

**in**

**COLLABORATORS**

	<i>TITLE :</i> in		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		July 26, 2024	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## in

### 1.1 ModuleInformation

```
ShowModule v1.10 (c) 1992 $#%!
now showing: "graphics/gfxbase.m"
NOTE: don't use this output in your code, use the module instead.
```

```
(----) OBJECT gfxbase
(  0)  lib:lib (or ARRAY OF lib)
( 34)  actiview:PTR TO view
( 38)  copinit:PTR TO copinit
( 42)  cia:PTR TO LONG
( 46)  blitter:PTR TO LONG
( 50)  loflist:PTR TO INT
( 54)  shflist:PTR TO INT
( 58)  blthd:PTR TO bltnode
( 62)  blttl:PTR TO bltnode
( 66)  bsblthd:PTR TO bltnode
( 70)  bsblttl:PTR TO bltnode
( 74)  vbsrv:is (or ARRAY OF is)
( 96)  timsrv:is (or ARRAY OF is)
(118)  bltsrv:is (or ARRAY OF is)
(140)  textfonts:lh (or ARRAY OF lh)
(154)  defaultfont:PTR TO textfont
(158)  modes:INT
(160)  vblank:CHAR
(161)  debug:CHAR
(162)  beamsync:INT
(164)  system_bplcon0:INT
(166)  spritereserved:CHAR
(167)  bytereserved:CHAR
(168)  flags:INT
(170)  blitlock:INT
(172)  blitnest:INT
(174)  blitwaitq:lh (or ARRAY OF lh)
(188)  blitowner:PTR TO tc
(192)  tof_waitq:lh (or ARRAY OF lh)
(206)  displayflags:INT
(208)  simplesprites:PTR TO LONG
(212)  maxdisplayrow:INT
(214)  maxdisplaycolumn:INT
```

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```
( 216) normaldisplayrows:INT
( 218) normaldisplaycolumns:INT
( 220) normaldpmx:INT
( 222) normaldpmx:INT
( 224) lastchancememory:PTR TO ss
( 228) lcmptr:PTR TO INT
( 232) microsperline:INT
( 234) mindisplaycolumn:INT
( 236) chiprevbits0:CHAR
( 237) memtype:CHAR
( 238) crb_reserved[4]:ARRAY OF CHAR
( 242) monitor_id:INT
( 244) hedley[8]:ARRAY OF LONG
( 276) hedley_sprites[8]:ARRAY OF LONG
( 308) hedley_sprites1[8]:ARRAY OF LONG
( 340) hedley_count:INT
( 342) hedley_flags:INT
( 344) hedley_tmp:INT
( 346) hash_table:PTR TO LONG
( 350) current_tot_rows:INT
( 352) current_tot_cclks:INT
( 354) hedley_hint:CHAR
( 355) hedley_hint2:CHAR
( 356) nreserved[4]:ARRAY OF LONG
( 372) a2024_sync_raster:PTR TO LONG
( 376) control_delta_pal:INT
( 378) control_delta_ntsc:INT
( 380) current_monitor:PTR TO monitorspec
( 384) monitorlist:lh (or ARRAY OF lh)
( 398) default_monitor:PTR TO monitorspec
( 402) monitorlistsemaphore:PTR TO ss
( 406) displayinfodatabase:LONG
( 410) topline:INT
( 412) activiewcprsemaphore:PTR TO ss
( 416) utilbase:PTR TO LONG
( 420) exebase:PTR TO LONG
( 424) bwshifts:PTR TO CHAR
( 428) strtfetchmasks:PTR TO INT
( 432) stopfetchmasks:PTR TO INT
( 436) overrun:PTR TO INT
( 440) realstops:PTR TO INT
( 444) spritewidth:INT
( 446) spritefmode:INT
( 448) softsprites:CHAR
( 449) arraywidth:CHAR
( 450) defaultspritewidth:INT
( 452) sprmovedisable:CHAR
( 453) wantchips:CHAR
( 454) boardmemtype:CHAR
( 455) bugs:CHAR
( 456) layersbase:PTR TO LONG
( 460) colormask:LONG
( 464) ivector:LONG
( 468) idata:LONG
( 472) specialcounter:LONG
( 476) dblist:LONG
( 480) monitorflags:INT
```

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```
( 482) scandoublesprites:CHAR
( 483) bp3bits:CHAR
( 484) monitorvblank:analogsignalinterval (or ARRAY OF analogsignalinterval)
( 488) natural_monitor:PTR TO monitorspec
( 492) progdata:LONG
( 496) extsprites:CHAR
( 497) pad3:CHAR
( 498) gfxflags:INT
( 500) vbcounter:LONG
( 504) hashtablesemaphore:PTR TO ss
( 508) hwemul[9]:ARRAY OF LONG
(----) ENDOBJECT      /* SIZEOF=544 */
```

```
CONST LPEN_SWAP_FRAMES=$20,
    BUS_16=0,
    GENLOC=2,
    BANDWIDTH_2XDBL=2,
    BUS_32=1,
    DBL_CAS=2,
    NML_CAS=0,
    SETCHIPREV_BEST=-1,
    GENLOCN=1,
    BANDWIDTH_1X=0,
    NEW_DATABASE=1,
    GFXF_AA_ALICE=4,
    GFXB_AA_ALICE=2,
    GBFLAGSF_TIMER=$40,
    PAL=4,
    GFXF_HR_DENISE=2,
    GFXB_HR_DENISE=1,
    QBOWNERN=1,
    BLITMSG_FAULT=4,
    BANDWIDTH_4X=3,
    BANDWIDTH_2XNML=1,
    GFXF_AA_MLISA=16,
    GFXF_AA_LISA=8,
    GFXB_AA_MLISA=4,
    GFXB_AA_LISA=3,
    GBFLAGSF_LASTBLIT=$80,
    SETCHIPREV_AA=15,
    BLITMSG_FAULTN=2,
    GFXF_BIG_BLITS=1,
    GFXB_BIG_BLITS=0,
    NTSC=1,
    SETCHIPREV_A=1,
    QBOWNER=2,
    TODA_SAFE=8,
    SETCHIPREV_ECS=3,
    REALLY_PALN=4,
    PALN=2,
    NTSCN=0,
    REALLY_PAL=16,
    TODA_SAFEN=3,
    GFXF_HR_AGNUS=1,
    GFXB_HR_AGNUS=0,
    OWNBLITTERN=0
```

```
#define chunkytoplanarptr/0  
#define GRAPHICSNAME/0
```

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