

The background features a collage of images: a magnifying glass with an Apple logo on its handle, a globe, a pen, and a keyboard. The text is overlaid on this collage.

Worldwide

Developers

Conference





**Being QuickTime  
IC Savvy**





# Being QuickTime IC Savvy

*Dan Torres*

Apple Image Capture

# Being QuickTime IC Savvy

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## *Agenda*

- General Overview
- Technical Overview
- QuickTime IC SDK and Demo
- Q&A



# QuickTime IC Overview

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## *Status of QuickTime IC*

- SDK available today
- QuickTake 200 Product based on QT-IC
- Multiple camera support for QT-IC
- Ready to support developers



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# What is QuickTime IC?

*Extension to the QuickTime architecture for Image Capture*

- Abstracts applications from image capture devices
- Leverages QuickTime extensively
- Open architecture
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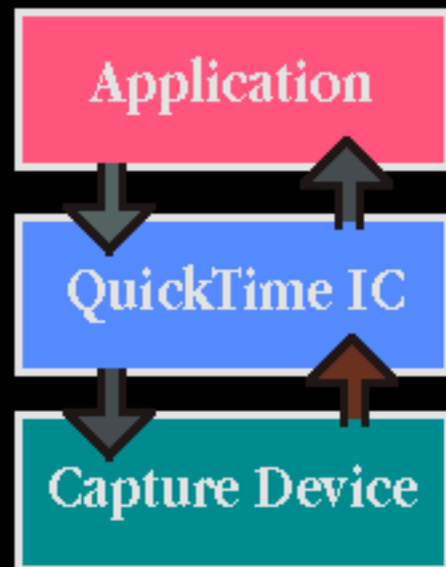
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# What is FlashPoint?

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## *New Company and Technology Camera Operating System*

- Embedded Camera Operating System
- Technology developed at Apple Computer
- Additional information: [www.flashpnt.com](http://www.flashpnt.com)



# Motivation for QuickTime IC

*Standardized API for connection to a wide range of cameras*

- **Digital Camera growing @ 48% CAGR to 2001**
  - 2001 expected 3 million plus digital cameras < \$1000
- **Extensible and modular**
  - Requirement for easy plug and play to drive personal imaging
  - Reduce development time and compatibility



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# Motivation to use QT-IC

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## *Built on industry standard*

- **Based on QuickTime**
  - Offers full set of support from CODEC to device layer abstraction
  - Media rich services
  - Simplifies development effort
  - Allows developers to focus on expertise
  - Offers new opportunities
    - "Panel" layer development





# QuickTime IC Framework & Demo





# QuickTime IC Framework & Demo

*Dave Cho*

*Dino Tang*

*Mike Bitz*

*QuickTime IC Engineering Team*



# QuickTime IC




## *Architecture Overview*



# QuickTime IC



## *Architecture Overview*


Application or Utility 



# QuickTime IC



## *Architecture Overview*

Application or Utility 


QT-IC Controls API



# QuickTime IC



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Physical I/O layer



# QuickTime IC



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Device specific interface



# QuickTime IC



## *Architecture Overview*

Application or Utility 

QT-IC Controls API

Panel API

QT-IC Camera API

Serial

SCSI

IRDA

1394

USB

Physical I/O layer

Device specific interface

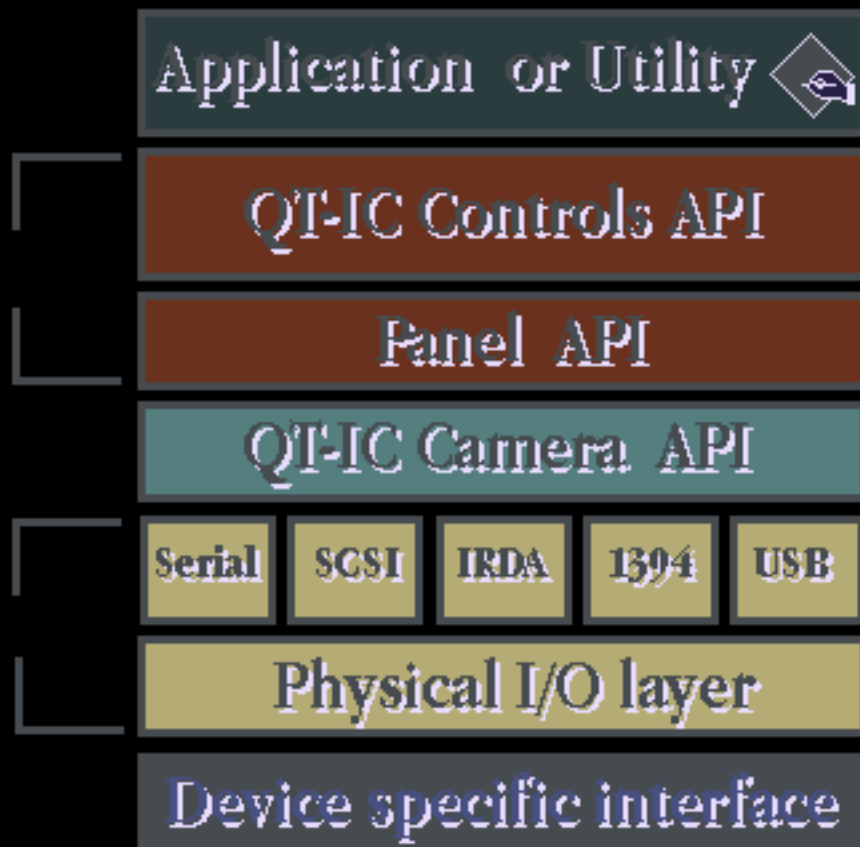




# QuickTime IC



## *Architecture Overview*




# QuickTime IC



## Architecture Overview

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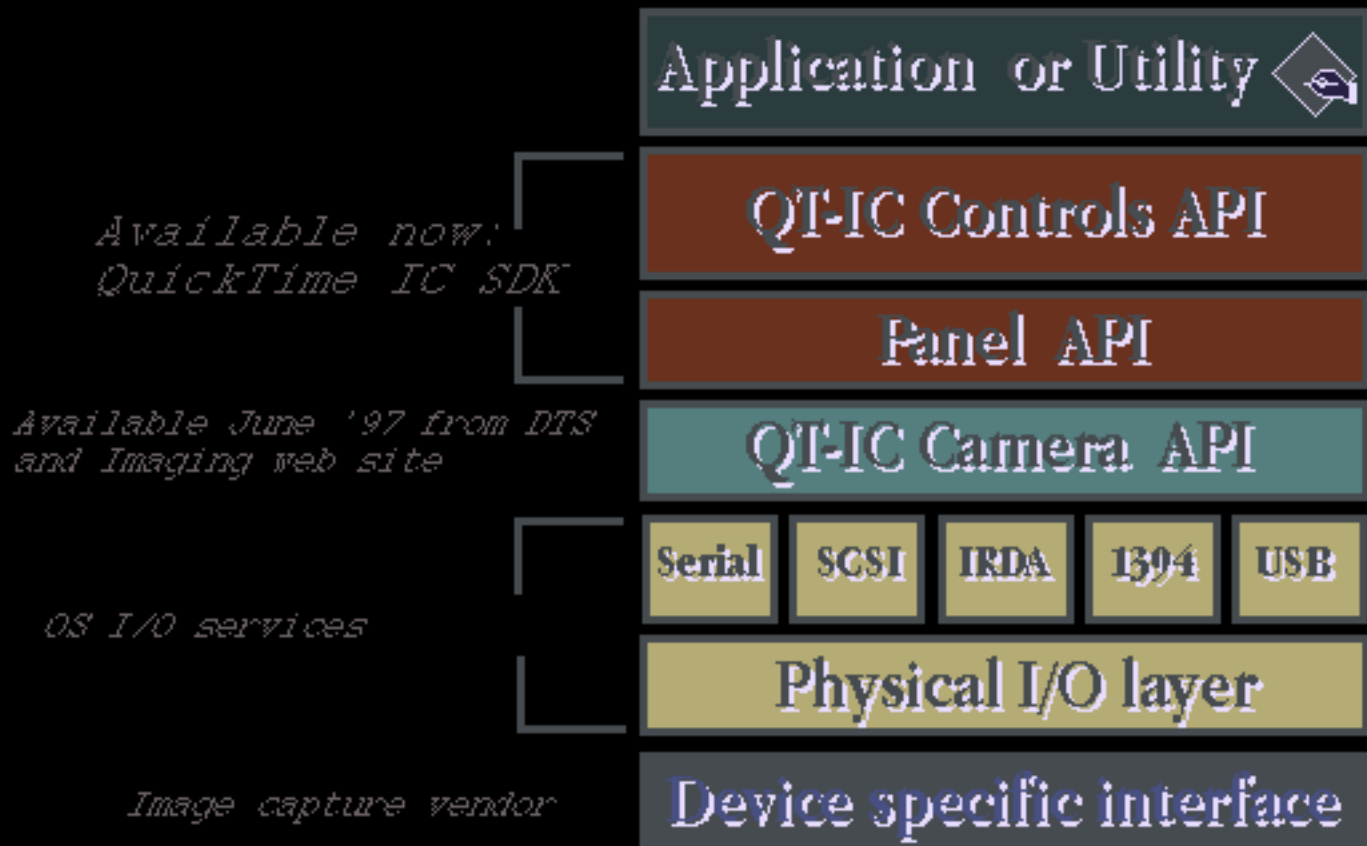
Device specific interface



# QuickTime IC



## Architecture Overview



# QuickTime IC

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## *Definitions and Descriptions*

- Controls API





# QuickTime IC

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- **Camera API**



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- **Controls API**
  - High level application interface provides controls and services for all QT-IC Component.
- **Panel API**
  - Component based applets interacting in a hosting application.
  - Panels have their own event loops, custom user interface and menu management.
- **Camera API**
  - Standard device interface for communicating to capture devices



# QuickTime IC

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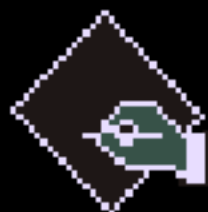
## *Theory of Operation*



# QuickTime IC

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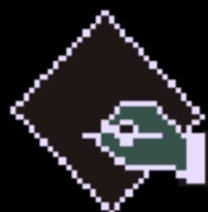
Application





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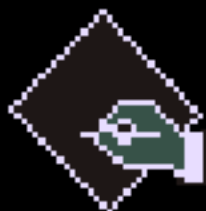


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Application

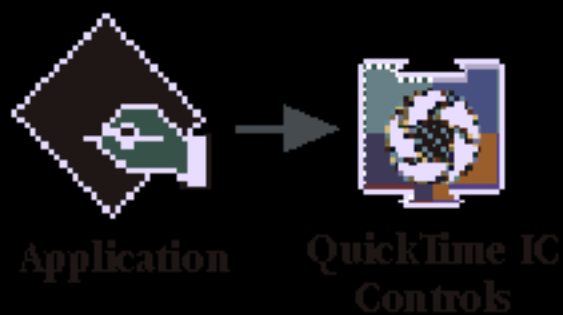


QuickTime IC  
Controls



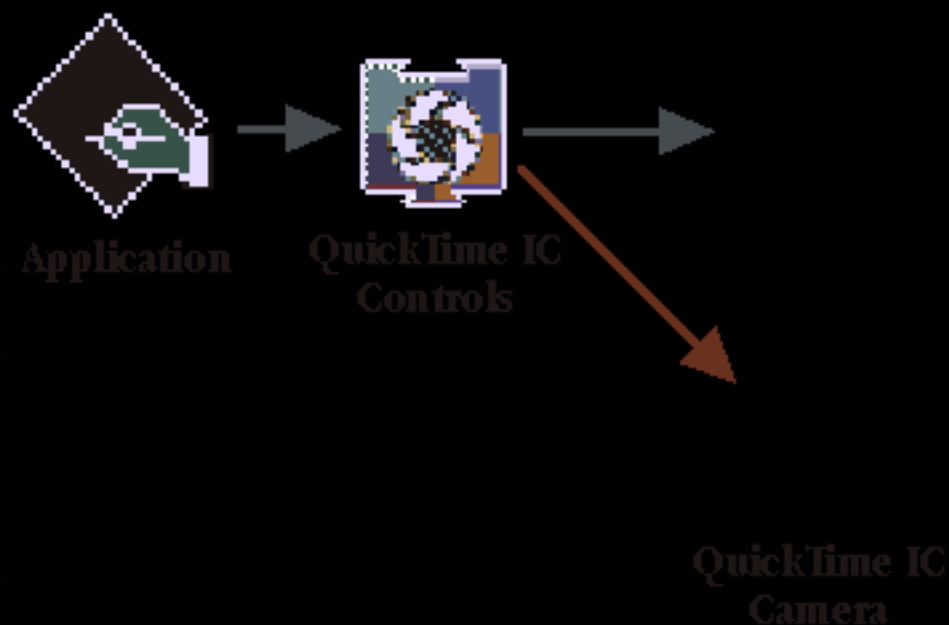
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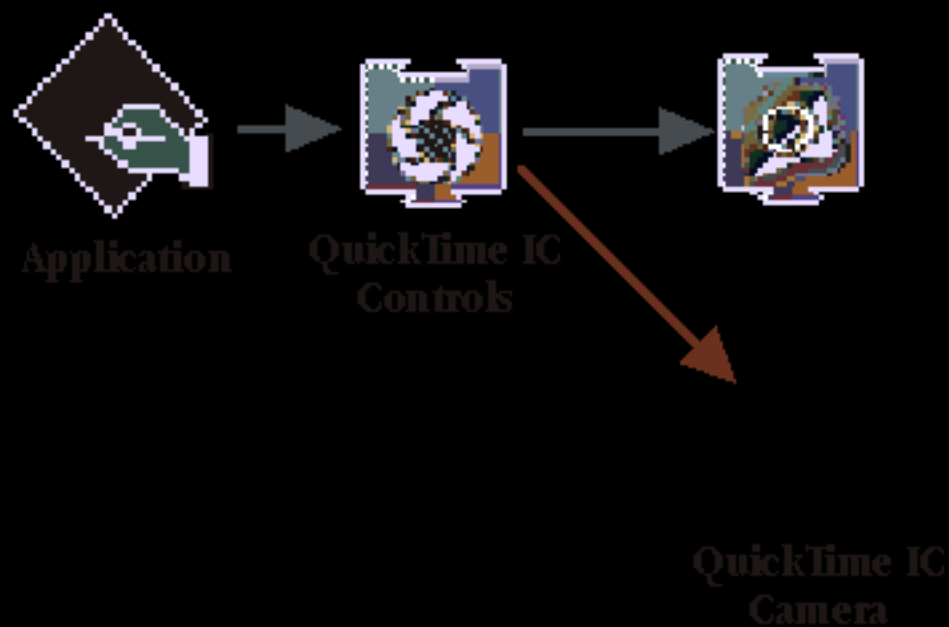
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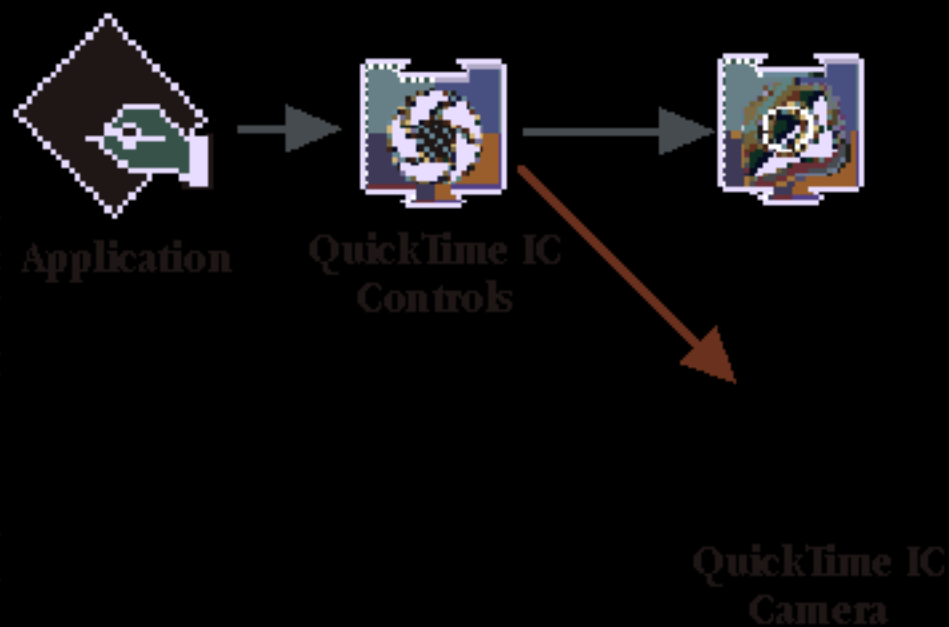
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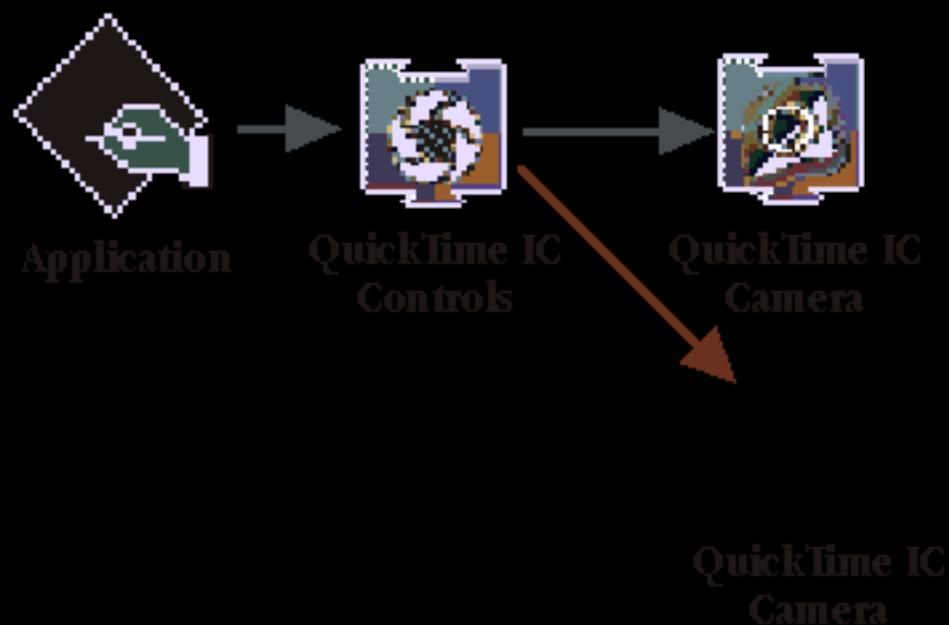
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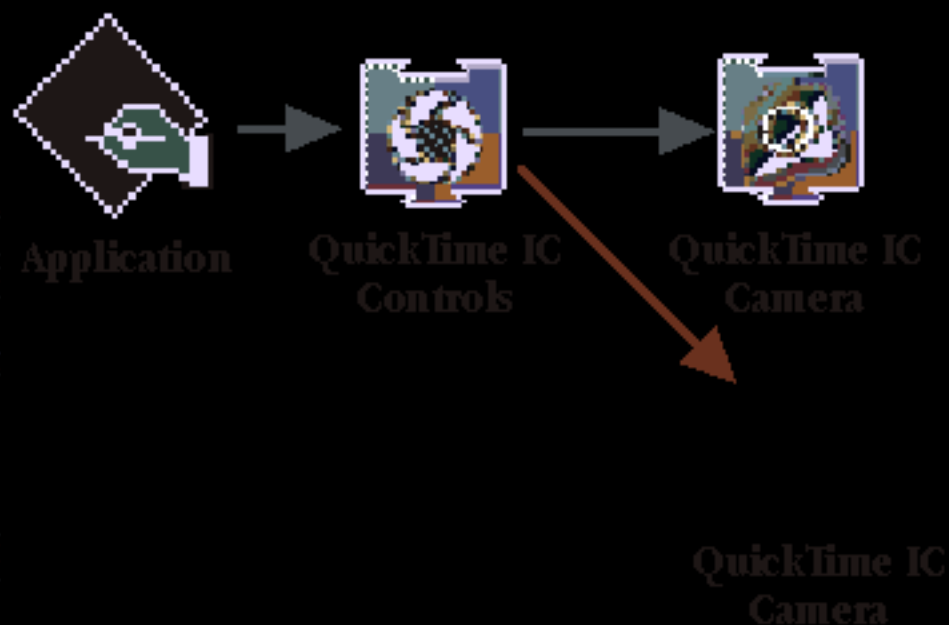
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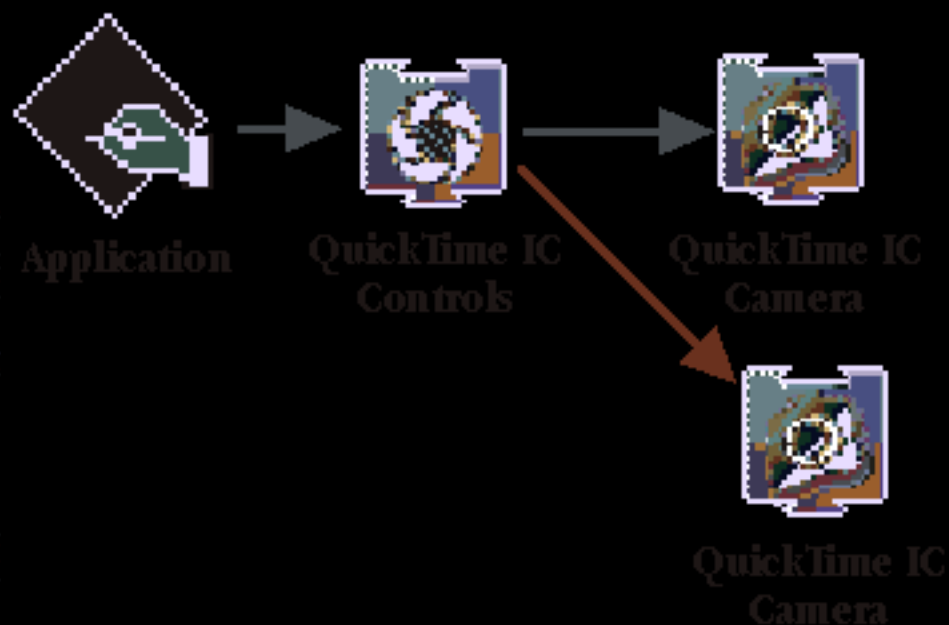
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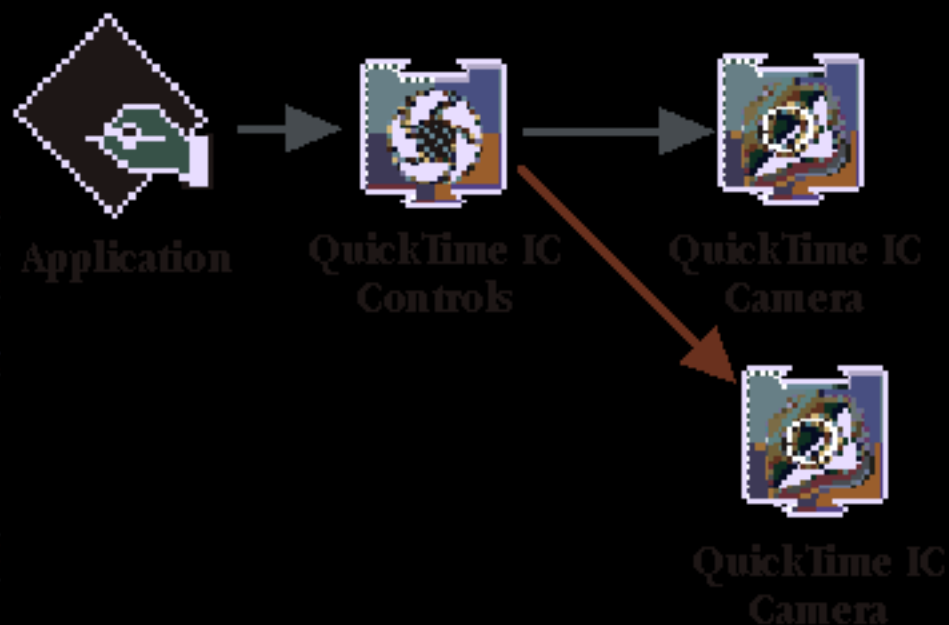
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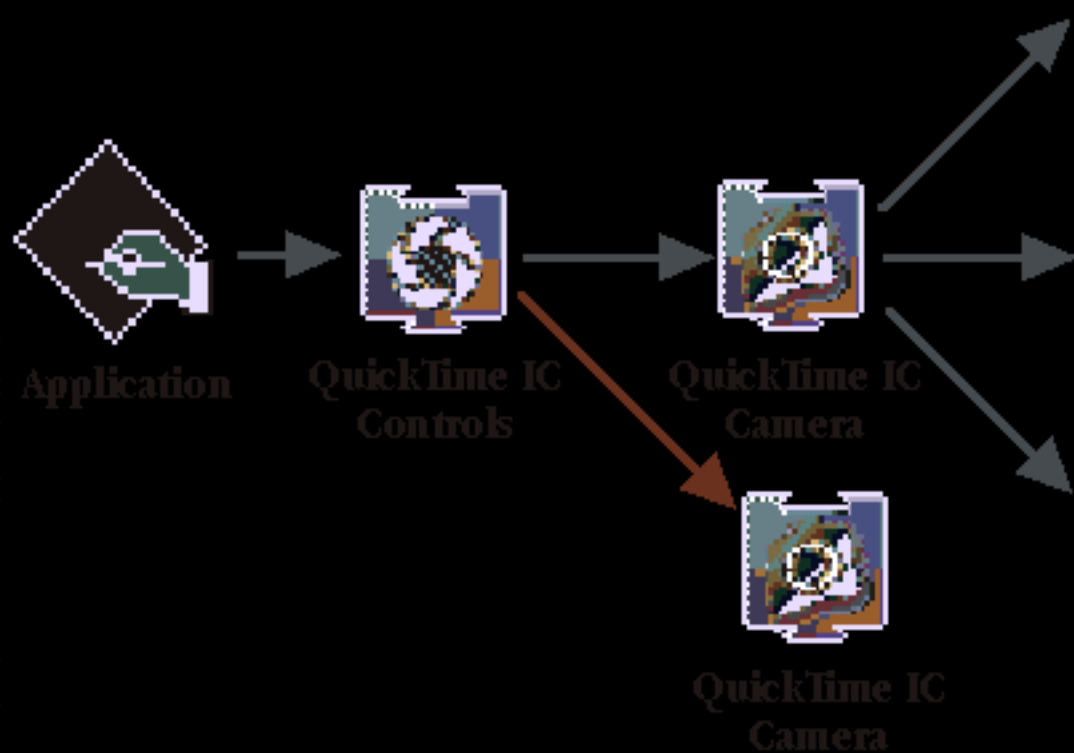
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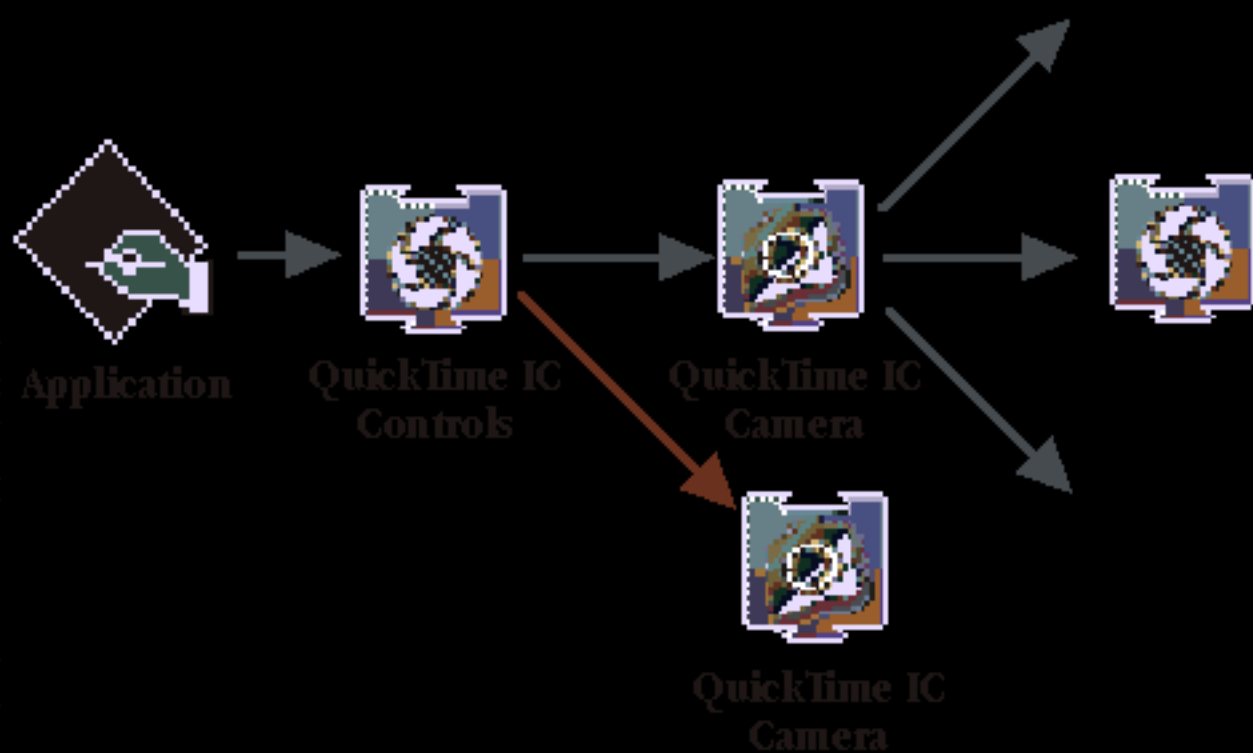
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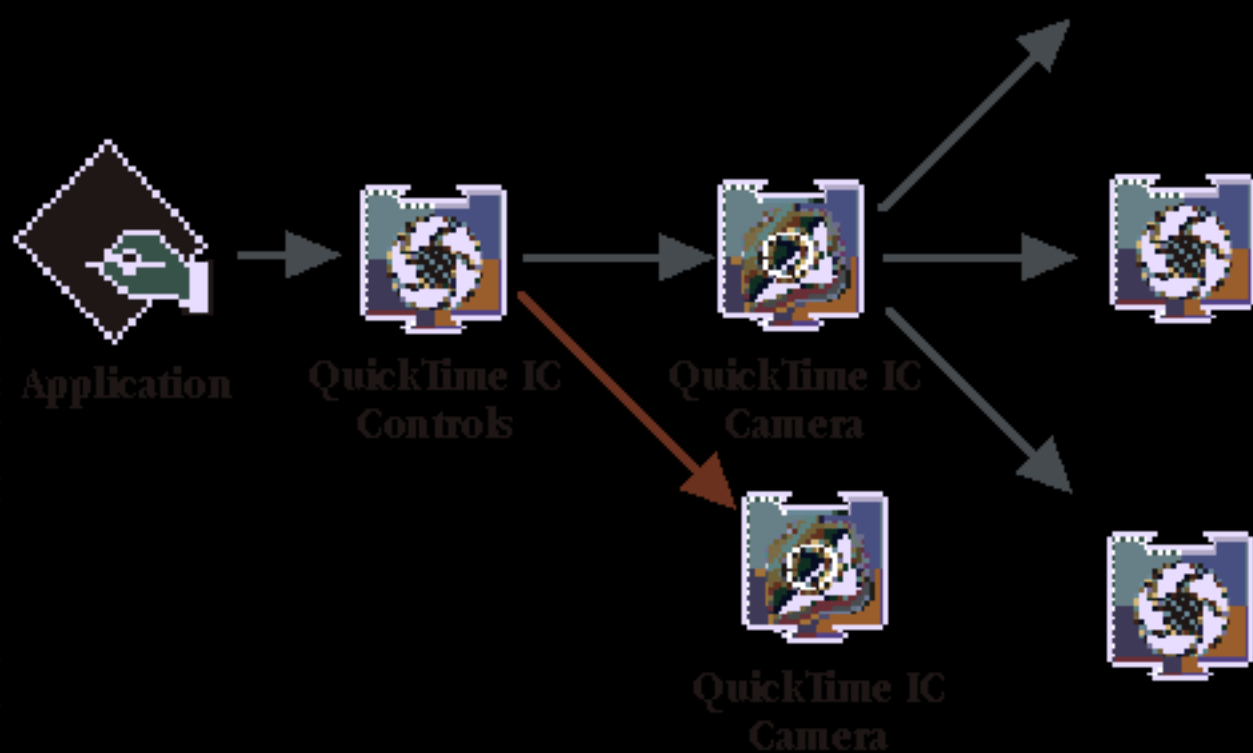
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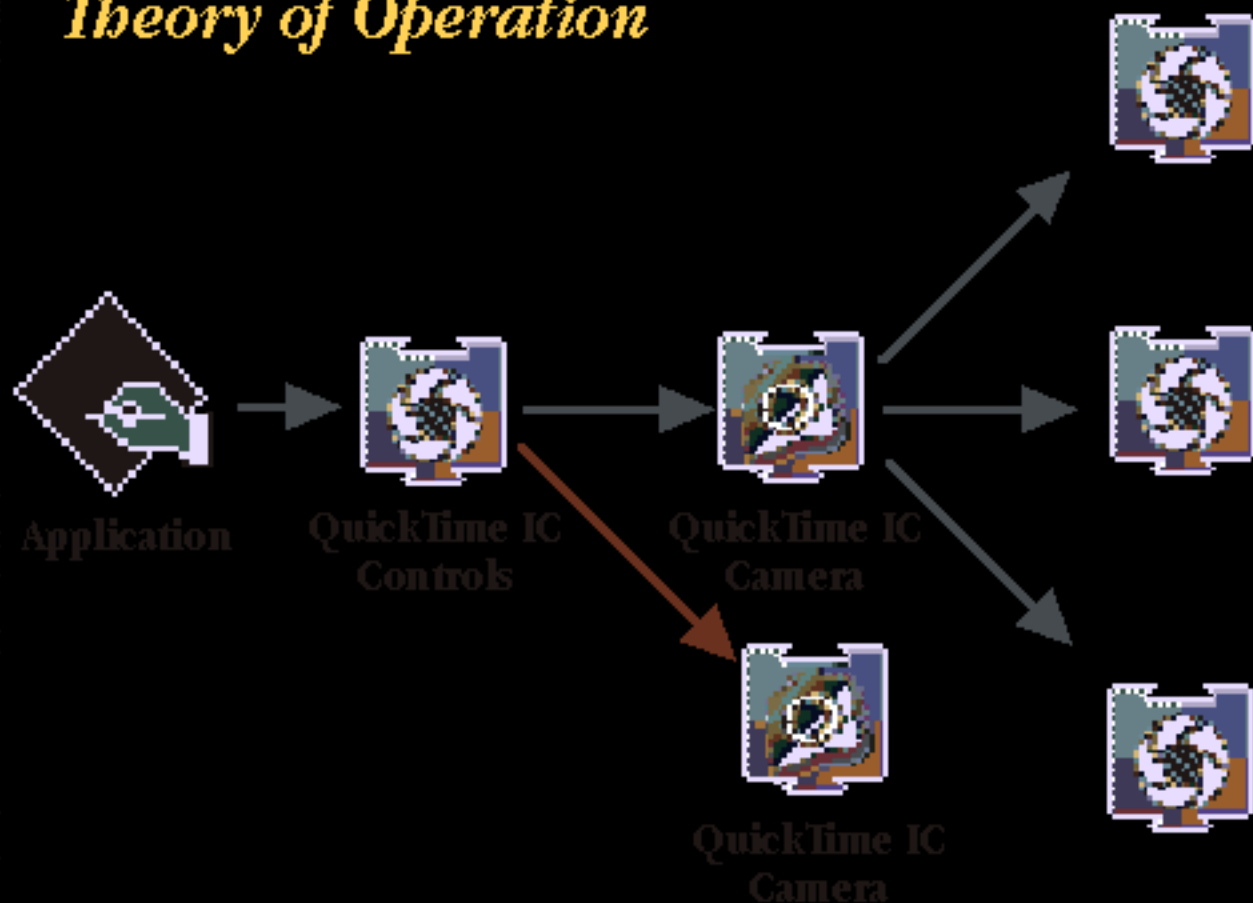
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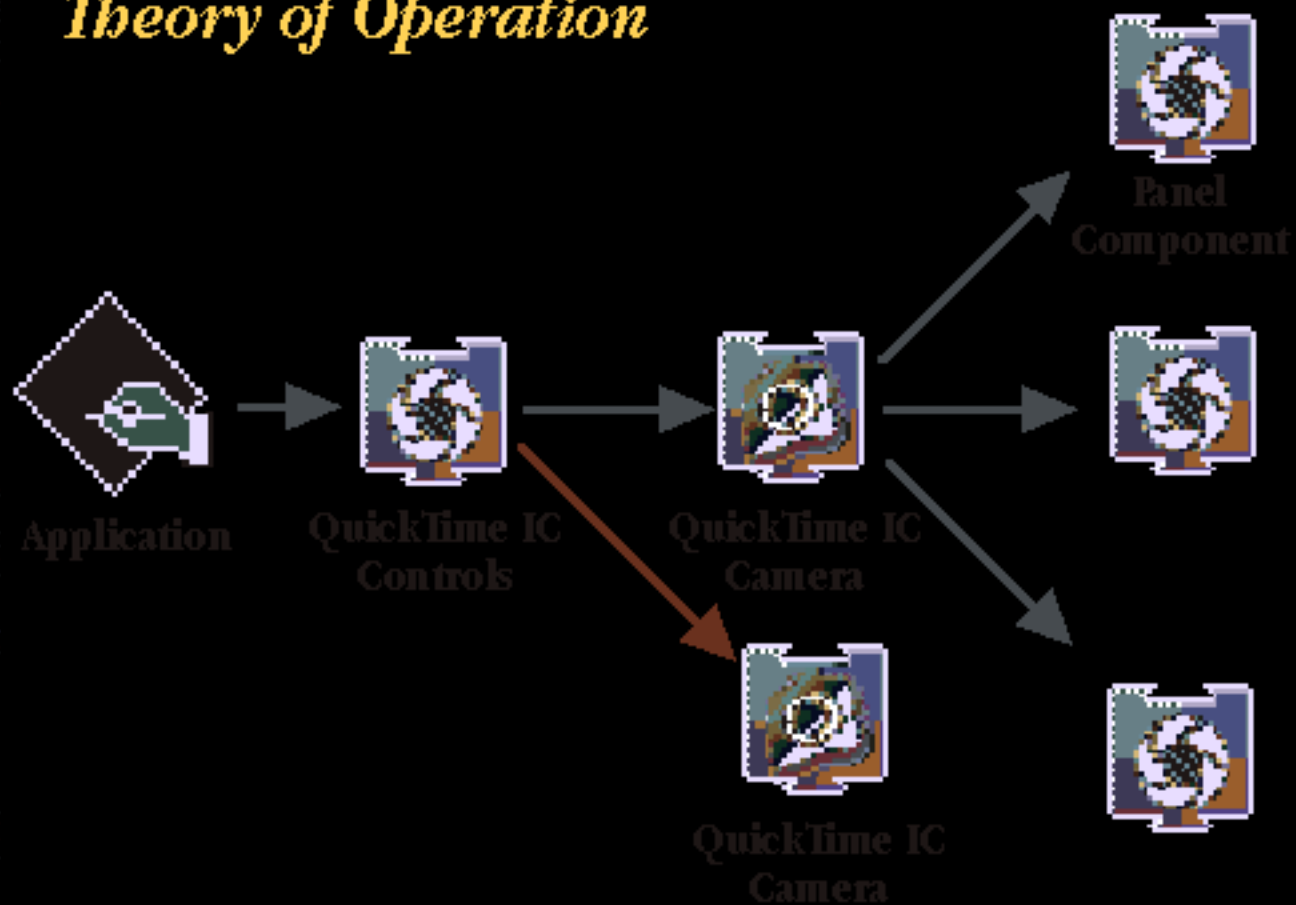
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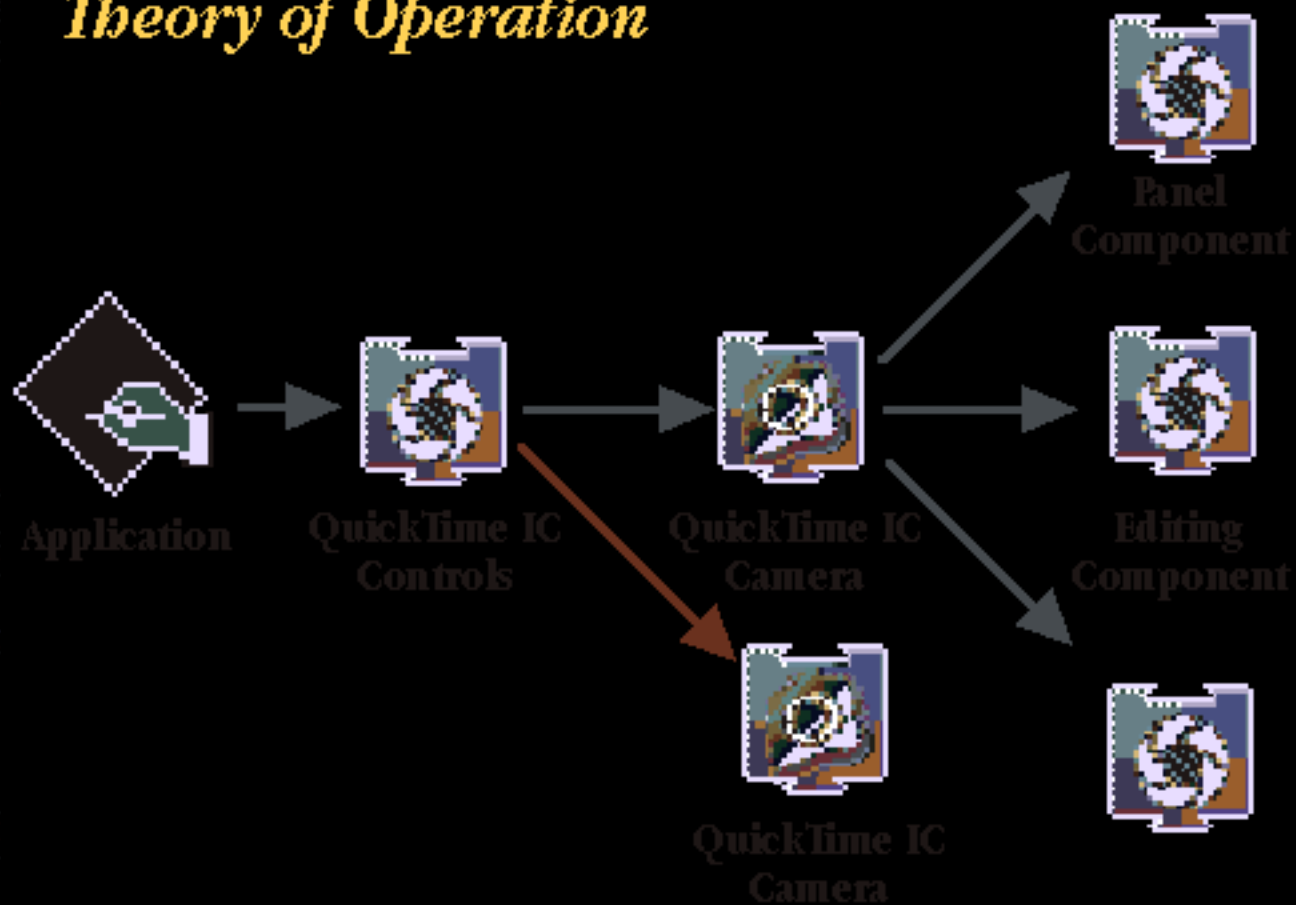
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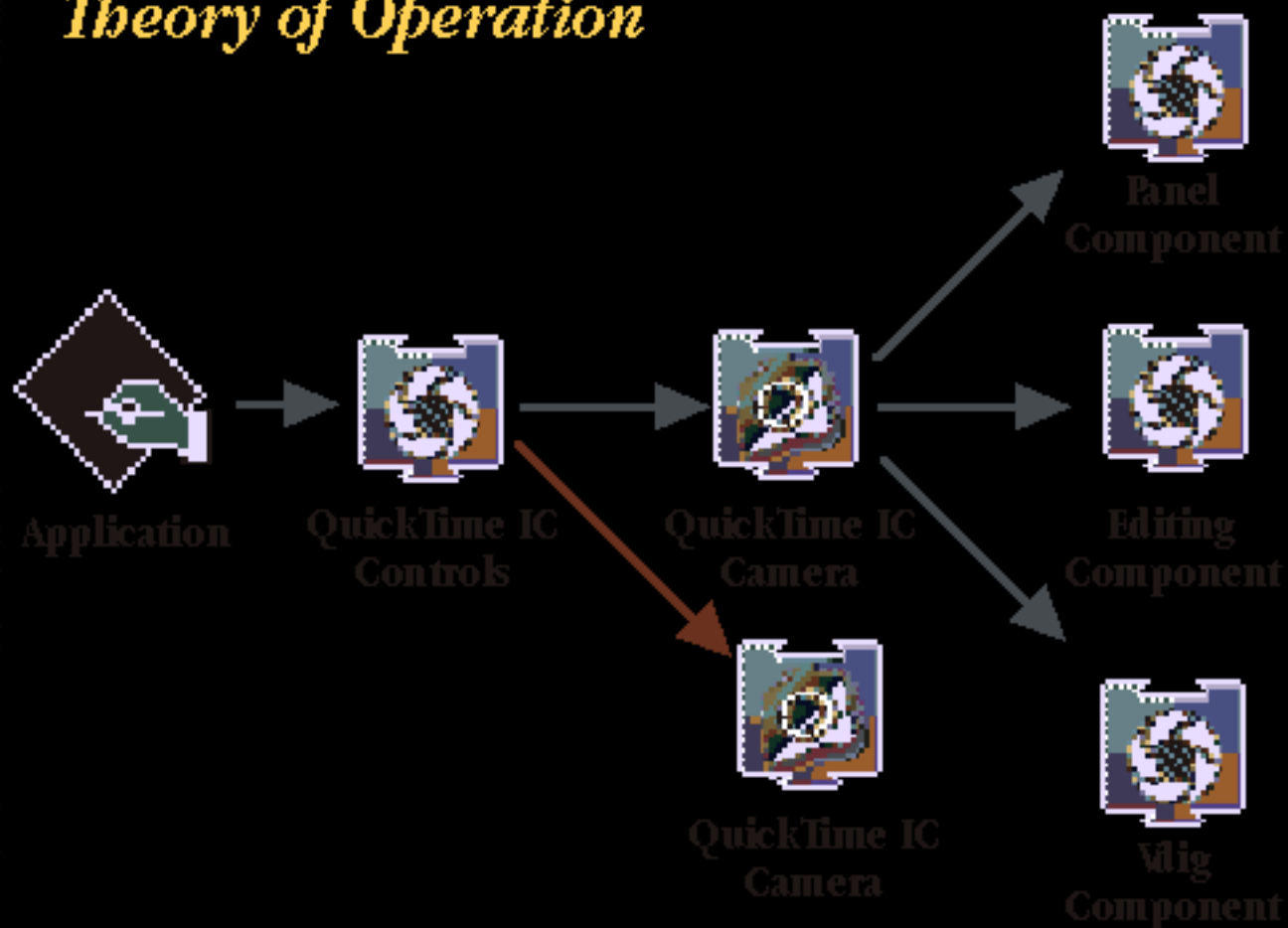
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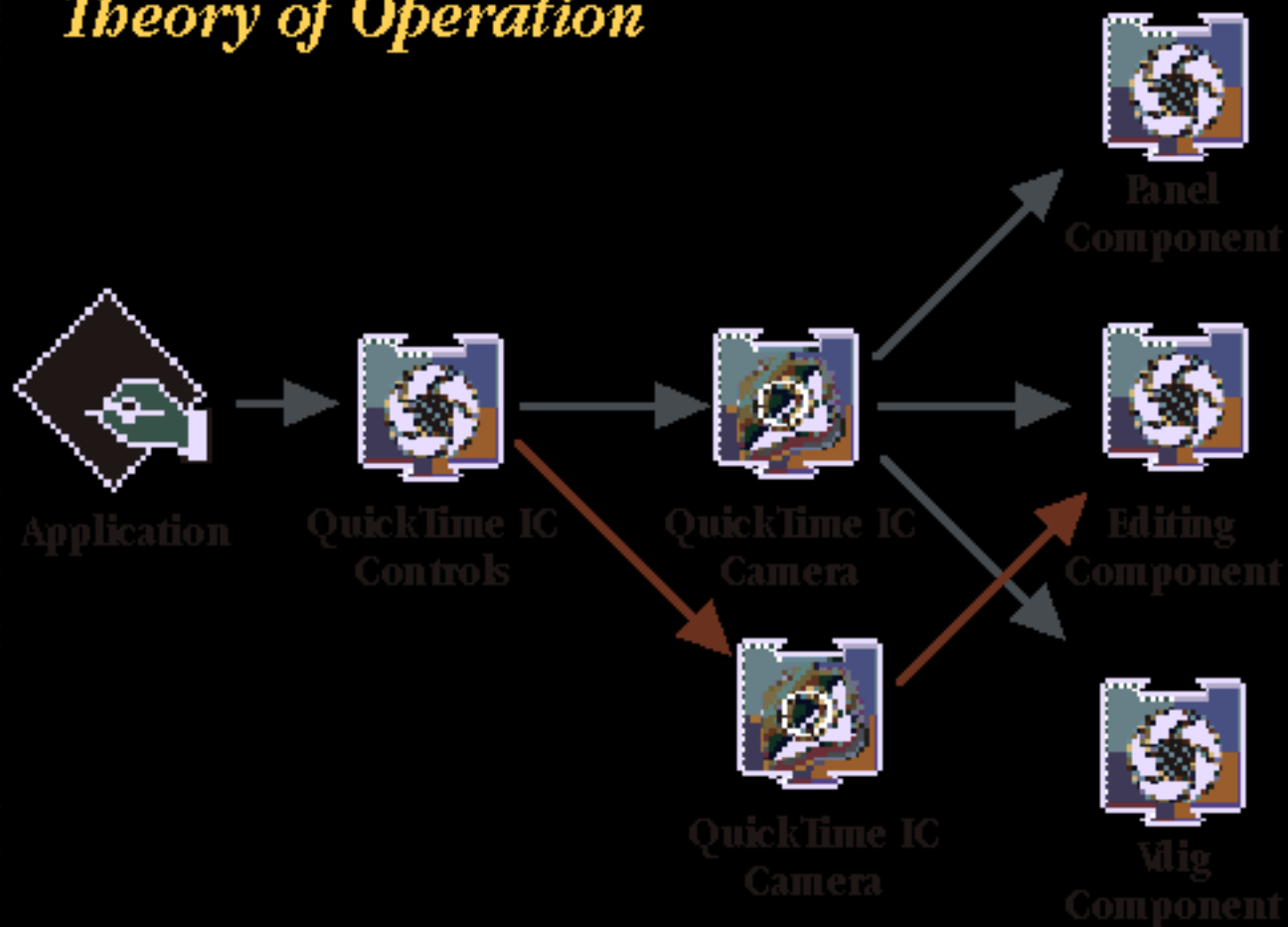
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# QuickTime IC Demo





# QuickTime IC Demo

*SDK*

*Sample Application*

*QuickTake 150/200*

*Minolta RD-175*

# QuickTime IC

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## *Future Directions*

- Rhapsody
- QuickTime 3.x
- How to reach us:
  - email: [devsupport@apple.com](mailto:devsupport@apple.com)
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