

## **Analysis of Bluefish444 Support for Combustion 4**

Driver version  
Bluefish444 installer 5.1.11  
Platform Windows XP

Bluefish444 video card evaluated  
HD | Lust, HD | Fury, Wildblue | AV, SD | Greed, SD | Pride

Tuesday, January 10, 2006

## Combustion 4

	Bluefish444	Other Products
SD SMPTE PAL and NTSC	Y	Y
SD 8 bit RGB frame buffer	Y	Y
SD 10 bit YUV real-time playback to broadcast monitor	Y	Y
HD 8 bit RGB frame buffer	Y	*N
HD 10 bit YUV real-time playback to broadcast monitor	Y	*N
HD 1080i 29.97/25	Y	*N
HD 1080p 23.98/24/24/29.97/30	Y	*N
HD 1080psf 23.98/24/25	Y	*N
HD 720p 59.94/60	Y	*N
Utilizes QuickTime Components	N	Y

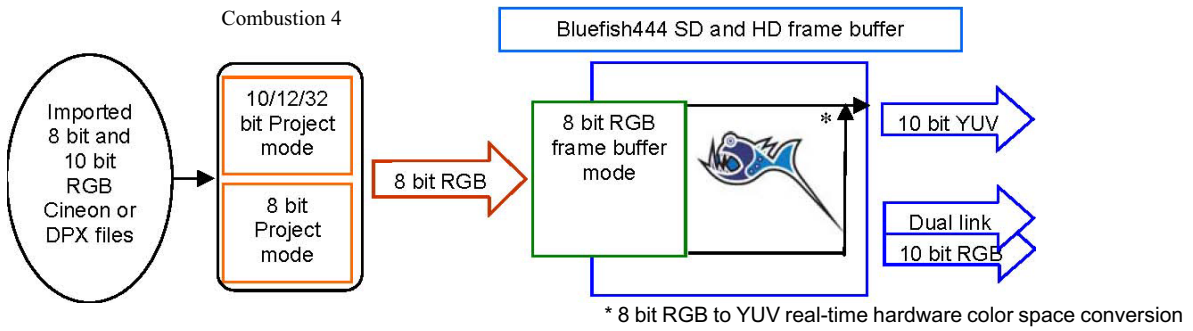
The major difference between Bluefish444 and other product support for Combustion 4 is that Discreet have written a plug in directly to the Bluefish444 SDK and other products may use QuickTime components.

Bluefish444 SD and HD frame buffer support for Combustion 4 ensures frames pass directly to the Bluefish444 video card's frame buffer as 8 bit RGB. The frame is then output to 10 bit YUV via a hardware real time color space conversion.

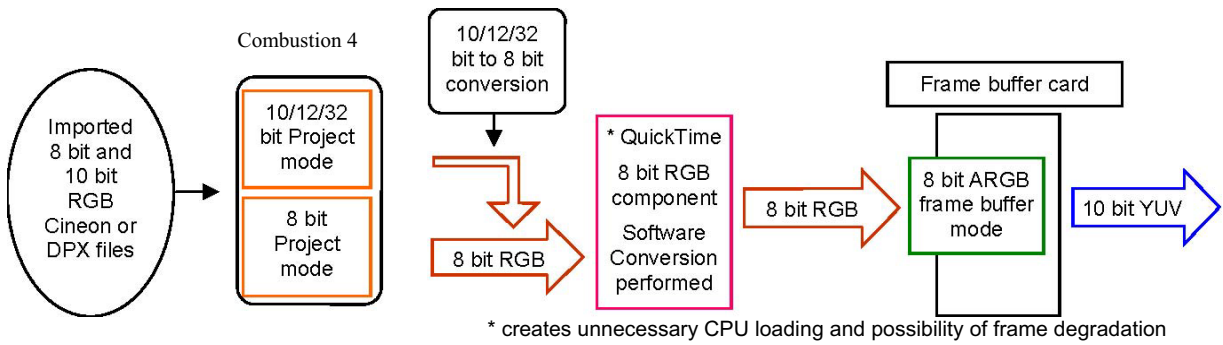
Accessing the Bluefish444 video card's frame buffer directly via the Bluefish444 SDK is a far superior method of obtaining frame buffer support than utilizing QuickTime components. The use of QuickTime components ensures that a software conversion occurs between Combustion 3 and the frame being sent to the video card's frame buffer. This extra step (the software conversion) ensures unnecessary CPU loading and the possibility of frame degradation where the ultimate output is required to be 10 bit YUV.

\*no public available HD driver available at time of testing.

### Bluefish444 Combustion 8 bit frame buffer support



### QuickTime Component frame buffer support



### Bluefish444 and Combustion typical workflow

