DirectFB

CELF Technical Conference 2005
Overview

- Introduction
- System Diagram
- Design Goals
- Features
- Hardware Abstraction
- API Overview
- Driver Interfaces
Introduction

- Initiated in May 2000
- Motivated by and originally designed for the Multimedia Home Platform (MHP)
- Established technology for advanced embedded appliances
- Scalability allows state of the art desktop environments
- 2D Games take advantage
- Adoption of OpenGL makes it competitive in the 3D market
Design Goals

- Minimum overhead for CPU, RAM, Flash
- Maximum usage of and control over the underlying hardware
- Extensible interfaces
- Modularized system
- Versatile API
- Clean driver interfaces
Feature Excerpt

- Multiple graphics and video layers
- Many pixel formats (ARGB, YUV + planar)
- Accelerated graphics operations with software fallback mechanism
- Windowing system with alpha blending
- Video memory management (on/offscreen)
- Input devices including remote controls
- Multiple applications w/o client/server
- Fast anti-aliased text rendering