

libdbfont Reference

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Structures

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SceDbgFontConfig

Initialization structure for the library

Definition

```
#include <libdbgfont.h>
typedef struct {
    SceInt32 fontSize;
} SceDbgFontConfig;
```

Members

fontSize Font size mode to be displayed

Description

This structure is the argument used in `sceDbgFontInit()` to initialize `libdbgfont`. To *fontSize*, specify the font size mode to be used for drawing.

See Also

`sceDbgFontInit()`, Font Size Modes

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SceDbgFontFrameBufInfo

Frame buffer configuration structure

Definition

```
#include <libdbgfont.h>
typedef struct {
    SceUChar8 *frameBufAddr;
    SceInt32 frameBufPitch;
    SceUInt32 frameBufPixelFormat;
    SceInt32 frameBufWidth;
    SceInt32 frameBufHeight;
} SceDbgFontFrameBufInfo;
```

Members

<i>frameBufAddr</i>	Frame buffer address
<i>frameBufPitch</i>	Frame buffer pitch
<i>frameBufPixelFormat</i>	Frame buffer pixel format
<i>frameBufWidth</i>	Frame buffer width
<i>frameBufHeight</i>	Frame buffer height

Description

This structure is the argument used to flush fonts in `sceDbgFontFlush()`.

In `libdbgfont`, the upper left corner of the screen is defined as (0, 0), while the lower right corner values are defined in *frameBufWidth* and *frameBufHeight*. The pixel format of the frame buffer to be drawn is specified with *frameBufPixelFormat*.

See Also

`sceDbgFontPrint()`, Pixel Formats

Basic Functions

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sceDbgFontInit

Initialize the library

Definition

```
#include <libdbgfont.h>
SceInt32 sceDbgFontInit(
    const SceDbgFontConfig *config
);
```

Calling Conditions

Can be called from a thread.
Not multithread safe.

Arguments

config Library initialization parameter (see `SceDbgFontConfig` structure for details)

Return Values

Returns `SCE_OK(0)` for normal termination.
Returns one of the error codes (a negative value) listed at the end of this document for errors.

Description

This function initializes `libdbgfont`. In `libdbgfont`, this function must be called before any other function. To *config*, specify a pointer to the `SceDbgFontConfig` structure, which contains the font size mode (described later).

Example

```
SceDbgFontConfig config;
memset(&config, 0, sizeof(SceDbgFontConfig));
config.fontSize = SCE_DBGFONT_FONTSIZE_DEFAULT; /* Font size mode */
sceDbgFontInit(&config);

/* Code using libdbgfont */

sceDbgFontExit();
```

Notes

Carry out the termination process using `sceDbgFontExit()` when `libdbgfont` is no longer required.

See Also

`SceDbgFontConfig`, `sceDbgFontExit()`, Font Size Modes

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sceDbgFontExit

Terminate the library

Definition

```
#include <libdbgfont.h>
SceInt32 sceDbgFontExit(void)
```

Calling Conditions

Can be called from a thread.

Not multithread safe.

Arguments

None

Return Values

Returns SCE_OK (0) for normal termination.

Returns one of the error codes (a negative value) listed at the end of this document for errors.

Description

This function terminates libdbgfont.

Example

Refer to the example for sceDbgFontInit().

See Also

sceDbgFontInit()

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Drawing Functions

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sceDbgFontPrint

Write to debug font buffer

Definition

```
#include <libdbgfont.h>
SceInt32 sceDbgFontPrint(
    SceInt32 x,
    SceInt32 y,
    SceUInt32 color,
    const SceChar8 *string
);
```

Calling Conditions

Can be called from a thread.
Multithread safe.

Arguments

x, y Drawing position (screen coordinates for starting point)
color Color values for font to be drawn
string String to be drawn

Return Values

Returns the number of output characters for normal termination.
Returns one of the error codes (a negative value) listed at the end of this document for errors.

Description

This function writes strings to the font buffer within libdbgfont.

Screen coordinates specified with *x, y* are used as the starting point (the upper left corner of the string) to draw the string specified with *string*, using the color value specified with *color*. In *color*, specify the value based on the pixel format specified in *frameBufPixelFormat* of the *SceDbgFontFrameBufInfo* structure.

The font size mode specified in *sceDbgFontInit()* determines the size of the characters to be drawn.

Call *sceDbgFontFlush()* to display the string written to the font buffer.

Example

```
char buf[32];
snprintf(buf, sizeof(buf), "(x,y)=(%d,%d)\n", x, y); /* String generation */
sceDbgFontPrint(0, 0, 0xffffffff, buf); /* Writes string to buffer */

SceDbgFontFrameBufInfo info;
info.frameBufAddr = addr;
info.frameBufPitch = 1024;
info.frameBufPixelFormat = SCE_DBGFONT_PIXELFORMAT_A8B8G8R8;
info.frameBufWidth = 960;
info.frameBufHeight = 544;

sceDbgFontFlush(&info); /* Draws string*/
```

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See Also

sceDbgFontFlush()

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sceDbgFontFlush

Drawing debug fonts

Definition

```
#include <libdbgfont.h>
SceInt32 sceDbgFontFlush(
    const SceDbgFontFrameBufInfo *info
);
```

Calling Conditions

Can be called from a thread.

Multithread safe.

Arguments

info Frame buffer parameter (see `SceDbgFontFrameBufInfo` structure for details)

Return Values

Returns `SCE_OK(0)` for normal termination.

Returns one of the error codes (a negative value) listed at the end of this document for errors.

Description

This function displays onscreen the string written to the font buffer in `sceDbgFontPrint()`.

To *info*, specify the pointer in the `SceDbgFontFrameBufInfo` structure to specify information about the targeted frame buffer to be drawn.

Example

Refer to the example for `sceDbgFontPrint()`.

See Also

`SceDbgFontFrameBufInfo`, `sceDbgFontPrint()`, Pixel Formats

Constants

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Font Size Modes

Font size modes available in libdbgfont

Definition

Value	Decimal	Description
SCE_DBGFONT_FONTSIZE_DEFAULT	0	Default font size (8x8)
SCE_DBGFONT_FONTSIZE_LARGE	1	Large font size (16x16)

Description

This constant specifies the font size mode for fonts to be drawn in libdbgfont.

Specify one of the above values to the *fontSize* member in the *SceDbgFontConfig* structure, which will be passed to *sceDbgFontInit()*. Each character will be drawn in 8x8 dots if

SCE_DBGFONT_FONTSIZE_DEFAULT is specified, or in 16x16 dots if

SCE_DBGFONT_FONTSIZE_LARGE is specified.

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Maximum Number of Displayable Fonts

Maximum number of fonts that can be displayed with libdbgfnt

Definition

Value	Decimal	Description
SCE_DBGFONT_FONTCOUNT_MAX	4096	Maximum number of fonts

Description

This constant indicates the maximum number of fonts that can be displayed with libdbgfnt.

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Pixel Formats

Pixel formats available in libdbgfnt

Definition

Value	Hexadecimal	Description
SCE_DBGFONT_PIXELFORMAT_A8B8G8R8	0x00000000U	A8B8G8R8 Pixel format

Description

This constant specifies the pixel format used to draw fonts in libdbgfnt.

Specify the above value in the *frameBufPixelFormat* member in the *SceDbgFontFrameBufInfo* structure, which will be passed to *sceDbgFontFlush()*.

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Return Codes

List of libdbfont return codes

Definition

Value	Hexadecimal	Description
SCE_OK	0	Normal termination
SCE_DBGFONT_ERROR_NOT_INIT	0x80570000	Library not initialized
SCE_DBGFONT_ERROR_EXISTS	0x80570001	Library initialization attempted twice
SCE_DBGFONT_ERROR_INVALID_FONTSIZE	0x80570002	Invalid font size
SCE_DBGFONT_ERROR_INVALID_PIXELFORMAT	0x80570003	Invalid pixel format
SCE_DBGFONT_ERROR_INVALID_ADDRESS	0x80570004	Invalid frame buffer address
SCE_DBGFONT_ERROR_FONT_OVER	0x80570005	Number of displayable fonts over limit
SCE_DBGFONT_ERROR_INVALID_POINTER	0x80570006	Invalid parameter address
SCE_DBGFONT_ERROR_INVALID_VALUE	0x80570007	Invalid parameter value

Description

libdbfont functions return SCE_OK (0) for normal termination, and one of the above return codes (a negative value) for errors.