

INDEX

1040ST, 1.3
 1040STe, 1.4
 260ST, 1.3
 520ST, 1.3
 56001, *see DSP*
 68000, 1.3, 5.3
 68030, 1.5, 5.3
 6850, 5.10
 68881/2, 1.4-1.5, 5.4-5.6
 _AKP cookie, 3.13, 4.13
 _CPU cookie, 3.11
 _FDC cookie, 3.11, 4.64
 _FLK cookie, 3.12, 2.7, 2.82
 _FRB cookie, 3.12
 _FPU cookie, 3.11, 5.4
 _IDT cookie, 3.13
 _MCH cookie, 3.12
 _mediach() function, 3.15
 _NET cookie, 3.12
 _SND cookie, 3.12, 4.6
 _SWI cookie, 3.12
 _vblqueue, 3.19, B.9
 _VDO cookie, 3.11, 4.3

A

about menu, 11.15, 6.26
 access permissions, *see MiNT access permissions*
 AC_CLOSE message, 6.7, 6.68
 AC_OPEN message, 6.7, 6.68
 ACIA, B.43-B.44
 ACSI, 4.15
 ADC, 4.6
 address error, 3.35, B.4
 AES, 6.1
 alerts, 6.25, 6.77, 11.10
 application identifier, 6.4, 6.47, 6.53
 application services library, 6.45
 applications, 6.4, 11.24
 clipping rectangles, 6.32
 desk accessories, 6.7
 desktop window, 6.31
 dialogs, 6.24, 6.81, 11.8

drop-down list boxes, 6.28, 6.108, 11.19
 environment string, 6.9, 6.139
 event dispatcher, 6.9
 event library, 6.59
 event loop, 6.4
 file selector library, 6.85, 11.12
 form library, 6.75
 function calling procedure, 6.37
 graphics library, 6.89
 hierachical menus, 6.27, 6.103, 11.20
 language, 6.49, 11.23
 menu buffer, 6.28, 6.154
 menus, 6.25, 11.15
 menu library, 6.101
 message events, 6.11, 6.64
 message types, 6.9
 mouse button events, 6.12, 6.61
 objects, 6.13
 object library, 6.113
 popup menus, 6.28, 6.108, 11.18
 rectangle list, 6.32
 resource library, 6.125
 scrap library, 6.135
 shell buffer, 6.35, 6.140-6.141
 shell library, 6.137
 timer events, 6.12, 6.73
 user-defined messages, 6.12, 6.58
 VDI workstation, 6.33, 6.92
 window toolbars, 6.33, 11.14
 windows, 6.29, 11.4
 window library, 6.147
 AES_BIOS device, 2.17
 AES_MT device, 2.17
 AESPB structure, 6.37
 AHDI, 3.5, 4.15, B.10
 alerts, *see AES alerts*
 alertware, 11.3

alt-help screen dump, 4.91, B.12
 alternative RAM, *see memory types*
 advanced keyboard processor, *see _AKP cookie*
 appl_exit(), 6.47
 appl_find(), 6.47
 appl_getinfo(), 6.48
 appl_init(), 6.4, 6.7, 6.53
 appl_read(), 6.12, 6.54
 appl_search(), 6.55
 appl_tplay(), 6.56
 appl_trecord(), 6.57
 appl_write(), 6.12, 6.58
 APPLBLK structure, 6.23
 application cartridges, 3.3, 5.7
 application services library, *see AES application services library*
 application software, 11.24
 AS68, 1.9
 ASCII, E.1
 assembly language, 1.9
 ASSIGN.SYS file, 7.12
 ARGS data type, H.4
 Atari Extended Argument Specification, *see GEMDOS ARGV*
 Atari GEM, *see GEM*
 attenuation, *see sound attenuation*
 attributes, *see GEMDOS file attributes*
 auto-vector interrupts, B.4
 aux: file, *see serial device*
B
 bad sector list, 4.16
 basepage, 2.11
 BASIC, 1.9
 Bconin(), 3.27
 Bconmap(), 3.14, 4.17, 4.23
 Bconout(), 3.28
 Bconstat(), 3.28
 Bcostat(), 3.29
 bezier curves, *see GDOS bezier curves*

- BGM partition, 4.16
- BIOS**, 3.1
 - calling from an interrupt, 3.22
 - devices, 3.14
 - errors, D.3
 - function calling procedure, 3.22
 - parameter block, 3.30
 - vectors, 3.18
- Bioskeys()**, 4.13, 4.24
- BITBLK** structure, 6.21
- bitmaps, *see VDI raster forms*
- Bitstream international character set, G.7
- Blitmode()**, 4.25
- BLITTER chip, 4.25, 7.9
- BOOLEAN**, *see Data Types*
- boot sectors, 4.14
- break codes, 5.11
- BPB**, *see BIOS parameter block*
- BSS segment, 2.9
- Bufoper()**, 4.25
- Bufptr()**, 4.8, 4.26
- bus error, B.4
- BYTE**, *see Data Types*
- C**
- C, 1.9
- C++, 1.9
- caches, 5.3
- CACR register, 5.3
- camera drivers, *see VDI camera drivers*
- cartridges, 5.7
- Cauxin()**, 2.34, 2.39
- Cauxis()**, 2.34, 2.39
- Cauxos()**, 2.34, 2.40
- Cauxout()**, 2.34, 2.41
- Cconin()**, 2.34, 2.41
- Cconis()**, 2.34, 2.42
- Cconos()**, 2.34, 2.43
- Cconout()**, 2.34, 2.43
- Cconrs()**, 2.34, 2.44
- Cconws()**, 2.34, 2.45
- CD-ROM drives, 2.3, 2.23, 4.12
- CHAR**, *see Data Types*
- CICON** structure, 6.22
- CICONBLK** structure, 6.22
- client, *see MiNT pipes*
- clipboard, *see AES scrap library*
- clipping, *see VDI clipping*
- clock, *see real time clock*
- Cnecin()**, 2.34, 2.46
- cold boot, 3.3
- colors
 - bit layout, 4.5, 5.25
 - mapping, 4.5
 - proper use of, 11.23
 - setting, 4.4
 - using, *see VDI using colors*
 - window, 6.160
- command line, *see GEMDOS command line*
- con: file, *see console device*
- console device, 2.8, 3.14
- context, *see MiNT process context*
- control panel, *see XCONTROL*
- control panel extensions, *see XCONTROL CPX's*
- controls, user-defined, 6.23, 11.10
- conventions, 1.10
- cookie jar, 3.8
 - COOKIE** structure, 3.8
 - determining hardware presence, 3.8
 - placing a cookie, 3.9
 - searching for a cookie, 3.8
 - system cookies, 3.11
- coordinate systems, *see VDI coordinate systems*
- coprocessor exceptions, 5.4
- coprocessor mode, 5.4
- country code, 3.6, 10.6
- CPM 68k, 2.3
- Cprnos()**, 2.34, 2.46
- Cprnout()**, 2.34, 2.47
- CPX, *see XCONTROL*
- cpx_button()**, 10.19
- cpx_call()**, 10.5-10.6, 10.19
- cpx_close()**, 10.5, 10.20
- cpx_draw()**, 10.20
- cpx_hook()**, 10.21
- cpx_init()**, 10.4, 10.6-10.7, 10.21
- cpx_key()**, 10.23
- cpx_m1()**, 10.23
- cpx_m2()**, 10.24
- CPX_Save()**, 10.4, 10.29
- cpx_timer()**, 10.24
- cpx_wmove()**, 10.25
- CPXHEAD** structure, 10.3
- CPXINFO** structure, 10.4
- Crawcin()**, 2.34, 2.48
- Crawio()**, 2.34, 2.49
- critical error handler, *see GEMDOS vectors*
- crys_if(), 6.39
- Cursconf()**, 4.13, 4.27
- CX-40 joystick, 5.12
- D**
- DAC, 4.6
- data cache, *see caches*
- DATA segment, 2.9
- data types, 1.11
- Dbmsg()**, 4.19, 4.28
- Dclosedir()**, 2.16, 2.50
- Dcntl()**, 2.16-2.18, 2.50
- Dcreate()**, 2.4, 2.53
- Ddelete()**, 2.4, 2.54
- debugging, 2.31
- debugging keys, *see MultiTOS debugging keys*
- debugging levels, 2.33
- deferred vertical blank handlers, 3.19
- desk menu, 6.26, 11.15
- DESKCICN.RSC file, 9.5
- DESKCOPY environment variable, *see desktop extensibility*
- DESKFMT environment variable, *see desktop extensibility*
- DESKICON.RSC file, 9.5

- desktop window, *see AES desktop window*
- desktop, 9.1
- drag and drop usage, 9.3
 - extendibility, 9.3
 - messages, 9.3
 - replacing, 9.3
 - TOS** application launching, 9.4
- DESKTOP.INF file, 9.4
- Devconnect()**, 4.7, 4.29
- device-specific format, *see VDI device-specific format*
- device independence, 11.22
- Dfree()**, 2.4, 2.54
- Dgetcwd()**, 2.16, 2.56
- Dgetdrv()**, 2.5, 2.56
- Dgetpath()**, 2.5, 2.57
- diagnostic cartridges, 5.7
- dialogs, *see AES dialogs*
- dialogware, 11.3
- Digital Research, Inc., 1.3
- disk transfer address, *see GEMDOS DTA*
- display, *see screen*
- Dlock()**, 2.16, 2.57
- DMA sound system, *see sound STe/TT030 digital sound*
- DMAread()**, 4.15, 4.31
- DMAwrite()**, 4.15, 4.32
- Dopendir()**, 2.16, 2.58
- Dosound()**, 4.18, 4.33, I.3
- dot-matrix printers, *see VDI printer drivers*
- Dpathconf()**, 2.3, 2.59
- drag and drop, H.1
- originator, H.3
 - recipient, H.5
- Dreaddir()**, 2.16, 2.61
- Drewinddir()**, 2.16, 2.62
- drop-down list boxes, *see AES drop-down list boxes*
- Drvmap()**, 3.30
- Dsetdrv()**, 2.5, 2.62
- Dsetpath()**, 2.5, 2.63
- DSP, 4.8
- connection matrix, 4.7
 - controller registers, B.36
 - debugging, 4.11
 - general-purpose pins, 4.11
 - ISR register, 4.11
 - memory map, 4.9
 - programs, 4.10
 - sending data, 4.11
 - state, 4.11
 - subroutines, 4.9
 - word size, 4.9
- Dsp_Available()**, 4.10, 4.34
- Dsp_BlkBytes()**, 4.11, 4.35
- Dsp_BlkHandshake()**, 4.11, 4.35
- Dsp_BlkUnpacked()**, 4.11, 4.36
- Dsp_BlkWords()**, 4.11, 4.37
- Dsp_DoBlock()**, 4.11, 4.38
- Dsp_ExecBoot()**, 4.11, 4.39
- Dsp_ExecProg()**, 4.11, 4.39
- Dsp_FlushSubroutines()**, 4.40
- Dsp_GetProgAbility()**, 4.11, 4.40
- Dsp_GetWordSize()**, 4.41
- Dsp_Hf0()**, 4.11, 4.41
- Dsp_Hf1()**, 4.11, 4.42
- Dsp_Hf2()**, 4.11, 4.43
- Dsp_Hf3()**, 4.11, 4.43
- Dsp_Hstat()**, 4.11, 4.44
- Dsp_InqrSubrAbility()**, 4.10, 4.44
- Dsp_InStream()**, 4.11, 4.45
- Dsp_IOSStream()**, 4.11, 4.46
- Dsp_LoadProg()**, 4.11, 4.47
- Dsp_LoadSubroutine()**, 4.48
- Dsp_Lock()**, 4.9, 4.48
- Dsp_LodToBinary()**, 4.11, 4.49
- Dsp_MultBlocks()**, 4.11, 4.50
- Dsp_OutStream()**, 4.11, 4.51
- Dsp_RemoveInterrupts()**, 4.11, 4.51
- Dsp_RequestUniqueAbility()**, 4.10, 4.52
- Dsp_Reserve()**, 4.10, 4.53
- Dsp_RunSubroutine()**, 4.53
- Dsp_SetVectors()**, 4.11, 4.54
- Dsp_TriggerHC()**, 4.11, 4.55
- Dsp_Unlock()**, 4.9, 4.55
- Dsptristate()**, 4.8, 4.56
- DTA**, *see GEMDOS DTA*
- dual-state menu items, 11.17
- ## E
- edit menu, 11.17
- EgetPalette()**, 4.5, 4.56
- EgetShift()**, 4.4, 4.57
- enhanced joystick, 5.8
- entertainment software, 11.25
- Epson printer, 4.96
- error codes, D.1
- EsetBank()**, 4.5, 4.58
- EsetColor()**, 4.5, 4.59
- EsetGray()**, 4.4, 4.60
- EsetPalette()**, 4.5, 4.60
- EsetShift()**, 4.4, 4.61
- EsetSmear()**, 4.4, 4.62
- EOF**, 2.39-2.41
- evnt_button()**, 6.12, 6.61
- evnt_dclick()**, 6.9, 6.62
- evnt_keybd()**, 6.12, 6.63
- evnt_mesag()**, 6.11, 6.64
- evnt_mouse()**, 6.12, 6.70
- evnt_multi()**, 6.10, 6.71
- evnt_timer()**, 6.12, 6.73
- EVNTREC** structure, 6.57
- exception vectors, B.4
- expansion area, B.46
- EXTEND.SYS file, 7.15
- extended partition, *see XGM partition*
- extension (file), 2.4
- ## F
- Falcon030, 1.6
- FALSE**, *see Data Types*
- FAT**, *see file allocation table*
- Fattrib()**, 2.6, 2.64
- Fchmod()**, 2.15, 2.65
- Fchown()**, 2.15, 2.66
- Fclose()**, 2.66
- Fcntl()**, 2.15, 2.67
- Fcreate()**, 2.6, 2.74
- Fdatetime()**, 2.7, 2.75

- Fdelete()**, 2.7, 2.76
- Fdup()**, 2.8, 2.76
- Fforce()**, 2.8, 2.77
- Fgetchar()**, 2.15, 2.79
- Fgetdta()**, 2.6, 2.79
- file allocation table, 4.14
- file menu, 11.16
- file selector library, *see* **AES**
 - file selector library*
- file systems, *see* **MiNT**
 - loadable file systems*
- filenames, *see* **GEMDOS**
 - filenames*
- fine scrolling, 5.26
- Finstat()**, 2.15, 2.80
- fix31**, *see* *Data Types*
- Flink()**, 2.15, 2.81
- floating-point coprocessor, 5.4
- floating-point support, *see*
 - _FPU cookie*
- flock* system variable, B.8
- Flock()**, 2.7, 2.82
- floppy drives, 4.15
- Flopfmt()**, 4.15, 4.63
- Floprate()**, 4.15, 4.65
- Floprd()**, 4.15, 4.66
- Flopver()**, 4.15, 4.66
- Flopwr()**, 4.15, 4.67
- .FNT file format, C.7
 - character offset table, C.9
 - data, C.8
 - header, C.7
 - horizontal offset table, C.9
- Fmidipipe()**, 2.16, 2.83
- folders, *see* **GEMDOS**
 - directories*
- Font Scaling Module, *see*
 - FSMGDOS**
- FONTGDOS**, *see* **GDOS**
 - FONTGDOS**
- fonts
 - in **AES** objects, 6.20
 - bitmap, *see* **VDI fonts**
 - file format, C.7
 - outline, *see* **VDI fonts**
 - system, 6.36, 6.48
- Fopen()**, 2.84
- form_alert()**, 6.25, 6.77
- form_button()**, 6.25, 6.78
- form_center()**, 6.79
- form_dial()**, 6.80
- form_do()**, 6.24, 6.81
- form_error()**, 6.25, 6.82
- form_keybd()**, 6.25, 6.83
- Forth, 1.9
- Foutstat()**, 2.15, 2.85
- Fpipe()**, 2.27, 2.86
- Fputchar()**, 2.15, 2.86
- Fread()**, 2.7, 2.87
- Freadlink()**, 2.15, 2.88
- Frename()**, 2.4, 2.89
- Fseek()**, 2.7, 2.89
- fsel_exinput()**, 6.34, 6.87
- fsel_input()**, 6.34, 6.88
- Fselect()**, 2.15, 2.90
- Fsetdta()**, 2.6, 2.91
- Fsfirst()**, 2.5, 2.92
- FSMC cookie, 3.13
- FSMGDOS**, 7.13
- Fsnext()**, 2.5, 2.93
- Fsymlink()**, 2.15, 2.94
- Fwrite()**, 2.6, 2.95
- Fxattr()**, 2.15, 2.95
- G**
 - gadgets, *see* **AES windows**
 - gain, *see* *sound setting gain*
 - game controllers, 5.8
 - GDOS**, 7.11
 - bezier curves, 7.13
 - caching, 7.15
 - camera drivers, 7.17
 - device drivers, 7.16
 - error support, 7.13
 - fix31** data type, 7.14
 - font naming convention, 7.12
 - FONTGDOS**, 7.13
 - fonts, 7.12
 - FSMGDOS**, 7.12-7.13
 - function calling procedure,
 - see* **VDI function calling procedure**
 - kerning, 7.15
 - memory driver, 7.18
 - metafiles, 7.17
 - original, 7.12
 - plotter drivers, 7.16
 - printer drivers, 7.16
 - special effects, 7.15
 - SpeedoGDOS**, 7.12, 7.14
 - Speedo character indexes, 7.15
 - tablet drivers, 7.17
 - user-defined printer buffer, 7.17
 - version, 7.11
 - GDP, *see* **VDI GDP's**
 - .GEM file format, C.3
 - GEM**, 1.7
 - partition type, 4.16
 - user interface guidelines, 11.1
 - GEM/3, 7.13
 - GEM.CNF file, 6.36
 - gemdos(), 2.35
 - GEMDOS**, 2.1
 - ARGV, 2.12
 - application startup, 2.11
 - character functions, 2.34
 - command line, 2.11
 - date functions, 2.35
 - default directory, 2.5
 - default drive, 2.5
 - deleting files, 2.7
 - directories, 2.4
 - drive identifiers, 2.3
 - DTA**, 2.6
 - environment string, 2.12
 - errors, D.3
 - executable file format, 2.9
 - file attributes, 2.6
 - file handles, 2.7
 - file locking, 2.7
 - file position pointer, 2.7
 - file time/date stamp, 2.7
 - filenames, 2.4

function calling procedure,
 2.35
 path, 2.5
 processes, 2.9
 record locking, 2.7
 redirection, 2.8
 root directory, 2.4
 time functions, 2.35
 the **TOS** file system, 2.3
 vectors, 2.13
 version, 2.3
 volume label, 2.6
GEMFILE.GEM, 7.17
 generalized device primitives,
 see VDI GDP's
GENLOCK, 4.6
Get_Buffer(), 10.29
Getbpb(), 3.15, 3.30
getcookie(), 10.30
GetFirstRect(), 10.30
Getmpb(), 3.31
GetNextRect(), 10.31
Getrez(), 4.4, 4.68
Gettime(), 4.18, 4.69
Giaccess(), 4.70, I.3
Gpio(), 4.8, 4.72
graf_dragbox(), 6.34, 6.91
graf_growbox(), 6.34, 6.92
graf_handle(), 6.34, 6.92, 7.3
graf_mkstate(), 6.34, 6.93
graf_mouse(), 6.34, 6.94
graf_movebox(), 6.34, 6.96
graf_rubberbox(), 6.34, 6.97
graf_shrinkbox(), 6.34, 6.98
graf_slidebox(), 6.34, 6.99
graf_watchbox(), 6.34, 6.100
 graphics library, *see AES
 graphics library*
 grayscale mode, 4.4
GRECT structure, 7.7
H
 handles, *see GEMDOS file
 handles or VDI*
 workstation handles
 hierarchical menus, 6.27, 11.20

I

icon, 6.21
 color, 6.22
ICONBLK structure, 6.21
 iconification, 6.30, 6.156, 11.7
IKBD, 5.10
 commands, 5.14
 scan codes, F.1
Ikbdws(), 4.14, 4.72
 Imagen, *see QMS/Imagen*
 .IMG file format, C.5
 extra palette information,
 C.5
 header, C.5
 image compression, C.6
 image data format, C.6
Initmous(), 4.12, 4.73
 instruction cache, 5.3
 interrupt priority level, 5.3
IOREC structure, 4.75
Iorec(), 4.17, 4.75
J
Jdisint(), 4.18, 4.76
Jenabint(), 4.18, 4.76
 joysticks, 5.8, 5.12
K
Kbdvbase(), 4.77
KBDVECS, 4.77
Kbrate(), 4.13, 4.78
Kbshift(), 3.7, 3.32
 kerning, *see GDOS kerning*
 keyboard, 5.11
 keyboard equivalents, 11.20
 keyboard tables, 4.12, 7.15, E.1,
 F.1
Keytbl(), 4.12, 4.78
 KEYTBL.TBL file, 4.13
L
 LAN connector, 4.17
 Lattice C, 1.9
 light gun, 5.10
Line-A, 8.1
 arbitrary line function, 8.12
 bitblt function, 8.15
 copy raster function, 8.21

draw sprite function, 8.20
 filled polygon function,
 8.14
 filled rectangle function,
 8.13
 font headers, 8.7
 function calling procedure,
 8.8
 get pixel function, 8.12
 hide mouse function, 8.19
 horizontal line function,
 8.13
 initialize function, 8.11
 plot pixel function, 8.11
 seed fill function, 8.22
 show mouse function, 8.18
 textblt function, 8.16
 transform mouse function,
 8.19
 undraw sprite function, 8.20
 variable table, 8.3

links, *see MiNT links*

list boxes, *see AES drop-down
 list boxes*

Localtalk, *see LAN connector*

Locksnd(), 4.6, 4.79

Logbase(), 4.3, 4.80

logical screen, 4.3

M

magneto-optical drives, 2.3

Maddalt(), 2.97

make codes, 5.11

Malloc(), 2.8, 2.98

MAPTAB structure, 4.24

matrix, *see sound connection
 matrix*

media change, 3.15

Mediach(), 3.15, 3.33

Mega ST, 1.4

Mega STe, 1.4

memory driver, *see GDOS
 memory driver*

memory initialization, 3.3

memory management unit, B.5

memory map, B.1

memory protection, 2.14

memory types, 2.8
 memory usage parameter block,
 3.31
MEMORY.SYS, *see GDOS*
memory driver
MENU structure, 6.103
 menu buffer, *see AES menu*
buffer
menu_attach(), 6.27, 6.103
menu_bar(), 6.27, 6.105
menu_ichack(), 6.27, 6.106
menu_ienable(), 6.27, 6.106
menu_istart(), 6.27, 6.107
menu_popup(), 6.28, 6.108
menu_register(), 6.4, 6.7,
 6.109
menu_settings(), 6.28, 6.110
menu_text(), 6.27, 6.111
menu_tnormal(), 6.27, 6.111
 menus, *see AES menus*
 messages, *see AES message*
events
META.SYS driver, *see GDOS*
metafiles
METADOS, 4.12
 metafiles
 creating, *see GDOS*
 metafiles
 header, C.3
 records, C.4
 sub-opcodes, C.4
METAINFO structure, 4.80
Metainit(), 4.12, 4.80
MFDB structure, 7.119
MFORM structure, 6.95
MFsave(), 10.31
MFP, B.5
 configuration, 4.17
 interrupts, 4.18
 ST port registers, B.37
 TT port registers, B.41
 vectors, B.5
Mfpint(), 4.18, 4.81
Mfree(), 2.99
MICROWIRE interface, 5.22
MIDI, 3.14, 5.10

Midiws(), 4.19, 4.82
MiNT, 2.14
 access permissions, 2.14
 cookie, 3.13
 debugging, 2.31
 default directory, 2.16
 DEV directory, 2.17
 directory enumeration, 2.16
 exit codes, 2.14
 file attributes, 2.15
 file ownership, 2.15
 file status, 2.15
 file system extensions, 2.15
 function calling procedure,
 see GEMDOS function
 calling procedure
 hard links, 2.15
 interprocess
 communication, 2.27
 links, 2.15
 loadable devices, 2.17
 loadable file systems, 2.23
 messages, 2.31
 MINT.CNF file, 2.33
 PIPE directory, 2.27
 pipes, 2.27
 PROC directory, 2.16
 process attributes, 2.17
 process context, 2.32
 process identifier, 2.14
 process priority, 2.14
 processes, 2.14
 pseudo-drives, 2.16
 resources, 2.14
 semaphores, 2.31
 shared memory, 2.30
 SHM directory, 2.30
 signals, 2.28
 symbolic links, 2.15
 threads, 2.14
 timeslice, 2.14
 tracing, 2.31
 user-defined longword,
 2.14
MN_SET structure, 6.110
 modem device, 2.17
 mouse, 5.11

mouse device, 2.17
MPB, *see memory usage*
parameter block
Mshrink(), 2.11, 2.99
MS-DOS, 2.3
 multi-function peripheral port,
see MFP
MultiTOS, 2.3
 debugging keys, 2.32
Mxalloc(), 2.8, 2.100
N
 NDC, *see VDI coordinate*
systems
 NEWDESK.INF file, 9.4
 non-maskable interrupt, 5.3
 non-volatile RAM, *see*
NVMaccess()
 normalized device coordinates,
see VDI coordinate
systems
 NULL device, 2.17
NVMaccess(), 4.18, 4.83
O
objc_add(), 6.14, 6.115
objc_change(), 6.17, 6.115
objc_delete(), 6.14, 6.116
objc_draw(), 6.117
objc_edit(), 6.25, 6.118
objc_find(), 6.14, 6.119
objc_offset(), 6.14, 6.120
objc_order(), 6.14, 6.121
objc_sysvar(), 6.122
OBJC_COLORWORD
 structure, 6.18
 objects, 6.13
 colorword, 6.18
 flags, 6.16
 fonts, 6.20
 ob_spec, 6.18
 states, 6.17
 structure, 6.15
 types, 6.15
Offgibit(), 4.17, 4.84
Ongibit(), 4.17, 4.84
 ORU's, G.3

- OS, 1.6
 overlay mode, *see VsetMask()*
- P**
- p_cookies*, *see cookie jar*
p_kbshift, 3.7
p_root, 3.5
p_run, 3.7
 paddles, 5.9
 page flipping, 4.3
 palette, *see VDI palette based devices*
 palette registers, 4.4
PARMBLK structure, 6.23
 partition information block, 4.16
 Pascal, 1.9
 PATH environment variable, 6.9
Pause(), 2.101
Pdomain(), 2.3, 2.102
 peripheral mode, 5.4
Pexec(), 2.9, 2.103
Pfork(), 2.14, 2.105
Physbase(), 4.3, 4.85
 physical screen, 4.3
Pgetegid(), 2.14, 2.106
Pgeteuid(), 2.14, 2.106
Pgetgid(), 2.14, 2.107
Pgetpgrp(), 2.14, 2.107
Pgetpid(), 2.14, 2.107
Pgetppid(), 2.14, 2.108
Pgetuid(), 2.14, 2.108
Pkill(), 2.109
 plotter drivers, *see VDI plotter drivers*
Pmsg(), 2.31, 2.109
Pnice(), 2.14, 2.111
Popup(), 10.32
 popup menus, 6.28, 11.18
Prenice(), 2.14, 2.111
 prescaler, 4.7
PRGFLAGS, 2.9-2.10
 printer, 4.18
 printer device, 2.8, 2.17
 printer drivers, *see VDI printer drivers*
 prn: file, *see printer device*
- process terminate handler, *see GEMDOS vectors*
 processor cache control, 5.3
 MegaSTe, B.34
 processor state save area, B.7
 progress indicators, 11.12
Protbt(), 4.15, 4.86
prt_cnt, B.12
PRTBLK structure, 4.87
Prtblk(), 4.18, 4.87
Prusage(), 2.14, 2.112
Psemaphore(), 2.31, 2.113
Psetgid(), 2.14, 2.114
Psetlimit(), 2.14, 2.114
Psetpgrp(), 2.14, 2.115
Psetuid(), 2.14, 2.116
 pseudo-drive, 2.16
 PSG, I.1
Psigaction(), 2.28, 2.116
Psigblock(), 2.28, 2.118
Psignal(), 2.28, 2.118
Psigpause(), 2.28, 2.119
Psigpending(), 2.28, 2.120
Psigreturn(), 2.28, 2.120
Psigsetmask(), 2.28, 2.121
Pterm(), 2.9, 2.11, 2.121
PtermØ(), 2.11, 2.122
Ptermres(), 2.11, 2.123
PTACEFLOW, 2.31
PTACEGO, 2.31
PTACESFLAGS, 2.31
PTACESTEP, 2.31
Pumask(), 2.16, 2.123
Puntaes(), 3.7, 4.19, 4.88
Pusrval(), 2.14, 2.124
Pvfork(), 2.14, 2.124
Pwait(), 2.14, 2.125
Pwait3(), 2.14, 2.126
Pwaitpid(), 2.14, 2.127
- Q**
- QMS/Imagen, 7.13
- R**
- Random()**, 4.18, 4.89
 raster coordinates, *see VDI coordinate systems*
 raster forms, *see VDI raster forms*
 RC, *see VDI coordinate systems*
 RCS, *see resource construction set*
 real-time clock, B.31
 rectangle list, *see AES rectangle list*
 rectangles, *see VDI rectangles*
 reset vector, *see BIOS vectors*
 resolutions, *see screen*
 resource construction set, 6.13
 resources, 6.13
 file format, *see .RSC file format*
 usage, *see AES resource library*
- ROOT** definition, 6.14
 .RSC file format, C.9
 CICONBLK extension, C.11
 extension array, C.11
 free strings and images, C.11
 header, C.9
 object trees, C.10
 AES 3.30 resource format, C.11
Rscnf(), 4.17, 4.89
rsh_fix(), 10.33
rsh_obfix(), 10.34
rsrc_free(), 6.127
rsrc_gaddr(), 6.13, 6.127
rsrc_load(), 6.7, 6.13, 6.128
rsrc_obfix(), 6.13, 6.129
rsrc_rcfix(), 6.13, 6.130
rsrc_saddr(), 6.13, 6.130
Rwabs(), 3.34
- S**
- Salert()**, 2.28, 2.128
SBUFPTR, 4.26
 scan codes, F.1
 SCC, 4.17
 DMA registers, B.33
 ports, B.33

- vectors, B.6
 - scr_dump*, B.14
 - scrap library, *see AES scrap library*
 - Scrdmp()**, 4.18, 4.91
 - screen
 - determining the size, 4.4
 - memory, 4.3, 5.25
 - registers, B.19
 - resolution, 4.4, 5.24
 - resolution change, 6.144
 - scrp_read()**, 6.34, 6.135
 - scrp_write()**, 6.34, 6.136
 - SCSI, 4.15
 - semaphores, *see MiNT semaphores*
 - serial device, 2.8
 - serial number, 4.14
 - serial port, 4.16
 - mapping, 4.17
 - server, *see MiNT pipes*
 - Set_Evnt_Mask()**, 10.34
 - Setbuffer()**, 4.7, 4.92
 - SetColor()**, 4.4, 4.93
 - Setexc()**, 3.20, 3.35
 - Setinterrupts()**, 4.8, 4.93
 - Setmode()**, 4.7, 4.94
 - Setmontracks()**, 4.8, 4.95
 - Setpalette()**, 4.4, 4.95
 - Setprt()**, 4.18, 4.96
 - Setscreen()**, 4.3, 4.97
 - Settime()**, 4.18, 4.98
 - Settracks()**, 4.8, 4.99
 - shadow image, B.46
 - shel_envrn()**, 6.9, 6.139
 - shel_find()**, 6.36, 6.139
 - shel_get()**, 6.35, 6.140
 - shel_put()**, 6.35, 6.141
 - shel_read()**, 6.36, 6.141
 - shel_write()**, 2.13, 6.9, 6.36, 6.142
 - shell buffer, *see AES shell buffer*
 - shell, *see AES shell library*
 - shift keys, 3.7, 3.32
 - signals, *see MiNT signals*
 - skeleton code, 6.4, 6.7
 - Sl_Arrow()**, 10.35
 - Sl_dragx()**, 10.36
 - Sl_dragy()**, 10.36
 - Sl_size()**, 10.37
 - Sl_x()**, 10.37
 - Sl_y()**, 10.38
 - slider bar, 6.30
 - SLM804, 7.16
 - SMALLER** gadget, 6.30
 - smear mode, 4.4
 - Sndstatus()**, 4.8, 4.99
 - sound
 - attenuation, 4.8
 - adjusting gain, 4.8
 - configuring levels, 4.8
 - connection matrix, 4.7
 - determining status, 4.8
 - envelopes, I.6
 - Falcon030 sound system, 4.6
 - FM, I.3
 - handshaking, 4.7
 - interrupts, 4.8
 - playing, I.1
 - proper use of, 11.24
 - recording, 4.8
 - registers, B.25-B.26
 - selecting tracks, 4.8
 - setting frequency, 4.7
 - STe/TT digital sound, 5.28
 - Soundcmd()**, 4.7, 4.100
 - SpeedoGDOS**, 7.14
 - character set, G.7
 - font header, G.3
 - Ssbrk()**, 4.19, 4.102
 - ST, 1.3
 - ST Book, 1.5
 - ST RAM, *see memory types*
 - Stacy, 1.3
 - stack allocation, 6.5
 - standard format, 7.9
 - standard RAM, *see memory types*
 - submenus, *see hierarchical menus*
 - Super()**, 2.128
 - supervisor mode, 2.128, 4.12, 4.103
 - Supexec()**, 4.12, 4.103
 - Sversion()**, 2.3, 2.129
 - Syield()**, 2.130
 - symbol table, 2.10
 - _sysbase*, 3.4
 - Sysconf()**, 2.130
 - system boot variables, B.4
 - system font, 6.36, 6.48
 - system bell vector, *see BIOS vectors*
 - system control unit, B.34
 - system keyclick vector, *see BIOS vectors*
 - system RAM, B.16
 - system startup, 3.3
 - system variables, B.7
 - system vectors, B.7
- ## T
- tablet drivers, *see VDI tablet drivers*
 - Talarm()**, 2.131
 - TEDINFO** structure, 6.19
 - terminal device, 2.17
 - TEXT segment, 2.9
 - Tgetdate()**, 2.35, 2.132
 - Tgettime()**, 2.35, 2.132
 - threads, *see MiNT threads*
 - three-dimensional objects, 6.16-6.17
 - Tickcal()**, 3.36
 - timer, *see AES timer events*
 - timer tick vector, *see GEMDOS vectors*
 - toolbars, 6.33, 11.14
 - toolboxes, 11.13
 - TOS**, 1.3
 - configuration bits, 3.6
 - file system, 2.3
 - header, 3.4
 - OSHEADER** structure, 3.5
 - TOSRUN pipe, 9.4
 - TPA, *see transient program area*
 - tracing, *see MiNT tracing*

transient program area, 2.11
 TRAP exception vectors, B.4
 TRUE, *see Data Types*
 true-color, *see VDI true-color devices*
 toolbars, *see AES window toolbars*

U

UBYTE, *see Data Types*
UCHAR, *see Data Types*
ULONG, *see Data Types*
 UNIX, 2.3
Unlocksnd(), 4.6, 4.103
 user interface, 11.1
 user mode, 4.12
UWORD, *see Data Types*

V

v_alpha_text(), 7.23
v_arc(), 7.24
v_bar(), 7.25
v_bez(), 7.13, 7.26
v_bez_fill(), 7.13, 7.27
v_bez_off(), 7.13, 7.28
v_bez_on(), 7.13, 7.29
v_bez_qual(), 7.30
v_bit_image(), 7.31
v_cellarray(), 7.32
v_circle(), 7.33
v_clear_disp_list(), 7.34
v_clrwk(), 7.34
v_clswwk(), 7.35
v_clswk(), 7.35
v_contourfill(), 7.36
v_curdown(), 7.37
v_curhome(), 7.37
v_curleft(), 7.38
v_curright(), 7.38
v_curttext(), 7.39
v_curup(), 7.40

v_dspcur(), 7.40
v_eeol(), 7.41
v_eeos(), 7.42
v_ellarc(), 7.42
v_ellipse(), 7.43
v_ellpie(), 7.44
v_enter_cur(), 7.45
v_exit_cur(), 7.46
v_fillarea(), 7.46
v_flushcache(), 7.47
v_fontinit(), 7.48
v_form_adv(), 7.48
v_ftext(), 7.49
v_ftext16(), 7.16, 7.50
v_ftext_offset(), 7.51
v_ftext_offset16(), 7.16, 7.52
v_get_pixel(), 4.5, 7.55
v_getbitmap_info(), 7.12, 7.14, 7.53
v_getoutline(), 7.12, 7.54
v_gtext(), 7.56
v_hardcopy(), 7.57
v_hide_c(), 7.57
v_justified(), 7.58
v_killoutline(), 7.12, 7.59
v_loadcache(), 7.59
v_meta_extents(), 7.60
v_opnvwk(), 7.3, 7.61
V_Opnvwk(), 7.5, 7.65
v_opnwk(), 7.3, 7.66
V_Opnwk(), 7.5, 7.67
v_output_window(), 7.68
v_pgcount(), 7.69
v_pieslice(), 7.70
v_pline(), 7.71
v_pmarker(), 7.72
v_rbox(), 7.72
v_rfbox(), 7.73
v_rmcur(), 7.74
v_rvoff(), 7.75
v_rvon(), 7.75
v_savecache(), 7.76
v_set_app_buff(), 7.77
v_show_c(), 7.77
v_updwk(), 7.16, 7.78

v_write_meta(), 7.79
 validation string, 6.19
VDI, 7.1
 clipping, 7.3, 7.125
 color mapping, 7.9
 coordinate systems, 7.5
 device IDs, 7.4
 device-specific format, 7.10
 fonts, *see GDOS fonts*
 function availability, 7.8
 function calling procedure, 7.18
 function reference, 7.21
GDOS, *see GDOS*
 GDP's, 7.6
 monochrome devices, 7.9
 raster forms, 7.9
 rectangles, 7.7
 rendering graphics, 7.6
 palette-based devices, 7.9
 parameter block, 7.18
 physical workstations, 7.3
 standard format, 7.10
 true-color devices, 7.9
 using color, 7.8
 vector handling, 7.10
 virtual workstations, 7.4
 workstations, 7.3
 workstation handles, 7.3
 write modes, 7.8, 7.162
VDI_Workstation structure, 7.65
 vertical blank
 handlers, 3.19
 interrupt, 3.19
vex_butv(), 7.10, 7.80
vex_curv(), 7.10, 7.81
vex_motv(), 7.10, 7.82
vex_timv(), 7.10, 7.83
VgetMonitor(), 4.4, 4.104
VgetRGB(), 4.6, 4.104
VgetSize(), 4.4, 4.105
 video control, 4.3
 video registers, B.19
 video mode, *see screen*

- `vm_coords()`, 7.17, 7.83
- `vm_filename()`, 7.17, 7.84
- `vm_pagesize()`, 7.17, 7.85
- VOID**, *see Data Types*
- VOIDP**, *see Data Types*
- VOIDPP**, *see Data Types*
- volume label, *see GEMDOS volume label*
- `vq_cellarray()`, 7.86
- `vq_chcells()`, 7.87
- `vq_color()`, 7.88
- `vq_curaddress()`, 7.89
- `vq_extnd()`, 7.8, 7.89
- `vq_gdos()`, 7.11, 7.92
- `vq_key_s()`, 7.93
- `vq_mouse()`, 7.93
- `vq_scan()`, 7.94
- `vq_tabstatus()`, 7.95
- `vq_tdimensions()`, 7.96
- `vqf_attributes()`, 7.96
- `vqin_mode()`, 7.97
- `vql_attributes()`, 7.98
- `vqm_attributes()`, 7.99
- `vqp_error()`, 7.100
- `vqp_films()`, 7.101
- `vqp_state()`, 7.101
- `vqt_advance()`, 7.102
- `vqt_advance32()`, 7.14, 7.103
- `vqt_attributes()`, 7.104
- `vqt_cachesize()`, 7.15, 7.105
- `vqt_devinfo()`, 7.106
- `vqt_extent()`, 7.107
- `vqt_f_extent()`, 7.108
- `vqt_f_extent16()`, 7.109
- `vqt_fontheadr()`, 7.12, 7.110
- `vqt_fontinfo()`, 7.111
- `vqt_get_table()`, 7.12, 7.15, 7.112
- `vqt_name()`, 7.16, 7.113
- `vqt_pairkern()`, 7.12, 7.15, 7.114
- `vqt_trackkern()`, 7.12, 7.15, 7.115
- `vqt_width()`, 7.115
- `vr_recfl()`, 7.117
- `vr_trnfm()`, 4.5, 7.9, 7.117
- `vro_cpyfm()`, 7.8-7.9, 7.119
- `vrq_choice()`, 7.121
- `vrq_locator()`, 7.121
- `vrq_string()`, 7.122
- `vrq_valuator()`, 7.123
- `vrt_cpyfm()`, 7.9, 7.124
- `vs_clip()`, 7.125
- `vs_color()`, 7.126
- `vs_curaddress()`, 7.126
- `vs_palette()`, 7.127
- `vsc_form()`, 7.128
- VsetMask()**, 4.6, 4.106
- VsetMode()**, 4.4, 4.107
- VsetRGB()**, 4.6, 4.108
- VsetScreen()**, 4.108
- VsetSync()**, 4.6, 4.109
- `vsf_color()`, 7.129
- `vsf_interior()`, 7.129
- `vsf_perimeter()`, 7.130
- `vsf_style()`, 7.131
- `vsf_udpat()`, 7.132
- `vsin_mode()`, 7.133
- `vsl_color()`, 7.134
- `vsl_ends()`, 7.134
- `vsl_type()`, 7.135
- `vsl_udsty()`, 7.136
- `vsl_width()`, 7.137
- `vsm_choice()`, 7.138
- `vsm_color()`, 7.138
- `vsm_height()`, 7.139
- `vsm_locator()`, 7.140
- `vsm_string()`, 7.141
- `vsm_type()`, 7.142
- `vsm_valuator()`, 7.143
- `vsp_message()`, 7.144
- `vsp_save()`, 7.145
- `vsp_state()`, 7.145
- `vst_alignment()`, 7.146
- `vst_arbpt()`, 7.147
- `vst_arbpt32()`, 7.14, 7.148
- `vst_charmap()`, 7.15, 7.149
- `vst_color()`, 7.150
- `vst_effects()`, 7.150
- `vst_error()`, 7.13, 7.151
- `vst_font()`, 7.152
- `vst_height()`, 7.153
- `vst_kern()`, 7.12, 7.15, 7.154
- `vst_load_fonts()`, 7.13, 7.155
- `vst_point()`, 7.155
- `vst_rotation()`, 7.156
- `vst_scratch()`, 7.15, 7.157
- `vst_setsize()`, 7.158
- `vst_setsize32()`, 7.14, 7.159
- `vst_skew()`, 7.160
- `vst_unload_fonts()`, 7.161
- `vswr_mode()`, 7.8, 7.162
- Vsync()**, 4.110
- VT-52 emulator, 3.14
- `vt_alignment()`, 7.163
- `vt_axis()`, 7.164
- `vt_origin()`, 7.164
- `vt_resolution()`, 7.165
- W**
 - warm boot, 3.3
 - WavePlay()**, 4.110
 - wildcards, 2.5
 - `wind_calc()`, 6.33, 6.149
 - `wind_close()`, 6.31, 6.150
 - `wind_create()`, 6.29, 6.150
 - `wind_delete()`, 6.31, 6.152
 - `wind_find()`, 6.31, 6.152
 - `wind_get()`, 6.31, 6.153
 - `wind_new()`, 6.157
 - `wind_open()`, 6.31, 6.158
 - `wind_set()`, 6.31, 6.158
 - `wind_update()`, 6.32, 6.161
 - windows, *see AES windows*
 - WORD**, *see Data Types*
 - workstations, *see VDI workstations*
 - WORM drives, 2.3
 - write modes, *see VDI write modes*
 - WYSIWYG, 7.14
- X**
 - XBIOS**, 4.1
 - calling from an interrupt, 4.20

function calling procedure,
4.19

Xbtimer(), 4.113

XCPB structure, 10.5

XCONTROL, 10.1

boot-only CPX's, 10.6

callback functions, 10.17

cpx flavors, 10.6

CPX types, 10.6

event CPX's, 10.9

executable format, 10.3

file formats, 10.12

file naming, 10.12

form CPX's, 10.6

function calling procedure,
10.13

function reference, 10.15

parameter block, 10.5

resident CPX's, 10.7

set-only CPX's, 10.7

stack space, 10.13

utility functions, 10.27

Xform_do(), 10.38

XGen_Alert(), 10.39

XGM partition, 4.16