playback/recording.
137	0x89	Dsptristate	TOS	Connect or disconnect the DSP from the connection matrix.
138	0x8A	Gpio	TOS	Read or write general purpose pins on the DSP port.
139	0x8B	Devconnect	TOS	Connect devices in the connection matrix.
140	0x8C	Sndstatus	TOS	Obtain the status of the sound system.
141	0x8D	Buffptr	TOS	Return the current position of the record or playback buffer pointers.
160	0xA0	CacheCtrl	Milan	Control CPU cache.
161	0xA1	WdgCtrl	Milan	Control hardware watchdog.
162	0xA2	ExtRsConf	Milan	extended RsConf for RS-422/RS-485 ports.
165	0xA5	WavePlay	SAM	Play a sample.
500	0x1F4	StarTrack	SWE	StarTrack extended XBIOS calls.
4200	0x1068	Oscanis	OverScan	
4201	0x1069	Oscantab	OverScan	
4202	0x106A	Oscanphy	OverScan	
4203	0x106B	Oscanscr	OverScan	
4204	0x106C	Oscanvb	OverScan	
4205	0x106D	Oscanpatch	OverScan	
4206	0x106E	Oscanswitch	OverScan	
50698	0xC60A	ct60_read_core_temperature	CT060	read CT060 CPU temperature
50699	0xC60B	ct60_rw_parameter	CT060	set/query CT060 parameters

† These functions share a common Opcode.

4   AES

Dec.	Hex	Name	By	Description
10	0x0A	appl_init	TOS	initialises a GEM application.
11	0x0B	appl_read	TOS	Reads data from the message pipe.
12	0x0C	appl_write	TOS	Writes data to the message pipe.
13	0x0D	appl_find	TOS	Locates a system process.
14	0x0E	appl_tplay	TOS	Plays back recorded events.
15	0x0F	appl_trecord	TOS	Records keyboard and mouse events.
16	0x10	appl_bvset	???	

continued ...

Dec.	Hex	Name	By	Description
17	0x11	appl_yield	Magic	
18	0x12	appl_search	TOS	Enumerates system processes.
19	0x13	appl_exit	TOS	Prepares a GEM application for termination.
20	0x14	evnt_keybd	TOS	Waits for a keyboard event.
21	0x15	evnt_button	TOS	Waits for a mouse button event.
22	0x16	evnt_mouse	TOS	Waits for a mouse rectangle event.
23	0x17	evnt_mesag	TOS	Waits for an application message.
24	0x18	evnt_timer	TOS	Waits for a timer event.
25	0x19	evnt_multi	TOS	Waits for multiple events.
26	0x1A	evnt_dclick	TOS	Sets the mouse double-click rate.
30	0x1E	menu_bar	TOS	Displays/removes a menu bar.
31	0x1F	menu_icheck	TOS	Places a check mark beside a menu item.
32	0x20	menu_ienable	TOS	Enables/disables a menu item
33	0x21	menu_tnormal	TOS	Selects/deselects a menu item or title.
34	0x22	menu_text	TOS	Changes menu item/title text.
35	0x23	menu_register	TOS	Registers applications in the menu bar.
36[†]	0x24	menu_unregister	Magic	
36[†]	0x24	menu_popup	TOS	Manages a floating pop-up menu.
37[†]	0x25	menu_click	Magic	
37[†]	0x25	menu_attach	TOS	Attaches a sub-menu to a menu item.
38	0x26	menu_istart	TOS	Defines the initial selection of a sub-menu.
39	0x27	menu_settings	TOS	Modifies pop-up menu settings.
40	0x28	objc_add	TOS	Adds an object to an object tree.
41	0x29	objc_delete	TOS	Deletes an object from an object tree.
42	0x2A	objc_draw	TOS	Draws an object tree.
43	0x2B	objc_find	TOS	Locates an object based on screen coordinates.
44	0x2C	objc_offset	TOS	Determines the offset of child objects in an object tree.
45	0x2D	objc_order	TOS	Reorders objects within an object tree.
46	0x2E	objc_edit	TOS	Manipulates an editable object.
47	0x2F	objc_change	TOS	Changes the state of an object.
48	0x30	objc_sysvar	TOS	Reads/modifies the system defaults for 3D effects.
50	0x32	form_do	TOS	Manages a user-defined form.
51	0x33	form_dial	TOS	Reserves/releases screen space for forms.
52	0x34	form_alert	TOS	Manages a generic alert.
53	0x35	form_error	TOS	Manages a generic error alert.
54	0x36	form_center	TOS	Centers an object tree on screen.
55	0x37	form_keybd	TOS	Provides a system-level editable field handler.
56	0x38	form_button	TOS	Provides a system-level button handler.
70	0x46	graf_rubberbox	TOS	Controls the shrinking/enlarging of a box outline.
71	0x47	graf_dragbox	TOS	Controls the moving of a box outline.
72	0x48	graf_movebox	TOS	Draws a moving box
73	0x49	graf_growbox	TOS	Draws an expanding box.
74	0x50	graf_shrinkbox	TOS	Draws a shrinking box.
75	0x51	graf_watchbox	TOS	Selects/draws an object depending on the position of the mouse.
76	0x52	graf_slidebox	TOS	Controls a slider outline.
77	0x53	graf_handle	TOS	Obtains AES workstation attributes.
78	0x54	graf_mouse	TOS	Defines the mouse form.
79	0x55	graf_mkstate	TOS	Provides information about the mouse state.
80	0x56	scrp_read	TOS	Determines the system scrap directory.
81	0x57	scrp_write	TOS	Sets the system scrap directory.
90	0x58	fsel_input	TOS	Manages the file selector.
91	0x59	fsel_exinput	TOS	Manages the extended file selector.

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Dec.	Hex	Name	By	Description
100	0x64	wind_create	TOS	Creates a window.
101	0x65	wind_open	TOS	Opens a window.
102	0x66	wind_close	TOS	Closes a window.
103	0x67	wind_delete	TOS	Deletes a window.
104	0x68	wind_get	TOS	Returns window attributes.
105	0x69	wind_set	TOS	Sets a window attribute.
106	0x6A	wind_find	TOS	Determines the window at given pixel coordinates.
107	0x6B	wind_update	TOS	Manages the window update semaphore.
108	0x6C	wind_calc	TOS	Calculates window extents.
109	0x6D	wind_new	TOS	Removes all windows.
110	0x6E	rsrc_load	TOS	Loads a disk-based resource file.
111	0x6F	rsrc_free	TOS	Releases a resource file from memory.
112	0x70	rsrc_gaddr	TOS	Calculates the address of a resource element.
113	0x71	rsrc_saddr	TOS	Sets the address of a resource element.
114	0x72	rsrc_obfix	TOS	Changes object coordinates from character to pixel based.
115	0x73	rsrc_rcfix	MTOS?	fix up a resource file already in memory.
120	0x78	shel_read	TOS	Determines the processes parent and command tall.
121	0x79	shel_write	TOS	Manages process loading and control.
122	0x7A	shel_get	TOS	Copies data from the system's shell buffer.
123	0x7B	shel_put	TOS	Stores data in the system's shell buffer.
124	0x7C	shel_find	TOS	Searches the AES's path for a file.
125	0x7D	shel_envrn	TOS	Searches the system environment string.
126	0x7E	shel_rdef	PCGEM	Inquire default shell program
127	0x7F	shel_wdef	PCGEM	Set a new default shell program.
130	0x82	appl_getinfo	TOS	Returns information about the AES.
135	0x87	form_popup	Magic	
136	0x88	form_xerr	Magic	
160	0xA0	wdlg_create	Wdialog	
161	0xA1	wdlg_open	Wdialog	
162	0xA2	wdlg_close	Wdialog	
163	0xA3	wdlg_delete	Wdialog	
164	0xA4	wdlg_get	Wdialog	
165	0xA5	wdlg_set	Wdialog	
166	0xA6	wdlg_evnt	Wdialog	
167	0xA7	wdlg_redraw	Wdialog	
170	0xAA	lbox_create	Wdialog	
171	0xAB	lbox_update	Wdialog	
172	0xAC	lbox_do	Wdialog	
173	0xAD	lbox_delete	Wdialog	
174	0xAE	lbox_get	Wdialog	
175	0xAF	lbox_set	Wdialog	
180	0xB4	fnts_create	Wdialog	
181	0xB5	fnts_delete	Wdialog	
182[†]	0xB6 [†]	fnts_open	Wdialog	
182[†]	0xB6 [†]	fnts_do	Wdialog	
183	0xB7	fnts_close	Wdialog	
184	0xB8	fnts_get_info	Wdialog	
185	0xB9	fnts_set	Wdialog	
186	0xBA	fnts_evnt	Wdialog	
190	0xBE	fslx_open	Magic	
191	0xBF	fslx_close	Magic	
192	0xC0	fslx_getnxtfile	Magic	
193	0xC1	fslx_evnt	Magic	

Dec.	Hex	Name	By	Description
194	0xC2	fslx_do	Magic	
195	0xC3	fslx_set_flags	Magic	
† These functions share a common Opcode.				

5 VDI

Dec.	Name	By	Description
—	vq_gdos	TOS	Test for presence of GDOS.
-1, 6	v_set_app_buff		
1	v_opnwk	TOS	Open a physical workstation.
2	v_clswk	TOS	Close a physical workstation.
3	v_clrwk	TOS	Clear a physical workstation.
4	v_updwk	TOS	Update workstation.
5, 1	vq_chcells	TOS	Get alpha screen size.
5, 2	v_exit_cur	TOS	Exit alpha text mode.
5, 3	v_enter_cur	TOS	Enter alpha text mode.
5, 4	v_curup	TOS	Move alpha text cursor up.
5, 5	v_curdown	TOS	Move alpha text cursor down.
5, 6	v_curright	TOS	Move alpha text cursor right.
5, 7	v_curleft	TOS	Move alpha text cursor left.
5, 8	v_curhome	TOS	Move alpha text cursor home.
5, 9	v_eeos	TOS	Erase to end of alpha screen.
5,10	v_eeol	TOS	Erase to end of alpha text line.
5,11	vs_curaddress	TOS	Set alpha text cursor position.
5,12	v_curtext	TOS	Output alpha text.
5,13	v_rvon	TOS	Reverse alpha text on.
5,14	v_rvoff	TOS	Reverse alpha text off.
5,15	vq_curaddress	TOS	Inquire alpha text cursor location.
5,16	vq_tabstatus	TOS	Get availability of tablet.
5,17	v_hardcopy	TOS	Output screen to printer.
5,18	v_dspcur	TOS	Set graphics cursor position.
5,19	v_rmcur	TOS	Remove graphic cursor.
5,20	v_form_adv	GDOS	Advance printer page.
5,21	v_output_window	GDOS	Output window of page to printer.
5,22	v_clear_disp_list	GDOS	Clear display list.
5,23	v_bit_image	GDOS	Output bit image file.
5,24	vq_scan	GDOS	Inquire printer parameters.
5,25	v_alpha_text	TOS	Output printer alpha text.
5,27	v_orient	NVDI	Set orientation.
5,28	v_copies	NVDI	Set number of copies.
5,29	v_trays	NVDI	Set input and output tray.
5,36	vq_tray_names	NVDI	Inquire tray names.
5,37	vq_page_size	NVDI	Set page size.
5,38	vq_page_name	NVDI	Inquire page name.
5,60	vs_palette	PC-GEM	Set IBM CGA colour palette.
5,61	v_sound	PC-GEM	Generate specified tone.
5,62	vs_mute	PC-GEM	Set/clear tone muting flag.
5,76	vs_calibrate	NVDI	Set calibration.
5,77	vq_calibrate	NVDI	Inquire calibration.
5,81	vt_resolution	?	Set tablet resolution in $lines/inch$.
5,82	vt_axis		Set tablet axis resolution.
5,83	vt_origin		Set tablet origin.
5,84	vq_tdimensions		Return tablet X and Y dimensions.
5,85	vt_alignment		Set tablet alignment.

Dec.	Name	By	Description
5,91	vqp_films		Return camera film types.
5,92	vqp_state		Return camera driver state.
5,93	vsp_state		Set camera driver state.
5,94	vsp_save		Save camera driver state.
5,95	vsp_message		Suppress camera screen messages.
5,96	vqp_error		Return camera error status.
5,98	v_meta_extents		Specify metafile bounding box.
5,99 †	v_write_meta		Write metafile item.
5,99,0 †	vm_pagesize		Set metafile page size.
5,99,1 †	vm_coords		Set metafile coordinate system.
5,99,32,1 †	v_bez_qual	NVDI	Set bezier quality.
5,100	vm_filename		Set metafile filename.
5,102	v_fontinit		Select a new system font.
5,2000	v_pgcount		Specify laser printer copies.
6,0	v_pline	TOS	Draw a polyline.
6,13	v_bez	NVDI	Draw a bezier curve.
7	v_pmarker	TOS	Draw polymarkers.
8	v_gtext	TOS	Output graphic text.
9,0	v_fillarea	TOS	Draw a filled polygon.
9,13	v_bez_fill	NVDI	Draw a filled bezier curve.
10	v_cellarray	TOS[1]	Draw a cell array.
11,1	v_bar	TOS	Draw a filled rectangle.
11,2	v_arc	TOS	Draw an arc.
11,3	v_pieslice	TOS	Draw a pieslice.
11,4	v_circle	TOS	Draw a circle.
11,5	v_ellipse	TOS	Draw an ellipse.
11,6	v_ellarc	TOS	Draw an elliptical arc.
11,7	v_ellpie	TOS	Draw an elliptical pie segment.
11,8	v_rbox	TOS	Draw a rounded rectangle.
11,9	v_rfbox	TOS	Draw a filled rounded rectangle.
11,10	v_justified	TOS	Output justified text.
11,13 †	v_bez_off	NVDI	Disable bezier drawing.
11,13 †	v_bez_on	NVDI	Enable bezier drawing.
12	vst_height	TOS	Set character height (in pixels).
13	vst_rotation	TOS	Set character baseline vector.
14	vs_color	TOS	Set colour in colour palette.
15	vsl_type	TOS	Set polyline line type.
16	vsl_width	TOS	Set polyline line width.
17	vsl_color	TOS	Set polyline colour index.
18	vsm_type	TOS	Set polymarker type.
19	vsm_height	TOS	Set polymarker height.
20	vsm_color	TOS	Set polymarker colour index.
21	vst_font	TOS	Set text face (font).
22	vst_color	TOS	Set graphic text colour index.
23	vsf_interior	TOS	Set fill interior type.
24	vsf_style	TOS	Set fill style index.
25	vsf_color	TOS	Set fill colour index.
26	vq_color	TOS	Inquire colour palette entry.
27	vq_cellarray	TOS	Inquire cell array.
28 †	vrq_locator	TOS	Set/get graphic cursor, request mode.
28 †	vsm_locator	TOS	Set/get graphic cursor, sample mode.
29 †	vrq_valuator	TOS[1]	Input valuator, request mode.
29 †	vsm_valuator	TOS[1]	Input valuator, sample mode.

Dec.	Name	By	Description
30 [†]	vrq_choice	TOS[1]	Input choice, request.
30 [†]	vsm_choice	TOS[1]	Input choice, sample mode.
31 [†]	vrq_string	TOS	Input string, request mode.
31 [†]	vsm_string	TOS	Input string, sample mode.
32	vswr_mode	TOS	Set writing mode.
33	vsin_mode	TOS	Set input mode (sample/request).
35	vql_attributes	TOS	Get polyline attributes.
36	vqm_attributes	TOS	Get polymarker attributes.
37	vqf_attributes	TOS	Get fill area attributes.
38	vqt_attributes	TOS	Get graphic text attributes.
39	vst_alignment	TOS	Set graphic text alignment.
100,0	v_opnvwk	TOS	Open a virtual screen workstation.
100,1	v_opnbm	NVDI	Open offscreen bitmap.
101,0	v_clsvwk	TOS	Close a virtual screen workstation.
101,1	v_clsbm	NVDI	Close offscreen bitmap.
102,0	vq_extnd	TOS	Extended inquire.
102,1	vq_scrninfo	NVDI	Inquire screen information.
103	v_contourfill	TOS	Fill a region.
104	vsf_perimeter	TOS	Set fill perimeter visibility.
105	v_get_pixel	TOS	Read screen pixel value and colour index.
106	vst_effects	TOS	Set graphic text special effects.
107	vst_point	TOS	Set character height (in point).
108	vsl_ends	TOS	Set polyline end styles.
109	vro_cpyfm	TOS	Copy raster, opaque.
110	vr_trnfm	TOS	Transform raster form.
111	vsc_form	TOS	Set mouse form.
112	vsf_udpat	TOS	Set user-defined fill pattern.
113	vsl_udsty	TOS	Set user-defined line style pattern.
114	vr_recfl	TOS	Draw a filled rectangle.
115	vqin_mode	TOS	Get input mode for device.
116	vqt_extent	TOS	Get graphic text extent.
117	vqt_width	TOS	Get graphic character cell width.
118	vex_timv	TOS	Exchange timer interrupt vector.
119	vst_load_fonts	GDOS	Load fonts.
120	vst_unload_fonts	GDOS	Unload fonts.
121	vrt_cpyfm	TOS	Copy raster, transparent.
122	v_show_c	TOS	Show mouse cursor.
123	v_hide_c	TOS	Hide mouse cursor.
124	vq_mouse	TOS	Get mouse position and state.
125	vex_butv	TOS	Exchange mouse button change vector.
126	vex_motv	TOS	Exchange mouse movement vector.
127	vex_curv	TOS	Exchange mouse cursor change vector.
128	vq_key_s	TOS	Get keyboard shift state information.
129	vs_clip	TOS	Set clipping rectangle.
130	vqt_name	TOS	Get font name and index.
131	vqt_fontinfo	TOS	Return font size information.
132	vqt_justified	PC-GEM	Inquire justified graphics text.
133	vs_grayoverride	NVDI?	
134	vex_wheelv	Milan	Exchange mouse wheel change vector.
190	vqt_char_index	NVDI	Convert character index to ASCII or Unicode.
229	vqt_xfntinfo	NVDI	Inquire extended font information.
230,0	vst_name	NVDI	Set font by name.
230,100	vqt_name_and_id	NVDI	Inquire font ID and name by name.

Dec.	Name	By	Description
231	vst_width	NVDI	Set character width in pixels.
232	vqt_fontheader	NVDI	Get Speedo font header.
234	vqt_trackkern	NVDI	Inquire track kerning information.
235	vqt_pairkern	NVDI	Inquire pair kerning information.
236 †	vst_charmap	NVDI	Switch between ASCII and direct mapping.
236 †	vst_map_mode	NVDI	Switch between ASCII, Unicode and direct mapping.
237 †	vst_kern	NVDI	Select track/pair kerning mode.
237 †	vst_track_offset	NVDI	Set user defined track kerning.
239	v_getbitmap_info	NVDI	Get character bitmap information.
240,0 †	vqt_f_extent	NVDI	Inquire outline font text extent.
240,4200 †	vqt_real_extent	NVDI	Inquire real outline font text extent.
240 †	vqt_f_extent16		
241 †	v_ftext	NVDI	Output outline font text.
241 †	v_ftext_offset	NVDI	Output outline font text with individual offsets.
241 †	vftext16		
241 †	v_ftext_offset		
241 †	v_ftext_offset16		
242	v_killoutline		
243	v_getoutline	NVDI	Get bezier outline for a character.
244	vst_scratch		
245	vst_error		
246 †	vst_arbpt		
246 †	vst_arbpt32	NVDI	Set character height by arbitrary points.
247 †	vqt_advance		
247 †	vqt_advance32	NVDI	Inquire text advance placement vector.
248,0	vq_devinfo	NVDI	Inquire device status information.
248,4242	vq_ext_devinfo	NVDI	Inquire extended device status information.
249	v_savecache		
250	v_loadcache		
251	v_flushcache	NVDI	Flush outline font cache.
252 †	vst_setsize		
252 †	vst_setsize32	NVDI	Set character cell width by arbitrary points.
253	vst_skew	NVDI	Set outline font skew.
254	vqt_get_table		
255	vqt_cachesize		

† These functions share a common Opcode.
1 not implemented in ROM VDI.