### **NAME**

**glClear** – clear buffers to preset values

# C SPECIFICATION

void glClear(GLbitfield mask)

# **PARAMETERS**

mask Bitwise OR of masks that indicate the buffers to be cleared. The four masks are GL\_COLOR\_BUFFER\_BIT, GL\_DEPTH\_BUFFER\_BIT, GL\_ACCUM\_BUFFER\_BIT, and GL\_STENCIL\_BUFFER\_BIT.

#### DESCRIPTION

**glClear** sets the bitplane area of the window to values previously selected by **glClearColor**, **glClearIndex**, **glClearDepth**, **glClearStencil**, and **glClearAccum**. Multiple color buffers can be cleared simultaneously by selecting more than one buffer at a time using **glDrawBuffer**.

The pixel ownership test, the scissor test, dithering, and the buffer writemasks affect the operation of **glClear**. The scissor box bounds the cleared region. Alpha function, blend function, logical operation, stenciling, texture mapping, and depth-buffering are ignored by **glClear**.

glClear takes a single argument that is the bitwise OR of several values indicating which buffer is to be cleared.

The values are as follows:

- GL\_COLOR\_BUFFER\_BIT Indicates the buffers currently enabled for color writing.
- GL\_DEPTH\_BUFFER\_BIT Indicates the depth buffer.
- **GL\_ACCUM\_BUFFER\_BIT** Indicates the accumulation buffer.
- GL\_STENCIL\_BUFFER\_BIT

Indicates the stencil buffer.

The value to which each buffer is cleared depends on the setting of the clear value for that buffer.

#### **NOTES**

If a buffer is not present, then a **glClear** directed at that buffer has no effect.

### **ERRORS**

- **GL\_INVALID\_VALUE** is generated if any bit other than the four defined bits is set in *mask*.
- **GL\_INVALID\_OPERATION** is generated if **glClear** is executed between the execution of **glBegin** and the corresponding execution of **glEnd**.

## **ASSOCIATED GETS**

```
glGet with argument GL_ACCUM_CLEAR_VALUE glGet with argument GL_DEPTH_CLEAR_VALUE glGet with argument GL_INDEX_CLEAR_VALUE glGet with argument GL_COLOR_CLEAR_VALUE glGet with argument GL_STENCIL_CLEAR_VALUE
```

## SEE ALSO

glClearAccum, glClearColor, glClearDepth, glClearIndex, glClearStencil, glDrawBuffer, glScissor

Page 1 July 22, 1997