

---

# CGGLContext Reference

[Graphics & Imaging](#) > Quartz



2006-12-22



Apple Inc.  
© 2003, 2006 Apple Computer, Inc.  
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

Apple Inc.  
1 Infinite Loop  
Cupertino, CA 95014  
408-996-1010

Apple, the Apple logo, Mac, Mac OS, and Quartz are trademarks of Apple Inc., registered in the United States and other countries.

OpenGL is a registered trademark of Silicon Graphics, Inc.

Simultaneously published in the United States and Canada.

**Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.**

**IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.**

**THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.**

**Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.**

# Contents

---

## **CGGLContext Reference 5**

---

Overview 5

Functions 5

    CGGLContextCreate 5

    CGGLContextUpdateViewportSize 6

---

## **Document Revision History 7**

---

---

## **Index 9**

---



# CGGLContext Reference

---

<b>Derived From:</b>	CGContextRef
<b>Framework:</b>	ApplicationServices/ApplicationServices.h
<b>Companion guide</b>	Quartz 2D Programming Guide
<b>Declared in</b>	CGGLContext.h

## Overview

The CGGLContext header file defines functions that create and update a graphics context for OpenGL drawing. A CGGLContext context is a type of CGContextRef that is used for OpenGL content. However, its use is not recommended.

## Functions

### CGGLContextCreate

Creates a Quartz graphics context from an OpenGL context.

```
CGContextRef CGGLContextCreate (  
    void *glContext,  
    CGSize size,  
    CGColorSpaceRef colorspace  
);
```

#### Parameters

*glContext*

The context that the OpenGL system uses to manage OpenGL drawing.

*size*

The dimensions of the OpenGL viewport rectangle.

*colorspace*

An RGB color space that serves as the destination space when rendering device-independent colors. If NULL, Quartz uses the default RGB color space. Quartz retains the color space you pass in; on return, you may safely release it.

#### Return Value

A new Quartz graphics context. You are responsible for releasing this object by calling CGContextRelease.

#### Discussion

The use of this function is not recommended.

Creates a Quartz context from the OpenGL context `glContext`. The context establishes an OpenGL viewport rectangle with dimensions specified by the `size` parameter by calling `glViewport(3G)`. If non-NULL, the `colorspace` parameter should be an RGB profile that specifies the destination space when rendering device-independent colors.

**Availability**

Available in Mac OS X version 10.3 and later.

**Declared In**

`CGGLContext.h`

**CGGLContextUpdateViewportSize**

Updates the size of the viewport associated with an OpenGL context.

```
void CGGLContextUpdateViewportSize (
    CGContextRef c,
    CGSize size
);
```

**Parameters**

*context*

A Quartz graphics context obtained by calling [CGGLContextCreate](#) (page 5).

*size*

The new dimensions of the OpenGL viewport.

**Discussion**

The use of this function is not recommended.

You should call this function whenever the size of the associated OpenGL context changes.

**Availability**

Available in Mac OS X version 10.3 and later.

**Declared In**

`CGGLContext.h`

# Document Revision History

---

This table describes the changes to *CGGLContext Reference*.

Date	Notes
2006-12-22	Minor correction.
2006-05-23	Revised the introduction.
	The use of <code>CGGLContext</code> objects are not recommended.
	Revised the introduction.
2005-04-29	Revised introduction.
2004-02-26	First version of this document. An earlier version of this information appeared in <i>Quartz 2D Reference</i> .

## REVISION HISTORY

### Document Revision History



# Index

---

## C

---

CGGLContextCreate [function 5](#)

CGGLContextUpdateViewportSize [function 6](#)