

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.
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.

continued ...

Dec.	Hex	Name	By	Description
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	Fdatetime()	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	
298	0x12A	Drewinddir()	MiNT	
299	0x12B	Dclosedir()	MiNT	
300	0x12C	Fxattr()	MiNT	
301	0x12D	Flink()	MiNT	
302	0x12E	Fsymlink()	MiNT	

continued ...

Dec.	Hex	Name	By	Description
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.
14	0x0E	lorecl()	TOS	Get the address of the IOREC structure for a BIOS device.
15	0x0F	Rskonf()	TOS	Configure the currently mapped serial port.
16	0x10	Keytbl()	TOS	Return the addresses of the current keyboard mapping tables.

continued ...

Dec.	Hex	Name	By	Description
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	Get/Set the floppy drive seek rates.
42	0x2A	DMAread()	TOS	1.04 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-	
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.

continued ...

Dec.	Hex	Name	By	Description
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_BlkJHandshake()	TOS	Handshakes byte-wise packed data to/from the DSP.
98	0x62	Dsp_BlkJUnpacked()	TOS	Transfers data stored in a longword array to/from the DSP.
99	0x63	Dsp_InStream()	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_IOStream()	TOS	Transfers data to/from the DSP via concurrent interrupt handlers.
102	0x66	Dsp_Remove- Interrupts()	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.
117	0x75	Dsp_InqSubrAbility()	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.

continued ...

Dec.	Hex	Name	By	Description
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.
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	

† 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()	???	
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.

continued ...

Dec.	Hex	Name	By	Description
31	0x1F	menu_ichkck()	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.
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.

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Dec.	Hex	Name	By	Description
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	
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.

continued ...

Dec.	Name	By	Description
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 <i>lines/inch</i> .
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.
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.

continued ...

Dec.	Name	By	Description
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.
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.

continued ...

Dec.	Name	By	Description
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_recl()	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.
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.
231	vst_width()	NVDI	Set character width in pixels.
232	vqt_fontheadr()	NVDI	Get Speedo font header.
234	vqt_trackern()	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()		

continued ...

Dec.	Name	By	Description
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.			